City of
SACRAMENTO

AUBURN BOULEVARD OVER ARCADE CREEK BRIDGE (24C0081) REPLACEMENT PROJECT [(#BRLS-5002(168))]

REVISED INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (California Code of Regulations Title 14, Section 15000 *et seq.*) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

Revisions have been made based upon comments received during the public review process. Revisions consisting of additions to the discussion are shown in underline text and any deletions are shown in strikethrough text. All revisions made, have been made based upon comments received that merely clarify, amplify, or make insignificant modifications and do not require recirculation pursuant to California Environmental Quality Act Guidelines Section 15073.5(c).

SECTION I - BACKGROUND

Project Name and File Number:	Auburn Boulevard over Arcade Creek Bridge (24C0081) Replacement
Project Location:	City of Sacramento where Auburn Boulevard crosses Arcade Creek, east of Winding Way and west of the intersection of Park Road and Auburn Boulevard
Project Applicant:	Zuhair Amawi City of Sacramento Public Works Department 915 I Street, Sacramento, CA 95814
Project Planner:	Ron Bess, Associate Planner Community Development Department City of Sacramento 300 Richards Blvd., Third Floor Sacramento, CA 95811 (916) 808-8272 rbess@cityofsacramento.org
Environmental Planner:	Dewberry | Drake Haglan
Date Initial Study Completed:	September 4, 2020

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento (City), Community Development Department, has reviewed the proposed Project and, on the basis of the whole record before it, has determined that the proposed Project is an anticipated subsequent project identified and described in the 2035 General Plan Master Environmental Impact Report (EIR) (Master EIR) and is consistent with the land use designation and the permissible densities and intensities of use for the Project site as set forth in the 2035 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the Project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)) Policies included in the 2035 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed. See also the Master EIR for the 2035 General Plan. The mitigation

monitoring plan for the 2035 General Plan, which provides references to applicable general plan policies that reduce the environmental effects of development that may occur consistent with the 2035 General Plan, is included in the adopting resolution for the Master EIR. See City Council Resolution No. 2015-0060, beginning on page 60. The resolution is available at:

http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx

This analysis incorporates by reference the general discussion portions of the Master EIR (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review on the City's web site at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx

The City will prepare and circulate a Notice of Availability/Notice of Intention to Adopt a Mitigated Negative Declaration (NOA/NOI) that invites comments regarding the issues discussed in the initial study. The NOA/NOI is posted on the Community Development Department web site at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx.

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Written comments should be sent at the earliest possible date, but no later than the 30-day review period ending on October 4, 2020.

Please send written responses to:

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SECTION II – PROJECT DESCRIPTION

INTRODUCTION

The City has prepared this Initial Study in compliance with the California Environmental Quality Act (CEQA) to address the environmental consequences of the proposed Auburn Boulevard over Arcade Creek Bridge (24C-0081) Replacement project (Project). The City is the Lead Agency for this Project under CEQA.

The Project is funded primarily by the federal aid Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA) through California Department of Transportation (Caltrans) Local Assistance. The replacement bridge would meet current applicable City, American Association of State Highway and Transportation Officials (AASHTO), and Caltrans design criteria and standards.

PROJECT LOCATION

The Project is located near the City's northeastern border with Sacramento County where Auburn Boulevard crosses Arcade Creek, east of Winding Way and west of Park Road and State Route (SR) 244 ramps (**Appendix B: Figure 1**, **Figure 2**, and **Figure 3**). The Project area is approximately 10.4 acres in area and land uses surrounding the Project consist of low- to medium-density residential uses to the south, commercial/office developments to the east, and recreational uses within Del Paso Park to the north and west.

EXISTING CONDITIONS

The existing bridge is a two-span, reinforced concrete T-beam structure that was originally constructed in 1927, and then widened in 1965. The existing bridge has a total width of 76 feet, 6 inches and a length of 70 feet. The existing lane configuration includes two through lanes in each direction of travel, one left turn lane from westbound Auburn Boulevard to Winding Way, with shoulders and sidewalks on each side of the existing bridge. The existing bridge has an average daily traffic (ADT) of ~~34,400~~ approximately 12,000 vehicles per day and conveys traffic to the SR 244 on- and off-ramps located east of the bridge.

The existing Auburn Boulevard and Winding Way intersection is a signalized T-intersection, with Auburn Boulevard running north-south, and Winding Way serving as the eastern leg of the intersection. Crosswalks are provided at the south and east legs of the intersection with island refuges on the southeast and northeast corners.

PROJECT PURPOSE AND NEED

The existing vehicular bridge structure has been determined to be structurally deficient with substandard load carrying capacity and bridge roadway geometry. The 2012 Caltrans Bridge Inspection Report for the Auburn Boulevard Bridge over Arcade Creek identifies many structural deficiencies such as cracks, spalling, minor scour, and hydraulic debris collection. The maintenance reports indicate that the water level in the channel has reached the elevation of the bridge girders several times.

The existing Auburn Boulevard and Winding Way Intersection operates at an acceptable level of service with stable flow. However, the existing left turn pocket on Auburn Boulevard lacks sufficient storage length since it is constrained between Winding Way and the SR 244 on/off ramps. The existing structure is located within 150 feet of the Winding Way intersection which does not have American with Disabilities Act (ADA) compliant ramps and does not provide a crosswalk at all intersection legs.

The purpose of the Project is to provide a new structure that is consistent with current design standards for roadway geometry, accessibility, and structural integrity, to increase hydraulic capacity, and update the Auburn Boulevard and Winding Way intersection to enhance pedestrian safety and improve the existing intersections operations.

PROJECT DESCRIPTION

The Project proposes to replace the existing structurally deficient bridge with a new bridge that meets current structural and geometric design standards, improves hydraulic capacity, and provides traffic-rated barrier railings. The proposed bridge replacement would also enhance the Auburn Boulevard and Winding Way intersection by adding an additional left turn pocket from westbound Auburn Boulevard to Winding Way. The proposed Project intersection improvements would also include the addition of sidewalk, bicycle lane, and high visibility crosswalk facilities at the Auburn Boulevard/Winding Way intersection. Sidewalk facities and Class II bike lanes would be added along both sides of Auburn Boulevard at the intersection, and pedestrian operations at the intersection would be completed by adding an additional crosswalk from the southwest corner of the intersection of Auburn Boulevard and Winding Way to Del Paso Regional Park.

The proposed replacement bridge would be a single-span precast-prestressed concrete girder bridge, placed along the existing bridge alignment. The proposed bridge would be approximately 97 feet in width and would provide two 12-foot through vehicle lanes, two 11-foot through lanes, two 11-foot left turn lanes, and shoulders and sidewalks in each direction. The length of the proposed bridge would be approximately 89 feet to avoid the existing bridge foundations. The proposed bridge would be supported by concrete seat abutments on a single row of cast-in-drilled-hole concrete piles. A total of 16 piles are anticipated, and the piles would be approximately 60 feet in length. The final vertical alignment is expected to be raised approximately 4.5 feet to enhance the site hydraulics.

Staging areas would be required to store materials and construction equipment while not hindering the traveling public (vehicular, bike, and pedestrian) and not exposing the traveling public to any hazards. One staging area would be established in the northeast corner of the Auburn Boulevard and Winding Way intersection. ~~A~~ Two larger staging area~~s~~ would be established approximately 0.5 miles west of the Project area in the currently closed, paved parking lot of Renfree Field and within the ~~a~~ vacant paved parking lot used for the Powerhouse Science Center (assuming that the Powerhouse Science Center relocated prior to the start of construction). Staging would also occur along Auburn Boulevard between the intersection at Winding Way and Park Road while the road is closed.

Utility Relocations

There are several utilities in the immediate vicinity of the Project site, including overhead, surface, and underground utilities. Multiple existing utilities cross Arcade Creek at the existing bridge and would need to be temporarily relocated to complete construction of the proposed bridge replacement Project. An existing sewer line that crosses under Arcade Creek at the existing bridge would be protected in place. Utility lines that are temporarily relocated to complete proposed project construction are anticipated to be permanently relocated onto the proposed bridge.

Right of Way

Temporary construction easements or rights of entry may be required from the properties at the southeastern side of the bridge and west of the Auburn Boulevard and Winding Way intersection. The property at the northwest side of the bridge is an existing city-owned park. Right-of-way take is still to be determined at this point but right of way acquisition from the Heritage Oaks Hospital south of the bridge is anticipated.

Temporary Detour

The replacement bridge would be constructed by fully closing Auburn Boulevard at Arcade Creek between Winding Way and SR 244 and establishing a traffic detour around the Project site. Closing the road would avoid the need to build the Project in stages which would span several construction seasons and would accelerate Project construction. Road closures would enable the demolition and construction to be completed within 6 months. To meet this schedule the contractor would likely require working 10 hours a day and 6 days per week; double shifts may also be required. Weekend closures of the Auburn Boulevard/Winding Way and Auburn Boulevard/SR 244 intersections would be necessary to implement traffic phasing through the intersections during Project construction. Extensive signage is anticipated to

guide motorists unfamiliar with the area to the detour route. Most traffic traveling to/from areas west of Winding Way would use portions of Watt Avenue as follows:

- Eastbound traffic would use the eastbound ramp from Watt Avenue on to the Capital City Freeway and then SR 244 to access Auburn Boulevard north of Arcade Creek;
- Westbound traffic would use SR 244 and its ramp connection to the westbound off ramp from Interstate 80 (I-80) to Watt Avenue.

Park Road would be closed at Auburn Boulevard except for emergency vehicle access.

A temporary pedestrian detour would be constructed approximately 100 feet upstream of the existing bridge. The pedestrian detour would be approximately 330 feet long, 8 feet wide and include a Hot Mix Asphalt (HMA) walking path connecting Auburn Boulevard to Winding Way. The pedestrian detour would require an approximately 45-foot long temporary bridge founded on short-seat concrete abutments located outside the ordinary high-water mark of Arcade Creek. The bridge would be constructed and secured using standard falsework material (steel stringers and lumber). The pedestrian detour path would be lined with a chain link security fence with bollards at each end to promote only pedestrian and bike traffic use. During the construction of the pedestrian detour, pedestrians may require temporary routing west of Auburn Boulevard. Once the pedestrian detour is in place it would provide pedestrian and bicycle access over Arcade Creek for the duration of Project construction. Upon Project completion, the temporary bridge and associated pathway would be removed, and the area restored to pre-construction conditions.

The Project team is currently coordinating with Caltrans, City of Sacramento, and County of Sacramento to approve the proposed detour route. Detailed detour plans would be reviewed and approved by the aforementioned stakeholders and provided in the Plan Specification and Estimate (PS&E) package. Public Outreach would be conducted prior to and during construction to keep residents informed of the Project.

Bridge Demolition

Demolition of the existing bridge would be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from bridge demolition would be removed from the Project site and disposed of by the contractor. The construction contractor would prepare a bridge demolition plan.

It is anticipated that construction would occur when the creek bed is dry; however, if water is present during construction, temporary cofferdams would be installed to divert water through the construction site. A temporary culvert would be installed between the cofferdams to carry water through the work area. The work area would then be dewatered by pumping. The temporary cofferdams and culvert would be removed after the completion of foundation construction and after placement of rock slope protection (RSP). All in-channel work will be limited to the dry season (June-October).

Construction Activities

In order of activity, construction would generally consist of the following:

Construction Area Sign Installation

Sufficiently in advance of construction operations, appropriate construction signage would be installed identifying road and lanes closures, and established detour routes. Signs would remain in place throughout the duration of construction.

Clearing, Grubbing, and Tree Removals

Portions of hardscape and landscaping in conflict with construction and demolition activities would be removed. Areas along the existing bridge would be cleared of vegetation and fencing.

Stream Diversion (If Necessary)

Should water be present, stream flow in Arcade Creek would be diverted through the active construction zone. The diversion would be established in conformance with City specifications as well as Sacramento County, California Department of Fish and Wildlife, Regional Water Quality Control Board, and U.S. Fish and Wildlife Service regulatory requirements. The stream diversion would be constructed within the existing channel to protect water flowing in Arcade Creek from demolition and construction activities. Materials to construct the diversion would consist of temporary culverts as needed to convey flow rates anticipated during construction, and temporary cofferdams in the channel upstream and downstream of the site. Temporary cofferdams may consist of sheet piles, gravel bags, water filled bladder dams, or another agency approved method. All stream diversion work would be contained within the approved Project area.

Utility Relocation

Multiple overhead, surface, and underground utilities would require relocation to complete Project construction. Upon completion of Project construction, multiple utilities would be permanently relocated onto the proposed bridge.

Temporary Pedestrian Bridge and Pedestrian Detour

A temporary pedestrian detour would be constructed upstream of the existing bridge. The pedestrian detour would be constructed to include an HMA walking path, temporary fencing, and temporary bollards. A temporary bridge founded on short seat concrete would provide pedestrian access at the Project site across Arcade Creek.

General Demolition

Demolition of the existing bridge work would be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the bridge demolition would be removed from the Project site and disposed of by the contractor.

New Bridge Foundation

The new concrete seat bridge abutment foundations would involve excavations of up to 10 feet deep and would be supported by concrete cast-in-drilled-hole concrete piles. A total of 16 piles are anticipated, and the piles would be approximately 60 feet in length.

New Bridge Construction

The new bridge construction would involve placement of single span precast-prestressed concrete girders along the existing bridge alignment. The creek diversion would be removed after the new bridge has been constructed. The bridge barriers, roadway approaches, intersection improvements, sidewalk improvements would then be completed. After the roadway is prepared for final surfacing and the full closure of Auburn Boulevard at the Project site is lifted, the temporary pedestrian detour would be removed.

Table 1 provides a description of the type of equipment likely to be used during the construction of the Project.

Table 1. Construction Equipment

Equipment	Construction Purpose
Hydraulic Hammer	Demolition
Hoe ram	Demolition
Jack Hammer	Demolition
Water Truck	Earthwork construction + dust control
Bulldozer / Loader	Earthwork construction + clearing and grubbing
Haul Truck	Earthwork construction + clearing and grubbing
Front-End Loader	Dirt or gravel manipulation
Grader	Ground grading and leveling
Dump Truck	Fill material delivery
Bobcat	Fill distribution
Excavator	Soil manipulation and placement of rock slope protection
Compaction Equipment	Earthwork
Roller / Compactor	Earthwork and asphalt concrete construction
Backhoe	Soil manipulation + drainage work
Drill Rig	Construction of drilled pile foundations
Holding tanks	Slurry storage for pile installation
Crane	Bridge removal, placement of pile rebar cages, precast girders, and temporary casing;
Oscillator	Pile Temporary Casing
Concrete Truck and Pump	Placing concrete
Truck with seed sprayer	Erosion control landscaping
Generators	Power Hand Tools

Construction Schedule and Timing

Construction of the Project is anticipated to take approximately 6 months to complete. Construction is scheduled for the 2022 calendar year and would begin in May. All work within Arcade Creek would be conducted during the dry season (June – October).

Permits and Approvals Required

The following table provides a list of the permits, reviews, and approvals are required for Project construction:

Table 2. Project Permits and Approvals

Agency	Permit/Approval	Status
Caltrans/FHWA	Approval of NEPA Categorical Exclusion (CE)	Follows approval of technical studies
U.S. Army Corps of Engineers (Corps)	Section 404 Nationwide Permit	Application to follow release of IS/MND
Central Valley Regional Water Quality Control Board	Section 401 Water Quality Certification	Application to follow release of IS/MND
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Application to follow release of IS/MND
United States Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species	Consultation Completed on 7/31/2018
Central Valley Flood Protection Board	Central Valley Flood Protection Plan	Application to follow release of IS/MND
City of Sacramento Department of Transportation	Tree Removal Permit	Application to follow release of IS/MND

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not, by itself, constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services; and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the Initial Study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed Project. This section also discusses agricultural resources and the effect of the Project on these resources.

Discussion

Land Use

The Project site is located within the boundaries of the 2035 General Plan and the Sacramento County Arden Arcade Community Plan (City of Sacramento, 2015a; Sacramento County, 1980). The land adjacent to and north of the Project site is designated for parks land use in the 2035 City General Plan and has been zoned as parks and recreation (City of Sacramento, 2015a).The land adjacent to and south of the Project site is designated as low density residential in the 2030 Sacramento County General Plan, while the area south of the proposed staging area is designated for medium density residential, and commercial and offices land uses (Sacramento County, 1980; Sacramento County, 2011). Existing land uses immediately adjacent to the Auburn Boulevard and Winding Way intersection include Del Paso Regional Park, the Heritage Oaks Outpatient Center, and several single-family residential developments.

According to the Del Paso Park Master Plan (2002), Del Paso Regional Park is approximately 624.4 acres in area, and includes the Haggin Oaks Golf Complex, Sacramento Horsemen's Association, Discovery Museum of Sacramento, and Harry Renfree Field developments. Additionally, the Del Paso Park Master Plan (2002) indicates that more than 100 acres of riparian forest, oak woodland-savanna, and vernal pools are permanently preserved within the designated Natural Habitat Area (West), Natural Habitat Area (East), and Longview Oaks Natural Habitat Area of the park.

The Project consists of the replacement of an existing bridge structure. The Project would not divide an established community, nor would it interfere with the activity associated with surrounding land uses. The Project does not propose any new land uses for the Project site and would result in operational activities similar to existing conditions. The Project would not result in any land use conflicts. The Project would not conflict with the 2035 General Plan, the 2030 Sacramento County General Plan, the Arden Arcade Community Plan, or any other applicable land use plan, policy, or regulations.

According to the California Department of Fish and Wildlife (CDFW) map of California natural community conservation plans, the Project site is not within the jurisdiction of an adopted Habitat Conservation Plan or Natural Community Conservation Plan (CDFW, 2019). The closest natural community conservation plan areas include the South Sacramento Habitat Conservation Plan, located approximately 11.5 miles to the southeast, and the Natomas Basin Habitat Conservation Plan, located approximately 9.5 miles to the northwest (City of Sacramento et al., 2003; Sacramento County, 2018). Therefore, Project implementation would not conflict with the provisions of an approved regional conservation plan.

Population and Housing

According to the 2019 Census data, Sacramento County has a population of approximately 1,552,058 individuals and a total of 578,937 housing units, and the City has a population of approximately 513,624 individuals and a total of 194,998 housing units (U.S. Census Bureau, 2019). The Project site is located within census tract number 59.01 and census tract number 75.04 and is adjacent to census tract number 60.03. Census tract 59.01 has a population of 5,965 people and a total of 2,585 housing units, census tract 75.04 has a population of 2,230 people and a total of 886 housing units, and census tract 60.03 has a population of 4,519 and a total of 1,963 housing units (U.S. Census Bureau, 19).

The Project proposes to replace an existing structurally deficient bridge and improve operations of the Auburn Boulevard and Winding Way intersection, and would not result in the displacement of housing, the displacement of people, or the permanent creation of new jobs or housing that would induce substantial population growth. The proposed replacement bridge would maintain two through lanes in each travel direction and would add an additional left turn lane from westbound Auburn Boulevard to Winding Way to improve intersection operations. The Project would not extend Auburn Boulevard or result in increased capacity along the roadway. Therefore, the Project would not indirectly induce substantial population growth in the surrounding community.

Agricultural Resources

The Master EIR discussed the potential impact of development under the 2035 General Plan on agricultural resources. See Master EIR, Chapter 4.1. In addition to evaluating the effect of the General Plan on sites within the City, the Master EIR noted that to the extent the 2035 General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized. The Master EIR concluded that the impact of the 2035 General Plan on agricultural resources within the City was less than significant.

The Project site does not contain lands designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance) (CDOC, 2018). The site is not zoned for agricultural uses, and there are no Williamson Act contracts that affect the Project site (CDOC, 2016). No existing agricultural or timber-harvest uses are located on or in the Project site vicinity (CDOC, 2018). Project site development would result in no impacts on agricultural resources.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
1. AESTHETICS Would the Project: A) Create a source of glare that would cause a public hazard or annoyance?			X
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

ENVIRONMENTAL SETTING

A Scenic Resource Evaluation and Visual Impact Assessment Technical Memorandum were prepared for this Project and are available for review at the City Community Development Department during business hours (DHA, 2017d).

Visual character is a description (not evaluation) of a site, and includes attributes such as form, line, color, and texture. Visual quality is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape, and this analysis rates visual quality as high, moderate, or low. Visual sensitivity is the level of interest or concern that the public has for maintaining the visual quality of a particular aesthetic resource and is a measure of how noticeable proposed changes might be in a particular scene and is based on the overall clarity, distance, and relative dominance of the proposed changes in the view, as well as the duration that a particular view could be seen.

The Project is located on Auburn Boulevard, a principal north/south multi-arterial road within the City that continues north past the City limits. The Project is within the Arden Arcade Community Plan and Special Study Areas which encompasses approximately 33 square miles, 5.7 square miles are within the City limits (Sacramento County, 1980; City of Sacramento, 2015). Del Paso Regional Park, which is owned and operated by the City, is located on the northern side of the existing bridge, and the riparian corridor of Arcade Creek provides aesthetic value to the Project vicinity. Arcade Creek is an undeveloped urban stream that consists of a mixture of oak woodland, native riparian, and ornamental urban forest trees.

STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the Project impacts to aesthetics are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the Project would:

- substantially interfere with an important scenic resource or substantially degrade the view of an existing scenic resource; or
- create a new source of substantial light or glare that is substantially greater than typical urban sources and could cause sustained annoyance or hazard for nearby sensitive receptors.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR described the existing visual conditions in the General Plan for the City and the potential changes to those conditions that could result from development consistent with the 2035 General Plan. See Master EIR, Chapter 4.13, Visual Resources.

The Master EIR identified potential impacts for light and glare (Impact 4.13-1) and concluded that impacts would be less than significant.

ANSWERS TO CHECKLIST QUESTIONS

A, B) **No Additional Significant Effect.** The Project would not increase existing street lighting. Roadway traffic and lighting from private properties are the primary sources of existing nighttime light in the project vicinity. The Project would not result in any changes that would introduce new sources of light and glare (e.g., billboards, streetlamps, security lighting) to the Project vicinity. The Project would include the addition of a left turn pocket from westbound Auburn Boulevard to Winding Way; however, traffic lighting as a result of the additional turn lane would be similar to the existing conditions at the intersection and would not be expected to have a significant viewer response.

C) **No Additional Significant Effect.** The Project site is located in a predominately residential, recreational, and commercial setting and is representative of the general visual character of the Sacramento area outside the urban core. The existing bridge and its replacement cross Arcade Creek.

According to the Caltrans California Scenic Highway Mapping System, there are no eligible state scenic highways or designated national scenic byways within the Project vicinity (Caltrans, 2011). State Route (SR) 160 is the closest officially designated state scenic highway to the Project site and is located over 13 miles southwest of the Project.

The visual character of the Project would be compatible with the existing visual character of the Auburn Boulevard corridor. The Project consists of replacing an existing bridge and would create minimal changes to the existing view. The bridge replacement project would not change or interrupt the current land uses in the area (roadway, bridge, residential, recreational, and commercial) with the addition of new land uses. Additionally, the Project would not affect the pattern elements (bridge design or roadway dominance) of the Project site.

Viewer groups include roadway users and adjacent residents, park visitors, and hospital patients and staff. Viewer sensitivity to the roadway changes is considered low because the Project would result in minimal aesthetic changes compared to existing conditions. Additionally, the proximity of urban development to the site and the fact that views of the bridge by adjacent viewer groups are largely shielded by vegetation further reducing viewers sensitivity to Project improvements (DHA, 2017c). Project construction would result in temporary changes in local visual conditions due to staging of construction equipment, clearing, and grading at the Project area; however, any disturbed soils would be contoured to smoothly transition into existing grades and to mimic adjacent landforms and would be revegetated with appropriate native vegetation upon the completion of construction.

The Project would be constructed with aesthetic design elements similar to the existing bridge; the replacement bridge would be built with design features that complement the surrounding area and minimize obstructions to views of Arcade Creek, pursuant to City 2035 General Plan (City General Plan) objective ER 7.1.5 (City of Sacramento, 2015). Any area disturbed during construction would be revegetated with appropriate native vegetation to minimize erosion and visual contrast with existing vegetation.

Since the Project would be along the same alignment as the existing bridge and proposed roadway and bridge improvements would be similar in visual character to existing conditions, there would be minimal

impacts to existing views. The Project would not substantially degrade the existing visual character or quality of the site and its surroundings and would not be expected to have a significant viewer response.

MITIGATION MEASURES

There are no required mitigation measures for this Project relating to Aesthetics.

FINDINGS

The Project would have no additional Project-specific environmental effects relating to Aesthetics.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. AIR QUALITY Would the Project: A) Result in construction emissions of NO_x above 85 pounds per day?			X
B) Result in operational emissions of NO_x or ROG above 65 pounds per day?			X
C) Violate any air quality standard or have a cumulatively considerable contribution to an existing or projected air quality violation?		X	
D) Result in PM_{10} and $PM_{2.5}$ concentrations that exceed SMAQMD requirements?		X	
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?		X	
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?		X	
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Conflict with the Climate Action Plan?			X

ENVIRONMENTAL SETTING

The City is located within the Sacramento Valley Air Basin (SVAB), which is bounded by the North Coast Mountain Ranges to the west and the Northern Sierra Nevada Mountains to the east. The terrain in the valley is flat and approximately 25 feet above sea level.

Hot, dry summers and mild, rainy winters characterize the Mediterranean climate of the Sacramento Valley. Throughout the year, daily temperatures may range by 20 degrees Fahrenheit, with summer highs often exceeding 100 degrees and winter lows occasionally below freezing. Average annual rainfall is about 20 inches and snowfall is very rare. Summertime temperatures are normally moderated by the presence of the "Delta breeze" that arrives through the Carquinez Strait in the evening hours.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants in the valley. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap cooler air and pollutants near the ground.

The warmer months in the SVAB (May through October) are characterized by stagnant morning air or light winds, and the Delta breeze that arrives in the evening out of the southwest. Usually, the evening breeze transports a portion of airborne pollutants to the north and out of the Sacramento Valley. During about half

of the day from July to September, however, a phenomenon called the "Schultz Eddy" prevents this from occurring. Instead of allowing the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. This phenomenon exacerbates the pollution levels in the area and increases the likelihood of violating federal or state standards. The Schultz Eddy normally dissipates around noon when the Delta breeze begins.

The Project site is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD) (ARB, 2012). The SMAQMD is one of 35 regional air quality districts in California and has jurisdiction over all of Sacramento County and Yolo County, the eastern portion of Solano County, the southern portion of Sutter County, and parts of western El Dorado County and Placer County. Air quality districts are public health agencies whose mission is to improve the health and quality of life for all residents through effective air quality management strategies. Sacramento County is also a member of the Sacramento Area Council of Governments (SACOG), a regional planning association that also includes the counties of El Dorado, Placer, Sacramento, Yolo, and Yuba, and is located within the SVAB. SACOG is responsible for regional transportation planning within its jurisdiction and preparing air quality conformity analyses, documents that are used to bring regional emissions into compliance with federal and state air quality standards pursuant to the Clean Air Act.

The Clean Air Act requires the U.S. Environmental Protection Agency (U.S. EPA) to set National Ambient Air Quality Standards (NAAQS) for major pollutants that could be detrimental to the environment and human health. The California Ambient Air Quality Standards (CAAQS) are the California state equivalent of the NAAQS. An air basin is in "attainment" (compliance) when the levels of the pollutant in that air basin are below NAAQS and CAAQS thresholds.

The Project site is located in an area that is currently in federal nonattainment for ozone (severe) and PM_{25} (U.S. EPA, 2020). The Project site is located in an area that is currently in state nonattainment for ozone, $PM_{2.5}$, and PM_{10} (ARB, 2019).

California's primary legislation for reducing greenhouse gas (GHG) emission is the California Global Warming Solutions Act (Assembly Bill 32). The City adopted its Climate Action Plan on February 12, 2012 and incorporated it into the General Plan on March 3, 2015 (City of Sacramento, 2015a). The Project site is also under the jurisdiction of SMAQMD and SACOG for GHG emissions thresholds and compliance with existing plans.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the proposed Project would result in the following impacts that remain significant after implementation of 2035 General Plan policies:

- Construction emissions of NO_x above 85 pounds per day;
- Operational emissions of NO_x or ROG above 65 pounds per day;
- Violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Any increase in PM_{10} concentrations, unless all feasible Best Available Control Technology (BACT) and Best Management Practices (BMPs) have been applied, then increases above 80 pounds per day or 14.6 tons per year;
- CO concentrations that exceed the 1-hour State ambient air quality standard (i.e., 20.0 ppm) or the 8-hour State ambient standard (i.e., 9.0 ppm); or
- Exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to GHG emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations. See Master EIR, Chapter 4.2.

Policies in the 2035 General Plan in the Environmental Resources chapter were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the SMAQMD to meet state and federal air quality standards; Policy ER 6.1.2 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policies ER 6.1.4 and ER 6.1.11 call for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of TAC as a potential effect. Policies in the 2035 General Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.4, requiring coordination with SMAQMD in evaluating exposure of sensitive receptors to TACs and impose appropriate conditions on projects to protect public health and safety; as well as Policy LU 2.7.5 requiring extensive landscaping and trees along freeways fronting elevation and design elements that provide proper filtering, ventilation, and exhaust of vehicle air emissions from buildings.

The Master EIR found that GHG emissions that would be generated by development consistent with the 2035 General Plan would contribute to climate change on a cumulative basis. Policies of the General Plan identified in the Master EIR that would reduce construction related GHG emissions include ER 6.1.2, ER 6.1.11 requiring coordination with SMAQMD to ensure feasible mitigation measures are incorporated to reduce GHG emissions, and ER 6.1.15. The 2035 General Plan incorporates the GHG reduction strategy of the 2012 Climate Action Plan (CAP), which demonstrates compliance mechanisms for achieving the City's adopted GHG reduction target of 15 percent below 2005 emissions by 2020. Policy ER 6.1.8 commits the City to assess and monitor performance of GHG emission reduction efforts beyond 2020 and progress toward meeting long-term GHG emission reduction goals. ER 6.1.9 also commits the City to evaluate the feasibility and effectiveness of new GHG emissions reduction measures in view of the City's longer-term GHG emission reductions goal. The discussion of GHG emissions and climate change in the 2035 General Plan Master EIR are incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

The Master EIR identified numerous policies included in the 2035 General Plan that addressed GHG emissions and climate change. See Draft Master EIR, Chapter 4.14, and pages 4.14-1 et seq. The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.

ANSWERS TO CHECKLIST QUESTIONS

A) **No Additional Significant Environmental Effect.** A project can meet SMAQMD's screening threshold for NO_x emissions for the construction phase of a project if a project is 35 acres or less in size

(SMAQMD, 2009). However, SMAQMD states that the screening level for NO_x can be used for a project if the construction phase of a project does not include: buildings more than four stories tall; demolition activities; major trenching activities; a construction schedule that is unusually compact, fast-paced, or involve more than two phases (e.g., grading. Building construction, and architectural coatings) occurring simultaneously; cut-and-fill operations; or require import or export of soil materials that would require a considerable amount of haul truck activity (SMAQMD, 2009).

The Project would require demolition of the existing bridge but does not require any of the other project aspects listed. In addition, roadway construction emissions modeling of the Project predicts that the Project would have the potential to emit a maximum of 70.91 lbs/day of NO_x (**Appendix C**) (Huss, K. and Grant, J., 2020). The assumptions were made during modeling that: 1) the types and quantities of construction equipment typical of bridge projects would be used, 2) all on-road equipment used for the Project would be year 2010 or newer models, 3) all construction equipment would meet 20 percent NO_x and 45 percent exhaust particulate matter (PM) reduction requirements, and 4) the construction area is anticipated to be and would remain less than 35 acres in size.

B) **No Additional Significant Environmental Effect.** The Project would not increase capacity along Auburn Boulevard, it is not anticipated to increase long-term air pollutant within the Project area. The additional left turn lane from westbound Auburn Boulevard to Winding Way is intended to reduce idling time at the intersection and is anticipated to reduce long-term air pollutant within the Project area. Implementation of the Project is anticipated to temporarily affect local air pollutants during the 6-month construction period; however, the Project would not affect long-term air pollutant emissions in the area or stationary air pollutant sources, and construction emissions would be short term in nature and would adhere to thresholds establish in the 2035 General Plan (Huss, K. and Grant, J., 2020). Therefore, the Project would not result in operational levels of NO_x or ROG.

C) **No Additional Significant Environmental Effect.** The Project would result in minimal air pollutant emissions during the short-term duration of construction and would not result in an increase in operational activities or emissions. The Project is consistent with the City General Plan air quality objectives, the Sacramento Climate Action Plan (incorporated into General Plan Appendix B), SMAQMD air quality plans, SACOG's air quality objectives, and applicable federal and state air quality plans. The Project would not increase long-term traffic levels and there would be no operational impacts to air quality. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (ozone, $PM_{2.5}$, and PM_{10}).

D) **Effects Can Be Mitigated to Less than Significant.** A project can meet SMAQMD's screening threshold for $PM_{2.5}$ and PM_{10} of a project if the project is 35 acres or less in size (SMAQMD, 2009). The Project is less than 35 acres in size, and thus meets SMAQMD's screening thresholds for $PM_{2.5}$ and PM_{10}.

Standard mitigation measures are required by SMAQMD as BACT/BMPs in project construction and would be implemented for this Project (SMAQMD, 2010). Implementation of **Mitigation Measure AQ-1** and **Mitigation Measure AQ-2** would ensure that potential violations to $PM_{2.5}$ and PM_{10} SMAQMD standards during construction would remain less than significant.

E) **Effects Can Be Mitigated to Less than Significant.** The Project would not increase capacity along Auburn Boulevard and therefore is not anticipated to increase long-term air pollutants within the Project area. The additional left turn lane from westbound Auburn Boulevard to Winding Way is intended to reduce idling time at the intersection and is anticipated to reduce long-term air pollutants within the Project area. Implementation of the Project is anticipated to temporarily affect local air pollutants during the six-month construction period. Roadway construction emissions modeling of the Project predicts that the Project would have the potential to emit a maximum of 66.70 lbs/day of CO (Huss, K. and Grant, J., 2020). The assumptions were made during modeling that: 1) the types and quantities of construction equipment typical of bridge projects would be used, 2) all on-road equipment used for the

Project would be year 2010 or newer models, 3) all construction equipment would meet 20 percent NO_x and 45 percent exhaust particulate matter (PM) reduction requirements, and 4) construction is anticipated to be and would remain less than 35 acres in size.

Implementation of **Mitigation Measure AQ-1** would ensure that potential impacts of CO during construction would remain less than significant.

F, G) **Effects Can Be Mitigated to Less than Significant.** The Project is located within a residential area near air quality sensitive receptors (e.g., residential dwellings, park users, medical facilities, and schools). The closest residential dwellings are located approximately 150 feet from the Project site, while park users could be located directly adjacent to the Project area. The Epic Bible College and Graduate School is located approximately 0.15 miles from the Project site and the Heritage Oaks Hospital is located approximately 50 feet northeast of the bridge replacement site.

The Project would not result in long term operational impacts greater than existing conditions and would therefore not result in an increase in criteria pollutants or TAC emission levels that could negatively impact nearby sensitive receptors. In addition, the Project is not expected to increase average daily traffic level on the bridge or induce population growth in the Project vicinity and therefore would not result in increased emissions. Project construction would be temporary, lasting six months, and this brief exposure period is less than the two-year exposure period typically assumed for health risk analysis for small construction projects, and the three-year exposure period assumed for PM_{10} and CO hotspot analysis (Caltrans, 2017). Therefore, the Project is not expected to result in significant impacts to nearby sensitive receptors.

Implementation of **Mitigation Measure AQ-1** and **Mitigation Measure AQ-2** would ensure than construction phase emissions from ROG and diesel would have a less-than-significant impact on nearby sensitive receptors.

H) **No Additional Significant Environmental Effect.** The City of Sacramento Climate Action Plan (CAP) was adopted February 14, 2012 and included GHG reduction targets, strategies, and specific actions intended to guide City development. In 2015, the CAP was incorporated into the 2035 General Plan. Both documents establish a goal of reducing community GHG emissions by 15 percent below 2005 baseline levels by 2020, and to strive to reduce community emissions by 49% percent and 83% percent by 2035 and 2050, respectively. Neither document identifies GHG policies specific to individual City projects or developments within the City.

The purpose of this Project is to remove the existing structurally deficient structure and replace it with a new bridge designed to current structural and geometric standards while minimizing adverse impacts to Arcade Creek and the surrounding park and residential land uses. As the Project would not increase capacity along Auburn Boulevard, the Project would not increase roadway facilities or service capabilities that would induce unplanned growth or remove an existing obstacle to growth. Consequently, the Project construction is considered small, short-term in nature, and would not generate substantial air quality (including GHG emission) pollutant concentrations as discussed in the Air Quality section. The Project would not increase long-term traffic levels and there would be no operational impacts associated with GHG emissions.

Road construction emissions modeling performed for the Project predicts that the Project would produce approximately 15.695.44 lbs/day (375.90 metric tons/year) of carbon-dioxide equivalent (Huss, K. and Grant, J., 2020). This amount is less than the 1,100 metric tons/year threshold for the construction phase of construction projects. The assumptions were made during modeling that: 1) the types and quantities of construction equipment typical of bridge projects would be used, 2) all road equipment used for the Project would be year 2010 or newer models, 3) all construction equipment would meet 20 percent NO_x and 45 percent exhaust particulate matter (PM) reduction requirements, and 4) that construction is anticipated to be and would remain less than 35 acres in size.

The Project would not increase long-term traffic levels and there would be no operational impacts associated with GHG emissions; therefore, the operations of the Project would have no additional significant environmental effect on the City's CAP. Additionally, the Auburn Boulevard/Winding Way intersection operations improvements are expected to reduce idol times at the intersection and would be consistent with goals and strategies established in the City CAP for achieving GHG reduction targets. The construction of the proposed Project has the potential to temporarily increase GHG emissions at the Project site; however, this increase small, short-term in nature, and would not generate substantial air quality (including GHG emission) pollutant concentrations. Project construction emissions would be below the 1,100 metric tons per year threshold established by SMAQMD and would have no additional significant environmental effect on the City's CAP or its reduction goals.

MITIGATION MEASURES

Mitigation Measure AQ-1: The Contractor shall implement the following measures and SMAQMD-recommended enhanced exhaust emission control ~~enhanced exhaust~~ practices during Project construction:

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1].
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
- ~~The Project representative shall s~~Submit to the lead agency and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
- Use of 2010 or newer diesel engines for all on-road haul trucks associated with Project construction.
- ~~The Project representative shall p~~Provide a plan for approval by the lead agency and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction Project, including owned, leased, and subcontractor vehicles, will achieve a Project-wide fleet-average 20 percent NO_x reduction and 45 percent PM_{10} and $PM_{2.5}$ reduction compared to the most recent California Air Resources Board fleet average.
- ~~The Project representative shall ensure that~~Prevent emissions from all off-road diesel-powered equipment used on the Project site ~~do not~~from exceeding 40 percent capacity for more than three minutes in any one hour.

SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other SMAQMD, state, or federal rules or regulations.

Mitigation Measure AQ-2: The contractor shall implement the following measures and SMAQMD-recommended ~~enhanced~~ fugitive PM dust control practices during Project construction:

- Water all exposed surfaces two times daily or with adequate frequency for continued moist soil. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads~~Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site~~. Do not overwater to the extent that sediment flows off the site.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 miles per hour.
- Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas.
- Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established.
- Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the site.
- Treat site accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of SMAQMD shall also be visible to ensure compliance.

FINDINGS

Environmental effects of the Project relating to Air Quality can be mitigated to a less-than-significant level.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
3. BIOLOGICAL RESOURCES Would the Project: A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?		X	
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?		X	

ENVIRONMENTAL SETTING

Prior to human development, the natural habitats within the region included perennial grasslands, riparian woodlands, oak woodlands, and a variety of wetlands including vernal pools, seasonal wetlands, freshwater marshes, ponds, streams, and rivers. Over the last 150 years, agriculture, irrigation, flood control, and urbanization have resulted in the loss or alterations of much of the natural habitat within the City limits. Non-native annual grasses have replaced the native perennial grasslands, many of the natural streams have been channelized, much of the riparian and oak woodlands have been cleared, and most of the marshes have been drained and converted to agricultural or urban uses.

Though the majority of the City is developed with residential, commercial, and other urban development, valuable plant and wildlife habitat still exists. These natural habitats are located primarily outside the City boundaries in the northern, southern, and eastern potions of the City, but also occur along river and stream corridors and on a number of undeveloped parcels. Habitats that are present in the City include annual grasslands, riparian woodlands, oak woodlands, riverine, ponds, freshwater marshes, seasonal wetlands, and vernal pools.

The Project lies within the Yolo-American Basins ecological subsection, an area consisting of nearly level to very gently sloping stream channels, levees, overflow basins, and alluvial fans. Fluvial erosion and deposition are the main geomorphic processes. The Sacramento River overflows onto parts of this area and overflowed onto most of the area when it flooded before being controlled by dams, artificial levees, and diversions. Streams drain toward the Sacramento River on alluvial fans and parallel to it in overflow basins. All but the larger streams are generally dry during the summer. There are no lakes, but there is temporary ponding in overflow basins. The Yolo-American Basin is characterized by emergent aquatic communities and needlegrass grasslands. The annual average precipitation at the National Climatic Data Center Sacramento Executive Airport weather station (047630) is 17.24 inches. Precipitation occurs primarily from October through April. Elevation of the Project vicinity ranges between 60 and 80 feet above mean sea level.

DATA SOURCES/METHODOLOGY

The Auburn Boulevard over Arcade Creek Bridge Replacement Natural Environment Study (NES) and Biological Assessment (BA) were prepared for the Project and are available for review at the City Community Development Department during business hours (DHA, 2018; Dewberry | Drake Haglan, 2020). These documents provide an evaluation of biological resources conducted to determine whether any special-status plant or wildlife species or associated sensitive habitat occurs within the Project site. Data on the potential for special-status species and habitats known in the area was obtained from the CDFW California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IpaC) website, the National Oceanic and Atmospheric Administration (NOAA) Fisheries West Coast Region Species Lists, and the California Native Plant Society's (CNPS) Inventory of Rare Plants (DHA, 2018; Dewberry | Drake Haglan, 2020). Maps and aerial photographs of the Project area and surrounding areas were reviewed. A field survey was conducted on September 14, 2015 to determine the habitats present. The biological study area (BSA) is defined as the area surveyed for biological resources in the NES and the BA.

HABITATS OF CONCERN

The Project is located in the Central Valley, an area characterized by vast agricultural regions and dotted with numerous population centers, including the City. Topography in the Central Valley is generally flat, with localized steeper slopes, particularly along the highly incised banks of Arcade Creek. Arcade Creek is the primary aquatic feature within the Project site and flows intermittently throughout the year which are generally supplemented by urban runoff and landscape irrigation.

Riparian habitats are sensitive natural communities because they are regulated by CDFW under Section 1602 of the California Fish and Game Code for the purpose of protecting fish and wildlife resources.

The Project would create temporary and permanent impacts to riverine, valley foothill riparian, ruderal, and urban habitats; total combined permanent and temporary impacts would equal less than 2.5 acres (Dewberry | Drake Haglan, 2020).

SPECIAL STATUS PLANT SPECIES

Sanford's Arrowhead (*Sagittaria sanfordii*). Sanford's arrowhead is listed by the California Native Plant Society as being fairly endangered in California, meaning that 20 to 80 percent of the known occurrences are threatened. Sanford's arrowhead is a rhizomatous, emergent herb found in marshes and swamps from 0 to 2,132 feet in elevation. Sanford's arrowhead is known to occur in Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties; however, this species is believed to be extirpated from southern California and mostly extirpated from the Central Valley. Sanford's arrowhead blooms from May to October. The unnamed tributary to Arcade Creek provides potentially suitable habitat for Sanford's arrowhead; however, this species was not observed within the Project Impact Areas nor areas directly adjacent to the Project Impact Area during the September 14, 2015 site visit (DHA, 2018; Dewberry | Drake Haglan, 2020).

SPECIAL STATUS AQUATIC AND SEMIAQUATIC SPECIES

Central Valley Steelhead (*Oncorhynchus mykiss*). Central Valley Distinct Population Segment (DPS). The Central Valley DPS of steelhead trout was listed as federally threatened on March 19, 1998. A recovery plan was drafted by NOAA Fisheries for steelhead in 2009. Arcade Creek does not provide suitable spawning or rearing habitat for this species most of the year due to its lack of water during most of the year, urban setting, and sandy substrate (DHA, 2018; Dewberry | Drake Haglan, 2020). However, the East Main Drainage Canal has been known to be utilized by both juvenile and adult steelhead as a migratory path to eastern Placer County streams, such as Dry Creek, Miners, and Secret Ravine, so there is the possibility for transients to utilize Arcade Creek for foraging if water levels are high enough (DHA, 2018).

Western Pond Turtle (*Emys marmorata*). The western pond turtle is a California species of special concern. Western pond turtles range throughout the state of California, from southern coastal California and the Central Valley, east to the Cascade Range and the Sierra Nevada. Western pond turtles occur in a variety of permanent and intermittent aquatic habitats, such as ponds, marshes, rivers, streams, and ephemeral pools. Arcade Creek does not provide suitable habitat for this species most of the year due to the lack of water during most of the year, lack of suitable basking structure, heavy canopy shading, lack of forage (aquatic vegetation, fish, and amphibians), and urban setting. Although Arcade Creek within the BSA ~~is very poor habitat~~does not provide suitable basking or foraging habitat, it does provide a potential movement corridor for western pond turtles. No western pond turtles were observed during the September 14, 2015 site visit (DHA, 2018; Dewberry | Drake Haglan, 2020).

SPECIAL STATUS TERRESTRIAL SPECIES

Nesting Songbirds and Raptors. Swainson's hawk (*Buteo swainsoni*) is a state-listed threatened species under the California Endangered Species Act (CESA). Potential Swainson's hawk nesting habitat is present within the large valley oak and walnut trees within the Project BSA and within 0.25 miles from the Project BSA (DHA, 2018; Dewberry | Drake Haglan, 2020). The Project BSA is a disturbed corridor located within an urban setting and does not support grassland habitat or agricultural fields that provide suitable foraging area for Swainson's hawk.

The white-tailed kite (*Elanus leucurus*) is a year-round resident in central California and is considered to be a fully protected species. The large walnut and oak trees which occur within the Project BSA could provide potential nesting areas for white-tailed kite; however, there is a low potential for white-tailed kites to nest near the Project BSA because the species is sensitive to human presence and typically does not nest in urban areas (DHA, 2018; Dewberry | Drake Haglan, 2020).

The purple martin (*Progne subis*) is a California species of special concern and is the largest swallow in North America. The Auburn Boulevard Bridge does not contain weep holes that would provide suitable nesting habitat for purple martin; however, the large mature trees within the riparian corridor along Arcade Creek and within Del Paso Park could provide suitable nesting habitat as numerous cavities were observed within the large oak trees (DHA, 2018; Dewberry | Drake Haglan, 2020). In addition, there are numerous bird boxes scattered throughout Del Paso Park and several are located within the Project BSA.

No Swainson's hawks, white-tailed kites, or purple martins were observed during the field survey conducted on September 14, 2015.

Pallid bat (*Antrozous pallidus*). The pallid bat is designated as a state species of special concern. Suitable roosting and overwintering habitat was observed within the Project BSA at the bridge and within the large walnut and oak trees. Based upon the presence of potential roosting bat habitat, there is a moderate potential for roosting bats to be found within the Project BSA (DHA, 2018; Dewberry | Drake Haglan, 2020). During the site visit on September 14, 2015, no bats were observed but signs of bats (e.g., guano or urine staining) were observed under the Auburn Boulevard Bridge (Dewberry | Drake Haglan, 2020).

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions, or potential thereof, would result with implementation of the proposed Project:

- Creation of a potential health hazard, or use, production, or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or

- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, "special-status" has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the CESA (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by USFWS, or as species of special concern to California Department of Fish and Wildlife (CDFW);
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.3 of the Master EIR evaluated the effects of the 2035 General Plan on biological resources within the City. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy ER 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy ER 2.1.11 requires the City to coordinate its actions with those of the CDFW, USFWS, and other agencies in the protection of resources.

The Master EIR discussed biological resources in Chapter 4.3. The Master EIR concluded that policies in the general plan, combined with compliance with the CESA, Natomas Basin HCP (when applicable) and CEQA, would minimize the impacts on special-status species to a less-than-significant level (see Impact 4.3-1) and that the general plan policies, along with similar compliance with local, state, and federal regulation, would reduce impacts to a less-than-significant level for habitat for special-status invertebrates, birds, amphibians and reptiles, mammals, and fish (Impacts 4.3-3-6).

Given the prevalence of rivers and streams in the incorporated area, impacts to riparian habitat are a common concern. Riparian habitats are known to exist throughout the City, especially along the Sacramento River and American River and their tributaries. The Master EIR discussed impacts of development adjacent to riparian habitat that could disturb wildlife species that rely on these areas for shelter and food and could also result in the degradation of these areas through the introduction of feral animals and contaminants that are typical of urban uses. CDFW regulates potential impacts on lakes, streams, and associated riparian (streamside or lakeside) vegetation through the issuance of Lake or Streambed Alteration Agreements (SAA) (per Fish and Game Code Section 1602) and provides guidance to the City as a resource agency. While there are no federal regulations that specifically mandate the protection of riparian vegetation, federal regulations set forth in Section 404 of the Clean Water Act address areas that potentially contain riparian-type vegetation, such as wetlands.

The General Plan calls for the City to preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources (Policy ER 2.1.5) and wetlands (Policy ER 2.1.6) and requires habitat assessments and impact compensation for projects (Policy ER 2.1.10). The City has adopted a standard that requires coordination with state and federal agencies if a project has the potential to affect other species of

special concern or habitats (including regulatory waters and wetlands) protected by agencies or natural resource organizations (Policy 2.1.11).

Implementation of 2035 General Plan Policy ER 2.1.5 would reduce the magnitude of potential impacts by requiring a 1:1 replacement of riparian habitat lost to development. While this would help mitigate impacts on riparian habitat, large open areas of riparian habitat used by wildlife could be lost and/or degraded directly and indirectly through development under the 2035 General Plan. Given the extent of urban development designated in the General Plan, the preservation and/or restoration of riparian habitat would likely occur outside of the City limits. The Master EIR concluded that the permanent loss of riparian habitat would be a less-than-significant impact. (Impact 4.3-7)

SUMMARY OF ANALYSIS UNDER THE CITY OF SACRAMENTO MUNICIPAL CODE- TREE PLANTING, MAINTENANCE, AND CONSERVATION

The City recognizes that the planting and preservation of trees enhances the natural scenic beauty, increases life-giving oxygen, promotes ecological balance, provides natural ventilation, air filtration, and temperature, erosion, and acoustical controls, increases property values, improves the lifestyle of residents, and enhances the identity of the City. City Code Chapter 12.56 includes provisions to protect City trees. Removal of city trees and private protected trees for the purpose of a public project is regulated by City Code Section 12.56.040. A City tree is defined as any tree, the trunk of which, when measured four and one-half feet above ground, is partially or completely located in a city park, on real property the city owns in fee, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip, or alley. Private protected trees are defined as trees designated to have special historical value, special environmental value, or significant community benefit, and are located on private property. Private protected trees are:

- All native trees at 12-inch diameter at standard height (DSH: 4.5 feet above ground surface). Native trees include: Coast, Interior, Valley and Blue Oaks, CA Sycamore and Buckeye.
- All trees at 32-inch DSH with an existing single family or duplex dwelling.
- All trees at 24-inch DSH on undeveloped land or any other type of property such as commercial, industrial, and apartments.
- The City Council may require, where appropriate, the replacement of City tree and private protected trees proposed for removal.

ANSWERS TO CHECKLIST QUESTIONS

A) **Effects Can Be Mitigated to Less than Significant.** Construction of the bridge abutments and rock slope protection has the potential to result in the release of sediment or other construction materials in Arcade Creek. Project construction also has the potential to result in the accidental release of hazardous materials typically used during bridge demolition and construction (DHA, 2017a; DHA, 2017d). Implementation of **Mitigation Measure HAZ-1** and the required permits will ensure that effects would remain less than significant.

B) **Effects Can Be Mitigated to Less than Significant.** Impacts to plant species could include loss of the plant species through trampling or excavation if present within the construction zone or damage to sensitive root systems through compaction could occur outside of the construction zone. Implementation of **Mitigation Measure BIO-1** would reduce potential impacts to Sanford's arrowhead to a less-than-significant level.

Dewatering (if necessary) and other construction activities could potentially impact Central Valley steelhead and western pond turtle, if they are present in this segment of Arcade Creek during Project construction. Potential impacts include direct harm to these species that could potentially come into contact with construction personnel and/or equipment. Additionally, the removal of riparian vegetation could negatively contribute to loss of stream channel shading.

Mortality or injury of western pond turtle in aquatic and upland habitats could occur by crushing with construction equipment or if fish or turtles are displaced from cover, exposing them to predators. Trenches left open during the night could trap turtles moving through the construction area. Lastly, the movement of equipment within uplands and construction of bridge structures could crush turtles or nests containing eggs or young of nest migratory birds.

Noise associated with construction activities involving heavy equipment operation that occurs during the breeding season (generally between February 1 and August 31) could disturb nesting Swainson's hawk, white-tailed kite, purple martin, and other raptors and songbirds if an active nest is located near these activities. Potential impacts could include abandonment of nest sites and the mortality of young. Any disturbance that causes nest abandonment and subsequent loss of eggs or developing young at active nests located near the Project site would violate the CESA (1 FGC §§ 2800, 3503, and 3503.5) and the Migratory Bird Treaty Act (MBTA).

In addition, the removal of trees within these habitats could potentially impact nesting Swainson's hawk, white-tailed kite, purple martin, and other raptors and songbirds if they begin nesting prior to construction. Construction-related activities could directly affect active nest sites through tree removal or cause indirect impacts such as nest abandonment.

Existing structure demolition and tree removal would remove potentially suitable bat roosting habitat. If bats are roosting under the bridge at the time of demolition or in trees during grubbing and clearing activities, there is the potential to result in mortality to individual bats. In addition, if bats are roosting under the existing bridge, they would have to relocate to another suitable roost site, potentially exposing them to increased stress and chance of predation.

Implementation of **Mitigation Measure BIO-2,** and **Mitigation Measure BIO-3**, would ensure that potential impacts to special-status aquatic and semi-aquatic wildlife species would be less than significant.

Implementation of **Mitigation Measure BIO-1, Mitigation Measure BIO-4, Mitigation Measure BIO-5,** and **Mitigation Measure BIO-6,** would ensure that potential impacts to special-status terrestrial wildlife species would be less than significant.

C) **Effects Can Be Mitigated to Less than Significant.** According to the CDFW map of California regional conservation plans, the Project site is not within the jurisdiction of an adopted Habitat Conservation Plan or Natural Community Conservation Plan (CDFW, 2017). The closest conservation plan jurisdictional areas are the South Sacramento Habitat Conservation Plan, located approximately 11.5 miles to the southeast, and the Natomas Basin Habitat Conservation Plan, located approximately 9.5 miles to the northwest (City of Sacramento et al., 2003; Sacramento County, 2018). Therefore, Project implementation would not conflict with the provisions of an approved local, regional, or state habitat conservation plan.

Valley foothill riparian habitat occurs in association with Arcade Creek and a tributary to Arcade Creek and is found within Del Paso Park with an annual grassland understory. Characteristic species that comprise the upper story of riparian habitat in the Project site include Fremont cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*), ~~canyon live oak (*Quercus chrysolepis*),~~ arroyo willow (*Salix lasiolepis*), bigleaf maple (*Acer macrophyllum*), box elder (*Acer negundo*), and California walnut (*Juglans hindsii*) (DHA, 2018; Dewberry | Drake Haglan, 2020a). Since valley oaks are less water-tolerant than willows and cottonwoods, valley oaks generally maintain a slightly higher topographic position than other species in this vegetation type and intergrade with the mixed oak woodland habitat type. The understory consists of dense shrubs and herbaceous species, including Himalayan blackberry (*Rubus armeniacus*), annual grasses and poison oak (*Toxicodendron diversilobum*) (DHA, 2018; Dewberry | Drake Haglan, 2020a).

Riverine habitat is also present within Arcade Creek and the unnamed tributary within Del Paso Regional Park. The slopes of the banks of Arcade Creek and the unnamed tributary are primarily vegetated with Himalayan blackberry, dallisgrass (*Paspalum sp.*), Johnson grass (*Sorghum halepense*), rabbitsfoot

grass (*Polypogon monspeliensis*), common cocklebur (*Xanthium strumarium*), giant reed (*Arundo donax*), tall flatsedge (*Cyperus eragrostis*), and sandbar willow (*Salix exigua*) (Dewberry | Drake Haglan, 2020a). Substrate within Arcade Creek and the unnamed tributary consist primarily of sand and small cobbles. Both features were completely dry at the time of the survey with patches of dallisgrass and common cocklebur growing within the channel (Dewberry | Drake Haglan, 2020a).

New bridge structure construction would result in permanent direct impacts to valley foothill riparian habitat, as well as understory herbaceous species. The loss of riparian vegetation can have adverse effects on aquatic habitat in Arcade Creek. Riparian habitat reduces sedimentation and erosion along stream banks as well as providing an important movement corridor for wildlife, overhanging canopies provide shade, and riparian vegetation offers habitat for invertebrates that are a source of food for aquatic and terrestrial life.

Project implementation may permanently impact approximately 0.02 acres of Arcade Creek due to the placement of rock slope protection below the ordinary high-water mark. In addition, the Project would temporarily impact approximately 0.06 acres of Arcade Creek (DHA, 2017b). Temporary impacts to Arcade Creek would result from stream diversion and removal of the existing bridge. The following permits are expected to be obtained prior to construction: a Clean Water Act Section 404 Nationwide Permit from the Army Corps of Engineers (Corps); a Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board; and a California Fish and Game Code 1600-1602 Streambed Alteration Agreement from the CDFW. All permit requirements will be implemented to ensure impacts to waters of the U.S. are less than significant.

Project implementation would involve the removal of up to ~~30~~ 34 trees within the Project site. Of the ~~30~~ 34 trees that have been identified for removal during construction, up to ~~24~~ 30 trees meet the criteria set forth under City Code Chapter 12.56 as either a City tree or a private protected tree, and ~~7~~ 10 of the 30 trees are located within the boundary of Del Paso Regional Park. The majority of the trees to be removed are native species, including bigleaf maple (*Acer macrophyllum*), box elder (*Acer negundo*), walnut (*Juglans sp.*), western sycamore (*Platanus racemose*), blue oak (*Quercus douglasii*), valley oak (*Quercus lobate*), interior live oak (*Quercus wislizeni*), and Gooding's willow (*Salix gooddingii*). A detailed description of the tree resources on the Project site, and the trees to be removed can be found in the Project Tree Survey Report (**Appendix D).** Removal of City trees with a DSH of 4 inches or more for a public project requires city council approval pursuant to City Code Section 12.56.040. Implementation of **Mitigation Measure BIO-7** would ensure that trees on the Project site that are not to be removed would be protected from construction activities.

The Project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. The Project site is not located within an established native resident or migratory wildlife corridor or wildlife nursery site. However, as discussed above, Arcade Creek may provide a movement corridor for wildlife to disperse. Construction noise could temporarily alter foraging and transportation patterns of resident wildlife species and temporarily disrupt wildlife movement within the Project site. However, the disturbance would only occur during Project construction and the disruption of wildlife movement would be temporary in nature. Implementation of **Mitigation Measure BIO-2** would ensure than this impact would remain less than significant.

MITIGATION MEASURES

Mitigation Measure BIO-1: *Conduct Preconstruction Surveys for Sanford's arrowhead.* A qualified biologist shall conduct a preconstruction survey for Sanford's arrowhead during the plant's blooming period (May to October) within 30 days prior to construction. If Sanford's arrowhead is not found, then no further measures are necessary.

If Sanford's arrowhead is found in the Project site BSA, CDFW will be notified at least ten days prior to dewatering or construction impacts in the vicinity of Sanford's arrowhead in accordance with the California

Native Plant Protection Act of 1977 (2 FGC § § 1900-1913). In consultation with CDFW, the City shall develop a Sanford's arrowhead avoidance, minimization, or relocation plan. The plan shall evaluate project impacts on the project area's population of Sanford's arrowhead and propose a scientifically supported response procedure. ~~to allow sufficient time to transplant the individuals to a suitable location~~

Mitigation Measure BIO-2: *Protect Central Valley Steelhead.* Implement the following measures, subject to approval during acquisition of regulatory permits, to avoid take of steelhead:

- Plan instream construction activities for periods between June 1 and October 31, or periods when the work area is dry to avoid conflicts with fish. If surface water is present when instream construction must be conducted, implement stream diversion such that diverted surface flow is returned to Arcade Creek immediately downstream of the work area. Prior to any work within surface water, a qualified fisheries biologist shall complete a survey for steelhead.
- If steelheads are found in the work area, cease all work affecting Arcade Creek and notify NOAA Fisheries and CDFW.
- Place the diversion berm and pipeline prior to beginning diversion of surface flow.
- Use non-erosive materials (e.g., sandbags, sheet pile, rubber/plastic tubes) to construct the diversion berm.
- Use an energy dissipater and sediment trap (fiber rolls, or equivalent) at the diversion pipeline outlet.
- Store away excavated material from the low-flow channel to prevent incidental discharge.
- Stabilize any streambed access points using a pad of coarse aggregate underlain by filter cloth to reduce erosion and tracking of sediment.
- Re-compact disturbed areas of the stream channel to original conditions prior to restoring flow to the original channel.
- Do not discharge silty or turbid water produced from dewatering or other activities into Arcade Creek until filtered or allowed to settle.
- Prohibit the use of heavy equipment in flowing water.
- Restore and/or enhance riparian habitat removed by the Project to improve fish habitat.
- To compensate for permanent impacts on aquatic habitat, the City shall purchase credits from a Corps and/or CDFW approved mitigation bank at a minimum 1:1 ratio (one acre of habitat replaced for every one acre filled).

Mitigation Measure BIO-3: *Protect Western Pond Turtle.* Implement the following efforts to reduce potential Project effects to western pond turtle:

- If dewatering is necessary, dewater the construction area prior to construction activities. Notify CDFW prior to dewatering activities.
- No more than two weeks prior to the commencement of ground-disturbing activities, the City shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the Project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles. The results of these surveys will be documented in a technical memorandum that will be submitted to CDFW (if turtles are documented).
- Implement standard construction BMPs throughout construction to avoid and minimize adverse effects to the water quality within the Project site.

Mitigation Measure BIO-4: *Conduct Preconstruction Surveys for Swainson's Hawk.* Prior to construction, surveys will be conducted by a qualified biologist to determine presence/absence of nesting Swainson's hawk in and within 0.50 miles of the Project site according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFG, 2000). If no Swainson's hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson's hawk nests are found, the City shall develop an avoidance plan in consultation with CDFW ~~CDFW will be consulted~~ regarding

measures to reduce the likelihood of forced fledging of young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a no-work zone around the nest until the young have fledged as determined by a qualified biologist.

Mitigation Measure BIO-5: *Protect White-Tailed Kite, Purple Martin, and other Migratory Birds and Raptors.*

Nests in Trees and Shrubs

- **Avoid Active Nesting Season.** Implement the following to ensure impacts to tree and shrub nesting species remain less than significant.
    - If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31).
    - If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), perform preconstruction surveys prior to the start of Project activities.
- **Conduct Preconstruction Nesting Bird Surveys.** If construction, grading, or other Project-related activities are schedule during the nesting season (February 1 to August 31), preconstruction surveys for other migratory bird species shall take place no greater than 15 days prior to the start of project activities. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos; 1,320 feet for fully protected species such as white-tailed kite~~less than 14 days and no more than 30 days prior to the beginning of construction within 250 feet of suitable nesting habitat~~. If the preconstruction surveys do not identify any nesting migratory bird species within areas potentially affected by construction activities, no further mitigation will be required.
- **Avoid Active Bird Nest Sites.** If active nests are found, avoid project-related construction impacts by establishing appropriate no-work buffers to limit Project related construction activities near the nest site. Determine the size of the no work buffer zone to avoid take of nesting birds in consultation ~~with~~with a qualified biologist and ~~the~~ CDFW although use a 500-foot buffer when possible. Delineate the no work buffer zone with highly visible temporary construction fencing or flagging. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. Do not commence project-related construction activity within the no work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active. If it is determined during surveys or project implementation that project activities may impact white-tailed kite, project personnel shall fully avoid any impacts that may result in take if white-tailed kite is observed to be utilizing the project area or adjacent area.

Nests in Structures other than the Bridge

- The contractor shall protect migratory birds, their occupied nests, and their eggs as specified in a contract special provision. Nesting is typically February 1 to August 31, or as determined appropriate in consultation with the Project biologist.
- When evidence of migratory bird nesting that may be adversely affected by construction activities is discovered, or when birds are injured or killed as a result of construction activities, immediately stop work and notify the resident engineer. Do not resume work until the resident engineer provides written notification that work may begin in this location.

Nests on or Underneath the Bridge

- Remove all existing unoccupied nests on the bridge during the non-nesting season (September 1 to January 31).
- Keep the bridge free of nests, using exclusionary netting or other approved methods, until completion of construction activities.
- Inspect all listed structures for nesting activity a minimum of three days per week; no two days of inspection will be consecutive. A weekly log will be submitted to the Project biologist. The contractor

will continue inspections until bridge removal and completion of construction on new bridge. If an exclusion device were found to be ineffective or defective, the contractor will complete repairs to the device within 24 hours. If birds were found trapped in an exclusion device, the contractor will immediately remove the birds in accordance with USFWS guidelines.

- Submit for approval working drawings or written proposals of any exclusion devices, procedures, or methods to the Project biologist before installing them.
- Install exclusion devices in a method that will not damage permanent features of the new bridge structure. Approval by the Project biologist of the working drawings or inspection performed by the authorized Project biologist will in no way relieve the contractor of full responsibility for deterring nesting.

Mitigation Measure BIO-6: *Protect Pallid Bat and Other Roosting Bat Species.* During April through September, before construction begins, a qualified biologist will survey trees within the Project work limits and identify any snags, hollow trees, or other trees with cavities that may provide suitable roosting habitat for pallid bat and other bat species. If no suitable roosting trees are found, construction may proceed. If snags, hollow trees, or other trees with suitable cavities are found, examine them for roosting bats. If bats are not found and there is no evidence of use by bats, construction may proceed. If pallid bats, or other bat species, are found or evidence of use by bats is present, consult CDFW for guidance on measures to avoid or minimize disturbance to the colony. Additional measures may include excluding bats from the tree before their hibernation period (mid-October to mid-March) and before construction begins. Mitigate bat habitat by incorporating suitable bat roosting habitat within the bridge design and/or the planting of mature trees that provide suitable roosting habitat within the Project vicinity. This mitigation measure shall be incorporated into the Construction Contract Specifications. If Caltrans 2015 Construction Contract Specifications are used for this Project, then this mitigation measure shall be incorporated as a special provision into section 14-6.03A of the Construction Contract Specifications.

Mitigation Measure BIO-7: *Preserve Trees and Riparian Habitat.*

- Retain current riparian vegetation and oaks to the extent feasible. Establish a Tree Protection Zone (TPZ) around any tree or group of trees to be retained. Delineate the TPZ by an International Society of Arboriculture certified arborist. Define the TPZ as a full and regular circle around the tree with a radius the length of the longest horizontal branch plus 1 foot. Demarcate the TPZ of all protected trees using fencing that will remain in place for the duration of construction activities.
- Limit construction-related activities within the TPZ to those activities that can be done with methods such as hydroexcavation, pneumatic excavation or hand-digging. Do not cut any roots greater than two inches in diameter unless doing so under the direct supervision and direction of an International Society of Arboriculture certified arborist. Do not operate heavy equipment or machinery within the TPZ. Prohibit grading within the TPZ. Do not store any construction materials, equipment, or heavy machinery within the TPZ.
- Include planting of valley foothill/floodplain/mixed riparian and oak woodland habitat as mitigation as appropriate.
- Coordinate with the City arborist and local advocacy groups in the development of a replanting/restoration plan.
- Implement a planting plan as detailed in a replanting/restoration plan approved by the City arborist and the CDFW. The restoration plan will include performance standards for revegetation that will ensure successful restoration of the onsite riparian areas.
- The City shall protect other wetlands, riverine, and associated riparian habitats located in the Project vicinity by installing protective fencing. Install protective fencing along the edge of construction areas including temporary and permanent access roads where construction will occur within 200 feet of the edge of wetland and riverine habitat (as determined by a qualified biologist). Mark the location of fencing in the field with stakes and flagging and show on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Erect signs along the protective fencing at a maximum spacing of one sign per 50 feet of fencing. The signs shall state: “This area is environmentally

sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment." The signs shall be clearly readable at a distance of 20 feet and shall be maintained for the duration of construction activities in the area.

- Where riparian vegetation occurs along the edge of the construction easement, the City shall minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire plant. Conduct trimming per the direction of a biologist and/or certified arborist.
- To compensate for the permanent removal of riparian vegetation associated with the bridge construction, the City shall ~~purchase credits from a Corps and/or CDFW-approved mitigation bank at a~~ mitigate at a minimum 3:1 ratio (three acres of habitat replaced for every one acre removed). Compensation may take the form of permanent protection, enhancement, or restoration of suitable habitat, purchase of credits at a Corps and CDFW-approved bank or conservation site, or through funding an equivalent project through a local organization.

Mitigation Measure HAZ-1: *Develop a Health and Safety Plan (HASP).* Please see Section 7, Hazards.

FINDINGS

All additional significant environmental effects of the Project relating to Biological Resources can be mitigated to a less-than-significant level.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
4. CULTURAL RESOURCES Would the Project: A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	
C) Disturb any human remains, including those interred outsides of formal cemeteries?		X	

ENVIRONMENTAL SETTING

A cultural resource is a broad term that includes prehistoric, historic and traditional cultural properties that reflect the physical evidence of past human activity across the landscape. Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under various federal, state, and local regulations, including CEQA and the National Historic Preservation Act of 1966 (NHPA). Cultural resources that are listed on or eligible for inclusion in the National Register of Historic Places (National Register) are also considered eligible for listing in the California Register of Historical Resources (California Register).

The City and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the City. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for archaeological resources, as identified in the 2035 General Plan Background Report, are located within close proximity to the Sacramento River, the American River, and other watercourses.

The 2035 General Plan land use diagram designates a wide swath of land along the American River as Parks, which limits development and impacts on sensitive prehistoric resources. High sensitivity areas may be found in other areas related to the ancient flows of the rivers, with differing meanders than found today. Recent discoveries during infill construction in downtown Sacramento have shown that the downtown area is highly sensitive for both historic- and prehistoric-period archaeological resources. Native American burials and artifacts were found in 2005 during construction of the new City Hall and historic period archaeological resources are abundant downtown due to the evolving development of the area and, in part, to the raising of the surface street level in the 1860s and 1870s, which created basements out of the first floors of many buildings.

Archaeological and historic investigations were conducted for the Project in 2017 resulting in a negative Archaeological Survey Report for the Auburn Boulevard over Arcade Creek Bridge (24C-0081) Improvement Project, Sacramento County, California (PAR, 2017). A Supplemental Historical Property Search Report was completed in 2020 to assess the added construction staging ~~a~~ areas within the paved parking lots of Renfree Field and the Powerhouse Science Center, ~~rea in the paved parking lot of the Powerhouse Science Center~~ and this report also resulted in negative findings (PAR, 2020). The ASR, HPSR, and Supplemental HPSR are available for review at the City. Some information from the ASR and HPSR is considered confidential under the California Public Resources Code (PRC) and CFRs in compliance to the Freedom of Information Act and the California Public Records Act in order to protect the

integrity of tribal cultural resources, and, thus, would not be available to the public (7 PRC 21082.3 and 36 CFR 800.11).

PAR conducted a cultural resources investigation for the proposed project which included a record search at the California Historical Resources Information System (CHRIS) North Central Information Center (NCIC), background research, Native American consultation, and pedestrian survey. No prehistoric or historic archaeological resources were recorded during the pedestrian survey conducted by PAR. Record searches conducted at CHRIS NCIC did not identify any resources within the APE. Search of the Sacred Lands File by the Native American Heritage Commission (NAHC) was negative and none of the tribal members consulted for the proposed Project indicated that they were aware of resources within the APE.

No historic resources were identified during the survey. The existing Auburn Boulevard Bridge over Arcade Creek was constructed in 1927 and widened in 19670. The existing bridge is coded as a Category 5 "not eligible" by Caltrans for listing on the National Register.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if construction and/or implementation of the proposed project would result in one or more of the following:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5; or
- Directly or indirectly destroy a unique paleontological resource; or
- A substantial adverse change in the significance of such resources.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources. See Chapter 4.4.

General Plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10), and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.14). Demolition of historic resources is deemed a last resort (Policy HCR 2.1.15).

The Master EIR concluded that implementation of the 2035 General Plan would have a significant and unavoidable effect on historic resources and archaeological resources. (Impacts 4.4-1, 2)

ANSWERS TO CHECKLIST QUESTIONS

A) **Effects Can Be Mitigated to Less than Significant.** No historical or archaeological resources, as defined in the California Code of Regulations (14 CCR §15064.5), are present in the project site.

The Project would not affect any known historical or archaeological resources; however, ground disturbing activities have potential to disturb previously undiscovered cultural resources, which may be historical in nature. Compliance with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act for the Project would ensure that if cultural resources are discovered during construction, they are protected and properly treated and evaluated. Discovered resources

would be avoided or recovered, at the discretion of the City-contracted archaeologist in consultation with the City, if they are considered historical resources. Impacts on the known historical resource is considered less than significant with implementation of Mitigation Measure CUL 1Therefore, the Project would result in a less-than-significant impact with mitigation incorporated.

B) **Effects Can be Mitigated to Less than Significant.** Paleontological resources are the fossilized evidence of organisms preserved in the geologic record. According to the Society of Vertebrate Paleontology standards and guidelines, sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present (SVP, 2010).

An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved and it meets at least one of the following criteria:

- A type specimen (i.e., the individual from which a species or subspecies has been described);
- A member of a rare species;
- A species that is part of a diverse assemblage;
- A skeletal element different from, or a specimen more complete than, those now available for its species; or
- A complete specimen.

A search of the University of California Museum of Paleontology (UCMP) collections database identified 126 occurrences in Sacramento County (UCMP, 2017). Based on the database search, no paleontological recourses have been identified in the Project site. Sediments, referable as the Riverbank Formation, are known to contain fossil remains of Late Pleistocene vertebrates such as bison, camels, and horses. The nearest fossil vertebrates are from Teichert gravel pit on State Route (SR) 16 in southeastern Sacramento County (PAR, 2017).

Given the high level of previous disturbance within the Project site, construction activities are not likely to destroy, either directly or indirectly, a unique paleontological resource or site or geological feature. Impacts would be reduced to less than significant levels with the **i**mplementation of **Mitigation Measure CUL-1.**

C) **Effects Can be Mitigated to Less than Significant**. Based upon a background research and survey, no human remains are known to exist within the Project site (PAR, 2017). In the unlikely event that human remains are discovered, work within the area would be stopped and the appropriate County coroner would be notified immediately. In the event that the bone most likely represents a Native American, the NAHC would be notified so that the most likely descendants (MLD) can be identified and appropriate treatment can be implemented. To ensure a less-than-significant impact in the event of an accidental discovery, **Mitigation Measure CUL-2** shall be implemented.

MITIGATION MEASURES

Mitigation Measure CUL-1: *Follow Protocol for the Unanticipated Discovery of Cultural Resources.* If buried cultural materials are encountered during construction, work will be stopped in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the Project changes to include areas not previously surveyed. The need for archaeological and Native American monitoring during the remainder of the Project will be reevaluated by the archaeologist as part of the treatment determination. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are precontact or Native American in nature. In considering any suggested mitigation by the archaeologist in order to mitigate impacts to cultural resources, the Project proponent will determine whether avoidance is

necessary and feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.

Mitigation Measure CUL-2: *Follow Protocol for the Unanticipated Discovery of Human Remains.* If buried cultural materials are encountered during construction, work will be stopped in that area until a qualified archaeologist can evaluate the nature and significance of the find. In the event that human remains or associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the City coroner will be contacted immediately. If the human remains are determined to be Native American, the coroner will notify the NAHC, who will notify and appoint an MLD. The MLD will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects.

FINDINGS

All additional significant environmental effects of the Project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
5. ENERGY Would the Project: A) Result in a potentially significant environmental impact due to wasteful. Inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?			X
B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X

ENVIRONMENTAL SETTING

The 2035 General Plan includes policies (see 2035 General Plan Energy Resources Goal U 6.1.1) and related policies to encourage energy-efficient technology by offering rebates and other incentives to commercial and residential developers, coordination with local utility providers and recruitment of businesses that research and promote energy conservation and efficiency.

The Master EIR discussed energy conservation and relevant general plan policies in section 6.3 (page 6-3). The discussion concluded that with implementation of the General Plan policies and energy regulation (e.g., Title 24) development allowed in the General Plan would not result in the inefficient, wasteful, or unnecessary consumption of energy.

The Master EIR concluded that implementation of state regulations, coordination with energy providers, and implementation of General Plan policies would reduce the potential impacts from construction of new energy production or transmission facilities to a less-than-significant level.

ANSWERS TO CHECKLIST QUESTIONS

A,B) **No Additional Significant Environmental Effect**. The Project is a bridge replacement project and would not result in operational increased use of energy or in uses of energy during construction beyond what would be typical for other types of development within the City. The Project does not include the addition of lighting or structures within the Project area that would result in additional energy consumption within the City. The Master EIR concluded that implementation of state regulation, coordination with energy providers and implementation of General Plan policies would reduce the potential impacts from construction of new energy production or transmission facilities to a less-than-significant level.

FINDINGS

There are no additional significant environmental effects of the Project relating to Energy.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
6. GEOLOGY AND SOILS Would the Project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?			X

ENVIRONMENTAL SETTING

The Project is located in Pleistocene-age alluvium consisting of fine-grained outwash materials locally capped by fan terraces. The Geologic Map of the Sacramento Quadrangle shows the Project site within the Riverbank Formation which consists of semi-consolidated gravel, sand, and silt which is overlain by surficial alluvium or basin deposits (Helley and Harwood, 1985; Wagner, D. L. et. Al, 1981). The Riverbank Formation, which was formed between 130,000 and 450,000 years ago, has three soil units, the lower of which is mapped in the Project site (Helley and Harwood, 1985). The lower Riverbank Formation was likely deposited by glacial runoff from the Sierra Nevada Mountains due to the high arkose content of the soil (Helley and Harwood, 1985).

The 2015 United States Department of Agriculture (USDA) National Conservation Service Soil Survey of Sacramento County, California identified four soil types in the Project site:

- Liveoak sandy clay loam, zero to two percent slopes. This is a moderately well-drained alluvium derived from granite. It is not a hydric soil and has a slight erosion potential of 86 tons per acre per year (USDA, 2006).
- Bruella sandy loam, zero to two percent slopes. This is a well-drained low terrace alluvium fan derived from granite with moderately slow permeability. It is not a hydric soil and has a slight erosion potential of 86 tons per acre per year (USDA, 2003).
- San Joaquin-Urban land complex, zero to three percent slopes. This is a moderately well drained alluvial terrace derived from granite. It is not a hydric and has a high runoff potential (USDA, 2006).
- Fiddyment – Urban land complex, one to eight percent slopes. This is a well-drained hill derived from residuum weathered from sedimentary rock. It is not a hydric soil and has a high runoff potential (USDA, 2006).

These soils are primarily underlain by lean clay and clayey sand soils at the Project site (WRECO, 2016).

The California Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature to regulate activities related to mineral resource extraction. The act requires the prevention of adverse environmental effects caused by mining, the reclamation of mined lands for alternative land uses, and the elimination of public health and safety hazards from the effects of mining activities. The California Geological Survey (formerly California Division of Mines and Geology) classifies the regional significance of mineral resources in accordance with SMARA. Mineral Resource Zones (MRZs) have been designated to indicate the significance of mineral deposits. A classification of MRZ-1 signifies an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence; MRZ-2 signifies an area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists; and MRZ-3 signifies an area where the significance of mineral deposits cannot be evaluated from existing

data. These designations are intended to preserve known mineral resources for future mining and to prevent encroachment of urban development that would compromise the resource's value.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources, and paleontological resources in the City. Implementation of identified policies in the 2035 General Plan reduced all effects to a less-than-significant level. Policy EC 1.1.1 requires regular review of the City's seismic and geologic safety standards and Policy EC 1.1.2 requires geotechnical investigations for project sites to identify and respond to geologic hazards, when present.

ANSWERS TO CHECKLIST QUESTIONS

No Additional Significant Impact. The area surrounding the Project site is composed of residential and built-up lands. According to the United States Geological Survey (USGS) Earthquake Hazards Program, there are no fault or earthquake zones near the Project site. According to the Department of Conservation, the Project is not located within the Alquist-Priolo Earthquake Fault Zone or Landslide and Liquefaction Zones (CDOC, 2015). The Project site is approximately equidistant from the Bangor, Knoxville, Mount George, and Fairfield South earthquake zones, which are each located approximately 45 miles outside of the Project vicinity.

Liquefaction of granular soils can be caused by strong vibratory motion due to earthquakes. Soils that are highly susceptible to liquefaction are medium to fine-grained, loose, granular, and saturated at depths of less than 50 feet below the ground surface. Liquefaction of soils causes surface distress, loss of bearing capacity, and settlement of structures that are founded on the soils. According to the USDA National Soil Conservation Service (2015), the four soil types in the Project site including Liveoak sandy loam, Bruella sandy loam, San Joaquin-Urban land complex, and Fiddyment – Urban land complex (USDA, 2015). These soils are moderately well-drained to well drained with very slow to high infiltration rates. The nearest landslide and liquefaction zones, Jersey Island and Bouldin Island, are located approximately 48 miles outside of the Project vicinity. Thus, the Project site has very low liquefaction susceptibility.

According to the Department of Conservation California Geological Survey (CGS) Information Warehouse (2015), landslides do not occur in the Project vicinity. The probability of landslides occurring on the Project site is very low. The Project is a bridge replacement and would not expose additional people or structures to substantial adverse effects. The new bridge would comply with the Caltrans Seismic Design Criteria, which would minimize the potential effects of ground shaking.

Construction activities would involve earth moving activities which include soil disturbance, excavation, cutting/filling, demolition, paving, and grading activities which have the potential for surface water runoff to carry sediment. However, the Project is anticipated to be constructed when Arcade Creek is dry, and the creek would be dewatered by pumping and temporary cofferdams if the Project is constructed while there is still water within the creek. The Project site covers a relatively small area and will not result in substantial loss of topsoil. Project operations would not result in a significant increase in the potential for soil erosion over existing conditions. With adherence to the City of Sacramento Grading, Erosion, and Sediment Control Ordinance (Chapter 15.88 of the Sacramento City Code), potential erosion impacts from construction activities would be less than significant.

Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). All soils types in the Project site are sandy loams, which are not considered expansive soil types. Therefore, the bridge replacement project would not expose individuals or properties to adverse effects associated with expansive soil.

The Project does not involve the connection to sewer systems or septic tanks.

The Riverbank Formation is not known to be mineral resource, and there are no known mineral resources within or adjacent to the Project site. The Project is not located near a mineral resource recovery site delineated on the General Plan or any other land use plan with jurisdiction over the Project site (City of Sacramento, 2015a; City of Sacramento, 2015b).

MITIGATION MEASURES

There are no required mitigation measures for this Project relating to Geology and Soils.

FINDINGS

The Project would have no additional Project-specific environmental effects relating to Geology and Soils.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
7. HAZARDS AND HAZARDOUS MATERIALS Would the Project: A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?		X	
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?		X	
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?		X	

ENVIRONMENTAL SETTING

An Initial Site Assessment (ISA) was prepared on behalf of the City and is available at the City Community Development Department during business hours (DHA, 2017a). The ISA identifies Recognized Environmental Conditions (RECs) for the project site that may adversely affect roadway and/or bridge construction or right-of-way acquisition. A database report was obtained from Environmental Database Resources, Inc. consisting of information compiled from various government records, such as Geotracker, National Priorities List and solid waste information system, for information regarding the Project area. Based on the results of the records review, no potential RECs have been found in the Project site (DHA, 2017a). A REC does not normally include asbestos and lead-based paint (LBP), as they go above and beyond the normal scope of an ISA and are also typically construction waste management or worker safety issues. However, Caltrans has a process for evaluating asbestos and lead within a project site.

Federal and State regulations and regulations adopted by the SMAQMD (for asbestos only) apply to the identification and treatment of asbestos and LBP during demolition and construction activities. Failure to comply with these regulations can result in violations and civil penalties under state and/or federal law. Furthermore, failure to comply with the regulations respecting asbestos may result in a Notice of Violation being issued by SMAQMD.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the Project would:

- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated effects of development on hazardous materials, emergency response, and aircraft crash hazards. See Chapter 4.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities and exposure of people to hazards and hazardous materials during the life of the general plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2035 General Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate), were effective in reducing the identified impacts.

ANSWERS TO CHECKLIST QUESTIONS

A – C) **Effects Can Be Mitigated to Less than Significant.** Project construction would potentially require the use of various types and quantities of hazardous materials. Hazardous materials that are typically used during construction that have the potential to contaminate soil and groundwater include, but are not limited to, hydraulic oil, diesel fuel, grease, lubricants, solvents, and adhesives. Although equipment used during construction activities could contain various hazardous materials, these materials would be used in accordance with standard best management practices (BMPs), the manufacturers specifications, and all applicable regulations. Project construction would not involve the routine storage or use of hazardous materials in the Project area.

According the 2017 ISA prepared for the Project, no known RECs or other known contamination have been recorded at the Project site. As stated above, if implemented, the Project has the potential to use a variety of hazardous materials. These materials would be stored, handled, and transported per federal, state, and local regulatory requirements. The 2017 Project ISA did not identify the potential for contamination to be present at the site and no known RECs or other known contamination sites; however, the report did indicate the potential for uncovering asbestos containing materials (ACMs) and LBP during Project construction. Avoidance, minimization, and/or mitigation measures are proposed as part of the Project for potential ACMs and LBP containing soils and materials that may be present at the Project site.

Asbestos: New uses of ACMs initiated for the first time were banned by the U.S. EPA in 1989. Revisions to regulations issued by the Occupational Safety & Health Administration (OSHA) on June 30, 1995, require that all thermal systems insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered presumed asbestos containing materials and treated accordingly. In order to rebut the designation as a presumed asbestos containing material, OSHA and the U.S. EPA require that these materials be surveyed, sampled, and assessed in accordance with the methodologies described in the Asbestos Hazard Emergency Response Act (40 CFR § 763). Surveying, sampling, and assessment should be completed prior to putting this Project out to bid. Potential asbestos containing materials have also been documented in the rail shim sheet packing, bearing pads, support piers, and expansion joint material of bridges. Because the Caltrans Historic Bridge Inventory and the Caltrans Local Agency Bridge List indicate that the Auburn Boulevard Bridge was built in 1927, there is the potential to encounter ACMs during demolition of the existing bridge structure (Caltrans, 2018). Furthermore, SMAQMD Advisory #16-02 states that the U.S. EPA has determined concrete is a suspect ACM.

Lead-based Paint: Lead has been used in commercial, residential, roadway, and ceramic paint; in electric batteries and other devises; as a gasoline additive; for weighting; in gunshot; and other purposes. It is recognized as toxic to human health and the environment and is widely regulated in the United States. Structures constructed prior to 1978 are presumed to contain LBP unless proven otherwise, although structures constructed after 1978 may also contain LBP. Because of the construction age of the existing bridge, there is the potential of lead-based paint to be present in the paint on the bridge, pavement striping, and thermoplastic paint on the roadway within the Project area. During construction, building materials associated with the bridge, thermoplastic, or pavement striping yellow paint would be abated by a California-

licensed abatement contractor and disposed of as a hazardous waste. Abatement and disposal of lead-based paint shall be conducted in compliance with the 2015 Caltrans Standard Specifications and the 2015 Caltrans Revised Specifications for section 14-11, including sections 14-11.12 and 14-11.13.

Aerially-Deposited Lead (ADL): Lead was used as a gasoline additive prior to 1987. Therefore, ADL is commonly located adjacent to heavily traveled roadways in service prior to 1987. Based on review of air photos and topographical maps, Auburn Boulevard was historically, and is currently, a major surface street within the City and County (DHA, 2017a). Due to its high average daily traffic (ADT) vehicular use, historic deposition of vehicle exhaust particulates containing lead may be above hazardous thresholds along Auburn Boulevard at the Project site. During construction, any existing hazardous materials that may be encountered could pose a hazard for construction workers and the environment. Construction workers typically are at the greatest risk for exposure to contaminated soil. Accidents or spills during transport of hazardous materials or wastes could have the potential to expose the public and the environment to these substances.

Implementation of **Mitigation Measure HAZ-1** and **Mitigation Measure HAZ-2** would be required to ensure there would not be a significant hazard to the public, construction personnel, or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during Project construction or operation.

There is one school within 0.25 miles of the Project site. The Epic Bible College and Graduate School is located approximately 0.15 miles northeast the Project site and is not anticipated to be impacted by the Project. This school campus includes one building and no outdoor facilities and the Project is anticipated to result in no additional significant environmental effect in regard to this facility. The closest compulsory schools to the Project site are Pasadena Avenue Elementary School, located approximately 0.3 miles south of the Project bridge site, and Arcade Spartans Middle School, located approximately 0.35 miles south of the Project staging area sites. The Project would result in no additional significant environmental effects in regard to these facilities.

The Project site is not included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DHA, 2017a). The closest water body that could be affected by the Project is Arcade Creek, which runs through the Project site; however, the Project would adhere to standard BMPs to protect water quality, which are discussed in the Hydrology and Water Quality section of this document.

To complete construction of the new bridge, the Project would require a full closure of Auburn Boulevard at Arcade Creek. A temporary traffic detour would be established that would direct public traffic around the project site; however, with the implementation of **Mitigation Measure PUB-1** this detour would not significantly interfere with an adopted emergency response plan or an adopted emergency evacuation plan with the implementation of appropriate traffic control measures (DKS, 2015b). The implementation of **Mitigation Measure PUB-1** would ensure that the Project's potential impacts to emergency access are less than significant.

The Project is a replacement of an existing bridge and will not expose additional people or structures to the threat of fire. Implementation of **Mitigation Measure PUB-1** would ensure that emergency access in the Project area is maintained throughout construction and that potential impacts to individuals by threat of fire are less than significant.

MITIGATION MEASURES

Mitigation Measure HAZ-1: *Develop a Health and Safety Plan (HASP).* Prior to start of construction, the City and its contractor shall prepare a HASP for the Project. The HASP shall describe appropriate procedures to follow in the event that any contaminated materials, soil, or groundwater is encountered during construction activities. Any unknown substances shall be tested, handled and disposed of in accordance with appropriate federal, state and local regulations. This mitigation measure shall be incorporated into the Construction Contract Specifications. If Caltrans 2015 Construction Contract

Specifications are used for this Project, then this mitigation measure shall comply with the Caltrans 2015 Standard Specifications and the Caltrans 2015 Revised Standard Specifications for section 14-11 of the Construction Contract Specifications.

Mitigation Measure HAZ-2: *Follow Protocol for Hazardous Materials.* A California-Certified asbestos consultant (CAC) or California-Certified Site Surveillance Technician (CSST), under the direction of a CAC, shall conduct a survey for asbestos containing materials prior to renovation or demolition (including concrete elements) and contractor shall submit a National Emission Standard for Hazardous Air Pollutants (NESHAP) notification to SMAQMD. Per the Asbestos NESHAP regulation, all "demolition activity" requires written notification even if there is no asbestos present. This notification shall be typewritten and postmarked or delivered no later than ten days prior to the beginning of the asbestos demolition or removal activity.

A California-Certified Lead Inspector/Assessor (I/A) or a California-Certified Sampling Technician (LST), under the direction of an I/A, shall conduct a survey for lead-based paint. If soil will be excavated, soil sampling should be performed by a licensed environmental professional. All survey results and reports shall be submitted to the City.

These mitigation measure shall be incorporated into the Construction Contract Specifications. If Caltrans 2015 Construction Contract Specifications are used for this Project, then this mitigation measure shall be incorporated as a special provision into section 14-11.01(A).

If hazardous materials are found, the following shall be required:

- Hazardous building materials associated with asbestos, paint on structures and paint on utilities shall be abated by a California-licensed abatement contractor and disposed of as a hazardous waste in compliance with 2015 Caltrans Standard Specification 14-11.12, 2015 Caltrans Standard Specification 14-11.13, SMAQMD Rule 902, and other federal and state regulations for hazardous waste.
- A Lead Compliance Plan shall be prepared by the contractor for the handling and disposal of LBP or lead in soil. The grindings (which consist of the roadway material and the yellow and white color traffic stripes) shall be removed and disposed of in accordance with the appropriate 2015 Caltrans Standard Specifications.
- A California-licensed lead contractor shall be required to perform all work that will disturb any lead-based paint as a result of planned or unplanned renovations in the Project area, including the presence of yellow traffic striping and pavement markings that may contain lead-based paint. All such material must be removed and disposed of as a hazardous material in compliance with 2015 Caltrans Standard Specification 14-11.12 and 14-11.13.

Mitigation Measure PUB-1: *Construction Period Emergency Access Plan.* Please see the Section 10, Public Services.

FINDINGS

All additional significant environmental effects of the project relating to Hazards can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
8. HYDROLOGY AND WATER QUALITY Would the Project: A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

ENVIRONMENTAL SETTING

A Preliminary Wetland Delineation and a Water Quality Technical Memorandum were prepared on behalf of the City and are available at the City Community Development Department during business hours (DHA, 2017b; DHA, 2017d).

Arcade Creek belongs to the Lower American Hydrologic Unit (HJUC 18020111) and is within the Sacramento River Basin. The Lower American Hydrologic Unit covers approximately 632 square miles and includes El Dorado and Placer counties. The Sacramento River Basin encompasses about 27,000 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Ranges and Trinity Mountains to the north, and the Sacramento-San Joaquin River Delta to the southeast. The Sacramento River Basin is the largest river basin in California, capturing on average approximately 22 million acre-feet of annual precipitation.

Arcade Creek is an intermittent stream and has the largest drainage basin of all the local Sacramento streams. It is approximately 16.2 miles long and drains an area of approximately 29.7 square miles (DHA, 2017b). It begins on the valley floor in the City of Orangevale and flows in a southwesterly direction, draining into the Natomas East Main Drainage Canal which empties into the Sacramento River. The Sacramento River is considered “traditional navigable water” under Section 404 of the Clean Water Act from its mouth to Keswick Dam, a distance of 301 miles.

Although Arcade Creek is mapped as a perennial stream on the Citrus Heights, CA USGS 7.5-minute Quadrangle and typically carries water throughout the year due to urban runoff from adjacent commercial and residential activities, the extreme drought conditions and water restrictions have changed Arcade Creek to an intermittent stream (DHA, 2017b). Arcade Creek is a tributary to the Sacramento River and occupies approximately 0.15 acres in the Project site with a total length of 381 feet.

Arcade Creek is located within the Sacramento Valley groundwater basin and the North American subbasin (Basin Number 5-21.64). The North American subbasin is bounded by Bear River to the north, Feather River to the west, and the Sacramento River to the south and is bounded to the east by a north-south line that extends from Bear River to south of Folsom Lake (City of Sacramento, 2015b). The general direction of drainage within the North American subbasin is west-southwest at an average grade of five percent.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan; or,
- Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.7 of the Master EIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 4.7-1, 4.7-2), and exposure of people to flood risks (Impacts 4.7-3). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1), comprehensive flood management (Policy EC 2.1.23), and construction of adequate drainage facilities with new development (Policy ER 1.1.1 to ER 1.1.10) were identified that the Master EIR concluded would reduce all impacts to a less-than-significant level.

ANSWERS TO CHECKLIST QUESTIONS

A) No Additional Significant Effect. Arcade Creek is the only body of water within the Project site. Arcade Creek is an intermittent stream located within the City. During periods of rainfall or runoff, Arcade Creek conveys flow to its confluence with the Sacramento River.

Project construction has the potential to expose bare soil and potentially generate other water quality pollutants that could be. Exposed to precipitation and subsequent entrainment in surface runoff to Arcade Creek. Prior to in-channel construction activities, the channel area where construction activities would occur would be dewatered through temporary cofferdams installed upstream and downstream from the construction site. Construction activities involving soil disturbance, excavation, cutting and filling, and grading activities could result in increased erosion and sedimentation to Arcade Creek and waters downstream. Construction materials such as asphalt, concrete, and equipment fluids could be exposed to precipitation and subsequent runoff. If precautions are not taken to contain contaminants, construction could produce contaminated stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality.

Project construction is anticipated to take between six and 16 months to complete, pending a final method of construction, with creek diversion work scheduled during the dry season between June 1 and October 31. The Project is subject to Construction General Permit Order No. 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ) requirements, which mandate preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The Project would comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit including preparing and implementing a SWPPP that identifies Project-specific BMPs to protect water quality during Project construction. SWPPP implementation, detailed below, would ensure that impact to water quality would remain less than significant. The following BMPs would be incorporated into the Project as part of the construction specifications:

- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water.
- Use a water truck or other appropriate measures to control dust on applicable access roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.
- Fuel and maintain vehicles in a specified area that is designated to capture spills. All fueling and maintenance of vehicles another equipment (including staging areas) will be located at least 65 feet from Arcade Creek and any other potential drainages on site.
- Do not store fuels and hazardous materials on site.
- Inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids.
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are expected to begin in the spring of 2019. If rains are forecasted during construction, additional erosion and sedimentation control measures would be implemented.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in stormwater pollution prevention practices.
- Revegetate disturbed areas in a timely manner to control erosion.

B) No Additional Significant Effect. According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center, the Project is located within the 100-year flood hazard Zone AE (FEMA, 2018); however, the Project would not construct housing or other structures that would result in the new exposure of people or structures to 100-year flood hazards nor would it place any structure that would redirect or impede flood flows. Similarly, the Project would not further expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a failure of a levee or dam, nor is it located near any tidally influenced water bodies or bodies of water that could be affected by a tsunami or seiche.

The Project would not construct a significant amount of new impervious surfaces that would impede surface water drainage into the soil (DHA, 2017d). No wells would be constructed; and construction activities would don't intercept or alter groundwater recharge, discharge, or flow conditions. Therefore, the Project would have a less-than-significant impact on groundwater resources.

The Project would not alter the course of Arcade Creek, nor would it alter the existing site drainage pattern. The Project is designed to replace the existing bridge structure with one that is similar in size and along a similar alignment. The site drainages are not expected to result in substantial on or offsite siltation or erosion.

The Project would don't substantially increase the amount or rate of surface runoff such that on- or off-site flooding would occur, nor would it create any additional features or change the surrounding land uses in such a way that would exceed the existing or planning stormwater drainage systems or provide substantial additional sources of polluted runoff (DHA, 2017d).

MITIGATION MEASURES

There are no required mitigation measures for this Project relating to Hydrology and Water Quality.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
9. NOISE Would the Project: A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?			X
B) Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project?			X
C) Result in construction noise levels that exceed the standards in the City of Sacramento general plan or Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

Noise is defined as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. A frequency weighting measure that simulates human perception is commonly used to describe noise environments and to assess impacts on noise-sensitive areas. It has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. The decibel (dB) notation used for sound levels describes a logarithmic relationship of acoustical energy; for example, a doubling of acoustical energy results in an increase of three dB, which is considered barely perceptible. A ten-fold increase in acoustical energy equals a 10 dBA change, which is subjectively like a doubling of loudness. **Table 3** below identifies decibel levels for common sounds heard in the environment.

Table 3. Typical A-weighted Noise Levels

Common outdoor activity	Noise level (dBA)	Common indoor activity
Jet flyover at 1,000 feet	110	Rock band
Gas lawnmower at three feet	100	
Diesel truck at 50 feet at 50 mph	90	Food blender at three feet
Noisy urban area, daytime	80	Garbage disposal at three feet
Gas lawnmower, 100 feet Commercial area	70	Vacuum cleaner at ten feet Normal speech at three feet
Heavy traffic at 300 feet	60	Large business office
Quiet urban daytime	50	Dishwasher next room
Quiet urban nighttime Quiet suburban nighttime	40	Theater, large conference room (background)
Quiet rural nighttime	30	Library Bedroom at night, concert hall (background)
	20	Broadcast/recording studio
	10	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans, 2013

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are equivalent A-weighted sound level over a given time period (Leq); average day-night 24-hour average sound level with a nighttime increase of 10 dBA to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL), also a 24-hour average that includes both an evening and a nighttime weighting. Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise with respect to public health because of sleep interference.

Noise within the City is regulated by the Environmental Constraints chapter of the City General Plan and the Sacramento City Code 8.68. Sacramento City Code 8.68.080 (Exemptions) states that "noise sources due to the erection (including excavation), demolition, alteration, or repair of any building or structure between the hours of 7 AM and 6 PM, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, and between 9 AM and 6 PM on Sunday; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order."

Sacramento County, located adjacent to the Project, also has a similar exemption in its County Code at 6.68.090 (Exemptions). This exemption states: "noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of 8 PM and 6 AM on weekdays and Friday commencing at 8 PM through and including 7 AM on Saturday; Saturdays commencing at 8 PM through and including 7 AM on the next following Sunday and on each Sunday after the hour of 8 PM."

Land uses within and adjacent to the Project site are predominately parks and recreation and residential land uses. During Project construction, noise from construction activities may intermittently dominate the

noise environment in the immediate area of construction. Noise from construction activities are assumed to attenuate at a rate of 6 dBA per doubling distance.

There are multiple noise-sensitive receptors (residential dwellings, daycares, schools, parks, or medical care facilities) within 1,000 feet of the Project site.

The Project is located approximately 1.6 miles southeast of the Sacramento McClellan Airport main runway and the Project staging area sites is located within the 60 dBA contour of the airport. However, the Project bridge site is not located within the designated noise contours of the airport. The Project is expected to temporarily result in negligible noise level increases in the Project vicinity. In addition, there are no private airstrips within 2 miles of the Project. The nearest private air strip is the Mercy San Juan Hospital Heliport, located approximately 3.8 miles northeast of the Project site.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Project would result in the following impacts that remain significant after implementation of General Plan policies:

- result in exterior noise levels in the Project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail, and stationary sources. The General Plan policies establish exterior (Policy EC 3.1.1) and interior (Policy EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the General Plan. See Policy EC 3.1.8, which requires new mixed-use, commercial, and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the General Plan policies, noise impacts for exterior noise levels (Impact 4.8-1) and interior noise levels (Impact 4.8-2), and vibration impacts (Impact 4.8-4) were found to be significant and unavoidable.

ANSWERS TO CHECKLIST QUESTIONS

A – C) **No Additional Significant Effect.** Noise at the construction site would be intermittent and its intensity would vary. The degree of construction noise impacts may vary for different areas of the project vicinity and also vary depending on the construction activities.

Roadway and/or bridge construction is accomplished in several different phases. General construction phases for typical roadway/highway projects and their estimated overall noise levels are summarized in **Table 4** below.

Table 4. Construction Equipment Noise

Construction Phase	Noise Level (dBA, Leq)
Ground clearing	84
Excavation	88/78
Foundations	88
Erection	79/78
Finishing	84

Source: U.S. EPA, 1971.

During Project construction, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction and some of the sensitive receptors in residential developments surrounding the Project site may be temporarily affected. The majority of construction noise would result from Project site clearing, along with the placement of the new bridge abutments and structure.

Table 5 summarizes noise levels produced by construction equipment that is commonly used on bridge replacement projects and is representative of the equipment necessary for Project construction. Construction equipment is expected to generate noise levels ranging from 80 to 90 dB at a distance of 50 feet and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

Table 5. Typical Construction Equipment Noise

Construction Equipment	Noise Level (dBA, Leq at 50 feet)
Scrapers	85
Bulldozers	85
Heavy trucks	85
Pneumatic tools	85
Concrete pump	82
Backhoe	80

Source: HMM&H, 2013

All work for the Project would take place between the hours of 7 AM and 6 PM Monday to Saturday and between the hours of 9 AM and 6 PM on Sunday, and therefore would be exempt from further regulation. If work is required outside of these establish construction hours, the Contractor would be required to receive prior authorization from the City. During construction, the contractor shall place temporary signage to inform the community of established construction hours and provide a point of contact to report excessive noise breaches. Therefore, Project construction would not conflict with Sacramento City Code 8.68.

D, F) **No Additional Significant Effect.** Equipment associated with high vibration levels (pile drivers) would not be used for the Project. Project construction would use bulldozers and other heavy tracked construction equipment, which may generate a groundborne vibration (VdB) level of 90 VdB (an equivalent of 0.036228 inches per second root mean squared, or 0.051 inches per second) at 50 feet from source. The closest sensitive receptor is located approximately 150 feet from the Project site. Noise from construction activities is exempt from the Sacramento City Code, pursuant to 8.68. Sacramento City Code 8.68.080 granted that it follows the exemption requirements. In addition, groundborne vibrations dissipate rapidly with distance and vibration source levels are assumed to attenuate by two-thirds for each doubling distance from the vibratory source. Assuming a two-thirds attenuation rate for each doubling distance from the vibratory

source, residences are the closest sensitive receptor from the Project site and would experience negligible changes in vibration; thus, the project would have a less than significant effect in this regard.

E) **No Additional Significant Effect.** The Project would have no long-term effects on noise or vibration levels. Noise and vibration levels would return to levels similar to the existing noise environment upon Project completion. The Project would not involve the construction of new highways or rail operations and would not result in the exposure of residences or commercial structures to new vibration noise from highways or rail operations.

MITIGATION MEASURES

There are no required mitigation measures for this Project relating to Noise.

FINDINGS

The Project would have no additional Project-specific environmental effects relating to Noise.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
10. PUBLIC SERVICES Would the Project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?		X	

ENVIRONMENTAL SETTING

The Project is located under the jurisdiction of the City of Sacramento Fire Department and within the vicinity of the Sacramento Fire Department jurisdiction (City of Sacramento, 2015a; Sacramento County, 2011). The City of Sacramento Fire Department provides response to fire, medical, and hazardous material emergencies in the Project vicinity. The City of Sacramento Fire Department serves the Project site, and its headquarters is located approximately 12.5 miles southwest of the Project at 5770 Freeport Boulevard. The closest fire station to the Project site under the City of Sacramento Fire Department jurisdiction is Sacramento Fire Department Station #17, located approximately 5 miles northwest of the Project site on 1311 Bell Avenue. The closest fire station to the Project site is Sacramento Metro Fire District Station #103, located approximately 0.6 miles southwest of the Project site at 3824 Watt Avenue.

The City of Sacramento Police Department provides law enforcement services to the Project vicinity (City of Sacramento, 2015a). The closest City of Sacramento Police Department facility to the Project is located approximately 4.6 miles west of the Project site at 3550 Marysville Boulevard.

The Project Area is located within the San Juan Unified School District. There are five district schools within one mile of the Project site and the closest district schools are Pasadena Avenue Elementary School, located approximately 0.3 miles south of the Project bridge site, and Arcade Spartans Middle School, located approximately 0.35 miles south of the Project. There is one private school Epic Bible College and Graduate School, that is located within 0.25 miles of the Project site. The Epic Bible College and Graduate School is located approximately 0.15 miles northeast the Project site and includes one building and no outdoor facilities.

Del Paso Regional Park is located adjacent to the Project site and is part of the City parks system; it is discussed in more detail in Section 11, Recreation, of this document.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential effects of the 2035 General Plan on various public services. These include police, fire protection, schools, libraries and emergency services (Chapter 4.10).

The General Plan provides that adequate staffing levels for police and fire are important for the long-term health, safety, and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects of development that could occur under the General Plan would be less than significant.

General Plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.4 that encourages joint-use development of facilities) reduce impacts on schools to a less-than-significant level (Impacts 4.10-3, 4). Impacts on library facilities were considered less than significant (Impact 4.10-5).

ANSWERS TO CHECKLIST QUESTIONS

EFFECTS CAN BE MITIGATED TO LESS THAN SIGNIFICANT. Project construction may result in accident or emergency incidents that would require police and/or fire services; however, construction activities would be short term and the potential for causing an increase in emergency incidents is minimal. The Project is a bridge replacement Project that would not create additional demands on the local fire district or the local police department during operations.

Emergency access to the Project vicinity would be maintained throughout construction. Construction of the Project would require a full closure of Auburn Boulevard at Arcade Creek, between Winding Way and SR 244. A temporary traffic detour would be established to direct public traffic along Auburn Boulevard around the Project site, and Park Road would be closed at Auburn Boulevard for the duration of construction, except for emergency vehicle access. The General Plan does not specify emergency response time standards for fire, medical, hazardous materials, police, or other law enforcement response; however, implementation of the temporary construction detour has the potential to increase emergency response times (City of Sacramento, 2015a; City of Sacramento, 2015b). As a result, **Mitigation Measure PUB-1** would be implemented to ensure that potential impacts to fire, medical, hazardous materials, and law enforcement response times are less than significant

The Project is located approximately 0.3 miles north of the Pasadena Avenue Elementary School and is within the San Juan Unified School District. The Project is a bridge replacement project and would not generate any additional demand for schools. Traffic access to schools would be maintained throughout construction through the implementation of the temporary detour, and **Mitigation Measure PUB-1** would ensure coordination of road closures and detours with school districts so that bus routes and schedules may be altered accordingly (DKS, 2015a; DKS, 2015b).

A Section 4(f) Temporary Occupancy Memorandum was prepared for the Project and is available for review at the City Community Development Department during business hours (Dewberry | Drake Haglan, 2020b). The Project site is located adjacent to Del Paso Regional Park and would require temporary occupancy from a small portion of the Park at the bridge site during construction. Additionally, the Project staging areas at the paved parking lots for Renfree Field ~~paved~~ and the Powerhouse Science Center ~~parking area is~~ are located within Del Paso Regional Park boundary and would be used during construction. Temporary construction easements (TCEs) within Del Paso Regional Park would not require the construction or expansion of existing recreational facilities and disturbed areas would be returned to existing conditions upon the completion of construction (Dewberry | Drake Haglan, 2020b). More information about temporary occupancy of Del Paso Regional Park is available in the Recreation section of this document. Implementation of **Mitigation Measure REC-1** would ensure that impacts to the park are less than significant.

The Project would not impact any other public services.

MITIGATION MEASURES

Mitigation Measure PUB-1: *Develop a Construction Period Emergency Services and School Access Plan.* Prior to the start of construction, the contractor shall coordinate with the City and County Police and Sheriff and Fire Departments, local public and private ambulance and paramedic providers, and school districts in the area to prepare a Construction Period Emergency Services and School Access Plan. The Construction

Period Emergency Services and School Access Plan shall identify Project phases and construction scheduling and shall identify appropriate alternative emergency service and school bus access routes.

Mitigation Measure REC-1: *Maintain Del Paso Park.* Please see the Recreation section of this document for information about this mitigation measure.

FINDINGS

All additional significant environmental effects of the Project relating to Public Services can be mitigated to a less-than-significant level.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
11. RECREATION Would the Project: A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?		X	
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?		X	

ENVIRONMENTAL SETTING

The proposed Project site is adjacent to, and includes portions of, the northeastern segment of Del Paso Regional Park. The proposed Project staging areas within the paved Renfree Field and Powerhouse Science Center parking areas ~~is~~ are also located within the northeastern segment of Del Paso Regional Park. Del Paso Regional Park consists of a total of ~~145.61~~624.4 acres and has a total of three natural habitat areas: the Del Paso Regional Park Natural Habitat Area (West), the Del Paso Regional Park Natural Habitat Area (East), and the Longview Oaks Natural Habitat Area (City of Sacramento, 2015b). The Del Paso Park Master Plan (2002) indicates that the designated natural habitat area within Del Paso Park permanently preserve more than 100 acres of riparian forest, oak woodland-savanna, and vernal pool habitat.

Del Paso Regional Park is under the jurisdiction of the City of Sacramento Youth Parks and Community Enrichment Department (City of Sacramento, 2015a). The park offers ball fields, City sports offices, the Powerhouse Science Center, golf courses, wetlands areas, and interpretive trails as some of its facilities (City of Sacramento, 2015b).

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.9 of the Master EIR considered the effects of the 2035 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The General Plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees, or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities (Policy ERC 2.2.5). Impacts were considered less than significant after application of the applicable policies. (Impacts 4.9-1 and 4.9-2)

ANSWERS TO CHECKLIST QUESTIONS

A, B) **Effects Can be Mitigated to Less than Significant.** A Section 4(f) Temporary Occupancy Memorandum was prepared for the Project and is available for review at the City Community Development Department during business hours (Dewberry | Drake Haglan, 2020b). The proposed Project site is adjacent to and would require temporary occupancy from Del Paso Regional Park. Additionally, the proposed Project staging areas within the paved Renfree Field and Powerhouse Science Center parking areas ~~is~~ are also located within the Park, and would require a temporary occupancy from, Del Paso Regional Park. As the Del Paso Regional Park is a Section 4(f) resource under the Department of Transportation Act (49 USC § 1653f), the Project has gone through Section 4(f) evaluation with Caltrans as the federal lead agency. As the result of the Section 4(f) evaluation, it was determined that the Project would satisfy the conditions under Code of Federal Regulations (23 CFR 774.13[d]) as an exemption to Section 4(f) approval given that the Project would require only temporary occupancy of the park and satisfies the five conditions set forth in Section 774.13(d). The five conditions are the following:

- Duration must be temporary; i.e., less than the time needed for project construction; and there should be no change in ownership of the land;
- Scope of the work must be minor; i.e., both the nature and the magnitude of the changes to the Section 4(f) property must be minimal;
- There are no anticipated permanent adverse physical impacts, nor would there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- The land being used must be fully restored; i.e., the resource must be returned to a condition which is at least as good as that which existed prior to the project; and
- There must be documented agreement of the appropriate federal, state, or local official(s) having jurisdiction over the Section 4(f) resource regarding the above conditions.

The Project would not otherwise affect the public's ability to access on or otherwise use the services provided by Del Paso Regional Park. Construction of the new bridge would require earthwork in a small area of park land directly adjacent to the bridge within the riparian zone; however, the use of the area would be temporary and would not impact or require the expansion of park facilities. Upon the completion of bridge construction, the temporarily occupied area would be restored to its existing conditions and revegetated with appropriate native plants and would not result in significant physical deterioration of the impact park area.

~~The parking area~~ Parking for the northeastern segment of Del Paso Regional Park is currently limited to a 21-space parking lot located at the intersection of Auburn Boulevard and Pasadena Avenue, and street parking along Park Road at the Del Paso Park picnic area. A large paved parking lot is located approximately 0.5 miles west of the proposed bridge site, just east of Bridge Road, and was historically used as parking for the northeastern segment of Del Paso Regional Park and Renfree Field; however, in 2011 the City closed Renfree Field for public use and the parking area along Bridge Road is no longer publicly accessible. ~~located approximately 0.5 miles west of the proposed bridge site, just east of Bridge Road, and would not be impacted by the Project. The proposed Project staging area is located west of the Del Paso Regional Park parking area in the small paved parking lot of the Powerhouse Science Center and would not impact access to the park parking area.~~ Additionally, ~~The~~ the Powerhouse Science Center has a dedicated paved parking ~~is~~ area ~~lot~~ located along Auburn Boulevard. The Powerhouse Science Center is anticipated to be relocated prior to the start of construction and no new tenants currently plan on utilizing the facilities during the Project construction period. The proposed Project plans to use the closed Renfree Field parking lot and the vacant Powerhouse Science Center parking area for Project staging, and would not impact access to available public parking for the park. ~~and would be used as a Project construction staging area only under the condition that the Powerhouse Science Center has been relocated prior to the start of construction and no new tenants plans on utilizing the facilities during the construction period.~~ Thus, the Project would have a less than significant effect on public access to Del Paso Park and would not result

in substantial physical deterioration of existing park areas or require the expansion of recreational facilities. The implementation of **Mitigation Measure REC-1** would ensure that impacts to the park and other recreational facilities are less than significant.

MITIGATION MEASURES

Mitigation Measure REC-1: *Maintain Del Paso Regional Park.* In order to avoid or minimize adverse effects to the park's use during Project construction, the City shall include the following measures:

- Prepare and implement a post-construction planting plan as detailed in a Restoration Plan approved by the CDFW. The Restoration Plan would include performance standards for revegetation that would ensure successful restoration of the onsite riparian areas.
- Install signage as a responsibility of the contractor along the temporary occupancy area, providing notice that roads, pedestrian and bicycle paths may be temporarily rerouted or closed during construction activities.
- Locate Project staging areas ~~outside the park~~that will ~~to~~ avoid damage to designated Natural Habitat area and will not block~~ed~~ existing access to the park.

FINDINGS

All additional significant environmental effects of the Project relating to Recreation can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
12. TRANSPORTATION AND CIRCULATION Would the project: A) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?			X
B) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X
C) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X
D) Result in inadequate emergency access?		X	

ENVIRONMENTAL SETTING

Auburn Boulevard is classified as a major collector street in the General Plan. The General Plan defines major collector streets as roadways that "primarily provide travel between arterial streets and collector or local streets, and secondarily, provide access to abutting properties~~"~~." Auburn Boulevard has a standard of LOS "D" as set by the General Plan within the Project site (City of Sacramento, 2015b). Auburn Boulevard past the Project site is classified as a thoroughfare roadway and Winding Way an arterial roadway in the County General Plan. The current ADT vehicular count at the Project site is approximately ~~30,900~~ 12,000(~~DKS, 2015a; DKS, 2015b~~Caltrans, 2018).

The Project site is also under the jurisdiction of the City of Sacramento Pedestrian Master Plan (2006), the City of Sacramento Bicycle Master Plan (2016), and the 2016 SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy.

Traffic analyses were prepared for this Project by John Long and Sean Carney of DKS Associates and are available for review at the City Community Development Department during business hours (DKS, 2015a; DKS, 2015b). the results of the analysis are presented in the discussion section below and were used to analyze the potential Project impacts.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the Master EIR:

Roadway Segments

- The traffic generated by a project degrades peak period LOS from "A," "B," "C," or "D" (without the project) to E or F (with project); or,
- The LOS (without project) is E or F, and project-generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- The traffic generated by a project degrades peak period level of service from A, B, C or D (without project) to E or F (with project); or,
- The LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more; or,
- If General Plan Mobility Element Policy M1.2.2 applies to a project, then an impact would be considered significant if the traffic generated by the project degrades LOS from an acceptable LOS (without the project) to an unacceptable LOS (with the project or the LOS (without project) is unacceptable and project generated traffic increases the average vehicle delay by 5 seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- Project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- Project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- The expected ramp queue is greater than the storage capacity.

Transit

- Adversely affects public transit operations, or
- Fails to adequately provide for access to public transit.

Bicycle Facilities

- Adversely affects existing or planned bicycle facilities, or
- Fails to adequately provide for access by bicycle.

Pedestrian Circulation

- Adversely affects existing or planned pedestrian facilities, or
- Fails to adequately provide for access by pedestrians.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Transportation and circulation were discussed in the Master EIR in Chapter 4.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. Provisions of the 2035 General Plan that provide substantial guidance include Mobility Goal 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), support for state highway expansion and management consistent with the Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG MTP/SCS) (Policy M 1.5.6) and development that encourages walking and biking (Policy LU 4.2.1).

While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 4.12-3 (roadway segments in adjacent communities, and Impact 4.12-4 (freeway segments).

ANSWERS TO CHECKLIST QUESTIONS

A) **No Additional Significant Effect.** One of the primary purposes of the Project is to improve safe transit on the Auburn Boulevard Bridge for all bridge users. The Project would replace the existing structurally deficient bridge along Auburn Boulevard over Arcade Creek and construct a new bridge designed to current structural and geometric standards. The new structure would remain major collector street as designated in the General Plan and implementation of the Project would not increase capacity along Auburn Boulevard, or further degrade the existing D LOS designation along the roadway. A temporary pedestrian bridge would be constructed to allow bicycle and pedestrian access across Arcade Creek, and motorists traveling along the detour route planned along SR 244, Business 80, I-80, and Watt Avenue (**Appendix B: Figure 4**) would not experience significant delay (i.e., LOS F conditions) (DKS, 2015a; DKS, 2015b). Additionally, the addition of a second left turn lane from westbound Auburn Boulevard to Winding Way is anticipated to increase the LOS of the existing intersection and would not result in an unacceptable LOS per the City General Plan.

The Project would not adversely affect public transit. The Project would not build new residential or commercial development, or induce growth, that would indirectly affect public transit. The Project would increase safety for all users of the Auburn Boulevard Bridge, including pedestrians and bicyclists, by making it structurally sufficient and increasing the width of the bridge. The Project would not conflict with the City General Plan Mobility Element, the City of Sacramento Pedestrian Master Plan (2006), the City of Sacramento Bicycle Master Plan (2016), the SACOG Metropolitan Transportation Plan for 2035, or any other applicable adopted policy, plan, or program supporting alternative transportation (DKS, 2015a; DKS, 2015b; City of Sacramento, 2006; City of Sacramento, 2015a; City of Sacramento, 2016; SACOG, 2016).

The Project would have a less than significant impact on circulation operations or plans and no mitigation is required. Therefore, pursuant to Section 15064.3(b), the Project would have a less than significant impact on transportation and no mitigation measures are required.

B) **No Additional Significant Effect.** Senate Bill (SB) 743 (Steinberg, 2013), which enacted Public Resources Code section 21099, required changes to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts. The City approved a General Plan Update which includes SB 743 and using Vehicle Miles Traveled (VMT) as a metric for evaluating transportation impacts of proposed projects under CEQA (City of Sacramento, 2015). The General Plan update will be approved in 2021.

If a transportation project would likely lead to a measurable and substantial increase in vehicle travel (i.e., increase total VMT), it is presumed to be a significant impact and an analysis assessing the amount of vehicle travel the project will induce shall be conducted. Transportation projects that can be presumed to lower VMT or have no effect on it, such as bike and pedestrian projects, transit improvements, and minor operational improvements, as defined in the State of California Governor's Office of Planning and Research (OPR) Technical Advisory (OPR, 2018), should be expected to cause a less-than-significant impact under CEQA and would not require further VMT analysis. The OPR Technical Advisory lists projects that would not likely lead to a substantial or measurable increase in VMT, one of which includes:

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs,

detection, or signals; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity.

The Project would remove the existing bridge along Auburn Boulevard and construct a new structure designed to current and geometric standards. Operations would be similar to existing conditions upon completion of construction. The replacement bridge would be approximately 97 feet in width and would provide two 12-foot through lands, two 11-foot through lanes, two 11-foot left turn lanes, and shoulders and sidewalks in each direction. The Project would result in the addition of a left turn pocket from westbound Auburn Boulevard to Winding Way. The Project would improve pedestrian and bicyclist access along Auburn Boulevard by creating new sidewalks, Americans with Disabilities (ADA)-compliant ramps, and added crosswalks.

Although the Project would create a new left turn pocket, the Project would not increase or add cars to the roadway, or increase distance traveled. The detour along SR 244, Business 80, I-80, and Watt Avenue (**Appendix B: Figure 4**) would be temporary in nature and normal traffic would resume at the completion of Project construction; therefore, there would be no permanent increase in distance traveled. The added left turn pocket would simply address existing congestion along Auburn Boulevard.

The Project would not increase VMT along Auburn Boulevard as a result of design or construction. The bridge would be replaced with a similar, improved structure that enhances the safety of motorists, pedestrians, and bicyclists and would operate similar to existing conditions. The Project falls under the OPR Technical Advisory list above, as a bridge replacement project. Therefore, pursuant to Section 15064.3(b), the Project would not result in an additional significant effect and no mitigation measures would be required.

C) **No Additional Significant Effect.** The Project would remove an existing bridge along Auburn Boulevard and replace it with a structure that is consistent with current structural and geometric standards. The Project would be constructed by fully closing Auburn Boulevard at Arcade Creek between Winding Way and SR 244 and establishing a traffic detour around the Project site. A temporary pedestrian detour would also be placed approximately 100 feet upstream of the existing bridge and would be approximately 330 feet long, 8 feet wide, and include a Hot Mix Asphalt walking path connecting Auburn Boulevard to Winding Way. The existing bridge would be demolished prior to constructing the replacement bridge. The replacement bridge would be approximately 10 feet wider than the existing and provide improved public safety features for pedestrians, bicyclists, and motorists through improved sidewalks, added crosswalks, Americans with Disabilities (ADA)-compliant ramps, and traffic-rated barrier railings. The replacement bridge would also improve hydraulic capacity. Therefore, the Project would not increase hazardous conditions due to geometric design or incompatible uses and the impact would be less-than-significant. No mitigation measures would be required.

D) **Effect Can Be Mitigated to Less Than Significant.** During the existing bridge demolition and the new bridge construction, the bridge would be closed (approximately six months to sixteen months). Southwest-bound vehicular traffic Auburn Boulevard would be able to take the detour route along SR 244, I-80, and Watt Avenue (**Appendix B: Figure 4**). Northeast bound traffic along Auburn Boulevard would be able to take the detour route along Auburn Boulevard, Watt Avenue, Business 80, and SR 244. The establishment of the proposed temporary detour is not anticipated to negatively impact LOS on any of the major detour roadways (DKS, 2015a; DKS, 2015b). The Project site is not anticipated to affect any LOS on the I-80, SR 244, or Business 80 on-ramp adjacent to the Project site. In addition, this closure would be temporary in nature and would not permanently impact LOS on the detour roadways or exceed the storage capacity of the on- and off-ramps included in the temporary detour.

Motorists traveling on the temporary detour route planned along 244, Business 80, I-80, and Watt Avenue would not experience significant delay. Additionally, residence and park users along Park Road are not anticipate to experience significant delays due to the establishment of the proposed detour or the temporary closure of the Auburn Boulevard/Park Road intersection. The planned detour would

maintain access for emergency vehicles and emergency vehicle access would be maintained through the Auburn Boulevard/Park Road intersection throughout construction. Access for emergency vehicles would be returned back to original conditions upon completion of construction. In order to plan for and minimize impacts of construction to emergency services, a *Construction Period Emergency Access Plan* would be prepared and implemented. See the *Public Services* section of this document for more details.

MITIGATION MEASURES

Mitigation Measure PUB—1: *Construction Period Emergency Access Plan.* See the Public Services section of this document for more information about this mitigation measure.

FINDINGS

All additional significant environmental effects of the project relating to Transportation and Circulation can be mitigated to a less-than-significant level.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
13. TRIBAL CULTURAL RESOURCES Would the Project: A) Cause a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resource Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) or		X	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X	

ENVIRONMENTAL SETTING

The City of Sacramento and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the city. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for tribal cultural resources are located within close proximity to the Sacramento and American rivers and other watercourses.

The Project area is situated within the lands traditionally occupied by the Valley Nisenan, or Southern Maidu. The language of the Nisenan includes several dialects and is classified within the Maiduan family of the Penutian linguistic stock (Kroeber, 1925). Valley Nisenan territory was divided into politically autonomous "triblet" areas, each including several large villages (Moratto, 1984). Two important villages were located near the Project area, on the south bank of the American River, Momol, to the west of the Project area, and Yalisumni, to the east (Wilson and Towne, 1978:388).

Nisenan houses were domed structures covered with earth and tule or grass that measured 10–15 feet in diameter. Brush shelters were used in the summer and at temporary camps during food-gathering rounds. Larger villages often had semi-subterranean dance houses that were covered in earth and tule or brush and had a central smoke hole at the top and an east-facing entrance. Another common village structure was a granary, which was used for storing acorns (Wilson and Towne, 1978).

Valley Nisenan people followed a seasonal round of food gathering, as did most California Indians. Food staples included acorns, buckeyes, pine nuts, hazelnuts, various roots, seeds, mushrooms, greens, berries, and herbs. Game was roasted, baked, or dried and included mule deer, elk, antelope, black bear, beaver, squirrels, rabbits, and other small animals and insects. Salmon, whitefish, sturgeon, and suckers, as well as freshwater shellfish, were all caught and eaten (Wilson and Towne, 1978).

Euro-American contact with the Nisenan began with infrequent excursions by Spanish explorers and Hudson's Bay Company trappers traveling through the Sacramento-San Joaquin Valley in the early 1800s (Wilson and Towne, 1978). With the coming of Russian trappers, Spanish missionaries, and Euro-American settlers, traditional lifeways were threatened by competition for land and resources, and by the introduction of new diseases. The malaria epidemic of 1833 decimated the Valley Nisenan population, killing an estimated 75 percent of the population. The influx of Euro-Americans during the Gold Rush-era further reduced the population due to forced relocations and violent retribution from the miners for real or imagined affronts.

Despite these major and devastating historical setbacks, today many Native Americans in the Project area are maintaining traditional cultural practices. Sometimes supported by thriving business enterprises, Tribal groups maintain governments, historic preservation programs, education programs, cultural events, and numerous other programs that sustain a vibrant culture.

Data Sources/Methodology

Under PRC section 21080.3.1 and 21082.3, the City must consult with tribes traditionally and culturally affiliated with the Project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

As part of the effort to identify and tribal cultural resources that may be present within the Project area, letters were sent on December 7, 2015, to the NAHC requesting a search of the Sacred Lands File and contact information for individuals of potential Native American descent who might hold information concerning the area of direct impact and its vicinity. A follow-up email was sent to the NAHC on May 24, 2017, asking for an expediated response. The NAHC responded in an email dated June 7, 2017, stating that a record search of the Sacred Lands File was negative for cultural resources and provide contact information for nine Native American individuals.

Regulatory Setting

Federal

There are no Federal plans, policies, or regulations related to Tribal Cultural Resources that are directly applicable to the Project, however Section 106 of the National Historic resources of Native American origin identified as a result of the identification efforts conducted under Section 106 may also qualify as tribal cultural resources under CEQA.

State

California Environmental Quality Act — Statute and Guidelines. CEQA requires that public agencies that finance or approve public or private projects must assess the effects of the project on tribal cultural resources. Tribal cultural resources are defined in Public Resources Code (PRC) 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is (1) listed

or determined eligible for listing on the California Register of Historical Resources (CRHR) or a local register, or (2) that are determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

California Public Resources Code Section 5024. PRC Section 5024.1 establishes the CRHR, which is the authoritative guide for identifying the State's historical resources to indicate what properties are to be protected, if feasible, from substantial adverse change. For a resource to be eligible for the CRHR, it must be more than 50 years old, retain its historic integrity, and satisfy one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. 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.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, a tribal cultural resource is considered to be a significant resource if the resource is: 1) listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources; or 2) the resource has been determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. For purposes of this Initial Study, impacts on tribal cultural resources may be considered significant if construction and/or implementation of the proposed project would result in the following:

- Cause a substantial change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources (see Master EIR Chapter 4.4 and Appendix C – Background Report, B. Cultural Resources Appendix), but did not specifically address tribal cultural resources because that resource type had not yet been defined in CEQA at the time the Master EIR was adopted. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources, some of which could be tribal cultural resources as defined Public Resources Code 21074. Ground-disturbing activities resulting from implementation of development under the 2035 General Plan could affect the integrity of an archaeological site (which may be a tribal cultural resource), thereby causing a substantial change in the significance of the resource. General plan policies identified as reducing such effects on cultural resources that may also be tribal cultural resources include identification of resources on project sites (Policy HCR 2.1.1); implementation of applicable laws and regulations (Policy HCR 2.1.2); consultation with appropriate organizations and individuals including the Native American Heritage Commission and implementation of their consultation guidelines (Policy HCR 2.1.3); enforcement programs to promote the maintenance, rehabilitation, preservation, and interpretation of the City's historic resources (Policy HCR 2.1.4); listing of qualified historic resources under appropriate national, State, and local registers (Policy HCR 2.1.5); consideration of historic and cultural resources in planning studies (Policy HCR 2.1.6); enforcement of compliance with local, State, and federal historic and cultural preservation requirements (Policy HCR 2.1.8); and early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10).

Of particular relevance to this project are policies that ensure compliance with protocol that protect or mitigate impacts to archaeological resources (Policy HCR 2.1.16) and that encourage preservation and minimization of impacts on cultural resources (Policy HCR 2.1.17).

Mitigation Measures from 2035 General Plan Master EIR that apply to the Project

None. As noted above, the Master EIR did not specifically address tribal cultural resources but did address archaeological resources and other cultural resources and noted that because the presence of significant archaeological resources is typically unknown until the resource is uncovered, which often occurs during ground disturbing activities, adverse effects may occur prior to discovery of the archaeological resources. Therefore, although laws and regulations combined with General Plan policy would substantially reduce impacts to these resources once they are discovered, the initial impacts that might occur prior to discovery would be considered potentially significant and that protection of all important archaeological resources from damage or destruction cannot be assured.

ANSWERS TO CHECKLIST QUESTIONS

Ai, Aii) **Effects Can be Mitigated to Less than Significant.** Pursuant to Section 21080.3.1The UAIC requested copies of archaeological reports prepared for the Project. An onsite AB 52 consultation took place between the UAIC, the City, and the Project consultants Dewberry | Drake Haglan on September 14, 2017. During the onsite AB 52 consultation, the bridge Project site was walked and details about the Project were discussed. The Project site is highly disturbed, and it was agreed that it is unlikely that any cultural resources would be present within the Project site. The proposed staging areas within the paved parking lot of Renfree Field and the Powerhouse Science Center ~~was~~ were not included in the onsite consultation; however, this area is similarly disturbed and unlikely to contain cultural resources. The City and the UAIC agreed to have a UAIC-appointed Native American resources monitor on the Project site during ground-disturbing activities and that the City would notify UAIC when ground-disturbance occurs. This agreement is described in **Mitigation Measure TCR-1**. Implementation of **Mitigation Measure TCR-1** would ensure that impacts to tribal cultural resources remain less than significant.

MITIGATION MEASURES

Mitigation Measure TCR-1: Retain a Native American Resources Monitor. A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the City shall notify the Cultural Resources Officer of UAIC via email. The UAIC-appointed Native American resources monitor shall be invited to inspect the Project site, including any soil piles, trenches, or other disturbed areas, within the first five days of groundbreaking activity. During this inspection, a site meeting of construction personnel shall also be held to afford the tribal representative the opportunity to provide tribal cultural resources awareness information. If any tribal cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during this initial inspection or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the City shall immediately notify the UAIC. The City shall coordinate any necessary investigation of the site with the UAIC-appointed Native American resources monitor; and as part of the site investigation and resource assessment, the UAIC Native American resources monitor shall consult with the UAIC and provide proper management recommendations should potential impacts to the resources be found by the UAIC-appointed Native American resources monitor to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City by the UAIC-appointed Native American resources monitor.

FINDINGS

All additional significant environmental effects of the Project relating to TCR can be mitigated to a less-than-significant level.

Issues	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
14. UTILITIES AND SERVICE SYSTEMS Would the Project: A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

ENVIRONMENTAL SETTING

Wastewater collection within the Project vicinity is provided by Sacramento Area Sewer District (SASD); wastewater treatment within the Project vicinity is provided by Sacramento Regional County Sanitation District (Regional San) (City of Sacramento, 2015a). Stormwater drainage at the Project site and within the Project vicinity is collected by drainage basins and drainage pumps owned and operated by the City (City of Sacramento, 2015a; City of Sacramento, 2015b). Stormwater collected in these basins are drained into local creeks and then into the Sacramento River and American River (City of Sacramento, 2015a). Potable water service within the Project vicinity is served by the City and is supplied from both the American River and Sacramento River and groundwater pumped from the North and South American groundwater basins (City of Sacramento, 2015b).

Solid waste service within the Project vicinity is collected by the City Recycling and Solid Waste Division and is transported to the Sacramento County North Area Recovery Station (NARS) before being disposed of at one of multiple landfill facilities including the Sacramento Recycling and Transfer Station, the Sacramento County Kiefer Landfill, the Yolo County Landfill, L & D Landfill, Florin Perkins Landfill, Elder Creek Transfer Station, and NARS (City of Sacramento, 2015b). The Sacramento Municipal Utility District (SMUD) provides electricity to the City and natural gas is provided through the City by Pacific Gas & Electric Company. Telecommunication service to and infrastructure within the City is provided by AT&T; Sprint; Comcast; Surewest; MetroPCS Wireless; Verizon Communications, Inc.; Integra Telecom Holdings, Inc.; Digital Path, Inc.; Frontier Communications Corporation; Level 3 Communications, LLC; and Earthlink Business (City of Sacramento, 2015b).

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered utility services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2035 General Plan:

- Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments; or
- Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 4.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the General Plan would reduce the impact generally to a less-than-significant level (see Impact 4.11-1) but the Master EIR concluded that the potential increase in demand for potable water in excess of the City's existing diversion and treatment capacity, and which could require construction of new water supply facilities, would result in a significant and unavoidable effect (Impact 4.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a less-than-significant effect (Impact 4.11-4). Impacts on solid waste facilities were less than significant (Impact 4.11-5). Implementation of energy efficient standards, as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings would reduce effects for energy to a less-than-significant level.

ANSWERS TO CHECKLIST QUESTIONS

A, B) **No Additional Significant Effect.** The Project is a bridge replacement project and would not generate any wastewater. The Project would not require the construction of additional wastewater or water treatment facilities nor would it require construction of new stormwater facilities or require the expansion of existing facilities.

The Project would require not require water supply. Some non-potable water use would be required for fugitive dust control during Project construction activities. See the Air Quality section of this document for more information about fugitive dust control during Project construction.

The Project would generate solid waste from the temporary construction activities and demolition of the existing Auburn Boulevard Bridge. Solid waste associated from construction activities would be handled by the City and NARS, located at 4450 Roseville Road. NARS is the closest solid waste disposal facility to the Project site. NARS has the capacity to accept waste generated by the Project, and the Project would not result in long-term demands for solid waste disposal services (City of Sacramento, 2015b). All recyclables and organics collected from the Project site by the City would be taken to the appropriate facilities. The Project would comply with all federal, state, and local statutes and regulations related to solid waste.

MITIGATION MEASURES

There are no required mitigation measures for this Project relating to Utilities and Service Systems.

FINDINGS

The Project would have no additional Project-specific environmental effects relating to Utilities and Service Systems.

MANDATORY FINDINGS OF SIGNIFICANCE

Issues	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
15. MANDATORY FINDINGS OF SIGNIFICANCE A.) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X	
B.) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

ANSWERS TO CHECKLIST QUESTIONS, QUESTIONS A THROUGH C

A) **Effects Can be Mitigated to Less than Significant.** Per the impact discussions in the Biological Resources section, the Project's potential to substantially degrade the environment would be less than significant with incorporated mitigation measures. Additionally, per the impacts discussion in the Cultural Resources and Tribal Cultural Resources section, the Project's potential to impact historical or prehistoric cultural and tribal resources would be less than significant with incorporated mitigation measures.

B) **No Additional Significant Effect.** The Project site is located within the City. The Project's purpose is to provide vehicular, bicyclist, and pedestrian access through and meet current design standards for the Auburn Boulevard Bridge. Additionally, the Project is included in the City 2035 General Plan, which included a large scale cumulative impacts analysis of projects within the City. The Project specific impacts are mitigated to a less-than-significant level, limited to the Project construction phase, and generally site specific. To the City's knowledge no other projects are proposed within the Project vicinity that would overlap or interact with the Project.

C) **No Additional Significant Effect.** The Project would not cause substantial adverse effects on human beings. Potential impacts related to air quality, cultural resources, hazards and hazardous materials,

hydrology and water quality, public services, and recreation are discussed above and would not result in any significant and unavoidable impacts.

Section IV - Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this Project.

	Aesthetics	X	Hazards
X	Air Quality		Noise
X	Biological Resources	X	Public Services
X	Cultural Resources	X	Recreation
	Energy and Mineral Resources		Transportation/Circulation
	Geology and Soils	X	Tribal Cultural Resources
	Hydrology and Water Quality		Utilities and Service Systems
	None Identified		

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional potentially significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

Signature

Date

Printed Name

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This Initial Study was prepared by DHA in cooperation with the other members of the environmental study team. DHA was responsible for project management and Initial Study preparation. The Initial Study technical team and other environmental study team members provided technical expertise, as presented below.

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Appendix A: Responses to Public Comments

AUBURN BOULEVARD OVER ARCADE CREEK BRIDGE REPLACEMENT PROJECT

Appendix A

Response to Comments

- **Comment Letter from Gary Gaspari - County of Sacramento**
- **Response to Gary Gaspari Comment Letter**
- **Email Comments from Robert Armstrong - Regional Sanitation**
- **Response to Robert Armstrong Email Comments**
- **Comment Letter from Tim Vendlinkski**
- **Response to Tim Vendlinkski Comment Letter**
- **Comment Letter from Molly Wright – SMAQMD**
- **Response to Molly Wright Comment Letter**
- **Comment Letter from Haley MacGowan - SASD**
- **Response to Comment Letter from Haley MacGowan**
- **Comment Letter from Teri Burns - Sacramento Horsemen's Assn**
- **Response to Comment Letter from Teri Burns**
- **Comment Letter from Dylan Wood – CDFW**
- **Response to Comment Letter from Dylan Wood**
- **Comment Letter from Alexander Fong – Caltrans**
- **Response to Comment Letter from Alexander Fong**
- **Email comments from Tim Vendlinkski**
- **Response to email comments from Tim Vendlinkski**

Department of Transportation
Ron E. Vicari, Director

Divisions
Administration
Maintenance & Operations
Engineering & Planning

County of Sacramento

Sept. 8, 2020

Ron Bess
Associate Planner
Community Development Department
300 Richards Blvd. 3rd Floor
Sacramento, CA 95811

SUBJECT: COMMENTS ON THE NOTICE OF AVAILABILITY (NOA) FOR AUBURN BOULEVARD OVER ARCADE CREEK BRIDGE REPLACEMENT PROJECT (24C0081).

Ron Bess,

The County of Sacramento appreciates the opportunity to review the submittal documents for Auburn Boulevard Over Arcade Creek Bridge Replacement. Sacramento County supports this project and the terms regarding the agreement from Sacramento County Board of Supervisors (BOS) meeting on July 16, 2019 Contact Number 81531 with the City of Sacramento.

As noted in the Contract, the County has authorized a full closure of Auburn Boulevard in between Winding Way and Park Road for a three-month period during construction of the project. Please continue to coordinate with the County through Right of Way Management regarding detours affecting nearby county facilities.

If you need any other information or have any questions, please contact me at gasperig@saccounty.net

Sincerely,

Gary Gasperi, P.E.
Associate Civil Engineer
Department of Transportation

GSG

Cc: Ron Vicari, DOT
Dan Shoeman, DOT
Lu Li, DOT
Stephen White, DOT
Lupe Rodriguez, DOT
Matthew Darrow, DOT
Hardeep Sidhu, DOT

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #1

Gary Gasperi **Sacramento County** **Department of Transportation**
Response to Comment
The City will continue to coordinate with the County through Right of Way management regarding detours affecting nearby county facilities

From: Armstrong, Robert
To: Ron Bess
Cc: Scott Johnson
Subject: RE: NOA/NOI for the Auburn Boulevard over Arcade Creek Bridge Replacement Project Mitigated Negative Declaration
Date: Tuesday, September 15, 2020 7:49:57 AM
Attachments: 897-S-120.pdf

Good Morning Ron,

Regional San doesn't have any facilities located within the proposed project's boundaries; however, the Sacramento Area Sewer District (SASD) has a collector line located adjacent/within Auburn Boulevard. SASD will be responding to the NOA/MND informing of this facility.

Best Regards,

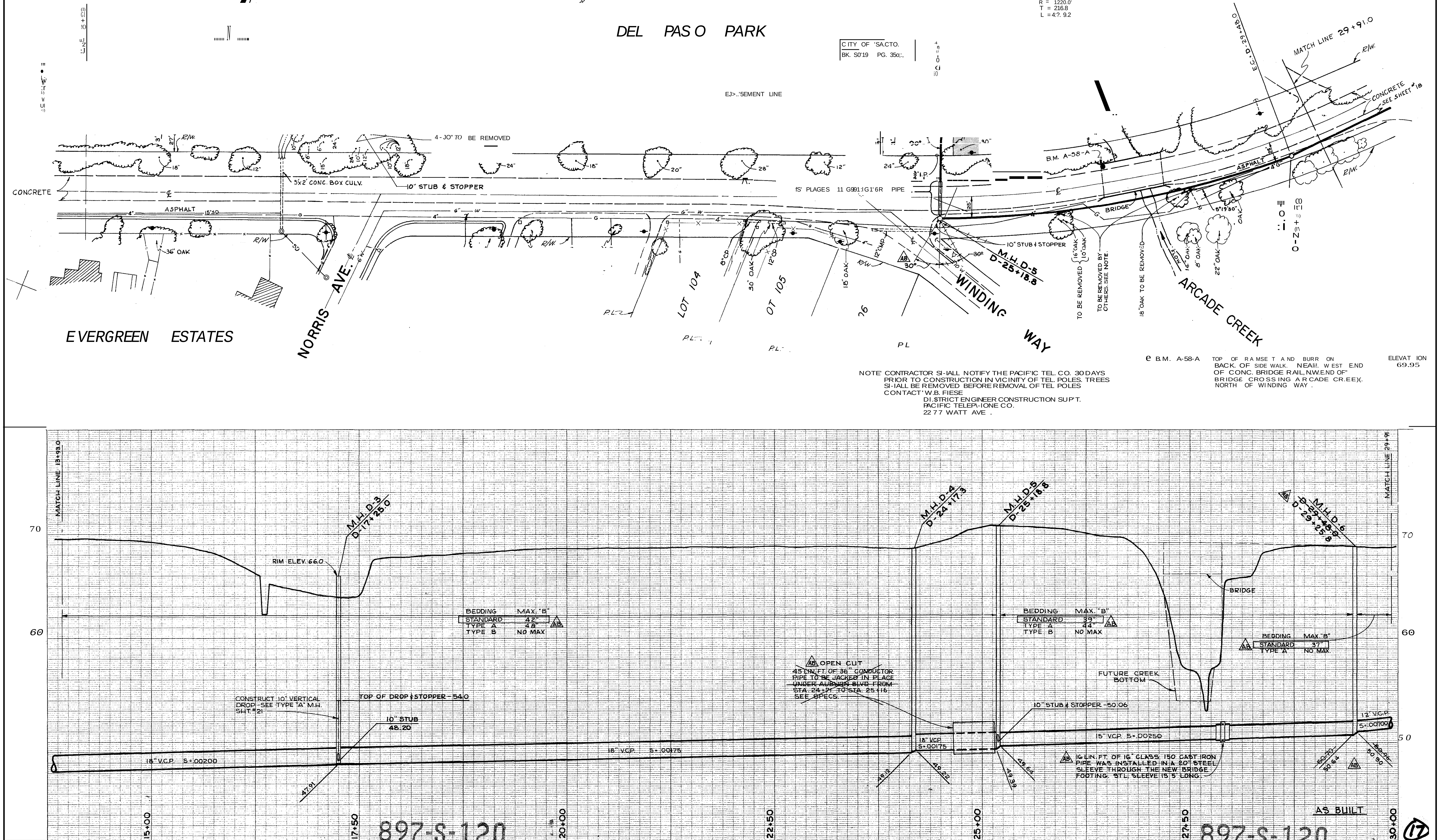
Robb

Robb Armstrong
Principal Engineering Technician

Regional San – Development Services & Plan Check
10060 Goethe Road
Sacramento, CA 95827
Phone: (916) 876-6104
Email: armstrongro@sacsewer.com
www.regionalsan.com

Please consider the environment before printing this email.

From: Ron Bess <RBess@cityofsacramento.org>
Sent: Friday, September 4, 2020 9:34 AM
To: Air Quality <pphilley@airquality.org>; Alexander Fong <Alexander.fong@dot.ca.gov>; Alisa Johnson <ABJohnson@cityofsacramento.org>; Allen W. Warren <AWarren@cityofsacramento.org>; Alta Tura <saccreek@gmail.com>; Anna Starkey <astarkey@auburnrancheria.com>; Arthur Murray - Caltrans <Arthur.murray@dot.ca.gov>; Bill Templin <wetemplin@att.net>; Bruce Monighan <BMonighan@cityofsacramento.org>; Caltrans <D3PlanningSouth@dot.ca.gov>; Carson Anderson <canderson@cityofsacramento.org>; Cherilyn Neider - UAIC <cneider@auburnrancheria.com>; Cheryle Hodge <CHodge@cityofsacramento.org>; Dana Repan <DRepan@cityofsacramento.org>; Dawn Plise <pgeplanreview@pge.com>; Evan Compton <ECompton@cityofsacramento.org>; Greg Sandlund <GSandlund@cityofsacramento.org>; Hannah Hughes <hannah@lozeaudrury.com>; Inthira Mendoza <imendoza@cityofsacramento.org>; Janet Laurain <jlaurain@adamsbroadwell.com>; Jeffrey Heeren <JHeeren@cityofsacramento.org>; Jennifer Donlon Wyant <JDonlonWyant@cityofsacramento.org>; John Mayfield <Johnmayfield30@msn.com>; Atwal, Kamal <atwalk@SacCounty.NET>; Kelli Trapani


DEL PASO PARK
CITY OF SACTO.
BK. S0'19 PG. 35o;.
R = 1220.0'
T = 216.8
EVERGREEN ESTATES
NORRIS AVE.
CONCRETE
ASPHALT
4-30" TO BE REMOVED
5'x2' CONC. BOX CULV.
10" STUB & STOPPER
36" OAK
LOT 104
LOT 105
WINDING WAY
ARCADE CREEK
M.H. D-5 D-25+18.8
10" STUB & STOPPER
BRIDGE
B.M. A-58-A
MATCH LINE 29+91.0
CONCRETE SEE SHEET #18
TO BE REMOVED
TO BE REMOVED BY OTHERS SEE NOTE
18" OAK TO BE REMOVED
NOTE: CONTRACTOR SHALL NOTIFY THE PACIFIC TEL. CO. 30 DAYS PRIOR TO CONSTRUCTION IN VICINITY OF TEL. POLES. TREES SHALL BE REMOVED BEFORE REMOVAL OF TEL POLES
CONTACT: W.B. FIESE
DISTRICT ENGINEER CONSTRUCTION SUPT.
PACIFIC TELEPHONE CO.
2277 WATT AVE.
B.M. A-58-A TOP OF RAMSET AND BURR ON BACK OF SIDE WALK. NEAR W. WEST END OF CONC. BRIDGE RAIL, N.W. END OF BRIDGE CROSSING ARCADE CREEK NORTH OF WINDING WAY.
ELEVATION 69.95
MATCH LINE 13+93.0
MATCH LINE 29+91
M.H. D-3 D-17+25.0
M.H. D-4 D-24+17.3
M.H. D-5 D-25+18.8
M.H. D-6 D-29+25.8
RIM ELEV. 66.0
BEDDING MAX. "B"
STANDARD 42"
TYPE A 48"
TYPE B NO MAX
BEDDING MAX. "B"
STANDARD 39"
TYPE A 44"
TYPE B NO MAX
BEDDING MAX. "B"
STANDARD 37"
TYPE A NO MAX.
BRIDGE
OPEN CUT
45 LIN. FT. OF 36" CONDUCTOR PIPE TO BE JACKED IN PLACE UNDER AUBURN BLVD FROM STA. 24+71 TO STA. 25+16 SEE SPECS.
FUTURE CREEK BOTTOM
CONSTRUCT 10" VERTICAL DROP - SEE TYPE "A" M.H. SHT. #21
TOP OF DROP & STOPPER - 54.0
10" STUB 48.20
10" STUB & STOPPER - 50.06
18" V.C.P. S = .00200
18" V.C.P. S = .00175
15" V.C.P. S = .00250
12" V.C.P. S = .00700
16 LIN. FT. OF 16" CLASS 150 CAST IRON PIPE WAS INSTALLED IN A 20" STEEL SLEEVE THROUGH THE NEW BRIDGE FOOTING. STL. SLEEVE IS 5' LONG.
47.91
AS BUILT
70
60
50
15+00
17+50
20+00
22+50
25+00
27+50
30+00
897-S-120

DEWANTE AND STOWELL					SUBMITTED	NORTHEAST SACRAMENTO COUNTY SANITATION DISTRICT	DATE	SHEET NO.
SANITARY AND CIVIL ENGINEERS SACRAMENTO, CALIFORNIA	AB	12-8-65	"AS BUILT" REVISION'S	R.N.E. S.J.S.	APPROVED	SACRAMENTO COUNTY, CALIFORNIA	NOV., 1964	17
	REVISION	DATE	DESCRIPTION	BY APPD		SANITARY TRUNK SEWERS DEL PASO PARK SYSTEM	CHKD S.J.S.	DRWN H.J.N.
						PLAN AND PROFILE "D" LINE		OF 23

897-8-/20

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #2

Robb Armstrong **Regional San**
Response to Comment
Acknowledge that Sacramento Area Sewer District (SASD) has a collector line located adjacent within Auburn Boulevard.

Comments by Tim Vendlinski
Arcade Creek Restoration Project
tvendlinski@sbcglobal.net
10/01/20

NOTICE OF AVAILABILITY/INTENT TO APPROVE THE DRAFT MITIGATED NEGATIVE DECLARATION
AUBURN BOULEVARD OVER ARCADE CREEK BRIDGE REPLACEMENT PROJECT (24C0081)
City of Sacramento - Community Development Department - Environmental Planning Services
Dewberry | Drake Haglan

Page 4.
SECTION II - PROJECT DESCRIPTION
PROJECT LOCATION

Page 96.
Tree Survey Report
2. METHODOLOGY

The CEQA document discloses that the study area for the project encompasses 6.4 acres, but this acreage figure is first enumerated on page 96 in the the Tree Survey Report. This useful information should be noted at the beginning of the document in the project description.

Page 5.
SECTION II - PROJECT DESCRIPTION
PROJECT DESCRIPTION

Pages 32-35.
4. CULTURAL RESOURCES
(ENVIRONMENTAL SETTING).

Page 56.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
RECREATION
(A, B) Effects Can be Mitigated...
Re: Staging Areas and Mitigation Measure REC-1

Staging Areas

Figures 2, 3, and 4 on pages 81, 82, and 83; respectively, show a red rectangle surrounding the unpaved **Owl Creek Terrace immediately west, and contiguous with, Bridge Road**. This is the historic floodplain of Owl Creek, and has a known history of saturated soils and ponding water. **Under no circumstances should Owl Creek Terrace be considered for, or used as, a staging area for the Auburn Blvd. Bridge Replacement project**.

Over the years, the site has been scraped, plowed, and filled with gravel and imported soil. In 2013, the City allowed the Sacramento Suburban Water District and Doug Veerkamp Engineering to use the southern half of the site (bordering Auburn Blvd.) as a

staging area for an infrastructure project. Heavy equipment was used to fill and compact the already degraded seasonal wetlands, and this greatly diminished the water holding and retention capacity of the wetland.

Then, in 2018, the City directed the heavy equipment operators working for Dan Rasmussen on the "Measure U parking lot" to dump innumerable truck loads of fill material onto the northern half of Owl Creek Terrace (bordering Arcade Creek). The City performed no surveys for aquatic resources and cultural resources at Owl Creek Terrace before allowing the use of heavy equipment and the disposal of fill material at the site in 2013 and 2018. The second incident was the subject of a complaint filed with CalEPA and the Regional Water Quality Control Board (Central Valley Region), and this potential enforcement case under the Clean Water Act has not been resolved.

Parks and Wreck?
https://www.newsreview.com/sacramento/parks-wreck/content?oid=27507919

If a staging area is indeed needed west of the project site for the Auburn Blvd. Bridge Replacement, it should be established on the **large, closed, paved parking area previously used for the dormant Renfree Field, immediately east and contiguous with Bridge Road**. In 2020, this Renfree parking lot was used as a staging area for a major infrastructure project on Auburn Blvd., so it would be more than adequate for the bridge replacement project. Renfree Field has been closed for years, so there would be no conflict with baseball activities, but there could be impacts to the nearby, State-funded play structure for children.

The Renfree lot would be more useful and convenient than the Powerhouse parking lot due to ease of access, and the absence of curbs, landscaping features, and mature shade trees that are present at the Powerhouse parking lot. The wide open spaces would make it easier to maneuver heavy equipment, and allow for the convenient storage of building materials and demolition waste.

Page 7.
New Bridge Construction
SECTION II - PROJECT DESCRIPTION
Temporary Pedestrian Bridge and Pedestrian Detour.

Page 61.
SECTION II - PROJECT DESCRIPTION
12. TRANSPORTATION AND CIRCULATION
ANSWERS TO CHECKLIST QUESTIONS
C) No Additional Significant Effect

Temporary Pedestrian Crossing
Rather than spending valuable material, labor costs, and time building, and then dismantling, a temporary pedestrian crossing, the City should instead be installing a **flood-resistant and permanent pedestrian/equestrian crossing** on Arcade Creek ~200 feet downstream (northwest) of the Auburn Blvd. Bridge.

A permanent pedestrian/equestrian bridge in this location would connect the trail on the north bank of the creek (along Park Road) to the trail on the south bank of the creek (within the East Side Natural Area), therefore establishing a new loop trail in the Park. There is already a loop trail encircling the East Side Natural Area south of the creek, but the trail on the north bank stops abruptly at Park Road, and is not connected to this loop.

A loop trail connecting the north and south banks via a permanent pedestrian/equestrian bridge would greatly improve recreation opportunities at the Park. As it stands, the only option available to hikers, runners, and equestrians for navigating the north and south trails is to cross the creek on the Auburn Blvd. Bridge itself, but this is treacherous for all concerned.

The design and installation of the new pedestrian/equestrian bridge should be melded with the design and implementation of a riparian restoration project on the unnamed tributary within the Del Paso Park picnic area, recommended below.

The City already installed a nice Hallsten bridge near the 18th tee of the Arcade Creek Golf Course, and that bridge has served golfers for many years. Please see the links below for the Hallsten bridge already in the Park, and another company that offers similar, pre-cast bridges.

Arcade Creek Hole #18 - Beware of the Double Cross
https://yougolfgirl.wordpress.com/2018/05/13/the-nines-at-haggin-oaks-arcade-creek/#jp-carousel-1726

Hallsten Pedestrian Bridges
https://hallsten.com/wp-content/uploads/2017/05/Pedestrian-Bridges.pdf

True North Steel
https://truenorthsteel.com/bridge/pedestrian-bridges/?gclid=EAIaIQobChMIibyMtdTu6w-IV5Ql9Ch0rwQoTEAAYASAAEgLML_D_BwE

Page 10-11.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
Discussion, Land Use.

Page 96.
Tree Survey Report
2. METHODOLOGY

The CEQA document must mention that the City Council passed Resolutions in 1985 and 2002 designating for conservation a total of ~100-acres within Del Paso Regional Park. There are four Natural Area "units" in the Park consisting of:
the *East Side Natural Area*, the *West Side Natural Area*, the *Arcade Creek Natural Area*, and *Longview Oaks Preserve*. The CEQA document should also provide acreage figures for the study area and project site; as far as I could tell, it is only mentioned once in the Tree Survey Report (6.4 acres).

The City maintains a large archive of documents pertaining to Del Paso Regional Park that should be utilized for this and all future CEQA documents.
https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory/Arden-Arcade/Del-Paso-Regional-Park

Page 20.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
Mitigation Measure AQ-2:

Non-native grasses **should not** be used for erosion control.

The City should order grass plugs and/or seeds from Hedgerow Farms derived from regional grass populations, if possible. Hedgerow Farms sells a mix of native grasses specifically for erosion control that could benefit biodiversity within the larger Arcade Creek Natural Area once the grasses mature and disperse seed.

Hedgerow Farms - Native Erosion Control Seed Mix
https://www.hedgerowfarms.com/online-store/Native-Erosion-Control-Mix-p94443350

Page 23.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
Re: the "*very poor habitat*" within Arcade Creek.

Portraying the condition of habitat within the watershed as "very poor" without providing a credible context for how it got that way, is inconsistent with the spirit of CEQA to characterize site conditions in a neutral and factual manner. This portrayal implies that something is intrinsically wrong with the Creek and Park, and that it lacks value to the community and society as a whole.

Private developers and "pro-business" elements within municipal governments have long favored this portrayal for sites they consider ripe for development as a way to downplay impacts of their proposed projects, and as a premise for developing these areas with a minimal regulatory burden. These same developers and municipal departments almost always fail to acknowledge their own collective and cumulative complicity in destroying and degrading these habitats through a steady sequence of egregious land-use decisions that span generations in the Sacramento metropolitan area. Developers and municipal governments caused these "very poor" habitat conditions, and they must be held accountable today with stringent regulatory requirements aimed at reversing some of the historical damage.

Oak Woodlands as Wildlife Habitat (2005)
https://www.fs.fed.us/psw/publications/purcell/psw_2005_purcell002_tietje.pdf

Haggin Oaks Background Report (2009)
https://saccreeks.org/wp-content/uploads/2012/10/HagginOaksBackgroundReport_Draft11-10-09.pdf

Page 23.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
SPECIAL STATUS AQUATIC AND SEMIAQUATIC SPECIES
Western Pond Turtle

The Western Pond Turtle was still present in Arcade Creek in the late 1970s, and it might still be present today in remote stream reaches where large woody debris have accumulated to form isolated, perennial pools, or in the proximity of beaver dams. Most importantly, Arcade Creek within the Regional Park could serve as an important reintroduction site for this declining species.

Deep pools persisting in Arcade Creek through the Sacramento Summer (June 2018)
https://www.facebook.com/ArcadeCreekAACP/photos/pcb.896281280581657/896280850581700

Page 22.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
SPECIAL STATUS AQUATIC AND SEMIAQUATIC SPECIES

Salmon, Steelhead, and Resident Inland Fishes
This CEQA document must be amended to account for the presence of Chinook salmon within the project area, and must ensure that standard mitigation measures for anadromous fishes are tailored to the site-specific conditions within Arcade Creek.

"*Salmon and Steelhead Observed in Arcade Creek*" (2016)
https://saccreeks.org/wp-content/uploads/2016/12/161220.Templin-Arcade-Creek-History-Salmon-Sightings-3.pdf

"*Evidence of Chinook Spawning in Urban Arcade Creek*
Can Urban Creek Habitat Help Replace Lost Spawning Habitat?"
(Templin and Le Doux-Bloom, circa 2017)
https://www.facebook.com/ArcadeCreekAACP/photos/gm.2035675083208149/1091864981023285

This CEQA document should acknowledge the presence of non-anadromous, native inland fishes that persist in Arcade Creek despite the large-scale habitat destruction, and the contamination of its surface waters. For example, the City should address the conservation needs of the Sacramento sucker regardless of its regulatory status.

Spawning Sacramento Suckers in Arcade Creek (Thompson, 2017)
https://www.facebook.com/ArcadeCreekAACP/photos/a.673968746146246/673979272811860

FishBio: *Subsistence Fishing for Sacramento Sucker*
https://fishbio.com/field-notes/wildlife-ecology/subsistence-fishing-for-sacramento-sucker

Threats, conservation strategies, and prognosis for suckers (Catostomidae)... (2004)

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.619.6508&rep=rep1&type=pdf
Page 23.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
SPECIAL STATUS TERRESTRIAL SPECIES
Nesting Songbirds and Raptors.

Page 28.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
Mitigation Measure BIO-4:
Conduct Reconstruction Surveys for Swainson's Hawk

This section needs to be revised and significantly expanded to incorporate a more comprehensive dataset generated by the Sacramento Audubon Society (SAS). SAS and its allies have assembled a robust, peer-reviewed dataset documenting the presence of 114 bird species at Del Paso Regional Park, including Swainson's Hawk and White-tailed Kite. My understanding is that Swainson's hawks were observed within 0.50 miles of the project site, immediately southeast of the intersection at Winding Way @ Auburn Blvd. Much further west, on Haggin Oaks Golf Course, a nesting pair was observed in a large oak tree near the junction of the "Arcade Creek" and the "MacKenzie" golf courses.

eBird - Bird Observations
https://ebird.org/barchart?r=L920553&yr=all&m=

Page 26.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
ANSWERS TO CHECKLIST QUESTIONS
C. Effects Can Be Mitigated to Less than Significant.

Native trees in the project area include Interior Live Oak and Blue Oak, a species endemic to California and locally rare. Canyon Live Oak is probably not present in the project area.

Trees Native to the 95821 Zip Code - Calscape
https://calscape.org/loc-38.6259,-121.3885%20(95821)/cat-Trees/ord-species?srchcr=sc5f62bcaba315f

Page 25.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
SUMMARY OF ANALYSIS -
GENERAL PLAN 2035 MASTER EIR
General Plan Policy ER 2.1.5
re: 1:1 replacement of riparian habitat.

The temporal and permanent impacts to riparian habitat on the main-stem of Arcade Creek should be mitigated onsite by re-aligning, re-vegetating, and securing the un-named tributary to Arcade Creek within the Del Paso Park picnic area. This tributary carries surface water from north to south from the culvert beneath SR-244 across the sunken picnic. Please see my more detailed comments below regarding Pages 28 and 30 of the CEQA document.

Page 27.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
SUMMARY OF ANALYSIS...TREE PLANTING, MAINTENANCE, AND CONSERVATION
ANSWERS TO CHECKLIST QUESTIONS
C) Effects Can Be Mitigated...

Page 97.
Appendix C: Tree Survey Report
2. METHODOLOGY

The tree survey was nicely done, however, the CEQA document needs to take the next step and identify which 30 of the 93 trees need to be removed for the bridge replacement project. Figures 3-1 and 3-2 should display color-coded dots for those trees that will be removed, and these proposed tree removals should be cross-referenced and noted on the actual survey table (pages 106-108) with a simple asterisk, or with notations in an additional column.

Page 7.
SECTION II - PROJECT DESCRIPTION
Stream Diversion

P. 27
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
ANSWERS TO CHECKLIST QUESTIONS
C. Effects Can Be Mitigated to Less than Significant.

Please delete the sentence: “The Project site is not located within an established native resident or migratory wildlife corridor or wildlife nursery site.”

Arcade Creek and Del Paso Regional Park are both nursery areas for for fish and wildlife, and known corridors for wildlife dispersal. Wildlife originating in, or visiting, the Creek include beaver, black-tailed jackrabbit, coyote, deer, puma and river otter.

The CEQA document should account for, and mitigate, any potential adverse impacts on these and other species that occupy habitat in the vicinity of the project area.

Beaver Dam on Arcade Creek (May 2019)
https://www.facebook.com/ArcadeCreekAACP/photos/pcb.1126621160881000/1126867594189690/

Page 28.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
Mitigation Measure BIO-2: Protect Central Valley Steelhead
Bullet #11
Bullet #12

This mitigation measure should be implemented by restoring the main-stem of Arcade Creek, and the unnamed tributary nearby, to benefit both Central Valley Steelhead and Chinook salmon.

Please see the detailed comments below on Page 30 regarding compensatory mitigation (on-site, in-kind) at "Mitigation Measure BIO-7: Preserve Trees and Riparian Habitat" - bullets #7 & #8).

Also, consistent with "Mitigation Measure BIO-7: Preserve Trees and Riparian Habitat" (page 30, bullets #4 & #5), the City should coordinate with "local advocacy groups" and CDFW on a "replanting/restoration plan...that will ensure successful restoration of the onsite riparian areas".

Page 30.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
"Mitigation Measure BIO-7:
Preserve Trees and Riparian Habitat"
Bullet #7

Consistent with my comment below on bullet #8, when non-native shrubs and trees (e.g., *Zelkova serrata*) are encountered in and around the project area, they should be completely removed and treated with herbicide rather than just trimmed and left in place.

Page 30.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
3. BIOLOGICAL RESOURCES
Mitigation Measure BIO-7:
Preserve Trees and Riparian Habitat
Bullet #8

No; please **do not** buy credits from a mitigation bank.

While there are excellent mitigation banks for shaded riparian habitat within the regulatory "service area", the City has a unique and compelling opportunity with this infrastructure project to leverage the compensatory mitigation requirements toward the restoration of the degraded, unnamed tributary that flows into Arcade Creek immediately downstream of the bridge replacement project.

In 1985, the City Council designated a Natural Area for the Arcade Creek riparian corridor that begins at the Auburn Blvd. Bridge and stretches westward almost all the way to the Roseville Road Bridge. The ~3 acre unnamed tributary that is contiguous with the Arcade Creek Natural Area near the project site should be restored, attractively fenced, and added to the portfolio of Natural Areas within Del Paso Regional Park.

The restoration design should incorporate the findings and recommendations of scientists who are restoring riparian forests for the maximum benefit of resident and migratory birds and fishes. The channelized ditch should be reworked to add meanders and sinuosity, and the existing natural dam of large woody debris at the tributary's confluence with Arcade Creek should be left in place, and possibly augmented.

California Riparian Restoration Handbook (2018)
http://www.riverpartners.org/wp-content/uploads/2018/08/Journal_2009-v5n3-fall.pdf

The Riparian Bird Restoration Plan (2004)
http://www.prbo.org/calpif/pdfs/riparian_v-2.pdf

The Oak Woodland Bird Conservation Plan (2002)
http://www.prbo.org/calpif/pdfs/oak.v-2.0.pdf

Stream Restoration: A Natural Channel Design Handbook
https://semspub.epa.gov/work/01/554360.pdf

Large Woody Debris in Urban Stream Channels: Redefining the Problem (2011)
https://people.wou.edu/~taylors/g407/restoration/Lassettre_Kondolf_2012_LWD_urban_streams.pdf

There are local engineering firms possessing the knowledge and skills to do riparian restoration projects on Arcade Creek. Consequently, the money earmarked by the City to purchase mitigation credits should instead be used to hire a reputable firm to design and build a tributary restoration project that adds value to Arcade Creek and Del Paso Regional Park.

Arcade Creek Park Preserve Restoration Project
https://www.cbecoeng.com/our-projects/arcade-creek-park-preserve-restoration-project/

The sunken picnic area already serves as a de facto detention basin for floodwaters, thereby helping to reduce the volume and velocity of peak flows on the main-stem of Arcade Creek. Civil engineers should use this pre-existing basin to their advantage when designing and implementing a restoration project on the unnamed tributary. A detention and filtration project here would complement the much larger detention basin that the City built immediately downstream within the East Side Natural Area to capture, retain, filter, and recharge contaminated run-off from Norris Swale.

Del Paso Regional Park Detention and Filtration Wetland
https://www.cityofsacramento.org/-/media/Corporate/Files/ParksandRec/Parks/DelPasoRegional/10-AC-DelPasoRegPark-DandFWProject_CPlans.pdf?la=en

The standing water that covers the picnic area and unnamed tributary during and after rainfall events is comprised by flows draining into the park from the SR 244 culvert that commingle with flows that back-up into the picnic area from the main-stem of Arcade Creek. The picnic area is part of the Creek's historic floodplain, and this natural process helps reduce peak flows on the main-stem and protect flood-prone parcels downstream. Even during average rainfall years, the standing water submerges the unnamed tributary, and would provide the dynamic hydraulic and hydrological conditions necessary to establish a native wetland and riparian forest.

Flooded Park: Picnic area at Del Paso Regional park is underwater! (Ali Wolf)
https://twitter.com/awolfTV/status/982376031557316608?s=20

Restoring the "liability" of the unnamed tributary (that is nothing more than a channelized, degraded ditch) into a multi-benefit, "ecological asset" with beautiful and productive wetlands and riparian forest would:

(i) replace the functions and values of the riparian habitat lost to the bridge replacement,

(ii) expand "off-stream" refugia for aquatic species who have been extirpated from all of the other small tributaries lost to suburban development and degradation, and

(iii) improve the water quality of the drainage flowing into Arcade Creek from the picnic area.

Persistence of native fishes in small streams of the urbanized San Francisco Estuary, California: acknowledging the role of urban streams in native fish conservation (2011) https://nature.berkeley.edu/carlsonlab/wp-content/uploads/2016/01/LeidyEtAl_2011_AquaticConserv.pdf

A **compensatory mitigation plan** for the bridge replacement project on the mainstem of Arcade Creek should include the following elements to both restore conditions on the project site, and to compensate for unavoidable impacts at the project site by restoring the unnamed tributary within the picnic area:

(a) directly seeding locally collected acorns;

(b) planting oak seedlings/saplings germinated from locally-collected acorns, and installing a drip-irrigation system for each seedling/sapling that will be maintained for a minimum of 3 years (NOTE: larger "native" trees from conventional nurseries should not be planted unless seeds and/or cutting were sourced from the Arcade Creek watershed or the Lower American River Basin);

(c) planting native shrubs that have been nearly extirpated from the Park, e.g., Elderberry (*Sambucus nigra ssp. caerulea*), Mulefat (*Baccharis salicifolia*), and Toyon (*Heteromeles arbutifolia*); (NOTE: the shrubs should be sourced from the CNPS' Elderberry Farms Native Plant Nursery or a similar nursery in the area that grows plants for local restoration projects):

Elderberry Farms Native Plant Nursery
https://www.sacvalleycnps.org/index.php?option=com_content&view=article&id=4&Itemid=110

Shrubs Native to the 95821 Zip Code - Calscape
https://calscape.org/loc-38.6259,-121.3885%20(95821)/cat-Shrubs/ord-species?srchcr=sc5f7543a54b832;

(d) planting Deergrass plugs (*Muhlenbergia rigens*) along the re-contoured channel of the unnamed tributary to hold the soil in place while the shrubs and trees are growing (NOTE: Deergrassed sourced from Placer County can be purchased at Hedgerow Farms);

(e) cutting, removing, and stump-treating with herbicide all non-native shrubs, trees, and plants growing within stream reaches 300' upstream, and 300' downstream, of the project site at Auburn Blvd.; and maintaining these reaches for a minimum of 3-years to prevent the recolonization of non-native vegetation;

California Wildland Invasive Plants
https://www.cal-ipc.org/resources/library/publications/ipcw/cwip/

(f) preparing a long-term maintenance plan for the mitigation areas that restricts the use of string-trimmers or flail-mowers to only those maintenance staff who are trained to use this machinery without harming or killing the native grasses, shrubs, and trees;

Tree damage reaches epic proportions
https://www.agweek.com/opinion/columns/4097778-kinzler-tree-damage-reaches-epidemic-proportions; and

(g) designing and installing site-specific fencing and signage for the compensatory mitigation site(s) explaining:

(i) the mitigation sites were placed there to compensate for the habitat lost to the bridge replacement project;
(ii) once the new trees mature, they will replace the functions and values of the ~30 mature trees that were removed;
(iii) the restored wetland, detention basin, and riparian forest on the unnamed tributary will improve water quality in Arcade Creek and help reduce the risk of flooding downstream; and
(iv) the mitigation sites are now part of the Park's Natural Area system, and access is restricted to Park personnel, and to those with permission from the City.

A number of large, mature, "original" oaks are still living in the Park and on adjacent private properties, and these venerable trees continue to produce acorns that have driven the recovery oak woodlands in the area since 1985. Oak reforestation projects along the Creek and within the Park should be done by germinating acorns from these "original" oaks and their likely progeny, and by protecting wild oak seedlings/saplings that have sprouted on their own.

Riparian canopy expansion in an urban landscape: Multiple drivers of vegetation change along headwater streams near Sacramento, California (Solins, 2018)
https://www.sciencedirect.com/science/article/abs/pii/S0169204617303262?via%3Dihub

How to Grow California Oaks
https://oaks.cnr.berkeley.edu/how-to-grow-california-oaks/

This mitigation approach incorporates an aggressive weed-eradication element, and can be thought of as "addition by subtraction"; that is every non-native shrub and tree that is subtracted from the forest will most likely be replaced by a native tree that is already growing in the understory nearby. Non-native plants of greatest concern within Del Paso Regional Park include:

Acacia dealbata,
Ailanthus altissima,
Albizia julibrissin,
Arundo donax,

Catalpa bignonioides,
Centaurea solstitialis,
Hedera helix,
Ligustrum japonicum,
Phoenix canariensis,
Pistacia chinensis,
Prunus ilicifolia,
Sesbania punicea,
Triadica sebifera,
Ulmus parvifolia, and
Vinca major.

In 2010, the City funded a major weed survey of the watershed, but it was never implemented. To my knowledge, no weeds were ever eradicated under this program. The mitigation requirements for the Auburn Blvd. Replacement Project should be leveraged to finally begin this necessary weed eradication work along Arcade Creek.

Invasive Plant Species Control and Management Plan for the Arcade Creek Stream Corridor (2010)
https://www.cityofsacramento.org/-/media/Corporate/Files/ParksandRec/Parks/DelPasoRegional/07-AC-InvasivePlantPlan_2010.pdf?la=en

Pages 32-35.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
4. CULTURAL RESOURCES
(ENVIRONMENTAL SETTING)

Page 66.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
13. TRIBAL CULTURAL RESOURCES
ANSWERS TO CHECKLIST QUESTIONS
(Ai, Aii) Effects Can be Mitigated...

The sections in this CEQA document on cultural resources need to be revised to reflect the presence of an archeological site within Del Paso Park less than 1-mile from the project site. The depth and boundaries of the site registered as CA-Sac-201 have not been precisely characterized, but it is possible that the site underlays Bridge Road near the crossing at Arcade Creek, and portions of the Renfree Field parking lot to the east, and Owl Creek Terrace to the west. In 2012, ICF prepared an environmental study for the Roseville Road Bridge Replacement Project, and made the following finding about the archeological site:

"*...(A) previously recorded prehistoric archaeological site, CA-Sac-201, was identified within 1 mile of the project site and is directly relevant for assessing the sensitivity of the project site. Geomorphological data in the area of CA-Sac-201 suggest that there is moderate potential for buried archaeological deposits to be present in the project vicinity, for two reasons. First, CA-Sac-201 and the project site share the same soil*

type. Second, CA-Sac-201 is buried under 9 feet of alluvium, which is within the proposed depth of construction for the creek realignment."
ICF March 2012
Page 35 (109 of 159)
Initial Study/Mitigated Negative Declaration
Roseville Road Bridge Replacement Project
(T15068500)
http://sacramento.granicus.com/MetaViewer.php?view_id=22&clip_id=2934&meta_id=381576

In 1984, the City first recognized the presence of CA-Sac-201 when it was preparing the in the EIR for the Master Plan for Del Paso Regional Park. However, the City has chosen not to conserve or celebrate the archeological resources in the area. Furthermore, the City has never engaged with the tribal communities in the region to formulate a proper stewardship framework for CA-Sac-201.

United Auburn Indian Community
https://www.auburnrancheria.com/about-us/tribal-council/

Securing and restoring CA-Sac-201 would honor the cultural history of Arcade Creek, and would add great value to the Park's portfolio of assets. A relevant example of what could be done at Del Paso Regional Park is the conceptual restoration plan for the Ohlone Shellmound in West Berkeley depicted in the link below.

Ohlone Heritage Site and Sacred Grounds
https://shellmound.org/learn-more/ohlone-vision/

There Were Once More Than 425 Shellmounds in the Bay Area: Where Did They Go?
Please see the conceptual restoration plan for the Shellmound at 4th Street
https://www.kqed.org/news/11704679/there-were-once-more-than-425-shellmounds-in-the-bay-area-where-did-they-go

There is an ongoing land-use dispute over the historic Shellmound in West Berkeley that demonstrates that indigenous people remain concerned with their sacred sites, even if they seem completely ruined to non-tribal observers. The City of Sacramento has a unique opportunity at Del Paso Regional Park to acknowledge and conserve the important cultural resources of the Valley Nisenan Maidu and their ancestors.

West Berkeley Shellmound is now Considered one of the Eleven Most Endangered Historic Places in the U.S.
https://www.berkeleyside.com/2020/09/25/west-berkeley-ca-shellmound-most-endangered-historic-places-national-trust-historic-preservation

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SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
HYDROLOGY AND WATER QUALITY
(B) No Additional Significant Effect
MITIGATION MEASURES

Page 68.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
14. UTILITIES AND SERVICE SYSTEMS
ANSWERS TO CHECKLIST QUESTIONS
(A, B) No Additional Significant Effect.

Page 70.
SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
MANDATORY FINDING OF SIGNIFICANCE
(C) No Additional Signifiant Effect

Re: the passages in the CEQA document:

"*The Project would not...alter the existing drainage pattern.*"

"*The Project would don't (sic) substantially increase the amount or rate of surface runoff...*"

"*There are no required mitigation measures for this Project relating to Hydrology and Water Quality.*"

The discharge of trash and contaminated drainage from the existing bridge contributes to the degradation of water quality and habitat in Arcade Creek on an ongoing basis. This is not an acceptable condition with the existing bridge, and it is not an acceptable outcome when the new bridge is built.

The CEQA document should acknowledge the cumulative adverse effects of contaminated drainage and trash being discharged into the creek from all of the bridges in the vicinity that were collectively built by the City, County, and the State (e.g., Bridge Road, SR-51, Watt Avenue, and the Softball Complex Access Bridge). These bridge crossings have permanently fragmented the aquatic and terrestrial habitats of the watershed, and have had a devastating, adverse effect on the ecology of Arcade Creek. Furthermore, the ongoing discharges of contaminants and trash from the bridges are further degrading the water quality in one of the most impaired waterbodies in the Sacramento Valley.

TMDL Projects - Sacramento County Urban Creeks (updated 2020)
https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/urban_creeks/index.html#EPA

Water Quality Progress Report
Sacramento County Urban Creeks – Diazinon and Chlorpyrifos (EPA, 2004)
https://www.epa.gov/sites/production/files/2015-07/documents/4-sac-county-urban-creeks-opp-tmdl-implementation-report-2015-06-15.pdf

The City should make this bridge replacement project a model for "low impact development" (LID) where cost-effective technologies and "green infrastructure" are incorporated into the design to eliminate the ongoing discharges of contaminated drainage and trash.

The new structure should be able to:
(i) trap and sequester trash so that it never enters the waterbody;
(ii) slow-down, filter, retain, and recharge stormwater runoff with rocky structures, bioswales, wetlands, and retention basins so that street runoff is held within the vicinity of the project site, and discharged slowing into the creek and its groundwater aquifer.
The references below demonstrate that these technologies and approaches are widely accepted and already being used extensively by transportation agencies, utility departments, and the civil engineering community:

US DOT - Green Transportation Infrastructure (2007)
Please scroll down to see: *Management of Highway Stormwater Runoff*
https://www.transportation.gov/testimony/green-transportation-infrastructure-challenges-access-and-implementation

Banking on Green: Green Infrastructure Can Save Municipalities Money
Please see pages 13-15 re: Cost-effective Street Reconstruction
https://www.asla.org/uploadedFiles/CMS/Government_Affairs/Federal_Government_Affairs/Banking%20on%20Green%20HighRes.pdf]

How to Filter 2 million gallons of stormwater from the Aurora Bridge
https://www.nature.org/en-us/about-us/where-we-work/united-states/washington/stories-in-washington/filtering-stormwater/

Trash Capture Technologies
https://www.epa.gov/trash-free-waters/trash-capture-technologies

City of Los Angeles - Clean Water Initiative Update (2018)
Page 18: Rory M. Shaw Wetlands Parkr
Page 21: Peck Park Canyon Enhancement
Page 34: Broadway Neighborhood Stormwater Greenway
Page 36: Catch Basin Inserts...
https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mdi2/~edisp/cnt026384.pdf

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SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
RECREATION
ENVIRONMENTAL SETTING

The acreage figure for the Regional Park should be corrected per the City's own website (624.36 acres NOT 145.61 acres). Furthermore, the CEQA document should explain that ~100 acres of the Regional Park have been designated as Natural Areas per two unanimous resolutions by the City Council in 1985 and 2002. Along with the three Natural Areas cited in this section, a fourth Natural Area (the "Arcade Creek Natural Area") protects the riparian corridor from the Auburn Blvd. Bridge and westward nearly to the Roseville Road Bridge.

Del Paso Regional Park
https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory/Arden-Arcade/Del-Paso-Regional-Park

In 2020, a conservation proposal was submitted to the City to extend Natural Area protections to the remaining, unprotected reach of Arcade Creek within Del Paso Regional Park — bounded by the 18th tee on the "Arcade Creek Golf Course", and the CDFW-mandated mitigation area for the Roseville Road Bridge Replacement.
Please see the image above depicting the pedestrian bridge at the 18th hole (page 3 of this comment letter, *Arcade Creek Hole #18 - Beware of the Double Cross*), and Figure 5 below from the CEQA document for the Roseville Road Bridge Replacement that shows the westernmost portion of this stream reach. The goal behind the conservation proposal is to restore the riparian forest within Haggin Oaks Golf Course so the entire stretch of Arcade Creek within Del Paso Regional Park is conserved and managed for water quality and biodiversity.

Natural Communities and Development in the Project Area (Page 78 of 159)
http://sacramento.granicus.com/MetaViewer.php?view_id=22&clip_id=2934&meta_id=381576

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SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION
13. TRIBAL CULTURAL RESOURCES
ANSWERS TO CHECKLIST QUESTIONS
(Ai, Aii) Effects Can be Mitigated...

It would be worthwhile to look for any artifacts that might be excavated from the nearly forgotten "Funland Amusement Park" that operated in Del Paso Park through the late 1960s. Featured attractions included a merry-go-round and miniature train, and there may be train-related artifacts within the project area. While such artifacts would not qualify as cultural resources, *per se*, anything found might be valuable to Sacramento historians.

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #3

Tim Vendlinski
Arcade Creek Restoration Project

Comment Number/ Location	Comment/Recommendation Summary	Response To Comment
#1, Page 1	The CEQA document should discloses that the size of study area for the project at the beginning of the document.	Disclosed the 10.4 acre size of the Project area at the beginning of the document under the Project Location subheader. The 6.4 acre study area included in the Tree Survey Report differs from the total project area due to addition of the staging areas on the paved Powerhouse Science Center and Renfree Field parking lots.
#2, Page 1-2	Figures indicate that the project area will include the unpaved Owl Creek Terrace immediately west, and contiguous with, Bridge Road. This is the historic floodplain of Owl Creek and has a known history of saturated soils and ponding water. This area should not be considered for, or used as, a staging area for the project. An ongoing complaint has been filed against the City with CalEPA and the Central Valley Regional Water Quality Control Board for past actions at this site.	The Owl Creek Terrace located immediately west, and contiguous with, Bridge Road is no longer considered for use as part of the Project area and has been removed from project figures. Staging for the Project will not occur within the Owl Creek Terrace and would be located at the northeast corner of the Auburn Boulevard and Winding Way intersection and within the closed, paved parking lot for Renfree Field and vacant paved parking lot used for the Powerhouse Science Center.
#3, Page 2	The project should consider using the paved parking lot for Renfree Field, immediately east and contiguous with Bridge Road, instead of the Powerhouse parking lot.	The closed Renfree Field paved parking lots has been added as a potential staging area for the proposed project, and the ISMND and associated figures have been revised accordingly.
#4, Page 2-3	The City should install a pedestrian/equestrian crossing along Arcade Creek 200 feet downstream of the Auburn Blvd. Bridge.	The addition of a separate pedestrian/ equestrian bridge downstream of Auburn Boulevard across from Arcade Creek is out of the scope of the proposed bridge replacement project. The purpose of the Project is to replace the existing bridge over Arcade Creek and provide a new structure that is consistent with current design standards for roadway geometry, accessibility, and structural integrity; to increase hydraulic capacity; and to update the Auburn Boulevard and Winding Way

		intersection to enhance pedestrian safety and improve the existing intersection operations. A temporary pedestrian detour path would be constructed approximately 100 feet upstream of the existing bridge to provide access over Arcade Creek for the duration of Project construction; however, the temporary pedestrian bridge and associated pathway would be removed upon the completion of Project construction.
#5 Page 3	The CEQA document must mention that the City Council passed resolutions to conserve a total of 100-acres within Del Paso Regional Park and provide acreage for the project study area.	A discussion of the Del Paso Regional Park Master Plan and associated developments and preserved areas within the park has been included under the land use subsection on page 10 of the document. Reference response to comment #1, acreage of the project area was added to project location subheader at the beginning of the document.
#6 Page 4	Non-native grasses should not be used for erosion control. The City should order grass plugs and/or seeds from Hedgerow Farms derived from regional grass populations, if possible.	Non-native grasses will not be used in the erosion control mix. A native seed mix will be provided in the final engineering specs and the contractor will be responsible for finding a suitable nursery which carries the required mix.
#7 Page 4	Portraying the condition of habitat within the watershed as "very poor" without providing a credible context for how it got that way, is inconsistent with the spirit of CEQA. This portrayal implies that something is intrinsically wrong with the Creek and Park, and that it lacks value to the community and society as a whole.	The quality of habitat within the BSA has been described as very poor, not within the watershed. In addition, while it may have value to the community and society, it does not have value to any special-status wildlife species other than as a movement corridor to more suitable habitat upstream or downstream of the BSA.
#8 Page 5	The Western Pond Turtle was still present in Arcade Creek in the late 1970s, and it might still be present today.	Thank you for the information. This was included in the technical studies but is not needed in the CEQA document. The City acknowledges turtles may be present as Arcade Creek could provide a movement corridor.
#9 Page 5	This CEQA document must indicate the presence of Chinook salmon within the project area and must ensure that standard mitigation measures for anadromous fishes are tailored to the site-specific conditions within Arcade Creek. This document should acknowledge the presence of non-anadromous, native inland fishes that persist in Arcade Creek despite the large-scale habitat destruction, and the contamination of its surface waters.	The City went through consultation with NOAA Fisheries and it was determined that the project would have no effect on chinook salmon. The City acknowledges the potential for steelhead to be moving through the area, and the appropriate mitigation measures are included. The purpose of the document is not to discuss common aquatic and terrestrial species however it is assumed that those will be present. The mitigation measures for steelhead will also protect any native fish species that may be present.
#10 Page 6	The Nesting Songbirds and Raptors needs to be revised and significantly	This is not a requirement of the CEQA document; furthermore, specific locations are not included in a public document as this will

	expanded to incorporate a more comprehensive dataset generated by the Sacramento Audubon Society. Swainson's hawks were observed within 0.50 miles of the project site, immediately southeast of the intersection at Winding Way @ Auburn Blvd.	allow for the disturbance and/or decimation of recorded species. The City acknowledges the potential for Swainson's hawk, white-tailed kite and other nesting raptors and songbirds and the appropriate mitigation measures to protect these species are included.
#11 Page 6	Native trees in the project area include Interior Live Oak and Blue Oak, a species endemic to California and locally rare. Canyon Live Oak is probably not present in the project area.	Thank you for that information. This species was removed from the description.
#12 Page 7	The temporal and permanent impacts to riparian habitat on the main-stem of Arcade Creek should be mitigated onsite by re-aligning, re-vegetating, and securing the unnamed tributary to Arcade Creek within the Del Paso Park picnic area.	While this is a good suggestion, it is not part of the project and would be a separate project in itself.
#13 Page 7	The CEQA document needs to identify which 30 of the 93 trees need to be removed for the bridge replacement project. Tree removals should be included in survey figures and the tree survey table.	Tree removals are not included in the survey report, this was not the purpose of the report. The report was prepared to identify the number and locations of the trees within the entire project area. Therefore, the survey figures and tables will not be updated. A restoration plan has been prepared for this project.
#14 Page 7-8	Please delete the sentence: "The Project site is not located within an established native resident or migratory wildlife corridor or wildlife nursery site." Arcade Creek and Del Paso Regional Park are both nursery areas for fish and wildlife and known corridors for wildlife dispersal. The document should account for, and mitigate, any potential adverse impacts species that occupy habitat in the vicinity of the project area.	This sentence is correct. While portions of Arcade Creek and Del Paso Regional Park may be considered as "native resident or migratory wildlife corridor or wildlife nursery site", the project site itself is not. The project site is not recognized as an established native resident or migratory wildlife corridor or wildlife nursery site by the regulatory agencies.
#15 Page 8	Mitigation Measure BIO-2: Protect Central Valley Steelhead should be implemented by restoring the main-stem of Arcade Creek, and the unnamed tributary nearby, to benefit both Central Valley Steelhead and Chinook salmon.	That is not a mitigation measure. The mitigation measures included in the CEQA document were developed in consultation with NOAA Fisheries. Restoration of this area would be a separate project.
#16 Page 8	When non-native shrubs and trees (e.g., Zelkova serrata) are encountered in and around the project area, they should be completely removed and treated with herbicide rather than just trimmed and left in place.	Herbicides are not allowed by the regulatory agencies to be used within the vicinity of a water body. The contractor will be responsible for tree removal and the City can put a spec in the bid document stating that the stumps be removed as well as having this as a measure in the required permits.

#17 Page 9-11	Please do not buy credits from a mitigation bank. The City has the opportunity to leverage the compensatory mitigation requirements toward the restoration of Arcade Creek. The restoration design should incorporate the findings and recommendations of scientists for the maximum benefit of resident and migratory birds and fishes.	While this is a good suggestion, it is not feasible for a number of reasons. The City would have to protect that area 'in perpetuity' which would require a large amount of funds. In addition, due to the current conditions at the site, long-term monitoring at the mitigation site would be unsafe and there is the potential for vandalism due to the surrounding development. Lastly, the project area is not large enough to accommodate on-site mitigation as only the areas that would be impacted were studied. As mentioned above, the restoration of Arcade Creek is an entirely separate project. However, the City may evaluate implementing or funding a project through a local organization that would directly benefit the Arcade Creek corridor or citizens of the City. A restoration plan for the temporarily impacted areas will be prepared during permitting and will include hydroseeding with a native riparian seed mix and planting native riparian trees.
#18 Page 11-12	A compensatory mitigation plan should be developed for the project to both restore conditions on the project site, and to compensate for unavoidable impacts at the project site by restoring the unnamed tributary within the picnic area.	A restoration plan for the temporarily impacted areas will be prepared during permitting and will include hydroseeding with a native riparian seed mix and planting native riparian trees. As mentioned above, restoration of Arcade Creek and the unnamed tributary would be a separate project. However, The City may evaluate implementing or funding a project through a local organization that would directly benefit the Arcade Creek corridor or citizens of the City
#19 Page 13-14	The CEQA document on cultural resources needs to be revised to reflect the presence of an archeological site within Del Paso Park less than 1-mile from the project site. The depth and boundaries of the site registered as CA-Sac-201 have not been precisely characterized, but it is possible that the site underlays Bridge Road near the crossing at Arcade Creek, and portions of the Renfree Field parking lot to the east, and Owl Creek Terrace to the west.	The Area of Potential Effects (APE) and ADI (Area of Direct Impact) were developed in coordination with the City and Caltrans and were established following guidelines set forth in the Caltrans PA Attachment 3. The presence of CA-SAC-201 was noted in the record search prepared for the project; however, the project would not directly impact the site. Additionally, pursuant to Section 106 PA Stipulation IX.A and as applicable PRC 5024 MOU Stipulation IX.A.2, has determined a Finding of No Historic Properties Affected is appropriate for this undertaking
#20 Page 15	The discharge of trash and contaminated drainage from the existing bridge contributes to the degradation of water quality and habitat in Arcade Creek on an	Thank you for your comment, the City acknowledges this is an on-going problem and routinely has their maintenance department clean up these areas.

	ongoing basis. This is not an acceptable condition with the existing bridge, and it is not an acceptable outcome when the new bridge is built. The document should acknowledge the cumulative adverse effects of contaminated drainage and trash being discharged into the creek from all of the bridges in the vicinity.	
#21 Page 16	The City should make this bridge replacement project a model for "low impact development" (LID) where cost-effective technologies and "green infrastructure" are incorporated into the design to eliminate the ongoing discharges of contaminated drainage and Trash.	Comment noted.
#22 Page 17	The acreage figure for the Regional Park should be corrected per the City's own website (624.36 acres NOT 145.61 acres).	Acreage of Del Paso Regional Park has been revised to 624.4 acres.
#23 Page 17	The CEQA document should explain that ~100 acres of the Regional Park have been designated as Natural Areas.	Added discussion of permanently preserved natural areas per the Del Paso Park Master Plan.
#24 Page 17	It would be worthwhile to look for any artifacts that might be excavated from the nearly forgotten "Funland Amusement Park" that operated in Del Paso Park through the late 1960s. While such artifacts would not qualify as cultural resources, per se, anything found might be valuable to Sacramento historians.	Comment noted.

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

October 4, 2020

SENT VIA EMAIL

Ron Bess, Associate Planner
City of Sacramento Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

RE: Auburn Boulevard over Arcade Creek Bridge Replacement (SCH# 2020099008)

Dear Mr. Bess:

Thank you for providing the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) with the opportunity to review the Mitigated Negative Declaration (MND) for the Auburn Boulevard over Arcade Creek Bridge Replacement project, consisting of the replacement of the existing structurally deficient bridge with a new bridge that meets current structural and geometric design standards, improves hydraulic capacity, and provides traffic-rated barrier railings. We offer the following comments and recommendations on project site considerations related to air quality.

- All projects are subject to Sac Metro Air District rules and regulations at the time of construction, and are required to implement our Basic Construction Emission Control Practices (BCECP). We recommend including the entire BCECP as mitigation in the MND. Please visit our website to find a list of the most common rules that apply at the construction phase of projects, and a copy of our BCECP.

- The MND indicates that project roadway construction emissions modeling assumed that all on-road haul trucks used for the project would have 2010 or newer model engines. Therefore, the MND should include a mitigation measure that explicitly requires use of 2010 or newer diesel engines for all on-road haul trucks associated with project construction.

- Sac Metro Air District has updated its Enhanced On-Site Exhaust Controls and we recommend including the full specifications of these controls into Mitigation Measure (MM) AQ-1.

- We commend the inclusion of enhanced fugitive particulate matter (PM) dust control practices into MM AQ-2, corresponding with Sac Metro Air District's Enhanced Fugitive PM Dust Control Practices.

- Because this project includes demolition, we recommend paying particular attention to Rule 902, regarding asbestos containing materials, in the referenced list of common

rules that apply at the construction phase of projects. Sac Metro Air District staff is available weekdays between 8:00 and 10:00 a.m. to review notifications and answer asbestos related questions, either by emailing asbestos@airquality.org or calling 916-874-4800.

- For clear disclosure of project impacts on or benefits to sustainable, non-polluting transportation, the MND should provide a more specific description of the project's pedestrian and bicycle improvements. This description should include information on where its added crosswalks will be located, and what pedestrian safety features are included in the crosswalks and sidewalks constructed as part of the project. There are two slip lanes on the southern leg of the intersection of Winding Way and Auburn Boulevard, and this configuration does not create optimally safe pedestrian conditions, because it facilitates higher vehicle speeds and necessitates further crossing distances over motor vehicle lanes for pedestrians. Therefore, it is particularly important to provide full, clear disclosure of project impacts on or benefits to sustainable transportation for this project.

Thank you for your attention to our comments and recommendations. If you have questions about them, please contact me at mwright@airquality.org or 916-874-4207.

Sincerely,

Molly Wright, AICP
Air Quality Planner / Analyst

c: Paul Philley, AICP, Sac Metro Air District

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #4

Molly Wright
Sacramento Metropolitan Air Quality Management District

Comment Number/ Location	Comment/Recommendation Summary	Response To Comment
#1 Page 1	All projects are subject to Sac Metro Air District rules and regulations at the time of construction, and are required to implement our Basic Construction Emission Control Practices (BCECP). We recommend including the entire BCECP as mitigation in the MND.	Updated BCECP measures have been incorporated into Mitigation Measure AQ-1 and AQ-2 of the Project ISMND.
#2 Page 1	The MND indicates that project roadway construction emissions modeling assumed that all on-road haul trucks used for the project would have 2010 or newer model engines. Therefore, the MND should include a mitigation measure that explicitly requires use of 2010 or newer diesel engines for all on-road haul trucks associated with project construction.	The "Use of 2010 or newer diesel engines for all on-road haul trucks associated with Project construction" measure has been added to Mitigation Measure AQ-1 of the Project ISMND.
#3 Page 1	Sac Metro Air District has updated its Enhanced On-Site Exhaust Controls and we recommend including the full specifications of these controls into Mitigation Measure (MM) AQ-1.	Updated Mitigation Measure AQ-1 to be consistent with SMAQMD Enhanced On-Site Exhaust Controls.
#4 Page 1	We commend the inclusion of enhanced fugitive particulate matter (PM) dust control practices into MM AQ-2.	Updated Mitigation Measure AQ-2 to be consistent with SMAQMD enhanced fugitive particulate matter dust control practices.
#5 Page 1-2	Because this project includes demolition, we recommend paying particular attention to Rule 902, regarding asbestos containing materials, in the referenced list of common rules that apply at the construction phase of projects.	Added a specific reference to adherence with SMAQMD Rule 902 to Mitigation Measure HAZ-2 and the abatement and disposal of hazardous materials associated with the Project.
#6 Page 2	The MND should provide a more specific description of the project's pedestrian and bicycle improvements. This description should include information on where its added crosswalks will be located, and what pedestrian safety features are included in the crosswalks and sidewalks constructed as part of the project.	Added a description of pedestrian and bicycle improvements to the Project Description section of the ISMND. Final pedestrian and bicycle signage, markings, and facility information will be determined during final design of the project.

SACRAMENTO AREA SEWER DISTRICT
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10060 Goethe Road
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Tel 916.876.6000
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www.sacsewer.com

October 5, 2020

Ron Bess
City of Sacramento
Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

Application: Auburn Boulevard Over Arcade Creek Bridge Replacement Project

Dear Mr. Bess,

The Sacramento Area Sewer District (SASD) has reviewed the Notice of Availability / Intent to Approve the Draft Mitigated Negative Declaration for the Auburn Boulevard Over Arcade Creek Bridge Replacement Project.

We expect that if the Project is subject to currently established policies, ordinances, fees, and to conditions of approval, then mitigation measures within the EIR will adequately address the sewage aspects of the project. We anticipate a less than significant impact to the sewage facilities due to mitigation, however an encroachment permit may be required.

If you have any questions regarding these comments, please call me at 916-876-9991 or Yadira Lewis 916-876-6336.

Sincerely,

Haley MacGowan

Haley MacGowan, EIT
SASD Development Services

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #5

Haley MacGowan **SASD Development Services**
Response To Comment
Acknowledge that SASD has reviewed and approved of the findings of the ISMND, and that an encroachment permit would be required for any relocations of SASD facilities.

From: Teri Burns
To: Ron Bess
Cc: bluevelvet@yahoo.com; Missy Worthley-Peterson; Sondra Betancourt
Subject: Notice of Availability/Intent to Approve the Auburn Boulevard over Arcade Creek Mitigated Negative Declaration.
Date: Monday, October 5, 2020 2:32:06 PM

On behalf of the Sacraments Horsemen's Association, I write to share that we were of the impression this project might include a separate pedestrian/ equestrian bridge slightly down stream from Auburn Blvd.

Since it isn't included here we continue to advocate for such a bridge across Arcade Creek.

We also request installation of secondary crosswalk buttons higher up on polls so that riders need not dismount to engage the walk signal across Auburn. As part of that crossing issue, we request clear areas be available on each side where horses can safely stand while waiting for the crossing signal.

Thank you for your consideration.
Teri Burns
916-802-8343

Sent from my Motorola Smartphone

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #6

Teri Burns
Sacramento Horsemen's Association

Comment Number/ Location	Comment/Recommendation Summary	Response To Comment
#1 Page 1	A separate pedestrian/ equestrian bridge should be included in the project slightly downstream from Auburn Blvd to cross Arcade Creek.	The addition of a separate pedestrian/ equestrian bridge downstream of Auburn Boulevard across Arcade Creek is out of the scope of the proposed bridge replacement project. The purpose of the Project is to provide a new structure along Auburn Boulevard that is consistent with current design standards for roadway geometry, accessibility, and structural integrity; to increase hydraulic capacity; and to update the Auburn Boulevard and Winding Way intersection to enhance pedestrian safety and improve the existing intersections operations. A temporary pedestrian detour path would be constructed approximately 100 feet upstream of the existing bridge to provide access over Arcade Creek for the duration of Project construction; however, the temporary pedestrian bridge and associated pathway would be removed upon the completion of Project construction.
#2 Page 1	Secondary crosswalk buttons should be installed higher up on polls so that riders need not dismount to engage the walk signal across Auburn Blvd.	Intersection facilities will be determined during final design of the Project and would adhere to existing City, AASHTO and Caltrans design criteria and standards.
#3 Page 1	Clear areas should be made available on each side of the Auburn Blvd. crosswalks so horses can safely stand while waiting for the crossing signal.	Intersection facilities will be determined during final design of the Project and would adhere to existing City, AASHTO and Caltrans design criteria and standards.

From: Wood, Dylan@Wildlife
To: Ron Bess
Cc: Wildlife R2 CESA; state.clearinghouse@opr.ca.gov
Subject: Comments on the MND for the Auburn Boulevard Bridge Replacement Project (SCH# 2020099008)
Date: Monday, October 5, 2020 6:52:41 PM
Attachments: image001.png

Dear Mr. Bess:

RE: Auburn Boulevard Bridge Replacement Project (PROJECT)
MITIGATED NEGATIVE DECLARATION (MND) SCH# 2020099008

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the City of Sacramento (the City) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

The proposed project consists of the replacement of the existing structurally deficient bridge with a new bridge that meets current structural and geometric design standards, improves hydraulic capacity, and provides traffic-rated barrier railings. The proposed bridge replacement would also enhance the Auburn Boulevard and Winding Way intersection by adding an additional left turn pocket from westbound Auburn Boulevard to Winding Way. The proposed replacement bridge would be a single span precast-prestressed concrete girder bridge, placed along the existing bridge alignment. The proposed bridge would be approximately 97 feet in width and would provide two 12-foot through lanes, two 11 -foot through lanes, two 11-foot left turn lanes, and shoulders and sidewalks in each direction. The length of the proposed bridge would be approximately 89 feet to avoid the existing bridge foundations.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document or facilitate an effective environmental review process. Where CDFW recommends specific revisions to the MND, deletions are marked with a strikethrough (~~example~~) while additions are marked as underlined (<u>example</u>).

Comment 1: BIO-1 revisions needed to mitigate impacts to Sanford's arrowhead a level of less-than-significant.

BIO-1 describes mitigation for potential impacts to Sanford's arrowhead (*Sagittaria sanfordii*); however, portions of this measure not specific enough to adequately assess plants within the project area or respond in the event plants are found during project surveys. As Sanford's arrowhead is a rhizomatous plant, there are situations where physical disturbances to the plant may be more advantageous than relocating the plant out of the project area, depending on the type of impact resulting from the project activity[2].

To address this comment, CDFW recommends revising the MND with the following language:

A qualified biologist shall conduct a preconstruction survey for Sanford's arrowhead <u>during the plant's blooming period (May-October)</u> within 30 days prior to construction. If Sanford's arrowhead is not found, then no further measures are necessary. If Sanford's arrowhead is found in the Project site BSA, CDFW will be notified at least ten days prior to dewatering or construction impacts in the vicinity of Sanford's arrowhead in accordance with the California Native Plant Protection Act of 1977 (2 FGC § § 1900-1913) ~~to allow sufficient time to transplant the individuals to a suitable location~~. <u>In consultation with CDFW, the City shall develop a Sanford's arrowhead avoidance, minimization, or relocation plan. The plan shall evaluate project impacts on the project area's population of Sanford's arrowhead and propose a scientifically supported response procedure.</u>

Comment 2: BIO-4 revisions suggested to improve mitigation for potential impacts to Swainson's hawk.

CDFW recommends the following revisions to BIO-4 to improve the MND:

Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Swainson's Hawk. Prior to construction, surveys will be conducted by a qualified biologist to determine presence/absence of nesting Swainson's hawk in and within 0.50 miles of the Project site according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFG, 2000). If no Swainson's hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson's hawk nests are found, <u>the City shall develop an avoidance plan in consultation with CDFW</u> ~~CDFW will be consulted~~ regarding measures to reduce the likelihood of forced fledging of young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a no-work zone around the nest until the young have fledged as determined by a qualified

biologist, biological monitoring, noise attenuating barriers, and/or construction best practices. In the event take of Swainson's hawk cannot be avoided, the project proponent may seek related take authorization as provided by the Fish and Game Code.

Comment 3: BIO-5 revisions needed to mitigate impacts to nesting birds to a level of less-than-significant.

BIO-5 describes preconstruction surveys for nesting migratory birds. For clarity during implementation, this measure should define the survey methodology more clearly for the potential nesting birds that may be encountered on the project site.

To address this concern, CDFW recommends revising the MND with the following language:

Nests in Trees and Shrubs

· Avoid Active Nesting Season. Implement the following to ensure impacts to tree and shrub nesting species remain less than significant.

- *o If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31).*
- *o If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), perform preconstruction surveys prior to the start of Project activities.*

· Conduct Preconstruction Nesting Bird Surveys. If construction, grading, or other Project-related activities are schedule during the nesting season (February 1 to August 31), preconstruction surveys for other migratory bird species shall take place no ~~less than 14 days and no more than 30 days prior to the beginning of construction within 250 feet of suitable nesting habitat.~~ greater than 15 days prior to the start of project activities. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos; 1,320 feet for fully protected species such as white-tailed kite. If the preconstruction surveys do not identify any nesting migratory bird species within areas potentially affected by construction activities, no further mitigation will be required.

· Avoid Active Bird Nest Sites. If active nests are found, avoid project-related construction impacts by establishing appropriate no-work buffers to limit Project related construction activities near the nest site. Determine the size of the no work buffer zone to avoid take of nesting birds in consultation with a qualified biologist and CDFW although use a 500-foot buffer when possible. Delineate the no work buffer zone with highly visible temporary construction fencing or flagging. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. Do not commence project-related construction activity within the no work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active. If it is determined during surveys or project implementation that project activities may impact white-tailed kite, project personnel shall fully avoid any impacts that may result in take if white-tailed kite is observed to be utilizing the

project area or adjacent area.

Comment 4: BIO-7 revisions suggested to improve mitigation for potential impacts to riparian habitat.

BIO-7 proposes City compensation for permanent removal of riparian habitat. While purchasing bank credits is typically acceptable for compensation, BIO-7 may lock the City in to a narrow mitigation strategy since there are limited CDFW-approved banks with a service area overlapping with the project location. That said, the City may consider implementing or funding a project through a local organization that would directly benefit the Arcade Creek corridor or citizens of the City rather than funnel mitigation funding offsite.

CDFW recommends the following revisions to BIO-7 to improve the MND:

To compensate for the permanent removal of riparian vegetation associated with the bridge construction, the City shall mitigate ~~purchase credits from a Corps and/or CDFW approved mitigation bank~~ at a minimum 3:1 ratio (three acres of habitat replaced for every one acre removed). Compensation make take the form of permanent protection, enhancement, or restoration of suitable habitat, purchase of credits at a Corps and CDFW-approved bank or conservation site, or through funding an equivalent project through a local organization.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental documents be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. The completed form can be sent electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this email or further coordination should be directed to Dylan Wood, Environmental Scientist at 916-358-2384 or dylan.a.wood@wildlife.ca.gov.

Sincerely,
Dylan Wood

California Department of Fish and Wildlife
Environmental Scientist
(916) 358-2384

References:

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000

[2] South Sacramento Habitat Conservation Plan (Sacramento County 2018)

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[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000.

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #7

Dylan Wood **California Department of Fish and Wildlife**		
Comment Number/ Location	**Comment/Recommendation Summary**	**Response To Comment**
#1 Page 2	BIO-1 describes mitigation for potential impacts to Sanford's arrowhead (*Sagittaria sanfordii*); however, portions of this measure not specific enough to adequately assess plants within the project area or respond in the event plants are found during project surveys. CDFW provides recommended revised language for the BIO-1 mitigation measure.	Revised as recommended.
#2 Page 2-3	CDFW provides recommended revised language for the BIO-4 mitigation measure.	Revised as recommended.
#3 Page 3-4	BIO-5 describes preconstruction surveys for nesting migratory birds. For clarity during implementation, this measure should define the survey methodology more clearly for the potential nesting birds that may be encountered on the project site. CDFW provides recommended revised language for the BIO-5 mitigation measure.	Revised as recommended.
#4 Page 4	BIO-7 may lock the City in to a narrow mitigation strategy since there are limited CDFW-approved banks with a service area overlapping with the project location. The City may consider implementing or funding a project through a local organization that would directly benefit the Arcade Creek corridor or citizens of the City rather than funnel mitigation funding offsite. CDFW provides recommended revised language for the BIO-7 mitigation measure.	Revised as recommended.

DEPARTMENT OF TRANSPORTATION
District 3
703 B Street
MARYSVILLE, CA 95901–5556
(530) 634-7616
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

October 9, 2020

GTS# 03-SAC-2020-00745
24C0081

Ron Bess
Associate Planner
Community Development Department
City of Sacramento
300 Richard Boulevard
Sacramento, CA 95811

Auburn Boulevard Over Arcade Creek Bridge Replacement Project (24C0081) – Initial Study/Mitigated Negative Declaration

Dear Mr. Bess:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the project referenced above. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system. We review this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision and goals for sustainability/livability/economy, and safety/health. We provide these comments consistent with the State's smart mobility goals that support a vibrant economy, and build communities, not sprawl.

Located in the City of Sacramento on Auburn Boulevard, between Winding Way and Park Road, the project aims to replace the existing structurally deficient bridge to meet current design guidelines and improve hydraulic capacity. The proposed bridge structure will be 89 feet in length, 97 feet wide, provide two 12-foot through lanes, two 11-foot through lanes, two 11-foot left turn lanes, and shoulders and sidewalks in each direction. During construction, a detour will be established between Winding Way and State Route 244 where extensive signage will be utilized to guide motorists along the detour route. Based on the information received, Caltrans provides the following comments.

Traffic Operations

Caltrans requests a copy of the DKS traffic analysis prepared for this project to review for potential impacts to the State Route 244 corridor and its connections to both Interstate 80 and State Route 51 during the construction phase. It is recommended that the existing traffic operations system and lighting at the State Route 244 ramps at the Auburn Boulevard intersection be maintained to typical working condition. Existing traffic signs should be maintained/replaced and proposed construction signs affecting the SHS should be reviewed with a traffic management plan with Caltrans. Additionally, any proposed changes or work to existing traffic operations systems should include coordination with Caltrans for review and comments.

Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any questions regarding these comments or require additional information, please contact Benjamin Garcia, Intergovernmental Review Coordinator for the City of Sacramento, by phone (530) 741-5173 or via email to Benjamin.Garcia@dot.ca.gov.

Sincerely,

Alexander Fong

ALEX FONG
Acting Branch Chief, Transportation Planning – South
Planning, Local Assistance, and Sustainability
Caltrans District 3

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #8

Alexander Fong
California Department of Transportation, District 3

Comment Number/ Location	Comment/Recommendation Summary	Response to Comment
#1 Page 2	Caltrans requests a copy of the DKS traffic analysis prepared for this project to review for potential impacts to the State Route 244 corridor and its connections to both Interstate 80 and State Route 51 during the construction phase.	The City shall provide Caltrans a copy of the DKS Traffic Analysis prepared for the proposed project.
#2 Page 2	It is recommended that the existing traffic operations system and lighting at the State Route 244 ramps at the Auburn Boulevard intersection be maintained to typical working condition.	The existing traffic operations system would remain in-place and in working order throughout proposed project implementation and would only experience temporary cycle modifications due to the implementation of the proposed construction detour.
#3 Page 2	Existing traffic signs should be maintained/replaced and proposed construction signs affecting the SHS should be reviewed with a traffic management plan with Caltrans.	Existing traffic signage in the proposed project would be maintained in place when feasible or replaced in coordination with Caltrans during final design of the proposed project. Proposed construction signage would be coordinated with Caltrans and included in the traffic management plan.
#4 Page 2	Any proposed changes or work to existing traffic operations systems should include coordination with Caltrans for review and comments.	The City shall coordinate with Caltrans on any further project design or action decisions made regarding the proposed project.

From: Tim Vendlinski <tvendlinski@sbcglobal.net>
Sent: Monday, October 12, 2020 2:21 PM
To: Ron Bess <RBess@cityofsacramento.org>; Zuhair Amawi <ZAmawi@cityofsacramento.org>
Cc: Ryan Moore <RMoore@cityofsacramento.org>; Raymond Costantino <RCostantino@cityofsacramento.org>; Janelle Oishi <JOishi@cityofsacramento.org>; Brianna Moland <BMoland@cityofsacramento.org>; Dylan Wood <dylan.a.wood@wildlife.ca.gov>
Subject: Requesting a call with you and the lead person from Dewberry/Drake Haglan re: Auburn Blvd. Replacement Bridge

Dear Messrs. Bess & Amawi:

Please let me know when you would be available for a call at your earliest convenience.

I'd also appreciate you inviting the lead person from Dewberry/Drake Haglan to participate in the call.

Please find below the discussion topics I'd like to cover:
1. Lack of conceptual engineering drawings and description of the bridge structure in the CEQA document.
The City obviously had these
drawings available as they we're presented during the Zoom call, and it would have been very helpful if these drawings would have been included in the CEQA document.

2. Poor sequencing of public involvement opportunities.
On the Zoom call, the City and their
consultants promised intensive outreach efforts only after the project is approved by the City Council in November 2020. That is no way to engage the community and win support for your project.
The City staff have shown great reluctance to make design changes in municipal projects after the City Council has approved a given project.
Over the years, I wrote several requests for engagement and collaboration, but the City was not receptive to these opportunities for input.
Together, we could have created a robust project design and CEQA document that we could all embrace. Instead, we have an insufficient CEQA document for a project whose features are poorly described.

3. Permanent bridge vs. temporary bridge. The CEQA document does not disclose cost information For the different project elements, so the cost of the temporary bridge upstream on private property is not known, and there's no way to compare it to the cost of a permanent pedestrian/equestrian bridge favored by Park stakeholders that would be installed downstream in the East Side Natural Area.

4. The need to address the discharge of contaminated water and trash into the creek.

5. Onsite mitigation vs. the purchase of credits in an off-site mitigation bank.

Thank you,
Tim

Tim Vendlinski
(510) 366-4669

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Response to Comments for Comment Letter #9		
Tim Vendlinski **Arcade Creek Restoration Project**		
Comment Number/ Location	**Comment/Recommendation Summary**	**Response to Comment**
#1	Lack of conceptual engineering drawings and description of the bridge structure in the CEQA document. The City obviously had these drawings available as they we're presented during the Zoom call, and it would have been very helpful if these drawings would have been included in the CEQA document.	The engineering drawings have not been finalized and therefore are not included in the CEQA document.
#2	Poor sequencing of public involvement opportunities. On the Zoom call, the City and their consultants promised intensive outreach efforts only after the project is approved by the City Council in November 2020. That is no way to engage the community and win support for your project. The City staff have shown great reluctance to make design changes in municipal projects after the City Council has approved a given project. Over the years, I wrote several requests for engagement and collaboration, but the City was not receptive to these opportunities for input. Together, we could have created a robust project design and CEQA document that we could all embrace. Instead, we have an insufficient CEQA document for a project whose features are poorly described.	The City has complied with the requirements of the CEQA guidelines. The City has met with surrounding property owners and interest groups to discuss the project. Additional outreach will continue during final design of the Project.
#3	Permanent bridge vs. temporary bridge. The CEQA document does not disclose cost information For the different project elements, so the cost of the temporary bridge upstream on private property is not known, and there's no way to compare it to the cost of a permanent	The addition of a separate pedestrian/ equestrian bridge downstream of Auburn Boulevard across from Arcade Creek is out of the scope of the proposed bridge replacement project. The purpose of the Project is to replace the existing bridge over Arcade Creek and

	pedestrian/equestrian bridge favored by Park stakeholders that would be installed downstream in the East Side Natural Area.	provide a new structure that is consistent with current design standards for roadway geometry, accessibility, and structural integrity; to increase hydraulic capacity; and to update the Auburn Boulevard and Winding Way intersection to enhance pedestrian safety and improve the existing intersection operations. A temporary pedestrian detour path would be constructed approximately 100 feet upstream of the existing bridge to provide access over Arcade Creek for the duration of Project construction; however, the temporary pedestrian bridge and associated pathway would be removed upon the completion of Project construction.
#4	The need to address the discharge of contaminated water and trash into the creek.	Water Quality BMPs including Sacramento County's stringent Water Quality measures will be followed. As far as trash on the ground and in the creek, the City acknowledges this is an on-going problem and routinely has the maintenance department clean up these areas.
#5	Onsite mitigation vs. the purchase of credits in an off-site mitigation bank.	The City will work with the permitting agencies to determine the best method of mitigation. Due to the current conditions at the site, long-term monitoring at the mitigation site would be unsafe and there is the potential for vandalism due to the surrounding development. In addition, the project area is not large enough to accommodate on-site mitigation as only the areas that would be impacted were studied. The restoration of Arcade Creek is an entirely separate project. However, the City may consider implementing or funding a project through a local organization that would directly benefit the Arcade Creek

		corridor or citizens of the City. A restoration plan for the temporarily impacted areas will be prepared during permitted and will include hydroseeding with a native riparian seed mix and planting native riparian trees.

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

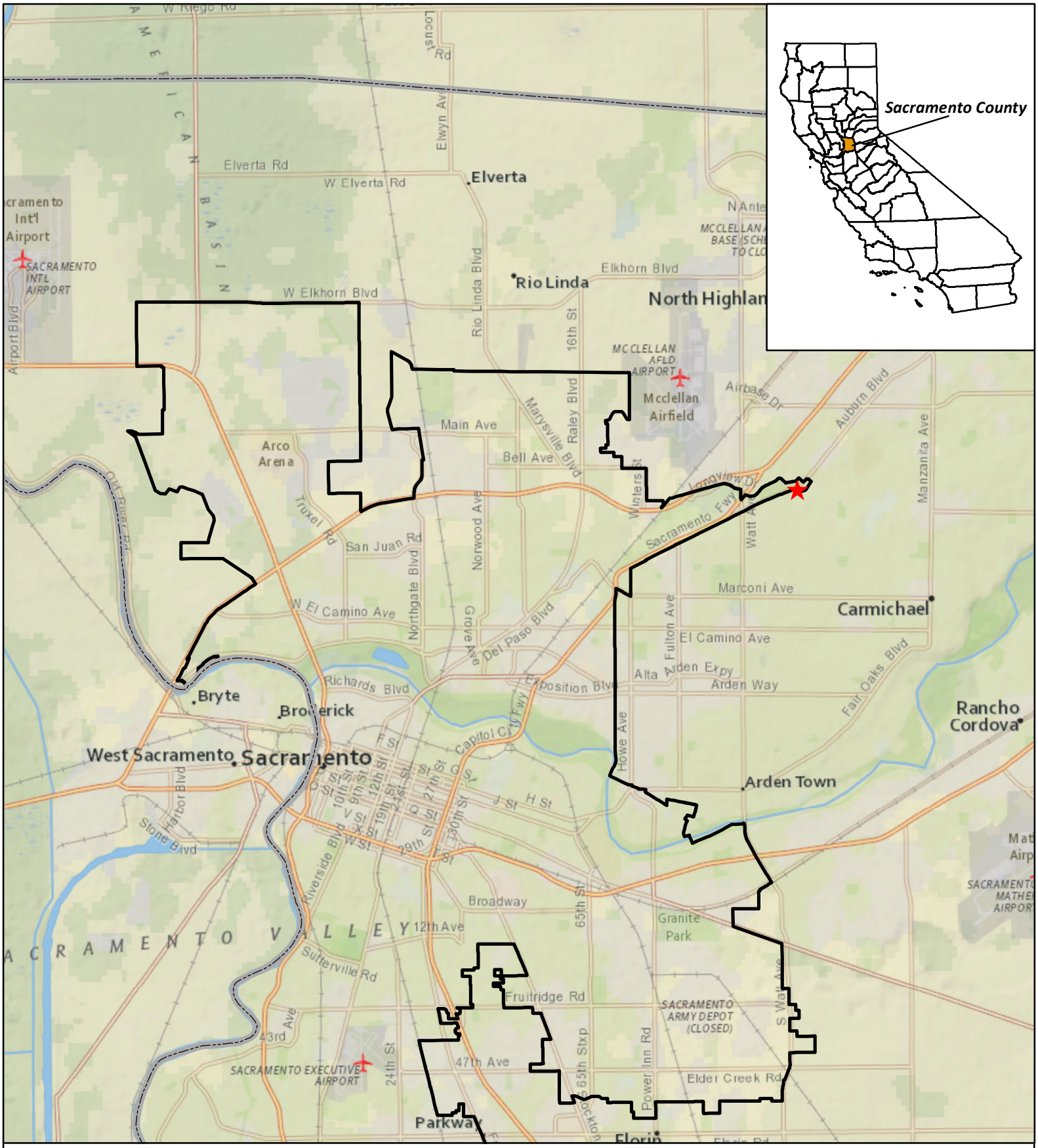
Table 1: Reponses to Comments Summary

Comment Letter	Commenter	Affiliation	Date Sent	Response to Comment
1	Gary Gasperi, PE	County of Sacramento	9/8/2020	The City will continue to coordinate with the County through Right of Way management regarding detours affecting nearby county facilities.
2	Robert Armstrong	Regional Sanitation	9/15/2020	Acknowledge that Sacramento Area Sewer District (SASD) has a collector line located adjacent within Auburn Boulevard.
3	Tim Vendlinski	Arcade Creek Restoration Project	10/1/2020	A summary of comments and responses is included in **Table 2** below.
4	Molly Wright	Sacramento Metropolitan Air Quality Management District	10/4/2020	A summary of comments and responses is included in **Table 3** below.
5	Haley MacGowan	Sacramento Area Sewer District	10/5/2020	Acknowledge that SASD has reviewed and approved of the findings of the ISMND, and that an encroachment permit would be required for any relocations of SASD facilities.
6	Teri Burns	Sacramento Horsemen's Association	10/5/2020	A summary of comments and responses is included in **Table 4** below.
7	Dylan Wood	California Department of Fish and Wildlife (CDFW)	10/5/2020	A summary of comments and responses is included in **Table 5** below.
8	Alexander Fong	California Department of Transportation, District 3	10/9/2020	A summary of comments and responses is included in **Table 6** below.
9	Tim Vendlinski	Arcade Creek Restoration Project	10/12/2020	A summary of comments and responses in included in Table 7 below.

AUBURN BOULEVARD BRIDGE OVER ARCADE CREEK
BRIDGE REPLACEMENT PROJECT
RESPONSE TO COMMENTS

Within five days following IS/MND approval, the City must file a Notice of Determination (NOD) with the State Clearinghouse and the Sacramento County Clerk-Recorder. A resolution approving the IS/MND and adopting the MMRP and a Notice Of Determination (NOD) will be prepared for the City's use in this process. This resolution will confirm that the City Council has received and reviewed the IS/MND pursuant to the provisions of CEQA.

APPENDIX B: FIGURES



Legend

- Project Location
- Sacramento City Boundary
- Sacramento County Boundary

Dewberry | drakehaglan

0 0.5 1 2 Miles

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Project Name:
Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, CA

Regional Location Map

Figure 1

Legend

Project Location - Auburn Boulevard Bridge

Proposed Staging Areas

Dewberry | drakehaglan

0 175 350 700 Feet

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Project Name:
Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, CA

Project Location Map

Figure 2

Legend

- Project Impact Area
- Existing Auburn Boulevard Bridge
- Temporary Pedestrian Bridge and Walkway
- Proposed Staging Area
- Proposed Bridge Location

Dewberry | drakehaglan

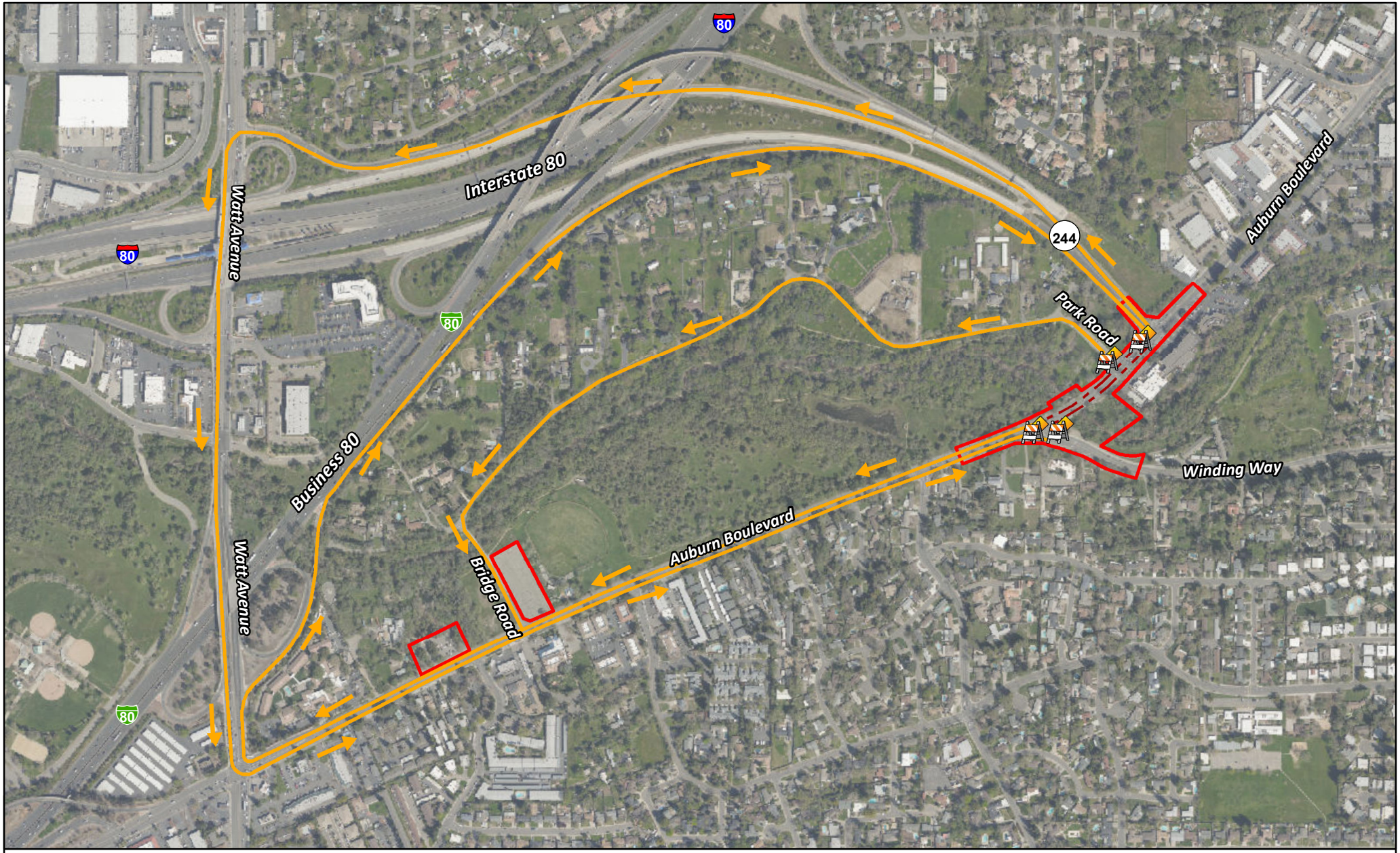
0 200 400 800 Feet

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS
0402 Feet
Notes: This map was created for informational and display purposes only

Project Name:
Auburn Boulevard Over Arcade Creek
Bridge (24C-0084) Replacement Project
Sacramento, CA

Project Details and Action Area

Figure 3



Legend

Project Extent | Road Closure Signs | Proposed Roadway Closure | Proposed Detour Route

Dewberry | drakehaglan

0 300 600 1,200 Feet

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Project Name:
Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, CA

Temporary Project Construction Detour

Figure 4

APPENDIX C: ROADWAY CONSTRUCTION EMISSIONS MODELING

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Auburn Blvd Bridge Replacement

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.06	10.17	8.60	20.27	0.27	20.00	4.39	0.23	4.16	0.02	2,216.98	0.58	0.05	2,245.43
Grading/Excavation	8.28	66.70	70.91	22.06	2.06	20.00	5.99	1.83	4.16	0.16	15,524.99	4.70	0.18	15,695.44
Drainage/Utilities/Sub-Grade	5.78	48.30	48.38	21.41	1.41	20.00	5.44	1.28	4.16	0.11	10,565.30	2.73	0.13	10,671.02
Paving	1.06	13.31	8.10	0.32	0.32	0.00	0.27	0.27	0.00	0.02	2,222.83	0.57	0.05	2,251.19
Maximum (pounds/day)	8.28	66.70	70.91	22.06	2.06	20.00	5.99	1.83	4.16	0.16	15,524.99	4.70	0.18	15,695.44
Total (tons/construction project)	0.37	3.08	3.13	1.21	0.09	1.12	0.32	0.08	0.23	0.01	690.56	0.20	0.01	697.97

Notes:

Project Start Year ->	2022
Project Length (months) ->	6
Total Project Area (acres) ->	11
Maximum Area Disturbed/Day (acres) ->	2
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	280	40
Grading/Excavation	0	0	0	0	1,160	40
Drainage/Utilities/Sub-Grade	0	0	0	0	760	40
Paving	0	0	0	0	360	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Auburn Blvd Bridge Replacement

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.01	0.07	0.06	0.13	0.00	0.13	0.03	0.00	0.03	0.00	14.63	0.00	0.00	13.44
Grading/Excavation	0.22	1.76	1.87	0.58	0.05	0.53	0.16	0.05	0.11	0.00	409.86	0.12	0.00	375.90
Drainage/Utilities/Sub-Grade	0.13	1.12	1.12	0.49	0.03	0.46	0.13	0.03	0.10	0.00	244.06	0.06	0.00	223.62
Paving	0.01	0.13	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.01	0.01	0.00	20.22
Maximum (tons/phase)	0.22	1.76	1.87	0.58	0.05	0.53	0.16	0.05	0.11	0.00	409.86	0.12	0.00	375.90
Total (tons/construction project)	0.37	3.08	3.13	1.21	0.09	1.12	0.32	0.08	0.23	0.01	690.56	0.20	0.01	633.19

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Appendix D: Tree Survey Report

Tree Survey Report

Auburn Boulevard Bridge Replacement Project

October 2020

Dewberry | drakehaglan

Tree Survey Report
Auburn Boulevard Bridge Replacement Project
City of Sacramento

October 2020

Submitted to:
City of Sacramento Department of Public Works
915 I Street, 2nd Floor
Sacramento, CA 95814

Prepared by:
Lindsay Tisch, ISA Certified Arborist®
WE-11451A
Dewberry | Drake Haglan
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670

TABLE OF CONTENTS

Tree Survey Report
Auburn Boulevard Bridge Replacement Project

1. INTRODUCTION

On behalf of the City of Sacramento Department of Public Works (City), Drake Haglan and Associates (DHA) prepared this Tree Survey Report (Report) for the Auburn Boulevard Bridge Replacement (Project). This Report documents the results of the tree survey and assessment conducted on July 11 and 23, 2018.

This Report includes a discussion of the Project, the methodology for surveying and assessing trees, the results of the tree survey, and recommendations to protect trees that may not be removed but may have work within the dripline.

1.1 Project Purpose

The purpose of the tree survey was to identify the type, amount, and condition of existing trees within and immediately adjacent to the Project site that may be impacted by construction activities.

1.2 Project Location

The proposed Project is located in the northeastern corner of the City of Sacramento near the border of Sacramento County (**Figure 1-1**) where Auburn Boulevard crosses Arcade Creek, east of Winding Way and west of Park Road and the I-80 ramps (**Figure 1-2**). The proposed Project is on the Citrus Heights CA USGS 7.5' Quadrangle within Township 9 North, Range 6 East, Section 7.

1.3 Project Description

The Project proposes to replace the existing structurally-deficient bridge with a new bridge that meets current structural and geometric design standards, improves hydraulic capacity, and provides traffic-rated barrier railings. The proposed bridge replacement would also enhance the Auburn Boulevard and Winding Way intersection, by adding an additional left-turn pocket from southbound Auburn Boulevard to eastbound Winding Way, and enhancing pedestrian safety facilities throughout the intersection.

The proposed replacement bridge would be a single span precast-prestressed concrete girder bridge, placed along the existing bridge alignment. The proposed bridge would be approximately 97 feet in width and would provide two 12-foot through lanes, two 11-foot through lanes, two 11-foot left turn lanes, and shoulders and sidewalks in each direction. The length of the proposed bridge would be approximately 89 feet to avoid the existing bridge foundations. The proposed bridge would be supported by concrete seat abutments on a single row of cast-in-drilled-hole concrete piles. A total of 16 piles are anticipated, and the piles would be approximately 60 feet in length.

Dewberry | drakehaglan

0 2 4 8 Miles

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County Coordinate System NAD 83 State Plane California II FIPS 0402 Feet; DHA, 2015
Notes: This map was created for informational and display purposes only

Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, California

Regional Location

Figure 1-1

★ Project Location: Auburn Boulevard Bridge

Dewberry | drakehaglan

0 75 150 300 Feet

Source: ESRI Online Basemap, Aerial Imagery, USGS National Map, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS 0402 Feet; DHA, 2015
Notes: This map was created for informational and display purposes only

Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, California

Project Location

Figure 1-2

The final vertical alignment is expected to be raised approximately 4.5 feet to enhance the site hydraulics.

The proposed Project would also result in the addition of a left turn pocket from southbound Auburn Boulevard eastbound Winding Way. The proposed Project would also improve pedestrian safety with the addition of a crosswalk on the west leg of the intersection.

Staging areas would be necessary to store materials and construction equipment while not hindering the traveling public (vehicular, bike, and pedestrian) and not exposing the traveling public to any hazards. One staging area would be established in the northeast corner of the Auburn Boulevard and Winding Way intersection. A larger staging area would be established approximately 0.5 miles west of the Project area, in either the paved parking lot on the corner of Auburn Boulevard and Bridge Road, or in a vacant paved parking lot used for the Powerhouse Science Center (assuming that the Powerhouse Science Center relocated prior to the start of construction).The Project Area and select Project details are shown in **Figure 1-3**.

Construction Activities

In order of activity, construction would consist of the following:

Construction Area Sign Installation

Sufficiently in advance of construction operations, appropriate construction signage would be installed identifying road and lanes closures, and established detour routes. Signs would remain in place throughout the duration of construction.

Clearing, Grubbing, and Tree Removals

Portions of hardscape and landscaping in conflict with construction and demolition activities would be removed. Areas along the existing bridge would be cleared of vegetation and fencing.

Stream Diversion (If Necessary)

Should water be present, stream flow in Arcade Creek would be diverted through the active construction zone. The diversion would be established in conformance with City specifications as well as Sacramento County, California Department of Fish and Wildlife, Regional Water Quality Control Board, and U.S. Fish and Wildlife Service regulatory requirements. The stream diversion would be constructed within the existing channel to protect water flowing in Arcade Creek from demolition and construction activities. Materials to construct the diversion would consist of temporary culverts as needed to convey flow rates anticipated during construction, and temporary cofferdams in the channel upstream and downstream of the site. Temporary cofferdams may consist of sheet piles, gravel bags, water filled bladder dams, or another agency approved method. All stream diversion work would be contained within the approved project area.

Legend

- Project Impact Area
- Proposed Bridge
- Existing Bridge
- Temporary Pedestrian Bridge
- Temporary Pedestrian Path
- Staging Areas

Dewberry drakehaglan

0 212.5 425 850 Feet

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project Sacramento, CA

Project Details and Project Impact Area

Figure 1-3

Utility Relocation

Multiple overhead, surface, and underground utilities would require relocation to complete proposed project construction. Upon completion of project construction, multiple utilities would be permanently relocated onto the proposed bridge.

Temporary Pedestrian Bridge and Pedestrian Detour

A temporary pedestrian detour would be constructed upstream of the existing bridge. The pedestrian detour would be constructed to include an HMA walking path, temporary fencing, and temporary bollards. A temporary bridge founded on short seat concrete would provide pedestrian access at the project site across Arcade Creek.

General Demolition

Demolition of the existing bridge work would be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the bridge demolition would be removed from the project site and disposed of by a contractor.

New Bridge Foundation

The new concrete seat bridge abutment foundations would involve excavations of up to 10 feet deep and would be supported by concrete cast-in-drilled-hole concrete piles. A total of 16 piles are anticipated, and the piles would be approximately 60 feet in length.

New Bridge Construction

The new bridge construction would involve placement of single span precast-prestressed concrete girder bridge along the existing bridge alignment. The creek diversion would be removed after the new bridge has been constructed. The bridge barriers, roadway approaches, intersection improvements, sidewalk improvements would then be completed. After the roadway is prepared for final surfacing and the full closure of Auburn Boulevard at the proposed project site is lifted, the temporary pedestrian detour would be removed.

Table 1 provides a description of the type of equipment likely to be used during the construction of the proposed project.

Table 1. Construction Equipment

Equipment	Construction Purpose
Hydraulic Hammer	Demolition
Hoe ram	Demolition
Jack Hammer	Demolition
Water Truck	Earthwork construction + dust control
Bulldozer / Loader	Earthwork construction + clearing and grubbing

Equipment	Construction Purpose
Haul Truck	Earthwork construction + clearing and grubbing
Front-End Loader	Dirt or gravel manipulation
Grader	Ground grading and leveling
Dump Truck	Fill material delivery
Bobcat	Fill distribution
Excavator	Soil manipulation and placement of rock slope protection
Compaction Equipment	Earthwork
Roller / Compactor	Earthwork and asphalt concrete construction
Backhoe	Soil manipulation + drainage work
Drill Rig	Construction of drilled pile foundations
Holding tanks	Slurry storage for pile installation
Crane	Bridge removal, placement of pile rebar cages, precast girders, and temporary casing;
Oscillator	Pile Temporary Casing
Concrete Truck and Pump	Placing concrete
Truck with seed sprayer	Erosion control landscaping
Generators	Power Hand Tools

Construction Schedule and Timing

Construction of the proposed project is anticipated to take approximately 6 months to complete. Construction is scheduled for the 2022 calendar year and would begin in May. All work within Arcade Creek would be conducted during the dry season (June - October).

1.4 Regulatory Requirements

The following regulations pertain to the protection of trees within the City of Sacramento:

CITY OF SACRAMENTO 2035 GENERAL PLAN

Goal ER 3.1 Urban Forest. Manage the city's urban forest as an environmental, economic, and aesthetic resource to improve Sacramento resident's quality of life.

Policies

- **ER 3.1.3 Trees of Significance.** The City shall require the retention of trees of significance (such as heritage trees) by promoting stewardship of such trees and ensuring that the design of development Projects provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or suitable mitigation.

CITY OF SACRAMENTO MUNICIPAL CODE

STREET TREES AND PRIVATE PROTECTED TREES

The City recognizes that the planting and preservation of trees enhances the natural scenic beauty, increases life-giving oxygen, promotes ecological balance, provides natural ventilation, air filtration, and temperature, erosion, and acoustical controls, increases property values, improves the lifestyle of residents, and enhances the identity of the city. City Code Chapter 12.56[1] includes provisions to protect City street trees. All removal, trimming, pruning, cutting, or other maintenance activities on any City street tree requires a permit from the director of the department of transportation pursuant to City Code Section 12.56.070. A City street tree is defined as any tree growing on a public street right-of-way that is maintained by the City. The director may require, where appropriate, the replacement of street trees proposed for removal. In such case, the City is responsible for the full cost of tree removal and replacement.

Private protected trees are defined as trees designated to have special historical value, special environmental value, or significant community benefit, and is located on private property. Private protected trees are:

All native trees at 12-inch diameter at standard height (DSH). Native trees include: Coast, Interior, Valley and Blue Oaks, CA Sycamore and Buckeye.

All trees at 32-inch DSH with an existing single family or duplex dwelling.

All trees at 24-inch DSH on undeveloped land or any other type of property such as commercial, industrial, and apartments.

[1] City of Sacramento. *Municipal Code Chapters 12.56 and 12.64*, *Trees Generally* and *Heritage Trees.* www.qcode.us/codes/sacramento.

2. METHODOLOGY

DHA's International Society of Arboriculture (ISA) Certified Arborist® Lindsay Tisch (WE-11451A) conducted a tree inventory and survey within the study area on July 11 and 23, 2018. The study area for the tree survey was defined as the area of direct impacts and includes the limits of disturbance determined by the site plans for the proposed Project. All individual trees in the approximately 6.4-acre study area with a diameter at breast height (DBH) of 4 inches or greater and multi-trunked trees with a cumulative DBH of 12 inches or greater were surveyed and evaluated for potential impacts that could occur as a result of Project implementation. DBH is defined as diameter at 4.5 feet above ground surface.

All inventoried trees were visually assessed from the ground and assigned health and structure ratings. Health (the overall vigor and vitality) was rated as poor, fair, or good based on several factors including crown density, extent of crown dieback (if present), leaf color and size, presence of epicormic growth (may indicate stress), and evidence of active callusing (wound closure). Structural stability was rated poor, fair, or good based on several factors including co-dominant trunks, included bark, abnormal lean, lopsided canopy, and presence of decay or conks (visible fruiting body of a fungus). Any areas of structural weakness such as decay, cracks, poor crown formation or branch structure, and signs of disease were also noted. The ratings are defined as follows:

> **Good:** these trees appear relatively healthy and structurally stable; have no apparent, significant health issues or structural defects; and require only periodic or regular care and monitoring to maintain their longevity and structural integrity. They are typically the most suitable for retention.
>
> **Moderate:** these trees may have health and/or structural issues that may or may not be reasonably addressed and properly mitigated; and frequent care is typically required for their remaining lifespan. They might be worth retaining, if provided proper care, but not seemingly at significant expense or major design revisions.
>
> **Low:** these trees have serious or significantly weakened health and/or structural defects that are expected to worsen regardless of tree care measures employed (i.e. beyond likely recovery); in numerous instances, they are nearly dead. All should be removed at this time.

A DBH for each tree over 4 inches DBH was recorded using a Perfect Measuring Tape Company Diameter Circumference Tape Measure, equipped with a steel measuring tape. DBH was recorded to the nearest tenth of an inch. For trees on slopes the DBH was measured at 4.5 feet above grade at the mid-point of the slope. Any trees with branches or swellings that interfered with DBH

measurement at 4.5 feet above grade were measured immediately below at the point closest to the expected DBH if the branches or irregularities were not present. For trees with trunks that fork at or just below 4.5 feet above grade DBH was measured at the narrowest part of the main stem below the fork and the height of the DBH measurement was noted under comments. For multi-trunked trees the DBH of each trunk was recorded.

All inventoried trees were assigned a tree tag (#1 through 93) which was affixed to the trunk of the tree. A GPS point was then taken to provide an approximate location of each tagged tree. Trees behind fences or within private property were not inventoried.

3. RESULTS

In total, 92 large mature trees were inventoried, representing 9 known species, 8 of which are native (**Table 3-1**). **Appendix A** contains the complete data set arranged by ID number. **Figure 4-1** provides location information for each individual or multi-trunk tree within the Project Area by ID number for each tree contained in Appendix A. **Appendix B** contains representative photographs of the site. The majority of tree resources at the Project site are in fair condition with 55% having fair health and structure and 34% with good health and structure. Of the remaining 11% (10 trees), seven trees have fair to poor health and structure (e.g.. considerable amount of dead branches in the crown, galls, lopsided canopy, etc.) and three trees have poor health and structure.

TABLE 3-1. TREE SPECIES FREQUENCY

Common Name	Scientific Name	Count
Bigleaf maple	*Acer macrophyllum*	1
Box elder	*Acer negundo*	6
Walnut	*Juglans sp.*	8
Western sycamore	*Platanus racemosa*	4
Blue oak	*Quercus douglasii*	9
Valley oak	*Quercus lobata*	36
Interior live oak	*Quercus wislizeni*	18
Gooding's willow	*Salix gooddingii*	1
Japanese zelkova	*Zelkova serrata*	9
Total Number of Trees		**92**

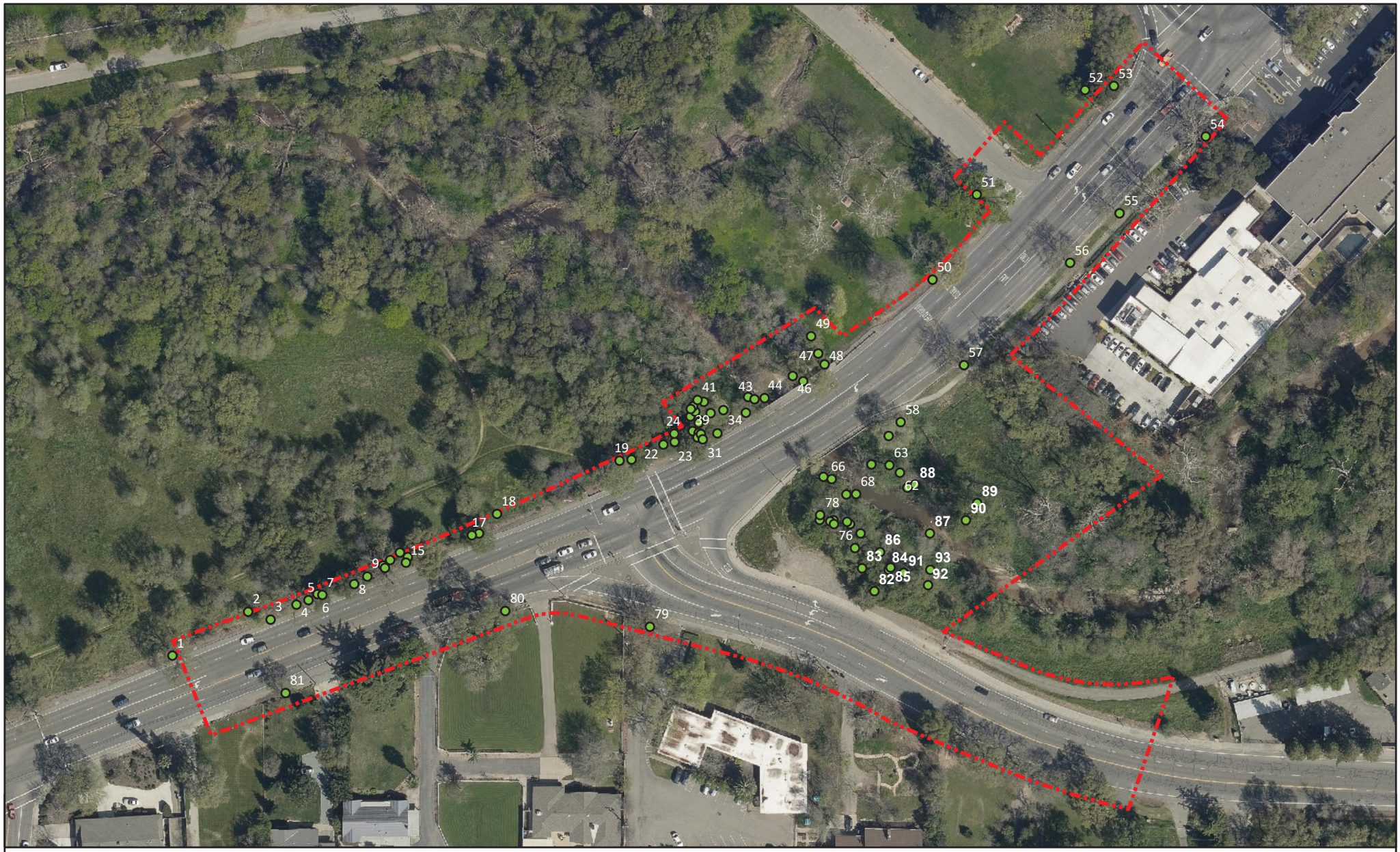
3.1 City of Sacramento Street and Private Protected Trees

Of the 92 trees inventoried, 46 trees meet the criteria set forth under City Code Chapter 12.56 and 12.64 as either a City street tree or a private protected tree (described under Section 1.4) (**Table 3-2**). The majority of tree resources at the Project site are in fair condition with 48% having fair health and structure and 43% with good health and structure. Of the remaining 9% (6 trees), three trees have fair to poor health and structure and three trees have poor health and structure. **Figure 4-2** provides location information for each individual or multi-trunk tree measuring 12 inches or greater within the Project Area by ID number for each tree contained in Appendix A.

TABLE 3-2. PROTECTED TREE SPECIES FREQUENCY

Common Name	Scientific Name	Count
Bigleaf maple	*Acer macrophyllum*	1
Box elder	*Acer negundo*	3
Walnut	*Juglans sp.*	2
Western sycamore	*Platanus racemosa*	4
Blue oak	*Quercus douglasii*	5
Valley oak	*Quercus lobata*	15
Interior live oak	*Quercus wislizeni*	9
Gooding's willow	*Salix gooddingii*	1
Japanese zelkova	*Zelkova serrata*	6
Total Number of Trees		**46**
Total Number of Native Trees ≥12 inches		**40**
Total Number of Other Protected Trees* ≥24 inches		**4**

*Other protected trees are trees on undeveloped land as per the City Code Chapter 12.56; does not include native trees



Legend

Project Area

Tree Location

Dewberry | drakehaglan

0 60 120 240 Feet

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only
*Points where labels overlap are not shown

Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, CA

Location of All Trees within the Project Area

Figure 3-1

Legend

Project Area

Protected Trees

Dewberry | drakehaglan

0 60 120 240 Feet

Source: ESRI Online Basemap, Aerial Imagery, Sacramento County
Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Auburn Boulevard Over Arcade Creek Bridge (24C-0084) Replacement Project
Sacramento, CA

Location of City of Sacramento Street or Private Protected Trees

Figure 3-2

4. DISCUSSION AND RECOMMENDATIONS

Trees can be affected in many ways from site development. Temporary and permanent grading, cut or fill activities, or soil compaction in the root zone lead to root loss. Changes in site hydrology can lead to inadequate or excessive soil moisture; changes in soil pH can affect nutrient uptake and stand thinning or removal of undergrowth can lead to increased exposure resulting in sun damage or windthrow. Crown reduction from pruning for clearance or sight lines may result in effects from reduced leaf area, increased sun exposure, and changes in weight distribution. Because a tree's root system both anchors the tree and transports water and minerals to the crown, protecting the root system is one of the most important factors in protecting a tree.

There are two types root zones that need to be considered when assessing impacts, the structural root zone (SRZ) and the root health zone (RHZ). The structural root zone (SRZ) is defined as a circular area with the tree trunk at the center and a radius equal to three times the tree trunk diameter measured 4.5 feet above the ground surface. This distance encompasses the major structural roots that support tree weight and distribute wind loads and is the minimum distance within which serious root disturbance should be avoided (Smiley et al. 2002). The tree root health zone (RHZ) is defined as a radius with the tree trunk at the center and equal to five times the tree trunk diameter measured 4.5 feet above grade and is considered to be the minimum distance from the tree needed to protect the long term health and stability of the tree. In general, a healthy tree can withstand removal of up to 40% of roots in the tree RHZ and up to 20% removal or shaving of the structural support roots (Smiley et al. 2002).

Trees with all or a substantial portion (>20%) of their SRZ within the footprint of permanent impacts or their trunks within a vegetation clearing zone would likely require removal to accommodate Project construction activities. Trees with their SRZ outside the limits of disturbance and up to moderate impacts in the RHZ are good candidates for preservation with implementation of standard tree protection measures provided in **Appendix C**. Trees with their SRZ within the limits of disturbance could experience impacts ranging from soil compaction that could eventually impair root function and tree health to immediate adverse effects on the structural stability of the tree. These potential impacts could be reduced by implementing alternative construction techniques or design modifications, as described below.

Trees that are preserved on sites undergoing development must be able to survive construction impacts and adapt to a new environment. Evaluating impacts from proposed development requires not only consideration of specific site changes but also consideration of the plant resource itself and its ability to function well over time. In general, a tree's suitability for preservation is based on its approximate age, health, structural integrity, species-specific tolerance to construction impacts, and potential to safely persist in the post-development environment. **Table 4-1** provides ratings of the

tolerance of roots to construction effects for the species of inventoried trees present in the Project area.

TABLE 4-1. TOLERANCE OF ROOTS TO CONSTRUCTION EFFECTS BY SPECIES

Common Name	Scientific Name	Tolerance
Bigleaf maple	*Acer macrophyllum*	Good
Box elder	*Acer negundo*	Good
Walnut	*Juglans sp.*	Moderate
Western sycamore	*Platanus racemosa*	Good
Blue oak	*Quercus douglasii*	Good
Valley oak	*Quercus lobata*	Good
Interior live oak	*Quercus wislizeni*	Good
Goodding's willow	*Salix gooddingii*	Good-Moderate
Japanese zelkova	--	--

Source: Matheny and Clark, 1998

Under the following conditions, root pruning should be avoided:

- Trees that are stressed by drought, insect infestation, disease, excessive trimming or prior root disturbance (Mann 2002)
- Trees leaning more than 40° (Dunster 2009)
- Trees with extensive root decay (more than 33% of structural roots have less than 33% shell wall thickness) (Dunster 2009)
- Trees with excessive trunk heart rot, where the trunk shell wall is less than the trunk radius X 0.33 (Mattheck 2004)
- Trees with root crown cavity openings more than 30% of the root crown circumference (Mattheck and Breloer 1994)
- Trees that would have been root pruned on another side
- Species considered intolerant of root pruning (Costello and Jones 2003)

5. LITERATURE CITED

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APPENDIX A

Tree Inventory Data

Auburn Boulevard Bridge Replacement Project
2018 Tree Survey

Tag Number	Species	Canopy Spread (Feet)	Tree Health	Structure	# of Stems	DBH (Inches)
1	*Quercus lobata*	60	Good	Good	1	35
2	*Quercus lobata*	8	Fair	Fair	1	4
3	*Juglans sp.*	20	Good	Fair	3	13, 13, 11
4	*Acer negundo*	30	Fair	Good	1	35
5	*Quercus lobata*	15	Fair	Fair	1	9
6	*Quercus wislizeni*	20	Good	Fair	1	10
7	*Quercus wislizeni*	20	Good	Good	1	7
8	*Quercus wislizeni*	30	Good	Good	3	6, 8, 17
9	*Quercus wislizeni*	15	Good	Fair	1	7
10	*Quercus lobata*	5	Fair/Poor	Poor	1	6
11	*Acer negundo*	50	Fair/Poor	Poor	3	8, 38, 6
12	*Quercus wislizeni*	10	Fair	Fair	1	7
13	*Zelkova serrata*	10	Fair	Good	3	4, 4, 4
14	*Quercus wislizeni*	45	Good/Fair	Fair	1	30
15	*Quercus wislizeni*	10	Fair	Fair	2	5, 5
16	*Quercus lobata*	25	Good	Good	2	17, 9
17	*Quercus wislizeni*	20	Good	Good	2	10, 10
18	*Quercus lobata*	10	Good	Good	1	6
19	*Quercus douglasii*	60	Good/Fair	Fair	1	27
20	*Quercus wislizeni*	10	Fair	Fair	1	6
21	*Quercus wislizeni*	10	Fair	Fair	2	8, 6
22	*Zelkova serrata*	15	Good/Fair	Fair	2	9, 9
23	*Querucs lobata*	15	Fair	Fair	1	10
24	*Quercus lobata*	10	Fair	Fair	1	6
25	*Querucs wislizeni*	<10	Poor	Poor	1	8
26	*Quercus wislizeni*	15	Fair	Good	2	10, 4
27	*Quercus wislizeni*	25	Fair	Fair	3	7, 18, 6
28	*Zelkova serrata*	10	Good	Good	1	6
29	*Quercus lobata*	15	Fair	Fair	1	9
30	*Quercus wislizeni*	<10	Poor	Poor	1	8
31	*Quercus wislizeni*	<10	Poor	Poor	1	6
32	*Quercus douglasii*	10	Fair	Fair	1	9
33	*Zelkova serrata*	10	Good	Good	1	8
34	*Quercus lobata*	10	Fair	Fair	1	5
36	*Quercus lobata*	10	Fair	Fair	1	7
37	*Quercus lobata*	10	Fair	Fair	1	4
38	*Quercus lobata*	10	Fair	Fair	1	4
39	*Quercus lobata*	10	Fair	Fair	1	5
40	*Quercus lobata*	10	Good/Fair	Good	1	4
41	*Quercus lobata*	25	Fair	Fair	1	18
42	*Quercus lobata*	20	Fair	Fair	1	17
43	*Acer negundo*	15	Good	Good	1	9
44	*Quercus douglasii*	45	Good	Good	1	22
45	*Juglans sp.*	15	Good	Good	1	10
46	*Juglans sp.*	10	Good	Good	1	8

Auburn Boulevard Bridge Replacement Project
2018 Tree Survey

Tag Number	Species	Canopy Spread (Feet)	Tree Health	Structure	# of Stems	DBH (Inches)
47	*Quercus lobata*	40	Fair/Poor	Poor	1	34
48	*Quercus lobata*	45	Good	Good	1	26
49	*Juglans sp.*	10	Good/Fair	Fair	1	11
50	*Quercus douglasii*	50	Good/Fair	Fair	1	27
51	*Quercus douglasii*	60	Good	Good	1	37
52	*Zelkova serrata*	25	Fair/Poor	Poor	1	34
53	*Quercus wislizeni*	45	Good	Good	1	27
54	*Platanus racemosa*	60	Good	Good	1	34
55	*Platanus racemosa*	30	Good	Good	1	15
56	*Platanus racemosa*	30	Good	Good	1	17
57	*Platanus racemosa*	30	Good	Good	1	16
58	*Zelkova serrata*	40	Good	Fair	1	4
59	*Zelkova serrata*		Good/Fair	Fair	2	12, 14
60	*Zelkova serrata*		Good/Fair	Fair	3	5, 15, 4
61	*Juglans sp.*	15	Good	Fair	1	9
62	*Quercus lobata*	15	Fair	Fair	1	8
63	*Quercus lobata*	25	Fair/Poor	Poor	1	19
64	*Acer macrophyllum*	40	Good	Good	8	3, 5, 6, 4, 9, 9, 6, 7
65	*Juglans sp.*	20	Good	Good	1	11
66	*Quercus lobata*	40	Fair	Fair	1	17
67	*Quercus lobata*	15	Fair	Fair	1	7
68	*Quercus lobata*	15	Fair	Fair	2	7, 7
69	*Quercus lobata*	20	Fair	Fair	1	11
70	*Quercus lobata*	15	Fair/Poor	Poor	2	11, dead
71	*Quercus lobata*	30	Fair	Fair	1	16
72	*Quercus lobata*	30	Fair	Fair	1	16
73	*Quercus lobata*	10	Fair	Fair	1	7
74	*Quercus lobata*	20	Fair	Fair	1	11
75	*Quercus lobata*	15	Fair	Fair	1	11
76	*Quercus lobata*	10	Fair	Fair	1	6
77	*Quercus lobata*	35	Fair	Fair	1	19
78	*Juglans sp.*	10	Fair/Poor	Poor	1	8
79	*Zelkova serrata*	60	Good	Good	1	30
80	*Quercus douglasii*	55	Good/Fair	Good	1	16
81	*Acer negundo*	25	Good	Good	1	18
82	*Quercus wislizeni*	25	Fair	Poor	1	27
83	*Quercus lobata*	15	Fair	Fair	1	16
84	*Quercus wislizeni*	10	Fair	Fair	4	11, 17, 20, 19
85	*Quercus douglasii*	15	Good	Fair	1	8
86	*Quercus douglasii*	10	Fair	Poor	1	9
87	*Salix goodingii*	25	Fair	Fair/Poor	1	13
88	*Acer negundo*	10	Fair	Fair	1	6
89	*Acer negundo*	10	Fair	Fair	1	5
90	*Juglans sp.*	10	Good	Good	3	4, 5, 5
91	*Quercus lobata*	20	Good	Good	1	14

Auburn Boulevard Bridge Replacement Project
2018 Tree Survey

Tag Number	Species	Canopy Spread (Feet)	Tree Health	Structure	# of Stems	DBH (Inches)
92	*Quercus lobata*	25	Fair	Fair	2	10, 9
93	*Quercus douglasii*	20	Fair	Fair	2	5, 6

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APPENDIX B

Representative Photographs

Auburn Boulevard Bridge Replacement Project – Tree Survey

Source: L.Tisch

Figure B-1

Representative photo of trees adjacent to the staging area (Top) and along Arcade Creek where proposed temporary pedestrian bridge will be placed (Bottom).
Photo date: July 23, 2018

Auburn Boulevard Bridge Replacement Project – Tree Survey

Source: L.Tisch

Figure B-2

Representative photo and along the northern bank of Arcade Creek (Top) and southern bank (Bottom) where proposed temporary pedestrian bridge will be placed.
Photo date: July 23, 2018

Auburn Boulevard Bridge Replacement Project – Tree Survey

Source: L.Tisch

Figure B-3

Representative photo of trees adjacent to the Auburn Boulevard Bridge (Top) and adjacent to the staging area (Bottom).
Photo date: July 23, 2018

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APPENDIX C

Standard Tree Protection Measures

Demolition and Site Clearing:

At least 48 hours before the start of ground-disturbing demolition and site clearing activities within the RHZ of native trees 12 inches DBH or larger, or other protected trees 24 inches DBH or larger, the Project engineer, the construction superintendent, and the Project arborist shall meet with the contractor(s) at the site to review all work procedures, access and haul routes, storage areas, and tree protection measures. The Project arborist and any other arborists working on the Project shall be certified by the International Society of Arboriculture (ISA).

Before the start of ground-disturbing demolition and site clearing activities within the RHZ of any native tree 12 inches DBH or greater, or other protected trees 24 inches DBH or larger, the Project arborist shall evaluate the proposed activities for impacts that may threaten the health of the tree;

1. If the arborist determines the activity is not likely to adversely impact the tree, the activity may proceed.
2. If the arborist determines the activity is not likely to adversely impact the tree when special measures are implemented such as; hand excavation only, or clean cutting of roots, the activity may proceed.

If native tree 12 inches DBH or greater, or other protected trees 24 inches DBH or larger require pruning to accommodate construction equipment and other vehicles, the pruning shall be kept to the minimum height required to allow safe passage of vehicles and equipment. All pruning shall be performed in accordance with the ISA Tree Pruning Guidelines and adhere to the most recent editions of the American National Standard for Tree Care Operations (ANSI Z133.1) and Pruning (A300).

Trees to be removed that have branches extending into the canopy of protected trees shall be removed under the supervision of a certified arborist and in a manner that causes no damage to the protected trees. Wherever possible, trees to be removed shall be cut near ground level and the stump left or ground out. Any trees to be removed by felling shall be felled so as to fall away from other trees. If roots of trees to be removed are entwined with trees to remain the root mass shall be severed before extracting or felling the trees to avoid pulling and breaking of the roots of trees to remain.

Any brush or undergrowth to be removed within 10 feet of the boundaries of the RHZ shall be cut at ground level and not pulled out by equipment. Downed brush and trees within the RHZ resulting from Project activities shall be removed either by hand or by equipment working outside the RHZ. To protect the RHZ, the arborist may recommend removal of downed material by lifting the material up and out of the RHZ, rather than by skidding or sliding across the ground.

Construction:

Any new contractors that could result in impacts to tree roots shall meet with the Project arborist to review all work procedures, access and haul routes, storage areas, and tree protection measures.

Any silt fencing, debris basins, or other erosion control devices shall be installed in such a way as to avoid siltation and/or erosion within the RHZ unless the arborist determines it will not adversely affect the tree.

No equipment, excess soil, chemicals, debris, waste, washout water, or other materials shall be parked, deposited, or stored within the RHZ.

Fire-safe areas shall be maintained around RHZs. No heat or ignition sources, flames, or smoking shall be allowed within 20 feet of the RHZ.

No grading, construction, trenching, demolition or other work shall be allowed in the RHZ unless approved and supervised by the Project arborist, as described below. All underground utilities and drain lines shall be routed outside the RHZ. If lines must cross the RHZ measures (such as hand excavation) will be implemented to protect trees.

Any grade changes outside the RHZ shall not significantly alter drainage to the tree. Grade changes within the RHZ are not allowed unless specifically approved and supervised by the Project arborist. Any impervious overlay within the RHZ shall incorporate an approved permanent aeration system, permeable material or other approved mitigation.

Any work that must occur within the RHZ shall be approved by the Project arborist and directly supervised by the Project arborist. The contractor shall notify the Project arborist a minimum of 48 hours in advance of any proposed activity in the RHZ.

Any approved excavation, demolition, or extraction within the RHZ shall be performed with equipment sitting outside the RHZ. Required methods within the RHZ are hand digging or tunneling or hydraulic or pneumatic air excavation technology ("air-spade").

If heavy equipment is approved by the Project arborist to be in the RHZ, or if haul or access routes must pass over the root areas of protected trees, a protective buffer must be installed consisting of 6-inches of mulch or 3/4-inch quarry gravel or a base course of 3 inches of wood chips layered with 3 inches of gravel and overlaid with 3/4-inch plywood sheets or metal plates. The buffer shall be maintained throughout the construction process.

Supplemental irrigation shall be required whenever tree roots of protected trees are exposed or severed due to trenching or grading. If trenching exposes roots 2 inches or larger in diameter, they shall be cleanly cut back. If trenches cannot be backfilled or covered within one-hour, exposed roots shall be kept from drying out by covering the exposed roots or top 3 feet of trench walls with layers of

burlap or similar material. The burlap must be kept wet until the trench is backfilled. Once the trench is backfilled soak the area within the same day. Avoid excavation within the RHZ during hot dry weather.

Any accumulated construction dust on the limbs or foliage of the trees is to be removed with water periodically or as directed by the Project arborist.

Any additional tree pruning of protected trees needed for clearance during construction must be performed under supervision of a certified arborist and not by construction personnel.

Any damage or injury to trees during construction shall be reported to the Project arborist immediately so that remedial action can be taken.

Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw. This work shall be supervised by the Project arborist.

If herbicides are placed under paving materials they must be safe for use around trees. Any pesticides used on site must be safe for use around trees and not easily translocated by water.

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Appendix E: Mitigation Monitoring and Reporting Program

Auburn Boulevard Bridge Replacement Project
Mitigation Monitoring and Reporting Program

Potential impact	Mitigation Measures	Timing	Responsible Agency/Person	Comments
AIR QUALITY				
A. Result in PM10 and PM2.5 concentrations that exceed SMAQMD requirements?	**Mitigation Measure AQ-1:** The Contractor shall implement the following measures and SMAQMD-recommended enhancement exhaust emission control practices during Project construction: • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. • Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1 • Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated. • Submit to the lead agency and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. • Use of 2010 or newer diesel engines for all on-road haul trucks associated with Project construction. • Provide a plan for approval by the lead agency and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction Project, including owned, leased, and subcontractor vehicles, will achieve a Project-wide fleet-average 20 percent NO_x reduction and 45 percent PM_{10} and $PM_{2.5}$ reduction compared to the most recent California Air Resources Board fleet average. • Prevent emissions from all off-road diesel-powered equipment used on the Project site from exceeding 40 percent capacity for more than three minutes in any one hour. SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other SMAQMD, state, or federal rules or regulations.	**Prior to construction** **During Construction**	**City of Sacramento**	

	Mitigation Measure AQ-2: The contractor shall implement the following SMAQMD enhanced fugitive PM dust control practices during Project construction: • Water all exposed surfaces two times daily or with adequate frequency for continued moist soil. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. Do not overwater to the extent that sediment flows off the site. • Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. • Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). • All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used • Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 miles per hour. • Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas. • Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established. • Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the site. • Treat site accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads. • Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of SMAQMD shall also be visible to ensure compliance.			

B. Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?	**See Mitigation Measure AQ-1 & AQ-2 above**	**Prior to construction** **During Construction**		
C. Result in exposure of sensitive receptors to substantial pollutant concentrations?	**See Mitigation Measure AQ-1 & AQ-2 above.**	**Prior to construction** **During Construction**		
D. Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?	**See Mitigation Measure AQ-1 & AQ-2 above.**	**Prior to construction** **During Construction**		
BIOLOGICAL RESOURCES				
Would the Project: A. Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected	**See Mitigation Measure HAZ-1 below**		**City of Sacramento**	

B. Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?	**Mitigation Measure BIO-1:** *Conduct Preconstruction Surveys for Sanford's arrowhead.* A qualified biologist shall conduct a preconstruction survey for Sanford's arrowhead during the plant's blooming period (May to October) within 30 days prior to construction. If Sanford's arrowhead is not found, then no further measures are necessary. If Sanford's arrowhead is found in the Project site BSA, CDFW will be notified at least ten days prior to dewatering or construction impacts in the vicinity of Sanford's arrowhead in accordance with the California Native Plant Protection Act of 1977 (2 FGC § § 1900-1913) In consultation with CDFW, the City shall develop a Sanford's arrowhead avoidance, minimization, or relocation plan. The plan shall evaluate project impacts on the project area's population of Sanford's arrowhead and propose a scientifically supported response procedure. **Mitigation Measure BIO-2:** *Protect Central Valley Steelhead.* Implement the following measures, subject to approval during acquisition of regulatory permits, to avoid take of steelhead: • Plan instream construction activities for periods between June 1 and October 31, or periods when the work area is dry to avoid conflicts with fish. If surface water is present when instream construction must be conducted, implement stream diversion such that diverted surface flow is returned to Arcade Creek immediately downstream of the work area. Prior to any work within surface water, a qualified fisheries biologist shall complete a survey for steelhead. • If steelheads are found in the work area, cease all work affecting Arcade Creek and notify NOAA Fisheries and CDFW. Place the diversion berm and pipeline prior to beginning diversion of surface flow. • Use non-erosive materials (e.g., sandbags, sheet pile, rubber/plastic tubes) to construct the diversion berm. • Use an energy dissipater and sediment trap (fiber rolls, or equivalent) at the diversion pipeline outlet. • Store away excavated material from the low-flow channel to prevent incidental discharge. • Stabilize any streambed access points using a pad of coarse aggregate underlain by filter cloth to reduce erosion and tracking of sediment. • Re-compact disturbed areas of the stream channel to original conditions prior to restoring flow to the original channel.	Prior to and During Construction	**Qualified Professional Biologist/City of Sacramento**	

	• Do not discharge silty or turbid water produced from dewatering or other activities into Arcade Creek until filtered or allowed to settle. • Prohibit the use of heavy equipment in flowing water. • Restore and/or enhance riparian habitat removed by the Project to improve fish habitat. • To compensate for permanent impacts on aquatic habitat, the City shall purchase credits from a Corps and/or CDFW approved mitigation bank at a minimum 1:1 ratio (one acre of habitat replaced for every one acre filled). **Mitigation Measure BIO-3:** *Protect Western Pond Turtle.* Implement the following efforts to reduce potential Project effects to western pond turtle: • If dewatering is necessary, dewater the construction area prior to construction activities. Notify CDFW prior to dewatering activities. • No more than two weeks prior to the commencement of ground-disturbing activities, the City shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the Project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles. The results of these surveys will be documented in a technical memorandum that will be submitted to CDFW (if turtles are documented). • Implement standard construction BMPs throughout construction to avoid and minimize adverse effects to the water quality within the Project site. **Mitigation Measure BIO-4:** *Conduct Preconstruction Surveys for Swainson's Hawk.* Prior to construction, surveys will be conducted by a qualified biologist to determine presence/absence of nesting Swainson's hawk in and within 0.50 miles of the Project site according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFG, 2000). If no Swainson's hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson's hawk nests are found, the City shall develop an avoidance plan in consultation with CDFW regarding measures to reduce the likelihood of forced fledging of			

	young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a • no-work zone around the nest until the young have fledged as determined by a qualified biologist. **Mitigation Measure BIO-5:** *Protect White-Tailed Kite, Purple Martin, and other Migratory Birds and Raptors.* <u>Nests in Trees and Shrubs</u> • **Avoid Active Nesting Season.** Implement the following to ensure impacts to tree and shrub nesting species remain less than significant. o If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31). o o If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), perform preconstruction surveys prior to the start of Project activities. • **Conduct Preconstruction Nesting Bird Surveys.** If construction, grading, or other Project-related activities are schedule during the nesting season (February 1 to August 31), preconstruction surveys for other migratory bird species shall take place no greater than 15 days prior to the start of project activities. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos; 1,320 feet for fully protected species such as white-tailed kite. If the preconstruction surveys do not identify any nesting migratory bird species within areas potentially affected by construction activities, no further mitigation will be required. • **Avoid Active Bird Nest Sites.** If active nests are found, avoid project-related construction impacts by establishing appropriate no-work buffers to limit Project related construction activities near the nest site. Determine the size of the no work buffer zone to avoid take of nesting birds in consultation with a qualified biologist and CDFW although use a 500-foot buffer when possible. Delineate the no work buffer			

	zone with highly visible temporary construction fencing or flagging. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. Do not commence project-related construction activity within the no work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active. If it is determined during surveys or project implementation that project activities may impact white-tailed kite, project personnel shall fully avoid any impacts that may result in take if white-tailed kite is observed to be utilizing the project area or adjacent area. <u>Nests in Structures other than the Bridge</u> • The contractor shall protect migratory birds, their occupied nests, and their eggs as specified in a contract special provision. Nesting is typically February 1 to August 31, or as determined appropriate in consultation with the Project biologist. • When evidence of migratory bird nesting that may be adversely affected by construction activities is discovered, or when birds are injured or killed as a result of construction activities, immediately stop work and notify the resident engineer. Do not resume work until the resident engineer provides written notification that work may begin in this location. <u>Nests on or Underneath the Bridge</u> • Remove all existing unoccupied nests on the bridge during the non-nesting season (September 1 to January 31). • Keep the bridge free of nests, using exclusionary netting or other approved methods, until completion of construction activities. • Inspect all listed structures for nesting activity a minimum of three days per week; no two days of inspection will be consecutive. A weekly log will be submitted to the Project biologist. The contractor will continue inspections until bridge removal and completion of construction on new bridge. If an exclusion device were found to be ineffective or defective, the contractor will complete repairs to the device within 24 hours. If birds were found trapped in an exclusion device, the contractor will immediately remove the birds in accordance with USFWS guidelines.			

	• Submit for approval working drawings or written proposals of any exclusion devices, procedures, or methods to the Project biologist before installing them. • Install exclusion devices in a method that will not damage permanent features of the new bridge structure. Approval by the Project biologist of the working drawings or inspection performed by the authorized Project biologist will in no way relieve the contractor of full responsibility for deterring nesting. **Mitigation Measure BIO-6:** *Protect Pallid Bat and Other Roosting Bat Species.* During April through September, before construction begins, a qualified biologist will survey trees within the Project work limits and identify any snags, hollow trees, or other trees with cavities that may provide suitable roosting habitat for pallid bat and other bat species. If no suitable roosting trees are found, construction may proceed. If snags, hollow trees, or other trees with suitable cavities are found, examine them for roosting bats. If bats are not found and there is no evidence of use by bats, construction may proceed. If pallid bats, or other bat species, are found or evidence of use by bats is present, consult CDFW for guidance on measures to avoid or minimize disturbance to the colony. Additional measures may include excluding bats from the tree before their hibernation period (mid-October to mid-March) and before construction begins. Mitigate bat habitat by incorporating suitable bat roosting habitat within the bridge design and/or the planting of mature trees that provide suitable roosting habitat within the Project vicinity. This mitigation measure shall be incorporated into the Construction Contract Specifications. If Caltrans 2015 Construction Contract Specifications are used for this Project, then this mitigation measure shall be incorporated as a special provision into section 14-6.03A of the Construction Contract Specifications.			
C. Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?	**Mitigation Measure BIO-7:** *Preserve Trees and Riparian Habitat.* • Retain current riparian vegetation and oaks to the extent feasible. Establish a Tree Protection Zone (TPZ) around any tree or group of trees to be retained. Delineate the TPZ by an International Society of Arboriculture certified arborist. Define the TPZ as a full and regular circle around the tree with a radius the length of the longest horizontal branch plus 1 foot. Demarcate the TPZ of all protected trees using fencing	Prior to and During Construction	**Qualified Professional Biologist/City of Sacramento**	

	that will remain in place for the duration of construction activities. • Limit construction-related activities within the TPZ to those activities that can be done with methods such as hydroexcavation, pneumatic excavation or hand-digging. Do not cut any roots greater than two inches in diameter unless doing so under the direct supervision and direction of an International Society of Arboriculture certified arborist. Do not operate heavy equipment or machinery within the TPZ. Prohibit grading within the TPZ. Do not store any construction materials, equipment, or heavy machinery within the TPZ. • Include planting of valley foothill/floodplain/mixed riparian and oak woodland habitat as mitigation as appropriate. • Coordinate with the City arborist and local advocacy groups in the development of a replanting/restoration plan. • Implement a planting plan as detailed in a replanting/restoration plan approved by the City arborist and the CDFW. The restoration plan will include performance standards for revegetation that will ensure successful restoration of the onsite riparian areas. • The City shall protect other wetlands, riverine, and associated riparian habitats located in the Project vicinity by installing protective fencing. Install protective fencing along the edge of construction areas including temporary and permanent access roads where construction will occur within 200 feet of the edge of wetland and riverine habitat (as determined by a qualified biologist). Mark the location of fencing in the field with stakes and flagging and show on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Erect signs along the protective fencing at a maximum spacing of one sign per 50 feet of fencing. The signs shall state: “This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment.” The signs shall be clearly readable at a distance of 20 feet and shall be maintained for the duration of construction activities in the area. • Where riparian vegetation occurs along the edge of the construction easement, the City shall minimize the potential			

	for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire plant. Conduct trimming per the direction of a biologist and/or certified arborist. • To compensate for the permanent removal of riparian vegetation associated with the bridge construction, the City mitigate at a minimum 3:1 ratio (three acres of habitat replaced for every one acre removed). Compensation make take the form of permanent protection, enhancement, or restoration of suitable habitat, purchase of credits at a Corps and CDFW-approved bank or conservation site, or through funding an equivalent project through a local organization.			
CULTURAL RESOURCES				
Would the Project: A. Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?	**Mitigation Measure CUL-1:** *Follow Protocol for the Unanticipated Discovery of Cultural Resources.* If buried cultural materials are encountered during construction, work will be stopped in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the Project changes to include areas not previously surveyed. The need for archaeological and Native American monitoring during the remainder of the Project will be reevaluated by the archaeologist as part of the treatment determination. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are precontact or Native American in nature. In considering any suggested mitigation by the archaeologist in order to mitigate impacts to cultural resources, the Project proponent will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.	During Construction	City of Sacramento	
B. Directly or indirectly destroy a unique paleontological resource?	See **Mitigation Measure CUL-1 above.**	During Construction	City of Sacramento	
HAZARDS & HAZARDOUS MATERIALS				
Would the Project: A. Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil	**Mitigation Measure HAZ-1:** *Develop a Health and Safety Plan (HASP).* Prior to start of construction, the City and its contractor shall prepare a HASP for the Project. The HASP shall describe appropriate procedures to follow in the event that any contaminated materials, soil, or groundwater is encountered during construction activities. Any unknown substances shall be tested, handled and disposed of in	Prior to Construction		

during construction activities?	accordance with appropriate federal, state and local regulations. This mitigation measure shall be incorporated into the Construction Contract Specifications. If Caltrans 2015 Construction Contract Specifications are used for this Project, then this mitigation measure shall comply with the Caltrans 2015 Standard Specifications and the Caltrans 2015 Revised Standard Specifications for section 14-11 of the Construction Contract Specifications. **Mitigation Measure HAZ-2:** *Follow Protocol for Hazardous Materials.* A California-Certified asbestos consultant (CAC) or California-Certified Site Surveillance Technician (CSST), under the direction of a CAC, shall conduct a survey for asbestos containing materials prior to renovation or demolition (including concrete elements) and contractor shall submit a National Emission Standard for Hazardous Air Pollutants (NESHAP) notification to SMAQMD. Per the Asbestos NESHAP regulation, all "demolition activity" requires written notification even if there is no asbestos present. This notification shall be typewritten and postmarked or delivered no later than ten days prior to the beginning of the asbestos demolition or removal activity. A California-Certified Lead Inspector/Assessor (I/A) or a California-Certified Sampling Technician (LST), under the direction of an I/A, shall conduct a survey for lead-based paint. If soil will be excavated, soil sampling should be performed by a licensed environmental professional. All survey results and reports shall be submitted to the City. These mitigation measure shall be incorporated into the Construction Contract Specifications. If Caltrans 2015 Construction Contract Specifications are used for this Project, then this mitigation measure shall be incorporated as a special provision into section 14-11.01(A). If hazardous materials are found, the following shall be required: • Hazardous building materials associated with asbestos, paint on structures and paint on utilities shall be abated by a California-licensed abatement contractor and disposed of as a hazardous waste in compliance with 2015 Caltrans Standard Specification 14-11.12, 2015 Caltrans Standard Specification 14-11.13, SMAQMD Rule 902, and other federal and state regulations for hazardous waste. A Lead Compliance Plan shall be prepared by the contractor for the handling and disposal of LBP or lead in soil. The grindings (which consist of the roadway material and the yellow and white color traffic			

	stripes) shall be removed and disposed of in accordance with the appropriate 2015 Caltrans Standard Specifications. • A California-licensed lead contractor shall be required to perform all work that will disturb any leadbased paint as a result of planned or unplanned renovations in the Project area, including the presence of yellow traffic striping and pavement markings that may contain lead-based paint. All such material must be removed and disposed of as a hazardous aterial in compliance with 2015 Caltrans Standard Specification 14-11.12 and 14-11.13. **Mitigation Measure PUB-1:** *Construction Period Emergency Access Plan below.*			
B. Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?	**See Mitigation Measure HAZ-1 & HAZ-2 above.**			
C. Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?	**See Mitigation Measure HAZ-1 & HAZ-2 above.**			
PUBLIC SERVICES				
Would the Project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?	**Mitigation Measure PUB-1:** *Develop a Construction Period Emergency Services and School Access Plan.* Prior to the start of construction, the contractor shall coordinate with the City and County Police and Sheriff and Fire Departments, local public and private ambulance and paramedic providers, and school districts in the area to prepare a Construction Period Emergency Services and School Access Plan. The Construction Period Emergency Services and School Access Plan shall identify Project phases and construction scheduling and shall identify appropriate alternative emergency service and school bus access routes. **See Mitigation Measure REC-1 below.**	Prior to Construction		

RECREATION				
Would the Project: A. Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?	**Mitigation Measure REC-1:** *Maintain Del Paso Regional Park.* In order to avoid or minimize adverse effects to the park's use during Project construction, the City shall include the following measures: • Prepare and implement a post-construction planting plan as detailed in a Restoration Plan approved by the CDFW. The Restoration Plan would include performance standards for revegetation that would ensure successful restoration of the onsite riparian areas. • Install signage as a responsibility of the contractor along the temporary occupancy area, providing notice that roads, pedestrian and bicycle paths may be temporarily rerouted or closed during construction activities. • Locate Project staging areas that will avoid damage to designated Natural Habitat area and will not block existing access to the park.	Prior to and After Construction		
B. Create a need for construction or expansion of recreational facilities beyond that was anticipated in the 2035 General Plan?	**See Mitigation Measure REC-1 above.**			
TRANSPORTATION AND CIRCULATION				
Would the Project: D. Result in inadequate emergency access?	**See Mitigation Measure PUB—1 above.**			
TRIBAL AND CULTURAL RESOURCES				
Would the Project: A. Cause a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resource	**Mitigation Measure TCR-1:** Retain a Native American Resources Monitor. A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the City shall notify the Cultural Resources Officer of UAIC via email. The UAIC-appointed Native American resources monitor shall be invited to inspect the Project site, including any soil piles, trenches, or other disturbed areas, within the	Prior to and During Construction	City of Sacramento	

Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	first five days of groundbreaking activity. During this inspection, a site meeting of construction personnel shall also be held to afford the tribal representative the opportunity to provide tribal cultural resources awareness information. If any tribal cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during this initial inspection or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the City shall immediately notify the UAIC. The City shall coordinate any necessary investigation of the site with the UAIC-appointed Native American resources monitor; and as part of the site investigation and resource assessment, the UAIC Native American resources monitor shall consult with the UAIC and provide proper management recommendations should potential impacts to the resources be found by the UAIC-appointed Native American resources monitor to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City by the UAIC-appointed Native American resources monitor.			