NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR THE HOLLOW LANE **CULVERT REPLACEMENT PROJECT CITY OF REDDING**

The City of Redding proposes the Hollow Lane Culvert Replacement Project. The project is located on Hollow Lane at the Dry Creek crossing, approximately 0.4 miles west of Ridgewood Road, in Redding, Shasta County, California.

The proposed project would replace the existing Dry Creek culvert crossing beneath Hollow Lane. The two existing 60" corrugated metal pipes will be removed and replaced with one 5-foot tall by 15-foot wide aluminum arch pipe with a concrete bottom. The new culvert will include headwalls, wing walls, concrete aprons, scour repair, and a 20-foot rock energy dissipation pad at the outlet. The project also includes underground utility relocation and scour repair at the culvert location. Most work would occur within the City right of way; however, acquisitions and easements may be required. Traffic control would be necessary to construct the project. It is anticipated that construction would take one season and is planned for 2021.

The City of Redding Public Works Department has reviewed the project and, based upon the whole record before the City (including the Initial Study and any supporting documentation), is recommending that a Mitigated Negative Declaration* be adopted pursuant to the California Environmental Quality Act.

All interested persons are invited to comment in writing on the draft Mitigated Negative Declaration to the Public Works Department prior to the end of the public review period. The comment period begins March 5, 2020 and ends April 6, 2020. The City Council will consider adopting the Mitigated Negative Declaration at 6 p.m., Tuesday, May 19, 2020, in the City Council Chambers located at 777 Cypress Avenue, Redding, California. Subsequent notification will be made for all public hearings scheduled for consideration of the environmental document and project approval. Adoption of the Mitigated Negative Declaration will conclude the environmental review of the project.

The Initial Study, information concerning the project, and the draft Mitigated Negative Declaration are available for public review from 8 a.m. to 5 p.m. weekdays at the Public Works Department, 777 Cypress Avenue, Redding, CA 96001 (telephone 530-225-4170). The documents can also be viewed online at: http://www.cityofredding.org/departments/publicworks/environmental-management. For more information, please contact Amber Kelley, Environmental Compliance Manager, at the above address.

Environmental Compliance Manager

HOLLOW LANE CULVERT REPLACEMENT PROJECT (STATE CLEARINGHOUSE NO. 2020XXXXX)

SUBJECT

Hollow Lane Culvert Replacement Project

PROJECT DESCRIPTION

The proposed project would consist of a culvert replacement project on Hollow Lane. This roadway which serves as the only access for approximately 20 residents on the west side of Dry Creek. Currently, two 60-inch corrugated metal pipes (CMPs) convey Dry Creek under Hollow Lane. The aging CMPs show signs of pitting and corrosion and are in need of replacement. The two existing CMPs will be removed and replaced with one 5-foot tall by 15-foot wide aluminum arch pipe with a concrete bottom. The new culvert will include headwalls, wing walls, concrete aprons, and a 20-foot rock energy dissipation pad at the outlet. Recent high-velocity storm water flows have created two large erosional scour holes at the outlet that form ponds during periods of inundation. These scour holes will be repaired by filling the holes, constructing a 20-foot diameter rock energy dissipation pad, and re-grading the creek channel bottom to direct positive downstream flow. The creek will be accessed on the northwest and southwest sides of the culvert. Existing utilities within the project work zone include: an 8-inch sewer main; a 2-inch gas line; and an 8-inch water main. The sewer main, currently located under the existing culverts, will be replaced and protected with the concrete culvert bottom. The gas line and water main will be replaced within the roadway.

The majority of work will occur within the City's right of way (ROW); however, temporary permits to enter and construct will be needed to access the north side of the creek, relocate utilities, and install the new culvert. Permanent ROW acquisition or easements may be required for long-term culvert maintenance. Half-width construction is required in order to maintain access for residents and emergency vehicles. As each half of the arch pipe is completed, Hollow Lane will be reconstructed and an asphalt concrete dike will be installed along the edge of the roadway. Staging will occur with the City's ROW. The project is anticipated to be built in 2021 and would require one season of construction.

ENVIRONMENTAL SETTING

Hollow Lane is a two lane residential road that crosses Dry Creek approximately 0.4 miles west of Ridgewood Road in Redding, Shasta County, California. The project area is bounded on the east, west, and north by residential development. The area to the south is City owned undeveloped open space. Dry Creek flows south through the project area, into the open space, and into Churn Creek approximately 800-feet downstream.

FINDINGS AND DETERMINATION

The City of Redding conducted an Initial Study (attached) that determined that the proposed project could have significant environmental effects on biological resources. Use of specific mitigation measures identified below will avoid or mitigate the potentially significant environmental effects identified, and the preparation of an environmental impact report will not be required. If there are substantial changes that alter the character or impacts of the proposed project, another environmental impact determination will be necessary.

Prior to approval of the project, the lead agency may conclude, at a public hearing, that certain mitigation measures identified in the Mitigated Negative Declaration are infeasible or undesirable. In accordance with CEQA Section 15074.1, the lead agency may delete those mitigation measures and substitute other measures that it determines are equivalent or more effective. The lead agency would adopt written findings that the new measure(s) is equivalent or more effective in mitigating or avoiding potential significant effects and that it would not cause any potentially significant effect on the environment.

- 1. Based on the whole record (including the Initial Study and any supporting documentation) and the mitigation measures incorporated into the project, the City of Redding has determined that there is no substantial evidence that the project will have a significant effect on the environment.
- 2. The Mitigated Negative Declaration, with its supporting documentation, reflects the independent judgment and analysis of the lead agency, which is the City of Redding.

DOCUMENTATION

The attached Initial Study documents the reasons to support the above determination.

MITIGATION MEASURES

The following mitigation measures will be incorporated into the project to minimize potential effects on biological resources:

MM-1. Prior to the start of construction, a focused botanical survey will be conducted during the blooming period for potentially occurring plant species. If no special status plant species are found during the botanical survey no other measures will be required. If special status plant species are discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with the California Department of Fish and Wildlife (CDFW) to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual plants have gone to seed, then stockpiling the top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation.

MM-2. Construction activities within Dry Creek shall be limited to a work window of June 1 to October 31.

MM-3. Within 7 days prior to the onset of construction activities, a qualified biologist shall conduct preconstruction surveys for western pond turtle, turtle nests, and Foothill yellow-legged frog. If these species or turtle nests are observed during the pre-construction survey or during construction, CDFW will be contacted and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or Foothill yellow-legged frog are not observed during the preconstruction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another pre-construction survey will be conducted.

MM-4. To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 15). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 15), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The preconstruction survey will be performed no more than 14 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.

MM-5. To the extent practicable, removal of vegetation shall occur outside of the ring-tailed cat maternal denning period (May 1–June 30). If vegetation removal is to occur during the ring-tailed cat maternal denning period (May 1–June 30), a qualified biologist shall conduct a preconstruction survey of the BSA to locate maternity dens. The preconstruction survey will be performed no more than 7 days prior to the vegetation removal. If a ring-tailed cat maternity den is found, a qualified biologist (in consultation with CDFW) will develop measures to protect the maternity den from disturbance.

MM-6. If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

PUBLIC REVIEW DISTRIBUTION

Draft copies or notice of this Mitigated Negative Declaration were distributed to:

- State Clearinghouse
- Shasta County Clerk
- California Department of Transportation District 2
- California Department of Fish and Wildlife District 1
- Central Valley Regional Water Quality Control Board
- California Native Plant Society
- California Highway Patrol
- Native American Heritage Commission
- State Office of Historic Preservation
- All property owners within 300 feet of the property boundary

PUBLIC REVIEW

- (X) Draft document referred for comments <u>03/05/2020–04/06/2020</u> Date
- () No comments were received during the public review period.
- () Comments were received but did not address the draft Mitigated Negative Declaration findings or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.
- () Comments addressing the findings of the draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public review period. The letters and responses follow (see Attachment D, Response to Comments).

Copies of the Mitigated Negative Declaration, the Initial Study, documentation materials, and the Mitigation Monitoring Program may be obtained at the Planning Division Public Works Department, City of Redding, 777 Cypress Avenue, Redding, CA 96001. Contact: Amber Kelley, Environmental Compliance Manager, (530) 225-4046 or akelley@cityofredding.org.

Date of Draft Report:

March 2, 2020

By: Name/ Title:

Amber Kelley // Environmental Compliance Manager

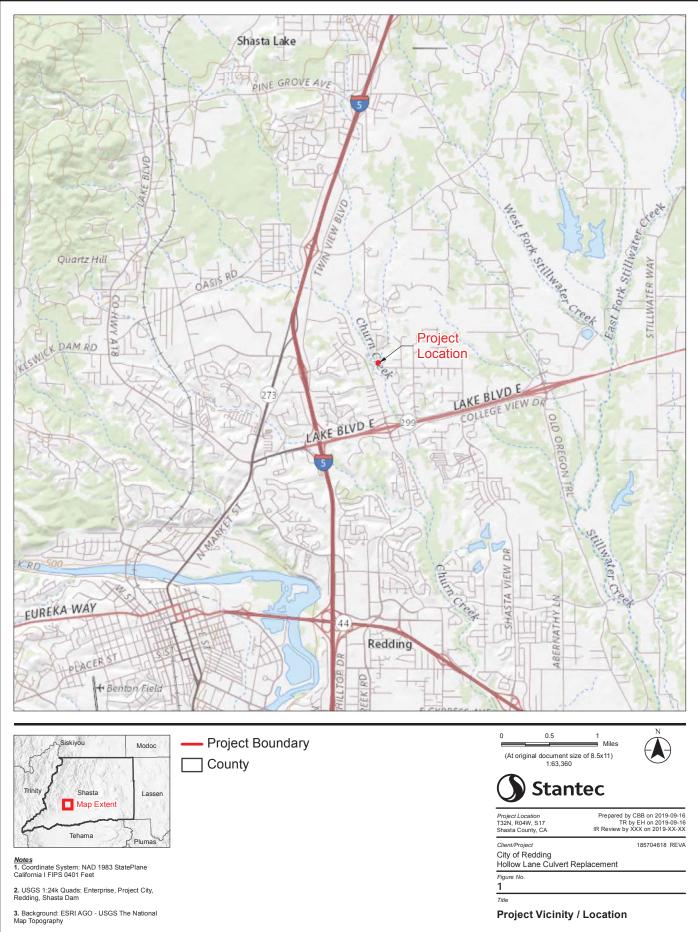
Date of Final Report

Attachments:

- A. Project Location Map
- B. Initial Study
- C. Mitigation Monitoring and Environmental Commitment Program
- D. Comments and Response to Comments (if any)

ATTACHMENT A

Figure 1 – Project Location Map



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

ATTACHMENT B

Initial Study

CALIFORNIA ENVIRONMENTAL QUALITY ACT INITIAL STUDY

Hollow Lane Culvert Replacement Project



Prepared by:

CITY OF REDDING Public Works Department Engineering Division 777 Cypress Avenue Redding, California 96001

March 2020

CITY OF REDDING ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Hollow Lane Culvert Replacement Project

2. Lead agency name and address:

CITY OF REDDING Public Works Department 777 Cypress Avenue Redding, CA 96001

3. Contact Person and Phone Number: Amber Kelley, Environmental Compliance Manager, (530) 225-4046

4. Project Location:

The proposed project is located in the City of Redding, Shasta County, California. The project area is located on Hollow lane at the Dry Creek crossing, approximately 0.4 mile west of Ridgewood Road.

Representative's Name and Address:

5. Applicant's Name and Address:

CITY OF REDDINGAmber KelleyPublic Works DepartmentCITY OF REDDING777 Cypress AvenuePublic Works DepartmentRedding, CA 96001777 Cypress AvenueRedding, CA 96001Redding, CA 96001

6. General Plan Designation: "Residential" and "Greenway"

7. Zoning:

- Residential Estate 2 Units Per Acre
- Residential Single Family 2 Units Per Acre
- Open Space

8. Description of Project:

The City proposes a culvert replacement project on Hollow Lane. This roadway serves as the only access for approximately 20 residents on the west side of Dry Creek. Currently, two 60-inch corrugated metal pipes (CMPs) convey Dry Creek under Hollow Lane. The aging CMPs show signs of pitting and corrosion and are in need of replacement. The two existing CMPs will be removed and replaced with one 5-foot tall by 15-foot wide aluminum arch pipe with a concrete bottom. The new culvert will include headwalls, wing walls, concrete aprons, and a 20-foot rock energy dissipation pad at the outlet. Recent high-velocity storm water flows have created two large erosional scour holes at the outlet that form ponds during periods of inundation. These scour holes will be repaired by filling the holes, constructing a 20-foot diameter rock energy dissipation pad, and re-grading the creek

channel bottom to direct positive downstream flow. The creek will be accessed on the northwest and southwest sides of the culvert. Existing utilities within the project work zone include: an 8-inch sewer main; a 2-inch gas line; and an 8-inch water main. The sewer main, currently located under the existing culverts, will be replaced and protected with the concrete culvert bottom. The gas line and water main will be replaced within the roadway.

The majority of work will occur within the City's right of way (ROW); however, temporary permits to enter and construct will be needed to access the north side of the creek, relocate utilities, and install the new culvert. Permanent ROW acquisition or easements may be required for long-term culvert maintenance. Half-width construction is required in order to maintain access for residents and emergency vehicles. As each half of the arch pipe is completed, Hollow Lane will be reconstructed and an asphalt concrete dike will be installed along the edge of the roadway. Staging will occur with the City's ROW. The project is anticipated to be built in 2021 and would require one season of construction.

9. Surrounding Land Uses and Setting:

Hollow Lane is a two lane residential road that crosses Dry Creek. The project area is bounded on the east, west, and north by residential development. The area to the south is City owned undeveloped open space. Dry Creek flows south through the project area, into the open space, and into Churn Creek approximately 800-feet downstream.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- U.S. Army Corps of Engineers (Sacramento District)
- California Regional Water Quality Control Board (Central Valley Region 5-Redding)
- California Department of Fish and Wildlife (Region 1)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Consultation letters were sent to the Redding Rancheria, the Wintu Tribe of Northern California, and the Winnemem Wintu Tribe on October 17, 2019, to invite their participation in the project development process and to request their assistance in the identification of sites of religious and cultural significance or the identification of historic properties that may be affected by the proposed project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant With Mitigation Incorporated" as indicated by the checklist on the following pages.

	Aesthetics	Agricultural and Forestry Resources	Air Quality
x	Biological Resources	Cultural Resources	Energy
	Geology/Soils	Greenhouse Gas Emissions	Hazards & Hazardous Materials
	Hydrology/Water Quality	Land Use/Planning	Mineral Resources
	Noise	Population/Housing	Public Services
	Recreation	Transportation	Tribal Cultural Resources
	Utilities/Service Systems	Wildfire	Mandatory Findings of Significance

DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

Based on the initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR of NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Copies of the Initial Study and related materials and documentation may be obtained at the Engineering Division of the Public Works Department, 777 Cypress Avenue, Redding, CA 96001. Contact Amber Kelley at (530) 225-4046 or akelley@cityofredding.org.

mlen Kelley

Amber Kellev Environmental Compliance Manager Public Works - Engineering

<u>3-2-2020</u> Date

EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning

- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire
- Mandatory Findings of Significance

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the State *CEQA Guidelines* and used by the City of Redding in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- No Impact. The development will not have any measurable environmental impact on the environment.
- Less Than Significant Impact. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are significant.
- Potentially Significant Impact Unless Mitigation Incorporated. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- Potentially Significant Impact. The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

Prior environmental evaluations applicable to all or part of the project site:

- City of Redding General Plan, 2000
- City of Redding General Plan Final Environmental Impact Report, 2000, SCH #1998072103

LIST OF ATTACHMENTS/REFERENCES

- Attachment A Figure 1 Project Location Map
 - Figure 2 Project Design Features Map
- Attachment B Biological Resources Assessment, Stantec Consulting Services Inc., December 2019, (on file in the Public Works, Engineering Division)
- Attachment C Cultural Resources Investigation, Stantec Consulting Services Inc., November 2019, (on file in the Public Works, Engineering Division)

I.	AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views the site and its surroundings (public views are those that are experience from publicly accessible vantage point).? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Discussion

- a) The project area does not include scenic vistas and the proposed project would have no impact on the overall scenic quality of the area.
- b) The project site is not located adjacent to, and would have no impact to, a state-designated scenic highway.
- c) The project will be compatible with the existing visual character of the property and its surroundings. The project would be consistent with applicable zoning and scenic quality regulations.
- d) The project would not create a new source of substantial light or glare and would not impact day or nighttime views in the area.

Documentation

- City of Redding General Plan, Natural Resources Element, 2000
- City of Redding Zoning Ordinance, Chapter 18.40.090
- California Department of Transportation, California Scenic Highway Mapping System. Updated September 7, 2011.

Mitigation

None necessary.

п.	AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural, Land Evaluation and Site Assessment Mode (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided bin Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				\boxtimes
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				

Discussion

a-e) The project area does not include any designated farmland or timberlands. According to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) no lands within the project area are under Williamson Act contracts and no lands are mapped as Important Farmlands. The project would not convert any farmland to non-agricultural use, or any forestland to non-forest use.

Documentation

- City of Redding General Plan, Natural Resources Element, 2000
- City of Redding GIS Parcel and Zoning Map Viewer
- California Department of Conservation, Farmland Mapping and Monitoring Program, United States Department of Agriculture, Soil Conservation Service and Forest Service, Soil Survey of Shasta County Area.

Mitigation

None necessary.

ш.	AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

Discussion

a-c) Air pollution controls will conform to Caltrans Standard Specifications, which state that the contractor shall comply with all applicable air pollution control rules, regulations, ordinances, and statutes. City standards (implemented through the Grading Ordinance and Uniform Building Code) require implementation of the following conservation measures and best management practices (BMPs) that contribute to achieving the City's goal of at least a 20 percent reduction in emissions or the best reduction otherwise feasible. The following standard conservation measures and BMPs will be used during construction to limit dust and PM₁₀ emissions:

AQ-1. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas.

AQ-2. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.

- AQ-3. Water all stockpiles, access roads, and disturbed or exposed areas, as necessary, to prevent airborne dust.
- AQ-4. Pursuant to the California Vehicle Code (Section 23114(e)(4)) (California Legislative Information 2016), all trucks hauling soil and other loose material to and from the construction site shall be covered or shall maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).
- AQ-5. All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads.

The proposed project consists of a culvert replacement, and the completed project would not result in the increased use of motor vehicles. Shasta County, including the far northern Sacramento Valley, currently exceeds the state's ambient standards for ozone (smog) and particulates (fine, airborne particles). Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative impacts are unavoidable when ozone or particulate emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential to incrementally contribute to the problem. The Environmental Impact Report for the City's *General Plan* acknowledged this dilemma; and as a result, the City Council has adopted *Findings* and a *Statement of Overriding Considerations* for impacts on air quality resulting from growth supported under the *General Plan*.

Project construction equipment would result in limited temporary emissions of Reactive Organic Gases (ROG) and oxides of nitrogen (NOx), which are ozone precursors, and inhalable particulate matter, 10 micron (PM_{10}). The culvert replacement would involve one season of construction in the year 2021. Because the project itself will not increase traffic, has a small footprint, and requires limited construction activities and equipment, it would be classified as a minor project in accordance with the City's General Plan findings. The proposed project would have no impact on air quality plans or policies. The project's cumulative contribution to criteria pollutants in a non-attainment area would be less than significant.

Potential impacts on neighboring homes (sensitive receptors) due to construction-related fugitive dust would be temporary, localized, and minor. Project operation would have no impact on air quality experienced by sensitive receptors. There are no other sensitive receptors (e.g., hospitals, schools) in the immediate project vicinity, and any impact would be less than significant.

d) The project would not other emissions that could generate objectionable odors affecting a substantial number of people.

Documentation

- Shasta County APCD Air Quality Maintenance Plan and Implementing Measures
- City of Redding General Plan, Air Quality Element, 2000

- City of Redding General Plan Final Environmental Impact Report, 2000, SCH #1998072103, Chapter 8.6, Air Quality,
- CEQA Findings of Fact and Statement of Overriding Considerations for the City of Redding General Plan Final Environmental Impact Report, as adopted by the Redding City Council on October 3, 2000, by Resolution 2000-166
- California Air Resources Board. 2017. Area designations maps/state and national. http://www.arb.ca.gov/desig/adm/adm.htm.

Mitigation

None necessary.

IV.	BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special- status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local of regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			\boxtimes	
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			\boxtimes	
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			\boxtimes	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\boxtimes

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?				\boxtimes

Discussion

a) A Biological Resources Assessment Report (Stantec 2019) was prepared to assess the impacts of the proposed project on biological resources in the project area and vicinity. Studies included research, database review, species list review, a habitat assessment survey, a biological reconnaissance survey, and a delineation of jurisdictional waters. No designated critical habitat is present in the study area; the nearest designated critical habitat is in Churn Creek approximately 1.9 miles south of the study area.

Special-status Plant Species

The following special-status plant species were determined to have the potential to occur in the study area:

- Watershield (Brasenia schreberi): CNPS list 2B.3 (not very threatened in California)
- Silky crypthantha (Cryptantha crinite): CNPS list 1B.2 (fairly threatened in California)
- Boggs Lake (*Gratiola heterosepala*): state endangered, CNPS list 1B.2 (fairly threatened in California)
- Sanford's Arrowhead (Sagittaria sanfordii): CNPS list 1B.2 (fairly threatened in California)

The project could adversely affect special status plant species if individuals or populations are present in the construction area. Potential direct effects include injury, mortality, and permanent loss of habitat resulting from project construction. Indirect effects could occur if construction activities result in degradation of habitat or water quality due to erosion and sedimentation, accidental fuel leaks, and spills. Standard conservation measures and BMPs HAZ-1 through HAZ-5 (included in Section IX, Hazards and Hazardous Materials) and BIO-1 through BIO-3 are included for all projects requiring earthwork, equipment use, and work near stream channels. These BMPs limit the potential for erosion, sediment transport, and spills, as well as prevent work from occurring in undesignated areas.

BIO-1. As required by the City of Redding Stormwater Quality Management and Discharge Control Ordinance, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared to address BMPs that will be used to prevent erosion and sediment loss within the project site. BMPs such as silt fence, mulching and seeding, and straw wattles will be placed where needed to prevent sediment from leaving the site during and after construction.

- **BIO-2.** Appropriate sediment control measures (e.g., silt fences, straw wattles) shall be in place prior to the onset of construction activities near jurisdictional waters and in project areas where there is a potential for surface runoff to drain into jurisdictional waters. Sediment control measures shall be monitored and maintained until construction activities have ceased.
- **BIO-3.** High visibility fencing, flagging, or markers will be installed along the edges of the work zone near avoided waters and avoided riparian areas.

While none of these plant species were observed in the study area, the biological field studies were performed on September 13, 2019, outside of the blooming period. To verify the presence or absence of special status plants, protocol level botanical surveys will be required. If any special status plants are found in the study area, protection measures will be implemented, as appropriate, to protect the plants from construction impacts. If state listed plants cannot be avoided, the California Department of Fish and Wildlife would be contacted and an Incidental Take Permit would need to be obtained. With incorporation of mitigation measure MM-1, potentially significant impacts to special status plants would be less than significant.

Special Status Fish Species

The following federal and state listed fish species have the potential to occur in or adjacent to the project area:

- Central Valley steelhead distinct population segment (DPS) (*Oncorhynchus mykiss irideus*): federally listed as threatened
- Central Valley fall/ late fall-run ESU Chinook salmon (*Oncorhynchus tshawytscha*): state species of special concern

The proposed project would have the potential to cause take of special-status anadromous salmonids if it resulted in any one of the following: direct mortality; temporary impacts on habitats such that special-status species suffer from injury, lowered reproductive success, increased stress, lessened fitness, or mortality; permanent loss of habitat critical to a special-status fish species; or a substantial reduction in the quantity or value of fish habitat in which a special-status population occurs. Indirect impacts on fish and their habitat could occur due to erosion and sediment transport, accidental fuel leaks, or spills of pollutants.

Central Valley DPS steelhead and Central Valley fall/late fall-run ESU Chinook salmon may enter Dry Creek during winter flows, as they are known to occur in nearby Churn Creek, located about 800 feet from the study area. When enough water is present in the winter months, Dry Creek in the study area would likely only be used by stray migrating fish or non-native predators. However, low flow and intermittent flow would preclude them from the study area during the construction season. During this period, Dry Creek's flow would be absent or nearly absent, and Dry Creek would be hydrologically disconnected from Churn Creek.

Although the Creek would be disconnected and fish do not have the potential to be present during the construction period, an in-water work window of June 1 to October 31 (MM-2) will be used to ensure the project would have no effect on Central Valley DPS steelhead and Central Valley fall/late fall-run ESU Chinook salmon. With incorporation of MM-2, project impacts to this species would be less

than significant. While MM-2 would ensure salmonids are not present during construction, Standard conservation measures and BMPs HAZ-1 through HAZ-5 and BIO 1 through BIO-3 have also been incorporated into the project.

Western Pond Turtle (state species of special concern)

Within the project area, Dry Creek contains ponded water which provides potential aquatic habitat for Western pond turtle (*Emys marmorata*), a state species of special concern. Suitable basking sites (e.g., woody debris and rocks) are limited in the study area, but the adjacent upland habitats may be used for nesting.

Direct impacts to this species could include injury or mortality of individual turtles; temporary impediments to dispersal along the stream channel, or the removal of vegetation. Indirect impacts could include potential sedimentation of downstream habitats or the reduction of suitable upland habitat for basking and nesting. While no western pond turtles were found during the biological survey, pre-construction surveys and construction requirements will be used to reduce potentially significant impacts to this species. With incorporation of MM-3, impacts to western pond turtle would be less than significant.

Foothill Yellow-Legged Frog (state species of special concern, state candidate species)

The rocky portions of Dry Creek may provide potential Foothill yellow-legged frog (*Rana boylii*) habitat; however, the potential for occurrence is low. The stream has a low amount of suitable cobble for breeding and it is covered in silt, which precludes breeding use. Additionally, American bullfrogs were observed in the study area. The bullfrogs compete with, and are predators of, Foothill yellow-legged frog.

While the potential for occurrence is low, the project could adversely affect foothill yellow-legged frog if individuals are present in the study area during project construction. Potential direct effects include harassment, injury and mortality of individuals due to equipment and vehicle traffic. The species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, and accidental fuel leaks or spills.

Although no Foothill yellow-legged frogs were found during the biological survey, pre-construction surveys and construction requirements will be used to reduce potentially significant impacts to this species. With incorporation of MM-3, impacts to this species would be less than significant.

Western Red Bat (state species of special concern)

The cottonwood trees, and to a lesser extent willow trees, in and near the study area provide potential roosting habitat for Western red bat (Lasiurus blossevillii). Vegetation in the area also provides potential foraging habitat. Western red bats may roost individually or in small groups in the riparian trees. If a tree is removed that contains a western red bat nursery colony, the removal could result in mortality or injury of individuals. Indirect impacts may occur from construction disturbance if a bat with pups is present in or adjacent to the study area. Significant noise disturbance could result in mothers temporarily or permanently leaving their pups.

Due to the ability of individual bats to move away from disturbance, direct impacts on bats are not expected. With incorporation of MM-4, potentially significant impacts to Western red bat would be less than significant.

Ring-Tailed Cat (state listed as fully protected)

Riparian brush near the study area provides potential denning habitat for Ring-tailed cat (*Bassariscus astutus*). Direct impacts on ring-tailed cat could result from tree and vegetation removal if it takes place during the natal and maternal denning period (May 1–June 30). Ring-tailed cat using dens within trees or brush slated for removal could perish if the tree is removed while it is occupied by the animal. Temporary noise disturbance generated by construction could indirectly affect ring-tailed cats. Since female ring-tailed cats commonly use multiple dens when raising their kits and move kits when disturbed, females using dens outside the area of ground disturbance would likely move kits to an alternate den if disturbed by construction noise.

While the project area contains little to no woody debris or rocks for denning, and the project would require the removal of only one tree, MM-5 will be used to reduce potentially significant impacts resulting from construction of the project. With incorporation of MM-5 the project's impact to ring-tailed cat would be less than significant.

Migratory Birds and Raptors

Construction activities would occur during the avian breeding season (generally February through August, depending on the species) and could disturb nesting birds in or adjacent to the project area. Construction-related disturbance could result in the incidental loss of fertile eggs or nestlings, or nest abandonment. Impacts could result from tree removal, noise from construction activities, as well as ground disturbance such as grubbing and grading.

Culvert replacement would result in a permanent loss of 0.028 acre of riparian/fresh emergent wetland and would temporarily impact 0.008 acre of riparian/fresh emergent wetland; however, the majority of this vegetation is low lying and lacks the density required to provide suitable nesting habitat for most species. The project would require the removal of one willow approximately 12-inches in diameter at breast height. Abundant avian nesting and foraging habitat would be retained within the project area and similarly suitable habitat occurs in the project vicinity. Foraging birds and birds present in, or adjacent to the project area would not be adversely impacted by construction activities due to their high mobility and available habitat outside of the project area. However, due to the project area, MM-6 will be used to ensure impacts on migratory bird species are avoided or minimized by requiring pre-construction surveys and use of protection measures for any potential nests found to occur within the project area. The project's impact on migratory birds and raptors would be less than significant with incorporation of MM-6.

b) Freemont cottonwood forest habitat is considered a sensitive natural community. It occurs in the project area within Dry Creek. The vegetation in this location has been identified as riparian/fresh emergent wetland, a water of the United States, and is described in Section "c" below.

c) Stantec Consulting, Inc. conducted a delineation of waters of the United States within the project area on September 13 and 27, 2019, and a preliminary jurisdictional determination (PJD) was received from the U.S. Army Corps of Engineers on January 7, 2020. The PJD confirmed that approximately 0.107 acre of waters of the United States occurs within the study area. Federally jurisdictional waters include 0.086 acre riparian/fresh emergent wetland, and 0.021 acre (71 linear feet) of perennial stream.

Removal of the existing culverts, and installation of the new culvert would result in permanent and temporary impacts to perennial stream and riparian/fresh emergent wetland. Approximately 0.028 acre of riparian /fresh emergent wetland and 0.010 acre of perennial stream would be permanently impacted by the new culvert, energy dissipation pad, and filling the scour holes. Approximately 0.008 acre of riparian/fresh emergent wetland would be temporarily impacted by the access routes. Upon construction completion the access routes will be re-contoured and erosion control seed will be applied. Impacts to the creek banks are limited to the access areas.

The project has been designed to avoid and minimize impacts to waters to the maximum extent practicable. Impacts to waters of the United States equate to 0.046 acre which is a small percentage of the "waters" located within the project vicinity. The impact of the project on waters of the United States would be less than significant. Standard conservation measures and BMPS HAZ-1 through HAZ-5 and BIO-1 through BIO-3 will be used during construction to ensure that potential project related impacts on waters of the United States would be minimized or avoided to the maximum extent practicable:

- d) The proposed project, a culvert replacement, is not expected to disrupt the habitat connectivity in the project area. Although wildlife may avoid the active construction area, the project would not permanently interfere with the movement of native wildlife. Work is confined to the culvert at the road crossing, and construction will be short in duration and would occur when migratory fish have no potential to be present. Potential wildlife passage or migration of fish will be improved with implementation of the new project, as the existing culverts are set at an elevation that impedes passage. The new culvert will be set at grade and the scour holes will be filled, creating an environment that is conducive to upstream fish passage and wildlife movement in Dry Creek. Impacts on wildlife migratory and travel corridors would be less than significant.
- e-f) There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan covering the proposed project area. The City has adopted a Tree Management Ordinance (Chapter 18.45 of the RMC) that promotes the conservation of mature, healthy trees in the design of new development. The ordinance also recognizes that the preservation of trees sometimes conflicts with necessary land-development requirements. There are no conflicts associated with the project that would prevent implementation of the Tree Preservation Ordinance or other resource protection ordinances. The project would have no impact on any habitat conservation plans.

Documentation

- California Department of Fish and Wildlife: California Natural Diversity Database, 2019
- City of Redding General Plan, Natural Resources Element, 2000
- City of Redding Municipal Code, Chapter 18.45, Tree Management Ordinance

- Stantec Consulting Services, Inc., Biological Resources Assessment, 2019
- Stantec Consulting Services, Inc., Delineation of Jurisdictional Waters of the United States, 2019

Mitigation

- **MM-1.** Prior to the start of construction, a focused botanical survey will be conducted during the blooming period for potentially occurring plant species. If no special status plant species are found during the botanical survey no other measures will be required. If special status plant species are discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with the California Department of Fish and Wildlife (CDFW) to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual plants have gone to seed, then stockpiling the top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation.
- **MM-2.** Construction activities within Dry Creek shall be limited to a work window of June 1 to October 31.
- **MM-3.** Within 7 days prior to the onset of construction activities, a qualified biologist shall conduct pre-construction surveys for western pond turtle, turtle nests, and Foothill yellow-legged frog. If these species or turtle nests are observed during the pre-construction survey or during construction, CDFW will be contacted and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or Foothill yellow-legged frog are not observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another pre-construction survey will be conducted.
- MM-4. To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 15). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 15), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The preconstruction survey will be performed no more than 14 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.
- MM-5. To the extent practicable, removal of vegetation shall occur outside of the ring-tailed cat maternal denning period (May 1–June 30). If vegetation removal is to occur during the ring-tailed cat maternal denning period (May 1–June 30), a qualified biologist shall conduct a preconstruction survey of the BSA to locate maternity dens. The preconstruction survey will be performed no more than 7 days prior to the vegetation removal. If a ring-tailed cat

maternity den is found, a qualified biologist (in consultation with CDFW) will develop measures to protect the maternity den from disturbance.

MM-6. If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

v.	CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				\boxtimes
d)	Disturb any human remains, including those interred outside of formal cemeteries?				

Discussion

- a) Archival research, Native American consultation, and archaeological survey are summarized in the Cultural Resource Investigation Report (CRI) prepared for the Hollow Lane Culvert Replacement Project (Stantec 2019). No resources were identified within the area of potential effect (APE), and the project would have no impact on historical resources.
- b,c) Archival research conducted for the project's CRI did not yield records of any documented prehistoric sites in the project area. While the project is not anticipated to affect cultural resources, the following standard practices were incorporated into the project design:
- **CR-1.** If previously unidentified cultural materials are unearthed during construction, it is the City's policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if the proposed project undertaking limits are extended beyond the present survey APE limits.
- **CR-2.** If human remains are discovered during project activities, all activities in the vicinity of the find will be stopped and the Shasta County Sheriff-Coroner's Office shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains shall

be conducted in accordance with further direction of the County Coroner or the NAHC, as appropriate.

Documentation

Stantec Consulting Services, Inc., Cultural Resources Investigation Report, 2019

Mitigation

None necessary.

VI.	Energy: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			\boxtimes	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

Discussion

a) The project would replace the existing stream crossing with a newer and more reliable facility for local area resident access. The project would not permanently alter energy use, as it would not increase the number of vehicle travel lanes or increase carbon emissions; therefore, direct energy use would involve the short-term use of energy for construction activities. Indirect energy use includes the long-term activities required to maintain the completed project.

Project construction would primarily consume diesel and gasoline through operation of construction equipment, material deliveries, and debris hauling. Construction is estimated to result in a short-term consumption of energy, representing a small demand on local and regional fuel supplies that would be easily accommodated and would be temporary. The roadway and crossing are City owned and currently require staff to travel to the site for maintenance and monitoring. Construction of the new facility would likely decrease the number of maintenance and monitoring visits as the deteriorated culvert crossing would be replaced with a new and more reliable crossing.

The project would not result in increased fuel consumption and the minor energy use needed for construction would be offset by the reduced number of maintenance and monitoring visits. The project would not result in an inefficient, wasteful, and unnecessary consumption of energy, and the project's impact on energy would be less than significant.

b) The project will not conflict with any state or local plans for renewable energy or energy efficiency.

Documentation

- City of Redding General Plan, Air Quality Element, 2000
- California Long-Term Energy Efficiency Strategic Plan, 2011
- Regional Transportation Plan for Shasta County, 2015

Mitigation

None necessary.

VI	I.GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake, fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publications 42. Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Landslides? 				
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off- site landslide, lateral spreading, subsidence, liquefaction, or collapse?				\boxtimes
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				\boxtimes
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				\boxtimes

VII	I.GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

Discussion

a,c,d) There are no Alquist-Priolo earthquake faults designated in the Redding area of Shasta County and there are no other documented earthquake faults in the immediate vicinity that pose a significant risk of rupture, ground shaking or otherwise unstable ground conditions.

Implementation of the proposed project would not increase the potential for ground shaking to occur. Other types of ground failure such as expansive soils and subsidence (the gradual settling or sinking of an area with little or no horizontal motion) are not considered to pose a significant hazard within the proposed project area. The proposed project would not be expected to substantially result in adverse effects from liquefaction.

b) The proposed project will replace a culvert and reconstruct the road crossing in Dry Creek. The project is subject to certain erosion control requirements and BMPs mandated by City regulations which include:

City of Redding Grading Ordinance. This ordinance requires preparation of an erosion and sediment control plan (ESCP) for projects within the City. The erosion and sediment control plan requires preparation and description of any BMPs that will be used during construction and post-construction, if needed.

City of Redding Stormwater Quality Management and Discharge Control Ordinance. This ordinance requires preparation of an ESCP for projects within the City. The objectives of the ESCP are to identify the sources of sediment and other pollutants that may affect water quality associated with stormwater discharges and to describe and ensure the implementation of BMPs to reduce those sources of sediment and other pollutants in stormwater discharges.

The potential for project implementation to result in substantial soil erosion or the loss of topsoil would be less than significant.

- e) The proposed project does not involve the use of septic tanks or alternative wastewater disposal.
- f) No unique geologic features, fossil-bearing strata, or paleontological sites are known to exist on the project site.

Documentation

 City of Redding.2000-2020 General Plan. Health and Safety Element figures 4-1 (Ground Shaking Potential) and 4.2 (Liquefaction Potential)

- City of Redding Grading Ordinance, RMC Chapter 16.12
- City of Redding Standard Specifications, Grading Practices
- Natural Resources Conservation Service. 2018. Web soil survey. Shasta County Area, California. http://websoilsurvey.nrcs.usda.gov/app/ cited July 30, 2019.
- State Regional Water Quality Control Board, Central Valley Region, Regulations related to Construction Activity Storm Water Permits and Storm Water Pollution Prevention Plans

Mitigation

None necessary.

VI	II. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Discussion

a) The primary generators of GHG emissions in the United States are electricity generation and transportation. The EPA estimates that nearly 85 percent of the nation's GHG emissions are comprised of CO₂. Most CO₂ emissions are generated by petroleum consumption associated with transportation and coal consumption, which is in turn associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

Regarding the proposed project, which is a culvert replacement project, the predominant associated GHG is CO₂ temporarily generated by construction vehicle travel to and from the site. CARB has recommended the use of 10,000 metric tons of carbon dioxide equivalent per year (mtCO₂-e/yr) as the de minimus gas emission threshold in its Climate Change Scoping Plan (approved January 9, 2009, updated May 22, 2014). According to California Air Pollution Control Officers Association's (CAPCOA), the 10,000 mtCO₂-e/yr is equivalent to 550 dwelling units, 400,000 square feet of office use, 120,000 square feet of retail, or 70,000 square feet of supermarket use. Given the scope and nature of the proposed project compared to that of similar projects, emissions from the project would be significantly below the thresholds put forth by CARB, as well as the City's air-quality thresholds. Therefore, the project would not contribute significantly to GHG emissions in the air basin. Additionally, the City and State's construction standards and BMPs, including AQ-1 through -5 (listed in Section III, Air Quality, above), will be used during construction to further limit any potential contribution to negative

impacts from GHG emissions. The project would have no direct or indirect impact on measurable GHGs in the Redding area.

b) The project would not conflict with any applicable plans, policies, or regulations adopted to reduce GHG emissions. As noted in "a" above, and in Section III, the project is in conformance with the City's air quality policies and thresholds, and with state guidelines and regulations, and conservation measures and BMPs AQ-1 through AQ-5 listed in Section III Air Quality. The proposed project would have no impact on any applicable plans, policies, or regulations related to GHG emissions.

Documentation

- City of Redding General Plan, 2000
- URBEMIS (2007, v 9.2.4) Air Quality Computer Model Redding General Plan Air Quality Element, 2000
- CAPCOA website, 2010
- California Office of the Attorney General, The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level, updated January 6, 2010
- Shasta Air Quality Management District, https://www.co.shasta.ca.us/index/drm_index/aq_index.aspx. Accessed July 19, 2019.

Mitigation

None necessary.

IX.	HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				

IX.	HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				\boxtimes
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				\boxtimes
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				

Discussion

a,b,d) The nature and scope of the proposed project would not present a significant risk related to hazardous materials or emissions. The project area is not on any lists of properties known to contain hazardous materials. Construction activities pose a slight risk for solvent or fuel spills or leaks. In compliance with the City of Redding Stormwater Quality and Discharge Control Ordinance an erosion and sediment control plan (ESCP) is required when obtaining a grading permit. Compliance under the ordinance would require use of the following standard conservation measures and BMPs to avoid or minimize the potential for accidental release of hazardous materials from spills or fuel leaks during project construction:

HAZ-1. Hazardous materials, including fuels, oils, cement, and solvents will be stored and contained in an area protected from direct runoff and away from areas where they could enter waters of the United States.

HAZ-2. Construction equipment will be inspected daily for leaks. Leaking fluids will be contained upon detection and equipment repairs will be made as soon as practicable or the leaking equipment will be moved off site.

HAZ-3. Secondary containment such as drip pans or absorbent materials shall be used to catch spills or leaks when removing or changing fluids. Secondary containment will be used for storage of all hazardous materials.

HAZ-4. Spill containment and clean-up materials shall be kept on site at all times for use in the event of an accidental spills.

HAZ-5. Absorbent materials shall be used on small spills rather than hosing down or burying the spill. The absorbent material shall be promptly removed and properly disposed. The potential for project construction and operation to create a hazard to the public or the environment through the accidental spill or pollutants would be less than significant.

- c) There are no existing or currently proposed schools within 0.25 mile of the project area. There would be no impact on schools.
- e) The project is not located within an airport land use plan or within two miles of a public airport and would not result in a significant safety hazard for people residing or working in the project area. There would be no impact on public safety.
- f) Although temporary short duration disruptions to normal traffic operations would occur during construction, the impact would be less than significant. Temporary traffic control and lane reduction will be used during construction. Temporary signage would be used to alert motorists and non-motorized travelers to any decreased speeds, uneven pavement, etc. throughout the project alignment in accordance with the California Manual on Uniform Traffic Control Devices standards. Controlled through-traffic would be allowed to pass during construction. Operation of the completed project would have no impact on traffic operations. The project would have a less-than-significant impact on emergency response and evacuation plans during project construction. The project does not involve a use or activity that could interfere with emergency response or emergency evacuation plans for the area.
- g) The use of construction equipment in and around vegetated areas increases the potential for wildfire ignition. Operation of the project would not increase the existing wildfire potential; however, the standard specifications require internal combustion engines to be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire. The potential for wildfire ignition would be less than significant.

Documentation

- City of Redding General Plan, Health and Safety Element, 2000
- California Environmental Protection Agency, Cortese List, 2019
- California Department of Toxic Substances Control, Envirostor, 2019
- Caltrans, California Manual on Uniform Traffic Control Devices Standards, 2017
- Shasta County Airport Land Use Commission, Comprehensive Land Use Plan Map, 1981.

Mitigation

None necessary.

X.	HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			\boxtimes	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				\boxtimes
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			\boxtimes	
	i) result in substantial erosion or siltation on- or off-site;				\boxtimes
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) impede or redirect flood flows?				\boxtimes
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

Discussion

a) The project would not involve any discharges of waste material into ground or surface waters. Construction and operation of the project would not violate any water quality standards or waste discharge requirements established by the Central Valley Regional Water Quality Control Board (RWQCB) in its Basin Plan for the Sacramento River and San Joaquin River Basins. Water pollution BMPs were incorporated into the project and are required. The City's construction standards require that all projects prepare an erosion and sediment control plan (ESCP) prior to construction to address water pollution control. The ESCP will ensure that water quality standards are not substantially affected by the project during construction. In addition to the ESCP and conservation measures HAZ-1 though HAZ-5, the following conservations measures have been incorporated into the project.

- **WQ-1.** All construction work and stockpiling of materials will be confined to the project disturbance area.
- **WQ-2.** Temporary stockpiling of excavated or imported material shall be placed in upland areas.
- **WQ-3**. Excess soil shall be used onsite or disposed of at a regional landfill or other appropriate facility.

The proposed project would have a less-than-significant impact on water quality.

b-e) The proposed project would use City water service for domestic and construction uses, and fire protection. The proposed project would not impact groundwater supplies and is not located in a tsunami or seiche zone. The project would not conflict with a water quality control plan or groundwater management plan. The project is not located within any agency or otherwise-documented flood-hazard boundary. Although construction activities could temporarily alter the existing drainage patterns in the project area, these activities would not result in substantial erosion, surface runoff, flooding on or off site, or otherwise substantially degrade water quality. The project involves a very minor amount of new impervious surface (wing-walls and apron) and would not create run-off that would exceed the capacity of existing or planned stormwater drainage systems. The proposed project is located in an area surrounded by pervious vegetated surfaces that allow infiltration and natural stormwater treatment. The project would have a less than significant impact on drainage patterns in the project area.

Documentation

- City of Redding 2000-2020 General Plan. Health and Safety Element 2000.
- City of Redding Storm Drain Master Plan, Montgomery-Watson Engineers 1993.
- Federal Emergency Management Agency (FEMA), Floodplain regulations, FIRM Map 06089C1539G, March 17, 2011.
- Central Valley RWQCB, The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, 4th edition, Revised July 2016.

Mitigation

XI.	• LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Physically divide an established community?				\boxtimes
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

- a) The project does not have the potential to physically divide an established community.
- b) The project is compatible with the applicable policies and regulations of the City's General Plan and Zoning Ordinance, and would not conflict with any other land use plan, policy, or regulation.

Documentation

- City of Redding General Plan, Community Development Element, 2000
- City of Redding General Plan, Natural Resources Element, 2000

Mitigation

None necessary.

XI	I.MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				

Discussion

a,b) The project area is not identified in the General Plan as having any known mineral-resource value or as being located within any critical mineral resource overlay area. No impact would occur.

Documentation

- City of Redding General Plan, Natural Resources Element, 2000
- California Geological Survey, Aggregate Sustainability in California prepared by J. Clinkenbeard, 2012

Mitigation

None necessary.

XI	II. NOISE: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive groundborne vibration or groundborne noise levels?				\boxtimes
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

Discussion

a-c) The project area is located within the right of way of an existing City street. Sources of ambient noise in the project area come from roadway traffic, a residential neighborhood, and State Route 299. When the new culvert is installed the roadway would be reconstructed with the same number of travel lanes and would not generate more traffic. Operation of the proposed project would not generate increases in ambient noise levels.

During construction, the City's Grading Ordinance (RMC Chapter 16.12.120.H) limits grading permit-authorized activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. No operations are allowed on Sunday. Noise generated by temporary construction activities and permanent operation of the proposed project would be similar to existing conditions. Potentially sensitive receptors such as nearby residences would not be subject to excessive ground-borne vibration or noise levels. No permanent or long-term noise impacts would occur because of the project. Temporary construction noise impacts would be less than significant.

The project area is not within the vicinity of a private airstrip. Area residents are not exposed to noise generated by airport operations; therefore, implementation of the proposed project would have no cumulative noise impact on residents near the project area.

Documentation

- City of Redding General Plan, Noise Element, 2000
- City of Redding General Plan, Transportation Element, 2000
- City of Redding Zoning Ordinance Redding Municipal Code, Section 18.40.100
- Shasta County Airport Land Use Commission, Comprehensive Land Use Plan Map, 1981

Mitigation

None necessary.

XI	V. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

Discussion

a-b) The proposed culvert replacement project would help maintain reliable access to approximately 20 residences on the west side of dry creek. The project would not create new roadways or travel lanes, and there are no developable parcels remaining in the project vicinity. The project would not result in displacement of persons or housing. The project would have no impact on population or housing.

Documentation

- City of Redding General Plan, Housing Element 2014
- City of Redding General Plan, Transportation Element

Mitigation

XV	7. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Fire Protection?			\boxtimes	
b)	Police Protection?			\boxtimes	
c)	Schools?			\boxtimes	
d)	Parks?			\boxtimes	
e)	Other public facilities?			\boxtimes	

a-e) The proposed project would not cause substantial adverse physical impacts on government facilities or negatively affect public services. Emergency services, including fire and police, may be temporarily affected during construction; however, access will be maintained through the project area and emergency vehicles would be given priority access. Similarly, access to schools, parks, and other public facilities would not be substantially affected. The project would not create the need to alter or create new facilities of any type. The proposed project would have no temporary or permanent impact on public services or government facilities. The proposed project would have a less than significant temporary impact, and no permanent impact on public services.

Documentation

• City of Redding General Plan, Public Facilities Element, 2000

Mitigation

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

a-b) The project would not increase the use of existing parks or other recreational facilities. The project does not include recreational facilities or require the construction or expansion of recreational facilities. The project would have no impact on recreation.

Documentation

- City of Redding General Plan, Recreation Element, 2000
- City of Redding General Plan, Public Facilities Element, 2000

Mitigation

XV	TI. TRANSPORTATION: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				\boxtimes
c)	Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?			\boxtimes	

- a-c) The project will not conflict with a program, plan, ordinance, or policy addressing the circulation system. The project does not propose roadway improvement or expansion, will not increase roadway hazards or incompatible uses, and will not conflict with CEQA guidelines section 15064.3(b).
- Emergency services, including fire and police, may be temporarily affected during construction; however, access will be maintained through the project area and emergency vehicles would be given priority access. The proposed project would have a less than significant temporary impact, and no permanent impact on public services.

Documentation

- City of Redding General Plan, Transportation Element, 2000
- City of Redding Traffic Impact Analysis Guidelines, 2009
- City of Redding Parks, Trails, and Open Space Master Plan, 2018

Mitigation

None necessary.

xv	TII. TRIBAL CULTURAL RESOURCES: Would the project: cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Discussion

a) In accordance with Assembly Bill 52 (AB 52), the City consulted with the NAHC and local Native American groups and individuals pursuant to Section 21080.3 of CEQA. This

consultation included contacting the local Native American individuals identified by the NAHC via letters sent on October 17, 2019, and conducting follow-up phone calls. No tribal cultural resources were identified within the project area and the proposed project would therefore, not cause a substantial adverse change in the significance of any known tribal cultural resources.

Documentation

Stantec Consulting Services, Inc., Cultural Resources Investigation Report, 2019

Mitigation

None necessary.

XI	X. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			\boxtimes	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				\boxtimes
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				\boxtimes
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Discussion

a,c) The proposed project would require the relocation of an 8-inch wastewater sewer main; a 2inch gas line; and an 8-inch water main; however, it would not require new or expanded facilities and would not exceed the existing available capacity. The two existing stormwater culverts would be replaced with a single arch culvert. The potential to cause significant environmental effects from relocation or reconstruction of utilities is less than significant.

- b) Sufficient water supplies are available to construct the project, and there would be no impact on water supplies.
- d-e) Construction and operation of the project would not generate excess solid waste, impair reduction goals, and would comply with statues and regulations related to solid waste. The project would have no impact on solid waste.

Documentation

- City of Redding General Plan, Public Facilities Elements, 2000
- Calrecycle Facility Operations, West Central Landfill, 2018

Mitigation

None necessary.

XX	. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

Discussion

a) The project is not located in or near a state responsibility area, or in an area classified as a very high fire hazard severity zone. One lane of traffic will be maintained during construction, which would allow emergency response access or emergency evacuation. The project would not

substantially impair an emergency response plan or an emergency evacuation plan. The project would have a less than significant impact.

- b) The project is located on an existing roadway within a relatively flat area and would not exacerbate wildfire risks or expose project occupants to pollutant concentrations.
- c) The project would not require the installation or maintenance of associated infrastructure that could exacerbate wildfire risks.
- d) The project would not expose people or structures to downstream flooding or landslides.

Documentation

CalFire, Fire Hazard Severity Zone Maps, Shasta County, 2008

Mitigation

XX	I. MANDATORY FINDINGS OF SIGNIFICANCE: Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, substantially 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)?				
c)	Does the project have potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly?				\boxtimes

- a) The proposed project would have minimal potential to degrade the quality of the environment, affect wildlife populations or their habitats, or reduce the number or restrict the range of rare or endangered plant and animal species. Although special-status wildlife species, including migratory birds and bats, may be impacted by implementation of the proposed project, standard conservation measures and BMPs, as well as mitigation measures, will be used to avoid adverse impacts on these species. Implementation of the proposed project would not eliminate examples of history or prehistory. The project's impacts would be less than significant with mitigation incorporated.
- b) As described in Section III, the proposed project could temporarily contribute to region-wide cumulative air quality impacts. However, these impacts would be considered less than significant and under policy of the City's General Plan, and application of standard BMPs would eliminate the potential for air quality impacts during project implementation. The project's potential cumulative impacts would be less than significant.
- c) As discussed in this document, the proposed project does not include any activities that cannot be mitigated to a less-than-significant level or that could otherwise cause substantial adverse impacts on human beings, either directly or indirectly.

Documentation

• See all sections above.

Mitigation

MM-1. Prior to the start of construction, a focused botanical survey will be conducted during the blooming period for potentially occurring plant species. If no special status plant species are found during the botanical survey no other measures will be required. If special status plant species are discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with the California Department of Fish and Wildlife (CDFW) to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual plants have gone to seed, then stockpiling the top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation.

MM-2. Construction activities within Dry Creek shall be limited to a work window of June 1 to October 31.

MM-3. Within 7 days prior to the onset of construction activities, a qualified biologist shall conduct pre-construction surveys for western pond turtle, turtle nests, and Foothill yellow-legged frog. If these species or turtle nests are observed during the pre-construction survey or during construction, CDFW will be contacted and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or Foothill yellow-legged frog are not observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another pre-construction survey will be conducted.

MM-4. To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 15). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 15), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The preconstruction survey will be performed no more than 14 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.

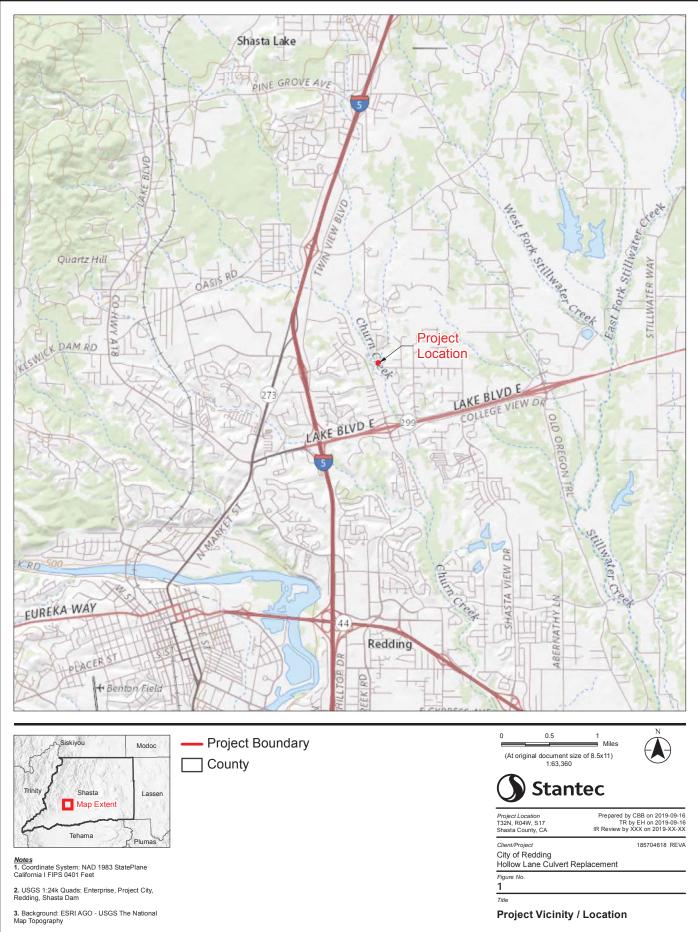
MM-5. To the extent practicable, removal of vegetation shall occur outside of the ring-tailed cat maternal denning period (May 1–June 30). If vegetation removal is to occur during the ring-tailed cat maternal denning period (May 1–June 30), a qualified biologist shall conduct a preconstruction survey of the BSA to locate maternity dens. The preconstruction survey will be performed no more than 7 days prior to the vegetation removal. If a ring-tailed cat maternity den is found, a qualified biologist (in consultation with CDFW) will develop measures to protect the maternity den from disturbance.

MM-6. If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

ATTACHMENT A

Figure 1 – Project Location Map

Figure 2 – Project Design Features Map



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

ATTACHMENT C

Mitigation Monitoring and Environmental Commitment Program

HOLLOW LANE CULVERT REPLACEMENT PROJECT STATE CLEARINGHOUSE NO. 2020XXXXX

MITIGATION MONITORING PROGRAM CONTENTS

This document is the Mitigation Monitoring and Environmental Commitment Program (MMP/ECP) for the Hollow Lane Culvert Replacement Project (project). The MMP/ECP includes a brief discussion of the legal basis for, and the purpose of, the program, discussion, and direction regarding complaints about noncompliance, a key to understanding the monitoring matrix, and the monitoring matrix itself.

LEGAL BASIS OF AND PURPOSE FOR THE MITIGATION MONITORING PROGRAM

California Public Resources Code Section 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report (EIR) or a mitigated negative declaration (MND). This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The MMP contained herein is intended to satisfy the requirements of CEQA as they relate to the Initial Study/Mitigated Negative Declaration prepared for the project. It is intended to be used by City of Redding (City) staff, participating agencies, project contractors, and mitigation monitoring personnel during implementation of the project.

- Mitigation is defined by CEQA Guidelines Section 15370 as a measure that does any of the following:
- Avoids impacts altogether by not taking a certain action or parts of an action.
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifies impacts by repairing, rehabilitating, or restoring the impacted environment.
- Reduces or eliminates impacts over time by preservation and maintenance operations during the life of the project.
- Compensates for impacts by replacing or providing substitute resources or environments.

The intent of the MMP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMP will provide for monitoring of construction activities as necessary, on-site identification and resolution of environmental problems, and proper reporting to City staff.

In addition to meeting the CEQA MMP requirements, this document incorporates environmental commitments, standard practices, conservation measures, and best management practices (BMPs). The

environmental commitments may be part of the project design, standard contract specifications, City of Redding requirements, or conservation measures. These commitments are part of the project, but do not constitute mitigation under CEQA as they have not been incorporated to reduce a potentially significant impact.

MITIGATION MONITORING/ENVIRONMENTAL COMMITMENT TABLE

The MMP/ECP Table identifies the mitigation measures and commitments proposed for the project. The tables have the following columns:

- **Mitigation Measure:** Lists the mitigation measures identified within the Initial Study for a specific potentially significant impact, along with the number for each measure as enumerated in the Initial Study.
- **Environmental Commitment:** Lists the commitments identified within the project that are not related to a potentially significant CEQA impact, but further ensure environmental resource protection.
- **Timing:** Identifies at what point in time, review process, or phase the mitigation measure will be completed.
- Agency/Department Consultation: References the City department or any other public agency with which coordination is required to satisfy the identified mitigation measure.
- Verification: Spaces to be initialed and dated by the individual designated to verify adherence to a specific mitigation measures.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures and commitments associated with the project. The complaint shall be directed to the City in written form, providing specific information on the asserted violation. The City shall investigate and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the City shall take appropriate action to remedy any violation. The compliant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

MITIGATION MONITORING AND ENVIRONMENTAL COMMITMENT TABLE FOR THE HOLLOW LANE CULVERT REPLACEMENT PROJECT MITIGATION MONITORING PROGRAM (STATE CLEARINGHOUSE NO.)

ENVIRONMENTAL COMMITMENTS

The following environmental commitments will be incorporated into the project to further protect environmental and biological resources:

Best Management Practices (BMPs)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials
Air Quality (AQ)	•		
AQ-1. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas.	Construction	City/ Construction Management	
AQ-2. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.	Construction	City/ Construction Management	
AQ-3. Water all stockpiles, access roads, and disturbed or exposed areas, as necessary, to prevent airborne dust.	Construction	City/ Construction Management	
AQ-4. Pursuant to the California Vehicle Code (Section 23114(e)(4)) (California Legislative Information 2016), all trucks hauling soil and other loose material to and from the construction site shall be covered or shall maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).	Construction	City/ Construction Management	
AQ-5. All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads.	Construction	City/ Construction Management	

Best Management Practices (BMPs)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials	
Biological Resources (BIO)				
BIO-1 . As required by the City of Redding Stormwater Quality Management and Discharge Control Ordinance, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared to address BMPs that will be used to prevent erosion and sediment loss within the project site. BMPs such as silt fence, mulching and seeding, and straw wattles will be placed where needed to prevent sediment from leaving the site during and after construction.	Preconstruction/ Construction	City/ Construction Management		
BIO-2. Appropriate sediment control measures (e.g., silt fences, straw wattles) shall be in place prior to the onset of construction activities near jurisdictional waters and in project areas where there is a potential for surface runoff to drain into jurisdictional waters. Sediment control measures shall be monitored and maintained until construction activities have ceased.	Construction	City/ Construction Management		
BIO-3. High visibility fencing, flagging, or markers will be installed along the edges of the work zone near avoided waters and avoided riparian areas.	Construction	City/ Construction Management		
Cultural Resources (CR)				
CR-1. If previously unidentified cultural materials are unearthed during construction, it is City policy that work be halted in that area until a qualified archaeologist can assess the significance of the find.	Construction	City/ Construction Management		
CR-2. If human remains are discovered during project activities, all activities near the find will be stopped and the Shasta County Sheriff-Coroner's Office shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains shall be conducted in accordance with further direction of the County Coroner or the NAHC, as appropriate.	Construction	City/ NAHC/ County Coroner		
HAZARDS AND HAZARDOUS MATERIALS (HAZ)				
HAZ-1 . Hazardous materials, including fuels, oils, cement, and solvents will be stored and contained in an area protected from direct runoff and away from areas where they could enter waters of the United States.	Construction	City/ Construction Management		

Best Management Practices (BMPs)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials
HAZ-2 . Construction equipment will be inspected daily for leaks. Leaking fluids will be contained upon detection and equipment repairs will be made as soon as practicable or the leaking equipment will be moved off site.	Construction	City/ Construction Management	
HAZ-3 . Secondary containment such as drip pans or absorbent materials shall be used to catch spills or leaks when removing or changing fluids. Secondary containment will be used for storage of all hazardous materials.	Construction	City/ Construction Management	
HAZ-4 . Spill containment and clean-up materials shall be kept on site at all times for use in the event of an accidental spills.	Construction	City/ Construction Management	
HAZ-5 . Absorbent materials shall be used on small spills rather than hosing down or burying the spill. The absorbent material shall be promptly removed and properly disposed.	Construction	City/ Construction Management	
HYDROLOGY AND WATER QUALITY	(WQ)		
WQ-1. All construction work and stockpiling of materials will be confined to the project disturbance area.	Construction	City/ Construction Management	
WQ-2. Temporary stockpiling of excavated or imported material shall be placed in upland areas.	Construction	City/ Construction Management	
WQ-3. Excess soil shall be used onsite or disposed of at a regional landfill or other appropriate facility.	Construction	City/ Construction Management	

CEQA MITIGATION MEASURES

Resource-specific mitigation measures to be used during project implementation include:

Mitigation Measure (MM)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials
MM-1. Prior to the start of construction, a focused botanical survey will be conducted during the blooming period for potentially occurring plant species. If no special status plant species are found during the botanical survey no other measures will be required. If special status plant species are discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with the California Department of Fish and Wildlife (CDFW) to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual plants have gone to seed, then stockpiling the top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation.	Preconstruction/ Construction	City/ Construction Management	
MM-2. Construction activities within Dry Creek shall be limited to a work window of June 1 to October 31.	Preconstruction/ Construction	City/ Construction Management	
MM-3. Within 7 days prior to the onset of construction activities, a qualified biologist shall conduct pre-construction surveys for western pond turtle, turtle nests, and Foothill yellow-legged frog. If these species or turtle nests are observed during the pre-construction survey or during construction, CDFW will be contacted and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or Foothill yellow-legged frog are not observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another pre-construction survey will be conducted.	Preconstruction/ Construction	City/ Construction Management	

Mitigation Measure (MM)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials
MM-4. To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 15). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 15), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The preconstruction survey will be performed no more than 14 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.	Preconstruction/ Construction	City/ Construction Management	
MM-5. To the extent practicable, removal of vegetation shall occur outside of the ring-tailed cat maternal denning period (May 1–June 30). If vegetation removal is to occur during the ring-tailed cat maternal denning period (May 1–June 30), a qualified biologist shall conduct a preconstruction survey of the BSA to locate maternity dens. The preconstruction survey will be performed no more than 7 days prior to the vegetation removal. If a ring-tailed cat maternity den is found, a qualified biologist (in consultation with CDFW) will develop measures to protect the maternity den from disturbance.	Preconstruction/ Construction	City/ Construction Management	
MM-6. If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.	Preconstruction/ Construction	City/ Construction Management	

ATTACHMENT D

Comments and Response to Comments (if any)