

BOULDER CREEK INTERCEPTOR SEWER PROJECT

MITIGATION MONITORING PROGRAM CONTENTS

This document is the Mitigation Monitoring Program (MMP) for the Boulder Creek Interceptor Sewer Project. The MMP 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. 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.

MITIGATION MONITORING PROGRAM

MITIGATION MONITORING TABLE

The Mitigation Monitoring Table identifies the mitigation measures proposed for the project. These mitigation measures are reproduced from the Initial Study and conditions of approval. The tables have the following columns:

Mitigation Measure: Lists the mitigation measures identified within the Initial Study for a specific impact, along with the number for each measure as enumerated in the Initial Study.

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 measure.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures 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 conduct an investigation 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 complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

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**TABLE 1
MITIGATION MONITORING AND REPORTING PROGRAM**

Proposed Mitigation	Summary of Measure	Enforcement and Monitoring Responsibility	Timing/ Implementation	Verification (Date and Initials)
POPULATION AND HOUSING				
1. General Plan Implementation	A. Mitigation measures outlined in the General Plan EIR are being implemented by the City of Redding. Implementation of the General Plan Policies and Programs will ensure impacts are maintained at a level considered less than significant.	City of Redding	During project construction	
HYDROLOGY AND WATER QUALITY				
1. Best Management Practices and Permit Compliance	<p>A. "Best Management Practices" (BMPs) will be implemented in accordance with the City's grading ordinance and the Erosion and Sediment Control Standards Design Manual (Redding Municipal Code Section 16.12.060, Subsections C, D, E). In practice, specific erosion-control measures are determined upon review of the final subdivision grading plan and are tailored to project-specific grading impacts.</p> <p>B. Prior to construction, the City will comply with the NPDES General Construction Activity Stormwater Permit. This will include preparation and submittal of a Notice of Intent (NOI) to the State Water Resources Control Board in order to receive a Waste Discharge Identification (WDID) and the preparation of a project Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will be prepared by the project contractor, who will incorporate sediment and erosion controls, such as silt fences and erosion-control blankets. Following the completion of construction activities, disturbed areas will be stabilized. With implementation of these standard measures for erosion control, the impact would be less than significant.</p> <p>C. All conditions outlined in the US Army Corps of Engineers (USACE) Clean Water Act Section 404 Nationwide Permit will be implemented. This permit provides measures to minimize impacts to riparian habitat and Waters of the US, including implementation of a restoration plan to return all affected channels to preconstruction contour and conditions, including vegetative and soil characteristics, in accordance with USACE regulations.</p> <p>D. All conditions outlined in the California Regional Water Quality Control Board "Clean Water Act Section 401 Water Quality Certification will be implemented. This permit will require that</p>	City of Redding and project contractor	During construction	

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	<p>water quality is not degraded and that appropriate BMPs are used to prevent erosion and sedimentation.</p> <p>E. All conditions outlined in the California Department of Fish and Game (CDFG) "Section 1602 Streambed Alteration Agreement" will be implemented. This notification is required for any work within a streambed. This permit will regulate activities potentially resulting in alteration of streambeds and banks or diversion of a stream's natural flow.</p>			
AIR QUALITY				
<p>1. Fugitive Dust and PM₁₀ emissions (Construction Phase)</p>	<p>A. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more).</p> <p>B. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.</p> <p>C. Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow (e.g., flag person).</p> <p>D. Construction activities that could affect traffic flow shall be scheduled in off-peak hours.</p> <p>E. Active construction areas, haul roads, etc., shall be watered at least twice daily or more as needed to limit dust.</p> <p>F. Exposed stockpiles of soil and other backfill material shall either be covered, watered, or have soil binders added to inhibit dust and wind erosion.</p> <p>G. All trucks hauling soil and other loose material shall be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.</p> <p>H. 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.</p> <p>I. Alternatives to open burning of cleared vegetative material on the project site shall be used unless otherwise deemed infeasible by the</p>	<p>City of Redding and project contractor</p>	<p>During project construction</p>	

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	City Engineer. Suitable alternatives include, but are not limited to, on-site chipping and mulching and/or hauling to a biomass fuel site.			
BIOLOGICAL RESOURCES				
1. Nesting Habitat for Special Status Bird Species and Common Raptors	<p>A. Conduct preconstruction surveys within two weeks of commencing construction that would occur during the nesting season (March – August) to determine the presence of nesting birds in the vicinity of project construction.</p> <p>B. If active nests are present, construction activity within 500 feet of the nest will cease and no project activity could occur within the buffer until a qualified biologist determines the activity would not result in nest failure. Additionally, if trees slated for removal are determined by a qualified biologist to be potential nesting trees, those trees may be removed during the non-nesting season, August 15 to March 1, or upon approval by a qualified biologist.</p>	City of Redding and project contractor	During construction	
2. Northwestern Pond Turtle	<p>A. If pond turtles are found at anytime during construction, they shall be relocated by a qualified biologist to upstream or adjacent aquatic habitat that would not be disturbed by construction activity.</p> <p>B. Best management practices (BMPs) shall be implemented for water quality during construction and site restoration plans following construction.</p>	City of Redding and project contractor	During construction	
3. Special Status Plant Species	<p>A. Focused botanical surveys shall be conducted at the appropriate time of year when the target species would be in flower and therefore easiest to identify. For silky cryptantha and dubious pea, the best time of year would be April; for fox sedge, May and June; and for four-angled spikerush the survey period would be May through September. If no special-status plants are found, no further mitigation shall be necessary.</p> <p>B. If special-status plants are documented and would be affected by project implementation, a mitigation plan will be prepared to insure avoidance or treatment to reduce the project-related impact to a less-than-significant level.</p>	City of Redding and project contractor	During construction	

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4. Riparian Habitat	A. Due to the excavation activities that will occur in the bed and bank of Boulder Creek and several of its tributaries during construction of the proposed project, a Streambed Alteration Agreement shall be obtained from DFG, a 404 permit from the U.S. Army Corps of Engineers, and a 401 permit from the Regional Water Quality Control Board. All measures to minimize impacts to riparian habitat as required by the permits shall be implemented.	City of Redding and project contractor	Prior to construction	
5. Federally Protected Wetlands	A. The project may result in impacts up to a total of 1.4047 acre of jurisdictional wetlands and other waters of the United States within the 60-foot-wide construction corridor and areas required for access to the construction corridor. Of this total, it is anticipated that less than 0.02 acres would be permanently impacted. Prior to project implementation, the preliminary wetland delineation shall be submitted to the USACE for verification. Based on the verified delineation, the City of Redding shall determine the exact acreage of jurisdictional wetlands to be affected by project construction and implement the following measures to mitigate for the loss of jurisdictional wetlands: I. Obtain a Clean Water Act Section 404 Nationwide permit from the USACE prior to project implementation, II. Obtain a Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board prior to project implementation, III. Develop and implement a restoration plan to return all affected channels to preconstruction contour and conditions, including vegetative and soil characteristics, in accordance with USACE regulations.	City of Redding	Prior to construction and during construction	
6. Native Resident or Migratory Fish	A. Implement Mitigation Measures 4 and 5 listed above, and Mitigation Measure 1 (Best Management Practices and Permit Compliance) as described in Item IV, Hydrology and Water Quality. In addition, the proposed project will comply with all conditions identified by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service in subsequent informal consultation with the USACE regarding the Section 404 Permit.	City of Redding and project contractor	During construction	

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7. Protected Trees	A. The proposed project would minimize impacts on trees to the extent feasible. Prior to construction, all trees greater than 6 inches dbh to be removed will be marked and delineated on maps. The provisions of the City's tree ordinance will be adhered to as applicable. The contractor shall implement appropriate measures to avoid or minimize potential impacts to protected trees.	City of Redding and project contractor	Prior to construction	
HAZARDS AND HAZARDOUS MATERIALS				
1. Asbestos Cement Pipe Demolition and Removal	A. Removal of asbestos cement pipe shall comply with all applicable state and federal regulations, including those described in 29 CFR 1926 (OSHA Construction Standards) and California Regulation Title 8 section 5208 (California Occupational Safety and Health Act). Bursting or reaming of asbestos cement pipe shall comply with the requirements of 40 CFR Part 61, Subpart M (National Emission Standards for Hazardous Air Pollutants), including as applicable sections 61.145 (removal of AC pipe fragments), 61.150 (transport of regulated ACM), 61.151 (inactive waste disposal sites), and 61.154 (active waste disposal sites).	City of Redding and project contractor	During construction	
2. Fire Prevention	A. The City's Project Manager will consult with the Fire Marshal about the potential fire hazard associated with construction activities scheduled for that day prior to authorizing or suspending construction activities on Red Flag Warning days. B. Appropriate precautionary fire prevention and control measures applicable to construction work, as required by State and local laws, shall be followed during project implementation. This shall include provisions for fire suppression equipment (water tender and pump with hose lines) to be available at the job site when construction occurs during the fire season. C. All waste vegetation shall either be chipped and spread on-site for erosion control or hauled away for lawful disposal off-site. No piles of slash vegetation shall be kept during the fire season or remain following the completion of the proposed project.	City of Redding and project contractor	During construction	
NOISE				
1. Noise	A. All construction activities shall comply with the City of Redding's Noise Ordinance.	City of Redding and project contractor	During construction	

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2. Vibration	<p>A. The general contractor shall address the potential for vibration impacts to residences during construction activities by preparing a detailed monitoring and notification plan, subject to review and approval by the City Engineer. The plan shall include, at a minimum, the following items:</p> <p>I. Public Notification. The general contractor shall notify property owners and residents located within 100 feet of pipe bursting and pile installation activities at least one week prior to construction.</p> <p>II. Vibration Monitoring. The general contractor shall perform vibration monitoring to establish the level produced by high impact activities during construction. Monitoring should be conducted whenever a vibratory hammer is to be used within 50 feet of any building or whenever pipe bursting is done within 25 feet of any building. Monitoring shall be conducted using a portable vibration monitoring instrument that provides a calibrated record of local ground movement/accelerations. If construction vibration exceeds 2.0 in./sec. during vibration monitoring, vibratory construction activities shall immediately stop, and alternative work methods (such as reduced bursting pressure, use of a static bursting head, special shoring designs or relief trench, open trench construction, etc.) shall be used, if construction vibration cannot be maintained below 2.0 inches/sec. The vibration monitors shall be set at specified locations prior to construction, to establish baseline vibration levels. The monitoring protocol and all monitoring results shall be submitted to the City Building Official for review and approval.</p> <p>III. Prior to construction, the general contractor shall inspect and record by videotape all properties within 50 feet of vibratory hammer or pipe bursting activities, to document the existing conditions. The inspection shall be done inside and outside of buildings, provided the necessary access is provided by building owners in a timely fashion. All existing cracks in</p>	City of Redding and project contractor	During construction	

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	walls, floors, driveways, and so forth shall be documented in sufficient detail so that a post-construction comparison and determination of damage can be made.			
UTILITIES AND SERVICE SYSTEMS				
1. General Plan Implementation	A. Mitigation measures outlined in the General Plan EIR are being implemented by the City of Redding. Implementation of the General Plan Policies and Programs will ensure impacts are maintained at a level considered less than significant.	City of Redding	During project construction	

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