



Agenda Information 5.1

Sacramento City Council

City Council Chamber, Interim City Hall
First Floor -730 "I" Street, Sacramento, California
(916) 808-5799

The following Agenda items presented at previous meetings are available for review in the Office of the City Clerk at 730 I Street, Suite 211, Sacramento, CA. Also noted, if applicable, are dates of required noticing.

Subject: (PN:XM79) – U & S Street In-Line Storage Project

September 28, 2004

Report Continued to October 5, 2004



3.15

DEPARTMENT OF UTILITIES
ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

1395 35th AVENUE
SACRAMENTO, CA
95822-2911

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August 25, 2004

City Council
Sacramento, California

CONTINUED
FROM 09-28-04
TO 10-05-04

Honorable Members in Session:

SUBJECT: U & S STREET IN-LINE STORAGE PROJECT (PN: XM79): APPROVE THE NEGATIVE DECLARATION; ADOPT THE MITIGATION REPORTING PLAN; ACCEPT GRANTS FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY FOR \$4,875,500; AMEND THE FY05 FEDERAL GRANTS REVENUE PROGRAM TO ADD \$4,875,500; AMEND THE FY05 FEDERAL GRANTS CAPITAL IMPROVEMENT PROGRAM TO APPROPRIATE \$4,875,500; TRANSFER \$60,000 TOTAL SEWER & DRAINAGE BASE CIP RESERVE FUNDS; AUTHORIZE A CONTRACT AWARD TO T & S CONSTRUCTION CO., INC., FOR AN AMOUNT NOT TO EXCEED \$4,565,640; AND AUTHORIZE EXECUTION OF A CONSULTANT SERVICES AGREEMENT WITH SALABER & ASSOCIATES, INC. FOR AN AMOUNT NOT TO EXCEED \$350,000.

LOCATION AND COUNCIL DISTRICT:

The project is located in Council District 4. See attached vicinity map.

RECOMMENDATION:

For the U & S St. In-Line Storage Project (PN:XM79): Staff recommends that City Council approve the project Negative Declaration; adopt the mitigation reporting plan; accept a grant from the U.S. Environmental Protection Agency for \$4,875,500; amend the FY05 Federal Grants Revenue Program to add \$4,875,500; amend the FY05 Federal Grants Capital Improvement Program to appropriate \$4,875,500; authorize the City Manager to transfer \$60,000 total Sewer and Drainage Base CIP Reserve funds; accept the low bid and authorize the City Manager and City Clerk to award the construction contract to T & S Construction Co., Inc. (T & S Co.) for an amount not to exceed \$4,565,640; and authorize the City Manager and City Clerk to execute a Consultant Services Agreement with Salaber & Associates Inc. (SAI) for an amount not to exceed \$350,000.



City Council
August 25, 2004
U&S St. In-Line Storage (PN: XM79)

CONTACT PERSON: David L. Brent, Engineering Services Manager, 808-1420
Rick Batha, Supervising Engineer, 808-1408

FOR THE COUNCIL MEETING OF: September 28, 2004

SUMMARY:

The U.S. Environmental Protection Agency has amended a current contract with the City of Sacramento to add \$4,875,500 for the purpose of combined system mitigation. Staff recommends accepting this grant and appropriating the funds to the U & S Street In-line Storage Project. The U & S St. project construction will be funded in large part by this EPA grant.

A combined Initial Study/Environmental Assessment was prepared for the project in accordance with CEQA and NEPA requirements. Approval of the Negative Declaration and adoption of the Mitigation Monitoring and Reporting Plan will allow a Notice of Determination (NOD) to be filed with the County Clerk.

Construction bids were received from five (5) contractors and opened by the City Clerk on June 30, 2004. T & S Co. submitted the lowest responsive bid of \$4,565,640, and submitted subsequent documentation indicating compliance with the EPA's "good faith" MBE/WBE project requirements. No bid protests have been filed.

Department of Utilities staff has negotiated a Consultant Services Agreement with SAI to provide Resident Engineering and Inspection services during project construction. SAI was selected from the Utilities Department 2004 list of prequalified support service consultants.

Approval of the negative declaration; adoption of the mitigation monitoring and reporting plan; acceptance of an EPA grant; authorization to amend the FY05 Federal Grants Revenue and Capital Improvement Programs; authorization to transfer Base CIP Sewer & Drainage funds; and authorization for the City Manager and the City Clerk to execute the Construction Agreement with T & S Co., and the Consultant Services Agreement with SAI is requested.

COMMITTEE/COMMISSION ACTION: None.

BACKGROUND INFORMATION:

Construction of the following improvements is planned:

- ± 2,100 linear feet of combined sewer in-line storage pipe, 520 linear feet of which will be microtunnelled beneath Interstate 5.
- ± 1,300 feet of 12-inch diameter forcemain in U St. connecting Sump 1A with the 60-inch diameter combined sewer in 5th St.
- Replacement of adjacent small curb drain inlets with larger current standard types.
- Installation of two 2-inch conduits between Sump 1A and 5th St. to facilitate future fiber

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U&S St. In-Line Storage (PN: XM79)

- optic system extension.
- Associated manholes and concrete structures to connect the new piping with existing.
- Two new pumps to handle summertime flows entering Sump 1A.

These modifications will improve Sump 1 and 1A reliability; mitigate back-up of sewage laden stormwater and reduce odors in the downtown combined sewer system; facilitate extension of the City's communication loop to serve the area west of I-5; and increase curb inlet drainage capacities in the project area.

Construction of the microtunnelled portion of the project beneath I-5 is anticipated to start in September, and be completed in late 2004. Installation of the other new facilities in U and S Streets, and the actual connection to Sump 1A will not likely start until the spring of 2005, with completion anticipated in the late summer/early fall of 2005.

Installation of new pipelines and associated facilities in U and S Streets will be by open cut methods, and this will necessitate closures and detours of the 3rd & U, 5th & U, and 5th & S Street intersections for several weeks at a time. Also, there will be localized closures and restrictions of parking along U and S Streets. The Contractor will submit a traffic plan for review, and if the City accepts the proposed closures and detours, then construction of the in-street improvements will start. Unless otherwise approved, street closures will not occur during the Holiday Moratorium period.

Construction bids were received from five contractors as follows:

Contractor	Bid Amount
T & S Construction Co., Inc.	\$4,565,640
Sierra National Construction	\$5,120,840
Tidelands Construction	\$5,265,400
Mitchell Engineering	\$5,468,585
Kaweah Construction	\$5,890,000

The Engineer's estimate for construction was \$3,641,262. The 25% difference between the estimate and bid price was attributed to recent increases in costs for fuel, steel, and concrete due to local and worldwide demands. The increase in estimated project costs is being primarily funded by the additional EPA grant money.

A project Initial Study/Environmental Assessment document was prepared, then circulated for a 30 day public review period in late 2003. Public comments were received and responded to by City staff, and City Council approval of the Negative Declaration is recommended. The US EPA

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U&S St. In-Line Storage (PN: XM79)

finalized their Finding of No Significant Impact (FNSI) for the Environmental Assessment on February 2, 2004.

SAI is a State certified SBE with provisional certification under the City's ESBD program. SAI was ranked very high in recent Department interviews for construction management on the Howe Avenue project, and SAI was able to offer the same team for the U & S Street project. Construction services to be performed by SAI staff and/or their subconsultant staff include construction management services, submittal tracking, schedule review, pipeline inspection, and microtunnel and shaft construction inspection. An agreement for a not to exceed amount of \$350,000 has been negotiated with SAI for these consultant services.

FINANCIAL CONSIDERATIONS:

Based on the low bid of \$4,565,640, the estimated total project cost including design, construction, inspection, and contingency is \$5,745,000. The City has secured \$4,875,500 in EPA Grant #98960401 Federal Assistance Funds. Staff recommends that the City Council accept these additional funds, amend the FY05 Federal Grant Revenue Budget (511-500-XM79-3513), and amend the FY05 Federal Grants Capital Improvement Program to appropriate these funds to the U & S Streets In-line Storage Project (511-500-XM79-4820). Staff also recommends that \$30,000 be transferred from the Base CIP Reserve-Sewer (414-500-XE01-4414) and that \$30,000 be transferred from the Base CIP Reserve-Drainage (425-500-WE71-4414) to the project in order to provide sufficient funds to award the construction contract and the consultant services agreement.

ENVIRONMENTAL CONSIDERATIONS:

City of Sacramento, Environmental Planning Services staff has determined that the subject project as proposed will not have a significant impact to the environment; therefore, a Mitigated Negative Declaration has been prepared. In compliance with Section 15070(B)1 of the California Environmental Quality Act (CEQA) guidelines, the City has incorporated mandatory mitigation measures into the construction documents to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures are included in the attached Mitigation Monitoring and Reporting Plan which address impacts to air quality, hazards, biological and cultural resources.

The Mitigated Negative Declaration was available for public review and comment, and distributed through the State Clearinghouse (SCH #2003112001) during the period of November 3, 2003 through December 3, 2003. A comment letter was received from the California Department of Transportation (Caltrans) regarding process requirements for work within the jurisdiction of Caltrans. Staff has responded to that letter, and all applicable permits will be obtained prior to construction, which will satisfy their comments. Therefore, staff recommends that the City Council approve the Mitigated Negative Declaration and adopt the Mitigation Monitoring and Reporting Plan.

City Council
August 25, 2004
U&S St. In-Line Storage (PN: XM79)

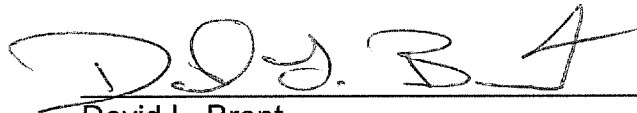
POLICY CONSIDERATIONS:

This project is consistent with the City's Strategic Plan Goals of "enhancing and preserving neighborhoods" and "supporting economic vitality of the area". Procedures for bidding and selection of the construction contractor were consistent with City Code Chapter 3.60.

ESBD CONSIDERATIONS:

There were EPA and federal "good faith" MBE/WBE requirements on this project, and thus the Department did not require specific construction participation levels for Emerging and Small Business Enterprises. Five subcontractors listed by T & S Co. are ESBE firms, and their proposed work represents approximately a 6.2% participation level. Salaber & Associates, Inc. is an SBE whose service agreement amount represents approximately 8% of the construction contract. T & S Co.'s bid includes approximately 1.5% MBE and 1.1% WBE subcontractor participation, and documentation has been submitted by T & S Co. that indicates compliance with the federal "good faith" MBE/WBE requirements.

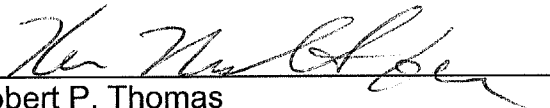
Respectfully submitted,



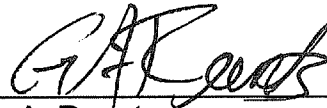
David L. Brent
Engineering Services Manager

RECOMMENDATION APPROVED:

APPROVED:



Robert P. Thomas
City Manager



Gary A. Reents
Director of Utilities

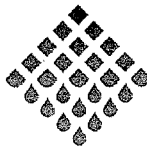
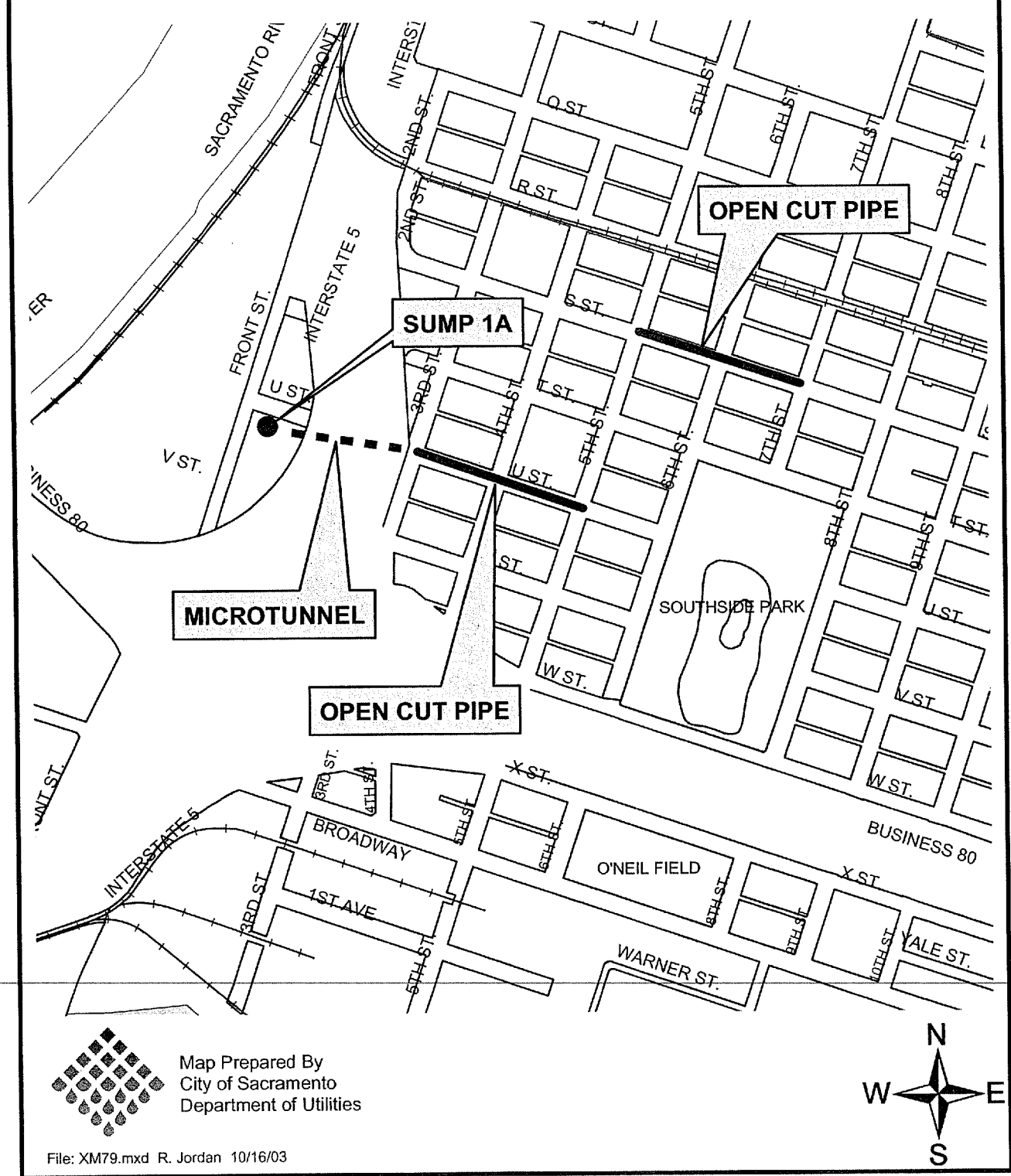
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VICINITY MAP

U & S STREET IN-LINE STORAGE

PN: XM79



Map Prepared By
City of Sacramento
Department of Utilities



File: XM79.mxd R. Jordan 10/16/03

RESOLUTION NO.

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF _____

RESOLUTION APPROVING THE NEGATIVE DECLARATION; ADOPTING THE MITIGATION REPORTING PLAN; ACCEPTING A GRANT FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY FOR \$4,875,500; AMENDING THE FY05 FEDERAL GRANTS REVENUE PROGRAM TO ADD \$4,875,500; AMENDING THE FY05 FEDERAL GRANTS CAPITAL IMPROVEMENT PROGRAM TO APPROPRIATE \$4,875,500; AUTHORIZING THE CITY MANAGER TO TRANSFER \$30,000 FROM BOTH THE SEWER & DRAINAGE BASE CIP RESERVE FUNDS; AUTHORIZING THE CITY MANAGER AND CITY CLERK TO EXECUTE A CONSTRUCTION CONTRACT WITH T & S CONSTRUCTION COMPANY, INC., FOR AN AMOUNT NOT TO EXCEED \$4,565,640; AND AUTHORIZING THE CITY MANAGER AND CITY CLERK TO EXECUTE A CONSULTANT SERVICES AGREEMENT WITH SALABER & ASSOCIATES, INC., FOR AN AMOUNT NOT TO EXCEED \$350,000, FOR THE U & S STREET IN-LINE STORAGE PROJECT (PN:XM79)

WHEREAS, the City of Sacramento has determined the need for the U & S Street In-Line Storage Project (PN:XM79) (hereinafter called the "Project") and has conditionally included the Project in the City of Sacramento Capital Improvement Program pending the California Environmental Quality Act and National Environmental Policy Act (CEQA/NEPA) compliance; and

WHEREAS, the City of Sacramento has prepared an Initial Study and Mitigated Negative Declaration for the Project; and

WHEREAS, this Initial Study and Mitigated Negative Declaration have been circulated for public review and comment pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, on the basis of the whole record before it, the City has determined that there is no substantial evidence that the project, with mitigation measures as identified in the Initial Study, will have a significant effect on the environment; and

WHEREAS, this Mitigated Negative Declaration reflects the lead agency's independent judgement and analysis; and

WHEREAS, in accordance with Section 21081.6 of the California Public Resources Code, the City of Sacramento requires that a Mitigation Reporting Plan be developed for implementing mitigation measures as identified in the Initial Study for the project; and

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____

WHEREAS, the Environmental Manager has prepared a Mitigation Reporting Plan for ensuring compliance and implementation of the mitigation measures as prescribed in the Initial Study for the Project.

NOW, THEREFORE BE IT RESOLVED BY THE SACRAMENTO CITY COUNCIL THAT:

The City Council hereby approves the Project Negative Declaration, finding on the basis of the Initial Study, that there is no substantial evidence that the project will have a significant effect on the environment.

1. The City Council hereby adopts the Project Mitigation Reporting Plan.
2. The City of Sacramento accepts \$4,875,500 in additional funds from the U. S. Environmental Protection Agency under EPA Grant #98960401.
3. The FY05 Federal Grants Revenue Budget hereby is amended to recognize revenue of \$4,875,500 in the U & S Streets Inline Storage Project (511-500-XM79-3513).
4. The FY05 Federal Grants Capital Improvement Budget hereby is amended to appropriate \$4,875,500 to the U & S Streets Inline Storage Project (511-500-XM79-4820).
5. The City Manager is authorized to transfer \$30,000 from the Base CIP Reserve-Sewer (414-500-XE01-4414) and \$30,000 from the Base CIP Reserve-Drainage (425-500-WE71-4414) to the U & S Streets Inline Storage Project (414/425-500-XM79-4820).
6. The City Manager and City Clerk are hereby authorized to sign and execute a construction contract with T & S Construction Company, Inc. for the subject Project for an amount not to exceed \$4,565,640.
7. The City Manager and City Clerk are hereby authorized to sign and execute a consultant services agreement with Salaber Associates, Inc. for the subject Project for an amount not to exceed \$350,000.

MAYOR

ATTEST:

CITY CLERK

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____

**U & S STREET IN-LINE STORAGE PROJECT
INITIAL STUDY / ENVIRONMENTAL ASSESSMENT
MITIGATION MONITORING AND REPORTING PLAN**

This Mitigation Monitoring and Reporting Plan (MMRP) has been prepared by City of Sacramento Environmental Planning Services, 1231 I Street, Room 300 Sacramento, CA 95814, pursuant to CEQA Section 21081.6, in conjunction with a City of Sacramento Utilities Department project.

PROJECT DESCRIPTION

Project Name: **U & S Street In-Line Storage Project – Initial Study / Environmental Assessment**

Contact Person: Stu Williams, Project Manager
Department of Utilities
City of Sacramento
1395 35th Avenue
Sacramento, CA 95822
(916) 808-1410

Project Location

The project site is located within the central city of Sacramento on U and S Streets with a portion crossing under Interstate 5 (I-5) to Sump 1/1A on the west side of the interstate.

Project Description

The Proposed Project/Action consists of constructing in-line storage capacity within the City's existing combined sewer system, and modifying the Sump 1A pumps. The intent of the project is control a public nuisance (odor) and mitigate a potential health problem (backup of sewage laden stormwater). The project will provide additional storage capacity so as to reduce combined stormwater runoff/sewage backup onto City streets and/or private property. Modifying the Sump 1A pumps will allow for the conveyance of summer flows out of the pipes to control odor problems. Specifically, approximately 800 feet of 54-inch Combined Sewer (CS) pipeline would be installed approximately 5-feet below surface, parallel to the existing combined sewer pipeline on S Street between 5th and 7th. Additionally, approximately 1,350 feet of 84-inch diameter pipe would be installed in U Street, 5-8 feet below the surface, parallel to the existing 84-inch CS. This pipe would extend from 3rd Street, where the microtunneled pipe ended to 5th Street. Concrete structures will be constructed at the connection to the existing sump 1A wet well, and at the 5th/U Street and at the 5th/S Street intersections. Finally, the installation of approximately 550 linear feet of 84-inch OD sewer would require microtunnelling beneath I-5

MITIGATION MONITORING AND REPORTING PLAN

Introduction

The California Environmental Quality Act (CEQA) requires review of any plan or project that could have significant adverse effects on the environment. In 1988, CEQA was amended to require reporting on and monitoring of mitigation measures adopted as part of the environmental review process. This MMRP is designed to aid the City of Sacramento in its implementation and monitoring of mitigation measures adopted for the Proposed Project.

Mitigation Measures

The mitigation measures are adapted from the Initial Study/Environmental Assessment and are assigned the same number they have in the document. The MMRP describes the actions to take to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

MMRP Components

The components of each monitoring form are addressed briefly, below.

Mitigation Measure: All mitigation measures that were identified in the Initial Study/Environmental Assessment are presented, and numbered accordingly. The mitigation measures are presented by topic (e.g., Air Quality, Biological Resources, etc.).

Implementing Responsibility: This item identifies the entity that will undertake the required action.

Monitoring Responsibility: This item identifies the entity that will monitor the required action.

Compliance Standards: This item identifies the specific actions that are required in each mitigation measure.

Timing: Each action must take place prior to the time at which a threshold could be exceeded. Implementation of the action must occur prior to or during some part of approval, project design or construction, or on an ongoing basis. The timing for each measure is identified.

Verification of Compliance: The individual assigned to assure compliance with identified mitigation measures will initial the form when the measure has been successfully implemented. The individual assigned to assure compliance will date the form when the measure has been successfully implemented.

Remarks: The individual assigned to assure compliance can include remarks concerning the implementation of the mitigation measure. At no time is it acceptable to remark that the implementation of the mitigation measure is/was unsuccessful.

MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
<p>6.6 Air Quality</p> <p>Construction Emissions</p> <ul style="list-style-type: none"> • Maintain the stationary and mobile equipment in proper working order. • Water twice daily or cover stockpiles of sand, soil, and similar materials with a tarp if high winds are expected to raise dust. • Water all unpaved construction areas at least twice per day during grading, excavation and site preparation activities to reduce dust emissions. • Contractor to perform street cleaning as required by City standards along streets in the vicinity of the construction site to remove dirt and debris from the Contractor's operations. • Require construction contractors to designate a person or persons to oversee the dust abatement program and to order increased watering, as necessary. • Any necessary revegetation of construction areas and staging areas shall take place immediately following completion of each project component. 	Contractor	City of Sacramento Department of Utilities	<p>Grading activities shall be conducted in accordance with the City of Sacramento's Grading, Erosion, and Sediment Control Ordinance 93-068.</p> <p>Notes containing mitigation language shall be placed on the final construction plans.</p>	The note shall be included on the final construction plans prior to City approval.	
<p>6.8 Biological Resources</p> <p>Special-Status Species</p> <p>If construction activities are to occur during the nesting season (approximately February-September), pre-construction surveys for nesting birds, especially raptors or migratory birds, shall be conducted by a qualified biologist within the APE and immediate vicinity. If surveys determine nesting birds are present, the</p>	Contractor	City of Sacramento Department of Utilities, Development Services	Based on the pre-construction biological assessment, mitigation measures shall be identified and submitted to the Department of Utilities and	A biological assessment shall be submitted to the Department of Utilities and Development	

MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
<p>following measure shall be implemented in accordance with the Migratory Bird Treaty Act, to avoid disturbance to active (occupied) nests during the nesting season. The California Department of Fish and Game (CDFG) shall be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. These may include avoidance measures such as the establishment of buffers and biological monitoring, or construction delays, until a qualified biologist has determined that young have fledged and nest sites are no longer active.</p>		Department, CDFG	<p>Development Services Department.</p> <p>Notes containing mitigation language shall be placed on the final construction plans.</p>	<p>Services Department prior to the start of construction activities.</p> <p>Any necessary consultations shall be completed prior to the initiation of any construction activities.</p>	
				<p>Notes containing the mitigation language shall be placed on the final construction plans prior to City approval.</p>	
				<p>The approved mitigation measures shall be implemented prior to or during construction activities.</p>	
<p>Tree Resources</p> <p>During the public review period, property owners' adjacent to potentially impacted City Street Trees shall be notified of possible tree removal due to excavation. Prior to allowing the Contractor to perform trench</p>	Contractor	City of Sacramento Department of Utilities, City Arborist	Mitigation measures shall be identified and implemented as directed by the International Society of Arborist (ISA) certified	The property owners' adjacent to the five potentially impacted City Street trees along	

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MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
<p>excavations within the street, and unless otherwise approved, Contractor shall install a 6-foot high chain link (or approved equal type) fence along the face of the closest adjacent curb where trees are located under the direction of the City Arborist. The fencing shall extend at least 50-feet in front of, in back of, and adjacent to the active trench, and shall remain in place until the Engineer authorizes its removal. No excavation shall occur behind the fenced area without prior approval from the project/city arborist. The contractor shall hire an International Society of Arboriculture (ISA) certified arborist (Project Arborist) to make weekly inspections to ensure the protective fencing stays in place as appropriate and to monitor tree health. The arborist may require that additional actions be taken (i.e. supplemental irrigation, fertilization, soil compaction remediation) to ensure the health of the trees.</p>			<p>arborist. Notes containing mitigation language shall be placed on the final construction plans.</p>	<p>“U” Street shall be notified of possible tree removal due to excavation prior to the commencement of any construction activities. The 6-foot chain link fence shall be installed around the trees as stated in the mitigation under the direction of the City Arborist prior to the issuance of the demolition/ grading permits. The notes shall be placed on the construction plans prior to City approval. The mitigation measures shall be implemented in the field during construction activities.</p>	
<ul style="list-style-type: none"> Project Arborist shall be on-site prior to and during initial excavation activities for inspection of tree roots in the excavation area. 	Contractor	City of Sacramento Department of	The Project Arborist shall be present on-site and develop mitigation	The notes shall be placed on the construction plans	

MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
<ul style="list-style-type: none"> • All roots shall be cut clean. Any roots greater than 2-inches in diameter will require an inspection by the arborist. • Any roots over one-inch in diameter that are damaged as a result of construction activities shall be traced back and cleanly cut behind any split, cracked, or damaged area. • After the severed roots have been properly pruned, burlap will be placed along the edge of the cut and kept moist to prevent the roots from drying out. The burlap will remain in place until the trench is backfilled. • The Project Arborist, in consultation with the City Arborist, will determine if supplemental irrigation/fertilization or canopy pruning is required. • The project/city arborist shall perform an examination of damage to trees and roots during excavation. An appraisal of damage will be assessed, and this damage should be mitigated by measures such as planting new trees. Damages will be assessed using the "Guide to Plant Appraisal" ninth edition published by the ISA. • If the Project Arborist determines that excavation and/or root severing has weakened the tree or surrounding soil, a safety evaluation will be performed. • If the tree is deemed to be unsafe due to possible soil failure and felling of the tree, the tree may 		Utilities, City Arborist	<p>measures upon inspection of tree roots in excavation areas.</p> <p>Notes detailing all applicable protocols and mitigation measures shall be included in the final construction plans.</p>	prior to City approval. The mitigation measures shall be implemented in the field during construction activities.	

MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
<p>need to be removed.</p> <ul style="list-style-type: none"> • Steel bracing will be used in trenches to protect workers and equipment from soil failure. • Mitigation for tree removal of any City Street tree shall be the installation of a new, 48-inch box size tree, where the City Arborist determines species selection. 					
<p>Any pruning required for equipment clearance or other construction activities shall be carried out or supervised by an ISA certified arborist. The contractor shall be held liable for any damage to existing trees (e.g. trunk wounds, broken limbs, pouring of any deleterious materials or washing out concrete under the drip line of the tree, etc.). The contractor will hire an ISA certified arborist to do the appraisal, submit a report for review by the City Arborist, and mitigate for damages.</p>	Contractor	City of Sacramento Department of Utilities, City Arborist	The ISA certified arborist shall submit a report to the City Arborist detailing any pruning required for equipment clearance or other construction activities.	The ISA certified arborist shall submit the report to the City Arborist prior to the initiation of construction activities	
			Notes detailing all applicable mitigation measures shall be included in the final construction plans.	The note shall be placed on the construction plans prior to City approval.	
<p>To maintain the aeration and soil conditions under the drip line of the trees, existing unpaved areas between the existing curbs and sidewalks should not be used as areas</p>	Contractor	City of Sacramento Department of	Notes detailing the mitigation measure shall be included in the final	The note shall be placed on the construction plans	

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MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
for the temporary storage of construction related equipment and fill material.		Utilities, City Arborist	construction plans.	prior to City approval. The mitigation measures shall be implemented in the field prior to and during construction activities.	
Backfill of a trench normally requires a high degree of soil compaction, which can adversely impact a tree's ability to send out new roots in this area. Structural soils, a patented product developed by Cornell University that can be used under streets and sidewalks to provide a stable base and allow root growth, shall be used as trench backfill in the top 48-inches of the trench where directed by the Engineer in consultation with the City and/or project arborist.	Contractor	City of Sacramento Department of Utilities, City Arborist	Notes detailing the mitigation measure shall be included in the final construction plans.	The note shall be placed on the construction plans prior to City approval. The mitigation measures shall be implemented in the field prior to and during construction activities.	
6.10 Hazards All construction and material shall be in accordance with the latest edition of the City of Sacramento's Standard Specifications and Improvement Standards for Public Works Construction in which there are measures for dealing with contaminated soil. Construction activities would also involve the use, transport, and storage of potentially hazardous materials (i.e. fuels, lubricants, and solvents). These materials would be stored in containers	Contractor	City of Sacramento Department of Utilities	Notes detailing contaminated soil mitigation measures in compliance with the City of Sacramento's Standard Specifications and Improvement Standards for Public Works Construction shall be included in the final	The note shall be placed on the construction plans prior to City approval. The applicable mitigation measures shall be implemented in the	

MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
engineered for safe storage, and would be used on a limited basis.			construction plans.	field prior to and during construction activities.	
6.15 Cultural Resources					
If subsurface archaeological or historical remains are discovered during construction, work in the area shall stop immediately and a qualified archeologist and a representative of the Native American Heritage Commission shall be consulted to develop, if necessary, further mitigation measures to reduce any archaeological impact to a less than significant level before construction continues.	Contractor	City of Sacramento Department of Utilities	Notes detailing the mitigation measure shall be included in the final construction plans.	The note shall be placed on the construction plans prior to City approval.	The applicable mitigation measures shall be implemented in the field prior to and during construction activities.
If human burials are encountered, all work in the area shall stop immediately and the Sacramento County Coroner's office shall be notified immediately. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants must be notified and recommendations for treatment solicited (CEQA Section 15064.5); Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and 5097.98.					