SPECIAL PROVISIONS

FOR

CITY OF SAN LUIS OBISPO

Mid-Higuera Bypass Draft 100% Design

Specification No. 2090649

June 2024

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

919 Palm Street
San Luis Obispo, CA 93401
(805) 781-7200

Mid-Higuera Bypass

Specification No. 2090649

Approval Date: <<date of CM or CAR Report Authorizing Advertisement>>

<<Engineer of Record Stamp>>

<<*Signature Date*>>

<<*Signature Date*>>

TABLE OF CONTENTS

NOTICE TO BIDDERS
BID SUBMISSION

Sealed bids will be received by the City of San Luis Obispo at the Public Works Administration Office located at 919 Palm Street, California 93401, until

2:00 p.m. on <<January 1, 2016>>

at which time they will be publicly opened and read aloud. Submit bid in a sealed envelope plainly marked:

Mid-Higuera Bypass, Specification No.2090649

Any bid received after the time and date specified will not be considered and will be returned to the bidder unopened. Bids received by Fax or Email will not be considered.

By submission of bid you agree to comply with all instruction and requirements in this notice and the contract documents.

All bids must be submitted on the Bid Item List form(s) provided and submitted with all other Bid Forms included in these Special Provisions.

Each bid must be accompanied by either a:

1. certified check
2. cashier's check
3. bidder's bond

made payable to the City of San Luis Obispo for an amount equal to ten percent of the bid amount as a guaranty. Guaranty will be forfeited to the City San Luis Obispo if the bidder, to whom the contract is awarded, fails to enter into the contract.

The City of San Luis Obispo reserves the right to accept or reject any or all bids or waive any informality in a bid.

All bids are to be compared based on the City Engineer's estimate of the quantities of work to be done, as shown on the Bid Item List.

Bids will only be accepted from bidders that are licensed in compliance with the provisions of Chapter 9, Division III of Business and Professions Code.

The award of the contract, if awarded, will be to the lowest responsive bid submitted by a responsible contractor whose bid complies with the requirements prescribed. If the contract is awarded, the contract will be awarded within 60 calendar days after the opening of the bids.

Failure to raise defects in the notice to bidders or bid forms prior to bid opening constitute a waiver of those defects.

BID DOCUMENTS

A copy of the plans and special provisions may be downloaded, free of charge, from the City's website at:

www.slocity.org/government/department-directory/public-works/public-works-bids-proposals

Standard Specifications and Engineering Standards referenced in the Special Provisions may be downloaded, free of charge, from the City's website at:

www.slocity.org/government/department-directory/public-works/documents-online/construction-documents

You are responsible to obtain all issued addenda prior to bid opening. Addenda will be available to download at the City's website listed above or at the office of the City Engineer.

Contact the project manager, Noah Maidrand at (805) 783-7854 or the Public Works Department at (805) 781-7200 prior to bid opening to verify the number of addenda issued.

PROJECT INFORMATION

In general, the project consists of grading new bypass channels in the San Luis Obispo Creek floodplain, grading within San Luis Obispo Creek to reshape existing creek banks and connect to the new bypass channels, replacement of the existing Bianchi Lane Bridge and associated roadway and utility improvements in Bianchi Lane, sediment removal at the Marsh Street Bridge, removal of an existing building adjacent to San Luis Obispo Creek on Higuera Street, grading of the City owned parcel referred to as Matthews Open Space including removal of contaminated soil, constructing two new driveway entrances on Higuera Street at the Matthews Open Space, removal of existing trees and other vegetation, removal of invasive plant species, installing vegetated rock slope protection, and revegetation and temporary irrigation.

The project estimated construction cost is $9,513,000

Contract time is established as 233 working days.

The fixed liquidated damages amount is established at $500 per day for failure to complete the work within the contract time.

In compliance with section 1773 of the Labor Code, the State of California Department of Industrial Relations has established prevailing hourly wage rates for each type of workman. Current wage rates may be obtained from the Division of Labor at:

https://www.dir.ca.gov/oprl/DPreWageDetermination.htm

Where do we add or are there DBE requirements for this project?

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

There will be a mandatory walkthrough on XX/XX/XX. Bidders should meet at 306 Higuera Street at XX:XX X.m. Prime contractors wishing to submit a bid proposal are required to attend and sign in at the meeting.

QUALIFICATIONS

You must possess a valid Class A Contractor's License at the time of the bid opening.

You and any subcontractors required to pay prevailing wage must be registered with the Department of Industrial Relations pursuant to Section 1725.5 of the Labor Code.

You must have experience constructing projects similar to the work specified for this project. Provide three similar reference projects completed as either the prime or subcontractor. All referenced projects must have been completed within the last five years from this project's bid opening date.

One of the three reference projects must have been completed under contract with a city, county, state or federal government agency as the prime contractor.

2 of the referenced projects must be for bridge construction.
1 of the referenced projects must be for grading, including roadway construction.

A minimum one of three of the above required reference project types must include work regulated by the Army Corp, US Fish and Wildlife, and the Regional Water Quality Control Board.

Failure to provide reference projects as specified in this section and as required on the qualification form is cause to reject a bid as being non-responsive.

The City reserves the right to reject any bid based on non-responsiveness if a bidder fails to provide a bid that complies with all bidding instructions.

The City reserves the right to reject a responsive bid based on the non-responsibility of the bidder if the Director of Public Works or Designee finds, after providing notice and a hearing to the bidder, that the bidder lacks the

1. knowledge
2. experience,
3. or is otherwise not responsible

as defined in Section 3.24 of the San Luis Obispo Municipal Code to complete the project in the best interest of the City.

Rejected bidders may appeal this determination. Appeal must comply with the requirements in this Notice to Bidders.

It is the City of San Luis Obispo's intent to award the contract to the lowest responsive bid submitted by a responsible bidder. If in the bidder's opinion the contract has been or may be improperly awarded, the bidder may protest the contract award.

Protests must be filed no later than five working days after either:

1. bid opening date
2. notification of rejected bid.

Protest must be in writing and received by the project manager located at:

919 Palm Street
San Luis Obispo, CA 93401.

Valid protests must contain the following information:

1. the reasons for the protest
2. any supporting documentation
3. the ruling expected by the City to remedy the protest.

Any protest not containing all required information will be deemed invalid and rejected.

The City will consider additional documentation or other supporting information regarding the protest if submitted in compliance to the specified time limits. Anything submitted after the specified time limit will be rejected and not be considered.

The Director of Public Works or Designee may request additional information to be submitted within three working days of the request, unless otherwise specified, and will notify the protester of ruling within ten working days of determination.

If the protester is not satisfied with ruling, the protester may appeal the ruling to the City Council in compliance with Chapter 1.20 of the City of San Luis Obispo Municipal Code.

Pursuant to the Public Records Act (Government Code, § 6250, et seq.), the City will make public records available upon request.

AWARD

The lowest bidder will be determined using the BID TOTAL.

As a condition to executing a contract with the City, two bonds each equal to one hundred percent of the total contract price are required in compliance with Section 3-1.05 of the Standard Specifications.

You may substitute securities for moneys withheld under the contract in compliance with the provisions of the Public Contract Code, Section 10263.

ACCOMMODATION

If any accommodations are needed to participate in the bid process, please contact Argelia Chang at (805) 781-7200 or by Telecommunications Device for the Deaf at (805) 781-7107. Requests should be made as early as possible in the bidding process to allow time for accommodation.

BID FORMS

All bid forms must be completed and submitted with your bid. Failure to submit these forms and required bid bond is cause to reject the bid as nonresponsive. Staple all bid forms together.

THE UNDERSIGNED, agrees that they have carefully examined:

1. the location of the proposed work
2. the plans and specifications
3. read the accompanying instructions to bidders

and propose to furnish all:

4. materials
5. labor

to complete all the required work satisfactorily in compliance with

6. plans
7. specifications
8. special provisions

for the prices set forth in the bid item list:

BID ITEM LIST FOR MID-HIGUERA BYPASS, SPECIFICATION NO. 2090649

Item No.	$SS_{(1)}$	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
1	7	LEAD COMPLIANCE PLAN	LS	1	-	
2	10	FURNISH FIELD OFFICE	QTR	6		
3	12	CONSTRUCTION AREA SIGNS	LS	1	-	
4	12	TRAFFIC CONTROL SYSTEM	LS	1	-	
5	13	JOB SITE MANAGEMENT	LS	1	-	
6	13	PREPARE AND EXECUTE STORMWATER POLLUTION PREVENTION PLAN	LS	1	-	
7	13	WATER QUALITY ANNUAL REPORT	EA	1		
8	13	TEMPORARY CREEK DIVERSION SYSTEM AND DEWATERING	LS	1	-	
9	14	EXCAVATION, MONITORING, AND TRANSPORTATION PLAN (HAZARDOUS WASTE)	LS	1	-	
10	14	SAMPLING AND ANALYSIS PLAN	LS	1	-	
11	14	EXCAVATION AND MONITORING PLAN (PALEONTOLOGICAL RESOURCEES)	LS	1	-	
12	14	REMOVE AND DISPOSE OF INVASIVE PLANT SPECIES	LS	1	-	

Item No.	SS(1)	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
13	14	REMOVE EXISTING TRASH AND DEBRIS	LS	1	-	
14	15	BUILDING REMOVAL	LS	1	-	
15	16	REMPORARY HIGH-VISIBILITY FENCE	LF	3,060		
16	16	TEMPORARY CONSTRUCTION ACCESS	LS	1	-	
17	16	TEMPORARY WATER SERVICE	EA	1		
18	17	CLEARING AND GRUBBING	LS	1	-	
19	19	ROADWAY EXCAVATION	CY	697		
20	19	ROADWAY EXCAVATION (TYPE Z-2) (LEAD)	CY	40		
21	19	ROADWAY EXCAVATION (TYPE COM) (LEAD)	CY			
22	19	ROADWAY EXCAVATION (TYPE CM) (HYDROCARBONS)	CY	180		
23	19	ROADWAY EXCAVATION (TOPSOIL)	CY			
24	19	STRUCTURE EXCAVATION (TYPE A)	CY	455		
25	19	STRUCTURE EXCAVATION (TYPE D)	CY	227		
26	19	STRUCTURE BACKFILL (BRIDGE)	CY	375		
27	19	DITCH EXCAVATION (BYPASS CHANNELS)	CY	19,410		
28	19	DITCH EXCAVATION (BENCHES)	CY	3,050		
29	19	DITCH EXCAVATION (MARSH STREET SEDIMENT REMOVAL)	LS	1	-	
30	19	DITCH EXCAVATION (TYPE Z-2) (LEAD)	CY	160		
31	20	HIGHWAY PLANTING	LS	1	-	
32	20	PLANT ESTABLISHMENT WORK (THREE YEARS)	QTR	12		
33	20	PRUNE TREE	EA	24		
34	20	PRUNE TREE AND ROOTS	EA	2		
35	20	REMOVE TREE	EA	90		
36	20	REMOVE TREE (48” DBH AND LARGER)	EA	11		
37	20	REMOVE TREE TO EXISTING GROUND	EA	14		
38	20	3’ x 5’ x 3’ BOULDER	EA	8		
39	20	4’ x 6’ x 2’ BOULDER	EA	7		
40	20	ROOT WAD	EA	3		

Item No.	SS(1)	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
41	20	IRRIGATION SYSTEM	LS	1	-	
42	20	QUICK COUPLER VALVE BOX	EA	2		
43	20	IRRIGATION SERVICE ASSEMBLY	EA	2		
44	20	2” WATER SERVICE AND METER (EXISTING PAVEMENT)	EA	1		
45	20	2” WATER SERVICE AND METER	EA	2		
46	21	ROLLED EROSION CONTROL PRODUCT (BLANKET) (BYPASS CHANNELS)	SQFT	89,433		
47	21	ROLLED EROSION CONTROL PRODUCT (BLANKET) (BENCHES)	SQFT	29,050		
48	21	HYDROSEED (BENCHES AND BYPASS CHANNELS)	SQFT	118,483		
49	21	HYDROSEED (DISTURBED AREAS)	LS	1	-	
50	25	CLASS 3 AGGREGATE SUBBASE	CY	240		
51	26	CLASS 2 AGGREGATE BASE	CY	218		
52	39	HOT MIX ASPHALT (TYPE A)	TON	217		
53	39	REMOVE BASE AND SURFACING	SF			
54	48	TEMPORARY BRIDGE	LS	1	-	
55	49	PERMANENT STEEL CASING	EA	3		
56	49	30” CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	347		
57	49	48” CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	36		
58	51	SEAL COURSE CONCRETE	CY	61		
59	51	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	85		
60	51	STRUCTURAL CONCRETE, BRIDGE	CY	161		
61	51	STRUCTURAL CONCRRETE, BRIDGE (POLYMER FABRIC)	CY	52		
62	51	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	CY	18		
63	51	STRUCTURAL CONCRETE, HEADWALL	CY	9		
64	51	MINOR CONCRETE (MINOR STRUCTURE) (CRASH CUSHION PAD)	CY	9		
65	51	PRECAST PRESTRESSED CONCRETE SLAB (TYPE SIV)	SQFT	3,318		
66	51	PRECAST CONCRETE GIRDER	EA	8		

Item No.	$SS_{(1)}$	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
67	51	JOINT SEAL (MR 1”)	LF	50		
68	52	BAR REINFORCING STEEL (BRIDGE)	LB	121,930		
69	60	BRIDGE REMOVAL	LS	1		
70	64	54” HDPE (TYPE S)	LF	120		
71	70	STORM DRAIN MANHOLE (DWG 3510)	EA	1		
72	71	REMOVE STORM DRAIN (54” RCP)	LF	109		
73	72	ROCK SLOPE PROTECTION GRAVEL FILTER	CY	489		
74	72	SMALL-ROCK SLOPE PROTECTION (7-INCH LAYER)	CY	3		
75	72	CLASS III VEGETATED ROCK SLOPE PROTECTION	CY	478		
76	72	CLAS IV VEGETATED ROCK SLOPE PROTECTION	CY	1,234		
77	73	MINOR CONCRETE (CURB AND GUTTER)	LF	76		
78	73	MINOR CONCRETE (SIDEWALK AND DRIVEWAY)	SF	686		
79	73	PRE/POST CONSTRUCTION SURVEYS	EA	5		
80	75	MISCELLANEOUS METAL (BRIDGE)	LB	200		
81	77	REMOVE WATERLINE	LF	233		
82	77	REMOVE WATER METER AND WATER SERVICE	EA	1		
83	77	REMOVE FIRE HYDRANT ASSEMBLY	EA	1		
84	77	6-INCH FLEXIBLE EXPANSION JOINT	EA	2		
85	77	6-INCH LINEAR EXPANSION JOINT	EA	2		
86	77	6-INCH WATERLINE (DIP)	LF	151		
87	77	6-INCH WATERLINE (PVC)	LF	91		
88	77	2” WATER SERVICE AND METER (EXISTING PAVEMENT)	EA	1		
89	77	2” WATER SERVICE AND METER	EA	2		
90	77	1” COMBINATION AIR VACUUM VALVE	EA	1		
91	77	FIRE HYDRANT ASSEMBLY	EA	2		
92	77	EXPOSE EXISTING GAS LINE	LF	281		
93	77	PROVIDE TRENCH FOR GAS LINE	LF	143		

Item No.	SS(1)	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
94	78	RESET MAILBOX	EA	2		
95	80	RECONSTRUCT WOOD FENCE (TYPE WOOD SLIT RAIL)	LF	157		
96	80	RECONSTRUCT FENCE (TYPE CL)	LF	69		
97	82	RELOCATE ROADSIDE SIGN (TWO POST)	EA	1		
98	82	RELOCATE ROADSIDE SIGN (METAL POST)	EA	3		
99	83	CRASH CUSHION (QUADGUARD II 1-BAY)	EA	4		
100	84	4” THERMOPLASTIC TRAFFIC STRIPE	LF	35		
101	84	THERMOPLASTIC PAVEMENT MARKING (LIMIT LINE)	SF	11		
102	89	CALIFORNIA ST-75 BRIDGE RAIL	LF	299		
103	0	MOBILIZATION	LS	1		
				Bid Total	**$**	
Company Name:						

(1) refers to section in the Standard Specifications, with modifications in the Special Provisions, that describe required work.

LIST OF SUBCONTRACTORS

Pursuant to Section 4100 of the Public Contracts Code and section 2-1.33C of the standard specifications, the Bidder is required to furnish the following information for each Subcontractor performing more than 1/2 percent (0.5%) of the total base bid. Do not list alternative subcontractors for the same work. Subcontracting must not total more than fifty percent (50%) of the submitted bid except as allowed in section 5-1.13 of the standard specifications.

For Streets & Highways projects, subcontractors performing less than ten thousand dollars ($10,000) worth of work need not be mentioned. **Subcontractors required to pay prevailing wage, must be registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 to be listed.**

NOTE: If there are no subcontractors, write "NONE" and submit with bid.

Name Under Which Subcontractor is Licensed	License Number	**DIR Public Works Registration Number**	Address and Phone Number of Office, Mill or Shop	Specific Description of Subcontract	% of Total Base Bid

Attach additional sheets as needed.

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In compliance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder, or any subcontractor to be engaged by the bidder, **has ____, has not** ____ been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

NOTE: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Bid. Signing this Bid on the signature portion constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In compliance with Public Contract Code Section 10162, the Bidder must complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

_____ Yes _____ No

If the answer is yes, attach a letter explaining the circumstances

PUBLIC CONTRACT CODE SECTION 10232 STATEMENT

In compliance with Public Contract Code Section 10232, you hereby state under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against you within the immediately preceding two-year period because of your failure to comply with an order of a federal court which orders you to comply with an order of the National Labor Relations Board.

LABOR CODE SECTION 1725.5 STATEMENTS

The bidder has delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. Any judgment, order, or determination that is

under appeal is excluded, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

_____ Yes _____ No

The bidder is currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

_____ Yes _____ No

NOTE: The above Statements and Questionnaire are part of the Bid. Signing this Bid on the signature portion constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

NON-COLLUSION DECLARATION

I, _____, declare that

I am _____ of_____,

the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone refrained from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed on _____, 20_____, in _____

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

_____

(Signature and Title of Declarant)

(SEAL)

Subscribed and sworn to before me
this _____day of _____, 20_____

_____

Notary Public

Company Name:_____

BIDDER ACKNOWLEDGEMENTS

By signing below, the bidder acknowledges and confirms that this bid is based on the information contained in all contract documents, including the notice to bidders, plans, specifications, special provisions, and addendum number(s) _____. **(Note: You are responsible to verify the number of addenda prior to the bid opening.)**

The undersigned further agrees that in case of default in executing the required contract, with necessary bonds, within eight days, (not including Saturdays, Sundays, and legal holidays), after having received a mailed notice that the contract is ready for signature, the proceeds of the check or bond accompanying his bid will become the property of the City of San Luis Obispo.

Licensed in accordance with an act providing for the registration of contractors, License No._____, Expiration Date _____.

The above statement is made under penalty of perjury, and any bid not containing this information "will be considered non-responsive and will be rejected" by the City.

Signature of Bidder _____

_____
(Print Name and Title of Bidder)

DIR– Public Works Registration No: _____

Business Name (DBA): _____

Owner/Legal Name: _____

Indicate One: ☐Sole-proprietor ☐ Partnership ☐Corporation

List Partners/Corporate Officers: _____
Name Title

_____
Name Title

_____
Name Title

Business Address _____

Street Address _____

Mailing Address _____

City, State, Zip Code _____

Phone Number _____

Fax Number _____

Email Address _____

Date _____

QUALIFICATIONS

Failure to furnish complete reference information **ON THIS FORM**, as specified in this project's Notice to Bidders and indicated below, is cause to reject the bid. Additional information may be attached but is not a substitute for this form.

Reference Number 1

Customer Name & Contact Individual	
Telephone & Email	
Project Name (Site Address):	
Is this similar to the project being bid or did this project include similar activity? Yes □ No □	Describe the services provided and how this project is similar to that which is being bid:
Was this contract for a public agency? Yes □ No □	Date project completed:

Reference Number 2

Customer Name & Contact Individual	
Telephone & Email	
Project Name (Site Address):	
Is this similar to the project being bid or did this project include similar activity? Yes □ No □	Describe the services provided and how this project is similar to that which is being bid:
Was this contract for a public agency? Yes □ No □	Date project completed:

Reference Number 3

Customer Name & Contact Individual	
Telephone & Email	
Project Name (Site Address):	
Is this similar to the project being bid or did this project include similar activity? Yes □ No □	Describe the services provided and how this project is similar to that which is being bid:
Was this contract for a public agency? Yes □ No □	Date project completed:

ATTACH BIDDER'S BOND TO ACCOMPANY BID

Know all men by these presents:

That we _____, AS PRINCIPAL, and

_____, AS SURETY, are held and firmly bound unto the City of San Luis Obispo in the sum of:

_____ Dollars (_____) to be paid to said City or its certain attorney, its successors and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents:

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the certain bid of the above

bounden _____

to construct _____
(insert name of street and limits to be improved or project)

dated _____ is accepted by the City of San Luis Obispo, and if the above

bounden _____, his heirs, executors, administrators, successors, and assigns shall duly enter into and execute a contract for such construction and shall execute and deliver the two bonds described within ten (10) days (not including Saturdays, Sundays, or legal holidays) after the above bounden,

_____, has received notice by and from the said City of San Luis Obispo that said contract is ready for execution, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, we hereunto set our hands and seals this ___ day of _____, 20____.

Bidder Principal:

_____

Signature Date
Title:

Surety:

_____

_____

_____

Bidder's signature is not required to be notarized. Surety's signature must be notarized.
Equivalent form may be substituted
(Rev. 6-30-14)

SPECIAL PROVISIONS

ORGANIZATION

Special provisions are under headings that correspond with the main section heading of the Standard Specifications. Each special provision begins with a revision clause that describes or introduces a revision to the Standard Specifications. Any paragraph added or deleted by a revision clause does not change the paragraph number of the Standard Specifications for any other reference to a paragraph of the Standard Specifications.

DIVISION I GENERAL PROVISIONS

1 GENERAL

Add to Section 1-1.01 GENERAL:

The work must be done in compliance with the City of San Luis Obispo, Department of Public Works:

1. Mid-Higuera Bypass Specification No. 2090649 Special Provisions
2. City of San Luis Obispo Standard Specifications and Engineering Standards – 2020 edition
3. State of California, Department of Transportation Standard Specifications and Standard Plans – 2015 edition
4. State of California, Department of Transportation Standard Specifications and Standard Plans – 2018 edition, for all work shown on the Structural plans, “S” sheets

In case of conflict between documents, governing ranking must comply with section 5-1.02 of the City of San Luis Obispo’s Standard Specifications.

Failure to comply with the provisions of these sections is a material breach of contract:

1. Sections 5 through 8 of the Standard Specifications
2. Section 12 through 15 of the Standard Specifications
3. Section 77-1 of the Standard Specifications
4. Section 81 of the Standard Specifications
5. authorized working hours
6. OSHA compliance

Add to Section 1-1.07B DEFINITIONS, Glossary:

Predicted Rain Event: Any day for which the National Weather Service has predicted a 25% or more chance of at least 0.1 inch of rain in 24-hours.

San Luis Obispo Creek: The waterway and riparian corridor of San Luis Obispo creek, including the area from top of existing or proposed creek bank to opposite top of existing or proposed creek bank.

Replace in Section 1-1.07B DEFINITIONS, Glossary with:

Specifications: Standard specifications revised standard specifications, and special provisions.

1. State Standard Specifications: Caltrans Standard Specifications dated 2015. For the Structural plans, “S” sheets, items of work only – Caltrans Standard Specifications dated 2018
2. Special Provisions: Specifications specific to the project. These specifications are in Book 1 titled Notice To Bidders and Special Provisions.
3. City of San Luis Obispo Standard Specifications: The directions, provisions and requirements contained in the City of San Luis Obispo, Standard Specifications and engineering standards.

2 BIDDING

Add after the 1st paragraph of Section 2-1.06B BID DOCUMENTS, Supplemental Project Information:

The City makes the following supplemental project information available:

Means	Description
Included in Book 2 titled Supplemental Project Information	1. Bridge As-Built Plans 2. Bridge Foundation Report - Mid-Higuera Bypass Project, Bianchi Lane Bridge Replacement at San Luis Obispo Creek, San Luis Obispo, California 3. Geotechnical Report, Mid-Higuera Bypass Channel Project, San Luis Obispo, California 4. Addendum No. 1 to Geotechnical Report, Mid-Higuera Bypass Channel Project, San Luis Obispo, California 5. Report of Findings Supplemental Soil Assessment Activities, Mid-Higuera Bypass 6. Mid-Higuera Bypass Project; Tree Identification Survey and Tagging within San Luis Obispo Creek 7. Southern California Gas Relocation Plan (By Others) 8. Pacific Gas and Electric Relocation Plan (By Others) 9. Charter Communication Relocation Plan (By Others) 10. AT&T Relocation Plan (By Others) 11. Astound Relocation Plan (By Others) 12. Permits - • Regional Water Quality Control Board Water Quality Certification (401c) • California Department of Fish and Wildlife Streambed Alteration Agreement • U.S. Army Corps of Engineers Permit (404) • US Fish and Wildlife Service Biological Opinion

Means	Description
	• National Marine Fisheries Service Biological Opinion • Caltrans Encroachment Permit 0523-NLT-0267 • Building Permit DEMO-1584-2023 • Grading Permit GRAD-1585-2023 13. Lead Paint Survey Report: Bianchi Lane Bridge 14. Lead Paint Survey Report: 306 Higuera Street 15. Asbestos Survey Report: 306 Higuera Street 16. Bridge Inspection Reports: Bridge No. 49C0381 (Bianchi Lane)
Included with the project plans	1. Log of Test Borings
Available as specified in the Standard Specifications	1. Digital terrain model in 3D xml format 2. Digital design model in 3D xml format 3. Design alignments and profiles in xml format 4. Temporary High Visibility Fence lines in xml format

3 CONTRACT AWARD AND EXECUTION

Replace 1st and 2nd paragraph in Section 3-1.18 CONTRACT EXECUTION with:

Upon notification of project award, return:

1. executed contract
2. insurance
3. contract bonds

within five business days after the bidder receives the contract.

Add Section 3-1.18B CONTRACT EXECUTION, Building Permit:

3-1.18B Building Permit

The contractor must obtain a no-fee building permit from the Community Development Department. All requirements of the building permit shall be applied to the project.

4 SCOPE OF WORK

Add to Section 4-1.03 WORK DESCRIPTION:

Comply with the provisions of Section(s) X [these section number should match the SS numbers listed in the Bid Item List]….for general, material, construction, and payment specifics.

Add Section 4-1.03A WORK DESCRIPTION, Project Specific Signage:

Signage shall be posted in a prominent location at the Project site and shall include the Department of Water Resources color logo and the following disclosure statement:

"Funding for this project has been provided in full or in part from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 and through an agreement with the State Department of Water Resources."

5 CONTROL OF WORK

Add to Section 5-1.20G COORDINATION WITH OTHER ENTITIES, City Authorizations and Permits:

Do not interrupt water service without written approval of the City. All waterline work to be done at night or after business hours unless otherwise approved by the City.

An encroachment permit has been issued to the City by Caltrans for work within Caltrans right of way. You must be fully informed of and comply with the requirements of this encroachment permit as well as rules, regulations, and conditions that may govern your activities within the Caltrans right-of-way and Caltrans property and should conduct the work accordingly.

You must obtain an encroachment permit rider from Caltrans before working within the State right of way or State Property. A fee may apply.

Here? Or where? to add a first order of work to establish temporary utilities to the west side of the Bianchi bridge prior to demo. We would need to give a detailed description of what that would include and verify we have pay items to cover the work. Water, gas, electricity, possible sewer. Some of this work could be done prior to the creek window start date.

Add to Section 5-1.26A CONSTRUCTION SURVEYS, General:

The City's Horizontal and Vertical Survey information to complete the work is available at the City's website:
https://www.slocity.org/government/department-directory/public-works/documents-online/construction-documents/survey-data

The Contractor shall provide all on site survey to construct the project.

Add to Section 5-1.36D PROPERTY AND FACILITY PRESERVATION Nonhighway Facilities:

The utility owner will relocate a utility shown in the following table before the corresponding date shown:

Utility Relocation and Contractor-Arranged Time for the Relocation

Utility	Utility Address	Location	Date
AT&T	196 Suburban Road San Luis Obispo, CA 93401	Bianchi Lane, Higuera Street at Matthews Open Space	December 15, 2024
Charter	270 Bridge Street San Luis Obispo, CA 93401	Bianchi Lane	December 15, 2024
Astound	1998 Santa Barbara Ave San Luis Obispo, CA 93401	Bianchi Lane, Higuera Street	December 15, 2024

PG&E	4325 South Higuera Street San Luis Obispo, CA 93401	Bianchi Lane	December 15, 2024
The Gas Company	750 Industrial Way San Luis Obispo, CA 93401	Bianchi Lane	December 15, 2024

Installation of the utilities shown in the following table requires coordination with your activities. Make the necessary arrangements with the utility company through the Engineer and submit a schedule:

1. Verified by a representative of the utility company
2. Allowing at least the time shown for the utility owner to complete its work

Utility Relocation and Contractor-Arranged Time for the Relocation

Utility	Utility Address	Location	Working Days
City of San Luis Obispo Water	25 Prado Road San Luis Obispo, CA 93401	Bianchi Lane	15
The Gas Company	750 Industrial Way San Luis Obispo, CA 93401	Bianchi Lane	15

6 CONTROL OF MATERIALS

Replace *Reserved* in Section 6-1.04A BUY AMERICA, General with:

Utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carries, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. Furnish within 20 days following the date of loading for shipments originating within the United State or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated “on-board” commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

Insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Replace *Reserved* in Section 7-1.02K(6)(j)(iii) LAWS, Labor Code - Earth Material Containing Lead with:

Section 7-1.02K(6)(j)(iii) includes specifications for handling, removing, and disposing of earth material containing lead at concentrations below levels regulated by DTSC. This is

unregulated material. Manage earth material containing regulated concentrations of lead under Section 14-11.08.

Lead is anticipated in earth material on the job site. Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan. Soil within the Matthews Open Space is anticipated to have the highest lead levels.

Handle the material under all applicable laws, rules, and regulations, including those of the following agencies:

1. US EPA
2. California Environmental Protection Agency
3. CDPH
4. Cal/OSHA
5. California Department of Recycling and Recovery
6. California Air Resources Board
7. California Department of Toxic Substances Control
8. California RWQCB, Region 3, Central Coast
9. San Luis Obispo County Air Pollution Control District

If the material is disposed of:

1. Disclose the lead concentration of the material to the receiving property owner when obtaining authorization for disposal on the property.
2. Obtain the receiving property owner's acknowledgment of lead concentration disclosure in the written authorization for disposal.
3. You are responsible for any additional sampling and analysis required by the receiving property owner.

If you choose to dispose of the material at a commercial landfill:

1. Transport it to a Class III or Class II landfill appropriately permitted to receive the material.
2. You are responsible for identifying the appropriately permitted landfill to receive the material and for all associated trucking and disposal costs, including any additional sampling and analysis required by the receiving landfill.

Add to Section 7-1.03 PUBLIC CONVENIENCE:

Maintain pedestrian and vehicle access to all businesses during business hours. Pavement removal outside of the Bianchi Lane Closure area must occur outside of normal business hours.

Maintain access to the private property APN 002-482-017 at all times unless approved by the City.

Maintain access to the front building of private property APN 002-482-027 at all times unless approved by the City.

Maintain through vehicle access between APN 002-482-027 and APN 002-482-007. Short duration closures of a maximum 2-hour duration are allowed.

Add to Section 7-1.03B PUBLIC CONVENIENCE, Traffic Control Plan:

Provide traffic control plan and traffic control application at or before the preconstruction meeting. Traffic control plan must be drawn to scale. Traffic control application may be obtained on the City's website:

www.slocity.org/government/department-directory/public-works/documents-online/construction-documents

Upon approval of the traffic control plan, the City will issue a no-fee Encroachment Permit. Permittee is responsible to comply with all conditions of the traffic control plan. Complete work using due diligence to restore free flowing of traffic.

8 PROSECUTION AND PROGRESS

Replace the 1st paragraph in Section 8-1.02A SCHEDULE, General with:

Provide a Level 3 schedule for this work.

Add to Section 8-1.05 TIME:

Complete all work within San Luis Obispo Creek between June 1 and October 15. The time limit specified for the completion of the work may be insufficient to permit completion of the work by working a normal number of hours per day or week on a single shift basis. Should you fail to maintain the progress of the work in conformance with these special provisions, you must provide additional shifts as necessary to ensure that the work is completed within the time limit specified at no additional cost to the City.

9 PAYMENT

Add to Section 9-1.01 PAYMENT, GENERAL:

Any item of work that does not have a separate pay item is considered included in other items cost of work and no additional compensation will be paid.

Monthly pay requests shall match the pay items in the bid documents. Subsections to the pay items will not be allowed in the pay request. Separate backup pages with subsections that support the total amount requested in each pay item can be submitted for clarification.

DIVISION II GENERAL CONSTRUCTION

10 GENERAL

Add to Section 10-1.01 GENERAL:

Before initial ground disturbance, all construction personnel must attend biological resource training. Training must comply with Section 14-6.03D(3).

Replace *Reserved* in Section 10-1.03 TIME CONSTRAINTS with:

You may work within San Luis Obispo Creek from June 1 to October 15 of any year. No construction activities below the top of creek banks or within San Luis Obispo Creek during rain events or predicted rain events.

Schedule the work to prioritize:

1. Removal of trees other than eucalyptus from September 1 to February 15.
2. Work near Eucalyptus trees from March 1 to November 1.
3. Work within the SLO Creek from June 1 to October 15.

A roosting bat survey by a City-supplied biologist must be conducted at dawn and dusk to identify potential roosting bats. Notify Engineer 7 calendar days before need survey. The survey must be conducted between two to four weeks before bridge and/or tree removal.

A City-supplied biologist must be on-site during ground disturbing activities and vegetation removal. Notify Engineer at least 7 calendar days before needing biologist.

No pets allowed on the construction site.

Replace *Reserved* in Section 10-3 with:

10-3 FURNISH FIELD OFFICE

10-3.01 GENERAL

10-3.01A Summary

Section 10-3 includes specifications for furnishing and maintaining a field office and associated services for the exclusive use of the Engineer. The field office may be a portable office trailer located within the project limits or a commercial rented office space within a 1,500-foot radius from the Bianchi Lane and Higuera Street intersection. Alternative locations may be requested in writing to the Engineer, subject to review and approval at the Engineer's discretion.

The office must be installed, fully operational, and ready for occupancy no later than 30 calendar days after award of contract and no later than 15 working days prior to the first working day designated or you starting work, whichever comes first. For each day thereafter that the office is not ready for occupancy, you will be assessed damages in the amount of $100.00 per calendar day.

Maintain the office until 30 calendar days after one hundred percent of the work is accepted. You are responsible for removing the office. All equipment, furniture and appliances are your property at the completion of the project.

Provide weatherproof buildings or trailers in good condition and meet all applicable ordinances, safety codes, and regulations. Equipment furnished must be for the Engineer's sole use and of standard quality and new or like new in appearance and function. Facilities and all furnished equipment are subject to approval.

You are responsible for providing a separate, private, professional working area for the Resident Engineer's Office. The field office must be safe, sanitary and include the appropriate electrical service, potable water supply, toilet accommodations and waste disposal services.

You must pay

1. sanitary and utility bills (electricity, phone and water)
2. the cost for all connection and disconnection fees for electricity, phone, water service, sanitary service, high speed internet
3. rental of all of the office and furnishings
4. all costs associated with days of delay in closing the office including, but not limited to, weather and/or contractor schedule completions delays
5. all costs to maintain insurance for such facility to cover any losses of equipment or material within this space

The field office shall be reasonably secure, and if determined necessary by the Engineer, shall be enclosed by a 6-foot-high chain link fence with a gate around the building and parking area.

If the office or furnished equipment is vandalized, stolen, or in need of repair, upon receipt of written notice by Engineer, you will have a maximum of 5 working days to replace or repair the items to full working order. If you fail to comply within the 5 working days specified, the City may at its option withhold monthly progress payments until the office is returned to full and complete working order.

10-3.01B Definitions
Not Used

10-3.01C Submittals
Not Used

10-3.01D Quality Control and Assurance
Not Used

10-3.02 MATERIALS
You must supply a field office with the minimum requirements:

1. 400 square feet floor space, with separate room for Resident Engineer's office
2. Locking outside doors, deadbolt with keys (minimum 2 doors)
3. Alarm system with 24-hour monitoring service
4. Slip proof tread and handrails on steps as required
5. Windows with locks, provide adequate cross ventilation in all rooms

6. 7-foot (min) ceiling height
7. Electrical lighting
8. Heat and air conditioning able to maintain temperature between 68 and 78 degrees Fahrenheit
9. Adequate electrical outlets and surge protectors
10. Adequate electricity (120 volt, 60 cycle)
11. Adequate potable water supply
12. Adequate indoor sanitary facilities, including sink
13. Parking for 4 vehicles (min)
14. Janitorial services – minimum once per week

You must furnish the office at a minimum with:

1. (3) Table 30” wide 8’ long x 30” high
2. (1) File cabinet, 4-drawer, fire resistant metal with lock and keys
3. (2) Desk, 30" x 60"
4. (2) Desk lamps
5. (3) Office chairs and 6 folding chairs
6. (1) 5 shelf Bookcase, 3’ wide x 1’ deep x 6’ high minimum
7. (2) 3 shelf Bookcase, 3’ wide x 1’ deep x 4’ high minimum
8. (1) 48”x72” dry erase board
9. (1) Fire extinguisher
10. (1) Refrigerator, 10 cubic feet, with minimum 2 cubic feet freezer compartment
11. (1) Microwave Oven
12. (1) Water cooler with hot/cold taps and water delivery service
13. (1) wireless, color, 11 x 17 scanning printer
14. (1) fully serviced commercial Copy Machine (with color, 11x17, and scanning
15. capabilities), with necessary paper and cartridges
16. (1) commercial grade First Aid Kit (Contractor maintained)
17. High speed internet (DSL equivalent or better), with secured “wifi” connectivity

The Field Office must have a 24”x36” sign, white color, affixed near the entrance door. The sign must read “City of San Luis Obispo, DEPARTMENT OF PUBLIC WORKS” and must have City seals affixed to it.

10-3.03 CONSTRUCTION

Not Used

10-3.04 PAYMENT

Payment for furnish field office as follows:

1. A total of 25 percent of the item total upon the Engineer determining the field office is complete and acceptable.
2. A total of 75 percent of the item total at such time that 50 percent of the work is complete
3. A total of 100 percent of the item total upon contract acceptance

12 TEMPORARY TRAFFIC CONTROL

Add to Section 12-1.01 GENERAL:

12-1.01A Definitions

Bianchi Lane Closure: Temporary closure of Bianchi Lane for construction of the new Bianchi Lane Bridge over San Luis Obispo Creek. Allowable limits of closure are the property line of private property APN 002-482-017 and "BL" Station 12+00..

Add to Section 12-4.01A MAINTAINING TRAFFIC, General:

The requirements of this Section do not apply to the Bianchi Lane Closure.

Add to Section 12-4.02A(2), TRAFFIC CONTROL SYSTEMS, Definitions:

Special days: Cal Poly Graduation Weekend, Friday to Sunday

Replace *Reserved* in Section 12-4.02C(3)(d) TRAFFIC CONTROL SYSTEMS, City Street Closure Requirements with:

Prior to the Bianchi Lane Closure, the Contractor shall establish access to the private property APN 002-482-017 via a temporary bridge, or as otherwise approved by the Engineer.

Replace *Reserved* in Section 12-4.02C(3)(f) TRAFFIC CONTROL SYSTEMS, Closure Restrictions for Designated Holidays and Special Days with:

Road closures are not allowed on Designated Holidays or Special Days, with the exception of the Bianchi Lane Closure.

Replace *Reserved* in Section 12-4.02C(3)(m) TRAFFIC CONTROL SYSTEMS, City Street Closure Hour Charts and City Street Lane Requirement Charts with:

Chart No. M1
City Street Lane Requirements and Hours of Work

Location: Higuera Street | Direction: NB/SB

Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Fri	C	C	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	
Sat	C	C	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	
Sun	C	C	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	

Legend:

1	Provide at least 1 City street lane open in the direction of travel.
C	Street may be closed completely.

REMARKS: The number of through traffic lanes in each direction of travel is 1.
The full width of the traveled way must be open for use by traffic when construction activities are not actively in progress.

Add to Section 12-4.04C, PEDESTRIAN FACILITIES, Construction:

Maintain pedestrian access to all businesses during business hours.

13 WATER POLLUTION CONTROL

Add to the end of Section 13-1.01A GENERAL, Summary:

The specifications in Section 13 for water quality monitoring apply to the following work activities whenever they occur in or over water:

1. Bridge removal
2. New bridge construction
3. Installing and removing the creek diversion system
4. Rock Slope Protection
5. Installation of CIDH
6. Any work below top of creek banks

The receiving water for this project is San Luis Obispo Creek.

Water quality monitoring and reporting will be conducted by a City-supplied biologist. Coordinate with the biologist for all work requiring water quality monitoring.

Only herbicides and pesticides approved for aquatic use may be used. If surfactants are required, they shall be restricted to non-ionic chemicals that are approved for aquatic use by the California Department of Pesticide Regulation. Herbicide spraying shall not occur when wind speeds exceed 10 miles per hour. All sprays shall contain a a dye registered for aquatic use by CDPR to identify overspray. Herbicide and pesticide use shall comply with all regulatory permits.

Add to the end of Section 13-3.01A STORMWATER POLLUTION PREVENTION PLAN, Summary:

This project is Risk Level 2.

Add to Section 13-4.01C, JOB SITE MANAGEMENT, Submittals:

At least 5 working days before the start of jobsite activities, submit a Spill Prevention and Clean-up Plan. The Spill Prevention and Clean-up Plan must include:

1. How chemical and hazardous substances will be stored
2. Cleanup supplies on site for possible spill cleanup
3. Spill cleanup procedures and procedures to prevent spills from entering storm runoff or the creek.
4. Reporting requirements for spills.

Replace the last paragraph of Section 13-4.03C(1) CONSTRUCTION, Material Management, General with:

Perform each of the following activities at least 100 feet from a concentrated flow of stormwater, a drainage course, aquatic or riparian habitat, or an inlet, and in a location where accidental discharges cannot flow into waterways..

1. Stockpiling materials
2. Storing pile-installation equipment and liquid waste containers

3. Washing vehicles and equipment in outside areas
4. Fueling and maintaining vehicles and equipment

Equipment staging and overnight parking of equipment must be at least 60 feet from aquatic or riparian habitat. If equipment is parked less than 60 feet from aquatic or riparian habitat at the end of the work day then drip pans or containment mats are required.

Add to Section 13-4.03G CONSTRUCTION, Dewatering:

If dewatering activities are needed, test the water for petroleum hydrocarbons and volatile organic compounds prior to discharging it. If the water is contaminated, dispose of it at a permitted disposal facility in accordance with Local, State, and Federal regulations. Provide the Engineer test results and disposal records.

Replace Section 13-12 with:

13-12 TEMPORARY CREEK DIVERSION SYSTEMS

13-12.01 GENERAL

13-12.01A Summary

Section 13-12 includes specifications for constructing, maintaining, reconstructing, and removing temporary creek diversion system (TCDS), and restoring creek bed to original condition. The temporary diversion system is used to divert upstream water flows to allow construction in a dry or dewatered location.

The TCDS must be designed and installed to:

1. Prevent erosion and build-up of sediment upstream or downstream of the project area.
2. Not cause blockage of creek flow upstream or downstream of the project area.
3. Have capacity for unanticipated rainfall events even outside of normal rainy periods.
4. Prevent impingement and entrainment of fish based on CDFW and NMFS criteria.

13-12.01B Definitions

Not Used

13-12.01C Submittals

Submit a certificate of compliance for:

1. Impermeable plastic sheeting
2. Gravel
3. Pipe material

13-12.01C(1) Temporary Creek Diversion System Plan

Within 30 working days of Contract award, submit 3 copies of the Temporary Creek Diversion System Plan (TCDSP). The TCDSP must include:

1. Installation and removal process, including equipment, platforms for equipment, and access locations.

2. Anticipated creek flow rates.
3. Calculations supporting the sizing of piping, channels, pumps, or other conveyance by using FHWA HY-8 or other equivalent method. Calculate the discharge water flow rate and velocity anticipated where it discharges on any erodible surface, so its conveyance does not cause erosion within the project or at the discharge to the water body. Temporary culverts attached to banks, walls, or other locations must be designed to hold the full weight of the culvert at capacity and restrain the culvert for any expected hydraulic forces.
4. Plans showing locations of diversion, including layouts, cross sections, and elevations.
5. Materials proposed for use, including MSDS if applicable.
6. Operation and maintenance procedures for the TCDS.
7. Restoration plans showing before and after conditions, including photos of existing conditions for areas to be disturbed during the installation, operation, and removal of the TCDS.
8. Monitoring and reporting plan to ensure applicable water quality objectives are met. This includes schedule of work including Temporary BMP implementation as part of the Construction Site BMP strategy and SWPPP.
9. Details of the pumping system, if used, including power source, debris handling, fish screens, and monitoring requirements.
10. Fish passage plan, following the Caltrans Fish Passage Design for Road Crossings, CA Department of Fish and Wildlife (CDFW), CA Salmonid Stream Habitat Restoration Manual, and National Marine Fisheries Service (NMFS), Guidelines for Salmonid Passage at Stream Crossings, as required by the applicable Permits, Licenses, Agreements, and Certifications (PLACs).
11. The TCDS design must demonstrate how it will comply with section 13-12.03A, water tightness, and prevent seepage.
12. Contingency plan to remove workers, equipment, materials, fuels, and any other work items that will cause pollution or violation of PLACs during a rain event out of the flow area. Develop the contingency plan for when a 12-inch freeboard cannot be maintained and overtopping of the coffer dams may occur.

If revisions are required, the Engineer notifies you of the date when the review stopped and provides comments. Submit a revised TCDSP within 15 working days of receiving the comments. The City's review resumes when a complete TCDSP has been resubmitted.

Submit an electronic copy on a read-only CD, DVD, or other Engineer-authorized data storage device and 4 printed copies of the authorized TCDSP.

The RWQCB or other regulatory agency requires review of the authorized TCDSP. The Engineer submits it to the RWQCB or other regulatory agency for review and comment. If the Engineer orders changes to the TCDSP based on the RWQCB's comments, submit a revised TCDSP within 10 working days.

All submittals which include plans, specifications, and calculations must be sealed and signed by a civil engineer registered in the State.

13-12.01D Quality Assurance
Not Used

13-12.02 MATERIALS

13-12.02A Gravel
Gravel must:

1. Be river run gravel obtained from a river or creek bed with gradation of 100 percent passing a 3/4-inch sieve and 0% passing a 3/8-inch sieve.
2. Be clean, hard, sound, durable, uniform in quality, and free of any detrimental quantity of soft, thin, elongated or laminated pieces, disintegrated material, organic matter, or other deleterious substances.
3. Be composed entirely of particles that have no more than 1 fractured face.
4. Have a cleanliness value of at least 85, as determined by California Test 227.

13-12.02B Impermeable Plastic Membrane
Impermeable plastic membrane must be:

1. Single ply, commercial quality, polyethylene with a minimum thickness of 10 mils complying with ASTM D2103. You must use stronger plastic membrane if required as part of design to resist hydraulic forces.
2. Free of holes, punctures, tears or other defects that compromise the impermeability of the material.
3. Suitable for use as an impermeable membrane.
4. Resistant to UV light, retaining a minimum grab breaking load of 70 percent after 500 hours under ASTM D4355.

13-12.02C Gravel-Filled Bags
A gravel-filled bag must:

1. Be a geosynthetic bag
2. Have inside dimensions from 24 to 32 inches long and from 16 to 20 inches wide
3. Have a bound opening sewn with yarn, bound with wire, or secured with a closure device
4. Weigh from 30 to 50 pounds when filled with gravel

Sand filled bags are not allowed.

13-12.02D Plastic Pipes
Plastic pipe must comply with section 61-3.01(ALTERNATIVE CULVERTS) and must:

1. Be clean, uncoated, in good condition free of rust, paint oil dirt or other residues that could potentially contribute to water pollution
2. Be adequately supported for planned loads
3. Use watertight joints under section 61-2.01.
4. Be made of a material or combination of materials that are suitable for clean water and which do not contain banned, hazardous, or unlawful substances
5. For temporary pipes not reused on the project you may use the following materials:

5.1. PVC closed-profile wall pipe must comply with ASTM F1803
5.2. PVC solid wall pipe must comply with ASTM D3034, ASTM F679, AWWA C900, AWWA C905, or ASTM D2241 and cell class 12454 defined by ASTM D1784
5.3. HDPE solid wall pipe must comply with AASHTO M 326 and ASTM F714
5.4. Polyethylene large-diameter-profile wall sewer and drainpipe must comply with ASTM F894

13-12.02E Rock
Rock layer must comply with the table titled Rock Gradation for 7-inch-Thick Layer in section 72-4.02.

13-12.02F Pumping System
Pumping system must:
1. Comply with section 74-2.02B
2. Be equipped with secondary containment
3. Be free of fuel and oil leaks
4. Meet intake screen regulatory requirements and have a wire mesh with a grid no larger than 0.2 inches on the intake.

13-12.02G Seepage Pumping System
If seepage occurs in the dewatered work area, the water must be removed by sump pumps as part of the TCDS.

Seepage pumping system must:
1. Comply with section 74-2.02B
2. Ensure discharge water conform with PLACs or is treated on site
3. Be free of fuel and oil leaks

13-12.02H Discharge Water Energy Dissipation and Erosion Control
Discharge water from pumps, pipes, ditches, or other conveyances must have BMPs to dissipate the flows and velocity of water discharged from the temporary diversion system if erosion would otherwise occur.

Energy dissipation measures:
1. May be plastic sheeting, flared end sections, rubber matting, or other materials appropriate for the design hydraulics
2. Must be anchored to prevent movement by expected flows
3. Must be removed when the TCDS is removed

13-12.03 CONSTRUCTION

13-12.03A General
Construction, use, and removal of the TCDS is restricted to the time period in the PLACs. If the work cannot be completed during the initial restricted time period, remove TCDS, restore the creek to original flow condition, and reconstruct the TCDS the following year. No work is allowed within the stream except during the restricted time period.

Do not use motorized equipment or vehicles in areas of flowing or standing water for the construction or removal of the TCDS in compliance with section 13-4.03.

Remove vegetation to ground level and clear away debris.

Place temporary or permanent fill as allowed by PLACs.

Place rock at outlet of diversion pipe under section 72-4.03, except motorized vehicles and equipment must not be used in areas of flowing or standing water.

Do not construct or reconstruct TCDS if the 72-hour forecast predicts a 50 percent or greater chance of rain in the project area.

Stop all work and remove all material and equipment from the creek between upstream and downstream cofferdams if the 72-hour forecast predicts a 50 percent or greater chance of rain in the project area and the predicted rainfall is estimated to produce a flow rate exceeding the design capacity of the TCDS.

If the required freeboard cannot be maintained and overtopping may occur, implement contingency plan to remove all workers, equipment, and potential sources of pollution from the dry working area of the creek bed.

The TCDS must be constructed within the temporary impact footprint as described in the environmental commitments.

Lap and join joints between the edges of impermeable plastic membrane with commercial-quality waterproof tape with minimum 4-inch lapping at the edges.

Seal openings or penetrations through the impermeable plastic membrane with commercial quality waterproof tape.

The TCDS must be watertight to keep the work area dry for construction and prevent the creation of pollutants. Maintain all portions of the TCDS and fix leaks as soon as they are discovered.

Contact water agencies that discharge to the construction area to ensure that unexpected water is not discharged during construction which could compromise the TCDS.

13-12.03B Maintenance

Maintain the TCDS to provide a minimum freeboard of 12 inches between the water surface and the impermeable top of the cofferdams.

Do not discharge runoff from existing or proposed drainage systems into the dry work area between the cofferdams. Runoff from these systems may be connected to the diversion pipe or conveyed by pipes downstream of the cofferdam.

Prevent leaks in the TCDS. Provide seepage pumps as necessary and keep the work area dry to prevent the creation of sediment-laden water.

Repair holes, rips and voids in the impermeable plastic membrane with commercial-quality waterproof tape. Replace impermeable plastic membrane when patches or repairs compromise the impermeability of the material.

Repair TCDS within 24 hours after the damage occurs.

Prevent debris from entering the TCDS and receiving water.

Remove and immediately replace gravel, gravel-filled bags, impermeable plastic membrane, or plastic pipes contaminated by construction activities.

Remove sediment deposits and debris from the TCDS as needed. If removed sediment is deposited within project limits, it must be stabilized and not subject to erosion by wind or water, under sections 19-1.01 and 19-2.03 B.

13-12.03C Removal

When no longer required, remove all components of TCDS. Return the creek bed and banks to the original condition.

Diversion must be removed if project has a winter suspension and re-installed after winter suspension if needed for work.

Do not excavate the native creek material. Backfill ground disturbance, including holes and depressions caused by the installation and removal of the TCDS with gravel or native creek material. Maintain the original line and grade of the creek bed.

13-12.04 PAYMENT

Bid item Temporary Creek Diversion System is paid by lump sum, and includes all labor, materials, tools, equipment, and incidentals to design, install, maintain, and remove the Temporary Creek Diversion System.

14 ENVIRONMENTAL STEWARDSHIP

Add to the end of Section 14-1.02, ENVIRONMENTALLY SENSITIVE AREA:

An ESA exists on this project.

Before starting job site activities, install temporary high visibility fence to avoid inadvertent impacts to San Luis Obispo Creek.

Add to Section 14-6.01, BIOLOGICAL RESOURCES- GENERAL:

If any wildlife is encountered during construction, allow said wildlife to leave the construction area unharmed.

Add to the 1st paragraph of Section 14-6.03A, SPECIES PROTECTION, General:

This project is within or near habitat for the regulated species shown in the following table:

Regulated Species

California Red-Legged Frog
South-Central California Coast Steelhead Trout
Migratory Birds
Roosting Bats
Monarch Butterfly

This project includes the sensitive habitats shown in the following table:

Sensitive Habitats

Riparian
Riverine

Species protection areas within the project limits are specified in the following table.

Species Protection Areas

Identification Name	Location
Species Protection Area 1	Entire Project Limits

Within Species Protection Area 1, implement the following protection measures:

1. Follow the fieldwork code of practice developed by the Declining Amphibian Populations Task Force
2. Filter fabric must line the channel prior to the placement of diversion materials into the channel. Substrate in channel, including gravel and rocks, that is removed during project construction will be set aside, rinsed, and then returned to the channel following completion of in-channel construction.
3. Project activities that may affect the flow of the creek through placement of fill, bridge construction, or diversion of the channel must comply with the 2001 NMFS Guidelines for Salmonid Passage at Stream Crossing, where applicable. The guidelines include but are not limited to:
   - 3.1. A minimum water depth (12 inch for adults and 6 inch for juveniles) at the low fish passage; or maximum depth as can be afforded if ambient creek flows begin to drop;
   - 3.2. A maximum hydraulic drop of 12 inch for adults and 6 inch for juveniles;
   - 3.3. Avoidance of abrupt changes in water surface and velocities; and
   - 3.4. Structures must be aligned with the stream, with no abrupt changes in flow direction upstream or downstream of the crossing.
4. In-channel construction will not be conducted at night to afford fish quiet migratory hours.
5. Pile installation activities must coincide with the least likely occurrence of upstream migrating adults or downstream juvenile migration (June 1-November 1).

6. All water pumping or withdrawal from the creek must comply with 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, and all PLACs to avoid entrainment of fish. The criteria include but are not limited to the following:
   6.1. Screen design must provide for uniform flow distribution over the surface of the screen;
   6.2. Screen material openings must not exceed 3/32 inches for fry (fish capable of feeding themselves) sized salmonids and must not exceed 1/4 inch for fingerling sized salmonids;
   6.3. Where physically practical, the screen must be constructed at the dewatering system entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bank line; and
   6.4. The design approach velocity must not exceed 0.33 feet per second for fry sized salmonids or 0.8 feet per second for fingerling sized salmonids.
7. Before any activities begin on the project, a City-supplied biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of all sensitive species, including steelhead; their habitat, Critical Habitats, the project specific measures being implemented to conserve these species, and the boundaries within which the project may be accomplished.

Add to Section 14-6.03C SPECIES PROTECTION, Fish Protection:

Regulated fish are anticipated throughout the project corridor. Implement the following protection measures:

1. Install exclusionary material, a cofferdam, or a combination of both
2. A City-supplied biologist will relocate the fish prior to the installation of the TCDS. Contractor shall coordinate with the City-supplied biologist to ensure relocation is planned prior to dewatering.

Maintain exclusion material and cofferdams such that regulated fish are prevented from entering the work area.

The pump screen's approach velocity must not exceed 0.33 feet per second.

Replace *Reserved* in Section 14-6.03D(3) SPECIES PROTECTION, Biological Resource Information Program with:

The City will prepare and present a biological resource information program (training) to familiarize personnel with regulated species and habitats, related laws and regulations, and species protection measures and protocols.

The biological resource information program will include:

1. Identification of the job site, ESAs, and species protection areas
2. Description of the regulated species and its general ecology
3. Description of habitats used by the regulated species and their locations
4. Requirements for protecting regulated species
5. Definition and consequences of take of regulated species
6. Response plan for encounters with the regulated species or a species that looks like one
7. Permit requirements for touching or moving a regulated species

8. Requirements for species protection
9. Description of avoidance and minimization measures
10. Handout materials about the regulated species, its habitats, and species protection measures
11. Handout on the Declining Amphibian Task Force Fieldwork Code of Practices

A City-supplied biologist will develop a program and present the biological resource training.

Notify the Engineer at least 7 calendar days before training session is necessary. All attendees must sign an attendance list.

Personnel who must complete biological resource training include laborers, tradesmen, material suppliers, equipment maintenance staff, supervisors, foremen, office staff, food vendors, and other workers who stay at the job site longer than 60 minutes. Required personnel must attend an initial training within 5 working days of their start date. Follow-up trainings are required a minimum of once in every 12 month period following the initial training.

Replace *Reserved* in Section 14-6.05 with:

14-6.05 INVASIVE PLANT SPECIES AND TRASH REMOVAL

Section 14-6.05 includes specifications for the removal of invasive plant species and for the removal of trash.

14-6.05A Invasive Plant Species Removal

Remove invasive plant species along the corridor of San Luis Obispo Creek from "SLOCRK" Station 10+00 (the north side of the Madonna Road bridge) to "SLOCRK" Station 44+00 (approximately 50-feet north of the Marsh Street bridge). The width of the removal area is from top-of-bank to top-of-bank, and a 10-ft strip outside of the top of banks (finish grade or existing grade whichever is furthest).

Comply with the PLACs and the Habitat Mitigation and Monitoring Plan (HMMP), and the project Order of Work requirements. Comply with section 13-4.03E(3).

Contractor is responsible to prevent invasive species from resprouting for the duration of the plant establishment period. Herbicides may be used in compliance with the PLACs and HMMP.

Within 30 working days of contract award, submit an Invasive Plant Species Removal Plan including:

1. Individual species management techniques
2. Schedule
3. Personnel with applicators qualifications

Remove invasive plant species as listed below:

1. Castor Bean

2. Cape Ivy
3. Giant Reed (Arundo)
4. Himalayan Blackberry

Comply with the removal methods and requirements of the PLACs and HMMP, and the following:

14-6.05A(1) Castor Bean Removal:
Wear gloves and clothing to prevent skin contact with the plant material. Remove the plants by any of the following methods: Hand pulling when the soils are such that the bulk of the root crown is removed; Weed wrenches for small to medium sized plants with a single stem; Shallow cultivation combined with the above.

14-6.05A(2) Cape Ivy Removal
Clear away plant material to gain visual and physical access to locations with cape ivy stems emerging from the ground. Roots and stems must be eased out of the ground using hand tools to loosen the soil.

Removed cape ivy must be placed in or on plastic and removed from the area. Mowing is not allowed.

14-6.05A(3) Giant Reed (Arundo) Removal
Hand pulling may be used when the method will remove all rhizome material. Typically, this is in loose soils and after rains and with plants less six feet in height. In all areas, plants may be dug up using hand tools. In dewatered areas, plants may be removed using mechanized equipment.,

14-6.05A(4) Himalayan Blackberry Removal
Within dewatered areas, Himalayan blackberry plants may be trimmed back by tractor-mounted mowers. In all areas, Himalayan blackberry plants may be trimmed with handheld tools. The preferred time for trimming is when plants begin to flower.

14-6.05A(5) Disposal of Invasive Plant Material
All invasive plant material must be removed from the site and disposed of in accordance with the HMMP and PLACs. Removed invasive plant material must be in bags or covered enclosures at all times until disposed of. Cape ivy tissues must not be put through a chipper. Arundo may be put through a chipper to reduce the material.

The removed invasive plant material must be taken to a landfill and disposed of as waste. Do not dispose of the material as green waste or for compost.

14-6.05B Trash Removal
Comply with the PLACs and Order of Work requirements. Comply with all requirements for removal of Contractor generated trash and debris.

Remove existing trash and manmade debris from the following areas: the area described for invasive plant removal; the area between San Luis Obispo Creek and the Caltrans

right of way fence from “SLOCRK” Station 14+00 to “SLOCRK” Station 35+00; and the Matthews Open Space (APN 002-482-026).

Existing trash that must be removed is all debris with any dimension larger than 4-inches and visible from the surface during the construction process. Below top of creek bank, debris removal must be by hand, except in earthwork areas or other dewatered areas requiring construction equipment to be in the creek corridor.

Dispose of all trash and debris in a permitted landfill or solid waste disposal site.

14-6.05C Payment
Bid items Remove Invasive Plant Species and Remove Existing Trash and Debris are paid by lump sum.

Replace *Reserved* in Section 14-6.06 with:

14-6.06 INVASIVE SPECIES CONTROL
Section 14-6.06 includes specifications for preventing the introduction and spread of invasive species to and from the job site.

Comply with Section 13-4.03E(3).

At least 2 working days before using vehicles and equipment on the job site, submit a signed statement that the vehicles and equipment have been cleaned of soil, seeds, vegetative matter, and other such debris that may introduce or spread invasive species.

The statement must include:
1. List of the vehicles and equipment with identifying numbers
2. Date of cleaning for each vehicle and piece of equipment
3. Description of the cleaning process
4. Measures to be taken to ensure the vehicles and equipment remain clean until operation at the job site
5. Verification that the equipment has not been operated in waters known to be infested by aquatic invasive species

Update the list of vehicles and equipment as needed.

Clean the following vehicles and equipment before operation at the job site:
1. Excavators
2. Loaders
3. Graders
4. Haul trucks
5. Water trucks
6. Cranes
7. Tractors
8. Trailers
9. Dump trucks

10. Waders

Do not clean vehicles, equipment, or tools at locations near sensitive habitat or waterways at the job site. Clean vehicles and equipment every time before it enters or leaves a sensitive habitat.

Implement the following protection measures:

1. Before entering or exiting the job site and staging areas, pressure wash your vehicles and equipment:
   1.1. At a temperature of 140 degrees F
   1.2. With a minimum nozzle pressure of 2,500 psi
   1.3. With a minimum fan tip angle of 45 degrees
2. Thoroughly scrub personal work equipment and tools, such as boots, waders, hand tools, and any other equipment used in water at the job site, using a stiff-bristled brush to remove any organisms. Decontaminate the equipment by one of the following methods:
   2.1. Immerse the equipment in water at a temperature of 140 degrees F for at least 5 minutes. If necessary, weigh down the equipment to keep it immersed in the water.
   2.2. Freeze the equipment to a temperature of 32 degrees F or colder for at least 8 hours.
   2.3. Thoroughly dry the equipment in a weed-free area for at least 48 hours.
3. Clean personal work equipment, and tools over drip pans or containment mats at the job site. Collect and contain the wastewater. Dispose of the wastewater at a waste management facility.

Replace *Reserved* in Section 14-7.04 PALEONTOLOGICAL RESOURCES MITIGATION with:

Section 14-7.04 includes specifications for coordinating and working with a paleontological resources mitigation team provided by the City.

Contractor is responsible to meet all requirements and mitigation measures outlined in the Excavation and Monitoring Plan. Coordinate with City-supplied archaeologist if any paleontological resources are identified.

Replace the 2nd paragraph of Section 14-8.02 NOISE CONTROL with:

Noise from job site activities between the hours of 7 p.m. to 7 a.m. must conform to the requirements of City issued Night Work Permit.

Add to Section 14-9.02 AIR POLLUTION CONTROL, General:

The City has obtained an annual permit for construction from the Air Pollution Control District (APCD). The annual APCD permit and construction log files are located on the City's website:

http://www.slocity.org/government/department-directory/public-works/documents-online/construction-documents

You are required to comply with the APCD permit including all notification and construction logs using the appropriate equipment. Provide training to all workers in the construction area.

You must comply with section 77-1 of the City Standard Specifications.

The US EPA has established the National Emission Standards for Hazardous Air Pollutants (NESHAP). Under the Health & Safety Code § 39658(b)(1), your demolition and rehabilitation activities must comply with 40 CFR 61, Subpart M (National Emission Standard for Asbestos).

Asbestos survey and sampling has been performed as provided in the Supplemental Project Information. Perform asbestos testing if needed before demolition.

You must notify the San Luis Obispo County Air Pollution Control District (APCD) of your demolition activities even if the activities will not disturb asbestos-containing material. You may obtain the notification form, submittal instructions, and other information from: https://www.slocleanair.org/rules-regulations/asbestos.php

Instead of the 10 working days specified at the website, submit a notification form to the San Luis Obispo County APCD at least 15 working days before starting demolition or rehabilitation activities.

If you discover unanticipated asbestos-containing material during the demolition or rehabilitation activities, immediately stop work in that area and notify the Engineer. Do not resume work in the area until authorized.

Notify the San Luis Obispo County APCD of a change to your demolition or rehabilitation activities, including a revised work plan or the discovery of unanticipated asbestos-containing materials, within 2 working days of the change or discovery.

Add Section 14-9.02A AIR POLLUTION CONTROL, Submittals:

Submit a copy of the APCD notification forms and necessary attachments as informational submittals before starting excavation, demolition, or rehabilitation activities.

Add Section 14-9.02B AIR POLLUTION CONTROL, Construction:

Where contamination is encountered, you are responsible to:

1. monitor
2. record
3. report

H2S and Hydrocarbon FID readings taken every hour during work in the contamination zone or as directed by the Engineer.

Appropriate Personal Protective Equipment (PPE) must be used.

Add Section 14-9.02C AIR POLLUTION CONTROL, Payment:

Full compensation for APCD Permit compliance and applicable engineering standards is included in the payment for the listed bid item. Compensation for APCD Permit Compliance includes the following:

1. Minimum two (2) week notification to APCD before planned excavation
2. A project description submitted to City and APCD for approval, including:
    a. Specific work zone boundary where public access is restricted,
    b. Estimated volume to be excavated,
    c. Location of nearest residence, business, and schools,
    d. A project specific Site Health and Safety Plan,
    e. Starting date, project finish date, and operating hours (for hazardous materials excavations)
    f. Preparation of a Monitoring, Recordkeeping and Reporting Plan (MRRP),
    g. Completion of a screening health risk assessment for toxic air pollutants associated with the excavation, and project related APCD fee payments.
3. All On-site contaminated soils monitoring needed during hazardous materials excavation.

Payment for asbestos testing is included in the payment for Bridge Removal and Building Removal. If asbestos is found, removal and disposal will be paid by change order work.

Replace *at least once a week* in the 2nd sentence of the 3rd paragraph of Section 14-10.01 SOLID WASTE DISPOSAL AND RECYCLING, GENERAL with:

daily

Add to Section 14-11.01 HAZARDOUS WASTE AND CONTAMINATION, GENERAL:

Contaminated soil within the grading limits of the project must not remain at the finished grade surface at the completion of grading activities. If contaminated soil is determined to exist at the finished grade surface, then over-excavate to a depth of 6-inches and place topsoil to achieve finish grade.

Add Section 14-11.01A(1) GENERAL, Health And Safety Plan - Contamination Site Information:

There is a potential of soil contamination in the work area. Known areas of soil and groundwater contamination are shown in the following tables, as identified by the *Report of Findings Supplemental Soil Assessment Activities, Mid-Higuera Bypass* included in the Supplemental Project Information.

Site Location	Prior or Current Use
Matthews Open Space	Industrial use

Listed below are the highest known contamination and type of contamination.

Site Location	Contaminate
Matthews Open Space	Lead
Matthews Open Space	Polycyclic Aromatic Hydrocarbons (PAH)

Add to Section 14-11.01 HAZARDOUS WASTE AND CONTAMINATION:

14-11.01B Excavation, Monitoring, and Transportation Plan

Submit an Excavation, Monitoring, and Transportation Plan for the excavation, containerizing, storage, transportation, and disposal of Type Z-2, Type COM, and TypeCM material. Submit the plan at least 20 working days before beginning construction for review and authorization.

The Excavation and Transportation Plan must comply with:

1. DTSC regulations
2. Cal/OSHA regulations

The Excavation, Monitoring, and Transportation Plan must include:

1. Excavation schedule by location and date for Type Z-2, Type COM, and Type CM material
2. Type of U.S. DOT-approved, leak proof storage containers, security measures, and secondary containment
3. Dust control measures
4. Methods and procedures for collecting and segregating Type Z-2, Type COM, and Type CM material from non-contaminated material
5. Transportation and disposal schedule, equipment, and routes
6. Method for preventing spills and tracking material onto public roads
7. Truck waiting and staging areas
8. Traffic control and loading procedures
9. Decontamination and inspection of vehicles before leaving the loading area
10. Identification of facility for disposal of Type Z-2, Type COM, and Type CM material
11. Example of bill of lading to be carried by trucks transporting Type Z-2, Type COM, and Type CM. The bill of lading must include:
    - 11.1. US Department of Transportation description, including shipping name
    - 11.2. Hazard class
    - 11.3. Identification number
    - 11.4. Handling codes
    - 11.5. Quantity of material
    - 11.6. Volume of material
12. Use of hazardous waste manifests for Type Z-2 material
13. Identification of the hazardous waste transporter that will be used for Type Z-2 material. Transporter must be registered with the DTSC to transport hazardous waste and have completed the California Highway Patrol's Basic Inspection of Terminals Program with a satisfactory rating.
14. Spill Contingency Plan for Type Z-2, Type COM, and Type CM material

If revisions are required, as determined by the Engineer, revise and resubmit the plan within 5 working days of receipt of the Engineer's comments and allow 5 working days for the Engineer to review the revisions.

14-11.01C Sampling and Analysis Plan

Submit a draft Sampling and Analysis Plan (SAP) for testing of Type Z-2, COM, and CM materials for review by the Engineer, for the waste generated from each of the identified areas of Type Z-2, COM, and Type CM material. Submit the SAP at least 45 working days before beginning excavation work. The purpose of the SAP is to ensure collection of valid and defensible waste characterization data to determine proper disposal of Type Z-2, COM, and CM materials.

The SAP must:

1. Identify the areas, containers, and stockpiles to be sampled
2. Identify the number, depth, and location of samples to be collected and analyzed in containers, and stockpiles
3. Specify the frequency of sampling
4. Describe the sampling methodology, analytical parameters and methods, and detection limits
5. Describe the management of decontamination water
6. List criteria for characterization of the Type CM, COM, and Type Z-2 material generated from excavation by Type from each area for use in determining whether the waste is designated waste, non-RCRA (California) hazardous waste, or RCRA hazardous waste and the disposal options (e.g., CA Class II or CA Class I)
7. Include analysis for the constituents previously analyzed in the *Report of Findings Supplemental Soil Assessment Activities, Mid-Higuera Bypass* as included in the Supplemental Project Information.
8. Meet the requirements for the design and development of the sampling plan, statistical analysis, and reporting of test results contained in USEPA, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods " (SW-846), Volume II: Field Manual, Chapter Nine, Section 9.1
9. Meet the requirements of the disposal facility accepting the waste materials
10. Be prepared, sealed and signed by a California Professional Geologist or Registered Civil Engineer with five or more years of experience in hazardous waste investigations and remediation.
11. Follow U.S EPA and DTSC Hazardous Waste sampling protocols and analytical methods
12. Include:
    - 12.1. Data quality objectives
    - 12.2. Description of activities to be performed
    - 12.3. Rationale for proposed number of samples, locations, and analytical tests
    - 12.4. Sampling methodology
        - 12.4.1. Step-by-step standard sampling protocol (with appropriate equipment) for samples
        - 12.4.2. Special collection and analytical methods to prevent the loss of volatile and unstable compounds

12.4.3. Type and size of sample containers and the method of preservation for each matrix and analysis

12.4.4. Appropriate packaging, labeling, marking, storing, and shipping methods

12.4.5. Discussion of field documentation such as sample identification, labeling, field logs and chain of custody

12.5. Recording of geologic observations of material removed during excavation in the field log during sample collection. Include descriptions of soil and sediment characteristics and changes and indications of contamination such as staining

12.6. Sample handling procedures:

12.6.1. Samples must be collected and transported in a container appropriate for the analytical methods to be run under proper chain of custody to an approved laboratory within 24 hours after collection

12.6.2. Samples must be analyzed within the holding times specified in SW-846 by a laboratory certified by the SWRCB ELAP for each analysis run

12.7. Decontamination of reusable equipment

12.8. Methodology for managing and disposing of investigation derived wastes (IDW): generated rinseate, water, and drill cuttings must be containerized in watertight containers, sealed, labeled, and stored onsite while awaiting analytical results to determine appropriate disposition.

12.9. Name and address of the SWRCB ELAP certified laboratory to be used

12.10. Laboratory and field Quality Assurance/Quality Control (QA/QC) procedures:

12.10.1. The Quality Assurance Samples (i.e., duplicates, travel blanks, equipment blanks, field blanks) must be collected and analyzed for the same constituents as the associated samples

12.10.2. The Quality Assurance samples must be labeled in a similar fashion as the property samples. Do not identify these samples as QA/QC samples to the analytical laboratory.

12.10.3. Laboratory data validation shall include a Tier 1A/1B laboratory data validation procedure as an attachment to the draft and final SQR. The laboratory data validation shall be performed in conformance with EPA Region IX Data Validation Guidance and submitted as a report as an appendix. A checklist is not a substitute for a Data Validation Report.

12.11. Statistical Analysis of the sample data in accordance with USEPA SW-846 Test Methods for Evaluating Solid Waste

12.12. Procedures for prevention of cross contamination

The Engineer has 20 working days to review the SAP. If revisions are required, as determined by the Engineer, revise and resubmit the SAP within 15 working days of receipt of the Engineer's comments. The Engineer has 15 working days to review the revisions. Prepare a final SAP that incorporates comments by the Engineer within 5 working days after receipt of comments by the Engineer. Submit four copies of the final approved SAP.

14-11.01D Sampling and Analysis Reports

The Sampling and Analysis Reports must document activities performed and collection and analysis of samples per the SAP. The Sampling and Analysis Reports must include:

1. Data summary tables of analytical results
2. Laboratory data sheets, and data validation report
3. Statistical analysis of sample data
4. Recommended disposal options for all waste types

The Sampling and Analysis Reports must be submitted no more than 30 working days after generation of Type CM, COM, and Z-2 materials (for each phase of the excavation progress if necessary).

14-11.01E Material Management Report

Submit the Z-2, COM, and CM Material Management Report within 20 working days after the last of the Type Z-2, Type COM, and Type CM material has been transported off the job site. Amend the report as needed to address the Engineer's comments.

Include:

1. Volume of waste disposed in each classification
2. Volume of waste disposed at each facility based on the classifications
3. Identification of excavation and source locations of all Type Z-2, Type COM, and Type CM generated
4. Volume of Type Z-2, Type COM, and Type CM material generated from each excavation location
5. Final disposition of the Type Z-2, Type COM, and Type CM material
6. Disposal documentation with dates of individual shipments, copies of manifests and bills of lading

The final report must be sealed and signed by an individual with waste characterization experience and who is either registered as a civil engineer in the State or as a professional geologist in the State. Submit the final report within 15 working days of receipt of the Engineer's comments on the draft report.

Replace Section 14-11.08A MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, General with:

Section 14-11.08 includes specifications for hazardous waste management while excavating, transporting, and disposing of material containing hazardous waste concentrations of lead.

Excavate and dispose of material containing lead under the rules and regulations of the following agencies:

1. US EPA
2. California Environmental Protection Agency
3. CDPH
4. Cal/OSHA
5. California Department of Recycling and Recovery
6. California Air Resources Board

7. California Department of Toxic Substances Control
8. California RWQCB, Region 3, Central Coast
9. San Luis Obispo County Air Pollution Control District

Add to Section 14-11.08B MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Definitions:

Type COM: Regulated material that must be disposed of at an appropriately permitted CA Class II or CA Class III disposal facility. Type COM material has average ADL concentrations less than 5.0 mg/L soluble lead and more than 80 mg/kg total lead but not exceeding 320 mg/kg total lead. The soluble lead is tested using the California Waste Extraction Test.

Add to Section 14-11.08C MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Site Conditions:

Type Z-2 and Type COM material exists at the Matthews Open Space (APN 002-482-026).

Replace Section 14-11.08D(2) MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Excavation and Transportation Plan with:

Comply with Section 14-11.01B.

Add Section 14-11.08D(5) MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Disposal Documentation:

14-11.08D(5) Disposal Documentation

Submit documentation from receiving landfills confirming appropriate disposal within 5 working days of transporting Type Z-2 or COM material from the project.

Replace *Reserved* in Section 14-11.08G MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Material Management with:

Do not start excavation of Type Z-2 or COM material until the Health and Safety Plan, Sampling and Analysis Plan, and Excavation, Monitoring, and Transportation Plan have been authorized.

Transfer Type Z-2 and COM material directly from the excavation to containers or trucks for transportation to the disposal facility. Do not stockpile Type Z-2 or COM material.

Prevent the flow of surface water runoff from entering the Type Z-2 or COM excavation areas.

Add to Section 14-11.08I MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Material Transportation:

Transport excavated Type Z-2 material using:

1. Hazardous waste manifest

2. Hazardous waste transporter with a current DTSC registration certificate and CA Highway Patrol (CHP) Basic Inspection of Terminals (BIT) Program with a satisfactory rating.

Add to Section 14-11.08J MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALLY DEPOSITED LEAD, Disposal:

Collect and dispose of used non-reusable protective equipment at an appropriately permitted disposal facility.

Replace *Reserved* in Section 14-11.10 NATURALLY OCCURRING ASBESTOS with:

Naturally occurring asbestos (NOA) is not anticipated on the job site. If NOA is encountered on the job site, it must be tested, monitored, and disposed of in accordance with the City's APCD Permit To Operate (Appendix H of the City Standard Specifications).

Testing, monitoring, and disposal of unanticipated NOA will be paid by contract change order.

Replace *Reserved* in Section 14-11.11 DEPARTMENT GENERATED CONTAMINATED SOIL with:

14-11.11A General

Section 14-11.11 includes specifications for handling, stockpiling, transporting, and disposing of Department-generated hydrocarbon contaminated soil. Excavate and dispose of contaminated soil under the rules and regulations of the following agencies:

1. US EPA
2. California Environmental Protection Agency
3. CDPH
4. Cal/OSHA
5. California Department of Recycling and Recovery
6. California air Resources Board
7. California Department of Toxic Substances Control
8. California RWQCB, Region 3, Central Coast
9. San Luis Obispo County Air Pollution Control District

Laboratories used to perform chemical analysis must be certified by the SWRCB Environmental Laboratory Accreditation Program (ELAP) for all analysis to be performed.

14-11.11B Definitions

Type CM: Excavation material containing hydrocarbons requiring special handling and disposal at an appropriately permitted disposal facility. Concentrations of polycyclic aromatic hydrocarbon (PAH) constituents are greater than or equal to San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFB RWQCB ESLs) and are below hazardous waste disposal criteria.

14-11.11C Site Conditions
Concentration data and sample location maps are included in the *Report of Findings Supplemental Soil Assessment Activities, Mid-Higuera* Bypass as included in the Supplemental Project Information..

14-11.11D Submittals

14-11.11D(1) General
Not Used

14-11.11D(2) Excavation, Monitoring, and Transportation Plan
Comply with Section 14-11.01B.

14-11.11D(3) Disposal Documentation
Submit documentation of proper disposal from the receiving disposal facility within 5 working days of Type CM material transport from the job site.

14-11.11DE Excavation
Do not start excavation of CM material until the Health and Safety Plan, Sampling and Analysis Plan, and Excavation, Monitoring, and Transportation Plan have been authorized.

Transfer Type CM directly from the excavation to a storage container approved for transport of contaminated material by the US DOT. Do not stockpile Type CM material.

Prevent the flow of surface water runoff from entering the Type CM excavation areas.

14-11.11F Transportation
Before traveling on public roads, remove loose and extraneous material from surfaces outside the cargo areas of the transport vehicles. Place tarpaulins or other cover over the cargo as described in the authorized excavation and transportation plan. You are responsible for costs due to spillage of Type CM material during transport.

14-11.11G Disposal
Transport and dispose of Type CM material under federal and state laws and regulations and county and municipal ordinances and regulations.

Collect and dispose of used non-reusable protective equipment at an appropriately permitted disposal facility.

You are responsible for identifying the appropriately permitted landfill to receive the material and for all associated trucking and disposal costs. The City does not pay for additional sampling and analysis required by the receiving landfill.

Replace the first paragraph of Section 14-11.13A DISTURBANCE OF EXISTING PAINT SYSTEMS ON BRIDGES, General with:
Section 14-11.13 includes specifications relating to the disturbance of an existing paint system on a bridge. The existing paint system on Bridge No. 49C0381 will be disturbed as part of the work activities. The paint system contains lead.

Replace *Reserved* in Section 14-11.13B(3), DISTURBANCE OF EXISTING PAINT SYSTEMS ON BRIDGES, Air Monitoring Reports with:

Air monitoring reports, including test results for samples taken after corrective action, must be prepared by the Certified Industrial Hygienist (CIH)and submitted:

1. Orally within 48 hours after sampling
2. As an informational submittal within 5 working days after sampling

Air monitoring reports must include:

1.Date and location of sample collection, sample number, Contract number, bridge number, name of the structure, and District-County-Route-Post Mile
2.Name and address of the certified laboratory that performed the analyses
3.Chain of custody documentation
4.List of emission control measures in place when air samples were taken
5.Air sample results compared to the appropriate permissible exposure limit (PEL)
6.Corrective action recommended by the CIH to ensure exposure to airborne metals outside containment systems and work areas is within specified limits
7.Signature of the CIH who reviewed the data and made recommendations

Replace *Reserved* in Section 14-11.13B(4) DISTURBANCE OF EXISTING PAINT SYSTEMS ON BRIDGES, Soil Sampling Results for Debris Containment Verification with:

Submit test results of soil analyses verifying debris containment, including results for soil samples taken after corrective action:

1.Orally within 48 hours after sampling
2.As an informational submittal within 5 working days after sampling

Soil sampling results must include:

1.Date and location of sample collection, sample number, Contract number, bridge number, name of the structure, and District-County-Route-Post Mile
2.Concentrations of heavy metals expressed in mg/kg and mg/L
3.Name and address of the certified laboratory that performed the analyses
4.Chain-of-custody documentation

Replace *Reserved* in Section 14-11.13D DISTURBANCE OF EXISTING PAINT SYSTEMS ON BRIDGES, Work Area Monitoring with:

14-11.13D(1) General

Monitor the ambient air and soil in and around the work area to verify the effectiveness of the containment system. Work area monitoring includes:

1.Collecting, analyzing, and reporting air and soil test results
2.Recommending corrective action whenever specified air or soil concentrations are exceeded

Collect air and soil samples at locations designated by the Engineer.

14-11.13D(2) Air Monitoring

Air monitoring must be performed under the direction of a CIH.

Collect and analyze air samples to detect lead under the NIOSH Method 7082 using a detection limit of at least 0.05 µg/m^3. Collect and analyze air samples to detect other metals under NIOSH Method 7300 using a detection limit of at least 1 percent of the appropriate PEL specified by Cal/OSHA. You may use alternative methods of sampling and analysis with equivalent detection limits.

Concentrations of airborne metals outside containment systems and work areas must not exceed any of the following:

1. Average of 1.5 µg/m^3 of air per day and 0.15 µg/m^3 per day on a rolling 90 calendar day basis. Calculate the average daily concentrations based on accumulated monitoring data and projections based on monitoring trends for the next 90 calendar days or to the end of the work subject to the lead compliance plan if less than the specified averaging period.
2. 10 percent of the action level specified for lead by 8 CA Code of Regs §1532.1.
3. 10 percent of the appropriate PELs specified for other metals by Cal/OSHA.

Collect air samples daily during work activities that disturb the existing paint system. Air samples must be analyzed within 48 hours by a facility accredited by the Environmental Lead Laboratory Accreditation Program of the American Industrial Hygiene Association. If concentrations of airborne metals exceed allowable levels, modify the containment system or work activities to prevent further release of metals. If the CIH recommends corrective action, collect and analyze additional samples after implementing the corrective action unless ordered otherwise.

14-11.13D(3) Soil Sampling for Debris Containment

Collect 4 soil samples before starting work and collect 4 soil samples within 36 hours after cleaning existing steel. A soil sample consists of 5 plugs, each 3/4 inch in diameter and 1/2 inch deep, taken at each corner and center of a 1 sq yd area. Analyze soil samples for:

1. Total lead by US EPA Method 6010B or US EPA Method 7000 series
2. Soluble lead by California Waste Extraction Test (CA WET)

The laboratory that analyzes the samples must be certified by the SWRCB's ELAP for all analyses to be performed.

Concentrations of heavy metals in the work area's soil must not increase when the existing paint system is disturbed. If soil sampling shows an increase in the concentrations of heavy metals after completing the work:

1. Clean the affected area
2. Resample until soil sampling and testing shows concentrations of heavy metals less than or equal to the concentrations collected before the start of work

Add to the end of the 1st paragraph of Section 14-11.13F DISTURBANCE OF EXISTING PAINT SYSTEMS ON BRIDGES, Debris Waste Characterization:

This waste characterization testing must include:

1. Total lead by US EPA Method 6010B
2. Soluble lead by California Waste Extraction Test (CA WET)

3. Soluble lead by Toxicity Characteristic Leaching Procedure (TCLP)

Add to the beginning of Section 14-11.13G(2) DISTURBANCE OF EXISTING PAINT SYSTEMS ON BRIDGES, Debris Transport and Disposal, Hazardous Waste Debris:

After the Engineer accepts the waste characterization test results, dispose of the debris:

1. Within 30 working days after accumulating 220 lb of debris
2. At a DTSC-permitted Class I facility located in California

Make all arrangements with the operator of the disposal facility.

If less than 220 lb of hazardous waste is generated in total, dispose of it within 30 working days after the start of the accumulation of the debris.

15 EXISTING FACILITIES

Delete the 7th paragraph of Section 15-1.03B CONSTRUCTION, Removing Concrete.

Add to the end of Section 15-1.03C, Salvaging Facilities:

Provide a minimum 72 hours notice to Bobby Browning, City's Bridge Specialist, before removing or disassembling the Bailey Bridge superstructure. Do not remove or disassemble the Bailey Bridge without City's Bridge Specialist on site. Catalog and package the disassembled bridge, including superstructure, decking, bearings, railings, etc., as directed by City's Bridge Specialist or the Engineer.

Contractor is responsible for offloading and stockpiling the materials at the Corporation yard as directed by the City Bridge Specialist.

At least 5 business days before hauling the material to the salvaged material stockpile location, notify the City Bridge Specialist.

Bobby Browning
Telephone: (805)783-7854
Email: bbrowning@slocity.org

The stockpile location is:
City Corporation Yard
25 Prado Road
San Luis Obispo, CA 93401

Replace *Reserved* in Section 15-1.03E EXISTING FACILITIES, CONSTRUCTION, with:

15-1.03E Remove Existing Building

Remove all components of existing buildings designated for removal, including:

1. Above-ground structure

2. Below-ground foundation
3. Interior facilities
4. Utility connections

Comply with the requirements of the Building Permit.

15-1.03E(1) Utility Connections
All utility and services to the existing building must be disconnected and capped or otherwise permanently closed. Expose and identify all utility or service connections prior to any removals. Provide submittal of proposed utility abandonment and disconnections at least 5 working days prior to the removal or abandonment.

Provide record drawings of the utility disconnections and abandonment.

15-1.03E(2) Payment
Bid item Remove Building is paid by lump sum, and includes all labor, materials, tools, equipment, and incidentals to complete the work.

16 TEMPORARY FACILITIES

Add to Section 16-2.03A(1) HIGH VISIBILITY FENCES, Summary:
High visibility fence must:

1. Be installed as the first order of work
2. Remain in place
3. Be continually maintained
4. Be removed as the last item of contract work, excluding the plant establishment period.

Add to Section 16-2.03C HIGH VISIBILITY FENCES, Construction:
Install high visibility fences as shown on the drawings and as directed by the Engineer.

Replace *Reserved* in Section 16-3 with:

16-3 TEMPORARY CONSTRUCTION ACCESS

16-3.01 GENERAL
Section 16-3 includes specifications for constructing and removing temporary construction access across San Luis Obispo Creek and restoring creek bed and banks to original condition. Temporary structure must comply with Section 48-7 of these special provisions.

Grading of the creek banks must comply with Section 19. All work performed on the storm drain must comply with Section 71 and Section 77.

16-3.01B Definitions
Not used

16-3.01C Submittals

16-3.01C(1) Temporary Construction Access Plan

Within 30 calendar days of Contract award, submit 3 copies of the Temporary Construction Access Plan (TCAP). The TCAP must include:

1. Installation and removal process, including equipment and access locations.
2. Plan showing location of construction access, including layouts, cross sections, and elevations.
3. Materials proposed for use.
4. Provisions for maintaining operation of the existing storm drain.

If revisions are required, the Engineer notifies you of the date when the review stopped and provides comments. Submit a revised TCAP within 15 working days of receiving the comments. The Department's review resumes when a complete TCAP has been resubmitted.

Submit an electronic copy on a read-only CD, DVD, or other Engineer-authorized data storage device and 4 printed copies of the authorized TCAP.

If the RWQCB or other regulatory agency requires review of the authorized TCAP, the Engineer submits it to the RWQCB for review and comment. If the Engineer orders changes to the TCAP based on the RWQCB's comments, submit a revised TCAP within 10 working days.

All submittals which include plans, specifications, and calculations must be sealed and signed by a civil engineer registered in the State.

16-3.01D Quality Assurance

Not used

16-3.02 MATERIALS

Materials placed below top of bank must be in accordance with Section 13-12.

16-3.03 CONSTRUCTION

16-3.03A General

Construction, use, and removal of the TCAP is restricted to the time period in the PLACs. If the work cannot be completed during the initial restricted time period, remove TCAP, restore the creek to original flow condition, and reconstruct the TCAP the following year. No work is allowed within the stream except during the restricted time period.

Do not use motorized equipment or vehicles in areas of flowing or standing water for the construction or removal of the TCAP in compliance with Section 13-4.03.

Remove vegetation to ground level and clear away debris.

Place temporary or permanent fill as allowed by PLACs and as specified in Section 14-6.

16-303B Removal
When no longer required, remove all components of TCAP. Return the creek bed and banks to the original condition.

TCAP must be removed if project has a winter suspension and re-installed after winter suspension if needed for work.

Do not excavate the native creek bed material. Backfill ground disturbance below OHWM, including holes and depressions caused by the installation and removal of the TCAP, with gravel. Gravel must comply with Section 13-12.02A. Maintain the original line and grade of the creek bed.

DIVISION III EARTHWORK AND LANDSCAPE

17 GENERAL

Add Section 17-2.01A CLEARING AND GRUBBING, GENERAL, Definitions:

17-2.01A Definitions
Diameter at Breast Height (DBH): Measurement of tree trunk diameter approximately 4.5 feet above ground level. If a tree has multiple trunks starting at or below this level, then DBH is equal to the sum of all trunk diameters measured at approximately 4.5 feet above ground level.

Add to Section 17-2.03A CLEARING AND GRUBBING, CONSTRUCTION, General:

Tree removal is limited to September 1 through February 28 to avoid potential impacts to nesting birds unless a survey by a City-supplied biologist determines the absence of nesting birds.

Removal and trimming of Eucalyptus trees is limited to March 16 to September 14 to avoid potential impacts to monarch butterflies, unless a survey by a City-supplied biologist determines the absence of nesting birds and monarch butterflies.

Removal of tree stumps is not restricted by the dates listed above.

Replace the 4th paragraph in Section 17-2.03A CLEARING AND GRUBBING, CONSTRUCTION, General with:

Clear and grub vegetation only within the excavation and embankment slope lines and contour grading limits.

Replace the 2nd paragraph of Section 17-2.03B CONSTRUCTION, Clearing:

Prune trees under Section 20-3.01C(2).

Replace Section 17-2.03C CONSTRUCTION, Grubbing with:

17-2.03C Grubbing
Grub all construction areas to a depth necessary to remove all trees identified for removal, buried logs, and other objectionable material, except embankment areas where the grading plane is 2 feet or more above original ground.

Where trees are shown on the drawings to be removed to existing ground, cut off trees and stumps not more than 1 foot above original ground. Stumps and roots below ground must remain unless approved by the Engineer.
In embankment areas where the grading plane is 2 feet or more above original ground, cut off trees, stumps, and roots not more than 1 foot above original ground, except remove trees, stumps, and roots completely where work includes any of the following:

1. Bridge construction
2. Subdrainage trench excavation

Replace Section 17-2.04 CLEARING AND GRUBBING, Payment with:

Payment for Remove Tree is per the DBH shown on the drawings or as measured in the field by a City representative.

Payment for Clearing and Grubbing includes removal of trees less than 8-inches DBH.

19 EARTHWORK

Replace the 2nd paragraph in Section 19-1.01A GENERAL, Summary with:

Performing earthwork activities includes removal of unsuitable material and buried man-made objects.

Add to Section 19-1.03A CONSTRUCTION, General:

All backfill within the San Luis Obispo Creek bed must be native creek bed material or gravel in compliance with Section 13-12.02A.

All backfill within the San Luis Obispo Creek banks must be native creek bank material.

Replace the 2nd, 3rd, and 4th paragraph of Section 19-2.03B ROADWAY EXCAVATION-CONSTRUCTION, Surplus Material with:

Dispose of surplus material in an approved manner. Ensure enough material is available to complete the embankments before disposing of it.

Replace the numbered list in Section 19-2.04 ROADWAY EXCAVATION-PAYMENT with:

1. Embankment construction unless a separate bid item for constructing embankments is shown on the Bid Item List
2. Local borrow excavation

Replace the 6th paragraph in Section 19-2.04 ROADWAY EXCAVATION-PAYMENT with:

The payment quantity for ditch excavation is the volume determined from average areas and the distances between them. If the nature of a particular operation make determining the quantities of ditch excavation based on average end areas impractical, the payment quantity is the volume determined using a method best suited to obtain an accurate quantity and approved by the Engineer.

Add to the beginning of Section 19-3.03B(1) CONSTRUCTION, Structure Excavation, General:

For footings at locations with structure excavation (Type D), ground or surface water is expected to be encountered but seal course concrete is not needed.

Replace 1st sentence in the 6th paragraph in section 19-3.03B(4) CONSTRUCTION, Structure Excavation, Cofferdams with:

Remove cofferdams completely after completing substructure construction.

Add to section 19-3.04 PAYMENT:

Except at locations where seal course concrete is shown, structure excavation for footings at locations not shown as structure excavation (Type D) and where ground or surface water is encountered is paid for as structure excavation (Type D).

20 LANDSCAPE

Replace *Reserved* in Section 20-2.14 TEMPORARY IRRIGATION SYSTEMS with:

20-2.14 TEMPORARY IRRIGATION SYSTEMS

20-2.14A General

20-2.14A(1) Summary

Section 20-2.14 includes specifications for installing and removing temporary irrigation systems and applying water.

Connection to the City's potable water distribution system is available through the new quick connect couplers installed as part of the work, and through an existing City-owned quick connect coupler located at Eto Park (APN 004-741-004). Contractor shall ensure that the temporary irrigation design and use shall not impact current irrigation at Eto Park. If the designed system is found to negatively impact irrigation operations at Eto Park, it shall be revised and resubmitted such that it does not impact operations.

Contractor shall protect in place all existing irrigation facilities.

20-2.14A(2) Definitions

Not used.

20-2.01A(3) Submittals

20-2.01A(3)(a) Temporary Irrigation System Plan

At least 30 working days before installation, submit drawings and specifications showing the location, equipment, materials, and methods of construction including anchoring.

Allow 15 working days for the Engineer's review.

20-2.01A(3)(b) Watering Schedule
Submit a seasonal watering schedule for approval at least 10 working days before use of the temporary irrigation system.

Allow 5 working days for the Engineer's review.

20-2.14A(4) Quality Assurance
Not used.

20-2.14B Materials
Materials must comply with Section 20-2.

Irrigation supply line must be UV resistant.

Prioritize use of drip or microspray irrigation systems.

20-2.14C Construction
Install the temporary irrigation system per the approved plan and apply water as required to conform with Section 20-4.

When temporary irrigation system is installed on grade, anchor all equipment to the ground surface every 10 feet min. at pipe joins, and at sprinkler locations. Use a commercially available pipe anchor system. Mainline piping shall be installed out of the creek high flow area.

The system must be installed to not interfere with traffic or other construction activity.

Relocation of the temporary irrigation system may be necessary as the work progresses. Remove, store, and reconnect temporary irrigation components as necessary.

Unless authorized by the Engineer to have the temporary irrigation system to remain in place, remove components of the temporary irrigation system not more than 10 working days following the end of the three year plant establishment period.

Backfill holes, trenches, and any ground disturbance with topsoil under section 19-5. Compact sufficiently to eliminate air pockets.

20-2.01D Payment
The City does not pay for the relocation of temporary irrigation system during work progress.

Payment for the three-year maintenance period shall include the cost of water to establish and maintain the plant material. The contractor shall set up an account with the city for the landscape meters shown on the plans.

Failure to maintain the landscape area as required for any quarter will cause the forfeiture of payment for that payment period.

Payment includes removal of the temporary irrigation system.

Replace Section 20-3.01B(2)(b)(iv) GENERAL Cottonwood Cuttings with:

Cottonwood cuttings or container stock will be provided by the City. If directed by the Engineer, obtain additional cuttings from within the project area. Flag intended cuttings for approval by the Engineer prior to removal.

Cottonwood cuttings for planting in RSP must be:

1. 2.5 to 5.0-inches diameter at the base of the cutting
2. 7 to 10-feet long

Cottonwood cuttings for planting in soil must be:

1. 1.5 to 3.0-inches diameter at the base of the cutting
2. 3 to 5-feet long

All cuttings must be:

1. Reasonably straight
2. Cut with sharp equipment and clean cuts
3. Cut from live wood 2-7 years old with smooth bark which is not split or deeply furrowed

When taking cuttings, remove the apical bud (tip of the branch) plus at least several inches of the cutting. Cut the top at an angle and the bottom straight to identify the proper orientation when planting. Trim off all side branches so cutting is a single stem.

Store cuttings in an area that is dark, moist, and cool at all times.

Prior to planting, soak cuttings completely covered in water for 5-8 days. Do not let portions become exposed and sprout roots. Remove cuttings from the water prior to root emergence from the bark.

Replace Section 20-3.01C(2) PLANTING, Construction, Pruning with:

Prune the trees identified to be pruned on the Drawings and as approved by the Engineer. Prune the minimum extent necessary to complete the work.

Provide a certified arborist to prune trees in compliance with American National Standard Institute:

1. ANSI A300 – Pruning Requirements
2. ANSI Z133.1 – Safety Requirements

Prune tree roots under Section 77-1.03A(2)(g).

Provide tree care compliant with the International Society of Arboriculture Best Management Practices.

Replace Section 20-3.02C(3)(d)(iii) PLANTING WORK, Cottonwood Cuttings with:

Plant cottonwood cuttings immediately after grading operations are complete. Apply root stimulant in accordance with the manufacturer's instructions.

Plant such that 3 to 5 bud scars are exposed above ground. If more than 5 bud scars are exposed, trim off the excess.

Backfill the plant holes with excavated material after planting. Distribute the excavated material evenly within the hole without clods, lumps, or air pockets. Compact the backfill such that the cutting cannot be easily removed from the soil.

Do not damage the cutting's bark.

Cottonwood cuttings planted in soil:

1. Excavate planting holes for cottonwood cuttings perpendicular to the ground by using a steel bar, auger, post hole digger, or similar hand tool.
2. If rock or other hard material prohibits the excavation of the planting holes, excavate new holes and backfill the unused holes.
3. Plant the base of the cutting from 20 to 24-inches deep.

Cottonwood cuttings planted in RSP:

1. Plant the cuttings vertically in the RSP.
2. Plant the base of the cutting at least 12-inches below the bottom of the gravel filter.

Replace *one year* in the 2nd paragraph of Section 20-4.01A PLANT ESTABLISHMENT WORK, Summary with:

three years

Add to Section 20-4.01A PLANT ESTABLISHMENT WORK, Summary:

Plant establishment will be Type 1 plant establishment per the State Standard Specifications for three years.

Add to Section 20-4.03B PLANT ESTABLISHMENT WORK, Plant Growth Control:

Prevent invasive species from resprouting during plant establishment period. Remove any invasive species that have resprouted during the plant establishment period.

Replace *one-year* in the 2nd paragraph of Section 20-4.04 PLANT ESTABLISHMENT WORK, Payment with:

three-year

Add Section 20-5.02B(6) CREEK HABITAT BOULDERS:

Creek Habitat Boulders must comply with the requirements in the rock material requirements table in Section 72-2.02B.

Creek Habitat Boulders must be rounded to sub-angular in shape with the dimension shown on the drawings.

The dimensions of individual boulders may vary from that shown on the drawings by 8-inches in any axis. For each size class, the combined boulders supplied must average the stated size for each axis.

Add Section 20-5.02C(5) CREEK HABITAT BOULDERS:

Placement of Creek Habitat Boulders must be Method A and comply with section 72-2.

Place Creek Habitat Boulders where shown on the drawings and arrange as directed by the Engineer. Place boulders partially buried and projecting above the streambed as indicated on the drawings or as directed by the Engineer. After placement is complete, place native stream bed material to the finished lines and grades and apply water to wash small fraction bed material into all voids.

21 EROSION CONTROL

Replace Section 21-2.02C(2) MATERIALS, Local Topsoil with:

Local topsoil must comply with the specifications for selected material in section 19 and consist of the excavated topsoil, including organic material and leaf litter. Local topsoil must be obtained from the excavation of the South Street Bypass and Bianchi Lane Bypass channels.

DIVISION V SURFACINGS AND PAVEMENTS

39 ASPHALT CONCRETE

Add Section 39-3.05:

39-3.05 REMOVE BASE AND SURFACING

39-3.05A General

Section 39-3.05 includes specifications for removing base and asphalt concrete surfacing.

39-3.05B Materials

Not Used

39-3.05C Construction

Where base and surfacing are described to be removed, remove base and surfacing to a depth of at least 6 inches below the grade of the existing surfacing.

Within areas that will not be paved as part of the work:

1. Remove base and surfacing to the depth required to remove all surfacing, or at least 6 inches below the grade of existing surfacing, whichever is greater.
2. Backfill resulting holes and depressions with embankment material in accordance with Section 19.

39-3.05D Payment

Removal of base and surfacing is paid by the surface area measured along the surface.

DIVISION VI STRUCTURES

48 TEMPORARY STRUCTURES

Replace *Reserved* in Section 48-7 with:

48-7 TEMPORARY BRIDGE

48-7.01 GENERAL

48-7.01A Summary

Section 48-7 includes specifications for constructing a temporary bridge for a detour on the project at the following locations:

- Location A: Near the north end of the project at the Matthews Open Space. This temporary bridge is for APN 002-482-017 use only. No construction access is allowed.

Location B: Bianchi Lane over San Luis Obispo Creek. This temporary bridge is optional and may be used for construction access in lieu of, and in the same location as, the existing Bianchi Lane Bridge.

APN 002-482-017 may not be used for construction access or storage of materials and equipment.

You must design, construct, and maintain a temporary bridge and roadway approaches that:

1. Is safe and adequate
2. ADA compliant
3. Provides the necessary rigidity
4. Supports the loads imposed
5. Produces a finished structure that conforms to the existing approaches
6. Meets AASHTO Greenbook standards for a design speed of 25 mph

The temporary bridge at Location A may be in place only between April 15 and November 1 unless otherwise approved by the Engineer.

The contractor may elect to utilize the City-owned Bailey Bridge for the temporary structure. If City-owned Bailey Bridge is utilized, contractor must:

1. Have representative from Bailey Bridge inspect the existing condition of the bridge and provide written certification they are acceptable for use
2. Replace all members deemed not suitable for use by Bailey Bridge
3. Replace all connection hardware including bolts, washers, etc. with new materials

4. Have representative from Bailey Bridge present during erection and removal; Bailey representative must certify that the bridge was erected correctly and is safe for passage.
5. Return the bridge to the City per Section 15-1.03C after use.

48-7.01B Definitions
Not Used.

48-7.01C Submittals

48-7.01C(1) General
Submit a certificate of compliance for each delivery of structural composite lumber used in a temporary structure.

Submit a letter of certification that certifies all components of the manufactured assemblies are used in compliance with the manufacturer's recommendations.

If requested (1) submit manufacturer's data for manufactured assemblies to verify manufacturer's recommendations or (2) perform tests demonstrating adequacy of the proposed assemblies.

Submit a letter of certification for all temporary structure members with field welded splices. The letter must certify that all welding and NDT, including visual inspection, comply with the Contract and the welding standard shown on the shop drawings. The letter must be signed by an engineer who is registered as a civil engineer in the State of California. Submit the letter before placing any concrete on the temporary structure being certified.

Submit a welding certification for temporary structure with previously welded splices. The certification must:
1. Itemize the testing and inspection methods used
2. Include tracking and identifying documents for previously welded members
3. Be signed by an engineer who is registered as a civil engineer in the State of California
4. Be submitted before erecting the members

48-7.01C(2) Shop Drawings
Submit shop drawings with supporting calculations for temporary structure including roadway approach horizontal and vertical alignment.

Shop drawings and calculations must be signed by an engineer who is registered as a civil engineer in the State of California.

Submit 6 sets of temporary structure drawings and 2 sets of design calculations. Include the following:
1. Details of erection and removal activities.

2. Methods and sequences of erection and removal, including equipment.
3. Details for the stability of temporary structure during all stages of erection and removal activities.
4. Assumed soil bearing values for temporary structure footings.
5. Grade (E-value), species, and type of any structural composite lumber. Include manufacturer's tabulated working stress values for the lumber.
6. Grade and material properties of any structural steel, aluminum, or reinforced concrete used for members in the Temporary Bridge.
7. Design calculations including stresses and deflections in load carrying members.
8. Provisions for complying with temporary bracing requirements.
9. Welding standard used for welded members and welded connection (both shop and field welds).

48-7.01D Quality Control and Assurance

48-7.01D(1) Welding and Nondestructive Testing

Welding must comply with AWS D1.1 or other recognized welding standard except (1) for previously welded splices and (2) if fillet welds are used where load demands are 1,000 lb or less per inch for each 1/8 inch of fillet weld.

Perform NDT on splices made by field welding at the job site. You may use UT or RT. Each field weld and any repair made to a previously welded splice must be tested. You must select locations for testing. The length of a splice weld where NDT is to be performed must be a cumulative weld length equal to 25 percent of the original splice weld length. The cover pass must be ground smooth at test locations. Acceptance criteria must comply with the specifications for cyclically loaded nontubular connections subject to tensile stress in clause 6 of AWS D1.1. If repairs are required in a portion of the weld, perform additional NDT on the repaired sections. The NDT method chosen must be used for an entire splice evaluation, including any repairs.

For previously welded splices, you must determine and perform all necessary testing and inspection required to certify the ability of the temporary structure members to sustain the design stresses.

48-7.01D(2) Design Criteria

48-7.01D(2)(a) General

The Temporary Bridge must:

1. Fit with the area defined on the drawings.
2. Provide a traveled way width for one – 13’-7” minimum traffic lane.
3. Clear span the creek channel (Location A only).
4. Provide a minimum bridge barrier 32” tall with a TL-2 crash rating under AASHTO Manual for Assessing Safety Hardware (MASH) or NCHRP Report 350. Secured type K temporary railing or other approved system may be used.
5. Provide a non-slip surface for vehicles
6. Not encroach into the channel or into the protected tree areas shown.
7. Meet all PLAC requirements
8. Meet AASHTO Greenbook standards for a design speed of 25 mph.

48-7.01D(2)(b) Loads

Design the Temporary Bridge under latest version of the AASHTO LRFD Bridge Design Specifications and its Amendments, with the following exceptions and modifications.

The loads for the Temporary Bridge must be combined under the load combinations specified in the code to determine the load combinations creating the highest stresses and deflections.

For vertical loads, all factored dead loads and legal vehicles (HL-93 plus lane load) loads combinations must be considered. Impact must be included to all vehicular loads.

The City does not adjust payment for a Temporary Bridge with a greater vehicle load to assist in your construction of the project. If construction loads beyond the legal vehicle (HL-93 plus lane load) are to be considered, they must be applied as in consideration of the Strength II load combination.

For lateral loads in the longitudinal direction of the Temporary Bridge, the following combinations of lateral loads must be considered, and the bridge must be designed to the larger of these:

1. Braking force of the applied vehicle live loads equal to 15 percent of the vehicle live load applied at 6 foot above the deck surface of the Temporary Bridge plus Wind Loads.
2. 25 percent of the Temporary Bridge dead load, factored by 1.0, and applied at the center of gravity of the bridge.

For lateral loads in the transverse direction of the Temporary Bridge, the following combinations of lateral loads must be considered, and the bridge must be designed to the larger of these:

1. The lateral load combinations listed the Caltrans' Falsework Manual.
2. Wind Loads.
3. 25 percent of the Temporary Bridge dead load, factored by 1.0, and applied at the center of gravity of the bridge.

Wind loads must be applied according to the latest edition of the AASHTO LRFD Bridge Design Specifications and the Caltrans Amendments.

48-6.01D(2)(c) Stresses, Loadings, and Deflections

The capacities of all members and connections of the Temporary Bridge must be based on latest edition of the AASHTO LRFD Bridge Design Specifications and its Amendments with appropriate reduction factors, with the following exceptions and modifications.

Design timber connections under the Caltrans' Falsework Manual.

Expect for flexural compressive stress, structural steel members and connections may be designed under LRFD criteria from the AISC Steel Manual.

The Temporary Bridge must be mechanically connected to its foundation. The mechanical connections must be capable of resisting the lateral temporary structure design forces. Friction forces developed between the Temporary Bridge and its foundations cannot be used to resist lateral forces and are not considered as an effective mechanical connection. The mechanical connections must be designed to tolerate adjustments to the Temporary Bridge during its use as a detour.

48-7.01D(2)(c)(i) Manufactured Assemblies
Do not exceed the manufacturer's recommendations for loadings and deflections on jacks, brackets, columns, joists, and other manufactured devices.

48-7.02 MATERIALS
Not Used.

48-7.03 CONSTRUCTION

48-7.03A General
Install temporary bracing as necessary to withstand all imposed loads during erection, construction, and removal of the Temporary Bridge.

Construct the Temporary Bridge on solid footings capable of supporting the Temporary Bridge loads. Protect footings from softening and undermining. The Engineer may order you to verify the design soil bearing values do not exceed the soil capacity using load testing.

The use of temporary structure piles is not permitted.

48-7.03C Removal
Remove the Temporary Bridge such that portions of the Temporary Bridge not yet removed remain stable at all times.

Completely remove roadway approaches placed for the temporary structure.

You must remove Temporary Bridge foundations to at least 2 feet below the original ground. Remove the Temporary Bridge foundations within ditch or channel excavation limits to at least 2 feet below the bottom and side slopes of the excavated areas.

Restore the disturbed area to its original condition if not identified in the plans.

Dispose of Temporary Bridge materials and work debris in an approved manner.

48-7.04 PAYMENT
Payment for Temporary Bridge Location A includes placement and removal of the aggregate base approach ramp and temporary driving surface as shown on the drawings.

Replace Reserved in Section 48-8 with:

48-8 TEMPORARY BRIDGE STRENGTHENING

48-8.01 GENERAL

48-8.01A Summary

Section 48-8 includes specifications for designing, providing, maintaining and removal of temporary bridge strengthening for existing structures for Contractor's equipment and during material hauling in excess of the restricted bridge width and posted load over the bridge.

The existing Bianchi Lane Bridge is posted for legal loads. The left 5 feet of bridge is closed to traffic until damaged stringers are fixed. As-builts, Load Rating, and Bridge Inspection Reports are included in the Supplemental Project Information.

If full width of existing bridge is to be used, you must design, construct, and maintain a temporary bridge strengthening system that:

1. Is safe and adequate
2. Provides the necessary rigidity
3. Supports the imposed loads
4. Provides a completed structure that conforms to the current load rating

Verify the weight of loaded materials and hauling equipment by weighing when required by the Engineer. Scales will be of the individual wheel or axle type and furnished by the Contractor. The weighing will be done within the limits of the project and within the County highway right of way at a location accessible to the equipment and suitable for weighing operations. The exact location of the weighing will be determined by the Contractor.

48-8.01B Definitions

frame: Portion of a bridge between expansion joints.

48-8.01C Submittals

48-8.01C(1) General

Submit 2 copies of the initial location survey of the existing structure signed by an engineer who is registered as a civil engineer in the State.

48-8.01C(2) Shop Drawings

Submit shop drawings with design calculations for the temporary strengthening. Submit 6 copies of shop drawings and 2 copies of design calculations. Include with the submittal:

1. Descriptions and values of all loads, including construction equipment loads.
2. Descriptions of equipment to be used.
3. Details and calculations for supporting the existing structure.
4. Details and calculations for strengthening the existing structure
5. Assumed soil bearing values and design stresses for temporary supports.

6.

Calculations must show a summary of computed stresses in (1) temporary supports, (2) connections between temporary supports and the existing structure, (3) existing load-supporting members, (4) load rating calculations. Calculations must include a lateral stiffness assessment of the temporary support system.

Shop drawings and calculations must be signed by an engineer who is registered as a civil engineer in the State.

48-8.01D Quality Assurance

48-8.01D(1) General
Welding, welder qualification, and welding inspection for temporary supports must comply with AWS D1.1.

Before starting bridge removal activities, an engineer who is registered as a civil engineer in the State must inspect and certify that the temporary supports, comply with the authorized shop drawings and the materials and workmanship are satisfactory for the work. A copy of this certification must be available at the job site at all times.

48-8.02 MATERIALS

48-8.02A General
Manufactured assemblies must comply with section 48-2.02B(3)(d).
Timber Stringers must comply with Section 57.

48-8.02B Design Criteria
The Engineer does not authorize temporary support designs based on allowable stresses greater than those specified in section 48-2.02B(3).

If falsework loads are imposed on temporary supports, the temporary supports must also satisfy the deflection criteria in section 48-2.02B(3).

The temporary support system must support the minimum temporary support design loads and forces. Adjust vertical design loads for the weight of the temporary supports and construction equipment loads, and additional loads imposed by Contractor's activities. Construction equipment loads must be at least 20 psf of deck surface area of the frame involved.

Design temporary support footings to carry the loads imposed without exceeding the estimated soil bearing values or anticipated settlements. You must determine soil bearing values.

Where temporary supports are placed on the deck of an existing structure:

1. Temporary supports must bear either:
   1.1. Directly on girder stems or bent caps of the supporting structure

1.2. On falsework sills that transmit the load to the stems or cap without overstressing any member of the new or existing structure
2. Temporary supports must not induce permanent forces into the completed structure or produce cracking.
3. Place additional temporary supports beneath the existing structure where temporary support loads are imposed on the existing structure. Design and construct the additional temporary supports to support all loads from the upper structure and construction activities.

Provide additional bracing as required to withstand all imposed loads during each phase of temporary support erection and removal. Include wind loads complying with section 48-2.02B(2) in the design of additional bracing.

Mechanically connect (1) the existing structure to the temporary supports and (2) the temporary supports to their foundations. Mechanical connections must be capable of resisting the lateral design forces. Friction forces developed between the existing structure and temporary supports (1) are not considered an effective mechanical connection and (2) must not be used to reduce lateral forces.

Design mechanical connections to accommodate adjustments to the temporary support frame during use.

If the concrete is to be prestressed, design temporary supports to support changes to the loads caused by prestressing forces.

Temporary supports must comply with the specifications for falsework in section 48-2.02B(4).

48-8.03 CONSTRUCTION
Construct temporary supports under the specifications for falsework in section 48-2.03C.

Remove temporary supports under the specifications for falsework in section 48-2.03D.

Remove attachments from the existing structure. Restore concrete surfaces to original conditions except where permanent alterations are shown.

48-8.04 PAYMENT
Not Used

49 PILING

Add to Section 49-1.03 CONSTRUCTION:

Expect difficult pile installation due to the presence of groundwater, overhead utilities, clay, sandy clay and clayey sand, moderately hard to hard bedrock and boulders.

Temporary casings will likely need to be provided and embedded into the weathered bedrock to help control groundwater and support the hole through the alluvium. Slurry can be considered in lieu of casings at your discretion.

Replace *Reserved* in Section 49-3.02A(3)(a) CAST IN DRILLED HOLE CONCRETE PILING, Submittals, General with:

Submit as an informational submittal for the proposed drilling equipment operational capacities or descriptions for:

1. Downward force in lb
2. Torque in ft-lb
3. Rotational speed in rpm
4. Rate of penetration in ft/hr
5. Number and type of drilling cutters or drilling teeth on drilling tool

Add to Section 49-3.02B(6)(c) CAST-IN-DRILLED-HOLE CONCRETE PILING, Materials, Synthetic Slurry:

The synthetic slurry must be one of the materials shown in the following table:

Material	Manufacturer
SlurryPro CDP	KB INTERNATIONAL LLC 735 BOARD ST STE 209 CHATTANOOGA TN 37402 (423) 266-6964
Super Mud	PDS CO INC 105 W SHARP ST EL DORADO AR 71731 (870) 863-5707
Shore Pac GCV	CETCO CONSTRUCTION DRILLING PRODUCTS 2870 FORBS AVE HOFFMAN ESTATES IL 60192 (800) 527-9948
Terragel or Novagel Polymer	GEO-TECH SERVICES LLC 220 N. ZAPATA HWY STE 11A-449A LAREDO TX 78043 (210) 259-6386
BIG FOOT	MATRIX CONSTRUCTION PRODUCTS 50 S MAIN ST STE 200 NAPERVILLE IL 60540 (877) 591-3137
POLY-BORE	BAROID INDUSTRIAL DRILLING PRODUCTS 3000 N SAM HOUSTON PKWY EAST HOUSTON TX 77032 (877) 379-7412

Use synthetic slurries in compliance with the manufacturer's instructions. Synthetic slurries shown in the above table may not be appropriate for a given job site.

Synthetic slurries must comply with the City's requirements for synthetic slurries to be included in the above table. The requirements are available from the Offices of Structure Design, P.O. Box 168041, MS# 9-4/11G, Sacramento, CA 95816-8041.

SlurryPro CDP synthetic slurry must comply with the requirements shown in the following table:

SlurryPro CDP

Quality characteristic	Test method	Requirement
Density During drilling (pcf) Before final cleaning and immediately before placing concrete (pcf)	Mud weight (density), API RP 13B-1, section 4	 ≤ 67.0[a] ≤ 64.0[a]
Viscosity During drilling (sec/qt) Before final cleaning and immediately before placing concrete (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	 50–120 ≤ 70
pH	Glass electrode pH meter or pH paper	6.0–11.5
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	 ≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a saltwater environment. The allowable density of slurry in a saltwater environment may be increased by 2 pcf.

Super Mud synthetic slurry must comply with the requirements shown in the following table:

Super Mud

Quality characteristic	Test method	Requirement
Density During drilling (pcf) Before final cleaning and immediately before placing concrete (pcf)	Mud weight (density), API RP 13B-1, section 4	 ≤ 64.0[a] ≤ 64.0[a]
Viscosity During drilling (sec/qt) Before final cleaning and immediately before placing concrete (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	 32–60 ≤ 60
pH	Glass electrode pH meter or pH paper	8.0–10.0
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	 ≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a saltwater environment. The allowable density of slurry in a saltwater environment may be increased by 2 pcf.

Shore Pac GCV synthetic slurry must comply with the requirements shown in the following table:

Shore Pac GCV

Quality characteristic	Test method	Requirement
Density During drilling (pcf) Before final cleaning and immediately before placing concrete (pcf)	Mud weight (density), API RP 13B-1, section 4	 ≤ 64.0[a] ≤ 64.0[a]
Viscosity During drilling (sec/qt) Before final cleaning and immediately before placing concrete (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	 33–74 ≤ 57
pH	Glass electrode pH meter or pH paper	8.0–11.0
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	 ≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a saltwater environment. The allowable density of slurry in a saltwater environment may be increased by 2 pcf.

Terragel or Novagel Polymer synthetic slurry must comply with the requirements shown in the following table:

Terragel or Novagel Polymer

Quality characteristic	Test method	Requirement
Density During drilling (pcf) Before final cleaning and immediately before placing concrete (pcf)	Mud weight (density), API RP 13B-1, section 4	 ≤ 67.0[a] ≤ 64.0[a]
Viscosity During drilling (sec/qt) Before final cleaning and immediately before placing concrete (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	 45–104 ≤ 104
pH	Glass electrode pH meter or pH paper	6.0–11.5
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	 ≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a saltwater environment. The allowable density of slurry in a saltwater environment may be increased by 2 pcf.

BIG-FOOT synthetic slurry must comply with the requirements shown in the following table:

BIG-FOOT

Quality characteristic	Test method	Requirement
Density During drilling (pcf) Before final cleaning and immediately before placing concrete (pcf)	Mud weight (density), API RP 13B-1, section 4	 ≤ 64.0[a] ≤ 64.0[a]
Viscosity During drilling (sec/qt) Before final cleaning and immediately before placing concrete (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	 30–125 55-114
pH	Glass electrode pH meter or pH paper	8.5–10.5
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	 ≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a saltwater environment. The allowable density of slurry in a saltwater environment may be increased by 2 pcf.

POLY-BORE synthetic slurry must comply with the requirements shown in the following table:

POLY-BORE

Quality characteristic	Test method	Requirement
Density During drilling (pcf) Before final cleaning and immediately before placing concrete (pcf)	Mud weight (density), API RP 13B-1, section 4	 62.8-65.8[a] 62.8-64.0[a]
Viscosity During drilling (sec/qt) Before final cleaning and immediately before placing concrete (sec/qt)	Marsh funnel and cup. API RP 13B-1, section 6.2	 50–80 50-80
pH	Glass electrode pH meter or pH paper	7.0–10.0
Sand content, percent by volume Before final cleaning and immediately before placing concrete (%)	Sand, API RP 13B-1, section 9	 ≤ 1.0

NOTE: Slurry temperature must be at least 40 °F when tested.
[a]If authorized, you may use slurry in a saltwater environment. The allowable density of slurry in a saltwater environment may be increased by 2 pcf.

Replace Section 49-3.02B(7) CAST-IN-DRILLED-HOLE CONCRETE PILING, Materials, Reserved with:

49-3.02B(7) Slurry Cement Backfill

Slurry cement backfill must comply with section 19-3.02E.

Add to Section 49-3.02C(1) CAST-IN-DRILLED-HOLE CONCRETE PILING, Construction, General:

If the piling center-to-center spacing is less than 4 pile diameters, do not drill holes or drive casing for an adjacent pile until 24 hours have elapsed after concrete placement in the preceding pile and your prequalification test results for the concrete mix design show that the concrete will attain at least 1800 psi compressive strength at the time of drilling or driving.

For Pier 2, construct outer piles before drilling the middle pile.

Drilling equipment must be equipped with instrumentation to measure accurately the actual downward force in pounds. Instrumentation must be visible for reading.

Add to Section 49-3.02C(2) CAST-IN-DRILLED-HOLE CONCRETE PILING, Construction, Drilled Holes:

Core barrels and rock augers and other tools are necessary to assist in advancing drilled holes.

Replace the 1st paragraph of section 49-3.02C(7) CAST-IN-DRILLED-HOLE CONCRETE PILING, Construction, Construction Joint with:

Section 49-3.02C(7) applies to CIDH concrete piles when a construction joint is shown.

Replace item 5 in the list in the 2nd paragraph of section 49-3.02C(7) CAST-IN-DRILLED-HOLE CONCRETE PILING, Construction, Construction Joint with:

5. Be corrugated metal pipe and placed in a drilled hole. Casings placed in a drilled hole must comply with section 49-3.02C(6).

Replace Section 49-3.02D CAST IN DRILLED HOLE CONCRETE PILING, Payment with:

The payment quantity for Cast-In-Drilled-Hole Concrete Piling is the length measured along the longest side of the pile from the specified tip elevation shown to the plane of pile cutoff.

Changed quantity payment adjustments under Section 9-1.06 of the Standard Specifications shall not apply to this bid item.

50 PRESTRESSING CONCRETE

Replace the 2nd paragraph of section 50-1.01C(3) GENERAL, Submittals, Shop Drawings with:

For initial review, submit 6 copies.

51 CONCRETE STRUCTURES

the second paragraph of Add to Section 51-1.01C(1) GENERAL, Submittals:

If the methacrylate crack treatment is applied to a bridge deck within 100 feet of a residence, business, or public space, submit a public safety plan. Include with the submittal:

1. Copy of public notification letter with a list of delivery addresses and posting locations. The letter must describe the work to be performed and state the treatment work locations, dates, and times. Deliver copies of the letter to residences and businesses within 100 feet of the treatment work and to local fire and police officials, at least 7 calendar days before starting treatment activities. Post a copy of the letter at the job site.
2. Airborne emissions monitoring plan. Plan must include monitoring point locations. A CIH certified in comprehensive practice by the American Board of Industrial Hygiene must prepare and execute the plan.
3. Action plan for protecting the public if levels of airborne emissions exceed permissible levels.
4. Copy of the CIH's certification.

After completing methacrylate crack treatment activities, submit results from monitoring production airborne emissions as an informational submittal.

Replace the 2nd paragraph of section 51-1.01C(1) GENERAL, Submittals, General with:

Submit a deck placement plan for concrete bridge decks. Include in the placement plan your method and equipment for ensuring that the concrete bridge deck is kept damp by misting immediately after finishing the concrete surface.

Replace *Reserved* in Section 51-1.01D(1) GENERAL, Quality Assurance, General with:

The job site must have at least 4 airborne emissions monitoring points, including the mixing point, application point, and point of nearest public contact. Monitor airborne emissions during methacrylate crack treatment activities.

Replace the 1st paragraph of section 51-1.03F(5)(b)(i) CONSTRUCTION, Finishing Concrete, Bridge Deck Surface Texture, General with:

Except for bridge widenings, texture the bridge deck surfaces longitudinally by grinding and grooving.

Add to Section 51-1.04 PAYMENT:

Bar reinforcing steel is included in the payment for “structural concrete, headwall”.

Add to Section 51-4.02D(3) MATERIALS, Fabricating Precast Concrete Members, , Slabs:

Coefficient of friction requirements do not apply for PC concrete slabs.

Add to Section 51-4.03C CONSTRUCTION, Slabs:

Wait 90 calendar days after the girders have been cast before placing the bottom portion of diaphragm concrete.

Wait at least 1 day after the bottom portion of diaphragm concrete and the deck concrete have been placed before placing the remaining concrete diaphragm.

Wait at least 10 calendar days after the remaining portion of diaphragm concrete is placed before vehicle loading the spans.

Add to Section 51-7.01D MINOR STRUCTURES-GENERAL, Payment:

Bar reinforcing steel is included in the payment for "minor concrete (minor structure) (crash cushion pad)".

60 EXISTING STRUCTURES

Add to Section 60-2.01A STRUCTURE REMOVAL-GENERAL:

Remove the following structure:

Bridge No./Structure name	Description of work
Bridge No. 49C0381/San Luis Obispo Creek Bridge	Remove entire bridge completely, including but not limited to steel plate girders, timbers deck and stringers, wearing surface, concrete footings, abutments, wingwalls, and barrier rail

Add to Section 60-2.02A(1) BRIDGE REMOVAL, General, Summary:

Provide protective covers preventing material, equipment, and debris from falling into the creek.

Replace #6 in the 2nd paragraph in Section 60-2.02A(3) BRIDGE REMOVAL, Submittals with:

6. Methods for preventing material, equipment, and debris from falling onto traffic or into the creek.

DIVISION VII DRAINAGE FACILITIES

64 PLASTIC PIPE

Add to Section 64-2.02B PLASTIC PIPE-MATERIALS, Backfill:

Controlled low-strength material and slurry cement backfill may not be used within San Luis Obispo Creek except as shown on the drawings.

Add to Section 64-2.04 PLASTIC PIPE, Payment:

Payment for bid item HDPE Pipe includes any temporary diversion of existing drainage facilities necessary to install the HDPE Pipe and all associated structures.

65 CONCRETE PIPE

Replace Section 65-2.04 REINFORCED CONCRETE PIPE, Payment with:

Payment for bid item Reinforced Concrete Pipe includes any temporary diversion of existing drainage facilities necessary to install the Reinforced Concrete Pipe and all associated structures.

DIVISION VIII MISCELLANEOUS CONSTRUCTION

72 SLOPE PROTECTION

Add to Section 72-2.01 ROCK SLOPE PROECTION-GENERAL:

All RSP is to be soil-filled and vegetated (VRSP).

The gravel filter is associated with streambank rock slope protection (RSP) revetments and used as a buffer between native base soil and RSP to reduce base soil migration and promote free passage of subsurface drainage.

Gravel filter includes its placement on streambank subgrade as shown.

Add Section 72-2.02D ROCK SLOPE PROTECTION-MATERIALS, Gravel Filter:

72-2.02D Gravel Filter:

The gravel filter will consist of hard, durable, clean and washed, gravel, cobble, crushed stone, crushed rock, or any combination of these free from organic material, clay balls, or other deleterious substances.

The aggregate used in the gravel filter must have a durability index not less than 40 and must contain at least 90 percent crushed particles when tested under California Test 205.

The percentage composition by weight of gravel filter in place must comply with the grading requirements shown in the following table:

Gravel Filter Gradation Requirements

Sieve Size	Percent (%) Passing
6”	95-100
4”	65-95
3”	30-65
2”	20-35
1.5”	10-25
1”	0-10

Add to the numbered list in Section 72-2.03C ROCK SLOPE PROECTION-CONSTRUCTION, Placement Method B:

3. As rock is being placed, fill the voids in the RSP with cohesive native soil from the project excavations. Fill voids with soil when rock has been placed to a thickness no more than 1.5 times the nominal size of the rock being placed. Wash the placed soil with water to fill voids and to provide for full rock-to-rock contact for the subsequent rock layer. Repeat rock placement and soil-filling in layers until the full thickness of the RSP layer is accomplished. Place a final layer of soil a minimum of 3" thick over the placed RSP. Compact the final layer of soils with tracked construction equipment.

4. Vegetate the RSP as indicated on the drawings.

Add Section 72-2.03D ROCK SLOPE PROECTION-CONSTRUCTION, Gravel Filter:
Deliver uniform mixture of gravel filter to the site. Spread uniform mixture in layers and shape to thickness and limits shown using suitable equipment.

Local surface irregularities of the gravel filter aggregate must not vary from the planned slope by more than 2 inches as measured at right angles to the slope.

Add to Section 72-2.04 ROCK SLOPE PROTECTION-PAYMENT:Payment for bid items Rock Slope Protection and Gravel Filter include all materials, labor, tools, and equipment necessary for the work, including excavation, soil backfill, and grout.
Gravel Filter is paid by the cubic yard. the payment quantity is the volume determined from the dimensions shown.

75 MISCELLANEOUS METAL

Add to the list in the 2nd paragraph of Section 75-3.01A MISCELLANEOUS BRIDGE METAL-GENERAL, Summary:

6. pipe support backets and anchor bolts

77 LOCAL INFRASTRUCTURE

Replace Section 77-1.03A(2)(a) CONSTRUCTION, Protection Fences with:
Comply with Section 16-2.03.

Replace Section 77-1.03A(2)(g) CONSTRUCTION, Excavation, Grading, Trenching, and Boring with:
No earthwork, including trenching of any depth, or grading cuts or fills, will be allowed within the dripline of trees or shrubs to be saved, except as shown on the drawings or otherwise approved by the Engineer.

If you plan to trench, cut, or fill within the drip line of trees to be saved, layout trench location or limits of cut or fill with chalk or paint, notify the Engineer for review and approval before earthwork begins. If the Engineer approves earthwork within the dripline of trees or shrubs to be saved, earthwork must be done in the manner approved by the Engineer.

During excavation if any roots are encountered less than 1-inch in diameter, the root may be cut by hand tools, leaving a clean cut.

During excavation if any roots are encountered greater than 1-inch in diameter, the root must be protected from:

1. Scarring
2. Drying
3. Then tunneled under.

Except as shown on the drawings. If the roots cannot be protected, you must schedule the Engineer and City Arborist to review excavation and give direction.

Where tree roots are identified on the drawings to be pruned, pruning must be done by a certified arborist per International Society of Arboriculture (ISA) standards.

Shade roots from direct sunlight when exposed by earthwork. Prior to backfilling the Engineer must review pruned or cut roots. Roots must be backfilled within 24 hours of exposure.

All directional boring within dripline of trees to be saved must maintain a minimum depth of 5 feet.

If severe tree or root damage occurs, you may be fined in compliance with the City's tree ordinance.

Add to the numbered list in Section 77-2.01 WATERLINES-GENERAL:

4. Temporary Water Service. The Contractor shall furnish, install, maintain, and remove all temporary pipe and connections during the period of the temporary water service.

Add Section 77-2.01A WATERLINES-GENERAL, Submittals:

77-2.01A Submittals

Submit a temporary water service plan for a temporary water system to provide potable water service to private property APN 002-482-071 to maintain water service for the entire duration of the project. The plan must identify:

1. The type of system, including proposed materials and point of connection to the existing water system, including but not limited to appurtenances and temporary thrust blocks that may be required,
2. The methods of construction, including installation and removal,
3. The maintenance and operation procedures to be used to maintain service throughout the duration of construction,
4. The name and phone number of a contact person and at least one alternate who shall be available on a twenty-four (24) hour basis for repair and/or maintenance of the temporary water system.

Submit the temporary water service plan at least 30 working days before installation of the temporary water system.

Allow 15 working days for the Engineer's review.

Add to Section 77-2.02C WATERLINES-MATERIALS, Joints and Fittings:

All mechanical joint fittings must be restrained with mechanical joint restraints.

Add Section 77-2.02H WATERLINES-MATERIALS, Flexible Expansion Joint:

77-2.02H Flexible Expansion Joint

All flexible expansion joints shall be the Force Balanced FLEX-TEND as manufactured by EBAA Iron, Inc. Eastland, TX., U.S.A, or a City approved equal, and shall comply with the following:

1. Flexible expansion joints shall be installed in the locations indicated on the drawings and shall be manufactured of ductile iron conforming to the material requirements of ASTM A536 and ANSI/AWWA C153/A21.53. Foundry certification of material shall be readily available upon request.

2. Each flexible expansion joint shall be pressure tested prior to shipment against its own restraint to a minimum of 250 PSI. A minimum 2:1 safety factor, determined from the published pressure rating, shall apply.

3. Each flexible expansion joint shall consist of an expansion joint designed and cast as an integral part of a ball and socket type flexible joint, having a minimum per ball deflection of: 25º and 8-inches minimum expansion. The flexible expansion fitting shall not expand or exert an axial imparting thrust under internal water pressure. The flexible expansion fitting shall not increase or decrease the internal water volume as the unit expands or contracts.

4. All internal surfaces (wetted parts) shall be lined with a minimum of 15 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C213. Sealing gaskets shall be constructed of EPDM. The coating shall meet ANSI/NSF-61.

5. Exterior surfaces shall be coated with a minimum of 6 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C116/A21.16.

6. The expansion joint assembly shall be supplied factory pre-set at the midpoint of its movement capability.

7. Manufacturer's certification of compliance to the above standards and requirements shall be readily available upon request. The purchaser (or owner) shall reserve the right to inspect the manufacturer's facility for compliance.

Add Section 77-2.02I WATERLINES-MATERIALS, Linear Expansion Joint:

77-2.02I Linear Expansion Joint

All linear expansion joints shall be the Force Balanced EX-TEND as manufactured by EBAA Iron, Inc. Eastland, TX., U.S.A, or a City approved equal, and shall comply with the following:

1. Linear expansion joints shall be installed in the locations indicated on the drawings and shall be manufactured of ductile iron conforming to the material requirements of ASTM A536 and ANSI/AWWA C153/A21.53. Foundry certification of material shall be readily available upon request.

2. Each expansion joint shall be pressure tested prior to shipment against its own restraint to a minimum of 250 PSI. A minimum 2:1 safety factor, determined from the published pressure rating, shall apply.

3. Each expansion joint shall have 8-inches minimum expansion. The expansion fitting shall not expand or exert an axial imparting thrust under internal water pressure. The expansion fitting shall not increase or decrease the internal water volume as the unit expands or contracts.

4. All internal surfaces (wetted parts) shall be lined with a minimum of 15 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C213. Sealing gaskets shall be constructed of EPDM. The coating shall meet ANSI/NSF-61.

5. Exterior surfaces shall be coated with a minimum of 6 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C116/A21.16.

6. The expansion joint assembly shall be supplied factory pre-set at the midpoint of its movement capability.

7. Manufacturer’s certification of compliance to the above standards and requirements shall be readily available upon request. The purchaser (or owner) shall reserve the right to inspect the manufacturer’s facility for compliance.

Add to Section 77-2.04 WATERLINES-PAYMENT:

In the event that the Contractor fails to repair and/or maintain the temporary water system and the City is required to perform repairs and/or maintenance, all costs associated with said repairs and/or maintenance shall be deducted from the Contract amount.

DIVISION IX TRAFFIC CONTROL DEVICES

83 RAILINGS AND BARRIERS

Replace Section 83-4 with:

83-4 CRASH CUSHIONS

83-4.01 GENERAL

83-4.01A General
Section 83-4 includes specifications for constructing crash cushions.

83-4.01B Materials
The permanent crash cushion shall consist of the following or a City approved equal.

1. CRASH CUSHION (QUADGUARD II 1-BAY).
   Type Quadguard II 1-bay is a potentially reusable, re-directive, non-gating crash cushion for roadside features of 24” or greater in width with use of an approved transition. Type Quadguard II 1-bay must comply with the descriptions shown in the following table:

Backup Width	Manufacturer’s Product Description
24-inch	00QG24024

83-4.01C Construction
Install Type QuadGuard II 1-bay crash cushion under the manufacturer's installation instructions. The Type QuadGuard II 1-bay must be a Tension Strut Backup or a Concrete Backup. A Transition Panel or Side Panel must be used on each side of the backup. Type QuadGuard II 1-bay should only be assembled on an existing or freshly placed and cured concrete base, and the location and orientation of the concrete base and attenuator must comply with the drawings. Concrete anchorage devices used for attaching the crash cushion to the base slab must be limited to those provided by the manufacturer. The concrete anchor slab, including bar reinforcing steel, must comply with Section 51 and 52.

83-4.01D Payment
Not Used

84 MARKINGS

Add to Section 84-2.03C Application of Stripes and Markings:
Preformed thermoplastic is only allowed with the approval of the Engineer.

DIVISION XI MATERIALS

90 CONCRETE

Add to Section 90-1.01C(6) Mix Design:

Concrete must contain a maximum of 15% pozolone or fly ash. Coarse aggregate for concrete must comply with the gradation specifications for the 1-inch x No. 4 primary aggregate nominal size.

DIVISION XIII APPENDICES

APPENDIX A - FORM OF AGREEMENT

THIS AGREEMENT, made on this _____ day of _____, 20__, by and between the City of San Luis Obispo, a municipal corporation and charter city, San Luis Obispo County, California (hereinafter called the Owner) and COMPANY NAME (hereinafter called the Contractor).

WITNESSETH:

That the Owner and the Contractor for the consideration stated herein agree as follows:

ARTICLE 1, SCOPE OF WORK: The Contractor shall perform everything required to be performed, shall provide and furnish all of the labor, materials, necessary tools, expendable equipment, and all utility and transportation services required to complete all the work of construction of

NAME OF PROJECT, SPEC NO.

in strict compliance with the plans and specifications therefor, including any and all Addenda, adopted by the Owner, in strict compliance with the Contract Documents hereinafter enumerated.

It is agreed that said labor, materials, tools, equipment, and services shall be furnished and said work performed and completed under the direction and supervision and subject to the approval of the Owner or its authorized representatives.

ARTICLE II, CONTRACT PRICE: The Owner shall pay the Contractor as full consideration for the faithful performance of this Contract, subject to any additions or deductions as provided in the Contract Documents, the contract prices as follows:

Item No.	Item	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
1.					
2.					
3.					

BID TOTAL: $ .00

Payments are to be made to the Contractor in compliance with and subject to the provisions embodied in the documents made a part of this Contract.

Should any dispute arise respecting the true value of any work omitted, or of any extra work which the Contractor may be required to do, or respecting the size of any payment to the Contractor, during the performance of this Contract, said dispute shall be decided by the Owner and its decision shall be final, and conclusive.

ARTICLE III, COMPONENT PARTS OF THIS CONTRACT: The Contract consists of the following documents, all of which are as fully a part thereof as if herein set out in full, and if not attached, as if hereto attached:

1. Notice to Bidders and Information for Bidders
2. Standard Specifications and Engineering Standards
3. Special Provisions, any Addenda, Plans and Contract Change Orders
4. Caltrans Standard Specifications and Standard Plans 2015
5. Accepted Bid and Bid Bond
6. List of Subcontractors
7. Public Contract Code Sections 10285.1 Statement
8. Public Contract Code Section 10162 Questionnaire
9. Public Contract Code Section 10232 Statement
10. Labor Code Section 1725.5 Statements
11. Bidder Acknowledgements
12. Qualifications
13. Non-collusion Declaration
14. Agreement and Bonds
15. Insurance Requirements and Forms

ARTICLE IV INDEMNIFICATION: The Contractor shall indemnify, defend with legal counsel approved by City, and hold harmless City, its officers, officials, employees and volunteers from and against all liability, loss, damage, expense, cost (including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with the Contractor's negligence, recklessness or willful misconduct in the performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole or active negligence or willful misconduct of the City. Should conflict of interest principles preclude a single legal counsel from representing both the City and the Contractor, or should the City otherwise find the Contractor's legal counsel unacceptable, then the Contractor shall reimburse the City its costs of defense, including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation. The Contractor shall promptly pay any final judgment rendered against the City (and its officers, officials, employees and volunteers) with respect to claims determined by a trier of fact to have been the result of the Contractor's negligent, reckless or wrongful performance. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this Agreement.

The Contractor obligations under this section apply regardless of whether such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an Indemnitee. However, without affecting the rights of the City under any provision of this agreement, the Contractor shall not be required to indemnify and hold harmless the City for liability attributable to the active negligence of City, provided such active negligence is determined

by agreement between the parties or by the findings of a court of competent jurisdiction. In instances where the City is shown to have been actively negligent and where the City's active negligence accounts for only a percentage of the liability involved, the obligation of the Contractor will be for that entire portion or percentage of liability not attributable to the active negligence of the City.

ARTICLE V. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid of said Contractor, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said bid conflicting herewith.

IN WITNESS WHEREOF, the parties to these presents have hereunto set their hands this year and date first above written.

CITY OF SAN LUIS OBISPO
A Municipal Corporation

_____
Derek Johnson, City Manager

APPROVED AS TO FORM

_____
J. Christine Dietrick
City Attorney

CONTRACTOR:

Name of Company

By:_____
Name of CAO/President
Its: CAO/PRESIDENT