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CITY OF PETALUMA

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ADDENDUM NO. 2

First and F Street Bridge Replacement Project City Project Number C16402141

November 3, 2021

This Addendum No. 2 modifies the Bidding Documents for the First and F Street Bridge Replacement Project C16402141. This Addendum shall become part of the Contract and all provisions of the Contract shall apply thereto. Bidders shall acknowledge all Addendums in the Bid Schedule.

RESPONSE TO QUESTIONS

1. Traffic Control: Confirm if 1st & F Street intersection can be closed for an extended period of construction?

RESPONSE: The intersection First and F St. can be closed with an approved Transportation Control Plan. Pedestrian access should be maintained on the west side.

2. Dewatering: What is the quantity and characteristics of the dewatering needed? RESPONSE: See attached Dewatering Memo that provides preliminary estimates of groundwater inflow to trenches, based on assumptions on trench size, width, depth, groundwater levels, and soil permeability characteristics, using information contained in the RGH Geotechnical Report. The Memo estimates groundwater inflow at 1-2 gallons per minute (GPM) or approximately 1,500 to 3,000 gallons per day (24/7). The Contractor is responsible for the development and submittal of a Dewatering Plan. The City of Santa Rosa Laguna Wastewater Treatment Plant on Llano Road has tentatively agreed to accept this water, provided that the water is settled to drop sediment and discharged directly into their headworks. The contact at the Laguna Treatment Plant is Patrick Pulis, Pretreatment Inspector, ph. (707) 543-3451, ppulis@srcity.org.

3. Type of Pile: The Plans, Specifications, and Bid Schedule are unclear as to the type of pile to be used, pile diameter and total length of pile used for Bidding and Measurement and Payment purposes.

RESPONSE: The Steel Torque-Down pile type and diameter as shown on detail 1A/S4.1, shall be used. Steel Torque-Down piles are considered to be a type of Drilled Displacement Piles and for purposes of this Project and Bidding and Construction, are considered to be one and the same. Where discrepancies occur between the Civil and Structural Plans, Construction Specifications, and Bid Schedule, the Structural Plans shall prevail. The Bid Schedule is revised to provide clarity on pile depths, indicator and production piles, unit measurement and payment, and related items on Pile Installation, as further clarified in the next several question responses.

4. Pile Installation: Can the pile depths be confirmed/estimated prior to indicator piles? RESPONSE: Yes, the bid schedule and structural plans will be revised to confirm the total depth of the piles.

5. Pile Installation: Where will indicator piles be located?

RESPONSE: The location of the indicator piles (or sacrificial piles) shall be determined by the contractor. Specification section 31 6213 section 3.4B indicates that "piles installed for testing shall be installed at locations where they will not interfere with installation of production piles". However, the specifications also indicate test piles shall be installed with same procedures/final conditions as production piles.

6. Pile Installation: Will each pile need to be tested?

RESPONSE: The specifications indicate the testing requirements. A testing procedure shall be submitted by the contractor to the City and design team for approval per section 31 6213 Section 3.4A. Proof testing of production piles is not required per specification 31 6213 Section 3.5A. Dynamic load testing of the production piles is required with pile driving analyzer (PDA) and Case Piles Wave Analysis Program (CAPWAP) in accordance with ASTM D4945.

7. Pile Installation: Confirm length of pile? RESPONSE: See response to item 4.

8. Arch Dimensions: Can arch dimension be confirmed? RESPONSE: Arch Dimensions are as shown on 1/S3.1.

9. Demolition: Can demolition be conducted prior to permitting window starting June 15th to allow for ordering of materials (such as piles)?

RESPONSE: The Contractor's Project Schedule submittal and schedule updates, and the Contractor's Demolition Plan submittal shall show the calendar sequencing of work, including demolition and dewatering work. Per regulatory permit conditions, installation of sheet piles can only begin on June 15, and they must be removed by October 15 (or sooner, depending on weather and stream flow conditions). Demolition work that can be accomplished from street level, such as removal of bridge decking and upper beams, and can be completed based on the approved Contractor schedule. No mechanized equipment can be deployed in the live stream channel prior to deployment of the sheetpile and dewatering work, but on-foot channel entry and work using hand tools at low tide or using small craft can be considered. Use of street level equipment (such as a "Cherry" picker) will be considered and coordinated with the City.

10. Environmental Work (Riparian Mitigation Plan): Can environmental work be conducted as a bid alternative?

RESPONSE: Yes, the Riparian Mitigation Plan is already shown on the Bid Schedule as an Additive Alternative, acceptance is at the sole discretion of the City of Petaluma.

11. Earthwork Quantity: Confirm earthwork quantity on Drawing C-2.

RESPONSE: The quantities shown on this sheet are incorrect. The Contractor is responsible for the determination and verification of all earthwork quantity determinations, including import and export fill quantities.

12. Limits of Work: Can the limits of work shown on the Plans be modified to reflect a larger area available with the now allowed larger closure of the First & F Street intersection? RESPONSE: Contractor may revise the limits of work and installation of temporary construction fencing with City approval to reflect a larger work area, including uses for mobilization and equipment and materials storage areas.

13. Trench and Slope Excavation: Can the trench and slope excavation details shown on the Plans be modified?

RESPONSE: Yes, these details were provided to demonstrate design intent and for regulatory permitting purposes. The Contractor's Trench Safety Plan submittal shall show any proposed and modified trench and excavation details, including depths, widths, and slope angles. The Contractor is solely responsible for trench and excavation slope safety and must meet all Cal-OSHA and OSHA requirements.

14. Insurance: Does the \$1,000,000 Garage Liability, Garage Keepers Insurance & Technology Professional Liability apply to this project? RESPONSE: No

15. Bid Schedule: Item 15 has a quantity of 2 but the unit is Lump Sum; is the quantity or unit correct? RESPONSE: Bid Schedule attached to Bid Addendum #1 has been revised.

This Addendum No. 2 shall become part of the Contract and all provisions of the Contract shall apply thereto. Bidders shall acknowledge all Addendums in the Bid Schedule.

All other items of the documents shall remain unchanged. A signed copy of this Addendum and the attached acknowledgement form shall be attached to the bid proposal. Failure to do so may cause rejection of your bid as being non-responsive.

Bids will be emailed into the City Clerk, and original copies of the sealed bids will be mailed in.

City of Petaluma,

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Ken Eichstaedt, P.E. T.E. Senior Traffic Engineer Public Works & Utilities Department

ADDENDUM NO. 2

FIRST AND F STREET BRIDGE REPLACEMENT PROJECT City Project Number C16402141

November 3, 2021

ACKNOWLEDGEMENT

Receipt of Addendum No. 2 is hereby acknowledged by _____

on the _____ day of _____, 2021.

By: ____

Signature

(Contractor's Name)

Title

Company

Technical Memorandum

Date: Oct. 26, 2021

To: Ken Eichstaedt, P.E., T.E., City of Petaluma

From: S. Temple P.E. Sr. Engineer/Hydrologist- Questa Engineering

CC: J. Peters, Principal/Project Manager

Subject: First & F Street Bridge Replacement Project- De-watering

Construction of the pier cap/grade beam outboard of the existing wood bridge piers and lagging walls will require a working trench in order to form, install rebar and pour the concrete foundation. Based on the Project geotechnical report, the trench will be below daily tidal height elevations and below the groundwater table. Dewatering will be necessary to isolate the work area from tidal inflow, manage any storm water, and remove inflowing groundwater. Installation of sheet piles and coffer dams are allowed as described in the regulatory permit conditions.

Although there is a Sanitary Sewer Man Hole (SSMH) located immediately adjacent to the work area, it is likely that groundwater salinities will be too high for acceptance by the City of Petaluma sewage treatment plant. Discharge of the dewatering flow to the creek downstream of the project is <u>not authorized</u> in the issued regulatory permits. The Contractor prepared dewatering plan should therefore consider the need for the installation and use of a FRAC tank i.e. (Baker tank) allowing for sediment settlement, with subsequent transport of the water to the City of Santa Rosa's Regional Laguna Wastewater Treatment Plant on Llano Road. This treatment plant has indicated that they will accept the groundwater-dewater.

An estimate of groundwater inflow into the trenches was made for initial planning purposes and to provide a basis for discussions with the wastewater treatment plants. The estimate was made for an excavation that would be 34' by 30', approximately 5' below groundwater elevation, using Darcy's law, a hydraulic conductivity of 1.25×10^{-6} and hydraulic slope of 30% and accounting for upwelling in the trench bottom. The groundwater inflow was estimated to be approximately 1-2 gallons per minute or roughly 1,500 to 3,000 gallons per day. For discussion purposes with the Laguna treatment plant, we reported what we believe to be a conservative volume of 8,000 to 10,000 gallons per day, and disclosed that the groundwater would be saline because of proximity to the Petaluma River. Considering the need to pump and store water evenings and weekends, we assumed a 16,000 to 21,000 FRAC tank would be needed, with daily trips to the treatment plant, depending on tanker truck size.

The Contractor will be responsible for developing their own dewatering plan, including independently estimating groundwater inflow and on-site tank storage and related logistics, and off haul equipment sizes and off haul trucking needs for Cost Estimation and Bidding purposes. As noted in the Project



Technical Specifications for De-watering, the Contractor is responsible for preparing and implementing a De-watering Plan and will be solely responsible for dealing with actual groundwater inflow into the trench excavation, and for all costs related to de-watering, including storage and off haul.

Neither the City of Petaluma nor Questa Engineers are able to confirm the accuracy of the de-water volume estimate provided in this Memorandum.

BID SCHEDULE (Bid Addendum #2)

BASE BID

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1	Mobilization	1	LS		
2	Survey, Utility Verification and Stakeout	1	LS		
3	Traffic Control Plan & Implementation	1	LS		
4	Demolition Plan	1	LS		
5	Excavation and Trench Safety Plan	1	LS		
6	De-watering Plan & Implementation	1	LS		
7	Erosion Control and Stormwater Management	1	LS		
8	Environmental Stewardship	1	LS		
9	Demolish Wood Bridge, Headwall, and Wood Railing	1	LS		
10	Sawcut and Demolish Pavement. Dec. Roc- Railroad Rail, etc.	1	LS		
11	Excavation, Grading and Backfill	1	LS		
12	Install 16- 20" OD Torque-Down Pile, 60 ft Pile Length,	16	EA		
13	Provide - 20" OD Torque-Down Indicator Pile, 60 ft Pile Length, Provide Reaction Piles as Needed for Load Tests	1	LS		
14	Additional 20" OD Steel Torque Down Pile Welded to Placed Pile- in 5 foot increments	5	LF		
15	Pile Cap Grade Beams (2) - Structural Concrete	18	СҮ		
16	Furnish & install Pre-cast Concrete Bottomless Arch Culvert	1	LS		
17	Concrete Wingwall & Grade Beam- CIP Structural Concrete	2	LS		
18	Concrete Headwall at E-Culvert- CIP Structural Concrete	1	LS		
19	Furnish & Install 42" Bridge Railing	52	LF		
20	Furnish & Install Grade Beam	2	EA		

	Drainage System*				
21	Concrete Infill Walls (2) - Structural Concrete and Rebar	2	EA		
22	Street Curb and Gutter	30	LF		
23	Furnish & Install 18" x 18" Storm Drain inlet and 12" HDPE outlet	2	EA		
24	Controlled Low Strength Materials Trench Backfill	65	СҮ		
25	Class 2 AB Backfill	200	CY		
26	Trench Bottom Drain rock	14	CY		
27	AC Paving	2,000	SF		
28	Concrete Rail Ties	12	EA		
29	Railroad Rails	70	LF		
30	Site Restoration, Seeding, Planting	1	LS		
31	Signage	2	EA		
32	Striping	1	LS		
			Total Ba	ase s	

Bid

* Includes 1 1/2" gravel, filter fabric, 4" perf. pipe, 1 1/2" weep hole

ALTERNATE BID

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1	Riparian Restoration (200 SF)	1	LS		

*Note: In case of error in extension of price into the total price column, the unit price will govern.

Total Amount of Bid (written in words) is:	
	Dollars and
	- Conta
In the event of discrepancy between words and figures, the words shall prevail.	Cents.
\$	
Figures	

Note: The award of the contract shall be awarded to the lowest price of the Base Bid.

Address of Bidder

Signature of Bidder

City		Name of Bidder (Print)		
Telephone Numbe	r of Bidder	Fax Number of Bidder		
Contractor's Licer	ise Number	License's Expiration Date		
Addendum Ackn	owledgement			
Addendum No. 1	Signature Acknowledging Receipt:	Date:		
Addendum No. 2	Signature Acknowledging Receipt:	Date:		
Addendum No. 3	Signature Acknowledging Receipt:	Date:		
Addendum No. 3	Signature Acknowledging Receipt:	Date:		



Below Deck 1 – 1st & F St.



Below Deck $2 - 1^{st}$ and F St.



Below Deck $3 - 1^{st}$ and F St.