

### CITY OF PETALUMA

Post Office Box 61 PETALUMA, CA 94953-0061

Teresa Barrett Mayor

**Brian Barnacle** D'Lynda Fischer Mike Healy **Dave King** Kevin McDonnell **Dennis Pocekay** Councilmembers

#### ADDENDUM NO. 1

SRJC 12-Inch Water Main and **Maria-Leghorn Recycled Water Main Extension Projects City Project Numbers C67502123 and C66501834** 

June 4, 2021

This Addendum No. 1 modifies the Bidding Documents for the SRJC 12-Inch Water Main and Maria-Leghorn Recycled Water Main Extension Projects, City Project Numbers C67502123 and C66501834. 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.

#### NOTICE INVITING BID CHANGE

Refer to page 1, item 2 of the Notice of Inviting Bids. The Bids will be publicly opened and read at 2:00 PM (enter time) on June 10 read at 2:00 PM (enter time) on Thursday June 10th, 2021 at the above-mentioned office of the CITY. The CITY reserves the right to postpone the date and time for opening of Bids at any time prior to the aforesaid date and time.

The following paragraphs of the "Notice Inviting Bids" will be modified as described.

- **1. RECEIPT OF BIDS**: Bids for this project will be submitted by email before 2:00 PM on Thursday June 10th, 2021. The emailed bid will include all of the completed documents found in the BID FORMS section of the Contract Documents. The bids will be emailed to: CITYCLERK@cityofpetaluma.org. The email subject line will be "SRJC 12-Inch Water Main and Maria-Leghorn Recycled Water Main Extension Projects C67502123 and C66501834". The response email from the City Clerk will indicate the time stamp of the bid receipt.
- 2. Original copies of the Sealed Bids will be sent by standard United States Postal Service (USPS) mail services and received by the mail clerk at 11 English Street, Petaluma CA 94952. The Sealed Bids will be postmarked at USPS not later than the date of June 10th, 2021. Sealed Bids postmarked after June 10th, 2021, may not be considered. The Sealed Bids sent via USPS will include all of the original signed and sealed documents included in the Bid Form section of the Contract Documents. This packet will be clearly marked on the outside of the package "SRJC 12-Inch Water Main and Maria-Leghorn Recycled Water Main Extension Projects C67502123 and C66501834".

11 English Street

Public Works & Utilities

City Engineer Petaluma, CA 94952 Phone (707) 778-4303

**Environmental Services** Ellis Creek Water Recycling Facility 3890 Cypress Drive

Petaluma, CA 94954 Phone (707) 776-3777 Fax: (707) 656-4067

Parks & Facility Maintenance 840 Hopper St. Ext. Petaluma, CA 94952 Phone (707) 778-4303 Fax (707) 206-6065

Transit Division 555 N. McDowell Blvd. Petaluma, CA 94954 Phone (707) 778-4421

**Utilities & Field Operations** 202 N. McDowell Blvd. Petaluma, CA 94954 Phone (707) 778-4546 Fax (707) 206-6034

> E-Mail: publicworks@ cityofpetaluma.org

**OPENING OF BIDS**: The emailed bids will be opened by the Project Manager and the City Clerk. The bids will be documented on the Bid Result template with the name of the bidding contractor and ranked by the Base Bid dollar amount. The Bid results will be posted on the City's webpage at <a href="https://cityofpetaluma.org/bid-opportunities-2/">https://cityofpetaluma.org/bid-opportunities-2/</a>

## CONTRACT DOCUMENT CHANGES TECHINCAL SPECIFICATIONS

1. Section IV-Specifications Section 825-Horizontal Directional Drilling: **Delete** Section 825 in its entirety. **Replace** with new Section 825-Horizontal Directional Drilling included in this Addendum No.1 package.

## TECHNICAL CLARIFICATION TO CONTRACTORS QUESTION AND RESPONSE

Question #1: What are the estimates for the Base Bid (Project A and Project B) and Bid Alternative items.

Response #1: The Base Bid (Project A and Project B) is estimated at \$700,000. Bid Alternative 1 and Bid Alternative 2 are estimated to be between \$50,000 and \$150,000.

Question #2: How is the bid being awarded?

Response #2: The award the Contract is on the <u>Base Bid Total (Project A and Project B)</u>. The City reserves the right to award any bid alternate it chooses.

Question #3: Can native material be used within the trench in open space/undeveloped areas?

Response #3: Yes, the use of native material within the top 30-inches of the trench. The pipe zone backfill (trench bottom up to 12-inches above pipe) shall remain Class II aggregate base.

Question #4: For excavation within lawn/turf areas, can we revegetate with hydroseed?

Response #4: Revegetation of disturbed areas shall conform to Section 40 Clearing and Grubbing. For turf/lawn areas, the Contractor shall replace the removed or damaged lawn/turf in kind.

Question #5: At the location of the tie in from the proposed 12-inch water main to the existing 12-inch water main, there appears to be a substantial difference in elevation. Does the Tie-in include an offset in elevation between the two pipes?

Response #5: Yes, the 12-inch Connection to Existing Main bid item includes all fittings, excavation, materials, and work to accommodate the difference in elevation. The offset and all piping, fittings, and materials to connect the proposed 12-inch water main to the existing 12-inch water main shall be included in the bid item price.

Question #6: The plan and profiles do not show vertical 45-degree elbows, is this on purpose?

Response #6: The plan and profiles show minimum cover for the proposed pipe, and changes in elevation that may occur due to conflicts with other utilities. It is the responsibility of the Contractor to determine whether vertical elbows or gradual lowering of the pipeline to avoid conflicts with other utilities should be used.

Question #7: Can the contractor discharge groundwater encountered in the trench or excavation pits to the City's sewer system?

Response #7: The contractor may obtain a discharge permit from the City to discharge to the sewer system, provided it meets all contaminant limit requirements. All groundwater encountered must meet turbidity and suspended solids requirements prior to being discharged to the to the Sewer System and may require metering to meet flow limitations. All treatment and/or discharge equipment shall be included in the bid items for the various work including excavation pit lump sums.

Question #8: Will excavation pits or potholing within Maria Drive or Sonoma Mountain Parkway require extensive paving?

Response #8: Both Maria Drive and Sonoma Mountain Parkway are recently paved and will require repaying to city standards for newly paved streets. This includes paving the entire width of the street and up to three feet outside of the trench lines and excavation areas. Paving shall be included in the various bid items for the project.

## SUBMITTAL CLARIFICATION TO CONTRACTORS QUESTION AND ANSWER

Q: Can I submit the original copies of the sealed bid by FedEx, UPS, courier, other delivery service or drop the packet off myself?

A: Due to the COVID-19 Shelter in Place Order, the City of Petaluma has closed City Hall to the general public to continue the practice of "social distancing". We will only accept the sealed bid packet by the daily mail delivery of the United States Postal Service (USPS).

Q: What if the USPS delivers my original copies a week, or more, later?

A: As long as the USPS postmark on the exterior of the package shows June 10, 2021, or earlier we will accept your original copies.

Q: What if my email doesn't go through the internet system because the attachments have too many megabytes?

A: You may send multiple emails to CityClerk@cityofpetaluma.org. All emails and all attachments must be received and acknowledged by the City Clerk's response before 2:00PM on June 10, 2021. All emails must be titled "Bid For SRJC 12-Inch Water Main and Maria-Leghorn Recycled Water Main Extension Projects C67502123 and C66501834".

Q: What attachment file will you accept?

A: .PDF is preferred. Other common file formats are JPG, TIF, DOC, XLS.

Q: Will you video the bid opening?

A: The bid opening will not be video taped.

Q: How am I assured that you are really choosing the lowest bid?

A: The bid packets are kept by the City Clerk for the duration of the project. After the low bid is posted, if you want to see Bid information, please call the project manager.

Q: Why are you doing it this way?

A: Due to the COVID-19 Shelter in Place Order we are trying to minimize person to person contact as much as possible to keep everyone as healthy as possible.

Q: What if my email goes to the junk or spam folder?

A: You may send a trial email in advance of the bid submittal date. Please send your email to CityClerk@cityofpetaluma.org.

This Addendum No. 1 shall become part of the Contract and all provisions of the Contract shall apply thereto. Bidders shall acknowledge all Addendums in the Bid Schedule.

**Summary of Changes:** Bids will be emailed into the City Clerk, and original copies of the sealed bids will be mailed in. New Technical Specification included in this document.

City of Petaluma,

Dan Herrera, P.E. Senior Civil Engineer

Public Works & Utilities Department

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.

#### ADDENDUM NO. 1

#### SRJC 12-Inch Water Main and Maria-Leghorn Recycled Water Main Extension Projects City Project Numbers C67502123 and C66501834

June 4, 2021

#### **ACKNOWLEDGEMENT**

| -      | •      | - •     | (Contractor's Name) |
|--------|--------|---------|---------------------|
| on the | day of | , 2021. |                     |
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# (NEW) SECTION 825 HORIZONTAL DIRECTIONAL DRILLING

#### 825-A. GENERAL

#### 825-A.1 SUMMARY

- i) These specifications apply to horizontal directional drilling (HDD) of high density polyethylene pipe (HDPE) for force mains, low pressure sewers, water mains, and recycled water mains from 1.25" through 24" diameter.
- ii) These specifications are intended to technically describe the nature of the materials, equipment and workmanship required for installing force mains, low pressure sewers, and water mains by HDD methods.
- iii) This specification is intended to cover all work necessary for the installation of the pipe as shown on the drawings and as specified herein by HDD methods.

#### 825-A.2 REFERENCES

- ASTM F1962 11 Standard Guide for Use of Maxi-Horizontal Directional Drilling for Placement of Polyethylene Pipe or Conduit Under Obstacles, Including River Crossings.
- ii) Plastics Pipe Institute Guidelines for Use of Mini-Horizontal Directional Drilling for Placement of High Density Polyethylene Pipe TR-46 2009.

#### 825-A.3 QUALIFICATIONS

i) HDD Contractors shall have actively engaged in the installation of pipe using HDD methods for a minimum of three years, during which time the Contractor has completed at least 5,000 feet of HDD installations from 1.25" to 24" inches in diameter.

#### 825-A.4 SUBMITTALS

- i) The Contractor shall submit documentation showing a minimum three years of HDD experience with at least 5,000 feet of guided boring installation of 1.25" to 24" diameter projects similar in the scope and value to the project specified in the contract documents. Information must include, but not be limited to the following.
  - 1. Date and duration of work.
  - 2. Location.
  - 3. Pipe information (i.e. length, diameter, depth of installation, pipe material, etc.).
  - 4. Project Owner information (i.e. name, address, telephone number, contact person, etc.).
  - 5. Contents handled by the pipeline (i.e. water, wastewater, conduit, gas, etc.).

- ii) The Contractor shall submit a list of field supervisory personnel and their experience with HDD operations. At least one of the field supervisors listed must be at the site and be responsible for all work at all times when HDD operations are in progress. HDD operations will be postponed until the resume(s) of the Contractor's field supervisory personal have been received.
- iii) Working drawings, written procedures, and information that demonstrates in detail the proposed method of operation. This submittal shall include, but not be limited to the following:
  - 1. Size, capacity and setup requirements of all equipment (including drill rig thrust/pullback and rotary torque capacity as well as the mud pump motor size).
  - 2. HDD guidance system type and information including the accuracy, range, and repeatability values for inclination, roll, and azimuth of the system.
  - 3. Type of cutting tool head.
  - 4. Method of monitoring and controlling line and grade.
  - 5. Arrangement of equipment.
  - 6. Location and sizes of drilling and receiving pits.
  - 7. Location of product pipe joining areas and staging areas.
  - 8. Method of dewatering.
  - 9. Method of removing spoils.
  - 10. Carrier pipe type and size.
  - 11. Method of joining carrier pipe.
  - 12. Method of installing tracer/detection wire.
  - 13. Method of abandonment of pilot holes.
  - 14. Carrier pipe end seals.
  - 15. Bentonite drilling fluid product information including the following:
    - a. Product information.
    - b. Material specifications.
    - c. Handling procedures.
    - d. Special precautions required.
    - e. Method of mixing and installation.
    - f. Identification of polymer enhancement material or special additives (if applicable).
    - g. Method of measuring and maintaining water and bentonite quality during bore progress.
    - h. MSDS sheet.
- iv) All drawings, catalog cuts and other descriptive data covering related items in the same system shall be submitted at the same time in order that their complete integrated applicability in the entire system may be adequately reviewed.

#### 825-A.5 FIELD CONDITIONS

i) HDD operations shall not interfere with, interrupt, or endanger the ground surface or the activities or items upon the surface.

- ii) HDD operations shall be confined to the area of work as shown on the project drawings.
- iii) The HDD Contractor shall comply with all local ordinances, codes, statutes, rules, and regulations including the Owner's Engineering standards and Occupational Safety and Health Administration requirements.
- iv) When rock stratum, boulders, underground obstructions, or other soil conditions that impede the progress of drilling operations are encountered, the Contractor will review the situation with the Owner. The Contractor shall determine the feasibility of continuing drilling operations and review this with the Owner should adjustments or switching to an alternative construction method determined to be necessary.
  - 1. Date and duration of work.
  - 2. Location.
  - 3. Pipe information (i.e. length, diameter, depth of installation, pipe material, etc.).
  - 4. Project Owner information (i.e. name, address, telephone number, contact person, etc.).
  - 5. Contents handled by the pipeline (i.e. water, wastewater, conduit, gas, etc.).

All work covered by this specification section shall conform to the applicable federal and state codes and regulations. If there is a conflict between these specifications, federal and state regulations, and any agreements/permits, the more stringent requirements shall govern.

#### 825-B. MATERIALS

#### 825-B.1 PIPING MATERIALS

i) Water and Recycled Water mains shall be HDPE DR 11 Conforming to AWWA C906.

#### 825-B.2 DRILLING FLUID

- i) No drilling fluid shall be used that does not comply with environmental regulations.
- ii) Drilling fluids shall be a mixture of clean water and bentonite clay. The fluid shall be inert. The fluid should remain in the tunnel to insure the stability of the tunnel, reduce drag on the pulled pipe, and provide backfill within the annulus of the pipe and tunnel.
- iii) Disposal of excess drilling fluid and spoils shall be the responsibility of the Contractor and shall be conducted in compliance with all relevant regulations, right-of-way, workspace requirements, and permit agreements. Excess drilling fluid and spoils shall be disposed of at an approved location and shall be performed at no additional cost to the Owner. The Contractor is responsible for transporting all excess drilling fluid and spoils to the disposal site and for paying any disposal costs. Excess drilling fluid and spoils shall be transported in a manner that prevents accidental

- spillage onto roadways. Excess drilling fluid and spoils shall not be discharged into sanitary or storm drain systems, or waterways.
- iv) Drilling fluid returns caused by fracturing, formations, or any other means at locations other than the entry and exit points shall be minimized. The Contractor shall immediately clean up and dispose of any drilling fluid and spoils from return areas.
- v) The Contractor shall provide mobile spoils removal equipment capable of quickly removing spoils from entry and exit pits and from return areas. This equipment must be present during all HDD operations to fulfill the disposal requirements previously described.

#### 825-C. CONSTRUCTION

#### 825-C.1 PREPARATION

- i) Excavate access and exit pits as necessary to horizontally directional drill the proposed pipe alignment as shown on the project drawings.
- ii) The drilling procedures and equipment shall provide protection of workers particularly against electrical shock. As a minimum, grounding mats, grounded equipment, hot boots, hot gloves, safety glasses and hard hats shall be used by crewmembers.
- iii) The drilling equipment shall be equipped with an operational alarm system capable of detecting electrical current.
- iv) The Contractor is responsible for protecting all existing utilities. The Contractor shall call USA (811) a minimum of 3 working days before any work is to begin. Existing utilities within the path of the proposed horizontal directional bore shall be "pot holed" to determine depth.

#### 825-C.2 HORIZONTAL DIRECTIONAL DRILLING OPERATONS

#### i) Equipment

- 1. The drilling equipment must be capable of placing the pipe within the planned line and grade without inverse slopes.
- 2. The drilling equipment must meet the minimum thrust/pullback rating, minimum rotary torque rating, and the minimum mud flow pumping capacity to facilitate installation of the product pipe per the contract drawings.
- 3. The guidance system must have the capability of measuring inclination, roll, and azimuth. The guidance system must have an independent means to ensure the accuracy of The installation. The Contractor will demonstrate a viable method to eliminate accumulated error due to inclinometer (pitch or accelerometer). The

- guidance system shall be capable of generating a plot of the borehole survey for the purposes of an as-built drawing
- 4. The proposed equipment set up requirements, including but not limited to proposed access and exit pit locations, are at the sole determination of the Contractor. Such information shall be submitted along with other required information per the specifications.

#### 825-C.3 PILOT HOLE BORING

- i) The entry angle and pilot hole and boring process shall maintain a curvature that does not exceed the allowable bending radius of the product pipe.
- ii) The pilot hole shall be drilled along the path shown on the plan and profile drawings to the following tolerances.
  - (1) Elevations: Plus or minus 6 inches
  - (2) Alignment: Plus or minus 6 inches
- iii) Alignment Adjustments and Restarts
  - (1) The Contractor shall follow the pipeline alignment as shown on the drawings within the specifications stated. If adjustments are required, the Contractor shall notify the Engineer for approval prior to making adjustments.
  - (2) In the event of difficulties at any time during boring operations requiring complete withdrawal from the tunnel, the Contractor may be allowed to withdraw and abandon the tunnel and begin a 2<sup>nd</sup> attempt at a location approved by the Engineer.
  - (3) The number of access pits shall be kept to a minimum. The equipment must be capable of boring and installing the proposed diameter product pipe in a continuous runoff a minimum distance of 600 feet without intermediate pits.

#### 825-C.4 INSTALLING PRODUCT PIPE

- i) After the pilot hole is completed, the Contractor shall install a swivel to the reamer and commence pullback operations. Should pre-reaming of the tunnel be necessary, it shall be performed at the option of the Contractor and at no additional cost to the City.
- ii) The reaming diameter shall not exceed 1.4 times the diameter of the product pipe being installed.
- iii) The product pipe being pulled into the tunnel shall be protected and supported so that it moves freely and is not damaged by stones and debris on the ground during installation.
- iv) Pullback forces shall not exceed the allowable pulling forces for the product pipe.

- v) The Contractor shall allow sufficient length of product pipe to extend past the termination point to allow connections to adjacent pipe sections or gate valves.
- vi) Pulled pipes will be allowed 24 hours of stabilization prior to making tie-ins.

#### 825-D. INSPECTIONS

The Contractor will at all times provide and maintain instrumentation which will accurately perform the following functions

- i) Locate the pilot hole
- ii) Record coordinates references to the drilled entry point
- iii) Measure drilling fluid flow discharge rate and pressure
- iv) Measure pullback pressure

#### 825-E. OBSTRUCTIONS

The Engineer must be notified immediately if any obstruction is encountered that stops the forward progress of the HDD operation. The Contractor must review the situation with the Engineer and Owner and determine the feasibility of continuing drilling operations or switching to an alternative construction method.

Dewatering of pits and excavations must meet the general provisions and specifications as set forth by the City standards. The type of dewatering method used by the Contractor must be approved by the City, prior to commencing with the dewatering activity.

#### 825-F. MEASUREMENT AND PAYMENT

Capri Creek (SRJC) Directional Drill – 12-Inch HDPE; Sonoma Mtn Pkwy Directional Drill – 12-Inch HDPE shall be paid for on a LINEAR FOOT (LF) basis. The linear foot prices paid for installing the casing per contract plans shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved in design, staking, potholing and locating existing utilities, settlement monitoring, excavating, dewatering, furnishing, cleaning and installing the product pipe, fittings, transition coupling, backfill, complete in place, including any other work required for Horizontal Directional Drilling installation not specifically enumerated on the plans or these Specifications and no additional allowance will be made therefor.

Design, installation, and removal of shoring and bracing for boring/receiving pits will be paid for under the lump sum price for Excavation for Receiving and Boring Pits as described in Section 80 Earthwork.

Excavation for receiving and boring pits will be paid for under the lump sum price for "Excavation for Receiving and Bore Pits" as described in Section 80 Earthwork.

Any dewatering required during directional drilling operations will be paid for under the lump sum price for "Excavation for Receiving and Bore Pits" as described in Section 70 Dewatering and Section 80 Earthwork.

#### **END OF SECTION**

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