# **PROJECT DOCUMENTS**

## **SILVERTON 2024 CIPP PROJECT**



PROJECT NO: **PN24-1097** 

DATE OF ISSUANCE: May 23, 2024

PROJECT TYPE: Public Works Capital

BIDS DUE BY: June 6, 2024, 2:00 p.m. local

CITY PROJECT MANAGER: Mike Dahlberg Public Works

**Operations Manager** 

PM CONTACT INFORMATION: mdahlberg@silverton.or.us

503-874-2209

# **CITY OF SILVERTON**

Public Works Department 306 South Water Street Silverton, Oregon 97381

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#### **SECTION 1 INVITATION TO BID**

## I. INVITATION TO BID

The City of Silverton is seeking bids to complete a CIPP (Cured-in-Place Pipe) project on selected sanitary sewer lines in Silverton, OR 97381. The project consists of lining approximately 280 feet of 12" main, 905 feet of 6" mains, and 3980 feet of an 8" mains. The project also includes reinstating service to laterals using the lined mains and point repairs if needed. Contractor will coordinate with City staff on construction timing to minimize disruptions to services and traffic.

## II. SCHEDULE

Documents Available May 23, 2024 **Bids Due June 6, 2024**Anticipated Notice of Award July 3, 2024

Project Completion April 15, 2025

**NOTE:** The City reserves the right to modify this schedule at the City's discretion. Proper notification of changes will be made to all interested parties via the City's website silverton.or.us.

## III. CONTRACTOR RESPONSIBILITIES AND DUTIES

All Bidders must be qualified and licensed to provide the goods and construction services requested in this document. Bidders shall have provided products and services similar to those listed in scope of work section for commercial and/or municipal customers. Bidders are required to submit documentation as outlined in this document, related to their ability to provide quality products and services as listed in this document.

## IV. BID REQUIREMENTS AND SELECTION PROCESS

## **Mandatory Site Visit**

There will not be a pre-bid site visit for this project. All areas of the project are public right-of-way that can be visited by contractors on their own. The City does not have recent TV videos of the mains to be lined.

#### **Pre-Submission Questions**

All questions related to the project must be directed to the Project Manager no later than May 30, 2024, at 2:00 p.m. Questions must be submitted via e-mail to mdahlberg@silverton.or.us.

## **Contact with City Staff**

The City's Project Manager is Mike Dahlberg and may be contacted at <a href="mailto:mdahlberg@silverton.or.us">mdahlberg@silverton.or.us</a>, or 503-874-2209. Communicating with other City staff or authority for information other than the Project Manager or assigned Designee may result in disqualification of bid.

## **Addenda**

Addenda are incorporated with the original solicitation as an attachment and can be viewed and downloaded by registered suppliers. Bidders should consult the City of Silverton website, <a href="www.silverton.or.us/rfps">www.silverton.or.us/rfps</a>, regularly until closing to avoid missing any Addenda.

#### **Bid Withdrawal**

Any bid may be withdrawn at any time before the "Bids Due" date and time specified in the Schedule, by

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providing written request for the withdrawal of the bid to the City. The request shall be executed by a duly authorized representative of the firm. Withdrawal of a bid will not prejudice the right of the Bidder to file a new bid.

## **Bid Content Requirements**

Bids must be sealed and identified per the "Bid Submission" requirements. Please list any bid content requirements i.e. list of previous jobs, cover letter, using an attached bid form, etc.

#### **Bid Submission**

Bids shall be delivered by mail (prior to bid closing date and time) or hand carried to the Silverton Public Works Administration Office located at 306 S Water Street, Silverton, OR 97381. The office is open 9-5 Monday – Friday. To ensure proper identification and handling, all packages and envelopes shall be clearly marked as follows:

Bids for PW PN24-1097, 2024 CIPP Project City of Silverton 306 S. Water St. Silverton, OR 97381

Bids may be emailed to the Project Manager at <a href="mailto:mdahlberg@silverton.or.us">mdahlberg@silverton.or.us</a>. Bids must be received by the bid closing date and time as listed above. Bids will not be opened until bid opening date and time as listed above.

The City shall not be responsible for the proper handling of any proposal not properly identified, marked and submitted in a timely manner. Proposals received after the date/time for Closing will not be considered for award. The City will do a public bid opening on June 6, 2024 at 2:00 PM at the Silverton City Hall Conference Room located at 306 S Water Street, Silverton, OR 97381.

## V. GENERAL INFORMATION

#### **Public Records**

This bid will be made a part of a file open to public inspection. If a bid contains any information that is considered a trade secret under ORS 192.501(2), each sheet of such information must be marked with the following legend:

"This data constitutes a trade secret and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192."

Nondisclosure of documents or any portion of a document submitted as part of a bid may depend upon official or judicial determinations made pursuant to the Oregon Public Records Law. The above restriction may not include cost or price information, which must be open to public inspection.

Identifying the bid in whole as a trade secret is not acceptable. Failure to identify a portion of the bid as a trade secret shall be deemed a waiver of any future claim of that information as a trade secret.

### Reimbursement

All costs for bids and interviews to secure this project are the Bidder's responsibility.

#### **Contract Award**

The City will award a contract to the Bidder whose bid would be most advantageous to the City. The selected Bidder will be required to assume responsibility for all services outlined in the ITB, whether the Bidder or a representative of the Bidder produces them. The City considers the selected Bidder responsible for any and all contractual matters.

The successful Bidder shall be required to execute a Public Works Contract, an example of which is attached as Exhibit B.

## VI. SCOPE OF WORK

## **Project Completion Date**

The project must be completed no later than April 15, 2025, unless otherwise agreed upon, in writing, by the City and the Successful Bidder.

## **Examination of Contract Documents and Project Site**

Project sites are located on public streets in Silverton, Oregon. Each Bidder is solely responsible for thorough review of the Invitation to Bid documents and the examination of the Project Site prior to submittal of bid. Documents are available for download on the City of Silverton website, <a href="https://www.silverton.or.us/rfps">www.silverton.or.us/rfps</a>, or by emailing project manager Mike Dahlberg at <a href="mailto:mdahlberg@silverton.or.us">mdahlberg@silverton.or.us</a>.

## **City obligations under this contract include:**

- 1. Will provide access and area for staging material and equipment at the Public Works Shops if needed. Shops are open 7:30 4:00 PM.
- 2. Will review video and inspect work. Will make determinations on when point repairs are needed.

## **Contractor Project Scope:**

- 1. Complete cleaning and TV inspection of selected mains to be lined.
- 2. Complete any point repairs that City and Contractor agree need to be fixed.
- 3. Install CIPP liner per specifications.
- 4. Reinstate services found during TV inspection prior to lining process.

## **Warranty:**

Successful Bidder shall warranty all work to be free from defects due to poor craftsmanship or materials for a minimum of one (1) years, or the duration of the Vendor's standard warranty, whichever is greater. The Vendor's craftsmanship warranty is in addition to any material warranty provided by manufacturer of materials used in construction. All warranty work will be provided without transportation charges. Warranty period begins after project goods are accepted by the City.

#### **Bonds and Insurance**

The Bidder shall furnish performance and payment bonds, each in an amount at least equal to 100 percent (100%) of the contract price as security for the faithful performance and payment of all Bidder obligations. These bonds shall remain In effect at least one year after the date when final payment is due.

The Bidder shall deliver to the City certificates of insurance as specified in Section 8. The City including respective agents, officers and employees shall be named additional insured.

## References

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The Bidder shall furnish at least three (3) references of comparable and previously completed project including the project owner's name and phone number.

#### **SECTION 2 -INSTRUCTIONS TO BIDDERS**

## 2.1 BIDDER'S QUALIFICATIONS:

No bids for construction contracts shall be received or considered by the City unless the bidder is licensed with the Construction Contractors Board or licensed by the State Landscape Contractors Board as required by ORS 671.530.

The Contractor shall have a public work bond filed with the Construction Contractors Board priorto starting work on the project, in accordance with ORS 279C.830. Additionally, the Contractor shall include in every subcontract a provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting work, in accordance with ORS279C.830, and submit it to the City for proof of Bonding.

#### 2.2 EXAMINATION OF THE CONTRACT DOCUMENTS AND WORK SITE:

Bidders should carefully examine the bid and contract documents and familiarize themselves with the work site to fully acquaint themselves with all the conditions and matters which can in any way affect the work or the cost thereof.

Each bidder shall thoroughly examine and be familiar with legal and procedural documents, general conditions, specifications, drawings, plans, addenda (if any), any tests and/or reports, andall other Contract Documents. The submission of a bid shall constitute an acknowledgment uponwhich the City may rely, that the bidder is experienced in the uses and interpretation of plans and specifications such as those included in the Contract Documents and has thoroughly examined and is familiar with the Contract Documents.

The failure or neglect of a bidder to receive or examine any of the Contract Documents, perform site investigations and/or other investigations or examinations shall in no way relieve the bidder from any obligations with respect to the bid or the contract. No claim for additional compensationwill be allowed which is based upon a lack of knowledge of any Contract Documents or existing site conditions.

All questions about the meaning or intent of the Bidding Documents are to be submitted to the Project Manager, listed in the Invitation to Bid, in writing. Interpretations or clarifications considered necessary by the Project Manager in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

#### 2.3 CONTRACTOR'S RESPONSIBILITY:

It is understood that the specifications and other contract documents do not purport to control the method of performing the work, but only the requirements as to the nature of the completed work.

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The Contractor assumes the entire responsibility for the method of performing and installing the work. Suggestions as to the method included in the contract documents shall be deemed advisory only and the feasibility of such methods or the lack thereof shall not affect the Contractor's liability or status as an independent Contractor to complete the work under this contract.

#### 2.4 LAWS AND REGULATIONS:

The bidder is assumed to be familiar with all Federal, State, County or City laws or regulations, which in any manner affect those engaged or employed in the work or the materials or equipmentused in the proposed construction, or which in any way affect the conduct of the work, and no pleaof misunderstanding will be considered on account of ignorance thereof. If the bidder shall discover any provision in these specifications, plans or contract documents which is contrary to orinconsistent with any law or regulations, he or she shall report it to the City in writing.

#### 2.5 WAGE RATES:

The Contractor shall pay the existing rate of wage which may be paid to workers in each trade or occupation required for such public work employed in the performance of the contract either by the Contractor or subcontractor or other person doing or contracting to do the whole or any part of the work contemplated by the contract, and such workers shall be paid not less than the specified minimum hourly rate of wage as set forth in the latest applicable edition of the Prevailing Wage Rates for Public Works in accordance with ORS 279C.838 and 279C.840.

#### 2.6 CONTRACT TIMES:

The number of days within which, or the dates by which, milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

## 2.7 LIQUIDATED DAMAGES:

Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

#### 2.8 BID SECURITY:

Bid security shall be submitted with the Bid Proposal and failure to submit shall be cause for rejection of the bid. The bidder, at his or her option, shall furnish a bid bond, cashier's check or a certified check made to the City of Silverton for an amount equal to no less than ten (10) percentof the total amount of the bid. Security deposited by unsuccessful bidders will be returned as soonas practicable after the bid opening. Said bonds shall be in the form herein prescribed or approved substitute form and shall be the surety bonds of an incorporated surety company licensed to transact surety business in the State of Oregon, and said bonds shall be in all respects satisfactory and acceptable to ORS 279.C.365(5).

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## 2.9 PREPARATION OF BIDS:

Bidders must submit their proposals on the Bid Form attached hereto. The blank spaces in the proposal must be filled in correctly where indicated for each and every item for which a quantityis given, and the bidders must state the unit prices, typed or written in ink. Any correction to entries made on the proposal forms shall be initialed by the person signing the proposal. In case of discrepancy between the unit prices and amounts, the unit prices will govern.

Alternative bids will not be considered unless specifically called for. Bids must be mailed or hand delivered to City Hall (306 S Water Street, Silverton, OR 97381).

Each bidder represents that their bid is based upon the specific material installation and equipment requirements, described in the Bidding Documents.

No substitutions will be considered unless written request has been submitted to the Project Manager for approval prior to the closing date for bids. Each such request shall include a complete description of the proposed substitute, and any other data or information necessary for a complete evaluation. Substitutions will be accepted only with the understanding that the supplier guarantees substituted material or equipment to be equal or better than that specified and meets all requirements of the Specifications.

Accepted substitutes will be listed in addenda mailed or delivered to each person or firm recorded by the Project Manager as having received the Bidding Documents and will be available for inspection at the City of Silverton, City Hall 306 S. Water St. Silverton, OR 97381.

## 2.10 SPECIFICATION LIMITING COMPETITION:

Bidders may comment on any specification or requirement contained within this Bid which they feel limits competition in the selection of a bid to perform the services herein defined. Protests shall detail the reasons and any proposed changes to the specifications. Such comments shall be formal in writing and are to be addressed to Mike Dahlberg, Public Works Operation Manager, at <a href="mailto:mdahlberg@Silverton.or.us">mdahlberg@Silverton.or.us</a>.

Such comments shall be submitted **no later than 3 days before the bid date**. No comments willbe accepted after that time. Any substitutions for items specified will not be accepted without prior written approval of the Project Manager.

## 2.11 PROTEST OF AWARD.

The Notice of Intent to Award by the City of Silverton shall constitute a final decision of the Cityto award the contract if no written protest of the award is filed with the City Project Manager within three (3) working days of issuing the Notice of Intent to Award. If a protest is timely filed, the Notice of Intent to Award is a final decision of the City only upon issuance of a written decision denying the protest and affirming the award. The Notice of Intent to Award and any written decision denying

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protest shall be sent to every bidder who provided an address.

#### 2.12 RIGHT TO PROTEST.

Any actual bidder who is adversely affected or aggrieved by the City's Notice of Intent to Award to another bidder on the same solicitation shall have three (3) working days after Notice of Intentto Award to submit to the City Project Manager a written protest of the award. The written protestshall specify the grounds upon which the protest is based. In order to be an adversely affected or aggrieved bidder with a right to submit a written protest, a bidder must be next in line for award, i.e. the protester must claim that all higher rated bidders are ineligible for award because they are non-responsive or non-responsible. The City will not entertain protests submitted after the time period established in this rule.

#### 2.13 SUBMISSION OF BIDS:

Bids must be submitted at the time and location shown on the Invitation to Bid to Silverton City Hall (306 S. Water Street, Silverton, OR 97381). All forms required to be submitted are provided.

#### 2.14 BASIS OF BID:

Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Schedule of Values in the Bid Form.

#### 2.15 SUBCONTRACTORS:

When the contract value for a public improvement is greater than \$100,000, bidders are required to disclose information about first-tier subcontractors who will furnish labor or labor and materials (see ORS 279C.370).

Within two working hours of the date and time of the deadline when the bids are due to the City for a public improvement, the bidder shall submit to the City a disclosure of the first-tier subcontractors that (A) will be furnishing labor, or will be furnishing labor and materials in connection with the public improvement, and (B) will have a contract value that is equal to or greater than five percent of the total project bid or \$15,000, whichever is greater; or \$350,000, regardless of the percentage of the total project bid. The disclosure of first-tier subcontractors shall include the name of each subcontractor, the category of work that each subcontractor will perform, and the dollar value of each subcontract. See the form provided in Section 3.

The City shall consider the bid of any contractor that does not submit a subcontractor disclosure to the City to be a nonresponsive bid and may not award the contract to the contractor. The City is not required to determine the accuracy or the completeness of the subcontractor disclosure.

#### 2.16 RECEIPT AND OPENING OF BIDS:

Bids shall be submitted prior to the time fixed in the Invitation to Bid. Bids received after the time so designated will be considered late bids and will be returned unopened. No responsibility will be attached to any official of the City for the premature opening of, or the failure to open, a bid not

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properly addressed and identified.

#### 2.17 WITHDRAWAL OF BIDS:

A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid and submit a new Bid prior to the date and time for the opening of Bids.

If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

#### 2.18 PRESENCE OF BIDDERS AT OPENING:

At the time and place fixed for opening of bids, the contents of all bids will be made public for the information of all bidders and other interested parties who may be present in person, electronically, or by representative.

#### 2.19 BIDDERS INTERESTED IN MORE THAN ONE BID:

If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected. A party who has quoted prices to a bidder is not thereby disqualified from quoting prices to other bidders or from submitting a direct bid on his or her own behalf.

## 2.20 AWARD OF CONTRACT:

The contract will be awarded as soon as practicable to the lowest responsive, responsible bidder, price and other factors considered, provided the bid is reasonable and it is to the interest of the City. Award will be made to one bidder and one bidder only.

Contractor or individuals awarded a contract shall provide the City with a correct Department of the Treasury Internal Revenue Service Tax Identification Number (TIN). In the event that the TIN is incorrect or inconsistent with the Contractor's name as described in this contract, the City may withhold taxes as required by law, or cancel or suspend further services under this contract, at the City's option, until the discrepancy is corrected.

The acceptance of a bid shall bind the successful bidder to execute the contract.

#### 2.21 REJECTION OF BIDS:

The City reserves the right to reject any and all bids. Bids may be rejected if they show any alteration of form, admissions not called for, conditions or alternate bids, irregularities of any kind, or that they contain a clause in which the bidder reserves the right to accept or reject a contract awarded to him except as herein provided, or if they do not comply with prescribed public contracting procedures and requirements including the requirement to demonstrate the bidders responsibility under ORS 279C.375(3)(b). Bids in which the prices are obviously unbalanced maybe rejected.

The City reserves the right to waive any informality in bids received when such waiver is in the interest of the City.

## 2.22 SURETY BOND:

To guarantee the faithful performance of the contract, the successful bidder will be required to furnish a performance bond and a payment bond in an amount equal to the full amount of the contract as amended. Said bonds shall be in the form herein prescribed or approved substitute form and shall be the surety bonds of an incorporated surety company licensed to transact surety business in the State of Oregon and said bonds shall be in all respects satisfactory and acceptable to ORS 279C.380.

#### 2.23 EXECUTION OF THE CONTRACT:

The successful bidder shall within ten calendar days from the date of receiving from the City the contract prepared and ready for execution, furnish the City the corporate surety bonds specified herein and enter into contract with the City. If the successful bidder fails to comply with any of the requirements herein, the City may, at its option, determine that the bidder has abandoned the contract and there upon the security accompanying this proposal shall be forfeited and the same shall become the property of the City.

#### 2.24 ENVIRONMENTAL AND NATURAL RESOURCES LAWS

In compliance with ORS 279C.525, lists of federal, state and local agencies of which the City has knowledge that have enacted ordinances or regulations relating to environmental pollution and the preservation of natural resources that may affect the performance of the Contract are listed in the 2015 Oregon Department of Transportation Standard Specifications for Construction, Section 00170.01.

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#### **SECTION 3 - BID FORM**

Submitted by:		
Address:		
Date:	Phone number:	
E-mail Address:		
Federal Tax I.D. Number or Soc	cial Security Number	

The undersigned, as a bidder, declares that he has carefully examined the location of the worksites, that he is aware of the general nature of the work, that he has examined the General and Supplemental Conditions, Special Provisions, Supplemental Special Provisions, Plans and Drawings, read the Instructions to Bidders, read and understood any reports, tests, or addenda that accompany this bid, and hereby proposes to furnish all materials and equipment and do all the work required to complete the project entitled **2024 CIPP Project** in accordance with the said Specifications herein for the bid prices set forth in the Schedule of ValuesForm attached hereto and forming a part of this proposal.

The Bidder hereby acknowledges the receipt of the following addenda:

Addendum No.	Addendum Date

This proposal is accompanied by a certified check, cashier's check or bid bond in the amount of 10% of the total bid.

The Bidder, by his signature below, certifies that he is qualified to perform the work and hereby represents as follows:

- A. That no Councilor, officer, agency or employee of the City of Silverton is personally interesteddirectly or indirectly in this contract or the compensation to be paid hereunder, and that no representation, statement or statements, oral or in writing, of the City, its Councilors, officers, agents, or employees had induced him to enter into this contract and the papers made a part hereof by its terms.
- B. That this bid is made without connection with any person, firm or corporation making a bid forthe same material, and is in all respects, fair and without collusion or fraud.
- C. That the provisions required by ORS 279C.800 through ORS 279C.870 or 40 U.S.C. 3141 et seq. relating to Prevailing Wage Rates shall be complied with.

- D. In the event the Bidder is awarded the contract and shall fail to complete the work within the time frame specified, including extensions granted, liquidated damages and engineering expenses shall be paid to the City as outlined in section 00180.85 of the Supplemental Conditions for each day of delay in the completion of the work.
- E. Contractor shall not perform any work under this contract until all bonding and insurance requirements have been met and a Notice to Proceed has been issued.
- F. I, the undersigned, agree to be bound by the form of agreement and all remaining contract documents, including Instructions to Bidders; Standard Terms and Conditions; Special conditions; Federal Provisions, if applicable; plans and specifications.
- G. Upon receiving notice to proceed from the City, the Contractor shall meet with the City assigned Project Manager for a preconstruction conference at a time mutually agreed upon. At this conference the Contractor shall furnish the Project Manager with a proposed schedule of work, as well as any other required submittals.
- H. Contractor shall not perform any work under this contract until the Contractor and every subcontractor has a public works bond filed with the Construction Contractors Board in accordance with ORS279C.830 and all other bonding and insurance requirements have been met and a Notice to Proceed has been issued.
- I. I, the undersigned, certify that the Bidder holds current licenses that businesses or services professionals operating in this state must hold in order to undertake or perform the work specified in these contract documents.
- J. I, the undersigned, certify that the Bidder is covered by liability insurance and other insurance in the amount(s) required by the Agreement.
- K. I, the undersigned, certify that the Bidder qualifies as a carrier insured employer or a self- insured employer under ORS 656.407 or has elected coverage under ORS 656.128.
- L. I, the undersigned, certify that the Bidder is legally qualified to contract with the City of Silverton.
- M. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- N. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing forthe Contract.
  - "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
  - "fraudulent practice" means an intentional misrepresentation of facts made (a) toinfluence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-

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competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

- "collusive practice" means a scheme or arrangement between two or more Bidders, withor
  without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, noncompetitive levels; and
- "coercive practice" means harming or threatening to harm, directly or indirectly, personsor their property to influence their participation in the bidding process or affect the execution of the Contract.

## **Specific Bidder Instructions**

- A. The undersigned agrees to comply with the provisions of ORS 279C.800 to 279C.870, the Oregon Prevailing Wage law. The undersigned, as bidder, acknowledges that provisions of ORS 279C.800 279C.870 relating to workers on public works to be paid not less than prevailing rate of wage (BOLI) shall be included in the Agreement, the undersigned Contractor agrees to be bound by and will comply with the provisions of ORS 279C.838, 279C.840.
- B. The undersigned certifies that the undersigned Contractor is not ineligible to receive a contract for a public work pursuant to ORS 279C.860. Bidder further agrees, if awarded a contract, that every subcontractor will be eligible to receive a contract for a public work pursuant to ORS 279C.860.
- C. The undersigned certifies that the undersigned Contractor has not discriminated against minority, women or emerging small businesses enterprises in obtaining any required subcontracts. The bidder understands and acknowledges that it may be disqualified from bidding on this public improvement project as set forth in OAR 137-049-0370, including but not limited to the City's discovery of a misrepresentation or sham regarding a subcontract or that the Bidder has violated any requirement of ORS 279A.110 or the administrative rules implementing the Statute.
- D. The undersigned bidder is registered with the Oregon Construction Contractors Board (CCB), the registration is current and valid, and the bidder's registration number is stated below. Bidder understands that failure to have a current CCB license shall result in rejection of this bid in accordance with OAR 137-049-0230(1).
- E. The undersigned bidder is licensed by the State Landscape Contractors Board, if applicable, the license is current and valid, and the bidder's registration number is stated below. Bidder understands that failure to have a current LCB license shall result in rejection of this bid.
- F. The undersigned represents him/her self in this bid to be either a Resident or a Nonresidentbidder by completing the check boxes below.

## Contractor shall check applicable box:

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	Resident Bidder, as defined in ORS 279A.120 Non-Resident Bidder, Resident State:
G.	The undersigned confirms that the Bidder has a Qualified Drug Testing Program for employees in place and will demonstrate this prior to award of contract in accordance withOAR 13 -049-02.001 (c)(B). The undersigned represents him/her self in this bid to have a drug testing program in place at the time of bid by completing the check box below.
	ntractor shall check if in compliance: Drug Testing Requirement, as defined in ORS 279C.505
н.	If the contract is for a public works project, subject to ORS 279C.800, 279C.870 and, <b>nobid will be</b> received or considered by the public contracting agency unless the box below is checked, certifying that the Bidder complies with the provisions of ORS 279C.800 through ORS 279C.870 or 40 U.S.C. 3141 et seq.
<b>Co</b> [	ntractor shall check if in compliance:  ] The Bidder certifies that the provisions of ORS 279C.800 through ORS279C.870.
l.	The undersigned confirms that if this contract involves asbestos abatement or removal, thebidder is licensed under ORS 468A.710 for asbestos removal. Asbestos abatement is not implicated in this contract.
J.	The bidder understands that the City will be awarding the contract to the Responsible Bidderwith the lowest Responsive Bid. Whether a Bidder is responsible will be determined by ORS 279C.375 and the City's review following the requirements laid out in Section 2.20 ofthe Instructions to Bidders, and that the Bidder has supplied all the required attachments listed in the "Attachments to this Bid" section listed on page 6 of the Bid Form.
K.	Bidder agrees that the Work will be substantially complete and will be completed and readyfor final payment on or before the dates or within the number of calendar days indicated in the Agreement.
	The Bidder further proposes to accept the following amount as full payment for the work proposed herein to complete the project and agrees that the price represents a true measure of the labor andmaterials required to perform the work, including all allowances for overhead and profit for each type of work called for in these Contract Documents. The total amount shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.
	If the Bidder is awarded a Contract on this proposal, the surety who will provide the Performance Bond will be whose address is

SCHEDULE OF VALUES FORM

## BASE BID SCHEDULE – 2024 CIPP Project, PN24-1097

	ITEM	QNTY	UNIT	UNIT PRICE	TOTAL PRICE
1.	Mobilization	1	LS	\$	\$
2.	Temporary Traffic Control	1	LS	\$	\$
3.	Cleaning and Video Inspection	5,165	LF	\$	\$
4.	12" CIPP Lining	280	LF	\$	\$
5.	8" CIPP Lining	3,980	LF	\$	\$
6.	6" CIPP Lining	905	LF	\$	\$
7.	Spot Repair, each 5' section of pipe	5	EA	\$	\$
8.	Bypass Pumping	1	LS	\$	\$
9.	Reinstate Services	110	EA	\$	\$
	BASE BID TOTAL				\$

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to beadequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

IOTAL BASE BID AMOUNT (Written):		
Contractor's Name:		
Contact Name:		
Signature:		
Telephone Number:		
Contractor Contact E-mail Address:		

## ATTACHMENTS TO THIS BID FORM

The following documents are submitted with and made a condition of this Bid:

- A. Bid Security
- B. Construction Contractor's Registration
- C. First-Tier Subcontractor Disclosure Form
- D. Affidavit of Noncollusion (completed and notarized)
- E. Employee Drug Testing Program (required under ORS 279C.505(2))
- F. Certification of Non-Discrimination (required under ORS 279A.110(3))
- G. Contractor Project References

## **CONSTRUCTION CONTRACTORS REGISTRATION**

No bids for construction contracts shall be received or considered by the Agency unless the bidderis licensed with the Construction Contractors Board or licensed by the State Landscape Contractors Board as required by ORS 671.530. The undersigned states that the bidder is now registered with the Oregon Construction Contractors Board.

Indicate Registration Number and Ex	xpiration Date:
Workers' Comp Insurance Company:	:
Workers' Comp Policy/Binder Numb	er:
The names of the principal officers on of all persons interested in this pr	of the corporation submitting this proposal; or of thepartnership oposal as principals; are as follows:
Name	Title
Name	Title
Name of Firm	nas set his (its) hand this day of July, 2024.
Signature of Bidder	
(If Corporation) In witness whereof the undersigned duly authorized officers this	corporation has caused this instrument to be executed by its
Name of Corporation	
Ву	Title

#### FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM FOR THE 2024 CIPP PROJECT

BID OPENING: Date: June 6, 2024 Time: 2:00 PM

Failure to submit this form by the disclosure deadline will result in a non-responsive bid. A nonresponsive bid will not be considered for award.

#### **INSTRUCTIONS:**

This form must be submitted at the location specified in the Instructions to Bidders on the advertised bid closing date, and within two working hours after the advertised bid closing time (ORS 279C.370).

Unless otherwise stated in the solicitation, this document shall not be submitted by facsimile. It is the responsibility of bidders to submit this disclosure form and any additional sheets with the project name clearly marked, at the location indicated by the specified disclosure deadline.

Subcontractor lists may be submitted with the bid in the same envelope at the bid closing date and time. Those subcontractor lists submitted after the bid closing shall be delivered in a separate sealed envelope that clearly identifies the contents. However, the subcontractor list **MUST** be submitted within two (2) hours of the bid closing date and time.

List below the name of each subcontractor that will be furnishing labor, or labor and materials, forwhich disclosure is required, the category of work that the subcontractor will be performing, and the dollar value of the subcontract. Enter "NONE" if the value of the project bid is less than \$100,000 or there are no subcontractors that need to be disclosed. ATTACH ADDITIONAL SHEETS IF NECESSARY.

1.	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK	
2.				
3.				

The above listed first-tier subcontractor(s) are providing labor, or labor and material, with a Dollar Value equal to or greater than:

- a) 5% of the total Contract Price, but at least \$15,000. [If the Dollar Value is less than \$15,000 do not list the subcontractor above.] or
- b) \$350,000 regardless of the percentage of the total Contract Price.

Form Submitted By (Bidder): _		
Bidder Signature:	Phone #	
	_	

# AFFIDAVIT OF NONCOLLUSION (for Standard Public Improvement Contracts)

**TO:** City of Silverton

**PROJECT NAME:** 2024 CIPP Project

KNOW ALL PERSONS BY THESE PRESENTS, that, \_

## Name of Contractor

as a Bidder on the above-named public improvement project, does hereby certify that no officer, agent, or employee of the State, County, or City who has a pecuniary interest in the Bid has participated in the Contract negotiations on the part of the City, that the Bid is made in good faith without fraud, collusion, or connection of any kind with any other Bidder, and that the Bidder is competing solely on its own behalf without connection with, or obligation to, any undisclosed person or firm.

**IN WITNESS WHEREOF**, the undersigned has duly authorized the execution of this document by the name and signature indicated below. If Contractor is an entity (Inc., LLC, LLP,Co., etc) or principal, their representative, by signing below, certifies that such representative is authorized by the entity or principal to execute this document.

Dated this	day of July, 2024.
Signature	
Title	
STATE OF OREGON	} } ss
COUNTY OF	}}
Personally appeared before me this foregoing instrument to be his or her vol	day of July, 2024,and has acknowledged the untary act and deed.
	NOTARY PUBLIC FOR OREGON
	My Commission expires:

# EMPLOYEE DRUG TESTING PROGRAM CERTIFICATION (for Standard Public Improvement Contracts)

**TO:** City of Silverton, a Municipal Corporation in the State of Oregon

**PROJECT NAME:** 2024 CIPP Project

In accordance with ORS 279C.505(2), as a Bidder on the above-named public improvement project, does hereby certify to the City that the Bidder has an employee drug testing program in place in accordance with Oregon Law at the time of submitting its Bid, and that such employee drug testing program will be maintained in accordance with Oregon Law throughout the duration of the Contract, including any extensions.

Name of Contractor	
Signature	
 Title	
.,	
Date	

# CERTIFICATION OF NON-DISCRIMINATION (for Standard Public Improvement Contracts)

10:	City of Silverton, a Mur	nicipal Corporation in the State of Oregoi
PROJECT NAME:	2024 CIPP Pro	pject
the above- name Bidder has not di 279A.110(1), aga business, a woma	d public improvement p scriminated andwill not inst a disadvantaged bus an-owned business, a bu	OAR 137-049-0440(3), as a Bidder on roject, does hereby certify that the discriminate, in violation of ORS siness enterprise, a minority-owned siness that a service- disabled veteran otaining or awarding of Subcontracts for
Name of Contracto	or	
Signature		
Title		
 Date		

## **CONTRACTOR PROJECT REFERENCES**

This form must be submitted with the bid. 3 references of similar completed projects shall be provided by the Contractor. Please provide the name of project, overall contract value, description of work completed, along with contact information for the project's owner.

Project #1:	Contract Amount:
Project Description:	
	Phone Number:
Address:	City, State, Zip:
Contact Name:	E-mail Address:
Project #2:	Contract Amount:
Project Description:	
	Phone Number:
Address:	City, State, Zip:
Contact Name:	E-mail Address:
Project #3:	Contract Amount:
Project Description:	
	Phone Number:
Address:	City, State, Zip:
Contact Name:	E-mail Address:
Form Submitted By (Bidder):	
Bidder Signature:	Phone #

## **SECTION 4 - BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that v	we
	(Name of Contractor)
as Principal, hereinafter called the Principa	l, and
	(Name of Surety)
a corporation, duly authorized to do a gene	eral surety business in Oregon, as SURETY, and
jointly and severally held and bound unto _	
	(Name of Obligee)
as Obligee, hereinafter called the Obligee, i	in the sum of
	Dollars
	ren Value)
	ayment of which sum well and truly to he made, the said es, our heirs, executors, administrators, successors and se presents.
WHEREAS, the Principal has submitted a bi	d for_
into a Contract with the Obligee in accord bonds as may be specified in the bidding or the faithful performance of such Contract furnished in the prosecution thereof, or in Contract and give such bond or bonds, if the exceed the penalty hereof between the a which the Obligee may in good faith contract.	ept the bid of the Principal and the Principal shall enter ance with the terms of such bid, and give such bond or Contract Documents with good and sufficientsurety for ct and for the prompt payment of labor and material in the event of the failure of the Principal to entersuch the Principal shall pay to the Obligee the difference not to mount specified in said bid and such larger amount for fact with another party to perform the Work covered by and void, otherwise to remain in full force and effect.
Principal:	Surety:
Ву:	
Title:	Title:
Attest:	Attest:

#### **SECTION 5 - AGREEMENT**

## **2024 CIPP Project**

This Agreement is entered into by and between the City of Silverton, hereinafter referred to as the "City", and \_\_\_\_\_\_\_\_hereinafter called the "Contractor", to provide the services described in the Invitation to Bid for the **2024 CIPP Project, SILVERTON, OREGON**, which by this reference is hereby made part of this Agreement. The following provisions shall comprise this Agreement:

Contractor shall complete all Work as specified or indicated in the Contract Documents. The Workis a CIPP (Cured-in-Place Pipe) lining project on selected sanitary sewer mains. The project consists of lining approximately 280 feet of 12" main, 3,980 feet of 8" mains that are concrete or clay, and 905 feet of an 6". The project also includes reinstating service to laterals using the lined mains and point repairs if needed. Contractor will coordinate with City staff on construction timing to minimize disruptions to services and traffic.

## **5.1 CONTRACT TIMES:**

The Work will be substantially completed on or before <u>April 15, 2025</u>, and completed and ready for final payment on or before <u>May 1, 2025</u>.

The anticipated issuance date of the Notice to Proceed is the 10<sup>th</sup> of July, 2024.

#### **5.2 LIQUIDATED DAMAGES**

Contractor and Owner recognize that time is of the essence and that the Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in 5.1 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

- **Substantial Completion**: Contractor shall pay Owner \$200 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 5.1 above for Substantial Completion until the Work is substantially complete.
- Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$200 for each day that expires after such time until the Work is completed and ready for final payment.

Liquidated damages for failing to timely attain Substantial Completion and final completionare not cumulative and will not be imposed concurrently.

## 5.3 COMPENSATION:

The City agrees to compensate the Contractor on a fee-for-services basis as outlined in these Documents. This agreement covers the period listed above. Work shall be performed in accordance with an approved schedule provided to the City by the Contractor as part of this document. Invoices submitted for payment in connection with this agreement shall be properly documented and shall indicate pertinent City contract and/or purchase order numbers. All invoicesshall be consistent with the bid amount accepted by the City and shall reflect any savings or reductions provided for in the bid amount. The City will retain 5% from progress payments. Theretainage will be released with the final payment after the project has been accepted as complete by the City. The compensation authorized under this contract is found under subsection 5.11 Contract Price.

The Contractor is engaged hereby as an independent contractor and will be so deemed for purposes of the following:

- 1. The Contractor will be solely responsible for payment of any Federal or State taxes required asa result of this agreement.
- 2. This contract is not intended to entitle the Contractor to any benefits generally granted to City employees. Without limitation but by way of illustration, the benefits which are not intended to be extended by this contract to the Contractor are vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits(except insofar as benefits are otherwise required by law if the Contractor is presently a member of the Public Employees Retirement System).
- 3. The Contractor is a sole proprietor or a partner or is an insured employer for purposes of the Oregon Workers' Compensation law (ORS Chapter 656) and is solely liable for any Workers' Compensation coverage under this contract. If the Contractor has the assistance of other persons in the performance of this contract, the Contractor shall qualify and remain qualified for the term of this contract as an insured employer under ORS 656.017 and ORS 656.407.

The Contractor, if an individual, certifies that he or she is not a program, City, or Federal employee. The Contractor, if an individual, certifies that he or she is not a member of the Public Employees Retirement System.

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#### 5.4 SERVICES TO BE PROVIDED:

The Contractor shall provide all materials and services required for the Project; as set forth in the Contract Documents, and the documents it references.

#### 5.5 CONTRACTOR OBLIGATIONS

This contract is expressly subject to all applicable State contracting laws and further, is expressly subject to the constitutional and charter debt limitation, and incorporates by reference all provisions required by applicable ORS 279A and ORS 279C and Oregon Administrative Rule Divisions 47 and 49 (i.e., OAR 137-049-0200(c)(A) through and including OAR 137-049-0200(c)(V) (2006). The contract is contingent upon funds being appropriated therefore.

- 1. The Contractor shall comply fully with all statutory requirements for payment of prevailing wage rates on public works projects. The hourly rate of wage to be paid workers on this projectshall not be less than the prevailing wage for an hour's work in the same trade or occupation in the locality of the project. This requirement shall apply to all workers employed on the project by the prime contractor, subcontractors, or other persons doing, or contracting to do thewhole or any part of the work required for the project. The existing prevailing rates of wages as established by the Commissioner of the Bureau of Labor and Industries pursuant to ORS 279.359 are hereby incorporated into these Specifications. A reference to the Prevailing Wage Rates is attached to this Contract in **Section 7.** When a contractor or subcontractor is a party toa statewide collective bargaining agreement in effect with any labor organization, the rate of wages provided for in such agreement shall be considered to be the prevailing rate of wage to be paid to the workers on this project.
- 2. The Contractor shall indemnify, save harmless and defend the City, its officers, councilors, agents and employees from and against all claims and actions, and all expenses incidental to the investigation and defense thereof, arising out of or based upon damage or injuries to personsor property caused by the errors, omissions, fault or negligence of the Contractor or the Contractor's employees and agents.
- **3.** Contractor shall comply with all applicable federal and state civil rights and rehabilitation statutes, rules, and regulations. Contractor shall maintain valid all required licenses and certificates required by law.
- **4.** If the Contractor fails to pay for labor and services, the City can pay for them and withhold those amounts from payment to the Contractor. ORS 279C.515; OAR 839-025-0020(2)(a)

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- **5.** The Contractor must pay daily, weekly and holiday overtime as required. ORS 279C.520; OAR839-025-0020(2)(b)
- **6.** The Contractor must make prompt payment for all medical services for which the Contractor has agreed to pay, and for all amounts for which the Contractor collects or deducts from workers wages. ORS 279C.530; OAR 839-025-0020(2)(d)
- 7. The Contractor must submit a Public Work Contract Fee form (WH-39) and pay a prevailing wage rate fee to BOLI. ORS 279C-830 (2); OAR 839-025-0020(2)(e)
- **8.** The Contractor must pay the workers not less than the applicable state or federal prevailing wage rate, whichever is higher. ORS 279C3830 (1)(c); OAR 839-025- 0020(3)
- **9.** The Contractor must have a public works bond filed with the Construction Contractors Board before commencement of any work on the project. ORS 279C.830(3)(a)
- **10.** The Contractor shall include in every subcontract a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board before commencing any work on the project. ORS 279C.830(3)(b).

Contractor warrants all installed materials or systems to be free from design, material or construction defects and the systems shall perform to the City's satisfaction for two years from the date the City accepts the work. Contractor warrants that the renovation work shall be performed consistent with professional standards found to be prevalent in the State of Oregon.

## 5.6 INSURANCE COVERAGES:

Required Insurance Coverages are found in **Section 8** of these documents.

#### **5.7 SUBCONTRACTS:**

The Contractor shall be responsible to the City for the actions of persons and firms performing subcontract work.

#### **5.8 TERMINATION OF CONTRACT:**

The City may terminate the whole or any part of this contract in any one of the following circumstances.

- **1.** The City may terminate this Agreement if sufficient funds are not appropriated for the completion of this project.
- 2. If the Contractor fails to make delivery of the supplies or to perform the services within the time specified (to be determined) herein or any extension thereof; or
- 3. If the Contractor fails to perform any of the other provisions of this contract, or so fails to make progress as to endanger performance of this contract in accordance with its terms, and in either of these two circumstances does not cure such failures within a period of ten (10) days (or such longer period as the City may authorize in writing) after receipt of notice from the City specifying such failure.
- **4.** In the event the City terminates this contract in whole, or in part, the City may procure, upon such terms and in such manner as the City may deem appropriate, supplies or services similar to those terminated, and the Contractor shall be liable to the City for any excess costs for such similar supplies or services; provided, that the Contractor shall continue the performance of this contract to the extent not terminated under the provisions of this clause.
- **5.** Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the Contractor(s). Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the City in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freightembargoes and unusually severe weather; but, in every case, the failure to perform must be beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.
- **6.** The rights and remedies of the City provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.
- **7.** As used in paragraph (5) of this clause, the terms "subcontractor" and "subcontractors" mean subcontractor(s) at any tier.

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## 5.9 PERFORMANCE AND PAYMENT BOND

The Contractor will be required to file with the City Performance and Labor and Material Payment bonds in the full amount of the contract price at the time of execution of the contract. The surety company furnishing this bond shall have a sound financial standing and a record of service satisfactory to the City and shall be authorized to do business in the State of Oregon. The Attorney-in-Fact (Resident Agent) who executes this performance and payment bond in behalf of the surety company must attach a copy of his power-of-attorney as evidence of his authority. A notary shall acknowledge the power as of the date of the execution of the surety bond, which it covers. AIA forms may be used for the Performance and Labor and Material Payment bonds.

#### 5.10 WARRANTY BOND

At the completion of the project and prior to received final acceptance by the City, the Contractor shall provide the City with a Warranty Bond in the amount of 15% of the contract amount, which covers any defects in either materials or workmanship, for a period of two years from the date of acceptance. AIA forms will be used for the Warranty Bond.

#### **5.11 CONTRACT PRICE:**

Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

BASE BID SCHEDULE – 2024 CIPP Project, PN24-1097

	ITEM	QNTY	UNIT	UNIT PRICE	TOTAL PRICE
1.	Mobilization	1	LS	\$	\$
2.	Temporary Traffic Control	1	LS	\$	\$
3.	Cleaning and Video Inspection	5,165	LF	\$	\$
4.	12" CIPP Lining	280	LF	\$	\$
5.	8" CIPP Lining	3,980	LF	\$	\$
6.	6" CIPP Lining	905	LF	\$	\$
7.	Spot Repair, each 5' pipe section	5	EA	\$	\$
8.	Bypass Pumping	1	LS	\$	\$
9.	Reinstate Services	110	EA	\$	\$
	BASE BID TOTAL				\$

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## **5.12 PAYMENT PROCEDURES:**

Comply with Section 00195 of the Standard Specifications.

## 5.13 INTEREST:

All amounts not paid when due shall be subject to terms listed on invoice.

## **5.14 TERMINATIONS AND AMENDMENTS:**

This contract and any amendments thereto will not be effective until approved in writing by the City of Silverton.

This contract supersedes and cancels any prior contracts between the parties hereto for similar services.

In the event of litigation arising out of or relating to this Agreement, the prevailing party in such suit or action shall be entitled to recover its reasonable attorney fees as may be awarded by the court in which such suit or action is tried, heard or decided, and on any appeal therefrom.

## 5.15 SIGNATURES:

By their signatures below, the parties to this contract agree to the terms, conditions, and content expressedherein.

CONTRACTOR		CITY OF SILVERTON		
Authorized Signature	Date	Cory Misley, City Manager		
Printed Name and Title		Date		
Telephone/Fax Number				
Federal Tax I.D. Number				
CCB Number				

## **SECTION 6 PERFORMANCE AND PAYMENT BONDS**

## **PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS, that we			
As PRINCIPAL, and			
a corporation, duly authorized to do a general surety business in Oregon, as SURETY, and jointly and severally held and bound unto			
the OBLIGEE herein, in the sum of			
(dollars) (\$)			
for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns, firmly by these presents:			
THE CONDITION OF THIS BOND IS SUCH THAT			
WHEREAS,			
(Contractor)			
the PRINCIPAL herein, on the			

NOW, THEREFORE, if said PRINCIPAL herein shall commencing with the date hereof and continuing for one year after the complete performance of the contract and the final acceptance of the work in the contract, save harmless the OBLIGEES, its officers and agents, from all claims therefore, or form any claim for damages or injury to property or persons arising by reason of saidwork; and shall, in the time and manner, and under the terms and conditions prescribed, well and faithfully do, perform, and furnish all matters and things as by them in said contract undertaken, and as by law, state and national, prescribed, then this obligation shall be void; but otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER, that this bond is subject to the following conditions:

- (a) The said SURETY for the value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.
- (b) The PRINCIPAL herein shall faithfully and truly observe and comply with the terms of the contract and shall well and truly perform all matters and things by him undertaken to be performed under said contract upon the terms proposed therein and shall promptly, as due, make payment to any person, co-partnership, association, or corporation furnishing medical, surgical and hospital care or other needed care and attention incidental to sickness or injury to the employees of such PRINCIPAL, pursuant to the laws of this state and any contract entered into pursuant thereto or collected or deducted from the wages of said employees pursuant to any law, contract or agreement for the purpose of providing or paying for such services, and shall do all things required of said PRINCIPAL by the laws of this state.

This bond is given and received under the authority of ORS Chapter 279, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, the part	ies hereto hav	e caused this bond to be executed in	
	this	_day of July, 2024.	

BIDDER			SURET	ГҮ	
		(Seal)		(Seal)	
Bidder's Name and Corporate Seal			Surety's Name and Corporate Seal		
Ву:			Ву:		
	Signature			Signature (Attach Power of Attorney)	
	Print Name			Print Name	
	Title			Title	
Attest	:		Attest:		
	Signature			Signature	
	Title			Title	

The attorney-in-fact who executes this bond in behalf of the surety company, must attach a copy of his power-of-attorney as evidence of his authority.

To each executed original of this bond, there must be attached a complete set of the contract documents, as the term is defined in the "Standard Specifications and Special Provisions", with all corrections, interlineations, signatures, etc., completed reproduced therein.

## **PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS, that we			
As PRINCIPAL, and			
a corporation, duly authorized to do a general surety business in Oregon, as SURETY, and jointly and severally held and bound unto			
the OBLIGEE herein, in the sum of			
(dollars) (\$)			
for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns, firmly by these presents:			
THE CONDITION OF THIS BOND IS SUCH THAT			
WHEREAS,(Contractor)			
the PRINCIPAL herein, on the			

NOW, THEREFORE, if said PRINCIPAL herein shall promptly pay all persons furnishing labor, services and material, and sums due for workmen's compensation insurance or equivalent, social security and unemployment compensation, sums due to the Department of Revenue, to him and to his subcontractor, or to their assigns, on or about said work then this obligation shall be void; but otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER, that this bond is subject to the following conditions:

- (a) All material men, and all persons who shall supply such laborers, mechanics, or subcontractors with material, supplies or provisions for carrying on such work, shall have a direct right of action against the PRINCIPAL and SURETY on this bond, second only to the right of the OBLIGEE under this bond, which right of action shall be asserted in proceedings instituted in the appropriate court of the State of Oregon, and insofar as permitted by the laws of Oregon, such right of action shall be asserted 'in a proceeding instituted in the name of the OBLIGEE to the useand benefit of the person, firm, or corporation instituting such action and of all other persons, firms, or corporations having claims hereunder, and any other person, firm or corporation havinga claim hereunder shall have the right to be made a party to such proceeding (but not later than one year after the complete performance of said contract and final acceptance of the work in the contract) and to have such claim adjudicated in such action and judgment rendered thereon.
- **(b)** The said SURETY for the value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.
- (c) The PRINCIPAL herein shall faithfully and truly observe and comply with the terms of the contract and shall promptly make payments to all persons supplying labor or material for any prosecution of the work provided for in such contract and shall not permit any lien or claim tobe filed or prosecution against the OBLIGEES, on account of any labor or material furnished, and shall promptly pay all contributions or amount due the workmen's compensation board or equivalent and all contributions or amounts due the state employment compensation trust fund incurred in the performance of said contract, and shall also pay all sums of money withheld from the employees and payable to the state tax commission pursuant to ORS 316.711, and shall do all things required of said PRINCIPAL by the laws of this state.

This bond is given and received under the authority of ORS Chapter 279, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, the parti-	es hereto hav	e caused this bond to be executed in	
, t	:his	_day of July, 2024.	

BIDDE	R	<i>(</i>	SURET	
Bidder	's Name and Corporate Seal	(Seal)	Surety	's Name and Corporate Seal
Ву:			Ву:	
-	Signature		•	Signature (Attach Power of Attorney
	Print Name			Print Name
	Title			Title
Attest	:		Attest:	
	Signature			Signature
	Title			Title

The attorney-in-fact who executes this bond in behalf of the surety company, must attach a copy of his power-of-attorney as evidence of his authority.

To each executed original of this bond, there must be attached a complete set of the contract documents, as the term is defined in the "Standard Specifications and Special Provisions", with all corrections, interlineations, signatures, etc., completed reproduced therein.

## **SECTION 7 PREVAILING WAGE RATES (BOLI)**

# **2024 CIPP Project**

# **PREVAILING WAGES**

This Public Works Project is subject to the applicable prevailing wage rates. If a contractor fails to pay for labor and services, the City can withhold these amounts from payments due the contractor.

The latest Prevailing Wages applicable to this project can found electronically at: <a href="https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx">www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx</a>.

## **SECTION 8 SPECIAL PROVISIONS**

This project uses the ODOT/APWA Oregon Standard Specifications for Construction (OSSC) 2021 project manual. In the event any discrepancies are found regarding procurement instructions and/or requirements given in Sections 1 through 6 of this bidding package and Part 00100 General Conditions of the OSSC 2021, Sections 1 through 6 of this bidding package shall govern.

Modifications from the OSSC 2021 project manual are listed in these special provisions. If there are no modifications listed then the Contractor will comply with the section as written in the OSSC 2021 Project Manual.

### **SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES**

Comply with Section 00170 of the Standard Specifications modified as follows:

**00170.70 Insurance** – Add the following information on required insurance limits:

- Commercial General Liability \$1,000,000 per occurrence, \$2,000,000 aggregate
- Excess/Umbrella Coverage \$4,000,000
- Automobile Liability \$1,000,000 combined single limit

## **SECTION 00195 - PAYMENT**

Comply with Section 00195 of the Standard Specifications modified as follows:

**00195.12(d) Steel Materials Pay Item Selection** - Add the following paragraph to the end of this subsection:

No Pay Items under this Contract qualify for the steel escalation/de-escalation program.

## SECTION 00221 – COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

Comply with Section 00221 of the Standard Specifications modified as follows:

**00221.06 Traffic Control Plan** – Replace the first paragraph with the following:

The Contractor is required to provide a TCP to the Agency for review and approval per 00221.06 (b) Contractor Modified Traffic Control Plan prior to the beginning of construction. Contractor needs to maintain access for residents and businesses during lining. Oak, Water, and 1<sup>st</sup> Streets are ODOT highways and require an ODOT access permit to work in these areas. A copy of the ODOT access permit must be provided by the Contractor to the City before any work on those streets can begin.

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## **SECTION 9 - CIPP LINING SPECIFICATIONS**

#### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. Furnish all labor, tools, equipment, materials, and incidentals to CCTV, clean, and rehabilitate existing pipelines and conduits by trenchless means and methods.
- B. Approved Cured-in-place pipe (CIPP) liner methods include:
  - 1. Glass Reinforced thermosetting Plastic (GRP) cured-in-place pipe (CIPP) liner cured using ultraviolet (UV) cure methods (basis of design).
  - 2. Installation of a resin-impregnated flexible tube, which is formed to the original conduit by use a hydrostatic head or air pressure, cured using either hot water under hydrostatic pressure or steam within the tube.
- C. When completed and cured, the CIPP shall extend from end-to-end of the section being lined and provide a structurally sound, smooth, continuous, jointless, seamless, tight fitting, and watertight pipe-within-a-pipe as specified herein.
- D. The CIPP liner shall be designed to carry the full internal pressure without consideration of the structural ability of the existing pipe.
- E. The purpose of the pipe rehabilitation work is to restore and protect the interior pipe structure and surface and to seal faults in the pipeline or conduit to prevent root intrusion, infiltration/exfiltration, corrosive attack, etc.
- F. The Contractor shall CCTV, cleanup, restore existing surface conditions and structures and repair any trenchless pipe rehabilitation system determined to be defective. The Contractor shall conduct installation operations and schedule cleanup in a manner to cause the least possible obstruction and inconvenience to the Owner, traffic, pedestrians, businesses, and property owners or tenants.
- G. The Contractor shall coordinate a temporary shutdown of the affected pipelines for the duration of the trenchless pipeline rehabilitation Work including but not limited to installation, wet out, cure, and testing work. The temporary shutdown will be limited to no more than 1 working day for each section of pipe repaired.
- H. Only proven products with substantial successful long term track records will be approved.
- I. The City has not performed a CCTV video inspection of the existing pipelines.

#### 1.2 REFERENCES

- A. The following standards are included in this specification by reference:
  - 1. ASTM C581 Standard Practice for Determining Chemical Resistance of

Thermosetting Resins Used in Glass Fiber Reinforced Structures Intended for Liquid Service

- 2. ASTM D543 Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
- 3. ASTM D578 Standard Specifications for Glass Fiber Strands
- 4. ASTM D638 Standard Test Method for Tensile Properties of Plastics
- 5. ASTM D790 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- 6. ASTM D792 Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
- 7. ASTM D883 Standard Terminology Relating to Plastics
- 8. ASTM D903 Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
- 9. ASTM D1600 Terminology for Abbreviated Terms Relating to Plastics
- 10. ASTM D2990 Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics
- 11. ASTM D5813 Standard Specification for Cured-In-Place Thermosetting Resin Sewer Piping Systems
- 12. ASTM F1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
- 13. ASTM F1743 Rehabilitation of Pipelines by Pulled-In-Place Installation Of A Cured-In-Place Thermosetting Resin Pipe
- 14. ASTM F2019 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Resin Pipe (CIPP) using UV-Light Curing Method.
- 15. ASTM D5034 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).
- 16. ASTM D790 Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- B. In the case of conflicting requirements between this specification and these referenced documents, this specification shall govern.

#### 1.3 SUBMITTALS

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## A. Submit the following items prior to installation:

## 1. Installation Experience:

- a. For a Product to be considered Commercially Proven, the Product shall have been installed over at least the previous five (5) years, with a total installed amount in sewer collection systems in the U.S. documented to the satisfaction of the Owner to assure commercial viability.
- b. For a Contractor to be considered as Commercially Proven, the Contractor must satisfy all insurance, financial, and bonding requirements of the Owner, and must have had at least five (5) years active experience in the commercial installation of the product bid. The Contractor's foreman/superintendent shall have sufficient experience as a foreman/superintendent for a trenchless pipeline rehabilitation crew installing actual product included with this bid/project. Such experience shall include the actual product, by trade name, Contractor proposes to install. Acceptable documentation of these installations must be submitted to the Owner.
- c. For CIPP: For a product and installer to be Commercially Proven, the installer must own and operate a legally permitted permanent facility to impregnate the CIPP tubes. To ensure the Owner all installed products will meet the minimum product quality control standards set forth by the manufacturer, all CIPP liners shall be impregnated by the approved product's licensed installer that is performing the work. No pre-impregnated CIPP products will be accepted from a third-party vendor without written pre-approval from the owner. Provide a copy of applicable permits for this facility.
- 2. Resumes of the superintendents, foremen, and applicable lead personnel for the CIPP crews that will be used on this project. These must demonstrate competency and experience to perform the Work as defined in the Contract Documents.

## 3. Provide installers who:

- a. Are licensed and certified by the manufacturer of the trenchless pipe rehabilitation product system to be used on the Project.
- b. Have at least five (5) years of active experience in the installation of the curing method proposed by the Contractor. Contractor must be able to complete work according to proposed curing methods ASTM F2019 (for UV curing) or ASTM F1743 or ASTM F1216 (for steam or hot water curing) in sewer pipelines.
- 4. Letters of qualification by the trenchless rehabilitation system supplier (i.e., liner manufacturer(s), the resin supplier(s), certifying the suitability of their products for use in the trenchless pipeline rehabilitation process, stating the history of successful application of these trenchless pipeline rehabilitation products, and stating that

these products have been supplied to and successfully used by the installation contractor. Product manufacturer experience shall not be utilized in lieu of actual installer experience. Installer experience refers to the actual Contactor intending to do the work, with no exceptions.

- 5. Products submitted for approval must provide Third Party Test Results supporting the long-term performance and/or structural strength of the product and such data shall be satisfactory to the Owner. No product will be approved without independent third-party testing verification.
- 6. If the Contractor proposes a substitution liner thickness differing than the minimums specified herein, engineering design calculations shall be prepared by and certified by a Registered Professional Engineer licensed in the State of Oregon. Liner design calculations shall conform to the minimum requirements contained in this Section.
- 7. Submit the following product and installation information:
  - a. Description of all equipment, tools, and materials to be used during the rehabilitation. The Contractor shall outline the mitigation procedure to be implemented in the event of key equipment failure during the installation process.
  - b. Contractor's description of the proposed rehabilitation lining methodology.
  - c. Contractor's description of the proposed procedures for removal of any existing blockages in the pipelines that may be encountered during the cleaning process (e.g., protruding service taps, pipe failures, roots, etc.).
  - d. Material Test reports.
  - e. Material Safety Data Sheets (MSDS) for the liner, resin, catalyst, cleaners, and repair agents, if used.
  - f. Manufacturers' shipping, storage, and handling recommendations for:
    - 1) Fabric Tubes.
    - 2) Resin.
  - g. Certified Test Results from three cured field installations within the previous 12-month period for the resin and fabric tubes proposed for use on this project that show the materials conform to the Contract Documents. Tests shall include, but not necessarily be limited to, physical properties of cured liner, chemical resistance, flexural strength, short- and long-term modulus of elasticity.
  - h. Installation and Cure Schedule: For each diameter and thickness of CIPP liner to be installed, submit an installation and cure schedule identifying the period of time that the sewer will be out of service to affected customers,

including the following minimum work items:

- 1) Liner installation
- 2) Total cure time
- The Manufacturer's narrative for cure procedure and curing equipment description. Curing equipment configuration as recommended by the liner manufacturer.
- 8. CCTV and PACP inspection reports/logs of the entire length of the host pipeline prior for review by the City after initial cleaning and prior to CIPP installation. Prior to installation City and Contractor will agree on any repairs that are needed.
- B. Submit the following items at the time of installation or within 24 hours thereafter.
  - A certified copy of the wetout sheet (batch ticket) for each liner delivered to the site and installed, including quality control forms and inspection sheets for each liner.
  - Certified copies of all cure logs submitted each week with the CIPP field samples.
     Certified copies of all cure logs shall be submitted for each installation to the Owner's representative weekly.
  - 3. All preliminary post-installation television inspection logs and records (PACP coded). At the request of the Owner's representative, the Contractor shall provide preliminary copies of the post-installation videos for review on a weekly basis.
- C. Submit the following items prior to Substantial Completion.
  - 1. Two copies of pre- and post-installation video inspections and logs for Owner's records and Engineer's use.
  - 2. Copies of all quality control forms, and quality records used at each step throughout the fabrication, wet-out, and installation process.

## 1.4 WARRANTY

- A. The Contractor shall provide to the Owner an unconditional warranty for the product and installation under this Section against failure.
- B. "Unconditionally warrant" means that the warranty covers all failures, regardless of the source or cause of the failure, including, without limitation, whether the source or cause is or may be related to workmanship, inspection, or choice of materials.
- C. Owner or Engineer inspection of any portion of the Work during the Contract and during the product installation, Owner or Engineer acceptance of the Work, corrections under the warranty, or expiration of the warranty shall not relieve the obligations under this warranty.
- D. Warranty Period The warranty period shall be for 1 year from Owner or Engineer acceptance of the Work covered by this Section.

- E. Failure For the purposes of the warranty, failure is defined as one or more of the following:
  - 1. Tears or gouges.
  - 2. Leakage of water through the liner.
  - 3. Wrinkles, fins, or other discontinuities that, in the opinion of the Owner or the Engineer, are a structural deficiency in the liner. The Owner will review video of liner and work with the Contractor to mitigate and wrinkles, fins, or other discontinuities in the liner that are deemed a concern by the Owner.
  - 4. Holes, blisters, dimples, lifts, or dry spots.
  - 5. Separation of the liner from the host pipe.
  - 6. Delamination of CIPP layers.
- F. Remedy Upon notification by the Owner or Engineer of a failure as defined above, provide the following remedy at no additional cost to the Owner:
  - 1. Liner repair plan and written timeline of when the work will be completed within 10 Days of the Owner's written notification of failure.
  - 2. One of the following, as approved:
    - a. Install a second liner,
    - b. Remove the failed liner and install a full-thickness liner,
    - c. Construct a full pipe replacement, or
    - d. Install a liner repair.
  - 3. Complete one of the approved remedies within 60 Calendar Days of the Owner's written notification of failure.
  - 4. Use materials and procedures meeting the Contract Documents.
  - 5. Coordinate timing of repair Work with the Engineer.

#### PART 2 – PRODUCTS

## 2.1 CIPP MATERIALS

#### A. Fabric Tube

 CIPP UV Cured – The tube material shall meet the requirements of ASTM F2019, in addition to the specifications set forth herein. Standard felt or felt composite lining material and systems are not acceptable. Furnish tubing that consists of at least two separate tubes made of corrosion resistant (E-CR or equivalent) glass fibers according to ASTM D578 and ASTM F2019 which when UV light cured are completely chemically resistant to and will withstand internal exposure to sewage temperatures up to 100 F. The fiberglass liner shall have a second UV blocking outer layer applied during manufacturing. The tube material shall include an impermeable inner and outer foil layer to contain resin migration and contamination. The inner foil should release easily from the inside wall for removal after completion of installation or remain if fabricated as a permanent part of the system and an integral part of the fabric tube by bonding or fusing to the fabric tube.

- 2. CIPP Water or Steam Cured The tube material shall meet the requirements of ASTM F1216 or ASTM F1743, Section 5, reinforcing fibers may be included, in addition to the specifications set forth herein. Furnish tubing that consists of one or more layers non-woven felt fabric which when water or steam cured are completely chemically resistant to and will withstand internal exposure to raw water and temperatures up to 100 F.
- 3. The liner shall be constructed to withstand pulling and installation pressures as required by the manufacturer's recommendations and bridge missing pipe wall segments or other defects and stretch to fit irregular pipe sections.
- 4. Liners shall be cured-in-place to cure resin composite into a hard, impermeable, and structurally sound pipe. When cured, the new material shall extend over the entire length of the insertion in a continuous, tight- fitting, watertight pipe within a pipe.
- 5. The fabric tube shall be manufactured to a size that when installed will tightly fit the internal circumference, meeting ASTM D 5813, 6.3.1 standards or better, and the length of the original pipe. Allowances shall be made for circumferential stretching during installation. The Contractor shall verify the lengths and diameters in the field before fabricating the tube. Contractor shall consider the host pipe condition and potential for additional wall loss due to cleaning.
- 6. The fabric tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material shall be included in the fabric tube that may cause de-lamination in the cured CIPP. The outside layer of the tube shall be translucent plastic coated with flexible material that clearly allows inspection of the resin impregnation or wetout procedure. No dry or unsaturated layers shall be acceptable upon visual inspection as evident by color contrast between the fabric tube and the activated resin containing a colorant.
- 7. The wall color of the interior pipe surface of CIPP after installation shall be a light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made. The hue of the color shall be dark enough to distinguish a contrast between the fully resin saturated tube material and dry or resin lean areas.
- 8. The outside of the tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 ft. Such markings shall include the manufacturers name or identifying symbol.

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- 9. Seams in the fabric tube shall be equal to or greater in strength than the un-seamed tube.
- 10. The minimum length of the fabric tube shall be that deemed necessary by the installer to effectively span the distance from the starting manhole to the terminating manhole or access point, plus that amount required to run-in and run-out for the installation process, unless otherwise specified.
- 11. Prior to installation, the liner shall be free of all tears, holes, cuts, foreign materials, and other defects.
- 12. The tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material shall be included in the Tube that may cause delamination in the cured CIPP. No dry or unsaturated layers shall be evident.

### B. Resin – UV Cure

- 1. Resin shall be an epoxy resin capable of curing in the presence of UV light, meeting the requirements of ASTM F2019, Section 5.4. Supplier shall provide a certificate that the product meets the appropriate certification. The mix ratio of resin to catalyst shall be as recommended by the manufacturer. The resin must have a delayed curing agent system after having been mixed into the resin be capable of remaining in a refrigerated state without hardening for over 36 hours.
- 2. The resin shall be corrosion, shrinkage and abrasion resistant UV cured epoxy resin that when properly cured within the tube composite meets the requirements of ASTM F2019, the physical properties herein, and those to be utilized in the design of the CIPP for this project. The resin shall produce CIPP that will comply with the structural and chemical resistance requirements of this Section.
- 3. The acceptable resin shall have been tested according to ASTM D2990, D5813, and F1216 by accredited third party testing facilities. Submit results of these tests to the Owner.
- 4. Capable of curing in the presence and absence of water.
- 5. The quantity of resin used for tube impregnation shall be sufficient to fill the volume of all voids in the tube material with additional allowances for polymerization shrinkage and the loss of resin through cracks and irregularities in the original pipe. The amount of resin used shall exceed the calculated value by five to ten percent (5%-10%). Resin in excess of the calculated value shall be uniformly distributed throughout the length of the liner. The volume of resin required to meet the conditions listed above, shall be calculated for the diameter, thickness and targeted additional allowance of each diameter and thickness of CIPP liner per unit length, typically, per foot, and submitted to the Owner/Engineer for review.
- 6. Completely impregnate ("wet out") the liner with resin in the manufacture's plant under quality-controlled conditions. Attach certification (provided by the

manufacturer), according to ASTM F2019, to the impregnated fabric tube. No onsite or mobile resin impregnation is allowed.

## C. Resin – Water or Steam Cure

- The resin system when properly cured within the tube composite shall be corrosion, shrinkage, and abrasion resistant, meet the requirements of ASTM F1216 and ASTM F1743, the physical properties herein, and those which are to be utilized in the design of the CIPP for this project. The resin shall produce CIPP which will comply with the structural and chemical resistance requirements of this specification.
- 2. The acceptable resin shall have been tested according to ASTM D2990, D5813, and F1216 by accredited third party testing facilities. Submit results of these tests to the Owner.
- 3. The quantity of resin used for tube impregnation shall be sufficient to fill the volume of all voids in the tube material with additional allowances for polymerization shrinkage and the loss of resin through cracks and irregularities in the original pipe. The amount of resin used shall exceed the calculated value by five to ten percent (5%-10%). Resin in excess of the calculated value shall be uniformly distributed throughout the length of the liner. The volume of resin required to meet the conditions listed above, shall be calculated for the diameter, thickness and targeted additional allowance of each diameter and thickness of CIPP liner per unit length, typically, per foot, and submitted to the Owner/Engineer for review.
- 4. Completely impregnate ("wet out") the liner with resin in the manufacture's plant under quality-controlled conditions. Attach certification (provided by the manufacturer), according to ASTM F2019, to the impregnated fabric tube. No onsite or mobile resin impregnation is allowed.

## D. CIPP Structural Requirements

1. The design flexural modulus shall be de-rated from the laboratory values published by the resin supplier by an amount that reflects the Contractor's confidence in their field sampling method and that considers field conditions that are less ideal than the laboratory environment. The Contractor must have performed long-term testing for flexural creep of the CIPP pipe material installed by its Company. Such testing results are to be used to determine the long-term time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (Tube and Resin) and general workmanship of the installation and curing as defined within the relevant ASTM Standard. A percentage of the instantaneous flexural modulus value (as measured by ASTM D790 testing) will be used in design calculations for external buckling. The percentage, or the long-term creep retention value utilized, shall be verified by this testing. Retention values exceeding 50 percent of the short-term test results shall not be applied unless substantiated by qualified third party test data to the Owner's satisfaction. The materials utilized for the project shall be of a quality equal to or better than the materials used in the long-term test with respect to the initial flexural modulus used in the CIPP design.

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- The layers of the cured CIPP shall be uniformly bonded. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly, or the probe or knife blade moves freely between the layers. If separation of the layers occurs during testing of field samples, new samples will be cut from the work. Any reoccurrence may cause rejection of the work.
- 3. The design shall be based on the following physical properties parameters, unless otherwise specified by the Owner:

**Table 1: CIPP Minimum Design Parameters** 

Property	
Diameter	8 and 12 inches
Pipe Design Condition	Fully Deteriorated
Minimum service life	Greater than 50 years
Internal Operating Pressure	15 Psi
Maximum Soil Depth (above top of pipe)	10 feet
Groundwater Depth (above invert)	3' below surface.
Live Load	H-20 Highway
Soil Load	125 lb/cu. Ft.
Retention Factor	50%
Ovality	2% minimum, or actual if 2 2%
Modules of passive soil reaction	1,000 psi
Enhancement Factor, k	7.0
Long Term Flexural	
Strength	4,500 psi or 50% of initial (ASTM D790), whichever is greater

Property	
Modulus of Elasticity	250,000 psi or 50% of initial (ASTM D790), whichever is greater
Factor of safety	2.0
Poisson's ratio	0.3

4. In no case shall the nominal liner thickness be less than 6 mm. The nominal liner wall thickness shall be constructed to the nearest 0.5 mm increment.

## E. CIPP Physical Requirements

1. The minimum physical properties for UV Cured CIPP are as follows:

## **Table 2: UV CIPP Minimum Physical Properties**

Property		Cured Composite Per ASTM F1216
Flexural Modulus of Elasticity	ASTM D790 (short term)	1,000,000 psi
Flexural Modulus of Elasticity	ASTM D790 (long term)	250,000 psi
Flexural Strength	ASTM D790	4,500 psi
Tensile Strength	ASTM D638	20,000 psi

- Chemical resistance The CIPP shall meet the chemical resistance requirements of ASTM F1216, Appendix X2. CIPP samples tested shall be of the fabric tube and resin proposed for use on this project. It is required that CIPP samples with or without plastic coating meet these chemical testing requirements.
- 3. Hydraulic Capacity The hydraulic profile shall be maintained as large as possible. The CIPP shall have a minimum of the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using a commonly accepted roughness coefficient for the existing pipe material taking into consideration its age and condition.

## F. End Sealing

1. Each end of the CIPP shall be sealed to provide a watertight seal between the original pipe and the CIPP liner. Sealing materials shall be compatible with the original pipe material and shall be suitable for application to moist surfaces.

## PART 3 - WORKMANSHIP

### 3.1 EXCAVATION

A. Backfill and restore all excavations to existing or better conditions, as directed by the Owner.

## 3.2 DELIVERY AND STORAGE

- A. Deliver and store all product materials according to the manufacturer's recommendations and accompanied by the material safety data sheets.
- B. Store and transport the impregnated CIPP liner according to ASTM F2019, Section 6.4 and the manufacturer's recommendations.
- C. Use tubing material that is homogenous throughout, free from tears, holes, cracks, foreign materials, and other surface defects

## 3.3 SEWER LINE PREPARATION

A. It shall be the responsibility of the Contractor to locate and designate all access points open and accessible for the work according to the drawings. If a street must be closed to traffic, the Contractor shall institute the actions necessary to do this for the mutually agreed time

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- period. The Contractor is also responsible for obtaining access to water hydrants for cleaning, inversion and other work items requiring water.
- B. Cleaning of sewer lines The Contractor shall remove all internal debris from the sewer line that will interfere with the proposed trenchless pipeline rehabilitation system. Care shall be exercised during cleaning to preserve the existing sewer pipe while still thoroughly removing internal corrosion, debris, and other obstructions in the pipe and the pipe flushed clean. The Contractor is responsible for disposing of all debris removed from the sewer line during the cleaning operation. If any hazardous or toxic materials are encountered during this project, the Contractor is responsible for the removal and disposal of the materials.
- C. Contractor shall perform PACP video inspections of the pipelines. Inspections shall be completed prior to pipe line cleaning, after cleaning and removal of line obstructions, and after installation of the proposed trenchless pipeline rehabilitation system. Only experienced, PACP-certified personnel trained in locating breaks, obstacles, and service connections by closed circuit television shall perform the inspection. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation of the proposed trenchless pipeline rehabilitation system, such as protruding service taps, collapsed or crushed pipe, and significant reductions in the cross-sectional area. If additional conditions are noted that affect installation, Contractor shall notify the Engineer in writing requesting clarification on how to proceed. A video record and suitable PACP log shall be kept and submitted to the Owner and Engineer. At a minimum, include the following in PACP video inspection logs:
  - 1. Inner and outer diameter of host pipe
  - 2. Host pipe material
  - 3. Reductions in cross sections caused by incrustations and obstacles protruding into the cross section (sagging weld seams, roots, tuberculation, protruding flanges, screws, pins, plugs, fittings, or sacrificial anodes).
  - 4. Sudden changes in cross section (steps)
  - 5. Direction changes (bends)
- D. Line Obstructions It shall be the responsibility of the Contractor to clear the line of obstructions or stationary obstacles (casting defects, sagging weld seam roots, tuberculation, protruding flanges, screws, pins, plugs, fittings, or sacrificial anodes, etc.) protruding from the host pipe wall prior to installation of the proposed trenchless pipeline rehabilitation system.
  - Line obstructions must be removed by removing the pipe section containing the obstacle or by using a milling robot equipped with diamond tools. Weld seams have to be machined until they are perfectly uniform and flat all the way around.
  - If pre-installation inspection reveals an obstruction such as a protruding service connection, dropped joint, or a collapse that will prevent the installation of the proposed trenchless pipeline rehabilitation system that cannot be removed by cleaning or milling robotic trenchless equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner prior to the commencement of the work and shall be paid as a "Spot Repair". A standard Spot Repair will be

repair of a 5 feet section of the pipe. If the repair is longer than 5 feet additional "Spot Repair" items will be paid per units of 5 feet of pipe.

#### 3.4 LINER INSTALLATION - GENERAL

- A. Verify the liner condition with the Engineer prior to installation. If any part of the liner material becomes torn, cut, or damaged before or during insertion, repair or replace the liner at no additional cost to the Owner before proceeding further.
- B. If installation of liner should fail for any reason and the liner removed from pipe reach, the liner shall not be reused for rehabilitation of original or other pipe reach.
- C. Care shall be taken not to damage the host pipe. Appropriate sleeves and rollers shall be used to protect the liner in addition with an installation of a sliding foil.

#### 3.5 CIPP LINERS

- A. The CIPP liner shall be installed and cured in the host pipe per the manufacturer's instructions, following the methods indicated in the materials submitted under this specification. CIPP installation shall be in accordance with ASTM F2019, ASTM F1216, or ASTM F1743, except as modified herein.
- B. Before the installation begins, the tube manufacturer shall determine the minimum pressure required to hold the tube tight against the existing conduit, and the maximum allowable pressure so as not to damage the tube. Once the installation has started, the pressure shall be maintained between the minimum and maximum pressures until the installation has been completed.
- C. Provide temporary downstream dams or filtration measures in the pipeline to catch excess resin and construction debris.
- D. Tube installation forces or pressures shall be limited so as not to stretch the tube longitudinally by more than 5% of the original length.
- E. The existing conduit shall be dewatered and free of incoming sewage. If water is present, alternative measures shall be taken to minimize contact of the water with the inverting tube.
- F. Tube Insertion The wet-out tube shall be positioned in the pipeline using either inversion or a pull-in method. If pulled into place, a power winch should be utilized, and care should be exercised not to damage the tube as a result of pull-in friction. The tube should be pulled-in or inverted through an approved access point and fully extend to the termination point. The pulling speed shall not exceed 15 ft/min. Care shall be exercised not to damage the tube during the pulling phase. Do not exceed the manufacturer's recommendations for pulling forces (tension) and speed.
- G. All lubricants used to reduce friction shall be a nontoxic product that has no detrimental effects on the tube or boiler and pump system, will not support the growth of bacteria, and will not adversely affect the fluid to be transported.

H. Liner Inflation: The Liner shall be inflated with air with sufficient pressure to hold the Liner tight to the host pipe wall and prevent wrinkles as recommended by the manufacturer.

#### I. Water or Steam Cure:

Temperature gauges shall be placed inside the tube at the invert level of each end to monitor the temperatures during the cure cycle.

### J. CURING

 During the curing process use the same pressure head to prevent water infiltration from entering the pipeline. Maintain the pressure head long enough to allow pockets of water to exfiltrate through the host pipe and prevent lifts in the liner and resin washout.

### 2. UV Cured

- a. Curing shall be accomplished by utilizing ultraviolet curing lamps operating in a sufficient frequency range to insure the curing of the resin in accordance with the manufacturer's recommended cure schedule and ASTM F2019. A camera must be located on the ultraviolet light assembly to enable the video inspection of the Liner and to ensure that the liner has been properly inflated, and any liner problems can be identified before curing begins.
- b. Operate the ultraviolet curing lamps in a sufficient frequency range to ensure the curing of the resin.
- c. Submit a documented field log recording of time, rate of travel of the ultraviolet light assembly, and internal temperatures and pressures during the curing process to the Engineer. Include CCTV video recording of each lining segment.
- 3. Water or Steam Cured Curing shall be accomplished by utilizing either hot water under hydrostatic pressure or steam in accordance with the manufacturer's recommended cure schedule.

#### 3.6 FINISH

- A. The finished lining shall be continuous over the entire length of an installation run and be free from visual defects such as foreign inclusions, dry spots, pinholes, and de-lamination. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to inside the lined pipe.
- B. Any defect, which will or could affect the structural integrity or strength of the linings, shall be repaired at the Contractor's expense. Contractor shall propose a repair method for approval by the Owner and Engineer.

### 3.7 INSPECTION AND TESTING

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## A. Post-Installation PACP Television Inspection

- 1. The Contractor shall perform a post-installation PACP television inspection of the installed replacement pipe.
- All post-installation television inspection logs and records shall be submitted to the Engineer for final approval. Any additional work to repair damaged CIPP shall be conducted by the Contractor at no additional cost to the Owner.
- B. Any defects in the liners which will affect the integrity or strength of the liners, in the opinion of the Engineer, shall be repaired by the Contractor at no expense to the Owner in a manner satisfactory to the Engineer.

### 3.8 CLEAN-UP

A. Upon acceptance of the installation work and testing, the Contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work.

### 3.9 REPAIRS

- A. Before making repairs, provide the proposed trenchless pipe rehabilitation system manufacturer's recommendations for repairs, subject to Engineer's approval. Repair or replace trenchless pipe rehabilitation system at no additional cost to the Owner per the manufacturer's recommendations that have:
  - 1. Wrinkles, fins, or other discontinuities that, in the opinion of the Owner or the Engineer, are a structural deficiency in the liner. The Owner will review video of liner and work with the Contractor to mitigate and wrinkles, fins, or other discontinuities in the liner that are deemed a concern by the Owner.
  - 2. Holes, blisters, dimples, lifts, or dry spots present.
  - 3. Tears or gouges.
  - 4. Leakage of water through the liner according to ASTM F2019 Section 7.3.
  - 5. Separation of the liner from the host pipe.
  - 6. Delamination of CIPP layers.
  - 7. Design thickness is less than 90 percent of submitted value as determined by ASTM F2019.

## **SECTION 10 CIPP LOCATIONS MAP**

This section contains an project.	aerial map of t	he sanitary se	wer mains that	will be lined as	a part of this





