



CITY OF PROVIDENCE, RHODE ISLAND

Department: Providence Water

RFP Title: TRINITY SQUARE LEAD SERVICE LINE REPLACEMENT PROGRAM (Expires 5-3-23)

Opening Date: 12/19/2022

Addendum #: 2

Issue Date: 12/13/2022

This Addendum No. 2, including all referenced attachments, modifies, amends, and supplements designated parts of the Contract Documents to the above-referenced project and shall be part of the Contract Documents as provided in the "Instructions to Bidders" for the above-referenced project.

The Contract Documents are hereby modified, amended, and supplemented as attached.



ADDENDUM NO. 2

TO: ALL CONTRACT DOCUMENT HOLDERS OF RECORD
ALL PROSPECTIVE BIDDERS

FROM: PROVIDENCE WATER
125 DUPONT DRIVE
PROVIDENCE, RHODE ISLAND 02907
PHONE: (401) 521-6300

DATE ISSUED: MONDAY, DECEMBER 12, 2022

RE: TRINITY SQUARE LEAD SERVICE LINE REPLACEMENT PROGRAM
PROJECT NO. 27002 & 20173

BID OPENING DATE: MONDAY, DECEMBER 19, 2022 AT 2:15 PM

BID OPENING LOCATION: BOARD OF CONTRACT AND SUPPLY MEETING
CITY COUNCIL CHAMBERS
PROVIDENCE CITY HALL
25 DORRANCE STREET
PROVIDENCE, RHODE ISLAND 02903

LAST WRITTEN QUESTIONS DUE: FRIDAY, DECEMBER 9, 2022

This Addendum No. 2, including all referenced attachments, modifies, amends, and supplements designated parts of the Contract Documents to the above-referenced project and shall be part of the Contract Documents as provided in the "Instructions to Bidders" for the above-referenced project.

Acknowledge receipt of this Addendum by inserting its number and date on page 00 41 00 – 1 of the Bid Form. Failure to do so may subject the Bidder to disqualification.

The Contract Documents are hereby modified, amended, and supplemented as follows:

ATTACHMENTS

The following attachments are included with this Addendum:

1. Revised Specification Section 00 41 00 – Bid Form.
2. Revised Specification Section 01025 – Measurement and Payment.
3. Revised Appendix B – Construction Details – Updated Details No. 2, 5, 6a, and 6b.

SPECIFICATIONS

1. **SECTION 00 10 00 – BOCS TERMS & REQUIREMENTS FOR BIDDING (INSTRUCTIONS FOR SUBMISSION):** On Page 4, **ADD** the following Number 18:

“18. Any work taking place after the contract completion date will be subject to liquidated damages at a rate of \$2,000 for each day that work is being performed.”

2. **SECTION 00 41 00 – BID FORM: REPLACE** Section 00 41 00 – Bid Form in its entirety with the attached revised Section 00 41 00 – Bid Form.
3. **SECTION 00 52 00 – AGREEMENT:** On Page 00 52 00 –2, Paragraph 1, **ADD** the following sentence:

“Any work taking place after the contract completion date will be subject to liquidated damages at a rate of \$2,000 for each day that work is being performed.”

4. **SECTION 01025 – MEASUREMENT AND PAYMENT: REPLACE** Section 01025 – Measurement and Payment in its entirety with the attached revised Section 01025 – Measurement and Payment.
5. **SECTION 02221 – TRENCHING, BACKFILLING, AND COMPACTION:** On Page 02221 – 3, **REPLACE** Article 3.01 Paragraph K with the following revised Paragraph K:

“K. Excavation and dewatering shall be accomplished by methods which preserve the undisturbed state of subgrade soils. The trench may be excavated by machinery to or just below the designated subgrade, provided that material remaining in the bottom of the trench is no more than slightly disturbed. Subgrade soils which become soft, loose, "quick," or otherwise unsatisfactory as a result of inadequate excavation, dewatering or other construction methods shall be removed and replaced by crushed stone as required by the Engineer at the Contractor's expense.”

6. **SECTION 02221 – TRENCHING, BACKFILLING, AND COMPACTION:** On Page 02221 – 4, **REPLACE** Article 3.03 Paragraph C with the following revised Paragraph C:

“C. A 6-inch thick layer of gravel borrow shall be placed below the pipe. Select common fill shall then be placed in 6-in layers thoroughly compacted up to the normal grade of the pipe. If directed by the Engineer, crushed stone shall be used for refill of excavation below grade.”

7. **SECTION 02230 – GRANULAR FILL MATERIALS:** On Page 02230 – 2, **REPLACE** Article 2.01 Paragraph A with the following revised Paragraph A:

“A. Common Fill/Granular Backfill: In accordance with State of Rhode Island, Department of Transportation Standard Specifications for Road and Bridge Construction, Subsection M.01.01”

8. **SECTION 02230 – GRANULAR FILL MATERIALS:** On Page 02230 – 2, **REPLACE** Article 2.01 Paragraph E with the following revised Paragraph E:

“E. Bedding material shall be gravel borrow as specified in 2.01 B.1.”

9. **SECTION 02230 – GRANULAR FILL MATERIALS:** On Page 02230 – 2, **REPLACE** Article 2.01 Paragraph J with the following revised Paragraph J:

“J. Select Common Fill/Unclassified Fill: Select common fill shall be as specified above for common fill/borrow except that the material shall contain no stones larger than 1-inch in its largest dimension.”

10. **SECTION 02230 – GRANULAR FILL MATERIALS:** On Page 02230 – 3, **REPLACE** Article 2.01 Paragraph K with the following revised Paragraph K:

“K. Flowable Fill/Controlled Low-Strength Material (CLSM)/Controlled Density Fill (CDF) used as backfill in State Highway right-of-ways or as specified in the Drawings, shall be in accordance with State of Rhode Island, Department of Transportation Standard Specifications for Road and Bridge Construction, Section 603.”

11. **APPENDIX B – CONSTRUCTION DETAILS:** **REPLACE** Details No. 2, 5, 6a and 6b with the attached revised Details No. 2, 5, 6a and 6b.

WRITTEN QUESTIONS AND COMMENTS SUBMITTED

All questions asked during the pre-bid conference meeting are documented with responses provided in the pre-bid conference meeting report that is included with Addendum No. 1. The following additional questions were also received:

1. **QUESTION:** Can you confirm that mill/overlay will be 1.5" for this project? I know that is what the City of Providence usually requires, but I do not see any construction detail for the mill/overlay.

RESPONSE: Refer to updated Detail No. 6a and 6b of this Addendum.

2. **QUESTION:** The measurement/payment section mentions GPS coordinates and before/after photos for every location before payment is approved. Is this the contractor's responsibility? Or will PWSB or CDM Smith have an inspector there to verify the work performed?

RESPONSE: Yes, all preconstruction and postconstruction photographs will be the responsibility of the contractor. GPS coordinates shall be provided as stated in the updated Section 01025 attached to this Addendum and will be the responsibility of the contractor.

3. **QUESTION:** Is there a liquid asphalt escalation based on RIDOT specs?

RESPONSE: Due to the short contract duration, there is not a liquid asphalt escalation item.

4. **QUESTION:** What is the estimated construction budget?

RESPONSE: An estimated construction budget will not be provided.

5. **QUESTION:** Can I get a copy of the plan holder's list?

RESPONSE: Refer to the City of Providence Purchasing Department, per Section 00 10 00.

-END OF ADDENDUM NO. 2-

ATTACHMENT 1

**PROVIDENCE WATER
 TRINITY SQUARE LEAD SERVICE LINE REPLACEMENT PROJECT
 PROJECT NO. 27002 & 20173**

BID FORM

<u>ITEM NO.</u>	<u>ESTIMATED QUANTITY</u>	<u>BRIEF DESCRIPTION OF ITEMS WITH UNIT BID PRICE IN WORDS</u>	<u>UNIT BID PRICE IN FIGURES</u>	<u>AMOUNT IN FIGURES</u>
1A	10 each	Lead Service Line Replacement - Public Side Only (Water Main to Curb Stop) <hr/> each	<hr/> \$	<hr/> \$
1B	125 each	Lead Service Line Replacement - Public Side Portion of a Full Replacement (Water Main to Curb Stop) <hr/> each	<hr/> \$	<hr/> \$
1C	50 each	Test Pit at Curb Stop <hr/> each	<hr/> \$	<hr/> \$
1D	64 each	Long Side Replacement <hr/> each	<hr/> \$	<hr/> \$
1E	175 CY	Lead Service Line Excavation Greater Than Five (5) Feet <hr/> per cubic yard	<hr/> \$	<hr/> \$
1F	25 SY	Final Trench Pavement Restoration (Infra-red) <hr/> per square yard	<hr/> \$	<hr/> \$
1G	130 SY	Final Trench Pavement Restoration (Milling and Paving) <hr/> per square yard	<hr/> \$	<hr/> \$
1H	23,200 SY	Final Pavement (Curb-to-curb) <hr/> per square yard	<hr/> \$	<hr/> \$

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BID FORM

ITEM NO.	ESTIMATED QUANTITY	BRIEF DESCRIPTION OF ITEMS WITH UNIT BID PRICE IN WORDS	UNIT BID PRICE IN FIGURES	AMOUNT IN FIGURES
1I	\$ 125,000.00 ALLOWANCE	Uniformed Traffic Control One hundred and twenty five thousand dollars and zero cents allowance	\$ 125,000.00	\$ 125,000.00
2A	55 each	Lead Service Line Replacement - Private Side Only (Curb Stop to Meter) - each	\$ _____	\$ _____
2B	120 each	Lead Service Line Replacement - Private Side Portion of a Full Replacement (Curb Stop to Meter) - each	\$ _____	\$ _____
2C	20 each	New Curb Box - (For Replacements Under Item 2A) each	\$ _____	\$ _____
3A	2 each	Lead Service Line Replacement - Commercial - Private Side Only (Water Main to Curb Stop) each	\$ _____	\$ _____
3B	10 each	Lead Service Line Replacement - Commercial - Private Side Portion of a Full Replacement (Water Main to Curb Stop) each	\$ _____	\$ _____
3C	3 each	New Curb Box - Commercial - Private Side Only (For Replacements Under Item 3A) each	\$ _____	\$ _____
TOTAL BASE BID PRICE IN WORDS (Items 1A-3C)			_____	
TOTAL BASE BID PRICE IN FIGURES (Items 1A-3C)			\$ _____	

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BID FORM

<u>ITEM NO.</u>	<u>ESTIMATED QUANTITY</u>	<u>BRIEF DESCRIPTION OF ITEMS WITH UNIT BID PRICE IN WORDS</u>	<u>UNIT BID PRICE IN FIGURES</u>	<u>AMOUNT IN FIGURES</u>
S-1A	100 CY	Imported Common Fill _____ per cubic yard	\$ _____	\$ _____
S-1B	10 CY	Crushed Stone _____ per cubic yard	\$ _____	\$ _____
S-1C	5 CY	Flowable Fill _____ per cubic yard	\$ _____	\$ _____
S-2A	30 SY	Initial Pavement Restoration With Concrete Subbase _____ per square yard	\$ _____	\$ _____
S-3	10 CY	Miscellaneous Concrete _____ per cubic yard	\$ _____	\$ _____
S-4	\$ 150,000.00 ALLOWANCE	Miscellaneous Work at Direction of the Owner _____ One hundred and fifty thousand dollars and zero cents allowance	\$ 150,000.00	\$ 150,000.00
TOTAL SUPPLEMENTAL PRICE IN WORDS (S-1A through S-4)			_____	_____
TOTAL SUPPLEMENTAL PRICE IN FIGURES (S-1A through S-4)			\$ _____	_____

**PROVIDENCE WATER
TRINITY SQUARE LEAD SERVICE LINE REPLACEMENT PROJECT
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BID FORM

<u>ITEM NO.</u>	<u>ESTIMATED QUANTITY</u>	<u>BRIEF DESCRIPTION OF ITEMS WITH UNIT BID PRICE IN WORDS</u>	<u>UNIT BID PRICE IN FIGURES</u>	<u>AMOUNT IN FIGURES</u>
TOTAL BASE BID PRICE PLUS SUPPLEMENTAL PRICE IN WORDS			<hr/>	
TOTAL BASE BID PRICE PLUS SUPPLEMENTAL PRICE IN FIGURES			\$ <hr/>	

ATTACHMENT 2

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes specifications for the measurement and payment of the various elements of the Work, with provisions applicable to lump sum prices, unit prices, and allowances, if applicable.
- B. In the case of conflict between this Section and the measurement methods specified in the individual technical Sections, the measurement methods in the technical specifications shall govern.
- C. The Contractor shall receive no payment for any portion of the work until it is installed and accepted by the Engineer. The only exception to this is payment for stored materials on-site if the Contract provides for the payment of stored materials. A partial payment may be requested for items partially installed.

1.02 RELATED WORK

- A. Bid Form is included in Section 00 41 00.
- B. General Conditions are included in Section 00 72 00.
- C. Applications for Payment are included in Section 01026.
- D. Schedule of Values is included in Section 01370.

1.03 LUMP SUM ITEMS

- A. Lump Sum measurement will be for the entire item, unit of work, structure, or combination thereof, as specified and as indicated in the Bid Form. Measurement and payment for all bid items indicated as Lump Sums shall include the cost of all labor, materials, and equipment necessary to furnish, install, clean, test, and place each bid item into operation, including general conditions, overhead and profit.
- B. Progress payments will be based on the Schedule of Values prepared by the Contractor and approved by the Engineer and Owner before acceptance of the first Application for Payment.
- C. In order for the Contractor to request progress payments against Lump Sum items, Contractor shall provide a disaggregation or breakdown in sufficient measurable detail that is acceptable to the Engineer.
- D. Measurement
 - 1. Measurement shall be based on the estimated percent complete of each item of the Schedule of Values, as determined by the Engineer.
- E. Payment

1. Payment will be made at the lump sum price proportional to the completion percentages approved by the Engineer.
2. Contactor must track and maintain copies of all necessary permits submitted. Retainage as specified in Section 00 73 00 will be held until all permits are approved, paid for and received by Engineer and Owner.

1.04 UNIT PRICE ITEMS

- A. Quantity and measurement estimates stated in the Bid Form are estimates for bidding purposes only. Actual payments shall be based on actual quantities installed, in-place, as measured and/or verified by the Engineer.
- B. Unless otherwise provided in the General Conditions, the bid unit prices shall be in effect throughout the contract duration, regardless of variances between the estimated quantities and the actual quantities.
- C. The Contractor shall make no claim, nor receive any compensation, for anticipated profits, loss of profit, damages, or any extra payment due to any difference between the amounts of work completed, or materials or equipment furnished, and the estimated quantities.
- D. Assist Engineer by providing necessary equipment, workers, and survey personnel as required to measure quantities.
- E. Measurement
 1. Measurement for progress payment shall be made by, or approved by, the Engineer based on the estimated effective quantity installed. The effective quantity installed represents the actual units or quantities installed, adjusted for incomplete elements or components.
 2. Unless otherwise provided for in the Bid Form, unit price items are all-inclusive of all related work, direct and indirect, to provide a complete and functional item.
 3. The final measurement shall be based on actual quantities, jointly measured by Contractor and Engineer, complete, fully, tested and placed into service.
- F. Payment
 1. Progress payments shall be in accordance with the contract documents based on estimated effective quantities installed, paid at the bid unit price.
 2. The final payment shall be based on actual quantities, fully installed, tested, and placed into service, paid at the bid unit price.

1.05 ALLOWANCES

- A. Allowances, if any, specified in the Contract Documents and indicated in the Bid Form are considered provisional amounts to be used only as needed.

- B. Allowances are exclusive of work indicated in the Contract Documents for which payment is included under other items in the Bid Form. No work may be performed under an allowance without the prior written approval of the Owner.
- C. Any unused balance of the allowances shall revert to the Owner upon completion of the project. Prior to final payment, the original amount provided for allowances shall be adjusted to actual costs by deductive Change Order, adjusting the contract price, accordingly.
- D. The Contractor shall make no claim, nor receive any compensation, for anticipated profits, loss of profit, damages, or any extra payment due to any unexpended portion of the allowances.
- E. Include time for allowance work in the construction schedule. No adjustment of Contract Time will be allowed for any work performed under allowance items.
- F. Allowance items shall be included in the Schedule of Values.
- G. Unless otherwise indicated in the specific measurement and payment provisions under allowance items, the measurable and allowable costs for work performed under an Allowance item shall be limited to the actual, demonstrable, and direct costs associated with that Allowance item. Shipping and sales taxes (if applicable) are allowable costs.
 - 1. No markup for overhead or profit (including cost for bonds) shall be included for payment under an Allowance item. Overhead and profit (including cost for bonds) shall be included in the contract base bid or allocated across other bid items.
 - 2. Work authorized by the Owner under an allowance may be performed as a lump sum (negotiated before the fact), unit prices (when applicable), or time and material. For work performed under time and material, submit detailed verification (break-down) of all costs, subject to the approval of the Engineer or Owner. Time and material records shall be submitted to the Engineer on a daily basis and in no case later than 48 hours after the work is performed.

1.06 DEFECT ASSESSMENT

- A. Replace defective Work, or portions of defective Work, not conforming to specified requirements.
- B. If in the opinion of the Engineer, it is not practical to remove and replace the Work, the Engineer will direct a remedy in accordance with the requirements of the General Conditions.

1.07 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from the transporting vehicle.
 - 4. Products placed beyond the lines and levels of the required Work.

5. Products remaining on hand after completion of the Work.
6. Loading, hauling, and disposing of rejected products.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.01 PUBLIC SIDE BID ITEMS (ITEMS 1A-1I)

A. General

1. Replacement Items

- a. Trenchless or other approved means of lead water service line replacement which may include, replacement of the public side only service line (Item 1A), replacement of the public side portion of a full replacement (Item 1B), and replacement of all necessary appurtenances. All replacements on the public side shall include mobilization (sanitary facilities, insurance, temporary construction facilities, construction vehicle parking and storage, bonds, permit acquisition, permit fees, labor, project coordination, control of work, project signs, coordination with homeowner and inspectors, scheduling, notifications, printing, all data and record document management, and preparation of contract required submittals); removal and disposal of excess soil, spoil, rubble, lead pipes and construction debris, vegetation and similar items; stockpiling, sampling and testing, all labor, materials, new corporation stop, temporary sidewalk and/or yard restoration, equipment required for erosion and sediment control, and protection of existing trees as approved by the Engineer; all work required for or incidental to the satisfactory completion of the Work.
- b. Each property listed by the Owner in Appendix A, or the updated list in CityWorks at the time of construction, must have either a replacement, an internal home inspection, or a test pit performed unless the Homeowner rejects participation in the program in writing, does not provide access to the home after three documented attempts by the Contractor, or unless otherwise determined by the Owner. If the Homeowner rejects participation in the program or does not provide entry, no test pit shall be performed.

2. Test Pit at Curb Stop (Item 1C)

- a. A test pit is defined as a planned service line replacement that is found not to be lead on either side or a property where the Owner or Engineer specifically directs the Contractor to perform a test pit.
- b. If there is more than one service in the same excavation as a planned replacement, Contractor must notify the Owner of observed materials at all properties. Contractor must make every effort to inspect and photograph all properties within the excavation. Only test pits at locations of planned replacements or as directed by the Owner or Engineer will be paid for under Item 1C.

3. Long-Side Replacement (Item 1D) A long-side replacement is when the resident with the service line being replaced is on the opposite side of the street from the water main. The distance from the water main to the curb must be greater than half the roadway width for a

replacement to be considered a long side replacement. Water mains down the center of the road do not have long-side replacements on either side.

4. Lead Service Line Excavation Greater Than 5 Feet (Item 1E)
 - a. Lead water service trenching to a depth of greater than 5-feet and non-hazardous waste disposal; shoring; dewatering; installation, backfill; compaction; including all labor, materials, and equipment necessary.
5. Final Trench Pavement Restoration (Infra-red) (Item 1F); ~~Final Trench Pavement Restoration (Milling and Paving) (Item 1G); Final Pavement (Curb-to-curb) (Item 1H)~~
 - a. In general, final pavement restoration will be undertaken only on streets shown in red and listed on page 2 of Appendix C where any construction work is performed within the roadways as a result of service line replacement or otherwise deemed necessary in the field. Final pavement on streets shown in red will be required to be restored by either mill and pave (patch paving at trench locations), infra-red, or curb to curb (full width paving) methods, based on the paving requirements of the Department of Public Works or RIDOT permit issued. Streets shown in yellow and not listed on page 2 of Appendix C will only require temporary road and sidewalk restoration, and will be paved and sidewalk restored as part of a separate paving project. Pavement replacement necessary resulting from the activities of the Contractor outside of the limits defined in the Details in Appendix B shall be paid for by Contractor. Payment of restoration does not relieve the contractor of responding to complaints by Customers and returning, for the period of the 5-year warranty, to make necessary repairs.
 - b. Owner will make every effort to ensure the proposed number of restoration locations will be provided to the Contractor. However, if the final restoration area is less than the bid quantity, Contractor shall have no claim to modify the price of the unit price item.
 - c. Final Pavement (Curb-to-curb, full width paving of a block or street) will be used at the direction of the Engineer when initial paving areas encompass a majority of the pavement surface and as required by the Owner or Department of Public Works and as defined by the Rhode Island Department of Transportation Minimum Standards for State and Municipal Road Repair for Utility Work.
 - e.d. Only one of the paving items (Items 1F-1H) will be applied per lead service line address.

B. Measurement

1. (Item 1A) Lead Service Line Replacement – Public Side Only - Measurement will be based on the number of installations completed from the water main to the curb stop within the Work Area and shall be contingent on the submission of comparable pre-construction and post-construction photographs of each installation and complete record documents, including all permits, for each property. When only a public side only replacement (i.e., from water main to curb stop) is completed at a property, the Contractor shall be paid under Item 1A. Replacement includes all road opening permit acquisition and fees, piping, curb stop valve and box, new corporation stop, appurtenances to make all connections, procurement and placement of warning tape, flushing at the meter, pressure testing, and

temporary sidewalk and/or yard restoration. Full Replacements will not be paid for under this item.

2. (Item 1B) Lead Service Line Replacement – Public Side Portion of a Full Replacement - Measurement will be based on the number of installations completed from the water main to the curb stop within the Work Area, only where the private side of the service line is also being replaced (full replacement) and shall be contingent on the submission of comparable pre-construction and post-construction photographs of each installation and complete record documents, including all permits, for each property. Replacement includes all road opening permit acquisition and fees, piping, curb stop valve and box, procurement and placement of warning tape, and appurtenances to make all connections. Full Replacements performed under this contract within the Work Area will be paid for as the sum of Item 1B and Item 2B.
3. (Item 1C) Test Pit at Curb Stop - Measurement will be based on the number of locations in Appendix A (or most updated list as provided during construction), and those properties that the Owner has acquired a Right-of-Entry and Replacement Agreement for, where pipe material in the test pit was found not to be lead on both the private side and the public side or where directed by the Owner or Engineer and all material information is documented by Contractor. Submit comparable pre-construction and post-construction photographs of each test pit, and Owner and Engineer shall accept the surface restoration of the test pit prior to payment. Temporary sidewalk and/or yard restoration shall be included in this item.
- 3.4. (Item 1D) Long-Side Replacement - Measurement will be based on the number of long-side replacements. A long-side replacement is when the resident with the service line being replaced is on the opposite side of the street from the water main. The distance from the water main to the curb must be greater than half the roadway width for a replacement to be considered a long side replacement. Water mains down the center of the road do not have long-side replacements on either side and will not be measured under this item. This Item will be paid in addition to either Bid Item 1A or Bid Item 1B to cover the cost of the additional time and material for the additional length of service line required to be replaced.
- 4.5. (Item 1E) Lead Service Line Excavation Greater Than 5 Feet - Measurement will be based on the actual depth of excavation beyond a 5-foot depth, as approved by the Engineer, for a maximum trench width as shown in Details, if and when directed. If the trench bottom is more than twelve inches below pipe invert through an error by the Contractor or if improper drainage softens the subgrade and additional excavation in the trench or access pit is required before laying the pipe or installing the water service line, such removal and replacement of material will not be paid for by Owner. Measurement by truck count will not be permitted.
6. (Item 1F) Final Trench Pavement Restoration (Infra-Red) - Measurement will be based on the square yard(s) installed on streets, as directed by the Engineer, and as measured by the Engineer, within the specified widths as shown on the Details in Appendix B and completed between 45 and 90 days of placing the temporary paving. This item shall include milling and paving of the trench and infra-red sealing of the seams.
7. (Item 1G) Final Trench Pavement Restoration (Milling and Paving) - Final Pavement Restoration (Milling and Paving) - Measurement will be based on the square yard(s) of

patch paving installed at each trench as measured by the Engineer, within the specified widths as shown on the Details in Appendix B and completed between 45 and 90 days of placing the temporary paving.

8. (Item 1H) Final Pavement (Curb-to-curb) - Measurement will be based on square yard(s) of full width, curb-to-curb, entire block, or street paving installed as measured by the Engineer, within the specified widths as shown on the Details in Appendix B, if and when directed.

C. Payment

1. Full payment for Item 1A Lead Service Line Replacement – Public Side Only and Item 1B Lead Service Line Replacement – Public Side Portion of a Full Replacement shall be provided once the following components are completed:
 - a. **Administration:** Price and payment shall include, but not be limited to customer coordination, printing and distributing door hangers for notifications of service disturbance, **procurement and posting of no parking signs**, local agency coordination for permits, permit fees, inspections and scheduling; pipe material validation through interior inspection; underground utility mark outs and coordination, pre-construction photographs; and all other preliminary documentation as required by the Contract.
 - b. **Site Preparation:** Price and payment shall include, but not be limited to temporary traffic control including traffic signage and flagger; erosion and sediment control; mobilization (sanitary facilities, insurance, temporary construction facilities, construction vehicle parking and storage, bonds, permit preparation and fees, project coordination, control of work, project signs, scheduling, and preparation and submittal of contract required work plans); cutting existing pavement, pavement with concrete subbase and/or concrete; temporarily support and protection of all existing utilities and structures; all trench excavation up to depth of 5 feet (including hand, vacuum, rock and boulders and concrete road base excavation); excavation support and protection (as required); dewatering and drainage.
 - c. **Service Replacement:** Price and payment shall include, but not be limited to: temporary traffic control including traffic signage and flagger; temporary water for customer (as required); furnishing and installation of water service line (up to and including 2-inches in size) to limits defined in individual bid items by trenchless methods or by open-cut methods when approved by the Engineer, including pipe, curb stop valve and box, all the necessary adapters, reducers, fittings and appurtenances of the necessary size required to connect to existing piping; flushing, testing of the new service line, placing the service line into service; existing lead water service line and appurtenances removal, disposal, demolition or abandonment; new corporation stops; backfill materials shown in Appendix B; compaction; restoring the trench surface to grade or the limits of roadway base course; stockpiling, sampling and laboratory testing of excess excavated material including, but not limited to, spoil, rubble, concrete, asphalt, vegetation, etc. Payment for these items shall include all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.

- d. **Restoration on Public Side:** Price and payment shall include, but not be limited to temporary traffic control including traffic signage and flagger; GPS coordinates of the corporation stop, curb stop, and where the service line enters the house, service application records, closeout documentation including photographs; repairs and cleaning of interior work spaces; procurement and placement of warning tape; restoring exterior physical features; temporary sidewalk and/or yard restoration; forming and pouring concrete curbs, concrete testing and all other testing required to complete the project as specified herein; transportation and disposal of excess excavated material, spoil, rubble, concrete, asphalt, vegetation, lead pipes and construction debris, etc. in accordance with all Federal, State and local regulations; including all labor, materials and necessary equipment; removal of erosion and sediment control; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.
 - e. When a private side only replacement (i.e., from curb stop to meter) is completed at a property, the Contractor shall be paid under Item 2A.
2. Payment for Item 1C, Test Pit at Curb Stop, shall be made as follows: Payment for this Item shall be provided for the Contractor completing 3.01-C.1a Administration, 3.01-C.1b Site Preparation, performing the test pit, and 3.01-C.1d. Test pit shall assume excavation is in concrete and ~~concrete~~ temporary sidewalk restoration is included in this bid item. Payment for Item 1C will only be made if the entire water service line (corporation stop to meter) is found not to be lead. No payment will be made under this Item if any pipe replacement is performed. If the curb box is replaced without a portion of the service line being replaced, payment will be made under Item 1C plus Item 2C for the curb box. Contractor will not receive payment for Item 2C if the curb box is damaged during excavation.
3. Payment for Item 1D Long Side Replacement shall be made as follows: When the Contractor performs a long-side replacement (i.e., when the resident with the service line being replaced is on the opposite side of the street from the water main it will be supplied from), Contractor will be paid for the service line replacement under the replacement bid items (1A or 1B as applicable), however, an additional payment under this bid item will be made to cover the additional work associated with performing trenchless or open-cut installation across utilities in the roadway. This item shall include the additional excavation, backfill, restoration, pipe and all other items associated with a long-side replacement that are not included in a short-side replacement. All items associated with administration, site preparation, service replacements and restoration shall be included in Item 1A or 1B, as applicable with this item being an additional payment for long-side replacements.
4. Payment for Item 1E Lead Service Line Excavation Greater Than 5-Feet shall be as follows: All work associated with excavation beyond 5-feet in depth shall be included under this bid item unless otherwise stated. Price and payment shall be full compensation for, but not limited to, protection of all existing utilities and structures; excavation (including hand excavation); loading; hauling; excavation support and protection; dewatering and drainage; temporarily support of utilities; backfilling with native soil; compaction, testing by technician from the Soils Testing Laboratory; removal of debris, spoils, pipe, tubing, rubble, vegetation, and similar items removed and legally disposed, including all labor, materials and necessary equipment; all work required for or incidental

to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form. Payment for excavation 5-feet or shallower is included in Items 1A, 1B, 2A, 2B, 3A or 3C as applicable.

5. Payment for Item 1F Final **Trench** Pavement Restoration (Infra-Red) shall be as follows: All work associated with final infra-red pavement, shall be included under this bid item unless otherwise stated. Price and payment shall be full compensation for, but not limited to: sweeping, cleaning and preparing the base course surface; traffic control, traffic signage, and traffic flaggers; cutting back existing pavement, furnishing, hauling, heating, raking mixing and placing the final pavement, compacting, testing, pavement marking restoration, including all labor, materials and necessary equipment; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.
6. Payment for Item 1G Final **Trench** Pavement Restoration (Milling and Paving) shall be as follows: All work associated with final milling and paving, shall be included under this bid item unless otherwise stated. Price and payment shall be full compensation for, but not limited to: sweeping, cleaning and preparing the base course surface; traffic control, traffic signage, and traffic flaggers; cutting back existing pavement, milling and disposal, installation of tack coat, furnishing, hauling, and placing the final pavement, compacting, testing, pavement marking restoration, including all labor, materials and necessary equipment; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.
7. Payment for Item 1H Final Pavement (Curb to Curb) shall be as follows - All work associated with final pavement restoration shall be included under this bid item unless otherwise stated. Price and payment shall be full compensation for, but not limited to: sweeping, cleaning and preparing the base course surface, traffic control, traffic signage, traffic flaggers; milling and removing initial or existing pavement surface, installation of tack coat, furnishing, hauling and placing the final pavement, compacting, pavement marking restoration, including all labor, materials and necessary equipment; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.

3.02 UNIFORMED TRAFFIC CONTROL ALLOWANCE (ITEM 1I)

A. General

1. The traffic control allowance will apply only to the labor for traffic control Police officers provided by the City for the direction of traffic for this Contract per Manual on Uniform Traffic Control Devices.

B. Measurement

1. The Contractor will be reimbursed for costs for uniformed traffic control Police officers for the project.

C. Payment

1. Payment for traffic control Police officers provided by the City to direct traffic will be made based on the actual time on site and applicable City Ordinances. No markup will be allowed by the Contractor. The allowance price established in the Bid Form is for bidding purposes only, and the amount paid for Traffic Control may differ from this amount.
 - a. All other costs associated with traffic control for this Contract, including traffic control devices, barriers, signage, flaggers, vehicles, equipment, personnel, and administrative costs, shall be paid separately, as identified in other bid items.
 - b. Additionally, any fees associated with permits required for road opening by the Rhode Island Department of Transportation and Municipalities shall be paid under the respective replacement bid item and not under any allowance item.

3.03 PRIVATE SIDE BID ITEMS (ITEMS 2A-2~~CE~~)

A. General

1. Replacement Items

- a. Trenchless or other approved means of lead water service line replacement which may include, replacement of the private side only service line (Item 2A), replacement of the private side portion of a full replacement (Item 2B), and replacing, furnishing and installing all required ball valves, adapters, reducers, fittings, flare adapters (before and after water meter), pressure reducing valves (after main isolation and before water meter), backflow devices (after water meter), expansion tanks (after backflow device), reduced pressure zone (RPZ) backflow preventers (if required), and appurtenances of the necessary size required and as required by Rhode Island Plumbing Code. All replacements, full or private side only, shall include mobilization (sanitary facilities, insurance, temporary construction facilities, construction vehicle parking and storage, drywall restoration, bonds, permit acquisition and fees, labor, project coordination, control of work, project signs, coordination with homeowner, property residents, tenants, and inspectors, scheduling, notifications, printing, all data and record document management, and preparation of contract required submittals); removal and disposal excess soil, spoil, rubble, lead pipes and construction debris, vegetation and similar items; stockpiling, providing for an on-site technician from the Soils Testing Laboratory for at least 10 days of the project work, sampling and testing; temporary sidewalk and/or yard restoration; all work required for or incidental to the satisfactory completion of the Work.
- b. Each property listed by the Owner in Appendix A, or the updated list in CityWorks at the time of construction, must have either a replacement, an internal home inspection or a test pit performed unless the Homeowner rejects participation in the program in writing, does not provide access after three documented attempts by the Contractor, or unless otherwise determined by the Owner. If the Homeowner rejects participation in the program or does not provide entry, no test pit shall be performed.

B. Measurement

1. (Item 2A) Lead Service Line Replacement – Private Side Only - Measurement will be based on the number of installations completed from the curb stop to water meter within

the Work Area and shall be contingent on the submission of comparable pre-construction and post-construction photographs of each installation and complete record documents, including any required permits, for each property. When a private side only replacement (i.e., from curb stop to water meter) is completed at a property, the Contractor shall be paid under Item 2A. Replacement includes scheduling all service line replacement appointments with homeowner, residents, or tenants, plumbing permit acquisition and fees, piping, coring and patching through wall or floor, drywall restoration, one ball valve (or one on each side of meter if directed by Owner or Engineer due to a meter replacement), appurtenances to make all connections as listed in A above, procurement and placement of warning tape, temporary sidewalk and/or yard restoration, flushing at the meter, pressure testing, equipment required for erosion and sediment control, and protection of existing trees as approved by the Engineer. New curb boxes for private side only replacements will be paid under Item 2C as directed by the Engineer. Full Replacements will not be paid for under this item.

2. (Item 2B) Lead Service Line Replacement – Private Side Portion of a Full Replacement - Measurement will be based on the number of installations completed from the curb stop to water meter within the Work Area only where the public side installation is also being replaced (full replacement) and shall be contingent on the submission of comparable pre-construction and post-construction photographs of each installation and complete record documents, including any required permits, for each property. Replacement includes scheduling all service line replacement appointments with homeowner, plumbing permit acquisition and fees, piping, coring and patching through wall or floor, drywall restoration, one ball valve (or one on each side of meter if directed by Owner or Engineer due to a meter replacement), temporary sidewalk and/or yard restoration, appurtenances to make all connections as listed in A above, procurement and placement of warning tape, flushing at the meter, and pressure testing. Full Replacements performed under this contract within the Work Area will be paid for as the sum of Item 1B and Item 2B.
3. (Item 2C) New Curb Box - Measurement will be based on the number of curb boxes replaced at the direction of the Engineer for private-side only replacements (Item 2A) and curb boxes replaced during a test pit (Item 1C) at the direction of the Engineer (~~Item 1C~~). Curb box and valve replacement is already included in Items 1A and 1B for public side replacements.

C. Payment

1. Payment for Item 2A Lead Service Line Replacement – Private Side Only and Item 2B Lead Service Line Replacement – Private Side Portion of a Full Replacement shall be provided once the following components are completed:
 - a. **Administration:** Price and payment shall include, but not be limited to customer coordination, printing and distributing door hangers, notifications of service disturbance, procurement and posting of no parking signs, local agency coordination and all -preparation, submittal and fees associated with permits, inspections and scheduling; pipe material validation through interior inspection; underground utility mark outs and coordination, pre-construction photographs; and all other preliminary documentation as required by the Contract.

- b. **Site Preparation:** Price and payment shall include, but not be limited to temporary traffic control including traffic signage and flagger; erosion and sediment control; mobilization (sanitary facilities, insurance, temporary construction facilities, construction vehicle parking and storage, bonds, permit acquisition and fees, project coordination, control of work, project signs, scheduling, and preparation and submittal of contract required work plans); cutting existing pavement, pavement with concrete subbase and/or concrete; temporarily support and protection of all existing utilities and structures; all trench excavation up to depth of 5 feet (including hand, vacuum, rock and boulders and concrete road base excavation); excavation support and protection (as required); dewatering and drainage.
 - c. **Service Replacement:** Price and payment shall include, but not be limited to: temporary traffic control including traffic signage and flagger; temporary water for customer (as required); furnishing and installation of water service line (up to and including 2-inches in size) to limits defined in individual bid items by trenchless methods or by open-cut methods when approved by the Engineer, including pipe, all the necessary adapters, reducers, fittings and appurtenances of the necessary size required to connect to existing piping; coring through the existing foundation or wall, flushing, testing of the new service line, placing the service line into service; existing lead water service line and appurtenances demolition or abandonment; procurement and placement of warning tape; backfill materials as shown in Appendix B; compaction; restoring the trench surface to grade; stockpiling. Payment for these items shall include all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.
 - d. **Restoration on Private Side:** Price and payment shall include, but not be limited to GPS coordinates of the corporation stop, curb stop, and where the service line enters the house, service applications, closeout documentation including photographs; repairs and cleaning of interior work spaces; drywall restoration, patching and waterproofing of new and abandoned penetrations; loaming and seeding; temporary restoration of sidewalk, and all other testing required to complete the project as specified herein; transportation and disposal of excess excavated material, spoil, rubble, concrete, asphalt, vegetation, lead pipes and construction debris, etc. in accordance with all Federal, State and local regulations; including all labor, materials and necessary equipment; removal of erosion and sediment control; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.
2. Payment for Item 2C New Curb Box shall be made in full for all private side only replacements (Item 2A) when a public side replacement (Item 1B) does not occur at the same location and the curb box is replaced. Payment shall also be made in full if a curb box is replaced during a test pit when the curb box is considered in need of replacement by the Engineer.

3.04 PUBLIC SIDE ITEMS – COMMERCIAL (ITEMS 3A-3C)

A. General

1. Replacement Items

- a. Trenchless or other approved means of lead water service line replacement which may include, replacement of the private side only service line at a commercial property (Item 3A), replacement of the private side portion of a full replacement at a commercial property (Item 3B), and replacing, furnishing and installing all required ball valves, adapters, reducers, fittings, flare adapters (before and after water meter), pressure reducing valves (after main isolation and before water meter), backflow devices (after water meter), expansion tanks (after backflow device), reduced pressure zone (RPZ) backflow preventers (if required), and appurtenances of the necessary size required and as required by Rhode Island Plumbing Code. All replacements, full or private side only, shall include mobilization (sanitary facilities, insurance, temporary construction facilities, construction vehicle parking and storage, bonds, permit acquisition and fees, labor, project coordination, control of work, project signs, coordination with property owner and inspectors, scheduling, notifications, printing, all data and record document management, and preparation of contract required submittals); removal and disposal of excess soil, spoil, rubble, lead pipes and construction debris, vegetation and similar items; stockpiling, equipment required for erosion and sediment control, protection of existing trees and replacement or healing treatment of all trees as approved by the Engineer, providing for an on-site technician from the Soils Testing Laboratory at all locations for at least 10 days of project work, sampling and testing; temporary sidewalk and/or yard restoration; all work required for or incidental to the satisfactory completion of the Work.
- b. Each property listed by the Owner in Appendix A, or the updated list in CityWorks at the time of construction, must have either a replacement, an internal home inspection or a test pit performed unless the property owner rejects participation in the program in writing or unless otherwise determined by the Owner.

B. Measurement

1. (Item 3A) Lead Service Line Replacement – Commercial – Private Side Only - Measurement will be based on the number of installations completed from the curb stop to water meter at a commercial property within the Work Area and shall be contingent on the submission of comparable pre-construction and post-construction photographs of each installation and complete record documents, including all required permits, for each property. When a private side only replacement (i.e., from curb stop to water meter) is completed at a commercial property, the Contractor shall be paid under Item 3A. Replacement includes scheduling all service line replacement appointments with property owner, permit fees, piping, coring and patching through wall or floor, drywall restoration, one ball valve (or one on each side of meter if directed by Owner or Engineer due to a meter replacement), temporary sidewalk and/or yard restoration, appurtenances to make all connections, flushing at the meter, and pressure testing. New curb boxes for commercial private side only replacements will be paid under Item 3C as directed by the Engineer. No full replacements will be paid for under Item 3A.
2. (Item 3B) Lead Service Line Replacement – Commercial – Private Side Portion of a Full Replacement - Measurement will be based on the number of installations completed from the curb stop to water meter at a commercial property within the Work Area only where the public side installation is also being replaced (full replacement) and shall be contingent on the submission of comparable pre-construction and post-construction photographs of each installation and complete record documents, including all required permits, for each

property. Replacement includes scheduling all service line replacement appointments with property owner, permit fees, piping, coring and patching through wall or floor, drywall restoration, two ball valves (or one on each side of meter if directed by Owner or Engineer due to a meter replacement), temporary sidewalk and/or yard restoration, appurtenances to make all connections, flushing at the meter, and pressure testing. Full Replacements performed under this contract within the Work Area will be paid for as the sum of Item 1B and Item 3B.

3. (Item 3C) New Curb Box – Commercial – Private Side Only - Measurement will be based on the number of curb boxes replaced for private-side only replacements at commercial properties (Item 3A) and curb boxes replaced during a test pit at a commercial property at the direction of the Engineer (Item 1C). Curb box and valve replacements are already included in Items 1A and 1B for public side replacements.

C. Payment

1. Payment for Item 3A Lead Service Line Replacement – Commercial – Private Side Only and Item 3B Lead Service Line Replacement – Commercial -- Private Side Portion of a Full shall be provided once the following components are completed:
 - a. **Administration:** Price and payment shall include, but not be limited to customer coordination, printing and distributing door hangers for notifications of service disturbance, procurement and posting of no parking signs, local agency coordination, any preparation, submittal, and fees associated with permitting, inspections and scheduling; pipe material validation through interior inspection or test pit; underground utility mark outs and coordination, pre-construction photographs; and all other preliminary documentation as required by the Contract.
 - b. **Site Preparation:** Price and payment shall include, but not be limited to temporary traffic control including traffic signage and flagger; erosion and sediment control; mobilization (sanitary facilities, insurance, temporary construction facilities, construction vehicle parking and storage, bonds, permit acquisition and fees, project coordination, control of work, project signs, scheduling, and preparation and submittal of contract required work plans); temporarily support and protection of all existing utilities and structures; all trench excavation up to depth of 5 feet (including hand, vacuum, rock and boulders and concrete road base excavation); excavation support and protection (as required); dewatering and drainage.
 - c. **Service Replacement:** Price and payment shall include, but not be limited to: temporary traffic control including traffic signage and flagger; temporary water for customer (as required); furnishing and installation of water service line (up to and including 2-inches in size) to limits defined in individual bid items by trenchless methods or by open-cut methods when approved by the Engineer, including pipe, all the necessary adapters, reducers, fittings and appurtenances of the necessary size required to connect to existing piping; coring through the existing foundation or wall, drywall restoration, patching and waterproofing of new and abandoned penetrations; flushing, testing of the new service line, placing the service line into service; existing lead water service line and appurtenances demolition or abandonment; backfill materials as shown in Appendix B; compaction; on-site technician from Soils Testing Laboratory and associated testing for at least 10 days of the project; restoring the

trench surface to grade or the limits of roadway base course; stockpiling, sampling and laboratory testing of excess excavated material including, but not limited to, soil, spoil, rubble, concrete, asphalt, vegetation, etc. Payment for these items shall include all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.

2. **Restoration on Private Side:** Price and payment shall include, but not be limited to GPS coordinates of the corporation stop, curb stop, and where the service line enters the house, service application records, closeout documentation including photographs; repairs and cleaning of interior work spaces; drywall restoration, patching and waterproofing of new and abandoned penetrations; loaming and seeding; temporary restoration of sidewalk, and all other testing required to complete the project as specified herein; transportation and disposal of excess excavated material, spoil, rubble, concrete, asphalt, vegetation, lead pipes and construction debris, etc. in accordance with all Federal, State and local regulations; including all labor, materials and necessary equipment; removal of erosion and sediment control; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form. Payment for Item 3C New Curb Box shall be made in full for all private side only replacements or test pits at a commercial property (Item 3A) when a public side replacement (Item 1B) does not occur at the same location and the curb box is replaced. Payment shall also be made in full if a curb box is replaced during a test pit at a commercial property when the curb box is considered in need of replacement by the Engineer.

3.05 FILL MATERIALS (ITEMS S-1A - S-1C)

A. General

1. Imported Common Fill (Item S-1A) - will be utilized for backfill of miscellaneous work at the direction of the Owner or Engineer. This item shall include handling, transportation placing of common fill where the native hazardous material or unsuitable material is being replaced by common fill.
2. Crushed Stone (Item S-1B) and Flowable Fill (Item S-1C) - will be installed on an as-needed basis for miscellaneous work at the direction of the Owner or Engineer throughout the course of the project.

B. Measurement

1. (Item S-1A) Common Fill and (Item S-1B) Crushed Stone - Measurement will be based on cubic yards installed as measured in place by the Engineer and as allowable per the maximum trench payment width for trenches as indicated in the Contract Documents or the actual amount placed, whichever is less, if and when directed. Under no circumstances will measurement for payment under this item be made unless specifically approved by the Engineer to replace unsuitable soil.
2. (Item S-1C) Flowable Fill - Measurement will be based on cubic yards installed in place as measured by the Engineer, if and when directed. Under no circumstances will measurement for payment under this item be made unless specifically approved by the Engineer. If used

in trenches, the payment limits shall not exceed the trench widths as indicated in the Contract Documents or the actual amount placed, whichever is less.

C. Payment

1. Payment for Items (Item S-1A) Imported Common Fill, and (Item S-1B) Crushed Stone shall be as follows - Price and payment shall be full compensation for, but not limited to: purchasing, transporting, testing, washing, placement, compaction, loading, unloading, reloading; including all labor, materials and necessary equipment; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form. Backfill materials related to service line replacements shall be paid for under Items 1A and 1B.
2. Payment of Item S-1C Flowable Fill shall be as follows- Price and payment shall be full compensation for, but not limited to: purchasing, transporting, testing, pumping, placement, finishing, including all labor, materials and necessary equipment; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form.

3.06 INITIAL PAVEMENT RESTORATION WITH CONCRETE SUBBASE (ITEM S-2A)

A. General

1. Any gravel or paved surfaces disturbed during the performance of supplemental work shall be replaced with existing or new materials to match the existing surface.

B. Measurement

1. (Item S-2A) Initial Pavement Restoration with Concrete Subbase - Measurement will be based on square yard(s) installed as measured by the Engineer, within the specified widths as shown on the Details in Appendix B, if and when directed.

C. Payment

1. Payment for Item S-2A Initial Pavement Restoration with Concrete Subbase shall be as follows - All work associated with final pavement restoration for pavement with concrete subbase shall be included under this bid item unless otherwise stated. Price and payment shall be full compensation for, but not limited to: compaction, installation of concrete subbase and reinforcing (matching existing concrete), formwork, curing, testing, protection, sweeping, cleaning and preparing the base course surface, compaction, traffic control, traffic signage; traffic flaggers; cutting back existing pavement, installation of tack coat, furnishing, hauling and placing the initial pavement, compacting, pavement marking restoration, including all labor, materials and necessary equipment; all work required for or incidental to the satisfactory completion of the Items for which payment is not provided under other items in the Bid Form. This item is for replacement only. Cutting into and removing an existing concrete subbase will be paid for under Items 1A and 1B

3.07 MISCELLANEOUS CONCRETE (ITEM S-3)

A. General

1. Miscellaneous Concrete - The installation of miscellaneous concrete will be performed on an as-needed basis as directed by the Engineer throughout the course of the project. Miscellaneous concrete shall contain no wire or steel reinforcement. In general, the installation of miscellaneous concrete will be undertaken whenever any construction work is required as a result of service line replacement, curb stop installation, or otherwise deemed necessary in the field.

B. Measurement

1. (Item S-3) Miscellaneous Concrete - Measurement will be based on cubic yards installed as measured by the Engineer, if and when directed and as not included already in another bid item.

C. Payment

1. Payment for Item S-3 Miscellaneous Concrete shall be as follows - Price and payment shall be full compensation for, but not limited to: formwork, purchasing and transporting all concrete used for the Work; all labor, material (including expansion joints) and equipment required to properly place, prepare, finish and protect the concrete, concrete testing; and all other incidentals to the Work for which separate payment is not provided under other items in the Bid Form. Concrete shown on the Details in Appendix B or as listed in other bid items will not be paid for under this bid item.

3.08 MISCELLANEOUS WORK AT DIRECTION OF THE OWNER (ITEM S-4)

A. General

1. This item is intended to pay the Contractor for performing emergency repairs of water, sewer utilities and services for correction of any unforeseen conditions as discovered during the performance of the work as directed and approved by the Engineer. Utility repairs resulting from activities related to the Contractor's convenience or negligence will not be paid for under this item and will be paid for by the Contractor at no additional cost to the Owner.

B. Measurement

1. (Item S-4) Miscellaneous Work at Direction of the Owner - Measurement shall be based on the Contractor's time and material costs for performing emergency repairs of water and sewer utilities, as approved by Engineer. Contractor shall notify the Engineer's representative prior to proceeding with time and material work and shall provide time and material ticket to the Engineer's representative the day the work is performed. No time and material tickets will be accepted if not provided within 48 hours of work being performed.

C. Payment

1. Payment for Item S-4 Miscellaneous Work at Direction of the Owner will be made on the actual amount of work done approved and measured by the Engineer. Emergency repairs of water and sewer utilities shall include but not be limited labor, materials and equipment required for repair and replacement of water and sewer utilities and services utilizing the methods allowed herein and shall be full compensation for all work related to cutting existing pavement and excavation; excavation support and protection (as required);

dewatering and drainage; repair of utility pipelines as directed by the Engineer; backfilling with native soil; compaction; restoring the trench surface to grade; restoring all physical features to grade including furnishing, installing, placing, compacting and sweeping; dense-graded base course, formwork, curing, concrete sidewalks, driveway aprons, concrete curb, initial paving, roadway concrete subbase, resetting or replacing of existing slate sidewalks and granite curbs, asphalt or concrete stamping, resetting or replacement of brick or rock pavers, pavement markings; painting, patching; cleaning, chlorinating; and all other incidentals to the satisfactory completion of this Item.

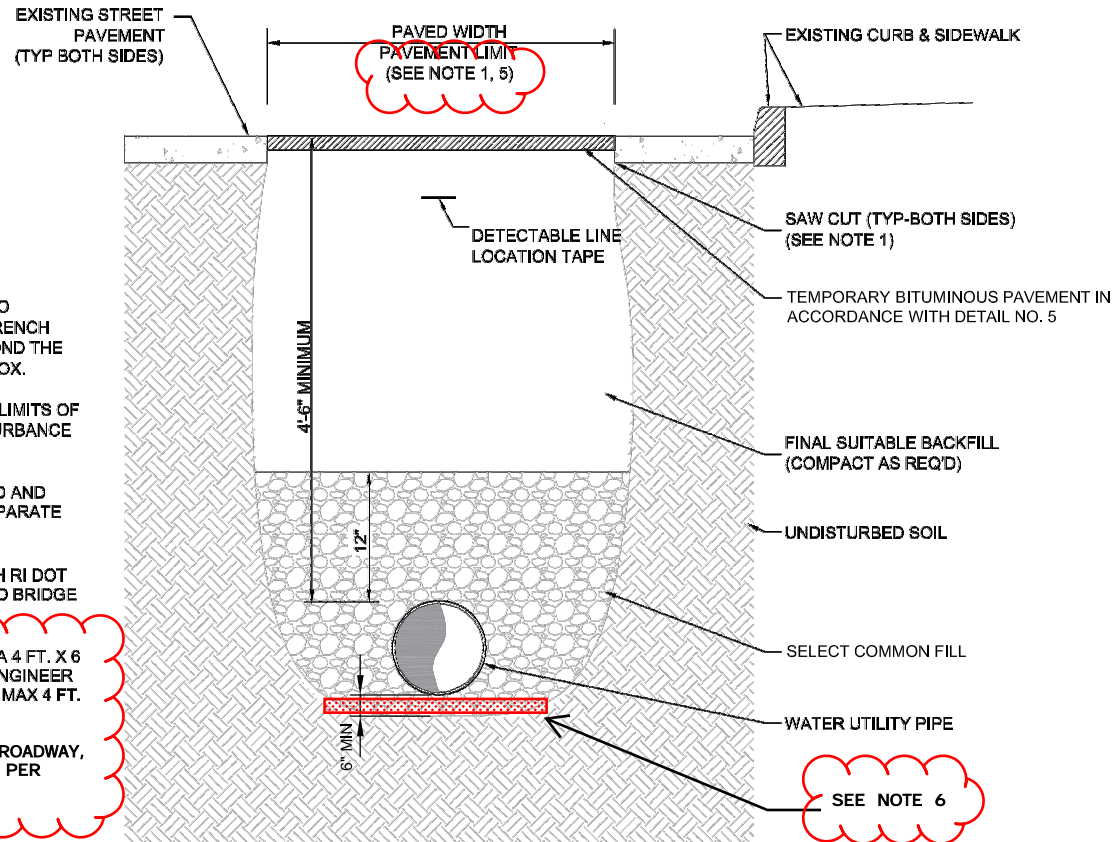
2. Services shall be based on the Contractor's time and material costs for performing the work as approved by Engineer.
3. Only work authorized in writing by the Engineer will be allowed to be reimbursed under this item.

END OF SECTION

ATTACHMENT 3

NOTES:

1. EXISTING STREET PAVEMENT SAW-CUT TO ACCOMMODATE DESIRED TRENCH WIDTH. TRENCH WIDTH SHALL NOT EXCEED 4'-0" OR 6" BEYOND THE EXTERIOR OF THE SHEETING OR TRENCH BOX.
2. TEMPORARY PAVEMENT PLACED WITHIN LIMITS OF SAW-CUT TRENCH, OR THE LIMITS OF DISTURBANCE OF EXISTING PAVEMENT, AS REQUIRED
3. TEMPORARY PAVEMENT TO BE REMOVED AND PERMANENTLY RESTORED AS PART OF SEPARATE PAVING PROJECT.
4. BACKFILL SHALL BE IN COMPLIANCE WITH RI DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 205.03.5.
5. FINAL PAVEMENT TRENCHLESS PAY AREA 4 FT. X 6 FT. OPEN CUT (WHEN PRE-APPROVED BY ENGINEER AS SPECIFIED) FINAL PAVEMENT PAY AREA MAX 4 FT. WIDTH X LENGTH OF PIPE + 3 FT.
6. MINIMUM 6" BEDDING OUTSIDE OF ROADWAY, 1 FT BEDDING REQUIRED IN ROADWAY PER PROVIDENCE DPW.



TYPICAL DETAIL WATER MAIN & WATER SERVICE TRENCH DETAIL

NOT TO SCALE

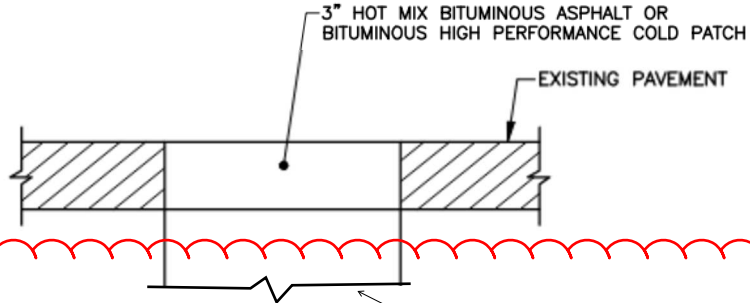
SOURCE: PROVIDENCE WATER SUPPLY BOARD



CITY OF PROVIDENCE, RHODE ISLAND
 PROVIDENCE WATER SUPPLY BOARD
 TRINITY SQUARE LEAD SERVICE LINE
 REPLACEMENT PROJECT

Detail No. 2

REVISED PER ADDENDUM NO. 2



SEE DETAIL NO. 2

NOTES:

1. BITUMINOUS CONCRETE SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 401.
2. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY (AASHTO T180), AND SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 301.
3. EXCAVATABLE FLOWABLE FILL (CONTROLLED DENSITY FILL, CDF) SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 603.
4. ANY TEMPORARY PATCH INSTALLED PRIOR TO SEPTEMBER 1 IN ANY YEAR SHALL BE REPLACED WITH PERMANENT PATCH NO LATER THAN DECEMBER 1 OF THAT YEAR.
5. IF TEMPORARY PATCH IS INSTALLED, PERMITEE MAY ALLOW NO MORE THAN 45 DAYS FOR SETTLING BEFORE PERMANENT RESTORATION. THE PERMITEE SHALL BE RESPONSIBLE TO MAINTAIN TEMPORARY ROADWAY RESTORATIONS IN A SAFE CONDITION FOR ALL TYPES OF TRAVEL UNTIL A PERMANENT PAVEMENT REPAIR HAS BEEN MADE. TO ENSURE PROPER MAINTENANCE, THE PERMITEE SHALL PERFORM PERIODIC INSPECTION OF EACH TEMPORARY PATCH UNTIL IT IS REPLACED WITH A PERMANENT PATCH.
6. FOR ROADS UNDER STATE JURISDICTION AND MAINTENANCE, RESTORATION MUST BE IN ACCORDANCE WITH RIDOT STANDARD SPECIFICATIONS SECTION 410.

TEMPORARY ROADWAY RESTORATION

NOT TO SCALE

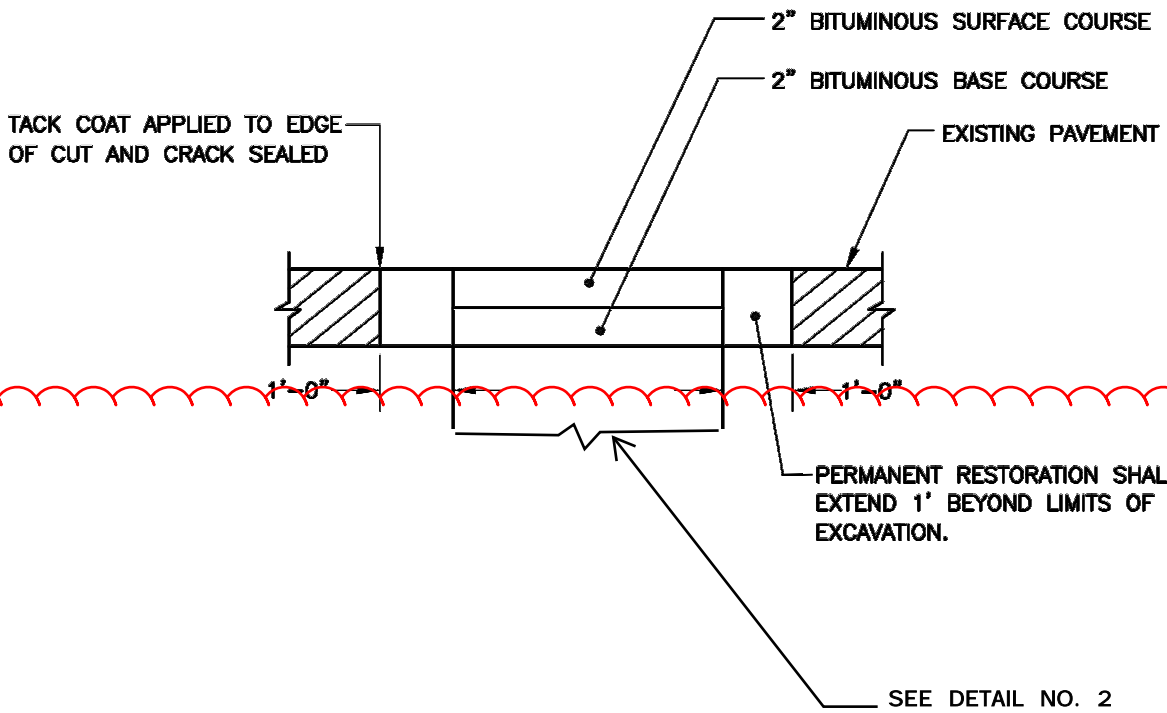
SOURCE: PROVIDENCE DEPARTMENT OF PUBLIC WORKS



CITY OF PROVIDENCE, RHODE ISLAND
 PROVIDENCE WATER SUPPLY BOARD
 TRINITY SQUARE LEAD SERVICE LINE
 REPLACEMENT PROJECT

Detail No. 5

REVISED PER ADDENDUM NO. 2



NOTES:

1. BITUMINOUS CONCRETE SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 401.
2. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY (AASHTO T180), AND SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 301.
3. EXCAVATABLE FLOWABLE FILL (CONTROLLED DENSITY FILL, CDF) SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 603.
4. PRIOR TO PERMANENT RESTORATION, ALL EDGES OF THE EXCAVATED AREA AND ONE FOOT BEYOND SHALL BE SAWCUT TO A CLEAN, SQUARE EDGE.
5. IF STREET TO BE PAVED CURB TO CURB, THE REMAINING ROADWAY OUTSIDE THE TRENCH TO THE NEAREST CURB SHALL BE MILLED 2.0 INCHES WITH 2.0 INCH BITUMINOUS CONCRETE SURFACE OVERLAY. THE JOINTS SHALL BE SEALED USING INFRARED TECHNOLOGY. THE LENGTH OF THE NEW PAVED AREA MUST BE MINIMUM OF 10 FEET TO ALLOW FOR PROPER ROLLING.
6. IF THE DISTANCE FROM EDGE OF EXCAVATION TO EDGE OF ROADWAY IS TWO FEET OR LESS, THE REMAINING AREA TO EDGE OF ROADWAY SHALL BE REMOVED AND REPLACED IN CONJUNCTION WITH THE PERMANENT ROADWAY RESTORATION.
7. FOR ROADS UNDER STATE JURISDICTION AND MAINTENANCE, RESTORATION MUST BE IN ACCORDANCE WITH RIDOT STANDARD SPECIFICATIONS SECTION 401.04.
8. PERMANENT RESTORATION WILL ONLY BE REQUIRED FOR ROADS LISTED IN APPENDIX C.

PERMANENT ROADWAY RESTORATION - GRANULAR BASE

NOT TO SCALE

SOURCE: PROVIDENCE DEPARTMENT OF PUBLIC WORKS

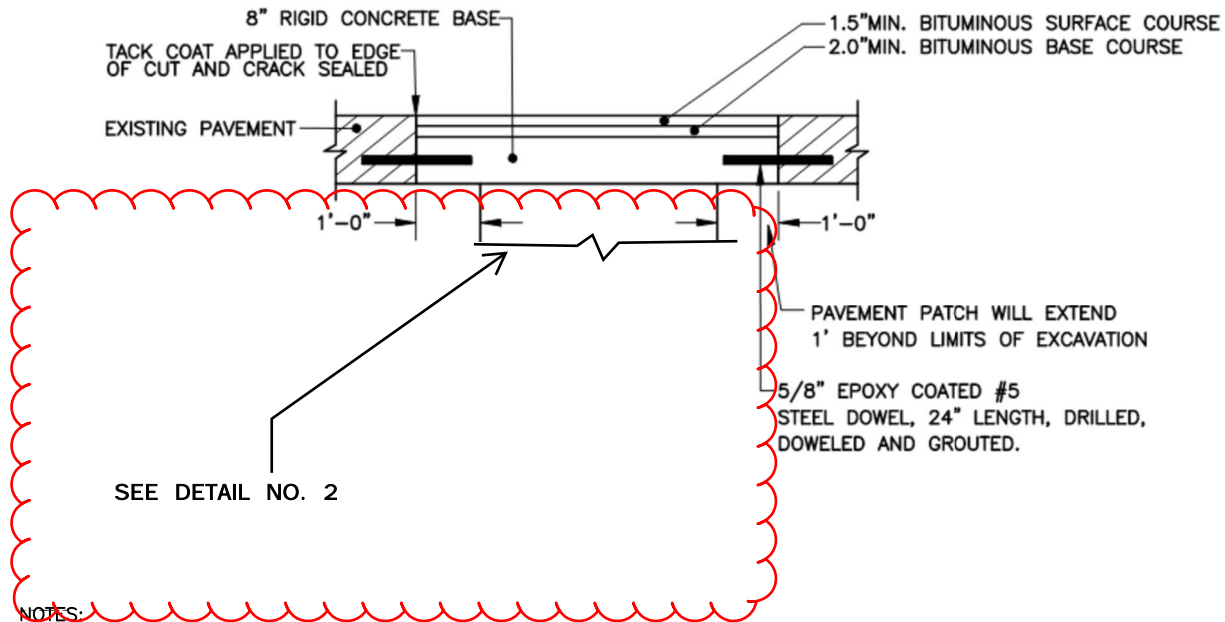
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CITY OF PROVIDENCE, RHODE ISLAND
 PROVIDENCE WATER SUPPLY BOARD
 TRINITY SQUARE LEAD SERVICE LINE
 REPLACEMENT PROJECT

Detail No. 6a

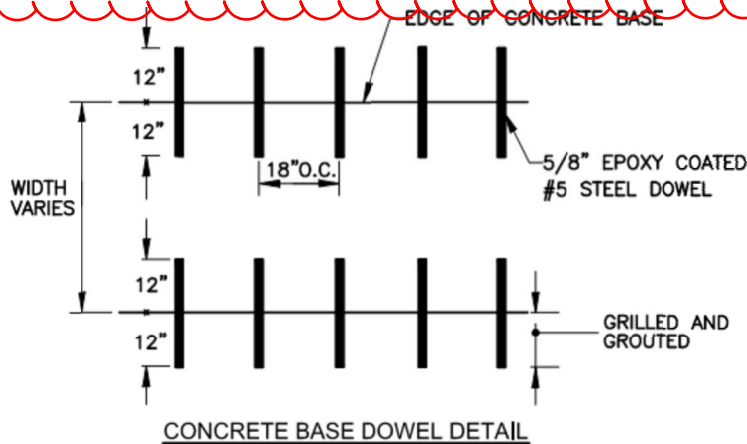
REVISED PER ADDENDUM NO. 2



SEE DETAIL NO. 2

NOTES:

1. CONCRETE ROAD BASE MUST BE RESTORED TO THE EXISTING DEPTH OR A MINIMUM OF 8 INCHES. A MINIMUM OF 3.5 INCHES OF BITUMINOUS CONCRETE SURFACE COURSE MEETING RIDOT SPECIFICATIONS, SECTION 401 SHALL BE PLACED OVER BASE.
2. 8 INCH RIGID CONCRETE BASE SHALL BE TYPE XX (28 DAY -4000 PSI) PER RIDOT SPECIFICATIONS, SECTION 601.
3. PRIOR TO PERMANENT RESTORATION, ALL EDGES OF THE EXCAVATED AREA AND ONE FOOT BEYOND SHALL BE SAWCUT TO A CLEAN, SQUARE EDGE.
4. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY (AASHTO T180), AND SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 301.
5. EXCAVATABLE FLOWABLE FILL (CONTROLLED DENSITY FILL, CDF) SHALL ADHERE TO RIDOT SPECIFICATIONS, SECTION 603.
6. THE REMAINING ROADWAY OUTSIDE THE TRENCH TO THE NEAREST CURB SHALL BE MILLED 1.5 INCHES WITH A 1.5 INCH BITUMINOUS CONCRETE SURFACE OVERLAY. THE JOINTS SHALL BE SEALED USING INFRARED TECHNOLOGY. THE LENGTH OF THE NEW PAVED AREA MUST BE A MINIMUM OF 10 FEET TO ALLOW FOR PROPER COMPACTION.
7. IF THE DISTANCE FROM EDGE OF EXCAVATION TO EDGE OF ROADWAY IS TWO FEET OR LESS, THE REMAINING AREA TO EDGE OF ROADWAY SHALL BE REMOVED AND REPLACED IN CONJUNCTION WITH THE PERMANENT ROADWAY RESTORATION.



NOTES:

1. DOWEL SHALL BE INSTALLED 4" FROM SURFACE OF CONCRETE BASE.
2. THE EXISTING CONCRETE ROAD BASE SHALL BE DRILLED AND GROUTED EVERY 18" ON CENTER TO RECEIVE THE EPOXY COATED STEEL DOWELS.

PERMANENT ROADWAY RESTORATION - CONCRETE BASE

NOT TO SCALE

SOURCE: PROVIDENCE DEPARTMENT OF PUBLIC WORKS



CITY OF PROVIDENCE, RHODE ISLAND
 PROVIDENCE WATER SUPPLY BOARD
 TRINITY SQUARE LEAD SERVICE LINE
 REPLACEMENT PROJECT

Detail No. 6b

REVISED PER ADDENDUM NO. 2