| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | | | 1. CONTRACT ID CODE | | PAGE OF PAGES | |
|---|---|--|---|---|------------|----------------------|--|
| AMENDMENT OF SOLICITA | ATION/MIODIF | ICATION OF CONTRACT | | | | 1 13 | |
| 2. AMENDMENT/MODIFICATION NO. | 3. EFFECTIVE DATE | 4. REQUISITION/PURCHASE REQ. NO. | | | 5. PROJEC | CT NO.(Ifapplicable) | |
| 0001 | 12-Jun-2023 | | | | | | |
| 6. ISSUED BY CODE | W912WJ | 7. ADMINISTERED BY (Ifother than item 6) | | COI | DE | | |
| U S ARMY ENGR DISTRICT, NEW ENGLAND 696 VIRGINIA RD CONCORD MA 01742-2751 | | See Item 6 | | | | | |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) | | | X 9A. AMENDMENT OF SOLICITATION NO. W912WJ23Q0093 | | | | |
| | | | x 9 | B. DATED (SI 30-May-2023 | | 11) | |
| | | | 1 | 0A. MOD. OF | CONTRA | ACT/ORDER NO. | |
| CODE FACILITY CODE | | | | 10B. DATED (SEE ITEM 13) | | | |
| | • | PPLIES TO AMENDMENTS OF SOLI | CIT A | TIONS | | | |
| X The above numbered solicitation is amended as set forth | in Item 14. The hour and | date specified for receipt of Offer | X is | s extended, | is not ex | stended. | |
| Offer must acknowledge receipt of this amendment prior (a) By completing Items 8 and 15, and returning 1 or (c) By separate letter or telegram which includes a ref RECEIVED AT THE PLACE DESIGNATED FOR TH REJECTION OF YOUR OFFER. If by virtue of this am provided each telegramor letter makes reference to the s | copies of the amendmen erence to the solicitation a E RECEIPT OF OFFERS I endment you desire to char | t; (b) By acknowledging receipt of this amendment amendment numbers. FAILURE OF YOUR APRIOR TO THE HOUR AND DATE SPECIFIEI nge an offer already submitted, such change may be a compared to the specific of the company of the specific of the | ent on e ACKNO D MAY be made | each copy of the of OWLEDGMENT RESULT IN e by telegramor let | ТО ВЕ | l; | |
| 12. ACCOUNTING AND APPROPRIATION DA | TA (If required) | | | | | | |
| 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14. | | | | | | | |
| A. THIS CHANGE ORDER IS ISSUED PURSU CONTRACT ORDER NO. IN ITEM 10A. | ANT TO: (Specify a | uthority) THE CHANGES SET FORTH | IN IT | TEM 14 ARE N | MADE IN | THE | |
| B. THE ABOVE NUMBERED CONTRACT/O office, appropriation date, etc.) SET FORT | H IN ITEM 14, PUR | SUANT TO THE AUTHORITY OF FA | | | as changes | s in paying | |
| C. THIS SUPPLEMENT AL AGREEMENT IS | ENTERED INTO PU | RSUANT TO AUTHORITY OF: | | | | | |
| D. OTHER (Specify type of modification and a | nuthority) | | | | | | |
| E. IMPORTANT: Contractor is not, | is required to sig | n this document and return | copi | es to the issuin | g office. | | |
| DESCRIPTION OF AMENDMENT/MODIFIC where feasible.) Amendment is necessary to provide reponses date until June 16, 2023 at 5:00 PM Eastern. | . • | | | - | | | |
| All other terms and conditions remain unchang | od | | | | | | |
| All other terms and conditions remain unchang | ed. | | | | | | |
| Except as provided herein, all terms and conditions of the do | cument referenced in Items | 9A or 10A, as heretofore changed, remains uncha | ınged ar | nd in full force and | effect. | | |
| 15A. NAME AND TITLE OF SIGNER (Type or | 16A. NAME AND TITLE OF CO JENNIFER M SAMELA/ADDED BY UPASS | ND TITLE OF CONTRACTING OFFICER (Type or print) A/ADDED BY UPASS | | | | | |
| 15D COMPRISON OF STATES | lica piema | TEL: 978-318-8324 | | EMAIL: jennifer.m.s | | | |
| 15B. CONTRACTOR/OFFEROR | 15C. DATE SIGNEI | D 16B. UNITED STATES OF AME | KICA | | | 6C. DATE SIGNED | |
| (Signature of person authorized to sign) | | BY (Signature of Contracting Of | fficer) | | | 12-Jun-2023 | |

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 30 - BLOCK 14 CONTINUATION PAGE

The following have been added by full text: REQUEST FOR INFORMATION

OUESTION 1: Has the leak location been found?

RESPONSE: The general location of the leak has been detected via sound testing, but the exact location has not been pinpointed. Please refer to the revised Statement of Work for more information.

SECTION A - SOLICITATION/CONTRACT FORM

The required response date/time has changed from 12-Jun-2023 05:00 PM to 16-Jun-2023 05:00 PM.

SECTION C - DESCRIPTIONS AND SPECIFICATIONS

The following have been modified: STATEMENT OF WORK

WATER SUPPLY LINE REPAIR
U.S. ARMY CORPS OF ENGINEERS
STAMFORD HURRICANE BARRIER
STATMENT OF WORK

I. General

1. Scope

Furnish all labor, materials, and equipment to confirm the identify location of a water leak and repair service water supply line at Stamford Hurricane Barrier. The general location of the leak has been detected via sound testing, but the exact location of the leak and depth of the pipe in the ground is unknown. Contractor will be responsible for excavation, removing all damaged pipe, and installing new "in-kind" piping; ensuring connection to existing undamaged piping is functional and secure, and re-asphalting the roadway in accordance with the Statement of Work.

The service water supply line is located within the Woodland Cemetery in Stamford, CT which is adjacent to the Stamford Hurricane Barrier within an existing easement. The contractor will coordinate with all applicable agencies, to include Woodland Cemetery, Aquarian Water Services (Area's Water Provider), and US Army Corps of Engineers (USACE). All work must meet all applicable industry standards and shall comply with any

applicable federal, state, and municipal laws, codes, and regulations. Work shall be performed in a timely manner and to the satisfaction of the Technical Point of Contact (TPOC).

2. Locations

Work location is within the Woodland Cemetery, which is located at 63 Woodland Place, Stamford Connecticut, 06902. The responsible agency is the U. S. Army Corps of Engineers, Stamford Hurricane Barrier- East Branch located at 230 Elmcroft Road, Stamford Connecticut, 06902.

Attached overhead photographs show location of existing water line.

3. Site Visit

To arrange a site visit contact the Technical Point of Contact, Park Ranger Ryan Maher at 978-318-8387 (Office) or 203-464-8652 (Mobile) or email ryan.a.maher@usace.army.mil

4. Schedule

The period of performance is 120 days from contract award. The Preconstruction Conference shall be completed within 14 days of contract award, and safety paperwork shall be submitted, reviewed, and accepted within 30 days of contract award. Field work shall begin no later than 30 days after contract award. The project area will be open to the contractor Monday through Friday 7:00 AM to 3:30 PM and all work must be done during those hours, unless additional hours and days are approved by the Technical Point of Contact. Work will not be permitted on Saturdays, Sundays or Government holidays unless approved in advance by the Technical Point of Contact.

5. Safety Requirements

a. General:

All work shall be conducted in accordance with the U.S. Army Corps of Engineers Safety and Health Requirements Manual (EM 385-1-1, most recent edition), and all applicable Occupational Safety and Health Administration (OSHA), federal, state, and local safety and health requirements. A copy of EM 385-1-1 can be accessed at the project office or electronically at Headquarters USACE website under publications using the following link: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1.pdf

Project staff reserve the right to cease work at any time should the safety of employees, Contractors, and/or the public become jeopardized.

b. Accident Prevention Plan:

The Contractor shall prepare an Accident Prevention Plan (APP) specific to the activities being performed. It shall include Activity Hazard Analyses (AHAs) as described below. A non-mandatory, fillable AAPP template is available upon request. However, the contractor is permitted to submit their own plan, at a minimum it must meet the requirements of EM 385-1-1, Appendix A, Section K.

A preparatory meeting shall be conducted by the prime contractor to discuss the AAPP contents with all effected onsite employees. The Prime Contractor is responsible for informing their subcontractors of the safety provisions under the terms of the contract, the penalties for noncompliance, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out.

c. Activity Hazard Analysis:

An AHA shall be submitted for each major phase of work. A major phase of work is defined as an operation involving a type of work presenting hazards not experienced in previous operations or where a new subcontractor or work crew is to perform the work. The analysis shall define all activities to be performed, identify the sequence of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. The AHA shall be continuously reviewed and revised to address changing site conditions as appropriate.

d. **Emergency Response:**

Emergency procedures shall be documented in the Abbreviated Accident Prevention Plan and will include a map with directions to the nearest hospital, emergency contact numbers, and onsite First Aid/CPR responders.

e. Required Personnel:

The Contractor shall employ a minimum of one Competent Person (CP) at each project site to function as the Site Safety and Health Officer (SSHO). The SSHO shall be present at the project site and report to the contractor's upper management. The SSHO is required to have related construction experience and have at a minimum completed a <u>10-Hour OSHA Course</u> (or equivalent).

In addition, when emergency medical services are not accessible within 5 minutes of the work location and there are 2 or more workers onsite, at least 2 employees shall have (inperson) training in First Aid and CPR. Minimum qualifications are listed in EM 385-1-1, Section 03.A.02.c.

Note: Other Competent or Qualified Persons may be required per EM 385-1-1 and/or other sections of this Scope of Work, based on the definable features of work for this project*

f. Accident Reporting:

All accidents and near misses shall be investigated by the Contractor. All work-related recordable injuries, illnesses, and property damage accidents (excluding on-the-road vehicle accidents), in which the property damage exceeds \$5,000.00, shall be verbally reported to the Technical Point of Contact within four (4) hours of the incident. Serious accidents as described in EM 385-1-1 Section 01.D shall be immediately reported to the Technical Point of Contact. ENG Form 3394 shall be completed and submitted to the Technical Point of Contact within five (5) working days of the incident.

The Contractor shall compile employee work hours (including subcontractors) and forward the total hours to the Technical Point of Contact no later than close of business on the 10th calendar day of the following month. The method of transmission by the prime contractor to the Technical Point of Contact shall be electronically.

6. Specific Safety Section Excavation and Trenching

- **a.** <u>General</u>: All excavating and trenching activities are required to be completed in accordance with EM 385-1-1, Section 25.
- **b.** <u>Submittals</u>: An Activity Hazard Analysis is required for all excavations and trenches. In addition, for excavations or trenches greater than 5 feet in depth an Excavation and Trenching Plan will need to be submitted for review by the Technical Point of Contact. USACE will provide a non-mandatory, fillable template plan. However, the contractor is permitted to submit their own plan, at a minimum it must meet the requirements listed in EM 385-1-1, Section 25.A.01.c.
- **c.** Required Personnel: All projects that involve excavation and trenching activities are required to have a Competent Person in excavation and trenching onsite. This person is typically (but not limited to) the Site Safety Health Officer (SSHO), Superintendent, or site foreman and is defined as:
 - i. An onsite employee who has been designated in writing by the employer to be responsible for the immediate supervision, implementation, and monitoring of the excavation/trenching program, who through training, knowledge and experience in excavation/trenching is capable of identifying, evaluating, and addressing existing and potential hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

7. Traffic Control.

Provide and erect temporary safety fencing and/or barricades at areas as needed to prohibit access by unauthorized vehicles and public.

8. Preconstruction Conference

Prior to the start of any work, the Technical Point of Contact will schedule and conduct a "Preconstruction Conference". The Contractor's Project Manager and Quality Control Personnel will attend this meeting. This conference will be held at the time and location agreeable to the government and contractor. No work may be performed under this contract prior to this conference. The purpose of the conference is to enable the Technical Point of Contact to outline the procedures that will be followed by the Government in its administration of the contract, and to discuss the performance that will be expected from the Contractor. This conference will allow the Contractor an opportunity to ask questions about the Government's administration and inspection of contract work or obtain other pertinent information that might be required. At the Preconstruction conference the contractor shall provide the name of the project superintendent with a telephone number for project coordination.

The following is a general list of items for discussion during this Preconstruction Conference:

i. Authority of the Technical Point of Contact and Quality Assurance Inspectors.

- ii. Contractor's Safety Program (including sub-contractors).
- iii. Accident Prevention Plan (Submitted & accepted prior to start of work on site)
- iv. Weekly Safety Meetings (Documented on NED Form 251)
- v. Accident Reporting (ENG Form 3394)
- vi. Safety Data Sheet (SDS) requirements
- vii. Correspondence, Communication and Administrative Procedures.
- viii. Invoice and payment.

9. Permits

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses, permits, and letters of certification. The Contractor shall comply with any applicable federal, state, and municipal laws, codes, and regulations in connection with the performance of the work specified under this contract.

10. Security

The Contractor shall comply with all established security policies at each Project Location identified. If applicable, Contractor shall comply with Projects Key Control Management Program. Due to periods of heightened security that may affect the access to the areas covered under this contract, areas may be subject to periodic closures, which in turn may reduce or inhibit the Contractor's ability to access certain areas. During periods of heightened security, the Government reserves the right, at any time, to close any property or portion of property and reschedule and/or cancel any subsequent service in an area. The Contractor shall be given at least a 24-hour notice of any such closure.

11. Contractor Conduct

Alcohol, illegal substances and firearms are prohibited on project grounds. Contractor and employees must comply with CFR 36 Rules and Regulations.

12. Payment

Payment shall be made on a per job basis. After final inspection and acceptance by the Government, the Contractor must submit an invoice to the Technical Point of Contact. The invoice shall include the invoice date, contract number, dates of service, description of work, quantities, process, and total amount due per line item. For jobs greater than 30 days the contractor may request -multiple payments.

All invoices may be mailed to:

USACE - Hop Brook Lake 4 Straits Turnpike Middlebury, CT 06762

Or e-mailed to Ryan.A.Maher@usace.army.mil

II. Technical Requirements:

Part 1 General:

1. Summary

Furnish all labor, materials, and equipment to confirm the identify location of a water leak and repair service water supply line at Stamford Hurricane Barrier. The general location of the leak has been detected via sound testing, but the exact location of the leak and depth of the pipe in the ground is unknown.

Contractor will be responsible for excavation, removing all damaged pipe, and installing new "in-kind" piping; ensuring connection to existing un-damaged piping is functional and secure. Contractor will re-asphalt roadway.

Contractor will need to coordinate water service interruption/shut off with Aquarian Water Company, notify potentially affected end users, and the Technical Point of Contact prior to beginning project work.

2. Existing Conditions

The water line that supplies the Stamford Hurricane Barrier Project Facility runs through the adjacent property (Woodland Cemetery). The water leak in the service supply line for Stamford Hurricane Barrier has been detected in the adjacent property (Woodlawn Cemetery). Woodland Cemetery is where the project repair site is located.

Detection has indicated that the leak is under an asphalt roadway. Exposing the damaged pipe will require cutting, removal of asphalt and trench excavation. Aquarian Water Company has noted the pipe to be a cast iron, 6-inch service water supply line and at approximately 4-5 feet depth. U.S. Army Corps of Engineers drawing STA-1 Sheet 023 (Stamford Hurricane Barrier Utilities East Branch Plans) indicates that the waterline pipe is 6 inches in diameter. Due to its age, no record of prior pipe replacement, and the fact that the material of the pipe at the curb stop shut-off being cast iron, it is an educated assumption that the material of the waterline to be cast iron.

Leak is not affecting water pressure beyond the leak site but is causing groundwater retainment/minor flooding within the Woodland Cemetery. Leak point has been identified by a leak detection service. The attached photos show aerial location map and leak location. In the event that the markings fade, the leak point is located directly in front of the headstone marked "Bella" and roughly 30 feet from the 90 degrees turn in the road.

3. Requests for Information

After contract award requests concerning the work of this project should be directed to the Technical Point of Contact, Park Ranger Ryan Maher at 978-318-8387 or mailto:Ryan.A.Maher@usace.army.mil

4. Submittals

Although the Government technically reviews submissions required by this scope of work, it is emphasized that the Contractor's work must be prosecuted using proper internal controls and review procedures. The documents identified below must be prepared in accordance with the applicable standards, submitted for review and accepted by the government within 30 days of Contract Award. Submittals must be accepted before the commencement of any field activities.

- Copy of contractor's Accident Prevention Plan (APP) and be in compliance with all regulatory safety items to include EM 385-1-1 Section 25.A.01 (a).
- Copy of contractor's Excavation and Trenching Plan for trenches greater than 5 feet in depth.
- Copy of contractor's Activity Hazard Analysis (AHA).
- Copy of 10-hour OSHA Construction Safety Training Certificate.
- Copies of all products Safety Data Sheets (SDS).

5. Clean Up and Waste Disposal

The contractor shall practice good housekeeping to maintain a safe job site. The contractor shall keep the work area, including any designated storage areas free from accumulation of waste materials. Upon completing work in an area, the contractor shall remove any tools, equipment, and materials that are not the property of the Government. Any and all disturbed areas resulting from contractor activities shall be restored by the contractor to the satisfaction of the Technical Point of Contact. All waste material will be disposed of offsite in accordance with all federal, state, and local regulations.

6. Government Resources

The contractor is responsible for providing all materials to complete the project. Unless specified in the contract, the Government will not provide any equipment, telephone services or other resources. The contractor may use the restroom at the office.

7. Environmental Protection

Containers for waste materials, rubbish, etc. shall be provided by the contractor at the site, and the site will be inspected and cleaned daily when working onsite. Water, air, and land resources shall not be adversely impacted during the course of the work. The contractor will take necessary steps to ensure all Federal, State, and Local environmental regulatory requirements are met at no additional cost to the Government. Assurance of compliance with this section by subcontractors shall be the responsibility of the contractor.

8. Personal Protective Equipment

It is the contractor's responsibility to furnish and supply personnel with the proper personal protective equipment necessary for performing the work.

9. Damage to Government and Private Property

The Contractor shall exercise caution and follow sound industry practices in the conduct of the work to avoid Contractor related damage to any Government and Woodland Cemetery facilities or features. The contractor shall be responsible for restoring all Government and Woodland Cemetery facilities or structures damaged as a result of the contractor's operation.

The contractor shall also be responsible for any damage to private property or injury to any person as a result of the contractor's operation. The contractor shall notify the Technical Point of Contact immediately of damage to Government and private property

and injury to any person resulting from the contractor's operation.

Trucks, trailers, and equipment will be driven on existing roads only. The Contractor shall also restore landscape features (example: shrubs, flowers, grasses), which are damaged or destroyed by the contractor's operation. Damaged or destroyed grass areas shall be re-planted as directed by the Technical Point of Contact, and shrubs and flowers which are damaged or destroyed shall be replaced from nursery stock of like size and kind.

Any Government and Woodland Cemetery property damaged as a result of the services performed under this contract shall be repaired or replaced at no additional cost to the Government and to the satisfaction of the Technical Point of Contact.

10. Omissions

This contract may not cover all specified activities, steps, and procedures required to supply the contract product. In case of omission, the normal industry, state, or federal standards, practices, specifications, and/or guides shall prevail. In no instance shall an omission be reason to produce less than an acceptable product.

11. Quality Assurance

The contractor is responsible for the quality control of the contract work. The government has the right to inspect and test all items called for by the contract, to the extent practicable at all times and at all places during the term of the contract.

12. Other Contracts

The Government may undertake or award other contracts for additional work not related to this contract, and the Contractor shall fully cooperate with other Contractors and Government employees. The contractor shall not commit or permit any act, which will interfere with the performance of work by another contractor, or by Government employees.

13. Staging and Storage Area.

A designated staging and storage area shall be used by the Contractor for staging work, storage of equipment, materials, and trailers during the life of this contract. The site-specific location of the staging and storage area will be in the Woodland Cemetery and will require coordination with TPOC and Woodland Cemetery prior to start of work. Coordination between all parties will be discussed at the Preconstruction Conference. The Contractor shall confine its storage and staging area to the limits as designated or approved by the TPOC and shall be responsible for the security of the area. Upon completion of the contract, all equipment, and materials, shall be removed, and the site must be restored to its original condition as approved by the TPOC.

Contractor shall not stockpile materials outside the staging and storage area in preparation for the next day's work.

14. Receiving and Storing Materials:

The contractor is responsible for protecting any stored material until it is placed in service. The contractor is responsible for receiving and unloading all delivered goods. Government employees will not receive materials or supplies for the contractor and will not be responsible for damage to contractor equipment or material.

Part 2 Products:

1. Sustainability

Under the Comprehensive Procurement Guidelines (CPG) program, the Environmental Protection Agency (EPA) designates products that are or can be made with recovered materials and recommends practices for buying these products. Any designated product that is being offered or supplied under this contract shall meet the minimum recommended content levels as identified under the CPG program. Visit https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program for a complete list of designated products and the associated recommended contents levels. Offerors must be able to demonstrate that each offered products meets minimum content levels upon request.

Furthermore, The United States Department of Agriculture (USDA) designates certain bio-based products for federal procurement and specifies minimum bio-based content levels for those products. Any designated product that is being offered or supplied under this contract shall meet USDA BioPreferred's minimum bio-based content level. Visit the BioPreferred web site

https://www.biopreferred.gov/BioPreferred/faces/pages/ProductCategories.xhtml for the complete list of designated products and the associated minimum bio-based content level requirements.

Part 3 Execution:

1. General

- a. Prior to starting any work, the contractor must contact "Call Before You Dig" at 1-800-322-4844. Notification shall not be earlier than 30 days prior, or later than 3 days prior to planned excavation.
- b. Contractor must repair 10 feet or less of a portion of the water line where a leak has been identified by a water line detection service. Any damage to the water line requiring more than 10 ft of piping will be considered an additional option for up to an additional 15 feet length of pipe.
- c. Work shall include the following work activities:
 - i. Excavation
 - ii. Trenching
 - iii. Bedding
 - iv. Filling/Backfilling
 - v. Compacting
 - vi. Removing damage piping

- vii. Installing new piping
- viii. Re-asphalting roadway
- ix. Disposal of excess materials and waste products
- d. Contractor will need to coordinate water service interruption/shut off with Aquarian Water Company, potentially affected end users, and TPOC prior to beginning project.
- e. Existing paved, unpaved areas, all surrounding structures, water supply line and all surrounding landscaping vegetation to include but not be limited to trees, shrubs, flowers, plantings, grass areas, and shoreline areas shall be protected during the duration of this contract.
- f. Activities including excavation, demolition, and installation, shall be scheduled to minimize impacts of weather-related events to structures and any of their contents.
- g. The contractor shall keep on site the means to quickly cover and protect all areas open to the elements during an unforeseen weather-related event that could cause damage to the structures and any of their contents.
- h. The contractor is required to construct a "safe zone" around excavated/trenched areas using temporary safety fencing and/or barricades to prohibit access by unauthorized vehicles and foot traffic. Temporary fencing and/or barricades must be maintained throughout duration of project.
- i. Any hole or trench must be covered when work is not being performed. In accordance with EM385-1-1 Section 21 G.01-03, covers must be capable of supporting, without failure, at least twice the weight of the worker, equipment and material combined. Covers must also be properly labeled.
- j. Once the repair is completed, the contractor shall coordinate with Aquarian Water Company to restore water service to supply line and notify end users of service status.

2. Excavation

- a. Cutting of asphalt along roadway at leak point will be necessary for excavation.
- b. Removed asphalt shall be properly disposed at an approved off-site facility at no additional cost to the government. This includes any excavated materials.
- c. The contractor shall recycle all waste and demolition materials to the fullest extent possible.
- d. Contractor will excavate trench to the required depth, alignment, and grade at the location of leak to expose the necessary length of water supply line to properly repair the leak. Reference EM 385-1-1 Section 25.A.01 (a).

- e. Existing structures, and other water supply line piping within the work area shall be protected.
- f. Erosion control material, if needed by the Contractor's construction methods, shall be installed in accordance with the manufacturer's instructions.

3. <u>Installation</u>

- a. The appropriate length of exposed compromised water supply pipe will be cut out. The removed damaged/compromised section of water supply piping will be replaced with the necessary length of new "in-kind" piping.
- b. The Contractor will install transition couplings as necessary, and bed underneath as needed to ensure proper support of the pipe. in accordance with the manufacturer's specifications.
- c. Contractor will coordinate with the Aquarian Water Company and leak test the new section of pipe and couplings before backfilling. Test will be completed in accordance with the Aquarian Water Company specifications.
- d. Contractor will bed and cover the water supply pipe with necessary material and backfill. Material will be installed and compacted to the subgrade of the pavement per the following recommendations provided by Aquarian Water Company. Backfilling material for at least one (1) foot above the top of the pipe shall consist of selected fine material containing no stones larger than one-half inch in size. Backfill of the fine selected material shall be carefully and thoroughly tamped with approved tools in such a manner as to prevent settlement. Special care shall be taken to place sand or stone dust material under the pipe to solidly furnish a hard bedding for the entire new section of piping.

The required backfill above the one-foot layer of fine selected material can be 4 inch or less processed stone and may be placed in one layer provided it is compacted by means of a hoe-pack to achieve a 95% modified proctor density. If a hoe-pack is not used, the backfill shall be spread in layers not exceeding twelve (12) inches in depth prior to compaction. Each layer shall be carefully and thoroughly tamped with approved tools in such a manner as to prevent settlement after the backfill has been completed and to achieve a 95% modified proctor density. All settlement in backfill shall be repaired by the Contractor at his expense. The use of frozen material will not be permitted. The excavated paving, either bituminous or other, shall not be placed in the trench as backfill.

Blue marking tape reading "Caution - Water Line Below" shall be placed a minimum of 24 inches above the top of the water main.

e. In the area where the excavation and repair took place the removed asphalt will be replaced with new asphalt pavement to the grade of the existing pavement. Pavement

shall be installed and compacted to the state of Connecticut Department of Transportation (CTDOT) State Standards.

Asphalt pavement materials and mixtures shall be obtained from a supplier regularly producing asphalt pavement that is in accordance with and meets the requirements of CTDOT State Standards.

f. (Option) Additional Length of Pipe - If it is found that any damage to the water line requiring more than 10 feet of piping will be considered an additional option. This option may be exercised for up to an additional 15 feet of pipe length. No work identified under the optional task shall be performed until the Contractor receives a formal modification to the Purchase Order signed by the Contracting Officer.

4. Final Cleanup and Restoration

- a. At the Contractor's expense, any areas deemed by the Technical Point of Contact to be outside of the designated work area, which are damaged during construction operations, will be restored to their original conditions. This includes paved or unpaved areas, all surrounding structures, water supply line and all surrounding landscaping vegetation.
- b. Remove all construction debris, waste, surplus materials, and rubbish from work area to off-site location at the completion of installation.
- c. Temporary storage area(s) used by the Contractor shall be cleaned and restored in accordance with this statement of work.
- d. Upon the completion of all work, the Contractor shall leave the work area in the condition in which it was found just prior to work.
- e. All paved areas used or disturbed during construction shall be swept clean. Surplus material or other not required or suitable for the work, such as fills and backfills, pipe and fittings, brush, refuse, stumps, roots, and timber shall be removed from Government and Woodland Cemetery property.

(End of Summary of Changes)