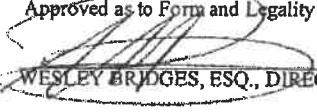


# RESOLUTION

No. 24-441

Date of Adoption OCT 17 2024

Approved as to Form and Legality

  
WESLEY BRIDGES, ESQ., DIRECTOR OF LAW

Councilman /woman

Factual content certified by

  
SEAN SEMPLE, DIRECTOR OF WATER AND SEWER

presents the following Resolution:

SPONSORED BY:

## RESOLUTION ACCEPTING A BID AND AWARDING A CONTRACT TO VALVETEK UTILITY SERVICES FOR THE VALVE EXERCISING PROGRAM FOR TRENTON WATER WORKS, CONSTRUCTION AND MAINTENANCE OFFICE IN AN AMOUNT NOT TO EXCEED \$652,741.50 FOR A PERIOD OF ONE (1) YEAR FROM DATE OF AWARD – BID2024-33

WHEREAS, one (1) sealed bid was received in the Division of Purchasing on May 15, 2024, at 11:00am, by the Purchasing Agent for the Valve Exercising Program for the City of Trenton, Department of Water and Sewer, Trenton Water Works, Construction and Maintenance Office for a period of one (1) year from date of award; and

WHEREAS, the purpose of the valve exercising program is to exercise the main line valves throughout the Distribution System to assure reliable operation and maintain water quality. In the event of an emergency, it allows TWW personnel the ability to immediately isolate water lines for main flushing and for main breaks. It extends valve life, which can reduce overtime for TWW personnel dealing with emergency repairs; and

WHEREAS, the sole bid of ValveTek Utility Services, 20 Lafayette Place, Kenilworth, NJ 07033 is made pursuant to advertisement, be and is hereby accepted, as the lowest, responsible, responsive bidder complying with terms and specifications on file in the Division of Purchasing; and

WHEREAS, funds in an amount not to exceed \$652,741.50 have been certified to be available in the following account number: 4-05-55-5504-835-006. This contract shall be awarded for a period of (1) year from date of award.

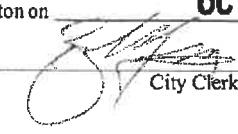
NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Trenton that the Mayor is hereby authorized to execute a contract with ValveTek Utility Services, 20 Lafayette Place, Kenilworth, NJ 07033 for the Valve Exercising Program for the City of Trenton, Department of Water and Sewer, Trenton Water Works Construction and Maintenance Office for a period of (1) year from date of award; for the said purposes in the manner prescribed by law.

| MOTION:                |                                     |  |  |  |  |          |                                     |  |  | SECOND |     |         |        |           |                                     |         |        |
|------------------------|-------------------------------------|--|--|--|--|----------|-------------------------------------|--|--|--------|-----|---------|--------|-----------|-------------------------------------|---------|--------|
|                        |                                     |  |  |  |  |          |                                     |  |  | Aye    | Nay | Abstain | Absent | Aye       | Nay                                 | Abstain | Absent |
| EDWARDS                | <input checked="" type="checkbox"/> |  |  |  |  | GONZALEZ | <input checked="" type="checkbox"/> |  |  |        |     |         |        | FELICIANO | <input checked="" type="checkbox"/> |         |        |
| FIGUEROA<br>KETTENBURG | <input checked="" type="checkbox"/> |  |  |  |  | HARRISON | <input checked="" type="checkbox"/> |  |  |        |     |         |        |           |                                     |         |        |
| FRISBY                 | <input checked="" type="checkbox"/> |  |  |  |  | WILLIAMS | <input checked="" type="checkbox"/> |  |  |        |     |         |        |           |                                     |         |        |

This Resolution was adopted at a Meeting of the City Council of the City of Trenton on

OCT 17 2024

  
President of Council

  
City Clerk

**A G R E E M E N T**  
**C I T Y O F T R E N T O N , N E W J E R S E Y**  
**B I D 2 0 2 4 - 3 3**  
**R E S . N O . 2 4 - 4 4 1**  
**A W A R D E D T O**  
**V A L V E T E K U T I L I T Y S E R V I C E S**

This Agreement, entered into this 18<sup>th</sup> Day of October, 2024 between the City of Trenton, a municipal corporation of the State of New Jersey, ('CITY') **319 EAST STATE STREET, TRENTON, NEW JERSEY 08608** and **VALVETEK UTILITY SERVICES, 20 LAFAYETTE PLACE, KENILWORTH, NJ 07033** ("Contractor"), witnesseth that:

**WHEREAS**, Contractor has bid, proposed or offered to furnish and deliver to the City the materials, supplies and/or goods to perform the services **IN AN AMOUNT NOT TO EXCEED \$652,741.50 FOR A PERIOD OF ONE (1) YEAR FROM DATE OF AWARD**.

**FIRST**, A. Contractor, under the penalty expressed in the bond hereinafter mentioned, will furnish, supply and deliver to the City of Trenton the following materials, supplies or services as authorized by:

**R E S O L U T I O N A C C E P T I N G A B I D A N D A W A R D I N G A C O N T R A C T T O V A L V E T E K U T I L I T Y S E R V I C E S F O R T H E V A L V E E X E R C I S I N G P R O G R A M F O R T R E N T O N W A T E R W O R K S , C O N S T R U C T I O N A N D M A I N T E N A N C E O F F I C E I N A N A M O U N T N O T T O E X C E E D \$652,741.50 F O R A P E R I O D O F O N E (1) Y E A R F R O M D A T E O F A W A R D - B I D 2 0 2 4 - 3 3**

B. The contract shall submit with contracts with the following:

**U P D A T E D C E R T I F I C A T E O F I N S U R A N C E W I T H S I G N E D C O N T R A C T S**

Such performance by Contractor will be in strict accordance with the terms and conditions of the bid specifications, the bid response and the authorizing resolution, which are included above and is incorporated by reference. Additionally, Contractor will furnish good and ample security in a sum equal to the said contract price for the said articles and services.

**SECOND**. The City of Trenton will pay Contractor the total sum mentioned herein when the appropriate Department Director has executed a certification that the said articles or services have been furnished, delivered, and accepted in full conformity to the aforementioned specifications and offer or proposal.

**THIRD**. The City of Trenton reserves the right to order a greater or lesser quantity, not to exceed twenty-five percent, of any or all of the articles named in the said offer or proposal than is stated therein, and it is distinctly agreed between the said parties that the price quoted in the offer or proposal of Contractor shall be regarded as a standard of prices, and the total sum mentioned herein as the consideration of this contract shall not be regarded as limiting the right of the City of Trenton to order such greater or lesser quantity.

**FOURTH**. In the event of the failure of Contractor to deliver to the City of Trenton, such articles or perform such work or labor as described in such quantities as ordered at the time stated for such delivery by the City of Trenton, or in the event that such articles as are delivered or work and labor performed do not meet the specifications or standards, as established by the City of Trenton for such articles or acceptance of such work and labor, then such delivery shall be rejected by telephone or written notice to the Agent or address indicated by the Contractor and by simultaneous and like notice to his surety. Additionally, if Contractor or his surety does not cure the default within the time set by the said Agent on behalf of the City of Trenton, then the said Agent on behalf of the City, shall have the right to procure such services or purchase such articles in their place and stead in the open market as are needed for replacement, and from the best source available in the judgment of the said Agent and to charge the expense of such articles or work performed to Contractor and to deduct the amount thereof from any moneys due or to become due to Contractor by virtue of this agreement. Provided, however, that the surety on the bond of Contractor for the faithful performance of this agreement shall be first

notified of the necessity for such replacement and given the same time allowance for such replacement as is given Contractor.

FIFTH. This contract shall not be amended, assigned or subcontracted without the consent of the City of Trenton in writing (if the total compensation payable thereunder shall thereby exceed \$2,500.00, approval by Resolution of the Governing Body shall be required), and any breach of this convenient shall authorize the City of Trenton, by its said Agent, to declare this contract null and void and to refuse to make any further payments thereunder to Contractor.

SIXTH. In case of any conflict between the provisions of this agreement and of any of the provisions of the specifications, the latter shall govern and control.

Applicable for Public Construction Contracts Only: "Dispute Resolution Procedures (NJSA 40A:11-50). Disputes arising under this contract shall be subject to mediation or non-binding arbitration at the sole discretion of the City of Trenton, before a construction industry mediator or arbitrator or panels thereof. The City of Trenton shall have the right to select a third party to mediate any disputes arising under this agreement and the mediation shall be conducted informally in a manner decided upon by the mediator".

SEVENTH. Contractor hereby agrees to pay all workmen as a minimum the prevailing wages rate in accordance with Chapter 150 of the New Jersey Laws of 1963, Prevailing Wages on Public Contracts and U.S. Department of Labor Wage Rates with the higher rate for any given occupation being the governing rate, and N.J.S.A. 10:2-1 et seq., prohibiting discrimination in employment on public contracts.

EIGHTH. During the performance of this contract, the contractor agrees as follows:

a. CONTRACTOR or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, or sex. CONTRACTOR will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation, disability, nationality or sex. Such action shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. (N.J.S.A. 10:5-33; N.J.A.C. 17:27-3.4)

b. CONTRACTOR or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation, disability, nationality or sex. (N.J.S.A. 10:5-33; N.J.A.C. 17:27-3.4)

c. CONTRACTOR or subcontractor where applicable, will send to each labor union

or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of CONTRACTOR's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment. (N.J.S.A. 10:5-33; N.J.A.C. 17:27-3.4)

d. THE CONTRACTOR or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c.127, as amended and supplemented from time to time. (N.J.A.C. 17:27-3.4)

Note: A public works contract for a subcontractor with a total work force of four or fewer employees or for a contractor or subcontractor performing under an existing Federally approved or sanctioned affirmative action program shall contain as mandatory language only paragraphs a, b, and c above, and the contract shall not contain any other mandatory language prescribed by N.J.A.C. 17:27. (N.J.A.C. 17:27-3.4) (c)

e. All bidders and all contractors who are negotiating for a procurement or service contract with the public agency which is not subject to a federally approved or sanctioned affirmative action program are required to submit to the public agency, prior to or at the time the contract is submitted for signing

by the public agency (in accordance with N.J.A.C. 17:27-4.3 promulgated by the Treasurer pursuant to P.L. 1975, c. 127), one of the following three documents:

1. Appropriate evidence that the contractor is operating under an existing federally approved or sanctioned affirmative action program; or

2. A certificate of employee information report approval issued in accordance N.J.A.C. 17:27-4; or

3. An initial employee information report consisting of forms provided by the affirmative action office and completed by the contractor in accordance with N.J.A.C. 17:27-4. (N.J.A.C. 17:27-3.3) (a)

f. CONTRACTOR or subcontractor agrees to attempt in good faith to employ minority and female workers consistent with the applicable county employment goals prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the affirmative action office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time. (N.J.A.C. 17:27-5.3) (a) (1)

g. CONTRACTOR or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status or sex, gender identity or expression, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices. (N.J.A.C. 17:27-5.3) (a) (2)

h. CONTRACTOR or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey, and as established by applicable Federal law and applicable Federal court decisions. (N.J.A.C. 17:27-5.3) (a) (3)

i. CONTRACTOR or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, or sex, and conform with the applicable employment goals, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions. (N.J.A.C. 17:27-5.3) (a) (4)

j. CONTRACTOR agrees that in the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity, or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates. (N.J.S.A. 10:2-1) (a)

k. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex. (N.J.S.A. 10:2-1) (b)

l. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract. (N.J.S.A. 10:2-1) (c)

m. This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract. (N.J.S.A. 10:2-1) (d)

n. The parties of this contract do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4, dealing with discrimination in employment on public contracts, and the rules and regulations promulgated pursuant thereto, are hereby made a part of this contract and are binding upon them. (N.J.A.C. 13:6-1.1)

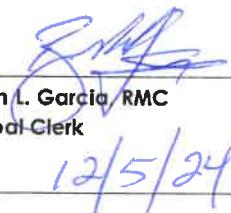
o. Contractor and subcontractor agree and guarantee to afford equal opportunity in performance of the contract and, except with respect to affectional or sexual orientation, and gender identity or expression in accordance with an affirmative action program approved by the State Treasurer. (N.J.S.A. 10:5-32 and 10:5-35) (a)

p. The parties of this contract do hereby agree that the provisions of Title II of the Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101 et seq., which prohibits discrimination on the basis of disability by public entities in all services programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, are made a part of this contract. The contractor agrees to conduct all activities in compliance with the provisions of Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and the U.S. Department of Labor's regulations at 29 CFR Parts 31, 32 and 34.

Contractor shall cooperate with any state or federal reviews aimed at determining compliance with nondiscrimination laws and regulations authorized by State Law and expressly specified herein.

IN WITNESS WHEREOF, the City of Trenton has caused this agreement to be signed by the Mayor of the City of Trenton and its corporate seal to be hereto affixed, attested by the City Clerk, and Contractor has likewise caused this agreement to be executed the day and year first above written.

**CITY OF TRENTON**

Attest:   
Brandon L. Garcia RMC  
Municipal Clerk

Date

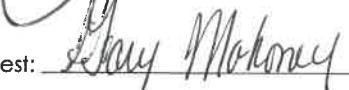
and

  
W. Reed Gusciola, Esq. Mayor  

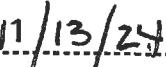

Date

**VALVETEK UTILITY SERVICES, 20 LAFAYETTE PLACE, KENILWORTH, NJ 07033**

CONTRACTOR SIGNATURE

Attest:   
Secretary

Date

  
DATE

President

Date

**City of Trenton  
Trenton Water Works  
Distribution System**

**CY'2024 Valve Operation and Exercising Contract for a Period of One (1) Year**

**Item 1 For 6-inch valves including valve location,  
valve box work, vault work, valve operation,  
collection of data, inputting in TWW computer,  
preparation and submission of reports**

**4390 Units @ \$ 74.50 each**  
Seventy four dollars and fifty cents  
\_\_\_\_\_  
**(Write Unit Price)**

**\$ 327,055.00**

**Item 2 For 8-inch valves including valve location,  
valve box work, vault work, valve operation,  
collection of data, inputting in TWW computer,  
preparation and submission of reports**

**2068 Units @ \$ 74.50 each**  
Seventy four dollars and fifty cents  
\_\_\_\_\_  
**(Write Unit Price)**

**\$ 154,066.00**

**Item 3 For 10-inch valves including valve location,  
valve box work, vault work, valve operation,  
collection of data, inputting in TWW computer,  
preparation and submission of reports**

**382 Units @ \$ 74.50 each**  
Seventy four dollars and fifty cents  
\_\_\_\_\_  
**(Write Unit Price)**

**\$ 28,459.00**

**Item 4 For 12-inch valves including valve location,  
valve box work, vault work, valve operation,  
collection of data, inputting in TWW computer,  
preparation and submission of reports**

**707 Units @ \$ 74.50 each**  
Seventy four dollars and fifty cents  
\_\_\_\_\_  
**(Write Unit Price)**

**\$ 52,671.50**

**Item 5 For 16-inch valves including by-pass valve, valve location, valve box work, vault work, valve operation, inputting in TWW computer, collection of data, preparation and submission of reports**

**355 Units @ \$ 195.00 each**

**One hundred ninety five dollars \$ 69,225.00**  
**(Write Unit Price)**

**Item 6 For 20-inch valves including by-pass valve, valve location, valve box work, vault work, valve operation, collection of data, inputting in TWW computer, preparation and submission of reports**

**41 Units @ \$ 245.00 each**

**Two hundred forty five dollars \$ 10,045.00**  
**(Write Unit Price)**

**Item 7 For 24-inch valves including by-pass valve, valve location, valve box work, vault work, valve operation, collection of data, inputting in TWW computer, preparation and submission of reports**

**33 Units @ \$ 340.00 each**

**Three hundred forty dollars \$ 11,220.00**  
**(Write Unit Price)**

**TOTAL BID FOR CONTRACT \$ 652,741.50**  
**(Items 1 through 7)**

|   |
|---|
| <b>Company Name</b> <input type="checkbox"/> ValveTek Utility Services, Inc.  |
| <b>Authorized Signature</b> <input type="checkbox"/>  |
| <b>Person to Contact</b> <input type="checkbox"/> Jeffrey Favina  |
| <b>Telephone Number</b> <input type="checkbox"/> 347-739-4674   |

**City of Trenton**  
**Trenton Water Works**  
**Valve Exercising Contract**  
**Specifications**

**Introduction and Purpose**

Waterline distribution valves are rarely used, and the need for operation (opening and closing) often comes at times of critical usage, that is: emergency shutdown, flushing, pressure relief, etc. In an emergency, sections of a water distribution system may need to be completely shut down without delay. It's not uncommon for valves to rest idle for many years, or even decades between operations. If a valve is not used or properly exercised, it can seize-up from corrosion and make the valve inoperable. Valve exercising programs can help maintain the useful life, safety, and operation of water system valves. Department of Water & Sewer, Division of Water (Trenton Water Works) seeks proposals for a contractor(s) to perform Public Water System Valve: locating, inspecting and valve exercising. Including documenting specific operating information and the GPS data of valves in a format suitable and compatible with the Water System. The following valve operation contract commencing with valve inspection, exercising and data collection for maintenance work is required in its distribution system. Daily operation and exercising data of each valve as described in the scope of work shall be recorded in ESRI ArcGIS software Field Maps application. The contractor shall convert existing TWW valve data and integrate it with the new database to be a single repository of data resulting in a single database containing new inspections and old inspections. The following minimum requirements are for the provision of labor, equipment, and materials for valve maintenance work on the distribution system valves and transmission line valves. All the work shall be performed under the supervision of a New Jersey Department of Environmental Protection (NJDEP) water operator holding at least a W-2 license.

## **Data Management**

### **Workflow Development:**

With asset inventory datasets as delivered by Trenton Water Works, the contractor shall provide actionable plans and best practices by which Trenton Water Works (TWW) can interact with spatial and non-spatial data. The contractor's technical project manager shall: meet with TWW staff to review tasks and expectations and to secure access to TWW technical resources; shall participate in project status update meetings not less than biweekly; and shall submit progress reports monthly.

### **Application Development and Maintenance:**

For use within the context of spatial ArcGIS Enterprise and data stored in non-spatial applications, the contractor shall deliver applications and/or processes by which Trenton Water Works can interact with spatial and non-spatial data; shall implement deliverables within Trenton Water Works environments; and shall provide training in the usage of deliverables to end-users in Using Departments.

### **Data Collection and Tracking:**

Valve data shall be collected using ArcGIS Field Maps; an all-in-one app, that uses data-driven maps and mobile forms to help workers perform data capture and editing, find assets and information, and report their real-time locations. ArcGIS Dashboards shall be used to convey valve operation information by presenting location-based analytics using intuitive and interactive data visualizations.

Using Departments include:

- I. Geographical Information Technology Office, for which the contractor will provide development, implementation, and support toward:
  - a. Enterprise Asset Management applications which are connected to enterprise geodatabase assets, e.g.: GIS-Based asset and work management software.
  - b. Field collection and spatial data applications, e.g.: Esri spatial apps such as Field Maps and Survey123 and Workforce which are currently in use, and the Esri Enterprise stack and field data collection.
- II. Construction and Maintenance, whose needs include valve operation, emergency repairs, service/fire line replacement and repairs, e.g., service data updates and management of data interoperability.

III. Engineering, whose needs include, mapping, project management, service area boundaries, and management of data interoperability models for schema transformations.

Enable Survey123 and ArcGIS Collector(maps) for ArcGIS Mobile app to capture field data. Assets shall be surveyed in the NJ State Plane NAD83/NAVD88 datum. Surveyed locations shall have at least an accuracy of 0.1 meter (decimeter) of their true location.

**Deliverables:**

A detailed scope of work describing how the deliverables will be met, including a description of how the valve exercising program will be conducted, including the technology and equipment to be used to operate/exercise the valves, and determine field location.

**Description of Work and Requirements**

The following provides specifics regarding each task.

Task 1 - Initial Survey

- Locating each valve to be exercised.
- Verifying valve location with district maps.

Task 2 – Valve Exercising

- Cleaning valve boxes and painting valve box lids.
- Operating/exercising the valve.

Task 3 – Reporting - Daily Survey Logs and Final Project Reports

- Documenting valve location, number of turns, size, turn direction, and depth.
- Identifying valves that were inoperable, broken, leaking, etc.
- Furnishing a database with collected information See Deliverables under Data Management section above for all deliverables that must be included in the proposal.

## **Scope of Work**

1. The contractor will submit a valve exercising program that includes locating valves, inspecting, and exercising valves, and documenting specific operating information and the GPS data of valves in a format suitable and compatible with TWW water distribution system. A final report shall be submitted after completion. The reports must follow standard formats approved by TWW and be provided to the water system. TWW will be responsible for any repairs identified/needed during the survey. The contractor(s) will complete a daily survey log and indicate the location of the valves found on a map. The contractor(s) will meet with the designated representative for TWW on a daily basis and deliver survey logs from the previous day. At the conclusion, the contractor(s) will prepare a final report and submit it to TWW. If and when the valve location data that is determined in the field does not match the data on the TWW GIS, the correct data shall be collected, and GPS point gathered by contractor. The contractor shall survey all valves using sub-one-foot expected accuracy GPS and provide those locations in an ESRI ArcGIS Geodatabase with all of the inspection data required under this scope.
2. All valve information shall be verified by the Contractor to determine if the information agrees with the TWW GIS. Any discrepancies between source data's and the field survey will be clearly identified in the ArcGIS Geodatabase and reported to TWW.
3. The contractor shall use the unique identification numbers assigned to all valves by TWW. If unique valve identification numbers have not been assigned for any valve prior to commencement of work, then the contractor shall communicate with TWW to assign the unique and suitable identification numbers through its ESRI ArcGIS Field Maps application.
4. Valves shall be located by the contractor and all required work shall be completed. Should any valve not be located after due diligence by the

contractor, a record of the valve not being located shall be made through the issuance of a work order to the TWW construction and maintenance office by the contractor. Furthermore, the contractor will take a GPS shot recording the approximate center of the area searched for the valve. This GPS point will be given the identification number of the valve which could not be located and clearly identified as such. If the valve shall be subsequently located by TWW, then the valve shall be revisited by the contractor and all required work shall be completed. To fulfill the requirement of due diligence to locate the valve, appropriate high quality locating equipment shall be used by the contractor during its effort to locate the valve.

5. The contractor's valve crews shall be responsible for the complete inspection of the valve box as well as performing all necessary work.
6. As a minimum the following work shall be performed by the contractor:
  - For each valve so equipped, remove and inspect the valve box lid and inspect the valve box body barrel and then fix, repair, and replace as described in item No.12 below.
  - Remove from the valve box all debris, water, or other materials that prevent accessibility to the operating nut. If the valve is in a vault, remove all debris, water or other material that prevents access to the valve-operating nut. Any bypass valves existing in the field shall not be charged as additional valves.
  - Once the operating nut has been sufficiently exposed to allow it to fit completely within the operating nut receptacle, prepare a condition report that includes the information listed below. When removing debris from the valve box, all materials shall be captured and stored until the valve crew reaches a suitable disposal site.
  - Attributes of each valve and bypass valve shall include:
    - Valve Identification Number

- Size
- Turns / Direction to close.
- Position Found
- Position Left
- Depth (Distance from grade to the top of valve operating nut)
- Map Number
- District
- Street Address and Cross Street(s)
- Notes and detailed location information
- Date Operated
- Condition (Good, Fair, Poor, Inoperable, etc.)
- Valve Use (In-Line, Stub, Hydrant Isolation, etc.)
- Lid Condition
- Materials Used
- Surface Cover (Asphalt, Concrete, Ground, etc.)
- Operation Method (Hand, Electric, TZM, etc.)
- Mapping Discrepancies
- Clean out required (Valve, Pump, etc)
- All torque information derived from the exercising procedure shall be able to be shown on a detailed torque curve chart that includes details on left hand to right hand positioning.

7. Prior to the commencement of the work in the contract, the contractor shall be required to demonstrate to TWW its procedural methods and what safety procedures it will use to safely execute and complete the contract.
8. The contractor shall provide for the safety of the public and ensure the safety of public and private property. The contractor will abide by all OSHA safety regulations in the fulfillment of this scope of services. The contractor shall contact in advance and with sufficient notice, not to be less than 48 hours,

all appropriate State, Municipal, County and emergency officials of all roads and/or lane closings before beginning work.

9. Prior to the commencement of the contract the contractor shall be required to demonstrate the means and methods it will use to promote good public relations and how it will notify the appropriate authorities prior to the performance of the work.
10. The progress of the work by the contractor shall be monitored and reviewed by TWW. If it is determined that the Contractor is not meeting the production standards, TWW will notify the contractor of its determination. After receiving such notice, the Contractor will be given an opportunity to remedy the deficiencies. If after having the opportunity to remedy the deficiencies the Contractor still does not meet the production standards, then the Contractor shall be subject to termination of the contract and other legal remedies.
11. The contractor shall provide documentation with its bid that it has executed and completed a job of this scope and size to the satisfaction of another municipally owned water utility.
12. The valve cover shall be removed by the contractor in order to access the valve in the following manner:
  - If the valve cover is "stuck" the cover will be broken, the valve accessed, and the cover replaced (cover to be provided by TWW).
    - a. The paved over valve boxes will not be uncovered or repaired by the contractor but will be recorded in a daily log by the contractor. The valve boxes buried in landscape shall be raised and repaired using the following process.
    - b. Remove landscape as necessary. Raise the valve box to the grade of landscape using the top section of valve box. If necessary, use the new covers provided by TWW. Replace landscape in like or in better condition than existing prior to this contract and cost to be

included in the uncovering and resetting of valve unit. Landscape replacement will include topsoil and grass seed.

- c. Valves boxes covered by concrete will not be raised by the contractor but will be recorded in a daily log by the contractor.

### **Equipment**

The contractor shall provide a fully equipped vehicle for the crew or crews for the performance of the work of this contract. The vehicle shall be maintained and filled with fuel at the contractor's expense. The contractor shall furnish full automobile insurance coverage for the vehicle and the TWW shall be named as an additional insured. Proof of this coverage must be submitted and approved by TWW prior to any work commencing under this contract. The following equipment, at a minimum, shall be provided for the crew.

- Truck (type at discretion of contractor), clearly marked with contractor's name and address of sufficient capacity to carry all the required equipment listed herein.
- Roof-mounted yellow flashing emergency beacon
- Two-way radios mounted in truck or cellular telephone.
- Valve operating and exercising equipment having the capability to control and register various torque settings, which must be always visible to the operator for safe operations and protection of the distribution system. All exercising equipment must have the ability to record, integrate and export its information with the data transfer software to the valve maintenance software.
- Using a valve operating machine that limits the amount of torque applied to the valve, all valves shall be exercised with a minimum of 2 [two] complete cycles. Valves shall be operated at the lowest torque required to turn the operating nut and shall not exceed 450 ft. lbs. The torque increase above 450 ft. lbs. will require the field crew to contact TWW engineer for authorization to

proceed. However, the increased torque shall not exceed a safe, operable limit. This will be solely at the discretion of a duly authorized TWW representative.

- Hand-held valve turning machine (for difficult to reach valve locations)
- Valve wrenches with 3' and 6' extensions for both square and pentagonal operating nuts.
- A vacuum device to clean out valve boxes without blowing debris around
- Trash pump with 10 feet of suction hose and 200 feet of discharge hose for emptying water and mud from valve casings - minimum capacity 50gpm
- Six-foot ladder
- Six traffic barricades equipped with battery powered yellow flashing light
- Appropriate number of orange traffic cones
- Cellular phones
- Hard hat with reflective tape for each crew
- Safety vest for each crew
- Waterproof clothing including parka, hood and bib-type coverall for each crew.
- Flashlights
- Pipe locator.
- Push broom, shovel and trash barrel for miscellaneous cleanup
- First Aid Kit
- ABC Fire extinguisher
- Clipboard (11"x17")
- Miscellaneous wrenches, hammers, screw drivers, chisels, etc. needed to operate/maintain equipment.
- Tools for opening manhole covers and valve boxes.
- Fluorescent blue marking paint for identifying inoperable valves.
- Batteries for all equipment, as required.

All equipment shall be always maintained in good working condition during the completion of this contract.

#### **Method of Payment**

Payment shall be made by TWW after the contractor has submitted properly executed Trenton.

Water Works vouchers with detailed supporting details for the quantities billed. The voucher shall show the total contract price, the amount paid previously, the amount of the current voucher and the remaining amount of the contract. TWW shall verify that the quantities that are listed or itemized within the voucher have been satisfactorily performed during the course of the work of the contract. After having verified the actual items that have been satisfactorily performed, TWW will authorize payment.

#### **Schedule of Operations**

The Contractor at the start of each \*working day (8:00 a.m.) or at the conclusion of each working day between 4:15 p.m. and 4:30 p.m. shall notify the Construction and Maintenance office where the Contractor shall be working that day or the following working day, respectively. When the Contractor shall be working in any of the jurisdictions listed below, he shall notify that jurisdiction's Street Inspector's Office at: