



THE
CITY OF BRUNSWICK
MARYLAND

1 WEST POTOMAC STREET · BRUNSWICK, MARYLAND 21716 · (301) 834-7500

FINANCE & UTILITY COMMISSION MEETING

BRUNSWICK CITY HALL

Wednesday, July 20, 2022

6:00 PM

Agenda

1. ARPA Water Main – Phase I Engineering & Phase 1 to Phase 6 Geotechnical/Survey Work – The Matthews Group - \$428,222.24
2. ARPA Water Main – Phase 2 Engineering – The Matthews Group - \$187,778.69
3. Yourtee Spring Water Distribution Rehabilitation Project – Phase 1
4. Water Tank Maintenance Contract
5. FY2022 Finance Reports



Work Order Signature Document

EZIQC Contract No.: MD-WMA-GC02-042419-TMG			
<input checked="" type="checkbox"/> New Work Order		<input type="checkbox"/> Modify an Existing Work Order	
Work Order Number:	105722.00	Work Order Date:	06/13/2022
Work Order Title:	CTYBRUNSWCK - 6th Avenue Water Main DESIGN		
Owner Name:	MID ATLANTIC - City of Brunswick	Contractor Name:	TMG Construction Corp.
Contact:	John Gerstner	Contact:	Simone E. Johnston
Phone:	301-834-7500	Phone:	(540) 751-4492
Work to be Performed			
Work to be performed as per the Final Detailed Scope of Work Attached and as per the terms and conditions of EZIQC Contract No MD-WMA-GC02-042419-TMG.			
<u>Brief Work Order Description:</u>			
Design of new Water Mainline and laterals			
Time of Performance	<i>See Schedule Section of the Detailed Scope of Work</i>		
Liquidated Damages	Will apply: <input type="checkbox"/>	Will not apply: <input checked="" type="checkbox"/>	
Work Order Firm Fixed Price: \$428,222.24			
Owner Purchase Order Number:			

Approvals

_____	_____	_____	_____
Owner	Date	Contractor	Date



Detailed Scope of Work

To: Simone E. Johnston
The Matthews Group, Inc.
PO Box 2099
Purcellville, VA 20134
(540) 751-4492

From: John Gerstner
MID ATLANTIC - City of Brunswick

301-834-7500

Date Printed: June 13, 2022
Work Order Number: 105722.00
Work Order Title: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Brief Scope: Design of new Water Mainline and laterals

Preliminary

Revised

Final

The following items detail the scope of work as discussed at the site. All requirements necessary to accomplish the items set forth below shall be considered part of this scope of work.

All work shall be done as described on the TMG document attached.

Contractor

Date

Owner

Date

Contractor's Price Proposal - Summary

Date: June 13, 2022
IQC Master Contract #: MD-WMA-GC02-042419-TMG
Work Order Number: 105722.00
Owner PO #:
Work Order Title: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Contractor: TMG Construction Corp.
Proposal Name: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Proposal Value: \$428,222.24

01 - General Requirements	\$416,703.97
02 - Site Work	\$11,518.27
Proposal Total	\$428,222.24

This total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding.

Contractor's Price Proposal - Detail

Date: June 13, 2022
IQC Master Contract #: MD-WMA-GC02-042419-TMG
Work Order Number: 105722.00
Owner PO #:
Work Order Title: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Contractor: TMG Construction Corp.
Proposal Name: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Proposal Value: \$428,222.24

Sect.	Item	Modifier	UOM	Description					Line Total
Labor	Equip.	Material	(Excluded if marked with an X)						
01 - General Requirements									
1	01 22 20 00-0043		HR	Senior Surveyor (Party Chief)					\$14,496.86
				Installation	Quantity	Unit Price	Factor	Total	
					217.00	59.68	x 1.1194	=	\$14,496.86
				Utility Survey & Mapping -					
2	01 22 20 00-0044		HR	Surveyor (Instrument person)					\$25,840.74
				Installation	Quantity	Unit Price	Factor	Total	
					434.00	53.19	x 1.1194	=	\$25,840.74
				Utility Survey & Mapping -					
3	01 22 20 00-0045		HR	Surveyor (Rod person)					\$23,027.85
				Installation	Quantity	Unit Price	Factor	Total	
					434.00	47.40	x 1.1194	=	\$23,027.85
				Utility Survey & Mapping -					
4	01 22 20 00-0046		HR	On-Site Certified Materials Testing Technician					\$7,867.50
				Installation	Quantity	Unit Price	Factor	Total	
					104.00	67.58	x 1.1194	=	\$7,867.50
				Geotechnical - Field Support					
5	01 22 20 00-0053		HR	Principal Engineer					\$344.22
				Installation	Quantity	Unit Price	Factor	Total	
					1.50	205.00	x 1.1194	=	\$344.22
				Geotechnical - Design Review					
6	01 22 20 00-0053		HR	Principal Engineer					\$6,195.88
				Installation	Quantity	Unit Price	Factor	Total	
					27.00	205.00	x 1.1194	=	\$6,195.88
				Design -					
7	01 22 20 00-0053		HR	Principal Engineer					\$2,065.29
				Installation	Quantity	Unit Price	Factor	Total	
					9.00	205.00	x 1.1194	=	\$2,065.29
				Geotechnical - Design/Report					
8	01 22 20 00-0054		HR	Senior Engineer					\$1,382.50
				Installation	Quantity	Unit Price	Factor	Total	
					8.00	154.38	x 1.1194	=	\$1,382.50
				Geotechnical - Design Review					
9	01 22 20 00-0054		HR	Senior Engineer					\$8,295.02
				Installation	Quantity	Unit Price	Factor	Total	
					48.00	154.38	x 1.1194	=	\$8,295.02
				Geotechnical - Design/Report					

Contractor's Price Proposal - Detail Continues..

Work Order Number: 105722.00
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Proposal Name: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Proposal Value: \$428,222.24

Sect.	Item	Modifier	UOM	Description					Line Total
Labor	Equip.	Material	(Excluded if marked with an X)						
01 - General Requirements									
10	01 22 20 00-0054		HR	Senior Engineer					\$40,956.67
				Installation	Quantity	Unit Price	Factor	Total	
					237.00	154.38	1.1194	\$40,956.67	
				Design -					
11	01 22 20 00-0055		HR	Engineer					\$65,661.21
				Installation	Quantity	Unit Price	Factor	Total	
					474.00	123.75	1.1194	\$65,661.21	
				Design -					
12	01 22 20 00-0055		HR	Engineer					\$6,372.18
				Installation	Quantity	Unit Price	Factor	Total	
					46.00	123.75	1.1194	\$6,372.18	
				Geotechnical - Design/Report					
13	01 22 20 00-0055		HR	Engineer					\$2,216.41
				Installation	Quantity	Unit Price	Factor	Total	
					16.00	123.75	1.1194	\$2,216.41	
				Geotechnical - Design Review					
14	01 22 20 00-0056		HR	Draftsman					\$29,466.19
				Installation	Quantity	Unit Price	Factor	Total	
					360.00	73.12	1.1194	\$29,466.19	
				Design -					
15	01 22 23 00-1391		DAY	1,500 To 2,000 Gallon Vacuum Truck With Full-Time Truck Driver					\$27,340.36
				Installation	Quantity	Unit Price	Factor	Total	
					38.00	642.74	1.1194	\$27,340.36	
				Utility Survey & Mapping - Vacuum Test Pit - Multiple Locations - Non-consecutive days					
16	01 45 23 00-0006		EA	Resistance (R) Value Soils Test, CA 301, Field Soils Test					\$1,640.41
				Installation	Quantity	Unit Price	Factor	Total	
					6.00	244.24	1.1194	\$1,640.41	
				Geotechnical - Soil Testing					
17	01 45 23 00-0007		EA	Soils Classification Test, ASTM D-2487, Field Soils Test					\$4,921.24
				Installation	Quantity	Unit Price	Factor	Total	
					12.00	366.36	1.1194	\$4,921.24	
				Geotechnical - Soil Testing					
18	01 45 23 00-0017		EA	Atterberg Limits - Liquid Limits (LL) And Plastic Limits (PL), T89, T90, ASTM D4318, Soil Borings Laboratory Test					\$564.58
				Installation	Quantity	Unit Price	Factor	Total	
					6.00	84.06	1.1194	\$564.58	
				Geotechnical - Soil Testing					
19	01 45 23 00-0023		EA	Moisture Content, ASTM D2216, Soil Borings Laboratory Test					\$647.46
				Installation	Quantity	Unit Price	Factor	Total	
					48.00	12.05	1.1194	\$647.46	
				Geotechnical - Soil Testing					

Contractor's Price Proposal - Detail Continues..

Work Order Number: 105722.00
Work Order Title: CTYBRUNSWCK - 6th Avenue Water Main DESIGN

Proposal Name: CTYBRUNSWCK - 6th Avenue Water Main DESIGN
Proposal Value: \$428,222.24

Sect.	Item	Modifier	UOM	Description	Line Total		
Labor	Equip.	Material	(Excluded if marked with an X)				
01 - General Requirements							
20	01 45 23 00-0024		EA	Moisture-Density Determination, Standard, ASTM D698, Soil Borings Laboratory Test	\$653.51		
				Quantity	Unit Price	Factor	Total
	Installation	6.00	x	97.30	x	1.1194	= \$653.51
	Geotechnical - Soil Testing						
21	01 45 23 00-0031		EA	Sieve Analysis, ASTM D422, Soil Borings Laboratory Test	\$728.86		
				Quantity	Unit Price	Factor	Total
	Installation	6.00	x	108.52	x	1.1194	= \$728.86
	Geotechnical - Soil Testing						
22	01 45 23 00-0032		EA	Sulfate Soundness, Soil Borings Laboratory Test	\$900.80		
				Quantity	Unit Price	Factor	Total
	Installation	6.00	x	134.12	x	1.1194	= \$900.80
	Geotechnical - Soil Testing						
23	01 71 23 16-0006		ACR	Survey Highly Developed Areas, Sidewalks, Etcetera (>65% Buildings)	\$145,118.23		
				Quantity	Unit Price	Factor	Total
	Installation	30.00	x	4,321.31	x	1.1194	= \$145,118.23
	Survey - Topographic						
Subtotal for 01 - General Requirements					\$416,703.97		
02 - Site Work							
24	02 32 13 00-0002		EA	Mobilization Of Drilling Crew	\$622.93		
				Quantity	Unit Price	Factor	Total
	Installation	1.00	x	556.49	x	1.1194	= \$622.93
	Geotechnical - Borings						
25	02 32 13 00-0007		LF	4" Diameter Cased Borings In Earth, With Samples	\$10,895.34		
				Quantity	Unit Price	Factor	Total
	Installation	120.00	x	81.11	x	1.1194	= \$10,895.34
	Geotechnical - Borings - Samples						
Subtotal for 02 - Site Work					\$11,518.27		
Proposal Total					\$428,222.24		

This total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding.



The Matthews Group, Inc.
18915 Lincoln, Rd.,
Purcellville, VA 20132-4145

Ph: 540-338-0411
Fax: 540-338-9518

Scope of Work – Phase 1

General

1. Normal Working Hours
2. Single mobilization of Survey Teams
3. No wage scale
4. No permitting
5. Project cleanup
6. Approximate start date: July 2022

Project Description

The City of Brunswick in Maryland is planning to replace main water lines in six different phases within the city limits, at the following locations:

1. **Phase #1 at 6th Avenue from East H Street to East R Street - 1,080 linear feet**
2. Phase #2 at East H Street from 5th Avenue to gum Springs – 1,650 linear feet
3. Phase #3 at 5th Avenue from East F Street to East H Street - 550 linear feet
4. Phase #4 at 4th Avenue along 100s block - 380 linear feet
5. Phase #5 at 2nd Avenue from Concord Street to K Street - 700 linear feet
6. Phase #6 at West Potomac Street from Delaware to Florida Avenue - 1,250 linear feet

A total of 5,610 linear feet of water line replacement is planned.

Note that all Geotechnical work and all Survey work is included in Phase #1 to reduce re-mobilization costs over the entire project. It is assumed for the purposes of this proposal that the Geotechnical and Survey tasks will be performed under a single mobilization each. Subsequent phases shall only include Civil Engineering and Design. Please refer to proposals and scope summaries for other phases.

Pricing of this phase and subsequent phases was developed with the assumption that Phase #1 will be completed first. Phases 2-6 may not be completed for the pricing indicated if Phase #1 is not completed first. Should the City desire, pricing for individual phase mobilizations for these tasks can be provided.

The existing water lines are 8-inches diameter pipes running along the paved city roads at about 4 to 6 ft below ground surface. The proposed new alignment is adjacent to the existing water lines.



Geotechnical Engineering Report – All Phases

Subsurface Exploration

We will perform a subsurface exploration program that includes the following:

- Perform site reconnaissance and approximate boring stakeout. We will locate borings by measuring from existing features. Ground surface elevations at the boring locations will be estimated from topographic data provided by your office.
- Obtain Right-Of-Way permit from the City of Brunswick. MD required for borings. We assume any permit fees will be waived by the City.
- Arrange for traffic control (MOT) during our investigation. We have included 3 days of MOT (single lane closure – flagging operation) in our proposal for drilling along the roadways.
- Contact Miss Utility prior to mobilizing drilling equipment to the project site.
- Retain a private utility locator to sweep a 25-ft radius around the borehole location. The private utility locator will not be able to pick up any non-conductive utilities (those manufactured from materials such as PVC, clay and concrete), very deep utilities, utilities that are buried directly below other utilities, utilities located next to a conductive source such as overhead electric lines, non-conductive utilities that are inaccessible via manholes, spring or irrigation systems, buried tanks, septic systems and wells. Therefore, it is essential that any available plans be provided prior to our boring stakeout and meeting with the private utility locator.
- Observe and log the borings, coordinate our site work, perform infiltration tests, and prepare written logs.
- Performing the following test borings:

Water Line Phase	No. of Borings	Soil Depth (ft)	Total Soil Depth (ft)
Phase #1	2	10	20
Phase #2	3	10	30
Phase #3	1	10	10
Phase #4	1	10	10
Phase #5	2	10	20
Phase #6	3	10	30
Total	12 Borings	--	120 lf



- Shallow rock may be encountered at the site. If rock is encountered prior to reaching the proposed boring depths, rock coring will not be performed.
- Drilling the borings to the depths indicated or to prior auger or sampler refusal. Sampler refusal is defined as a Standard Penetration Test N-value of 50 blows for 1 inch or less penetration. In the event shallow obstructions are encountered below grade which cannot be penetrated with ordinary soil drilling equipment, the obstructed borings will be offset and redrilled. Boring depths included in this proposal are estimated, and may be increased or decreased depending upon subsurface conditions encountered.
- Obtaining six soil bulk samples from auger cuttings, one from each Phase.
- Backfilling all test borings with soil cuttings and place asphalt cold-patch at the paved locations

Laboratory Testing

Samples collected during the Subsurface Exploration will be delivered to our soils laboratory for the following tests:

- 48 Moisture Content, ASTM D2216
- 6 Grain Size Distribution, ASTM D422 (and/or D1140)
- 6 Liquid Limit, Plastic Limit, and Plasticity Index of Soils, ASTM D4318
- 6 Moisture-Density (Proctor) Relationships, ASTM D698 (ASTM D1557)
- 6 Corrosion Potential Test Series (pH, Reduction-Oxidation Potential, Resistivity, Qualitative Test for Sulfides, 6 Water-soluble Sulfate and Chloride Test for soil)

We will retain soil samples from the subsurface exploration 45 days beyond the submission of our report, unless other disposition is requested.

Geotechnical Engineering Analysis and Report

We will provide the following discussion in our geotechnical engineering report using data and information gathered in the prior tasks:

- Estimated subsurface conditions and groundwater levels within the area explored based on data collected in the subsurface exploration.
- Evaluation of the shrink/swell potential of the soils encountered in the exploration.



- Earthwork recommendations for the construction of load-bearing fill and backfill, including an assessment of on-site soils for use as fill, subgrade preparation, and compaction criteria.
- Earthwork recommendations for construction of load-bearing fill including an assessment of on-site soils for use as fill, subgrade preparation, and compaction criteria.
- Comments regarding potential support of excavation systems.
- Comments on construction dewatering considerations.
- Evaluation of rock excavation considerations including a sample definition for rock.
- Construction considerations related to the implementation of our recommendations.

We will prepare a single report for the entire project in PDF format to submission.

Surveying & Subsurface Utility Engineering Services – All Phases

Survey Control & Field Run Topographic Survey

Establish horizontal and vertical control for the project based on GNSS RTN/RTK methods. Horizontal control will be referenced to NAD83 (2011) and vertical control will be referenced to NAVD88.

Field run, process, and plot at a presentation scale of 1" = 30' or as requested by CLIENT, a topographic survey of the site within the PROJECT EXTENTS. Topographic survey scope to include:

- All surface features including buildings, paving limits, fencing, retaining walls, spot elevations and contours at 1' vertical intervals.
- All individual planted landscape trees & shrubs.
- Drip lines of clustered trees will be surveyed as edge of woods.
- Top of structures or grates, approximate orientation, type and size of pipes and next up and downstream structures for all gravity dependent storm drain and sanitary sewer systems.
- All land cover changes and limits.
- Building first floor elevations.



- Supplemental site photographs to accompany the survey limits of the PROJECT EXTENTS. The photographs will be general in nature and may not include each individual surface feature located in the survey.
- A depiction of the road right-of-way as shown on the existing condition plan to be provided by the City. This item does not include property or right-of-way line surveys.

The topographic survey will be prepared in AutoCAD Civil 3D 2022 with a generated TIN to conform with the City's layering standards. The survey will comply with the Minimum Standards of Practice for Land Surveying per Code of Maryland Regulations (COMAR) 09.13.06.04.

Utility Designating Services

Map the wet and dry (gravity independent) subsurface utilities within the PROJECT EXTENTS as defined herein, all consistent with Quality Level B (QLB) as described in CI/ASCE 38-02 – Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data (ASCE 38-02). The measurement and documentation of invert depths and elevations are included. Gravity dependent systems will primarily be depicted at QLC based on surveyed locations of surface features, observation of connecting pipe directions, and record information.

At project initiation, we will conduct utility records research. The records will be requested from the City, any public utilities and private utility companies known to provide service within the PROJECT EXTENTS, and other sources. The intent of this effort is to develop a comprehensive inventory of utility systems likely to be encountered at the site. Record documents may include construction plans, system diagrams, distribution and transmission maps, and geographic information system data as well as oral descriptions of existing systems.

Historical record documents will be reviewed and assessed for applicability to the subject project area. Record information will not be employed as a substitute for field location methods unless it is determined to be the most appropriate method for depicting the utilities at the site. The depiction of utilities from records (ASCE 38-02 QLC or D) will be based on thorough field and office activities and shall be based on the most reliable indications of position available.



We will field investigate wet and dry utility systems including storm drains, sanitary sewer, water, gas, electrical, communication, steam, hot water, chill water, force mains, and security systems shown on the record drawings that are included within the PROJECT EXTENTS. In addition, visible surface features and appurtenances of subsurface utilities found within the project area will be evaluated. Using appropriate surface geophysical methods, we will search for detectable indications of the location of anticipated subsurface utilities. Locations that can be validated will be marked or targeted using paint, flags, or other devices that are color-coded according to the APWA/ULCC Uniform Color Code.

Before leaving the project site, we will also search for unknown or undocumented utilities along one or more transects (sweeps) through the project area. If needed in the judgment of the field investigator, then transects will be made along intersecting grid lines throughout the project extents.

The field investigator will prepare sketched documentation of the utilities encountered and marked that will include their general location, orientation, type, and size, if known. Clarifying remarks and notes will also be included.

We will conduct location surveys, based on control points established for the topographic survey, of utility marks and surface features that relate to the utility systems to be mapped. We will extend the local control through the area of interest as needed. The data collected by survey will be downloaded, processed, and mapped in AutoCAD Civil 3D 2022. All mapped data will be correlated with the field documentation and existing record drawings to produce an enhanced representation of the existing utility systems. The drawing will be signed and sealed by a professional engineer licensed in Maryland. Digital mapping files in CAD format will be sent to the City along with a .pdf file.

Engineering Grade Test Hole Services

We will provide test hole services by air-vacuum or other minimally invasive methods at the locations described in the PROJECT EXTENTS. We will provide, directly or on a sub-contract basis, necessary personnel, equipment, supplies, management, and supervision needed for the test holes. We will prepare and process a permit application, notify Miss Utility of Maryland of the proposed excavation, and coordinate with the City, property owner, Miss Utility, and permitting agencies, as needed.

Test hole services include the set-up or final positioning over the target utility based on plan information provided by the City, excavation, measurement, and documentation of the horizontal and vertical position of the target structure. Test hole documentation will contain a general description of the target structure with condition, material, and general orientation noted as well as data on paving material and thickness and a generalized description of the material encountered in the test hole.



A test hole data sheet will be prepared for each excavation or attempt. The sheets will include all field observations noted above as well as elevation data and horizontal positioning information. Horizontal positions will be provided by means of at least three (3) measured dimensions to existing site features. Elevation information will be determined through trigonometric or differential leveling referenced to benchmarks to be provided by City. Coordinated positions will also be determined by field survey and reported on the test hole data sheets. The test hole data sheets will be signed and sealed by a professional engineer or surveyor licensed in Maryland.

Test holes will be backfilled with excavated materials and compacted with a pneumatic tamper. Turf areas will be restored with the salvaged turf plug removed before the start of excavation. Pavement cuts will be restored using suitable patching material and methods. Except as otherwise stated herein, bituminous cold patch materials will be used to close each test hole repair in pavement.

Civil Engineering and Design Services – Phase 1 Only

Our Services include developing Civil construction documents for the City of Brunswick Municipal Water Line for 6th Ave, from East H Street to East E Street (approximately 1080 linear feet). The civil CD Design will be specifically to replace in kind the existing water line network proposing the same sizes, valves, path, flowrates, and routes.

The following are the proposed design deliverables. With each design phase, a two week Client review period is included. Each design deliverable will included drawings and MasterSpec specifications. A review meeting, responses, and revisions due to comments are included in this proposal for each phase:

- 50% Design Development Documents
- 100% Design Documents
- IFC Documents

The following design standards will be used for this project:

- International Building Code
- International Plumbing Code
- National Fire Protection Agency (NFPA)
- Manual on Uniform Traffic Control Devices (MUTCD) Chapter 6
- City of Brunswick Standards Design Manual
- Frederick County Design Standards



Clarifications & Exclusions

- Owner responsible to insure all vehicles are removed (towing if required) from work area no later than 7am. Any locked gates or other impediments to the areas of work will be mitigated prior to the start of work
- No permits are required
- No utility relocation included unless stated above
- Precast inlet structures are not MD DOT approved
- Proposal does not include any unforeseen conditions and/or upgrading existing conditions to code compliance
- Proposal does not include any cost incurred due to adverse weather
- No Liquidated Damages
- No HAZMAT testing
- TMG will submit monthly payment requests at Net 30 terms
- Coordinating with any historic societies is excluded
- Electrical, mechanical, plumbing (other than the water lines), and fire protection engineering is not included
- Storm Water Management analysis and study is not included
- Relocation of above-ground appurtenances not associated with the water lines (i.e. light poles, signs, etc.) is not included
- As-build drawings are not included at this time, but can be provided as an additional service following construction.
- Easement Plat update or modifications to the current County mosaic and related work is not included.
- Erosion and Sediment Control design is not included
- Hydraulic water network modeling analysis and flowrate improvement studies are not included.
- It is assumed that the City will provide access to mechanical, electrical, and communication rooms and facilities that may be needed to investigate the existing subsurface utility systems thoroughly.
- Ground Penetrating Radar will not be the method used for locating services
- Unmaintained areas with vegetation greater than 24in in height will make the use of the proposed electro-magnetic detection methods of location impractical.

Purchase Orders

PO Proof List



User: jmouse
 Printed: 07/11/2022 - 3:09PM
 Batch: 00021.07.2022 - PW07112022JM

Ship Location	Vendor No.	Vendor Name	PO Date	Acct No.	Account Description	Amount	Qty
Water Main Engineering 0000230025 11907		The Matthews Group Inc	7/11/2022	20-532-19-8503	East H fr 5th to Gum Spr-ARPA	\$187,778.69	0.00
						\$187,778.69	0.00
					Grand Total:	\$187,778.69	0.00

Contractor's Price Proposal - Summary

Date: June 13, 2022
IQC Master Contract #: MD-WMA-GC02-042419-TMG
Work Order Number: 106317.00
Owner PO #:
Work Order Title: CTYBRNSWCK -East H Street- Water Mainline -Design
Contractor: TMG Construction Corp.
Proposal Name: CTYBRNSWCK -East H Street- Water Mainline -Design
Proposal Value: \$187,778.69

01 - General Requirements

\$187,778.69

Proposal Total

\$187,778.69

This total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding.



The Matthews Group, Inc.
18915 Lincoln, Rd.,
Purcellville, VA 20132-4145

Ph: 540-338-0411
Fax: 540-338-9518

Scope of Work – Phase 2

General

1. Normal Working Hours
2. No wage scale
3. No permitting

Project Description

The City of Brunswick in Maryland is planning to replace main water lines in six different phases within the city limits, at the following locations:

1. Phase #1 at 6th Avenue from East H Street to East R Street - 1,080 linear feet
2. **Phase #2 at East H Street from 5th Avenue to gum Springs – 1,650 linear feet**
3. Phase #3 at 5th Avenue from East F Street to East H Street - 550 linear feet
4. Phase #4 at 4th Avenue along 100s block - 380 linear feet
5. Phase #5 at 2nd Avenue from Concord Street to K Street - 700 linear feet
6. Phase #6 at West Potomac Street from Delaware to Florida Avenue - 1,250 linear feet

A total of 5,610 linear feet of water line replacement is planned.

Note that all Geotechnical work and all Survey work was included in Phase #1 to reduce re-mobilization costs over the entire project. Pricing of this phase and subsequent phases was developed with the assumption that Phase #1 will be completed first. Phases 2-6 may not be completed for the pricing indicated if Phase #1 is not completed first. Should the City desire, pricing for individual phase mobilizations for these tasks can be provided.

The existing water lines are 8-inches diameter pipes running along the paved city roads at about 4 to 6 ft below ground surface. The proposed new alignment is adjacent to the existing water lines.



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Fax: 540-338-9518

Civil Engineering and Design Services – Phase 2 Only

Our Services include developing Civil construction documents for the City of Brunswick Municipal Water Line for East H Street, from 5th Avenue to Gum Springs (approximately 1650 linear feet). The civil CD Design will be specifically to replace in kind the existing water line network proposing the same sizes, valves, path, flowrates, and routes.

The following are the proposed design deliverables. With each design phase, a two week Client review period is included. Each design deliverable will included drawings and MasterSpec specifications. A review meeting, responses, and revisions due to comments are included in this proposal for each phase:

- 50% Design Development Documents
- 100% Design Documents
- IFC Documents

The following design standards will be used for this project:

- International Building Code
- International Plumbing Code
- National Fire Protection Agency (NFPA)
- Manual on Uniform Traffic Control Devices (MUTCD) Chapter 6
- City of Brunswick Standards Design Manual
- Frederick County Design Standards



Clarifications & Exclusions

- No permits are required
- No utility relocation included unless stated above
- Proposal does not include any unforeseen conditions and/or upgrading existing conditions to code compliance
- No Liquidated Damages
- No HAZMAT testing
- TMG will submit monthly payment requests at Net 30 terms
- Coordinating with any historic societies is excluded
- Electrical, mechanical, plumbing (other than the water lines), and fire protection engineering is not included
- Storm Water Management analysis and study is not included
- Relocation of above-ground appurtenances not associated with the water lines (i.e. light poles, signs, etc.) is not included
- As-build drawings are not included at this time, but can be provided as an additional service following construction.
- Easement Plat update or modifications to the current County mosaic and related work is not included.
- Erosion and Sediment Control design is not included
- Hydraulic water network modeling analysis and flowrate improvement studies are not included.
- It is assumed that the City will provide access to mechanical, electrical, and communication rooms and facilities that may be needed to investigate the existing subsurface utility systems thoroughly.

Purchase Orders

PO Proof List



User: jmosc
 Printed: 07/14/2022 - 12:52PM
 Batch: 00028.07.2022 - PW07142022JM

Ship Location	Vendor No.	Vendor Name	PO Date	Acct No.	Account Description	Amount	Qty
Refining-Under RR Tracks Weaverton	0000230033	Utility Service Company Inc	7/14/2022	20-532-19-8508	Yourtee-Reline Under RR-ARPA	\$300,000.00	0.00
Refining-Under RR Tracks Knoxville	0000230033	Utility Service Company Inc	7/14/2022	20-532-19-8509	Reline Waterline-KnoxvilleARPA	\$185,286.00	0.00
Refining-Western Ave. to Knoxville	0000230033	Utility Service Company Inc	7/14/2022	20-532-21-8115	Yourtee-Reline-Fred Co Contrib	\$500,000.00	0.00
						\$985,286.00	0.00
					Grand Total:	\$985,286.00	0.00

SCOPE OF WORK NO. 1
TO THE MASTER SERVICES AGREEMENT BETWEEN
UTILITY SERVICE CO., INC.
AND
CITY OF BRUNSWICK, MD

CONSTRUCTION SERVICES - PIPE REHABILITATION PROJECT

1. **Effective Date.** The Effective Date for this Scope of Work No. 1 ("SOW1") shall be July _____, 2022.
2. **Term.** The term of this SOW1 shall commence on the Effective Date and shall continue in full force and effect for one year ("Term").
3. **Scope of Work and Company's Obligations.** The Company shall supply all material, equipment, and personnel necessary to perform the services as outlined in Exhibit A. (collectively, "Services".)
4. **Owner's Obligations.** The Owner shall, at no cost to the Company, perform or provide: (1) the Company with ingress, egress, and all reasonably necessary access to the real property which the Company needs to access to perform the Services, including an access point and access for equipment within fifty feet of access pits (20' x 60' working area required); (2) potable water supply and disposal for cleaning water at no charge; and (3) permits and fees necessary to perform the Services, if any. The previous list is not intended to be exhaustive. If any additional support of the Owner is reasonably necessary to perform the Services, the Owner shall provide such needed support or services in good faith so that the Company can perform the Services.
5. **Cost and Payment Terms.** The Owner agrees to pay the amount of **\$985,286.00** to the Company for the performance of the Services ("Contract Price".) The Contract Price shall be due and payable upon completion of the services as defined in Exhibit A. All applicable taxes are the responsibility of the Owner, if any, and are in addition to the Contract Price. This Contract Price is based on one mobilization, and is lump sum pricing and not to be assumed as a price per linear foot.

The parties agree and understand that upon initiation of the Services as defined in Exhibit A, if the services are unable to be performed due to the condition of the pipes, Owner shall be responsible for the costs of mobilization, Company's crew time and costs, and any materials or supplies used in the attempt to deliver the Services.

6. **Warranty.** Company warrants to Owner ("Warranty") for a period of one (1) year ("Warranty Period") from completion of the Services that the Services are free from defects in workmanship and material under normal and proper use within the Warranty Period ("Covered Defect"). Covered Defects do not include defects caused by fire, war, earthquake, or other earth movement, acts of God, negligence, abuse, alteration, aggressive environmental conditions or from the failure to properly inspect, service, or maintain the asset. If a defect in workmanship or material is identified by Owner during

the Warranty Period, then Owner shall promptly notify the Company of the nature of the defect in writing. Following the receipt of such notice, the Company shall inspect the work product produced by the Services to determine if a Covered Defect exists to the reasonable satisfaction of the Company. The Company's inspection shall be performed on a date that is mutually agreeable to the Owner and the Company, and the Owner agrees to provide an access point and satisfy any other reasonable requests of the Company so that it can carry out its inspection. If a Covered Defect exists, the Company's sole liability shall be discharged by the Company providing the labor and material to repair any part or parts of the work product produced by the Services which prove to be defective. COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES AND ALL OTHER WARRANTIES ARE SPECIFICALLY EXCLUDED, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR OR SPECIAL PURPOSES.

7. **Exclusions.** This Agreement does NOT include the cost for and/or liability on the part of the Company for: (1) dewatering well points of excavations due to water table elevations; (2) survey locations – Company is not responsible for un-marked or mis-marked utilities; (3) rock excavations or backfill aggregates; (4) chlorination; (5) site or landscape restoration; (6) pressure testing; (7) permits, fees, or bonds; (8) curb replacement; (9) pipe repair; (10) permanent pipe; (11) dust and erosion control; (12) joint coverage; (13) heating the host pipe due to weather conditions; (14) temporary water connections at meters; (15) backflow preventer at hydrant for temporary water; (16) cost of water to clean the lines; (17) discovery, identification, and/or removal of any hazardous waste or materials; and (18) other conditions which are beyond the Owner's and Company's control, including, but not limited to: acts of God and acts of terrorism.
8. **Asset Condition Disclaimer.** This Contract is based upon the assumption that the described pipeline is a candidate for rehabilitation via the methods described in Exhibit A. The Owner and the Company hereby acknowledge and agree that upon opening up a pipeline, if the pipeline cannot be rehabilitated as specified due to deterioration or any other reason, the Owner agrees and acknowledges that the Company shall not be responsible to repair the pipeline, and Owner shall be responsible to Company for any costs incurred to that point in time.

The SOW1 is executed and effective as of the date last signed by the parties below.

OWNER

City of Brunswick

By: _____

Name: _____

Title: _____

Date: _____

COMPANY

Utility Service Co., Inc.

By:  _____

Name: Jonathan Cato

Title: Chief Operating Officer

Date: July 14, 2022

Exhibit A

The Company shall provide the equipment and personnel necessary to complete cleaning, surface preparation, and pipe rehabilitation of 4100 LF of 10" unlined cast iron. This work is packaged as one mobilization, and additional mobilizations will increase the Contract Price. This increase shall be negotiated via written amendment signed by both parties.

1. Traffic control
2. Excavation of the access points
3. Surface preparation of pipe to receive epoxy.
4. Conduct pre-spraying and post spraying CCTV.
5. Spray application of epoxy coatings at 125 mils.

Site access to be determined by physical location. Quantities relative to depth and structure size are subject to field verification and the Contract Price may change, via a written amendment signed by both parties.

Additional repair work may be needed, depending on the pipe and joint condition. This will be determined after the inspection process and will be subject to a negotiated written amendment.

The Contract Price is based on performing the work when no external heat sources will be required for the coating requirements.

Pipe can only be lined with spray coating application in "runs" as <500' sections. Contract Price is subject to change if quantity runs are increased over 9 runs.

Pricing based on 10 excavations and subject to change if additional pits are required due to obstructions, driveways or other interferences.

A 2-page PDF document will be provided at close-out to report findings.

MASTER SERVICES AGREEMENT
Terms and Conditions

This MASTER SERVICES AGREEMENT ("Agreement") is entered into by and between CITY OF BRUNSWICK, with a principal business address of 1 West Potomac Street, Brunswick, Maryland 21716 ("Owner"), and UTILITY SERVICE CO., INC., a Georgia corporation with a principal business address of 535 General Courtney Hodges Boulevard, P O Box 1350, Perry, GA 31069 ("Company").

WHEREAS, the Owner and Company (collectively, "the Parties") desire for Company to provide services to Owner under the terms set forth herein;

NOW THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Scope. The Company agrees to provide the Owner with certain services ("Services") set forth on each properly executed Scope of Work ("SOW") to be attached hereto and incorporated herein by reference. Each SOW shall be subject to the general terms and conditions (the "Terms and Conditions") set forth in this Agreement. Each time Owner engages Company to perform Services, a new SOW shall be prepared specifying the scope of Services specific to that engagement. Unless otherwise indicated in any given SOW, Company shall be responsible for furnishing all labor and materials to perform the Services. Each new SOW represents a separate contract between Company and Owner that incorporates the Terms and Conditions and is governed by this Agreement. All changes to any SOW may only be made by a written amendment to such SOW and signed by an authorized representative of each Party. Owner may terminate a SOW in accordance with the terms of each SOW. In the event there is a conflict between any term of an SOW and this Agreement, the term(s) of the SOW shall control.

2. Term. The effective date of this Agreement shall be _____, 20____ ("Effective Date"). The term of this Agreement shall commence on the Effective Date and shall continue in full force and effect for one year ("Term"). This Agreement will automatically renew for successive one-year terms ("Renewal Terms") unless terminated as set forth in Section 9 of this Agreement. The term of an SOW shall begin on the commencement date provided in that SOW and continue in effect for the agreed term provided in that SOW.

3. Fees. For all Services performed, Owner shall pay Company in accordance with the terms of each SOW. The fees paid in accordance with each SOW shall constitute the full and complete compensation to Company for the Services performed pursuant to the SOW. Unless otherwise expressly set forth in any given SOW, Company shall be responsible for expenses it incurs in connection with its provision of the Services.

4. Independent Contractor. Company is, and shall at all times remain, an independent contractor. Company and each of Company's employees and principals shall not be deemed for any purpose to be Owner's employees, and they shall not be entitled to any claims, rights, benefits and privileges to which an employee of Owner or any of its respective affiliates may be entitled under any retirement, pension, insurance, medical or other plans which may now be in effect or which may hereafter be adopted. Owner is not responsible to any governing body or to Company for paying or withholding payroll taxes and other employee expenses related to payments made to Company. Notwithstanding anything to the contrary,

this Agreement does not, and shall not be deemed to, constitute a partnership or joint venture between the Parties and neither Party nor any of their respective directors, officers, officials, or employees shall, by virtue of the performance of their obligations under this Agreement, be deemed to be an agent or employee of the other. No Party has the authority to bind another Party except to the extent approved in writing by the Party to be bound.

5. Insurance. Company shall maintain statutory minimum Worker's Compensation as required by the laws of any jurisdiction in which Services are performed, and commercial general liability insurance covering Company's liabilities hereunder and for injury to persons or damage to property with limits of not less than \$2,000,000 per occurrence. Upon Owner's request, Company shall furnish Owner with a certificate of insurance evidencing this coverage.

6. Representations. Company represents and warrants that Company has the full power and authority to enter into and perform this Agreement; that the execution, delivery and performance of this Agreement has been duly authorized and constitutes a valid and binding agreement of Company; and that the execution, delivery and performance of this Agreement will not result in the breach of, or constitute a default under, or violate any provision of, any agreement or other instrument to which Company is a party to a non-competition agreement or bound by any competitive restrictive covenant concerning or relating to, in any manner, the performance by Company of services similar to the Services to be performed hereunder.

7. Indemnification. Company shall indemnify Owner and its officers and officials from and against any claims, actions, and suits resulting from Company's negligence while performing the Services hereunder. Company's indemnification obligations hereunder shall be subject to Owner's prompt notification to Company with respect to the pertinent third-party claim(s).

8. Assignment of Receivables. The Company reserves the right to assign any outstanding receivables from this Contract to its financial institutions as collateral for any loans or lines of credit.

9. Termination. This Agreement or any SOW may be terminated by either Party if written notice of termination is received by the non-terminating Party at least ninety (90) days before the commencement of the upcoming Renewal Term. If the notice of termination is not received at least ninety (90) days before the commencement of the upcoming Renewal Term, this Agreement shall renew for the upcoming Renewal Term of one-year, and then terminate at the expiration of that Renewal Term. In the event of termination by Owner, Owner shall pay Company any amounts due or owing pursuant to all SOWs for products and/or services delivered by Company prior to the date of termination, unless otherwise agreed by the Parties in SOW(s).

10. Intellectual Property. The Owner acknowledges that all intellectual property rights in the Services, their method of delivery, and all related know-how are owned by the Company or its licensors. The Owner hereby agrees and acknowledges that this Agreement and its SOWs shall not be construed as a license for the Owner to use, deliver, or exploit the intellectual property used by the Company in delivering the Services. To the extent that any new intellectual property or know-how is developed as a result of carrying out the Services, the new intellectual property rights will all be owned by the Company or its licensors, and the Owner agrees that it will not make a claim to any such new intellectual property rights.

11. Limitation of Liability. IN NO EVENT SHALL EITHER PARTY OR ITS RESPECTIVE DIRECTORS, OFFICERS, OFFICIALS, AND EMPLOYEES BE LIABLE FOR ANY LOSS OF PROFITS OR REVENUES, OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, HOWSOEVER CAUSED OR ARISING UNDER THIS AGREEMENT. The foregoing provision limiting the liability of the Parties' directors, officers, officials, and employees shall be deemed to be trust provisions for the benefit of such directors, officers, officials, and employees and shall be enforceable by such persons as trust beneficiaries. Such provisions shall not be construed as imposing any liability on such directors, officers, officials, and employees where it does not otherwise exist in law.

12. Rules of Construction. In construing this Agreement and the SOWs, the following principles shall be followed: (a) no meaning may be inferred from any presumption that one Party had a greater or lesser hand in drafting this Agreement; (b) examples do not limit, expressly or by implication, the matter they illustrate; (c) the plural shall be deemed to include the singular and vice versa, as applicable; and (d) the headings are for convenience only and do not affect the meaning or construction of any such provision. The Parties specifically acknowledge and agree: (a) that they have a duty to read all of the documents constituting this Agreement, including its SOWs, and that they are charged with notice and knowledge of the terms in this Agreement, including its SOWs; and (b) that it has in fact read this Agreement, including its SOWs, and is fully informed and has full notice and knowledge of the terms, conditions and effects of this Agreement, including its SOWs. **Each Party further agrees that it will not contest the validity or enforceability of any provision of this Agreement on the basis that it had no notice or knowledge of such provision or that such provision is not conspicuous.**

13. Miscellaneous.

a. Notices. All notices hereunder shall be in writing and shall be sent by certified mail, return receipt requested, or by overnight courier service, to the address set forth below each Party's signature, or to such other addresses as may be stipulated in writing by the Parties pursuant hereto. Unless otherwise provided, notice shall be effective on the date it is officially recorded as delivered by return receipt or equivalent.

b. Entire Agreement; Amendment. This Agreement and each properly executed SOW supersedes all prior agreements, arrangements, and undertakings between the Parties and constitutes the entire agreement between the Parties relating to the subject matter thereof. This Agreement may not be amended except by written instrument executed by both Parties. In the event of a conflict between the terms of any given SOW and this Agreement, the terms of the SOW shall prevail. The invalidity or unenforceability of any provision of this Agreement shall in no way affect the validity or enforceability of any other provision of this Agreement.

c. Assignment. Neither Party may assign this Agreement without the prior written consent of the other Party; such consent will not be unreasonably withheld. Any attempt to assign this Agreement without the prior written consent of the other Party shall be null and void. A change in control of a Party shall not be deemed an assignment of this Agreement.

d. Force Majeure. If either party is prevented from performing any of its duties or obligations hereunder (other than duties or obligations with respect to payment) in a timely manner by reason or act of God or force majeure such as fire; war; earthquake; strike; lock-out; labor dispute; flood; public disaster; pandemic or epidemic event (to include but not limited to COVID-19); interruptions or delays in reasonably available means of transportation; acts of any government or its agencies or officers, or any order, regulation, or ruling thereof; equipment or technical malfunctions or failures; power failures or interruptions; or any other reason beyond its reasonable control, such condition shall be deemed to be a valid excuse for delay of performance or for nonperformance of any such duty or obligation for the period during which such conditions exist.

e. Survival of Certain Provisions. Notwithstanding the termination or expiration of this Agreement, the provisions of Sections 6, 10, and 11 shall survive and continue and bind the parties and their legal representatives, successors and permitted assigns.

f. No Waiver. The waiver of any breach or failure of a term or condition of this Agreement by any party shall not be construed as a waiver of any subsequent breach or failure of the same term or condition, or a waiver of any other breach or failure of a term or condition of this Agreement.

g. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same Agreement. The Parties may utilize electronic means (including facsimile and e-mail) to execute and transmit the Agreement and all such electronically executed and/or transmitted copies of the Agreement shall be deemed as valid as originals.

SIGNATURE PAGE TO FOLLOW.

WHEREFORE, for the purpose of being bound, the Parties execute this Agreement by their duly authorized representatives as of the date(s) set forth below.

OWNER

CITY OF BRUNSWICK

By: _____

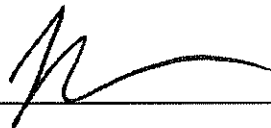
Name: _____

Title: _____

Date: _____

COMPANY

UTILITY SERVICE CO., INC.

By: _____ 

Name: Jonathan Cato

Title: Chief Operating Officer

Date: July 6, 2022

Notice Address for Each Party:

Attn: _____

Utility Service Co., Inc.

Attn: Customer Service Department

535 General Courtney Hodges Blvd

P O Box 1350

Perry, Georgia 31069

SPRAY-IN-PLACE PIPE REHABILITATION

MARKET DRIVERS



AGING INFRASTRUCTURE LEADS TO WATER MAIN BREAKS AND NON-REVENUE WATER

Drinking water is delivered via one million miles of pipes across the country. Many of those pipes were laid in the early to the mid-20th century with a lifespan of 75 to 100 years. Aging water pipe infrastructure leads to pipe degradation and main breaks. There are close to 237,000 breaks per year in the US leading to approximately \$2.8 billion lost in yearly revenue.¹



WATER QUALITY

Decaying pipes can be plagued with heavy tuberculation, biological buildup, and corrosion.



HIGHER COST OF MAINTENANCE

Aging pipes require more maintenance, and pumps have to work harder because of corrosion and mineral buildup – resulting in pumps wearing out quicker and higher energy costs.

PIPE TYPES

There are several pipe materials that have been used over the last 120+ years. Each pipe material listed below can benefit from our pipe lining technology.



Cast Iron

- Cast iron is a metal alloy made of iron, carbon, and silicone. It is cast in a mold to create a pipe.



Ductile Cast Iron

- Ductile iron is a type of cast iron. It is more fatigue and wear-resistant than cast iron because of the round graphite structures that are cast into the metal.



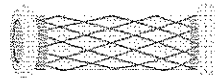
Concrete Lined Ductile Iron

- Cast iron pipes are lined with cement to increase flow efficiency and prevent tuberculation.



Concrete

- Concrete pipes are composed of cement (an aggregate of sand and gravel) and water. The concrete pipe making equipment casts the pipes with a rotating mold, giving them a hollow shape.



Asbestos Cement (AC)

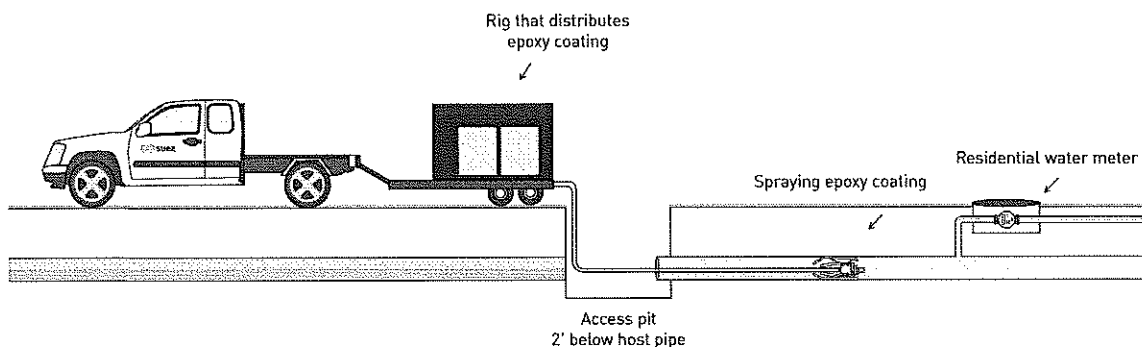
- Asbestos cement pipes are made of a mixture of asbestos fiber, Portland cement, and silica sand, compressed by steel rollers.



Galvanized Steel

- Galvanized pipes are steel pipes that are coated with zinc.

SUEZ SPRAY-IN-PLACE PIPE (SIPP) REHABILITATION



Sources:

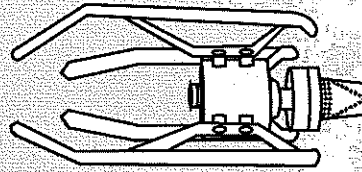
1. American Society of Civil Engineers (ASCE) 2017 Infrastructure Report Card

Contact us

855-526-4413 ask@suez.com

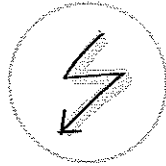
Copyright © 2021 SUEZ

HOW DOES SIPP WORK?



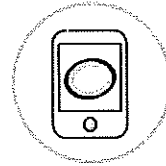
1 DIG PIT & ACCESS PIPE

We mutually agree with the utility on the access point locations. We then dig an access pit two-feet below the host pipe. A three-foot section of the host pipe is removed to allow access to the relining equipment. We confirm the section of pipe that we are restoring utilizing CCTV.



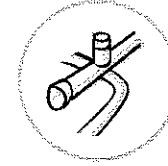
2 PREPARE PIPE INTERIOR

The pipe interior is prepared for restoration by drag scraping and/or hydro-jetting to create a clean, smooth dry surface.



3 CCTV INSPECTION & REPAIRS

A second CCTV inspection follows to determine that the surface of the host pipe has been fully prepared for the lining.



4 APPLY EPOXY COATING

The epoxy coating is then applied and, once cured, we do a final CCTV to make sure the lining is correct. We reassemble the sections of pipe that were removed at the access points. The utility proceeds with the chlorination/disinfection before system restoration.

COATING

- ☑ NSF 61 approved
- ☑ NSF 61-600 approved
- ☑ May extend the service life of pipes by 75 years
- ☑ High build coating – minimum standard thickness is 125mil.
- ☑ 100% solids epoxy
- ☑ No fish kill and safe for aquatic life
- ☑ Manufacturer, Warren, is ISO 9001 certified
- ☑ No VOC
- ☑ Styrene free
- ☑ Highly adhesive and sticks to substrate without leaving any annular space
- ☑ Corrosion resistant

WHAT ARE THE BENEFITS?

OPERATING COST SAVINGS

- Extend service life of pipes
- Minimal excavation – 2% excavation compared to traditional dig-and-replace
- No reinstatement of service connections required
- No specific tools required to add new service lines or perform repairs

CUSTOMER SATISFACTION

- Can improve water quality
- Can improve system efficiency by enhancing flow capacity
- Lining is impermeable epoxy coating

TIME SAVINGS

- Reduce frequency of maintenance
- Rapid cure
- Minimal disruption

Contact us
855-526-4413 ask@suez.com

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