

## ADDENDUM NO. 1

### FAIRLEE WTP CLARIFLOCCULATOR REPLACEMENT FAIRLEE, MARYLAND

#### GMB FILE No. R190065

**General Note:** The following supplementary data and corrective notations are hereby made a part of this project. The General Contractor is responsible for notifying his suppliers and subcontractors regarding items covered by all addenda.

#### GENERAL

1. The attached Pre-Bid Meeting Minutes of July 29, 2020 shall be inserted into and made part of the specifications.

#### CONTRACTOR QUESTIONS

Below are written questions received through August 5, 2020. Wording of some questions may have been modified to suit format of this document.

1. The documents do not appear to detail a new polymer injection system. Is the design intent, for the existing polymer injection system, to be utilized for the new Clariflocculator? If not, please clarify who is to supply the polymer injection system and what system is being used as the basis of design.

*The new polymer injection quill is to be provided by the Contractor, and shall be of the retractable type, rated for 150 psi, and as manufactured by Saf-T-Flo, or approved equal. Injection quill materials of construction shall be compatible with the polymer feed service application, and in accordance with the manufacturer's recommendations for main line fluid velocity.*

2. Is any slab repair, at the location of the existing Clariflocculator, anticipated to be required after demolition?

*No slab repair, of the slab under the existing Clariflocculator, is required after demolition.*

3. Please confirm the chemical feed relocation is not included in the scope of this project.

*The relocation of all chemical storage and pumping equipment is by the Owner. The Contractor is only responsible for providing and installing the polymer injection quill.*

#### SPECIFICATIONS

1. SECTION CONTENTS – TABLE OF CONTENTS – PERMITS; **DELETE** “00890-1 THRU 00890-1” and **INSERT** “00890-1 THRU 00890-5”.
2. SECTION 00890 – PERMITS AND NOTICES – **DELETE** in footer “180118” and

**INSERT** "190065".

3. SECTION 11338 – FLOCCULATING TUBE CLARIFIER – **INSERT** the attached Supplement 4: Clariflocculator Proposal Document, after Page 10 of Supplement 3: Tube Settlers O&M

## **PLANS**

1. SHEET Q1.0 – DEMOLITION PLAN – **DELETE** SHEET Q1.0 and **INSERT** the attached, revised SHEET Q1.0 which includes demolition requirements for the existing floor slab and adds general notes to further detail demolition requirements for the project.
2. SHEET Q2.0 – SECTION – **DELETE** SHEET Q2.0 and **INSERT** the attached, revised SHEET Q2.0 which includes an additional note relating to the elevation of the clariflocculator inlet piping.
3. SHEET E1.1 – ELECTRICAL DRAWINGS – **INSERT** GENERAL NOTE #2, which states: The Contractor is responsible for all power and control wiring and conduit necessary to integrate the motorized sludge valves into the new Clariflocculator Control Panel. For arrangement of piping, and number of valves, refer to sheet Q1.1.

**PLEASE ACKNOWLEDGE THIS ADDENDUM ON PAGE 00410-3 OF THE BID FORM.  
FAILURE TO ACKNOWLEDGE ALL ADDENDA COULD RESULT IN  
REJECTION OF YOUR BID.**

**\*\*\*END OF ADDENDUM NO. 1\*\*\***



GEORGE, MILES & BUHR, LLC

■ ■ ■ ■

ARCHITECTS  
ENGINEERS

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## PRE-BID MEETING MINUTES

### FAIRLEE WTP CLARIFLOCCULATOR REPLACEMENT FAIRLEE, MARYLAND

GMB FILE No. R190065

July 29, 2020  
TIME: 10:00 A.M.

#### LOCATION: KENT COUNTY DEPARTMENT OF PUBLIC WORKS

A pre-bid meeting was held on July 29, 2020 at 10:00 a.m. at the Kent County Department of Public Works. Those in attendance included:

Mike Moulds	Kent County	410-778-2600	<a href="mailto:mmoulds@kentgov.com">mmoulds@kentgov.com</a>
Kim Middleton	Kent County	410-778-2600	<a href="mailto:kmiddleton@kentgov.com">kmiddleton@kentgov.com</a>
Greg Swartz	Kent County	410-778-2600	<a href="mailto:gswartz@kentgov.com">gswartz@kentgov.com</a>
Eddie Porter	Somerset Well Drilling	410-251-3134	<a href="mailto:sales@peninsulawater.com">sales@peninsulawater.com</a>
Brett Mariner	Somerset Well Drilling	757-709-3125	<a href="mailto:Brett@somersetwell.com">Brett@somersetwell.com</a>
John Troutman	M2 Construction	717-415-1773	<a href="mailto:est@m2constructionLLC.com">est@m2constructionLLC.com</a>
Shannon Miller	R.E. Pierson	908-798-8318	<a href="mailto:estimating@repierson.com">estimating@repierson.com</a>
Jim Criss	Sherwin Williams	609-577-4034	<a href="mailto:jim.criss@sherwin.com">jim.criss@sherwin.com</a>
Ryan Irving	Sherwin Williams	215-378-3325	<a href="mailto:ryan.f.irving@sherwin.com">ryan.f.irving@sherwin.com</a>
Jim Hoageson	George, Miles & Buhr	410-724-3115	<a href="mailto:JHoageson@gmbnet.com">JHoageson@gmbnet.com</a>
Matt Hall	George, Miles & Buhr	410-742-3115	<a href="mailto:mhall@gmbnet.com">mhall@gmbnet.com</a>

#### I. Overview of Pre-Bid Meeting / Introductions

- A. Engineer: George, Miles & Buhr, LLC, represented by Jim Hoageson, PE
- B. Owner: County Commissioners of Kent County, Maryland, represented by Mike Moulds, PE

#### II. Project Background

- A. Kent County owns and operates an existing water treatment plant (WTP), located at 1 Watertower Rd, Fairlee, MD 21620. The WTP was completed in 1994 and utilizes an existing clarifying, flocculating tube settler (clariflocculator) as pretreatment for the removal of Iron and Manganese from well water. The purpose of this project is to install a new clariflocculator in the existing treatment plant, and demolish the existing unit, once the proposed unit is in operation.

#### III. Project Scope

- A. Installation of the Clariflocculator: Includes the fabrication and installation of a stainless steel tank structure, piping, flocculator drives, motor-operated valves, and associated electrical equipment that will be provided by Kent County.

JAMES H. WILLEY, JR., PE  
PETER A. BOZICK, JR., PE  
JUDY A. SCHWARTZ, PE  
CHARLES M. O'DONNELL, III, PE  
W. BRICE FOXWELL, PE  
A. REGGIE MARINER, JR., PE  
JAMES C. HOAGESON, PE  
STEPHEN L. MARSH, PE  
DAVID A. VANDERBEEK, PE  
ROLAND E. HOLLAND, PE  
JASON M. LYTLE, PE  
CHRIS B. DERBYSHIRE, PE  
W. MARK GARDOCKY, PE  
MORGAN H. HELFRICH, AIA  
KATHERINE J. MCALLISTER, PE

JOHN E. BURNSWORTH, PE  
MICHAEL G. KOBIN, PE  
VINCENT A. LUCIANI, PE  
ANDREW J. LYONS, JR., PE  
W. NICHOLAS LLOYD  
AUTUMN J. WILLIS

- B. Concrete Slab Modifications: Demolition of the existing concrete floor slab, and construction of a new, thickened, floor slab.
- C. Demolition of the existing Clariflocculator: includes removing the existing steel tank and associated appurtenances, while ensuring the new clariflocculator remains in operation.
- D. All work shall be in accordance with all Kent County standards.

IV. Bidding Information

- A. Bids Due / Bid Opening: Wednesday, August 12, 2020 at 10:00 a.m. local time, at the Kent County Department of Public Works.
- B. No bids may be withdrawn within 90 days of the Bid Due Date.
- C. 10% Bid bond or certified check required with submission of Bid.
- D. A recommendation for award is anticipated to be presented to Council in early September dependent upon the completeness of the bids received and funding resources.
- E. The Owner reserves the right to award the contract based on selection of either Bid Option 1 (Schedules A and B) or Bid Option 2 (Schedules A, B, and C)

V. Contract Provisions

- A. Contract Duration: Part 1 - Material Acquisition shall be completed within 240 days after the Notice to Proceed. Part 2 - Work shall be substantially completed within 330 days after the Notice to Proceed and completed and ready for final payment within 360 days after the Notice to Proceed.
- B. Liquidated Damages: \$500 per calendar day for each day beyond the 330 days until Substantial Completion is reached and \$250 per calendar day beyond the 360 days to reach final payment. Liquidated damages for failing to timely attain Substantial Completion and Final Completion are additive and will be imposed concurrently. This total will also include any engineering fees that would be charged to the Owner as a result of failure to meet the established milestones.
- C. Performance Bond & Payment Bond: 100% each.
- D. Project is funded entirely with local funds and has no stipulations typically carried by MDE-funded projects.
- E. There are no wage rates on this project.

VII. Comments and Discussions

A. Kent County repeatedly stressed the importance of coordinating any needed shutdowns of the facility in advance. The Contractor is responsible for adequately coordinating any work that will impact the operations of the facility with the County at least **Two (2) Days** in advance. It was noted that the town uses roughly 50,000 gallons of water per day, on average, and it is critical that the plant's ability to make water not be impacted by construction.

B. Question was asked regarding the requirements for MDE inspections for final project closeout.

*GMB indicated that all contractors shall familiarize themselves with the requirements of the MDE construction permit prior to submitting a bid on the project. It is the contractor's responsibility to coordinate all necessary inspections **in advance**. No time extension or change in contract price will be entertained due to the contractor's inability to coordinate or schedule project closeout.*

C. It was reiterated that Substantial and Final Completion will not be granted unless **all** provisions pertaining to each perspective deadline are met. These requirements are outlined throughout the Standard General Conditions, and specifically in Section 15.06 of the Standard General Conditions.

D. It was noted that the tank will be constructed of Stainless Steel (due to its corrosion resistance) and will be shipped to the site in pieces to be welded by the contractor. It will be the Contractor's responsibility to coordinate delivery with the Clariflocculator Vendor, once the unit is purchased by the County.

E. Question was asked regarding the location of the Clariflocculator manufacturer.

*The Clariflocculator manufacturer, Westech Engineering, is located in Salt Lake City, Utah.*

F. Question was asked regarding if any "Buy American" or "American Iron and Steel" stipulations apply to this project.

*No, there are no requirements for Buy American or American Iron and Steel on this project.*

VIII. Questions

A. All questions pertaining to this bid shall be directed via email to Mike Moulds [mmoulds@kentgov.org](mailto:mmoulds@kentgov.org) by **12:00 p.m., Wednesday, August 05, 2020**. Please include the Project Name in the Subject heading.



Scope of Supply

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## Item A – Flocculating Tube Clarifier Model CLX2F

General Scope of Supply		
Description	Unit	Dimension/Capacity
Number of Clarifiers	each	1
Number of Flocculator Mechanisms	each	2
Flocculator Section Basin Size	ft x ft x ft	5.5 L x 11 W x 12 D (inside dimensions)
Tube Settler and Clearwell Section Basin Size	ft x ft x ft	16.5 L x 7 W x 12 D (inside dimensions)
Application		Surface Water Clarification
Design Flow Rate	gpm	140 gpm
Tube Settler Design Surface Loading Rate	gpm/ft <sup>2</sup>	2.0
Number of Flocculation Cells	each	2
Flocculation Cell Size	ft x ft	5.5 W x 5.5 L
Detention time Per Cell at Design Flow	minutes	17.8
Total Flocculation Detention Time	minutes	35.6

Detail Scope of Supply				
Item	Unit/Size	Quantity	Description	Material
Steel Tank	Varies	1	304SS tank with compartments for flocculation and sedimentation with tube settlers	304SS
Hopper Bottoms	-	2	Hopper bottom to collect the settled sludge for blowdown; includes sludge blowdown valves	304SS
Flocculators	4' dia.	2	304SS Paddle wheel flocculators with FRP paddles. 4 arms with 4 paddles per arm	304SS
Tube Settlers	~102 Sq. ft.	-	24" deep 60° incline tube settler modules with supports	PVC with 304SS supports
Mixer Supports	Full Span	1	Flocculator support beams	Steel
Launder System	140 gpm	2	Two V-notch weir finger launders feed into an effluent launder for effluent collection and transportation	304SS Launders; min. 3/16" thickness; FRP V-notch weirs
Anchor Bolts and Fasteners	Varies	TBD	-	304SS

## Drive Unit

Drive Unit		
Description	Unit	Dimension/Capacity
Flocculator Drive Type		Direct drive with helical reduction
Flocculator Motor Characteristics		0.5 hp, 230/460 V, 3 ph, 60 Hz, TEFC, VFD rated

## Surface Preparation and Painting

Paint						
Coating Area	Sandblast SSPC	Paint Type	Brand	Product #	Total DFT	Coats
Stainless Steel		No coating				
Drive Unit	Manufacturer's standard enamel coating					

## Control Panel

Controls & Instrumentation		
Description	Type	Notes
Control Panel Type	NEMA 4X 304SS	Includes lights, switches, buttons, etc. for full control of flocculators
VFD	Line Reactor	0.5 hp, included in control panel for each flocculator
Control Power Transformer		Provide 120 VAC for internal controls

## On-Site Service

WesTech Trips to the Site		
Number of Trips	Number of Days	Includes
3	6	Installation inspection, startup, instruction of plant personnel, and observation of testing

## Equipment Options

Equipment Options			
Item	Quantity	Description	Material
A-1: Carbon Steel Tank and Equipment	1	Flocculating Tube Clarifier tank and equipment to be made of carbon steel. Coating system for carbon steel option listed below.	Steel



**Optional Item A-1: Surface Preparation and Painting**

Paint						
Coating Area	Sandblast SSPC	Paint Type	Brand	Product #	Total DFT	Coats
Submerged Coating	SSPC-SP10 / NACE 2 near white blast	Epoxy	Tnemec	N140-1255	4-6 mils	1, finish coats by others
Non-Submerged	SSPC-SP6 / NACE 3 commercial blast	Epoxy	Tnemec	N140-1255	4-6 mils	1, finish coats by others

**Clarification Comments**

- External piping not included in WesTech’s scope of supply.
- Access stairs, walkway for flocculator motor maintenance, and other items not listed above are not currently included.
- In order to fit through the doors, the tank will ship in two pieces and need to be field welded together.
- All of the tank internals will ship loose and need to be installed once the tank is assembled on site.
- Stainless Steel will be cleaned according to WesTech’s workmanship standard Grade C cleaning. See below.



**CLEANING GRADE “C”**

1. ALL SURFACES SHALL BE FREE FROM:
  - HEAT TINT (REGARDLESS OF HEAT SOURCE; WELDING, THERMAL CUTTING OR GRINDING).
2. THE FOLLOWING MAY REMAIN ON SURFACES:
  - OXIDES AND TARNISH (FROM THERMAL CUTTING AND THOSE THAT FORM ALONG THE TOE OF A WELD).
3. A MINIMUM AMOUNT OF FREE AND EMBEDDED IRON MAY REMAIN ON SURFACES. THESE LOCATIONS SHALL BE LIMITED TO SMALL PIN-POINT AREAS SMALLER THAN 1/16” (1mm) IN DIAMETER, SCATTERED IN A RANDOM PATTERN, AND LESS THAN 1% OF THE TOTAL SURFACE AREAS.

### **Exceptions to Terms and Conditions**

- Taxes are not included in WesTech's proposal; however, WesTech is registered to collect taxes in the state of Maryland. If WesTech is the selected bidder, please send a current tax exemption certificate to our attention or taxes will be added to all invoices at the current rate at the time of invoicing.
- Shipping Terms: FOB jobsite, full freight allowed.
- It is Purchaser's responsibility to inspect the shipment for any damage or shortages, and note them on the Bill of Lading, at the time of delivery. Notify WesTech within three (3) working days of any shortages, damage, or concealed damage.
- The minimum insurance limits specified, in some instances, may be met only with a combination of underlying and umbrella coverage. WesTech carries \$10M umbrella coverage.
- Seller shall not be liable for claims, demands, or causes of action arising solely out of Buyer's acts or omissions. WesTech shall indemnify for any negligent acts or omissions of its employees, agents, and subcontractors. In the event that any such injury, including death or damage is caused by the joint or concurring negligence of Purchaser and WesTech, the loss or liability shall be borne by Purchaser and WesTech in proportion to each party's negligence.

**Note: Any Item Not Listed Above to Be Furnished by Others.**

### **Items Not by WesTech**

Electrical wiring, conduit, or electrical equipment, piping, valves, or fittings, shimming material, lubricating oil or grease, shop or field painting, field welding, erection, assembly of component handrail, detail shop fabrication drawings, performance testing, bonds, unloading, storage, concrete work, or field service (except as specifically noted).

*This proposal has been reviewed and is approved for issue by David Whittle on March 3, 2020.*

# One-Year Warranty

WesTech equipment is backed by WesTech's reputation as a quality manufacturer, and by many years of experience in the design of reliable equipment.

Equipment manufactured or sold by WesTech Engineering, Inc., once paid for in full, is backed by the following warranty:

For the benefit of the original user, WesTech warrants all new equipment manufactured by WesTech Engineering, Inc. to be free from defects in material and workmanship, and will replace or repair, F.O.B. its factories or other location designated by it, any part or parts returned to it which WesTech's examination shall show to have failed under normal use and service by the original user within one (1) year following initial start-up, or eighteen (18) months from shipment to the purchaser, whichever occurs first.

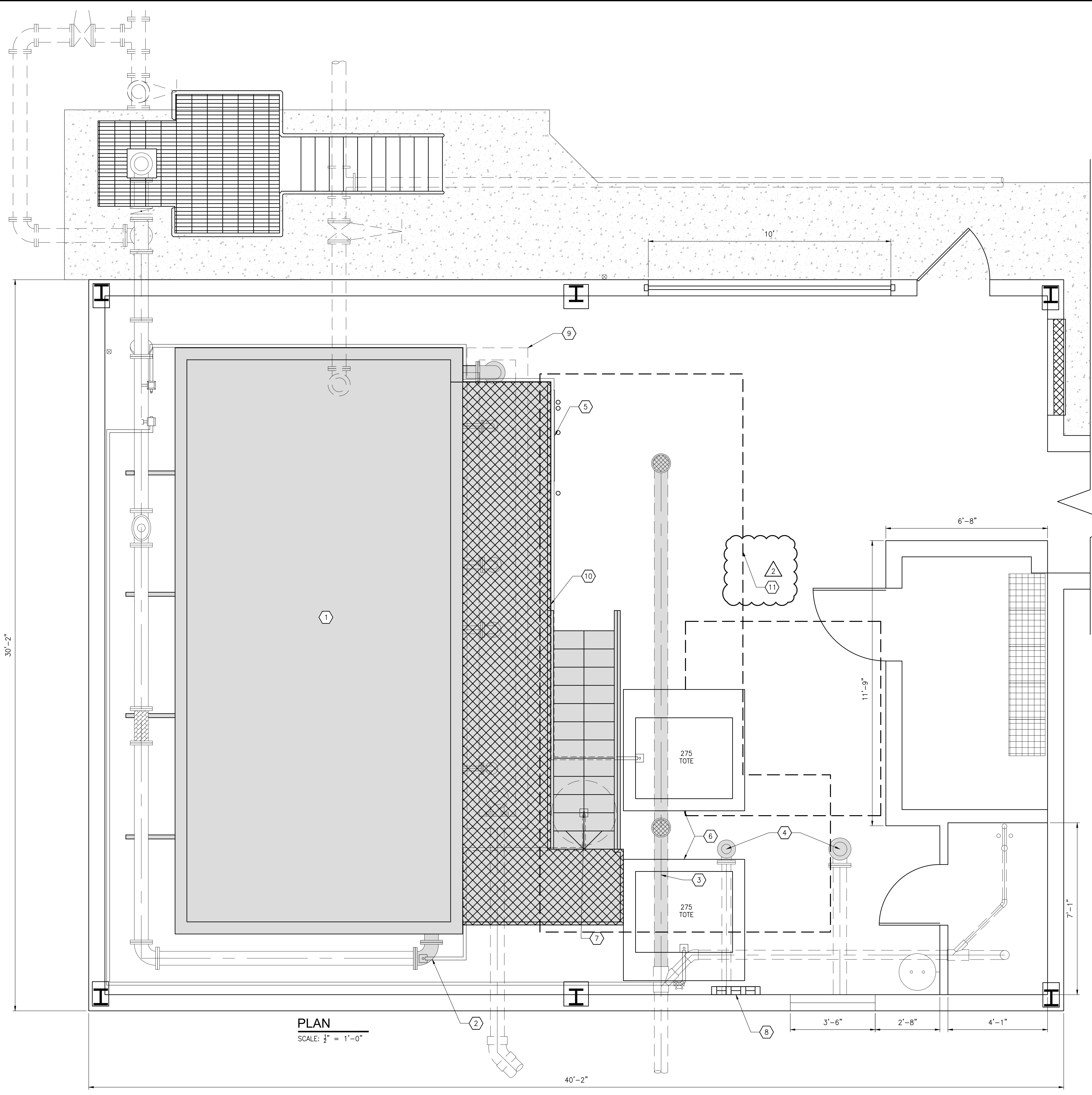
Such repair or replacement shall be free of charge for all items except for those items such as resin, filter media and the like that are consumable and normally replaced during maintenance, with respect to which, repair or replacement shall be subject to a pro-rata charge based upon WesTech's estimate of the percentage of normal service life realized from the part. WesTech's obligation under this warranty is conditioned upon its receiving prompt notice of claimed defects, which shall in no event be later than thirty (30) days following expiration of the warranty period, and is limited to repair or replacement as aforesaid.

**This warranty is expressly made by WesTech and accepted by purchaser in lieu of all other warranties, including warranties of merchantability and fitness for particular purpose, whether written, oral, express, implied, or statutory. WesTech neither assumes nor authorizes any other person to assume for it any other liability with respect to its equipment. WesTech shall not be liable for normal wear and tear, corrosion, or any contingent, incidental, or consequential damage or expense due to partial or complete inoperability of its equipment for any reason whatsoever.**

This warranty shall not apply to equipment or parts thereof which have been altered or repaired outside of a WesTech factory, or damaged by improper installation, application, or maintenance, or subjected to misuse, abuse, neglect, accident, or incomplete adherence to all manufacturer's requirements, including, but not limited to, Operations & Maintenance Manual guidelines & procedures.

This warranty applies only to equipment made or sold by WesTech Engineering, Inc.

WesTech Engineering, Inc. makes no warranty with respect to parts, accessories, or components purchased by the customer from others. The warranties which apply to such items are those offered by their respective manufacturers.



**LEGEND**

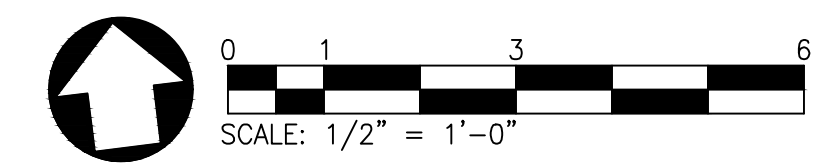
EXISTING	PROPOSED	
---	N/A	BUILDING/WALL
---	N/A	PIPE UNDER GROUND
---	N/A	PIPES ABOVE GROUND
N/A	█	TO BE REMOVED
---	N/A	CHEMICAL FEED LINE
█	N/A	GRAVEL ROAD/DRIVEWAY
█	N/A	CONCRETE SURFACE
---	N/A	CENTERLINE OF PIPES
█	N/A	ELECTRICAL CABINETS

- DEMOLITION NOTES:**
- EXISTING CLARIFLOCCULATOR UNIT TO BE REMOVED IN ITS ENTIRETY.
  - EXISTING 6" D.I. 90° BEND TO BE REMOVED.
  - EXISTING FLOOR DRAIN CUT & CAP TO THE LIMITS OF THE NEW CLARIFLOCCULATOR SLAB.
  - EXISTING SLAB PENETRATIONS CUT & CAP TO THE LIMITS OF THE NEW CLARIFLOCCULATOR.
  - EXISTING CONTROL PANEL TO BE RELOCATED BY CONTRACTOR DURING CONSTRUCTION. (SEE ELECTRICAL DEMO PLAN SHEET E1.0)
  - EXISTING CHEMICAL TOTES AND DUAL-CONTAINMENT UNITS TO BE RELOCATED BY THE OWNER PRIOR TO CONSTRUCTION.
  - EXISTING POLYMER STORAGE TANK TO BE RELOCATED BY OWNER PRIOR TO CONSTRUCTION.
  - EXISTING CHEMICAL FEED RECEPTACLES TO BE RELOCATED BY OWNER PRIOR TO CONSTRUCTION.
  - EXISTING GRATING TO BE MODIFIED BY CONTRACTOR TO FACILITATE THE INSTALLATION OF NEW SLUDGE PIPING. ONCE EXISTING CLARIFLOCCULATOR IS DEMOLISHED, REMOVE EXISTING TRENCH GRATING IN ITS ENTIRETY.
  - EXISTING STAIRS & WALKWAY TO BE REMOVED BY CONTRACTOR IN THEIR ENTIRETY TO FACILITATE CONSTRUCTION.
  - EXISTING SLAB TO BE CUT & REMOVED TO THE LIMITS OF THE NEW CLARIFLOCCULATOR TO FACILITATE CONSTRUCTION OF THE NEW EQUIPMENT SLAB. NOTE THAT A PORTION OF THE EXISTING SLAB IS THICKENED AND WILL ALSO REQUIRE REMOVAL.

- GENERAL NOTES:**
- THE OWNER RESERVES THE RIGHT TO SALVAGE FOR ALL MATERIALS TO BE REMOVED FROM THE FACILITY. CONTRACTOR TO COORDINATE MATERIALS TO BE SALVAGED WITH THE OWNER PRIOR TO ANY DEMOLITION.
  - CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ALL PIPING ASSOCIATED WITH THE PRETREATMENT UNIT AND SHALL PROVIDE MEANS TO TERMINATE ALL CONNECTING PIPING TO THE EXISTING CLARIFLOCCULATOR.
  - CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK WITH KENT COUNTY. ALL WORK REQUIRING PLANT SHUTDOWN SHALL BE COORDINATED WITH THE COUNTY AT LEAST ONE (1) WEEK BEFORE THE WORK IS PROPOSED TO OCCUR.
  - CONTRACTOR IS RESPONSIBLE FOR SLAB, APRON AND PAVEMENT DEMOLITION AND RESTORATION ASSOCIATED WITH THE INSTALLATION OF THE NEW CLARIFLOCCULATOR OUTLET PIPING.

PLOT CODE  
 PEN-RED : 0.08 INCHES (2.0mm)  
 PEN-YELLOW : 0.07 INCHES (1.8mm)  
 PEN-GREEN : 0.10 INCHES (2.5mm)  
 PEN-BLUE : 0.02 INCHES (0.5mm)  
 PEN-MAGENTA : 0.07 INCHES (1.7mm)  
 PEN-WHITE : 0.09 INCHES (2.3mm)

**PLAN**  
 SCALE: 1/2" = 1'-0"



PRINTS ISSUED FOR CONSTRUCTION

NO.	REVISIONS	DATE
1	PER ADDENDUM #1	07/30/20

**GMB**  
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**FAIRLEE WTP  
 CLARIFLOCCULATOR  
 REPLACEMENT**  
 FAIRLEE, MARYLAND

**DEMOLITION PLAN**

SCALE : AS NOTED	SHEET NO.
DESIGN BY : MMH	<b>Q1.0</b>
DRAWN BY : YPV	
CHECKED BY : JCH	
GMB FILE : 190065	
DATE : JULY 2019	

