Demolition of Commercial Point CSO Facility
Screenings Building

June 19, 2019
Commercial Point CSO Facility Connection to Storm Sewer
Next Steps

• Design Bulkheads to Isolate the Facility’s Bypass Piping from the BWSC Storm Drain (Task Order Consultant Services)

• Award Contract to Install Bulkheads and Fill Bypass Piping/Channel

• Prepare Demolition Contract for Screening Building (In-house Effort)

• Award Demolition Contract to Return Property to Pre-Facility Condition

• Return Property to Commonwealth
Telog Dataloggers for Wastewater Metering

June 19, 2019
Current Wastewater Metering System

**Hardware**
- Flow meters
- Telog dataloggers / telemetry
- 3G Modems
- Antenna

**Software**
- Dedicated server inside firewall
- Telog Enterprise for Wastewater/Water
- Telog Web Module
- Interface to MWRA PI Historian
A wastewater meter and datalogger mounted in a manhole chamber
Seven systems evaluated, two systems short-listed:
  – Ayyeka
  – Telog
• Both not “cloud-based”
• Both compatible with multiple meter vendors
Recommendation

Staff recommend purchase of Telog dataloggers

- No need to build and maintain new server and system on MWRA network
- Allows data editing
- Remote programming capability of connected meters
- Able to meet Verizon 4G deadline
Chemical Tank Relining & Pipe Replacement
Deer Island Treatment Plant
Contract 7373

June 19, 2019
Contract 7373 Work Areas

CHEMICAL STORAGE TANKS

GRAVITY THICKENER COMPLEX
Chemical Tank Relining

- 4 Tanks - Sodium Hypochlorite
  - Disinfection (NPDES)
  - Odor control (Air Permit)

- 2 Tanks - Sodium Bisulfite
  - Dechlorination (NPDES)

- Stores 270,000 Gallons Each
Chemical Tank Relining (Continued)

- Constructed of welded steel plates
- Lined with chlorobutyl rubber
- Interior inspected annually
- Linings becoming brittle
- 5 of 6 tanks will be relined
Other Chemical Storage Tank Work

- Paint tank nozzles & access ports
  - 21 per tank
- Replace sight tubes and valves
Gravity Thickener Overflow Piping

- GT Overflow piping
  - 16-inch to 30-inch diameter
- Original Piping - 25 years
- Internal corrosion observed
- Complete replacement recommended
Contract 7373 – Chemical Tank Relining and Pipe Replacement

- Recommended Contractor: Walsh Construction Co. II, LLC
- Price: $8,504,505
- Contract Term: 850 Calendar Days
Chelsea Creek Headworks Upgrade
Contract 7161 - Change Order 29

June 19, 2019
Chelsea Creek Headworks: Future Equipment Screen
Chelsea Creek Headworks: Existing Dunnage Demolition
Chelsea Creek Headworks: Carbon Adsorber 1
Chelsea Creek Headworks: Exterior Windows and Siding
Section 22 Rehabilitation Alternatives Analysis and Environmental Permitting
Contract 7155

June 19, 2019
Distinct Project Segments

Section 22 – Upland Area
- 8,000 feet of steel pipe with dresser couplings
- 70 years old
- Multiple cross country easements

Section 22 – ACEC Area
- 8,000 feet of steel pipe encased in 6" (min) of reinforced concrete
- 2,000 feet of piles
- 70 years old
- Neponset River Marsh

Section 21
- 5,000 feet of cast iron pipe
- 100 years old
- Urban Streets
Section 22 through DCR’s Neponset River Estuary (ACEC), Boston
Section 22 in ACEC between Route 93 and Granite Avenue, Milton
Project Components

Project Design Assessment
• Review of Leak and Maintenance History
• Review of hydraulic operating conditions
• Hydraulic analysis to determine if smaller diameter possible for slip lining

Field Condition Assessment
• Geotechnical Borings – soil corrosivity/hazardous materials
• Field test pits – pipe and piers
• Acoustic leak detection
• Internal pipe inspection – intelligent pipe pig
• $72/linear foot comparable to recent projects
Condition Assessment Flow Chart

Phase 1

- Soil Corrosivity
- Initial Test Pits
- Pipe Coupons and Testing

Substantial Pipe Corrosion?

Yes

No Additional Condition Assessment

Replace / Slipline

~ $900-1100/linear foot

No

Confirm Remaining Pipe Section is Structurally Sound

Clean and Line

~ $400/linear foot

~ $900-1100/linear foot

Additional Condition Assessment
Alternative Analysis

- Replace, Clean and Line, Slip Line Piping
- Evaluate Neponset River Crossing
  - Microtunnel
  - Horizontal Directional Drilling
- Provide recommended alternative for each pipe section

Environmental Permitting

- Environmental Notification Form
- Environmental Impact Report
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## Schedule and Award Summary

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