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Meeting Notes

Subject	Peirce Island WWTF Upgrade – Monthly Public Construction Meeting
Date	September 18, 2019
Time	11:00 AM
Location	Portsmouth, NH

A public meeting was held at 11:00 AM on September 18, 2019 in Conference Room A at Portsmouth City Hall for the subject project. A record of the discussion follows:

Terry Desmarais, City Engineer, gave an introduction to the meeting and outlined the topics of discussion, including work completed since the last meeting, work to be completed in the coming month, work anticipated in the next six months, construction cost to date, summary of Consent Decree milestones, events and recreation, and public input.

The members of the Project Team in attendance introduced themselves, and included:

- Peter Rice, Director of Public Works
- Terry Desmarais, City Engineer
- Patrick Wiley, Wastewater Operations Manager
- Erik Meserve, AECOM Project Engineer
- Andy Brodeur, Methuen Construction, Project Manager

Terry noted that to obtain additional information regarding the project, there is a project website that can be accessed through www.cityofportsmouth.com/publicworks/wastewater/peirce-island-wastewater-facility/peirce-island-wastewater-facility-upgrade-project. The website is updated weekly with news and recreational information and contains a link to a reporting form that can be used to provide feedback or notify the City of any issues associated with the project. Terry Desmarais, City Engineer, is the point of contact for the City.

Erik discussed work that has been completed this month. He noted areas where work is ongoing at the site, including:

- Yard Piping / Utility Service
- Grit Building
- Solids Building
- Biological Aerated Filter (BAF) Building
- Gravity Thickener No. 2
- Chlorine Contact Tanks / Effluent Distribution Box
- Existing Sludge Processing / New Operations/Lab Building

Erik reviewed photos of construction progress, including:

- Site Overview – Existing conditions of the Peirce Island Wastewater Treatment Facility in November 2016. Prior to construction, the treatment process consisted of the Aerated Grit Chambers, followed by the Primary Clarifiers and Chlorine Contact Tanks.
- Yard Piping and Utility Service - Work to install yard piping and electrical ductbanks between the Grit Building, Primary Clarifiers, Solids Building and BAF Building is in progress.
- BAF Building – Installation of mechanical process piping and equipment within the Pipe Gallery and mechanical process spaces is in progress. Hydrostatic testing of the cells has been completed. Work to install the nozzles within the nozzle decks has been completed; during the treatment process, water will pass through the strainer portion of the nozzle and the filter media will remain within the cell. Bubble testing of the cells is underway, this involves turning on the air diffusers in each cell while the cell is partially filled with water so that the diffuser operation can be observed prior to loading the cell with media. Work to install electrical conduit and electrical equipment throughout the building is in progress; this includes but is not limited to the wiring of the Motor Control Center and various control panels and equipment. Work to install the brick façade of the building and windows is in progress. Work to install the staircases in the stair towers is in progress. HVAC and plumbing rough in work has begun.
- Solids Building – Primary sludge is now being dewatered by the screw presses and the existing Fournier Press that had been dewatering sludge has been taken out of service. Work to install the potassium permanganate chemical system has been completed. The various electrical hoists in the building have been load tested. Work to install and wire remaining electrical features, including but not limited to permanent lighting, throughout the building is in progress. Work to install fire protection and sprinklers throughout the building is in progress. Plumbing, HVAC, and architectural work is continuing.
- Existing Sludge Processing Building/ New Operations/Lab Building – Asbestos abatement work has been completed and clearance has been received from the industrial hygienist. Selective mechanical demolition has begun as well. PCB abatement work has not yet started. The abatement plan has been reviewed and accepted by the EPA. All demolished materials are being placed into dumpsters which are then covered and removed.
- Gravity Thickener No. 2 – Installation of the protective coating in Gravity Thickener No. 2 is complete. The FRP weir has been installed and work to install the mechanism is in progress.
- Primary Clarifier Distribution Box – work to replace the old slide gates and install new slide gates and a new weir gate is complete. During high flows resulting from wet weather events, the weir gate will control the amount of flow that is directed to the BAF treatment process and the portion that is bypassed.
- Flow Meter Vault – The flow meter vault, including installation of the motor operated valve and flow meter have been completed. This meter will measure wastewater flow that bypasses the BAF system during high wet weather events.

Andy discussed work anticipated for the coming month, including:

- Continue minor finish work in the Headworks Building.
- Continue architectural, structural, mechanical process, HVAC, plumbing, and electrical construction in the Grit Building.
- Continue installation and testing of process piping in the pipe gallery of the BAF Building.
- Continue mechanical and electrical work throughout the BAF Building.
- Continue hydrostatic testing of BAF effluent channels.
- Continue installation of stairs in the BAF and Solids Buildings.
- Continue masonry work on the BAF Building.

- Begin delivery and installation of filter media at the BAF Building.
- Continue installation, testing, and startup of equipment and process piping in the Solids Building.
- Continue electrical, HVAC and plumbing work in the Solids Building.
- Complete underground piping installation between the Grit Building, Solids Building, and BAF Building.
- Continue installation of mechanism in Gravity Thickener No. 2.
- Continue temporary equipment relocation and selective demolition in the existing Sludge Processing Building.
- Begin PCB abatement in the existing Sludge Processing Building.

Andy then discussed the work anticipated through August and into March 2020, including:

- Grit Building – Interior: Complete selective architectural, structural and mechanical process modifications. Complete installation and turnover of new chemical systems (ferric chloride and polymer). Complete installation and turnover of mechanical process piping and equipment. Exterior: Complete work on the yard piping associated with the building and installation of exterior features such as doors and windows.
- BAF Building – Complete installation mechanical, electrical, plumbing, and HVAC systems, this includes the Boiler Room, Mechanical Room, and Blower Room. Complete installation of mechanical process piping and equipment. Complete interior painting and protective coatings. Begin startup and testing of equipment, including but not limited to the delivery and loading of the filter media. Complete installation of stairs, ladders, railings and stair towers. Complete masonry work, including the brick façade. Complete installation of yard piping associated with the BAF Building and backfilling around the building.
- Solids Building – Complete installation of stairs, ladders and railings. Complete installation of yard piping and underground utilities in and around the Solids Building. Complete installation of exterior features, including windows and doors.
- Existing Sludge / New Operations/Lab Building – Complete hazardous materials abatement work as well as demolition of the upper level and selective demolition in the lower level. Complete installation of new structural steel. Complete exterior wall framing and sheeting, and weather depending, begin exterior masonry work. Complete installation of CMU walls and chemical containment curbs in the basement. Continue the installation of interior wall framing and sheeting. Begin mechanical processes, electrical, HVAC and plumbing rough-in work.
- Existing Gravity Thickener No. 1 – Complete installation of scum trough.
- Gravity Thickener No. 2 – Complete installation of all interior coatings and modifications and installation of the mechanism.
- Underground Piping and Utility Services – Complete yard piping from the Primary Clarifiers to the BAF Building, Solids Building, and Primary Clarifier Effluent Distribution Box. Complete the electrical and communication ductbanks towards the BAF and Solids Buildings. Complete installation of utility connections to the Operations Building. Begin preparation for paved areas, this include placing the binder course pavement from the Grit Building down to the BAF Building. Begin installation of sidewalks and railings at the Operation Building. Begin landscaping and grading at the Headworks and BAF Buildings.

Erik provided an update on the project construction cost:

- Original Contract: $72.786 million
- Change Order No. 1: $0.367 million

- Change Order No. 2: $0.547 million
- Change Order No. 3: $0.093 million
- Change Order No. 4: $0.163 million
- Change Order No. 5: $0.250 million
- Change Order No. 6: $0.292 million
- Change Oder No. 7: $0.169 million
- Total Contract: $74.667 million

Erik provided a summary of the project milestones set by the Consent Decree:

- Execute Contract for Construction Upgrades - Date: 9/1/2016 - Status: Complete
- Submit Two Additional Milestones for EPA Review and Approval - Date: 12/1/2016 - Status: Complete
- Additional Milestone 1: Transfer of the Existing SCADA system to the New Headworks Building - Date: 11/21/2017 - Status: Complete
- Additional Milestone 2: Startup and Testing of the Secondary Influent Pump Station in the New Solids Building - Date: 5/9/2019 - Status: Complete
- BAF Substantial Completion - Date: 12/1/2019 - Status: On Schedule
- Achieve Compliance with NPDES Permit Limits - Date: 4/1/2020 - Status: On Schedule

Erik noted that the project team is continuing to coordinate construction with community events. Upcoming events this month include the Friends of the South End Fairy House Tour, Alzheimer's Association Annual Seacoast Walk to End Alzheimer's, and Strawbery Banke Events.

A question and answer session then occurred, and is summarized below:

Paige Trace asked the following:

> Q: At what time will the public green space surrounding the WWTF be open to residents?
> A: Terry noted that although the Consent Decree schedule indicates that the WWTF be in compliance with the NPDES permit by April 1st, 2020, there is no connection between the Consent Decree deadlines and the construction contract deadlines for substantial and final completion. Based on the construction contract, construction can continue at the site until September 2020. When construction has been completed the City will begin the process of opening the green spaces back up for public use. The City will work with Methuen Construction (MC) to see if the spaces can be opened sooner but contractually, MC will have access to the staging areas until September 2020.
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> Q: Will the WWTF be run by plant staff at the WWTF or from the trailers after April 1st, 2020 and what buildings will be occupied on this date?
> A: The facilities that are used to treat the wastewater will be functional by 4/1/20, however, there will still be ongoing construction after this date. Work in the Operations/Lab Building has just started and will continue for approximately one year. The Consent Decree deadline to meet the limits of the NPDES permit can still be met without work in the Operations/Lab Building being completed. To operate the facility, plant staff can access SCADA at either the computer stations at the trailers or at any of the computer stations in the various buildings. The WWTF staff trailers will remain after the 4/1/20 date for administrative and lab purposes.

Q: Will the WWTF be able to bypass wastewater around the BAF system even if there is no wet weather event?
A: Terry responded that no, the only time wastewater will be bypassed around the BAF system is during wet weather events.

Q: How long will the PCB abatement process at the Existing Sludge Processing / New Lab/Operations Building take?
A: Andy responded that abatement will take approximately one month and will follow EPA guidelines and direction.

Q: When discussing the temporary bypass piping that was removed this month, were those bypass lines bypassing treatment processes?
A: Erik responded no, the bypass lines were installed to bypass flow around distribution boxes that performed no treatment so that work could be completed in them. Flow was still being directed to all the in-service treatment processes. Once the work was completed, the temporary bypass piping was removed.

Q: Have there been any Change Orders executed in the past month?
A: No, there have been no new Change Orders.

Q: Has the BAF system media been delivered to the site? How will it be loaded into the cells?
A: The media is currently being stored in trailers at an off-site location. When the media is ready to be loaded into the cells, a blower system will be used to take the media out of the trailers and load it into the cells through ports in each cell.

The next public construction meeting will be on October 16, 2019 at 11:00 AM in Conference Room A at Portsmouth City Hall.

These notes present a summary of the items discussed at the meeting and are not a transcript of the meeting.