



TECHNICAL COMMITTEE MEETING MINUTES

Wednesday, November 15, 2023

4:30PM

Via VIDEO/TELECONFERENCE

Attendees:

Ed Kelly	Acting Chairman, Technical Committee
Merritt Nesin	Committee Member
Steve Bagwin	Committee Member
Bill Brink, P.E.	Executive Director, WPCA
Ann Brown, P.E.	Supervising Engineer, WPCA
Robert Pudelka	Plant Supervisor, WPCA
Steve Pietrzyk	Collection System Supervisor, WPCA
Lori Carriero	Tighe and Bond
Damien Foster	Tighe and Bond

1. **Call to Order and Roll Call**– E. Kelly called the meeting to order at 4:30PM and announced the attendees as listed above.
2. **Approval of October 11, 2023 Meeting Minutes**- E. Kelly made a motion to approve the minutes of the October 11, 2023 Technical Committee Meeting. The motion was seconded by M. Nesin. S. Bagwin abstained. Motion carried 2-0-1.
3. **Public Comments** – None
4. **Presentation and Discussion of Basis of Design Report from Tighe & Bond for Alvord Lane, Commerce Road, Saddle Rock Road Pump Station Upgrades** – Tighe & Bond presented an overview of each pump station explaining existing conditions and proposed improvements. Saddle Rock PS will be converted from a traditional canned station with separate wet well and pump chambers to a submersible station with new submersible pumps using the existing wet well. A standby generator is proposed. Probable construction cost is \$1.2M. Commerce Road is a canned station nearly identical to Saddle Rock Road. Commerce Road PS will be converted to a submersible station using the existing wet well. There are numerous conflicts in Commerce Road such as large twin storm sewer box culverts which make the new design difficult. Tighe & Bond is trying to maintain all structures within the existing easement. The Probable construction costs are \$1.2M. Alvord Lane is a much larger station. It is a wet pit/dry pit pump station. It has an existing building and a building that houses the generator. The pumps are in the dry portion and pull sewage from the wet well. The proposed plan is to turn the station into a submersible station with 3 new submersible pumps in the existing wet well. The discharge piping will be at a higher elevation making it easier to maintain. Saddle Rock Rd is the top priority with design beginning as soon as possible and construction in the next fiscal year. The design of Commerce Road and Alvord Lane will be done together as one contract. The force main for Saddle Rock Road will also be reevaluated for lining or replacement as a future project.
5. **Review updated Capital Improvement Plan through FY 28-29** - W. Brink gave an update of the Capital Improvement plan and reviewed each major project as follows:

The Sludge Degritting Project has not changed from the past Capital Improvement Plan. It is under construction and funding will be from FY23 to FY25.

The RAS/WAS/Plant Water pump project is pushed out a year. It's now in the final design with construction starting in FY 24/25.

New focus on the three pump stations to be upgraded. Saddle Rock Road PS is in the worse shape so the design should be done this year and construction in the next fiscal year. Design and construction of Commerce Road and Alvord Lane will be one project due to their proximity. The design will be in FY24/25 and construction in the following fiscal year.

Perna Lane will be ready to go to bid this December with construction next spring into FY24/25.

The CMOM project will continue with funding in FY24/25 from WPCA cash reserve and a Clean Water Fund grant. Cost is for sewer system evaluation surveys (SSES) of sewer system subareas for two (2) years of sewer rehabilitation.

A new project is Saddle Rock PS Force main for FY 25/26.

A new project is the purchase of a new Jet/Vac truck estimated at \$650,000 for FY24/25.

6. **Review Capital Projects Request** – A. Brown reviewed each project listed and explained the need for the request. These projects were presented to the Planning Board on Tuesday, 12/14 as part of the City's Capital Budget process.
 - C71196 CMOM-Sewer Capacity Management, Operation & Maintenance (additional \$600,000)
 - CP9270 Sanitary Pumping Station Upgrades (additional \$2,100,000)
 - C71282 Vehicle Replacement and Repair (additional \$700,000)
7. **Determine Selection Committee to Review Qualifications Received in Response to RFQ to Operate and Maintain the Stamford WPCF Sludge Drying Facility and Transportation and Beneficial Use or Disposal of Biosolids** – A. Brown indicated that WPCA received 2 qualification packages for the RFQ that was advertised. She asked who wanted to be on the selection committee for this project. Ed Kelly and Steve Bagwin volunteered. The qualification packages will be sent out to the selection committee.
8. **Discussion on Collection System** – S. Pietrzyk presented the Monthly Pump Station and Collection Activities, which is attached and made part of these minutes. S. Pietrzyk explained that his crew performed over 5 miles of sewer cleaning this month. That totals 23-1/2 miles for the year to date. The goal is 10% of the system or 25 miles per year.
9. **Discussion on Plant Operations** – R. Pudelka reviewed the Monthly Operating Report and Equipment Update with the Committee, which is attached and made part of these minutes. R. Pudelka made the committee aware that the flow was higher, about 2.7 million gallons, over the normal average for October. The BOD and suspended solids were also higher this month. There were no exceedances.
10. **Update on Engineering Studies and Designs** – A. Brown provided the Committee with a Capital Projects Update including engineering studies and designs, which is attached and made part of these minutes. A. Brown provided an update on the Perna Lane project indicating that approval was received from DOT. The Committee was made aware that the City Traffic Department is planning a project for new sidewalks on High Ridge Road in the Perna Lane project area. DOT is requiring both projects to be coordinated. WPCA will include the sidewalk project as a part of the Perna Lane bid. The sidewalk project will have separate plans, specs and bid sheets. The sidewalks will be installed after the High Ridge Road sewer work is complete.
11. **Update on Construction Projects** – A. Brown provided the Committee with a Capital Projects Update including construction projects, which is attached and made part of these minutes.
12. **Old Business** – E. Kelly made the Committee aware that it was reported in the news that Darien doubled their sewer budget to address infiltration and flooding during storms. It seems that Darien is focused on eliminating infiltration into the system which eventually comes to Stamford.
13. **New Business** –None.

There being no further issues to discuss, E. Kelly made a motion to adjourn the meeting, seconded by S. Bagwin; motion carried 3-0-0. The meeting adjourned at 5:35pm.

Monthly Activities (10/10/23 to 11/13/23)

Collection and Pump Station Division

Overview of Pump Station and Gravity Collection Systems:

1. Pump station inspections for 22-sanitary sewer and 4-stormwater stations (240)
2. Pump station call-out activities (9)
3. Manhole Inspections (401)
4. Gravity line service calls investigated (8)
5. Private lateral investigations and repairs in City ROW (0)
6. Sewer line repair (0)
7. Manhole repair(s) (2)
8. CCTV sanitary sewer lines (191 LF)
9. Sewer line cleaning (5.15 miles)

Pump Stations:

1. Performed monthly landscape maintenance activities at pump stations.
2. Exercised portable generators.
3. Performed electrical preventative maintenance inspections at various pump stations.
4. WPCA staff vacuumed pump station wet wells and removed build-up of grease at Bennet and Bonner pump stations.
5. Crew removed the old anti-locking bar on flapper gate #2 at Dyke Lane. Additional preparation work will continue on this flapper gate during low tide events until the new anti-lacking bar can be installed.

Collection System:

1. Crew jetted lines on Edice RD.; Iroquois RD., Algonquin Ave., Rippowam RD., Halloween BLVD., Brightside DR., Shippan Ave. (South of Ocean DR. West), Willowbrook Ave. (South of Soundview Ave.), Horton ST. (between Martin and Robin ST.), Summer ST. Ext., West Park PL., Main ST., Fenway ST., Bedford ST. (between 1172 and 1400), Edice RD., Haig Ave. (between 1177 and 131), Brook Run LN., Lakeview DR., Coopers Pond RD., Stone Wall DR., Woodridge DR. South, Bridle Path RD., Three Lakes DR., Elaine DR., Florence CT., Warwick LN., Amherst PL., Amherst CT., Buckingham CT., Buckingham DR., Meadow Ave. West, Meadow Ave. East., Meadow Ave. North, Bradley PL., Snow Crystal LN., and Corn Cake LN.
2. Crew CCTV line segments: Ocean Drive West (MH-6716-MH-6727).

Miscellaneous:

1. Continue to work with CDMSmith on the GIS upgrade project.
2. Provided sanitary sewer plan sheet information to various civil engineers and/or contractors working on City development projects.

Overview of Regulatory Compliance:

1. Initial building permit reviews (11)
2. Re-review of building permit applications (47)
3. Sanitary sewer tie-in plan reviews (5)
4. Zoning permit application reviews (0)
5. Initial Food Service Establishment (FSEs) Inspections (6)
6. FSE Follow-up Inspections (13)
7. Notice of violations (NOVs) Issued (4)
8. CTDEEP General Permit plan reviews or applications (4)

Work performed by outside contractors:

1. Vitti Construction replaced two (2) manhole frames and covers at 42 8th ST. and the intersection of Knickerbocker Ave. and Shorthill RD.



October 2023 TECHNICAL COMMITTEE REPORT

Monthly Operating Report data:	September Results			Permit Limit
	This month (Sept)	Last month (Aug)	Historical Sept. Monthly AVG	
Q (FLOW) DAILY AVG MGD	16.4	14.3	15.1	24 MGD DESIGN AVG
Q MAXIMUM DAILY AVG MGD	38.3	18.5	22.3	58 MGD MAX AVG
BOD INFLUENT AVG MG/L	222	296	243	
BOD INFLUENT AVG LBS/D	30,364	35,302		
BOD EFFLUENT AVG MG/L	2	2	3	
BOD EFFLUENT MAX MG/L	5	4		20 mg/L
BOD REMOVAL %	98.8	99.1	99	85%
TSS INFLUENT AVG MG/L	256	373	357	
TSS INFLUENT AVG LBS/D	35,015	44,485		
TSS EFFLUENT AVG MG/L	5	4	8	
TSS EFFLUENT MAX MG/L	13	6		20 MG/l
TSS REMOVAL %	97.9	98.7	97.3	85%
TOTAL N INFLUENT AVG MG/L	34.9	39.4	36.1	
TOTAL N INFLUENT AVG LBS/D	4773	4699	4465	
TOTAL N EFFLUENT AVG MG/L	1.97	2.00	2.65	
TOTAL N EFFLUENT AVG LBS/D	259	237	354	926 LBS/D
N REMOVAL %	94.4	94.9	92.2	
TOTAL P INFLUENT AVG MG/L	4.28	5.08	5.18	
TOTAL P EFFLUENT AVG MG/L	1.29	1.85	0.68	
P REMOVAL %	69.9	63.6	85.5	
UV EXCEEDANCES <30 mJ/cm2	0	0		Entero daily grab

Plant Equipment Update

BFP #3

TWAS Pump

BFP 1 -3 Feed Pumps

Primary Clarifier #1

New VFD installed

VFD ordered, need to install

Ordering new VFDs

Repair to rake assembly tension rods and welding .

Annual Electricity Use for the Plant
as prepared for Nitrogen O&M Report

Metered
Account

#51306672080

	kWh billed	% Change kWh	\$/kWh AVG	% Change \$/kWh	Electric Total \$	% Change Cost	Plant Flow AVG Daily MGD	kWh/MG	Electrical Cost \$/MG
FY16	14534100		\$ 0.100		\$ 1,406,900		15.0	2655	\$ 256.97
FY17	14139300	-3%	\$ 0.116	14%	\$ 1,637,796	14%	15.4	2515	\$ 291.37
FY18	12835200	-10%	\$ 0.124	6%	\$ 1,670,227	2%	15.2	2313	\$ 301.05
FY19	14597100	12%	\$ 0.117	-6%	\$ 1,701,109	2%	18.3	2185	\$ 254.68
FY20	12601134	-16%	\$ 0.120	3%	\$ 1,517,038	-12%	15.8	2185	\$ 263.05
FY21	12804876	2%	\$ 0.118	-2%	\$ 1,504,802	-1%	14.9	2354	\$ 276.69
FY22	11522742	-11%	\$ 0.145	19%	\$ 1,667,923	10%	16.3	1937	\$ 280.35
FY23	10722180	-7.47%	\$ 0.149	3%	\$ 1,593,257	-5%	14.5	2026	\$ 301.04
Change 2016 vs 2023	-3811920	-36%	0.049	33%	\$ 186,357	12%		-629	\$ 44.07



**UPDATE OF CAPITAL PROJECTS
TECHNICAL COMMITTEE MEETING
November 15, 2023**

ENGINEERING STUDIES AND DESIGNS:

1. Infiltration Inflow Study

The contractor is working on lining pipes in Washington Blvd and in the area off Cove Road.

2. Sludge Management Plan

We met with Hazen, and they will begin working on the fermentation study.

3. Plant Water, Return Activated Sludge (RAS) and Waste Activated Sludge (WAS)

Gannett Fleming is working on the preliminary and final design of this project. WE have had meetings where we looked at pump and piping layouts.

4. RFQ for Evaluation of the Alvord Lane, Commerce Rd, and Saddle Rock Pump Stations

Basis of Design Report for the pump station upgrades was completed. Presentation and discussion of the recommended upgrades is on the 11/15 meeting agenda.

5. RFP for the Design and Supply of a Standby Generator at Clay Hill Pump Station and West Avenue Pump Station

Technical specifications are being finalized and will be reviewed by the collection system electrician. Bid documents should be completed by the end of this month.

6. Perna Lane, Phase I Collection Sewers

Tighe & Bond received approval from CTDOT. They are finalizing pump station layouts and the bid documents. We expect to advertise for bids by the end of the year.

7. Structural Evaluation of the Columns in the Sludge Dewatering Building

Preparing bid documents for the repair.

8. Bid for Design Build Standby Generator for the Greenwich Ave. Pump Station

Preparing the bid documents to purchase and install a generator for Greenwich Ave Pump Station. The controls will be provided by the WPCA. Bid documents should be completed by the end of this month.

9. RFQ for the Operation and Maintenance of Stamford WPCF Sludge Drying Facility and Transportation and Beneficial Use or Disposal of Biosolids

Qualifications were received from two firms. Choosing a selection committee to review the qualifications is on the agenda for the 11/15 meeting. The next step is to request proposals. Our contract with Synagro expires 3/3/24.



CONSTRUCTION PROJECTS:

1. **Electrical Preventive Maintenance / Arc Flash**

In discussion with Siemens. Asked Siemens for a cost for Siemens to do the arc flash study. Waiting for the proposal.

2. **Modular Office Trailers for Collection System Staff**

The trailers are in place. The power and cable for phone and internet is installed. The collection system staff has moved into the trailers. We are getting a water line connected to the trailers.

3. **Painting of Final Clarifiers # 1, 2 and 4**

Bonds have been submitted and are approved. Work will be scheduled for the spring when the weather is warmer.

4. **Repair of Storm Water Pumps #1 and 3 at Cummings Pump Station**

Awarded to New England Pump and Valve. Bonds and insurance have been approved. They have been out to the site to assess removal of the pumps. They will begin repairing one pump at a time.

5. **Sludge Degritting System Upgrade**

CH Nickerson is working on the following:

- Install mud mat in jacking pit for Clarifier #1.
- Prepare push wall and pipe opening.
- Investigating the condition of the 18" overflow pipe.

6. **Repair/Replacement of approximately 175 LF of 12" Sewer on Edice Rd**

Bids were received from two firms. The lowest bidder was A. Vitti who we have worked with before and currently are under contract with for emergency sewer repairs. We are waiting for the approved bonds, insurance, and a contract to be signed so we can schedule a kickoff meeting.

PAYMENT/CHANGE ORDER LOG AS OF 10/10/2023

Sludge Degritting System Upgrade (Contractor – CH Nickerson)

Original Value of the Contract = \$ 8,908,350.00

Total Approved CO Amount = \$ 0

Contract Sum to Date = \$ 8,908,350.00