



## TECHNICAL COMMITTEE MEETING MINUTES

Tuesday 12/14/2021

4:30PM

Via VIDEO/TELECONFERENCE

### Attendees:

Merritt Nesin, P.E.	Chairman, Technical Committee
Edward Kelly	Committee Member
Steve Bagwin	Committee Member
William Brink, PE	Executive Director, WPCA
Ann Brown, PE	Supervising Engineer, WPCA
Robert Pudelka	Plant Supervisor, WPCA

### 1. Call to Order and Roll Call.

M. Nesin called the meeting to order at 4:32pm and announced the attendees as listed above.

### 2. Approval of November 10, 2021 Meeting Minutes.

E. Kelly made a motion to approve the minutes of the November 10, 2021 Technical Committee Meeting; seconded by S. Bagwin. Motion carried 3-0-0.

### 3. Public Comments – None.

### 4. Discussion and Vote on Amendment No. 5 to the Agreement with CDM Smith for Task 5 – Rehabilitation Design Services – Phase II Rehabilitation Design for an amount of \$55,000.

W. Brink stated that CDM Smith prepared a Sewer System Evaluation Survey (SSES) and Infiltration/ Inflow (I/I) Report for WPCA which recommended field investigation programs that identify sources of extraneous flow into the sanitary sewer system and corrective actions for the removal of extraneous flow. The field investigations have been completed and WPCA has been addressing the areas having the most infiltration in a Phased approach. This amendment is for CDM Smith to prepare the design and bid documents for the next Phase of work. The Committee agreed that this work should be done and will recommend approval of the amendment to the full Board at the December 20<sup>th</sup> meeting.

### 5. Discussion and Vote on Amendment No. 2 to the Agreement with Gannett Fleming for Additional Design Services for the Sludge Degritting System Improvements Project for an amount of \$25,000.

W. Brink explained that the design and bid documents for the degripping system were complete. The WPCA asked that replacement of the equipment in Primary Clarifier No.1 be added to this contract which requires additional engineering. He explained that the skimmer arm of the clarifier had collapsed and the equipment needs to be replaced due to age and corrosion. WPCA looked at this as a stand-alone project and found that the cost of the equipment was high. If it is included in the bid, it may be more competitively priced. He also explained that if this was a stand-alone project, there would be 2 different contractors working in the same area at the same time which he sees as a conflict. The Committee agreed with the approach for this work and will recommend approval of the amendment to the full Board at the December 20<sup>th</sup> meeting.

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### 6. Discussion on Plant Operations.

R. Pudelka stated that the plant saw average numbers this month. He indicated that there was an emergency shut down of one train of the aeration system because a gate fell into the tank damaging some piping and diffusers. The plant staff repaired the diffusers and piping and replaced the gate and stops. He indicated that there were 4 UV exceedances in the last month but, none within the last 30 days. The exceedances were caused by an error in the automatic UV channel rotation which has been corrected. M. Negin asked when the septage receiving will be opened to the septic haulers. R. Pudelka indicated that it should be ready next week. M. Negin asked if anything is being done about the pump shaft vibrations at the raw sewage pumps. R. Pudelka indicated that there will be 2 days of vibration analysis on all 5 pumps. The Monthly Operating Report and Equipment Update will be sent following this meeting.

### 7. Update on Engineering Studies and Designs.

A. Brown provided the committee with an update on engineering studies and designs which is attached and made part of these minutes.

- a. Infiltration & Inflow Removal Project
- b. Sludge Degritting System Upgrade
- c. Sludge Management Plan
- d. Engineering Design Services for Plant Water System and the RAS/WAS Pumping Systems
- e. Storm Water Pump Station Study and FEMA BRIC Grant Application.

### 8. Update on Construction Projects.

A. Brown provided the board with an update on engineering studies and designs which is attached and made part of these minutes.

- a. Standby Generator for the Greenwich Ave. Pump Station
- b. Preliminary, Secondary and Disinfection Treatment Improvements
- c. Clay Hill Pump Station Generator
- d. Electrical Preventive Maintenance and Arc Flash Evaluation

### 9. Old Business.

E. Kelly asked if a report identifying the cause of the dryer explosion had been issued. W. Brink responded that he has not seen a report and that information has not been released due to ongoing litigation.

### 10. 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 was adjourned at 5:19PM.



**UPDATE OF CAPITAL PROJECTS  
TECHNICAL COMMITTEE MEETING  
December 14, 2021**

A. Brown presented the following project updates:

**1. UPDATE ON ENGINEERING STUDIES AND DESIGNS**

**a. Infiltration Inflow Study**

CDM Smith will begin the next phase of the Infiltration and Inflow Removal Project which includes the design of the sewer rehabilitation in subareas F1-1 and B1-3. These subareas were ranked 4th and 5th for subareas having the most infiltration. The work needed in these areas includes sewer and manhole cleaning, manhole rehabilitation, sewer spot replacement and CIPP lining. The sewer rehabilitation is expected to be performed in FY 22-23.

**b. Sludge Degritting System Upgrade**

The bid documents for replacing the primary sludge pumps and sludge degritting equipment, as well as the sludge withdrawal piping from the primary settling tanks, are ready. We asked Gannett Fleming to include replacing the broken skimmer arm and drive unit in the primary clarifier to the bid documents. This project is scheduled for advertising January 13<sup>th</sup> with bids received February 17<sup>th</sup>.

**c. Sludge Management Plan**

A meeting was held with Hazen to discuss the mass and energy balances for each of the alternatives that have been selected so far and review a preliminary energy dashboard for the WPCA. Hazen is now working on the capital costs for all the alternatives and continuing to work on the energy model. They plan on scheduling a workshop during the 2nd or 3rd week in January to present the results.

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

No change to this item. We are reviewing the scope of services submitted by Gannett Fleming. Once the scope is agreed to, Gannett Fleming will submit a fee schedule.

**e. Storm Water Pump Station Study for FEMA BRIC Grant**

Stantec completed the needs assessment, cost estimate, project schedule and benefit cost analysis required for the FEMA BRIC grant application. The grant was submitted on November 29th. The recommended improvements include replacement of the pump stations' aged electrical switch gear and pump motors. We would also like to include the addition of an emergency standby generator.

**2. UPDATE ON CONSTRUCTION PROJECTS**

**a. Design-Build Standby Generator for the Greenwich Ave. Pump Station**

This work should begin soon. We are meeting with Northeast Generator next week to review the construction schedule.

**b. Preliminary, Secondary and Disinfection Treatment Improvements**

Most of the work for this project is complete. The equipment has been installed and is operating. There are still issues with the controls for equipment. Right now, aeration/ blower control issues are continuing. We are working with Wright-Pierce, the design engineers, to address these issues. Cleanup and site restoration is being done. Most disturbed areas of the site have been topsoiled and hydroseeded. Areas in the RSPS building still require cleanup, painting and new flooring.



**c. Clay Hill Pump Station Generator**

No change to this item. The generator pad has been installed. We have requested a date from purchasing for bidding the sizing, purchase and installation of a generator for this site.

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

Siemens has completed electrical preventive maintenance portion of the project. They are finalizing all the information compiled and will be providing it to Tighe & Bond for the Arc Flash Study to be prepared.

**Change Order Log as of 12-14-21**

Copy of Change Order log for construction projects is attached. We just received a change order for CH Nickerson's work on the Force Main repairs which is not yet included in the values below.

**Preliminary, Secondary and Disinfection Treatment Improvements (Contractor – CH Nickerson)**

Original Value of Contract =	\$ 26,751,500.00
Total Approved CO Amount =	\$ 1,590,129.60
Contract Sum to Date =	\$ 28,341,629.60
Percent of total project =	5.9%

**Stamford WPCF Preliminary, Secondary and Disinfection Treatment Improvements  
Change Order Summary**

CHN PCCOR No.	CHN Date	Description	Contractor Amount	Status	Included In CO#	Total Approved Amount	Approved to Preliminary	Approved to Secondary	Approved to UV	Approved Date	No.	RFI		RFP		WCD Date Issued
												Date Issued	No.	Date Issued	No.	
01 (rev)	6/21/2019	Programming Services Provider / Integration Services - Revised	\$ 194,922.00	Approved	2	\$ 194,922.00	\$ 48,240.00	\$ 110,000.00	\$ 36,582.00	7/9/2019						
02 (rev)	1/20/2020	Additional Plank Support Framing & Planking at UV Basin 1 Outfall	\$ 35,257.23	Approved	3	\$ 35,257.23			\$ 35,257.23	2/27/2020				H-01	11/19/2019	
03 (rev)	10/25/2020	Changes to Moment Connection at UV Canopy	\$ 4,076.36	Approved	3	\$ 4,076.36			\$ 4,076.36	12/12/2019				H-019		
05	11/19/2019	UV Plasters	\$ 2,689.46	Approved	3	\$ 2,689.46			\$ 2,689.46	11/19/2019						
09	1/29/2020	Remove and Reinstall clean piping and electrical conduits/boxes in Blower Room to install new fire rated wall. Plans did not call for this work.	\$ 28,473.69	Approved	3	\$ 28,473.69	\$ 28,473.69			4/7/2020				W-06	11/20/2019	
11	2/21/2020	Add spool pipe to Segrage Area	\$ 1,214.84	Approved	3	\$ 1,214.84	\$ 1,214.84			2/27/2020				W-03	11/20/2019	
13	3/9/2020	Additional Rebar at UV Basin 1	\$ 21,447.91	Approved	3	\$ 21,447.91			\$ 21,447.91	3/15/2020				H-01	12/18/2019	
17	4/14/2020	UV Power Panel Relocation	\$ 23,740.56	Approved	3	\$ 23,740.56			\$ 23,740.56					H-095	4/8/2020	
14	3/18/2020	Relocate Generator and Modify Bridge Crane per Building Department Request	\$ 83,080.40	Approved	4	\$ 83,080.40	\$ 83,080.40			8/19/2020						
18	6/19/2020	Replace Missing Hardware @ AT Bridges	\$ 5,082.33	Approved	4	\$ 5,082.33	\$ 5,082.33			6/19/2020						
19	7/14/2020	Provide Additional Thin Client Licensing & Integrate Existing Monitors per City Request	\$ 23,618.32	Approved	4	\$ 23,618.32	\$ 23,618.32									
16	4/1/2020	Credit for Redundant Breaker @ ATS	\$ (17,296.74)	Approved	5	\$ (17,296.74)	\$ (17,296.74)			8/23/2020						
21	8/7/2020	Add External Breaker for RSP-2	\$ 9,061.48	Approved	5	\$ 9,061.48	\$ 9,061.48			9/23/2020						
24	8/26/2020	Additional Tags for the GE Historian	\$ 8,590.02	Approved	5	\$ 8,590.02	\$ 2,863.34	\$ 2,863.34	\$ 2,863.34	8/26/2020				H-164	8/19/2020	
25	8/14/2020	Replace UV Channel #3 Inlet Gate	\$ 37,004.86	Approved	5	\$ 37,004.86			\$ 37,004.86	8/15/2020				H-02	8/2/2020	
27	8/15/2020	Install Missing Wring to MX 60-6 & 60-12	\$ 16,235.90	Approved	5	\$ 16,235.90	\$ 16,235.90			9/23/2020						
28	8/15/2020	New Sampler Location at UV	\$ 5,232.89	Approved	5	\$ 5,232.89			\$ 5,232.89	8/17/2020				H-154	8/9/2020	
29	8/22/2020	Replace Missing WML support rods in Aeration tank 1-4E/AW	\$ 4,869.75	Approved	5	\$ 4,869.75	\$ 4,869.75			8/23/2020						
31	8/22/2020	Test Soils for City Storage tent	\$ 1,525.86	Approved	5	\$ 1,525.86	\$ 1,525.86			8/23/2020						
20	8/21/2020	Cut Sumps in Aeration Tank Floors	\$ 37,083.78	Approved	6	\$ 37,083.78	\$ 37,083.78			10/5/2020						



Stamford WPCF Preliminary, Secondary and Disinfection Treatment Improvements  
Change Order Summary

62	5/10/2021	(RFI-157A) Grading Grounding at UV Basins	\$ 5,492.86	Approved	0	\$	5,492.86	\$	5,492.86	5/11/2021	157A			
64 (rev)	5/12/2021	(RFI-129) Accessibility of UV Transmittance Sensor	\$ 8,493.96	Approved	0	\$	8,493.96	\$	8,493.96	5/13/2021	126			
65	5/12/2021	Sawcut Overhead in Stairs in NSPS	\$ 900.43	Approved	0	\$	900.43	\$	900.43					
66	5/12/2021	Rework Removable Railings at AT Motors	\$ -	Approved	0	\$	-	\$	-					
67	5/12/2021	Add Supports @ Influent Channel for Aluminum Paving	\$ 5,315.63	Approved	0	\$	5,315.63	\$	5,315.63					
68	5/12/2021	Notch Framing around new influent pump shafts @ 5 Locations	\$ 1,009.50	Approved	0	\$	1,009.50	\$	1,009.50					
70	5/17/2021	(WCD-H-03) Encase Electrical and Hydraulic Conduit in Basin #2 (T&M)	\$ 23,166.63	Approved	0	\$	23,166.63	\$	23,166.63			H-03		
71	5/21/2021	Provide 7 MGD Clean Recirculated Flow at UV Basin #2	\$ 4,372.78	Approved	0	\$	4,372.78	\$	4,372.78	5/26/2021				
72 (rev)	5/21/2021	(RFI-222-H) Basin 2, Channel 3 Existing Wall Inconsistencies	\$ 8,436.33	Approved	0	\$	8,436.33	\$	8,436.33	6/6/2021	222			
74	5/26/2021	(RFI-167) Repair to Existing Concrete Beam at UV Effluent PS	\$ 42,048.45	Approved	0	\$	42,048.45	\$	42,048.45	6/6/2021	167			
63 (rev)	7/15/2021	Investigate/Repair Failed 42" Force Main	\$ 209,722.28	Approved	10	\$	209,722.28	\$	209,722.28					
69 (rev)	7/15/2021	Install Temporary 24" HDPE Force Mains & Manifold	\$ 367,747.46	Approved	10	\$	367,747.46	\$	367,747.46					
59	4/16/2021	Add Current Transformers to Blowers to Accept signal and monitoring of Amperage	\$ 24,700.84	Approved	11	\$	24,700.84	\$	24,700.84	6/10/2021	237			
75	6/9/2021	Replace Mixer Motor Connector to Match New Mixers	\$ 7,330.29	Approved	11	\$	7,330.29	\$	7,330.29	6/10/2021				
77	7/12/2021	Re-align Pumps 4 and 5 per GA Plans Recommendation	\$ 2,924.56	Approved	11	\$	2,924.56	\$	2,924.56					
78	7/15/2021	Bypass Force Main Rentals/ops Costs 4/21/21 through 6/18/21	\$ 136,711.13	Approved	11	\$	136,711.13	\$	136,711.13	6/11/2021				
80	7/29/2021	Paint Existing Bridge Crane runway beams and crane rail at UV Basin #2	\$ 8,221.33	Approved	11	\$	8,221.33	\$	8,221.33	7/29/2020	6	7/22/2021		
81	8/13/2021	Radar Level Sensor	\$ 2,407.75	Approved	12	\$	2,407.75	\$	2,407.75	8/18/2021			H-04	6/10/2021
83	8/13/2021	Debris Blower Room Floor Painting	\$ (12,915.20)	Approved	12	\$	(12,915.20)	\$	(12,915.20)	8/25/2021				
84	8/18/2021	WCD-05-HUDV P.D. Programming Modifications - Add Channel out of Service Status	\$ 7,691.61	Approved	12	\$	7,691.61	\$	7,691.61	8/24/2021			H-05	7/14/2021
85	8/24/2021	(RFI-256) Protection around Fixed Ultrasonic Sensors at UV	\$ 3,050.06	Approved	12	\$	3,050.06	\$	3,050.06	8/23/2021	256	7/8/2021		
89	8/27/2021	Add WFT to Aeration Tank Instruments	\$ 15,421.01	Approved	12	\$	15,421.01	\$	15,421.01	8/20/2021				
90	8/27/2021	Replace Existing Plastic JBs on Aeration	\$ 10,997.74	Approved	12	\$	10,997.74	\$	10,997.74					

