



## TECHNICAL COMMITTEE MEETING MINUTES

Wednesday, March 16, 2022

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, P.E.	Supervising Engineer, WPCA
Robert Pudelka	Plant Supervisor, WPCA

### 1. Call to Order and Roll Call

M. Nesin called the meeting to order at 4:30 pm and announced the attendees as listed above

### 2. Approval of February 23, 2022 Meeting Minutes

E. Kelly made a motion to approve the minutes of the February 23, 2022 Technical Committee Meeting; seconded by S. Bagwin. Motion carried 3-0-0.

### 3. Public Comments – None.

### 4. Update on the Board of Reps Operations Committee Invite To Discuss the Status of the Perna Lane Sanitary Sewer Project

A. Brown informed the committee that WPCA was asked to present the Perna Lane project to the Board of Reps, Operations Committee at a future meeting. She indicated that at the last Operations Committee meeting, when she and B. Brink appeared for the storm resilience, there were a lot of questions from the committee members regarding the status of Perna Lane. At the next Operations Committee meeting, they will present a timeline of the project and the current status. M. Nesin voiced his opinion over the high cost of the project. The WPCA has been looking at this project for years. It is very expensive and it would not be fair to have the current SWPCA customers fund this project. M. Nesin stated that there are ways to mitigate issues with failing septic systems. S. Bagwin asked if there are any homes north of the Merritt Parkway connected to the WPCA system. B. Brink gave a brief history of the two properties north of the Merritt Parkway, Aquarion Water plant and Northeast School, which discharge to the system. He also went through the history of bidding the Perna Lane project.

### 5. Discussion on Sludge Management Plan

B. Brink stated that the last meeting did not produce new results. Hazen will adjust the costs and scoring based on personnel requirements provide by B. Brink and see if the options rank differently. M. Nesin stated his preference for an incinerator since land application and sludge disposal at landfill is uncertain. E. Kelly asked if the incinerator will destroy PFAS. B. Brink indicated it does not get to temperatures hot enough and will not. This will be looked at in more detail as well as visiting existing installations.

## **6. Update on Raw Sewage Pumps/Shafts Vibration Testing**

A. Brown indicated that there was another vibration test performed on all 5 raw sewage pumps in February. For each pump, the motor vibration is low and within tolerances, the pump vibration is acceptable but the shaft vibration exceeds the alarm setting. They found the shaft vibration changes/improves by putting leverage on the shaft cover. Wright-Pierce recommends installing additional stiffener supports to the vertical columns which support the pumps shafts. The stiffeners would be between the catwalks and the wall. M. Negin stated his opinion of what is causing the vibration. M. Negin thinks that on the 3 section shaft, both bearings should secure the middle shaft. B. Brink indicated that the stiffener supports will be installed first to see if that is an improvement. This work is considered a field condition that will require a change order.

## **7. Discussion on Plant Operations**

R. Pudelka provided a summary of plant operations for March 2022. He reviewed the Monthly Operating Report and Equipment Update with the Committee which is attached and made part of these minutes.

## **8. 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 Management Plan
- c. Engineering Design Services for Plant Water System and the RAS/WAS Pumping Systems
- d. RFQ for Evaluation of the Alvord Lane, Commerce Drive and Saddle Rock Pump Stations
- e. RFQ for the Design and Supply of a Standby Generator at Clay Hill Pump Station
- f. Bid for Yearly Landscape Maintenance of the Stamford Hurricane Barrier

## **9. Update on Construction Projects**

A. Brown provided the board with an update on construction projects 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. Electrical Preventive Maintenance and Arc Flash Evaluation
- d. Sludge Degritting System Upgrade

## **10. Old Business**

M. Negin asked if Synagro has applied to the state for a permit increase. A. Brown indicated she had a contacted Synagro but has not heard back.

## **11. New Business**

E. Kelly advised the committee that there are plans for the City to build an animal shelter on City property adjacent to the WPCF. He has seen the plans and although they seem sensible, they may limit the WPCF from future expansion. He would like to add this item to the agenda for discussion with the full board Monday night.



## MARCH 2022 TECHNICAL COMMITTEE REPORT

Monthly Operating Report data:	February Results			Permit Limit
	This month (Feb)	Last month (Jan)	10 Year month's Monthly AVG	
Q (FLOW) DAILY AVG MGD	16	14.5	16.9	24 MGD DESIGN AVG
Q PEAK MGD	29.6	26	33.9	58 MGD MAX AVG
BOD INFLUENT AVG MG/L	248	309	202	
BOD INFLUENT AVG LBS/D	33,093	37,367		
BOD EFFLUENT AVG MG/L	4	3	4	
BOD EFFLUENT MAX MG/L	5	5		20 mg/L
BOD REMOVAL %	98.5	98.9	98.2	85%
TSS INFLUENT AVG MG/L	360	446	269	
TSS INFLUENT AVG LBS/D	48,038	53,934		
TSS EFFLUENT AVG MG/L	8	7	8	
TSS EFFLUENT MAX MG/L	14	9		20 MG/l
TSS REMOVAL %	97.4	98.3	96.8	85%
TOTAL N INFLUENT AVG MG/L	34.7	37.6	33.2	
TOTAL N INFLUENT AVG LBS/D	4630	4547	4538	
TOTAL N EFFLUENT AVG MG/L	1.95	2.18	2.6	
TOTAL N EFFLUENT LBS/D	256	267	352	926 LBS/D
N REMOVAL %	94.4	94.2	92.2	
TOTAL P INFLUENT AVG MG/L	4.93	5.46	4.49	
TOTAL P EFFLUENT AVG MG/L	0.052	0.5	0.68	
P REMOVAL %	89.5	90.8	86	
UV EXCEEDANCES <30 mJ/cm2	0	2		

### Equipment Update

NRCY Pumps

BANANA MIXER

FINAL EFFLUENT PUMP

Secondary Clarifier #3

Two pumps out at REM - no change, waiting on parts.

Both mixers operational. Fleet to replace control panels

SPARE OUT FOR SERVICE - no change waiting on parts.

Back in service, scum trough replaced by Northeast Water



**UPDATE OF CAPITAL PROJECTS  
TECHNICAL COMMITTEE MEETING  
March 16, 2022**

A. Brown presented the following project updates:

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

**a. Infiltration Inflow Study**

No change to this item. CDM Smith is working on 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 Management Plan**

A workshop was held to discuss the criteria and any adjustments that should be made to the weighting of the criteria /sub-criteria. WPCA will work with the spreadsheet tool provided to adjust the criteria weighting and see how this affects the options.

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

We are waiting for the contracts from Gannett Fleming for signatures.

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

WPCA is requesting qualifications from engineers to evaluate these three stations. Alvord Lane and Commerce Rd are located in close proximity to each other with Commerce Rd discharging into Alvord Lane. The study will see if the Commerce Rd pump station can be eliminated by a new Alvord Lane station. The Saddle Rock Rd pump station is a small station that is in need of repairs.

**e. RFP for the Design and Supply of a Standby Generator at Clay Hill Pump Station**

A generator for Clay Hill pump station was bid in 2020. The bids received were much higher than anticipated and they were all rejected. Engineering then constructed the concrete pad for a standby generator at this location as part of their drainage project. The pad will raise the generator out of the flood elevation. This bid is for a company to size and supply the generator.

**f. Bid for the Yearly Landscape Maintenance of the Stamford Hurricane Barrier**

This bid is for the yearly contract for landscaping services to maintain the weeds and mow the lawn at the Stamford Hurricane Barrier. Bids are scheduled to be received on 4/19/22.

**2. UPDATE ON CONSTRUCTION PROJECTS**

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

Approval form the City for Costal Site Plan Review has been issued. We will be meeting with the contractor this week to discuss a schedule for moving forward with the project.

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

The equipment has been installed and is operating. Painting, cleanup and site restoration is being done. Nickerson is completing the punch.



- c. Electrical Preventive Maintenance / Arc Flash**  
Siemens has completed electrical preventive maintenance portion of the project. They need to return for one day to acquire information from the control panels at the sludge dryer building. They will be doing this within the next few weeks. This work will be coordinated with Synagro and will take place on a Saturday.
  
- d. Sludge Degritting System Upgrade**  
Bids for this project are scheduled to be received March 17, 2022.

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

Copy of Change Order log for construction projects is attached. We anticipate one more change order to cover the pump shaft supports and the work needed to address the city electrical inspector comments.

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

Original Value of Contract =	\$ 26,751,500.00
Total Approved CO Amount =	\$ 3,619,443.37
Contract Sum to Date =	\$ 30,373,991.22
Percent of total project =	13.5%

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

CHN PCCOR No.	CHN PCCOR Date	Description	Contractor Amount	Status	Included in COB	Total Approved Amount	Approved to Preliminary	Approved to Secondary	Approved to UV	RFI		RFP		WCD
										No.	Date Issued	No.	Date Issued	
NA	NA	Replace the Issue for Bidding Specification Sections 00520 - Agreement and 00800 - Supplementary Conditions with the Attached Specifications	\$ -	Approved	1	\$ -			5/10/2019					
01 (rev)	8/1/2019	Programming Services Provider / Integration Services - Revised	\$ 194,922.00	Approved	2	\$ 194,922.00	\$ 43,340.00	\$ 110,000.00	\$ 38,562.00					
02 (rev)	1/20/2020	Additional Plank Support Framing & Planing at UV Basin 1 Outlet	\$ 35,257.23	Approved	3	\$ 35,257.23			\$ 35,257.23			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		H-019			
05	11/18/2019	UV Plasters	\$ 2,889.46	Approved	3	\$ 2,889.46			\$ 2,889.46					
09	1/28/2020	Remove and Reinstall drain piping and electrical conduits 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						W-06
11	2/21/2020	Add spool pipe to Septage Area	\$ 1,214.84	Approved	3	\$ 1,214.84	\$ 1,214.84							W-03
13	3/9/2020	Additional Rebar at UV Basin 1	\$ 21,447.91	Approved	3	\$ 21,447.91			\$ 21,447.91					H-01
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						
18	6/19/2020	Replace Missing Hardware @ AT Bridges	\$ 5,082.33	Approved	4	\$ 5,082.33		\$ 5,082.33						
19	7/14/2020	Provide Additional Thin Client Licensing & Integrate Existing Assets per City Request	\$ 23,818.32	Approved	4	\$ 23,818.32		\$ 19,287.40						
16	4/4/2020	Credit for Redundant Breaker @ ATS	\$ (17,286.74)	Approved	5	\$ (17,286.74)		\$ (17,286.74)						
21	8/7/2020	Add External Breaker for RSP-2	\$ 9,081.48	Approved	5	\$ 9,081.48	\$ 9,081.48							
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		H-184	8/19/2020		
25	9/14/2020	Replace UV Channel #3 Inlet Gate	\$ 37,004.86	Approved	5	\$ 37,004.86			\$ 37,004.86			H-02	9/3/2020	
27	9/15/2020	Install Missing Wiring to MX 60-6 & 60-12	\$ 16,235.90	Approved	5	\$ 16,235.90		\$ 16,235.90						
28	9/15/2020	New Sampler Location at UV	\$ 5,232.89	Approved	5	\$ 5,232.89			\$ 5,232.89		H-154	9/8/2020		
29	9/22/2020	Replace Missing WWML support rods in Aeration tank 1-4E/AW	\$ 4,869.75	Approved	5	\$ 4,869.75		\$ 4,869.75						
31	9/22/2020	Test Soils for City Storage tank	\$ 1,525.86	Approved	5	\$ 1,525.86		\$ 1,525.86						
20	8/21/2020	Cut Surps in Aeration Tank Floors	\$ 37,083.78	Approved	6	\$ 37,083.78		\$ 37,083.78						

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

30	9/22/2020	Add Cable Tray and Bus Supports	\$ 57,017.98	Approved	6	\$ 57,017.98	\$ 57,017.98					12/2/2020	
33	10/2/2020	Replace Failing Straub Coupling (Existing)	\$ 5,513.98	Approved	6	\$ 5,513.98	\$ 5,513.98						
40	11/2/2020	Add Supports to Existing Pipe in Blower room	\$ 16,024.43	Approved	6	\$ 16,024.43	\$ 16,024.43					11/11/2020	
36	10/26/2020	Paint UV Steel Walkway at Basins 1 & 2 - Option 1	\$ 12,145.53	Approved	6	\$ 12,145.53	\$ 12,145.53					12/2/2020	
37 (rev)	12/8/2020	Trench Cover at Spare Parts Building	\$ 25,055.44	Approved	7	\$ 25,055.44	\$ 25,055.44					12/17/2020	H-03
41 (rev)	12/8/2020	Canopy Extension and Davit Crane	\$ 36,975.66	Approved	7	\$ 36,975.66	\$ 36,975.66					12/17/2020	H-05
42 (rev)	12/8/2020	Maintenance Access at UV Electrode Sensors	\$ 16,475.43	Approved	7	\$ 16,475.43	\$ 16,475.43					12/17/2020	RFI-159
44	12/22/2020	Electrical Power in Spare Parts Building	\$ 13,554.20	Approved	7	\$ 13,554.20	\$ 13,554.20					1/6/2021	H-04
43	1/11/2021	Retrace Fire Alarm Conduit Around Door 1010c	\$ 5,410.15	Approved	7	\$ 5,410.15	\$ 5,410.15					1/6/2021	
45	1/11/2021	Increase Conduit Size to CP-11	\$ 1,181.24	Approved	7	\$ 1,181.24	\$ 1,181.24					1/12/2021	
48	1/21/2021	Add Bleeding Cooling Water Gleeed to Influent Pumps	\$ 16,267.28	Approved	8	\$ 16,267.28	\$ 16,267.28					3/1/2021	
49	1/29/2021	Unionssew Below Grade Conditions @ RSPS	\$ 19,244.40	Approved	8	\$ 19,244.40	\$ 19,244.40					3/1/2021	
46	4/8/2021	Demo Existing Embed at New Channel #3	\$ 5,163.56	Approved	9	\$ 5,163.56	\$ 5,163.56					5/2/2021	
50 (rev)	2/3/2021	(RFI-196) Heat Trace and Insulate 2" CW	\$ 4,734.43	Approved	9	\$ 4,734.43	\$ 4,734.43					5/28/2021	
52	3/15/2021	Control Mods to Ex. NRCY Pumps to Meet Code	\$ 2,924.08	Approved	9	\$ 2,924.08	\$ 2,924.08						
53	3/15/2021	Add EXP Motor to OH Door at RSPS	\$ 2,815.39	Approved	9	\$ 2,815.39	\$ 2,815.39						
54	3/15/2021	Retrace HVAC Duct to Install Pump VFDs	\$ 1,670.90	Approved	9	\$ 1,670.90	\$ 1,670.90						
55	4/8/2021	Assist in Opening Gate 5030	\$ 3,710.78	Approved	9	\$ 3,710.78	\$ 3,710.78					5/2/2021	
56	4/9/2021	Separate Power/Control on Existing Meter and Pumps to Maintain Current Code Compliance	\$ 19,076.76	Approved	9	\$ 19,076.76	\$ 19,076.76						
57	4/9/2021	Add Missing Wiring to New Ammonia Air Blast Kits	\$ 9,299.78	Approved	9	\$ 9,299.78	\$ 9,299.78						
58	4/9/2021	Delete UPS's @ Blower LCPs	\$ (2,057.30)	Approved	9	\$ (2,057.30)	\$ (2,057.30)						
60	4/20/2021	Emergency repair Assistance - Failed Gate at Primary DBox	\$ 8,483.32	Approved	9	\$ 8,483.32	\$ 8,483.32						
61	4/30/2021	Handrail Around Opening at MWG for UV Channel #3	\$ 2,105.85	Approved	9	\$ 2,105.85	\$ 2,105.85					5/19/2021	

Stamford WPCF Preliminary Secondary and Disinfection Treatment Improvements  
Change Order Summary

62	5/10/2021	(RFI-157A) Grating Grounding at UV Basins	\$ 5,492.06	Approved	9	\$ 5,492.06		\$ 5,492.06	5/11/2021	157A		
64 (rev)	5/12/2021	(RFI-126) Accessibility of UV Transmittance Sensor	\$ 9,493.96	Approved	9	\$ 9,493.96		\$ 9,493.96	5/13/2021	126		
65	5/12/2021	Sweat Overhead in Stairs in RSPS	\$ 900.43	Approved	9	\$ 900.43	\$ 900.43					
66	5/12/2021	Rework Removable Railings at AT Meters	\$ -	Approved	9	\$ -		\$ -				
67	5/12/2021	Add Supports @ Influent Channel for Aluminum Posing	\$ 5,315.63	Approved	9	\$ 5,315.63	\$ 5,315.63					
68	5/12/2021	Notch Framing around new influent pump shafts @ 5 Locations	\$ 1,009.50	Approved	9	\$ 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	9	\$ 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	9	\$ 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	9	\$ 8,436.33		\$ 8,436.33	6/6/2021	222		
74	5/28/2021	(RFI-167) Repair to Existing Concrete Basin at UV Effluent PS	\$ 42,048.45	Approved	9	\$ 42,048.45		\$ 42,048.45	6/6/2021	167		
83 (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	\$ 387,747.46	Approved	10	\$ 387,747.46	\$ 387,747.46					
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 Metric 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 Fleets Recommendation	\$ 2,924.56	Approved	11	\$ 2,924.56	\$ 2,924.56					
78	7/15/2021	Bypass Force Main Rental/Costs 4/21/21 through 6/16/21	\$ 136,711.13	Approved	11	\$ 136,711.13	\$ 136,711.13		8/11/2021			
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
83	8/13/2021	Delete Blower Room Floor Painting	\$ (12,915.20)	Approved	12	\$ (12,915.20)	\$ (12,915.20)		8/25/2021			
84	8/18/2021	WCD-05-H UV PLC Programming Modifications - Add channel out of Service Status	\$ 7,691.61	Approved	12	\$ 7,691.61		\$ 7,691.61	8/24/2021			H-05
85	8/24/2021	(RFI-256) Protection around Fired Ultrasonic Sensors at UV	\$ 3,053.06	Approved	12	\$ 3,053.06		\$ 3,053.06	8/23/2021	256	7/6/2021	
89	8/27/2021	Add WiFi to Aeration Tank Instruments	\$ 15,421.01	Approved	12	\$ 15,421.01		\$ 15,421.01	8/30/2021			
90	8/27/2021	Replace Existing Plastic JBs on Aeration	\$ 10,997.74	Approved	12	\$ 10,997.74		\$ 10,997.74				



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

92		Add Metic Plugs AT NRCY Pumps	\$ 24,806.41	Approved	12	\$ 24,806.41	\$ 24,806.41												
		Credit for Remaining Unit Price Item 4C - Surface Spall Repair		Approved	12	\$ (15,107.00)	\$ (15,107.00)												
		Credit for Remaining Unit Price Item 5C - Formed Spall Repair		Approved	12	\$ (35,000.00)	\$ (35,000.00)												
		Additional Unit Price Item 6C - Type I Crack Repair		Approved	12	\$ 875.00	\$ 875.00												
		Credit for Remaining Unit Price Item 7C - Type II Crack Repair		Approved	12	\$ (3,750.00)	\$ (3,750.00)												
		Credit for Remaining Unit Price Item 8C - Type III Crack Repair		Approved	12	\$ (13,655.00)	\$ (13,655.00)												
		Credit for Remaining Unit Price Item 9C - Disposal of Polluted Soils		Approved	12	\$ (14,250.00)	\$ (14,250.00)												
		Credit for Remaining Unit Price Item 10C - Disposal of Contaminated Soils		Approved	12	\$ (21,750.00)	\$ (21,750.00)												
15	3/18/2020	Reroof roof drain from Screenings Building as required by the Stamford Building Department. Approved materials only. Labor to high so going TAM	\$ 6,812.20	Partial Approval	TBD	TBD	TBD	4/7/2020											W-01
23	4/24/2020	Replace Cables for Gates Not Shown on Contract Drawing	\$ 5,893.78	Revisions Required															
78	8/15/2021	Increase Influent Pump VFD and Cabling	\$ 132,196.26	Approved	12	\$ 132,196.26	\$ 132,196.26												
73	11/23/2021	Replace Primary D-Box Gates and Actuators	\$ 96,748.25	Approved	13	\$ 96,748.25	\$ 96,748.25					01	11/22/2021						
94	11/23/2021	Realign RSP 1,2 & 3	\$ 4,087.19	Approved	13	\$ 4,087.19	\$ 4,087.19												37
95	11/23/2021	Add light to CP-96	\$ 762.80	Approved	13	\$ 762.80	\$ 762.80												26
98	11/23/2021	Configure Hach Controller for WIFI Use	\$ 6,102.42	Approved	13	\$ 6,102.42	\$ 6,102.42												31
99	11/23/2021	Add Aeration Blower VDV Alarm	\$ 2,874.05	Approved	13	\$ 2,874.05	\$ 2,874.05												51
105	11/23/2021	Add Neoprene Pads on Roof	\$ 2,370.74	Approved	13	\$ 2,370.74	\$ 2,370.74									258			36
108	11/23/2021	Provide Additional Roof Duct Supports	\$ 7,958.42	Approved	13	\$ 7,958.42	\$ 7,958.42									268			54
107	11/23/2021	Change Pipe Colors in RSPS	\$ 1,762.00	Approved	13	\$ 1,762.00	\$ 1,762.00									288			
109	11/23/2021	SMEET Services Asset City	\$ 4,014.79	Approved	13	\$ 4,014.79	\$ 4,014.79												
79	11/23/2021	Force Main Repair and S&P Lining Assistance	\$ 1,302,438.55	Approved	14	\$ 1,302,438.55	\$ 1,302,438.55												
		Additional Work at Spare Parts Building Exterior Door		Pending															
97	10/1/2021	CP-11 Reprogramming for Washpress Operations	\$ 2,542.85	Approved	15	\$ 2,542.85	\$ 2,542.85						1/1/2022						

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

110	12/10/2021	RSPS Building Additional Painting	\$ 12,098.92	Approved	15	\$ 12,098.92	\$ 12,098.92		1/4/2022		3	12/2/2021	
111	12/10/2021	Power Feed to Motor room OH Door	\$ 6,141.48	Approved	15	\$ 6,141.48	\$ 6,141.48		1/4/2022				57
112	12/17/2021	Power Feed for Indirect Gas Fired Furnace	\$ 1,574.98	Approved	15	\$ 1,574.98	\$ 1,574.98		1/4/2022				62
115	12/22/2021	Test and Replace Existing Gas Piping at RSPS	\$ 10,802.15	Approved	15	\$ 10,802.15	\$ 10,802.15		3/4/2022				58
116	12/22/2021	Install and Wire Exterior Pushbutton Station for OH Door 101A	\$ 771.44	Approved	15	\$ 771.44	\$ 771.44		1/4/2022				60
117	1/3/2022	Programming Changes to Sequencing of Aeration Blower	\$ 1,557.39	Approved	15	\$ 1,557.39	\$ 1,557.39		1/4/2022				61
119	1/6/2022	Remove NRCY Pump Temp Cabling	\$ 1,475.97	Approved	15	\$ 1,475.97	\$ 1,475.97		1/11/2022				59
121	1/13/2022	Furnish and Install Horn and Strobe	\$ 5,407.73	Approved	15	\$ 5,407.73	\$ 5,407.73		1/11/2022				63
122	1/10/2022	Integrate Fire Alarm Duct Smoke Sensors to Existing FACP	\$ 6,902.93	Approved	15	\$ 6,902.93	\$ 6,902.93		1/11/2022				63
123	1/14/2022	Misc SM Duct Modifications at Screenings/RSPS	\$ 8,848.53	Approved	15	\$ 8,848.53	\$ 8,848.53		1/11/2022				56
124	1/20/2022	Configure Hach Controller for WWF Use	\$ 2,987.65	Approved	15	\$ 2,987.65	\$ 2,987.65		1/25/2022				
125	1/26/2022	Explosion Proof Horn all	\$ 1,244.85	Approved	15	\$ 1,244.85	\$ 1,244.85						
	3/1/2022	Balance in Contract Item Quantities - Secondary Treatment Upgrade	\$ 6,378.76	Approved	16	\$ 6,378.76	\$ 6,378.76		3/1/2022				
	3/1/2022	Balance in Contract Item Quantities - Preliminary Treatment Upgrade	\$ 341,762.51	Approved	16	\$ 341,762.51	\$ 341,762.51		3/1/2022				
87	11/24/2021	Demo Cove Base in RSPS	\$ 5,553.44	Approved	16	\$ 5,553.44	\$ 5,553.44		3/1/2022				42
93	9/21/2021	Add Wiring and Electrical Infrastructure for Mech Bar Screen Controls	\$ 14,316.56	Approved	16	\$ 14,316.56	\$ 14,316.56		3/1/2022	245	4/9/2021		
126	2/2/2022	Lighting Protection Repairs	\$ 5,455.19	Approved	16	\$ 5,455.19	\$ 5,455.19		2/22/2022				
127	2/24/2022	OH Door Wiring Credit	\$ (1,853.67)	Approved	16	\$ (1,853.67)	\$ (1,853.67)		3/1/2022				57
128	3/1/2022	ATC-H1 Wiring Revisions	\$ 6,501.38	Approved	16	\$ 6,501.38	\$ 6,501.38		3/1/2022				65
129	3/1/2022	Power Feed to Low Flow Switch at Odor Control	\$ 2,942.80	Approved	16	\$ 2,942.80	\$ 2,942.80		3/1/2022				
130	3/1/2022	Retools Gas Detection Panel	\$ -	Approved	16	\$ -	\$ -						64
					Total	\$ 3,619,443.17	\$ 2,823,461.43	\$ 491,287.57	\$ 300,303.25				