



## TECHNICAL COMMITTEE MEETING MINUTES

Wednesday, April 13, 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 March 16, 2022 Meeting Minutes

S. Bagwin made a motion to approve the minutes of the March 16, 2022 Technical Committee Meeting; seconded by E. Kelly. Motion carried 3-0-0.

### 3. Public Comments. None

### 4. Update on Animal Shelter and WPCF Future Needs

A. Brown presented several site plans which showed the needs of a future plant expansion and future sludge handling options with the footprint of the Animal Shelter. The options included a 25% plant expansion and different methods of future sludge handling that are being discussed now as part of the Sludge Management Plan. The options include thermal expansion, anaerobic digestion, incineration, and gasification/pyrolysis. The Committee discussed the needs of the WPCF pointing out that the treatment plant is a critical need of the City. If the Animal Shelter is located within the plant as proposed, it may need to be relocated for a future plant expansion which could add to the cost of the project and may affect the user rates.

### 5. Discussion and Vote on Amendment to the Agreement with Hazen for Additional Electronic O&M Manual Development and an Updated Hydraulic Analysis of the WPCF for an Amount Not To Exceed \$20,000

A. Brown explained that the Amendment will increase the existing Hazen Agreement for the UV project by an amount not to exceed \$20,000. This increase is for Hazen to help prepare an electronic O&M Manual and to update the hydraulic analysis of the plant. R. Pudelka stated he is in favor of the electronic O&M and it would benefit the plant. The Committee agreed.

### 6. Discussion on Perna Lane Sanitary Sewer Project

M. Nesin began the discussion by providing his thoughts on several options for sewers for the Perna Lane area as well as options to decrease water into the septic systems. He reviewed the Health Department records and indicated that over the last 5 years, only 5 septic systems in the Perna Lane area have been replaced/repared. M. Nesin felt that a decision should be made as to what alternative WPCA will pursue. E. Kelly stated that WPCA made a commitment that if signatures were obtained in favor of sewers from 2/3 of the homeowners, we would proceed in a phased approach. If we continue, WPCA will need to communicate to everyone in the area the option that will be constructed. A review of the share in costs was discussed. W. Brink explained that once the project is bid and the cost is known, the City will cover the

cost for drainage improvements such as catch basins, storm sewers and pavement. The remaining sanitary sewer related costs will be shared by the WPCA and the homeowners, 60/40% respectively. This issue will be on the April 18<sup>th</sup> agenda for further discussion.

**7. Discussion on Plant Operations**

R. Pudelka provided a summary of plant operations for April 2022. He reviewed the Monthly Operating Report and Equipment Update with the Committee which is attached and made part of these minutes. E. Kelly complimented Rob on the job he is doing with the operation of the plant.

**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**

**11. New Business**



## APRIL 2022 TECHNICAL COMMITTEE REPORT

Monthly Operating Report data:	March Results			Permit Limit
	This month (Mar)	Last month (Feb)	10 Year month's Monthly AVG	
Q (FLOW) DAILY AVG MGD	15.8	16	18.5	24 MGD DESIGN AVG
Q PEAK MGD	25.6	29.6	41.2	58 MGD MAX AVG
BOD INFLUENT AVG MG/L	252	248	187	
BOD INFLUENT AVG LBS/D	33,207	33,093		
BOD EFFLUENT AVG MG/L	3	4	3	
BOD EFFLUENT MAX MG/L	6	5		20 mg/L
BOD REMOVAL %	98.9	98.5	98.2	85%
TSS INFLUENT AVG MG/L	308	360	261	
TSS INFLUENT AVG LBS/D	40,585	48,038		
TSS EFFLUENT AVG MG/L	6	8	7	
TSS EFFLUENT MAX MG/L	18	14		20 MG/l
TSS REMOVAL %	98	97.4	97.3	85%
TOTAL N INFLUENT AVG MG/L	30.2	34.7	32	
TOTAL N INFLUENT AVG LBS/D	3980	4630	4632	
TOTAL N EFFLUENT AVG MG/L	1.64	1.95	2.56	
TOTAL N EFFLUENT LBS/D	216	256	376	926 LBS/D
N REMOVAL %	94.6	94.4	91.9	
TOTAL P INFLUENT AVG MG/L	3.98	4.93	3.95	
TOTAL P EFFLUENT AVG MG/L	0.27	0.052	0.63	
P REMOVAL %	93.2	89.5	93.2	
UV EXCEEDANCES <30 mJ/cm2	0	0		

### Equipment Update

NRCY Pumps  
BANANA MIXER  
BFP #2

One pumps out at REM - no change, waiting on parts.  
Both mixers operational. Fleet to replace control panels  
Removed from Service to begin Retrofit.



**UPDATE OF CAPITAL PROJECTS  
TECHNICAL COMMITTEE MEETING  
April 13, 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. We would also like to schedule site visits. There are two gasification projects recently put online. We can schedule a site visit when they have been operating a few months.

**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. This is advertised this month with qualifications due May 28<sup>th</sup>.

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

WPCA is working on a request for bids to size and supply the generator. We are also making sure that we have the need permits prior to bidding.

**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 from the City for Costal Site Plan Review has been issued. We met with the Contractor to discuss a schedule for moving forward with the project. Engineering has required the transformer on site to be raised as part of the approval. We are also meeting with Eversource to discuss the transformer.

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

The equipment has been installed and is operating. There is still some operation concerns regarding the blower controls. Nickerson and Wright Pierce are trying to address these issues. Wright Pierce suggested additional supports to be installed at the catwalk beams as the first measure to mitigate the shaft vibrations. 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**

We received two bids for this project in March. Both bids were over \$10M which exceeded our budget. Our original budget was \$4.4M and we requested an increase of \$1.2M when we added replacing the skimmer arm unit to the bid documents. The latest Engineer's estimate is \$6.3M. We have asked the Engineers to perform Value Engineering to identify options that may reduce the cost of the project.

**Change Order Log as of 4-13-22**

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%

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

CHH PCCOR No.	CHH PCCOR Date	Description	Contractor Amount	Status	Included in CDM	Total Approved Amount	Approved to Preliminary	Approved to Secondary	Approved to UV	RFI		RFP		WCD
										No.	Date Issued	No.	Date Issued	
NA	NA	Replicate the Issues for Bidding Specification Sections 00520 Agreement and 00800 Supplementary Conditions with the Attached Specifications	\$ -	Approved	1	\$ -			5/16/2019					
01 (rev)	6/21/2019	Programming Services Provider / Integration Services Revisit	\$ 104,922.00	Approved	2	\$ 104,922.00	\$ 48,310.00	\$ 110,000.00	\$ 36,582.00	7/9/2019				
02 (rev)	1/26/2020	Additional Rack Support Framing & Plumbing at UV Basin 1 Outfall	\$ 35,257.23	Approved	3	\$ 35,257.23		\$ 35,257.23	2/27/2020	H-01	11/18/2019			
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-01B				
05	11/19/2019	UV Nipples	\$ 2,689.48	Approved	3	\$ 2,689.48		\$ 2,689.48	11/19/2019					
09	1/28/2020	Remove and Reinstall down piping and electrical conduits/buses in Blower Room to install new fire rated wall. Photo did not call for this work.	\$ 28,473.69	Approved	3	\$ 28,473.69	\$ 28,473.69		4/7/2020					W-08 11/20/2019
11	2/21/2020	Add spool pipe to Septic Area	\$ 1,214.84	Approved	3	\$ 1,214.84	\$ 1,214.84		2/27/2020					W-03 11/20/2019
13	3/0/2020	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 4/9/2020				
14	3/18/2020	Rebate Generator and Heavy 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		8/19/2020					
19	7/14/2020	Provide Additional Thin Client Licensing & Integrate Existing Servers per City Request	\$ 23,818.32	Approved	4	\$ 23,818.32	\$ 19,287.40							
16	4/0/2020	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	\$ 0,061.48		8/23/2020					
24	8/26/2020	Additional Tags for The GE Helixian	\$ 8,500.02	Approved	5	\$ 8,500.02	\$ 2,863.24	\$ 2,863.24	8/26/2020	H-164 8/19/2020				
25	9/14/2020	Replace UV Channel #3 Inlet Gate	\$ 37,004.86	Approved	5	\$ 37,004.86		\$ 37,004.86	9/15/2020	H-82 9/2/2020				
27	9/15/2020	Install Missing Wring to AUX 60-A & 60-12	\$ 18,235.90	Approved	5	\$ 18,235.90	\$ 18,235.90		9/23/2020					
28	9/15/2020	New Sampler Location at UV	\$ 5,232.89	Approved	5	\$ 5,232.89		\$ 5,232.89	9/17/2020	H-154 9/8/2020				
29	9/22/2020	Replace Missing VMB support rods in Aeration tank 1. 4E/1W	\$ 4,869.75	Approved	5	\$ 4,869.75	\$ 4,869.75		9/23/2020					
31	9/22/2020	Test Soils for City Storage Tent	\$ 1,525.86	Approved	5	\$ 1,525.86	\$ 1,525.86		9/23/2020					
20	8/21/2020	Cut Sump 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

30	8/22/2020	Add Cable Ties and Bus Supports	\$ 57,017.98	Approved	8	\$ 57,017.98	\$ 57,017.98		12/9/2020
33	10/27/2020	Replace Faling Straps Coupling (Eurling)	\$ 5,513.98	Approved	6	\$ 5,513.98	\$ 5,513.98		
40	11/2/2020	Add Supports to Existing Pipe in Blower room	\$ 18,024.43	Approved	6	\$ 18,024.43	\$ 18,024.43	11/11/2020	
30	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	11-03 10/5/2020
41 (rev)	12/8/2020	Canopy Extension and Davit Crane	\$ 36,875.66	Approved	7	\$ 36,875.66	\$ 36,875.66	12/17/2020	11-05 10/22/2020
42 (rev)	12/8/2020	Maintenance Access at UV Electrode Sensors	\$ 18,475.43	Approved	7	\$ 18,475.43	\$ 18,475.43	12/17/2020	RFI 158 8/4/2020
44	12/22/2020	Electrical Power in Spare Parts Building	\$ 13,554.20	Approved	7	\$ 13,554.20	\$ 13,554.20	1/8/2021	11-04 10/22/2020
43	1/11/2021	Relocate Fire Alarm Conduit Around Door 1010c	\$ 5,410.15	Approved	7	\$ 5,410.15	\$ 5,410.15	1/8/2021	
45	1/11/2021	Increase Conduit Size to CP-11	\$ 1,191.24	Approved	7	\$ 1,191.24	\$ 1,191.24	1/11/2021	
46	1/21/2021	Add Bearing Cooling Water Gland to Influent Pumps	\$ 16,287.28	Approved	8	\$ 16,287.28	\$ 16,287.28	3/1/2021	
49	1/20/2021	Unleashed Below Grade Conduits @ RSPS	\$ 19,244.40	Approved	8	\$ 19,244.40	\$ 19,244.40	3/1/2021	
46	4/9/2021	Demol Existing Embed at New Channel #3	\$ 5,163.56	Approved	9	\$ 5,163.56	\$ 5,163.56	5/2/2021	
50 (rev)	2/2/2021	IRFI-198) Hail Trace and Insulate 2' CW	\$ 4,734.43	Approved	9	\$ 4,734.43	\$ 4,734.43	5/26/2021	
52	3/15/2021	Control Mods to Ex. HFCY Pumps to Meet Code	\$ 2,924.08	Approved	9	\$ 2,924.08	\$ 2,924.08		
53	3/15/2021	Add EXP Motor to DH Door at RSPS	\$ 2,815.38	Approved	9	\$ 2,815.38	\$ 2,815.38		
54	3/15/2021	Relocate HVAC Duct to Install Pump VFDs	\$ 1,670.80	Approved	9	\$ 1,670.80	\$ 1,670.80		
55	4/9/2021	Asset in Opening Gate 5000	\$ 3,710.78	Approved	9	\$ 3,710.78	\$ 3,710.78	5/2/2021	
56	4/9/2021	Separate Power/Control on Existing Motor and Pumps to Meet Current Code Compliance	\$ 19,078.76	Approved	9	\$ 19,078.76	\$ 19,078.76		
57	4/9/2021	Add Missing Wiring to New Ammonia Air Blast Valve	\$ 9,299.78	Approved	9	\$ 9,299.78	\$ 9,299.78		
58	4/9/2021	Delete UPS's @ Blower LCP's	\$ (2,057.30)	Approved	9	\$ (2,057.30)	\$ (2,057.30)		
60	4/20/2021	Emergency repair Assistance - Fried Gate at Primary DBB's	\$ 8,483.32	Approved	9	\$ 8,483.32	\$ 8,483.32		
81	4/30/2021	Handled Around Opening at MHVC for UV Channel #3	\$ 2,105.85	Approved	9	\$ 2,105.85	\$ 2,105.85	5/18/2021	

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

62	5/10/2021	(RFI-157A) Grading Grounding at UV Basins	\$ 5,482.86	Approved	9	\$ 5,482.86	5/11/2021	157A
64 (rev)	5/12/2021	(RFI 128) Accessibility of UV Transmittance Sensor	\$ 9,483.86	Approved	9	\$ 9,483.86	5/13/2021	128
65	5/12/2021	Service Overhead in Stairs in RSPS	\$ 900.43	Approved	0	\$ 900.43		
66	5/12/2021	Rework Removable Railings at AT Mounts	\$	Approved	0	\$		
67	5/12/2021	Add Supports @ Influent Channel for Aluminum Paving	\$ 5,315.63	Approved	0	\$ 5,315.63		
68	5/12/2021	Match Framing around new influent pump shafts @ 5 Locations	\$ 1,009.50	Approved	0	\$ 1,009.50		
70	5/17/2021	(WCD-H-03) Encase Electrical and Hydraulic Control in Basin #2 (1&4)	\$ 23,168.63	Approved	0	\$ 23,168.63		H-03
71	5/21/2021	Provide 7 IACB Clean Recirculated Flow at UV Basin #2	\$ 4,372.78	Approved	9	\$ 4,372.78	5/26/2021	
72 (rev)	5/21/2021	(RFI 222-H) Basin 2, Channel 3 Existing Wall Inconspicuous	\$ 8,438.33	Approved	9	\$ 8,438.33	6/6/2021	222
74	5/26/2021	(RFI-167) Repair to Existing Concrete Basin at UV Effluent PS	\$ 42,048.45	Approved	0	\$ 42,048.45	6/6/2021	167
60 (rev)	7/15/2021	Investigate/Repair Failed 48" Force Main	\$ 209,722.29	Approved	10	\$ 209,722.29		
69 (rev)	7/15/2021	Install Temporary 24" HDPE Force Mains & Manhole	\$ 367,747.46	Approved	10	\$ 367,747.46		
56	4/16/2021	Add Current Transformer to Blowers in Accept Signal and monitoring of Amperage	\$ 24,700.84	Approved	11	\$ 24,700.84	6/10/2021	237
75	6/6/2021	Replace Meter Motor Connector to Match New Meters	\$ 7,500.29	Approved	11	\$ 7,500.29	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		
78	7/15/2021	Bypass Force Main Reinstall Cops Coats 421121 through 6/18/21	\$ 136,711.13	Approved	11	\$ 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	7/29/2020	
81	8/13/2021	Radar Level Sensor	\$ 2,407.75	Approved	12	\$ 2,407.75	8/18/2021	H-04
83	8/13/2021	Delete Blower Room Floor Paving	\$ (12,915.20)	Approved	12	\$ (12,915.20)	8/25/2021	
84	8/18/2021	WCD-05-11 UV PLC Programming Modifications Add channel out of Service Status	\$ 7,691.61	Approved	12	\$ 7,691.61	8/24/2021	H-05
65	8/24/2021	(RFI 268) Protection around Fixed Ultrasonic Sensors at UV	\$ 3,053.06	Approved	12	\$ 3,053.06	9/3/2021	258
89	8/27/2021	Add WFI to Aeration Tank Instruments	\$ 15,421.01	Approved	12	\$ 15,421.01	8/30/2021	
90	8/27/2021	Replace Existing Plastic Joints on Aeration	\$ 10,997.74	Approved	12	\$ 10,997.74		



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

Item #	Description	Amount	Approved	12	24,808.41	24,808.41	24,808.41	
87	Add Metric Pumps AT NRCY Pumps	\$ 24,808.41	Approved	12	\$ 24,808.41	\$ 24,808.41		
	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 I Crack Repair		Approved	12	\$ (13,855.00)	\$ (13,855.00)		
	Credit for Remaining Unit Price Item 9C - Disposal of Polished Sole		Approved	12	\$ (14,250.00)	\$ (14,250.00)		
	Credit for Remaining Unit Price Item 10C - Disposal of Contaminated Sole		Approved	12	\$ (21,750.00)	\$ (21,750.00)		
15	Remove roof drain from Screening Building as required by the Stamford Building Department. Approved materials only. Labor to high so going T&M	\$ 6,912.50	Partial Approval	TBD	TBD	TBD	4/7/2020	W 81
20	Replace Cables for Gates Not Shown on Contract Drawing	\$ 5,897.78	Revisions Required					
76	Increase Influent Pump VFD and Cabling	\$ 132,196.26	Approved	12	\$ 132,196.26	\$ 132,196.26		
73	Replace Primary D-Box Cables and Actuators	\$ 96,748.25	Approved	13	\$ 96,748.25	\$ 96,748.25		01 11/22/2021
84	Realign RSP 1.2 & 3	\$ 4,067.19	Approved	13	\$ 4,067.19	\$ 4,067.19		
85	Add light to CP-06	\$ 762.80	Approved	13	\$ 762.80	\$ 762.80		
88	Configure Hach Controller for WiFi Use	\$ 6,102.42	Approved	13	\$ 6,102.42	\$ 6,102.42		
89	Add Arcton Blower VDV Alarm	\$ 2,674.05	Approved	13	\$ 2,674.05	\$ 2,674.05		
105	Add Neoprene Pads on Roof	\$ 2,370.74	Approved	13	\$ 2,370.74	\$ 2,370.74		
108	Provide Additional Roof Duct Supports	\$ 7,958.42	Approved	13	\$ 7,958.42	\$ 7,958.42		
107	Change Pipe Colors in RSP5	\$ 1,782.00	Approved	13	\$ 1,782.00	\$ 1,782.00		
109	SHEET Services Asset Qty	\$ 4,014.79	Approved	13	\$ 4,014.79	\$ 4,014.79		
79	Force Main Repair and Slip 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	CP-11 Reprogramming for Washpress Operations	\$ 2,542.68	Approved	15	\$ 2,542.68	\$ 2,542.68		11/1/2022

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

110	12/10/2021	RSPS Building Additional Paying	\$ 12,098.82	Approved	15	\$ 12,098.82	\$ 12,098.82	11/2/2022	3	12/2/2021				
111	12/10/2021	Power Feed to Meter room CH Door	\$ 6,141.48	Approved	15	\$ 6,141.48	\$ 6,141.48	11/2/2022			57			
112	12/11/2021	Power Feed for Indirect Gas Fired Furnace	\$ 1,574.98	Approved	15	\$ 1,574.98	\$ 1,574.98	11/2/2022			52			
115	12/22/2021	Test and Replace Existing Gas Piping at RSPS	\$ 10,802.15	Approved	15	\$ 10,802.15	\$ 10,802.15	11/2/2022			58			
116	12/22/2021	Install and Wire Exterior Pushbutton Station for CH Door 101A	\$ 771.44	Approved	15	\$ 771.44	\$ 771.44	11/2/2022			60			
117	1/2/2022	Programming Changes to Sequencing of Anoxion Blower	\$ 1,557.39	Approved	15	\$ 1,557.39	\$ 1,557.39	11/2/2022			61			
119	1/5/2022	Remove HRCY Pump Temp Cabling	\$ 1,475.87	Approved	15	\$ 1,475.87	\$ 1,475.87	11/1/2022			59			
121	1/13/2022	Furnish and Install Horn and Strobe	\$ 5,407.73	Approved	16	\$ 5,407.73	\$ 5,407.73	11/1/2022			63			
122	1/16/2022	Integrate Fire Alarms Duct Smoke Sensors to Existing FACP	\$ 6,902.83	Approved	15	\$ 6,902.83	\$ 6,902.83	11/1/2022			63			
123	1/14/2022	Max SM Duct Modifications at Screens/RSPS	\$ 8,848.53	Approved	15	\$ 8,848.53	\$ 8,848.53	11/1/2022			56			
124	1/20/2022	Configure Meth Controller for WGT Use	\$ 2,987.65	Approved	15	\$ 2,987.65	\$ 2,987.65	1/25/2022						
125	1/26/2022	Explosion Proof Horn ab.	\$ 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	18	\$ 6,378.76	\$ 6,378.76	3/1/2022						
3/1/2022		Balance in Contract Item Quantities - Preliminary Treatment Upgrade	\$ 341,782.51	Approved	18	\$ 341,782.51	\$ 341,782.51	3/1/2022						
87	1/12/2021	Demo Core Base in RSPS	\$ 5,553.44	Approved	16	\$ 5,553.44	\$ 5,553.44	3/1/2022			42			
93	8/21/2021	Add Wiring and Electrical Infrastructure for Mech Bar Screen Controls	\$ 14,318.56	Approved	16	\$ 14,318.56	\$ 14,318.56	3/1/2022	245	4/9/2021				
126	2/2/2022	Lightning Protection Repairs	\$ 5,455.19	Approved	16	\$ 5,455.19	\$ 5,455.19	2/22/2022						
127	2/7/2022	CH Door Wiring Credi	\$ (1,853.67)	Approved	16	\$ (1,853.67)	\$ (1,853.67)	3/1/2022			57			
128	3/1/2022	ATC-HI Wiring Revisions	\$ 6,501.38	Approved	16	\$ 6,501.38	\$ 6,501.38	3/1/2022			63			
129	3/1/2022	Power Feed to Low Flow Switch at Odor Control	\$ 2,942.83	Approved	18	\$ 2,942.83	\$ 2,942.83	3/1/2022						
130	3/1/2022	Release Gas Detection Panel	\$	Approved	16	\$	\$				64			
										Total	\$ 2,810,443.17	\$ 2,822,461.43	\$ 491,217.67	\$ 308,263.25