

WATER POLLUTION CONTROL AUTHORITY
Town of Trumbull
CONNECTICUT

TOWN HALL
(203) 452-5048



5866 MAIN STREET
TRUMBULL, CT 06611

MAY 27, 2020
AGENDA

NOTICE is hereby given that the Water Pollution Control Authority of the Town of Trumbull, Connecticut will hold a meeting on Wednesday, May 27, 2020 at 7:00 p.m. via videoconference for the following purpose:

Join the meeting online:

<https://zoom.us/j/99366046710?pwd=bVJobm1rQ1dUS0xVdTFpTjNLclJldz09>

Webinar ID: 993 6604 6710 Password: 418274

Join by telephone: (301) 715-8592 / Webinar ID: 993 6604 6710

1. Call to Order
2. Approval of Minutes:
 - April 22, 2020 meeting minutes
3. New Business:
 - Sewer Usage Bill Freeze
 - CPI Beardsley Pump Station Force Main Failure Report
 - COVID-19 Monitoring Email Discussion
 - Beardsley Pump Station Rehabilitation Kovacs Change-Order #2
 - Bridgeport WPCA Proposed FY 2020-2021 Budget
 - Quarterly Year-To-Budget Report
4. Old Business:
 - K&K Developers - Sewer Connection at 5085 Main Street, Parcel E11-170 (Formerly Stuart Place, Whalburn Avenue, and Stuart Place parcels)
 - 2020 Fiscal Year WPCA Budget Update
 - Beardsley Pump Station Rehabilitation Update
 - Old Town and Reservoir Avenue Pump Stations Update
5. Any Other Business That May Come Before the Authority
6. Adjournment

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**APRIL 22, 2020
MINUTES**

Call to Order: The Chair called the April 22, 2020 meeting to order at 7:05 p.m. and stated the meeting was being held by videoconference via Zoom.

Roll Call: The clerk called the roll and recorded it as follows:

Present: Chairman Richard Boggs, Charles Berezin, Jon Greene, Frank Regnery, Scott Thornton, Alternate, (Joined at 7:12 p.m.)

Absent: Andrew Palo

Also

Present: William C. Maurer, P.E., L.S., Town Engineer/Sewer Administrator, Town Attorney James Nugent, (Joined at 7:07 p.m.)

The Chair asked that each speaker to identify themselves every time they speak, and where appropriate, state their title (e.g., "WPCA Commissioner"), The Chair reminded those present only one person should speak at a time and all votes will be taken by roll call of seated members.

Approval of Minutes:

Moved by Greene, seconded by Regnery to approve the February 26, 2020 meeting minutes as submitted.

The clerk called the roll call vote and recorded it as follows:

	Aye	Nay	Abstain
Richard Boggs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charles Berezin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jon Greene	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frank Regnery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VOTE: Motion CARRIED unanimously.

New Business:

- Election of Officer – Secretary

The Chair called for nominations. Hearing none, the Chair nominated Jon Greene as secretary of the WPCA. Mr. Greene accepted the nomination. The Chair called for other nominations, hearing none, the Chair called the vote.

The clerk called the roll call vote and recorded it as follows:

	Aye	Nay	Abstain
Richard Boggs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charles Berezin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jon Greene	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frank Regnery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VOTE: Motion CARRIED unanimously.

- K&K Developers - Sewer Connection at 5085 Main Street, Parcel E11-170 (Formerly Stuart Place, Whalburn Avenue, and Stuart Place parcels)

(Commissioner Thornton joined the meeting at 7:12 p.m.)

Mr. Maurer shared his screen with the Commission and viewers with the attached plans. He explained this is a development at the Westfield Mall where Whalburn Avenue and Stuart Place roads were. Apartments are being proposed where they will reuse the existing sanitary sewer system. The flow capacity of the lines is acceptable for this development.

John Schmitz, Project Manager and Principal of BL Companies was present and indicated this would be a residential development on the Main Street side of the mall comprised on five (5) new buildings. There would be 260 units, a mix of 1 and 2-bedroom units.

At peak the flow estimate is 290,000 gallons per day. The report from Wright Pierce shows plenty of capacity of the line as well as the line they are tying into at the ring road. They designed their project to work around the existing mains in Whalburn and Stuart and don't anticipate any improvements beyond their boundaries of their parcel.

Mr. Schmitz explained the lines from the mall that tie into the 8" line are from Lord & Taylor, and another that combines Whalburgers and Chesecake Factory. There are separate lines for grease. They all tie together into manhole 1A-45 which is just south of the entrance where it hits the ring road, since this is a residential use the peak would be in the morning when the mall is closed. He tried to get flows for the mall but because of the health crisis they are closed now. Lord & Taylor would have limited flow since it's just a retail space. The overlap of flows would be in the evening, but based on capacity

it's not an issue. It was confirmed for the Commission the mains are existing from the previous use as residential streets and have been unaffected by this project. They are not touching any of the existing lines, including the other utility lines

Mr. Schmitz noted there is a community area with an outside swimming pool. The wastewater from the pool would discharge through the system, the cul-de-sac round about is in the middle of the plan and the pool is just southwest of that. They will go to DEEP for a pool wastewater discharge permit, not unlike the permit they have for LA Fitness. They will discharge off hours and has to be coordinated with the receiving plant in Bridgeport.

There are 260 proposed units, 65 of them are 1-bedroom and the remaining units are 2-bedroom, (195 units) plus a pool and a 4,000 sf clubhouse adjacent to the pool. There are no other structures proposed. They will be making an application with P&Z soon and would want to know that they have already been before this board for a recommendation. He was requesting a vote to approve the connection.

The Commission discussed whether this was noticed for a vote. Mr. Maurer explained this item on the agenda was for the connection and fee, but if it needs to be tabled to that is fine. Mr. Maurer explained the fee is \$2,500 per the number of units. This is not a new assessment, the sewer lines have been there and had already been assessed previously, therefore would not need a public hearing. Mr. Maurer confirmed he had reviewed the report, there is sufficient capacity. They developer will be making new connections to the existing mains in what used to be a former town road. The mains are going to be reused and not rerouted.

Attorney Nugent confirmed for the Commission there was adequate notice to the public on the agenda for a vote on this item.

The 8" line is a typical size of pipe used in most streets, the upper limit is based on many things such as pitch and what is flowing in. This was reviewed by our consultants and is well within capacity. The mains from this development run from the mall to Sunnydale and Leighland, a gravity line to Bridgeport, (through the middle of the mall area between Main Street and Madison towards Bridgeport). Mr. Maurer confirmed the 8" line was sufficient for the flow.

Mr. Greene stated as a general practice he would prefer not to vote on an item when the materials had been sent out the same day as these plans had been. Mr. Schmitz indicated it would not be an issue to postpone but would like to be able to go to P&Z with an approval. The Chair indicated he agreed with Mr. Greene with regard to waiting to vote on this item noting Mr. Schmitz could leave the meeting with confidence this would be approved unless something is discovered upon review of the plans between now and the next WPCA meeting. Attorney Nugent indicated the P&Z public hearing will more than likely take more than one night given the size of this project, which is something to keep in mind when it comes to timing.

Moved by Greene, seconded by Regnery to Table this item.

The clerk called the roll call vote and recorded it as follows:

	Aye	Nay	Abstain
Richard Boggs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charles Berezin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jon Greene	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frank Regnery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scott Thornton	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VOTE: Motion CARRIED unanimously.

Old Business:

- Eddie Road Extension – (2300 Reservoir Avenue)

Mr. Maurer shared his screen and reviewed the plan with the Commission and viewers. There is development (apartments) at 2300 Reservoir Avenue. The Eddie Road extension of sewers is by an easement granted to us. The 2018 approval of the project’s connections included a condition to increase the size of the main on Reservoir Avenue. What is being proposed at this meeting in place of doing work in Reservoir Avenue is this extension up to Eddie Road.

The Eddie Road area is on septic now, this would enable us to connect Eddie Road to the sanitary sewer system. There is a need to increase the size of the main but that is being done in conjunction of upgrading the pump station which is currently in design and will go out to bid soon. The developer paid for a portion of the pump station upgrade.

The Chair noted that this has been discussed by the Commission previously and most are familiar. Mr. Maurer confirmed if this was to be done at a later date the cost of this would be more because they would have to disturb all of that is being done now including the landscaping. Mr. Maurer showed the commission where the manholes were on the plan.

Moved by Greene, seconded by Berezin to approve the developer of 2300 Reservoir Ave to provide and install the sewer main extension within the sewer easement located at 2300 Reservoir Avenue, starting at SMH5 to SMH12, then to SMH13, as depicted on sheets U-1 and U-2 of the plan set entitled “Woodside” 2300 Reservoir Avenue and Rocky Hill Road, prepared by Spath-Bjorklund Associates, Inc., having the latest revision date of 4-1-20. This work is in lieu of upgrading the sewer main on Reservoir Avenue as previous approved by this commission. Approval is subject to the following conditions:

1. Inspection by an independent Connecticut licensed P.E.
2. Acceptable pressure testing results
3. Video inspection of the completed installation
4. Certified as-built plan and profile
5. All other conditions of approval from the July 25, 2018 WPCA meeting.

The clerk called the roll call vote and recorded it as follows:

	Aye	Nay	Abstain
Richard Boggs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charles Berezin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jon Greene	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frank Regnery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scott Thornton	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VOTE: Motion CARRIED unanimously.

- 2020 Fiscal Year WPCA Budget Update

Mr. Maurer explained the BOF had met this evening and didn't know the outcome yet and will update the Commission next month.

- Beardsley Pump Station Rehabilitation Update

Mr. Maurer reported the new pumps are operational and have had no issues. The two smaller pumps have been running while the two larger pumps only go on after a heavy rain storm. There have been no issues to date.

They're still working on the interior fit-up. There is approximately a month of work to be done. They will start training on the generators and pump station in the next week. There are four (4) pumps, two (2) 50 hp motors which run on and off most of the time for normal flow, the two larger 380 hp only have to run at the very high peak. They have only kicked on once during a recent rain storm and have made sure the larger pumps don't over pressurize the line.

A portion of the pipe from Beardsley Park has been sent out to be analyzed to see why it corroded as it did and are awaiting the results which are expected next week.

- Old Town and Reservoir Avenue Pump Stations Update

Mr. Maurer reported there are a few more items in the design phase and are almost ready to go out bid with construction anticipated to begin late summer.

Any Other Business That May Come Before the Authority –

- The Impact of the Pandemic on Staff

Mr. Maurer explained they have staff alternating days. One person checks the stations to make sure everything is running as it should and another person does the same on alternating days. This is so they don't work together. A new employees is starting May 1st to replace the maintainer that left us. We have been very fortunate that we have not had any major problems. The contractor has been working the project steadily and is on-going, this has not impacted construction either.

Adjournment

There being no further business to discuss and upon motion made by Boggs, seconded by Greene to adjourn, the clerk called the roll call vote and recorded it as follows:

	Aye	Nay	Abstain
Richard Boggs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charles Berezin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jon Greene	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frank Regnery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scott Thornton	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Trumbull Water Pollution Control Authority adjourned by unanimous consent at 7:51 p.m.

Respectfully Submitted,



Margaret D. Mastroni, WPCA Clerk



CORROSION PROBE, INC.

THE COMPLETE ENGINEERING APPROACH – FROM DETECTION TO CORRECTION



FORCE MAIN FAILURE INSPECTION REPORT
AT THE
BEARDSLEY PUMP STATION
FOR THE
TOWN OF TRUMBULL, CT

Submitted to:

ARCADIS

44 S. Broadway
White Plains, New York 10602

CPI Project Number: MPI070

May 6, 2020

CORPORATE HEADQUARTERS:

12 INDUSTRIAL PARK ROAD • P.O. BOX 178 • CENTERBROOK, CT 06409-0178 • PHONE: (860) 767-4402 • FAX: (860) 767-4407 • WWW.CPIENGINEERING.COM

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Appendix A – CTL Report

1.0 INTRODUCTION

Corrosion Probe, Inc. (CPI) is pleased to provide this report for the failure analysis of a force main at the Beardsley Pump Station located in Trumbull, CT for Arcadis and the Town of Trumbull, CT. The field inspection was performed to examine the exterior and interior conditions of a section of removed pipe and perform discrete ultrasonic thickness (UT) testing.

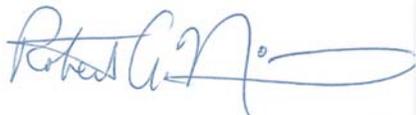
The subject force main, at the location of the failure, is composed of 20-inch diameter ductile iron pipe. According to Arcadis, the average flow rate of the wastewater through this section of pipe is approximately 2 ft/s. This section of the force main was installed around 1970 with no historic trend of leaks. The subject failure occurred on January 23, 2020 along White Plains Road in Trumbull, CT. A section of force main, approximately 8 feet in length, was removed and stored onsite for later inspection. This section of removed pipe was inspected in the field by CPI and a sample was sent to our laboratory to assess potential failure mechanisms.

This report documents CPI's inspection findings, testing data, analysis, and conclusions. This document is respectfully submitted for your review, use, and consideration by,

The Staff of Corrosion Probe, Inc.



Bryce Annino
Project Engineer



Robert A. (Randy) Nixon
Principal Consultant
NACE Certified Protective Coating Specialist #70989
SSPC Protective Coatings Specialist #2019-117-310

2.0 INSPECTION FINDINGS

The site inspection took place on March 18, 2020, and was conducted by Mr. Bryce Annino with CPI. Personnel from Arcadis and the repair contractor were onsite during the inspection to assist as necessary.

The section of removed force main was labelled with cardinal directions, as well as direction of flow (Photograph No. 001) and clock positions. The clock positions will be utilized as longitudinal reference lines with 6 o'clock being the invert and 12 o'clock being at the crown of the pipe. The pipe was oriented so that the invert was on top for the inspection, and crown against the ground. The pipe was rotated so that the entire exterior could be inspected, but the majority of the inspection was performed on the lower (invert) portion of the pipe. The long-range longitudinal break was observed along the invert of the force main.

The majority of the exterior of the pipe appeared to be in generally good condition. The thin, black bituminous coating applied by the manufacturer was generally intact (Photograph No. 002) across the exterior surfaces of the pipe. A number of areas of corrosion pitting and material loss were observed near the invert of the pipe. A section, approximately 4"x7", on the southern end of the pipe section exhibited external corrosion losses (Photograph Nos. 003 & 004) up to 1/8" in depth from the manufactured surface. Typical pitting was also observed across this general area between 4 o'clock and 7 o'clock, which can be seen in Photograph No. 004. A lateral band of corrosion and material loss was observed at the northern end of the pipe section (Photograph No. 005). This band extended approximately from 5 o'clock to 7 o'clock with material loss approximately up to 3/16" in depth. Light mechanical damage was observed across the exterior of the pipe, presumably from excavation and removal.

The force main was originally cement mortar lined. The remaining lining on the removed pipe section was largely failed (Photograph No. 006). Where still present, the lining was not well adhered and large spalls were typical (Photograph Nos. 007 & 008). No lining was observed within 1" on either side of the fracture at the invert of the pipe. The lining was quite soft when tested with a 5-in-1 tool, and powdered at the touch.

The long-range fracture occurred along the invert of the force main. The separation in the break was observed to be typically over 1/4" wide (Photograph No. 009) with smooth edges (Photograph No. 010). Significant material loss on the internal side of the pipe was observed within 1 1/2" of either side of the break (Photograph No. 007). UT measurements were taken at the north end, as well as the south end of the pipe section. Results can be seen in **Table 1** below.

TABLE 1: DI PIPING ULTRASONIC THICKNESS MEASUREMENTS (inches)											
LOCATION								MAX.	MIN.	AVE.	MIN./AVE.
COMPONENT	END	4:00	5:00	6:00	7:00	8:00	9:00				
DI Force Main	North	0.302	0.304	0.098	0.323	0.289	0.296	0.323	0.098	0.269	36%
	South	0.291	0.282	0.093	0.294	0.312	0.307	0.312	0.093	0.263	35%

Table 1 – North and South End UT Measurements

The UT measurements above were taken within 12” of the cut ends of the pipe section. The 6 o’clock measurement on the north end was taken within ½” of the break, while the south end measurement was taken at the invert (the break does not extend all the way to the south end of the pipe section). Measurements were taken from the outside of the pipe which exhibited minimal corrosion losses.

A sample was cut from this pipe section and sent to Corrosion Testing Laboratories (CTL) for further analysis. The sample was taken approximately between 5 o’clock and 7 o’clock on the north end of the pipe section, extending approximately 14” into the length of the pipe (Photograph No. 011). CTL’s report can be found in Appendix A, and discussion of their report can be found in the following sections.

3.0 LABORATORY ANALYSIS

A sample was cut from the invert of the subject pipe section in the field and sent to CTL for analysis. The sample was composed of two pieces – one from each side of the break.

Deposit and corrosion product buildup was present on the pipe, **Figure 2** (in the CTL report). Near the fracture face both the graphitic corrosion product and the deposit buildup had broken away. The fracture surface was thin walled due to general corrosion originating from the ID.

No evidence of an ID liner was observed. Due to the pervasiveness of ID corrosion, the nominal wall thickness of the pipe could not be ascertained. The thickest area measured was 0.36” away from the failure.

A cross section of the fracture face was prepared for metallurgical examination, **Figures 4 to 6** (in the CTL report). Both the ID and OD wall loss was from graphitic corrosion. The microstructure of the pipe consisted of pearlite in a matrix of ferrite.

In summary, the laboratory report from CTL indicates that failure originated from the inside of the pipe. Graphitic corrosion was observed on both the inside and outside of the pipe wall. The amount of graphitic corrosion on the inside of the pipe wall was considerably greater, and more consistent, than that observed on the exterior of the pipe. No cement mortar lining was present on the inside face of the sample. The lining, as observed in the field, was generally failed and not well adhered where it was still intact.

Graphitic corrosion is a mechanism of deterioration found in cast irons. Ductile iron is a form of cast iron. In ductile iron, the graphite forms nodules within the fine-particulate iron matrix which increases the ductility and impact and fatigue resistance of the metal compared to grey cast iron. Since graphite is cathodic to iron, both of which are components in the ductile iron matrix, the iron will be preferentially attacked and leached from the structure by an acidic environment. In this mechanism, the iron is leached from the wall of the pipe, leaving behind a weak and more brittle graphite matrix. When the iron is leached out of the pipe wall, the dimensions are not generally altered as the graphite remains in position, but is weakly bonded together by iron oxides and the wall structure is easily broken or penetrated in affected areas.

Microbiologically influenced corrosion (MIC) commonly occurs in wastewater applications in both aerobic and anaerobic conditions. While aerobic MIC is more common in applications where a headspace is allowed to form by wastewater pipes not flowing full, anaerobic MIC can also occur under certain conditions. Domestic septic sewage contains an ample supply of sulfate ions. Within slime layers that form in wastewater piping under low flow conditions, sulfate reducing bacteria (SRB) exist. This type of bacteria requires an anaerobic environment, and will not become active until the slime layers are sufficiently thick enough to prevent penetration by dissolved oxygen in the wastewater. Ultimately, the process of SRB metabolizing the available sulfates will form hydrogen sulfide and weak acids. Under-deposit corrosion occurs when wastewater biosolids build up in low areas of sewer pipelines including force mains which flow at low velocity. In these cases, acidic conditions promote acidic dissolution of cement mortar linings and active graphitic corrosion of ductile iron pipe. Invert failures in fore mains are typically caused either by erosive conditions or by acidic attack associated with septic under-deposit corrosion. All evidence in this subject force main failure points to acidic attack of the mortar lining and later the ductile iron pipe. Once the wall thickness was sufficiently weakened, the pipe wall fractured as the pipe could no longer resist internal and /or external pressure.

4.0 CONCLUSIONS & RECOMMENDATIONS

Based upon the field inspection and laboratory analysis performed by CTL, the failure associated with the Beardsley Pump Station Force Main was caused by graphitic corrosion of the ductile iron pipe. The acidic environment at the invert of the pipe was the likely result of a build-up of biosolids and under-deposit corrosion associated with sulfate reducing bacteria (SRB). Once the pipe wall was no longer strong enough to resist the operating pressures of the force main, the pipe fractured.

This section of pipe is at a low point, or belly, in the line. The slow flow rate, 2ft/s, likely caused the deposition of biosolids at the invert of the pipe. The buildup of biosolids turned septic, creating an acidic environment against the invert of the pipe through the action of the SRB. The CTL report indicates that the pH of the inside face of the pipe sample was around 5.82; a pH of around 9.5 is required for ductile iron to begin corroding. And the wastewater pH is near neutral itself.

Similar low elevation locations along the force main are likely subject to the same mechanism of deterioration. Low points with slow moving wastewater are potentially in similar condition to this section of pipe. A desktop review of the pipeline's hydraulic profile should be conducted to identify areas of concern.

If it is possible to take the force main out of service for some reasonable amount of time, CPI would recommend performing CCTV services. This is an invasive procedure which would require sufficient cleaning of the lines, but would allow for visual observations of the internal force main conditions at low areas. It may also be possible to perform test pit inspections at areas of concern, assuming that the invert of the pipe can be exposed. Test pit inspections are less intrusive to pump station operation and can be performed while the force main is in service, though the amount of information acquired from such inspections may be more limited. The potential for a break to occur during test pit activities may also be greater than that posed by a CCTV inspection as the pipe would need to be fully exposed, removing any supportive pressures which the surrounding earth would have been providing. Another option to consider might be to use digital profile radiography to detect significant corrosion losses in the pipe's invert. This would also require exposing the pipe for 180 degrees of its outside circumference.

4.0 PHOTOGRAPHS



Photograph No. 001 – Overview of force main section with general labelling



Photograph No. 002 – Overview of bottom of pipe surface. New pipe seen on right side of photo



Photograph No. 003 – Large area of material loss on south end of pipe. Pitting visible on right side of tape measure.



Photograph No. 004 – Large area of material loss on south end of pipe section with visible pitting



Photograph No. 005 – Lateral band of corrosion at north end of pipe section



Photograph No. 006 – Overview of internal condition of pipe section



Photograph No. 007 – Internal view of the pipe section at the north end, invert of pipe



Photograph No. 008 – Internal view of the pipe section at the north end, crown of pipe



Photograph No. 009 – Typical width of break at invert



Photograph No. 010 – Smooth edges of break



Photograph No. 011 – Sample for laboratory analysis marked and labelled



Corrosion Testing Laboratories, Inc.

Analysis of Fractured Ductile Iron Waste Water Main from Trumbull CT

Prepared for Kevin Krawiec of Corrosion Probe, Inc.

CTL REF NO: 37118; CPI REF NO: MPI070

April 26, 2020

Samples Provided

Two sections of fractured ductile iron waste water pipe were supplied to CTL for analysis, **Figure 1**. The sections provided were of opposite ends of a longitudinal crack at the bottom of the pipe.

Methods of Analysis

Metallurgical Analysis

- The sample surfaces were examined macroscopically as well as using stereo optical microscopes at up to 144X magnification.
- Cross-sectional mounts were prepared for microscopic examination of the various features, including through the fracture surface and corrosion of the threads.

Deposit Analysis¹

- The elemental composition of deposits was determined via energy dispersive x-ray spectroscopy (EDS) performed in the scanning electron microscope (SEM).
- Deposits for water-soluble anions often associated with corrosion. An extract was collected by grinding deposits and boiling them in deionized water. The extract was then analyzed via ion chromatography (IC) for chloride, sulfate, fluoride, and others. The pH of the solution was also measured.

Analysis Findings

Deposit and corrosion product buildup was present on the pipe, **Figure 2**. Near the fracture face both the graphitic corrosion product and the deposit buildup had broken away. The fracture surface was thin walled due to general corrosion originating from the ID.

A circumferential band of OD corrosion was present on the sample. A section of missing metal was present in line with the circumferential band. The deepest OD corrosion was measured at 100 Mils.

¹ Both techniques are to be considered semi-quantitative. Technique can influence concentrations of detected species (e.g., water concentration in extraction, method of extraction preparation, location of analysis), and, therefore, these results should be used to gain a general understanding of deposit composition while respecting limitations.

No evidence of an ID liner was observed. Due to the pervasiveness of ID corrosion, the nominal wall thickness of the pipe could not be ascertained. The thickest area measured was 0.36” away from the failure.

A cross section of the fracture face was prepared for metallurgical examination, **Figures 4 to 6**. Both the ID and OD wall loss was from graphitic corrosion. The microstructure of the pipe consisted of pearlite in a matrix of ferrite.

The EDS and IC results indicate that the environment in the inside of this line is sulfate and formate rich and acidic. Smaller amounts of acetate and chloride ions were present as well. The IC results are summarized in **Table 1**, and representative EDS spectra are shown in **Figure 7**.

Table 1. IC Results*					
pH	Chloride	Sulfate	Acetate	Formate	Phosphate
5.82	135	3217	254	1096	92

*Anions present in concentrations <50 ppm were not reported.

We appreciate the opportunity to assist you in this investigation. If you have any questions or comments, please do not hesitate to contact us.

Respectfully submitted by,

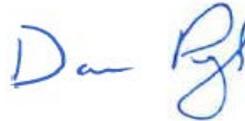
Corrosion Testing Laboratories, Inc.

Principal Investigator:



Lewis Krantz
Metallurgical Technician

Reviewed and approved by:



Dan Pugh
Director of Laboratory Services

Policy Statement

This study was performed and this report was prepared based upon specific samples and/or information provided to Corrosion Testing Laboratories, Inc. (CTL) by Corrosion Probe, Inc.. The information contained in this report represents only the materials tested or evaluated. Such work was performed in accordance with CTL's Quality Assurance Manual, Revision 13, issued 22 June 2009. The conclusions and opinions provided were developed within a reasonable degree of scientific certainty and are based upon materials and information provided to date. Should additional information become available (e.g., on further continued review of the material received or submission of additional samples for examination), we reserve the right to adjust our professional opinions.

CTL assumes no responsibility for variations in sample or data quality (composition, appearance, performance, etc.) or any other feature of similar subject matter produced (measured, manufactured, fabricated, etc.) by persons or under conditions over which we have no control. This report may not be altered, added to or subtracted from and, if this does occur, CTL does not accept responsibility for such alterations, additions, or deletions. This report shall not be reproduced, except in full, without the written approval of CTL. All material that was received by CTL will be discarded six (6) months after this report has been issued, unless other arrangements have been agreed upon. All liquid, soil and gaseous samples that are received by CTL shall not be stored for more than thirty (30) days and shall be disposed of in accordance with applicable rules and regulations.

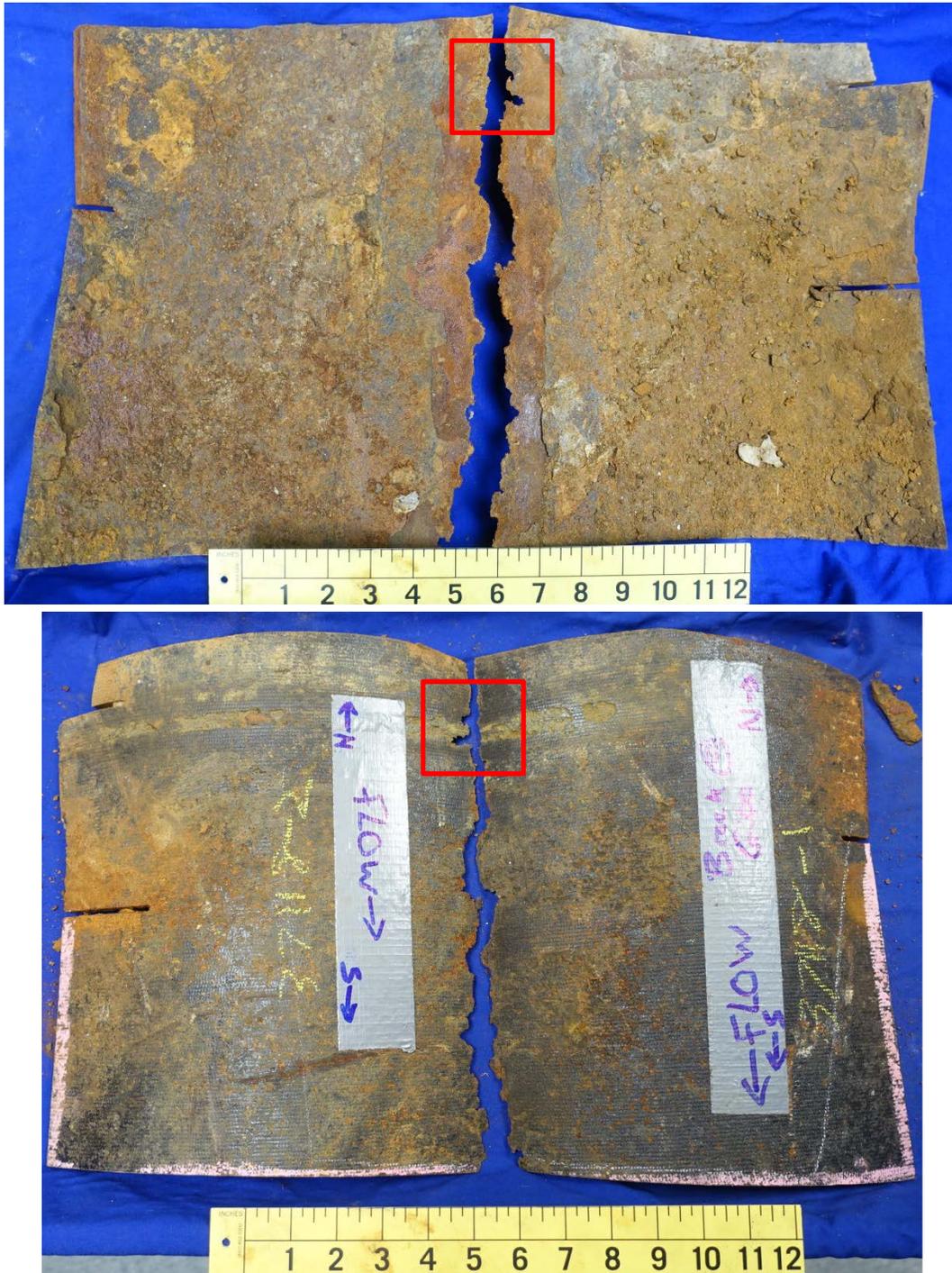


Figure 1. Samples as received. The red box indicates areas of missing metal (through wall corrosion as opposed to fracture).

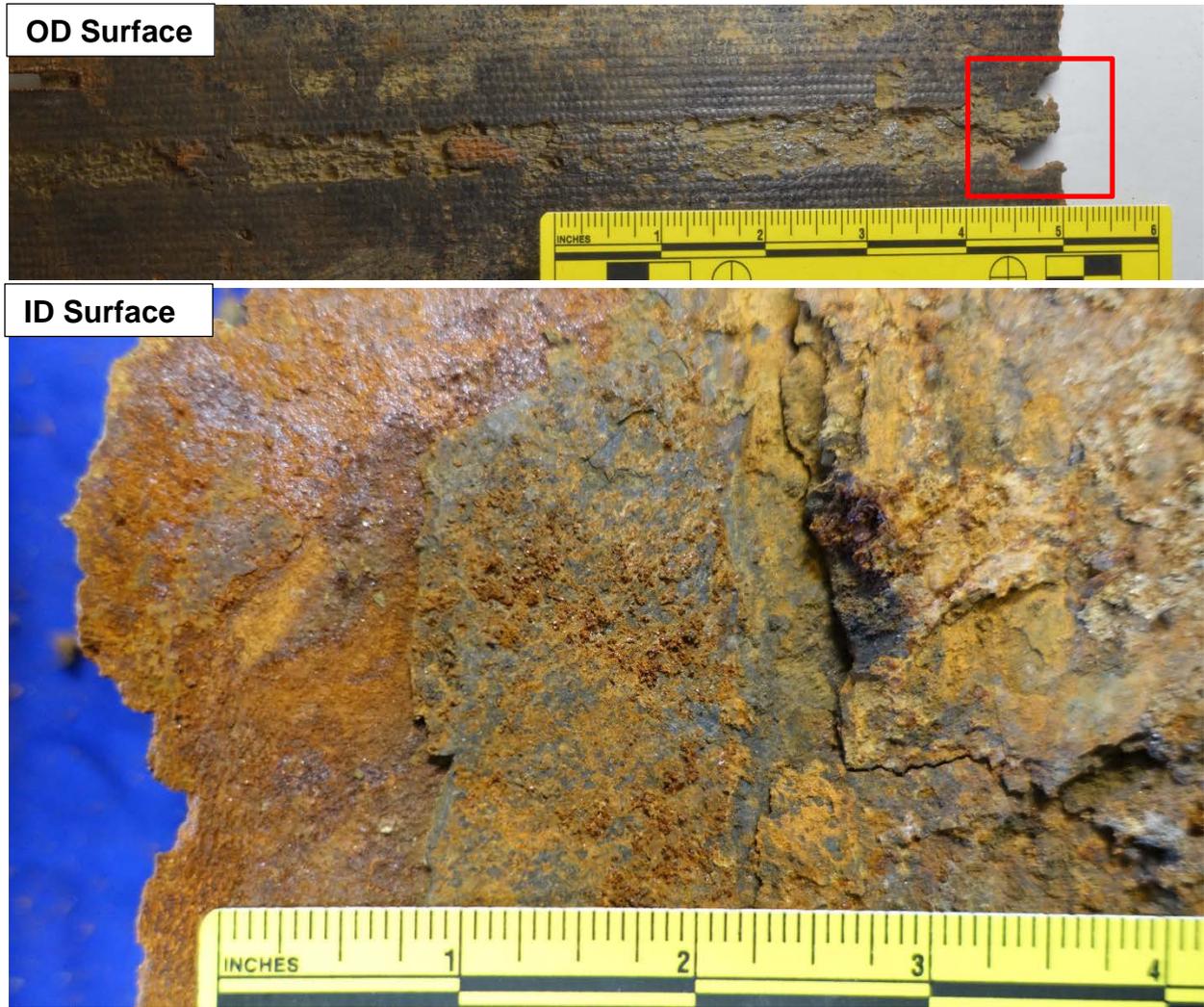


Figure 2. ID and OD surfaces. OD surface and a circumferential band of graphitic corrosion. ID deposits and corrosion product had fallen off near the fracture face.



Figure 3. Smooth general ID corrosion and rough OD corrosion at the circumferential band.

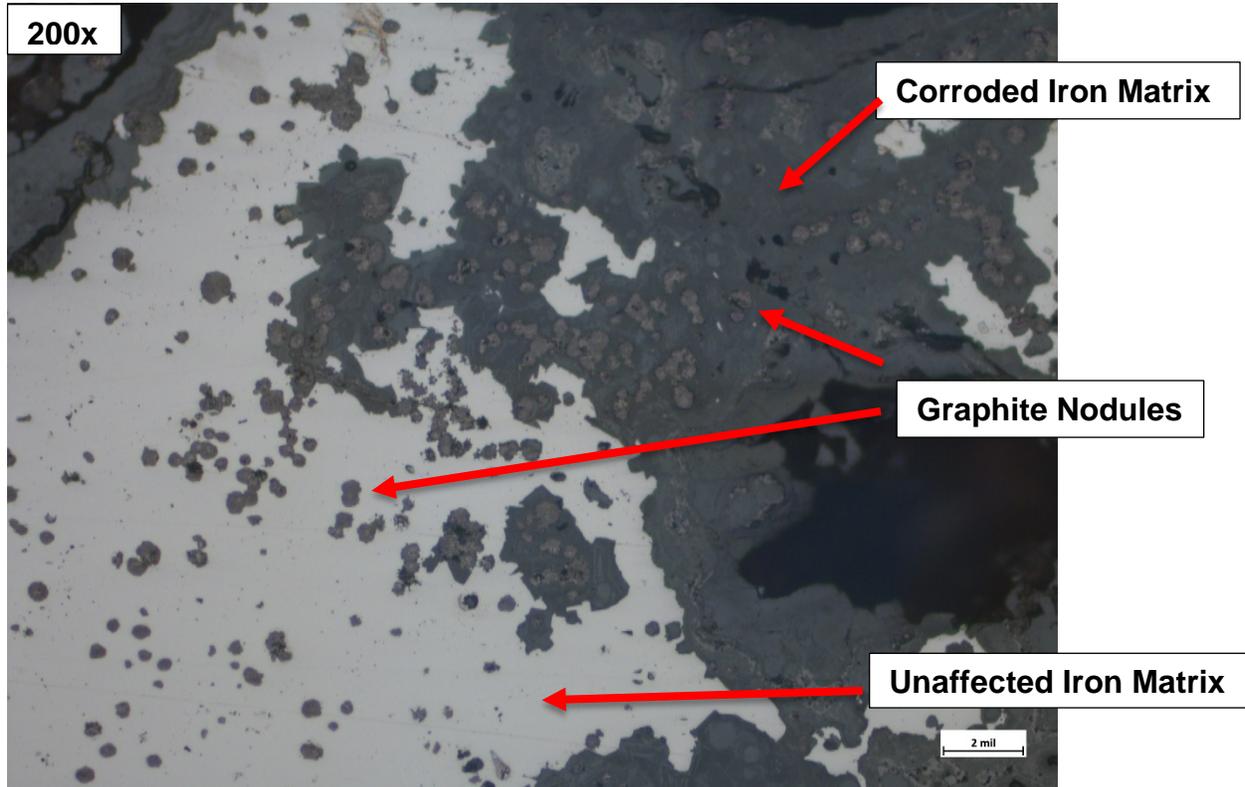


Figure 4. Graphitic corrosion on the ID.

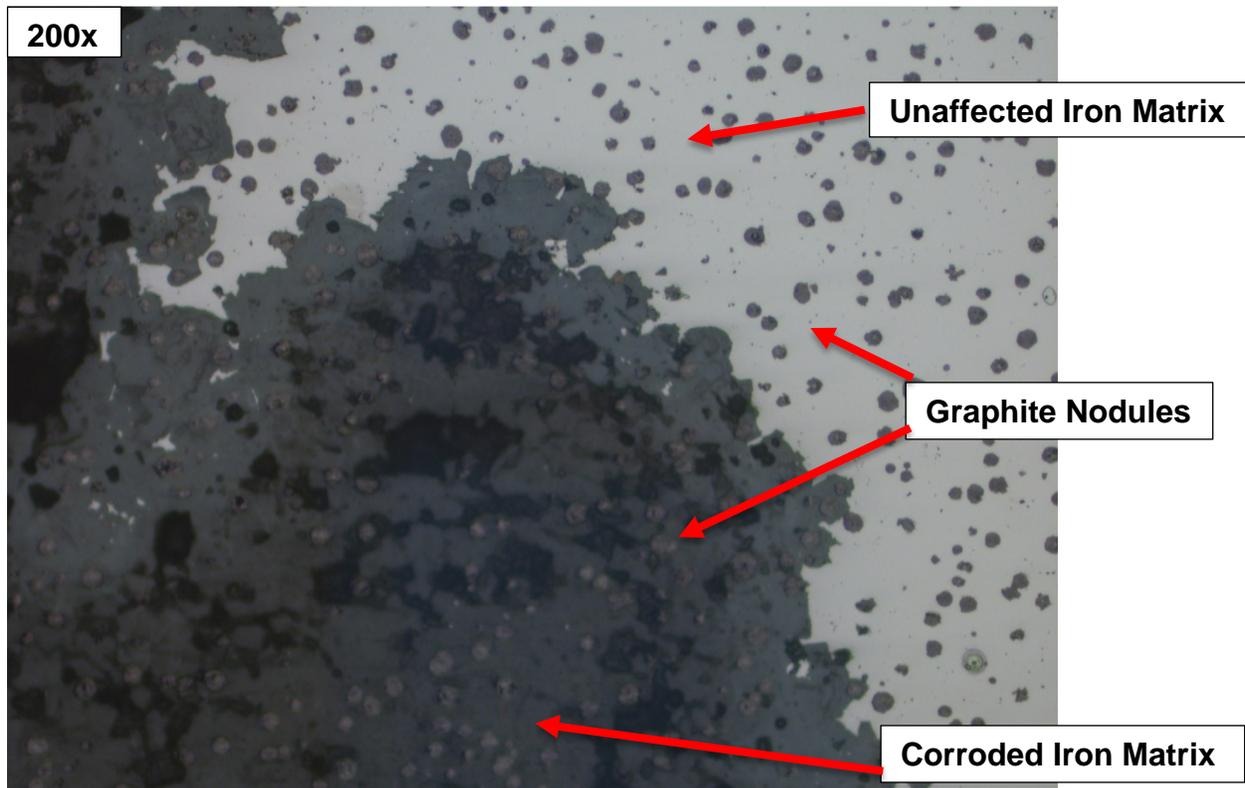


Figure 5. Graphitic corrosion on the OD.

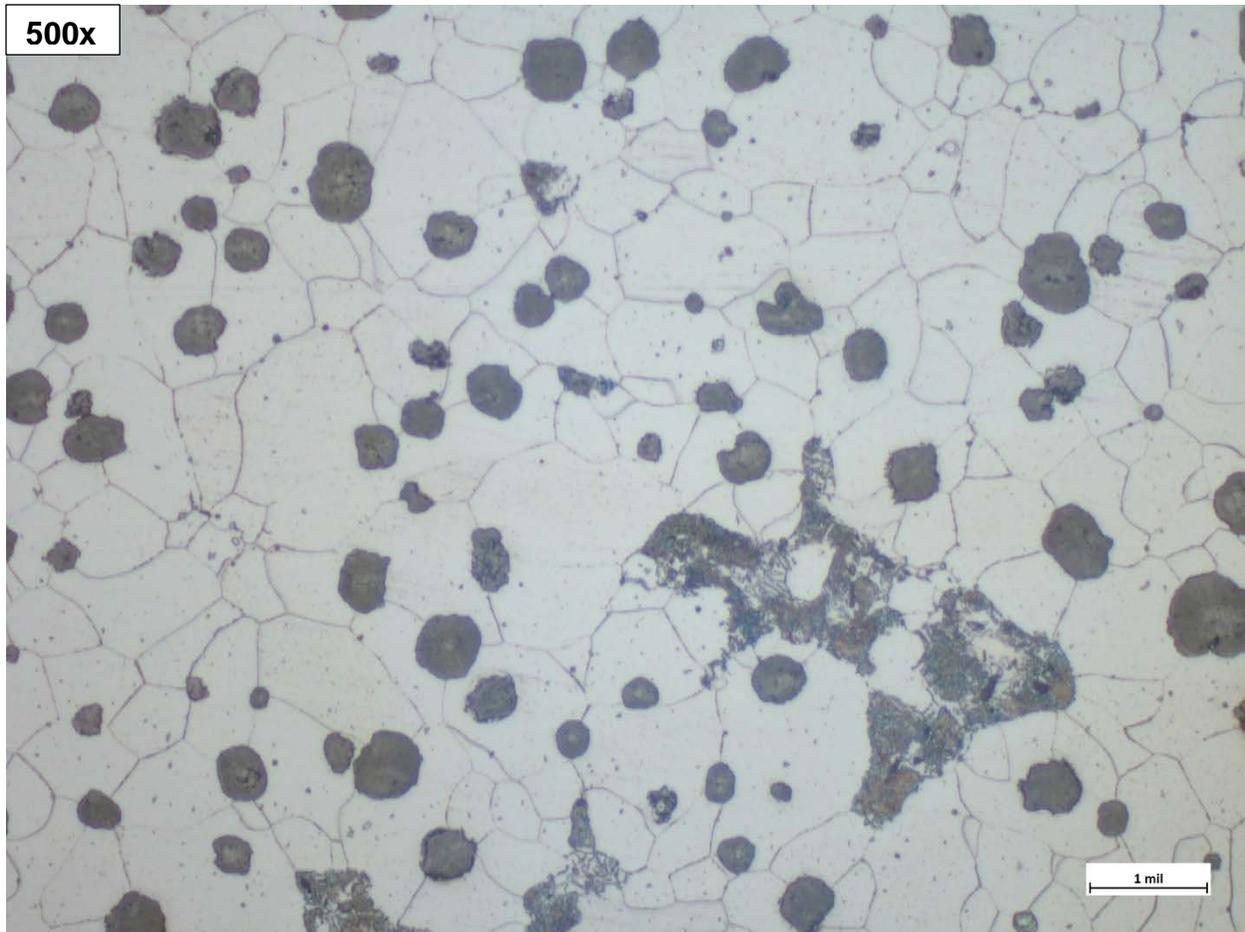


Figure 6. Microstructure of pipe etched with 3% Nital.

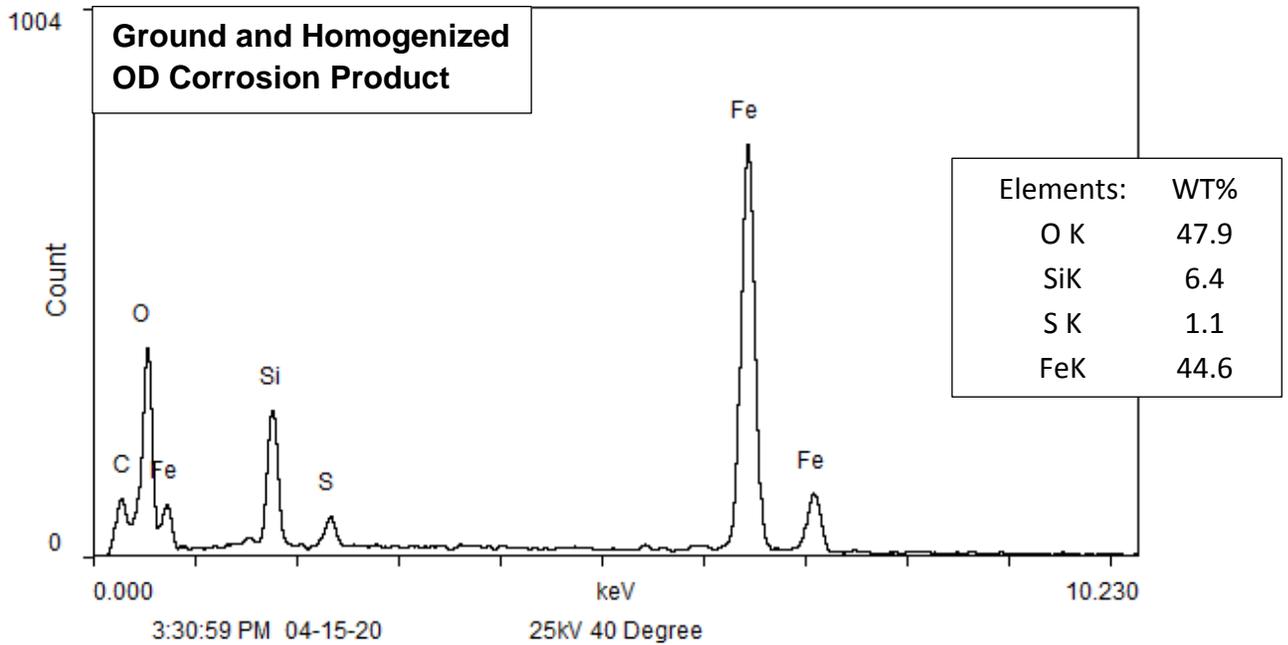
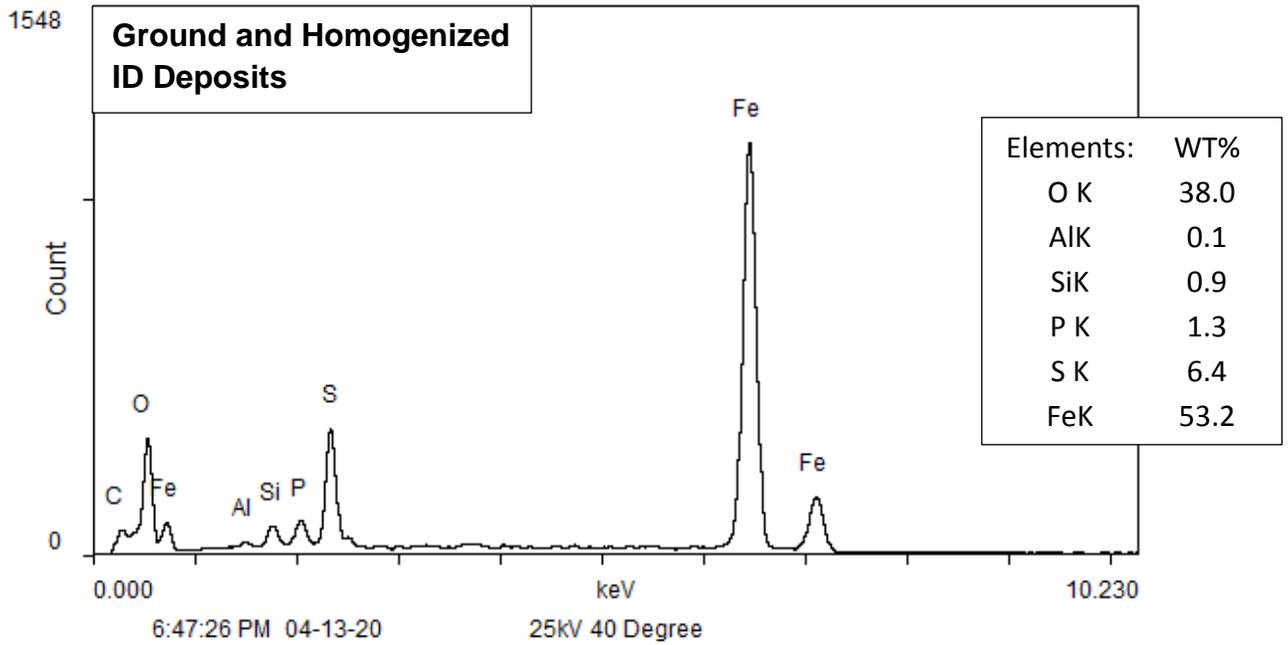


Figure 7. Representative EDS Spectra.

From: [Richard Boggs](#)
To: [Andrew Palo](#); rcboggs@charter.net
Cc: [Margaret Mastroni](#); Cberezin@aol.com; charles.r.berezin@lmco.com; Frank.Regnery@fticonsulting.com; jongreene@yahoo.com; Scottthorntonmd@yahoo.com; [William Maurer](#); jmn@quidproquo.com; jon@network-1.com
Subject: RE: [External] Agenda Item
Date: Wednesday, May 13, 2020 11:53:51 AM

Andy

I appreciate your intent here and have no problem adding this to the agenda for consideration, but am struggling a bit with the idea of the WPCA funding the conveyance of what is primarily discretionary water usage on the basis of hardship. The difference between consumption during the period from Jan-March and April-June is mostly exterior use, for lawn irrigation, plant watering, car washing and the like. Any resident having financial difficulties can easily curtail these kinds of things to save money if necessary. It would be interesting to see if we can get the data comparing residential water use from April 2019 and April 2020 to see the impact all the people working from home has had, but that may be a tall order. Assuming most Trumbull residents work elsewhere, it may be sufficient to just look at total water usage, hopefully with the Trumbull Mall broken out from these totals. If the difference between April water use in 2019 and 2020 is significant, that would suggest that the COVID-19 impact should be considered in addition to the usual seasonal variations, and your case is stronger.

That said, we can certainly consider allowing residents to defer payment of WPCA bills without penalty, as the town has already done with property tax bills, as long as our cash position will allow this. Hopefully we can get enough information prior to our meeting to make an assessment of the most appropriate course. Bill, can you help with this?

Regards,
Rick

Richard Boggs, PE, SECB, LEED AP
Senior Project Manager
Fuss & O'Neill, Inc. | 56 Quarry Road | Trumbull, CT 06611
203.374.3748 x5502 | rboggs@fando.com | cell: 203.450.0499
www.fando.com | [twitter](#) | [facebook](#) | [linkedin](#)

From: Andrew Palo [mailto:dobler000@aol.com]

Sent: Tuesday, May 12, 2020 10:45 PM

To: Richard Boggs <RBoggs@fando.com>; rcboggs@charter.net

Cc: mmastroni@trumbull-ct.gov; Cberezin@aol.com; charles.r.berezin@lmco.com; Frank.Regnery@fticonsulting.com; jongreene@yahoo.com; Scottthorntonmd@yahoo.com; wmaurer@trumbull-ct.gov; jmn@quidproquo.com; jon@network-1.com

Subject: [External] Agenda Item

Richard,

First off, I hope you and everyone on this distribution are doing well. I'd like to ask if you could include the following as a discussion item on our next agenda. I recently received my WPCA bill which covers the period of April, May & June. This bill is derived from water readings from 1/1/20 through 3/31/20. In light of the financial difficulties so many of our residents face during these unprecedented times and heading into heavier water usage months (especially with so many people staying home), I was wondering if we could freeze the amount due from this bill and apply it to the next bill that will go out. So, the bill that would cover the months of July, August & September, calculated from water readings from 4/1/20 through 6/30/20, would be the same as the bill we just received.

The questions that come to my mind are whether we can do this logistically and financially. Can the company who sends out our bills handle such a request? Can we as a Commission afford what I believe would be a reduction of revenues for one period? I'd like to eventually request that someone ask the Director of Finance how much revenue historically we've generated from these two billings. I'd like to get a handle as to how much revenue, if any, we'd be losing. Ideally, if it could be broken out by commercial versus residential, that would be fantastic but I don't even know if we are able to generate this information at all.

As you well know, in the past, the Town used to try to adjust for water usage that impacts just the sewer system via a complex formula. I'd like to see our Commission help our residents financially, if possible, for this one period as we used to do in the past with that formula. Back then the Town kicked in the difference between what we actually were billed and what the WPCA charged. I am hoping to accomplish this by not getting the Town involved and seeing if we, as a Commission, can afford this financially. I really think it's the right thing to do during this difficult time for so many.

Lastly, I'd like to ask that this email be included in our next packet for discussion purposes if the item is added to the agenda.

Thanks,

Andy Palo

From: James Nugent
To: jon@network-1.com
Cc: Richard Boggs; Margaret Mastroni; Andrew Palo; Cberezin@aol.com; charles.r.berezin@lmco.com; Frank.Regnery@fticonsulting.com; jongreene@yahoo.com; rcboggs@charter.net; Scottthorntonmd@yahoo.com; William Maurer
Subject: Re: [External] Sewers: The Signature of Our Community
Date: Wednesday, May 6, 2020 11:23:46 AM

Emails to a quorum of the commission are discoverable under FOI and this constitutes a meeting. We will have to include these as part of the minutes at the next meeting in order to comply with FOI rules

Sent from my iPad

On May 6, 2020, at 12:29 AM, "jon@network-1.com" <jon@network-1.com> wrote:

In order to be useful that approach would have to be done in every sewer community and tied to extensive testing and contact tracking by health experts. Therefore, it would have to be a state initiative in conjunction with local health departments. I think our role, or really the sewer administrator's role with at most our approval (and, frankly, I'm not even sure that's required), would be to facilitate the testing by whoever the state would designate. Does anyone know if there is such an initiative?

Jon

P.S. Question for Attorney Nugent: Does email discussion among the entire body stray into potential open meeting law conflicts? At a minimum I presume the emails are FOIA discoverable and I don't think anyone would have a problem with that (I wouldn't say anything in email that I wouldn't say in public), but I want to understand if there are boundaries we should not cross.

----- Original Message -----

Subject: RE: [External] Sewers: The Signature of Our Community
From: Richard Boggs <RBoggs@fando.com>
Date: Tue, May 05, 2020 5:54 pm
To: Margaret Mastroni <mmastroni@trumbull-ct.gov>, Andrew Palo <dobler000@aol.com>, "Charles Berezin (Cberezin@aol.com)" <Cberezin@aol.com>, "charles.r.berezin (charles.r.berezin@lmco.com)" <charles.r.berezin@lmco.com>, "Frank Regnery-WPCA (Frank.Regnery@fticonsulting.com)" <Frank.Regnery@fticonsulting.com>, "Jon Greene (jon@network-1.com)" <jon@network-1.com>, "jongreene@yahoo.com" <jongreene@yahoo.com>, "Richard Boggs (rcboggs@charter.net)" <rcboggs@charter.net>, "Scott Thornton (Scottthorntonmd@yahoo.com)" <Scottthorntonmd@yahoo.com>
Cc: James Nugent <jmn@quidproquo.com>, William Maurer <wmaurer@trumbull-ct.gov>

A friend of mine shared this earlier today, and I thought you'd all find it interesting. Does COVID-19 monitoring fall within our area of responsibility?

https://www.nytimes.com/2020/05/01/science/coronavirus-sewage-monitoring-lockdown.html?algo=identity&fallback=false&imp_id=420879518&imp_id=893021054&action=click&module=Science%20%20Technology&pgtype=Homepage

Cheers,
Rick

Richard Boggs, PE, SECB, LEED AP
Senior Project Manager
Fuss & O'Neill, Inc. | 56 Quarry Road | Trumbull, CT 06611
203.374.3748 x5502 | rboggs@fando.com | cell: 203.450.0499
www.fando.com | [twitter](#) | [facebook](#) | [linkedin](#)

From: Margaret Mastroni [<mailto:mmastroni@trumbull-ct.gov>]

Sent: Wednesday, April 29, 2020 2:21 PM

To: Andrew Palo <dobler000@aol.com>; Charles Berezin (Cberezin@aol.com) <Cberezin@aol.com>; charles.r.berezin (charles.r.berezin@lmco.com) <charles.r.berezin@lmco.com>; Frank Regnery-WPCA (Frank.Regnery@fticonsulting.com) <Frank.Regnery@fticonsulting.com>; Jon Greene (jon@network-1.com) <jon@network-1.com>; jongreene@yahoo.com; Richard Boggs <RBoggs@fando.com>; Richard Boggs (rcboggs@charter.net) <rcboggs@charter.net>; Scott Thornton (Scottthorntonmd@yahoo.com) <Scottthorntonmd@yahoo.com>

Subject: [External] 04-22-2020 WPCA minutes

Good Afternoon Commissioners,

Attached are the 04-22-2020 WPCA minutes.

Have a nice afternoon,

Margaret Mastroni

Date of Issuance: 4/2/2020	Effective Date: 4/2/2020
Owner: Town of Trumbull	Owner's Contract No.: 6297
Contractor: Kovacs Construction Corporation	Contractor's Project No.: F-2820
Engineer: Arcadis U.S., Inc.	Engineer's Project No.: 06532002.0000
Project: Beardsley Pump Station Comprehensive Upgrade	Contract Name:

The Contract is modified as follows upon execution of this Change Order:

CO-2 Item 1 Description: Modify the configuration of the new CMU wall along the dry well stairs, resulting in less CMU required and a deduct of approximately 94sq ft of 8" CMU block.

Credit: (\$1,797.60)

CO-2 Item 2 Description: Furnish and install a concrete equipment pad for the main switch and CT cabinet which was modified to be a combo unit to eliminate additional wall mounted electrical equipment.

Cost: \$3,798.33

CO-2 Item 3 Description: Furnish and install a new door for Door 108-1 to accommodate actual field conditions. *Cost: \$1,527.91*

CO-2 Item 4 Description: Materials, equipment, and labor for emergency force main repair in the Beardsley Park on January 23, 2020.

Cost: \$20,064.54

CO-2 Item 5 Description: Cost for replenishing parts borrowed during the emergency force main repair in the Beardsley Park on January 23, 2020 and provision of additional spares at the Town's request.

Cost: \$17,912.78

CO-2 Item 6 Description: Furnish additional programming to modify the Mission Dialer I/O alarm signals as requested by the Town.

Cost: \$1,689.21

CO-2 Item 7 Description: Credit for Allowance Item allocated for Provision of New Electrical Service. United Illuminating has provided the new service at no cost to the Town.

Credit: (\$5,000)

CO-2 Item 8 Description: Credit for Allowance Item allocated for Provision of New Gas Service. SCG has provided the new service at no cost to the Town.

Credit: (\$3,000)

Attachments:

- CO-2 Pricing Details

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ <u>5,019,025.00</u>	Original Contract Times: October 17, 2018 Substantial Completion: <u>450 Days</u> Ready for Final Payment: <u>510 Days</u> <div style="text-align: right;">days or dates</div>
[Increase] [Decrease] from previously approved Change Orders No. <u>1</u> to No. <u>1</u> : \$ <u>160,058.87</u>	[Increase] [Decrease] from previously approved Change Orders No. <u>1</u> to No. <u>1</u> : Substantial Completion: <u>45 Days</u> Ready for Final Payment: <u>45 Days</u>
Contract Price prior to this Change Order: \$ <u>5,179,083.87</u>	Contract Times prior to this Change Order: Substantial Completion: <u>495 Days</u> Ready for Final Payment: <u>555 Days</u>
Increase of this Change Order: \$ <u>35,195.17</u>	Increase of this Change Order: Substantial Completion: <u>0 Days</u> Ready for Final Payment: <u>0 Days</u>
Contract Price incorporating this Change Order: \$ <u>5,214,279.04</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>495 Days</u> Ready for Final Payment: <u>555 Days</u>

RECOMMENDED: By: _____ Engineer (if required) Title: _____ Date: _____	ACCEPTED: By: _____ Owner (Authorized Signature) Title _____ Date _____	ACCEPTED: By: _____ Contractor (Authorized Signature) Title _____ Date _____
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February 27, 2020

Arcadis
44 South Broadway
White Plains, NY 10601

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley P.S. Comprehensive Upgrade, Trumbull, CT
RFI#9- Deduct Masonry Modifications

Dear Vanessa:

Kovacs Construction Corporation is offering a credit per RFI#9 for the modifications described in RFI#9. We provided a new wall at back floor hatch and deducted approximately 94 sq.ft. of 8" block.

GMC Mason Contractors	-1,712.00
5% GC P&O	85.60

TOTAL REVISED CREDIT \$1,797.60

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

Enclosure

G.M.C. MASON CONTRACTORS, INC.

HARTFORD, CT 06114
(860) 727-9181 Fax (860) 525-1955

TITLE:	Change Order RFI #9	PROPOSED CHANGE ORDER NO.	3
PROJECT:	Beardsley Pump Trumbull	DATE:	02/06/2020
TO:	Attn: Tom Kovacs Kovacs Construction Corporation 321 Riggs Street Oxford, CT 06478 Phone:203-743-4022	CONTRACT/PO:	F-2820-11
		SUBMITTED:	
		COMPLETED:	
		REQUIRED:	

DESCRIPTION

New wall at Back Floor Hatch in Garage Area.

Less Masonry Deduct 94 Sqft of 8" Block

Add Demo to insert precast lintels into existing exterior wall

Num	Item	Description	Ref	Qty	Unit	Unit Price	Amount	
1	01	8" Masonry		-94.000	Sq. Ft.	20.00	-1,880.00	
2	03	Bricklayer		1.000	Hrs	95.00	95.00	
3	04	Mason Tender		1.000	Hrs	73.00	73.00	
							<hr/>	
							Item Total:	(\$1,712.00)
							Profit and Overhead 15%	\$0.00
							<hr/>	
							Total:	(\$1,712.00)

APPROVAL

By: _____

By: _____

Date: _____

Date: _____



February 3, 2020

Arcadis
44 South Broadway
PO Box 751
White Plains, NY 10602-0751

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley Pump Station Comprehensive Upgrade, Trumbull, CT
Electrical Concrete Pad

Dear Vanessa:

Kovacs Construction Corporation is requesting a change order to furnish and install a concrete equipment pad for the main switch and CT cabinet. During the approval of the equipment, we provided a combo unit to eliminate extra electrical equipment mounted on the wall. This unit, however was too large to be wall mounted, so an electrical pad was poured. The pricing is as follows:

C&R Concrete	3,564.00
5% GC P&O	178.20
Bonding Costs	<u>56.13</u>
Total this Proposed Change Order	\$3,798.33

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

GENERAL CONTRACTOR
321 Riggs Street, Oxford, CT 06478
Tel: (203) 743-4022 • Fax: (203) 790-1326



February 17, 2020

Arcadis
44 South Broadway
PO Box 751
White Plains, NY 10602-0751

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley Pump Station Comprehensive Upgrade, Trumbull, CT
Door 108-1

Dear Vanessa:

Kovacs Construction Corporation is requesting a change order to provide a new door for 108-1. The door was ordered to the schedule as shown on the drawings. The opening was thought to be opened up to the opening as shown on the drawings. We need to provide a new door and modify the frame to fit in the existing opening. The pricing is as follows:

Door & Security Solutions	1,455.15
5% GC P&O	<u>72.76</u>
Total this Proposed Change Order	\$1,527.91

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

Enclosures

GENERAL CONTRACTOR
321 Riggs Street, Oxford, CT 06478
Tel: (203) 743-4022 • Fax: (203) 790-1326



8 Horseshoe Lane Farmington, CT 06032 | 860.404.2838

Change Order 3

<u>Project Information:</u> Beardsley Pump Station Trumbull, CT	<u>Presented To:</u>
<u>Bid Documents:</u> Plans Dated: 10/2018	
<p style="text-align: center;">1/ 3'0" x 7'2" Hollow Metal A60 Polystyrene Insulated Door</p> <p style="text-align: center;">Total Cost of Material: \$1,305.15</p> <p style="text-align: center;">Reweld Frame</p> <p style="text-align: center;">Total Cost of Labor: \$150.00</p>	
<p>Total Credit: <u>One Thousand Four Hundred Fifty-Five Dollars 15/100 (\$1,455.15)</u></p> <p style="text-align: center;"><small>Payment due 30 days from request. Late payments subject to a %1.5 late fee.</small></p> <p style="text-align: center;"><small>This proposal is to be incorporated into and shall become part of any further or additional agreement made for this project.</small></p>	
<u>Authorized Signature:</u> _____ Caitlyn Tuz Date: 2/11/2020	<u>Acceptance of Proposal:</u> _____ _____ Date:

KOVACS CONSTRUCTION CORPORATION

321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

To: Arcadis
 44 South Broadway
 P.O. Box 751
 White Plains, NY 10602-0751
 Attn: Vanessa McPherson
 Phone: (914) 641-2418
 Fax: (914) 641-2404

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change order	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

SUMMARY

Material charges	\$ 2,359.19
15% contractor profit and overhead	353.88
Total material charges	2,713.07

Subcontractor charges	-
5% contractor profit and overhead	-
Total subcontractor charges	-

Labor charges	15,434.95
----------------------	-----------

Equipment charges	1,916.52
--------------------------	----------

This change order is to fix the forcemain break in the Beardsley Zoo park area. We excavated down, found break, replaced one length of 20" pipe, one short sleeve and one long solid sleeve with megalugs, backfilled and cleaned area. Our price does not include fence, paving or landscaping.

TOTAL CHARGES FOR CHANGE ORDER	\$ 20,064.54
---------------------------------------	---------------------

As a result of this change order, we request a contract extension of XX working days.

Very truly yours,

KOVACS CONSTRUCTION CORPORATION,



Thomas Kovacs
 General Manager

Accepted by _____

Date _____

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

MATERIAL CHARGES

Line Number	Description of material	Quantity	Unit of Measure	Unit Price	Extended Price
1.00	Four Loads of 3/4 process	1.00	lot	\$ 1,610.44	\$ 1,610.44
2.00	One (1) load of 3/4" stone	1.00	each	498.75	498.75
3.00	All Pipe used on spare part piping change order	-	each	-	-
4.00	20" pipe, long solid sleeve, short solid sleeve	-	each	-	-
5.00	megalugs and accessories	-	each	-	-
6.00	Misc Equipment	1.00	each	250.00	250.00
7.00		-	each	-	-
8.00		-	each	-	-
9.00		-	each	-	-
10.00		-	each	-	-
11.00		-	each	-	-
12.00		-	each	-	-
13.00		-	each	-	-
14.00		-	each	-	-
15.00		-	each	-	-
16.00		-	each	-	-
17.00		-	each	-	-
18.00		-	each	-	-
19.00		-	each	-	-
20.00		-	each	-	-

TOTAL MATERIALS BEFORE APPLICABLE SALES TAX	\$ 2,359.19
Sales tax, if applicable	0.00% -
TOTAL MATERIALS INCLUDING APPLICABLE SALES TAX	\$ 2,359.19

Notes:

Invoice 547707

[Print Document](#)

HAYNES MATERIALS
 GOHAYNES.COM
 (203) 888 - 8117

Customer KOVACS CONSTRUCTION CORP 016791 Job # 11 Date/Time 01/24/2020 2:26 PM
 Store 5 Clerk / User BLB Phone (203) 743 - 4022

Bill To Address:
 KOVACS CONSTRUCTION CORP
 321 RIGGS STREET
 OXFORD, CT
 06478

Ship To Address:
 PUMP STA. 119 WHITE PLAINS RD
 119 WHITE PLAINS ROAD
 TRUMBULL, CT
 06611

Terms NET 30 DAYS PO # F2820-X Resale # 0743849-000
 Taxcode 001 Reference PO # F2820-X BankCard
 Salesperson 14 Authorized Charge TOM KOVAC Other
 Charge ~~1,712.70~~ Check
 Cash Change

Item	Description	Ord	UM	Units	Price	Ext
LVW	LIGHT VEHICLE WEIGHT	26,820	EA	26,820	0.00/EA	0.00
GVW	GROSS VEHICLE WEIGHT	72,840	EA	72,840	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	23.01	TN	23.01	8.50/TN	195.59
1292	DEL ZONE 3 TRI/TON 7010 MATT	23.01	EA	23.01	8.50/EA	195.59
RT8 S. EXIT 7 LEFT AT BOTTOM, GO TO LIGHT WITH CUMBERLAND FARMS TAKE RIGHT ON TO NOBLE AVE. GO TO STOP SIGN & TAKE RIGHT INTO ZOO ABOUT 1/2 MILE IN ON LEFT						
GVW	GROSS VEHICLE WEIGHT	74,480	EA	74,480	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	23.83	TN	23.83	8.50/TN	202.56
1292	DEL ZONE 3 TRI/TON 7010 MATT	23.83	EA	23.83	8.50/EA	202.56
GVW	GROSS VEHICLE WEIGHT	73,480	EA	73,480	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	23.33	TN	23.33	8.50/TN	198.31
1292	DEL ZONE 3 TRI/TON 7010 MATT	23.33	EA	23.33	8.50/EA	198.31
GVW	GROSS VEHICLE WEIGHT	75,940	EA	75,940	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	24.56	TN	24.56	8.50/TN	208.76
1292	DEL ZONE 3 TRI/TON 7010 MATT	24.56	EA	24.56	8.50/EA	208.76

Subtotal

1,610.44

Tax

~~102.26~~

Invoice 547493

[Print Document](#)

HAYNES MATERIALS
GOHAYNES.COM
(203) 888 - 8117

Customer KOVACS CONSTRUCTION CORP 016791
Store 5

Job # 13 Date/Time 01/17/2020 2:29 PM
Clerk / User BLB Phone (203) 743 - 4022

Bill To Address:
KOVACS CONSTRUCTION CORP
321 RIGGS STREET
OXFORD, CT
06478

Ship To Address:
SHELTON PUMP STATION
505 HUNTINGTON STREET
SHELTON, CT
06484

Terms NET 30 DAYS PO # HUNTINGTON Resale # 0743849-000
Taxcode 001 Reference PO # HUNTINGTON BankCard
Salesperson 14 Authorized Charge TOM KOVAC Other
Charge 2,141.78 Check
Cash Change

F2840

Item	Description	Ord	UM	Units	Price	Ext
LVW	LIGHT VEHICLE WEIGHT	25,940	EA	25,940	0.00/EA	0.00
GVW	GROSS VEHICLE WEIGHT	71,280	EA	71,280	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	22.67	TN	22.67	14.50/TN	328.72
1290	DEL ZONE 2 TRI/TON 7014 GLEN	22.67	EA	22.67	7.50/EA	170.03
GVW	GROSS VEHICLE WEIGHT	72,140	EA	72,140	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	23.1	TN	23.1	14.50/TN	334.95
1290	DEL ZONE 2 TRI/TON 7014 GLEN	23.1	EA	23.1	7.50/EA	173.25
GVW	GROSS VEHICLE WEIGHT	71,780	EA	71,780	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	22.92	TN	22.92	14.50/TN	332.34
1290	DEL ZONE 2 TRI/TON 7014 GLEN	22.92	EA	22.92	7.50/EA	171.90
GVW	GROSS VEHICLE WEIGHT	71,640	EA	71,640	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	22.85	TN	22.85	14.50/TN	331.33
1290	DEL ZONE 2 TRI/TON 7014 GLEN	22.85	EA	22.85	7.50/EA	171.38
Subtotal		2,013.90	Tax	127.88		

49875

 **PAID**

\$4555.7
02/18/2020

\$19,365.91

Awe

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

EQUIPMENT CHARGES

Line Number	Equipment Type	Equipment Hours	Equipment Rate	Extended Equipment
1.00	Truck	2.00	70.00	140.00
2.00	Excavator	8.00	75.00	600.00
3.00	Skidster	4.00	70.00	280.00
4.00	Swat Truck -Generator etc.	8.00	75.00	600.00
5.00	Bonding Costs	19,768.02	0.015	296.52
6.00		-	-	-
7.00		-	-	-
8.00		-	-	-
9.00		-	-	-
10.00		-	-	-
11.00		-	-	-
12.00		-	-	-
13.00		-	-	-
14.00		-	-	-
15.00		-	-	-
16.00		-	-	-
17.00		-	-	-
18.00		-	-	-
19.00		-	-	-
20.00		-	-	-

TOTAL EQUIPMENT BEFORE APPLICABLE SALES TAX	\$ 1,916.52
Sales tax, if applicable	0.00% -
TOTAL EQUIPMENT INCLUDING APPLICABLE SALES TAX	\$ 1,916.52

Notes:

KOVACS CONSTRUCTION CORPORATION

321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

To: Arcadis
 44 South Broadway
 P.O. Box 751
 White Plains, NY 10602-0751
 Attn: Vanessa McPherson
 Phone: (914) 641-2418
 Fax: (914) 641-2404

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change order	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

SUMMARY

Material charges	\$ 15,011.76
15% contractor profit and overhead	2,251.76
Total material charges	17,263.52

Subcontractor charges	-
5% contractor profit and overhead	-
Total subcontractor charges	-

Labor charges	234.54
----------------------	--------

Equipment charges	414.72
--------------------------	--------

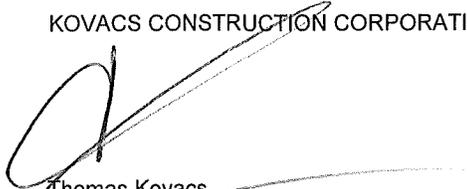
TOTAL CHARGES FOR CHANGE ORDER	\$ 17,912.78
---------------------------------------	---------------------

This Change order is to furnish 20" pipe and couplings for spare Piping for the Beardsley Pump Station. The pricing also includes replacing the materials that Nickerson provided during the forcemain break at the Beardsley Zoo area.

As a result of this change order, we request a contract extension of XX working days.

Very truly yours,

KOVACS CONSTRUCTION CORPORATION,



Thomas Kovacs
 General Manager

Accepted by _____

Date _____

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

MATERIAL CHARGES

Line Number	Description of material	Quantity	Unit of Measure	Unit Price	Extended Price
1.00	20" CL 52 Pushon Pipe	3.00	lengths	\$ 1,608.12	\$ 4,824.36
2.00	20X15 MJ long sleeve	4.00	each	702.16	2,808.64
3.00	20 short sleeve on site	1.00	each	596.12	596.12
4.00	20" megalug set with gasket and hardware	10.00	each	349.16	3,491.60
5.00		-	each	-	-
6.00	Nickerson return	-	each	-	-
7.00	20X15 MJ long sleeve	1.00	each	702.16	702.16
8.00	20 short sleeve	2.00	each	596.12	1,192.24
9.00	20" megalug set with gasket and hardware	4.00	each	349.16	1,396.64
10.00		-	each	-	-
11.00		-	each	-	-
12.00		-	each	-	-
13.00		-	each	-	-
14.00		-	each	-	-
15.00		-	each	-	-
16.00		-	each	-	-
17.00		-	each	-	-
18.00		-	each	-	-
19.00		-	each	-	-
20.00		-	each	-	-

TOTAL MATERIALS BEFORE APPLICABLE SALES TAX	\$ 15,011.76
Sales tax, if applicable	0.00% -
TOTAL MATERIALS INCLUDING APPLICABLE SALES TAX	\$ 15,011.76

Notes:



FERGUSON WATERWORKS #1985
 57 S.W. CUTOFF
 WORCESTER, MA 01604-1517

Phone: 508-754-2027
 Fax: 508-754-2158

Deliver To: From: Paul Cleveland Comments:
--

14:46:06 JAN 29 2020

Page 1 of 1

FERGUSON WATERWORKS #576
 Price Quotation
 Phone: 508-754-2027
 Fax: 508-754-2158

Bid No: B371388
 Bid Date: 01/27/20
 Quoted By: PC

Cust Phone: 203-743-4022
 Terms: NET 10TH PROX

Customer: KOVACS CONSTRUCTION CORP
 BEARDSLEY PUMP STS
 321 RIGGS STREET
 OXFORD, CT 06478

Ship To: KOVACS CONSTRUCTION CORP
 BEARDSLEY PUMP STS
 321 RIGGS STREET
 OXFORD, CT 06478

Cust PO#: 20" MATERIAL

Job Name: BEARDSLEY PUMP STS

Item	Description	Quantity	Net Price	UM	Total
DI52SJP20	20 CL52 DI SJ PIPE	18	89.340	FT	1608.12
MJLSLA20	20X15 MJ C153 LONG SLV L/A	2	702.155	EA	1404.31
E112000	20 MEGALUG F/ DI	4	299.158	EA	1196.63
IMJBGP20	20 MJ C153 BLT GSKT PK L/ GLAND	4	50.000	EA	200.00
FBSS20	20 MJ C110 SHORT SLV W/A	1	596.120	EA	596.12
MJLSLA20	20X15 MJ C153 LONG SLV L/A	1	702.150	EA	702.15
E112000	20 MEGALUG F/ DI	4	299.160	EA	1196.64
IMJBGP20	20 MJ C153 BLT GSKT PK L/ GLAND	4	50.000	EA	200.00

Net Total: \$7103.97
 Tax: \$0.00
 Freight: \$0.00
 Total: \$7103.97

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
 Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with *NP in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=576&on=46128>

KOVACS CONSTRUCTION CORPORATION

321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

LABOR CHARGES

Line Number	Labor type	Labor Hours	Labor Rate	Extended Labor
1.00	Millwright-in-charge - regular time	-	\$ 112.63	\$ -
2.00	Millwright-in-charge - overtime	-	168.95	-
3.00	Millwright-in-charge - double time	-	225.26	-
4.00	Laborer - regular time	-	93.54	-
5.00	Laborer - overtime	-	140.31	-
6.00	Laborer - double time	-	187.08	-
7.00	Millwright - regular time	-	109.01	-
8.00	Millwright - overtime	-	163.52	-
9.00	Millwright - double time	-	218.02	-
10.00	Machine operator - regular time	2.00	117.27	234.54
11.00	Machine operator - overtime	-	175.91	-
12.00	Machine operator - double time	-	234.54	-
13.00	Truck driver - regular time	-	98.33	-
14.00	Truck driver - overtime	-	147.50	-
15.00	Truck driver - double time	-	196.66	-
16.00	AUTOCAD shop drawings	-	95.00	-
17.00	Shop	-	90.00	-
18.00		-	-	-
19.00		-	-	-
20.00		-	-	-

TOTAL LABOR BEFORE APPLICABLE SALES TAX **2.00** \$ **234.54**

Travel
 XX trips at XXX miles per trip

Miles	Rate	Total
-	\$ 2.50	-

Sales tax, if applicable 0.00% -

TOTAL LABOR INCLUDING APPLICABLE SALES TAX **\$ 234.54**

Notes:

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

EQUIPMENT CHARGES

Line Number	Equipment Type	Equipment Hours	Equipment Rate	Extended Equipment
1.00	Excavator	2.00	75.00	150.00
2.00		-	-	-
3.00	Bond Costs	17,648.06	0.015	264.72
4.00		-	-	-
5.00		-	-	-
6.00		-	-	-
7.00		-	-	-
8.00		-	-	-
9.00		-	-	-
10.00		-	-	-
11.00		-	-	-
12.00		-	-	-
13.00		-	-	-
14.00		-	-	-
15.00		-	-	-
16.00		-	-	-
17.00		-	-	-
18.00		-	-	-
19.00		-	-	-
20.00		-	-	-

TOTAL EQUIPMENT BEFORE APPLICABLE SALES TAX	\$ 414.72
Sales tax, if applicable	0.00% -
TOTAL EQUIPMENT INCLUDING APPLICABLE SALES TAX	\$ 414.72

Notes:



March 23, 2020

Arcadis
44 South Broadway
PO Box 751
White Plains, NY 10602-0751

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley Pump Station Comprehensive Upgrade, Trumbull, CT
Instrumentation

Dear Vanessa:

Kovacs Construction Corporation is requesting a change order to modify the Mission Dialer I/O per alarm changes requested by the Town. The pricing is as follows:

Knapp (Attached)	1,585.00
5% GC P&O	79.25
Bonding Costs	<u>24.96</u>
Total this Proposed Change Order	\$1,689.21

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

Enclosure

GENERAL CONTRACTOR
321 Riggs Street, Oxford, CT 06478
Tel: (203) 743-4022 • Fax: (203) 790-1326



P.O. Box 7057 Prospect, CT 06712

(203) 758-3503 FAX (203) 758-0554

INVOICE

DATE

INVOICE #

3/18/2020	202003-23
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BILL TO:

Accounts Payable
 KOVACS CONSTRUCTION CORP.
 321 Riggs Street
 Oxford, CT 06478

P.O. NUMBER	TERMS	PROJECT
F-2820-4	Net 30	180825 BEAR...

QUANTITY	DESCRIPTION	RATE	AMOUNT
	BEARDSLEY PUMP STATION-TRUMBULL		
	Mission Dialer I/O changes contract modification request		
2	3/12/20 Design Changes	115.00	230.00
6	3/16/20 Make wiring changes to mission inputs. Rewire components in PLC Panel and connect to mission control wiring.	95.00	570.00
6	Program changes for inputs to mission. Change OIT screens for removed alarms, Change scaling on Trend Screen. Added time control for high capacity pump exercise routine.	115.00	690.00
1	Update Drawings	95.00	95.00

TOTAL \$1,585.00

Date of Issuance: 4/2/2020	Effective Date: 4/2/2020
Owner: Town of Trumbull	Owner's Contract No.: 6297
Contractor: Kovacs Construction Corporation	Contractor's Project No.: F-2820
Engineer: Arcadis U.S., Inc.	Engineer's Project No.: 06532002.0000
Project: Beardsley Pump Station Comprehensive Upgrade	Contract Name:

The Contract is modified as follows upon execution of this Change Order:

CO-2 Item 1 Description: Modify the configuration of the new CMU wall along the dry well stairs, resulting in less CMU required and a deduct of approximately 94sq ft of 8" CMU block.

Credit: (\$1,797.60)

CO-2 Item 2 Description: Furnish and install a concrete equipment pad for the main switch and CT cabinet which was modified to be a combo unit to eliminate additional wall mounted electrical equipment.

Cost: \$3,798.33

CO-2 Item 3 Description: Furnish and install a new door for Door 108-1 to accommodate actual field conditions. *Cost: \$1,527.91*

CO-2 Item 4 Description: Materials, equipment, and labor for emergency force main repair in the Beardsley Park on January 23, 2020.

Cost: \$20,064.54

CO-2 Item 5 Description: Cost for replenishing parts borrowed during the emergency force main repair in the Beardsley Park on January 23, 2020 and provision of additional spares at the Town's request.

Cost: \$17,912.78

CO-2 Item 6 Description: Furnish additional programming to modify the Mission Dialer I/O alarm signals as requested by the Town.

Cost: \$1,689.21

CO-2 Item 7 Description: Credit for Allowance Item allocated for Provision of New Electrical Service. United Illuminating has provided the new service at no cost to the Town.

Credit: (\$5,000)

CO-2 Item 8 Description: Credit for Allowance Item allocated for Provision of New Gas Service. SCG has provided the new service at no cost to the Town.

Credit: (\$3,000)

Attachments:

- CO-2 Pricing Details

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ <u>5,019,025.00</u>	Original Contract Times: October 17, 2018 Substantial Completion: <u>450 Days</u> Ready for Final Payment: <u>510 Days</u> <div style="text-align: right;">days or dates</div>
[Increase] [Decrease] from previously approved Change Orders No. <u>1</u> to No. <u>1</u> : \$ <u>160,058.87</u>	[Increase] [Decrease] from previously approved Change Orders No. <u>1</u> to No. <u>1</u> : Substantial Completion: <u>45 Days</u> Ready for Final Payment: <u>45 Days</u>
Contract Price prior to this Change Order: \$ <u>5,179,083.87</u>	Contract Times prior to this Change Order: Substantial Completion: <u>495 Days</u> Ready for Final Payment: <u>555 Days</u>
Increase of this Change Order: \$ <u>35,195.17</u>	Increase of this Change Order: Substantial Completion: <u>0 Days</u> Ready for Final Payment: <u>0 Days</u>
Contract Price incorporating this Change Order: \$ <u>5,214,279.04</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>495 Days</u> Ready for Final Payment: <u>555 Days</u>

RECOMMENDED: By: _____ <div style="text-align: center;">Engineer (if required)</div> Title: _____ Date: _____	ACCEPTED: By: _____ <div style="text-align: center;">Owner (Authorized Signature)</div> Title: _____ Date: _____	ACCEPTED: By: _____ <div style="text-align: center;">Contractor (Authorized Signature)</div> Title: _____ Date: _____
---	--	---



February 27, 2020

Arcadis
44 South Broadway
White Plains, NY 10601

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley P.S. Comprehensive Upgrade, Trumbull, CT
RFI#9- Deduct Masonry Modifications

Dear Vanessa:

Kovacs Construction Corporation is offering a credit per RFI#9 for the modifications described in RFI#9. We provided a new wall at back floor hatch and deducted approximately 94 sq.ft. of 8" block.

GMC Mason Contractors	-1,712.00
5% GC P&O	85.60

TOTAL REVISED CREDIT \$1,797.60

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

Enclosure

G.M.C. MASON CONTRACTORS, INC.

HARTFORD, CT 06114
(860) 727-9181 Fax (860) 525-1955

TITLE:	Change Order RFI #9	PROPOSED CHANGE ORDER NO.	3
PROJECT:	Beardsley Pump Trumbull	DATE:	02/06/2020
TO:	Attn: Tom Kovacs Kovacs Construction Corporation 321 Riggs Street Oxford, CT 06478 Phone:203-743-4022	CONTRACT/PO:	F-2820-11
		SUBMITTED:	
		COMPLETED:	
		REQUIRED:	

DESCRIPTION

New wall at Back Floor Hatch in Garage Area.

Less Masonry Deduct 94 Sqft of 8" Block

Add Demo to insert precast lintels into existing exterior wall

Num	Item	Description	Ref	Qty	Unit	Unit Price	Amount	
1	01	8" Masonry		-94.000	Sq. Ft.	20.00	-1,880.00	
2	03	Bricklayer		1.000	Hrs	95.00	95.00	
3	04	Mason Tender		1.000	Hrs	73.00	73.00	
							<hr/>	
							Item Total:	(\$1,712.00)
							Profit and Overhead 15%	\$0.00
							<hr/>	
							Total:	(\$1,712.00)

APPROVAL

By: _____

By: _____

Date: _____

Date: _____



February 3, 2020

Arcadis
44 South Broadway
PO Box 751
White Plains, NY 10602-0751

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley Pump Station Comprehensive Upgrade, Trumbull, CT
Electrical Concrete Pad

Dear Vanessa:

Kovacs Construction Corporation is requesting a change order to furnish and install a concrete equipment pad for the main switch and CT cabinet. During the approval of the equipment, we provided a combo unit to eliminate extra electrical equipment mounted on the wall. This unit, however was too large to be wall mounted, so an electrical pad was poured. The pricing is as follows:

C&R Concrete	3,564.00
5% GC P&O	178.20
Bonding Costs	<u>56.13</u>
Total this Proposed Change Order	\$3,798.33

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

GENERAL CONTRACTOR
321 Riggs Street, Oxford, CT 06478
Tel: (203) 743-4022 • Fax: (203) 790-1326



February 17, 2020

Arcadis
44 South Broadway
PO Box 751
White Plains, NY 10602-0751

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley Pump Station Comprehensive Upgrade, Trumbull, CT
Door 108-1

Dear Vanessa:

Kovacs Construction Corporation is requesting a change order to provide a new door for 108-1. The door was ordered to the schedule as shown on the drawings. The opening was thought to be opened up to the opening as shown on the drawings. We need to provide a new door and modify the frame to fit in the existing opening. The pricing is as follows:

Door & Security Solutions	1,455.15
5% GC P&O	<u>72.76</u>
Total this Proposed Change Order	\$1,527.91

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

Enclosures

GENERAL CONTRACTOR
321 Riggs Street, Oxford, CT 06478
Tel: (203) 743-4022 • Fax: (203) 790-1326



8 Horseshoe Lane Farmington, CT 06032 | 860.404.2838

Change Order 3

<u>Project Information:</u> Beardsley Pump Station Trumbull, CT	<u>Presented To:</u>
<u>Bid Documents:</u> Plans Dated: 10/2018	
<p style="text-align: center;">1/ 3'0" x 7'2" Hollow Metal A60 Polystyrene Insulated Door</p> <p style="text-align: center;">Total Cost of Material: \$1,305.15</p> <p style="text-align: center;">Reweld Frame</p> <p style="text-align: center;">Total Cost of Labor: \$150.00</p>	
<p>Total Credit: <u>One Thousand Four Hundred Fifty-Five Dollars 15/100 (\$1,455.15)</u></p> <p style="text-align: center;"><small>Payment due 30 days from request. Late payments subject to a %1.5 late fee.</small></p> <p style="text-align: center;"><small>This proposal is to be incorporated into and shall become part of any further or additional agreement made for this project.</small></p>	
<u>Authorized Signature:</u> _____ Caitlyn Tuz Date: 2/11/2020	<u>Acceptance of Proposal:</u> _____ _____ Date:

KOVACS CONSTRUCTION CORPORATION

321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

To: Arcadis
 44 South Broadway
 P.O. Box 751
 White Plains, NY 10602-0751
 Attn: Vanessa McPherson
 Phone: (914) 641-2418
 Fax: (914) 641-2404

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change order	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

SUMMARY

Material charges	\$ 2,359.19
15% contractor profit and overhead	353.88
Total material charges	2,713.07

Subcontractor charges	-
5% contractor profit and overhead	-
Total subcontractor charges	-

Labor charges	15,434.95
----------------------	-----------

Equipment charges	1,916.52
--------------------------	----------

This change order is to fix the forcemain break in the Beardsley Zoo park area. We excavated down, found break, replaced one length of 20" pipe, one short sleeve and one long solid sleeve with megalugs, backfilled and cleaned area. Our price does not include fence, paving or landscaping.

TOTAL CHARGES FOR CHANGE ORDER	\$ 20,064.54
---------------------------------------	---------------------

As a result of this change order, we request a contract extension of XX working days.

Very truly yours,

KOVACS CONSTRUCTION CORPORATION,



Thomas Kovacs
 General Manager

Accepted by _____

Date _____

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

MATERIAL CHARGES

Line Number	Description of material	Quantity	Unit of Measure	Unit Price	Extended Price
1.00	Four Loads of 3/4 process	1.00	lot	\$ 1,610.44	\$ 1,610.44
2.00	One (1) load of 3/4" stone	1.00	each	498.75	498.75
3.00	All Pipe used on spare part piping change order	-	each	-	-
4.00	20" pipe, long solid sleeve, short solid sleeve	-	each	-	-
5.00	megalugs and accessories	-	each	-	-
6.00	Misc Equipment	1.00	each	250.00	250.00
7.00		-	each	-	-
8.00		-	each	-	-
9.00		-	each	-	-
10.00		-	each	-	-
11.00		-	each	-	-
12.00		-	each	-	-
13.00		-	each	-	-
14.00		-	each	-	-
15.00		-	each	-	-
16.00		-	each	-	-
17.00		-	each	-	-
18.00		-	each	-	-
19.00		-	each	-	-
20.00		-	each	-	-

TOTAL MATERIALS BEFORE APPLICABLE SALES TAX	\$ 2,359.19
Sales tax, if applicable	0.00% -
TOTAL MATERIALS INCLUDING APPLICABLE SALES TAX	\$ 2,359.19

Notes:

Invoice 547707

[Print Document](#)

HAYNES MATERIALS
 GOHAYNES.COM
 (203) 888 - 8117

Customer KOVACS CONSTRUCTION CORP 016791 Job # 11 Date/Time 01/24/2020 2:26 PM
 Store 5 Clerk / User BLB Phone (203) 743 - 4022

Bill To Address:
KOVACS CONSTRUCTION CORP
 321 RIGGS STREET
 OXFORD, CT
 06478

Ship To Address:
PUMP STA. 119 WHITE PLAINS RD
 119 WHITE PLAINS ROAD
 TRUMBULL, CT
 06611

Terms NET 30 DAYS PO # F2820-X Resale # 0743849-000
 Taxcode 001 Reference PO # F2820-X BankCard
 Salesperson 14 Authorized Charge TOM KOVAC Other
 Charge ~~1,712.70~~ Check
 Cash Change

Item	Description	Ord	UM	Units	Price	Ext
LVW	LIGHT VEHICLE WEIGHT	26,820	EA	26,820	0.00/EA	0.00
GVW	GROSS VEHICLE WEIGHT	72,840	EA	72,840	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	23.01	TN	23.01	8.50/TN	195.59
1292	DEL ZONE 3 TRI/TON 7010 MATT	23.01	EA	23.01	8.50/EA	195.59
RT8 S. EXIT 7 LEFT AT BOTTOM, GO TO LIGHT WITH CUMBERLAND FARMS TAKE RIGHT ON TO NOBLE AVE. GO TO STOP SIGN & TAKE RIGHT INTO ZOO ABOUT 1/2 MILE IN ON LEFT						
GVW	GROSS VEHICLE WEIGHT	74,480	EA	74,480	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	23.83	TN	23.83	8.50/TN	202.56
1292	DEL ZONE 3 TRI/TON 7010 MATT	23.83	EA	23.83	8.50/EA	202.56
GVW	GROSS VEHICLE WEIGHT	73,480	EA	73,480	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	23.33	TN	23.33	8.50/TN	198.31
1292	DEL ZONE 3 TRI/TON 7010 MATT	23.33	EA	23.33	8.50/EA	198.31
GVW	GROSS VEHICLE WEIGHT	75,940	EA	75,940	0.00/EA	0.00
2770	PROCESS STONE 3/4" SEYMOUR	24.56	TN	24.56	8.50/TN	208.76
1292	DEL ZONE 3 TRI/TON 7010 MATT	24.56	EA	24.56	8.50/EA	208.76

Subtotal 1,610.44 Tax ~~102.26~~

Invoice 547493

[Print Document](#)

HAYNES MATERIALS
GOHAYNES.COM
(203) 888 - 8117

Customer KOVACS CONSTRUCTION CORP 016791
Store 5

Job # 13 Date/Time 01/17/2020 2:29 PM
Clerk / User BLB Phone (203) 743 - 4022

Bill To Address:
KOVACS CONSTRUCTION CORP
321 RIGGS STREET
OXFORD, CT
06478

Ship To Address:
SHELTON PUMP STATION
505 HUNTINGTON STREET
SHELTON, CT
06484

Terms NET 30 DAYS PO # HUNTINGTON Resale # 0743849-000
Taxcode 001 Reference PO # HUNTINGTON BankCard
Salesperson 14 Authorized Charge TOM KOVAC Other
Charge 2,141.78 Check
Cash Change

F2840

Item	Description	Ord	UM	Units	Price	Ext
LVW	LIGHT VEHICLE WEIGHT	25,940	EA	25,940	0.00/EA	0.00
GVW	GROSS VEHICLE WEIGHT	71,280	EA	71,280	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	22.67	TN	22.67	14.50/TN	328.72
1290	DEL ZONE 2 TRI/TON 7014 GLEN	22.67	EA	22.67	7.50/EA	170.03
GVW	GROSS VEHICLE WEIGHT	72,140	EA	72,140	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	23.1	TN	23.1	14.50/TN	334.95
1290	DEL ZONE 2 TRI/TON 7014 GLEN	23.1	EA	23.1	7.50/EA	173.25
GVW	GROSS VEHICLE WEIGHT	71,780	EA	71,780	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	22.92	TN	22.92	14.50/TN	332.34
1290	DEL ZONE 2 TRI/TON 7014 GLEN	22.92	EA	22.92	7.50/EA	171.90
GVW	GROSS VEHICLE WEIGHT	71,640	EA	71,640	0.00/EA	0.00
2775	CRUSHED STONE 3/4" SEYMOUR	22.85	TN	22.85	14.50/TN	331.33
1290	DEL ZONE 2 TRI/TON 7014 GLEN	22.85	EA	22.85	7.50/EA	171.38
Subtotal		2,013.90	Tax	127.88		

49875

 **PAID**

\$4555.7
02/18/2020

\$19,365.91

Awe

KOVACS CONSTRUCTION CORPORATION

321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

LABOR CHARGES

Line Number	Labor type	Labor Hours	Labor Rate	Extended Labor
1.00	Millwright-in-charge - regular time	11.00	\$ 112.63	\$ 1,238.93
2.00	Millwright-in-charge - overtime	23.50	168.95	3,970.33
3.00	Millwright-in-charge - double time	-	225.26	-
4.00	Laborer - regular time	16.00	93.54	1,496.64
5.00	Laborer - overtime	33.50	140.31	4,700.39
6.00	Laborer - double time	-	187.08	-
7.00	Millwright - regular time	11.00	109.01	1,199.11
8.00	Millwright - overtime	15.50	163.52	2,534.56
9.00	Millwright - double time	-	218.02	-
10.00	Machine operator - regular time	-	117.27	-
11.00	Machine operator - overtime	-	175.91	-
12.00	Machine operator - double time	-	234.54	-
13.00	Truck driver - regular time	-	98.33	-
14.00	Truck driver - overtime	2.00	147.50	295.00
15.00	Truck driver - double time	-	196.66	-
16.00	AUTOCAD shop drawings	-	95.00	-
17.00	Shop	-	90.00	-
18.00		-	-	-
19.00		-	-	-
20.00		-	-	-

TOTAL LABOR BEFORE APPLICABLE SALES TAX **112.50** \$ **15,434.95**

Travel
 XX trips at XXX miles per trip

Miles	Rate	Total
-	\$ 2.50	-

Sales tax, if applicable 0.00% -

TOTAL LABOR INCLUDING APPLICABLE SALES TAX **\$ 15,434.95**

Notes:

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade Force Main Break in the Beardsley Zoo Area
Date submitted	2/28/2020

EQUIPMENT CHARGES

Line Number	Equipment Type	Equipment Hours	Equipment Rate	Extended Equipment
1.00	Truck	2.00	70.00	140.00
2.00	Excavator	8.00	75.00	600.00
3.00	Skidster	4.00	70.00	280.00
4.00	Swat Truck -Generator etc.	8.00	75.00	600.00
5.00	Bonding Costs	19,768.02	0.015	296.52
6.00		-	-	-
7.00		-	-	-
8.00		-	-	-
9.00		-	-	-
10.00		-	-	-
11.00		-	-	-
12.00		-	-	-
13.00		-	-	-
14.00		-	-	-
15.00		-	-	-
16.00		-	-	-
17.00		-	-	-
18.00		-	-	-
19.00		-	-	-
20.00		-	-	-

TOTAL EQUIPMENT BEFORE APPLICABLE SALES TAX	\$ 1,916.52
Sales tax, if applicable	0.00% -
TOTAL EQUIPMENT INCLUDING APPLICABLE SALES TAX	\$ 1,916.52

Notes:

KOVACS CONSTRUCTION CORPORATION

321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

To: Arcadis
 44 South Broadway
 P.O. Box 751
 White Plains, NY 10602-0751
 Attn: Vanessa McPherson
 Phone: (914) 641-2418
 Fax: (914) 641-2404

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change order	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

SUMMARY

Material charges	\$ 15,011.76
15% contractor profit and overhead	2,251.76
Total material charges	17,263.52

Subcontractor charges	-
5% contractor profit and overhead	-
Total subcontractor charges	-

Labor charges	234.54
----------------------	--------

Equipment charges	414.72
--------------------------	--------

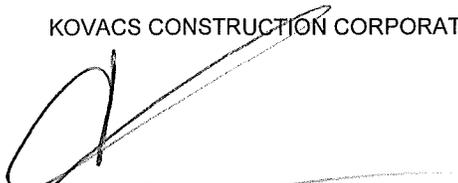
TOTAL CHARGES FOR CHANGE ORDER	\$ 17,912.78
---------------------------------------	---------------------

This Change order is to furnish 20" pipe and couplings for spare Piping for the Beardsley Pump Station. The pricing also includes replacing the materials that Nickerson provided during the forcemain break at the Beardsley Zoo area.

As a result of this change order, we request a contract extension of XX working days.

Very truly yours,

KOVACS CONSTRUCTION CORPORATION,



Thomas Kovacs
 General Manager

Accepted by _____

Date _____

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

MATERIAL CHARGES

Line Number	Description of material	Quantity	Unit of Measure	Unit Price	Extended Price
1.00	20" CL 52 Pushon Pipe	3.00	lengths	\$ 1,608.12	\$ 4,824.36
2.00	20X15 MJ long sleeve	4.00	each	702.16	2,808.64
3.00	20 short sleeve on site	1.00	each	596.12	596.12
4.00	20" megalug set with gasket and hardware	10.00	each	349.16	3,491.60
5.00		-	each	-	-
6.00	Nickerson return	-	each	-	-
7.00	20X15 MJ long sleeve	1.00	each	702.16	702.16
8.00	20 short sleeve	2.00	each	596.12	1,192.24
9.00	20" megalug set with gasket and hardware	4.00	each	349.16	1,396.64
10.00		-	each	-	-
11.00		-	each	-	-
12.00		-	each	-	-
13.00		-	each	-	-
14.00		-	each	-	-
15.00		-	each	-	-
16.00		-	each	-	-
17.00		-	each	-	-
18.00		-	each	-	-
19.00		-	each	-	-
20.00		-	each	-	-

TOTAL MATERIALS BEFORE APPLICABLE SALES TAX	\$ 15,011.76
Sales tax, if applicable	0.00% -
TOTAL MATERIALS INCLUDING APPLICABLE SALES TAX	\$ 15,011.76

Notes:



FERGUSON WATERWORKS #1985
 57 S.W. CUTOFF
 WORCESTER, MA 01604-1517

Phone: 508-754-2027
 Fax: 508-754-2158

Deliver To: From: Paul Cleveland Comments:
--

14:46:06 JAN 29 2020

Page 1 of 1

FERGUSON WATERWORKS #576
 Price Quotation
 Phone: 508-754-2027
 Fax: 508-754-2158

Bid No: B371388
 Bid Date: 01/27/20
 Quoted By: PC

Cust Phone: 203-743-4022
 Terms: NET 10TH PROX

Customer: KOVACS CONSTRUCTION CORP
 BEARDSLEY PUMP STS
 321 RIGGS STREET
 OXFORD, CT 06478

Ship To: KOVACS CONSTRUCTION CORP
 BEARDSLEY PUMP STS
 321 RIGGS STREET
 OXFORD, CT 06478

Cust PO#: 20" MATERIAL

Job Name: BEARDSLEY PUMP STS

Item	Description	Quantity	Net Price	UM	Total
DI52SJP20	20 CL52 DI SJ PIPE	18	89.340	FT	1608.12
MJLSLA20	20X15 MJ C153 LONG SLV L/A	2	702.155	EA	1404.31
E112000	20 MEGALUG F/ DI	4	299.158	EA	1196.63
IMJBG20	20 MJ C153 BLT GSKT PK L/ GLAND	4	50.000	EA	200.00
FBSS20	20 MJ C110 SHORT SLV W/A	1	596.120	EA	596.12
MJLSLA20	20X15 MJ C153 LONG SLV L/A	1	702.150	EA	702.15
E112000	20 MEGALUG F/ DI	4	299.160	EA	1196.64
IMJBG20	20 MJ C153 BLT GSKT PK L/ GLAND	4	50.000	EA	200.00

Net Total: \$7103.97
 Tax: \$0.00
 Freight: \$0.00
 Total: \$7103.97

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
 Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with *NP in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=576&on=46128>

KOVACS CONSTRUCTION CORPORATION
 321 Riggs Street
 Oxford, CT 06478-1129
 Phone: 203-743-4022
 Fax: 203-790-1326

Contract number	F-2820
Contract owner	Town of Trumbull
Description of change	Beardsley P.S. Comprehensive Upgrade 20" MJ Pipe and Couplings- Spare Parts
Date submitted	01/27/20

EQUIPMENT CHARGES

Line Number	Equipment Type	Equipment Hours	Equipment Rate	Extended Equipment
1.00	Excavator	2.00	75.00	150.00
2.00		-	-	-
3.00	Bond Costs	17,648.06	0.015	264.72
4.00		-	-	-
5.00		-	-	-
6.00		-	-	-
7.00		-	-	-
8.00		-	-	-
9.00		-	-	-
10.00		-	-	-
11.00		-	-	-
12.00		-	-	-
13.00		-	-	-
14.00		-	-	-
15.00		-	-	-
16.00		-	-	-
17.00		-	-	-
18.00		-	-	-
19.00		-	-	-
20.00		-	-	-

TOTAL EQUIPMENT BEFORE APPLICABLE SALES TAX	\$ 414.72
Sales tax, if applicable	0.00% -
TOTAL EQUIPMENT INCLUDING APPLICABLE SALES TAX	\$ 414.72

Notes:



March 23, 2020

Arcadis
44 South Broadway
PO Box 751
White Plains, NY 10602-0751

Attn: Vanessa McPherson
(914) 641-2418 phone
(914) 641-2404 fax

Re: Beardsley Pump Station Comprehensive Upgrade, Trumbull, CT
Instrumentation

Dear Vanessa:

Kovacs Construction Corporation is requesting a change order to modify the Mission Dialer I/O per alarm changes requested by the Town. The pricing is as follows:

Knapp (Attached)	1,585.00
5% GC P&O	79.25
Bonding Costs	<u>24.96</u>
Total this Proposed Change Order	\$1,689.21

Very truly yours,

KOVACS CONSTRUCTION CORPORATION

Wanda L. McGarry

Wanda L. McGarry
Sales Manager

Enclosure

GENERAL CONTRACTOR
321 Riggs Street, Oxford, CT 06478
Tel: (203) 743-4022 • Fax: (203) 790-1326



P.O. Box 7057 Prospect, CT 06712

(203) 758-3503 FAX (203) 758-0554

INVOICE

DATE

INVOICE #

3/18/2020

202003-23

BILL TO:

Accounts Payable
 KOVACS CONSTRUCTION CORP.
 321 Riggs Street
 Oxford, CT 06478

P.O. NUMBER	TERMS	PROJECT
F-2820-4	Net 30	180825 BEAR...

QUANTITY	DESCRIPTION	RATE	AMOUNT
	BEARDSLEY PUMP STATION-TRUMBULL		
	Mission Dialer I/O changes contract modification request		
2	3/12/20 Design Changes	115.00	230.00
6	3/16/20 Make wiring changes to mission inputs. Rewire components in PLC Panel and connect to mission control wiring.	95.00	570.00
6	Program changes for inputs to mission. Change OIT screens for removed alarms, Change scaling on Trend Screen. Added time control for high capacity pump exercise routine.	115.00	690.00
1	Update Drawings	95.00	95.00
		TOTAL	\$1,585.00



05/22/2020 10:31
mmastroni

TOWN OF TRUMBULL
YEAR-TO-DATE BUDGET REPORT

P 1
glytdbud

FOR 2020 99

ACCOUNTS FOR: 20 SEWER	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
10 ENTERPRISE FUNDS							
20100000 SEWERS-ENTERPRISE							
20100000 410010 ONE TIME PROJ M	0	0	0	-1,518.76	.00	1,518.76	100.0%
20100000 430000 PROGRAM REVENUE	0	0	0	-47,500.00	.00	47,500.00	100.0%
20100000 440000 FEE REVENUE	0	0	0	-50.00	.00	50.00	100.0%
20100000 440022 SEWER USAGE FEE	0	0	0	-5,933,212.21	.00	5,933,212.21	100.0%
20100000 480002 MISCELLANEOUS R	0	0	0	-1,567.00	.00	1,567.00	100.0%
20100000 501101 SALARIES-FT/PER	321,018	0	321,018	204,372.64	.00	116,645.36	63.7%
20100000 501103 SALARIES-SEASON	4,800	0	4,800	4,597.50	.00	202.50	95.8%
20100000 501105 SALARIES-OVERTI	20,000	0	20,000	3,056.52	.00	16,943.48	15.3%
20100000 501888 UNIFORM ALLOWAN	1,560	0	1,560	236.95	.00	1,323.05	15.2%
20100000 522201 SERVICES & FEES	1,750	0	1,750	39.80	.00	1,710.20	2.3%
20100000 522202 SERVICES & FEES	125,000	0	125,000	64,441.57	46,201.25	14,357.18	88.5%
20100000 522204 SERVICES & FEES	6,608,885	0	6,608,885	4,452,623.75	1,842,032.78	314,228.47	95.2%
20100000 522210 REIMBURSABLE SE	613,901	0	613,901	613,901.00	.00	.00	100.0%
20100000 534402 PROGRAM SUPPLIE	18,000	0	18,000	4,830.59	5,285.12	7,884.29	56.2%
20100000 545501 COMMUNICATIONS-	3,500	0	3,500	1,618.23	.00	1,881.77	46.2%
20100000 567701 TRANSPORTATION-	9,200	0	9,200	4,875.90	.00	4,324.10	53.0%
20100000 567702 TRANSPORTATION-	6,600	0	6,600	1,456.07	.00	5,143.93	22.1%
20100000 578801 MNTNCE/REPAIR S	45,000	0	45,000	11,957.77	4,122.74	28,919.49	35.7%
20100000 578803 MNTNCE/REP-PROG	70,000	0	70,000	42,769.44	4,065.00	23,165.56	66.9%
20100000 578805 EXTRAORDIANRY I	90,000	0	90,000	12,328.95	.00	77,671.05	13.7%
20100000 581888 CAPITAL OUTLAY	297,000	0	297,000	117,174.47	58,252.30	121,573.23	59.1%
20100000 589901 RENTALS-ANNUAL	11,340	0	11,340	11,340.24	.00	-.24	100.0%
20100000 590011 UTILITIES-HEAT	6,200	0	6,200	35,885.87	.00	-29,685.87	578.8%
20100000 590012 UTILITIES-ELECT	168,363	0	168,363	135,128.41	.00	33,234.59	80.3%
20100000 590013 UTILITIES-WATER	2,459	0	2,459	1,868.31	.00	590.69	76.0%
20100000 590014 UTILITIES-TELEP	1,616	0	1,616	1,105.08	.00	510.92	68.4%
20100000 595888 INTEREST ON G/O	88,055	0	88,055	89,776.05	.00	-1,721.05	102.0%
20100000 597888 PRINCIPAL-G/OBL	156,000	0	156,000	156,000.00	.00	.00	100.0%
TOTAL SEWERS-ENTERPRISE	8,670,247	0	8,670,247	-12,462.86	1,959,959.19	6,722,750.67	22.5%
TOTAL ENTERPRISE FUNDS	8,670,247	0	8,670,247	-12,462.86	1,959,959.19	6,722,750.67	22.5%
TOTAL SEWER	8,670,247	0	8,670,247	-12,462.86	1,959,959.19	6,722,750.67	22.5%
TOTAL REVENUES	0	0	0	-5,983,847.97	.00	5,983,847.97	
TOTAL EXPENSES	8,670,247	0	8,670,247	5,971,385.11	1,959,959.19	738,902.70	



05/22/2020 10:31
mmastroni

TOWN OF TRUMBULL
YEAR-TO-DATE BUDGET REPORT

P 2
glytdbud

FOR 2020 99

	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
GRAND TOTAL	8,670,247	0	8,670,247	-12,462.86	1,959,959.19	6,722,750.67	22.5%

** END OF REPORT - Generated by Margaret Mastroni **

REPORT OPTIONS

Sequence	Field #	Total	Page Break
Sequence 1	1	Y	Y
Sequence 2	2	Y	N
Sequence 3	9	Y	N
Sequence 4	0	N	N

Report title:
YEAR-TO-DATE BUDGET REPORT

Includes accounts exceeding 0% of budget.

Print totals only: N

Print Full or Short description: F

Print full GL account: N

Format type: 1

Double space: N

Suppress zero bal accts: Y

Include requisition amount: N

Print Revenues-Version headings: N

Print revenue as credit: Y

Print revenue budgets as zero: N

Include Fund Balance: N

Print journal detail: N

From Yr/Per: 2020/ 1

To Yr/Per: 2020/13

Include budget entries: Y

Incl encumb/liq entries: Y

Sort by JE # or PO #: J

Detail format option: 1

Include additional JE comments: N

Multiyear view: D

Amounts/totals exceed 999 million dollars: N

Year/Period: 2020/99

Print MTD Version: N

Roll projects to object: N

Carry forward code: 1

Find Criteria

Field Name	Field Value
------------	-------------

Org	20100000
-----	----------

Object

Project

Rollup code

Account type

Account status



WATER POLLUTION CONTROL AUTHORITY
for the City of Bridgeport

695 Seaview Avenue • Bridgeport, Connecticut 06607-1628
Telephone (203) 332-5550 • Fax (203) 576-7005

Lauren McBennett Mappa, P.E.
General Manager

M E M O R A N D U M

TO: Town Clerk, Town of Trumbull, Ct

FROM: Lauren M. Mappa PE, General Manager *Lauren Mappa*

DATE: May 6, 2020

SUBJECT: City of Bridgeport Water Pollution Control Authority Proposed
Fiscal 2021 Budget, Proposed Charges for the connection with and for
the use of the City of Bridgeport Sewerage System and Public Hearing

Attached is a copy of the City of Bridgeport Water Pollution Control Authority's proposed charges and Budget for Fiscal 2021 and the Proposed Charges for the connection with and use of the City of Bridgeport Sewerage System which we are filing at your office pursuant to Bridgeport City Ordinance, Section 13.04.220, and the Connecticut General Statutes, Section 7-255 prior to our scheduled public hearing on May 19, 2020. A copy of the public hearing notice is attached.

Attachments

NOTICE

The Water Pollution Control Authority for the City of Bridgeport will hold a Public Hearing on May 19, 2020 at 5:00 P.M. pursuant to Connecticut General Statutes, Section 7-255 and Section 13.04.220 of the Bridgeport Code of Ordinances to present the Proposed Budget for Fiscal 2021 with the projected revenue and expenses and proposed charges for the connection with and for the use of the City of Bridgeport sewerage system.

Tuesday, May 19, 2020 at 5:00 P.M.

Comments can be sent to:

WPCA Board

695 Seaview Ave

Bridgeport Ct 06607

Must be received by 12 noon on May, 19 2020

All owners of property against which the charges are to be levied shall have an opportunity to be heard in writing concerning the proposed charges. A copy of the proposed charges will be on file in the City Clerk's Office, City Hall, 45 Lyon Terrace, and Online at the WPCA website available for inspection by the Public at least ten (10) days before the date of the Public Hearing

WATER POLLUTION CONTROL AUTHORITY
FOR THE CITY OF BRIDGEPORT

PROPOSED BUDGET

FISCAL 2020/2021

JANUARY 10, 2020

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REVENUE AND EXPENSE SUMMARY	2
DEPARTMENT EXPENSES:	
400 ADMINISTRATION	3
401 OTHER	4
PERSONNEL COST-ADMINISTRATION	SCHEDULE A 5
CONTRACT OPERATOR COST	SCHEDULE B 6
MAJOR PROJECT AND SOURCE OF FUNDING	SCHEDULE C 7-13
STATE LOAN RETIREMENT FUNDING	SCHEDULE D 14-17
CAPITAL BUDGET	SCHEDULE E 18
PLANNED SEWR REHABILITATION	SCHEDULE F 19
PERMIT AND MISCELLANEOUS FEES	SCHEDULE G 20

NOTICE

In accordance with Sub-Part 35.929-2 of the 40 CFR, Connecticut General Statutes, Section 7-255 and Section 13.04.220 of the Bridgeport Code of Ordinances the projected revenues and expenses for the Water Pollution Control Authority for the City of Bridgeport for Fiscal 2020-2021 are presented below.

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**WATER POLLUTION CONTROL AUTHORITY
FOR THE CITY OF BRIDGEPORT
FISCAL 2020-2021 PROPOSED BUDGET**

	PROPOSED FY 2021 BUDGET
REVENUES:	
BRIDGEPORT	\$30,335,907
OUTSIDE COMMUNITIES	6,986,975
INTEREST ON INVESTMENTS	17,000
SEPTIC TICKET REVENUE	1,183,000
OTHER REVENUE	171,908
BOND REVENUE-CAPITAL PROJECTS	2,271,450
ARREARAGE COLLECTIONS	2,227,500
TOTAL REVENUES	\$43,193,739
EXPENSES:	
OPERATIONS, MAINTENANCE & MANAGEMENT	
SERVICES AGREEMENT	\$27,017,561
UTILITIES	2,615,000
ADMINISTRATION	2,055,853
COLLECTION SYSTEM REHABILITATION	1,404,330
NITROGEN PAYMENT	400,000
CITY OVERHEAD COSTS	475,000
COLLECTION FEES	300,000
DEBT SERVICE-BONDS	595,776
STATE LOAN RESERVE FUNDING	2,754,896
EQUIPMENT & VEHICLES	3,856,000
BAD DEBT RESERVES	1,469,323
OPERATING RESERVE	250,000
TOTAL EXPENSES	\$43,193,739

The approved usage fee and rates are as follows:

Sewer Use Per Hundred Cubic Feet(CCF)or 748 Gallons	\$6.124
Industrial Biological Oxygen Demand Surcharge per Pound	\$0.48
Industrial Total Suspended Solids Surcharge per Pound	\$0.43

Sewer Connection Permit Fee (New Connections):

Sanitary-Single Family Dwelling	\$125
Sanitary-Multiple Family Dwelling(up to 4 units)	\$200
Sanitary-Multiple Family Dwelling(5 or more units) additional charge per unit over 4	\$50
Sanitary-Commercial/Industrial Building	\$275
Storm Sewer(Residential per connection)	\$125
Storm Sewer(Commercial/Industrial per connection)	\$275

NEW A/C#	ACCOUNT DESCRIPTION	2015/2016 ACTUAL	2016/2017 ACTUAL	2017/2018 ACTUAL	2018/2019 MODIFIED BUDGET	2018/2019 ESTIMATE	2020/2021 PROPOSED BUDGET
DEPT. 400 - ADMINISTRATION							
1000	SALARIES	655,082	560,291	608,314	732,892	605,840	767,084
1140	LONGEVITY	6,375	5,738	3,950	3,375	2,175	2,475
1108	OVERTIME	16,747	8,082	8,509	25,000	8,500	25,000
2000	BENEFITS	195,639	206,780	271,587	419,580	269,705	371,078
3605	SEMINAR,CONF. FEES & MEMBERSHIPS	1,149	804	420	2,300	2,070	2,300
3705	ADVERTISING	2,923	2,283	3,232	8,500	7,500	8,500
3720	TELEPHONE	2,528	2,515	1,938	3,500	2,550	3,500
3905	REIMBURSED TRAVEL	1,755	1,823	1,840	2,500	1,900	2,500
4020	COMPUTER PARTS	35	1,067	0	500	250	500
4555	COMPUTER SUPPLIES	441	1,182	0	1,600	1,200	1,600
4550	COMPUTER SOFTWARE	0	0	0	1,200	75	1,200
4610	DIESEL FUEL	37,618	41,936	47,425	120,000	47,000	120,000
4615	GASOLINE FOR VEHICLES	52,246	57,364	57,687	105,200	59,000	105,200
4675	SUPPLIES-OFFICE	2,381	1,895	2,914	3,000	1,950	3,000
4680	PERMITS(NPDES)	7,680	6,825	7,217	8,400	7,000	8,400
4705	SUBSCRIPTIONS	0	0	0	300	250	300
4725	POSTAGE DIRECT	0	376	0	2,500	1,500	2,500
4745	SAFETY EQUIPMENT	0	0	0	800	400	800
5055	COMPUTER EQUIPMENT	0	531	335	7,500	3,500	7,500
5150	OFFICE EQUIPMENT	120	394	750	750	370	750
5155	EQUIPMENT RENTAL	1,849	2,078	2,093	2,500	1,950	2,500
5530	OFFICE FURNITURE	0	1,342	1,365	3,750	500	3,750
6010	ENGINEERING SERVICES	236,099	220,970	262,423	400,000	540,000	400,000
6010	MS4 WATER QUALITY CONSULTANT				25,000		25,000
6010	COST OF SVC Study				35,000		35,000
6055	COMPUTER SERVICES	500	106	1,077	3,500	500	3,500
6065	COMMUNICATION EQUIP-M&R	12,855	926	13,256	14,500	8,700	14,500
6100	AUDIT FEES	16,000	16,000	16,000	16,000	16,000	16,000
6110	BILLING SERVICES	4,541	15,951	0	3,400	3,400	3,400
6130	LEGAL SERVICES	218,649	218,421	55,715	275,000	100,000	175,000
6175	M & R EQUIP.-OFFICE EQUIP	1,350	1,818	2,037	2,250	1,560	2,250
6180	OTHER SERVICES	11,550	98,766	49,994	65,000	53,000	65,000
6200	PRINTING-IN HOUSE	1,370	(890)	684	2,000	432	2,000
6225	SECURITY SERVICES	3,234	(3,974)	3,389	3,400	3,400	3,400
7005	CONTINGENCY	0	78,100	87,489	100,000	100,000	100,000
8801	GASOLINE& DIESEL/ RECOVERY	(89,864)	(99,300)	(105,112)	(225,200)	(106,000)	(225,200)
8803	M & R EQUIP. & SECURITY-RECOVERY	0	0	0	(8,934)	0	(8,934)
9015	PRINTING SERVICES	1,278	0	140	4,500	3,500	4,500
2278	WORKERS COMPENSATION	0	0	0	0	3,000	0
TOTAL DEPT 400		1,402,128	1,450,199	1,406,668	2,171,063	1,752,677	2,055,853

A/C #	ACCOUNT DESCRIPTION	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	2020/2021
		ACTUAL	ACTUAL	ACTUAL	MODIFIED BUDGET	ESTIMATE	PROPOSED BUDGET
DEPT. 401- WPCA OTHER							
4625	NATURAL GAS	90,420	87,518	113,045	140,000	97,000	140,000
3130	ELECTRICITY	2,449,963	2,385,094	2,133,596	2,375,000	2,525,000	2,475,000
3210	DEBT SVC-INTEREST '09-CITY BONDS	88,274	88,274	81,128	76,982	81,317	67,798
3205	DEBT SVC- PRINCIPAL- '09 CITY BONDS	76,800	76,800	81,317	84,028	81,128	89,901
3210	DEBT SVC-INTEREST 2010-CITY BONDS	12,137	12,137	11,198	10,640	11,198	9,365
3205	DEBT SVC- PRINCIPAL- 2010 CITY BONDS	18,815	18,815	19,690	20,237	19,690	21,549
3210	DEBT SVC-INTEREST 2012-CITY BONDS	68,516	68,516	62,628	59,461	62,628	52,639
3205	DEBT SVC- PRINCIPAL- 2012 CITY BONDS	57,452	57,452	63,324	66,548	63,324	73,341
3210	DEBT SVC-INTEREST 2016-CITY BONDS			48,509	39,419	48,507	37,854
3210	DEBT SVC-PRINCIAL 2016-CITY BONDS						20,866
3210	DEBT SVC-INTEREST 2017-CITY BONDS				40,211	0	39,506
3210	DEBT SVC-PRINCIAL 2017-CITY BONDS						28,206
3210	DEBT SVC-INTEREST 2018-CITY BONDS						42,500
3210	DEBT SVC-PRINCIAL 2018-CITY BONDS						50,000
3210	DEBT SVC-INTEREST 2019-CITY BONDS						62,250
3210	DEBT SVC-PRINCIAL 2019-CITY BONDS						0
7950	BAD DEBTS & ADJUSTMENTS	366,225	(37,384)	(254,900)	1,557,589	1,600,000	1,469,323
3301	CITY ADMIN. ALLOCATION	475,000	475,000	475,000	475,000	475,000	475,000
6060	SEWER REHABILITATION	1,040,755	620,664	1,404,330	1,404,330	1,450,000	1,404,330
4365	COLLECTION EXPENSE	316,423	321,343	300,000	300,000	322,000	300,000
	STATE LOAN FUNDING RESERVE	6,001,543	4,969,590	4,631,418	4,480,000	4,631,418	2,754,896
4324	OPERATIONS, MAINTENANCE					0	0
	& MGT SERVICES AGREEMENT	25,809,938	25,467,243	25,250,691	25,702,965	25,324,563	27,017,561
4324	NITROGEN PAYMENT			170,000	170,000	0	400,000
4324	OPERATING RESERVES	0	0	0	250,000	250,000	250,000
6170	DESIGN				350,000	0	2,718,500
6170	VEHICLES	33,300	0	0	520,000	278,000	400,000
6170	MS 4 MAPING			57,500	250,000		75,000
6170	EQUIPMENT	180,123	77,929	351,623	430,000	362,000	167,500
6170	AIR SYSTEM			143,500	150,000	125,000	145,000
6170	EQUIPMENT M&R	370,277	96,737	96,737	260,000	433,500	350,000
	TOTAL DEPT 181-OTHER	37,455,962	34,785,728	35,240,333	39,212,410	38,241,273	41,137,886
	TOTAL EXPENSES	38,858,090	36,235,927	36,647,001	41,383,473	39,993,950	43,193,739

PERSONNEL SHEET

SCHEDULE A

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FISCAL 2021 PRELIMINARY BUDGET

SALARY AND BENEFITS

DIVISION: 180 ADMIN OFFICE

05/06/20

G/L ACCT G/L ACCT G/L ACCT G/L ACCT
 56100 51400 51600 52000

PROJECTED

POSITION	Job Code	UNION	ANNUAL SALARY	LONGEVITY	OVERTIME	BENEFITS	GRAND TOTAL
GENERAL MANAGER		S	154,936.80	0.00		38,671.56	193,608.35
DIRECTOR OF FINANCE		S	98,364.48	0.00		10,446.31	108,810.79
ACTING MGR TRMT& FIELD OPS	8322	S	128,678.05	1,275.00		47,430.77	177,383.82
RESIDENT ENGINEER		S	40,575.60	0.00		16,838.34	57,413.94
CONSTRUCTION INSPEC	8213	S	64,626.73	0.00		36,259.84	100,886.57
SUPERVISOR-CSO	8308	S	26,719.57	0.00		13,838.51	40,558.08
CIVIL ENGINEER 1	2201	S	85,907.30	0.00		16,792.25	102,699.54
TYPIST 2	1233	G	46,169.20	0.00		11,723.91	57,893.11
ACCTG CLERK 2	1240	G	70,670.98	1,200.00		37,987.21	109,858.18
COLLECTION AIDE (Note 1)	1248	G	50,434.89	0.00		11,560.67	61,995.56
NUMBER OF EMPLOYEES:		10					
Sub-total			767,083.58	2,475.00		241,549.35	1,011,107.94
OVERTIME:					25,000.00		25,000.00
ADD'L BENEFITS ON BUDGETED OVERTIME							
MERF	14.00%					3,500.00	3,500.00
MEDITAX	1.45%					362.50	362.50
FICA TAX	6.20%					0.00	0.00
Retirement medical						125,666.40	125,666.40
			767,083.58	2,475.00	25,000.00	371,078.25	1,165,636.84

Note 1: Works at City attorney's office

Merf	114,666.70
Medicare	11,485.21
FICA	4,172.30
Life Ins	579.60
Health Ben	240,174.44
	<u>371,078.25</u>

SCHEDULE B

BASE ANNUAL CONTRACT AMOUNT: \$27,267,561

FIRST CPI ADJUSTMENT BASED ON PERCENT CHANGE IN CPI FROM STARTING DATE OF CONTRACT (December 31, 2013)

NEXT ADJUSTMENT BASED ON COMPARISON WITH CPI INDEX AS OF JUNE 30, 2019 VS JUNE 30, 2020

(MINIMUM CPI ADJUSTMENT IS 2.5% PER CONTRACT YEAR)

Budget Year	Time Period	Contract Year	Contract Amount	Prior Yr CPI Adjusted Contract Amount	Minimum CPI Rate Adj.	Annual CPI Dollar Adjustment	Contract Fee Budget Year Cost	Monthly Fee
2014	01/01/14-6/30/14	1	\$11,459,683				\$11,459,683	\$1,909,947.17
2015	07/01/14-6/30/15	2	\$22,919,366		1.5980%	\$366,251	\$23,285,617	\$1,940,468.12
2016	7/01/15-6/30/16	3		\$23,285,617	2.5000%	\$582,140	\$23,867,758	\$1,988,979.83
2017	7/1/16-6/30/17	4		\$23,867,758	2.5000%	\$596,694	\$24,464,452	\$2,038,704.32
2018	7/1/17-6/30/18	5		\$24,464,452	2.5000%	\$611,611	\$25,076,063	\$2,089,671.93
2019	7/1/18-6/30/19	6		\$25,076,063	2.5508%	\$639,640	\$25,715,703	\$2,142,975.28
2020	7/1/19-6/30/20	7		\$25,715,703	2.5000%	\$642,893	\$26,358,596	\$2,196,549.66
2021	7/1/20-6/30/21	8		\$26,358,596	2.5000%	\$658,965	\$27,017,561	\$2,251,463.40

Contract fee for Fiscal 2021

\$27,017,561

Additional chemical cost for Fiscal 2021

\$250,000

Total Contract cost for Fiscal 2021

\$27,267,561

NORTHEAST URBAN ALL ITEMS NOT SEASONALLY ADJUSTED CPI SERIES: cuur0100sa0	INDEX DATE	CPI	INDEX CHANGE VS	CPI PERCENT CHANGE VS	CPI PERCENT CHANGE USED FOR FEE ADJ EFFECTIVE
			12/31/2013	12/31/2013	
CPI STARTING POINT	Dec 31, 2013	249.567			
	June 30, 2014	253.555	3.988	1.5980%	7/1/2014
	June 30, 2015	253.626	0.071	0.0280%	7/1/2015
	June 30, 2016	255.471	1.845	0.7274%	7/1/2016
	June 30, 2017	259.335	3.864	1.5125%	7/1/2017
	June 30, 2018	265.950	6.615	2.5508%	7/1/2018
	June 30, 2019	270.133	4.183	1.5729%	7/1/2019
	INDEX DATE	CPI	Vs 6/30/20	Vs 6/30/19	
	Nov 30, 2019	270.643	0.5100	0.1888%	

MAJOR CONSTRUCTION AND REHABILITATION PROJECTS
SPENDING AND SOURCE OF FUNDING

SCHEDULE C

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	ACTUAL SPENDING AS OF 6/19	FY 2020 ESTIMATE	FY 2021 BUDGET	FY '22 LTP	FY '23 LTP	FY '24 LTP	FY '25 LTP	FY '26 LTP	FY '27 LTP	FY '28 LTP	TOTAL PROJECT COSTS
FACILITIES PLAN FOR WSTP & ESTP											
LOCAL SHARE		601,114	601,114								1,202,229
LOAN											0
GRANT		734,695	734,695								1,469,391
		<u>1,335,810</u>	<u>1,335,810</u>								<u>2,671,619</u>
SLUDGE PROCESSING-DESIGN EAST & WEST TREATMENT PLANTS											
LOAN		400,000	400,000	800,000							1,600,000
GRANT		100,000	100,000	200,000							400,000
		<u>500,000</u>	<u>500,000</u>	<u>1,000,000</u>							<u>2,000,000</u>
LOW LEVEL NITROGEN AND SLUDGE PROCESSING-CONSTRUCTION WEST TREATMENT PLANTS											
LOAN				7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	52,500,000
GRANT				2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	17,500,000
				<u>10,000,000</u>	<u>70,000,000</u>						
LOW LEVEL NITROGEN AND SLUDGE PROCESSING-CONSTRUCTION EAST TREATMENT PLANTS											
LOAN						7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	37,500,000
GRANT						2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	12,500,000
						<u>10,000,000</u>	<u>10,000,000</u>	<u>10,000,000</u>	<u>10,000,000</u>	<u>10,000,000</u>	<u>50,000,000</u>
TOTAL TREATMENT FACILITIES											
LOAN	79,631,761	400,000	400,000	8,300,000	7,500,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	171,231,761
GRANT	25,339,796	839,378	834,695	2,700,000	2,500,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	57,213,869
LOCAL SHARE	766,463	607,946	601,114	0	0	0	0	0	0	0	1,975,524
	<u>105,738,020</u>	<u>1,847,325</u>	<u>1,835,810</u>	<u>11,000,000</u>	<u>10,000,000</u>	<u>20,000,000</u>	<u>20,000,000</u>	<u>20,000,000</u>	<u>20,000,000</u>	<u>20,000,000</u>	<u>230,421,154</u>

	ACTUAL SPENDING AS OF 6/18	FY 2019 ESTIMATE	FY 2020 BUDGET	FY '21 LTP	FY '22 LTP	FY '23 LTP	FY '24 LTP	FY '25 LTP	FY '26 LTP	FY '27 LTP	TOTAL PROJECT COSTS
CSO PROJECTS											
MCSO A,B,C, & D: CWF 109C-CD2											
LOANS	3,040,718										3,040,718
GRANTS	6,635,053										6,635,053
	<u>9,675,771</u>										<u>9,675,771</u>
JOHNSON CREEK CSO E DESIGN CWF 208D											
LOANS	136,000										136,000
GRANTS	127,000										127,000
	<u>263,000</u>										<u>263,000</u>
CONSTRUCTION CWF 208C											
LOANS	3,889,833										3,889,833
GRANTS	3,789,832										3,789,832
	<u>7,679,665</u>										<u>7,679,665</u>
YELLOW MILL CHANNEL & HARBORPOINTE CSO F CWF208D											
DESIGN:											
LOANS	570,147										570,147
GRANTS	554,136										554,136
	<u>1,124,283</u>										<u>1,124,283</u>
CONSTRUCTION: CWF372C											
CSO F1,F2,F3 & F4											
LOANS	5,719,151										5,719,151
GRANTS	5,034,152										5,034,152
	<u>10,753,303</u>										<u>10,753,303</u>

MAJOR CONSTRUCTION AND REHABILITATION PROJECTS
SPENDING AND SOURCE OF FUNDING

SCHEDULE C

	ACTUAL										10
	SPENDING AS OF 6/19	FY 2020 ESTIMATE	FY 2021 BUDGET	FY '22 LTP	FY '23 LTP	FY '24 LTP	FY '25 LTP	FY '26 LTP	FY '27 LTP	FY '28 LTP	TOTAL PROJECT COSTS
CSO FACILITY PLAN UPDATE											
LOCAL SHARE	385,354										385,354
GRANTS CWF 283PG	472,524										472,524
	<u>857,878</u>										<u>857,878</u>
BRIDGEPORT HARBOR											
CSO G CWF 409D											
LOANS	518,492										518,492
GRANTS	514,632										514,632
	<u>1,033,124</u>										<u>1,033,124</u>
PUMP STATION FACILITY REPORT											
CSO RELATED CWF 409D											
LOANS	92,793										92,793
GRANTS	92,793										92,793
	<u>185,586</u>										<u>185,586</u>
CSO G-1 CWF 409C-CONSTRUCTION											
LOANS	1,911,688										1,911,688
GRANTS	1,886,688										1,886,688
	<u>3,798,376</u>										<u>3,798,376</u>
CSO G-2 CONSTRUCTION 575C											
LOANS	2,319,591										2,319,591
GRANTS	2,058,725										2,058,725
	<u>4,378,316</u>										<u>4,378,316</u>
CSO G-4-CONSTRUCTION 452C											
LOANS	1,781,687										1,781,687
GRANTS	1,771,185										1,771,185
	<u>3,552,872</u>										<u>3,552,872</u>
CSO G-3 & G-5 CWF 452C (REPLACE RIVER ST PUMP STATION)											
CONSTRUCTION											
LOANS	4,818,830										4,818,830
GRANTS	4,634,346										4,634,346
	<u>9,453,176</u>										<u>9,453,176</u>
LONG TERM CONTROL PLAN											
GRANTS CWF 205PG	692,950	7,319									700,269
LOCAL SHARE	605,452	5,988									611,440
	<u>1,298,402</u>	<u>13,307</u>									<u>1,311,709</u>

MAJOR CONSTRUCTION AND REHABILITATION PROJECTS
SPENDING AND SOURCE OF FUNDING

SCHEDULE C

11
TOTAL
PROJECT
COSTS

	ACTUAL SPENDING AS OF 8/19	FY 2020 ESTIMATE	FY 2021 BUDGET	FY '22 LTP	FY '23 LTP	FY '24 LTP	FY '25 LTP	FY '26 LTP	FY '27 LTP	FY '28 LTP	11 TOTAL PROJECT COSTS
CSO H											
DESIGN CWF 621D											
LOANS	1,260,771										1,260,771
GRANTS	1,236,439										1,236,439
	<u>2,497,210</u>										<u>2,497,210</u>
CSO H											
CONSTRUCTION CWF 621C (H-1 & H-2)											
LOANS	3,956,483										3,956,483
GRANTS	3,933,371										3,933,371
	<u>7,889,854</u>										<u>7,889,854</u>
CSO H											
CONSTRUCTION CWF 628C											
LOANS	7,456,209										7,456,209
GRANTS	7,438,197										7,438,197
	<u>14,894,406</u>										<u>14,894,406</u>
CSO H											
CONSTRUCTION CWF 681C											
LOANS	1,561,171										1,561,171
GRANTS	1,545,120										1,545,120
	<u>3,106,291</u>										<u>3,106,291</u>
CSO H											
CONSTRUCTION CWF 706D/C											
LOANS	1,963,076	1,812,578									3,775,654
GRANTS	1,963,078	1,797,575									3,760,653
	<u>3,926,154</u>	<u>3,610,153</u>									<u>7,536,307</u>
CSO H 3											
CONSTRUCTION CWF											
LOANS		913,700	913,700								1,827,400
GRANTS		913,700	913,700								1,827,400
		<u>1,827,400</u>	<u>1,827,400</u>								<u>3,654,800</u>
CSO H 5											
CONSTRUCTION CWF											
LOANS						1,750,000	1,750,000				3,500,000
GRANTS						1,750,000	1,750,000				3,500,000
						<u>3,500,000</u>	<u>3,500,000</u>				<u>7,000,000</u>
CSO H 6											
CONSTRUCTION CWF											
LOANS								1,750,000	1,750,000		3,500,000
GRANTS								1,750,000	1,750,000		3,500,000
								<u>3,500,000</u>	<u>3,500,000</u>		<u>7,000,000</u>
CSO PROJECTS- LONG TERM CONTROL PLAN											
STAGE 1- PLANNING(ASH CREEK)											
LOCAL SHARE		157,500	157,500								315,000
LOANS											
GRANTS		192,500	192,500								385,000
DESIGN & CONSTRUCTION											
STAGE 1- DESIGN(ASH CREEK)											
LOANS				1,500,000	1,500,000						3,000,000
GRANTS				1,500,000	1,500,000						3,000,000
STAGE 1- CONSTRUCTION											
LOANS				250,000	3,500,000	3,500,000					7,250,000
GRANTS				250,000	3,500,000	3,500,000					7,250,000
STAGE 2-WQT											
LOANS						350,000					350,000
GRANTS						350,000					350,000

	MAJOR CONSTRUCTION AND REHABILITATION PROJECTS										12 TOTAL PROJECT COSTS
	SPENDING AND SOURCE OF FUNDING					SCHEDULE C					
	ACTUAL SPENDING AS OF 6/19	FY 2020 ESTIMATE	FY 2021 BUDGET	FY '22 LTP	FY '23 LTP	FY '24 LTP	FY '25 LTP	FY '26 LTP	FY '27 LTP	FY '28 LTP	
STAGE 2- CONSTRUCTION											
LOANS											
GRANTS											
STAGE 3-CEDAR CREEK& WQT											
LOANS					250,000	1,250,000					1,500,000
GRANTS					250,000	1,250,000					1,500,000
STAGE 3- CONSTRUCTION											
LOANS						250,000	1,500,000				1,750,000
GRANTS						250,000	1,500,000				1,750,000
STAGE 3-DESIGN-ASH CREEK STORAGE											
LOANS							350,000				350,000
GRANTS							350,000				350,000
STAGE 4-DESIGN -RELIEF INTERCEPTOR											
LOANS						250,000	1,500,000				1,750,000
GRANTS						250,000	1,500,000				1,750,000
TOTAL LT CONTROL PLAN -LOCAL SHARE		157,500	157,500								157,500
TOTAL LT CONTROL PLAN -LOANS		0	0	1,750,000	5,250,000	5,600,000	3,350,000				15,950,000
TOTAL LT CONTROL PLAN- GRANTS		192,500	192,500	1,750,000	5,250,000	5,600,000	3,350,000				15,950,000
TOTAL LT CONTROL PLAN		192,500	192,500	3,500,000	10,500,000	11,200,000	6,700,000				32,057,500
INFLOW AND INFILTRATION											
PIPE LINING-CWF 559C											
LOANS	1,236,190										1,236,190
GRANTS	304,850										304,850
	1,541,040										1,541,040
TOTAL CSO PROJECTS											
LOCAL SHARE	990,806	163,488	157,500	0	0	0	0	0	0	0	1,311,794
LOANS	42,232,830	2,726,278	913,700	1,750,000	5,250,000	5,600,000	5,100,000	1,750,000	1,750,000	1,750,000	68,822,808
GRANTS	44,685,071	2,911,094	1,106,200	1,750,000	5,250,000	5,600,000	5,100,000	1,750,000	1,750,000	1,750,000	71,652,365
	87,908,707	5,800,860	2,177,400	3,500,000	10,500,000	11,200,000	10,200,000	3,500,000	3,500,000	3,500,000	141,786,967

MAJOR CONSTRUCTION AND REHABILITATION PROJECTS
SPENDING AND SOURCE OF FUNDING

SCHEDULE C

13
TOTAL
PROJECT
COSTS

	ACTUAL SPENDING AS OF 6/19	FY 2020 ESTIMATE	FY 2021 BUDGET	FY '22 LTP	FY '23 LTP	FY '24 LTP	FY '25 LTP	FY '26 LTP	FY '27 LTP	FY '28 LTP	13 TOTAL PROJECT COSTS
INFLOW AND INFILTRATION											
MITIGATION- NON CSO											
PIPE LINING- CWF 625CSL											
LOANS	1,672,257										1,672,257
LOCAL SHARE	153,686										153,686
TOTAL	1,825,943										1,825,943
PUMP STATION & SIPHONS											
DESIGN CWF 102CSL											
LOANS	428,000										428,000
CONSTRUCTION CWF102CSL											
PHASE 1											
LOANS	4,180,318										4,180,318
PHASE 2 & 3											
LOCAL SHARE (BOND FUNDS)											
LAKE FOREST BCH & SEQUOIA RD	824,570										824,570
CWF 213CSL LOANS											
WALLER RD & LAKESIDE DR	3,115,301	0									3,115,301
TOTAL PUMP STATIONS											
LOANS-CWF	7,723,619	0	0	0	0	0	0	0	0	0	7,723,619
LOCAL SHARE(BONDS)	824,570										824,570
	8,548,189	0	0	0	0	0	0	0	0	0	8,548,189
TOTAL LOCAL SHARE	2,735,525	771,434	758,614	0	4,265,574						
TOTAL LOANS	131,260,467	3,126,278	1,313,700	10,050,000	12,750,000	20,600,000	20,100,000	16,750,000	16,750,000	16,750,000	249,450,445
TOTAL GRANTS	70,024,867	3,750,472	1,940,895	4,450,000	7,750,000	10,600,000	10,100,000	6,750,000	6,750,000	6,750,000	128,866,235
TOTALS-ALL PROJECTS	204,020,859	7,648,185	4,013,210	14,500,000	20,500,000	31,200,000	30,200,000	23,500,000	23,500,000	23,500,000	382,582,253

WATER POLLUTION CONTROL AUTHORITY SCHEDULE D
 RESERVE FOR CAPITAL IMPROVEMENTS
 (STATE CLEAN WATER FUND LOAN RETIREMENT FUNDING)

ORIGINAL	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	
COMPLETED PROJECTS									
PRINCIPAL PAYMENTS:									
CONTRACT 1 CWF 218C	34,259,604	115,685							
CONTRACT 2 CWF 206D	2,810,440								
CONTRACT 2 CWF 206C	32,033,046	1,601,652	1,601,652	1,601,652	1,601,652	64,806			
CONTRACT 6 CWF 164C	2,193,820								
WATER FACILITIES CWF 416D/C	3,384,911	169,246	169,246	169,246	169,246	169,246	169,246	13,180	
DECHLOR PROJECT CWF 572C	624,067	31,203	31,203	31,203	31,203	31,203	31,203	31,203	
WATER STATIONS CWF 208D	706,147								
WATER STATIONS CWF 208C	3,889,833	152,385							
WATER F-1,2,3 & 4 CWF372C	5,719,151	309,655	309,655	154,828					
WATER G BPT HARBOR CWF409D	611,285	30,564	30,564	30,564	30,564	30,564	20,489		
WATER G BPT HARBOR CWF409C	1,911,688	95,584	95,584	95,584	95,584	95,584	95,584	95,584	
FLOW AND INFILTRATION CWF 559C	1,236,190	63,394	63,394	63,394	63,394	63,394	63,394	63,394	
WATER G-1 & 2 CWF 575C	2,323,913	116,196	116,196	116,196	116,196	116,196	116,196	116,196	
IMP STATIONS CWF 102CSL	4,608,318	230,416	230,416	230,416	230,416	230,416	230,416	230,416	
FLOW AND INFILTRATION CWF 625CSL	1,672,257	83,613	83,613	83,613	83,613	83,613	83,613	83,613	
EAST SIDE DECHLOR 613C	958,789	48,010	48,010	48,010	48,010	48,010	48,010	48,010	
WATER H DESIGN CWF 621D	1,260,771	72,044	72,044	72,044	72,044	72,044	72,044	72,044	
WATER G3&G5 RIVER ST PS CWF452C2	6,824,081	419,943	419,943	419,943	419,943	419,943	419,943	419,943	
IMP STATIONS CWF 213CSL	3,115,301	159,759	159,759	159,759	159,759	159,759	159,759	159,759	
WATER 621C	3,959,483	239,787	239,787	239,787	239,787	239,787	239,787	239,787	
GENERATOR REHAB 658C	352,921	16,643	16,643	16,643	16,643	16,643	16,643	16,643	
WATER REHAB 628C	3,956,483		372,810	372,810	372,810	372,810	372,810	372,810	
WATER WORK 681C	1,561,171			80,060	80,060	80,060	80,060	80,060	
TOTAL BORROWINGS AND PRINCIPAL PAYMENTS	119,973,670	3,955,780	4,060,521	3,905,693	3,830,926	2,294,079	2,229,273	2,219,197	2,042,643
DEBT SERVICE FUNDING-ACTIVE PROJECTS (SEE SCHEDULE F)	60,099	17,599	84,136	136,186	136,186	136,186	136,186	136,186	
COMPLETED PROJECTS									
INTEREST PAYMENTS:									
CONTRACT 1 CWF 218C	238								
CONTRACT 2 CWF 206D									
CONTRACT 2 CWF 206C	116,120	84,087	52,054	20,021	337				
CONTRACT 6 CWF 164C									
WATER FACILITIES CWF 416D/C	22,707	19,322	15,937	12,552	9,167	5,783	1,904	1,692	
DECHLOR PROJECT CWF 572C	5,747	5,123	4,488	3,874	3,250	2,826	1,521	1,326	
WATER STATIONS CWF 208D									
WATER STATIONS CWF 208C	1,799								
WATER F-1,2,3 & 4 CWF372C	12,644	6,451	903	0	0	0			
WATER G BPT HARBOR CWF409D	3,897	3,286	2,674	2,063	1,452	841	238		
WATER G BPT HARBOR CWF409C	18,400	16,488	14,577	12,665	10,753	8,842	6,930	5,018	
FLOW AND INFILTRATION CWF 559C	10,830	9,562	8,294	7,026	5,758	4,490	3,223	1,955	
WATER G-1 & 2 CWF 575C	26,241	23,917	21,593	19,269	16,945	14,621	12,297	9,973	
IMP STATIONS CWF 102CSL	56,260	51,652	47,043	42,435	37,827	33,218	28,610	24,002	
FLOW AND INFILTRATION CWF 625CSL	21,948	20,276	18,604	16,932	15,259	13,587	11,915	10,243	
EAST SIDE DECHLOR 613C	13,403	12,443	11,482	10,522	9,562	8,602	7,642	6,681	
WATER H DESIGN CWF 621D	20,232	18,792	17,351	15,910	14,469	13,028	11,587	10,146	
WATER G3&G5 RIVER ST PS CWF452C2	113,035	104,636	96,237	87,838	79,439	71,040	62,642	54,243	
IMP STATIONS CWF 213CSL	58,179	54,984	51,789	48,593	45,398	42,203	39,008	35,813	
WATER 621C	74,933	70,138	65,342	60,546	55,750	50,955	46,159	41,363	
GENERATOR REHAB 658C	6,199	5,867	5,534	5,201	4,866	4,535	4,202	3,870	
WATER REHAB 628C		144,464	137,008	129,552	122,095	114,639	107,183	99,727	
WATER WORK 681C				30,089	28,488	26,887	25,286	23,685	
TOTAL INTEREST PAYMENTS	582,811	651,487	570,921	525,088	460,817	415,897	370,345	336,141	
DEBT SERVICE FUNDING-ACTIVE PROJECTS	155,160	184,493	63,023	472,372	604,561	620,848	585,984	551,119	
TOTAL DEBT SERVICE FUNDING	4,753,850	4,914,100	4,623,773	4,964,571	3,495,645	3,402,204	3,311,712	3,056,088	
NEW STATE RFL	215,259	202,092	147,159	608,558	740,747	757,034	722,169	687,305	
EXISTING STATE RFL DEBT	4,538,592	4,712,008	4,476,614	4,356,014	2,754,898	2,645,170	2,589,543	2,378,784	

WATER POLLUTION CONTROL AUTHORITY
RESERVE FOR CAPITAL IMPROVEMENTS
(STATE CLEAN WATER FUND LOAN RETIREMENT FUNDING)

SCHEDULE D

WATER POLLUTION CONTROL AUTHORITY
RESERVE FOR CAPITAL IMPROVEMENTS
(STATE CLEAN WATER FUND LOAN RETIREMENT FUNDING)

NO. OF
YEARS TO
MATURITY
FOR
FUNDING

15

ACTIVE OR FUTURE PROJECTS	ACTUAL BORROWED AS OF 06/19	ESTIMATED BORROWINGS					TOTAL BORROWING	NO. OF YEARS TO MATURITY FOR FUNDING	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	
		FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24								FY 24-25
LOW LEVEL WSTP DESIGN LOAN			0	400,000	400,000	0	800,000	21	32,826	32,826	32,826	32,826	32,826	
JUDGE PROCESSING PROJECT-DESIGN LOAN			0	200,000	400,000	0	600,000	22	27,273	27,273	27,273	27,273	27,273	
EAST AND WEST TREATMENT PLANTS JUDGE PROCESSING PROJECT-CONSTRUCTION LOAN - 3 TO 4 YEAR PROJECT				7,500,000	7,500,000	7,500,000	7,500,000	30,000,000	24	1,304,348	1,304,348	1,304,348	1,304,348	1,304,348
NORTHERN TREATMENT FACILITIES			0	8,100,000	8,300,000	15,000,000	15,000,000	53,900,000	24	625,000	625,000	625,000	625,000	625,000
SO H CONSTRUCTION CWF 628C LOANS H-3 thru H-5	0								20	0	0	0	0	0
		0							23	0	0	0	0	0
			0						23	0	0	0	0	0
SO H COMPLETION CONSTRUCTION CWF UB LOANS	0	0	875,000	875,000			1,750,000		23	76,087	76,087	76,087	76,087	76,087
SO H COMPLETION CONSTRUCTION CWF 706DC LOANS	1,963,078	1,812,578	0	0		0	0		21	0	0	0	0	0
							3,775,656		21	179,793	179,793	179,793	179,793	179,793
TOTAL PROJECT CSO H	1,963,078	1,812,578	875,000	875,000	0	0	0	5,525,656		76,087	76,087	76,087	76,087	76,087
LONG TERM CONTROL PLAN LOANS														
STAGE 1- DESIGN			1,500,000				1,500,000		23	65,217	65,217	65,217	65,217	65,217
STAGE 1- DESIGN				1,500,000			1,500,000		24	68,182	68,182	68,182	68,182	68,182
STAGE 1- CONSTRUCTION			250,000				250,000		23	10,870	10,870	10,870	10,870	10,870
STAGE 1- CONSTRUCTION				3,500,000			3,500,000		24	145,833	145,833	145,833	145,833	145,833
STAGE 1- CONSTRUCTION					3,500,000		3,500,000		23	152,174	152,174	152,174	152,174	152,174
STAGE 1- CONSTRUCTION						2,000,000	2,000,000		22	90,909	90,909	90,909	90,909	90,909
STAGE 2- WQT					350,000		350,000		23	15,217	15,217	15,217	15,217	15,217
STAGE 3- DESIGN-ASH CREEK & WQT			192,500	192,500			385,000		24	16,042	16,042	16,042	16,042	16,042
STAGE 3- DESIGN					1,250,000		1,250,000		23	54,348	54,348	54,348	54,348	54,348
STAGE 3- CONSTRUCTION					2,500,000		2,500,000		23	113,636	113,636	113,636	113,636	113,636
STAGE 3- CONSTRUCTION						1,500,000	1,500,000		22	68,182	68,182	68,182	68,182	68,182
STAGE 3- DESIGN-ASH CREEK STORAGE						0	0		22	0	0	0	0	0
STAGE 4- DESIGN-RELIEF INTERCEPTOR					0		0		23	0	0	0	0	0
STAGE 4- DESIGN						0	0		22	0	0	0	0	0
TOTAL PROJECT-LT CONTROL PLAN			1,942,500	5,192,500	7,600,000	3,500,000	0	18,235,000		800,610	800,610	800,610	800,610	800,610
IF RETIREMENT FUND ADJUSTMENT TOTAL ACTIVE PROJECTS	1,963,078	1,812,578	2,817,500	14,167,500	15,900,000	18,500,000	15,000,000	77,660,656		136,186	136,186	136,186	136,186	136,186

INTEREST CALCULATIONS
 FOR STATE DEBT RESERVE FUNDING
 ACTIVE PROJECTS SCHEDULE D 16

	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
ACTIVE PROJECTS					
JW LEVEL NITROGEN PROJECT-DESIGN					
LOAN BALANCE	480,000	450,000	420,000	390,000	360,000
REPAYMENTS:	-30,000	-30,000	-30,000	-30,000	-30,000
LOAN BALANCE	480,000	450,000	420,000	390,000	360,000
	<u>9,925</u>	<u>9,325</u>	<u>8,725</u>	<u>8,125</u>	<u>7,525</u>
INTEREST	9,925	9,325	8,725	8,125	7,525
JUDGE PROCESSING PROJECT-DESIGN					
LOAN BALANCE	850,000	800,000	750,000	700,000	650,000
REPAYMENTS:	-50,000	-50,000	-50,000	-50,000	-50,000
LOAN BALANCE	850,000	800,000	750,000	700,000	650,000
	<u>17,542</u>	<u>16,542</u>	<u>15,542</u>	<u>14,542</u>	<u>13,542</u>
INTEREST	17,542	16,542	15,542	14,542	13,542
SO H3, H4 CONSTRUCTION CWF 628C					
LOAN BALANCE	6,480,056	6,083,318	5,686,580	5,289,842	4,893,104
REPAYMENTS:	-396,738	-396,738	-396,738	-396,738	-396,738
LOAN BALANCE	6,480,056	6,083,318	5,686,580	5,289,842	4,893,104
	<u>133,902</u>	<u>125,967</u>	<u>118,032</u>	<u>110,097</u>	<u>102,163</u>
TOTAL INTEREST	133,902	125,967	118,032	110,097	102,163

INTEREST CALCULATIONS
FOR STATE DEBT RESERVE FUNDING
ACTIVE PROJECTS SCHEDULE D 17

LOANS					
STAGE 1- DESIGN					
BORROWINGS:					
REPAYMENTS:	-150,000	-150,000	-150,000	-150,000	-150,000
.OAN BALANCE	2,700,000	2,550,000	2,400,000	2,250,000	2,100,000
	<u>55,626</u>	<u>52,626</u>	<u>49,626</u>	<u>46,626</u>	<u>43,626</u>
OTAL INTEREST	55,626	52,626	49,626	46,626	43,626
STAGE 1- CONSTRUCTION					
BORROWINGS:	2,000,000				
REPAYMENTS:	-462,500	-462,500	-462,500	-462,500	-462,500
.OAN BALANCE	8,787,500	8,325,000	7,862,500	7,400,000	6,937,500
	21,658				
	<u>140,764</u>	<u>171,514</u>	<u>162,264</u>	<u>153,014</u>	<u>143,764</u>
OTAL INTEREST	162,422	171,514	162,264	153,014	143,764
LOANS					
STAGE 2-WQT					
BORROWINGS:					
REPAYMENTS:	-17,500	-17,500	-17,500	-17,500	-17,500
.OAN BALANCE	332,500	315,000	297,500	280,000	262,500
	<u>6,840</u>	<u>6,490</u>	<u>6,140</u>	<u>5,790</u>	<u>5,440</u>
OTAL INTEREST	6,840	6,490	6,140	5,790	5,440
STAGE 3- DESIGN CEDAR CREEK & WQT					
BORROWINGS:					
REPAYMENTS:	-75,000	-75,000	-75,000	-75,000	-75,000
.OAN BALANCE	1,350,000	1,275,000	1,200,000	1,125,000	1,050,000
	<u>27,813</u>	<u>26,313</u>	<u>24,813</u>	<u>23,313</u>	<u>21,813</u>
OTAL INTEREST	27,813	26,313	24,813	23,313	21,813
STAGE 3- CONSTRUCTION					
BORROWINGS:	1,500,000				
REPAYMENTS:	0	-87,500	-87,500	-87,500	-87,500
.OAN BALANCE	1,750,000	1,662,500	1,575,000	1,487,500	1,400,000
	16,244				
	<u>5,000</u>	<u>34,199</u>	<u>32,449</u>	<u>30,699</u>	<u>28,949</u>
OTAL INTEREST	21,244	34,199	32,449	30,699	28,949
STAGE 3 DESIGN-ASH CREEK STORAGE					
BORROWINGS:	350,000				
REPAYMENTS:		-17,500	-17,500	-17,500	-17,500
.OAN BALANCE	350,000	332,500	315,000	297,500	280,000
	3,790				
	<u>0</u>	<u>6,840</u>	<u>6,490</u>	<u>6,140</u>	<u>5,790</u>
OTAL INTEREST	3,790	6,840	6,490	6,140	5,790
STAGE 4-DESIGN RELIEF INTERCEPTOR					
BORROWINGS:	1,500,000				
REPAYMENTS:		-87,500	-87,500	-87,500	-87,500
.OAN BALANCE	1,750,000	1,662,500	1,575,000	1,487,500	1,400,000
	16,244				
	<u>5,000</u>	<u>34,199</u>	<u>32,449</u>	<u>30,699</u>	<u>28,949</u>
OTAL INTEREST	21,244	34,199	32,449	30,699	28,949
CSO PROJECTS- LONG TERM CONTROL PLAN					
TOTAL INTEREST	298,977	332,179	314,229	296,279	278,329
OTAL INTEREST ACTIVE PROJECTS	604,561	620,848	585,984	551,119	516,255
WF RETIREMENT FUND ADJUSTMENT					
OTAL INTEREST ACTIVE PROJECTS	604,561	620,848	585,984	551,119	516,255

WPCA
CAPITAL BUDGET
FISCAL 2020/2021

SCHEDULE E

18

DEPT/ ACCOUNT	DESCRIPTION	SOURCE OF FUNDING				TOTAL
		OPERATING FUNDS	BOND FUNDS	CWF STATE LOANS	CWF STATE GRANTS	
MAJOR PROJECTS						
401-56060	FACILITIES PLAN FOR THE WSTP	\$ 1,202,229			\$ 1,469,391	\$ 2,671,619
401-56060	COMBINED SEWER OVERFLOW PROJECT H CONSTRUCTION CWF 706DC			\$ 1,677,612	\$ 1,677,612	\$ 3,355,224
401-56060	COMBINED SEWER OVERFLOW PROJECT H 3			\$ 1,500,000	\$ 1,500,000	\$ 3,000,000
EQUIPMENT & VEHICLES						
<u>WEST SIDE TREATMENT FACILITY</u>						
401-56170	MAJOR EQUIPMENT REPLACEMENT/OVERHAUL	\$ 175,000				\$ 175,000
	Flygts & Chains		\$ 100,000			\$ 100,000
	Spare Primary Drives (2)		60,000			\$ 60,000
	Spare Final Drives (2)		60,000			\$ 60,000
	Overhaul Misc Pumps		50,000			\$ 50,000
	Primary Sludge Piping		100,000			\$ 100,000
	Bypass Screen Upgrade		200,000			\$ 200,000
<u>EAST SIDE TREATMENT FACILITY</u>						
	MAJOR EQUIPMENT REPLACEMENT/OVERHAUL	\$ 175,000				\$ 175,000
	Rebuild Misc Pumps		30,000			\$ 30,000
	Rebuild Main Pump #1,4		70,000			\$ 70,000
	Rebuild Mixed Sludge Pump		60,000			\$ 60,000
	Rebuild Grit Classifier #1,2		100,000			\$ 100,000
	Misc Building Roof Repair		30,000			\$ 30,000
	Replace Mix Sludge Pumps		40,000			\$ 40,000
<u>FIELD OPERATIONS</u>						
401-55045	Small Pickup Truck (2)		60,000			\$ 60,000
	Mini Boom		120,000			\$ 120,000
	Gondola Truck		95,000			\$ 95,000
	Mason Dump Truck		120,000			\$ 120,000
<u>ADMINISTRATION</u>						
401-55055	MS 4 Mapping	\$ 125,000				\$ 125,000
TOTALS		\$ 1,677,229	\$ 1,295,000	\$ 3,177,612	\$ 4,647,003	\$ 10,796,844

Planned Sewer Rehabilitation
Fiscal 2020/2021 Budget

SCHEDULE F

Contract PL-2 Pipe lining

	Location	Pipe Size inches	Length Ft.	Unit price	Estimated cost
1	miscellaneous locations	12	240	\$54.00	\$12,960
2	miscellaneous locations	22x28	400	\$102.00	\$40,800
3	miscellaneous locations	10x15	250	\$75.00	\$18,750
4	miscellaneous locations	60x41	700	328	\$229,600
5	miscellaneous locations	50x38	600	246	\$147,600
6	miscellaneous locations	10x15	1500	75	\$112,500
7	Manual Openings	N/A	N/A	N/A	\$30,000
8	Heavy cleaning	N/A	N/A	N/A	\$230,000
9	Police Time	N/A	0	57	\$75,630
	Total PL-2		2190		\$897,840

Contract PR-2 Pipe replacement

	Location	Pipe Size inches	Length Ft or Each	Unit price	Estimated cost
1	miscellaneous locations	30	298	125	\$37,250
2	miscellaneous locations	30	850	95	\$80,750
3	Open Manholes and rebuild lining	7		20,000	\$100,000
4	Drywells	3		6,500	\$19,500
6	Mobilization (non Emergency)		6	1,600	\$9,600
7	Class B Concrete in place (Approximate)		14	200	\$2,700
8	Connect to sewer /MH		10	500	\$5,000
9	Crushed Stone in Place (Approximate) CY		800	40	\$32,000
10	Bank run gravel (Approximate)		311	40	\$12,440
11	Bituminous hot mix Paving for Replacement	32ft wide	1200	65	\$78,000
12	Bituminous hot mix 2" overlay		1500	12	\$18,000
13	Police Time	N/A	1250	57	\$71,250
14	Utility relocation	N/A			\$40,000
	Total PR-2				\$506,490
	Grand Total for PL-2 and PR-2				\$1,404,330

**Water Pollution Control Authority for
the City of Bridgeport**

Schedule G

**Schedule of Fees (other than Sewer Use)
Fiscal Year 2020-2021**

	<u>Fee Amount</u>
Sewer Connection Permit Fee (New Connections):	
Sanitary Single Family Dwelling	\$125
Sanitary Multiple Family Dwelling(up to 4 units)	\$200
Sanitary Multiple Family Dwelling(5 or more units) Additional charge per unit over 4	\$50
Sanitary Commercial/Industrial Building	\$275
Storm Sewer(Residential per connection)	\$125
Storm Sewer(Commercial/Industrial per connection)	\$275
Review and Approval of Grease Trap Plans and Specifications	\$200
Inspection Permit Fees:	
Sanitary Sewer Lateral Repair (8:00AM to 4:00PM M-F)	\$100
Sanitary Sewer Lateral Repair(Other Hours)	\$200
Special Sewer Use Billing Charge(Non-Discharge Adjustment or Special Discharge Permit)Per Invoice	\$25
Special Sewer Use Billing Charge(Non-Discharge Adjustment for residential installed irrigation systems)Per Invoice	\$3
Returned Check Fee	\$40
Sewer User Full Account History	\$2
Sewer Maps(per Sheet) Up to 3' Wide	\$5
8-1/2" x 11" to 17" per sheet	\$3
Septage Dumping(Up to 1000 Gallons)	\$260

TO:	William Maurer, PE	DATE:	5/8/2020
FROM:	Joe Hausmann, PE Christine Kurtz, PE	PROJECT NO.:	13905E
SUBJECT:	Trumbull Mall outparcel expansion Review of available sewer capacity – May 2020 Revised Draft		

The Trumbull Mall purchased the properties on Whalburn Avenue and Stuart Place and are looking into the possibility of developing the area. The consultant is requesting information from the Trumbull WPCA regarding the potential available sewer capacity in this area. This information has been requested in order to determine what types of development are possible, and how large a sewer flow the development could generate and still be acceptable to Trumbull.

COLLECTION SYSTEM IMPACTED

In order to determine the sewer capacity, we utilized sewer system mapping from previous projects working with the WPCA as well as the available record drawings from the Trumbull WPCA's ArcGIS collector system.

Figure 1 below shows the sewer system in the vicinity of the Mall and the subject area. Proposed flow would leave the area of Whalburn Avenue and Stuart place, and flow to the west to an 8-inch PVC sewer that generally follows the loop road around the Mall building, flowing towards the south side of the Mall building. Behind the mall, the 8-inch PVC sewer connects to the 30-inch RCP trunk line on the "gravity-side" of the sewer system, about 3 manholes above the Sunnydale and Leeland meter station, where the Trumbull system connects into the Bridgeport Sewer System.

The 8-inch main along the loop road carries flow from the mall itself, and formerly from Whalburn and Stuart along with approximately 37 mostly residential buildings along Main street (from Gorham Place to the Merritt Parkway). The only notable non-residential building in the contributing area is a funeral home at the corner of Gorham Place and Main Street. Sewer Manhole 1A-67 in Figure 1 flows south to Bridgeport and does not connect to the impacted sewers.

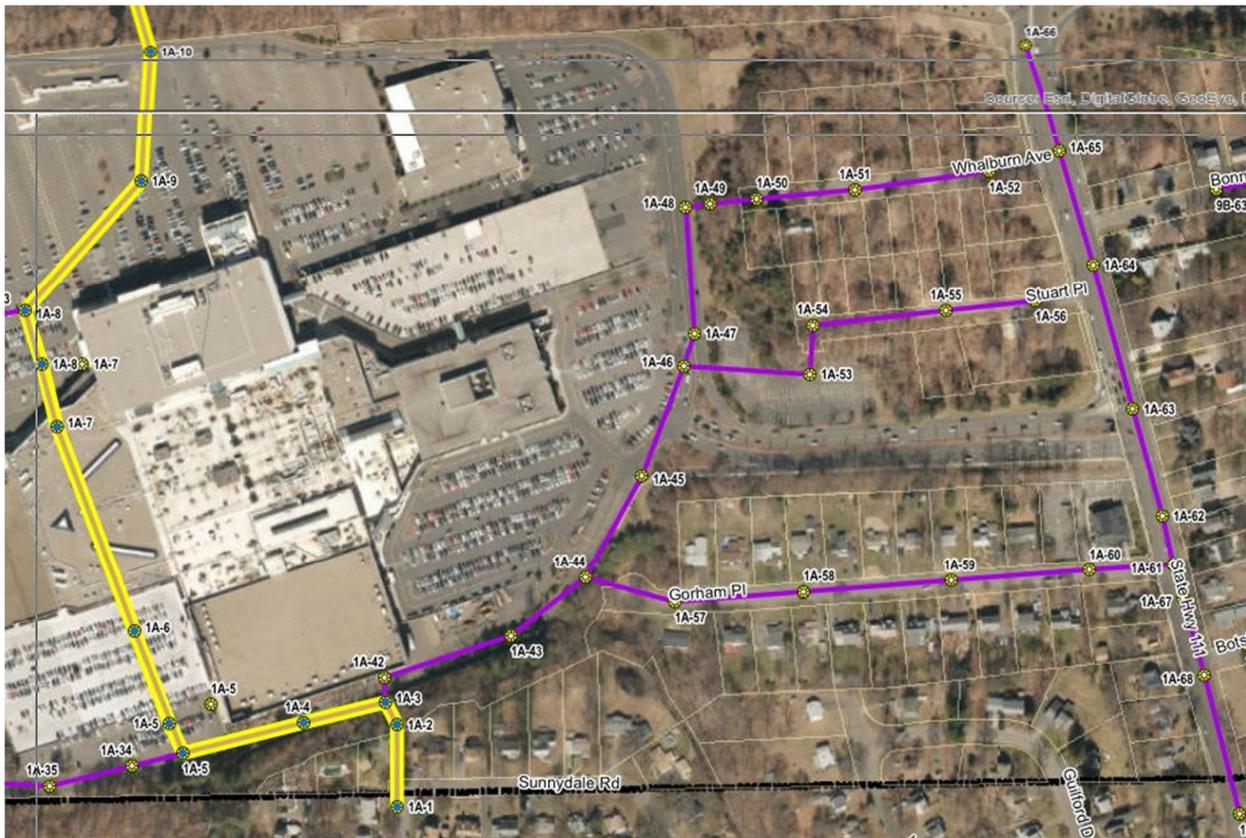
We first evaluated the collector sewers in the vicinity of the mall expansion area to determine their capacity in the most limiting sewer segment. We then estimated the flows from adjoining areas that flow through the limiting segment, to determine the estimated remaining available capacity for expansion at the proposed site. We then reviewed the 30-inch trunk sewer downstream of the impacted collector sewers, compare its capacity to the metering data available, to verify that the trunk line has enough capacity to accept the same flow as the local collector sewers.

For the purposes of this evaluation we obtained water use data from the mall to attempt to account for mall flows that are connected to the impacted sewers. Because we could not determine where

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the wastewater from the mall tenants entered the collection system, we conservatively presumed that all of the water entered the 8-inch collector sewer versus connecting to the 30-inch interceptor.

FIGURE 1
IMPACTED SEWER SYSTEM AREA



COLLECTOR SEWER CAPACITY

The 8-inch sewer along the loop road has a section that was installed close to minimum slope (approximately 0.0055 ft/ft). This segment is between manholes 1A-42 and 1A-43 in the sewer system shown Figure 1 and appears to be the limiting segment in the area.

Using manning's equation, and an 'n' factor of 0.013, an 8-inch sewer at 0.0055 ft/ft has an approximate full pipe capacity of 580,000 gpd.

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Existing Flows in Collector Sewer

Using the typical method utilized by Trumbull for calculating flows from existing parcels, we have estimated the amount of flow from the 37 parcels connected to the Gorham Place sewer. Typically, for residential uses, we utilize an assumed 2.78 residents per residential unit and a flow of 70 gallons per person, per day. In addition, we add a peaking factor based on the relative size of the drainage area and contributing flow to estimate peak flows and add an allowance for infiltration and inflow based on the surface area of the contributing sewers. For the existing parcels along Gorham Place and Main Street, the estimate flows were determined as follows:

- 37 parcels * 2.78 residents per parcel * 70 gallons per person per day = 7,200.2 gpd
- Peaking factor = 5.6 taken from TR-16 table
- Peak sewer flow = 7,200.2 * 5.6 = 40,321 gpd
- I/I allowance = 500 gpd/in-mile of pipe * 8" pipe * 2,300 ft = 1,742 gpd
- Estimated peak existing flow = 40,321 + 1,742 = 42,063 gpd

This estimated flow does not include any connections from the mall parcel itself. For the mall flows, we obtained 3 years of flow data for the 11 separate accounts located at the mall property. We assumed that the average daily sewer flow from the mall is the average daily flow of the highest year. For this evaluation, we assumed that all of the water used by the mall would be discharged to the 8-inch sewer. We then put the peaking factor on the average flow to estimate the peak flow from the mall:

- 2019 average daily water use = 57,700 gpd
- Estimated peak flow = 57,700 * 5.6 = 323,120 gpd

Therefore, the current peak flow in the pipe could be as high as approximately 365,200 gpd.

Available collector sewer capacity

Based on this evaluation there appears to be approximately 215,000 gpd of existing peak full pipe capacity available.

It is our understanding that the proposed development is anticipated to contain approximately 260 residential units. This development could generate the following flows:

- 260 units * 2.78 residents per unit * 70 gpd/person = 50,596 gpd
- Peaking factor = 5.6 taken from TR-16 table
- Peak sewer flow = 50,596 * 5.6 = 283,338 gpd

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This estimation does not include any additional flows for the pool or clubhouse, but also assumes 2.78 residents per unit despite a proposed mix of 60 one-bedroom units, and 200 two-bedroom units. However, the result resembles the developer's proposed peak flow rate of 290,000 gpd.

Therefore, in this conservative evaluation, it appears that the 260-unit development could cause the pipe to be approximately 68,000 gpd above its capacity in a peak flow scenario. However, this evaluation assumes that all of the mall's water use is connected to the 8-inch collector sewer, and not to the 30-inch interceptor which also runs across the property (or to any other private sewers on site that do not connect to the 8-inch main).

From a quick review of Collector (the town's software program used for mapping) for sewer lateral tie cards and records drawings, we were unable to determine if there are any sewer connections from the mall to the 8-inch sewer there are notations for three connections to the 30-inch sewer. Thus, it is unlikely that the full flow of the mall directly impacts the 8-inch sewer as was assumed in the above evaluation. The developer indicated at the recent WPCA meeting that the flows from the Lord & Taylor retail store and from the Whalburger and Cheesecake Factory restaurants are connected to the 8-inch sewer. From the water use records we received, there was a billing site noted for Lord & Taylor, but it was unclear which of the other accounts is the Whalburger/Cheesecake Factory account. The Lord & Taylor water billing account utilized only approximately 516 gpd on average in 2019.

It is recommended that the mall work with its developer and the WPCA to determine where the existing mall property water meters and sewer connections are located to determine more accurately what part of the mall's sewer flows connect to the 8-inch sewer to ensure that the 8-inch pipe does have the required capacity.

However, in a worst-case scenario, if it is determined that the mall flows are fully connected to the 8-inch pipe, it would be recommended that the limiting 8-inch segment and the short 8-inch segment downstream of the limiting segment (from MH 1-3 to MH 1A-43) be increased in size to prevent a surcharged condition during peak flows.

TRUNK SEWER CAPACITY

The 30-inch sewer between manhole 1A-2 and 1A-1 (which is also the Sunnydale and Lealand meter pit), is an RCP pipe with a slope of approximately 0.0022 ft/ft. Using Manning's equation, and an 'n' factor of 0.015, a 30-inch sewer at 0.0022 ft/ft has an approximate full pipe capacity of 10.8 MGD.

Existing flows

We reviewed the Sunnydale meter flow data in mission for 2019 to identify the peak hourly flow rate in the 30-inch pipe. The highest flow rate recorded by the Sunnydale and Lealand flow meter

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(located in Manhole 1A-1 just south of the mall) in 2019 was on January 24th, in the early afternoon, which was just after a 1.5-inch rainstorm (likely with some snow melt). Based on the flow meter data around this time, it appears that the flow rate in the 30-inch pipe reaches about 2,770 gpm, or about 4 MGD, on occasion as the peak hourly flow.

Available trunk sewer capacity

Since the capacity in the 30-inch interceptor sewer line between the Mall and the metered connection into the Bridgeport sewer system is approximately 10.8 MGD, with a peak hourly flow around 4 MGD, there appears to be enough excess capacity in the main interceptor line to handle any flows that are conveyed to the trunk line by the collector sewers in the mall vicinity, unless those sewers are dramatically upsized.