

EAST GOSHEN MUNICIPAL AUTHORITY

October 12, 2020

7:00 PM

1. **CALL TO ORDER/PLEDGE OF ALLEGIANCE/MOMENT OF SILENCE**

- a. Ask if anyone will be taping the meeting

2. **CHAIRMAN'S REPORT/OTHER MEMBERS REPORTS**

3. **SEWER REPORTS**

- a. Director of Public Works Report.
- b. Pennoni Engineer's Report.
- c. Big Fish Environmental Report

4. **APPROVAL OF MINUTES**

- a. September 14, 2020

5. **APPROVAL OF INVOICES**

Pennoni Invoice #1040599	\$	5,845.50
Pennoni Invoice #1040604	\$	601.50
Pennoni Invoice #1040607	\$	222.25
Yale Invoice # S11650645.001	\$	441.17
Lenni Electric Invoice # 200837	\$	7,875.02 Paid
Teledyne Instruments Invoice #S020419254	\$	7,912.90 P

6. **LIAISON REPORTS**

7. **FINANCIAL REPORTS**

- a. September Financial Report

8. **OLD BUSINESS**

- a. Westtown Way Pump Station Review

9. Goals:

Goal	Status
Continue to Monitor Upgrades at WGSTP and Westtown Way Pump Station	On – going, MA Rep attending WGSA meetings monthly. WGSA plans to go to bid in early 2021 on WWPS
Continue to Implement Infiltration and Inflow for the Sewer System	Currently have 4 portable meters on R.C. Lines Just finished TVing Supplee Valley
<i>Implement planned capital projects:</i>	
RCSTP Emergency Generator Replacement	Installed and completed
Caustic Soda Project	\$152,890 DCED grant awarded. Project to be deferred until 2021
Hunt Country Pump Station Mag Meter Replacement	2021
Hunt Country Pump Station Muffin Monster Replacement	2021
Hunt Country Pump Station Bypass Pump	2021
Two New RC Permanent Flow Meters	Manhole and flow meter ordered for Hibberd Lane. Two other flow meters deferred till 2021 Flow meter has arrived, waiting on meter pit

10. NEW BUSINESS

- a. 632 Thorncroft Drive

11. CAPACITY REQUESTS

12. ANY OTHER MATTER

13. CORRESPONDENCE AND REPORTS OF INTEREST

14. PUBLIC COMMENT

15. ADJOURNMENT

EAST GOSHEN MUNICIPAL AUTHORITY
EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199

October 9, 2020

To: Municipal Authority

From: Mark Miller

Re: September 2020 Monthly Report

Monthly Flows: The average daily flow to West Goshen was 714,000 per day.

Meters: The meters were been read on a daily basis. We have had some problems with the Reservoir Road meter. Allied Control has ordered the parts, we are waiting their arrival. We have installed the portable flow meters and are reading them on a weekly basis, the data is sent to Mike Ellis's office for their review.

C.C. Collection: The stations were visited on a daily basis. We had no problems for the month. We continued to open up the sewer right of ways so we could get through in the event of an emergency. We will be working on the Ashbridge Farms right of ways in the upcoming month.

On Wednesday during routine maintenance we found a radiator leaking on the generator. To replace the generator we are looking at \$3800.00. We are going to pull the radiator out and send it out to be repaired. It will be out of service for ten days. We have arranged to rent a generator until ours is back in service.

R.C. Collection: The stations were visited on a daily basis. We had no problems for the month. The fence around the Hershey mill generator still needs to be completed. The landscaping should be planted sometime in October. We also cut the sewer right of ways. We had a new lateral connection at 936 Cornwallis Drive.

R.C. Plant: Routine maintenance was performed as needed. The two pumps that were sent to Deckmen Electric have returned. The aeration pump was in good condition the impellers that we switched two years ago were in great condition. The sludge pump was a different story, they had to replace the primary and secondary seals and rewind the motor. The motors were dropped into SBR 3; Lenni Electric will wire them up. We

had received a call from a resident who was concerned with his lateral; we televised the lateral and found a large root ball at the main connection. We used our root cutter and removed the blockage. While we were on site, we took the time to pull a half dozen manholes to check the condition of the manholes. I also showed the men where the Meadowbrook/Cornwallis system was routed and tied in. The lines were in very good condition and the manholes were dry. While looking into a storm water problem on Hibberd Lane I pulled two sewer lateral caps and found both were broken. I talked to Kevin and Steven and we decided that we would inspect every lateral cap and install new caps with **Cast Iron Buffalo boxes at ground level**. This will eliminate the landscapers running them over. I am going to look into the GPS for the cleanouts while we were doing the repairs.

The new Generator was brought on line Tuesday; they encountered an alarm problem with the oil-sending unit, which will be replaced. Our generator technician had the vendor run the generator through several load tests, all were successful by the end of the day, and the new unit was placed in service.

Alarms: We responded to 12 alarms for September.

PA 1 Calls: We responded to over 95 PA One Calls for the month of September.

Monthly Rainfall: 4.23 inches for the month of September.

Lateral Caps: We replaced 6 lateral caps.



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**EAST GOSHEN MUNICIPAL AUTHORITY
ENGINEER'S REPORT
October 8, 2020**

Invoices

- Invoices with summaries are provided under separate cover.

Ridley Creek Sewage Treatment Plant (RCSTP)

- Generator Replacement – We evaluated an inquiry from the electrician to tie an additional circuit and equipment into the new generator.
- SBR #3 Assessment – We performed construction observation during Dutchland's CIM coating repairs. We are also finalizing our visual condition assessment report, which we anticipate submitting by October 19.
- Caustic Soda Conversion – We will initiate design work upon confirmation of the grant approval from PA DCED.

Tallmadge Drive Sewer Main Replacement

- The 2-year maintenance bond period ends March 21, 2021.

Capital Improvement Planning

- We reviewed scoping for projects in the 5-year CIP and provided update budgetary cost opinions.

I&I Support and Reporting

- We reviewed the first week of meter data from the new portable meter locations in the Ridley Creek collection system.

Ridley Creek Collection System Permanent Meters

- We understand that the manhole and permanent meter for the Hibberd Lane location has been ordered. We will provide construction phase assistance as needed.

New Connections

- No activity by Pennoni since our last report.

Act 537 Planning

- As discussed at the May MA meeting, the need for an Act 537 Plan Update will be revisited in early 2021.

Westtown Way Pump Station

- We completed review of documentation including concept plans, reports, calculations, and engineering estimates for potential value engineering options. We issued comments on October 8 to East Goshen Township for consideration.

END OF REPORT



**RCSTP Monthly Operations
Report: October 2020**

Executive Summary

The Ridley Creek sewage treatment plant outfall 001 achieved compliance with the permit discharge limitations for the month of August 2020. Discharge to the Applebrook irrigation lagoon remained on line. Chemical usage utilized for pH and total alkalinity remained consistent with previous months. No significant mechanical or operational issues were observed during operation of sludge dewatering equipment or SBR treatment process. There were no reported odor complaints during the month.

Treatment Process Operation

Table 1 illustrates the final effluent composite sample data reported for outfall 001 for the August 2020 DMR.

Table 1

August 2020- Final Effluent - Outfall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	10	131	2.5	44	0.5	3	200	1,000
		40		15							
Sample Date											
August 3, 2020	0.168			4	5.6						
August 4, 2020	0.712	3.2	19.0	7	41.6	0.636	3.78	0.15	0.89	10	1.0000
August 10, 2020	0.186			3	4.7						
August 11, 2020	0.185	3.4	5.2	2	3.1	0.673	1.04	0.12	0.19	1	0.0000
August 18, 2020	0.248	3.0	6.2	3	6.2	0.100	0.21	0.12	0.25	6	0.7782
August 25, 2020	0.198	2.3	3.8	9	14.9	0.100	0.17	0.20	0.33	4	0.6021
Average	0.306	3.0	8.6	5	14.1	0.38	1.30	0.15	0.41	5	0.5951
Minimum	0.185	2.3	3.8	2	3.1	0.10	0.17	0.12	0.19	1	0.0000
Maximum	0.712	3.4	19.0	9	41.6	0.67	3.78	0.20	0.89	10	1.0000

Compliance with the NPDES discharge permit was achieved. The monthly average total phosphorus was reported as 0.15 mg/L as compared to the permit limitation of 0.5 mg/L. The TSS samples were consistently in single digits and well below the weekly maximum of 15 mg/L. The monthly average TSS was reported as 5 mg/L as compared to the discharge limitation of 10 mg/L. The TSS weekly averages are presented below in Table 2.



**RCSTP Monthly Operations
Report: October 2020**

Table 2	
August 2020 Final Effluent Weekly TSS Averages	
Week 1	6 mg/L
Week 2	3 mg/L
Week 3	3 mg/L
Week 4	9 mg/L

The final effluent test results demonstrate that the biological treatment process performed well during August and September. Sequencing batch reactors (SBRs) numbered 1, 2 and 4 were in service during August and September. SBR 3 remained out of service for repairs. Process monitoring of each SBR included ammonia as N, nitrite as N, Nitrate as N, COD, SSV, MLSS and total phosphorus. Daily analysis of the final effluent flow equalization grab sample for total phosphorus is ongoing. Sample collection and analysis of the influent wastewater collected at the influent pump station wet well is ongoing.

Discharge to the Applebrook irrigation lagoon, outfall 002, continues to remain on line. Table 3 illustrates the Applebrook sample data reported for outfall 002 for the August 2020 DMR.

Table 3											
August 2020 - Applebrook - Out Fall 002											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total		Fecal Coliform	
	MGD	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.135	25		30		2.5	44	0.5	3	200	1,000
		40		45							
August 3, 2020	0.1422			4	5.60						
August 4, 2020	0.1548	3.2	4.1	7	9.04	0.636	0.82	0.15	0.19	10	1.0000
August 10, 2020	0.1670			3	4.18						
August 11, 2020	0.1623	3.4	4.6	2	2.71	0.673	0.91	0.12	0.16	1	0.0000
August 18, 2020	0.1503	3.0	3.8	3	3.76	0.100	0.13	0.12	0.15	6	0.7782
August 25, 2020	0.1576	2.3	3.0	9	11.83	0.100	0.13	0.20	0.26	4	0.6021
Average	0.146	3.0	3.9	5	6.3	0.38	0.50	0.15	0.19	5	0.5951
Minimum	0.150	2.3	3.0	2	2.71	0.10	0.13	0.12	0.15	1	0.0000
Maximum	0.167	3.4	4.6	9	11.8	0.67	0.91	0.20	0.26	10	1.0000



**RCSTP Monthly Operations
Report: October 2020**

The influent wastewater pollutant concentrations and loading entering the wastewater treatment facility remained within the design concentration and organic loading values. The monthly average daily concentrations were observed to be less than the design parameters for the treatment process.

Table 4 presents the available pollutant data for the influent wastewater collected at the doghouse manhole during August 2020.

Table 4

August 2020 - Influent Wastewater											
Design Basis	Flow	BOD ₅		TSS		NH ₄ -N		TKN, mg/L		Phosphorus, Total, mg/L	
		mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day
	MGD Average	335	2,098	320	2,001	32	200	48	301	9.1	57
Sample Date											
August 4, 2020	0.6293	229	1,202	318	1,669	28.5	150	26.1	137	4.8	25.2
August 11, 2020	0.35581	205	608	330	979	35.4	105	42.9	127	7.8	23.1
August 18, 2020	0.32944	87.7	241	182	500	32.9	90	32.8	90	5.3	14.6
August 25, 2020	0.46754	270	1,053	245	955	32.3	126	38.3	149	5.3	20.7
Average	0.4455	198	776	269	1,026	32	118	35.0	126	5.8	20.9
Minimum	0.3294	88	241	182	500	29	90	26.1	90	4.8	14.6
Maximum	0.6293	270	1,202	330	1,669	35	150	42.9	149	7.8	25.2

Table 5 illustrates the available data for the final effluent composite sample data reported for outfall 001 for use with the September 2020 DMR.

The foam on the SBR surface remains at approximately 70 to 100% coverage of the surface area. The foam thickness is approximately 3 to 4 inches with a light to medium brown color. These conditions may contribute to a decrease in clarity within the final effluent post flow equalization basins; however, the clarity is improved after passing through the disc filters. The operation strategy is to lower the MLSS to maintain a F:M ratio of 0.06 while ensuring the ammonia effluent discharge concentration remains within the seasonal limit of 2.5 mg/L.



**RCSTP Monthly Operations
Report: October 2020**

Table 5

September 2020- Final Effluent - Outfall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total		Fecal Coliform	
	MGD	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	10	131	2.5	44	0.5	3	200	1,000
		40		15							
Sample Date											
September 1, 2020	0.191	2.8	4.5	5	8.0	0.125	0.20	0.12	0.19	5	0.6990
September 2, 2020	0.18			4	6.0						
September 8, 2020	0.174	2.0	2.9	6	8.7	0.100	0.15	0.21	0.30	3	0.4771
September 9, 2020	0.19						0.00	0.15	0.24		
September 15, 2020	0.196	3.2	5.2	6	9.8	0.100	0.16	0.13	0.21	40	1.6021
September 22, 2020	0.198	2.9	4.8	4	6.6	0.100	0.17	0.20	0.33	5	0.6990
September 29, 2020	0.2							0.17	0.28		
Average	0.190	2.7	4.3	5	7.8	0.10	0.12	0.17	0.27	16	0.9261
Minimum	0.174	2.0	2.9	4	6.0	0.10	0.00	0.13	0.21	3	0.4771
Maximum	0.200	3.2	5.2	6	9.8	0.10	0.17	0.21	0.33	40	1.6021

Table 6 illustrates the available data for the Applebrook composite sample data reported for outfall 002 for use with the September 2020 DMR.

Table 6

September 2020 - Applebrook - Out Fall 002											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total		Fecal Coliform	
	MGD	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.135	25		30		2.5	44	0.5	3	200	1,000
		40		45							
September 1, 2020	0.1438	2.8	3.4	5	6.00	0.125	0.15	0.12	0.14	5	0.6990
September 2, 2020	0.1406			4	4.69						
September 8, 2020	0.1386	2.0	2.3	6	6.94	0.100	0.12	0.21	0.24	3	0.4771
September 9, 2020	0.1478							0.15	0.18		
September 15, 2020	0.1452	3.2	3.9	6	7.27	0.100	0.12	0.13	0.16	40	1.6021
September 22, 2020	0.1494	2.9	3.6	4	4.98	0.100	0.12	0.20	0.25	5	0.6990
September 29, 2020	0.1501							0.17	0.21		
Average	0.146	2.7	3.3	5	6.0	0.10	0.12	0.17	0.21	16	0.9261
Minimum	0.139	2.0	2.3	4	4.69	0.10	0.12	0.13	0.16	3	0.4771
Maximum	0.150	3.2	3.9	6	7.3	0.10	0.12	0.21	0.25	40	1.6021



**RCSTP Monthly Operations
Report: October 2020**

Table 7 presents the available pollutant data for the influent wastewater collected at the doghouse manhole during September 2020. The influent wastewater pollutant loadings remain within the design criteria for the treatment process and equipment.

Table 7

September 2020 - Influent Wastewater											
Design Basis	Flow	BOD ₅		TSS		NH ₄ -N		TKN, mg/L		Phosphorus, Total, mg/L	
		mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day
	MGD Average	335	2,098	320	2,001	32	200	48	301	9.1	57
Sample Date											
September 1, 2020	0.4259	218	774	530	1,883	38.7	137	46.0	163	6.0	21.3
September 8, 2020	0.4189	189	660	234	818	35.5	124	49.3	172	5.5	19.2
September 15, 2020	0.4605	184.0	707	235	903	34.7	133	46.6	179	6.0	23.0
September 22, 2020	0.3675	382.0	1,171	243	745	37.7	116	46.9	144	5.3	16.2
September 29, 2020	0.4472										
Average	0.4240	243	828	311	1,087	37	128	47.2	165	5.7	20.0
Minimum	0.3675	184	660	234	745	35	116	46.0	144	5.3	16.2
Maximum	0.4605	382	1,171	530	1,883	39	137	49.3	179	6.0	23.0

During September, the average monthly influent wastewater flow measured at the "field" flow meter was 427,064 gallons/day as compared to the influent flow into the SBRs as 412,561 gallon/day. The difference was 14,503 gallons/day.

The field flow meter, influent flow channel, grinder and fine screen are inspected routinely for any noticeable signs (blinding of screens) that may contribute to increased head losses through the channel. The depth of grit in the channel prior to the fine grinder is also monitored for depth and for scheduling cleaning of the channel.

PA DEP

No activity



**RCSTP Monthly Operations
Report: October 2020**

Significant Rainfall

During September, there were nine (9) days when rainfall occurred. Two (2) storm events resulting in a daily precipitation amount equal to or greater than 0.50 inches. These events occurred on:

September 11 th	0.62 inches
September 30 th	1.43 inches

Consecutive Storm events included:

September 1 st through 4 th	for a total of 0.29 inches
September 26 th through 28 th	for a total of 0.77 inches

A total of 3.11 inches of rainfall measured during the month.

Plant operations were adjusted to manage the precipitation to prevent exceedances of the permitted discharge limitations for Outfalls 001 and 002. Adjustments included reducing aeration minutes per cycle, extending decant minutes per cycle and reducing settling times.

Minor Preventative Maintenance

- Flushed chemical feed lines to the SBRs.
- Cleaned final effluent weir trough daily
- Skimmed surface of disc filters daily
- Drained and cleaned disc filters bi-weekly
- Cleaned buildings and laboratory
- Replaced influent sampler pump tubing

Chemical Usage:

September 2020		
Chemical	Daily Average	Total Monthly
Soda Ash	300	9,600
Aluminum Sulfate solution	81.4	2,442



**RCSTP Monthly Operations
Report: October 2020**

Flow data:

Flow Meter Location	September 2020		Daily Maximum Flow, gpd
	Total Volume for Month, MG	Average Daily Flow, gpd	
Influent Wastewater to Screening Building*	12.811	427,064	527,720
Influent Wastewater to SBRs*	12.377	412,561	496,384
Internal Recycle**	0.138	22,946	49,164
Treated Effluent to Disc Filters	12.381	412,702	475,520
Final Effluent Discharge	5.459	181,967	212,000
Applebrook Golf Course	4.248	141,590	165,000

SBR 3

- Representatives from Dutchland were on site on the 14th and 15th to perform repairs on SBR 3
- The Motive and waste pump bases were sand blasted and painted the 18th. A second coat of paint was applied on the 21st.
- The sump pump removed on 22nd to prepare SBR for service.

Disc Filters

- Replaced a back-wash valve on disc filter number 1. The valve was failing to fully close.

LMI Alum Feed Pump

- Replaced the 1-inch ball valve. The seals failed and were leaking.

Lenni Electric working on New Emergency Generator

- On the 29th Electricians were on site working on the new generator
- On the 30th, Colonial Electric delivered supplies for the new generator
- On 1st October, assist Electricians pulling wires for the new generator.

DRAFT
EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY
MEETING MINUTES
September 14, 2020

The East Goshen Township Municipal Authority held their regular meeting on Monday, September 14, 2020 at 7:00 pm. Due to restrictions caused by the COVID-19 virus, the meeting was held via electronic conferencing Zoom. Members in attendance were: Chairman Phil Mayer, Jack Yahraes, Dana Pizarro, Kevin Cummings and Walter Wujcik. Also in attendance were: Jon Altshul (Township Asst. Manager), Mark Miller (Director of Public Works), Mike Ellis (Pennoni), Robert Jefferson (Gawthrop), Michael Lynch (Township Supervisor); Scott Towler (Plant Operator)

COMMON ACRONYMS:

<i>BFES – Big Fish Environmental Services</i>	<i>MA- Municipal Authority</i>
<i>BOS – Board of Supervisors</i>	<i>NPDES – National Pollutant Discharge Elimination System</i>
<i>CB – Conservancy Board</i>	<i>PC – Planning Commission</i>
<i>DEP – Department of Environmental Protection</i>	<i>PM – Prevention Maintenance</i>
<i>EPA – Environmental protection Agency</i>	<i>PR – Park & Recreation Board</i>
<i>HC – Historical Commission</i>	<i>RCSTP – Ridley Creek Sewer Treatment Plant</i>
<i>I&I – Inflow & Infiltration</i>	<i>SBR – Sequencing Batch Reactor</i>
<i>LCSTP – Lockwood Chase Sewer Treatment Plant</i>	<i>SSO – Sanitary System Overflow</i>
	<i>WAS – Waste Activated Sludge</i>

Call to Order & Pledge of Allegiance

Phil called the meeting to order at 7:05 pm and led those present in the Pledge of Allegiance. There was a moment of silence to remember our medical and healthcare staffs, troops, veterans and first responders. Phil asked if anyone would be recording the meeting. There was no response.

Chairman's Report

1. Phil reported that the West Goshen Sewer Plant was in compliance. With the Hurricane there were some after flows. They are working on the design issues with the Westtown Pump Station. They received two grant awards, one from PASWS for \$411,000 and the other from H2OPAWS for \$500,000. Jon asked about the miscellaneous legal expenses. Phil commented that the estimates from 5 months ago are the most recent.

Sewer Reports

1. Director of Public Works, Mark Miller's report for August 2020:

Monthly Flows: The average daily flow to West Goshen was 739,000 gal/day.

Meters: The meters were read on a daily basis. We did have a problem with the Reservoir Road meter. We tried to reset it, but the problem continued. Allied Control was out on September 3 to calibrate the meters at which time they looked at the Reservoir Road meter and the totalizer was bad. The part has been ordered and will be installed as soon as we receive it.

C.C. Collection: We visited the pump stations on a daily basis. All of the wet wells were washed down due to the high levels during the Hurricane Isaias. John Laidley was called in to reset the FOG Rods, which were out of control due to the high levels from the hurricane. During the storm, the pump stations ran well with no problems to report. All the stations were on emergency power for two days. We hauled fuel to all of the stations until power was restored. We cleaned and televised the lines in Suplee Valley. We called in for a possible

sewer overflow between Meadow Drive and Baldwin Dr. After searching the entire area, nothing was found. We started clearing the sewer right of ways. The work required us to remove downed trees and repair washouts around manholes.

Hurricane Isaias:

The plant held its own. The plant went into storm mode. Our Operator remained on site until the plant went back to normal. Matthew did an outstanding job operating the plant during and after the storm. We lost the Internet and phone service. The plant had to be monitored around the clock. The generators ran for 4 days. We shuttled fuel each day to fill the generators.

I have to say PECO was very responsive. I located two fuses that were destroyed causing our power problems. PECO showed that we had power when we truly didn't. I explained to the emergency operation center that they had two separate problems. The power was restored Friday morning. As of Friday morning, we were still waiting on the internet service. It was restored Saturday morning.

R.C. Collection: The pump station was visited on a daily basis. We ordered the new metering manhole and the new flow meter for Hibberd Lane. The Hurricane kept us busy for days at the pump stations. Both stations were on emergency power for two days. Hershey Mill carried over. We did contact DEP as required. I did not hear anything from DEP. The Hershey Mill generator is up and running. Our generator contractor was on site and he took care of running the generator under load and checking the installation. We cleared the sewer right of ways. After the hurricane, the guys inspected the manholes along the creek.

Ridley Creek Plant: Routine maintenance was performed. We pulled the pumps out of the SBR3 and they were taken to Deckman for repairs. While the tank is down, we will have a contractor sand blast the fittings and piping and primer the paint.

Alarms: We responded to 39 alarms in August.

PA One Calls: We responded to over 70 PA One Calls for the month of August.

Rainfall: 12.76 inches for the month of August.

Lateral Caps: We replaced 8 lateral caps.

2. Pennoni Engineer's Report for August dated September 10, 2020

Invoices – Invoices with summaries were provided under separate cover.

Ridley Creek Sewage Treatment Plant (RCSTP)

- Generator Replacement – No activity by Pennoni since our last report. We will provide construction phase assistance as needed.
- SBR #3 Assessment – We performed a visual condition assessment of the coatings, concrete and piping on August 26, and met with Mark Miller to discuss the assessment and recommended repairs. We also met with Dutchland on September 10 to discuss and schedule the coating repairs. They will recoat the three isolated bubbles that were cut out during our assessment, repair peeling at the top of the coatings and repair bubbling on the floor coating. They plan to start on September 14 and anticipate the work will take 2-3 days.

Note: Dutchland is not charging for the repairs. Mike mentioned that for tank 1, they took some cores and found the concrete was better than expected. He wants to take some cores as samples now to have tested. Phil pointed out that there is a Capital Budget line for linings. Mike is concerned about areas where there is no coating. Mike and Mark will discuss costs.

1 Tallmadge Drive Sewer Main Replacement

2 The 2-year maintenance bond period ends March 21, 2021.

3 I&I Support and Reporting

4 We coordinated with Mark Miller on locations for five metering locations for the next round
5 of portable metering. The metering will continue in the Ridley Creek collection system and
6 will occur along the interceptor and developments upstream of Bow Tree (where the last
7 metering occurred) to strategically work through the entire collection system.

8 Ridley Creek Collection System Permanent Meters

9 We understand that the manhole and permanent meter for the Hibberd Lane location has been
10 ordered. We will provide construction phase assistance as needed.

11 New Connections

12 No activity by Pennoni since our last report.

13 Act 537 Planning – Grant Opportunity

14 As discussed at the May meeting, the need for an Act 537 Plan Update will be revisited in
15 early 2021.

16 Willistown Township

17 No activity by Pennoni since our last report regarding the possible Willistown sewer system
18 sale.

19 Westtown Way Pump Station

20 We continued review of documentation including plans, calculations, and engineering
21 estimates for potential value engineering options. We expect to issue a draft comment memo on
22 September 11 for consideration by the Township.

24 **3. Big Fish Environmental Services –**

25 He reported that the Ridley Creek sewage treatment plant outfall 001 achieved compliance with the
26 permit discharge limitations for the month of July 2020. Discharge to the Applebrook irrigation
27 lagoon remained online. Chemical usage utilized for pH and total alkalinity remained consistent with
28 previous months. No significant mechanical or operational issues were observed during operation of
29 sludge dewatering equipment or SBR treatment process. There were no odor complaints during the
30 month.

31 They cleaned up the plant after the hurricane. The peak flow into the SBRs occurred during the
32 hurricane for over 1 million gpd. SBR 3 is being serviced. Upon completion of SBR 3, SBR 4 will
33 be removed from service for cleaning, inspection and repairs. It will remain offline until required for
34 service. He is getting better service from the lab. Two others he looked at would cost 15-20% more
35 and one wouldn't do Tuesday pickup.

37 Approval of Minutes

38 Jack moved to approve the August 10, 2020 minutes as amended. Walter seconded the motion. The
39 motion passed unanimously.

41 Approval of Invoices

42 Kevin moved to approve payment of the 15 invoices as listed on the agenda totaling \$26,037.97.
43 Walter seconded the motion. There was no discussion. The motion passed unanimously.

45 Liaison Reports

46 1. Board of Supervisors – Mike Lynch reported that there will be a live Zoning Board Hearing next
47 week in the Public Works Garage concerning the Malvern Institute.

2. Conservancy Board – Walter mentioned that Keep East Goshen Beautiful Day will be Saturday October 3, 2020.

Financial Reports

Jon Altshul provided the following written report:

In August, the Municipal Authority recorded \$24,047 in revenues (via transfers) and \$19,756 in expenses for a positive variance of \$4,291. As of August 31, the fund balance was \$5,561.

MA Audit Committee – Jon mentioned that through conversations with Walter and Dana the following items were discussed:

1. Quarterly Administrative charge backs are not being approved by the MA. He provided a worksheet that lays out the formula for these charges. Presumably the formula was approved by the MA a decade ago. The current members agreed to the current percentages. They will review these items quarterly.

2. Transfers – Jon explained that they transfer money from the Sewer Operating Fund for either operating expenses or the purchase of new assets. They transfer from the Sewer Capital Reserve Fund for replacement assets.

Phil thanked Walter and Dana for their work on the Audit Committee.

Goals

Goals for 2020 were reviewed.

Old Business

1. Caustic Soda Project – The PA DCED Small Water and Sewer Grant has been awarded for \$152,890.00. Mike Ellis explained that this will be used to change the caustic soda process from manual to automatic. There will be a large tank outside with piping through the wall to the chemical feed pumps to each SBR. The DEP does not require permits only notification. The Township Public Works will do the installation along with sub-contractors. 10 to 15% of the engineering costs will be covered by the grant. Dana moved to accept the proposal for engineer costs for the Caustic Soda Project. Jack seconded the motion. The motion passed unanimously. Mike Lynch thanked Jon for getting this grant.

New Business

1. 2021 Budget – The Proposed Budget for 2021 and the 2021-2025 Capital Improvement Program were discussed. The MA members agreed with the Proposed Budget for 2021.

Adjournment

There being no further business Jack moved to adjourn the meeting. Walter seconded the motion.

The motion passed unanimously. The meeting was adjourned at 8:25 pm.

The next regular meeting will be held on Monday, October 12, 2020 at 7:00 pm.

Respectfully submitted,

Ruth Kiefer, Recording Secretary



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Rick Smith
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1040599
Invoice Date : 09/24/2020
Project : EGMAU20001
Project Name : 2020 General
Services

For Services Rendered Through 09/20/2020

September Engineer's Report; reviewed September RCSTP operator's report; and prepared for and attended September MA meeting. Prepared updated cost estimates for projects in 5-year Capital Improvement Plan including budgetary estimating and scoping for remainder of Supplee Valley cured-in-place pipe lining. Performed visual structural and coating assessment for SBR #3, prepared draft report of observations and recommendations, attended field meetings with M. Miller and Dutchland to discuss and schedule CIM coating repairs and ductile iron influent pipe fittings re-coating, contacted contractors for DIP re-coating quotes, and performed on-site observation of Dutchland's CIM coating repairs.

Billing Limits	Current	Prior	To-Date
Total Billings	5,845.50	16,092.00	21,937.50
Limit			28,000.00
Remaining			6,062.50

Labor

	Hours	Rate	Amount
Authority Engineer	8.00	132.00	1,056.00
Senior Professional	10.75	125.00	1,343.75
Associate Professional	8.75	97.00	848.75
Graduate Professional	21.50	88.00	1,892.00
Sr. Engineering Technician	7.50	94.00	705.00
Totals	56.50		5,845.50
Total Labor			5,845.50

Total this Invoice \$5,845.50

OK

INVOICES DUE ON RECEIPT. Invoices outstanding over 30 days will have a Service Charge of 1 1/2% per month.

East Goshen Municipal Authority
EGMAU20001 Invoice Summary
Invoice Date 9/24/2020

Project: EGMAU20001
Pennoni Job No.: 2020 General Services
Invoice No: 1040599
Invoice Period: 8/17/2020 to 9/20/2020
Initial Authorization: \$ 27,000.00 **Date:** 9/24/2020
Contract Amount: \$ 28,000.00
Previously Invoiced: \$ 16,092.00
Current Invoice: \$ 5,845.50
Invoiced to Date (\$): \$ 21,937.50
Invoiced to Date (%): 78%
Remaining Budget (\$): \$ 6,062.50
Remaining Budget (%): 22%

Budget by Phase:

Phase Name: 2020 General Services
Phase Budget: \$ 28,000.00
Previously Invoiced: \$ 16,092.00
Current Invoice: \$ 5,845.50
Invoiced to Date (\$): \$ 21,937.50
Invoiced to Date (%): 78%
Remaining Budget (\$): \$ 6,062.50
Remaining Budget (%): 22%

Comments: September Engineer's Report; reviewed September RCSTP operator's report; and prepared for and attended September MA meeting. Prepared updated cost estimates for projects in 5-year Capital Improvement Plan including budgetary estimating and scoping for remainder of Suplee Valley cured-in-place pipe lining. Performed visual structural and coating assessment for SBR #3, prepared draft report of observations and recommendations, attended field meetings with M. Miller and Dutchland to discuss and schedule CIM coating repairs and ductile iron influent pipe fittings re-coating, contacted contractors for DIP re-coating quotes, and performed on-site observation of Dutchland's CIM coating repairs.



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Rick Smith
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1040604
Invoice Date : 09/24/2020
Project : EGMAU20002
Project Name : 2020 I&I Support and
Reports

For Services Rendered Through 09/20/2020

Attended meeting with M. Miller to determine locations for next round of portable collection system metering, and prepared follow-up exhibit and written recommendations of proposed locations.

Billing Limits	Current	Prior	To-Date
Total Billings	601.50	5,281.75	5,883.25
Limit			11,000.00
Remaining			5,116.75

Labor

	Hours	Rate	Amount
Authority Engineer	1.25	132.00	165.00
Associate Professional	4.50	97.00	436.50
Totals	5.75		601.50
Total Labor			601.50

Total this Invoice \$601.50

OK
[Signature]

East Goshen Municipal Authority
EGMAU20002 Invoice Summary
Invoice Date 9/24/2020

Project: EGMAU20002
Pennoni Job No.: 2020 General Services
Invoice No: 1036928
Invoice Period: 8/17/2020 to 9/20/2020
Initial Authorization: \$ 11,000.00 **Date:** 9/24/2020
Contract Amount: \$ 11,000.00
Previously Invoiced: \$ 5,281.75
Current Invoice: \$ 601.50
Invoiced to Date (\$): \$ 5,883.25
Invoiced to Date (%): 53%
Remaining Budget (\$): \$ 5,116.75
Remaining Budget (%): 47%

Budget by Phase:

Phase Name: 2020 General Services
Phase Budget: \$ 11,000.00
Previously Invoiced: \$ 5,281.75
Current Invoice: \$ 601.50
Invoiced to Date (\$): \$ 5,883.25
Invoiced to Date (%): 53%
Remaining Budget (\$): \$ 5,116.75
Remaining Budget (%): 47%

Comments: Attended meeting with M. Miller to determine locations for next round of portable collection system metering, and prepared follow-up exhibit and written recommendations of proposed locations.



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Rick Smith
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1040607
Invoice Date : 09/24/2020
Project : EGMAU20005
Project Name : West Goshen Sewer
System Consultation

For Services Rendered Through 09/20/2020

Continued preparation of comment memo on Westtown Way Pump Station value engineering review; and initial discussion of comments with M. Miller.

Labor

	Hours	Rate	Amount
Authority Engineer	.50	132.00	66.00
Senior Professional	1.25	125.00	156.25
Totals	1.75		222.25
Total Labor			222.25
Total this Invoice			<u>\$222.25</u>

West Goshen Sewer System Consultation
EGMAU20005 Invoice Summary
Invoice Date 9/24/2020

Project: EGMAU20005
Pennoni Job No.: West Goshen Sewer System Consultation
Invoice No: 1037327
Invoice Period: 8/17/2020 to 9/20/2020
Initial Authorization: \$ 5,000.00 **Date:** 9/24/2020
Contract Amount: \$ 5,000.00
Previously Invoiced: \$ 2,817.75
Current Invoice: \$ 222.25
Invoiced to Date (\$): \$ 3,040.00
Invoiced to Date (%): 61%
Remaining Budget (\$): \$ 1,960.00
Remaining Budget (%): 39%

Budget by Phase:

Phase Name: West Goshen Sewer System Consultation
Phase Budget: \$ 5,000.00
Previously Invoiced: \$ 2,817.75
Current Invoice: \$ 222.25
Invoiced to Date (\$): \$ 3,040.00
Invoiced to Date (%): 61%
Remaining Budget (\$): \$ 1,960.00
Remaining Budget (%): 39%

Comments: Continued preparation of comment memo on Westtown Way Pump Station value engineering review; and initial discussion of comments with M. Miller.



200 GARFIELD AVENUE
WEST CHESTER PA 19380-4512
610-719-9253 Fax

APPROVED BY: _____

DATE PAID: _____

CHECK #: _____

CHARGED TO: 07429 1503

INVOICE

CUSTOMER NUMBER	SUB ACCOUNT #
117491	117491
INVOICE NUMBER	INVOICE DATE
S116506452.001	09/29/20
REMIT TO:	
US ELECTRICAL SERVICES, INC. PO BOX 412485 BOSTON MA 02241-2485	

BILL TO:

SHIP TO:

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER PA 19380-6107

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER PA 19380-6107

CUSTOMER PO #		JOB NAME / RELEASE #	ORDERED BY	SALESPERSON	
RIDLEY CREEK GEN				HOUSE ACCOUNT	
WRITER		SHIP VIA	TERMS	SHIP DATE	ORDER DATE
DAVID A SMITH		WILL CALL	NET 15TH	09/29/20	09/28/20
ORDER QTY	SHIP QTY	DESCRIPTION		UNIT PRICE	EXT PRICE
3ea	3ea	KRY 078077 FA30 3" PVC FEMALE ADAPTER		368.043 c	11.04
5ea	5ea	KRY 078072 FA10 1" PVC FEMALE ADAPTER		68.591 c	3.43
5ea	5ea	TOPAZELE RB3 1" X 1/2" RIGID REDUCING BUSHING		178.336 c	8.92
		!! TAGGED ITEM !!			
6ea	6ea	EGS SC-50 1/2" D/C SQZ FLEX CONN		55.037 c	3.30
50ft	50ft	FLEX 1/2" STEEL UL 100' COIL		72.944 c	36.47
6ea	6ea	EGS SC-300 3" D/C SQZ FLEX CONN		2060.083 c	123.60
		!! TAGGED ITEM !!			
20ft	20ft	FLEX 3" STEEL UL 25' COIL		1188.916 c	237.78
3ea	3ea	EGS PB-800-D 3" 105D PLSTC INSB SH		126.239 c	3.79
2ea	2ea	STLCTY 52171-1/2-3/4-E 4SQ 2-1/8 DEEP BOX MADE IN USA		203.709 c	4.07
2ea	2ea	STLCTY RS11 4" RAISED COVER SINGLE F/RECPT		180.171 c	3.60
2ea	2ea	CWD 1877W-BOX SGL RCPT-NEMA5-20R		2.356 ea	4.71
1pk	1pk	RACO 5269-0 1/2 GRY ZINC PLUG BG4 (1 PK = 4 PCS)		46.000 c	0.46

*Ridley Capital
Generator*



SAVE TIME AND MONEY WITH OUR FREE E-BILLING SERVICE

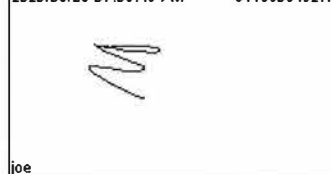
Choose from three easy ways to receive your invoices: email, fax or Invoice Gateway, our secure online site. With Invoice Gateway, you are notified by email when new invoices are posted. You can search, sort, view, print, download and pay your bills on this site. With email and fax delivery, your invoices are sent once per day and you get an exact replica of your paper bill.

Contact the Credit Department at 717-606-1317 and get set up today!

Invoice is due by 11/15/20.

For complete Terms & Conditions go to:
<https://tinyurl.com/Yale-Customer-TC>

2020/09/29 07:08:45 AM S116506452.1



Subtotal	441.17
Shipping Chgs	0.00
Tax	0.00
Payments	0.00
Amount Due	441.17

A U.S. Electrical Company

Visit us at www.usesi.com

TO VIEW ONLINE GO TO: [HTTP://USESI.BILLTRUST.COM](http://usesi.billtrust.com)

USE THIS ENROLLMENT TOKEN: VHD QLP SLM



200 GARFIELD AVENUE
WEST CHESTER, PA 19380-4512
610-719-9253
Fax 610-719-0650



Ship Ticket

SHIP DATE	ORDER NUMBER	PAGE NO.
09/29/2020	S116506452.001	1 of 2
CUST PO#:	RIDLEY CREEK GEN	
JOB/REL#:		

SOLD TO:

SHIP TO:

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER, PA 19380-6107

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER, PA 19380-6107

CUSTOMER NUMBER		CUSTOMER PHONE#		ORDERED BY		SALESPERSON		
117491		610-692-7171				HOUSE ACCOUNT		
WRITER		SHIP VIA		WAREHOUSE		ORDER DATE	FREIGHT ALLOWED	
DAVID A SMITH (610)-719-9253		WILL CALL		Ship: WECH Price: WECH		09/28/2020	No	
ORDER QTY	SHIP QTY	✓	DESCRIPTION				UNIT PRICE	EXT PRICE
3ea	3ea		KRY 078077 FA30 3" PVC FEMALE ADAPTER				368.043/c	11.04
5ea	5ea		KRY 078072 FA10 1" PVC FEMALE ADAPTER				68.591/c	3.43
5ea	5ea		TOPAZELE RB3 1" X 1/2" RIGID REDUCING BUSHING				178.336/c	8.92
			!! TAGGED ITEM !!					
6ea	6ea		EGS SC-50 1/2" D/C SQZ FLEX CONN				55.037/c	3.30
50ft	50ft		FLEX 1/2" STEEL UL 100' COIL				72.944/c	36.47
6ea	6ea		EGS SC-300 3" D/C SQZ FLEX CONN				2060.083/c	123.60
			!! TAGGED ITEM !!					
20ft	20ft		FLEX 3" STEEL UL 25' COIL				1188.916/c	237.78
3ea	3ea		EGS PB-800-D 3" 105D PLSTC INSHSH				126.239/c	3.79
2ea	2ea		STLCTY 52171-1/2-3/4-E 4SQ 2-1/8 DEEP BOX MADE IN USA				203.709/c	4.07
2ea	2ea		STLCTY RS11 4" RAISED COVER SINGLE F/RECPT				180.171/c	3.60
2ea	2ea		CWD 1877W-BOX SGL RCPT-NEMA5-20R				2.356/ea	4.71
1pk	1pk		RACO 5269-0 1/2 GRY ZINC PLUG BG4 (1 PK = 4 PCS)				46.000/c	0.46
APPROVED BY: <u> </u>								

APPROVED BY: uo

DATE PAID: _____

CHECK #: _____

CHARGED TO: _____

** Continued on Next Page *

Subtotal	
Shipping Chgs	
Tax	
Payments	
Amount Due	



1020 Andrew Drive
West Chester PA 19380
610-436-9922

Service Invoice

Invoice#: 200837

Date: 08/31/2020

63219

Billed To: East Goshen Township
1580 Paoli Pike
West Chester PA 19380

Project: 32053
HERSHEYS MILL STATION
1490 HERSHEY MILL RD
WEST CHESTER PA 19380

PAID

Scheduled: 06/08/2020

Time:

Employee:

Order#:

Description	UM	Quantity	Price	Ext Price
HERSHEY'S MILL GENERATOR INSTALL JUNE THROUGH AUGUST 2020 SET UP GENERATOR AND WIRING; TEST GENERATOR OPERATION; DEMO WIRING TO GENERATOR, HEATER AND BATTERY CHARGER; RUN CONDUITS FROM GENERATOR TO BUILDING AND CORE HOLES; SET ATS, LOAD DISC AND PIPED IN; PIPED IN NORMAL POWER; RUN CONDUIT FOR LOAD AND CONTROLS; PULLED WIRE TO GENERATOR; PULLED AND LANDED WIRING; REPLACED METER SOCKET, MAIN DISCONNECT SWITCH AND COMPLETED START UP; DISCONNECTED PORTABLE GEN SET.				
ELECTRICIAN	HR	78.50	86.50	6,790.25
APPRENTICE	HR	12.00	69.00	828.00
MISC MATERIALS	LS	1.00	256.77	256.77
BULK OF MATERIALS PLACED ON EAST GOSHEN ACCOUNT				

Notes:

APPROVED BY: M. M. M.

DATE PAID: _____

CHECK #: _____

CHARGED TO: 07429.1503

Capital New Generator

Terms are Net 30 days.

Balances over 30 days are subject to a finance charge of 2% per month.

Thank you for your prompt payment!

Non-Taxable Amount:	7,875.02
Taxable Amount:	0.00
Sales Tax:	0.00
Amount Due	7,875.02



TELEDYNE INSTRUMENTS, INC.

Everywhere you look

Federal ID: 95-4888283

Page 1 of 2

Remit to:

12497 Collections Center Drive
Chicago, IL 60693
ABA# 121-000-358
Acct# 12331-07806

Sold to:

East Goshen Township
1580 Paoli Pike
WEST CHESTER, PA 19380

Invoice

Bill To:

East Goshen Township
1580 Paoli Pike
WEST CHESTER, PA 19380

Ship To:

East Goshen Township
1580 Paoli Pike
WEST CHESTER, PA 19380

Sales Order		Customer PO		Customer Reference		Payment Terms		Discount		Customer No		Invoice No	
00477247		17369				Net 30				0054768		S020419254	
Carrier			Tracking Number			Teledyne Contact Information						Invoice Date	
UPS Ground			1Z6343870397363394			Frink, Elizabeth Ann			800/228-4373			9/8/2020	
Delivery Terms				Named Destination				Packing List				RMA Number	
ORIG-S&HAD								004873: 34					
Line	Item Number		Description				Tax	U/M	Quantity	Unit Price		Amount	

684310000	MODEL 310 USNC 10M BM 4300	Y	ea	1	5,541.00	5,541.00
-----------	----------------------------	---	----	---	----------	----------

624300005 - Signature Ultrasonic Flow Meter 684310000 - Signature Ultrasonic Flow Meter
684310000 - Signature Ultrasonic Flow Meter
604314005 - TIENET 310 ULTRASONIC Sensor10m (32.8 ft) cable
604307015 - Battery Backup
604304044 - AC Line Cord
604307104 - LE910 Modem
604307023 - Expansion Box
604304050 - TIENet Cable (130 Feet)

***For replacement parts refer to the replacement parts list
that is included in the instruction manual***

Serial Number(s): 604307015:
220H02036

604307023:
220H03196

604307104:
220H01850

604314005:
220J01464

624300005:
220H02783

APPROVED BY: WME

DATE PAID: _____

CHECK #: _____

CHARGED TO: 07429.1505

791290

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Seller's acceptance of this Order is expressly conditioned upon the Buyer's assent to Seller's Terms and Conditions of Sale as stated in Seller's Offer and found at the applicable Teledyne company internet website listed below. Seller is proceeding with the performance of Buyer's Order strictly on this basis. Teledyne ISCO is an indirect subsidiary of Teledyne Technologies Incorporated. Teledyne Ethics Line 1-877-666-6968.

Continued Next Page



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+1-800-228-4373



TELEDYNE INSTRUMENTS, INC.
Everywhere you look™

Federal ID: 95-4888283

Page 2 of 2

Remit to: 12497 Collections Center Drive
Chicago, IL 60693
ABA# 121-000-358
Acct# 12331-07806

Sold To:
East Goshen Township
1580 Paoli Pike
WEST CHESTER, PA 19380

Invoice

Bill To:
East Goshen Township
1580 Paoli Pike
WEST CHESTER, PA 19380

Ship To:
East Goshen Township
1580 Paoli Pike
WEST CHESTER, PA 19380

Sales Order	Customer PO	Customer Reference	Payment Terms	Discount	Customer No	Invoice No
00477247	17369		Net 30		0054768	S020419254
Carrier	Tracking Number		Teledyne Contact Information			Invoice Date
UPS Ground	1Z6343870397363394		Frink, Elizabeth Ann	800/228-4373	9/8/2020	
Delivery Terms		Named Destination		Packing List		
ORIG-S&HAD				00487334		

Line	Item Number	Description	Tax	U/M	Quantity	Unit Price	Amount
	682540200	SWR FL 5.1 KB Flowlink 5.1 Software, two user licenses. For retrieving measurement, parameter, and sample data from Isco 2100 Series Modules and 2101 Field Wizard, 4100 Series Flow Loggers, 4200 Series Flow Meters, Pulsed Doppler Flow Meters, Signature Flow Meters, 6700 Series/Avalanche Samplers, 676 and 677 Logging Rain Gauge Systems, and 581 Rapid Transfer Device. Stores data in a database and generates a variety of user-customizable graphs and tables. Data can also be exported in ASCII format for analysis by programs such as Microsoft Excel, HTML format for viewing in a web browser, and PDF format for viewing in Adobe Reader. Operates on Windows XP, Vista, 7, Server 2003, and Server 2008. Supplied on CD-ROM. Software supports multiple languages, one of which is selected during installation.	Y	ea	1	1,800.00	1,800.00

Serial Number(s): 602544200:
220B01521

Shipping & Handling 124.00

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Sales Tax 447.90

Seller's acceptance of this Order is expressly conditioned upon the Buyer's assent to Seller's Terms and Conditions of Sale as stated in Seller's Offer and found at the applicable Teledyne company internet website listed below. Seller is proceeding with the performance of Buyer's Order strictly on this basis. Teledyne ISCO is an indirect subsidiary of Teledyne Technologies Incorporated. Teledyne Ethics Line 1-877-666-6968.

Invoice Amount

7,912.90 USD



**TELEDYNE
DETCON**

4055 Technology Forest Blvd., Suite 100
The Woodlands, TX 77381
Phone: (713) 559-9200
Fax: (713) 893-6729

Shipper has not
been confirmed!

Shipping List 521687

Customer No 015151

Sales Order Shipper

Ship to : East Goshen Township
1580 Paoli Pk
West Chester PA 19380
USA

Sold to : Pendergast Safety Equipment Company
8400 Enterprise Avenue
Philadelphia PA 19153
USA

APPROVED BY: 

DATE PAID: _____

CHECK #: _____

CHARGED TO: *Capital*

Ship Date	Customer PO	# of Boxes	Weight	Ship VIA	Bill of Lading	F O B
05/11/2020	309325A	0	0.0000	UPS Collect		NamedPlace
Item	Fac / Part / Rev / Description / Details			Order Quantity	Ship Quantity	
000001	Default	Sales Order 112083-00	Item 001			
	GMI-64066	Rev 000	U/M EA	4.0000		
	O2 Sensor for PS200					
	Lot/SN(s) 39012548	Qty 1.0000			4.0000	
	39012508	1.0000				
	38553201	1.0000				
	37553524	1.0000				
000002	Default	Sales Order 112083-00	Item 002			
	GMI-64825	Rev 000	U/M EA	1.0000		
	LEL Sensor					
	Lot/SN(s) 0338626040030	Qty 1.0000			1.0000	
000003	Default	Sales Order 112083-00	Item 003			
	GMI-64067	Rev 000	U/M EA	1.0000		
	Dual Tox. H2S/CO Sensor					
	Lot/SN(s) 0438683494010	Qty 1.0000			1.0000	
000004	Default	Sales Order 112083-00	Item 004			
	998-PH0000-000	Rev 000	U/M EA	1.0000		
	PACKING AND HANDLING				1.0000	

UPS COLLECT# 8R9462

TAG ALL PAPERWORK/PACKING LIST - ATTN: M. MILLER

THANK YOU FOR YOUR BUSINESS. THIS IS AN ACKNOWLEDGMENT OF YOUR PURCHASE ORDER. PLEASE REVIEW YOUR SALES ORDER CONFIRMATION AND REPORT DISCREPANCIES WITHIN THREE DAYS OF RECEIPT OF THIS ACKNOWLEDGEMENT TO DETCON-SALES@TELEDYNE.COM. OTHERWISE, THIS ORDER WILL BE PROCESSED AS STATED IN THIS DOCUMENT.

Terms of Sale: Unless otherwise stated in writing, all sales will be governed by Detcon Standard Terms and Conditions of Sale.

INCOTERMS: Free Carrier (FCA, Named Place)

Customer Copy

RECEIVED
8



**TELEDYNE
DETCON**

4055 Technology Forest Blvd., Suite 100
The Woodlands, TX 77381
Phone: (713) 559-9200
Fax: (713) 893-6729

**Shipper has not
been confirmed!**

Shipping List 521687

Customer No 015151

Sales Order Shipper

Ship to : East Goshen Township
1580 Paoli Pk
West Chester PA 19380
USA

Sold to : Pendergast Safety Equipment Company
8400 Enterprise Avenue
Philadelphia PA 19153
USA

Ship Date	Customer PO	# of Boxes	Weight	Ship VIA	Bill of Lading	F O B
05/11/2020	309325A	0	0.0000	UPS Collect		NamedPlace
Item	Fac / Part / Rev / Description / Details			Order Quantity	Ship Quantity	
ECCN # EAR99 SCHEDULE B # (HS Code/Tariff Code/Foreign Trade #) 9027:10:0000 COUNTRY OF ORIGIN: Detcon Equipment Manufactured in USA GMI Equipment Manufactured in Scotland Oldham Equipment Manufactured in USA, China or France Simtronics Equipment Manufactured in USA, Norway, or France ALL APPLICABLE FREIGHT/CRATING AND/OR DROP SHIP CHARGES WILL BE ADDED TO INVOICE/PROFORMA INVOICE. ALL PRICES QUOTED ARE FREE CARRIER (FCA, Named Place), AND ARE IN ACCORDANCE WITH INCOTERMS 2010. ALL DOCUMENT/PACKAGING REQUIREMENTS MUST BE DETAILED ON YOUR PURCHASE ORDER. ADDITIONAL COSTS RESULTING FROM LEGALIZATION OF DOCUMENTS WILL BE ADDED TO YOUR ORDER CONFIRMATION AND INVOICE. A REVISED PO MAY ALSO BE REQUIRED. CONSIGNEE MUST POSSESS A VALID HAZARDOUS IMPORT LICENSE, ON ALL ORDERS FOR CALIBRATION GAS AND/OR BATTERIES. FINAL DESTINATION (COUNTRY ONLY) IS REQUIRED TO PROCESS ALL QUOTATIONS AND ORDERS, FOR EQUIPMENT. ORDERS CONTAINING CALIBRATION GAS REQUIRE THE END USER NAME, ADDRESS, AND CONTACT INFORMATION. EXPORT CONTROL INFORMATION: RESALE, ONWARD SHIPMENT, OR DIVERSION OF DETCON/GMI/OLDHAM/SIMTRONICS PRODUCTS TO EMBARGOED DESTINATIONS INCLUDING BUT NOT LIMITED TO IRAN, SYRIA, SUDAN, AND NORTH KOREA IS STRICTLY PROHIBITED. PLEASE REFERENCE QUOTE NUMBER ON ALL PURCHASE ORDERS, TO ENSURE ALL PREVIOUSLY ESTIMATED DELIVERY DATES OR COMMITMENT DATES ARE HONORED.						

COPIES
60

Memo

To: Municipal Authority
From: Jon Altshul
Re: MA September Financial Report
Date: October 8, 2020

In September, the Municipal Authority recorded \$36,595 in revenues (including a tap in fee for 938 Cornwallis and \$28,891 in transfers) and \$36,775 in expenses, for a negative variance of \$180. As of September 30, the fund balance was \$5,381.

A complete list of 2020 YTD MA revenues and expenses is attached.

Attached also find a revised estimate for East Goshen's share of WGSA expenses for 2021. I am proposing to the Board of Supervisors that the cost of all of the WGSA except the Westtown Way Pump Station be paid for directly from the Sewer Operating Fund. This is how these capital expenses were paid for prior to the 2017 bond sale.

EAST GOSHEN TOWNSHIP
Other Funds
September 2020
Municipal Authority

Account Title	Acct #	Annual Budget	Y-T-D Budget	Y-T-D Actual	Y-T-D Variance	M-T-D Budget	M-T-D Actual	M-T-D Variance
REVENUE								
INTEREST EARNINGS	07341 1000			(130.20)	(130.20)		(14.62)	(14.62)
CAPITAL RESERVE-INTEREST	07341 1010							
INTEREST EARNED - CONSTRUCTION	07341 1020							
DCED GRANT	07354 0400			3,231.00	3,231.00			
C.C. TAPPING FEES	07364 1100							
R.C.TAPPING FEES	07364 1110			7,148.00	7,148.00		7,148.00	7,148.00
M.C. LOAN PAYMENTS	07364 1120							
CONNECTION FEES - SEWER	07364 1130			1,275.52	1,275.52		429.88	429.88
MISCELLANEOUS REVENUE	07380 1000	565	424	564.48	140.48	47	141.12	94.04
TRANSFER FROM GENERAL ACCT	07392 0100							
TRANSFER FROM SEWER OPERATING	07392 0500	319,435	239,577	34,446.75	(205,130.25)	26,620	11,941.50	(14,678.08)
TRANSFER FROM SEWER CAP RESV	07392 0501	277,000	207,750	265,979.79	58,229.79	23,083	16,949.12	(6,134.21)
TRANSFER-ANNUAL CAP.RESERVE	07392 0510							
GRANT REVENUE	07392 0800							
LOAN PROCEEDS - SEWER PROJECT	07392 0804							
TRANSFER FROM SEWER CAP RESERVE	07392 0900							
TOTAL REVENUE		597,000	447,751	312,515.34	(135,235.66)	49,750	36,595.00	(13,155.00)
EXPENSES								
ADMINISTRATIVE WAGES	07424 1400	32,000	24,000	23,653.32	346.68	2,667	7,884.44	(5,217.77)
R.C. LOAN ISSUANCE COSTS	07424 1500							
MISCELLANEOUS EXPENSE	07424 3000			778.00	(778.00)			
MUNIC.AUTH.-AUDITING	07424 3110			9,300.00	(9,300.00)			
ENGINEERING SERVICES	07424 3130	60,000	45,000	31,694.00	13,306.00	5,000	11,201.50	(6,201.50)
LEGAL SERVICES	07424 3140	8,000	6,000	4,098.05	1,901.95	667	740.00	(73.33)
W.G. C.C.STP-UPGRADE	07424 7400							
MANHOLE COVER REPLACEMENTS	07424 7405							
C.C. CAPITAL - METERS	07424 7410							
C.C. CAPITAL- COLLECTION	07424 7420							
C.C. CAPITAL- INTERCEPTOR	07424 7430							
CAPITAL PROJ.-ENGINEERING	07424 7431							
R.C. CAPITAL-STP	07424 7440							
R.C. CAPITAL - COLLECTION	07424 7450							
R.C.-CAP. PROJ.-ENGINEER	07424 7451							
CAP.REPLACEMENT R.C.	07424 7490			26,264.60	(26,264.60)			
CAPITAL REPLACEMENT ASHBRIDGE	07424 7491							
HERSHEY MILL STATION - ENGINEER	07426 1000			6,294.49	(6,294.49)			
HERSHEY MILL STATION - CONSTRUCTION	07426 2000							
TALLMADGE DRIVE	07426 3000							

EAST GOSHEN TOWNSHIP
Other Funds
September 2020
Municipal Authority

Account Title	Acct #	Annual Budget	Y-T-D Budget	Y-T-D Actual	Y-T-D Variance	M-T-D Budget	M-T-D Actual	M-T-D Variance
RESERVOIR PUMP STATION - ENGINEER	07428 1000							
RESERVOIR PUMP STATION CONSTRUCTION	07428 2000							
RELINING	07429 1500							
BARKWAY PUMP STATION CAPITAL	07429 1501			2,810.99	(2,810.99)			
HERSHEYS MILL PUMP STATION CAPITAL	07429 1503	45,000	33,750	60,497.76	(26,747.76)	3,750	12,172.83	(8,422.83)
HUNT CO PUMP STATION CAPITAL	07429 1504	87,000	65,250		65,250.00	7,250		7,250.00
RCSTP CAPITAL	07429 1505	365,000	273,750	166,615.93	107,134.07	30,417	4,776.29	25,640.38
ASBESTOS CONCRETE ENGINEERING	07429 3130							
DIVERSION PROJ. - LEGAL	07429 3166							
WEST GOSHEN CAPITAL	07429 6100							
M.C.-DVRFA-DEBT SERVICE	07471 1000							
M.A.-R.C. DEBT SERVICE	07471 1010							
DVRFA PUMPING STATIONS - PRINCIPAL	07471 2000							
M.C.-DVRFA-INTEREST PAYMEN	07472 1000							
M.A.-R.C. INTEREST	07472 1010							
DVRFA PUMPING STATIONS - INTEREST	07472 2000							
TRANSFER TO GENERAL FUND	07492 0100							
TRANSFER TO SEW.OPERATING	07492 0500							
TRF TO SEWER CAPITAL RESERVE FOND	07492 0550							
TRANSFER TO AUTHORITY CAP FUND	07492 0990							
TOTAL EXPENSES		597,000	447,750	332,007.14	115,742.86	49,750	36,775.06	12,974.94
NET RESULT FROM OPERATIONS			1	(19,491.80)	(19,492.80)		(180.06)	(180.06)

September 30, 2020 YTD Revenues & Expenses--East Goshen Municipal Authority

Account #	Description	Per	Debits	Credits	Date	Check#	Name	Description	Description 2
07341-1000	BEGINNING BALANCE								
07341-1000	INTEREST EARNINGS	2001	15.00	-	1/2/2020	BANK FEES	REIMBURSE S/R FOR DEC.2019	BANK FEES	
07341-1000	INTEREST EARNINGS	2001	-	0.65	1/31/2020	INTEREST	INTEREST EARNED JANUARY 2020		7100.1035
07341-1000	INTEREST EARNINGS	2002	15.00	-	2/4/2020	REIMB.FEES	REIMBURSE S/R FOR JANUARY 2020	ACH & POSITIVE PAY BANK FEES	
07341-1000	INTEREST EARNINGS	2002	-	0.64	2/29/2020	INTEREST	INTEREST EARNED FEBRUARY 2020		7100.1035
07341-1000	INTEREST EARNINGS	2003	15.00	-	3/2/2020	BANK FEES	REIMBURSE S/R FOR FEB.2020	BANK FEES	
07341-1000	INTEREST EARNINGS	2003	-	0.62	3/31/2020	INTEREST	INTEREST EARNED MARCH 2020		7100.1035
07341-1000	INTEREST EARNINGS	2004	15.00	-	4/6/2020	BANK FEES	REIMBURSE S/R FOR MARCH 2020	BANK FEES	
07341-1000	INTEREST EARNINGS	2004	-	1.77	4/30/2020	INTEREST	INTEREST EARNED APRIL 2020		7100.1035
07341-1000	INTEREST EARNINGS	2005	15.00	-	5/4/2020	REIMBURSE	REIMBURSE S/R FOR APRIL 2020	POSITIVE PAY & ACH BANK FEES	
07341-1000	INTEREST EARNINGS	2005	-	0.11	5/31/2020	INTEREST	INTEREST EARNED MAY 2020		7100.1035
07341-1000	INTEREST EARNINGS	2006	15.00	-	6/1/2020	BANK FEES	REIMBURSE S/R FOR MAY 2020	BANK FEES	
07341-1000	INTEREST EARNINGS	2006	-	0.09	6/30/2020	INTEREST	INTEREST EARNED JUNE 2020		7100.1035
07341-1000	INTEREST EARNINGS	2007	15.00	-	7/2/2020	REIMBURSE	REIMBURSE S/R FOR JUNE 2020	BANK FEES	
07341-1000	INTEREST EARNINGS	2007	-	0.13	7/31/2020	INTEREST	INTEREST EARNED JULY 2020		7100.1035
07341-1000	INTEREST EARNINGS	2008	15.00	-	8/6/2020	BANK FEES	REIMBURSE S/R FOR JULY 2020	BANK FEES	
07341-1000	INTEREST EARNINGS	2008	-	0.41	9/2/2020	INTEREST	INTEREST EARNED AUGUST 2020		7100.1035
07341-1000	INTEREST EARNINGS	2009	15.00	-	9/2/2020	REIMBURSE	REIMBURSE S/R FOR AUG.2020	BANK FEES	
07341-1000	INTEREST EARNINGS	2009	-	0.38	9/30/2020	INTEREST	INTEREST EARNED SEPT.2020		7100.1035
07354-0400	BEGINNING BALANCE								
07354-0400	DCED GRANT	2002	-	3,231.00	2/1/2020	LAST 10%	DCED GRANT - MUFFIN MONSTER	DCED GRANT	
07364-1110	BEGINNING BALANCE								
07364-1110	R.C.TAPPING FEES	2009	7,148.00	-	9/11/2020	TRX#75514	REVERSE TRX# 75514		
07364-1110	R.C.TAPPING FEES	2009	-	7,148.00	9/11/2020	75514 1	TAP IN FEE FOR 938 CORNWALLIS	R.C.TAPPING FEES	
07364-1110	R.C.TAPPING FEES	2009	-	7,148.00	9/11/2020	75567 1	TAP IN FEE FOR 938 CORNWALLIS	R.C.TAPPING FEES	
07364-1130	BEGINNING BALANCE								
07364-1130	CONNECTION FEES - SEWER	2002	-	423.00	2/3/2020		2670 STOFFLET, MICHAEL		
07364-1130	CONNECTION FEES - SEWER	2002	-	423.00	2/26/2020		659 JACOBS, ROBERT & CHERYL		
07364-1130	CONNECTION FEES - SEWER	2002	-	423.00	2/28/2020		869 GEORGE SMITH & CHRISTINA CONLE		
07364-1130	CONNECTION FEES - SEWER	2002	141.12	-	2/3/2020	PINE ROCK	ANNUAL PINE ROCK INSTALLMENT		
07364-1130	CONNECTION FEES - SEWER	2002	141.12	-	2/26/2020	PINE ROCK	ANNUL PINE ROCK INSTALLMENT		
07364-1130	CONNECTION FEES - SEWER	2002	141.12	-	2/28/2020	PINE ROCK	ANNUAL PINE ROCK INSTALLMENT		
07364-1130	CONNECTION FEES - SEWER	2009	-	423.00	9/16/2020	30837183	PAPPANO, JOSEPH & PATRICIA		
07364-1130	CONNECTION FEES - SEWER	2009	141.12	-	9/16/2020	PINE ROCK	PINE ROCK INSTALLMENT		
07364-1130	CONNECTION FEES - SEWER	2009	148.00	-	9/11/2020	TRX#75514	REVERSE TRX# 75514		
07364-1130	CONNECTION FEES - SEWER	2009	-	148.00	9/11/2020	75514 2	TAP IN FEE FOR 938 CORNWALLIS	CONNECTION FEES - SEWER	
07364-1130	CONNECTION FEES - SEWER	2009	-	148.00	9/11/2020	75567 2	TAP IN FEE FOR 938 CORNWALLIS	CONNECTION FEES - SEWER	
07380-1000	BEGINNING BALANCE								
07380-1000	MISCELLANEOUS REVENUE	2002	-	141.12	2/3/2020	PINE ROCK	ANNUAL PINE ROCK INSTALLMENT		
07380-1000	MISCELLANEOUS REVENUE	2002	-	141.12	2/26/2020	PINE ROCK	ANNUL PINE ROCK INSTALLMENT		
07380-1000	MISCELLANEOUS REVENUE	2002	-	141.12	2/28/2020	PINE ROCK	ANNUAL PINE ROCK INSTALLMENT		
07380-1000	MISCELLANEOUS REVENUE	2009	-	141.12	9/16/2020	PINE ROCK	PINE ROCK INSTALLMENT		
07392-0500	BEGINNING BALANCE								
07392-0500	TRANSFER FROM SEWER OPER	2002	-	1,451.30	2/12/2020	XFER	XFER FROM SEWER TO MA		
07392-0500	TRANSFER FROM SEWER OPER	2002	1,451.30	-	2/12/2020	REVERSE	REVERSE XFER TO MA FROM SEWER	OPERATING	
07392-0500	TRANSFER FROM SEWER OPER	2004	-	3,666.00	4/15/2020	XFER	XFER TO MUN.AUTH. FROM SEWER	OPERATING AND SEWER CAPITAL	
07392-0500	TRANSFER FROM SEWER OPER	2005	-	1,986.50	5/12/2020	XFER	XFER \$ FROM 05 SEWER OPERATING	TO MA 5/12/20	
07392-0500	TRANSFER FROM SEWER OPER	2006	-	1,677.25	6/12/2020	XFER	XFER \$ FROM 05 TO MA FUND		

07392-0500	TRANSFER FROM SEWER OPER	2006	-	5,000.00	6/29/2020	XFER	XFER \$ FROM SEWER TO MA		
07392-0500	TRANSFER FROM SEWER OPER	2007	-	1,062.75	7/15/2020	XFER	XFER TO 07 FROM 05		
07392-0500	TRANSFER FROM SEWER OPER	2008	-	9,112.75	8/11/2020	XFER	XFER \$ FROM SEWER TO MA - AUG.	INVOICES	
07392-0500	TRANSFER FROM SEWER OPER	2009	-	11,941.50	9/15/2020	XFER	XFER \$ FROM SEWER TO MA		9/15/2020
07392-0501	BEGINNING BALANCE								
07392-0501	TRANSFER FROM SEWER CAP F	2002	-	4,391.80	2/11/2020	RECLASS	RECLASS TRXS 72036 & 72044		
07392-0501	TRANSFER FROM SEWER CAP F	2002	-	10,984.60	2/11/2020	RECLASS	RECLASS TRXS 72036 & 72044		
07392-0501	TRANSFER FROM SEWER CAP F	2002	-	16,832.16	2/12/2020	XFER	XFER \$ FROM SEWER CAPITAL TO	MA	
07392-0501	TRANSFER FROM SEWER CAP F	2003	-	18,342.17	3/12/2020	XFER	XFER \$ FROM SEWER CAPITAL TO	MUNICIPAL AUTH. 3/12/20	
07392-0501	TRANSFER FROM SEWER CAP F	2003	-	1,451.30	3/17/2020	XFER	XFER FROM SEWER OPERATING TO	MA FEB.2020	
07392-0501	TRANSFER FROM SEWER CAP F	2004	-	156,237.00	4/3/2020	XFER	XFER \$ FROM SEWER CAPITAL TO	MUNIC.AUTH.	
07392-0501	TRANSFER FROM SEWER CAP F	2004	-	1,422.50	4/15/2020	XFER	XFER TO MUN.AUTH. FROM SEWER	OPERATING AND SEWER CAPITAL	
07392-0501	TRANSFER FROM SEWER CAP F	2004	-	1,451.30	4/17/2020	XFER	XFER FROM 09 TO 07 2/12/20		
07392-0501	TRANSFER FROM SEWER CAP F	2004	1,451.30	-	4/20/2020	REVERSE	REVERSE TRX. 73370		
07392-0501	TRANSFER FROM SEWER CAP F	2004	1,451.30	-	4/20/2020	XFER	XFER TO 09 FROM 07- 3/13/20		
07392-0501	TRANSFER FROM SEWER CAP F	2004	-	15,000.00	4/27/2020	XFER	XFER \$ FROM SEWER CAPITAL TO	MA 4/27/20	
07392-0501	TRANSFER FROM SEWER CAP F	2005	-	1,069.25	5/12/2020	XFER	XFER FROM 09 SEWER CAPITAL	RESERVE TO MA 5/12/20	
07392-0501	TRANSFER FROM SEWER CAP F	2007	-	5,457.65	7/1/2020	REIMBURSE	REIMBURSE MA OPERATING FOR 09	EXPENSES	
07392-0501	TRANSFER FROM SEWER CAP F	2007	-	4,345.00	7/17/2020	XFER	XFER FR: SEWER CAP.RESERVE TO	MUNICIPAL AUTH.	
07392-0501	TRANSFER FROM SEWER CAP F	2008	-	9,861.00	8/11/2020	XFER	XFER FROM SEWER CAPITAL RESER.	TO MA AUGUST INVOICES	
07392-0501	TRANSFER FROM SEWER CAP F	2008	-	5,087.54	8/28/2020	XFER	XFER \$ FROM SEWER CAP.RESERVE	TO MA	
07392-0501	TRANSFER FROM SEWER CAP F	2009	-	9,074.10	9/15/2020	XFER	XFER FROM SEWER CAP.RESERVE TO	MA 9/15/20	
07392-0501	TRANSFER FROM SEWER CAP F	2009	-	7,875.02	9/28/2020	XFER	XFER \$ FROM 09 SEWER SINKING	TO 07	
07392-0900	BEGINNING BALANCE								
07392-0900	TRANSFER FROM SEWER CAP F	2001	-	4,391.80	1/15/2020	XFER	XFER \$ FROM SEWER SINKING TO	MA RE: JANUARY EXPENSES	
07392-0900	TRANSFER FROM SEWER CAP F	2001	-	10,984.60	1/15/2020	XFER	XFER \$ FROM SEWER SINKING TO	MA RE: JAN.2020 ADDL'EXP.	
07392-0900	TRANSFER FROM SEWER CAP F	2002	4,391.80	-	2/11/2020	RECLASS	RECLASS TRXS 72036 & 72044		
07392-0900	TRANSFER FROM SEWER CAP F	2002	10,984.60	-	2/11/2020	RECLASS	RECLASS TRXS 72036 & 72044		
07424-1400	BEGINNING BALANCE								
07424-1400	ADMINISTRATIVE WAGES	2003	7,884.44	-	3/30/2020	3198	EAST GOSHEN TOWNSHIP - GENERAL	QTR.1 2020 REIMBURSEMENT - M	
07424-1400	ADMINISTRATIVE WAGES	2006	7,884.44	-	6/26/2020	3208	EAST GOSHEN TOWNSHIP - GENERAL	QTR.2 2020 REIMBURSEMENT - M	
07424-1400	ADMINISTRATIVE WAGES	2009	7,884.44	-	9/25/2020	3226	EAST GOSHEN TOWNSHIP - GENERAL	QTR.3 2020 REIMBURSEMENT - M	
07424-3000	BEGINNING BALANCE								
07424-3000	MISCELLANEOUS EXPENSE	2003	100.00	-	3/12/2020	3194	PMAA	PMAA SPRING WORKSHOP - W.WI	
07424-3000	MISCELLANEOUS EXPENSE	2003	638.00	-	3/19/2020	3196	DELAWARE RIVER BASIN COMMISSION	2020 ANNUAL FEE D-2000-030 CP	
07424-3000	MISCELLANEOUS EXPENSE	2008	40.00	-	8/6/2020		REIMBURSE S/R FOR NSF FEE IN	MA FUND	
07424-3110	BEGINNING BALANCE								
07424-3110	MUNIC.AUTH.-AUDITING	2003	9,300.00	-	3/26/2020	3197	MAILLIE FALCONIERO & CO.	EXAM.- FINANCIAL STATEMENTS 12 MUNICIPAL AUTHORITY	
07424-3130	BEGINNING BALANCE								
07424-3130	ENGINEERING SERVICES	2001	1,666.00	-	1/15/2020	3183	PENNONI ASSOCIATES INC.	SERVICES THRU 12/8/19 2019 GEN	
07424-3130	ENGINEERING SERVICES	2002	893.25	-	2/12/2020	3187	PENNONI ASSOCIATES INC.	SERVICE THRU 1/19/20 2020 GEN.	
07424-3130	ENGINEERING SERVICES	2003	2,508.00	-	3/11/2020	3193	PENNONI ASSOCIATES INC.	SERVICE THRU 2/16/20 2020 GEN.	
07424-3130	ENGINEERING SERVICES	2004	3,366.00	-	4/15/2020	3202	PENNONI ASSOCIATES INC.	SERVICES THRU 3/22/20 2020 I&I	
07424-3130	ENGINEERING SERVICES	2005	1,486.50	-	5/12/2020	3205	PENNONI ASSOCIATES INC.	SERVICE THRU 4/19/20 2020 GEN.	
07424-3130	ENGINEERING SERVICES	2006	717.25	-	6/11/2020	3207	PENNONI ASSOCIATES INC.	SERVICES THRU 5/17/20 2020 GEN	
07424-3130	ENGINEERING SERVICES	2007	742.75	-	7/15/2020	3213	PENNONI ASSOCIATES INC.	SERVICES THRU 6/21/20 2020 GEN	
07424-3130	ENGINEERING SERVICES	2008	9,112.75	-	8/11/2020	3216	PENNONI ASSOCIATES INC.	SERVICES THRU 7/19/20 2020 I&I	
07424-3130	ENGINEERING SERVICES	2009	11,201.50	-	9/15/2020	3225	PENNONI ASSOCIATES INC.	SERVICE THRU 8/16/20 W.GOSHE	
07424-3140	BEGINNING BALANCE								
07424-3140	LEGAL SERVICES	2001	558.05	-	1/16/2020	3185	GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICE - 12/6-12/11/19	
07424-3140	LEGAL SERVICES	2003	720.00	-	3/11/2020	3191	GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICE - 1/13/20 GEN.AU	

07424-3140	LEGAL SERVICES	2004	300.00	-	4/15/2020	3201 GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICE 3/6-3/9/20 GEN.AI
07424-3140	LEGAL SERVICES	2005	500.00	-	5/12/2020	3204 GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICE 4/7-4/13/20 GEN.J
07424-3140	LEGAL SERVICES	2006	960.00	-	6/11/2020	3206 GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICES 5/8-5/14/20 GEN
07424-3140	LEGAL SERVICES	2007	320.00	-	7/15/2020	3212 GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICE 6/5-6/8/20 GEN.AI
07424-3140	LEGAL SERVICES	2009	740.00	-	9/15/2020	3223 GAWTHROP GREENWOOD & HALSTED	LEGAL SERVICE 7/8-7/13/20 GEN.J
07424-7490	BEGINNING BALANCE						
07424-7490	CAP.REPLACEMENT R.C.	2001	10,984.60	-	1/15/2020	3184 EVOQUA WATER TECHNOLOGIES LLC	DECANTER VALVES
07424-7490	CAP.REPLACEMENT R.C.	2002	15,280.00	-	2/12/2020	3188 TRI-STATE TECHNICAL SALES CORP.	ELECTRIC VALVES FOR SBR TANKS
07426-1000	BEGINNING BALANCE						
07426-1000	HERSHEY MILL STATION - ENGI	2001	3,805.05	-	1/15/2020	3183 PENNONI ASSOCIATES INC.	SERV. THRU 12/8/19 HMPS SURVE DESIGN FOR GENERATOR
07426-1000	HERSHEY MILL STATION - ENGI	2002	1,390.67	-	2/12/2020	3187 PENNONI ASSOCIATES INC.	SERVICE THRU 1/19/20 HMPS SURVE DESIGN FOR GENERATOR
07426-1000	HERSHEY MILL STATION - ENGI	2003	1,098.77	-	3/11/2020	3193 PENNONI ASSOCIATES INC.	SERV. THRU 2/16/20 HMPS SURVE
07429-1501	BEGINNING BALANCE						
07429-1501	BARKWAY PUMP STATION CAP	2002	91.57	-	2/12/2020	3186 CONTRACTOR'S CHOICE	SLINGS & STIHL HD LOCK-BLADE K
07429-1501	BARKWAY PUMP STATION CAP	2002	69.92	-	2/12/2020	3189 YALE ELECTRIC SUPPLY CO	FENDER WASHER, PVC ADAPTER, 1" & 1.5" & 2" GRAY LIQUIDTITE
07429-1501	BARKWAY PUMP STATION CAP	2003	2,649.50	-	3/11/2020	3192 LEC - LENNI ELECTRIC CORPORATION	MUFFIN MONSTER PIPED & WIRE
07429-1503	BEGINNING BALANCE						
07429-1503	HERSHEYS MILL PUMP STATION	2004	37,409.00	-	4/3/2020	3199 PREMIUM POWER SERVICES LLC.	60k W GENERATOR HERSHEY MILL
07429-1503	HERSHEYS MILL PUMP STATION	2007	1,850.00	-	7/2/2020	3210 O'ROURKE & SONS INC.	REBARS - HERSHEY MILL GENERAT
07429-1503	HERSHEYS MILL PUMP STATION	2007	4,345.00	-	7/16/2020	3214 LEC - LENNI ELECTRIC CORPORATION	HERSHEY PS UPGRADE SERVICE
07429-1503	HERSHEYS MILL PUMP STATION	2008	2,448.97	-	8/27/2020	3218 COLONIAL ELECTRIC SUPPLY	ELECTRICAL SUPPLIES- HM GENER
07429-1503	HERSHEYS MILL PUMP STATION	2008	2,271.96	-	8/27/2020	3220 YALE ELECTRIC SUPPLY CO	ELECTRICAL SUPPLIES- HM GENER
07429-1503	HERSHEYS MILL PUMP STATION	2009	12.81	-	9/15/2020	3221 COLONIAL ELECTRIC SUPPLY	PVC PIPING CAR1-1/2
07429-1503	HERSHEYS MILL PUMP STATION	2009	4,285.00	-	9/15/2020	3224 P T EQUIPMENT LLC.	TEMP. GENERATOR RENTAL JULY 1
07429-1503	HERSHEYS MILL PUMP STATION	2009	7,875.02	-	9/28/2020	3227 LEC - LENNI ELECTRIC CORPORATION	HERSH.MILL GENERATOR INSTALL.
07429-1505	BEGINNING BALANCE						
07429-1505	RCSTP CAPITAL	2001	586.75	-	1/15/2020	3183 PENNONI ASSOCIATES INC.	SERV. THRU 12/8/19 RCSTP GENER
07429-1505	RCSTP CAPITAL	2003	8,884.00	-	3/11/2020	3190 DECKMAN MOTOR & PUMP INC.	REBUILT SBR PUMP #2
07429-1505	RCSTP CAPITAL	2003	2,798.40	-	3/11/2020	3192 LEC - LENNI ELECTRIC CORPORATION	RIDLEY CREEK MCC BREAKER BUCI
07429-1505	RCSTP CAPITAL	2003	2,911.50	-	3/11/2020	3193 PENNONI ASSOCIATES INC.	SERV. THRU 2/16/20 RCSTP GENER
07429-1505	RCSTP CAPITAL	2003	1,160.48	-	3/19/2020	3195 ABLE EQUIPMENT RENTAL INC.	CRANE CARRY DECK RENTAL 3/9-3
07429-1505	RCSTP CAPITAL	2004	118,828.00	-	4/3/2020	3199 PREMIUM POWER SERVICES LLC.	450k W GENERATOR RCSTP
07429-1505	RCSTP CAPITAL	2004	1,422.50	-	4/15/2020	3202 PENNONI ASSOCIATES INC.	SERV. THRU 3/22/20 2020 RCSTP (REPLACEMENT
07429-1505	RCSTP CAPITAL	2004	14,688.00	-	4/24/2020	3203 DECKMAN MOTOR & PUMP INC.	REBUILT FLYGT PUMP - RCSTP
07429-1505	RCSTP CAPITAL	2005	1,069.25	-	5/12/2020	3205 PENNONI ASSOCIATES INC.	SERVICE THRU 4/19/20 RCSTP GEN
07429-1505	RCSTP CAPITAL	2007	3,451.50	-	7/2/2020	3209 MAIN LINE CONCRETE	CONCRETE - FOR RCSTP GENERATI
07429-1505	RCSTP CAPITAL	2007	156.65	-	7/2/2020	3211 PIPE XPRESS INC.	PIPING & CONDUITS - RCSTP GENER PAD
07429-1505	RCSTP CAPITAL	2008	500.00	-	8/11/2020	3215 ABEL BROTHERS TOWING & AUTO	LIFT NEW GENERATOR ONTO RCST
07429-1505	RCSTP CAPITAL	2008	5,016.00	-	8/11/2020	3217 TRI-STATE TECHNICAL SALES CORP.	VALVES, BRACKETS & ADAPTERS & SERVICE TO TROUBLESHOOT UNITS
07429-1505	RCSTP CAPITAL	2008	366.61	-	8/27/2020	3219 HOME DEPOT CREDIT SERVICES	BITS & ANCHORS - RCSTP GENERA
07429-1505	RCSTP CAPITAL	2009	4,776.29	-	9/15/2020	3222 DECKMAN MOTOR & PUMP INC.	REBUILT MYERS PUMP

Aug-20

EAST GOSHON SHARE OF
W GSA IMPROVEMENTS
As OF 10/1/20

SEWER FUND

	2020	2021
Miscellaneous Capital Improvements	11,669	12,503
Priority A Interceptor Rehabilitation		28,509
Priority B Interceptor Rehabilitation		
UV Control Upgrade	-	15,003
Effluent Flow Meter	3,712	-
Trickling Filter Bearing Replacement	4,983	-
Clarifier Drive Replacement & Rehab.	-	22,505
Screw Pump Replacement	-	4,168
Cemetery Sewer Rehab. & ARV Replacement		
Sanitary Sewer Rehabilitation / Repairs		
Fern Hill PS Spare Pump Purchase		
Fern Hill PS Improvements		
Spruce Avenue PS Pump Replacement		
Ellis Lane PS Improvements		
Montgomery Avenue PS Improvements		
Washington Street PS Improvements		
Lift Pump VFDs	-	-
RAS Building VFDs	-	-
RAS/Raw Pump	-	6,668
TMDL Litigation	2,834	2,834
Total	23,198	92,190

BOND FUND

	2020	2021
Taylor Run PS Improvements		
Trinity Drive Way PS Improvements		
WWTP Phase II (CoMag/Dewatering)	paid	paid
Westtown Way PS Improvements		1,867,036
Aeration Basin Improvements		9,400
Digester Replacements	paid	paid
Downing Avenue PS Improvements		
Total	0	1,876,436

	2020	2021
Totals	23,198	1,968,626

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER, PA 19380
(610) 692-7171

March 26, 2020

MUNICIPAL AUTHORITY EXPENSES:
3rd QTR 2020

		AMOUNT	NOTES
ABC Secretarial Services (Preparing & distributing packets):	15% of Monthly Wages & Benefits =.....	\$1,214.71	15% of salary & benefits
Secretarial Services (Taking & Preparing Minutes):	6 Hours @ \$35.00 per hour=.....	\$210.00	6 hours @ \$35 hours/hour
Director of Finance/Treasurer	5% of Quarterly Wages & Benefits	\$1,833.42	5% of salary & benefits
Staff Accountant: (Barb/AP)	5% of Quarterly Wages & Benefits.....	\$1,023.27	5% of salary & benefits
Director of Public Works:	5% of Quarterly Wages & Benefits.....	\$2,176.48	5% of salary & benefits
Manager:	3% of Quarterly Wages & Benefits.....	\$1,426.56	3% of salary & benefits
	TOTAL DUE TO GENERAL FUND.....	\$7,884.44	

07424-1400

Kelly Brophy
Staff Accountant

Westtown Way Pump Station

2018 SANITARY SEWER SYSTEM REPAIR PROJECT

The 2018 Sanitary Sewer System Repair Project consists of replacement, repairs, and rehabilitation of priority repair areas identified by the Township through closed circuit televisual inspections (CCTV) and visual manhole inspections. The conceptual cost estimate below is based on size and scope of 2016 Sanitary Sewer System Repairs.

The estimated Project cost is \$512,000 and is expected to be substantially completed by November 2018. It is not known at this time if any of these improvements will result in shared costs with the municipal partners.

PUMP STATION PHASE II IMPROVEMENTS

Pump Station Phase II Improvements include major repairs to the Trinity Drive Pump Station, Westtown Way Pump Station, and Taylor Run Pump Station as well as replacement of the Downing Avenue Pump Station.

Trinity Drive (Pump Station No. 2)

Repairs to the Trinity Drive Pump Station generally includes the following:

1. Replace submersible pumps
2. Replace 4-inch diameter forcemain
3. Replace non-functioning 4-inch diameter mag meter and install new data logger
4. Installation of fall protection system
5. Repair spalling/cracked concrete around wet well
6. Replace water service to pump station
7. Install sewage grinder on wet well influent
8. Minor site improvements

The repairs are necessary to replace aged and deteriorated equipment as well as to correct issues with the pumps including, but not limited to, clogging due to rags, lack of automatic alternating operation, head conditions (impaired pump capacity) most likely as a result of forcemain condition (reduced diameter or increased roughness coefficient typical in cast iron forcemains).

Westtown Way (Pump Station No. 13)

Repairs to the Westtown Way Pump Station generally includes the following:

1. Upgrade electrical equipment in the wet well to meet hazardous area requirements
2. Rehabilitate deteriorated ferrous metal and concrete components
3. Evaluate installation of a wet well mixing system to keep grease in suspension in the wastewater and prevent from accumulating in the wet well
4. Relocation of the influent sewage grinder to the end of the influent channel to reduce the headloss impact and therefore reduce grit accumulation. This may require the installation of new a new railing system to support the sewage grinder.

5. Minor building improvements:
 - A. Replace existing windows
 - B. Repair, replace and upgrade existing HVAC equipment
 - C. Block in any building penetrations no longer needed
 - D. Seal leaking wall penetrations
 - E. Cut new floor drain piping into the floor.
6. Replace existing valve with a new gate valve. This will require the installation of a temporary line stop or new valve outside of the pump station in order to prevent wastewater from draining out of the force main.
7. Replacement of the existing emergency generator
8. The existing diesel fuel tank for the emergency generator is located outside above the wet well. If the emergency generator is replaced with an exterior rated unit, a subbase fuel tank can be combined into the base for the new generator.
9. Install new VFDs
10. Evaluate replacement of MCC
11. Install mount-anywhere style discharge flow meter
12. Install gas detection equipment in the wet well
13. Evaluate the effectiveness of switching to a series pumping configuration should be performed due to high head conditions
14. Installation of a data logger or influent flow meter to monitor influent flows to the pump station
15. Modify louver over the wet well so the base of the louver is more than 18 inches above the top of the wet well tank.

Woodcrest/Downing Avenue (Pump Station No. 10)

Repairs to the Trinity Drive Pump Station generally includes replacement of the current dry well /wet well style pump station with a submersible style pump station due to the following:

1. Existing comminutor is no longer operational
2. Concrete and ferrous metal deterioration from exposure to hydrogen sulfide gas was observed in the wet well
3. Evidence of infiltration in the dry well
4. Observed corrosion of the below grade steel dry well, particularly near the pipe penetrations
5. Township Staff reported that maintenance of the existing equipment in the dry well is very difficult given the arrangement of the various pumps, piping, valves, controls, and other components in the small dry well area
6. The existing pumps are 41 years old

Westtown Way Pump Station Review Comments

October 8, 2020

Pennoni reviewed the 20-sheet plan set titled “Westtown Way Pump Station Improvements Project” dated July 2020, the design report titled “Westtown Way Pumping Station No. 13 Rehabilitation Design Engineer’s Report” dated July 2020, the “Westtown Way PS Dry Pit Pump Selection” memorandum dated June 26, 2020, existing pump calculation spreadsheets dated May 2, 2018, proposed pump calculation spreadsheets dated June 30, 2020, and the “Value Engineering Opinion of Probable Construction Cost Estimate” dated May 2020, all prepared by HRG for the Westtown Way Pump Station (WWPS). We also reviewed daily WWPS flow meter data for six separate months between 2018 and 2020.

Our scope was to evaluate value engineering and cost savings opportunities and proposed features that exceed minimum needs. We focused on the highest cost impact components in the cost estimate, specifically the pump sizing, dry pit submersible pump solution, and electrical service. We offer the following associated comments for consideration by East Goshen Township and Municipal Authority.

Station Flow Capacity

The pump station rehabilitation appears to be based upon a pumping rate that is far in excess of that needed, thereby resulting in larger pumps, motors, and other associated rehabilitation and operational cost impacts. A detailed explanation follows:

It is our understanding that the WWPS Chapter 94 rating is 7.7 MGD. However, the peak pumping rate of the existing Fairbanks Morse pumps is 6.192 MGD (4,300 gpm) according to the HRG reports. The station is being designed to maintain a similar capacity at 6.624 MGD (4,600 gpm), but the actual flow to the station is significantly less than this design basis. The report states that no notable future flow increases are projected since the tributary area is fully developed. We therefore suggest that the existing flow conditions should be the basis of design instead of those flow conditions that were projected when the WWPS was originally constructed.

The East Goshen-West Goshen intermunicipal agreement is based upon an average design flow for the WWPS of 1.825 MGD, with 1.0 MGD allocated to East Goshen (54.8%). According to the six months of flow data, the monthly average flow generally ranges from 1.172 MGD to 1.398 MGD with a maximum monthly average of 1.889 MGD during a very wet period in January 2019. Although the station is being designed to match the existing oversized pump capacity, the Engineer’s Report states that the design average daily flow should be 1.580 MGD, which is consistent with the actual flows. This stated flow would also be consistent with a planning flow rate of 300 gpd/EDU for the existing $\pm 5,181$ tributary EDUs. However, given that East Goshen’s average flow to the WWPS has been 0.735 MGD over the past five years, below East Goshen’s intermunicipal agreement capacity of 1.0 MGD, we suggest the intermunicipal agreement capacity of 1.825 MGD is a more practical design basis for pump station rehabilitation.

The suggested peak factor for a pump station of this size based on Ten States Standards is approximately 2.7. The Engineer’s Report references the same peaking factor. With an average design flow rate of 1.825 MGD, the peak instantaneous flow would therefore be 4.927 MGD (1.825 MGD \times 2.7 peak factor) or 3,422 gpm. This peak flow is approximately 26% less than the basis of design peak flow of 6.624 MGD (4,600 gpm) that is proposed to maintain existing pump rates. Further, the maximum day flow during the six months of meter data was 2.485 MGD. While this is not an instantaneous peak flow rate, it is well within our suggested 4.927 MGD peak rating. The proposed pumps are therefore considered to be significantly oversized.

The following table below summarizes the aforementioned flows, including the peaking factors associated with the various pump size alternatives (based on an average flow of 1.825 MGD).

Flow Condition	MGD	gpm	Peak Factor Over 1.825 MGD
Pump Rate Based on 1.825 MGD Allocation	4.927	3,422	2.7
Existing Peak Pump Rate	6.192	4,300	3.4
Design Peak Pump Rate	6.624	4,600	3.6
Chapter 94 Rating	7.7	5,347	4.2

The calculations provided by HRG indicate selection of three 250 horsepower dry pit submersible pumps. Considering typical operations of a triplex pump station, two pumps operating together must meet the peak flowrate at the head condition.

Based on the above data, the proposed pumps will provide significant excess capacity over the required peak. A reduction of the proposed pump rate would decrease the capital cost for rehabilitation including the costs of the incoming power equipment, generator, pumps, and VFDs. The hatch installation and structural modifications may be simplified since the hatches may be smaller. The size of the discharge piping and valves may be able to be reduced. The service platforms for the generator and electrical equipment will be smaller. It is also projected to decrease operational costs since the higher flow rate creates additional dynamic head through the system, thereby increasing the horsepower and power consumption needed for the pumps, and in turn adding to electricity costs.

Additionally, there may be an opportunity to reduce the pump sizing even further since there can be a reduction of horsepower per gallon pumped once the force main is filled to the peak elevation, thereby reducing the static head to the discharge elevation after the initial pump start.

Extended Shaft Sewage Pumps

Two of the existing pumps are extended shaft sewage pumps and the third, or added, pump is labeled 1A and appears to be a dry pit submersible pump. The extended shaft sewage pump motors are located on the intermediate floor. As noted by HRG, moving an extended shaft sewage pump is awkward because the pump extended shaft does not allow for the placement of a hoist beam above the pump. Removal of an extended shaft sewage pump requires that the pump be moved from underneath the motor and hoisted through a floor opening. The station does not have permanent hoisting equipment, so we understand that temporary equipment is currently used.

Overall, the presented dry pit pump installation can be characterized as a typical retrofit. The use of dry pit submersibles for a sewage station retrofit is preferred by most end users but is not mandatory. The dry pit submersible design allows for the direct removal of the pump. The motors are protected from flooding by design. The maintenance issues associated with the shafts are removed. Even though the chance of flooding the dry well to the intermediate level where the motors are located is remote, there is still a risk. The use of dry pit submersibles removes the flood risk associated with the extended shaft motors.

That said, we expect the dry pit submersible installation will be more costly than the replacement of the existing extended shaft sewage pumps. The submersible pumps are typically more expensive, and the piping needs to be reconfigured to allow for installation of the submersible pumps. Neither HRG or Pennoni has obtained pricing for comparable extended shaft pumps, but HRG has suggested that they may be approximately 10% less costly for initial purchase and installation. Their cost opinion estimates the

submersible pumps at \$493,000, so there could be a capital savings on the order of \$50,000 by using extended shaft pumps.

HRG's memo suggests that these initial capital cost savings may be offset by efficiency reductions and associated long-term operational costs for extended shaft pumps. We recommend that the efficiency and operational cost impacts be determined with more certainty to determine if there is in fact an offset.

The submersible pump installation also requires structural modification and installation of four larger floor hatches and two new floor hatches. Should the pumps be replaced with three extended shaft sewage pumps, it may only be necessary to install the two new floor hatches, and the other four existing hatches can remain as-is or will not need to be enlarged as much. The pressure relief valve and its discharge would also need to be relocated to provide an area to remove Pump 1A. Either permanent hoisting equipment should be installed, or a rolling gantry crane could be used to remove the pumps and motors. We estimate that the HRG cost opinion, including contingency, contains \$300,000 – \$400,000 for the structural work and installation of floor hatches. It may be reasonable to anticipate a savings of \$50,000 – \$100,000 on structural work if extended shaft pumps are used, but this cost reduction cannot be determined with certainty at this time since the specific structural upgrades are not known.

The electrical installation is more expensive for rerouting the conduit and wiring as well for submersible pumps, but we have not estimated the potential electrical cost savings associated with extended shaft pumps.

Without the benefit of mechanical, structural, and electrical re-design and vendor price quotes, it may be reasonable to anticipate an overall capital cost savings of \$100,000 – \$200,000 by using extended shaft pumps.

Electric Upgrade

From online imagery, it appears the station is powered from a PECO pole on Westtown Way. The Medium Voltage (MV) service cabling is presumed to run under the roadway and then run underground through Barker Park to the existing MV Switchgear (approximately 350 feet). It would be prudent to have this MV service cable tested to determine its condition and continued viability prior to finalizing the improvements design. If this cabling should require replacement, then that cost impact should be reflected in the project estimate/budgeting.

Based on the location of the PECO MV lines, we agree with the proposed replacement of the MV transformer and West Goshen maintaining ownership of the MV transformer.

Cost Estimate

The general construction estimate overall seems to be conservative, but we offer the following cost-related comments:

Contract WW-1 Cost Opinion

- Item 2 – Bypass piping costs seem high as a per day rate, but duration of required bypassing depends upon efficiency of the contractor.
- Items 8 and 9 – The generator and electrical gear platforms seem high at a total of \$130,000. Elevated concrete pad foundations may be less costly.
- Various Items – Structural steel cost totals \$93,000 in material costs at \$5 per pound. There are likely additional costs to install the steel. Typical structural steel fabrication costs are \$2 to \$3 per pound.
- Item 47 – The hoist is estimated as \$40,000. A 5-ton rail mounted hoist is approximately \$15,000 with the cabling system.
- Item 52 – Extent of HVAC work is not clear for the \$50,000 estimated.

Contract WW-2 Cost Opinion

- Item 13 – Misc. Electrical Conduit, Wire, and Work seem low at \$25,000 to install the equipment shown.

General

- Even though some of the line items seem conservative, the contingency is listed as 10%, which we consider low for a conceptual design estimate.

Questions for West Goshen and/or the Design Engineer

- Is there a reason the station needs to be designed to maintain the high existing peak flow rating?
- Are there available pump options to accommodate the lower minimum peak pump rate to save capital and ongoing costs?
- The 6 x 6 hatches seem large for the pump sizes shown and potentially dangerous. What is the criteria for the hatch size?
- Has the use of guard rail been considered rather than pump hatches to protect the intermediate floor openings?
- Has consideration been given to combining the generator and incoming electrical gear platforms into one elevated concrete pad foundation?
- The pump calculations are showing a high point elevation of 443 ft, a FM discharge elevation of 329 ft, and a suction head elevation of 262 ft. The static head of 180 ft is calculated on the high point elevation, rather than the FM discharge elevation. Has the designer considered the use of air release valves located at high points to vent trapped air to assure a full pipe to the FM discharge so that static head requirements and pump horsepower can be reduced?

EAST GOSHEN MUNICIPAL AUTHORITY
EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199

October 9, 2020

To Municipal Authority

From Mark Miller

Ref. NEW Home 632 Thorncroft Dr.

The building department has received a plan to construct a new home on the vacant lot at 632 Thorncroft Drive. The builder is proposing a single family home with a paver patio and swimming pool. The paver patio is shown on the sanitary sewer right of way and the pool on far side of the easement.

In the event that we had to do a repair on the sanitary sewer our work would be hindered if we had to dig through a patio. Although the pool is outside of the right of way, we have concerns of running electric and water service through the right of way. Therefore, we may want a formal assurance that the homeowner would be responsible for any damage to their property as a result of maintenance, repair or upgrades to the sewer line in the easement.

Staff would recommend the solicitor review the easement agreement, and draft a letter from the Municipal Authority stating their position on the matter.

BOARD OF SUPERVISORS
EAST GOSHEN TOWNSHIP
CHESTER COUNTY
1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199

FYI

October 2, 2020

Dear Property Owner:

The purpose of this letter is to inform you that Robert Jordan, owner of a vacant parcel at 1631 E. Strasburg Rd., has applied for a Zoning Variance requesting relief from the zoning ordinance. Mr. Jordan is requesting dimensional relief from the steep slopes requirement of the ordinance; §240-25.C(5)(d)[1], §240-25.C(5)(d)[2] and, §240-40.A(1)(b). Mr. Jordan proposes to construct a new single family home on the property and the proposed plan will require disturbance of steep slopes on the lot.

Pursuant to Township policy, property owners within 1000 feet of the subject property are notified of Zoning Variance applications.

This application will be discussed during the meetings outlined below and is subject to change without further written notice to surrounding properties:

Wednesday October 6, 2020 - Planning Commission meeting (7:00 pm)

Tuesday October 20, 2020 - Board of Supervisors meeting (7:00 pm)

Tuesday October 27, 2020 - Zoning Hearing Board (7:00 pm) **(Zoning Hearing)**

Due to COVID -19 all township meetings and hearings are being held virtually via video / telephone conference. These meetings will be conducted remotely via Zoom teleconference. Members of the public can participate via telephone and view the teleconference on YouTube. Meeting access information can be found on the Township website at <https://eastgoshen.org/> under the Latest News posts.

The public is welcome and encouraged to attend and participate in these meetings. The application information is available for public inspection at the Township Building. Please call the Township staff at 610-692-7171 if you need assistance finding the meeting access information, or email me at mgordon@eastgoshen.org if you have any questions or need additional information.

Sincerely,



Mark A. Gordon
Township Zoning Officer

Cc: All Township Authorities, Boards and Commissions

Fall Virtual Training Schedule

September 16 – November 12, 2020

Although our in-person events, including Board Member Training, Management Workshop and the Annual Conference, did not take place this year, we are working hard to bring you the same valuable experiences by offering these educational sessions virtually. These workshops apply to **ALL** authorities and will include topics such as **stormwater, tenants' rights and fair credit reporting, COSTARS, acquisitions, accounting/finance for board members, litigation review, legislative and regulatory updates.**

Now is a perfect time to experience these great learning opportunities all from the comfort of your office or home!

How does virtual training work?

All workshops will be held via a webinar platform accessible from your computer or mobile device. You will receive links to each workshop the day of the event.

What do you need to participate?

- A computer (Mac or PC) or mobile device with high-speed internet access
- Speakers or headphones to listen to the audio portion of the sessions
- A valid email address for registration

An asterisk () after the webinar title denotes it is part of the Virtual Conference series. If you registered for the entire Virtual Conference, you are automatically registered for the additional conference webinars at no additional charge. If you are not able to attend any of these sessions, please contact us and you will be sent a link to the recorded session.*

Meeting dates are subject to change.

Make sure your authority is aware of today's issues by attending these educational sessions!

September 16 ➤ 1:00 – 2:00 pm

Cost: \$40

➤ **Physical Security from A-Z (1 PDH)***

Bob Winters, United States Homeland Security

Bob Winters, of the US Department of Homeland Security, Protective Advisor-Pittsburgh District, will provide a presentation on physical security essentials based on his over 300 security assessments conducted during his 15 years with DHS. His presentation will mostly focus on low-cost/no-cost options and opportunities for consideration. His exploration of practices, policies, and procedures will be beneficial to any site, from those that have only door locks and physical keys to those with sophisticated access control and security camera systems.

September 23 ➤ 1:00 – 2:00 pm

**Cost: Free to Members
\$40/non-members**

➤ **The New Normal – Responding to a Positive COVID-19 Case in the Workplace and Reducing the Spread**

David Barron, Cozen O'Connor

Walter Stella, Cozen O'Connor

With many states seeing significant spikes of COVID-19 cases for the first time, employers facing these issues for the first time can learn and build on the experiences from the first three months of the pandemic. This webinar will address best practices and applicable legal requirements in the following areas:

- Step by step protocol for handling a positive COVID-19 case in the workplace

- How to handle reinstatement for both symptomatic and asymptomatic employees who test positive or who are self-quarantined for exposure
- Screening of employees for symptoms and temperature checks
- Conducting investigation into source of COVID-19 cases for contact tracing and OSHA recording purposes

September 30 ➤ 10:00 am – 12:00 noon

Cost: \$50

➤ Board Member Training

- **Government Relations Update** - PMAA Government Relations staff will provide an overview of association government relations activities, including newly enacted state law, tracked legislation currently under consideration in the Pennsylvania House and Senate, upcoming federal and state agency regulatory and policy initiatives, as well as other related areas of interest.
- **Accounting/Finance for Authority Board Members**
David Busch, Keystone Alliance Consulting
Christopher Gibbons, Concord Public Finance
 A pair of Authority consultants will address Board responsibility for Financial Reporting including both external (Annual Audits, DCED Reporting, Continuing Disclosure for financings) and internal reports (Monthly reporting to the Board, bill payment, budget status, account balances and financial planning). They will also discuss budgeting, including both Capital (5 year plan) and annual operating (Preparation, Approval and Monitoring and Adjusting). Other topics will include Revenue Generation (rate increases, full cost pricing and board process involved), Tapping Fees, Acquisitions, Annual revisions to Capital planning policy and closing with how to adopt sound financial, investment and project management policies.
- **Public Official Ethics Refresher** - Attorneys from the PA State Ethics Commission (PASEC) will provide a brief review of ethical standards, recent Ethics Commission rulings impacting Municipal Authority officials, and briefly address their required Statement of Financial Interest forms. The Ethics Act requires this form be filed each year the position (board &/or Mgt.) is held and the year following termination of service.

October 7 ➤ 1:00 – 2:00 pm

Cost: \$40

➤ Stormwater Authorities 2.0 – Optimizing Implementation & Programming through the Next Permit Cycle (1 PDH)*

Adrienne Vicari, PE, Herbert, Rowland & Grubic, Inc.

It's been seven years since Act 68 authorized the formation of municipal authorities for stormwater management, and programs have evolved significantly over that time. The presenter will look at the lessons communities have learned as implementation has progressed and will share best practices that are generating success across the state. It will also provide a preview of the challenges anticipated in the next MS4 cycle and offer guidance on how to address these challenges as the evolution of stormwater authorities continues.

October 14 ➤ 1:00 – 2:00 pm

Cost: \$40

➤ Successfully Utilizing COSTARS and Other Procurement Best Practices (1 PDH)*

Joshua T. Fox, Herbert, Rowland & Grubic, Inc.

John Shaffer, PennBid

Whether purchasing equipment or putting construction projects out to bid, authorities have many options to consider when putting together a plan on their purchasing processes. These engaging presenters will provide an overview of the COSTARS program, its advantages, and its disadvantages, using real-world examples from nearly a dozen projects. It will also discuss how applying several simple Best Practices, supported by the analysis of over 7,000 PA projects and 31,000 sealed bids, can create conditions that attract more competent bidders, yielding more competitive pricing. Participants will leave with a better understanding of identifying basic requirements of the public bidding process, especially as it relates to the Municipality Authorities Act; when using COSTARS can be advantageous versus traditional competitive bidding; the advantages and disadvantages of purchasing through COSTARS as part of a larger project; understanding the analytics from large population of PA projects; implementing a few basic Best Practices that can lead to higher bidder participation, better pricing, and enhancing risk management.

October 21 ➤ 1:00 – 2:00 pm

Cost: \$40

➤ Tenants' Rights, Fair Credit Reporting & Customer Service Programs (CAPs)*

Candace Hoover, Manheim Area Water & Sewer Authority

Kathy L. Pape, McNees Wallace & Nurick, LLC

John Sweet, PA Utility Law Project

Explore the Utility Service Tenants' Rights Act and best practices for municipal authorities to protect against liability and shield the rights of tenants. Discuss fair credit reporting and best practices for establishing well-designed and funded customer service programs (CAPs).

October 28 ➤ 1:00 – 2:00 pm

Cost: \$40

➤ How to Grow Your Authority and as a Result Reduce Future Rate Increases

A Case Study of an Authority Growth Strategy – LASA's Three Recent Acquisitions (1 PDH)*

Michael A. Kyle, Lancaster Area Sewer Authority

This presentation includes a case study of Lancaster Area Regional Sewer Authority (LASA) and three recent system acquisitions. The purpose of this presentation is threefold: 1) to demonstrate actual efficiencies gained through growth of a sewer utility, 2) identify tactics that other utilities can use to purposefully grow their systems in a way that benefits their customers, and 3) present a list of do's and don'ts. As a result of these acquisitions, LASA has experienced measurable reductions in operating costs, an expanded service area and has developed a reliable strategy that will be shared with attendees.

November 4 ➤ 10:00 am – 12:00 noon

Cost: \$50

➤ Management Workshop

- **PMAA Legislative/Regulatory Update** - A comprehensive overview of association government relations activities, including newly enacted state law, tracked legislation currently under consideration in the Pennsylvania House and Senate, upcoming federal and state agency regulatory and policy initiatives, as well as other related areas of interest including available funding through the Army Corps of Engineers.

- **Cybersecurity for Municipal Authorities: Risks, Trends & Preparations to Avoid Disaster**

Adeolu A. Bakare, Esq. McNees, Wallace & Nurick LLC

Thomas Markey, Esq. and Certified Information Privacy Professional

The presenters will address cybersecurity risks faced by municipal authorities, recent trends in cyberattacks, and the regulatory response from state and federal government. Attendees will learn best practices to prepare for, and respond to, cyber threats in a digital world, including risk mitigation practices for employees and contractors.

- **Solicitors Update and Litigation Review**

Steven A. Hann, Esq., Hamburg, Rubin, Mullin, Maxwell & Lupin

Michael Witherel, Esq., Witherel & Associates

PMAA solicitors will address recent litigation involving municipal authorities and PMAA solicitors will address recent litigation impacting Pennsylvania municipal authorities, as well as discuss recent federal, state and administrative initiatives that municipal authorities need to be aware of in 2020.

November 12 ➤ 1:00 – 2:00 pm

Cost: \$40

➤ Addressing Legacy Stormwater Issues in Today's MS4 Environment (1 PDH)*

Pierre O. McCoy, Susquehanna River Basin Commission

Jeremy Miller, Hampden Township Sewer Authority

Stormwater management standards have changed over time, evolving as our understanding of stormwater has evolved. Legacy BMP's may no longer be serving their intended purpose. The presenters will provide background on the evolution of stormwater management, unique difficulties in suburban karst landscape, and will present an innovative approach to dealing with legacy facilities.

**For more detailed session information, please visit our website
www.municipalauthorities.org**



PMAA's Fall Virtual Training
September 16 – November 12, 2020

Online registration is
available on our website at
www.municipalauthorities.org

REGISTRATION

Authority/Firm: _____

Address: _____

City, State, Zip: _____ **Phone:** _____

An asterisk () after the webinar title denotes it is part of the Virtual Conference series. If you registered for the entire Virtual Conference, you are automatically registered for the additional conference webinars at no additional charge. If you are not able to attend any of these sessions, please contact us and you will be sent a link to the recorded session.*

➤ **Name/Title:** _____ **E-mail:** _____

☐ **Check here if you need PDH certificates**

<input type="checkbox"/> September 16	Physical Security from A-Z*	\$40
<input type="checkbox"/> September 23	The New Normal, etc. - Free to Members/\$40 to non-members	\$ _____
<input type="checkbox"/> September 30	Board Member Training	\$50
<input type="checkbox"/> October 7	Stormwater Authorities 2.0 – Optimizing Implementation, etc.*	\$40
<input type="checkbox"/> October 14	Successfully Utilizing COSTARS & Other Procurement Best Practices*	\$40
<input type="checkbox"/> October 21	Tenants Rights, Fair Credit Reporting & Customer Service Programs*	\$40
<input type="checkbox"/> October 28	Case Study of an Authority Growth Strategy, etc.*	\$40
<input type="checkbox"/> November 4	Management Workshop	\$50
<input type="checkbox"/> November 12	Addressing Legacy Stormwater, etc.*	\$40
Subtotal		\$ _____

➤ **Name/Title:** _____ **E-mail:** _____

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<input type="checkbox"/> November 4	Management Workshop	\$50
<input type="checkbox"/> November 12	Addressing Legacy Stormwater Issues, etc.*	\$40
Subtotal		\$ _____

TOTAL DUE: \$ _____

Return registrations to the PMAA office at 1000 North Front Street, Suite 401, Wormleysburg, PA 17043.
Payment is due with registration. Checks made payable to PMAA. We also accept:

☐ Visa ☐ MasterCard ☐ Discover

Card # _____ Exp.: _____ Security code: _____

CANCELLATION POLICY: All cancellations must be submitted to the office one week prior to the meeting date.
Unpaid "no-shows" will be charged. NO REFUNDS will be made after the cancellation deadline.