

EAST GOSHEN MUNICIPAL AUTHORITY

January 10, 2022

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. December 13, 2021

5. APPROVAL OF INVOICES

Pennoni Invoice #1099545	\$	1,768.25
Pennoni Invoice #1099546	\$	3,852.69
Pennoni Invoice #1099547	\$	2,308.50
JWC Environmental #109024	\$	11,255.01
Deckman Invoice #3921	\$	2,709.00
Deckman Invoice #3922	\$	2,215.00
Deckman Invoice #3923	\$	1,870.00
Pennsylvania Municipal Authorities Assoc.	\$	880.25

6. LIAISON REPORTS

7. FINANCIAL REPORTS

- a. December Financial Report

8. OLD BUSINESS

- a.

9. 2021 Goals:

Goal	Status
Ridley Creek Plant Compliance	January, February, March, April, May, June, July, August, September, October, November and December were all in compliance and met all requirements.
Continue to Monitor Upgrades at WGSTP and Westtown Way Pump Station	On – going
Continue to Implement Infiltration and Inflow for the Sewer System	On-going
Caustic Soda Project Mike Ellis is currently working on the Project	75% complete – Public Works is building the shelving
Replace sewer line Hershey Mill Estate trunk line replacement	Engineer will bring you up to date under old business. Public Works dug test holes for Pennoni 12-6-2021
Hunt Country Pump Station Mag Meter	On Hold
Hunt Country Pump Station Muffin Monster Replacement	On Hold
Hunt Country Pump Station Bypass Pump	On Hold
Three new meters for Ridley Creek Collection	Hibberd Lane is on line. Ridley Creek Plant is the next meter, in the process of replacing the meter at the plant.

10. NEW BUSINESS

- a. Municipal Authority 2022 Proposed Budget – David Ware
- b. Draft proposal from Scott Towler to upgrade the filter feed panel
- c. Sewer Extention Study - Pennoni sewer vs. life cycle cost analysis

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

January 10, 2022

To: Municipal Authority
From: Mark Miller
Re: December 2021 Monthly Report

Monthly Flows: The average daily flow to West Goshen was 687.150 per day.

Meters: The meters were read on a daily basis. The meters have been calibrated and all meters have been working correctly

C.C. Collection: We cleaned and televised 12,000 LF of pipe in Quad 3 the sewer main from Ellis lane and Route 3 down to the interceptor line at Westtown Way. Then moved to Water View Farms. We noticed three 4 inch laterals that peaked our interest. The lines appeared in good condition as did the manholes. Aqua will be replacing the water mains beginning in February. The Public Works Department has televised and located the laterals and marked them out.

R.C. Collection: The emergency generators were checked out by Paul Siddel. Paul found that when the transfer switched from run time to normal power the switch jammed and welded the switch gear in the normal position and would not switch to emergency power. It also fried the alarm panel wiring; leaving us without alarms at the station so Kevin installed a cable hot spot at the station and he installed a camera which allowed us to monitor the station until we could locate the new switch gear. If you recall the emergency generator and switch gear were from the Reserve Pump Station. Lenni has been notified and are working with Paul to locate the new switch gear. The Hunt Country pump station transfer switch has been repaired. The New Muffin Monster has been installed at the Hershey Mill Pump Station.

We are actively working with Verizon to get internet service for installing the surveillance cameras.

Ridley Creek Plant: The Public Works Department moved pallets of soda ash up, per the operator's request. Lenni will be performing routine maintenance to the motor control centers. We had to replace a UPS Box for the sludge press controller.

Alarms: We responded to 33 alarms for December.

PA One Calls: We responded to over 63 PA One Calls for the month December.

Monthly Rainfall: 3.85 inches of rain for the month of December.

Lateral repairs or Caps: We did make several lateral repairs at a property on Reservoir Road. We found three laterals that appeared ok but after further examination we found huge holes in three pipes. We replaced the pipes.

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

January 10, 2022

To: Municipal Authority
From: Mark Miller
Re: 2021 Accomplishments

Below is a list of accomplishments that the Public Works Department completed for the year of 2021.

Cleaned and televised 80,440 lf of sanitary sewer pipes.

Installed metering station at Hibberd Lane and East Boot Road

Replaced 42 castings and water tight lids

Continued with extensive INI work throughout the year, by use of portable meters and plain old detective work. By pulling manhole lids in the middle of the night to view flows. We estimate that we roved between 75,000 to 100,000 gallons of infiltration.

While televising we located three manholes that has deteriorated and needed to be replaced.

We continued to replace sewer caps on residents laterals.

We continued to perform routine maintenance at the pumping stations and the sewer plant. Pumps were pulled from the wet wells and rebuilt. We also performed extensive electrical Maintenance at all the stations and plant, this work has resulted in less downtime.

Drained two SBR tanks which were cleaned and inspected. Dutchland performed maintenance To both tanks and the decking.

In December 2020 we had an emergency on the trunk line in Hershey's Mill Estates upon Further investigations we found the line to have many sags and deflections, the Municipal Authority has decided to replace the sewer line from Tanglewood Drive down to the Hershey Mill Dam.

For 2021:

Total man hours for sewer were 3,970

Total wages were \$198,194.69

Total equipment hours were 2,014.25

Total equipment cost were \$107,827.00

The Public Works Department hosted trench safety course which was attended by surrounding Municipalities.

The Public Works Department purchased several new gas detectors for confined space entry.

We had to deal with two rain events which brought 7" of rain and two weeks later another 10" of rain.

**EAST GOSHEN MUNICIPAL AUTHORITY
ENGINEER'S REPORT
January 7, 2022**

Ridley Creek Sewage Treatment Plant (RCSTP)

- Caustic Soda Conversion – We are continuing to evaluate if any improvements or revisions will be required by chemical suppliers, such as an additional safety shower/eye wash, to make deliveries.
- UV Disinfection System – We submitted design information to Lenni Electric for quotes for the electrical installation of the Trojan system and separately for the installation of the entire Glasco UV system, as well as a breakdown of the labor vs. material cost from the Trojan vendor in order to establish an apples-to-apples cost comparison of the two systems.
- NPDES Permit Renewal – The application was submitted to DEP on November 1, and we are awaiting their review comments.
- Filter Feed Pump Controls – We reviewed the proposed scope and quote for the new SCADA functionality and equipment to provide for remote control of the pumps, and we provided questions to Mark about the compatibility of the new HMI interface to the existing SBR computer and internet.

Ridley Creek Collection System Permanent Meters

- No activity since our last report.

Westtown Way Pump Station

- No activity since our last report.

Sanitary Sewer Pipe Rehab

- Supplee Valley – No activity since our last report.
- Hershey's Mill Estates – We prepared a summary report of the geotechnical investigation and resultant recommendations. We will now finalize the design plans, bid documents, and GP-11 permit application, and update the cost estimate.

I&I Program

- No activity since our last report.

New Connections

- Sewer Extension Study – We researched life cycle costs of septic systems, and we prepared a memo of the life cycle costs to property owners of septic systems vs. public sewer.

Industrial Pretreatment Ordinance

- No activity since our last report. As discussed at the May MA meeting, a headworks study with sampling at the RCSTP can be conducted to set contaminant limits.

Executive Summary

The Ridley Creek sewage treatment plant outfall 001 achieved compliance with the permit discharge limitations for the month of November 2021. All supplemental reports were submitted with the DMR. Discharge to the Applebrook irrigation lagoon remained in service. Chemical usage utilized for pH and total alkalinity remained consistent with previous months. Aluminium sulfate solution volumes increased during December (14 gal/day) as compared to November to achieve phosphorus removal. Supply chains issues procuring aluminium sulfate were experienced. Additional volumes of aluminium sulfate stored in totes throughout the facility have been purchased. The goal is maintaining a 6-month supply on hand (approximately 12,000 gallons) stored within buildings to provided spill containment. Aluminium sulfate solution is a critical component for total phosphorus removal. No significant mechanical or operational issues were observed during operation of sludge dewatering equipment or SBR treatment process. There were no odor complaints during the month.

Treatment Process Operation

Compliance with the NPDES discharge permit was achieved during November. The monthly average total phosphorus was reported as 0.10 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 4 mg/L as compared to the discharge limitation of 10 mg/L. The TSS weekly averages are presented below:

Week 1	1.0 mg/L
Week 2	4.0 mg/L
Week 3	8.5 mg/L
Week 4	6.8 mg/L
Week 5	7.0 mg/L
Monthly Average	5.5 mg/L

The final effluent pollutant concentrations for outfall 001 are listed below:

	CBOD ₅	TSS	NH ₄ -N	Phosphorus, Total	Fecal Coliform	
November 2nd		2.0	1.0	0.10	0.13	4
November 9th	2.0	4.0	0.10	0.17	5	
November 16th	2.0	8.5	0.10	0.10	2	
November 23rd	2.0	6.8	0.27	0.13	1	
November 30th	2.0	7.0	0.10	0.14	3	

The final effluent test results demonstrate that the biological treatment process performed well during November and December. Sequencing batch reactors (SBRs) numbered 2, 3 and 4 were in service. 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 continued through December.

The effluent pollutant concentrations discharged to ASpplebrook, outfall 002 are the same as for outfall 001.

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

The November 2021 Influent wastewater pollutant concentrations are presented below:

	<u>BOD₅</u>	<u>TSS</u>	<u>NH₄-N</u>	<u>TKN</u>	<u>Phosphorus, Total</u>	
November 2nd		230	630	30.1	5.06	4.64
November 9th	241	375	35.3	53.7	4.61	
November 16th	242	222	32.2	63.6	5.34	
November 23rd	232	270	38.4	56.9	5.61	
November 30th	299	262	45.8	70.4	5.88	

The foam on the SBR surface reduced to approximately 5% to 10% 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.

PA DEP

No activity

Pennoni Associates

No activity

Chemical Usage:

December 2021		
Chemical	Daily Average	Total Monthly
Soda Ash, pounds	300	9,600
Aluminium Sulfate solution, gal	75.2	2,330

Flow data:

December 2021	

Flow Meter Location	Total Volume for Month, MG	Average Daily Flow, gpd	Daily Maximum Flow, gpd
Influent Wastewater to Screening Building*	13.561	437,475	618,190
Influent Wastewater to SBRs*	13.830	446,117	567,296
Internal Recycle**	0.598	19,297	280,680
Treated Effluent to Disc Filters	13.520	436,113	529,536
Final Effluent Discharge	8.803	283,968	364,000
Applebrook Golf Course	1.151	48,735	56,000

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

Significant Rainfall

During December, there were nine (9) days when rainfall occurred. There were no events of rainfall exceeding 0.50 inches.

The total rainfall during the month was recorded as 1.53 inches.

Maintenance and Repair Activities

No unplanned maintenance repairs during december 2021.

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DRAFT
EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY
MEETING MINUTES
December 13, 2021

6 The East Goshen Township Municipal Authority held their regular meeting on Monday,
7 December 13, 2021 at 7:00 pm. at the Township Building.

8 Members in attendance were: Dana Pizarro, Chairman; Jack Yahraes Vice Chairman; Phil Mayer,
9 Kevin Cummings, and Walter Wujcik.

10 Also in attendance were: Mark Miller (Director of Public Works), David Ware (Financial Director),
11 Mike Ellis (Pennoni), and Mike Lynch (Township Supervisor).

12
13 **COMMON ACRONYMS:**

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

24 **Call to Order & Pledge of Allegiance**

25 Dana called the meeting to order at 7:00 pm and led those present in the Pledge of Allegiance.
26 He asked for a moment of silence for our First Responders, EMTs and Military around the world.
27 Dana asked if anyone would be recording the meeting. There was no response.
28

29 **Chairman’s Report**

30 Phil reported that he attended the West Goshen meeting last week. They are in compliance. COMAG
31 has been in operation for two weeks. They are collecting data for a year. The general and electrical
32 contracts are done at the main plant. Work at Westtown Way has not started yet. They are changing
33 the start time for their meeting from 7:00 pm to 6:00 pm.
34

35 **SEWER REPORTS**

36 **1. Director of Public Works, Mark Miller’s report for November 2021**

37 **Monthly Flows** – The average daily flow to West Goshen was 690,010 per day.
38

39 **Meters:** The meters were read on a daily basis with no problems to report. We have the technical
40 issues resolved with the Hibberd Lane meter. John Laidly worked with the factory.
41

42 **C.C. Collection:** The pumping stations were visited on a daily basis. We had some problems again
43 with the Ashbridge Pump Station. We received numerous seal failures. Kevin and his assistant
44 responded to reset the alarm. We checked on the OHMS, however the readings were inconsistent, so
45 we pulled both pumps and switched them. We did not want to cause further damage to the pumps.
46 We also milled and overlaid the match that we did last year. We were notified of possible sewer
47 problems at Waterview. We checked the main and the lateral. It was decided that the problem was
48 on the Homeowner’s side of the lateral. The homeowner, Mr. D.J. Jackson was very impressed with
49 our responsiveness to his problem and sent a thank you letter.

1 **R.C. Collection:** We did some INI checking on the trunk line running through the Applebrook
2 property. We came back in the middle of the night to compare the flows which were significantly
3 lighter. We will be cleaning and televising lines on the system. We took some time last week to
4 clear the right of the Applebrook Towne Homes over the Hibberd Lane bridge. We had to install
5 some 24” concrete pipe to control a spring that had popped up in the right or way. We had to
6 investigate a sink hole over the sewer main on Bowtree Drive. We televised the main and found a
7 portion that was collapsed so we excavated the main. We replaced 40’ of pipe. The problem was
8 caused from a terrible installation.

9
10 **Ridley Creek Plant:** We performed routine maintenance when requested by the operator.

11
12 **Alarms:** We responded to 27 alarms for November.

13 **PA One Calls:** We responded to over 58 PA One Calls for the month of November.

14 **Monthly Rainfall:** 1.47 inches of rain for the month of November.

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16 **Lateral Repairs or Caps:** We did make several lateral repairs at a property on Reservoir Road. We
17 found three laterals that appeared off but after further examination, we found huge holes in three
18 pipes. We dug down to a place where we could make a solid repair.

19
20 **Additional Notes** – The Hershey Mill Pump Station is getting slammed. We can’t locate where it is
21 coming from. Mark suspects that someone is dumping old sewage in a manhole. Mark will install
22 cameras.

23 24 25 **2. Pennoni Engineer’s Report for October dated December 9, 2021**

26 **Ridley Creek Sewage Treatment Plant (RCSTP)**

- 27 • Caustic Soda Conversion – We responded to comments from a chemical supplier, and we are
28 evaluating if any improvements or revisions, such as an additional safety shower/eye wash,
29 are needed to meet their requirements to make deliveries. We are also providing the final
30 plans to the controls contractor and electrician for pricing.
- 31 • UV Disinfection System – We continued coordination with vendors about scoping, pricing,
32 contractual terms, and potential field visits to local installations for the Glasco and Trojan UV
33 systems. Both systems are available through COSTARS. We are awaiting additional
34 information to perform an apples-to-apples cost comparison:
 - 35 ○ Trojan provided a quote that includes installation of the UV modules, inspections of
36 others’ work and start-up assistance and training, and provision of a temporary bypass
37 system. The Township would be responsible for demolition of the existing UV system,
38 raising the concrete channel walls and new concrete to raise the finger weirs, all
39 electrical and controls work, and installation of the temporary bypass system. The
40 Phoenixville WWTP utilizes Trojan UV, and Matt Mullin offered to provide a tour of
41 their system. Kappe, the vendor, also offered a tour of an installation in Upper
42 Gwynedd Township in Montgomery County (near Lansdale). We have requested
43 Kappe provide a breakdown of installation vs. material costs. We are also contacting
44 an electrician for a quote for the electrical work.

- 1 ○ Glasco’s quote is solely for the materials. They do not offer installation. They are
- 2 looking into their ability and cost to provide a temporary bypass system. They offered
- 3 a tour of an installation in Hazleton, PA. We are contacting contractors to obtain
- 4 pricing for installation of the entire system, with the exception of the Township Public
- 5 Works Department performing the concrete channel work.
- 6 ○ Additional notes – Glasco’s quote for materials only was \$120,000. Trojan’s estimate
- 7 is \$220,000 - \$240,000 including all work. Mike discussed the differences in the two
- 8 systems.
- 9 ● NPDES Permit Renewal – The application was submitted to DEP on November 1. The lab
- 10 subsequently provided the remaining sampling results, and we forwarded all of the sampling
- 11 data to DEP so that DEP can initiate their technical review.

12 **Ridley Creek Collection System Permanent Meters**

- 13 ● No activity since our last report.

14 **Westtown Way Pump Station**

- 15 ● No activity since our last report.

16 **Sanitary Sewer Pipe Rehab**

- 17 ● Supplee Valley – No activity since our last report.
- 18 ● Hershey’s Mill Estates – We performed observations of test pit subsurface excavations by
- 19 Public Works on December 6, and we performed dynamic cone penetrometer testing of
- 20 subgrade conditions to evaluate depth to rock. We are preparing a summary report and
- 21 profiles of observed groundwater and rock elevations, which will enable us to estimate the
- 22 extent of excavation and stone bedding below the pipe to provide solid bearing, as well as any
- 23 quantity of rock removal. This subsurface information is expected to be included in the bid
- 24 documents for bidder’s reference on subsurface conditions as well. We can then finalize the
- 25 design plans, bid documents, and GP-11 permit application, and we can update the cost
- 26 estimate.

27 **I&I Program**

- 28 ● No activity since our last report.

29 **New Connections**

- 30 ● We previously submitted the study report of costs and feasibility for public sewer extensions
- 31 to ten unsewered neighborhoods. The Township is obtaining cost data for recent septic system
- 32 replacements, and we will update the report and cost-benefit/payback period analysis
- 33 thereafter.

34 **Industrial Pretreatment Ordinance**

- 35 ● No activity since our last report. As discussed at the May MA meeting, a headworks study
- 36 with sampling at the RCSTP can be conducted to set contaminant limits. Consideration should
- 37 be given to budgeting for the headworks study and sampling in 2022.

1 **Sewer Extension Study** – Mark contacted Horn Plumbing for an estimate per household. They
2 estimate \$30,000 – 40,000.00. Dana mentioned that most systems are designed to last 10 years and
3 current on site systems have to be pumped out every 3 years. Mark mentioned that there are 9
4 developments that do not have public sewer. After discussion it was decided to make a presentation
5 at the Annual ABC meeting in January. Mark and Mike Ellis will work on the presentation for
6 review at the MA meeting on January 10, 2022.

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

10 The Ridley Creek sewage treatment plant outfall 001 achieved compliance with the permit discharge
11 limitations for the month of October 2021. All supplemental reports were submitted with the DMR.
12 Discharge to the Applebrook irrigation lagoon remained in service. Chemical usage utilized for pH
13 and total alkalinity remained consistent with previous months. Aluminium sulfate solution volumes
14 slightly decreased during November (4 gal/day) as compared to October to achieve phosphorus
15 removal. Supply chain issues procuring Aluminium sulfate were experienced. Additional volumes
16 of Aluminium sulfate stored in totes throughout the facility have been purchased. The goal is
17 maintaining a 6-month supply on hand (approximately 12,000 gallons) stored within buildings to
18 provide spill containment. Aluminium sulfate solution is a critical component for total phosphorus
19 removal. No significant mechanical or operational issues were observed during operation of sludge
20 dewatering equipment or SBR treatment process. There were no odor complaints during the month.

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23 **Approval of Minutes**

24 Kevin moved to approve the November 8, 2021 minutes as amended. Walter seconded the motion.
25 The motion passed unanimously.

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28 **Approval of Invoices**

29 1. Kevin moved to approve the following Pennoni invoices:

30 Invoice #1096202	\$2,827.00
31 Invoice #1096203	\$1,325.00
32 Invoice #1096204	\$2,319.25
33 Invoice #1096205	\$ 112.75

34 Walter seconded the motion. The motion passed unanimously.

35
36 2. Phil moved to approve the Gawthrop Greenwood invoice #PC #6604-001M for \$960.00. Jack
37 seconded the motion. The motion passed unanimously.

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39 3. Walter moved to approve The Authorities Assoc. invoice for \$175.00. Jack seconded the motion.
40 The motion passed unanimously.

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42 Since the members of the MA are not familiar with Penn. League Municipal, Jack moved to void the
43 check for \$65.00. Phil seconded the motion. The motion passed unanimously. Dave will take care
44 of this.

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Liaison Reports

1. Conservancy Board – Walter reported that they will hold Keep East Goshen Beautiful Day on April 23, 2022. They are planning to do a fall planting on the northeast corner of Strasburg and Reservoir Road. It will be a substantial planting along the creek. Mark spoke about the beavers and their dam.

2. Board of Supervisors – Mike reported that the BOS approved a new ordinance for Small Wireless Facilities. This would be mostly for the new 5G service. The FAA required this ordinance. It is on the website. They are researching alternatives to Section B of the Paoli Pike trail. The 2022 budget has no tax increase and the 5-year plan looks good. The Annual ABC meeting will be held on January 25, 2022 at 6:00 pm.

Financial Reports

1. November Financial Report - Dave Ware reviewed the following report:
In November 2021, the Municipal Authority recorded \$14,815 in revenues (transfers from Sewer Operating and Sewer Capital Reserve and connection fees) and \$13,869 in expenses (MA books, General Services, Legal Services, and HM Estates Design/Permitting), for a positive variance of \$946. As of November 30, 2021, the fund balance was \$19,617.

2. Westtown Way – Dave explained how the escrow account works for payments for this project. West Goshen made a withdrawal but did not notify him about it. He has requested an invoice for it.

Old Business

1. Reorganization - The rotation of officers was discussed. For 2022 it was agreed that the officers will be: Chairman - Walter; Vice Chairman - Kevin; Secretary - Phil; Treasurer - Dana; Asst. Secretary/Treasurer - Jack. This will be voted on at the January 10th meeting.

Goals

The goals were reviewed. Mike Lynch suggested adding a goal for the sewer extension project for 2022.

New Business

1. 2022 Fee Schedules –
 - a. Pennoni – Phil moved to accept the Pennoni package for the Municipal Authority with a 5.9% increase (current COLA). Kevin seconded the motion. The motion passed unanimously.
 - b. Gawthrop Greenwood – Jack moved to accept their hourly fee package which will remain the same as 2021. Walter seconded the motion. The motion passed unanimously.
 - c. Gawthrop Greenwood Solicitorship – Kevin authorized Derek Davis, Township Manager, to sign the Solicitorship for the Municipal Authority and Dana Pizarro to sign as the Client. Walter seconded the motion. The motion passed unanimously.

1 **Capacity Request** - None

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3 **Any Other Matter** - None

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5 **Correspondence**- None

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7 **Public Comment** - None

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9 **Adjournment**

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

11 The motion passed unanimously. The meeting was adjourned at 8:45 pm.

12 The next regular meeting will be held on Monday, January 10, 2022 at 7:00 pm.

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14 Respectfully submitted,

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17 Ruth Kiefer, Recording Secretary



INVOICE

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

Mark Miller
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1099545
Invoice Date : 12/29/2021
Project : EGMAU21001
Project Name : 2021 General
Services

For Services Rendered Through 12/19/2021

December Engineer's Report; preparation for and attendance at December MA meeting including review of RCSTP operator's report.

RCSTP UV Replacement - Continued scoping with vendors for Trojan and Glasco UV systems and temporary UV bypass system alternatives, reviewed Trojan's cost quote and followed-up with questions on quote and exclusions and requested breakdown of labor vs. material costs, and compiled scoping information for installation quote from contractor for Glasco system (Trojan quote included installation).

Sewer Extension Study - Emailed grant program opportunities to Township for construction funding; and evaluated septic system replacement costs from Township vs. estimated cost/property of extensions.

Billing Limits	Current	Prior	To-Date
Total Billings	1,768.25	32,602.50	34,370.75
Limit			40,000.00
Remaining			5,629.25

Labor

	Hours	Rate	Amount
Authority Engineer	7.75	132.00	1,023.00
Senior Professional	1.50	125.00	187.50
Associate Professional	5.75	97.00	557.75
Totals	15.00		1,768.25
Total Labor			1,768.25
Total this Invoice			<u><u>\$1,768.25</u></u>

MM
1-7-2022

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

West Goshen Sewer System Consultation
EGMAU21001 Invoice Summary
Invoice Date 12/29/2021

Project:	EGMAU21001		
Pennoni Job No.:	2021 General Services		
Invoice No:	1099545		
Invoice Period:	11/15/2021	to	12/19/2021
Initial Authorization:	\$ 30,000.00	Date:	12/29/2021
Contract Amount:	\$ 40,000.00		
Previously Invoiced:	\$ 32,602.50		
Current Invoice:	\$ 1,768.25		
Invoiced to Date (\$):	\$ 34,370.75		
Invoiced to Date (%):			
Remaining Budget (\$):	\$ 5,629.25		
Remaining Budget (%):	14%		

Budget by Phase:

Phase Name:	2021 General Services		
Phase Budget:	\$ 40,000.00		
Previously Invoiced:	\$ 32,602.50		
Current Invoice:	\$ 1,768.25		
Invoiced to Date (\$):	\$ 34,370.75		
Invoiced to Date (%):			
Remaining Budget (\$):			
Remaining Budget (%):			

Comments: December Engineer's Report; preparation for and attendance at December MA meeting including review of RCSTP operator's report.

RCSTP UV Replacement - Continued scoping with vendors for Trojan and Glasco UV systems and temporary UV bypass system alternatives, reviewed Trojan's cost quote and followed-up with questions on quote and exclusions and requested breakdown of labor vs. material costs, and compiled scoping information for installation quote from contractor for Glasco system (Trojan quote included installation).

Sewer Extension Study - Emailed grant program opportunities to Township for construction funding; and evaluated septic system replacement costs from Township vs. estimated cost/property of extensions.



INVOICE

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

Mark Miller
 East Goshen Municipal Authority
 1580 Paoli Pike
 West Chester, PA 19380-6199

Invoice No : 1099546
 Invoice Date : 12/29/2021
 Project : EGMAU21004
 Project Name : HM Estates Sewer
 Design & Permitting

For Services Rendered Through 12/19/2021

Phase 04: Continued preparation of specifications.

Phase 07: Performed on-site observation of test pits and performed dynamic cone penetration tests at additional locations. Prepared test pit logs, sketches, and summary report.

Phase Code / Name	Contract Amount	Previously Billed	% Complete	Complete To Date	Amount This Invoice
01 -- Wetland & Watercourse Investigation	\$6,750.00	\$6,750.00	100.00%	\$6,750.00	\$0.00
02 -- Phase I Bog Turtle Habitat Assessment	\$6,750.00	\$6,750.00	100.00%	\$6,750.00	\$0.00
03 -- Survey	\$17,200.00	\$17,200.00	100.00%	\$17,200.00	\$0.00
04 -- Design	\$26,100.00	\$24,338.58	94.85%	\$24,756.02	\$417.44
05 -- Permitting	\$8,000.00	\$3,839.59	47.99%	\$3,839.59	\$0.00
07 -- Geotechnical	NTE \$10,000.00	\$1,513.00	49.48%	\$4,948.25	\$3,435.25
Total :	\$74,800.00	\$67,911.67		\$71,764.36	\$3,852.69

Phase: 07 -- Geotechnical

Labor

Class	Hours	Rate	Amount
Authority Engineer	0.75	132.00	99.00
Senior Professional	0.50	125.00	62.50
Associate Professional	33.75	97.00	3,273.75

Labor 3,435.25

Phase Subtotal

\$3,435.25

Amount Due This Invoice

\$3,852.69

Outstanding Invoices

Number	Date	Balance
1096205	11/24/2021	112.75
Total		112.75

MSB
 1-7-2022

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

West Goshen HM Estates Sewer Design Permitting
EGMAU21004 Invoice Summary
Invoice Date 12/29/2021

Project:	EGMAU21004		
Pennoni Job No.:	HM Estates Sewer Design & Permitting		
Invoice No:	1099546		
Invoice Period:	11/15/2021	to	12/19/2021
Initial Authorization:	\$ 64,800.00	Date:	12/29/2021
Contract Amount:	\$ 74,800.00		
Previously Invoiced:	\$ 67,911.67		
Current Invoice:	\$ 3,852.69		
Invoiced to Date (\$):	\$ 71,764.36		
Invoiced to Date (%):	96%		
Remaining Budget (\$):	\$ 3,035.64		
Remaining Budget (%):	4%		

Budget by Phase:

Phase Name:	HM Estates Sewer Design & Permitting		
Phase Budget:	\$ 74,800.00		
Previously Invoiced:	\$ 67,911.67		
Current Invoice:	\$ 3,852.69		
Invoiced to Date (\$):	\$ 71,764.36		
Invoiced to Date (%):	96%		
Remaining Budget (\$):	\$ 3,035.64		
Remaining Budget (%):	4%		

Comments: Phase 04: Continued preparation of specifications.

Phase 07: Performed on-site observation of test pits and performed dynamic cone penetration tests at additional locations. Prepared test pit logs, sketches, and summary report.



INVOICE

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

Mark Miller
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1099547
Invoice Date : 12/29/2021
Project : EGMAU21005
Project Name : RCSTP NPDES
Permit Renewal

For Services Rendered Through 12/19/2021

Finalized and submitted permit application to PADEP (prior to receipt of final sampling results); analyzed sampling results received thereafter and assembled for supplemental submission to PADEP.

Billing Limits	Current	Prior	To-Date
Total Billings	2,308.50	6,520.00	8,828.50
Limit			8,828.50

Labor

	Hours	Rate	Amount
Authority Engineer	1.00	132.00	132.00
Senior Professional	.50	125.00	62.50
Project Professional	5.50	111.00	610.50
Associate Professional	15.50	97.00	1,503.50
Totals	22.50		2,308.50
Total Labor			2,308.50
Total this Invoice			<u>\$2,308.50</u>

Outstanding Invoices

Number	Date	Balance
1096202	11/24/2021	2,827.00
Total		2,827.00

12-29-2021

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

RCSTP NPDES Permit Renewal
EGMAU21005 Invoice Summary
Invoice Date 12/29/2021

Project:	EGMAU21005		
Pennoni Job No.:	RCTP NPDES Permit Renewal		
Invoice No:	1099547		
Invoice Period:	11/1/2021	to	12/19/2021
Initial Authorization:	\$ 7,000.00	Date:	12/29/2021
Contract Amount:	\$ 8,828.50		
Previously Invoiced:	\$ 6,520.00		
Current Invoice:	\$ 2,308.50		
Invoiced to Date (\$):	\$ 8,828.50		
Invoiced to Date (%):	100%		
Remaining Budget (\$):	\$ -		
Remaining Budget (%):	0%		

Budget by Phase:

Phase Name:	RCTP NPDES Permit Renewal		
Phase Budget:	\$ 8,828.50		
Previously Invoiced:	\$ 6,520.00		
Current Invoice:	\$ 2,308.50		
Invoiced to Date (\$):	\$ 8,828.50		
Invoiced to Date (%):	100%		
Remaining Budget (\$):	\$ -		
Remaining Budget (%):	0%		

Comments: Finalized and submitted permit application to PADEP (prior to receipt of final sampling results); analyzed sampling results received thereafter and assembled for supplemental submission to PADEP.



JWC Environmental®
 2850 S. Red Hill Ave., STE 125
 Santa Ana, CA 92705
 (949) 833-3888

Invoice No: 109024
 Date: 12/8/2021
 Order No: S040134
 Page No: 1
 F.O.B: Origin

Sold To
East Goshen Township 1580 Paoli Pike West Chester, PA 19380 US - UNITED STATES US

Ship To
East Goshen Township 1580 Paoli Pike West Chester, PA 19380 US - UNITED STATES US

TIN: 45-2771126

DUNNS# 61-059-2388

CUSTOMER ID	CUSTOMER PO	PAYMENT TERMS	FREIGHT TERMS			
6005886	17403	Net 60 Days	Freight: Prepaid			
SALES REP ID	SHIPPING METHOD		SHIP DATE	INVOICE DUE DATE		
035	Old Dominion Freight Line		12/8/2021	2/6/2022		
QUANTITY						
LI#	ORD	SH	BCK	PART	DESCRIPTION	X

1 1 1 0 30005-0008

30005-0008 Renew
 11 Tooth Cam Cutters
 1:1 Stack Hardened Alloy STL
 Buna N Elastomers
 Cork & Rubber Gaskets
 Motor Type Hydraulic
 New TRQ MTR ASSY 4.3GPM 5HP Motor
 New Spool
 Paint Epoxy Green

 Grinder SN: S040134-1-1

2 1 1 0 Shipping

Shipping & Handling

SUB TOTAL: \$11,255.01
SALES TAX: \$0.00


TOTAL AMOUNT DUE: \$11,255.01

PLEASE REFERENCE THIS INVOICE
 NUMBER ON YOUR CHECK AND REMIT TO:

JWC Environmental Inc.
 2850 S. Red Hill Ave Ste 125
 Santa Ana, CA 92705

IF PAYING BY ACH OR WIRE:

ACH/WIRE INSTRUCTIONS
 BANK NAME: BANK OF AMERICA
 NEWPORT BEACH, CA.
 ABA/EFT ROUTING#: 111000012
 DOM WIRE ROUTING#: 026009593
 SWIFT ADDRESS: BOFAUS3N
 ACCOUNT #: 4451287711
 ACCOUNT NAME: **JWC Environmental Inc.**

APPROVED BY: 
 DATE PAID:
 CHECK #: 07429.1503
 CHARGED TO:

Handwritten:
 1-7-2022

Deckman Motor & Pump, Inc.
49 W. Front Street
Bridgeport, PA 19405
610-272-6944



DECKMAN
MOTOR & PUMP INC

BILL TO
East Goshen Township
1580 Paoli Pike
West Chester, PA 19380

SHIP TO
Mark-cell 610-656-2742

INVOICE 3921

DATE 12/10/2021 TERMS Net 30

SHIP VIA
Cust Pick Up

P.O. NUMBER
Hershey Mill

TECH
KBD

WORK ORDER #
30141 & 30142

ITEM	DESCRIPTION	QTY	EACH	AMOUNT
RBM	Rebuilt - Hydromatic Pump, Model No: S4NX750EC, Date: 9-99, BC: 18 Serial No: S82246, 8.00" Impeller 7.5 HP, 1750 RPM, 3 Phase, 230 Volts Clean, sandblast, machine impeller nose and make & install new wear ring, install new lower seal, o-rings, add oil and paint	1	1,130.00	1,130.00
RBM	Rebuilt - Hydromatic Pump, Model No: S4nX750JC, Date: 6-00, Serial No: S95042, 8.00" Impeller, 7.5 HP 1750 RPM, 3 Phase, 230 Volts - Clean, sandblast, make & install new wear ring, install bearings, new upper & lower seals, bearings, o-rings, seal probes, wear ring, o-rings add oil and paint	1	1,579.00	1,579.00

TOTAL DUE

\$2,709.00

APPROVED BY: MSL
DATE PAID: _____
CHECK #: _____
CHARGED TO: 07429.1503

MSL
1-7-2022

Picked Up/Received By: _____

We Appreciate Your Business

We Accept Visa, MasterCard, Discover & American Express

Deckman Motor & Pump, Inc.
49 W. Front Street
Bridgeport, PA 19405
610-272-6944



BILL TO
East Goshen Township
1580 Paoli Pike
West Chester, PA 19380

SHIP TO
Mark-cell 610-656-2742

INVOICE 3923

DATE 12/10/2021 TERMS Net 30

SHIP VIA
Cust Pick Up

P.O. NUMBER
Hunt County

TECH
KBD

WORK ORDER #
30143

ITEM	DESCRIPTION	QTY	EACH	AMOUNT
RBM	Rebuilt - Hydromatic Pump, Model No: G2FX500JC, Date: 1-00, Serial No: G86778, 9.75" Impeller, 5 HP 1750 RPM, 3 Phase, 230 Volts - Clean, sandblast, install new axial, stationary, radial cutters, o-rings and paint	1	1,870.00	1,870.00

TOTAL DUE \$1,870.00

APPROVED BY: _____
DATE PAID: _____
CHECK #: _____
CHARGED TO: 07429, 1504

Handwritten signature and date: 1-7-2022

Picked Up/Received By: _____

We Appreciate Your Business

We Accept Visa, MasterCard, Discover & American Express

Deckman Motor & Pump, Inc.
49 W. Front Street
Bridgeport, PA 19405
610-272-6944



DECKMAN
MOTOR & PUMP INC

BILL TO

East Goshen Township
1580 Paoli Pike
West Chester, PA 19380

SHIP TO

Mark-cell 610-656-2742

INVOICE 3922

DATE 12/10/2021 TERMS Net 30

SHIP VIA

Cust Pick Up

P.O. NUMBER

Barkway

TECH

KBD

WORK ORDER #

30144

ITEM	DESCRIPTION	QTY	EACH	AMOUNT
RBM	Rebuilt - Hydromatic Pump, Model No: HPGFX500JC, Date: 01-04, BC: 8 Serial No: G61396, 9.75" Impeller, 5 HP 1750 RPM, 3 Phase, 230 Volts - Clean, sandblast, install new radial cutter, lower seal, o-rings, volute add oil and paint	1	2,215.00	2,215.00

TOTAL DUE

\$2,215.00

APPROVED BY: _____
DATE PAID: _____
CHECK #: _____
CHARGED TO: 07429.1501

Handwritten signature and date: 1-7-2022

Picked Up/Received By: _____

We Appreciate Your Business

We Accept Visa, MasterCard, Discover & American Express

**Pennsylvania Municipal Authorities Association
1000 North Front Street, Suite 401
Wormleysburg, PA 17043**

**Phone: 717-737-7655 * Fax: 717-737-8431
E-mail: info@municipalauthorities.org
Website: www.municipalauthorities.org**

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380

12/15/2021
ID: 212

INVOICE

	<u>Current Bal.</u>	<u>Adjustments</u>	<u>Balance Due</u>
2022 ACTIVE MEMBERSHIP DUES	\$880.25	\$0.00	\$880.25

We would appreciate payment within 60 days. If you pay by check, please remit a copy of invoice with payment. We accept Visa, Master Card, and Discover. If you DO NOT wish to renew your membership, please send a written notice to our office. Thank you for your prompt response.

Name on Card: _____, Type of Credit Card: _____
Credit Card No.: _____, Exp.: _____
3 Digit Security Code on reverse side of credit card: _____


1-7-2022

Memo

To: Municipal Authority
From: Dave Ware
Re: MA December 2021 Financial Report
Date: January 6, 2022

In December, 2021, the Municipal Authority recorded \$7,366 in revenues (transfer from Sewer Operating and connection fees) and \$15,363 in expenses (Engineering, Legal Services, RC STP Capital, and Administrative Wages), for a negative variance of (\$7,997). As of December 31, 2021, the fund balance was \$11,620.

A complete list of 2021 full year MA revenues and expenses is attached.

MUNICIPAL AUTHORITY December 31, 2021 YTD Financials

Account #	Description	Per	Src	Trx#	Debits	Credits	Balance	Date	Check#	Name	Description	Description 2
07491-5001	Bank Fees	2110	EX	80639	34.5	0	0	44473	80639	1	REIMB.S/R FOR 9/2021 BANK FEES	Bank Fees
07491-5001	Bank Fees	2111	EX	81016	34.5	0	0	44502	81016	1	REIMB.S/R OCT.2021 BANK FEES	Bank Fees
07491-5001	Bank Fees	2112	EX	81407	34.5	0	0	44532	81407	1	NOVEMBER 2021 BANK FEES	Bank Fees

EAST GOSEEN TOWNSHIP
Other Funds
December 2021
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			2.93	2.93		0.19	0.19
DCED GRANT	07354 0400	152,980	152,980		(152,980.00)			
C.C. TAPPING FEES	07364 1100			2,060.00	2,060.00			
R.C.TAPPING FEES	07364 1110			11,508.00	11,508.00			
CONNECTION FEES - SEWER	07364 1130			3,367.76	3,367.76		1,259.56	1,259.56
MISCELLANEOUS REVENUE	07380 1000	565	565	2,664.48	2,099.48			
TRANSFER FROM SEWER OPERATING	07392 0500	279,915	279,915	90,338.41	(189,576.60)		6,106.25	6,106.25
TRANSFER FROM SEWER CAP RESERVE	07392 0900	122,000	122,000	179,592.49	57,592.49	17,284		(17,283.76)
TOTAL REVENUE		555,460	555,460	289,534.07	(265,925.94)	17,284	7,366.00	(9,917.76)
EXPENSES								
ADMINISTRATIVE WAGES	07424 1400	30,000	30,000	30,920.37	(920.37)	7,500	7,784.55	(284.55)
MISCELLANEOUS EXPENSE	07424 3000			1,693.25	(1,693.25)			
MUNIC.AUTH.-AUDITING	07424 3110	9,440	9,440	10,000.00	(560.00)			
ENGINEERING SERVICES	07424 3130	60,900	60,900	55,388.56	5,511.44	8,231	5,146.25	3,084.64
LEGAL SERVICES	07424 3140	8,120	8,120	9,193.82	(1,073.82)	2,373	960.00	1,413.10
CAP.REPLACEMENT R.C.	07424 7490			(10,984.77)	10,984.77			
RELINING	07426 3001	130,000	130,000		129,999.99			
BARKWAY PUMP STATION CAPITAL	07429 1501			5,117.00	(5,117.00)			
ASHERIDGE PUMP STATION CAPITAL	07429 1502			30,324.00	(30,324.00)			
HERSHEYS MILL PUMP STATION CAPITAL	07429 1503			76,692.71	(76,692.71)		112.75	(112.75)
HUNT CO PUMP STATION CAPITAL	07429 1504	87,000	87,000	8,277.00	78,723.00			
RCSTP CAPITAL	07429 1505	230,000	230,000	67,250.98	162,749.01	71,645	1,325.00	70,320.06
Bank Fees	07491 5001			414.00	(414.00)		34.50	(34.50)
TOTAL EXPENSES		555,460	555,460	284,286.92	271,173.06	89,749	15,363.05	74,386.00
NET RESULT FROM OPERATIONS			0	5,247.15	5,247.12	(72,465)	(7,997.05)	64,468.24

Memo

To: Municipal Authority
From: Dave Ware
Re: MA 2022 Proposed Budget
Date: January 6, 2021

Included in the agenda is the Proposed 2022 Municipal Authority Budget for your review and adoption.

2022 Budget Revenue is \$764,910 and includes the following:

- \$152,980 in DCED PA Small Water Grant money for the Ridley Creek STP
- \$5,000 Tapping and Connection Fees
- \$130,000 Transfer from Sewer Operating Fund for Re-lining
- \$476,930 Transfer from Sewer Capital Reserve which includes
 - \$23,400 RCSTP Flow Meter
 - \$24,000 RC Collection Flow Meter
 - \$190,000 RC Caustic Soda Project
 - \$18,000 RC Filter Feed Pump
 - \$125,000 RC UV System (this was the original estimate, if it is \$250,000 then the transfer from Sewer Capital will match the higher cost)
 - \$22,897 RC Meter/Manhole
 - \$136,284 West Goshen STP Capital expenditures
 - (\$62,651) Adjustment for net zero budget

2022 Budget Expenses are \$764,910 and include pipe re-lining, administrative and engineering costs, and the RC STP Capital purchases listed above.

Mr. Chairman, I recommend making a motion to adopt the 2022 Municipal Authority Budget as it is proposed.

Account Title	Acct #	2018 Actual	2019 Actual	2020 Actual	2021 Budget	2021 YE Projection	2022 Proposed Budget	\$ Increase	% Increase
MUNICIPAL AUTHORITY, PROPOSED 2022 BUDGET									
ESTIMATED BEGINNING FUND BALANCE					6,372	6,372	11,234		
REVENUE									
INTEREST EARNINGS	07341 1000	(145)	(170)	(213)	-	2	-	-	0.0%
INTEREST EARNED - CONSTRUCTION	07341 1020	614	-	-	-	-	-	-	
DCED GRANT	07354 0400	-	29,078	3,231	152,980	-	152,980	152,980	
C.C. TAPPING FEES	07364 1100	-	2,000	-	-	2,060	2,000	(60)	-2.9%
R.C.TAPPING FEES	07364 1110	4,000	2,000	7,148	-	11,508	2,000	(9,508)	-82.6%
CONNECTION FEES - SEWER	07364 1130	1,128	1,248	1,276	-	1,128	1,000	(128)	-11.3%
MISCELLANEOUS REVENUE (PINE ROCK)	07380 1000	565	565	564	565	2,664	-	(2,664)	-100.0%
TRANSFER FROM GENERAL ACCT	07392 0100	71	-	-	-	-	-	-	
TRANSFER FROM SEWER OPERATING	07392 0500	122,000	224,120	56,885	279,915	179,915	130,000	(49,915)	-27.7%
TRANSFER FROM SEWER CAP RESV	07392 0501	-	-	310,428	-	-	-	-	
TRANSFER FROM SEWER CAP RESERVE	07392 0900	-	39,852	-	122,000	159,385	476,930	317,545	199.2%
TOTAL REVENUE		128,232	298,693	379,320	555,460	356,662	764,910	209,450	58.7%
EXPENSES									
ADMINISTRATIVE WAGES	07424 1400	33,085	30,350	31,058	30,000	30,000	30,529	529	1.8%
MISCELLANEOUS EXPENSE	07424 3000	2,317	1,629	678	-	1,518	1,500	(18)	-1.2%
MUNIC.AUTH.-AUDITING	07424 3110	9,400	9,650	9,300	9,440	10,000	10,300	300	3.0%
ENGINEERING SERVICES	07424 3130	73,407	46,680	44,550	60,900	60,900	45,000	(15,900)	-26.1%
LEGAL SERVICES	07424 3140	4,600	5,680	6,276	8,120	8,120	8,000	(120)	-1.5%
R.C. CAPITAL-STP	07424 7440	-	15,776	-	-	-	315,000	315,000	
CAP.REPLACEMENT R.C.	07424 7490	-	-	33,730	-	-	41,400	41,400	
HERSHEY MILL STATION - ENGINEER	07426 1000	-	21,092	6,294	-	-	-	-	
TALLMADGE DRIVE	07426 3000	19,233	102,660	-	-	-	-	-	
RELINING	07426 3001	-	-	-	130,000	130,000	130,000	-	0.0%
RESERVOIR PUMP STATION - ENGINEER	07428 1000	188	-	-	-	-	-	-	
BARKWAY PUMP STATION CAPITAL	07429 1501	-	59,303	2,811	-	5,117	-	(5,117)	-100.0%
HERSHEYS MILL PUMP STATION CAPITAL	07429 1503	-	-	78,225	-	20,848	-	(20,848)	-100.0%
HUNT CO PUMP STATION CAPITAL	07429 1504	-	-	-	87,000	8,277	-	(8,277)	-100.0%
RCSTP CAPITAL	07429 1505	-	6,924	184,898	230,000	77,020	46,897	(30,123)	-39.1%
WEST GOSHEN CAPITAL	07429 6100	102,339	-	-	-	-	136,284	136,284	
M.C.-DVRFA-DEBT SERVICE	07471 1000	-	-	-	-	-	-	-	
M.A.-R.C. DEBT SERVICE	07471 1010	-	-	-	-	-	-	-	
TRANSFER TO GENERAL FUND	07492 0100	71	-	-	-	-	-	-	
TOTAL EXPENSES		244,640	299,744	397,820	555,460	351,800	764,910	413,110	117.4%
NET RESULT FROM OPERATIONS		(116,408)	(1,051)	(18,500)	-	4,862	0		
ESTIMATED ENDING FUND BALANCE					6,372	11,234	11,235		

Mark Miller

From: John Laidley <jlaidley@kappe-inc.com>
Sent: Wednesday, January 5, 2022 9:40 AM
To: Mark Miller
Cc: Bobby-Ann Laidley
Subject: Ridley Creek - Filter Feed Control Panel Upgrade.

Mark,

Per the request of Matt your operator at the plant.
We would like to offer the following upgrade to the Filter Feed Control Panel.

We will provide the capability to remotely access the Operator Interface Terminal (Touch Screen/ HMI).
The operator will be able to link in from a remote computer and have viewing and control capabilities.
This would provide the operator with quick access to monitor and change the operation remotely.

We will replace the existing Allen Bradley Touch Screen(HMI) with a New Allen Bradley Plus 7 color touch screen(HMI).

- Convert existing HMI program and migrate to new HMI
- Test new HMI with existing Allen Bradley PLC
- Connect HMI to existing SCADA Computer.
- Install Remote Access Software on existing SCADA Computer
- Test operation of remote access.

Price \$ 9,163.00

This proposal assumes that the existing SCADA computer is properly functioning and can expand to the remote access requirements.

Please feel free to contact me if you have any questions

Sincerely,

John Laidley
Kappe Associates

INTRODUCTION

The Ridley Creek Sewage Treatment Plant is a 750,000 GPD sequencing batch reactor facility (SBR). The facility has multiple PLCs throughout the plant; however, they are not networked together to allow monitoring and control of the entire plant through SCADA. There is a limited SCADA system in place that was provided with the OMNIFLOW Siemens SBR system which includes a PLC and a PC with HMI (Human Machine Interface) software.

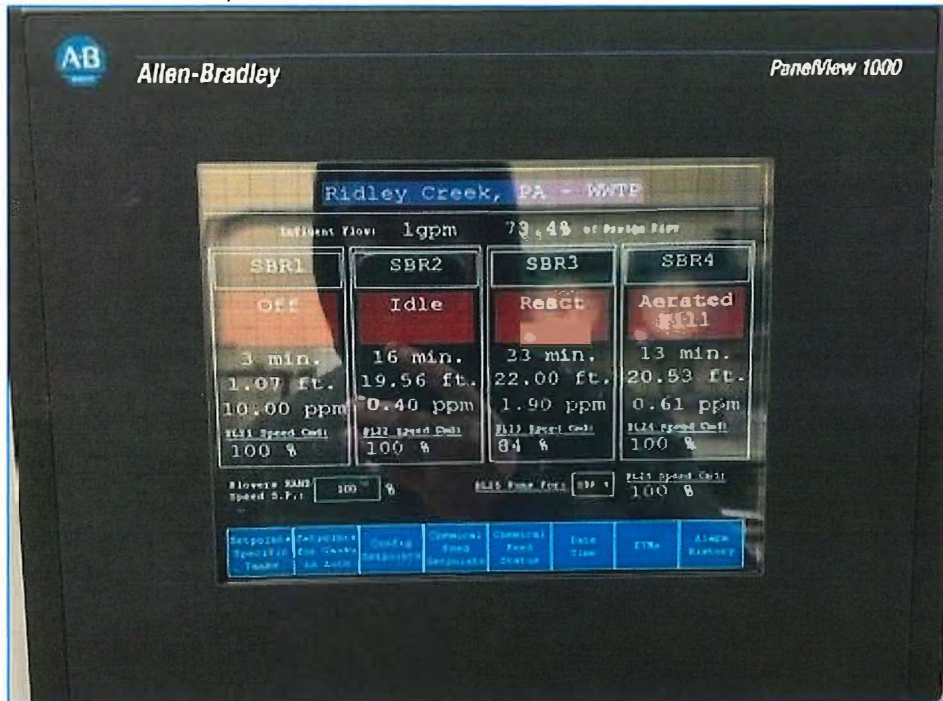


Figure 1: OMNIFLOW Siemens SBR Control Panel

A large portion of the treatment process and equipment is not accessible remotely for viewing and/or control. During October 2010, plant personnel solicited a letter proposal to access and network all of the PLCs throughout the facility and expanding the HMI in order to create a comprehensive SCADA system. The cost for the feasibility evaluation was \$3,200. It was anticipated that full implementation was anticipated in the range of \$50,000 to \$100,000, therefore there was not forward movement.

Recognizing that the facility has been in service for over 11 years, aging equipment and controls and recent few years of intense rainfall, the need for remote viewing and/or control of specific equipment has been revisited. The filter feed control panel was identified as controlling key components of the treatment process which should be viewed and/or controlled remotely. This panel controls and/or monitors the following treatment components:

1. Treated effluent post flow equalization basins,
2. Filter feed pumps,
3. Disc filters,
4. UV Modules and flow, and
5. Sludge holding and decant valves.

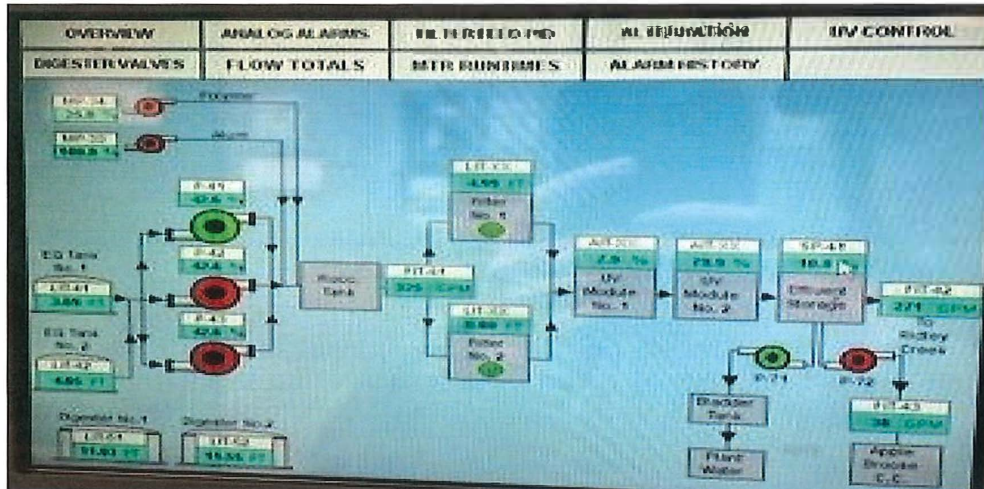


Figure 2: FILTER FEED CONTROL PANEL

As an alternative to networking the various PLCs throughout the plant and expanding the HMI in order to create a comprehensive SCADA system for the facility, upgrading and expanding the capabilities to view and control the treatment processes controlled and/or monitored by the Filter Feed panel is recommended. The objectives include:

- The ability to monitor and/or control critical plant processes
- The ability to remotely access the plant
- The ability to provide critical plant alarms from one source (instead of multiple autodialers)

SCOPE OF WORK

The following equipment and services are proposed:

Replace the existing Allen Bradley Touch Screen (HMI) with a New Allen Bradley Plus 7 color touch screen (HMI).

Convert existing HMI program and migrate to new HMI

Test new HMI with existing Allen Bradley PLC

Connect HMI to existing SCADA Computer.

Install Remote Access Software on existing SCADA Computer

Test operation of remote access.

PROPOSED COST

The lump sum proposed fee is \$ 9,163.00

This proposal assumes that the existing SCADA computer is properly functioning and can expand to the remote access requirements.



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121 Continental Drive, Suite 207
Newark, DE 19713
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MEMORANDUM

TO: Mark Miller, Public Works Director
CC: Derek Davis, Township Manager
Dave Ware, Finance Director
East Goshen Municipal Authority
FROM: Michael Ellis, PE
DATE: January 7, 2022
SUBJECT: Sewer Extension Study – Sewer vs. OLDS Life Cycle Cost Analysis

This memo outlines Life Cycle Cost Opinions for property owners for On-Lot Disposal Systems (OLDS), Gravity Sewer, and Grinder Pump (Low Pressure Sewer) systems.

SUMMARY

Pennoni's "Sewer Extension Study" report, dated November 5, 2021, estimated the overall cost to extend public sewer to ten neighborhoods ranged from \$48,000 to \$90,000 per property with an average of approximately \$54,000 per property. We note that there are various grant programs for which the extensionS would be eligible to receive financial support to reduce that cost.

We evaluated both 30-year and 50-year life cycle periods. 30 years is considered to be the higher end of an average OLDS lifespan, and 50 years is the approximate life expectancy of a gravity sewer system.

The estimated 30-year and 50-year life cycle cost opinions to the property owner follow. These costs do not take into account the initial cost of a public sewer extension.

	30-Yr Cost	50-Yr Cost
Public Sewer – Gravity Sewer	\$28,900	\$68,600
Public Sewer – Grinder Pump	\$48,800	\$112,300
Gravity Septic System ⁽¹⁾	\$35,100	\$111,600

⁽¹⁾ The Gravity Septic System life cycle cost opinions assume a complete septic system replacement in the 30-year estimate and a second replacement in the 50-year estimate. However, the feasibility of a replacement system will be dependent upon lot size and other factors, and the second replacement in particular may not be viable as a gravity septic system as a result.

OLDS BACKGROUND

The following pricing and lifespan for OLDS' is based upon discussions with Hickman Sanitation and Grey Brothers:

Replacement

- Replacement cost of a typical gravity septic system (drain field and tank) with ideal soils and available land is approximately \$20,000

- Sand mound systems are approximately \$25,000
- Advanced treatment systems are approximately \$30,000-\$35,000

Maintenance

- Maintenance inspections and pump outs of a typical gravity system generally range from \$250-\$400
- They recommend service and pump-out be done annually to extend the life of the system as much as possible. However, most municipal ordinances only require it be done at least every 3 years.
- Annual maintenance on an advanced system is around \$1,000
- For systems with pumps, the life of the pump is typically 10-15 years, and the replacement cost is typically \$1,750-\$1,900

Life Expectancy

- Well-maintained systems with minimal usage can last up to 40-50 years
- Abused systems with extremely high use can fail as quickly as 1 year (i.e. dumping paint down the drain plus high flows)
- There is no accepted average life expectancy given the number of environmental and usage factors, but they have found that the life of most systems in the East Goshen area is 20–30 years

LIFE CYCLE COST OPINIONS

The following tables present the life cycle cost opinions for the three alternatives. Pricing for the public sewer options does not include the initial costs for installation. All life cycle costs are based upon a 3% per year inflation rate.

Life Cycle Cost Opinion			
PUBLIC SEWER – GRAVITY SERVICE			
Item	2022 Cost	30-Yr Cost	50-Yr Cost
Lateral Installation	Inc. in Initial Cost	\$ -	\$ -
Connection Fees	Assume Waived	\$ -	\$ -
Initial Project Cost		\$ -	\$ -
Operation and Maintenance Cost			
Annual Sewer Fee (average \$152/quarter)	\$608		
Property Owner Annual O&M Cost	\$608	\$ 28,926	\$ 68,580
Equipment Replacement Cost			
None	N/A	\$ -	\$ -
Equipment Replacement Cost		\$ -	\$ -
Property Owner Life Cycle Cost Opinion (rounded)		\$ 28,900	\$ 68,600

Life Cycle Cost Opinion			
PUBLIC SEWER – GRINDER PUMP / LOW PRESSURE SEWER			
Item	2022 Cost	30-Yr Cost	50-Yr Cost
Grinder Pump Installation	Inc. in Initial Cost	\$ -	\$ -
Connection Fees	Assume Waived	\$ -	\$ -
Initial Project Cost		\$ -	\$ -
Operation and Maintenance Cost			
Annual Grinder Pump Electric	\$50		
Annual Grinder Pump Maintenance	\$200		
Annual Sewer Fee (average \$152/quarter)	\$608		
Property Owner Annual O&M Cost	\$858	\$ 40,820	\$ 96,780
Equipment Replacement Cost			
Grinder Pump Replacement at 15 years	\$2,000	\$ 3,116	\$ 3,116
Grinder Pump Replacement at 30 years	\$2,000	\$ 4,855	\$ 4,855
Grinder Pump Replacement at 45 years	\$2,000	N/A	\$ 7,563
Equipment Replacement Cost		\$ 7,970	\$ 15,534
Property Owner Life Cycle Cost Opinion (rounded)		\$ 48,800	\$ 112,300

Life Cycle Cost Opinion			
OLDS – GRAVITY SEPTIC SYSTEM			
Item	2022 Cost	30-Yr Cost	50-Yr Cost
OLDS Replacement in ±10 Years	\$20,000	\$ 26,878	\$ 26,878
OLDS Replacement in ±40 Years (if land remains)	\$20,000	N/A	\$ 65,241
Replacement Cost		\$ 26,878	\$ 92,119
Operation and Maintenance Cost			
Maintenance/Pumping Every 2 Years	\$350	\$ 8,203	\$ 19,448
Property Owner Annual O&M Cost		\$ 8,203	\$ 19,448
Property Owner Life Cycle Cost Opinion (rounded)		\$ 35,100	\$ 111,600

-- END OF MEMO --



TO: PMAA MEMBER AUTHORITIES
FROM: DOUGLAS E. BILHEIMER, EXECUTIVE DIRECTOR
DATE: DECEMBER 15, 2021
SUBJECT: 2022 ROSTER SHEET

We have enclosed our newly designed Roster Sheet for 2022. Please review this form and make changes as outlined below. Return the original corrected copy to the PMAA office as soon as possible.

Please Note: This print-out may contain typographical errors. Please check all information very closely and correct as required. Print corrections legibly, using red or bright ink (no pencil). PLEASE BE ACCURATE. This information is essential for printing the 2023 Directory, to assure correct addresses for mailings, and processing of membership dues.

PAGE 1

Section 1: Authority Information:

Authority facts: name, address, phone, fax, e-mail, website, type of project, type of authority.

Section 2: Revenue Information:

For **OPERATING Authorities** – Gross Revenues. Revise the gross revenue figure, and indicate the gross revenues for the authority's last completed fiscal year.

For **LEASE-BACK Authorities** – Leaseback Revenue – Revise the annual lease rental figure, and indicate the lease rental figure for the authority's last completed fiscal year.

If your authority is a COMBINATION Authority, with both Gross Revenues and Lease-Back Rentals, provide both figures in the appropriate spaces.

Section 3: Staff Information:

Revise any changes in the number of employees and board members.

Section 4: Important Information:

Please respond to these questions relating to the size of your system, the number of municipalities you serve, and if your authority has undertaken or is in the process of undertaking a stormwater project.

(over)

Section 5: Administrative Staff, Consultants, and Board Members in Listing

Administrative Staff – Provide name, title and email address for upper level management positions you wish to appear.

Officers & Board Members – Provide name, position, email address and home* address (**optional*).

Consultants – Provide name, firm, address, phone number, and email address for your Solicitor, Auditor, Engineer, Trustee, and Investment Banker, if applicable.

Make adjustments to the listing as required. Cross out members who are no longer on the board. Note changes to position on the board. Add any applicable individuals, in any of these categories (Administrative, Consultant, Officers and Board Members, with details), in the space provided (*below, above, or to the side*). A separate sheet can be attached if required.

Thank you for your assistance. If you have any questions, please contact Cindy Geesaman at PMAA, 717-737-7655.

Authority Information:

East Goshen Municipal Authority

1580 Paoli Pike
West Chester, PA 19380
Telephone: (610) 692-7171
Fax: (610) 692-8950
Email: egtadmin@eastgoshen.org
Website: www.eastgoshen.org

Type of Project: Sewer
Type of Authority: Leaseback

MEMBERSHIP ROSTER FOR 2022

Please verify that this information is correct and make any necessary changes in the space provided on the right.

Revenue Information: (Please provide gross revenue or lease rental figures for the past fiscal year)

Gross Revenues:	\$0.00
<i>(Total from service charges if an Operating Authority)</i>	
Fiscal Year Ends:	December 31
Leaseback Revenue:	\$780,251.00
<i>(If Project is a Leaseback Authority)</i>	
Bonded Debt:	\$8,596,000.00

Change:

Staff Information:

Number of Full-Time Employees:	23
Number of Part-Time Employees:	6
Number Covered by Collective Bargaining:	0
Number of Board Members:	5

Change:

Please respond to the questions below: (IMPORTANT)

Water Service (Size of System):

Number of connections: Residential _____ Commercial _____ Bulk _____ Fire _____ Industrial _____

Flow (Total average gallons per day): Residential _____ Commercial _____ Bulk _____ Fire _____ Industrial _____

Distribution Only: Distribution and Supply: (Please check one)

Sewer Service (Size of System):

Number of connections: Residential 6,501 Commercial 117 Bulk _____

Flow - (Total average gallons per day): Residential 800,000 Commercial 150,000 Bulk _____

Collection Only: Collection and Treatment: (Please check one)

Stormwater Authority:

Have you undertaken a stormwater project or in the process of undertaking a stormwater project? Yes No

If not, do you anticipate taking on a stormwater project? Yes No

Municipalities Served:

Number of municipalities served by your Authority: 5

Please verify that the information below is correct and make any changes or additions in the space provided.

Township Supervisor: Mike Lynch

1580 Paoli Pike, West Chester, PA 19380

Phone: (610) 692-7171 | Email:

Chair: Dana Pizarro,

301 East Germantown Pike, 3rd Floor, East Norriton, PA 19401

Phone: (484) 804-7254 | Email: dana.pizarro@obg.com

Vice Chair: Jack Yahraes

911 Vista Drive, West Chester, PA 19380

Phone: (610) 692-2285 | Email: jyahraes@aol.com

Assistant Secretary/Treasurer: Phil Mayer

922 Saratoga Drive, West Chester, PA 19380

Phone: (610) 692-7171 | Email:

Secretary: Mr. Walter Wujcik

1580 Paoli Pike, West Chester, PA 19380

Phone: (610) 692-7171 | Email: sdamore@eastgoshen.org

Treasurer: Kevin Cummings

1606 Williams Way, West Chester, PA 19380

Phone: (610) 563-8893 | Email: kcummings@aol.com

Solicitor: Gawthrop Greenwood, PC/Patrick McKenna, Esq.

17 East Gay Street, Suite 100, PO Box 562, West Chester, PA 19381-0562

Phone: (610) 696-8225 | Email: pmckenna@gawthrop.com

Engineer: Pennoni Associates Inc./Michael Ellis, PE

121 Continental Drive, Suite 207, Newark, DE 19713-4325

Phone: (302) 655-4451 | Email: mellis@pennoni.com

Auditor: Maillie LLP/Edward Franczkowski, CPA

600 Willowbrook Lane, Suite 624, West Chester, PA 19382

Phone: | Email:
