

EAST GOSHEN MUNICIPAL AUTHORITY

February 11, 2019

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. January 14, 2019

4. APPROVAL OF INVOICES

Pennoni Invoice #844042	\$ 2,793.45
Pennoni Invoice #844045	\$ 4,678.25
Pennoni Invoice #844046	\$ 2,161.00
Pennoni Invoice #844047	\$ 722.00
Pennoni Invoice #844048	\$ 822.50
Pennoni Invoice #844049	\$ 3,625.50

6. LIAISON REPORTS

7. FINANCIAL REPORTS

- a. January Financial Report

8. OLD BUSINESS

- a.

9. GOALS

- a. Continue to monitor the upgrades at West Goshen Sewer Plant. Jack and Phil have been attending meetings.de
- b. Continue to implement the I&I Plan – 3-8-2018 completed

- c. Submit articles for the newsletter – The fall newsletter included an article about flushable wipes; the winter newsletter was submitted with an article about the improvements at WGSTP.

10. NEW BUSINESS

- a. Please welcome the new member of the Municipal Authority – Walter Wujcik
- b. Acknowledge the letter from a former Township resident – Bill Harrison in need of a generator for a Fire Department.
- c. Sale of Generator for Beale Township Volunteer Fire Department
- d. West Chester Area COG Renewable Energy Planning Services Energy Reduction, site assessments

11. CAPACITY REQUESTS

- a. Revised planning module from 1302 Wilson Dr. with letter from DEP

12. ANY OTHER MATTER

13. CORRESPONDENCE AND REPORTS OF INTEREST

14. PUBLIC COMMENT

15. ADJOURNMENT

EAST GOSHEN MUNICIPAL AUTHORITY
EAST GOSHEN TOWNSHIP
1380 PAOLI PIKE, WEST CHESTER, PA 19380-6199

February 6, 2019

To: Municipal Authority
From: Mark Miller
Re: January 2019 Monthly Report

Monthly Flows: The average daily flow to West Goshen was 900,000 gallons per day. No problems to report.

Meters: All meters were read on a daily basis with no problems to report. We installed portable meters on the three Bow Tree lines that tie into the interceptor line. I will have meter flows next month.

C.C. Collection: We have been busy televising and looking for INI. We have also been repairing the leaks as we find them. I have reached out to Able Recon to seal up the manholes that are leaking unfortunately we are on a waiting list. We completed the televising and cleaning of the Ashbridge system repairs are being done.

We have televised 25,000 feet of pipe and cleaned 26,000 feet of pipe.

R.C. Collection: We have been repairing the INI as we find them. We did a significant repair on Tanglewood Drive. (photos attached). We still have three point repairs to do. I hope to have that completed next week. We have received word that PECO will change out the transformer at the Hershey Mill Pump Station.

R.C. Plant: The flow meter was installed earlier last week, however the cable that feeds power to the unit needs replaced which we are waiting on. The flow channel in the grit room was cleaned last week as part of our routine maintenance.

Alarms: We responded to 15 alarms for January ranging from power outages to high level alarms.

PA One Calls: We received 54 PA One calls January.

Monthly Rainfall:

4.82 inches for January


Tallmadge Dr.:

The contractor came back and opened up 280 feet of trench to repair the sags in the pipe. They ended up chasing the problem and they finally got it repaired. We televised the pipe on 2/4/2019 and found another sag. He came back on the 5th to make the repair which he corrected. Pipe Data View came in on the 6th and cleaned the line. We will restore the trench with black top as soon as we can get a plant to re-open. I met with the residents on February 4th to explain the problems that we had with the contractor and I assured them that we will re-pave the street and do a complete restoration of the islands and curbing in the spring.



Tanglewood Dr.





This is how we
found the lateral.
We were taking in a
Ton of INI



Christiana Executive Campus
121 Continental Drive, Suite 207
Newark, DE 19713
T: 302-655-4451
F: 302-654-2895

www.pennoni.com

**EAST GOSHEN MUNICIPAL AUTHORITY
ENGINEER'S REPORT
February 8, 2019**

Invoices

- Invoices with summaries are provided under separate cover.

Ridley Creek Sewage Treatment Plant (RCSTP)

- No activity since last report.

RCSTP and Pump Stations' O&M Manual

- We recommend the Manual be revisited to determine if updates are needed and/or if new information has become available to incorporate now that it has been in place for over one year.

Barkway Pump Station Grinder

- Revisions to the design plans in order to incorporate an external Muffin Monster unit in a prefabricated manhole have been completed. The plans have been submitted to the Township for review. The lead time for the equipment is about 4 months.

Ashbridge Pump Station Force Main

- Test pits will be performed to identify backfill conditions along Manley Road with one test pit on Edith Lane, as recommended by the Municipal Authority, when weather permits. *No update since our last report.*

Tallmadge Drive Sewer Main Replacement

- The contractor completed work on December 19, 2018. However, major and minor deficiencies that required monitoring and/or repair were identified during manhole vacuum testing and post-construction pipe televising. We prepared an agreement regarding the deficiencies and required repairs that was signed by the contractor.
- A pre-construction meeting was conducted between Pennoni, Mark Miller, and the contractor on January 10 to review necessary major deficiency repairs. As per the agreement, the contractor was directed to repair the infiltration runner, approximately 30 LF of pipe with a severe sag, repair the newly installed manhole such that it passes a vacuum test, and repair the abandoned downstream drop connection pipe stub which is leaking groundwater. The contractor was also directed to repair minor deficiencies following a re-evaluation of the site conditions in mid-March, including monitoring and/or repairing two minor sags between MH R-034 and MH R-033 and one minor sag between MH R-033 and MH R-032.
- The following re-work items were completed between January 16 and February 6. The contractor had initially projected 2-3 active work days to complete the work, but it has taken 8 active work days to-date.
 1. The contractor repaired the infiltration runner approximately 6' downstream of MH R-035 (which was part of the 30 LF severe sag referenced below).

2. While repairing the 30 LF severe sag, it was determined that the sag was the result of the pipe being installed at an incorrect slope. The contractor excavated and re-sloped the pipe from MH R-035 for approximately 130 LF in order to provide an acceptable slope. A TV inspection of the pipe by the PW Department afterwards showed that the severe sag was eliminated.
 3. The replaced manhole MH-033 was re-grouted in order to eliminate air leaks. The manhole will be vacuum tested again in mid-March.
 4. During the post-rehab TV inspection by the PWD, the previously identified minor sag from between MH R-034 and MH R-033 from 235' to 260' was found to be significantly worse. The contractor excavated the pipe at this location and additional stone was placed beneath the pipe in an effort to eliminate the sag; however, additional re-sloping beyond that 15' extent may be needed to fully eliminate the sag. A follow-up TV inspection of the pipe will be performed by the PWD overnight between February 9-10 with the upstream Hershey's Mill PS turned off to determine if this repair was sufficient.
 5. The abandoned drop connection pipe in MH R-032 was re-grouted; however, this action was insufficient to eliminate infiltration. The contractor has indicated he will return to site next week to complete this repair.
 6. The downstream pipe in the new manhole MH R-033 is protruding approximately 12" into the manhole and needs to be cut back by the contractor. The contractor indicated he will return to site next week to complete this repair.
 7. The recent TV inspections by the PWD also identified that the previous minor sag between MH R-034 and MH R-033 from 340' to 353' has gotten worse. This will be revisited during the overnight TV inspection this weekend. If the sag has increased, it will need to be repaired.
- The following items still need to be monitored or repaired following the mid-March re-evaluation:
 8. All three minor sags will be re-evaluated to determine if the sags have increased and repairs are necessary.
 9. The new manhole MH R-033 needs to be vacuum tested.
 10. The contractor must re-televiser the full extent of the work at his own expense to confirm no deficiencies remain in the pipe.
 - The plan is that any additional re-work that may be required in the mid-March re-evaluation would be completed by early April so that the PWD can re-pave the road by the end of April, weather permitting.
 - The contractor submitted two invoices for consideration at the January MA meeting. The first invoice was for a 50% contract payment for work completed and was approved for immediate release. The second invoice was for an additional 25% contract payment to be paid immediately following acceptance of the aforementioned major deficiency repairs. That payment will not be released until Items 4-7 above are fully addressed.

I&I Support and Reporting

- We completed the semi-annual I&I report and will issue it prior to the February MA meeting.

New Connections

- We reviewed plans for two sewer connections:
 - 938A Cornwallis Drive – re-use of an existing sewer lateral for demolition of an existing house and construction of a new house.

- Ducklings Early Learning Center (1302 Wilson Drive) – new sewer lateral to tie directly into an existing Township manhole.

West Goshen Sewer System Consultation

- No activity since last report.
- A meeting has been scheduled on February 26 at 10:00 am at the WGSTP for the WGSA and HRG to provide an update to the tributary municipalities on WGSA's ongoing capital program, review any invoicing or billing questions, and discuss any operation's questions or concerns.

Hershey's Mill Pump Station

- We understand that PECO has replaced the undersized transformer with a larger transformer.
- We continued evaluation of sizing for a replacement generator, and we prepared a conceptual site exhibit to determine if the generator can be sited externally (instead of inside the control building). The evaluation has included a review of the projected future demand for the pump station, initial calculations for the potential pump size to meet the future demand, and evaluation of the existing electrical load and the potential additional load from future larger pumps.



**RCSTP Monthly Operations
Report:
February 2019**

Executive Summary

The Ridley Creek sewage treatment plant outfall 001 will achieve compliance with the permit discharge limitations for the month of January 2019. Discharge to the Applebrook irrigation lagoon remained off line during January 2019. Chemical usage utilized for total phosphorus removal, pH and total alkalinity remained consistent with previous months. The fine screen was repaired and is functioning as intended. No significant mechanical or operational issues were observed during operation of sludge dewatering equipment or SBR treatment process.

Treatment Process Operation

Table 1 illustrates the revised final effluent composite sample data reported for outfall 001 for the December 2018 DMR.

Table 1

December 2018 - Final Effluent - Outfall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD		lbs/		lbs/		lbs/		lbs/	Geo	Geo
	Average	mg/L	month	mg/L	month	mg/L	month	mg/L	month	Mean	Mean
	0.75	20	125	10	131	2.5	44	0.5	3	200	1,000
		40		42							
Sample Date											
December 4, 2018	0.523	2.0	8.7	2	8.7	0.189	0.82	0.10	0.44	1	0.0000
December 6, 2018	0.516			1	4.3						
December 11, 2018	0.451	2.8	10.5	2	7.5	0.236	0.89	0.10	0.38	1	0.0000
December 13, 2018	0.424			2	7.1						
December 18, 2018	0.491	2.0	8.2	2	8.2	0.363	1.49	0.23	0.94	1	0.0000
December 26, 2018	0.610			1	5.1						
December 27, 2018	0.545	2.0	9.1	1	4.5	1.410	6.41	0.16	0.73	1	0.0000
Average	0.509	2.2	9.1	2	6.5	0.550	2.40	0.15	0.62	1	0.0000
Minimum	0.424	2.0	8.2	1	4.3	0.189	0.82	0.10	0.38	1	0.0000
Maximum	0.610	2.8	10.5	2	8.7	1.410	6.41	0.23	0.94	1	0.0000

The treatment process performed well during January with no abnormalities. The process monitoring, and control data indicates the facility will remain within compliance of the NPDES permit.



**RCSTP Monthly Operations
Report:
February 2019**

There was no discharge to the Applebrook outfall 002 during January 2019.

The monthly average influent wastewater pollutant concentrations and loading entering the wastewater treatment facility remained within the design concentrations. There were periodic BOD₅ and TSS sample concentration atypically less than "normal" conditions. Although these samples are collected from the influent flow meter located prior to the Screening Building which excludes the internal recycle flows, debris can accumulate around the sampler suction line impacting the pollutant concentrations measured.

Table 2 presents the available pollutant data for the influent wastewater collected at the doghouse manhole during December 2018.

Table 2

December 2018 - 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											
December 4, 2018	0.614	154	788	110	563	16.9	86	21.3	109	2.6	13.3
December 11, 2018	0.534	132	675	92	471	22.2	99	25.0	111	2.8	14.3
December 18, 2018	0.563	216	1,105	146	747	22.4	105	25.2	118	3.4	17.4
December 27, 2019	0.759	132	675	136	696	30.2	191	31.0	196	3.6	18.4
Average	0.617	159	811	121	619	22.9	120	25.6	134	3.1	15.9
Minimum	0.534	132	675	92	471	16.9	86	21.3	109	2.6	13.3
Maximum	0.759	216	1,105	146	747	30.2	191	31.0	196	3.6	18.4

Continued maintenance activities of cleaning the alum static mixer injector, flushing of the alum chemical piping to the SBRs and weekly draining and cleaning of the disc filters.

The foam on the SBR surface remained consistent at approximately 90% to 100% coverage of the surface area. The foam thickness is approximately 3 to 4 inches with a light to medium brown color. The colder water temperatures within the SBRs historically contributes increasing the foam concentrations.



**RCSTP Monthly Operations
Report:
February 2019**

Sequencing batch reactors (SBRs) numbered 1, 3 and 4 are in service during December and January. 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 is total phosphorus is ongoing. Sample collection and analysis of the influent wastewater collected at the influent pump station wet well is ongoing.

Table 3 1 illustrates the available data for the final effluent composite sample data reported for outfall 001 for use with the January 2019 DMR.

There was no discharge to the Applebrook outfall 002 during January 2019.

Table 3

January 2019- Final Effluent - Outfall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	Average	20	125	10	131	2.5	44	0.5	3	200	1,000
	0.75	40		42							
Sample Date											
January 2, 2019	0.609			2	10.2						
January 3, 2019	0.574	2.6	12.4	1	4.8	0.100	0.00	0.10	0.48	1	0.0000
January 8, 2019	0.530	2.0	8.8	1	4.4	0.178	0.00	0.10	0.44	1	0.0000
January 10, 2019	0.527			2	8.8						
January 15, 2019	0.478	2.1	8.4	1	4.0	0.100	0.00	0.18	0.72	1	0.0000
January 17, 2019	0.462			1	3.9						
January 22, 2019	0.463	3.4	13.1	2	7.7	0.100	0.00	0.21	0.81	1	0.0000
January 24, 2019	0.789										
January 29, 2019	0.736										
January 31, 2019	0.557										
Average	0.573	2.5	10.7	1	6.2	0.120	#DIV/0!	0.15	0.61	1	0.0000
Minimum	0.462	2.0	8.4	1	3.9	0.100	0.00	0.10	0.44	1	0.0000
Maximum	0.789	3.4	13.1	2	10.2	0.178	0.00	0.21	0.81	1	0.0000

The final effluent outfall 001 monthly average flow to Ridley Creek was measured and recorded as 0.562 MGD. This represents approximately 74.9% of the facility's average daily design hydraulic loading of 0.750 MGD. During January, there were



**RCSTP Monthly Operations
Report:
February 2019**

four (4) daily final effluent flow measurements exceeding 0.700 MGD. Those measurement are provided below:

1/1/2019 0.770 MGD
1/20/2019 0.728 MGD
1/24/2019 0.789 MGD
1/29/2019 0.739 MGD

The influent organic loadings remain below those of the influent design loadings.

Table 4 presents the available pollutant data for the influent wastewater collected at the doghouse manhole during January 2019

Table 4

January 2019 - 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											
January 3, 2019	0.661	128	706	128	706	23.0	127	23.4	129	3.6	19.9
January 8, 2019	0.640	160	882	164	904	18.7	100	24.0	128	3.6	19.9
January 15, 2019	0.581	171	943	122	673	19.3	94	25.8	125	3.0	16.5
January 22, 2019	0.669	189	1,042	116	640	23.2	129	26.8	150	3.0	16.5
January 29, 2019	0.676										
Average	0.646	162	893	133	731	21.1	112	25.0	133	3.3	18.2
Minimum	0.581	128	706	116	640	18.7	94	23.4	125	3.0	16.5
Maximum	0.676	189	1,042	164	904	23.2	129	26.8	150	3.6	19.9

Addition of aluminum sulfate solution to the SBRs to assist with phosphorus removal continued. Soda ash assists towards maintaining SBR pH concentrations above 7.0 standard units and assists to replenish alkalinity consumed during the nitrification process and aluminum sulfate solution addition.

Significant Rainfall



**RCSTP Monthly Operations
Report:
February 2019**

During January, there were eleven (11) days when rainfall occurred. Three (3) storm events resulting in a daily precipitation amount equal to or greater than 0.50 inches measured during a 24-hour period as well as consecutive days of precipitation exceeding 0.5 inches of rainfall. Two (2) of three storms resulted in over 1.40 inches of rainfall within a 24-hour period. A total of 5.65 inches of rainfall measured during the month. These events occurred on:

January 1 st	0.90 inches
January 20 th	1.48 inches
January 24 th	1.85 inches

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

PA DEP

Provided required influent and final effluent report to Pennoni Associates for preparation of the 2018 annual Chapter 94 report.

Solids Dewatering and Disposal:

January 2019	
Gallons of sludge dewatered	328,878
Number of dumpsters	4

**Twenty (20) days of centrifuge operation*

An increase of 49,696 gallons of sludge was dewatered during January as compared to December.

Chemical Usage:

January 2019		
Chemical	Daily Average	Total Monthly
Soda Ash	300	9,000
Aluminum Sulfate solution	47.8	1,482
Polymer (centrifuge)	0.85	17.0 gallons

**Twenty (20) days of centrifuge of operation*



**RCSTP Monthly Operations
Report:
February 2019**

Flow data:

January 2019			
Flow Meter Location	Total Volume for Month, MG	Average Daily Flow, gpd	Daily Maximum Flow, gpd
Influent Wastewater to Screening Building*	Flow Meter removed for rebuild		
Influent Wastewater to SBRs	20.946	675,671	1,044,864
Internal Recycle	NA	NA	NA
Treated Effluent to Disc Filters	20.507	661,508	968,704
Final Effluent Discharge	17.422	562,000	789,000
Applebrook Golf Course	0	0	0

Influent wastewater flow measurements to the SBRs are being used for DMR and Chapter 94 reporting. These flow measurements are typically 10 to 15% above the flow from the community when the internal recycle flow volumes are removed. The January influent flow measurements into the SBR averaged 0.676 MGD, which is 90.1% of the average daily hydraulic design for the SBRs of 0.750 MGD, with all four (4) SBRs in service. The plant utilized three (3) SBRs during January and achieved compliance with all effluent discharge limitations within the NPDES permit.

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

Major Preventative Maintenance Activities

Influent Flow Meter located in the "field"

The meter remains at the factory for repair.



**RCSTP Monthly Operations
Report:
February 2019**

Screening Building

Replacement of the screening basket and brush was completed mid-January.

UV Alarm on January 15, 2019

Responded to alarm and replaced two ballasts. Placed both banks in service.

Alarm Auto dialers

Re-programmed contact personnel and telephone numbers.

Centrifuge

Rewired Auger panel so hour meter only runs when Auger is actually turning.
Cleaned jets of the auger.

SBR 2

Adjusted waste pump to properly seat pump to waste sludge.

DRAFT
EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY
MEETING MINUTES
January 14, 2019

The East Goshen Township Municipal Authority held their regular public meeting on Monday, January 14, 2019 at 7:00 pm at the East Goshen Township building. Members in attendance were: Chairman Jack Yahraes, Kevin Cummings and Dana Pizarro. Also in attendance were: Jon Altshul (Asst. Township Manager), Michael Ellis (Pennoni), Carmen Battavio (Supervisor), Patrick McKenna (Attorney), and Walter Wujcik (Conservancy Board).

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

Jack called the meeting to order at 7:00 pm and led those present in the Pledge of Allegiance. There was a moment of silence to remember our troops and first responders.
Jack asked if anyone would be recording the meeting. There was no response.

Chairman's Report

1. Jack reminded everyone that it's time to rotate the officers. For 2019 it will be:
Chairman – Kevin Cummings
Vice Chairman – Phil Mayer
Secretary – Dana Pizarro
Treasurer – Jack Yahraes
Asst. Treasurer/secretary – New member
Dana made a motion to accept these. Kevin seconded the motion. The motion passed unanimously.
2. Kevin reviewed the report he gave at the Annual ABC Planning meeting.
3. Dana attended the West Goshen meeting on January 2, 2019. The boiler contract is complete. They approved a bid for \$1.7M for equipment at the plant.

Sewer Reports

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

Monthly Flows: The average daily flow to West Goshen was 817,000 gallons per day. No problems to report.

Meters: We have been reading the meters on a daily basis. The flows are running high.

1 C.C. Collection: We have been inspecting the entire collection system. We have been pulling
2 manholes in the middle of the night to try and locate the infiltration. So far we have repaired
3 24 sewer laterals and found 3 manholes that need attention due to significant inflow. On the
4 Ashbridge system we have three laterals to excavate, which are scheduled for next week. We
5 are scheduled to install the portable flow meters on the Chester Creek system as well as the
6 R.C. Collection system.

7 R.C. Collection: We have three point repairs to do in Hershey's Mill Estates. We also have
8 to dig two laterals that are broken and taking in significant inflow. We also have to replace
9 several castings and lids that are in bad shape. As I stated in the Chester Creek report, we will
10 be installing portable meters on this system as well. We have been working in the early
11 morning hours trying to locate inflow. So far it has paid off. We have to pull the pumps at
12 Hershey's Mill pump station for preventive maintenance.

13 Ridley Creek: The new screen has arrived and should be installed in the next two weeks. The
14 flow meter arrived yesterday and is scheduled to be installed next week weather permitting.
15 As you can see, the flows are up as well. We have been repairing laterals as we inspect them.
16 Once we get the Ashbridge system and Hershey Mill Estates tightened up then we will begin
17 the Ridley Creek system.

18 Alarms: We responded to 22 alarms for December.

19 PA One Calls: We received 40 PA One calls in December.

20 Rainfall: December rainfall total was 6.00 inches.

21 Laterals: 5 lateral repairs reported for December

22 Note: I was notified last week that Deckman Electric is closing at the end of February. I have
23 already started looking for a new shop to do our pump work.

25 **2. Pennoni Engineer's Report for December**

26 **Invoices**

- 27 • Invoices with summaries are provided under separate cover.

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

- 29 • No activity since last report.

30 **RCSTP and Pump Stations' O&M Manual**

- 31 • We recommend the Manual be revisited to determine if updates are needed and/or if new
32 information has become available to incorporate now that it has been in place for over one
33 year.

34 **Barkway Pump Station Grinder**

- 35 • We have continued redesign and vendor coordination for an external Muffin Monster in a
36 prefabricated manhole. Project specific manhole details are currently being prepared by the
37 vendor. Upon receipt of the details, the plans can be finalized and the Township can order
38 equipment. The lead time for the equipment is about 4 months.
39
40
41
42
43

1 **Ashbridge Pump Station Force Main**

- 2 • Test pits will be performed to identify backfill conditions along Manley Road with one test pit
3 on Edith Road, as recommended by the Municipal Authority, when weather permits. *No*
4 *update since our last report.*

5 **Tallmadge Drive Sewer Main Replacement**

- 6 • The contractor completed work on December 19, 2018. However, major and minor
7 deficiencies that require monitoring and/or repair were identified during manhole vacuum
8 testing and post construction pipe televising. We prepared an agreement regarding the
9 deficiencies and required repairs that was signed by the contractor (enclosed with our Pay
10 Application #1 recommendation letter).
11 • A repair pre-construction meeting was conducted between Pennoni, Mark Miller and the
12 contractor on January 10. The contractor will begin repair of the major deficiencies on
13 January 16 and is expected to take 3 days to complete. The contractor will repair
14 approximately 30 LF of pipe with a severe sag, repair the newly installed manhole such that it
15 passes a vacuum test, and repair the abandoned downstream drop connection pipe stub, which
16 is leaking groundwater. The pipes will be re-televised immediately upon completion of the
17 repair work.
18 • Minor deficiencies, including minor sags (10% or less), were also noted at two locations
19 within the replaced pipes. The contractor will re-televiser the pipes again in April to determine
20 if the sags have increased, and if so, will perform repairs at that time.
21 • The contractor has submitted two invoices for consideration at the January MA meeting. The
22 first invoice is for a 50% contract payment for work completed and the second invoice is for
23 an additional 25% contract payment to be paid immediately following acceptance of the
24 aforementioned major deficiency repairs.
25

26 **I&I Support and Reporting**

- 27 • We analyzed permanent meter data and expect to issue a semi-annual I&I report prior to the
28 January MA meeting. We also provided assistance to the Township on contractors for
29 manhole injection grouting to eliminate infiltration sources.
30

31 **New Connections**

- 32 • No activity since last report.

33 **West Goshen Sewer System Consultation**

- 34 • No activity since last report.
35

36 **Hershey's Mill Pump Station**

- 37 • We continued to evaluate electrical problems via discussions with the generator mechanic
38 and evaluation of electrical test data provided by the mechanic. We prepared a letter
39 recommending the PECO transformer be replaced with a larger transformer.
40 • We initiated evaluation of sizing for a replacement generator, and we are preparing a
41 conceptual site exhibit to determine if the generator can be sited externally (instead of inside
42 the control building).
43

1 **3. Big Fish Environmental Services** – Scott’s report showed that the Ridley Creek sewage
2 treatment plant outfall 001 achieved compliance with the permit discharge limitations for the month
3 of December 2018. Discharge to the Applebrook irrigation lagoon remained off line during
4 December 2018. Chemical usage utilized for total phosphorus removal, pH and total alkalinity
5 remained consistent with previous months. No significant mechanical or operational issues were
6 observed during operation of sludge dewatering equipment or SBR treatment process.

7
8 **Approval of Minutes**

9 The minutes of the December 10, 2018 meeting were approved as amended.

10
11 **Approval of Invoices**

12 1. Kevin moved to approve payment of the following Pennoni invoices:

13	Pennoni invoice #839068	\$ 582.21
14	Pennoni invoice #839069	\$ 2,677.00
15	Pennoni invoice #839070	\$ 301.50
16	Pennoni invoice #839085	\$ 2,187.00
17	Pennoni invoice #839095	\$ 9,082.00

18 Dana seconded the motion. The motion passed unanimously.

19 2. Jack moved to approve payment of the Gawthrop invoice #203528 for \$440.00. Kevin seconded
20 the motion. The motion passed unanimously.

21 3. Kevin moved to approve payment of the JWC Environ invoice #95288 for \$11,830.72 and
22 approved a total of \$12,208 to cover future installation charge. Dana seconded the motion. The
23 motion passed unanimously.

24
25 **Liaison Reports**

26 **Conservancy Board** – Walter mentioned that Keep East Goshen Beautiful Day is scheduled for
27 Saturday April 13.

28 **Board of Supervisors** – Carmen reported that they reorganized. Chairman is Janet Emanuel, Vice
29 Chairman is Marty Shane, and Police Carmen. They gave out a bid for sections F & G of the Paoli
30 Pike Trail.

31
32 **Financial Reports**

33 Jon Altshul provided the following written report:

34 In December, the Municipal Authority recorded \$19,985 in revenues (a \$20,000 transfer from Sewer
35 Operating minus banking fees) and \$12,635 in expenses, including \$8,382 for the Q4 overhead
36 chargeback, for a positive variance of \$7,350. As of December 31st, the fund balance was \$13,923.
37 He asked for recommendation on whether the Tallmadge Dr. and RCSTP screen replacement
38 expenses should be paid by the MA (Via reimbursement from the Township’s sewer funds) or via the
39 Sewer Operating and Sewer Capital Reserve funds. These projects were not included in the MA’s
40 2019 budget because Tallmadge was budgeted by the Township for 2018 and the screen was an
41 emergency repair. In addition, for the purposes of or financial statements, both projects will be
42 accrued back to 2018 for accounting purposes. This was discussed, and for 2019, pay any expenses
43 from MA funds. The MA will get reimbursed.

1 **Goals**

2 The following changes should be made to the MA Goals for 2019:

3 a. remove the names of attendees to the West Goshen meetings.

4 c. Remove this goal

5 add d. Continue to run the plant to DEP permit requirements.

6
7 **New Business**

8 1. 2018 General Services – Mike explained that the previously approved hourly rate budget was
9 \$23,000. As discussed at the MA December meeting, the electrical evaluation of Hershey's Mill PS
10 extended our year-to-date general consultation effort beyond that budget. The actual total effort for
11 the year is \$26,190. They are proposing that the MA increase the budget to \$26,190. Kevin moved
12 to increase general services to \$26,190. Dana seconded the motion. The motion passed
13 unanimously.

14 2. Tallmadge Drive Sewer Replacement Contract #TD-2018-2

15 Mike explained the problems they are having and sent a letter to the contractor listing the problems
16 and the contractor acknowledged receipt of the letter. The contractor has been cooperative. The
17 concerns of the MA members were discussed. Mike commented that an initial payment of 50% of
18 the Contract value would be provided for the work completed, an additional 25% of the contract
19 value would be provided immediately following the correction of major deficiencies by January 25,
20 2019 and the final 25% would be considered following repair of minor deficiencies.

21 Kevin moved to approve payment of Application #1, Invoice #106 for \$42,431.40 which includes
22 deduction of 10% for retainage. Jack seconded the motion. The motion passed unanimously.

23 Kevin moved to approve payment of Application #2, Invoice #107 for \$21,326.40 which has
24 retainage deduction and is contingent on satisfaction of the work to be signed off by Jon and the
25 engineer. Dana seconded the motion. The motion passed unanimously.

26
27
28 **Adjournment**

29 There being no further business, Jack moved to adjourn the meeting. Dana seconded the motion. The
30 meeting was adjourned at 8:00 p.m. The next regular meeting will be held on Monday, February 11,
31 2019 at 7:00 pm.

32
33 Respectfully submitted,

34
35
36 Ruth Kiefer
37 Recording Secretary



INVOICE

Newark, DE
302-655-4451 Fax: 302-654-2895

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

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199
Attention: Louis F. Smith, Twp Mgr.

Invoice # : 844042
Invoice Date : 02/08/2019
Project : EGMAU17006
Project Name : Barkway PS Muffin Monster



For Services Rendered through: 1/27/2019

Continued design and plan revisions for Muffin Monster prefabricated manhole system, and coordinated with vendor for equipment specifications and details.

Phase Code / Name	Contract Amount	Previously Billed	% Complete	Complete To Date	Amount This Invoice
**** -- Professional Services	\$16,000.00	\$10,003.50	79.98%	\$12,796.95	\$2,793.45
Total :	\$16,000.00	\$10,003.50		\$12,796.95	\$2,793.45

Amount Due This Invoice

\$2,793.45

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
EGMAU17006 Invoice Summary
Invoice Date 2/8/2019

Project: EGMAU17006
Pennoni Job No.: Barkway PS Muffin Monster
Invoice No: 844042
Invoice Period: 12/31/2018 to 1/27/2019
Initial Authorization: \$ 9,000.00 **Date:** 2/8/2019
Contract Amount: \$ 16,000.00
Previously Invoiced: \$ 10,003.50
Current Invoice: \$ 2,793.45
Invoiced to Date (\$): \$ 12,796.95
Invoiced to Date (%): 80%
Remaining Budget (\$): \$ 3,203.05
Remaining Budget (%): 20%

Budget by Phase:

Phase Name: Barkway PS Muffin Monster
Phase Budget: \$ 16,000.00
Previously Invoiced: \$ 10,003.50
Current Invoice: \$ 2,793.45
Invoiced to Date (\$): \$ 12,796.95
Invoiced to Date (%): 80%
Remaining Budget (\$): \$ 3,203.05
Remaining Budget (%): 20%

Comments: Continued design and plan revisions for Muffin Monster prefabricated manhole system, and coordinated with vendor for equipment specifications and details.



INVOICE

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302-655-4451 Fax: 302-654-2895

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Philadelphia, PA 19182-7328

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199
Attention: Louis F. Smith, Twp Mgr.

Invoice # : 844045
Invoice Date : 02/08/2019
Project : EGMAU18004
Project Name : Tallmadge Dr Sewer Constr Phase

For Services Rendered through: 1/27/2019

Phase **** - General construction phase services consisting of processing Pay Applications #1 and #2 and reviewing prevailing wage certifications.

Phase 01 - Construction phase services related to pipe and manhole deficiencies and associated re-work: finalized and issued the Notice of Deficiencies letter to the contractor, coordinated signing of letter by the contractor, conducted sewer sags and manhole re-work pre-construction meeting with the contractor and Township, re-work scheduling, and on-site re-work construction observation for 6 days between January 16-25.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor :	611.50
Expense :	0.00
Phase Total :	611.50

Phase : 01 -- Deficiency Assistance

Total Phase : 01 -- Deficiency Assistance

Labor :	4,066.75
Expense :	0.00
Phase Total :	4,066.75

Amount Due This Invoice

\$4,678.25

Fee :	9,000.00
Prior Billings :	12,348.75
Current Billings :	4,678.25
Total Billings :	17,027.00

Continued on next page...

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

...Continued from previous page

Phase : **** -- Professional Services

Labor			
<i>Class</i>	<i>Hours/ Units</i>	<i>Rate</i>	<i>Amount</i>
Authority Engineer	1.00	127.00	127.00
Authority Engineer	0.50	123.00	61.50
Associate Professional	4.50	94.00	423.00
Labor Total:	6.00		611.50

Total Phase : **** -- Professional Services

Labor : \$611.50

Expense : \$0.00

Phase : 01 -- Deficiency Assistance

Labor			
<i>Class</i>	<i>Hours/ Units</i>	<i>Rate</i>	<i>Amount</i>
Authority Engineer	5.75	127.00	730.25
Associate Professional	0.75	94.00	70.50
Sr. Engineering Technician	35.50	92.00	3,266.00
Labor Total:	42.00		4,066.75

Total Phase : 01 -- Deficiency Assistance

Labor : \$4,066.75

Expense : \$0.00

Total Project : EGMAU18004 -- Tallmadge Dr Sewer Constr Phase

Labor : \$4,678.25

Expense : \$0.00

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

East Goshen Municipal Authority
EGMAU18004 Invoice Summary
Invoice Date 2/8/2019

Project: EGMAU18004
Pennoni Job No.: Tallmadge Drive Sewer Construction Phase
Invoice No: 844045
Invoice Period: 12/31/2018 to 1/27/2019
Initial Authorization: \$ 9,000.00 **Date:** 2/8/2019
Contract Amount: \$ 9,000.00
Previously Invoiced: \$ 12,348.75
Current Invoice: \$ 4,678.25
Invoiced to Date (\$): \$ 17,027.00
Invoiced to Date (%): 189%
Remaining Budget (\$): \$ (8,027.00)
Remaining Budget (%): -89%

Budget by Phase:

Phase Name: Tallmadge Drive Sewer Construction Phase
Phase Budget: \$ 9,000.00
Previously Invoiced: \$ 12,348.75
Current Invoice: \$ 611.50
Invoiced to Date (\$): \$ 12,960.25
Invoiced to Date (%): 144%
Remaining Budget (\$): \$ (3,960.25)
Remaining Budget (%): -44%

Phase Name: Deficiency Assistance
Phase Budget: \$ -
Previously Invoiced: \$ -
Current Invoice: \$ 4,066.75
Invoiced to Date (\$): \$ 4,066.75
Invoiced to Date (%): 0%
Remaining Budget (\$): \$ (4,066.75)
Remaining Budget (%): 0%

Comments: Phase **** - General construction phase services consisting of processing Pay Applications #1 and #2 and reviewing prevailing wage certifications.
Phase 01 - Construction phase services related to pipe and manhole deficiencies and associated re-work: finalized and issued the Notice of Deficiencies letter to the contractor, coordinated signing of letter by the contractor, conducted sewer sags and manhole re-work pre-construction meeting with the contractor and Township, re-work scheduling, and on-site re-work construction observation for 6 days between January 16-25. completed processing of Pay Applications #1 and #2 and associated prevailing wage certifications, conducted sewer sags and manhole re-work pre-construction meeting with the contractor and Township, re-work scheduling, and on-site re-work construction observation for 6 days between January 16-25.



INVOICE

Newark, DE
302-655-4451 Fax: 302-654-2895

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

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199
Attention: Louis F. Smith, Twp Mgr.

Invoice # : 844046
Invoice Date : 02/08/2019
Project : EGMAU18005
Project Name : Hershey's Mill Generator Replace

For Services Rendered through: 1/27/2019

Continued analysis of replacement generator sizing and preparation of conceptual site plan for external generator including research of historical pump station files, review of 1999 and 2013 permitting and available design information, analysis of potential future pump upgrades, generator vendor coordination, and floodplain evaluation.

Phase : 01 -- Concept Design

Total Phase : 01 -- Concept Design

Labor : 2,161.00
Expense : 0.00
Phase Total : 2,161.00

Amount Due This Invoice

\$2,161.00

Fee : 5,000.00
Prior Billings : 301.50
Current Billings : 2,161.00
Total Billings : 2,462.50

Phase : 01 -- Concept Design

Labor

Class	Hours/ Units	Rate	Amount
Authority Engineer	2.25	127.00	285.75
Authority Engineer	0.25	123.00	30.75
Senior Professional	10.00	121.00	1,210.00
Associate Professional	6.75	94.00	634.50
Labor Total:	19.25		2,161.00

Total Phase : 01 -- Concept Design

Labor : \$2,161.00
Expense : \$0.00

Total Project : EGMAU18005 -- Hershey's Mill Generator Replace

Labor : \$2,161.00
Expense : \$0.00

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
EGMAU18005 Invoice Summary
Invoice Date 2/8/2019

Project: EGMAU18005
Pennoni Job No.: Hershey's Mill Generator Replacement
Invoice No: 844046
Invoice Period: 12/31/2018 to 1/27/2019
Initial Authorization: \$ 5,000.00 **Date:** 2/8/2019
Contract Amount: \$ 5,000.00
Previously Invoiced: \$ 301.50
Current Invoice: \$ 2,161.00
Invoiced to Date (\$): \$ 2,462.50
Invoiced to Date (%): 49%
Remaining Budget (\$): \$ 2,537.50
Remaining Budget (%): 51%

Budget by Phase:

Phase Name: Hershey's Mill Generator Replacement
Phase Budget: \$ 5,000.00
Previously Invoiced: \$ 301.50
Current Invoice: \$ 2,161.00
Invoiced to Date (\$): \$ 2,462.50
Invoiced to Date (%): 49%
Remaining Budget (\$): \$ 2,537.50
Remaining Budget (%): 51%

Comments: Continued analysis of replacement generator sizing and preparation of conceptual site plan for external generator including research of historical pump station files, review of 1999 and 2013 permitting and available design information, analysis of potential future pump upgrades, generator vendor coordination, and floodplain evaluation



INVOICE

Newark, DE
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Philadelphia, PA 19182-7328

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199
Attention: Louis F. Smith, Twp Mgr.

Invoice #: 844047
Invoice Date: 02/08/2019
Project: EGMAU19001
Project Name: 2019 General Services

For Services Rendered through: 1/27/2019

January Engineer's Report, prepared for and attended January Municipal Authority meeting, finalized and issued Hershey's Mill Pump Station undersized PECO transformer letter to Township, and provided list of potential manhole injection grouting contractors to the Township for I&I repair work.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor :	722.00
Expense :	0.00
Phase Total :	722.00

Amount Due This Invoice

\$722.00

Fee :	27,000.00
Prior Billings :	0.00
Current Billings :	722.00
Total Billings :	722.00

Phase : **** -- Professional Services

Labor

Class	Hours/ Units	Rate	Amount
Authority Engineer	5.50	127.00	698.50
Associate Professional	0.25	94.00	23.50
Labor Total:	5.75		722.00

Total Phase : **** -- Professional Services

Labor :	\$722.00
Expense :	\$0.00

Total Project : EGMAU19001 -- 2019 General Services

Labor :	\$722.00
Expense :	\$0.00


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
EGMAU19001 Invoice Summary
Invoice Date 2/8/2019

Project:	EGMAU19001		
Pennoni Job No.:	2019 General Services		
Invoice No:	844047		
Invoice Period:	NTP	to	1/27/2019
Initial Authorization:	\$ 27,000.00	Date:	2/8/2019
Contract Amount:	\$ 27,000.00		
Previously Invoiced:	\$ -		
Current Invoice:	\$ 722.00		
Invoiced to Date (\$):	\$ 722.00		
Invoiced to Date (%):	3%		
Remaining Budget (\$):	\$ 26,278.00		
Remaining Budget (%):	97%		

Budget by Phase:

Phase Name:	2019 General Services		
Phase Budget:	\$ 27,000.00		
Previously Invoiced:	\$ -		
Current Invoice:	\$ 722.00		
Invoiced to Date (\$):	\$ 722.00		
Invoiced to Date (%):	3%		
Remaining Budget (\$):	\$ 26,278.00		
Remaining Budget (%):	97%		

Comments: January Engineer's Report, prepared for and attended January Municipal Authority meeting, finalized and issued Hershey's Mill Pump Station undersized PECO transformer letter to Township, and provided list of potential manhole injection grouting contractors to the Township for I&I repair work.



INVOICE

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Philadelphia, PA 19182-7328

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199
Attention: Louis F. Smith, Twp Mgr.

Invoice #: 844048
Invoice Date: 02/08/2019
Project: EGMAU19002
Project Name: 2019 I&I Support and Reports

For Services Rendered through: 1/27/2019

Continued preparation of semi-annual I&I report, and assembled final draft copy for Township review.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor : 822.50
Expense : 0.00
Phase Total : 822.50

Amount Due This Invoice

\$822.50

Fee : 11,000.00
Prior Billings : 0.00
Current Billings : 822.50
Total Billings : 822.50

Phase : **** -- Professional Services

Labor

Class

Hours/
Units

Rate

Amount

Authority Engineer	0.50	127.00	63.50
Associate Professional	4.50	94.00	423.00
Engineering Technician	4.00	84.00	336.00
Labor Total:	9.00		822.50

Total Phase : **** -- Professional Services

Labor : \$822.50
Expense : \$0.00

Total Project : EGMAU19002 -- 2019 I&I Support and Reports

Labor : \$822.50
Expense : \$0.00


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
EGMAU19002 Invoice Summary
Invoice Date 2/8/2019

Project: EGMAU19001
Pennoni Job No.: 2019 I&I Support and Reports
Invoice No: 844048
Invoice Period: NTP to 1/27/2019
Initial Authorization: \$ 11,000.00 **Date:** 2/8/2019
Contract Amount: \$ 11,000.00
Previously Invoiced: \$ -
Current Invoice: \$ 822.50
Invoiced to Date (\$): \$ 822.50
Invoiced to Date (%): 7%
Remaining Budget (\$): \$ 10,177.50
Remaining Budget (%): 93%

Budget by Phase:

Phase Name: 2019 I&I Support and Reports
Phase Budget: \$ 11,000.00
Previously Invoiced: \$ -
Current Invoice: \$ 822.50
Invoiced to Date (\$): \$ 822.50
Invoiced to Date (%): 7%
Remaining Budget (\$): \$ 10,177.50
Remaining Budget (%): 93%

Comments: Continued preparation of semi-annual I&I report, and assembled final draft copy for Township review. potential manhole injection grouting contractors to the Township for I&I repair work.



INVOICE

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302-655-4451 Fax: 302-654-2895

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

East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199
Attention: Louis F. Smith, Twp Mgr.

Invoice # : 844049
Invoice Date : 02/08/2019
Project : EGMAU19003
Project Name : 2018 Chapter 94 Reports

For Services Rendered through: 1/27/2019

Preparation of Ridley Creek STP, West Goshen Service Area, and Westtown Service Area Chapter 94 Reports.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor : 3,625.50
Expense : 0.00
Phase Total : 3,625.50

Amount Due This Invoice

\$3,625.50

Fee : 11,000.00
Prior Billings : 0.00
Current Billings : 3,625.50
Total Billings : 3,625.50

Phase : **** -- Professional Services

Labor

Class

Hours/
Units

Rate

Amount

Authority Engineer	4.50	127.00	571.50
Associate Professional	13.50	94.00	1,269.00
Engineering Technician	21.25	84.00	1,785.00
Labor Total:	39.25		3,625.50

Total Phase : **** -- Professional Services

Labor : \$3,625.50
Expense : \$0.00

Total Project : EGMAU19003 -- 2018 Chapter 94 Reports

Labor : \$3,625.50
Expense : \$0.00

OK [Signature]

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

East Goshen Municipal Authority
EGMAU19003 Invoice Summary
Invoice Date 2/8/2019

Project: EGMAU19001
Pennoni Job No.: 2019 Chapter 94 Reports
Invoice No: 844049
Invoice Period: NTP to 1/27/2019
Initial Authorization: \$ 11,000.00 **Date:** 2/8/2019
Contract Amount: \$ 11,000.00
Previously Invoiced: \$ -
Current Invoice: \$ 3,625.50
Invoiced to Date (\$): \$ 3,625.50
Invoiced to Date (%): 33%
Remaining Budget (\$): \$ 7,374.50
Remaining Budget (%): 67%

Budget by Phase:

Phase Name: 2019 Chapter 94 Reports
Phase Budget: \$ 11,000.00
Previously Invoiced: \$ -
Current Invoice: \$ 3,625.50
Invoiced to Date (\$): \$ 3,625.50
Invoiced to Date (%): 33%
Remaining Budget (\$): \$ 7,374.50
Remaining Budget (%): 67%

Comments: Preparation of Ridley Creek STP, West Goshen Service Area, and Westtown Service Area Chapter 94 Reports.

Memo

To: Municipal Authority
From: Jon Altshul
Re: MA January Financial Report
Date: February 7, 2019

In January, the Municipal Authority recorded \$69,941 in revenues (including a \$12,132 transfer from sewer operating for the RCSTP screen and a \$57,400 transfer from Sewer Capital for the Tallmadge Drive repairs) and \$69,540 in expenses, for a positive variance of \$401. As of January 31st, the fund balance was \$26,324.

EAST GOSHEN TOWNSHIP
Other Funds
January 2019
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			(13.94)	(13.94)		(13.94)	(13.94)
CAPITAL RESERVE-INTEREST	07341 1010							
INTEREST EARNED - CONSTRUCTION	07341 1020							
DCED GRANT	07354 0400	32,307						
C.C. TAPPING FEES	07364 1100							
R.C. TAPPING FEES	07364 1110							
M.C. LOAN PAYMENTS	07364 1120							
CONNECTION FEES - SEWER	07364 1130			423.00	423.00		423.00	423.00
MISCELLANEOUS REVENUE	07380 1000							
TRANSFER FROM GENERAL ACCT	07392 0100							
TRANSFER FROM SEWER OPERATING	07392 0500	311,118		57,399.61	57,399.61		57,399.61	57,399.61
TRANSFER FROM SEWER CAP RESV	07392 0501	357,000						
TRANSFER-ANNUAL CAP.RESERVE	07392 0510							
GRANT REVENUE	07392 0800							
LOAN PROCEEDS - SEWER PROJECT	07392 0804							
TRANSFER FROM SEWER CAP RESERVE	07392 0900			12,132.22	12,132.22		12,132.22	12,132.22
TOTAL REVENUE		700,425		69,940.89	69,940.89		69,940.89	69,940.89
EXPENSES								
ADMINISTRATIVE WAGES	07424 1400	32,000						
R.C. LOAN ISSUANCE COSTS	07424 1500							
MISCELLANEOUS EXPENSE	07424 3000	2,262	189	8.00	181.00	189	8.00	181.00
MUNIC.AUTH.-AUDITING	07424 3110	9,663						
ENGINEERING SERVICES	07424 3130	70,000	5,833	4,864.00	969.00	5,833	4,864.00	969.00
LEGAL SERVICES	07424 3140	8,000	670	440.00	230.00	670	440.00	230.00
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			11,830.72	(11,830.72)		11,830.72	(11,830.72)
R.C. CAPITAL - COLLECTION	07424 7450							
R.C.-CAP. PROJ.-ENGINEER	07424 7451							
CAP.REPLACEMENT R.C.	07424 7490							
CAPITAL REPLACEMENT ASHBRIDGE	07424 7491							
HERSHEY MILL STATION - ENGINEER	07426 1000			301.50	(301.50)		301.50	(301.50)
HERSHEY MILL STATION - CONSTRUCTION	07426 2000							
TALLMADGE DRIVE	07426 3000			51,513.40	(51,513.40)		51,513.40	(51,513.40)

EAST GOSHEN TOWNSHIP
Other Funds
January 2019
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	130,000						
BARKWAY PUMP STATION CAPITAL	07429 1501	67,000		582.21	(582.21)		582.21	(582.21)
HERSHEYS HILL PUMP STATION CAPITAL	07429 1503	125,000						
HUNT CO PUMP STATION CAPITAL	07429 1504	87,000						
RCSTP CAPITAL	07429 1505	169,500						
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 PAYM	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 SINKING FUND	07492 0550							
TRANSFER TO AUTHORITY CAP FUND	07492 0990							
TOTAL EXPENSES		700,425	6,692	69,539.83	(62,847.83)	6,692	69,539.83	(62,847.83)
NET RESULT FROM OPERATIONS			(6,692)	401.06	7,093.06	(6,692)	401.06	7,093.06

East Goshen Township General Ledger

Report Date 02/07/19

GL Transaction Details

PAGE 1

Acct #	Per	Src Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07341-1000	INTEREST EARNINGS				0.00				
	1901 JE	66381	15.00			01/04/19	BANK FEES		REIMBURSE S/R FOR DEC.2018
		66727		1.06		02/04/19	INTEREST		BANK FEES
									INTEREST EARNED JANUARY 2019
									07100.1035
07341-1000	****	***	15.00	1.06	13.94				
07364-1130	CONNECTION FEES - SEWER				0.00				
	CR	66666		423.00		01/30/19	2629	011168	1 STOFFLET, MICHAEL
07364-1130	****	***	0.00	423.00	-423.00				
07392-0500	TRANSFER FROM SEWER OPERATING				0.00				
	JE	66495		57,399.61		01/15/19	XFER		XFER FR: SEWER TO MA 1/15/19
07392-0500	****	***	0.00	57,399.61	-57,399.61				
07392-0900	TRANSFER FROM SEWER CAP RESERVE				0.00				
		66496		12,132.22		01/15/19	XFER		XFER FROM SEWER SINKING TO MA
									1/15/19
07392-0900	****	***	0.00	12,132.22	-12,132.22				
07424-3000	MISCELLANEOUS EXPENSE				0.00				
	CD	66492	8.00			01/15/19	3147	1004	PMAA
									"PA MUNICIPAL AUTH.- PROUD HISTO
									- BRIGHT FUTURE"
07424-3000	****	***	8.00	0.00	8.00				
07424-3130	ENGINEERING SERVICES				0.00				
			4,864.00			01/15/19	3146	1052	PENNONI ASSOCIATES INC.
									SERV. THRU 12/30/18 2018 I&I SUP
07424-3130	****	***	4,864.00	0.00	4,864.00				
07424-3140	LEGAL SERVICES				0.00				
			440.00			01/15/19	3143	528	GAWTHROP GREENWOOD & HALSTED
									LEGAL SERV. 12/7-12/28/18 GEN.AU
07424-3140	****	***	440.00	0.00	440.00				

East Goshen Township General Ledger

Report Date 02/07/19

GL Transaction Details

PAGE 2

Acct #	Per	Src Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07424-7440	R.C.	CAPITAL-STP			0.00				
			11,830.72			01/15/19	3145	2128	JWC ENVIRONMENTAL SCREEN REPLACEMENT
07424-7440	****	*** ****	11,830.72	0.00	11,830.72				
07426-1000	HERSHEY	MILL STATION - ENGINEER			0.00				
			301.50			01/15/19	3146	1052	PENNONI ASSOCIATES INC. SERV. THRU 12/30/18 HERSHEY MILL GENERATOR REPLACE
07426-1000	****	*** ****	301.50	0.00	301.50				
07426-3000	TALLMADGE	DRIVE			0.00				
			42,431.40			01/15/19	3144	4095	IRON EAGLE EXCAVATING INC. EXCAVATING - TALLMADGE DR. SEWER REPLACEMENT
			9,082.00			01/15/19	3146	1052	PENNONI ASSOCIATES INC. SERV. THRU 12/30/18 TALLMADGE DR.
	**		51,513.40	0.00	***				
07426-3000	****	*** ****	51,513.40	0.00	51,513.40				
07429-1501	BARKWAY	PUMP STATION CAPITAL			0.00				
			582.21			01/15/19	3146	1052	PENNONI ASSOCIATES INC. SERVICE THRU 12/30/18 BARKWAY PS
07429-1501	****	*** ****	582.21	0.00	582.21				
Grand Total			69,554.83	69,955.89	-401.06				

Source	Debits	Credits
JE	15.00	69,532.89
CR	0.00	423.00
CD	69,539.83	0.00
	69,554.83	69,955.89

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

February 6, 2019

Mr. Walter Wujcik
622 Meadow Drive
West Chester, PA 19380

RE: Municipal Authority Appointment

Dear Walter:

I am pleased to inform you that at their meeting on Tuesday, February 5, 2019, the Board of Supervisors appointed you to fill an unexpired term on the East Goshen Township Municipal Authority. Your term will run until 2020 after which you may be reappointed to serve a 5-year term.

The Municipal Authority holds their formal meeting the second Monday of each month at 7:00 PM and may schedule workshops as needed. A meeting agenda and applicable information will be delivered to your home the weekend prior to each meeting.

As always, if we can be of any assistance, please feel free to call.

Sincerely yours,

Louis F. (Rick) Smith

Louis F. Smith, Jr.
Township Manager

cc: Municipal Authority

sed

Sue Smith

From: Mark Miller <mmiller@eastgoshen.org>
Sent: Wednesday, February 6, 2019 6:38 AM
To: 'Sue Smith'
Subject: Generator

I received a letter from Bill Harrison who used to reside in the township. He has since moved up to Juniata County where he is the Fire Chief of the Beale Township Volunteer Fire Department. They are in need of an emergency generator for their firehouse . We have the old 12.5 KW generator that we pulled out of the Hunt Country the unit was in service for 38 years. I contacted Paul Siddell who does the maintenance on our generators if the unit had any value. He stated that do to its age the unit did not really have any value and we have no use for it. I would ask that you sell the generator to the fire department for a dollar.
Thank you for considering this request.

Mark S. Miller
Director of Public Works
East Goshen Township
(610) 692-7171 x3402
mmiller@eastgoshen.org

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

February 6, 2019

To: Municipal Authority

From: Mark Miller

Re: Sale of Generator

When we refurbished the Hunt Country Pump Station we replaced the generator with the one that we pulled from the Reserve Pump Station. We salvaged the old one which is **(38 years old)**. Attached is a letter that I received from a past resident of the Township who is the current Fire Chief of the Beale Township Volunteer Fire Department in Walnut PA. He is asking if we have any old generators from our stations. I would like to ask the Authority to consider selling the generator from the Hunt Country Pump Station to the fire department for a dollar. I reached out to Paul Siddell who services our generators and asked if the unit had any value, he stated that due to its age it had no value. Thank you for considering this request.

Mark Miller

From: Beale Township Fire Company Webmaster <btfc5.webmaster@gmail.com>
Sent: Monday, February 4, 2019 12:36 PM
To: mmiller@eastgoshen.org
Subject: Emergency Generator

Hello Mark Miller!

I am writing to you on behalf of the Beale Township Fire Department, 2051 Cider Press Road, Port Royal, PA

We are currently in need of an emergency generator for our fire station. We are designated a county warming shelter, and this past week (1/30/19) the village of Walnut lost power, including our station. This incident made it very cumbersome to maintain heat and electric to the warming station (Firehouse), with small portable generators. If the township would be replacing any generators in the near future, would they consider donating one to our fire department?

Thank You!

William D. Harrison Sr.
Vice President
Beale Township Fire Department

--

Jeffrey Harrison
Webmaster
Beale Township Fire Department
2051 Cider Press Road
Port Royal, PA 17082

Sue Smith

From: Jon Altshul <jaltshul@eastgoshen.org>
Sent: Friday, February 8, 2019 10:24 AM
To: Sue Smith
Subject: FW: West Goshen Sewer Authority Intermunicipal Progress Meeting

See below. Thanks!

From: Kevin Cummings [<mailto:krcummings@aol.com>]
Sent: Friday, February 8, 2019 10:17 AM
To: Jon Altshul <jaltshul@eastgoshen.org>
Subject: Re: West Goshen Sewer Authority Intermunicipal Progress Meeting

Jon

Let's put this on the agenda for Monday's meeting.

Thanks.

Kevin Cummings
610-563-8893

On Feb 8, 2019, at 9:17 AM, Jon Altshul <jaltshul@eastgoshen.org> wrote:

Kevin:

FYI on this. I think it's appropriate for 1 or 2 MA members to join us.

Jon

From: Fox, Joshua [<mailto:jfox@hrg-inc.com>]
Sent: Thursday, February 7, 2019 9:21 PM
To: Mimi Gleason <mgleason@westwhiteland.org>; Theodore Otteni <TOtteni@westwhiteland.org>; Mike Moffa <MMoffa@westgoshen.org>; Casey LaLonde <clalonde@westgoshen.org>; Dave Woodward <dwoodward@westgoshen.org>; Bill Malin <bmaline@carrollengineering.com>; George Hook <ghook@westwhiteland.org>; Jon Altshul <jaltshul@eastgoshen.org>; Mark Gross <mgross@westtown.org>; Mark Miller <mmiller@eastgoshen.org>; Mike Ellis <mellis@pennoni.com>; Rick Smith <rsmith@eastgoshen.org>; Rob Pingar <rpingar@westtown.org>
Subject: RE: West Goshen Sewer Authority Intermunicipal Progress Meeting

Good evening,

It appears that February 26 at 10:00am works for the majority of the group.

I will send you all an Outlook invite.

Thanks again and have a great evening.

Sincerely,

Josh

From: Fox, Joshua

Sent: Thursday, February 07, 2019 7:32 AM

To: 'Mimi Gleason' <mgleason@westwhiteland.org>; 'Theodore Otteni' <TOtteni@westwhiteland.org>; 'Mike Moffa' <MMoffa@westgoshen.org>; Casey LaLonde <clalonde@westgoshen.org>; Dave Woodward <dwoodward@westgoshen.org>; 'Bill Malin' <bmaline@carrollengineering.com>; 'George Hook' <ghook@westwhiteland.org>; 'Jon Altshul' <jaltshul@eastgoshen.org>; 'Mark Gross' <mgross@westtown.org>; 'Mark Miller' <mmiller@eastgoshen.org>; 'Mike Ellis' <mellis@pennoni.com>; 'Rick Smith' <rsmith@eastgoshen.org>; 'Rob Pingar' <rpingar@westtown.org>

Subject: West Goshen Sewer Authority Intermunicipal Progress Meeting

Importance: High

Good morning,

On behalf of the West Goshen Sewer Authority, I would like to schedule a meeting to provide you with an update of the Authority's on-going Capital Program, review any invoicing or billing questions, and discuss any operations questions or concerns.

Please let me know which of the following dates and times you would be available to meet at the WWTP:

1. February 19 at 2:30PM
2. February 20 at 2:30PM
3. February 26 at 10:00AM
4. February 27 at 10:00AM
5. February 28 at 10:00AM

Thanks and I look forward to catching-up with everyone.

Sincerely,

Josh

Joshua T. Fox, P.E.

Practice Area Leader | Water & Wastewater

Herbert, Rowland & Grubic, Inc.

369 East Park Drive

Harrisburg, PA 17111

717.564.1121 (o) 717.979.1526 (c) 717.564.1158 (f)

jfox@hrg-inc.com

<image001.png>

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Rick Smith

From: Stephen Zeller <steve.zeller@ebaengineering.com>
Sent: Thursday, January 17, 2019 2:30 PM
To: Rick Smith
Cc: Stephen Zeller; Joseph Burns
Subject: RE: West Chester Area COG Renewable Energy Planning Services, WWTP services Energy Reduction
Attachments: SITE ASSESSMENTS P2E2 EBA.pdf

Mr. Rick Smith:

Good afternoon. Great day!

As I had mentioned – we are working with Jerred G. at Hershey's Mill V – WWTP on several innovative measures for sludge reduction, energy reduction.

Attached is some information on the P2E2 site visits that I can provide – no cost for the initial meeting and facility review – and then review your WWTP to see if there are any opportunities for us to assist in reducing O&M costs including energy and chemical.

If there is an interest in this and you can provide me with some dates/times – as I said – I do not prepare a proposal unless you and I agree, following my site visit – that there are opportunities that warrant the proposal and our services.

Average costs can run from about \$7000 to \$9000. Depending upon the facility size and opportunities for facilities in your GPD or MGD. Our site visit is only an initial investigation which if we pursue a project/proposal – we will do a more detailed site visit as part of our services.

We appreciated your time meeting with us. I am working on firms that may be able to fulfill your COG energy planning study RFP.

We look forward to hearing back from you.

Thank you kindly.

Stephen N. Zeller | Sr. Project Manager
Water Resources
o. 717.510-9644 | c. 717.979-0060 | steve.zeller@ebaengineering.com
1525 Oregon Pike, Suite 202 | Lancaster, PA 17601 | www.ebaengineering.com

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counts
An ENR Top 500 Design Firm
3JN2

From: Rick Smith <rsmith@eastgoshen.org>
Sent: Wednesday, December 26, 2018 4:29 PM

Jon - Mark

I MET WITH STEVE
ON 1-9-19 TO DISCUSS
WCAGOG ENERGY RFP.

HE ASKED ABOUT SEWER
PLANT

SAID I WOULD REFER TO MA.

POLLUTION PREVENTION AND ENERGY EFFICIENCY AUDITS

By Stephen N Zeller, *Certified P2E2 Site Assessor*
EBA Engineering, Inc.

Pollution Prevention and Energy Efficiency (P2E2) Site Assessment Program was instituted in Pennsylvania to help companies and organizations perform energy and pollution prevention audits for any industry with a state air, water or wastewater permit or a commercial processing facility with the same permits employing less than 100 employees.

The Program provides a tool for managers, owners and operators of these businesses to reduce operating costs at their respective facilities. Operating costs are reduced by decreasing chemical use, reducing utility bills and by optimizing operations of the facility including the water and sludge waste streams.

EBA staff have been performing energy audits for more than 10 years and most recently, has completed more than eight (8) P2/E2 Site Assessments. The clientele includes seven wastewater treatment plants and one commercial food processing industry. The average savings for the P2E2 opportunities recommended, which have been implemented by clients, is more than \$3,500 annually with a range of \$500 to \$12,000 annually. Engineering services for the studies are typically paid off in less than 1.5 years based on this average amount of savings.

Here's some background on the benefits of a P2E2 site assessment to businesses and organization.

BACKGROUND

P2E2 was provided as a means of analyzing a facilities water and or wastewater treatment processes and operations/maintenance to achieve savings in energy and or process chemicals or sludge (biomass) to reduce operating costs for the WWTP or WTP.

This method of controlling costs is to examine an existing system, evaluating and maximizing the use potential of the existing system while outlining a long-term plan for upgrade and or replacement. As a good portion of businesses and industries focus on less than two to three-year paybacks for any capital expenditure and rarely rely on borrowing for larger, much needed improvements, this article suggests a possible solution to support examination of both issues.

One method of assisting small business owners with this issue: These systems are assessed for energy usage, pollution generation (or reduction), and optimum use through the administration of a local site assessment. Incorporated in this assessment are recommendations for the most cost-effective use of a system along with a projected

outlook for repair, replacement and or upgrade based on a variety of factors.

The facility owner/manager has experienced a sometimes-alarming trend that is almost guaranteed to continue: increasing energy and chemical costs and raw material costs along with increasing energy use at the facility. As equipment and facility ages, operation and maintenance expenses increase. The increase on operation expenses often has a negative impact on production, end user costs and management decisions.

Unfortunately, in some cases, the production of the end product may suffer by reduced staff operation time or by not performing the much-needed facility improvement to the point that it is difficult to maintain high quality. Maintenance budgets are cut at the expense of both equipment performance and product quality and sometimes employee safety.

Energy costs for industries typically constitute approximately 10 to 25 percent or more of the total annual operating costs. Next to labor, energy costs currently rank as the number one issue for industries and business primarily because these are costs which can be controlled. These costs continue to escalate, largely due to increased fuel and energy costs, equipment wear, supply and delivery cost, and taxes. For example, a food processing facility will consume approximately 70% of total energy costs for process equipment and or HVAC. Depending on the technology used at an industry, process equipment, then HVAC and then lighting consume, almost in equal parts, the largest amount of energy. As energy costs are tied directly to the product cost and quality, managers and owners must continually look for ways to maintain or improve the bottom line. In addition, managers and owners must consider the ever-increasing age of the facility with production and quality and personnel performance and determine a long-range plan for expansion, equipment upgrades and replacement.

THE ASSESSMENT PROCESS

During the initial site visit, the site assessor will generally exchange information with the owner and operators about the energy using systems at the plant and discuss plant operations, physical layout, and projected outlook for future use. Information on the utility bills, blueprints, and O&M manuals will be reviewed and a thorough analysis of the treatment process, all motor-driven equipment and the control building lighting and HVAC will be performed to allow a more thorough understanding of the trends of the treatment plant's operation. Interviews with plant maintenance staff and management staff to focus the P2E2 as well as obtaining additional information is also part of the site visit.

The P2E2 report evaluates every energy-using process and provides recommendations for energy-saving opportunities for process equipment, HVAC, motors and lights which impacts the product quality and or the environment at the facility.

Where possible, the site assessor analyzes opportunities to utilize wasted or excess energy sources to supplement existing sources. In addition, the site assessor recommends cost-savings opportunities which follow standard operations and maintenance (O&M) practices for energy management to be utilized in the existing O&M plan for the plant.

The report requirements are comprehensive and include all buildings, processes and equipment for the facility. The report examines the environmental impacts for all

processes, procedures, wastes and energy uses at the facility. The report also makes recommendations and proposes solutions for each recommendation. The implementation costs presented are based on construction and lifecycle costs to calculate simple payback based on avoided or actual cost savings. Finally, each recommendation includes a financial savings estimated including the cost savings (annual average).

The site assessor can review a draft of the report with the facility operator /manager to ensure that the report meets the intent of the manager and the goals and objectives of the owner. It is important to understand that these plans can be used as long-range facility planning documents for small businesses while examining the pollution prevention and energy saving opportunities that exist at a facility.

The report objectives include giving clients decision -making information -- identifying the P2E2 opportunities as viable solutions (construction estimates and lifecycle costs) and providing simple payback periods for each opportunity.

Energy costs for most fuels have reached high's with future increases possible. Prior to the current high energy cost market, most industrial and commercial entities could list energy as one of their top three operating costs concerns. Today, energy and fuel costs are the top concern for most businesses. Finding ways to reduce energy costs, find alternatives energy sources, reduce peak loads for businesses and other cost reducing measures are critical to reducing operating costs.

The following data shows the general energy distribution for a small industrial business:

Why is P2E2 Worthwhile: Typical Overall Annual Operational Cost Distribution:

- Labor - 30-40%
- Energy- 10-25%
- Raw Material - 15%-25%
- Other - 10-45%

Why is P2E2 Worthwhile: Typical Overall Energy Distribution:

- HVAC Building s - 25%
- Diesel Fuel - 12-15%
- Gasoline- 8-15%
- Lighting Building - 28%
- Process Equipment - 32%
- Process Ventilation - 10%

Energy costs are now the number one issue for any small business regarding operating costs because these costs show the greatest potential for bottom line savings through programs such as an energy audit or site assessments such as the P2E2 site assessment.

THE RESULTS

A summary of the P2E2 opportunities which EBA staff has performed are presented below in several examples involving a food processing facility and wastewater treatment plants (WWTP) including paybacks for recommended opportunities:

Food Processing Facility, Greencastle, PA Franklin County (Produce Processing and Cold Storage) (2006)

- *Install Pump Station and Screening System - \$125,000/\$10,000 (12.5 years)
- Convert Single Phase to Three Phase for All Facility Power - \$40,000/\$6,000 (6.6 yrs.)
- Upgrade All T-12 UV Lights with T-8 UV Lights - \$28/\$22 (12 years per bulb replaced)
- LED Replacement for Exit Signs - \$25/\$21 (1.01 years)
- Reuse of Process Water for Cleanup \$20,000/\$9,600 (2 years)

WWTP, Pocono Area (2.5 MGD Schreiber System) (2006)

- VFD Installation Raw Pumps - \$190,000 installed, \$8,000/year energy savings, no payback
- Electric Bill: Review of demand charges - \$4,500/year energy savings (Immediate)*
- Eliminate Post Aeration - \$7,400/year energy savings (Immediate)*
- Utility Water System Upgrade - \$30,000 cost installed, \$3,600/year energy savings (8.25 yrs.)
- Thermostats for Heating - \$725 cost installed, \$1,277 /year energy savings (0.5 yrs.) *
- Change Disinfection System - \$231,000 cost installed, \$7,200/year chemical savings (Safety, no payback)
- Sludge Management - \$1.4 Million cost installed, \$75,000/year disposal and polymer use savings (18 years)
- * Implemented P2E2 recommendation

WWTP, Northumberland County (1.125 MGD CMAS) (2006)

- Reduce Number of Digesters Online - \$26,663/year energy savings per year (Immediate)*
- Replace Blower Motors - \$17,120 cost, \$2,140/year energy savings (8.0 yrs.)
- Insulate Press building - \$4,050 cost, \$315/year energy savings (12.8 yrs.)
- Change Mixers to Diffusers - \$75,317 cost, \$2,783/year energy savings (27 yrs.)
- Clarifier Modifications - \$15,500 cost installed, no savings no payback
- * Implemented P2E2 recommendation

WWTP, York County (0.570 MGD Trickling Filter) (2005)

- *Replace Raw Sewage Pumps - \$4,760 cost per pump installed, \$980/year energy savings (4.9 yrs.) *
- Upgrade Aerobic Digester System - \$60,000 cost installed, \$4,200/year energy savings (14.2 yrs.)
- Replace Blower Motors - \$2000 cost per motor installed, \$168 /year energy savings (11.9 yrs.)
- *Biological Larvicide's - \$3,100 cost installed (NA) (Safety)*
- *Bioaugmentation for Polymer - \$2,500 cost per year application, \$10,000 /year chemical elimination savings (0.2 yrs.) *
- *New Level Sensor - \$1,500 (NA) (Maintenance)*
- *Upgrade Chlorine System - \$4,500 cost installed, \$800/year chemical reduction savings (5.6 yrs.) *

WWTP, Hershey's Mill Village, West Chester (0.25 MGD WWTP) (2018)

- *Utilize biological additive to reduce sludge in wastewater lagoon before replacing liner for #3 cell. Results: Eight (8) months of biologicals addition at a cost of about \$3500 resulted in cost to pump sludge of two (2) days or \$20,000. Compared to previous years – five (5) days to pump sludge and \$50,000 cost. For same cell.
- Upgrade with Venturi aeration system to augment existing aeration system to eliminate low dissolved oxygen issues and sludge build-up in wastewater cells. 15 HP provides 2400 lbs./DO. Compared to existing diffusers which are 50 HP providing 900 lbs./DO.
- Applying biologicals to spray lagoon to reduce sludge. Engineering estimate is about \$0.5 million to pump out sludge in storage lagoon. Biologicals and services equate to about \$30,000 thus far to reduce sludge. Results – as of August 2018 with about 2 years in results – sludge density reduced 50% or more and levels more than 30% reduced.

* Indicates those P2E2 recommendations that were implemented by clients.

As can be seen from the information above, the site assessment report can be used for strategic planning as well as reducing operation and maintenance costs. Some clients desire to address specific engineering strategies during the study and these are worked into the overall site assessment and study.

It is critical that business hire a certified and qualified site assessor. Some site assessors are more familiar with electrical and HVAC systems, some with lighting, some with motors, some with air compressors, some with food processing, some with water treatment and some with wastewater treatment. Therefore, selection of the proper site assessor is critical to the objectives of the client for the P2E2 study. It is recommended that anyone interested in this type of study by a consultant request copies of previous reports completed to review as part of the selection process. In this manner, the client can see the type of work that the site assessor will deliver.

[Stephen Zeller](#) is a Certified P2E2 Site Assessor for EBA Engineering, Inc.

Rick Smith

From: Andrew Zerby <azerby@dlhowell.com>
Sent: Wednesday, January 30, 2019 10:07 AM
To: Rick Smith
Cc: Mark Gordon; 'Mark Miller'; Jon Altshul; Anthony Diver
Subject: RE: 1302 Wilson Dr. / LD Plan
Attachments: Revised PM Info 1-30-19.pdf

Rick,

Attached is the revised planning module info reflecting the change of sewage treatment plant. We just wanted to make sure everyone had the correct information for this approval process.

Thank you for letting us know we do not need to attend the meeting.

Kind regards,

Andrew Zerby, EIT
Civil Designer

D.L. Howell and Associates, Inc.
Civil Engineering, Environmental, Land Planning
1250 Wrights Lane
West Chester, PA 19380
PH: (610) 918-9002
Fax: (610) 918-9003
Email: Azerby@dlhowell.com
Web: <http://www.dlhowell.com>

From: Rick Smith <rsmith@eastgoshen.org>
Sent: Tuesday, January 29, 2019 3:34 PM
To: Andrew Zerby <azerby@dlhowell.com>
Cc: Mark Gordon <mgordon@eastgoshen.org>; 'Mark Miller' <mmiller@eastgoshen.org>; Jon Altshul <jaltshul@eastgoshen.org>
Subject: RE: 1302 Wilson Dr. / LD Plan

Andrew

The Municipal Authority will consider your request for capacity at their meeting on February 11, 2019. The information that is contained in submission to DEP should be sufficient.

I would note that the sewage would go to the West Goshen Sewer Treatment Plant and not Ridley. However, we have capacity available at West Goshen, so it should not be a problem.

You do not need to attend the meeting.

Rick Smith
East Goshen Township Manager
610-692-7171

From: Andrew Zerby [<mailto:azerby@dlhowell.com>]
Sent: Tuesday, January 29, 2019 3:13 PM

To: rsmith@eastgoshen.org

Subject: FW: 1302 Wilson Dr. / LD Plan

Good Afternoon Rick,

I am working on the planning module aspect of the 1302 Wilson Dr project and I was told that I needed to obtain a sewer capacity adequacy letter from EGMA. Attached is the package I sent to DEP. Are you able to review this information and provide a capacity letter? If not, could you please point me in the direction of the individual that can?

Thanks,

Andrew Zerby, EIT

Civil Designer

D.L. Howell and Associates, Inc.

Civil Engineering, Environmental, Land Planning

1250 Wrights Lane

West Chester, PA 19380

PH: (610) 918-9002

Fax: (610) 918-9003

Email: Azerby@dlhowell.com

Web: <http://www.dlhowell.com>

From: Joseph Russella <jrussella@dlhowell.com>

Sent: Tuesday, January 29, 2019 2:48 PM

To: Anthony Diver <ajdiver@tamora.com>; John Jaros <johnj@RRHC.COM>

Cc: Chris Daily <cdaily@dlhowell.com>; Alex Barlow <abarlow@dlhowell.com>; Kristie Judge <Kristie@RRHC.COM>;

Andrew Zerby <azerby@dlhowell.com>

Subject: FW: 1302 Wilson Dr. / LD Plan

FYI,

Attached are comments from Mark Gordon for the plans and some meeting dates. The next PC meeting is February 5th and EGMU February 11th. Please review and we can discuss.

Zerby, please review comment #3 and follow up. Thanks

Joseph S. Russella

Director of Operations

D.L. Howell and Associates, Inc.

Civil Engineering, Environmental, Land Planning

1250 Wrights Lane

West Chester, PA 19380

PH: (610) 918-9002

Fax: (610) 918-9003

Cell: (610)-637-4640

Email: jrussella@dlhowell.com

Web: <http://www.dlhowell.com>



**DLHowell
HowellKline**

From: Mark Gordon <mgordon@eastgoshen.org>

Sent: Tuesday, January 29, 2019 2:18 PM

To: Joseph Russella <jrussella@dlhowell.com>; Christopher Daily <cdaily@dlhowell.com>

Cc: Nathan M. Cline <ncline@pennoni.com>; Rick Smith <rsmith@eastgoshen.org>; 'Mark Miller' <mmiller@eastgoshen.org>

Subject: 1302 Wilson Dr. / LD Plan

Joe and Christopher,

Just wanted you to know that I delivered the Plans to the CCPC and Pennoni. Nate is working on his review of the application. The application will be on the PC meeting agenda for 2/5. I did spend some time looking at the plans and I have a couple of items for your attention in preparation for your presentation to the PC and the Conservancy Board.

1. It appears that the total tree count on the lot is 167 trees (6" or > in dbh). If so, this is not a wooded lot. The lot would have to have 348 or more trees over 6" in dbh in order to meet the "wooded lot" definition. That said, you still need to screen the parking area and provide landscaping in accordance with the landscape plan and design re.
2. We like the LS plan for the project and believe this would be a good opportunity to plant in the wetland areas. I'm sure there will be wetland remediation requirements from the DEP. More comments to follow from Pennoni on the LS plan.
3. Please forward a letter to the EGMA requesting sewer capacity for this development. I'll get it on their 2/11 meeting agenda. See the attached letter from Kelly at DEP, which you have most likely seen already.
4. I'm assuming that you are using the traffic analysis that was presented with the CU application, that is acceptable to the Township. The Applicant should realize the Traffic Impact fee will be \$396.25 / per PM Peak Hr. Trip, $\$396.25 \times 12 = \$4,755$. We're going to look at Wilson Drive to determine if there is any opportunity to re-stripe the lanes as discussed during the CU Process.
5. Does the applicant have any architectural renderings of the building to share with the PC? The design standards outlined in the Zoning Ordinance require architectural design plans to be submitted with the development plans; 240-27 E.(2). Also, I'm assuming that mechanicals will be on the roof of the structure. The Township Design Standards outline requirements for the rooftop mechanicals and structures. I have provided links to these sections of the Township code for your use.

<https://www.ecode360.com/7253589>

<https://www.ecode360.com/7254222>

Let me know if you have any questions.

-Mark

Mark A. Gordon, CFM

Director of Code Enforcement / Zoning Officer

East Goshen Township

1580 Paoli Pike

West Chester, PA 19380

O: 610-692-7171

F: 610-692-8950

mgordon@eastgoshen.org

www.eastgoshen.org



pennsylvania

DEPARTMENT OF ENVIRONMENTAL
PROTECTION



January 18, 2019

Mr. Andrew Zerby
D.L. Howell & Associates, Inc.
1250 Wright's Lane
West Chester, PA 19380

Re: Act 537, Sewage Facilities Planning
Ducklings Early Learning Center Project
DEP Code No. 1-15919-243-X
East Goshen Township
Chester County

Dear Mr. Zerby:

This letter is in reference to your application for Sewage Facilities Planning Modules for an early learning facility with 169 students and staff. The project is located at 1302 Wilson Drive in East Goshen Township, Chester County.

This project does not meet the definition of a subdivision under the Pennsylvania Sewage Facilities Act. Therefore, no planning modules are required to be submitted to the Department of Environmental Protection (DEP).

The project will be connected to the East Goshen Township Municipal Authority collection system and will generate 375 gallons of sewage per day to be treated at the East Goshen Township Municipal Authority Wastewater Treatment Facility.

If you have any questions or concerns, please contact me at 484.250.5182.

Sincerely,

Kelly A. Sweeney
Sewage Planning Specialist 2
Clean Water

cc: Chester County Planning Commission
Chester County Health Department
Chester County Conservation District
Tamora Building Systems, Inc.
Mr. Smith - East Goshen Township
East Goshen Township Municipal Authority
Planning Section
Re 30 (GJE19CLW)018-5



January 11, 2019

Pennsylvania Department of Environmental Protection
Southeast Regional Office
Bureau of Water Supply and Wastewater Management
2 East Main Street
Norristown, PA 19401

Attn: Ms. Kelly Sweeney, Sewage Planning Specialist II

RE: Sewage Facilities Application Mailer Waiver Request
Ducklings Early Learning Center
1302 Wilson Drive
East Goshen Township, Chester County

Dear Ms. Sweeney,

Please find enclosed the Sewage Facilities Application Mailer (waiver request) for the Ducklings Early Learning Center development located at 1302 Wilson Dr in East Goshen Township, Chester County. The project involves the construction of a 14,000 sf day care center and associated improvements. Sewage disposal will be accomplished by utilizing a proposed lateral which will gravity flow to an existing manhole located within the property. Flows will be conveyed through East Goshen Township, eventually reaching the Ridley Creek Sewer Treatment Plant for treatment and disposal. If you have any questions, or require further information, please feel free to contact me at (610) 918-9002. Thank you for your attention to this project.

Sincerely,

D.L. HOWELL & ASSOCIATES, INC.

Andrew Zerby, EIT
Civil Designer

**SEWAGE FACILITIES PLANNING MODULE
APPLICATION MAILER**



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

For more information, visit DEP's website at
www.depweb.state.pa.us, keyword: Act 537.

1. Development Information

Name of Development Ducklings Early Learning Center
 Developer Name Tamora Building Systems, Inc.
 Address 1390 Birmingham Road
West Chester, PA 19382
 Telephone # 610-364-0144
 Email ajdiver@tamora.com

2. Location of Development

- a. County Chester
 b. Municipality East Goshen Township
 c. Address or Coordinates 1302 Wilson Drive

 d. Tax Parcel # 53-3-1.2C
 e. USGS Quad Name West Chester, PA
 inches up _____ over _____
 from bottom right corner of map.
 f. Located in a High Quality/Exceptional Value watershed?
☐ Yes ☒ No

3. Type of Development Proposed (check appropriate box)

- ☐ Residential ☐ Multi-Residential
 Describe _____

☒ Commercial ☐ Institutional
 Describe Early learning facility

☐ Brownfield Site Redevelopment
☐ Other (specify) _____

4. Size

- a. # of lots 1 # of EDUs 2
 b. # of lots since 5/15/72 1
 c. Development Acreage 1.8
 d. Remaining Acreage 2.2

5. Sewage Flows 375 gpd

6. Proposed Sewage Disposal Method (check applicable boxes)

- a. ☒ Sewerage System
☒ Existing (connection only) ☐ New (extension)
☒ Public ☐ Private
☐ Pump Station(s)/Force Main ☒ Gravity
 Name of existing system being extended _____

 Interceptor Name _____
 Treatment Facility Name West Goshen Sewer Treatment Plant
 NPDES Permit # _____
 b. ☐ Construction of Treatment Facility
☐ With Stream Discharge
☐ With Land Application (not including IRSIS)
☐ Other
☐ Repair?
 Name of waterbody where point of discharge is proposed
 (if stream discharge) _____

- c. ☐ Onlot Sewage Disposal Systems
 (check appropriate box)
☐ Individual onlot system(s) (including IRSIS)
☐ Community onlot system
☐ Large-Volume onlot system
 d. ☐ Retaining tanks

Number of Holding Tanks _____

Number of Privies _____

7. ☐ Request Sewage Facilities Planning Module forms in electronic format

8. Request for Planning Exemption

- a. Protection of rare, endangered or threatened species

Check one:

- ☐ The "PNDI Project Environmental Review Receipt" is attached.
 or
☐ A completed "PNDI Project Planning & Environmental Review Form," (PNDI Form) is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning exemption will be considered incomplete and that the DEP processing of my planning exemption request will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials _____

- b.
- ☐
- Plot Plan Attached
- ☐
- Site Reports Attached

- c. Onlot Disposal Systems

- (1) I certify that the Official Plan shows this area as an onlot service area.

 (Signature of Municipal Official) Date

 Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # _____

- (2) I certify that each lot in this subdivision has been tested and is suitable for both a primary and replacement sewage disposal system.

 Signature of SEO) Date

 Name (Print) Certification #

Telephone # _____

- (3) I certify that each lot in this subdivision is at least 1 acre in size

 (Signature of Project Applicant/Agent) Date

- d. Public Sewerage Service (i.e., ownership by municipality or authority)

Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach documents.)

 (Signature of Municipal Official) Date

 Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # _____

Return Correspondence/Forms to:
D.L. Howell & Associates, Inc

1250 Wrights Lane

West Chester, PA

Attn: Andrew Zerby, EIT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office

2 East Main Street

Norristown, PA 19401

DEP USE

Components Sent

Onlot Disposal ☐

Collection and Treatment ☐

Planning Agency Review ☐

Exempt from Planning ☐

Code _____

Date _____

"Fold Here"

Project Narrative

**Ducklings Early Learning Center
East Goshen Township
Chester County
PA DEP Sewage Facilities Planning Module**

Project Narrative

1. Type of Development

The proposed project will consist of constructing a 14,000 sf daycare center and associated parking and improvements. Sewage disposal for the daycare center will be through a proposed gravity lateral connecting to an existing manhole located along the eastern portion of the lot. The 4.0 acre site is located in an R-2 Low Density Suburban Residential Zoning District in East Goshen Township, Chester County.

2. Number of Lots

There is one 4.0 acre lot proposed for development. One early learning center will comprise the 4.0 acre parcel. Design flows are based on existing water data.

3. Proposed Sewage Disposal Method

Disposal Method: Treatment and disposal will be at the West Goshen Sewer Treatment Plant.

Collection System: Sewage from the proposed dwelling will be pumped upslope, via grinder pump, and connect to the existing sewer line located within the property. Sewage will then be conveyed south towards and through the adjacent property, ultimately reaching the West Goshen Sewer Treatment Plant for treatment.

4. Project Sewage Flows

Sewage flows have been projected using East Goshen Township requirements:

East Goshen Township	275 gpd/EDU
Number of buildings	1
Existing Flow Rate from similar facility	319 gpd (avg flow from water bills)
Staff and students at existing facility	144 students and staff
Staff and students at proposed facility	169 students and staff
Scaling factor of occupancy	1.17x
Adjusted proposed flow	375 gpd (= 1.17 x 319 gpd)
EDU Flow Rate	275 gpd = 1 EDU
Total Flow	375 gpd or 2 EDUs

5. Location of Discharge or Land Application

Sewage from the proposed development will be treated at the West Goshen Sewer Treatment Plant.

6. Project Acreage

Total project acreage is 4.0 acres, all of which will be associated with the land development project.

7. Future Use of Adjacent Properties

The site is bordered by commercial properties to the east, south and west, and Wilson Drive to the north.

8. Previous Act 537 Planning

According to the current Act 537 Plan for East Goshen Township, this site is located within the Existing or Proposed Public Sewer Service Area.

9. Additional Information

Currently there is no additional information regarding this Planning Module application.

Existing Flow Data

Existing Flow Data
 Ducklings Early Learning Center
 1390 Lenape Road
 West Chester, PA 19382

Number of occupants = 144

Date	Days	Flow	GPD
Jan '18	32	3700	115.625
Feb '18	31	7600	245.16
Mar '18	29	6500	224.14
Apr '18	33	7800	236.36
May '18	28	7900	282.14
Jun '18	33	7200	218.18
July '18	30	9100	303.33
Aug '18	29	29200	1006.90
Sept '18	33	10100	306.06
Oct '18	29	8700	300.00
Nov '18	33	8900	269.70
		Average GPD	318.87



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
1101010 PWSID # PA1150185

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

Questions about your water service?... Contact us before the due date.

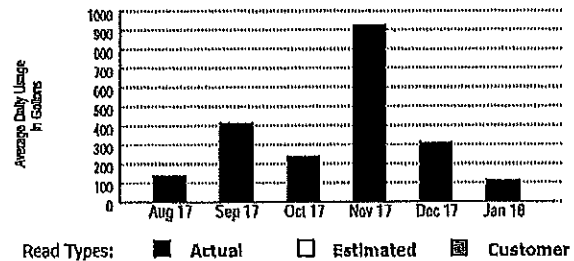
Bill Date
January 24, 2018
Credit Balance
(\$ 219.77)

Meter Data	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	16084486	1"	01/22/18 12/21/17	32	Actual Actual	119000 116100	3,700	Gallons
Average Daily Usage = 115 Gallons			Total Days: 32		Total Usage:		3,700	Gallons

Billing Detail

Amount Owed from Last Bill	\$ 453.72
Total Payments Received	765.27
Remaining Balance	311.55 Credit
Customer Charge	46.70
3,700 gallons @ \$0.01 per gallon	37.00
Total Water Charges	83.70
Late Charge	3.89
Distribution System Improvement Charge (Water)	4.19
Amount Due	\$ 219.77 Credit

Water Usage History



Message Center (see reverse side for other information)

- Effective January 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 5.00 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, which can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the Aqua Notify button at www.aquaamerica.com.

AQUA Water Bill

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

PLEASE DO NOT REMIT PAYMENT TO THE ABOVE ADDRESS

Cyc-10GE 1up-1801811

Seq-32118

DUCKLINGS EARLY LEARNING CENTER
700 OLD FORGE LN
KENNETT SQUARE PA 19348-1889

Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number - Please print on your check

002375756 1432901

Credit Balance
(\$ 219.77)

Do Not Pay

You have a credit balance on your account.

00237575614329010000000219779



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
1101010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

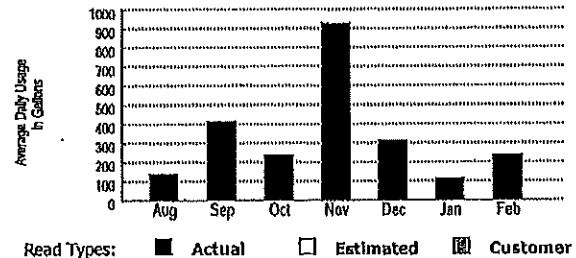
Questions about your water service?... Contact us before the due date.
Bill Date
February 26, 2018 (\$ 90.93)

Meter Data	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	16084486	1"	02/22/18	31	Actual	127400	7,600	Gallons
			01/22/18		Actual	119800		
Average Daily Usage = 245 Gallons			Total Days: 31		Total Usage:		7,600	Gallons

Billing Detail

Amount Owed from Last Bill	\$ 219.77 Credit
Total Payments Received.....	0.00
Remaining Balance	219.77 Credit
Customer Charge.....	46.70
7,600 gallons @ \$0.01 per gallon	76.00
Total Water Charges	122.70
Distribution System Improvement Charge (Water).....	6.14
Amount Due.....	\$ 90.93 Credit

Water Usage History



Message Center (see reverse side for other information)

- Effective January 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 5.00 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, which can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the Aqua Notify button at www.aquaamerica.com.

AQUA Water Bill

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

PLEASE DO NOT REMIT PAYMENT TO THE ABOVE ADDRESS

Cyc=10GE 1up=1015402

Seq=34859

DUCKLINGS EARLY LEARNING CENTER
700 OLD FORGE LN
KENNETT SQUARE PA 19348-1889

Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number - Please print on your check
002375756 1432901

Credit Balance
(\$ 90.93)

Do Not Pay

You have a credit balance on your account.

00237575614329010000000090933



Service To:

DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number

002375756 1432901

MAIN DIVISION

1101010

PWSID # PA1150155

Aqua Pennsylvania, Inc.,
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquamerica.com

Questions about your water service?... Contact us before the due date.

Bill Date **March 27, 2018** Total Amount Due **\$ 26.36** Current Charges Due Date **April 18, 2018**

Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
16084486	1"	03/23/18	29	Actual	133900	6,500	Gallons
		02/22/18		Actual	127400		

Average Daily Usage = 224 Gallons

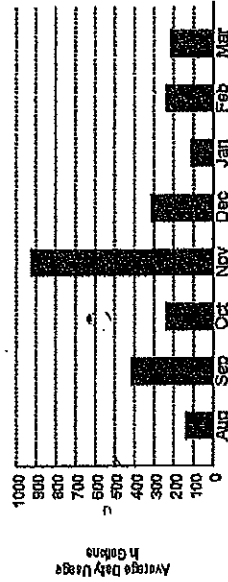
Total Usage: 6,500 Gallons

Billing Detail

Amount Owed from Last Bill
Total Payments Received
Remaining Balance
Customer Charge
6,500 gallons @ \$0.01 per gallon
Total Water Charges
Distribution System Improvement Charge (Water)
Amount Due

\$ 90.93 Credit
0.00
90.93 Credit
46.70
65.00
111.70
5.59
\$ 26.36

Water Usage History



Read Types: ☒ Actual ☐ Estimated ☒ Customer

Message Center (see reverse side for other information)

- Effective January 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 5.00 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, which can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the Aqua Notify button at www.aquamerica.com.

Keep top portion for your records.
Return this portion with your payment.



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
1101010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

Questions about your water service?... Contact us before the due date.

Bill Date
April 27, 2018

Total Amount Due
\$ 160.74

Current Charges Due Date
May 21, 2018

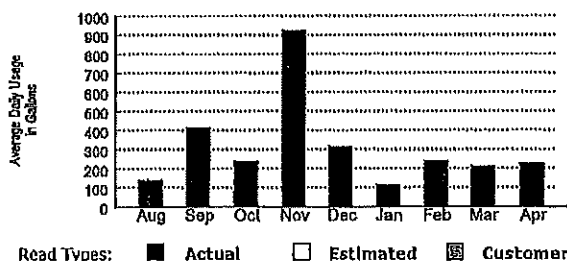
Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
16084486	1"	04/25/18	33	Actual	141700	7,800	Gallons
		03/23/18		Actual	133900		
Average Daily Usage = 236 Gallons		Total Days: 33		Total Usage:		7,800	Gallons

Billing Detail

Amount Owed from Last Bill	\$ 26.36
Total Payments Received	0.00
Remaining Balance	26.36
Customer Charge	46.70
7,800 gallons @ \$0.01 per gallon	78.00
Total Water Charges	124.70
Late Charge	0.33
Distribution System Improvement Charge (Water)	9.35
Amount Due	\$ 160.74

Water Usage History



Message Center (see reverse side for other information)

- Effective April 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 7.50 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, that can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquaamerica.com.

Keep top portion for your records.
Return this portion with your payment.

AQUA Water Bill

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

PLEASE DO NOT REMIT PAYMENT TO THE ABOVE ADDRESS

Cyo=10GE 1up=1937850

Seq=35462

DUCKLINGS EARLY LEARNING CENTER
700 OLD FORGE LN
KENNETT SQUARE PA 19348-1889



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number - Please print on your check
002375756 1432901

Amount Due Current Charges Due Date
\$ 160.74 May 21, 2018

Amount Enclosed

\$

Please make check payable to
Aqua PA
MAIL TO ADDRESS ON BACK OF THIS STUB

00237575614329010000000160741



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
1101010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.967.2782
Fax: 866.780.8292
www.aquapenn.com

Questions about your water services?... Contact us before the due date.
Bill Date **May 25, 2018** Total Amount Due **\$ 108.77** Current Charges Due Date **June 18, 2018**

Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
16084486	1"	05/23/18	28	Actual	149600	7,900	Gallons
		04/25/18		Actual	141700		

Average Daily Usage = 282 Gallons

Total Days: 28

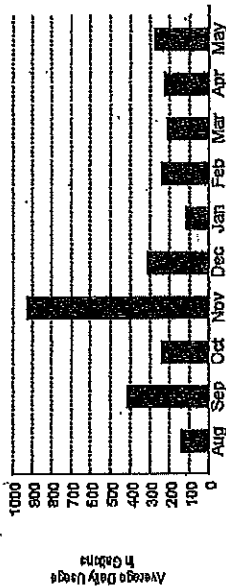
Total Usage:

Gallons

Billing Detail

Amount Owed from Last Bill \$ 160.74
Total Payments Received 187.10
Remaining Balance 26.36 Credit
Customer Charge 46.70
7,900 gallons @ \$0.01 per gallon 79.00
Total Water Charges 125.70
Distribution System Improvement Charge (Water) 9.43
Amount Due \$ 108.77

Water Usage History



Read Types: ☒ Actual ☐ Estimated ☒ Customer

Message Center (see reverse side for other information)

- Effective April 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 7.50 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, that can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquapenn.com.

Keep top portion for your records.



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
1101010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

Questions about your water service?... Contact us before the due date.

Bill Date
June 27, 2018
Total Amount Due
\$ 127.60
Current Charges Due Date
July 19, 2018

Meter Data	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	16084486	1"	06/25/18	33	Actual	156800	7,200	Gallons
			06/23/18		Actual	149600		
Average Daily Usage = 218 Gallons			Total Days:	33		Total Usage:	7,200	Gallons

Billing Detail

Amount Owed from Last Bill \$ 108.77
Total Payments Received 108.77
Remaining Balance 0.00
Customer Charge 46.70
7,200 gallons @ \$0.01 per gallon 72.00
Total Water Charges 118.70
Distribution System Improvement Charge (Water) 8.90
Amount Due \$ 127.60

Water Usage History



Read Types: ☒ Actual ☐ Estimated ☒ Customer

Message Center (see reverse side for other information)

- Effective April 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 7.50 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, that can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquaamerica.com.

Keep top portion for your records.



Service To:
DUCKINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
 1101010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
 762 W. Lancaster Avenue
 Bryn Mawr, PA 19010-3489

Toll Free: 877.967.2782
 Fax: 866.780.8292
www.aquapenn.com

Questions about your water service?... Contact us before the due date.
 Bill Date **July 27, 2018**
 Total Amount Due **\$ 148.03**
 Current Charges Due Date **August 20, 2018**

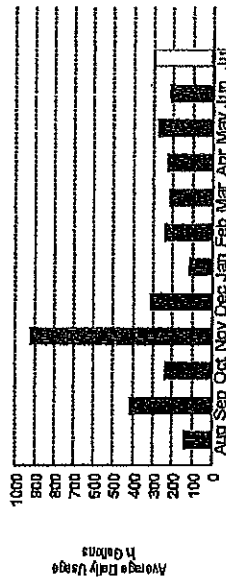
Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
16084486	1"	07/25/18	30	Estimated	165900	9,100	Gallons
		06/25/18		Actual	156800		
Average Daily Usage = 303 Gallons		Total Days:	30		Total Usage:	9,100	Gallons

Billing Detail

Amount Owed from Last Bill \$ 127.60
 Total Payments Received 127.60
 Remaining Balance 0.00
 Customer Charge 46.70
 9,100 gallons @ \$0.01 per gallon 91.00
 Total Water Charges 137.70
 Distribution System Improvement Charge (Water) 10.33
 Amount Due \$ 148.03

Water Usage History



Read Types: ☒ Actual ☐ Estimated ☒ Customer

Message Center (see reverse side for other information)

- Effective April 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 7.50 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, that can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
- This bill is based on an estimated reading. Your actual usage could be higher. Please refer to the back for estimated billing procedure.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquapenn.com.

Keep this portion for your records.



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
11D1010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

Questions about your water service?... Contact us before the due date.

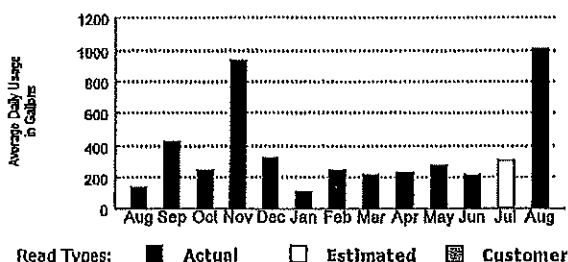
Bill Date August 27, 2018 Total Amount Due \$ 339.02 Current Charges Due Date September 18, 2018

Meter Data	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	16084406	1"	08/23/18	29	Actual	195100	29,200	Gallons
			07/25/18		Estimated	165900		
Average Daily Usage = 1,006 Gallons			Total Days: 29		Total Usage:		29,200	Gallons

Billing Detail

Amount Owed from Last Bill \$ 148.03
Total Payments Received 148.03
Remaining Balance 0.00
Customer Charge 46.70
10,000 gallons @ \$0.01 per gallon 100.00
Next 19,200 gallons @ \$0.008785 per gallon 168.67
Total Water Charges 315.37
Distribution System Improvement Charge (Water) 23.65
Amount Due \$ 339.02

Water Usage History



Message Center (see reverse side for other information)

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- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquaamerica.com.

Keep top portion for your records.
Return this portion with your payment.

AQUA Water Bill

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

PLEASE DO NOT REMIT PAYMENT TO THE ABOVE ADDRESS

Cyc=10GE 1up=1979311

Seq=38897



DUCKLINGS EARLY LEARNING CENTER
700 OLD FORGE LN
KENNETT SQUARE PA 19348-1889

Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number - Please print on your check
002375756 1432901

Amount Due Current Charges Due Date
\$ 339.02 September 18, 2018

Amount Enclosed

\$

Please make check payable to
Aqua PA
MAIL TO ADDRESS ON BACK OF THIS STUB

00237575614329010000000339024



Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number
002375756 1432901
MAIN DIVISION
1101010 PWSID # PA1150155

Aqua Pennsylvania, Inc.
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Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

Questions about your water service?... Contact us before the due date.

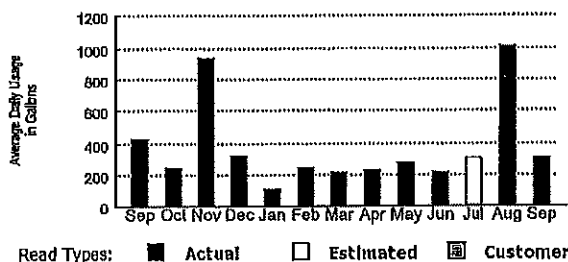
Bill Date Total Amount Due Current Charges Due Date
September 27, 2018 \$ 158.65 October 19, 2018

Meter Data	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	16084486	1"	09/25/18	33	Actual	205200	10,100	Gallons
			08/23/18		Actual	195100		
Average Daily Usage = 306 Gallons			Total Days: 33		Total Usage:		10,100	Gallons

Billing Detail

Amount Owed from Last Bill \$ 339.02
Total Payments Received 339.02
Remaining Balance 0.00
Customer Charge 46.70
10,000 gallons @ \$0.01 per gallon 100.00
Next 100 gallons @ \$0.008785 per gallon 0.88
Total Water Charges 147.58
Distribution System Improvement Charge (Water) 11.07
Amount Due \$ 158.65

Water Usage History



Message Center (see reverse side for other information)

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- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquaamerica.com.

Keep top portion for your records.
Return this portion with your payment.

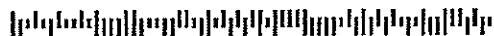
AQUA Water Bill

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

PLEASE DO NOT REMIT PAYMENT TO THE ABOVE ADDRESS

Cyc=10GE 1up=1991044

Seq=35877



DUCKLINGS EARLY LEARNING CENTER
700 OLD FORGE LN
KENNETT SQUARE PA 19348-1889

Service To:
DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number - Please print on your check
002375756 1432901

Amount Due Current Charges Due Date
\$ 158.65 October 19, 2018

Amount Enclosed

\$

Please make check payable to
Aqua PA
MAIL TO ADDRESS ON BACK OF THIS STUB

00237575614329010000000158656



Service To:

DUCKLINGS EARLY LEARNING CEN
1390 LENAPE RD
WEST CHESTER, PA 19382

Account Number

002375756 1432901
MAIN DIVISION

1101010

PWSID # PA1150155

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquaamerica.com

Questions about your water service?... Contact us before the due date.
Bill Date **October 26, 2018** Total Amount Due **\$ 142.73**
Current Charges Due Date **November 19, 2018**

Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
16084486	1"	10/24/18	29	Actual	213900	8,700	Gallons
		09/25/18		Actual	205200		
Average Daily Usage = 300 Gallons				Total Days: 29	Total Usage:	8,700	Gallons

Billing Detail

Amount Owed from Last Bill \$ 158.65
Total Payments Received 159.65
Remaining Balance 1.00 Credit
Customer Charge 46.70
8,700 gallons @ \$0.01 per gallon 87.00
Total Water Charges 133.70
Distribution System Improvement Charge (Water) 10.03
Amount Due \$ 142.73

Water Usage History



Message Center (see reverse side for other information)

- Effective April 1, 2018, the allowable water Distribution System Improvement Charge (DSIC) is 7.50 percent, which recovers a portion of the cost of distribution system improvements, including the replacement of aging water pipes and other infrastructure, that can also improve water quality. The Pennsylvania Public Utility Commission permits a maximum water DSIC of 7.50 percent.
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Keep top portion for your records.



Service To:

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WEST CHESTER, PA 19382

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762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: 877.987.2782
Fax: 866.780.8292
www.aquapenn.com

Questions about your water service? Contact us before the due date.

Bill Date: November 28, 2018
Total Amount Due: \$ 145.88
Current Charges Due Date: December 20, 2018

Account Number

002375756 1432901

MAIN DIVISION

1101010

PWSID # PA1150155

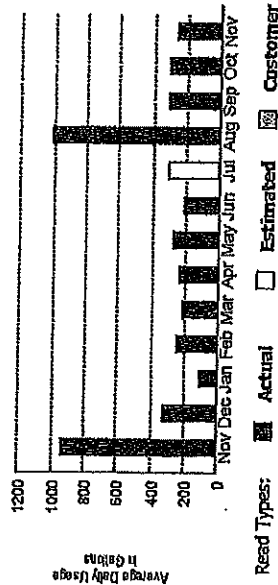
Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
16084486	1"	11/26/18	33	Actual	222800	8,900	Gallons
		10/24/18		Actual	213900		
Average Daily Usage = 269 Gallons				Total Days: 33	Total Usage:	8,900	Gallons

Billing Detail

Amount Owed from Last Bill \$ 142.73
Total Payments Received 142.73
Remaining Balance 0.00
Customer Charge 46.70
8,900 gallons @ \$0.01 per gallon 89.00
Total Water Charges 135.70
Distribution System Improvement Charge (Water) 10.18
Amount Due \$ 145.88

Water Usage History

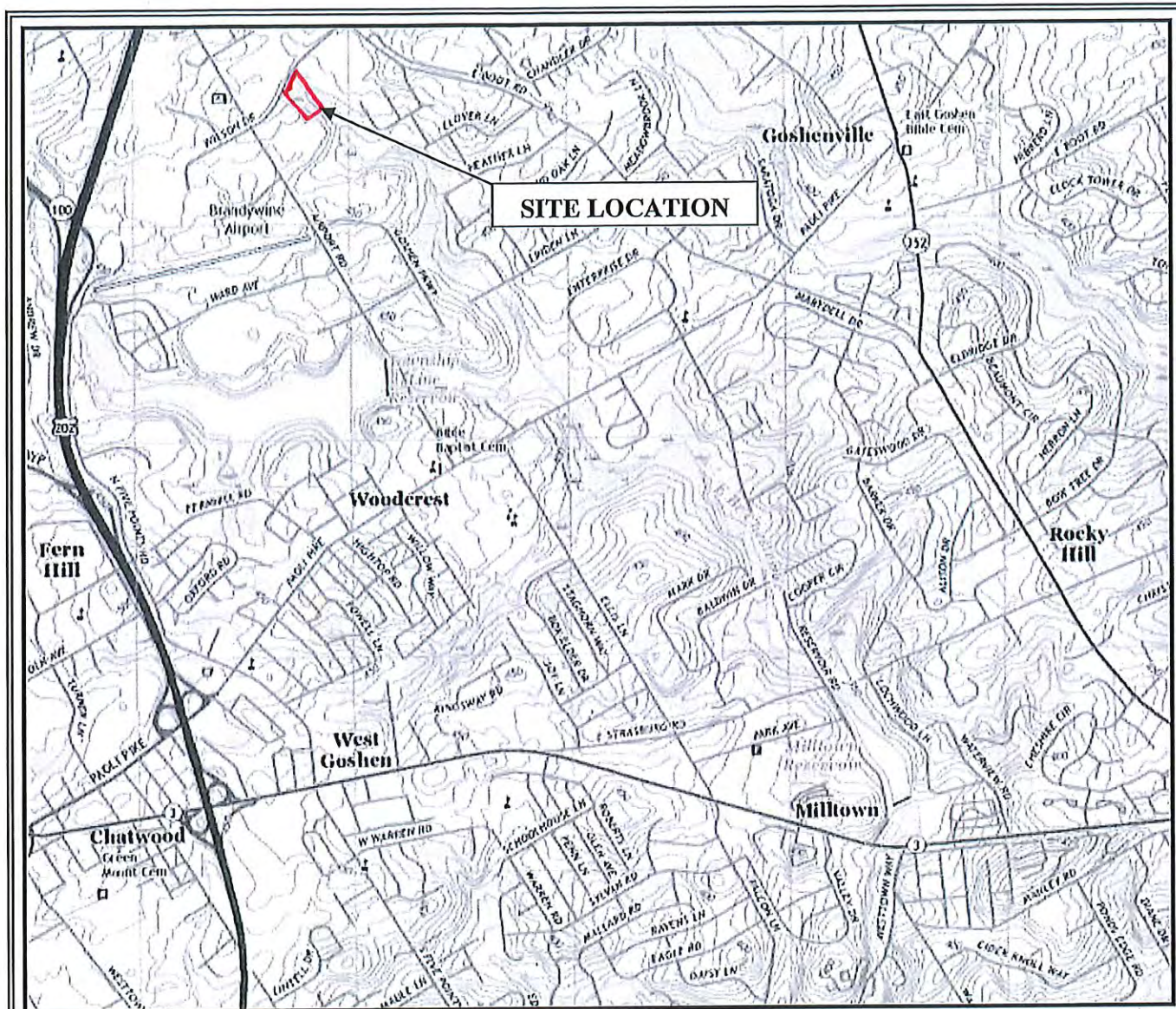


Message Center (see reverse side for other information)

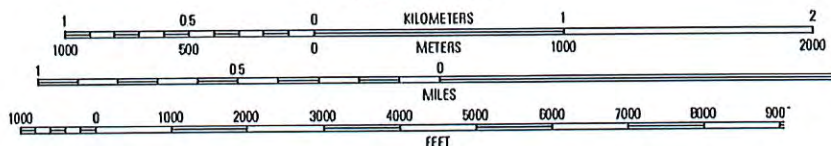
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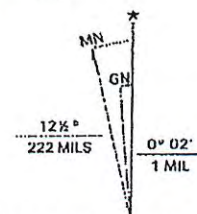
Location Map



SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988



UTM GRID AND 2001 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Source:
United States Department of the Interior Geological Survey
7.5 Minute Series (Topographic) Map
West Chester, Pennsylvania Quadrangle



DLHowell

Civil Engineering & Land Planning
www.DLHowell.com

1302 Wilson Drive
East Goshen Township
Chester County
Pennsylvania

Figure Number:

Title:
SITE LOCATION MAP

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

FYI

January 29, 2019

Dear Property Owner:

The purpose of this letter is to inform you that East Goshen Township has received a Land Development application for 1302 Wilson Dr., West Chester, PA 19380. The equitable owner, ESKE Development, LLC, is seeking approval to develop the property and build a 14,000 square foot Child Daycare Center. The property is situated in the I-1, Light Industrial Zoning District of East Goshen Township. Child Daycare Centers are permitted in the I-1 Zoning District as a Conditional Use. Conditional Use approval was granted for this use in 2018.

Pursuant to Township policy, property owners within 1000 feet of the subject property are notified when Land Development applications are received. **Meeting dates when this application will be discussed are listed below and subject to change without further written notice:**

February 6, 2019 – Planning Commission (7:00 PM)

February 13, 2019 – Conservancy Board (7:00 PM)

March 6, 2019 – Planning Commission (7:00 PM)

March 19, 2019 – Board of Supervisors (7:00 PM)

These meetings will be held at the Township Administration Building and will be open to the public. The Application is available for review at the Township building during normal business hours. If any person who wishes to attend the hearing has a disability and/or requires an auxiliary aid, service or other accommodation to observe or participate in the proceedings, he or she should contact East Goshen Township at 610-692-7171 to discuss how those needs may be accommodated.

Sincerely,

Mark A. Gordon

Mark A. Gordon
Township Zoning Officer