

EAST GOSHEN MUNICIPAL AUTHORITY

April 11, 2016

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 Inc. Report with DMR's

4. APPROVAL OF MINUTES

- a. March 14, 2016

5. APPROVAL OF INVOICES

a. William Wood Company	\$1,000.00 has been paid
b. Gawthrop Invoice #142725	\$1,523.50 has been paid
c. Pennoni Invoice #682656	\$1,576.25
d. Pennoni Invoice #682703	\$2,396.50
e. Pennoni Invoice #682658	\$1,955.75
f. Pennoni Invoice #682659	\$ 778.00
g. Pennoni Invoice #682660	\$ 761.75
h. Pennoni Invoice #682661	\$2,996.25

5. LIAISON REPORTS

6. FINANCIAL REPORTS

- a. March 2016 Report

7. OLD BUSINESS

8. GOALS

- a. Operate the Ridley Creek Sewer Treatment Plant in compliance with NPDES Permit requirements. *January, February*
- b. Continue to implement the formal Inflow (surface water) & Infiltration (ground water), (collectively "I&I") Plan to reduce the amount of I&I into the sewer system.

- c. Respond to capacity requests within 45 days. Develop an operation manual for Ridley Creek Sewer Treatment Plant and pump stations. *943 Cornwallis Drive*
 - d. Submit topical articles of interest for the East Goshen newsletter.
 - e. Attend West Goshen Municipal Authority meetings to keep informed of planned capital expenditures and operation compliance. *January, February*
9. NEW BUSINESS
- a. Act 537 Application for Exemption for 943 Cornwallis Drive
 - b. Force Main Reservoir Road Pump Station
 - c. Increase Manhole Lining Budget
10. CAPACITY REQUESTS
11. ANY OTHER MATTER
12. CORRESPONDENCE AND REPORTS OF INTEREST
13. PUBLIC COMMENT
14. ADJOURNMENT

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

April 8, 2016

To: Municipal Authority
From: Mark Miller
Re: March 2016 Monthly Report

Monthly Flows: The average daily flow to West Goshen was 872,000.

Meters: The meters have been read on a daily basis. The portable meters have been installed at various locations in the Township.

Chester Creek Pump: The pumping stations were visited on a routine basis with no problems to report.

Hunt Country Pump: Was visited on a daily basis. I ordered the equipment for the wet well. I have been working with MGK Inc. on scheduling the wet well work.

C.C. Collection: We were notified of sewer lateral backup at 1517 Brian Drive, we found the trap stack full; the crew plunged the lateral and cleared the blockage. We televised the lateral but we were not able to get to the main. It was decided that we excavate the lateral and install a cleanout. We had another lateral clog on Christine Lane when a tree fell and crushed the cleanout stand pipe. We were able to get the line open however; the home owner will have to get a plumber to install a new trap and cleanout. We televised the "A" portion on Eastwick Circle.

R.C. Collection: We completed the repairs on the collection system.

R.C. Plant: We finished the re-piping of the utility water pit and installed the rebuilt pump. Scott had sent me a list of items that needed repairs and parts lists.

Lochwood Plant:

The monitoring wells have been sealed as required by the County. The only items we have left are the removal of some spray heads and fencing.

Alarms:

We responded to 16 alarms for March.

PA One Calls:

We received 55 Pa One calls March.



MEMORANDUM

TO: East Goshen Municipal Authority Board
Rick Smith, Township Manager

FROM: Michael Ellis, P.E.
Authority Engineer

DATE: April 8, 2016

SUBJECT: Engineer's Report

Invoices

- Invoices with summaries are provided under separate cover.

Ridley Creek Sewage Treatment Plant (RCSTP)

- The NPDES Permit expires on February 28, 2017. The permit renewal application is due to PADEP by September 1, 2016. We anticipate initiating work on the renewal application within the next two weeks.

Reservoir Road Pump Station

- PADEP previously issued the permits for the Ridley Creek GP-5 "Utility Line Stream Crossings" and GP-8 "Temporary Road Crossings (across streams)" and for the pump station site floodplain filling work.
- We are still awaiting PADEP response for the Chester Creek Small Projects Joint Permit for the pump station site and Chester Creek utility crossing.
- PPL-IES approved the petroleum pipeline crossing. Approvals were already received from Williams-Transco and Sunoco. All pipeline companies have now approved the proposed crossings.
- The PennDOT Highway Occupancy Permit application for force main construction along and across E. Strasburg Road and Rt. 352 was resubmitted to address comments from our field meeting with PennDOT representatives. PennDOT reviewed and provided additional comments that we are in the process of addressing.
- The NPDES Permit application was submitted to the Chester County Conservation District on March 21, 2016.
- The Water Quality Management Permit application will be submitted to PADEP on April 8, 2016.

- The tentative schedule follows:

	<u>Estimated Date</u>
○ Submitted PADEP GP and JP Permit applications.....	November 19, 2015
○ Submitted NPDES Permit application	March 21, 2016
○ Submit PADEP WQM Permit application.....	April 8, 2016
○ Resubmit PennDOT HOP application	by April 15, 2016
○ PennDOT Permit issuance	Late April 2016
○ PADEP and CCCD Permit issuances	June-July 2016

RCSTP and Pump Stations' O&M Manual

- We continued preparation of the Sewer System Operations and Maintenance (O&M) Manual including reformatting to address comments from the Township Manager.

Sanitary Sewer Manhole Rehabilitation

- We have evaluated alternative manhole interior rehabilitation products and set up a field visit with the PW Department to observe an alternative product for equivalency.

Chapter 94 Reports

- The Ridley Creek STP and West Goshen Service Area Reports were completed and submitted to PADEP on March 30, 2016. The Westtown Service Area Report was completed and submitted to Westtown Township on March 25, 2016.



Ridley Creek Sewage Treatment Plant

Monthly Operations Report:
March 2016

Executive Summary

The Ridley Creek sewage treatment plant outfall 001 achieved compliance with the NPDES discharge permit during February 2016. Discharge to Applebrook was discontinued during February. Chemical usage utilized for total phosphorus removal, pH and total alkalinity remained consistent with previous months. The sludge grinder was observed to periodically become clogged with "rags and debris." The grinder and sludge pump were disassembled several times during the month to remove "rags" and debris. The grinder will be removed for installation of a head and shear plate assembly. No mechanical or operational issues were observed regarding the centrifuge sludge dewatering equipment.

Treatment Process Operation

During February 2016, there were no exceedances of the final effluent discharge limitations for outfall 001. Additional TSS samples were collected twice per week to allow for a means to calculate a weekly average. The total phosphorus monthly average concentration of 0.23 mg/L as compared to the permitted limitation of 0.50 mg/L. Table 1 illustrates the final effluent composite sample data reported for the February 2016 eDMR.

Table 1

February 2016 - Final Effluent - Out Fall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	10	131	7	44	0.5	3	200	1,000
	Instantaneous Maximum	40		42							
Sample Date											
February 2, 2016	0.409	2.9	9.9	4	14	7.09	24.18	0.21	0.72	1	0.0000
February 5, 2016	0.559			1	5						
February 9, 2016	0.390	2.0	6.5	1	3	3.40	11.06	0.18	0.59	2	0.3010
February 12, 2016	0.491			1	4						
February 16, 2016	0.699	2.0	11.7	2	12	3.38	19.70	0.16	0.93	1	0.0000
February 18, 2016	0.413			3	10						
February 23, 2016	0.432	2.4	8.6	5	18	3.044	10.97	0.10	0.36	1	0.0000
February 25, 2016	0.577			3	14						
Average	0.496	2.3	9.2	3	10	4.229	16.48	0.16	0.65	1	0.0753
Minimum	0.390	2.0	6.5	1	3	3.044	10.97	0.10	0.36	1	0.0000
Maximum	0.699	2.9	11.7	5	18	7.090	24.18	0.21	0.93	2	0.3010



Ridley Creek Sewage Treatment Plant

Monthly Operations Report: March 2016

Discharge to Applebrook, Outfall 002, continued to remain off line during February 2016. Table 2 illustrates the influent composite sample data reported for the February 2016.

Table 2

February 2016 - 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											
February 2, 2016	0.495	272	1,124	196	810	30.1	124	42.2	174	5.7	24
February 9, 2016	0.488	193	797	122	504	23.7	98	36.7	149	3.9	16
February 16, 2016	0.961	179	739	186	768	31.6	131	38.6	309	4.0	17
February 23, 2016	0.543	164	677	346	1,429	25.9	107	31.2	141	3.9	16
Average	0.622	202	834	213	878	27.8	115	37.2	194	4.4	18
Minimum	0.488	164	677	122	504	23.7	98	31.2	141	3.9	16
Maximum	0.961	272	1124	346	1429	31.6	131	42.2	309	5.7	24

Table 3 presents the available Outfall 001 final effluent data for the month of March 2016. During March, the presence of foam conditions on the surface of the SBRs remained consistent with the previous month with foam concentrations ranging from 25% to 60% of the area. This is attributed to decreasing water temperatures supporting conditions for growth of filamentous bacteria. Increasing the F:M ratio and decreasing MLSS concentrations is employed to assist in managing the increase in filamentous growth.

During March, there are no anticipated exceedances of the permitted limitations for Outfall 001. There was no discharge from outfall 002. Split sampling of the composite sample collected by Applied Laboratory Services (ALS) is ongoing for comparative analysis and daily results.



Ridley Creek Sewage Treatment Plant

Monthly Operations Report: March 2016

Table 3

March 2016 - Final Effluent - Out Fall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	10	131	7	44	0.5	3	200	1,000
	Instantaneous Maximum	40		42							
Sample Date											
March 1, 2016	0.403	2.6	8.7	4	13	3.48	11.70	0.24	0.81	1	0.0000
March 3, 2016	0.425			2	7						
March 8, 2016	0.398	2.6	8.6	3	10	0.250	0.83	0.18	0.60	1	0.0000
March 10, 2016	0.339			2	6						
March 15, 2016	0.384	2.4	7.7	4	13	0.146	0.47	0.20	0.64	1	0.0000
March 17, 2016	0.406			1	3						
March 22, 2016	0.341							0.26	0.74		
March 24, 2016	0.311										
March 29, 2016	0.351							0.27	0.79		
March 31, 2016	0.302										
Average	0.366	2.5	8.4	3	9	1.292	4.33	0.23	0.71	1	0.0000
Minimum	0.302	2.4	7.7	1	3	0.146	0.47	0.18	0.60	1	0.0000
Maximum	0.425	2.6	8.7	4	13	3.480	11.70	0.27	0.81	1	0.0000

The influent wastewater pollutant concentrations and loading entering the wastewater treatment facility remained within the design concentrations. Composite samples are collected at the influent doghouse manhole and influent wet well. The influent flow meter reading is collected from the influent flow meter located prior to the Screening Building, excluding the internal recycle flows.

Table 4 presents the available pollutant data for the influent wastewater collected at the doghouse manhole during March 2016.



Ridley Creek Sewage Treatment Plant

Monthly Operations Report: March 2016

Table 4

March 2016 - 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											
March 1, 2016	0.518	104	449	73	315	27.7	120	35.5	153	2.9	13
March 8, 2016	0.512	147	635	168	725	30.9	133	35.9	153	4.3	19
March 15, 2016	0.520	138	596	420	1,813	24.7	107	29.6	128	3.2	14
March 22, 2016	0.461										
March 29, 2016	0.446										
Average	0.491	130	560	220	951	27.8	120	33.7	145	3.5	15
Minimum	0.446	104	449	73	315	24.7	107	29.6	128	2.9	13
Maximum	0.520	147	635	420	1813	30.9	133	35.9	153	4.3	19

Sequencing batch reactors (SBRs) numbered 1, 3 and 4 were in service during February and March. Preparations to place SBR 2 were initiated during late March. The SBR is scheduled to be placed in service during April. 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.

Addition of aluminum sulfate solution to the SBRs to assist with phosphorus removal continued. The volume of aluminum sulfate solution to the SBRs creased to from 70.3 gpd to 73.0 gpd. Soda ash daily addition increased from 417 lbs./day to 452 lbs./day. 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.

SBR No. 2 remains out of service as a treatment unit. Minor repairs will be scheduled during April. Repairs include:

- Repair alum piping within SBR
- Replace two (2) decanter valves
- Reinstall dissolved oxygen probe



Ridley Creek Sewage Treatment Plant

Monthly Operations Report: March 2016

Solids Dewatering and Disposal: March 2016

Sludge Dewatering Summary	
Gallons of sludge dewatered	282,595
Number of dumpsters	5

**Eighteen (18) days of centrifuge operation*

Flow data:

March 2016			
Flow Meter Location	Total Volume for Month, MG	Average Daily Flow, gpd	Daily Maximum Flow, gpd
Influent Wastewater to Screening Building*	15.425	497,572	732,790
Influent Wastewater to SBRs	15.081	486,478	632,384
Internal Recycle	0.604	19,480	256,063
Treated Effluent to Disc Filters	14.884	480,130	636,480
Final Effluent Discharge	11.729	378,355	519,000
Applebrook Golf Course	No Discharge	No Discharge	No Discharge

Chemical Usage:

March 2016		
Chemical	Daily Average	Total Monthly
Soda Ash	452	13,100
Aluminum Sulfate solution	73.0	2,263
Polymer (centrifuge)	0.84	19.32

**twenty three (23) days of centrifuge operation*

During March, sludge wasting to the sludge holding tanks and decanting of the sludge holding tanks was ongoing. Process monitoring included pH, total alkalinity and total solids.

Sludge holding tank No. 1 was in service. The level transducer is out of service. The level transducer is scheduled for replacement during April. The level transmitter will be changed from pressure level sensor to an ultra-sonic level sensor. The average total solids concentration was 0.82%. The average pH was 5.76 S.U. with an average total alkalinity of 50 mg/L. Zero gallons of supernatant were decanted during the month. 500 pounds of soda ash were added.



Ridley Creek Sewage
Treatment Plant

Monthly Operations Report:
March 2016

Sludge holding tank No. 2 was in service. The level at the beginning of the month was 9.88 feet and the level at the end was 9.30. The average total solids concentration was 0.94%. The average pH was 6.86 S.U. with an average total alkalinity of 155 mg/L. Zero pounds of soda ash were added. Zero gallons of supernatant were decanted.

PA DEP

No activity

Significant Storm/Hydraulic Loading Events

During March, there were three (3) storm events resulting in a daily precipitation amount equal to or greater than 0.4 inches measured during a 24 hour period. A total of 2.45 inches of rainfall were measured during the month. These events occurred on the following dates:

- March 13th: 0.79 inches
- March 14th: 0.78 inches
- March 27th: 0.42 inches

Plant operations were adjusted to manage the precipitation to prevent exceedances of the permitted discharge limitations for Outfall 001.

Minor Repairs and Preventative Maintenance

- March 16, 2016: Repaired the back wash pump for disc filter number 1. Replaced the coupling for the motor and pump assembly.
- March 21, 2016: Disassembled the sludge grinder for the sludge pump for the centrifuge. Removed "rags" and debris.
- March 23, 2016: Disassembled the sludge grinder for the sludge pump for the centrifuge. Removed "rags" and debris.
- March 28, 2016: Transferred the contents of SBR 2 to SHT 2.

Draft
EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY
MEETING MINUTES
March 14, 2016

The East Goshen Township Municipal Authority held their regular public meeting on Monday, March 14, 2016 at 7:00 pm at the East Goshen Township building. Members in attendance were: Chairman Dana Pizarro, Jack Yahraes, Ed McAssey and new member Phil Mayer. Also in attendance were: Rick Smith (Township Manager), Mike Ellis (Pennoni), Carmen Battavio (Township Supervisor), Jessica Wiesak (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

Dana 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 the troops and all veterans. Dana asked if anyone would be recording the meeting. There was no response.

CHAIRMAN'S/MEMBERS REPORTS

1. Ed reported that he attended the West Goshen Sewer Authority meeting. He provided copies of the 2016 budget and Capitalization Policy and minutes of the March 2, 2016 meeting. Ed reported the HRG is going to build a simulation model of the process.
2. Jack mentioned that a flyer for the PMAA Spring Workshop is in the packet.

Sewer Reports

1. Director of Public Works, Mark Miller presented the following report:

Monthly Flows: The average daily flow to West Goshen was 850,000 to 900,000 gallons per day. It was over One Million for 10 days. It dropped once everything settled down. We also installed the portable meters at the new locations.

Meters: The meters were calibrated on the first of the month. I'm currently working with Allied Control and Lenni Electeic on the logistics for the Ridley Creek flow meters.

C.C. Collection: We were notified of a problem on Heather Lane. The resident thought his lateral was backing up. We inspected the pipe and the clean-out pipe had pulled out of the tee. We pushed the pipe back into the tee. This is the second time we have replaced the tee.

R.C. Collection – The leaks that we located on Cornwallis Drive have been repaired. Our next area will be the Ridley Creek interceptor line from Paoli Pike and Line Road to the plant. We will also inspect the Applebrook carriage homes and the Applebrook Reserve.

1 We placed an order for 2' and 4' risers as well as casting and lids, as we need to raise
2 several castings in low areas.

3 R.C. Plant: We had to pull the utility water pump for repairs. While pulling the pump
4 we found the piping to be in bad shape plus all of the gaskets were blown out. We pulled
5 the piping and replaced it as well as the gaskets and hardware. The pump went to
6 Deckman's for repairs. The estimate to repair the pump was \$3,890.00. The cost to
7 replace the pump is \$8,300.00. I gave the ok to repair the pump.

8 We also pulled the number 1 lift station pump for routine maintenance. The bearings on
9 the top end need to be replaced. In order to get to the bearings, the pump had to be
10 completely pulled down. The cost for the repairs is \$5,000.00. I gave them the ok for the
11 repairs. If we were to send the pump back to FLYGHT for repairs, the cost could be
12 \$7,800.00. Once the pump returns we will install it and pull pump 2 for maintenance.

13 Lenni Electric was called in to replace the UPS boxes on the filters. Lenni has also been
14 on site going thru all of the electrical components.

15 While we were working on the utility water piping, Dave Wolfinger showed for a
16 surprise inspection. He said he found the plant to be in good working condition and was
17 impressed with the preventive maintenance being done.

18 When we did the work at the plant, we needed to rent a 6 inch trailer pump to bypass the
19 flow. I would recommend that we purchase a trailer mounted pump in the 2017 budget.

20 As you know, most of our problems with sewer flows are weather related. If we had a
21 full blown pump failure at the plant, we would not be able to pump the effluent. The
22 nearest pump is 2.5 hours away in New Jersey and then there is no guarantee they will
23 have what we need. We could also use the pump to bypass pump the interceptor lines
24 and pump stations if need be. When we were working at the plant, the DEP showed up
25 for an inspection. The inspector was very surprised that we did not own a large pump
26 and hinted that we should consider purchasing one.

27 Action Items: MUFFIN MONSTER repair – discuss upgrades at Hunt Country pump
28 station.

29 Sewer Lateral: 5 sewer laterals repaired for the month by plumbers.

30 Alarms: We responded to 37 alarms for February.

31 PA One Calls: We received 50 PA One calls for February.

32 33 **2. Pennoni Engineer's Report**

34 Mike Ellis provided the following report:

35 Invoices: Invoices with summaries are provided under separate cover.

36 Ridley Creek Sewage Treatment Plant (RCSTP):

37 No activity since the last report.

38 Reservoir Rd Pump Station:

39 PADEP issued the permits for the Ridley Creek GP-5 "Utility Line Stream Crossings"
40 and GP-8 "Temporary Road Crossings (across streams)" and for the pump station site
41 floodplain filling work.

42 We are awaiting PADEP response for the Chester Creek Small Projects Joint Permit for
43 the pump station site and the Chester Creek Utility crossing.

44 Williams-Transco and Sunoco have approved the petroleum pipeline crossings. We are
45 still awaiting a response from PPL-IEC.

1 We met with PennDOT at the site to review the Highway Occupancy Permit application
2 for force main construction along and across E. Strasburg Rd. and Rt. 352. We revised the
3 application thereafter, to address PennDOT's comments, including eliminating the proposed
4 closure of Rt. 352 and utilizing traffic control instead, and we expect to resubmit the revised
5 application on March 14.

6 We are finalizing edits to the NPDES Permit Application and plans based on comments from the
7 Chester County Conservation District, and we expect to submit the revised documents the week
8 of March 14.

9 The Water Quality Management Park II Permit Application will be submitted to PADEP after
10 the plans are revised to address CCCD's comments.

11 We revised the sanitary sewer easement exhibit for 1636 Bow Tree Drive to address comments
12 from the Solicitor.

13 The tentative schedule follows:

14 Submitted PADEP GP and JP Permit application	November 19, 2015
15 Submit revised PennDOT HOP application	March 14 2016
16 Submit revised NPDES Permit Application	Week of March 14, 2016
17 Submit PADEP WQM Part II Permit application	Week of March 14, 2016
18 PennDOT Permit issuance	April 2016
19 PADEP & CCCD Permit issuances	May 2016

20

21 RCSTP and Pump Stations' O&M Plan

22 We continued preparation of the Sewer System Operations and Maintenance (O&M)
23 Manual and will provide a draft of the Manual's current status for review by the Township and
24 Municipal Authority on March 14.

25 White Chimneys Manhole Rehabilitation

26 We prepared a draft bid document, cost estimate, and map exhibit for interior
27 rehabilitation of numerous manholes that are deteriorated from hydrogen sulfide. The scope
28 included manholes in the White Chimneys neighborhood that are downstream of the Ashbridge
29 Pump Station force main discharge and manholes along Cornwallis Drive that are downstream of
30 the Hershey's Mill Pump Station discharge. We performed additional field observations in both
31 locations to determine the specific manholes to be rehabilitated. Manholes downstream of the
32 Barkway and Hunt Country Pump Station may also be added subject to field observation of
33 conditions.

34 Chapter 94 Reports

35 We have continued preparation of the reports. The Westtown Tributary Municipality
36 Report has been submitted to the Township for review and we anticipated submitting the Ridley
37 Creek STP and West Goshen reports for review the week of March 14.

38 Connections

39 We reviewed a plan submission for proposed connection of two new houses at 943
40 Cornwallis Drive via gravity laterals.

41 Manhole Rehabilitation – The estimate dated March 12, 2016 shows an estimated total cost of
42 \$104,470.

43
44 **3. Big Fish Environmental Services** – Scott's report showed that the Ridley Creek sewage
45 treatment plant outfall 001 achieved compliance with the NPDES discharge permit during
46 January 2016. Discharge to Applebrook was discontinued during January. Chemical usage

utilized for total phosphorus removal, pH and total alkalinity remained consistent with previous months. No mechanical or operational issues were observed during operation of sludge dewatering equipment.

During February, there were 5 storm events resulting in a daily precipitation amount equal to or greater than 0.4 inches measured during a 24 hour period. A total of 4.68 inches of rainfall were measured during the month. These events occurred on the following dates:

February 2 0.78 inches

February 15 0.43 inches

February 16 1.04 inches

February 23 0.54 inches

February 24 1.42 inches

Plant operations were adjusted to manage the precipitation to prevent exceedances of the permitted discharge limitation for Outfall 001.

On February 4, the SBR set points were adjusted as follows to manage the elevated hydraulic loadings as a result of rain and snow melt. At an influent flow of approx. 564.25 gpm, which is equivalent to 812,520 gpd, the following SBR adjustments were incorporated:

Sludge wasting still off to all 3 SBRs

Minimum aeration time 120 minutes per cycle

Maximum aeration time 180 minutes per cycle

Minimum react time was set at 60 minutes per cycle. The previous setting was 75 mins per cycle, however, the setting was adjusted during the evening of Feb 3 as part of the response for maximum SBR decant alarms.

On February 8, the React settings were returned to the initial settings from 60 to 75 minutes per cycle.

On February 9, the settle settings were returned to the initial settings from 45 to 60 minutes per cycle.

Minor repairs and preventative maintenance were:

February 3 – The alum line to the disc filters blew apart at injector site. All liquid was contained in alum containment area. Removed the LMI pump from service and isolated piping. Jim scheduled for troubleshooting the malfunction for Feb 4th.

February 4 – The pump suction strainer on hard piping between alum tank and pumps had solidified. Cleaned and Replaced. This task has been added to the preventative maintenance schedule. Replaced effluent sampler suction drive tubing.

February 16 – Power failures reported prior to arriving on site. Both generators operated approx. 1 hour. Responded to Siemens Panel (Max decant) Alarm last evening after heavy rain came through. SBR adjustments: Decreased minimum React from 90 to 60 mins per cycle. Decreased settle time from 60 to 30 mins per cycle.

February 17 – Mark Miller's Township crew performed the following tasks:

Removed influent pump #1 for overhaul and rebuild.

Removed utility water pump #1 for overhaul and rebuild.

Replaced a leaking gasket for Utility Pump #2.

Lenni Electric electricians removed the UPS from disc filter #1 control pan for replacement.

Electrician (Joe) installed new UPS units in both Disc Filter control panels.

February 18 – Completed the disassembly of the sludge pump and piping to remove blockages as a result of "rag" build up. The shear plat on the sludge grinder is recommended for replacement.

February 23 – Sludge Tank #1 level transducer failed. A replacement transducer is planned.

Approval of Minutes

Jack moved to accept the minutes of February 8, 2016. Ed seconded the motion. The motion passed unanimously.

Approval of Invoices

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

a.	Pennoni #678096	\$ 311.25
b.	Pennoni #678097	\$ 1,623.50
c.	Pennoni #678098	\$ 1,868.25
d.	Pennoni #678099	\$ 1,155.25
e.	Pennoni #678100	\$ 2,209.50
f.	Pennoni #678101	\$ 3,248.75
g.	Pennoni #678618	\$ 1,392.75

Jack seconded the motion. There was discussion of status of project budgets. The motion passed unanimously.

2. Ed moved to approve payment of Gawthrop Greenwood invoice #141172 for \$480.00 which has already been paid. Jack seconded the motion. The motion passed unanimously.

Liaison Reports

Conservancy Board – Walter reminded everyone that Keep East Goshen Beautiful Day is Saturday April 2, 2016, raindate April 9, 2016. They are planning a spring planting.

Board of Supervisors – Carmen reported that the WEGO Police Department should receive accreditation by the end of March. Auditors examine everything. He feels this may become a requirement.

On Tuesday March 22, 2016 there will be a meeting at the Fire Hall at 7:00 pm regarding the Milltown/Reservoir Dam. The engineers report is on the Township web site.

The BOS approved the Park Master Plan.

Financial Reports

Jon Altshul provided the following written report:

In February, the Municipal Authority recorded \$8,521 in revenues (primarily from a tap-in fee for 957 Cornwallis Dr.) and \$26,762 in expenses, (including \$19,313 for Reservoir Road Pump Station engineering) and \$6,969 for non-capital engineering, for a negative variance of -\$18,241. As of February 29, the fund balance was \$1,446,108, of which \$1,396,773 is in the main construction account.

Goals

Goals for 2016 were discussed.

New Business

1. The capacity request for 943 Cornwallis Drive was discussed. Jack moved to approve the request. Dana seconded the motion. The motion passed unanimously.
2. Mark reported that the Muffin Monster has been in operation since 2009 and needs to be rebuilt. He contacted Charlie Deckman about rebuilding the unit. However, it was

1 cheaper to swap out with JWC, the manufacture. The cost will be \$21,151 with
2 shipping. Mark's crew will install it. Ed moved to approve this request for \$21,151
3 for a new Muffing Monster. Jack seconded the motion. The motion passed
4 unanimously.

- 5 3. Mark reported it is time to close the wells at the Lochwood Treatment Plant. It is less
6 than \$10,000.00 which he authorized.
- 7 4. Mark reported that for bypass pumping we need a 6" or 8" trailer mounted pump. He
8 wants to put it in the 2017 budget. It will cost about \$40,000 including hoses, etc.
9 Jack asked Mark to put together a comparison to present to the BOS.
- 10 5. Hunt Country is the oldest pump station and needs rehabilitation. Mark received a
11 quote from J.T. Seeley & Co. Mark will install the components from the Reserve
12 pump station. He sent the control panel to John Laidley to update some of the
13 electronics since it has been in place for 35 years. The quote from Seeley is \$13,626.
14 The cost to upgrade the existing pumps by Deckmen will be \$2,500 per pump. He
15 will meet with MGK to get a price to gut and install the new rail system and pumps.
- 16 6. Pat McKenna, attorney, is working on the easement from Donald Pusey, 1636 Bow
17 Tree Drive. They have to get an appraisal of the property.
18
19

20 **Adjournment**

21 There being no further business, Jack moved to adjourn the meeting. Phil seconded the motion.
22 The motion passed unanimously. The meeting was adjourned at 8:05 pm. The next meeting will
23 be held on Monday, April 11, 2016 at 7:00 pm.
24

25 Respectfully submitted,

26
27
28 Ruth Kiefer

29 Recording Secretary

WILLIAM WOOD COMPANY, LLC

120 West Market Street
West Chester, Pennsylvania 19382
610-692-3966
Fax 610-692-8325

John Strickland II
PA/DE Certified General Appraiser

William S. Wood III
PA Certified General Appraiser
Broker of Record

Mary Kay Davis Sweeney
Office Manager

David E. Adams
Heidi S. Phillips
Timothy J. Mingey
Kimberlee A. Baker
Timothy C. Graham

INVOICE

MARCH 17, 2016

Rick Smith, Township Manager
East Goshen Township
1580 Paoli Pike
West Chester, PA 19380

File: 16-0184

JUST COMPENSATION VALUE of

1636 Bow Tree Drive

\$ 1,000.00

3-17-16

OK To PAY

Reservoir Rd Pump Station



Gawthrop Greenwood, PC
Attorneys at Law

17 East Gay Street, Suite 100 | (p) 610-696-8225
West Chester, PA 19381-0562 | (f) 610-344-0922
gglaw@gawthrop.com | www.gawthrop.com

East Goshen Municipal Authority
1580 Paoli Pike
West Chester PA 19380

COPY

Page: 1
03/10/2016
Client No: 6604-001R
Invoice No: 142725

General Authority Services

Fees

		Hours	
02/01/2016	JKW	Review file; Draft easement agreement for sanitary sewer.	2.00
02/02/2016	JKW	Complete draft Easement Agreement.	0.70
02/08/2016	PMM	Review and analyze meeting packet in preparation for meeting; Attend Authority meeting.	2.50
02/12/2016	JKW	Revise Easement Agreement.	0.50
02/15/2016	PMM	Email to R Smith regarding Pusey sewer easement.	0.20
02/16/2016	PMM	Email from R Smith regarding revisions to Pusey easement.	0.20
	OC	Obtain copy of Deed at the Recorder of Deeds.	0.30
02/17/2016	JKW	Revise easement per direction of R Smith; review Pusey deed.	0.40
02/18/2016	PMM	Emails to/from R Smith regarding revised Pusey Easement Agreement and deed to property.	0.40
02/19/2016	PMM	Emails from/to R Smith regarding Pusey Easement.	0.20
02/24/2016	PMM	Emails from/to R Smith regarding revision to contract with Pennoni for arbitration.	0.40
		For Current Services Rendered	7.80
			1,522.50

East Goshen Municipal Authority

General Authority Services

Page: 2

03/10/2016

Client No: 6604-001R

Invoice No. 142725

Recapitulation

<u>Timekeeper</u>	<u>Hours</u>	<u>Hourly Rate</u>	<u>Total</u>
Jessica K. Wiesak	3.60	\$200.00	\$720.00
Patrick M. McKenna	3.90	200.00	780.00
Office Clerk	0.30	75.00	22.50

Expenses

Recorder of Deeds - Copies	1.00
----------------------------	------

Total Expenses Thru 02/29/2016	1.00
--------------------------------	------

Total Current Charges	1,523.50
-----------------------	----------

Balance Due	<u>\$1,523.50</u>
-------------	-------------------

PAID

OK RS 3-15-16

THIS INVOICE HAS
BEEN PAID

To ensure proper credit, please write client number on
your check when returning payment. Thank You.
A finance charge of 1.25% per month (15% annually) may be
charged on balances not paid 60 days after the invoice date.



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 # : 682656
Invoice Date : 03/30/2016
Project : EGMA1504
Project Name : Reservoir Rd PS Design &
Permitting

For Services Rendered through: 3/20/2016

Attended PennDOT HOP application field review meeting with PennDOT representatives, revised plans to address PennDOT and CCCD's NPDES comments; resubmitted HOP application; and revised NPDES application documents including Post Construction Stormwater Report and E&S Narrative.

Phase : 11 -- Final Design

Total Phase : 11 -- Final Design

Labor :	962.50
Expense :	0.00
Phase Total :	962.50

Phase : 12 -- Permitting

Total Phase : 12 -- Permitting

Labor :	613.75
Expense :	0.00
Phase Total :	613.75

Amount Due This Invoice

\$1,576.25

Fee :	136,316.25
Prior Billings :	132,768.50
Current Billings :	1,576.25
Total Billings :	134,344.75

o/c RS 4/8

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 : 11 -- Final Design

Labor	<i>Hours/ Units</i>	<i>Rate</i>	<i>Amount</i>
<u>Class</u>			
Engineering Technician II	12.50	77.00	962.50
Labor Total:	12.50		962.50

Total Phase : 11 -- Final Design

Labor :	\$962.50
Expense :	\$0.00

Phase : 12 -- Permitting

Labor	<i>Hours/ Units</i>	<i>Rate</i>	<i>Amount</i>
<u>Class</u>			
Authority Engineer	4.75	115.00	546.25
Staff Engineer	0.75	90.00	67.50
Labor Total:	5.50		613.75

Total Phase : 12 -- Permitting

Labor :	\$613.75
Expense :	\$0.00

Total Project : EGMA1504 -- Reservoir Rd PS Design & Permitting

Labor :	\$1,576.25
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
EGMA1504 Invoice Summary
Invoice Date 3/30/2016

Project:	EGMA1504		
Pennoni Job No.:	Reservoir Rd PS Design & Permitting		
Invoice No:	682656		
Invoice Period:	1/22/2016	to	3/20/2016
Initial Authorization:	\$ 167,120.00	Date:	3/30/2016
Contract Amount:	\$ 167,120.00		
Previously Invoiced:	\$ 156,339.75		
Current Invoice:	\$ 3,972.75		
Invoiced to Date (\$):	\$ 160,312.50		
Invoiced to Date (%):	96%		
Remaining Budget (\$):	\$ 6,807.50		
Remaining Budget (%):	4%		

Budget by Phase:

Phase Name:	Final Design	Phase 11
Phase Budget:	\$ 61,500.00	
Previously Invoiced:	\$ 56,748.50	
Current Invoice:	\$ 962.50	
Invoiced to Date (\$):	\$ 57,711.00	
Invoiced to Date (%):	94%	
Remaining Budget (\$):	\$ 3,789.00	
Remaining Budget (%):	6%	

Comments: Attended PennDOT HOP application field review meeting with PennDOT representatives, revised plans to address PennDOT and CCCD's NPDES comments; resubmitted HOP application; and revised NPDES application documents including Post Construction Stormwater Report and E&S Narrative.

East Goshen Municipal Authority
EGMA1504 Invoice Summary
Invoice Date 3/30/2016

Project:	EGMA1504		
Pennoni Job No.:	Reservoir Rd PS Design & Permitting		
Invoice No:	682656		
Invoice Period:	2/15/2016	to	3/20/2016
Initial Authorization:	\$ 167,120.00	Date:	3/30/2016
Contract Amount:	\$ 167,120.00		
Previously Invoiced:	\$ 156,339.75		
Current Invoice:	\$ 3,972.75		
Invoiced to Date (\$):	\$ 160,312.50		
Invoiced to Date (%):	96%		
Remaining Budget (\$):	\$ 6,807.50		
Remaining Budget (%):	4%		

Budget by Phase:

Phase Name:	Permitting	Phase 12
Phase Budget:	\$ 28,610.50	
Previously Invoiced:	\$ 24,977.50	
Current Invoice:	\$ 613.75	
Invoiced to Date (\$):	\$ 25,591.25	
Invoiced to Date (%):	89%	
Remaining Budget (\$):	\$ 3,019.25	
Remaining Budget (%):	11%	

Comments: Attended PennDOT HOP application field review meeting with PennDOT representatives, revised plans to address PennDOT and CCCD's NPDES comments; resubmitted HOP application; and revised NPDES application documents including Post Construction Stormwater Report and E&S Narrative.



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 # : 682703
Invoice Date : 03/30/2016
Project : EGMA1504
Project Name : Reservoir Rd PS Design &
Permitting

For Services Rendered through: 3/20/2016

Phase 05 - Completed permanent and temporary easement exhibit and legal description, submitted documents to Township, and revised exhibit to address Solicitor's comments.

Phase : 05 -- 1636 Bow Tree Dr Bndry Survey & Eas

Contract Amount	\$4,020.00		
Percent Complete	100.00%		
Contract Amount Completed		\$4,020.00	
Less Previous Billed		<u>\$(1,623.50)</u>	
Phase Subtotal			<u>\$2,396.50</u>
Amount Due This Invoice			<u><u>\$2,396.50</u></u>

01CRS 4/8

East Goshen Municipal Authority
EGMA1504 Invoice Summary
Invoice Date 3/30/2016

Project: EGMA1504
Pennoni Job No.: Reservoir Rd PS Design & Permitting
Invoice No: **682703**
Invoice Period: 2/15/2016 to 3/20/2016
Initial Authorization: \$ 167,120.00 **Date:** 3/30/2016
Contract Amount: \$ 167,120.00
Previously Invoiced: \$ 156,339.75
Current Invoice: \$ 3,972.75
Invoiced to Date (\$): \$ 160,312.50
Invoiced to Date (%): 96%
Remaining Budget (\$): \$ 6,807.50
Remaining Budget (%): 4%

Budget by Phase:

Phase Name:	1636 Bow Tree Dr Boundary & Esmnts	Phase 05
Phase Budget:	\$ 4,020.00	
Previously Invoiced:	\$ 1,623.50	
Current Invoice:	\$ 2,396.50	
Invoiced to Date (\$):	\$ 4,020.00	
Invoiced to Date (%):	100%	
Remaining Budget (\$):	\$ -	
Remaining Budget (%):	0%	

Comments: Phase 05 - Completed permanent and temporary easement exhibit and legal description, submitted documents to Township, and revised exhibit to address Solicitor's comments.

Reservoir Road Pump Station Design & Permitting

INVOICE SUMMARY

For Services Rendered through: 3/20/2016

Task No.	Activity	Contract Amount*	Invoiced Effort thru 2/14/2016	Remaining Budget (\$)	Remaining Budget (%)	Completed?
1	Concept Design	\$13,655.75	\$13,655.75	-	-	Yes
2	DEP WQM Pre-App. Meeting	\$1,300.00	\$1,300.00	-	-	Yes
3	Existing Conditions Survey	\$22,783.75	\$22,783.75	-	-	Yes
4	Sewer Stakeout in Easements	\$0.00	\$0.00	-	-	Scope eliminated
5	1636 Bow Tree Dr. Boundary Survey & Easement	\$4,020.00	\$4,020.00	-	-	Yes
6	Additional Boundary Surveys & Easements	\$0.00	\$0.00	-	-	Scope eliminated
7	Geotechnical Borings	\$4,000.00	\$4,000.00	-	-	Yes
8	Install Permanent Survey Benchmarks	\$0.00	\$0.00	-	-	Scope eliminated
9	Progress Design	\$29,450.00	\$29,450.00	-	-	Yes
10	Infiltration Testing	\$1,800.00	\$1,800.00	-	-	Yes
11	Final Design	\$61,500.00	\$57,711.00	\$3,789.00	6%	No
12	Permitting	\$28,610.50	\$25,591.25	\$3,019.25	11%	No
TOTAL		\$167,120.00	\$160,311.80	\$6,808.25	4%	

*After 12/14/2015 approved re-allocation of task budgets.



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 # : 682658
Invoice Date : 03/30/2016
Project : EGMA1505
Project Name : RCSTP and Pump Station O&M Manual

For Services Rendered through: 3/20/2016

Continued preparation of O&M Manual, primarily pump station information from individual pump station manuals; and submitted progress draft of O&M Manual to Township for review.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor :	1,955.75
Expense :	0.00
Phase Total :	1,955.75

Amount Due This Invoice

\$1,955.75

Fee :	12,500.00
Prior Billings :	2,594.00
Current Billings :	1,955.75
Total Billings :	4,549.75

Phase : **** -- Professional Services

Labor

Class	Hours/ Units	Rate	Amount
Authority Engineer	0.25	115.00	28.75
Project Engineer	11.25	97.00	1,091.25
Senior Engineering Technician	1.00	85.00	85.00
Graduate Engineer	9.75	77.00	750.75
Labor Total:	22.25		1,955.75

Total Phase : **** -- Professional Services

Labor :	\$1,955.75
Expense :	\$0.00

Total Project : EGMA1505 -- RCSTP and Pump Station O&M Manual

Labor :	\$1,955.75
Expense :	\$0.00

OK RS 4/8

East Goshen Municipal Authority
EGMA1505 Invoice Summary
Invoice Date 03/30/2016

Project: EGMA1505
Pennoni Job No.: RCSTP & Pump Station O&M Manual
Invoice No: 682658
Invoice Period: 2/15/2016 to 3/20/2016
Initial Authorization: \$ 12,500.00 **Date:** 3/30/2016
Contract Amount: \$ 12,500.00
Previously Invoiced: \$ 2,594.00
Current Invoice: \$ 1,955.75
Invoiced to Date (\$): \$ 4,549.75
Invoiced to Date (%): 36%
Remaining Budget (\$): \$ 7,950.25
Remaining Budget (%): 64%

Budget by Phase:

Phase Name: RCSTP & Pump Station O&M Manual
Phase Budget: \$ 12,500.00
Previously Invoiced: \$ 2,594.00
Current Invoice: \$ 1,955.75
Invoiced to Date (\$): \$ 4,549.75
Invoiced to Date (%): 36%
Remaining Budget (\$): \$ 7,950.25
Remaining Budget (%): 64%

Comments: Continued preparation of O&M Manual, primarily pump station information from individual pump station manuals; and submitted progress draft of O&M Manual to Township for review.



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 # : 682659
Invoice Date : 03/30/2016
Project : EGMA1601
Project Name : 2016 General Services

For Services Rendered through: 3/20/2016

Prepared March Engineer's Report and prepared for and attended March MA meeting. Ashbridge PS Force Main Terminal Manhole C226 alternatives analysis for manhole rehab vs. replacement and submission of draft alternatives letter to Township Sizing and cost evaluation of potential bypass pump to purchase for RCSTP Influent Pump Station and other pump stations. General sewer system assistance including I&I located along Cornwallis Drive, Hunt Country PS grease problems, RCSTP pump piping deterioration, and upcoming RCSTP NPDES permit renewal.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor :	778.00
Expense :	0.00
Phase Total :	778.00

Amount Due This Invoice

\$778.00

Fee :	12,300.00
Prior Billings :	1,644.00
Current Billings :	778.00
Total Billings :	2,422.00

Phase : **** -- Professional Services

Labor

Class	Hours/ Units	Rate	Amount
Authority Engineer	5.50	115.00	632.50
Project Engineer	1.50	97.00	145.50
Labor Total:	7.00		778.00

Total Phase : **** -- Professional Services

Labor :	\$778.00
Expense :	\$0.00

Total Project : EGMA1601 -- 2016 General Services

Labor :	\$778.00
Expense :	\$0.00

ok RS 4/8

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

East Goshen Municipal Authority
EGMA1601 Invoice Summary
Invoice Date 03/30/2016

Project: EGMA1601
Pennoni Job No.: 2016 General Services
Invoice No: 682659
Invoice Period: 2/15/2016 to 3/20/2016
Date: 3/30/2016
Initial Authorization: \$ 12,300.00
Contract Amount: \$ 12,300.00
Previously Invoiced: \$ 1,644.00
Current Invoice: \$ 778.00
Invoiced to Date (\$): \$ 2,422.00
Invoiced to Date (%): 20%
Remaining Budget (\$): \$ 9,878.00
Remaining Budget (%): 80%

Budget by Phase:

Phase Name: 2016 General Services
Phase Budget: \$ 12,300.00
Previously Invoiced: \$ 1,644.00
Current Invoice: \$ 778.00
Invoiced to Date (\$): \$ 2,422.00
Invoiced to Date (%): 20%
Remaining Budget (\$): \$ 9,878.00
Remaining Budget (%): 80%

Comments: Prepared March Engineer's Report and prepared for and attended March MA meeting. Ashbridge PS Force Main Terminal Manhole C226 alternatives analysis for manhole rehab vs. replacement and submission of draft alternatives letter to Township. Sizing and cost evaluation of potential bypass pump to purchase for RCSTP Influent Pump Station and other pump stations. General sewer system assistance including I&I located along Cornwallis Drive, Hunt Country PS grease problems, RCSTP pump piping deterioration, and upcoming RCSTP NPDES permit renewal.



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 # : 682660
Invoice Date : 03/30/2016
Project : EGMA1603
Project Name : 2015 Chapter 94 Reports

For Services Rendered through: 3/20/2016

Continued preparation of Chapter 94 Reports and submitted Westtown Tributary Report to Township for review.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor : 761.75
Expense : 0.00
Phase Total : 761.75

Amount Due This Invoice

\$761.75

Fee : 15,000.00
Prior Billings : 4,121.00
Current Billings : 761.75
Total Billings : 4,882.75

Phase : **** -- Professional Services

Labor

Class	Hours/ Units	Rate	Amount
Authority Engineer	1.75	115.00	201.25
Project Engineer	3.00	97.00	291.00
Graduate Engineer	3.50	77.00	269.50
Labor Total:	8.25		761.75

Total Phase : **** -- Professional Services

Labor : \$761.75
Expense : \$0.00

Total Project : EGMA1603 -- 2015 Chapter 94 Reports

Labor : \$761.75
Expense : \$0.00

ok RS 4/8

East Goshen Municipal Authority
EGMA1603 Invoice Summary
Invoice Date 03/30/2016

Project:	EGMA1603		
Pennoni Job No.:	2015 Chapter 94 Reports		
Invoice No:	682660		
Invoice Period:	2/15/2016	to	3/20/2016
Initial Authorization:	\$ 15,000.00	Date:	3/30/2016
Contract Amount:	\$ 15,000.00		
Previously Invoiced:	\$ 4,121.00		
Current Invoice:	\$ 761.75		
Invoiced to Date (\$):	\$ 4,882.75		
Invoiced to Date (%):	33%		
Remaining Budget (\$):	\$ 10,117.25		
Remaining Budget (%):	67%		

Budget by Phase:

Phase Name:	2015 Chapter 94 Reports		
Phase Budget:	\$ 15,000.00		
Previously Invoiced:	\$ 4,121.00		
Current Invoice:	\$ 761.75		
Invoiced to Date (\$):	\$ 4,882.75		
Invoiced to Date (%):	33%		
Remaining Budget (\$):	\$ 10,117.25		
Remaining Budget (%):	67%		

Comments: Continued preparation of Chapter 94 Reports and submitted Westtown Tributary Report to Township for review.



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 # : 682661
Invoice Date : 03/30/2016
Project : EGMA1604
Project Name : White Chimneys MH Lining Bid Doc

For Services Rendered through: 3/20/2016

Field observations and measurements of manholes along/behind Cornwallis Drive to add to project scope; field observations of manholes off interceptor in White Chimneys to confirm rehab is not needed; vendor coordination; prepared bid document and technical specifications; updated cost estimate to include additional Cornwallis Drive manholes; updated exhibit of White Chimneys manholes to be lined and created exhibit of Cornwallis Drive manholes; and submitted draft bid document and cost estimate to Township for review.

Phase : **** -- Professional Services

Total Phase : **** -- Professional Services

Labor : 2,996.25
Expense : 0.00
Phase Total : 2,996.25

Amount Due This Invoice

\$2,996.25

Fee : 4,400.00
Prior Billings : 1,392.75
Current Billings : 2,996.25
Total Billings : 4,389.00

Phase : **** -- Professional Services

Labor

Class	Hours/ Units	Rate	Amount
Authority Engineer	5.00	115.00	575.00
Project Engineer	18.00	97.00	1,746.00
Senior Engineering Technician	5.00	85.00	425.00
Engineering Technician II	3.25	77.00	250.25
Labor Total:	31.25		2,996.25

Total Phase : **** -- Professional Services

Labor : \$2,996.25
Expense : \$0.00

Total Project : EGMA1604 -- White Chimneys MH Lining Bid Doc

Labor : \$2,996.25
Expense : \$0.00

OLC RS 4/8

East Goshen Municipal Authority
EGMA1601 Invoice Summary
Invoice Date 03/30/2016

Project:	EGMA1604		
Pennoni Job No.:	White Chimneys MH Lining Bid Doc		
Invoice No:	682661		
Invoice Period:	2/15/2016	to	3/20/2016
Initial Authorization:	\$ 4,400.00	Date:	3/30/2016
Contract Amount:	\$ 4,400.00		
Previously Invoiced:	\$ 1,392.75		
Current Invoice:	\$ 2,996.25		
Invoiced to Date (\$):	\$ 4,389.00		
Invoiced to Date (%):	100%		
Remaining Budget (\$):	\$ 11.00		
Remaining Budget (%):	0%		

Budget by Phase:

Phase Name:	White Chimneys MH Lining Bid Doc		
Phase Budget:	\$ 4,400.00		
Previously Invoiced:	\$ 1,392.75		
Current Invoice:	\$ 2,996.25		
Invoiced to Date (\$):	\$ 4,389.00		
Invoiced to Date (%):	100%		
Remaining Budget (\$):	\$ 11.00		
Remaining Budget (%):	0%		

Comments: Field observations and measurements of manholes along/behind Cornwallis Drive to add to project scope; field observations of manholes off interceptor in White Chimneys to confirm rehab is not needed; vendor coordination; prepared bid document and technical specifications; updated cost estimate to include additional Cornwallis Drive manholes; updated exhibit of White Chimneys manholes to be lined and created exhibit of Cornwallis Drive manholes; and submitted draft bid document and cost estimate to Township for review.

Memo

To: Municipal Authority
From: Jon Altshul
Re: MA March Financial Reports
Date: April 5, 2016

In March, the Municipal Authority recorded \$25,110 in revenues (primarily from a \$25,000 transfer from the Sewer Operating Fund) and \$22,038 in expenses (including \$7,705 for the quarterly administrative charge-back, \$9,875 for general engineering services, and \$2,935 for Reservoir Road Pump Station engineering), for a positive variance of \$3,072. As of March 31st, the fund balance was \$1,449,120, of which \$1,393,945 is in the main construction account.

A complete list of all year-to-date expenses and revenues is provided.

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER, PA
Municipal Authority
March 2016

Account Title	Acct #	Annual Budget	Month To Date Actual	Year To Date Actual
---------------	--------	---------------	----------------------	---------------------

MUNICIPAL AUTHORITY BEGINNING FUND BALANCE			1,446,108.40	
---	--	--	---------------------	--

RCSTP BUDGET

REVENUE

INTEREST EARNED - RCSTP EXPANSION	07341 1020	1,500.00	109.26	323.41
GRANT REVENUE	07392 0800	0.00	0.00	0.00

TOTAL REVENUE		1,500.00	109.26	323.41
----------------------	--	-----------------	---------------	---------------

EXPENSES

R.C.-CAP. PROJ.-ENGINEER	07424 7451	0.00		
R.C. CAP EXPANSION GEN'L CONTRACTOR	07424 7452	0.00		
R.C. CAP EXPANSION - ELECTRICAL	07424 7453	0.00		
R.C. CAP EXP CONTINGENCY CAPITAL	07424 7454	0.00		
R.C. CAP EXP CONTINGENCY ONGOING	07424 7455	0.00		
R.C. CAP EXP ADDITIONAL CONTINGENCY	07424 7456	0.00		
TRANSFER TO SEWER SINKING FUND	07492 0550	0.00		
TRANSFER TO AUTHORITY CAP FUND	07492 0990	0.00		

TOTAL EXPENSES		0.00	0.00	0.00
-----------------------	--	-------------	-------------	-------------

RCSTP NET RESULT		1,500.00	109.26	323.41
-------------------------	--	-----------------	---------------	---------------

OPERATING BUDGET

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER, PA
Municipal Authority
March 2016

Account Title	Acct #	Annual Budget	Month To Date Actual	Year To Date Actual
REVENUE				
INTEREST EARNINGS	07341 1000	10.00	0.51	1.45
C.C. TAPPING FEES	07364 1100	4,000.00	0.00	0.00
R.C.TAPPING FEES	07364 1110	4,000.00	0.00	12,152.00
CONNECTION FEES - SEWER	07364 1130	0.00	0.00	845.64
MISCELLANEOUS REVENUE	07380 1000	0.00	0.00	423.36
TRANSFER FROM SEWER OPERATING	07392 0500	93,832.00	25,000.00	25,000.00
TOTAL REVENUE		101,842.00	25,000.51	38,422.45
EXPENSES				
ADMINISTRATIVE WAGES	07424 1400	0.00	7,705.49	7,705.49
MISCELLANEOUS EXPENSE	07424 3000	3,000.00	0.00	1,641.62
MUNIC.AUTH.-AUDITING	07424 3110	9,500.00	0.00	0.00
ENGINEERING SERVICES	07424 3130	38,500.00	9,874.50	16,843.50
LEGAL SERVICES	07424 3140	9,000.00	1,523.50	2,403.50
M.C.-DVRFA-DEBT SERVICE	07471 1000	24,920.00	0.00	0.00
M.C.-DVRFA-INTEREST PAYMN	07472 1000	3,172.00	0.00	0.00
M.C.-DVRFA-INTEREST PAYMN	07472 1010	0.00	0.00	0.00
TOTAL EXPENSES		88,092.00	19,103.49	28,594.11
OPERATING NET RESULT		13,750.00	5,897.02	9,828.34

EAST GOSHEN TOWNSHIP
1580 PAOLI PIKE
WEST CHESTER, PA
Municipal Authority
March 2016

Account Title	Acct #	Annual Budget	Month To Date Actual	Year To Date Actual
CAPITAL BUDGET				
REVENUE				
LOAN PROCEEDS-SEWER PROJECT	07393 1001	0.00	0.00	0.00
TRANSFER FROM SEWER CAP RESERVE	07392 0900	0.00	0.00	0.00
TOTAL REVENUE		0.00	0.00	0.00
EXPENSES				
MARYDELL PUMP STATION - ENGINEER	07425 1000	0.00	0.00	0.00
MARYDELL PUMP STATION -CONSTRUCTION	07425 2000	0.00	0.00	0.00
MANHOLE COVER REPLACEMENTS	07424.7405	0.00	0.00	0.00
C.C. CAPITAL - COLLECTION	07424.7420	0.00	0.00	0.00
LOCHWOOD ABANDONMENT ENGINEER	07424 7475	0.00	0.00	0.00
LOCHWOOD ABANDONMENT CONSTRUCTION	07424 7476	0.00	0.00	0.00
LOCHWOOD ELIMINATION PHASE 2	07424 7477	0.00	0.00	0.00
HERSHEY MILL STATION - ENGINEER	07426 1000	0.00	0.00	0.00
HERSHEY MILL STATION - CONSTRUCTION	07426 2000	0.00	0.00	0.00
RESERVE PUMP STATION - ENGINEER	07427 1000	0.00	0.00	0.00
RESERVE PUMP STATION - CONSTRUCTION	07427 2000	0.00	0.00	0.00
RESERVOIR PUMP STATION - ENGINEER	07428 1000	0.00	2,934.75	22,248.00
RESERVOIR PUMP STATION CONSTRUCTION	07428 2000	0.00	0.00	0.00
ASBSTOS CONCRETE ENGINEERING	07429 3130	25,000.00	0.00	0.00
DIVERSION PROJ.- LEGAL	07429 3166	0.00	0.00	0.00
TOTAL EXPENSES		25,000.00	2,934.75	22,248.00
CAPITAL NET RESULT		(25,000.00)	(2,934.75)	(22,248.00)
MUNICIPAL AUTHORITY ENDING FUND BALANCE			1,449,179.93	

Report Date 04/05/16

GL Transaction Details

PAGE 1

MGRP18 run by BRIAN

1 : 35 PM

Acct #	Per	Src	Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07341-1000			INTEREST EARNINGS			0.00				
	1601	JE	51240		0.43		02/01/16	INTEREST		INTEREST EARNED JANUARY 2016 07 FUND
	1601			0.00	0.43	-0.43				
	1602		51651		0.51		03/01/16	INTEREST		INTEREST EARNED FEBRUARY 2016 07 FUND
	1602			0.00	0.51	-0.94				
	1603		52095		0.51		04/04/16	INTEREST		INTEREST EARNED MARCH 2016 07 FUND
	1603			0.00	0.51	-1.45				
07341-1000	****	***	*****	0.00	1.45	-1.45				
07341-1020			INTEREST EARNED - RCSTP EXPANSION			0.00				
	1601		51240		110.59		02/01/16	INTEREST		INTEREST EARNED JANUARY 2016 07 FUND
	1601			0.00	110.59	-110.59				
	1602		51651		103.56		03/01/16	INTEREST		INTEREST EARNED FEBRUARY 2016 07 FUND
	1602			0.00	103.56	-214.15				
	1603		52095		109.26		04/04/16	INTEREST		INTEREST EARNED MARCH 2016 07 FUND
	1603			0.00	109.26	-323.41				
07341-1020	****	***	*****	0.00	323.41	-323.41				
07364-1110			R.C.TAPPING FEES			0.00				
	1601	CR	51204		5,004.00		01/28/16	1247	7875 1	SUNNY RIDGE FARMS LLC
	1601			0.00	5,004.00	-5,004.00				

Report Date 04/05/16

GL Transaction Details

PAGE 2

MGRP18 run by BRIAN

1 : 35 PM

Acct #	Per	Src	Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07364-1110	1602	RE	51557		7,148.00		02/23/16	51557 1		TAP IN FEE-957 CORNWALLIS DR
	1602			0.00	7,148.00	-12,152.00				
07364-1110	****	***	*****	0.00	12,152.00	-12,152.00				
07364-1130			CONNECTION FEES - SEWER			0.00				
		CR	51318		423.00		02/05/16	804	9354	1 GEORGE SMITH & CHRISTINA CONLE
			51322		423.00		02/05/16	344	9356	1 JACOBS, ROBERT & CHERYL
			51357		423.00		02/08/16	2435	9355	1 STOFFLET, MICHAEL
		JE	51319	141.12			02/05/16	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
			51323	141.12			02/05/16	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
			51358	141.12			02/08/16	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
	1602			423.36	1,269.00	-845.64				
07364-1130	****	***	*****	423.36	1,269.00	-845.64				
07380-1000			MISCELLANEOUS REVENUE			0.00				
			51319	141.12			02/05/16	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
			51323	141.12			02/05/16	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
			51358	141.12			02/08/16	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
	1602			0.00	423.36	-423.36				
07380-1000	****	***	*****	0.00	423.36	-423.36				
07392-0500			TRANSFER FROM SEWER OPERATING			0.00				
	1603		52022		25,000.00		03/28/16	DEPOSIT		DEPOSIT TO MUNICIPAL ACCT.
	1603			0.00	25,000.00	-25,000.00				
07392-0500	****	***	*****	0.00	25,000.00	-25,000.00				
07424-1400			ADMINISTRATIVE WAGES			0.00				
		CD	51990	7,705.49			03/24/16	3013		425 EAST GOSHEN TOWNSHIP - GENERAL Q1 2016 REIMBURSEMENT FROM MUN.A
	1603			7,705.49	0.00	7,705.49				

Report Date 04/05/16

GL Transaction Details

PAGE 3

MGRP18 run by BRIAN

1 : 35 PM

Acct #	Per	Src	Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07424-1400	****	***	*****	7,705.49	0.00	7,705.49				
07424-3000						0.00				
			MISCELLANEOUS EXPENSE							
	1601		50894	978.00			01/04/16	3004		2132 PENNSYLVANIA MUNICIPAL AUTHORITIES ASSOC 2016 ACTIVE MEMBERSHIP DUES
			51002	163.62			01/18/16	3005		2967 SAFEGUARD CHECK ORDER FEE
			51028	500.00			01/14/16	3006		2737 COMMONWEALTH OF PA NPDES PERMITS -CHAP.92A 2016 PERMIT# PA0050504
	1601			1,641.62	0.00	1,641.62				
07424-3000	****	***	*****	1,641.62	0.00	1,641.62				
07424-3130						0.00				
			ENGINEERING SERVICES							
	1602		51394	5,905.25			02/10/16	3008		1052 PENNONI ASSOCIATES INC. SERVICES THRU 1/17/16 RCSTP & PU STATION O&M MANUAL
			51527	1,063.75			02/23/16	3010		1052 PENNONI ASSOCIATES INC. SERV.THUR 12/13/16 2015 GEN.SER
	1602			6,969.00	0.00	6,969.00				
	1603		51813	9,874.50			03/15/16	3012		1052 PENNONI ASSOCIATES INC. SERVICES THRU 2/14/16 RCSTP PS O
	1603			9,874.50	0.00	16,843.50				
07424-3130	****	***	*****	16,843.50	0.00	16,843.50				
07424-3140						0.00				
			LEGAL SERVICES							
	1601		51149	400.00			12/17/15	3007		528 GAWTHROP GREENWOOD & HALSTED LEGAL SERVICES 12/14/15 - GEN.AU
	1601			400.00	0.00	400.00				
	1602		51503	480.00			02/19/16	3009		528 GAWTHROP GREENWOOD & HALSTED LEGAL SERVICE 1/11-1/29/16 GEN.A
	1602			480.00	0.00	880.00				

East Goshen Township General Ledger

Report Date 04/05/16

GL Transaction Details

PAGE 4

MGRP18 run by BRIAN 1 : 35 PM

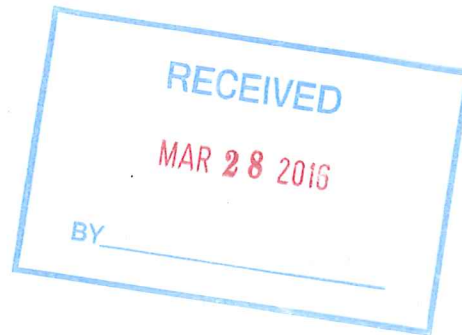
Acct #	Per	Src	Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07424-3140	1603	CD	51813	1,523.50			03/15/16	3011	528	GANTHROP GREENWOOD & HALSTED LEGAL SERVICE FEB.2016 - GEN. AU
	1603			1,523.50	0.00	2,403.50				
07424-3140	****	***	*****	2,403.50	0.00	2,403.50				
07428-1000						0.00				
	1602		51395	2,565.50			02/10/16	103	1052	PENNONI ASSOCIATES INC. SERVICE THRU 1/17/16 RESERV.RD.P
			51528	16,747.75			02/23/16	104	1052	PENNONI ASSOCIATES INC. SERVICE THRU 12/13/15 RESERV.RD
	1602			19,313.25	0.00	19,313.25				
	1603		51812	1,934.75			03/15/16	105	1052	PENNONI ASSOCIATES INC. SERV. THRU 2/14/16 RESERV.RD PS PENNDOT HOP
			52048	1,000.00			03/30/16	106	1496	WILLIAM WOOD CO. SEWER EASEMENT -1636 BOW TREE DR
	1603			2,934.75	0.00	22,248.00				
07428-1000	****	***	*****	22,248.00	0.00	22,248.00				
Grand Total				51,265.47	39,169.22	12,096.25				



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

March 22, 2016

Mr. Rick Smith
East Goshen Township
1580 Paoli Pike
West Chester, PA 19380



Re: Act 537, Application for Exemption
943 Cornwallis Drive Subdivision
DEP Code No. 1-15919-238-E
East Goshen Township
Chester County

Dear Mr. Smith:

The Department of Environmental Protection (DEP) has received the above-referenced subdivision plan. This letter confirms DEP's determination that the above-referenced project is exempt from the requirement to revise the Official Plan for new land development. This determination is based in part on municipal and other sign-offs. The project is located at 943 Cornwallis Drive, in East Goshen Township, Chester County.

This project proposes a 2 lot residential subdivision. The existing dwelling will be demolished and 2 new single-family dwellings will be constructed.

The project will be connected to the East Goshen Municipal Authority collection system and will generate an additional 275 gallons of sewage per day to be treated at the East Goshen Municipal Authority Wastewater Treatment Facility.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

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

March 18, 2016

Mr. Donald Pusey
1636 Bow Tree Drive
West Chester PA 19380

Dear Mr. Pusey:

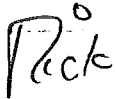
As I noted in my letter of March 2, 2016 the force main for the Reservoir Road Pump Station will have to cross the corner of your property that is next to the pond. This means the Authority will need to acquire an easement from you to install the force main.

The Authority engaged William Wood Company to conduct an appraisal and they have determined that the Just Compensation for the Temporary and Permanent Easement is \$690.00. Please consider this letter as a formal offer from the Municipal Authority to acquire the easement from you for \$690.00.

I have enclosed a copy of the appraisal and the easement for your review. If the offer is acceptable please contact me and we can set up a time for executing the agreement and payment of the compensation.

Please give me a call at 610-692-7171 or e-mail me at rsmith@eastgoshen.org if you have any questions.

Sincerely,



Louis F. Smith, Jr.
Township Manager

Enclosures

Rick Smith

From: Michael Ellis <MEllis@Pennoni.com>
Sent: Thursday, April 07, 2016 11:47 PM
To: rsmith@eastgoshen.org
Cc: Mark Miller (mmiller@eastgoshen.org); Nathan M. Cline; 'ssmith@eastgoshen.org'; Sherrie Ball
Subject: Pennoni Invoices - Municipal Authority - March 2016
Attachments: Current Invoices (2016-03).pdf

Hi Rick,

Current Municipal Authority invoices are attached.

Please note that we are up against the budget on the Manhole Lining project due to the addition of the Cornwallis Drive, Barkway, and Hunt Country manholes to the original White Chimneys scope, in addition to the alternative product evaluation. I anticipate the effort to visit the alternative product manholes on Tuesday, finalize the bid doc accordingly (90% draft was previously submitted), perform site visits to quantify the Barkway and Hunt Country manholes to be lined, and to provide limited bid assistance will be an additional \$2,500-\$3,000. This would take the total project value to approx \$6,900-\$7,400. Would this require MA approval?

Please call or email me if you have any questions.

Thanks,
Mike

Michael Ellis, PE
Municipal Division Manager

Pennoni
121 Continental Drive, Suite 207 | Newark, DE 19713
Direct: 302-351-5236 | **Mobile:** 302-561-4235
www.pennoni.com | MEllis@Pennoni.com



PARTNERS FOR WHAT'S POSSIBLE

4-8-16

Recommend we
Increase Budget

Recd