### **EAST GOSHEN MUNICIPAL AUTHORITY**

### May 13, 2013 Monday 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. <u>APPROVAL OF MINUTES</u>
  - a. April 8, 2013
- 4. APPROVAL OF INVOICES

a.	Pennoni #546001	\$ 1,126.50
b.	Pennoni #546002	\$ 127.75
c.	Pennoni #546003	\$ 47.50
d.	Pennoni #546004	\$ 472.50
e.	Pennoni #546005	\$ 2,387.75
f.	Pennoni #546006	\$ 5,355.00
g.	Pennoni #546007	\$ 976.50
h.	Pennoni #546008	\$ 7,040.25
i.	Reserve at Spring Meadows HOA	\$ 1,455.00
j.	Gawthrop Greenwood #108506	\$ 3,364.00
k.	Plymar Invoice – MaryDell Deversion	\$ 79,704.00

- 5. <u>LIAISON REPORTS</u>
- 6. FINANCIAL REPORTS
  - a. April 2013 Report
- 7. OLD BUSINESS

a.

- 8. GOALS
  - a. April Goals
- 9. NEW BUSINESS
  - a. Contract Change Order Hershey Mill Pump Station Diversion Delaware Valley Utility Contractors
  - b. Approval recommendation from Earthcore Services
  - c. Marydell construction phase budget

### 10. CAPACITY REQUESTS

a.

- 11. <u>SEWER REPORTS</u>
  - a. Director of Public Works Report
  - b. Pennoni Engineer's Report
  - c. Big Fish Environmental Inc Report with DMR's
  - d. East Goshen Township Flows for April 2013
- 12. ANY OTHER MATTER
- 13. CORRESPONDENCE AND REPORTS OF INTEREST
- 14. PUBLIC COMMENT
- 15. ADJOURNMENT

<u>Reminder</u> – NEWSLETTER ARTICLE SUBMISSION DUE DATES:

<u>Article Due Date</u>

<u>Website Posting Date</u>

1		draft	
2	EAST GOSHEN TOWN	SHIP MUNICIPAL AUTHORITY	
3		TING MINUTES	
4	Ap	ril 8, 2013	
5	•	,	
6	The East Goshen Township Municipal Aut	hority held their regularly scheduled meeting on	
7	Monday, April 8, 2013 at 7:00 pm at the Ea	ast Goshen Township building. Members in	
8	attendance were: Chairman Fran Beck, Jac	k Yahraes, Dana Pizarro, Ed McAssey and Kevin	
9	Cummings. Also in attendance were: Ric	k Smith (Township Manager), Mark Miller (Director	
10		Dan Barbato (Pennoni), Scott Towler (BFES), and	
11	Walter Wujcik (Conservancy Board).	(	
12			
13	COMMON ACRONYMS:		
14	BFES – Big Fish Environmental Services	MA- Municipal Authority	
15	BOS – Board of Supervisors	NPDES – National Pollutant Discharge Elimination System	
16 17	CB – Conservancy Board	PC – Planning Commission	
18	DEP – Department of Environmental Protection EPA – Environmental protection Agency	PR - Park & Recreation Board	
19	HC – Historical Commission	RCSTP – Ridley Creek Sewer Treatment Plant SBR – Sequencing Batch Reactor	
20	I&I – Inflow & Infiltration	SSO – Sanitary System Overflow	
21	LCSTP - Lochwood Chase Sewer Treatment Plant	WAS – Waste Activated Sludge	
22			
23	Call to Order & Pledge of Allegiance		
24	Fran called the meeting to order at 7:00 pm	and led those present in the Pledge of Allegiance.	
25	There was a moment of silence to remember the troops. Fran asked if anyone would be		
26	recording the meeting and there was no resp	ponse.	
27			
28	New Business		
29		or Pulte Homes, reported that a check and the	
30	easement agreement for the Pulte developm	ent at Applebrook were provided. Rick verified that	
31	he received the check for the cash escrow a	nd the agreement. Jack moved that the Authority	
32	authorize the execution of the easement agr	eement and the security agreement for the sewer lines	
33	in the Pulte Development at Applebrook. Kevin seconded the motion. The motion passed		
34	unanimously.		
35			
36	Chairman's Report		
37	Ed reported that he attended the West Gosh	en Authority meeting last week. Things are a little	
38	more positive. West Goshen, EPA and Just	ice Department are talking. Rick spoke with Dr.	
39	White who verified that they did meet with	the DEP and agreed to .8. They have 5 years to reach	
40	this and there will be new testing of the cree	ek.	
41			
42	Approval of Minutes		
43	The Chairman noted that the minutes of the	March 11, 2013 meeting were approved as corrected.	
44			
45	Approval of Invoices		
46	1. Jack moved to approve payment of 7 Pe		
47	#540995 \$2,020		
48	#540996 \$ 535	5.25	

1	#540997	\$ 497.50
2	#540998	\$ 752.00
3	#540999	\$4,995.75
4	#541000	\$2,580.50
5	#541001	\$6,327.75

- 6 Dana seconded the motion. The motion passed unanimously.
- 7 2. Dana moved to approve payment of the Gawthrop, Greenwood invoice #107114 for
- 8 \$1,661.12. Jack seconded the motion. The motion passed unanimously.
- 9 3. Kevin moved to approve payment of the Big Fish Environmental Ser. Invoice #13-040130-2
- for \$11,825. Ed seconded the motion. The motion passed unanimously.
- 4. Kevin moved to approve payment of the Lochwood Plant closure labor costs totaling
- 12 \$1,894.91. Dana seconded the motion. The motion passed unanimously.
- 5. Dana moved to approve payment of the Plymar Invoice, for the Marydell diversion, in the amount of \$20,700. Kevin seconded the motion. The motion passed unanimously.

### Liaison Reports

15 16

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2728

31 32

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- 17 1. Conservancy Board Walter reported that the dogwood trees were planted along E. Boot
- 18 Road last week. The Board is working with Township staff to install rain barrels at the
- 19 Township building.

### 21 Financial Reports

- 22 1. Jon Altshul, CFO, provided reports with the following comment: The Municipal
- Authority recorded \$9,875.27 in expenses and \$4,004.89 in revenues (primarily from tap-in fees
- 24 at Sorrell Hill) in the month of March, a difference of \$5,870.38. The fund balance is now
- \$49,363.73. The expenses were due to the quarterly administrative chargeback and further labor
   and equipment costs incurred for Lockwood Elimination.

### Old Business

- 29 1. Amend 2013 budget Per Rick's recommendation, Dana moved to amend the 2013
- 30 Municipal Authority Budget as follows:

Transfer from Sewer Cap Reserve	2013 Adopted	Change	2013 Revised
	\$556,769	+\$230,000	\$786,769
Marydell Pump Station - Engineer	\$25,000	+\$6,000	\$31,000
Marydell Pump Station - Construction	\$170,000	+\$80,000	\$250,000
Hershey Mill Pump Station - Engineer	\$25,000	+\$10,000	\$35,000
Hershey Mill Pump Station - Construction	\$46,000	+\$134,000	\$180,000

Jack seconded the motion. The motion passed unanimously.

- 2. Comprehensive Plan Goals The members of the Authority reviewed the goals report that
- Rick prepared (see attached). Rick explained that the Authority has 3 goals Marydell,
- Hershey's Mill and the Reserve. The *italics* indicate the status of the tasks. Jack moved to
- 37 accept the goals and recommendations in Rick's memo and present it to the Board of Supervisors

as the Municipal Authority's 1<sup>st</sup> Quarter Report for 2013. Dana seconded the motion. The motion passed unanimously.

### <u>Goals</u>

- 1. Rick announced that in Jan, Feb and March 2013 they met the permit at Ridley. He thanked Scott Towler and Mark Miller for their work.
- 2. June Newsletter article will be provided by Kevin.
- 3. June West Goshen meeting Jack will attend.

### Capacity Requests None

### Sewer Reports

1. Mark Miller, Director of Public Works, provided the following report for March:

Meters – The meters were calibrated on April 8, 2013. Minor adjustments were made to Wilson Dr. The portable flow meters were pulled and will be reinstalled this week. We will be monitoring the sewer flows between Rt. 3 and Paoli Pike.

<u>Pump Stations</u> – Were visited on a daily basis.

CC Collection: On March 17<sup>th</sup> we received an alarm at the Hershey Mill Pump Station for a pump failure. While I was en route, I received a high level alarm. We found that all of the pumps had tripped as well as the VFD's. We reset the breakers to get the pumps to run. It turns out that the block heather on the generator shorted out which tripped the circuit breakers.

R.C. Collection: Joann received a call from a resident at 202 Applebrook Drive who reported sewage coming thru his basement toilet. We arrived at 202 Applebrook Dr and started to pull manholes. We found manholes plugged with grease. As we worked to clear the clog, we found that two drop manholes were completely clogged and had to use shovels and pry bars to release the grease. The crew was able to get the line opened to alleviate the backup. I explained to the homeowner that the lines were not part of the Township System. I contacted the management company to advise them that they had a serious problem that needed immediate attention. We checked the other manholes to make sure they were clear before we left and we also worked our way back to the clubhouse where we found the main line with a 75% blockage. Applebrook called Pipe Data View in to clear their lines. The management company is having all the lines cleared.

R.C. Plant: Nothing to report at this time.

Alarms: We received a total of 17 alarms

PA One Calls: We received 47 PA One calls for the month of March.

- 2. **Pennoni**: Dan Barbato provided the following engineer's report:
  - <u>Invoices</u>: Invoices with summaries are provided under separate cover.
- 42 Ridley Creek Sewage Treatment Plant (RCSTP) Pennoni continues to coordinate with the Plant Operator and will provide operations assistance as needed. No issues were brought to our attention in March.

Marydell PS Elimination — We coordinated with Ply-Mar to have their insurance coverage revised to comply with contract requirements, and an acceptable insurance certificate was provided. We also reviewed additional shop drawing submissions. Notice to Proceed with Construction was issued effective March 18. The contract completion date is July 15.

Ply-Mar began construction on March 26. Ply-Mar originally estimated 6-8 weeks to complete the project. We have performed construction field observation and office support during the construction including but not limited to field meetings and

complete the project. We have performed construction field observation and office support during the construction including but not limited to field meetings and coordination with PECO to brace utility poles, coordination with Sunoco for required soft dig test pits of gas mains in Boot Road, observation of Paoli Pike jack and boring, and resolution of Paoli Pike jack and boring casing misalignment.

We reviewed the contractor's first payment request and forwarded our recommendation to the township.

Hershey's Mill PS Diversion: We issued Notice to Proceed with Construction effective April 1, 2013. The contract completion date is July 29, 2013. The contractor, Delaware Valley Utility Contractors, proposes to begin work on May 6. They estimate approximately one month to complete the project. A pre-construction meeting is tentatively scheduled for April 16 or 17.

We are also in the process of reviewing partial shop drawings from the contractor. Reserve PS Elimination – We completed the Bid Plans and near-final specifications. The plans and specifications were submitted to the Reserve at Spring Meadows HOA per their request. The project will be put out to bid after the Reserve at Spring Meadows HOA has granted the easement and rock borings are performed.

<u>Chapter 94 Annual Reports</u> – We prepared and submitted the reports for the Ridley Creek, West Goshen and Westtown Service Areas to DEP. We also prepared and submitted a letter to DEP stating that the Lockwood Chase STP was decommissioned in 2012 and that a Chapter 94 Report for that Plant is therefore not necessary.

<u>Semi-Annual I/I Report</u> – We analyzed permanent and portable (temporary) meter data from the preceding six months, and we met with Township staff to review the metering and discuss locations for metering and investigations over the next six months. We prepared the semi-annual report and submitted it to the Township.

<u>Applebrook Sewer Easements</u> – We reviewed the easement plan and legal description and we provided minor comments to the Township.

3. <u>Big Fish Environmental Services, Inc.</u>, Scott Towler presented a report for March 2013. The following is a summary:

**Treatment Process Operation** 

 During February, there were no exceedances of the final effluent discharge limitations for outfall 001. There was no discharge from outfall 002. The monthly average total phosphorus concentration was 0.20 mg/L as compared to the discharge limitation of 0.5 mg/L. During the month, the final effluent total phosphorus concentration discharged ranged from <0.14 mg/L to .026 mg/L.

Sequencing Batch Reactors (SBRs) number 1, 3, and 4 were in service during the month of March. Process monitoring of each SBR included, ammonia as N, nitrate as N, COD, SSV, MLSS and total phosphorus. Microscopic examinations and physical observation of the SBR MLSS and foam color is ongoing. Foam concentrations

increased in concentration of surface area coverage during the month. The foam remains as light brown in color and averages 3 to 4 inches in depth. The F:M ratios for SBR 3 and 4 decreased slightly. Increased sludge wasting rates were gradually implemented during the last week of the month and will continue during April to increase the F:M ratio and lower the MLSS.

Daily monitoring of the influent and final effluent 24-hour composites samples for total phosphorus is ongoing. Daily analysis of the final effluent flow equalization grab sample is total phosphorus 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 was largely consistent through March.

SBR No 2 remains out of service. Transfer of the remaining mixed liquor will be implemented during the month of April to drain the tank. The facility is anticipated to achieve compliance with the permitted effluent limitations.

<u>Process Monitoring On-Line Instrumentation</u> — The ChemScan phosphate analyzer remains on line. Comparison testing for reactive (ortho) and total phosphorus is ongoing. On site comparison, monitoring is measuring a significant difference among the analyzer data as compared to the onsite laboratory data. Dave Kershner was contacted to confirm calibration of the analyzer and adjust if needed. Suspended solids within the post final effluent feed to the flow floc tank and filters may be fouling the analyzer.

<u>Solids Dewatering and Disposal</u> – During the month, the centrifuge dewatering system was placed in service. 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 at the beginning of the month was 12.99 feet and the level at the end of the month was 14.14 feet. The initial total solids concentration was 0.77% and ended the month as 0.81% total solids. A total of 141,225 gallons of supernatant was decanted during the month.

Sludge holding tank No. 2 was out of service. The level at the beginning of the month was 2.57 feet and the level at the end of the month was 1.60 feet. This sludge tank is planned to be utilized during the month of April to drain SBR 2 and assist to handle the increase sludge wasting rates.

<u>Significant Storm Events</u> – During March there were no significant precipitation events contributing to excessive influent wastewater flows to the treatment facility.

### Minor Repairs and Preventative Maintenance:

2 3

- · ACS was contacted to schedule repair of the influent flow chart recorder.
- ACS installed flow meter signal cable connecting the new influent "field" flow meter to the influent sampler located at the doghouse manhole. The influent sample collection is a flow-proportioned sample.
- Jeff Bush from Worth & Company was contacted to replace the failed analog hour meters (previous warranty issue left unresolved by Worth & Co.).
- The spider gear for the centrifuge polymer feed system failed. The gear from the disc filter polymer feed system was used to return the centrifuge to service. Replacement parts will be ordered.

1	• The rear bearing of the centrifuge continues to be closely monitored as the temperature
2	has been observed to increase to 180°F. A temperature of 212°F activates a high
3	temperature alarm and results in the machine failure.
4	<ul> <li>Disc Filter Number 2 cloth media was cleaned. There have been no high vacuum</li> </ul>
5	alarms observed since completing the cleaning procedure.
6	The Township coordinated with Aqua Wastewater Management to remove grit from
7	the influent flow channel.
8	
9	Any Other Matter
10	None
11	
12	Correspondence
13	None
14	
15	Adjournment
16	There being no further business, Jack moved to adjourn the meeting. Dana seconded the motion.
17	The motion passed unanimously. The meeting was adjourned at 8:15 pm.
18	5 Same angestated at 1,10 paris
19	Respectfully submitted,
20	
21	
22	Ruth Kiefer
23	Recording Secretary



### INVOICE Newark, DE

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

Remit Payment To: Pennoni Associates Inc. 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 #: 546001 Invoice Date: 05/09/2013 Project: EGMA1107

Project Name: HersheyMill &Reserve PS Div Des

Per

For Services Rendered through: 4/14/2013

Reserve PS Diversion - Updated bid plans and specifications per new PA One Call PECO electric plans and to include specifics for detention basin embankment restoration; assembled and submitted bid plans and specifications to Reserve HOA for review.

Hershey's Mill PS Diversion - Prepared and issued letters notifying unsuccessful bidders of project award.

Phase: 1 -- Design

Total Phase: 1 -- Design

Labor: 1,126.50

Expense: 0.00

Phase Total: 1,126.50

Amount Due This Invoice \$1,126.50

Fee: 69,200.00

 Prior Billings:
 63,607.25

 Current Billings:
 1,126.50

 Total Billings:
 64,733.75

Phase: 1 - Design

Labor Hours/ Class Units Rate **Amount** Project Engineer 3.50 95.00 332.50 Staff Engineer 6.50 85.00 552.50 Graduate Engineer 1.75 73.00 127.75 Engineering Technician 1 1.75 65.00 113.75 Labor Total: 13.50 4,426.50

Total Phase: 1 - Design Labor: \$1,126.50

Total Project : EGMA1107 -- HersheyMill &Reserve PS Div Des Per Labor : \$1,126.50

Expense: \$0.00

\$0.00

Expense:

ok RS 5-10

### East Goshen Municipal Authority EGMA1107 Invoice Summary Invoice Date 05/09/2013

Project : Hershey Mill & Reserve PS Diverse Design & Permitting

Pennoni Job No.: EGMA1107 Invoice No.: 546001

Invoice Period : 3/18/2013 to 4/14/2013 Initial Authorization : \$ 60,200.00 Date : 7/7/2012

Changes: \$ 9,000.00 Date:

Contract Amount: \$ 69,200.00 Previously Invoiced: \$ 63,607.25 Current Invoice: \$ 1,126.50 Invoiced to Date (\$): 64,733.75 Invoiced to Date (%): 94% Remaining Budget (\$): \$ 4,466.25 Remaining Budget (%): 6%

Budget by Phase:

Phase No. 01

Hershey Mill &

Phase Name : Reserve PS

Phase Budget: 69,200.00 Previousy Invoiced: Ś 63,607.25 Current Invoice: \$ 1,126.50 Invoiced to Date (\$): \$ 64,733.75 Invoiced to Date (%): 94% Remaining Budget (\$): \$ 4,466.25 Remaining Budget (%): 6%

Comments: Reserve PS Diversion - Updated bid plans and specifications per new PA One Call PECO electric plans and to include specifics for detention basin embankment restoration; assembled and submitted bid plans and specifications to Reserve HOA for review. Hershey's Mill PS Diversion - Prepared and issued letters notifying unsuccessful bidders of project award.



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

Remit Payment To: Pennoni Associates Inc. 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 #: 546002

Invoice Date: 05/09/2013

Project: EGMA1109

Project Name: Marydell Pump Station Diversion

For Services Rendered through: 4/14/2013

Prepared and issued letters notifying unsuccessful bidders of project award.

Phase: 4 -- PennDOT Highway Occupancy Permits

Total Phase: 4 -- PennDOT Highway Occupancy Permits

Labor: 127.75

Expense: 0.00

Phase Total: 127.75

Amount Due This Invoice

\$127.75

127.75

\$0.00

Fee: **Prior Billings:**  36,100.00

**Current Billings:** 

34,212.00 127.75

**Total Billings:** 

34,339.75

Phase: 4 - PennDOT Highway Occupancy Permits

Labor Hours/ Class Units Rate **Amount** Graduate Engineer 1.75 73.00 127.75 Labor Total: 1.75

Total Phase: 4 - PennDOT Highway Occupancy Permits Labor: \$127.75

Expense: \$0.00

Total Project : EGMA1109 -- Marydell Pump Station Diversion Labor: \$127.75

Expense:

### East Goshen Municipal Authority EGMA1109 Invoice Summary Invoice Date 05/09/2013

Project: Marydell Pump Station Diversion

Pennoni Job No.: EGMA1109

Invoice No.: 546002

Invoice Period: 3/18/2013 4/14/2013 to Initial Authorization: 45,100.00 Date: 2/22/2012

Changes: \$ Date:

**Contract Amount:** 36,100.00 Previously Invoiced: 34,212.00 Current Invoice: 127.75 Invoiced to Date (\$): 34,339.75 Invoiced to Date (%): 95% Remaining Budget (\$): 1,760.25 Remaining Budget (%): 5%

**Budget by Phase:** 

Phase No. 01

Marydell Pump

Phase Name: Station

Phase Budget: 36,100.00 Previousy Invoiced: \$ 34,212.00 **Current Invoice:** 127.75 Invoiced to Date (\$): 34,339.75 Invoiced to Date (%): 95% Remaining Budget (\$): 1,760.25 Remaining Budget (%): 5%

Comments: Prepared and issued letters notifying unsuccessful bidders of project award.



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

**Remit Payment To:** Pennoni Associates Inc. 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 #: 546003

Invoice Date: 05/09/2013

Project: EGMA1206

Project Name: Hershey Mill PS Muffin Monster

Desi

For Services Rendered through: 4/14/2013

Provide M. Miller with requested information on hydraulic power pack enclosure.

Phase: \*\*\*\* -- Professional Services

Total Phase: \*\*\*\* -- Professional Services

Labor: 47.50

Expense: 0.00

Phase Total:

47.50

Amount Due This invoice

\$47.50

12,000.00 Fee:

Prior Billings: 8,531.30 **Current Billings:** 47.50

**Total Billings:** 8,578.80

Phase: \*\*\*\* -- Professional Services

Labor

Hours/ Class Units Rate **Amount Project Engineer** 0.50 95.00 47.50

0.50 47.50 **Labor Total:** 

Total Phase: \*\*\*\* -- Professional Services Labor: \$47.50

Expense: \$0.00

Total Project : EGMA1206 - Hershey Mill PS Muffin Monster Desi Labor: \$47.50 \$0.00 Expense:

OIC RS 5-10

### East Goshen Municipal Authority EGMA1206 Invoice Summary Invoice Date 05/09/2013

Project: He	ershey Mill PS Muffin Monster Desi
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Pennoni Job No. :	EGMA1206		
Invoice No. :	546003		

Invoice Period :	3/18/2013		to	4/14/2013
Initial Authorization:	\$	12,000.00	Date:	2/22/2012
	- X			

Changes:	\$ *	Date:

Contract Amount:	\$ 12,000.00
Previously Invoiced:	\$ 8,531.30
Current Invoice :	\$ 47.50
Invoiced to Date (\$):	\$ 8,578.80
Invoiced to Date (%):	71%
Remaining Budget (\$):	\$ 3,421.20
Remaining Budget (%):	29%

### **Budget by Phase:**

Phase No.	01

Hershey	Mill	PS
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### Phase Name: Muffin Monster

Phase Budget :	\$	12,000.00
Previousy Invoiced;	\$	8,531,30
Current Invoice :	5	47.50
Invoiced to Date (\$):	\$	8,578.80
Invoiced to Date (%):		71%
Remaining Budget (\$):	\$	3,421.20
Remaining Budget (%):		29%

Comments: Provide M. Miller with requested information on hydraulic power pack enclosure.



### INVOICE Newark, DE

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

Remit Payment To: Pennoni Associates Inc. 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 #: 546004 Invoice Date: 05/09/2013 Project: EGMA1301

Project Name: 2013 General Services

For Services Rendered through: 4/14/2013

Engineer's report and attendance at April MA meeting. Reviewed Applebrook sewer easement plan and legal description and provided comments to the Township and Developer.

Phase: \*\*\*\* -- Professional Services

Total Phase: \*\*\*\* -- Professional Services

Labor: 472.50 Expense: 0.00

Phase Total: 472.50

Amount Due This Invoice \$472.50

Fee: 10,000.00 Prior Billings: 1,856.25

Current Billings: 472.50 Total Billings: 2,328.75

Phase: \*\*\*\* -- Professional Services

Labor Hours/ Class Units Rate **Amount** Authority Engineer 3.00 110.00 330.00 Project Engineer 1.50 95.00 142.50 Labor Total: 4.50 472.50

Total Phase: \*\*\*\* -- Professional Services Labor: \$472.50

Expense: \$0.00

olc RS

### East Goshen Municipal Authority EGMA1301 Invoice Summary Invoice Date 05/09/2013

Project: 2013 General Services

Pennoni Job No. : EGMA1301 Invoice No. : 546004

Invoice Period: 3/18/2013 to 4/14/2013 Initial Authorization: \$ 10,000.00 Date: 1/9/2013

Changes: \$ - Date:

\$ Contract Amount: 10,000.00 \$ Previously Invoiced: 1,856.25 \$ Current Invoice: 472.50 Invoiced to Date (\$): 2,328.75 Invoiced to Date (%): 23% Remaining Budget (\$): 7,671.25 Remaining Budget (%): 77%

**Budget by Phase:** 

Phase No. \*\*\*\*

2013 General

Phase Name : Services

Phase Budget: \$ 10,000.00

Previousy Invoiced: \$ 1,856.25

Current Invoice: \$ 472.50

Invoiced to Date (\$): \$ 2,328.75

Invoiced to Date (%): 23%

Remaining Budget (\$): \$ 7,671.25

Remaining Budget (\$): \$ 7,671.25 Remaining Budget (%): 77%

Comments: Engineer's report and attendance at April MA meeting. Review Applebrook sewer easement plan and legal description and provided comments to the Township and Developer.



### INVOICE Newark, DE

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

Remit Payment To: Pennoni Associates Inc. 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 #: 546005 Invoice Date: 05/09/2013 Project: EGMA1302

Project Name: 2013 Semi-Annual I&I Reports

For Services Rendered through: 4/14/2013

Analyzed portable meter data; met with Township to present findings and strategize new metering locations; prepared, finalized, and issued March 2013 Semi-Annual I/I Report #09.

Phase: \*\*\*\* -- Professional Services

Total Phase: \*\*\*\* -- Professional Services

Labor: 2,387.75

Expense :

0.00

Phase Total:

2,387.75

**Amount Due This Invoice** 

\$2,387.75

Fee:

10,000.00

Prior Billings :

3,246.00

Current Billings:

2,387.75

Total Billings:

5,633.75

Phase: \*\*\*\* -- Professional Services

Labor

Hours/

Project Engineer

Labor Total:

<u>Units</u> Rate 6.50 95.00

73.00

<u>Amount</u> 617.50

Graduate Engineer

24.25 30.75 1,770.25 **2,387.75** 

Total Phase: \*\*\*\* -- Professional Services

Labor : Expense :

\$2,387.75 \$0.00

Total Project : EGMA1302 — 2013 Semi-Annual I&I Reports

Labor:

\$2,387.75

Expense:

\$0.00

ok RS

### East Goshen Municipal Authority EGMA1302 Invoice Summary Invoice Date 05/09/2013

Project: 2013 Semi-Annual I&I Reports

Pennoni Job No. : EGMA1302 Invoice No. : 546005

Invoice Period : 3/18/2013 to 4/14/2013 Initial Authorization : \$ 10,000.00 Date : 1/16/2013

Changes: \$ - Date:

Contract Amount: \$ 10,000.00 Previously Invoiced: \$ 3,246.00 \$ Current Invoice: 2,387.75 Invoiced to Date (\$): \$ 5,633.75 Invoiced to Date (%): 56% Remaining Budget (\$): \$ 4,366.25 Remaining Budget (%): 44%

**Budget by Phase:** 

Phase No. \*\*\*\*

2013 Semi-

Phase Name : Annual I&I

Phase Budget: \$ 10,000.00
Previousy Invoiced: \$ 3,246.00
Current Invoice: \$ 2,387,75
Invoiced to Date (\$): \$ 5,633.75
Invoiced to Date (%): \$ 56%
Remaining Budget (\$): \$ 4,366.25
Remaining Budget (%): 44%

Comments: Analyzed portable meter data; met with Township to present findings and strategize new metering locations; prepared, finalized, and issued March 2013 Semi-Annual I/I Report #09.



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

**Remit Payment To:** Pennoni Associates Inc. 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 #: 546006 Invoice Date: 05/09/2013 Project: EGMA1303

Project Name: 2012 Chapter 94 Report

For Services Rendered through: 4/14/2013

Completed and submitted Chapter 94 Reports to PADEP for Ridley Creek STP, West Goshen (Chester Creek) Service Area, and Westtown Service Area. Prepared and submitted letter notification to PADEP of Lockwood Chase STP decommissioning in lieu of full Chapter 94 Report.

Phase: \*\*\*\* -- Professional Services

Total Phase: \*\*\*\* -- Professional Services

Labor: 5,355.00

Expense: 0.00 Phase Total: 5,355.00

**Amount Due This Invoice** \$5,355.00

14,000.00 Fee: **Prior Billings:** 7,492,50 **Current Billings:** 5,355.00

**Total Billings:** 12,847.50

Phase: \*\*\*\* -- Professional Services

Labor Hours/ Class Units Rate **Amount** Project Engineer 22.75 95.00 2,161.25 Graduate Engineer 43.75 73.00 3,193.75 Labor Total: 66.50 5,355.00

Total Phase: \*\*\*\* -- Professional Services Labor: \$5,355.00

Expense: \$0.00 Total Project : EGMA1303 -- 2012 Chapter 94 Report Labor: \$5,355.00

> Expense: \$0.00

### East Goshen Municipal Authority EGMA1303 Invoice Summary Invoice Date 05/09/2013

Project: 2012 Chapter 94 Report

Pennoni Job No.: EGMA1303 Invoice No.: 546006

Invoice Period: 3/18/2013 to 4/14/2013 Initial Authorization: \$ 14,000.00 Date: 1/16/2013

Changes: \$ - Date:

Contract Amount: \$ 14,000.00 Previously Invoiced: \$ 7,492.50 Current Invoice: 5,355.00 Invoiced to Date (\$): 12,847.50 Invoiced to Date (%): 92% Remaining Budget (\$): \$ 1,152.50 Remaining Budget (%): 8%

**Budget by Phase:** 

Phase No.

2012 Chapter

Phase Name: 94 Report

Phase Budget: 14,000.00 Previousy Invoiced: \$ 7,492.50 Current Invoice: \$ 5,355,00 Invoiced to Date (\$): \$ 12,847.50 Invoiced to Date (%): 92% Remaining Budget (\$): \$ 1,152.50 Remaining Budget (%): 8%

Comments: Completed and submitted Chapter 94 Reports to PADEP for Ridley Creek STP, West Goshen (Chester Creek) Service Area, and Westtown Service Area. Prepared and submitted letter notification to PADEP of Lockwood Chase STP decommissioning in lieu of full Chapter 94 Report.



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

**Remit Payment To:** Pennoni Associates Inc. 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 #: 546007 Invoice Date: 05/09/2013

Project: EGMA1304

Project Name: Hershey Mill PS Div Construction

For Services Rendered through: 4/14/2013

Reviewed partial submission of shop drawings and performed pre-construction coordination including pre-construction meeting scheduling and review of contractor's tax exempt status request.

**Amount Due This Invoice** 

Phase: \*\*\*\* -- Professional Services

Total Phase: \*\*\*\* -- Professional Services

Labor: 976.50

Expense:

0.00 976.50

Phase Total:

\$976.50

\$976.50

20,000.00 Fee: **Prior Billings:** 2,580.50 **Current Billings:** 976.50

**Total Billings:** 

3.557.00

Phase: \*\*\*\* -- Professional Services

Labor Hours/

Total Project: EGMA1304 - Hershey Mill PS Div Construction Ph

Class Units Rate **Amount** Project Engineer 1.25 95.00 118.75 Graduate Engineer 11.75 73.00 857.75

13.00 Labor Total: 976.50

Total Phase: \*\*\*\* -- Professional Services Labor: \$976.50

Expense:

Expense: \$0.00

OIC RS

Labor:

### East Goshen Municipal Authority EGMA1304 Invoice Summary Invoice Date 05/09/2013

Project: Hershey Mill PS Div Construction Ph

Pennoni Job No.: EGMA1304 Invoice No.: 546007

Invoice Period: 3/18/2013 to 4/14/2013 Initial Authorization: Date: 20,000.00 1/16/2013

Changes: \$ Date:

**Contract Amount:** \$ 20,000.00 Previously Invoiced: 2,580.50 **Current Invoice:** 976.50 Invoiced to Date (\$): 3,557.00 Invoiced to Date (%): 18% Remaining Budget (\$): 16,443.00 Remaining Budget (%): 82%

**Budget by Phase:** 

Phase No.

Hershey Mill PS

82%

Phase Name: Div

Phase Budget: 20,000.00 Previousy Invoiced: \$ 2,580.50 **Current Invoice:** 5 976.50 Invoiced to Date (\$): \$ 3,557.00 Invoiced to Date (%): 18% Remaining Budget (\$): 16,443.00 Remaining Budget (%):

Comments: Reviewed partial submission of shop drawings and performed pre-construction coordination including pre-construction meeting scheduling and review of contractor's tax exempt status request.



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

Remit Payment To: Pennoni Associates Inc. 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 #: 546008 Invoice Date: 05/09/2013

Project: EGMA1305

Project Name: Marydell PS Diversion Construction

For Services Rendered through: 4/14/2013

Performed pre-construction coordination including shop drawing reviews and scheduling; set up and attended multiple site meetings with PECO and contractor about utility pole bracing; performed on-site daily construction observation; provided office support during construction in including assistance with resolution of Paoli Pike jack & bore problem and misalignment and increasing depth of sewer along Paoli Pike to provide vertical flexibility on Boot Road jack & bore; and reviewed Payment Application #1.

Phase: \*\*\*\* -- Professional Services

Total Phase: \*\*\*\* -- Professional Services

Labor:

7,040.25

Expense:

0.00

Phase Total:

7,040.25

**Amount Due This Invoice** 

\$7,040.25

Fee:

20,000.00

**Prior Billings:** 

6,327.75

Current Billings:

7,040.25

Total Billings:

13,368.00

Phase: \*\*\*\* -- Professional Services

Labor	Hours/		
Class	Units	Rate	Amount
Project Engineer	17.50	95.00	1,662.50
Technical Specialist	70.00	75.00	5,250.00
Graduate Engineer	1.75	73.00	127.75
Labor Total:	89.25		7 040 25

Total Phase: \*\*\*\* -- Professional Services Labor: \$7,040.25

> Expense: \$0.00

Total Project : EGMA1305 -- Marydell PS Diversion Construction

Labor:

\$7,040.25

Expense:

\$0.00

### East Goshen Municipal Authority EGMA1305 Invoice Summary Invoice Date 05/09/2013

Project : Marydell PS Diversion Construction

Pennoni Job No. : EGMA1305 Invoice No. : 546008

Invoice Period: 3/18/2013 to 4/14/2013
Initial Authorization: \$ 20,000.00 Date: 1/16/2013

Changes: \$ - Date:

\$ **Contract Amount:** 20,000.00 Previously Invoiced: \$ 6,327.75 Current Invoice: 7,040.25 Invoiced to Date (\$): 13,368.00 Invoiced to Date (%): 67% Remaining Budget (\$): 6,632.00 Remaining Budget (%): 33%

**Budget by Phase:** 

Phase No. \*\*\*\*

Marydell PS

Phase Name: Diversion

Phase Budget: \$ 20,000.00
Previousy Invoiced: \$ 6,327.75
Current Invoice: \$ 7,040.25
Invoiced to Date (\$): \$ 13,368.00
Invoiced to Date (%): 67%
Remaining Budget (\$): \$ 6,632.00
Remaining Budget (%): 33%

Comments: Performed pre-construction coordination including shop drawing review and scheduling; set up and attended multiple site meetings with PECO and contractor about utility pole bracing; performed on-site daily construction observation; provided office support during construction in including assistance with resolution of Paoli Pike jack & bore problem and misalignment and increasing depth of sewer along Paoli Pike to provide vertical flexibility on Boot Road jack & bore; and reviewed Payment Application #1.

### Memo **East Goshen Township** 1580 Paoli Pike West Chester, PA 19380

Voice (610) 692-7171

Fax

(610) 425-8950

E-mail rsmith@eastgoshen.org

Date: May 9, 2013

To:

Municipal Authority

From: Rick Smith, Township Manager

Re:

Invoices and Right of Way Agreement

Reserve at Spring Meadows Homeowners Association 34 Ruth Circle, Malvern PA 19355

\$1,455 for sewer right of way

Also need to authorize Chairman to execute the right-of-way agreement.

F:\Data\Shared Data\ABC'S\Municipal Authority\Projects\Hershey's Mill & The Reserve Pump Stations\Easements\Memo 050913.docx

Prepared by/Return to:

Robert F. Adams, Esquire P. O. Box 562 West Chester, PA 19381-0562

UPI # 53-2-20.39

### **RIGHT-OF-WAY AGREEMENT**

	y of May	, 2013,
between EAST GOSHEN MUNICIPAL AUT	HORITY ("Authority")	, a body corporate and
politic organized and existing under and by virtu	ue of the laws of the Cor	nmonwealth of
Pennsylvania, in East Goshen Township, Cheste	er County, Pennsylvania,	, and RESERVE AT
SPRING MEADOWS COMMUNITY ASSO	CIATION ("Owner"), a	llso of East Goshen
Township, Chester County, Pennsylvania,		

### WITNESSETH:

WHEREAS, the Owner owns a tract of land situate in East Goshen Township ("Township"), Chester County, Pennsylvania, located on the east side of Sherman Drive, recorded in Book 7088, page 1967, in the office of the Recorder of Deeds of Chester County, Pennsylvania; and

WHEREAS, the Authority is now constructing modifications to the sewer system for the Township, as part of the project to eliminate the pump station at the Reserve at Spring Meadows, to serve certain areas of the Township for which the Authority must obtain a certain right-of-way and easement upon, over and under the aforesaid tract of land of the Owner.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, and in consideration of the payment to the Owner of the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged by the Owner, the Authority and the Owner, each intending to be legally bound hereby, do hereby agree as follows:

1. <u>DEFINITIONS</u>: The term "sewer lines" when used in this instrument shall refer to a sanitary sewer pipe, conduit, manhole, drain, marker, service connection and other appurtenances to be constructed by the Authority, meeting the specifications of the consulting engineers of the Authority, as approved by the Authority for use in the aforesaid sewer system within the sanitary sewer easement on Owner's property, as shown on the plan of "Proposed Easement for Proposed Sanitary Sewer Main" (Sketch No. 0020.39) prepared by Pennoni Associates, Inc., marked Exhibit "A," attached hereto and made a part hereof.

- 2. <u>GRANT TO AUTHORITY</u>: The Owner hereby gives and grants to the Authority the free and uninterrupted right, liberty and privilege:
  - A. To install, construct, reconstruct, replace, remove, enlarge, inspect, operate, repair, make connections with and maintain perpetually such sewer lines, their accessories and appurtenances, as the Authority may from time to time require, consisting of underground pipes, conduits, manholes, drains, markers, mains, service connections and other appurtenances upon, over and under a strip of land 20.00 feet wide, more or less, across the aforesaid tract of land belonging to Owner as shown on Exhibit "A," and as more particularly described by metes and bounds on Exhibit "B," together with a temporary construction easement, as shown on Exhibit "A," during the period of construction.
  - B. To carry away and dispose of sewage through said sewer lines, regardless of the source of such sewage.

TO HAVE AND TO HOLD the same perpetually to the Authority and its successors or assigns, together with the right and privilege at any and all times to enter the said premises, or any part thereof, provided that the Authority gives to the Owner reasonable advance notification of the nature of any intended work on the premises and the expected duration of such work, for the purpose of installing, constructing, reconstructing, replacing, removing, enlarging, inspecting, operating, repairing, maintaining, and/or making connections with the sewer lines or other appropriate means of access to the sewer lines; all upon the condition that the Authority will at all times during the construction, reconstruction, replacement, removal, repair or maintenance of the sewer lines cause every reasonable means to be used to protect from injury or damage all property, including lawns, trees, shrubbery, fences, buildings, walls, roads, water courses, natural features, or any existing improvement thereto, and will at all times after doing any work in connection with the construction, reconstruction, replacement, removal, repair or maintenance of the sewer lines, cause the said premises to be restored to the condition in which the same were found before such work was undertaken, including replacement and/or repair of damaged property, to the extent reasonably possible under the circumstances and consistent with the rights and privileges herein granted.

### 3. COVENANTS OF THE OWNER:

A. The Owner does hereby release, remise, quitclaim and discharge the Authority, the Township and their several agents, servants, contractors and employees from any claim or right to damages or other emolument of value for the rights, liberties and privileges given and granted to the Authority under this Indenture.

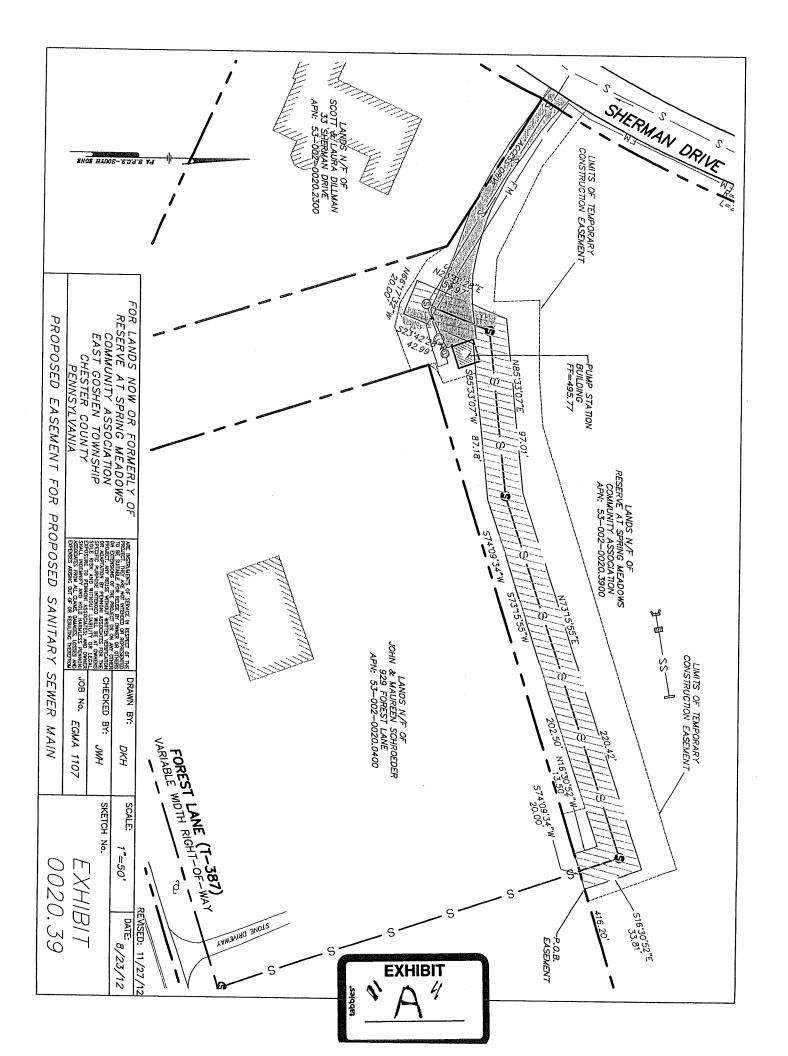
- B. The Owner does hereby covenant that it is lawfully seized and possessed of a good and marketable title in fee simple to the aforesaid tract of land and that it has a good and lawful right to grant the rights and privileges herein granted to the Authority, and it further covenants that it will execute or procure any additional necessary assurances of the rights and privileges herein granted.
- C. The Owner does hereby expressly consent to any transfer, conveyance, pledge, lease or mortgage by the Authority of the said sewer lines, including, but not limited to, the leasing thereof by the Authority, as lessor, to the Township, as lessee.
- D. The Owner does hereby covenant that no structure or other obstruction shall be erected or permitted on the aforesaid strip of land.
- E. The provisions of this Indenture shall be binding upon and inure to the benefit of the Authority, its successors and assigns, and the Owner, its successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed on the day and year first above written.

Attest:		EAST GOSHEN MUNICIPAL AUTHORITY
Secretary	Ву:	Chairman
Attest:		RESERVE AT SPRING MEADOWS COMMUNITY ASSOCIATION
Sala Khil	Ву:	Title PRESIDENT

### COMMONWEALTH OF PENNSYLVANIA COUNTY OF CHESTER

ON THIS, the day of and for said County and Commonwealth, personally acknowledged himself to be the Chairman of <b>EAST</b> and that he, as such, being authorized to do so, execupurposes therein contained.	appeared, who GOSHEN MUNICIPAL AUTHORITY.
WITNESS my hand and official seal.	
COMMONWEALTH OF PENNSYLVANIA COUNTY OF CHESTER	
ON THIS, the day of day of and for the aforesaid County and Commonwealth, peacknowledged himself/herself to be the reside MEADOWS COMMUNITY ASSOCIATION, and so, executed the foregoing instrument for the purpose	of RESERVE AT SPRING that he/she, as such, being authorized to do
WITNESS my hand and notarial seal.	
	Barba Stale
	COMMONWEALTH OF PENNSYLVANIA  Notarial Seal  Barbara L. Phillips, Notary Public East Goshen Twp., Chester County My Commission Expires March 29, 2015  MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES



### <u>DESCRIPTION OF</u> <u>PROPOSED EASEMENT FOR</u> <u>PROPOSED SANITARY SEWER MAIN</u> (7,253 square feet)

ALL that certain strip of land, situate in East Goshen Township, Chester County, Pennsylvania, being on a portion of land now or formerly of **Reserve at Spring Meadows Community Association**, as shown on the plan titled, "Proposed Easement for Proposed Sanitary Sewer Main," prepared by Pennoni Associates Inc. on Exhibit 0020.39, dated 8/23/12, last revised 11/27/12, and being more particularly bound and described by PENNONI ASSOCIATES INC., as follows, to wit:

BEGINNING for the same at a point on the common line of the lands now or formerly of Reserve at Spring Meadows Community Association and lands now or formerly of John and Maureen Schroeder, said point being the place of beginning, thence continuing;

- 1. South 74° 09′ 34″ West, 20.00 feet to a point, thence leaving the line with lands of Schroeder;
- 2. North 16° 30′ 52″ West, 13.50 feet to a point in the lands now or formerly of Reserve at Spring Meadows Community Association, thence through the same;
- 3. South 73° 15′ 55" West, 202.50 feet to a point, thence continuing;
- 4. South 85° 33' 07" West, 87.18 feet to a point, thence continuing;
- 5. South 23° 42' 28" West, 42.99 feet to a point, thence continuing;
- 6. North 66° 17′ 32" West, 20.00 feet to a point, thence continuing;
- 7. North 23° 42′ 28" East, 54.97 feet to a point, thence continuing;
- 8. North 85° 33′ 07" East, 97.01 feet to a point, thence continuing;
- 9. North 73° 15′ 55″ East, 220.42 feet to a point, thence continuing;
- 10. South 16° 30′ 52″ East, 33.81 feet to the point and place of beginning and containing within these metes and bounds, 7,253 square feet or 0.167 acres of land, more or less.

Our project number:

EGMA1107

August 23, 2012

Revised: November 27, 2012

DKH/SAS

P:\Projects\EGMA\EGMA1107-HersheyMill Reserve PS Div Des Per\DOCUMENTS\V\Legal Descriptions





### Gawthrop Greenwood, PC Attorneys at Law

17 East Gay Street, Suite 100 West Chester, PA 19381-0562 gglaw@gawthrop.com www.gawthrop.com

(p) 610-696-8225 (f) 610-344-0922

East Goshen Municipal Authority 1580 Paoli Pike West Chester PA 19380

Page: 1 04/30/2013 6604-001M Client No: 108506 Invoice No.

### General Authority Services

### **Fees**

		Hours
04/02/2013 RFA	Review messages from A Zarro and D Barbato regarding review of Pulte dedication plan and funding of escrow.	0.60
04/04/2013 RFA	Review messages from M Ellis and A Zarro regarding description for ROW dedication.	0.40
04/05/2013 RFA	Review final Pulte/Applebrook dedication and security documents.	0.50
04/08/2013 RFA	Review packet for Authority meeting of 4/8/13; attend regular meeting of Authority; review message from M Ellis regarding Pennoni semi-annual sewer system report and scan report.	3.00
04/09/2013 RFA	Review memo from R Smith regarding Pulte agreement.	0.30
04/10/2013 RFA	Letter to R Smith regarding Willow Pond agreement.	0.30
04/11/2013 SAK	Record Right of Way Agreement with the Recorder of Deeds.	0.30
04/24/2013 RFA	Review message from M Ellis regarding sales tax exemption for contractor on Hershey's Mill pump station project; review Title 72, sales and use tax exemptions, regarding Hershey Mill pump station diversion project contractor; Message to M Ellis regarding exemption of tax for pump station contractor.	2.50
04/25/2013 RFA	Telephone conference with M Ellis regarding exemption for Hershey Mill pump station materials; review message from R Smith regarding bid specs provision regarding sales tax; Message	

East Goshen Mu	unicipal Authority				nt No: ce No.	Page: 2 04/30/2013 6604-001M 108506
General Authorit	ty Services					
to sam	ne regarding sales tax; review m	nessage from l	M Ellis to pun		Hours	
	project bidder.				1.20	
For Cu	urrent Services Rendered				9.10	1,784.00
	Re	ecapitulation				
<u>Timekeeper</u> Robert F. Adams Stephanie A. Keller			8.80 0.30	Hourly Rate \$200.00 80.00		<u>Total</u> \$1,760.00 24.00
	]	Expenses				
Recor	der of Deeds - Pulte Agreemen	t				60.00
	Expenses Thru 04/30/2013					60.00
Previo	ous Balance					\$3,181.12
Total	Current Charges					1,844.00
04/12/2013 Cost A	Advance Payment					-56.00 -1.12

04/12/2013

04/12/2013

Cost Expense Payment

Fee Payment

Balance Due

**Total Payments** 

-1.12

-1,604.00

-1,661.12

\$3,364.00



### Gawthrop Greenwood, PC Attorneys at Law

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

(p) 610-696-8225 (f) 610-344-0922 gglaw@gawthrop.com | www.gawthrop.com

East Goshen Municipal Authority 1580 Paoli Pike West Chester PA 19380

Page: 1 04/30/2013

Client No:

6604M

Previous Balance	Fees	Expenses	Payments	Balance
6604-001 General Authority S	ervices			
3,181.12	1,784.00	60.00	-1,661.12	\$3,364.00

ok 75



# Application and Certificate for Payment

TO OWNER:	PROJECT:	APPLICATION NO: 2 Distribution to:
East Goshen Municipal	Marydeil Pump	Station PERIOD TO: 4/26/13
Authority	Diversion	CONTRACT FOR: Sewer Construction ARCHITECT
FROM CONTRACTOR:	VIA ARCHITECT:	
Piy-Mar Construction Co., Inc. 965 Plymouth Road	Inc.	7
Piymouth Meeting, PA 19462	2	O
CONTRACTOR'S APPLICATION FOR PAYMENT	S PAYMENT	The undersigned Contractor certifies that to the best of the Contractor's knowledge, information
Application is made for payment, as shown below, in connection with the Contract AIA Document G703TM Continuation Shoot is attached	connection with the Contract.	and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for
1. ORIGINAL CONTRACT SUM	\$ 229,835.00	which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.
2. NET CHANGE BY CHANGE ORDERS	***************************************	CONTRACTOR! Ply-Klar Genstruction Co., Inc.
3. CONTRACT SUM TO DATE (Line I ± 2)	8	_
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	on G703) \$ 111,560.00	2 gf: 12
5. RETAINAGE:		County of: Mrn Flora 2017 COMMONWEALTH OF PENNSYLVANIA
a. 10 % of Completed Work		
(Columns $D + E$ on $G703$ )	\$ 11,130.00	me this f whitemarsh Twp., Montgomery County
(Column F on G703)	00.00	NOWATY PURING: MICH. M. C. L.
Total Retainage (Lines 5a + 5b, or Total in Column I of G703)	lofG703) \$ 11,156.00	My commission expires:
6. TOTAL EARNED LESS RETAINAGE		
(Line 4 minus Line 5 Total)	00:404:00	In accordance with the Contract Documents, based on on-site observations and the data comprising
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	\$ 20,700.00	this application, the Architect certifies to the Owner that to the best of the Architect's knowledge,
(Line 6 from prior Certificate)		accordance with the Contract Documents, and the Contractor is entitled to payment of the
8. CURRENT PAYMENT DUE	S 79 704 00	AMOUNT CERTIFIED.
9. BALANCE TO FINISH, INCLUDING RETAINAGE		AMOUNT CERTIFIED STORY OF STOR
(Line 3 minus Line 6)	S 129,431.00	tified differs from the amount applied ion Sheet that are changed to conform
CHANGE ORDER SUMMARY	ADDITIONS DEDUCTIONS	-ARCHITECT: ENGINEER:
Total changes approved in previous months by Owner	S	By: Met 90:
Total approved this month	S	This Configuration of AMOUNT CONTINUED of the AMOUNT CONTINUED of the Cont
TOTAL	S	named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of
NET CHANGES by Change Order	S	the Owner or Contractor under this Contract.

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA Document G702\*\* – 1992. Copyright © 1953, 1963, 1971, 1978, 1983 and 1992 by The American Institute of Architects. All rights reserved, WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal courset, copyright@aia.org.

OK 725 5-13



## Continuation Sheet

Applicatic containing In tabulati Use Colur	Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached.  In tabulations below, amounts are in US dollars.  Use Column I on Contracts where variable retainage for line items may apply.	uction Manager as ached.	Adviser Edition.  may apply.	, cons.		APPLICATION NO: 2 APPLICATION DATE: 4 / 2 PERIOD TO: 4 / 26 / 13 ARCHITECT'S PROJECT NO:	NO: 2 DATE: 4 / 4 / 26 / 13 PROJECT NO	2 4/29/13 13 NO: MPS-2013	£
A	В	C	D	ш	í.	5		Н	1
			WORK	WORK COMPLETED					
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED	FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD	MATERIALS PRESENTLY STORED (Not in D or E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	(O+9)	BALANCE TO FINISH (C - G)	RETAINAGE (If variable rate)
1.8	Site Preparation (1 LS)	\$44,000.00	\$22,000.00	\$11,000.00		\$33,000.00	75%	\$11,000.00	\$3,300.00
2 E	E & S Controls (1 LS)	\$3,000.00	\$1,000.00	\$0.00		\$1,000.00	33%	\$2,000.00	\$100.00
8	8" Main in Paved Area (0-10") (296 LF)	\$31,080.00	\$0.00	\$21,000.00		\$21,000.00	67%	\$10,080.00	\$2,100.00
4	8" Main Paved Area (10-15") (88 LF)	\$11,440,00	\$0.00	\$18,460.00		\$18,460.00	161%	\$0.00	\$1,846.00
20	8" Main Un-Paved (0-10' (114 LF	\$5,130.00	\$0.00	\$0.00		\$0.00	%0	\$5,130.00	\$0.00
8	0-15") (2	\$11,475.00	\$0.00	80.00		\$0.00	%0	\$11,475.00	\$0.00
7 M	MH-6 to EXMH-201 (82 LF)	\$24,600.00	\$0.00	\$24,600.00		\$24,600.00	100%	\$0.00	\$2,460.00
8 7 8	J & B Boot Road (118 LF)	\$27,140.00	\$0.00	\$0.00		\$0.00	%0	\$27,140.00	\$0.00
9 We	Manhole (0-10') (3 EA)	\$9,000.00	80.00	\$6,000.00		\$6,000.00	%99	\$3,000.00	\$600.00
10 Ms	Manhole (10-15') (2 EA)	\$7,000.00	80.00	\$3,500.00		\$3,500.00	20%	\$3,500.00	\$350.00
11 4	4" Service Lateral (1 EA)	\$1,000.00	\$0.00	\$0.00		\$0.00	%0	\$1,000.00	\$0.00
12 Lo	Low Pressure Sewer Lat. (1 L\$)	\$1,000.00	\$0.00	\$0.00		\$0.00	%0	\$1,000.00	\$0.00
13 Fu	Full Depth Paving (275 SY)	\$22,000.00	\$0.00	\$0.00		\$0.00	%0	\$22,000.00	\$0.00
14 De	Demo Pump Station (1 LS)	\$6,500.00	\$0.00	\$0.00		\$0.00	%0	\$6,500.00	\$0.00
15 Tr	Traffic Maintenance (1 LS)	\$2,000.00	\$0.00	\$0.00		\$0.00	%0	\$2,000.00	\$0.00
16 Mi	16 Mill & Overlay Paoli Pike (75 SY)	\$2,250.00	\$0.00	\$0.00		\$0.00	%0	\$2,250.00	\$0.00
17 CL	Curb Replacement (30 LF)	\$1,500.00	\$0.00	\$0.00		\$0.00	%0	\$1,500.00	\$0.00
18 Min	Misc Exc. & 2A Backfill (20 CY)	\$1,200.00	\$0.00	\$0.00		\$0.00	%0	\$1,200.00	\$0.00
19 Mis	19 Misc. Exc. & Soil Backfill (20 CY)	\$600.00	\$0.00	\$0.00		\$0.00	%0	\$600.00	\$0.00
20 Co	Concrete Encasement (20 LF)	\$1,000.00	\$0.00	\$0.00		\$0.00	%0	\$1,000.00	\$0.00
21 Mil	Mill & Overlay Paoli Pike (455 SY)	\$10,920.00	\$0.00	\$0.00		\$0.00	%0	\$10,920.00	\$0.00
22 So	Soft Dig Test Pits (3.EA)	\$6,000.00	\$0.00	\$4,000.00		\$4,000.00	%19	\$2,000.00	\$400.00
	GRAND TOTAL	\$229,835.00	\$23,000.00	\$88,560.00		\$111,560.00		\$125,295.00	\$11,156.00

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

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### Memo

To: Municipal Authority

From: Jon Altshul

Re: MA April Financial Report

Date: May 2, 2013

The Municipal Authority recorded \$86,408.22 in expenses and \$110,008.80 in revenues (primarily from a transfer from the Sewer Capital Reserve Fund) in the month of April, a difference of \$23,600.58. The fund balance is now \$72,964.31.

A complete list of all monthly expenses is provided.

# EAST GOSHEN TOWNSHIP

WEST CHESTER, PA Municipal Authority 1580 PAOLI PIKE April 2013

		Annual	Month To Date	Vear To Date	
Account Title	Acct#	Budget	Actual	Actual	
MUNICIPAL AUTHORITY BEGINNING FUND BALANCE			49,363.73		
RCSTP BUDGET					
REVENUE INTEREST EARNED - RCSTP EXPANSION GRANT REVENUE	07341 1020	50.00	0.00	12.85	
TOTAL REVENUE		50.00	0.00	12.85	
EXPENSES					
R.CCAP. PROJENGINEER	07424 7451	0.00	0.00	0.00	
R.C. CAP EXPANSION GEN'L CONTRACTOR	074247452	0.00	0.00	0.00	
R.C. CAP EXPANSION - ELECTRICAL	07424 7453	0.00	0.00	0.00	
R.C. CAP EXP CONTINGENCY CAPITAL	07424 7454	0.00	0.00	00.0	
R.C. CAP EXP CONTINGENCY ONGOING	074247455	0.00	0.00	00.00	
R.C. CAP EXP ADDITIONAL CONTINGENCY	074247456	00.00	0.00	00.00	
TRANSFER TO AUTHORITY CAP FUND	07492 0990	992,470.00	0.00	0.00	
TOTAL EXPENSES		992,470.00	0.00	0.00	
RCSTP NET RESULT		(992,420.00)	0.00	12.85	

# EAST GOSHEN TOWNSHIP

1580 PAOLI PIKE WEST CHESTER, PA Municipal Authority April 2013

		Annual	Month To Date	Year To Date	
Account Title.	Acct #		Actual	Actual	
OPERATING BUDGET					
REVENUE					
INTEREST EARNINGS	07341 1000	20.00	8.80	10,94	
C.C. TAPPING FEES	07364 1100	128,000.00	0.00	0.00	
R.C.TAPPING FEES	07364 1110	2,000.00	0.00	4,000.00	
CONNECTION FEES - SEWER	07364 1130	0.00	0.00	1,689.64	
MISCELLANEOUS REVENUE	07380 1000	1,000.00	0.00	423.36	
TRANSFER FROM SEWER OPERATING.	07392 0500	121,696.00	00'0	00.00	
TOTAL REVENUE		252,746.00	8.80	6,123.94	
EXPENSES					
ADMINISTRATIVE WAGES	07424 1400	33,547.00	0.00	7,980.36	
MISCELLANEOUS EXPENSE	074243000	5,000.00	00.00	1,450.00	
MUNIC.AUTHAUDITING	07424 3110	8,843.00	00.00	0.00	
ENGINEERING SERVICES	07424 3130	35,000.00	12,256.00	17,059.50	
LEGAL SERVICES	07424 3140	7,000.00	1,661.12	6,357.02	
M.CDVRFA-DEBT SERVICE	07471 1000	20,720.00	0.00	0.00	
M.CDVRFA-INTEREST PAYMN	07472 1000	6,003.00	00.00	0.00	
M.CDVRFA-INTEREST PAYMN	07472 1010	5,583.00	0.00	0.00	
TOTAL EXPENSES		121,696.00	13,917.12	32,846.88	
OPERATING NET RESULT		131,050.00	(13,908.32)	(26,722.94)	

# EAST GOSHEN TOWNSHIP

1580 PAOLI PIKE
WEST CHESTER, PA
Municipal Authority
April 2013

Account Title	# took	Annual	Month To Date Year To Date	Year To Date	
שריסמוור דומב	#1770	nager	Actual	Pringi	
CAPITAL BUDGET					
REVENUE					
LOAN PROCEEDS-SEWER PROJECT	07392 0804	992,470.00	00.00	0.00	
TRANSFER FROM SEWER CAP RESERVE	07392 0900	556,769.00	110,000.00	140,000.00	
TOTAL REVENUE		1,549,239.00	110,000.00	140,000.00	
EXPENSES					
MARYDELL PUMP STATION - ENGINEER	07425 1000	25,000.00	0.00	20,513.25	
MARYDELL PUMP STATION -CONSTRUCTION	07425 2000	170,000.00	23,051.35	23,051.35	
LOCHWOOD ABANDONMENT ENGINEER	07424 7475	00.00	0.00	1,086.00	
LOCHWOOD ABANDONMENT CONSTRUCTION	074247476	55,769.00	30,769.00	31,015.01	
LOCHWOOD ELIMINATION PHASE 2	07424 7477	00.00	9,030,75	2,094.91	
HERSHEY MILL STATION - ENGINEER	07426 1000	25,000.00	6,110.25	13,939.99	
HERSHEY MILL STATION - CONSTRUCTION	07426 2000	46,000.00	0.00	0.00	
RESERVE PUMP STATION - ENGINEER	07427 1000	25,000.00	3,529.75	10,509.51	
RESERVE PUMP STATION - CONSTRUCTION	07427 2000	93,000.00	0.00	00.00	
RESERVOIR PUMP STATION - ENGINEER	07428 1000	0.00	0.00	0.00	
RESERVOIR PUMP STATION CONSTRUCTION	07428 2000	0.00	0.00	00.00	
TOTAL EXPENSES		439,769.00	72,491.10	102,210.02	
CAPITAL NET RESULT		1,109,470.00	37,508.90	37,789.98	
MINICIPAL ALTHORITY ENDING ELIND BALANCE			77 964 31		
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7341-1000	INTE	 REST	EARNINGS	· 3		0.00				
			36010		0.74		02/05/13	INTEREST		INTEREST EARNED JANUARY 2013
										07 FUND
	1302		36396	0.00	0.74 0.48		03/04/13	TNTEDEST		INTEREST EARNED FEB. 2013
	1302		30390		0.40		03/04/13	INIERESI		07 FUND
				0.00	0.48	-1.22				
	1303		36759		0.92		04/02/13	INTEREST		INTEREST EARNED MARCH 2013
										07 FUND
				0.00	0.92	-2.14				
	1304		37177	0.00	3.20		05/01/13	INTEREST		INTEREST EARNED APRIL 2013
			J. 411		5.20		70,02,40			07100.1000
			37178		5.60		05/01/13	INTEREST		INTEREST EARNED APRIL 2013
										07 CONTRUCTION FUND
					~~ ^	. 10 04	No	the lock and lock line line line link over link has lock line line		. In the sect and two lock and and and and had had had had had had had had had ha
					8.80	-10.94				
				0.00	10.94	-10.94				
AT241 1ACA	7\1m=	N 11 C 12	Es Dimo	DAGER SES	MATON					
07341-1020	1301		36011	- RCSTP EXP	ANSION 3.97		02/05/13	TNAGGGUNT		INTEREST EARNED JANUARY 2013
	1301		30011		3.31		02/03/13	INTEREST		07 CONSTRUCTION FUND
				0.00	3.97	-3.97				
	1302		36397		4.91		03/04/13	INTEREST		INTEREST EARNED FEB.2013
										07 CONSTRUCTION FUND
				0.00		-8.88	PA PR PR PR PR PR PR PR	PM 1965 5967 6969 8960 8460 8960 8960 8960 8960 8960 8960 8960		MI - MI
	1303		36760	0.00	3.97		04/02/13	INTEREST		INTEREST EARNED MARCH 2013
							,			07 CONSTRUCTION FUND
~~~~~			No 300 to 100 to	0.00	3.97	-12.85				
<del>-</del>				0.00	12.85	-12.85	<b></b>			
080 <i>64 444</i> 5										
07364-1110	R.C.:			2 000 00		0.00	01/30/13	עמה נוסמ		ממט עד מאוס #20770 man דען ממט
	T301		35931	2,000.00			01/30/13	KEV TKA		REVERSE TRX #32779 TAP IN FEE FOR 913 SORRELL HILL
			35934		2,000.00		01/30/13	REV TRX		RE-REVERSE TRX 35931 FOR 913
			<b>-</b>		,		;			SORRELL HILL TAP IN FEES
				******				led and and and and and any lest and and and and lest feel and		and
	1 2 4 4		20422	2,000.00	2,000.00			26420		Man TV MAN
	T203	KΕ	36430 36431		2,000.00			36430 1 36431 1		TAP IN FEE - 916 SORRELL HILL TAP IN FEE - 911 SORRELL HILL
			2042T		2,000.00		03/03/13	J0431 I		TWE IN COU - SIT SOKKENT UITT
				0.00		-4,000.00				
					4 444 65					
				2,000.00	6,000.00	-4,000.00				

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11000 11	Per	Src	Trx #	Debits	Credits	Beg/End Bal	Date			Name/Description
07364-1130	CONN	ECTT	ON FRES	- SEWER		0.00	100 100 100 100 100 100 100 100 100 100			
07504 1150			36075		423.00			264	7195 1	JACOBS, ROBERT & CHERYL
	1001	•••	55075		423.00			755		GEORGE SMITH & CHRISTINA CONLE
			***	0.00	846.00		V=, V=, ==			
			36147		423.00		02/13/13	11	6577 1	PAPPANO, JOSEPH & PATRICIA
					421.00		02/13/13			PAPPANO, JOSEPH & PATRICIA
			***	0.00	844.00	***				
			36193		423.00		02/15/13	2173	7194 1	STOFFLET, MICHAEL
		JE	36174	282.24				PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
			36194	141.12				PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
				423.36		-1,689.64				
				423.36		-1,689.64				
				423.36	2,113.00	-1,009.04				
7380-1000	MISC	ELLA	NEOUS R	EVENUE		0.00				
			36174		282.24		02/14/13	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
			36194		141.12		02/15/13	PINE ROCK		ANNUAL PINE ROCK INSTALLMENT
						-423.36				
				0.00		-423.36				
				****	120100	110.00				
7392-0900	TRAN	SFER		EWER CAP RES		0.00				
			36187		30,000.00		02/15/13			XFER \$ FROM 9100.1000 TO 7100. 1000 TO COVER MA EXPENSES
			36187	0.00			bet and and sed and and and and			•
	1304			0.00	30,000.00	-30,000.00	he had he dod het he had he	M M M M M M M M M M M M M		1000 TO COVER MA EXPENSES
	1304		36187	0.00		-30,000.00	bet and and sed and and and and	M M M M M M M M M M M M M		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO
	1304		36841	0.00	30,000.00	-30,000.00	04/08/13	XFER		1000 TO COVER MA EXPENSES
	1304			0.00	30,000.00	-30,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000
	1304		36841		30,000.00 50,000.00 60,000.00	-30,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000
	1304		36841	0.00	30,000.00 50,000.00 60,000.00	-30,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000
			36841 36905	0.00	30,000.00 50,000.00 60,000.00	-30,000.00 -30,000.00 -140,000.00 -140,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000
 07 <b>424-14</b> 00		·	36841 36905	0.00 0.00 0.00	30,000.00 50,000.00 60,000.00	-30,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000
 07 <b>424</b> -1400		·	36841 36905	0.00	30,000.00 50,000.00 60,000.00	-30,000.00 -30,000.00 -140,000.00 -140,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000  EAST GOSHEN TOWNSHIP 1ST QTR.2013 REIMBURSMNT TO GENE
 07424-1400		·	36841 36905	0.00 0.00 0.00	30,000.00 50,000.00 60,000.00	-30,000.00 -30,000.00 -140,000.00 -140,000.00	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES
 07 <b>424</b> -1400		·	36841 36905	0.00 0.00 0.00	30,000.00 50,000.00 60,000.00	-30,000.00 	04/08/13 04/11/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000  EAST GOSHEN TOWNSHIP 1ST QTR.2013 REIMBURSMNT TO GENE
 07424-1400		·	36841 36905	0.00 0.00 WAGES 7,980.36	30,000.00 50,000.00 60,000.00 110,000.00	-30,000.00 -140,000.00 -140,000.00 0.00 7,980.36	04/08/13 04/11/13  03/28/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000  EAST GOSHEN TOWNSHIP 1ST QTR.2013 REIMBURSMNT TO GENE
 ) <b>7424-14</b> 00		·	36841 36905	0.00 0.00 WAGES 7,980.36	30,000.00 50,000.00 60,000.00 110,000.00	-30,000.00 	04/08/13 04/11/13  03/28/13	XFER XFER		1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000  EAST GOSHEN TOWNSHIP 1ST QTR.2013 REIMBURSMNT TO GENE
07424-1400 07424-3000	ADMI 1303	NIST	36841 36905 RATIVE 1 36711	0.00 0.00 WAGES 7,980.36	30,000.00 50,000.00 60,000.00 110,000.00	-30,000.00 -140,000.00 -140,000.00 0.00 7,980.36	04/08/13 04/11/13  03/28/13	XFER  XFER	425	1000 TO COVER MA EXPENSES  XFER \$ FROM 9100.1000 TO 7100.1000  XFER \$ FROM 9100.1000 TO 7100.1000  EAST GOSHEN TOWNSHIP 1ST QTR.2013 REIMBURSMNT TO GENI

Report Date 05/02/13 GL Transaction Details

Acct #	Per	Src	Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID#	Name/Description
07424-3000	1301	CD	35783	950.00				2158		PENNSYLVANIA MUNICIPAL AUTHORITIES AS: 2013 ACTIVE MEMBERSHIP DUES
					0.00	1,450.00				
				1,450.00	0.00					
07424-3130	ENGIN	VEER:	ING SER	VICES		0.00				
			35695	3,264.75			01/15/13	2156		PENNONI ASSOCIATES INC. SERV.THRU 12/9/12 2012 GEN.SERV
				3,264.75	0.00	3,264.75				
	1302		36119	1,538.75		- <b>,                                   </b>	02/12/13	2162	1052	PENNONI ASSOCIATES INC. SERV.THRU 1/13/13 GEN.SERVICES 2
				1,538.75	0.00	4,803.50				
	1304		36889	6,695.25	0100	1,000,00	04/10/13	2171	1052	PENNONI ASSOCIATES INC. SERVICES THRU 3/17/13 GENERAL SE
			36890	5,560.75			04/10/13	2173		PENNONI ASSOCIATES INC. SERVICE THRU 2/20/13 GENERAL SER
				12,256.00	0.00	17,059.50				
				17,059.50	0.00	17,059.50	and how how how how how how	ten den lan lan lan den den den lan lan lan den den den den den den den		
07424-3140	LEGAL	L SEI	RVICES			0.00				
	1301		35695	3,289.10			01/15/13	2155	528	GAWTHROP GREENWOOD & HALSTED LEGAL SERV. 11/9-11/30/12 GEN.AU
			10 M M M M	3,289.10	0.00	3,289.10				
	1302		36119	1,406.80		·	02/12/13			GAWTHROP GREENWOOD & HALSTED LEGAL SERVICE - JAN. 2013 GEN.AU
		P# 101				4,695.90				
	1304		36889	1,661.12		,	04/10/13	2170	528	GAWTHROP GREENWOOD & HALSTED LEGAL SERVICES 2/4-2/25/13 GEN.A
				1,661.12	0.00				200 TAS 400 TAS 100 TAS 304 SAS SAS SAS	
				6,357.02	0.00	6,357.02			one has one has the last has had her	
		100D		NMENT ENGINEE	R	0.00				
	1301		35695	511.50			01/15/13	2156	1052	PENNONI ASSOCIATES INC. SERVICES THRU 12/9/12 HERSHEY M PUMP STATION MUFFIN MONSTER
				511.50	0.00	511.50				
	1302		36119	574.50			02/12/13	2162	1052	PENNONI ASSOCIATES INC. SERV.THRU 1/13/13 H.MILL PS MUF MONSTER DESIGN

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Report Date 05/02/13

GL Transaction Details

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Acct # Per Src Trx # Debits Credits Beg/End Bal Date Check/Ref # ID # 0.00 1,086.00 1,086.00 0.00 1,086.00 07424-7476 LOCHWOOD ABANDONMENT CONSTRUCTION 0.00 01/03/13 2152 317 CONTRACTOR'S CHOICE 1301 35598 246.01 ORANGE SAFETY FENCE, STAKES & PA 35695 1,482.40 01/15/13 2154 425 EAST GOSHEN TOWNSHIP LOCHWOOD PLANT CLOSING COSTS-LAB 35698 -1,482.40 01/15/13 2154 425 EAST GOSHEN TOWNSHIP VOID CK. 2154 - DUPLICATE PAYMEN 0.00 246.01 246.01 1304 36840 30,769.00 04/08/13 2169 2128 JWC ENVIRONMENTAL CONTROLLER ASSEMBLY, HPP, & REP SUPPLIED EQUIPMENT 30,769.00 0.00 31,015.01 31,015.01 0.00 31,015.01 07424-7477 LOCHWOOD ELIMINATION PHASE 2 0.00 01/24/13 2159 1301 35872 379.90 2762 A.J. BLOSENSKI INC. 30 YDS. ROLLOFF HAULING & LANDFI 379.90 0.00 379.90 1302 36189 200.00 02/15/13 2165 2762 A.J. BLOSENSKI INC. 30 YARD ROLLOFF HAULING FEE JE 36105 379.90 02/11/13 VOID CHECK VOID CK. 2159 - OVERCHARGED BY VENDOR - RETURNED CHECK 200.00 379.90 200.00 1303 CD 36711 1,894.91 03/28/13 2167 425 EAST GOSHEN TOWNSHIP 1/1-3/27/13 REIMBURSE GENERAL FU FOR LOCHWOOD PLANT CLOSING LABOR 1,894.91 0.00 2,094.91 ----2,474.81 379.90 2,094.91 07425-1000 MARYDELL PUMP STATION - ENGINEER 0.00 1301 35695 5,493.75 01/15/13 2156 1052 PENNONI ASSOCIATES INC. SERVICES THRU 12/9/12 MARYDELL 5,493.75 0.00 5,493.75 36119 5,988.75 02/12/13 2162 1302 1052 PENNONI ASSOCIATES INC. SERV.THRU 1/13/13 MARYDELL PS 5,988.75 0.00 11,482.50

Report Date 05/02/13 GL Transaction Details Acct # Per Src Trx # Debits Credits Beg/End Bal Date Check/Ref # ID # Name/Description 07425-1000 1304 CD 36889 6,863.00 04/10/13 2171 1052 PENNONI ASSOCIATES INC. SERVICES THRU 3/17/13 MARYDELL P 04/10/13 2173 1052 PENNONI ASSOCIATES INC. 36890 2,167.75 SERVICE THRU 2/20/13 MARYDELL 0.00 20,513.25 9,030.75 20,513.25 0.00 20,513.25 07425-2000 MARYDELL PUMP STATION -CONSTRUCTION 0.00 04/01/13 2168 3050 PECO ENERGY 36746 2,351.35 TWO MAN PECO CREW- BRACE PECO PO 04/10/13 2172 3059 PLY-MAR CONSTRUCTION CO.INC. 36889 20,700.00 MARYDELL PUMP STATION DIVERSION ----23,051.35 0.00 23,051.35 23,051.35 0.00 23,051.35 07426-1000 HERSHEY MILL STATION - ENGINEER 0.00 01/15/13 2156 1052 PENNONI ASSOCIATES INC. 1301 35695 2,047.12 SERV.THRU 12/9/12 HERSHEY MILL 35783 250.00 01/18/13 2157 263 CHESTER COUNTY CONSERVATION DISTRICT PERMIT FEE - HERSHEY MILL DAM 2,297.12 0.00 2,297.12 1302 36119 2,600.00 02/12/13 2160 2911 EARTHCORE SERVICES LLC MOBILIZATION ATV RIG-HMPS DIVERS 02/12/13 2162 2,932.62 1052 PENNONI ASSOCIATES INC. SERV. THRU 1/13/13 HERSHEY MILL \*\*\* 5,532.62 0.00 \*\*\* 5,532.62 0.00 7,829.74 1304 36889 3,593.75 04/10/13 2171 1052 PENNONI ASSOCIATES INC. SERVICES THRU 3/17/13 HERSHEY MI 1052 PENNONI ASSOCIATES INC. 36890 2,516.50 04/10/13 2173 SERVICE THRU 2/20/13 HRSHEY MILL 6,110.25 0.00 13,939.99 13,939.99 0.00 13,939.99

07427-1000	RESERVE	PUMP STAI	ION - ENGINEER		0.00			
	1301	35695	2,047.13			01/15/13	2156	1052 PENNONI ASSOCIATES INC. SERV.THRU 12/9/12 RESERVE PS
			2,047.13	0.00	2,047.13			
	1302	36119	2,932.63			02/12/13	2162	1052 PENNONI ASSOCIATES INC. SERV.THRU 1/13/13 RESERVE PS
		,	1,000.00			02/12/13	2163	3027 SCHRODER, JOHN SEWER RIGHT OF WAY

Report Date 05/02/13 GL Transaction Details PAGE 6

Acct #	Per	Sr	Trx #	Debits	Credits	Beg/End Bal	Date	Check/Ref #	ID #	Name/Description
07427-100	0 1302	CD	36119	1,000.00			02/12/13	2164	3029	WILLOW POND HOMEOWNERS ASSOCIATION SEWER RIGHT OF WAY
			***	4,932.63	0.00	***				
				4,932.63	0.00	6,979.76				
	1304	l	36889	1,013.25			04/10/13	2171	1052	PENNONI ASSOCIATES INC. SERVICES THRU 3/17/13 RESERVE PU
			36890	2,516.50			04/10/13	2173	1052	PENNONI ASSOCIATES INC. SERVICE THRU 2/20/13 RESERVE PS
	****			3,529.75	0.00	10,509.51			One has been not been one sou lost ton has	
	M4			10,509.51	0.00	10,509.51			~~~~	
				Par (see (see (see (see (see (see (see (se				M M M M M M M M M M M M M M M M M M M		
g Bal			0.00	137,860.16	148,940.05	-11079.889999	99			

#### MAY 2013 EAST GOSHEN MUNICIPAL AUTHORITY GOALS

#### **ON-GOING**

- 1. Submit an article for each newsletter.
  - a. Need by 3/1/13 **Jack**
  - b. Need by 6/1/13
  - c. Need by 9/1/13
  - d. Need by 12/1/13
- 2. Attend West Goshen Meetings quarterly more often if needed.
  - a. 1<sup>st</sup> Quarter (March) Ed
  - b. 2<sup>nd</sup> Quarter (June) Kevin
  - c. 3<sup>rd</sup> Quarter (September)
  - d. 4<sup>th</sup> Quarter (December)
- 3. Respond to capacity requests in 45 days or less.
- 4. Continue to implement I & I Plan March Report is in the Packet
- 5. Operate RCSTP in compliance with NPDES Permit January, February, March, April

#### **PROJECTS**

- 1. Lockwood Final Restoration Work started
- 2. Marydell Pump Station Construction Bid awarded, Notice to proceed issued and construction has commenced
- 3. Hershey Mill Pump Station Construction Bid awarded, Notice to proceed issued. Construction has commenced
- 4. Reserve Pump Station Construction We have all easements, need approval for test borings, Bids to be opened in early June.
- 5. Borrowing Reimburse Capital Reserve for design and construction funds.

		CONTRACT CHANGE ORD	ER	j
CONTRACT N CHANGE ORI TO: (Contract	DER NO.:	HMPS-2013 Hershey Mill Pump Station Force Main Diversion 1 Delaware Valley Utility Contractors, Inc.	DATE: PROJECT NO.: LOCATION: Chester County, Penns	9-May-13 EGMA 1304 East Goshen Mun. Auth. sylvania
You are heret	y requested to co	omply with the following changes from the contract p	plans and specifications.	
ITEM NO;		TION OF CHANGES QUANTITIES, UNITS; UNIT CHANGES IN COMPLETION SCHEDULE; ETC. (2)	DEGREASE IN CONTRACT PRICE (3)	INCREASE IN CONTRACT PRICE (4)
1	connection to r	nstall 6" HDPE Polyball gate valve with fused new HDPE piping instead of specified 6" on gate valve with MJ connection to new HDPE of pricing breakdown and product information is	\$502.38	
	TOTAL DECRI TOTAL INCRE NET (INCREAS		\$502.38	\$0.00 (\$502.38)
The sum of price to date is	(\$502.38) s thereby	is hereby added to the total contract price, and the \$170,937.62	e total adjusted contract	
This documen		on in the contract is unchanged. n amendment to the contract and all pply hereto.		
Accepted by:		Contractor	Date	•
Recommende	∍d by:	Engineer (	5/9/13 Date	
Approved by:		Owner	Date	,

## Delaware Valley Utility Contractors, Inc.

225 Warren Street Reading PA 19601 Phone: 610-372-7390

April 30, 2013

Pennoni Associates Inc. Christiana Executive Campus 121 Continental Drive, Suite 207 Newark, De 19713

Re: Hershey Mill Pump Station Force Main Diversion, Contract HMPS-2013 East Goshen Municipal Authority, Chester Co., PA Change Order – 6" Poly Valve

Attn: Michael Ellis, PE

Please find below the credit for installing the 6" Poly Valve in place of the 6" MJ Gate Valve.

6" MJ Gate Valve w/ MJ Adapters \$ 746.92
6" Poly Valve - 482.37
Credit Material \$(264.55)
Credit Labor & Equipment (1 Hr ) \$(237.83)
Total Credit \$(502.38)

Please let me know if you have any questions.

Thank you,

Dennis Heck

Estimator

## Submittal

## Delaware Valley Utility Contractors, Inc.

225 Warren Street Reading PA 19601

Contract No: 1		ation Force Main Diversion
Submittal No.	9	Date Submitted: April 26, 2013
Item: 6" Poly B	all Valve	
Manufacture/S	Supplier: Kerotes	st
Spec Section:	•	
Contractor App	oroval	
		ached submittal for compliance with the project
specifications:	() emis	Hock Date: 4/20/13
<b>Engineers Appr</b>	roval	

# PULYVALVES

NSF.

Polyethylene Valves for Water and Wastewater.



Providing valves and equipment to the world's energy markets for over 100 years.



# Over 100 years of experience in the valve industry.

The Kerotest Polyball™ line of polyethylene ball valves is designed to be the WATER industry standard for high performance polyethylene valving. The product is a "no-compromise" solution. Utility users will enjoy the very best performance with highest flow capacity, maximum pressure capability, compatible fusion materials and reliable, leak free operation.

The Kerotest Polyball<sup>rd</sup> Water Valve meets or exceeds all industry standards. Some examples are;

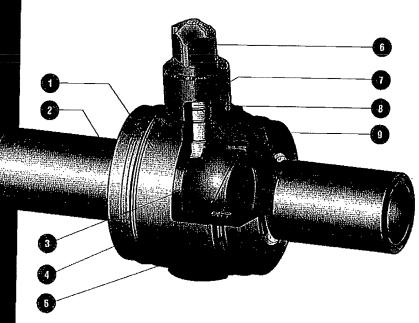
- NSF/ANSI 61 Drinking Water System Components - Health Effects
- AWWA C901 & C906
- IAMPO IGC 151-99
- Manufactured in an ISO 9001 guided facility
- Made in the United States of America
- Drop-tight shut-off
- Maintenance-free, corrosion-free
- Independent third party testing

Count on Polyball to take your water valves to a new level.

# POLY BOARD VALVES

#### **GENERAL INFORMATION**

ITEM	OPERATING FEATURES					
MAXIMUM ALLOWABLE SERVICE PRESSURES - PE 4710	SDR 9 : 160 psi (11 bar); 74°F (23°C) SDR 11 : 160 psi (11 bar); 74°F (23°C) SDR 13.5 : 128 psi (8.8 bar); 74°F (23°C) SDR 17 : 100 psl (6.9 bar); 74°F (23°C)					
MATERIALS	High Density Polyethylene (PE 4710)					
TEMPERATURE	32°F to 140°F (0°C to 60°C)					
PIPE CONNECTION VIA	Butt Fusion, Electrofusion or Flanged End					
BORE	Full Port or Reduced Port					
SDR	17.0, 15.5, 13.5, 11.5, 11.0, 9.3, 9.0, 7.0					



NO.	COMPONENT	MATERIAL	FEATURES AND BENEFITS
1	Body	POLYETHYLENE	PE 4710, flat base, robust design
2	Ends	POLYETHYLENE	PE 4710, various SDR's
3	Ball	POLYPROPYLENE	High strength, long life and low operating torque
4	Retainer	POLYPROPYLENE	Positive restraint under any condition; Retains seat under high differential pressure
5	Ball Seat	BUNA-N	Reliable sealing, 32°F to 140°F
6	Actuator	POLYPROPYLENE	2" operating square, positive position indication, over-torque protection
.7	Weather Seal	BUNA-N	Protects from ground water and dirt
8	Stern	ACETAL	Excellent durability and strength, blowout proof *
9 ;	Stem Seals	BUNA-N	Redundant sealing with dual o-rings
	1 2 3 4 5 6	1 Body 2 Ends 3 Ball 4 Retainer 5 Ball Seat 6 Actuator 7 Weather Seal 8 Stern	1 Body POLYETHYLENE 2 Ends POLYETHYLENE 3 Ball POLYPROPYLENE 4 Retainer POLYPROPYLENE 5 Ball Seat BUNA-N 6 Actuator POLYPROPYLENE 7 Weather Seal BUNA-N 8 Stern ACETAL



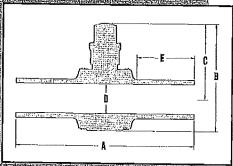
Full Port
-----------

SIZE	A	1	_ c	D	<u>E</u>	Cv:	WEIGHT (lbs)
1/2"	11.5	5.2	3.7	1.01	3.0	21	1
3/4"	11.5	5.2	3.7	1.01	3.0	30	1
1"	12	5.2	3.7	1.01	3.0	42	· 2
* 11/4"	11.8	6.9	5.2	1.38	3.2	49	2
* 1 1/2"	11.8	6.9	5.2	1.38	3.2	150	2
2"	19	9.7	7.0	1.90	6.4	180	5
3"	21	12.2	8.7	2.70	6.4	400	10
4"	25	14.8	10.2	3.63	7.6	710	20
6"	27	19.6	13.2	5.25	7.0	1900	42
8"	28	25.5	17.2	6.70	5.3	3750	96

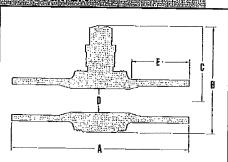
NSF

i i e i e civa alli

Full Port



Reduced Post



Valve Sizes and Dimensions (Approx. inches) Reduced Port

SIZE	A	8	C	D	Ε	Cν	WEIGHT (lbs)
* 2"	11.8	6.9	5.2	1.38	3.2	150	2
4"	21	12.2	8.7	2.70	6.5	450	11
6"	25	14.8	10.2	3.63	7.3	910	26
8"	27	19.6	13.2	5.25	7.2	2200	47
10"	28	25.5	17.2	6.70	5.5	4450	102
12"	28	25.5	17.2	6.70	5.7	4950	110

#### Metric

Valve Sizes and Dimensions (Approx. millimeters) Fu

Full Po	4

							,
SIZE	A	В	C	D	E	Cv	WEIGHT (kgs)
20 mm	292	132	94	26	76	16	0.5
25 mm	292	132	94	26	76	22	0.5
32 mm	292	132	94	26	76	30	0.5
40 mm	305	132	94	26	81	40	0.5
50 mm	300	175	132	35	81	150	1.0
63 mm	482	245	180	48	160	180	2.3
90 mm	535	310	220	69	160	400	4.6
110 mm	635	375	260	92	190	710	9.1
160 mm	685	500	335	133	175	1900	19.1
180 mm	685	500	335	133	175	2100	19.1
200 mm	710	650	435	170	135	3750	43.6
225 mm	710	650	435	170	135	4000	45,0
315 mm	710	650	435	170	135	4950	50.0



1458 Shaner Drive • Pottstown, PA 19465 p 610.404.2570 • f 610.404.2580

Rick Smith
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380
610-692-7171 phone
rsmith@eastgoshen.org

Reccomeno You Approve

Re: Reserve Pump Station Diversion, East Goshen Township, PA (M-043)

Rick,

We are pleased to provide the following proposal to perform drilling services for East Goshen Municipal Authority at the above location:

Mobilization of ATV drill rig, tooling and crew
 \$ 800.00 LS

ATV drill rig, auger probes (5 @ up to 13' deep)
 \$ 1,800.00/day

Portland, bentonite, asphalt (if required) \$ 30.00/bag

The above rates are quoted open shop, non-prevailing wage with work to be performed weekdays, 8 hour dayshifts, in one mobilization. All costs associated with permits, grouting, traffic control, inspections, offset drilling, dewatering, cuttings removal, and drilling through obstructions to be paid by client. We have excluded all environmental work and any and all associated costs to be paid by others. Earthcore will call to mark public utilities, Client responsible for private utility markout and hole location survey, and agrees to the responsibility to direct Earthcore where to drill. We assume the site is accessible via ATV drill rig.

Invoices payable upon receipt. Finance charges of 2% per month may be charged on all balances past 15 days from job completion date. All disputes to be settled by binding arbitration administered by the Construction Division of the American Arbitration Association, to be held near Pottstown, PA. Client agrees to pay all collection costs including but not limited to arbitration, court and attorney fees, and interest.

If you agree with the terms listed above, please sign and return one copy via fax to our office. The project will be scheduled upon receipt of signed authorization. If you have any questions or require additional information please feel free to give me a call. We appreciate the opportunity to provide our services and look forward to working with you.

AUTHORIZED SIGNATURES:

	1	/		
CONTRACTOR	Date	CLIENT	Date	
Rick Ketchell, president		Rick Smith, Authorized Agent		
Earthcore Services, LLC		East Goshen Township		

#### **Rick Smith**

From:

Michael Ellis <MEllis@Pennoni.com>

Sent:

Monday, May 06, 2013 11:54 AM

To:

rsmith@eastgoshen.org

Cc:

**Daniel Barbato** 

Subject:

Marydell construction phase budget

Rick,

As we discussed this morning, we are approaching our estimated fee on the Marydell construction phase task order. As of April 28, we had expended \$16,900 of the \$20,000 budget. We're around \$19,000 through yesterday (May 5). As you may recall, the estimated fee was based upon the time actually expended on the Lockwood Chase STP sewer diversion construction phase task order. A similar scope of work and construction duration was envisioned for this project. The estimated fee amount allowed for 150 hours of field inspection (approx. \$11,250) and approx. 100 hours of office support (approx. \$8,750). As of May 5, we have expended approx. 146 hours (\$10,900) of inspection time (including Matt's attendance at the pre-construction meeting) and 99.25 hours (\$8,100) of office support.

Matt has been on-site part-time as proposed. He has been on-site an average of 4.7 hours/day while the contractor is working, as was generally planned. However, the re-work associated with the Paoli Pike jack and bore operation and the extensive and repeated utility coordination efforts & meetings with PECO and Sunoco have resulted in more work days (hours) than projected. Ply-Mar had originally projected to complete the project in 4-6 weeks. They have already worked over 25 calendar days (over 5 weeks), and they are only halfway through construction (approx. 428 l.f. installed out of 955 l.f. total). Additionally, it was expected that the Hershey Mill PS Diversion construction would have been occurring concurrently and that inspection and travel time would be evenly distributed between the two projects, but the HMPS contractor chose to wait over one month to begin.

We somewhat conservatively estimate another 6 weeks to complete the work (2 weeks to locate Sunoco gas mains and jack & bore across Boot Rd, 2 weeks to construct the sewer across the island and turn lane and coordinate pole bracing with PECO, 1 week to demolish the pump station and install sewer to existing main, and 1 week for testing and restoration). In order to continue to perform inspections approx. half-time for the remainder of the work (6 wks x 4 hrs/day = \$7,200) and limited office support (14-16 hrs = \$1,700), we request an additional \$9,000 on the task order.

Given that the HMPS Diversion construction is starting tomorrow, Matt will likely now be balancing his inspection time between the two projects and distributing travel time between the two also from this point forward, so we some economy of work will be achieved. We will also continue to very closely monitor our time to ensure this supplemental budget is not exceeded, subject to any extreme unforeseen circumstances.

Several of our other projects have been completed or are on target to be completed under budget. Maybe some of those remaining budgets could be transferred:

- 1. The Marydell design task order was completed approx. \$1,000 under budget, even after the transfer of funds to the Hershey Mill & Reserve job.
- 2. Hershey Mill PS Muffin Monster is currently approx \$3,000 under budget.
- 3. 2012 Chp 94 Reports are currently approx \$1,100 under budget, although we were targeting to hold some money in there for responding to any DEP comments.
- 4. 2013 General Services approx. \$7,500 remaining in the budget for the rest of the year (we've billed approx. \$2,500 so far this year)

Please feel free to call Dan or me if you'd like to discuss further.

#### Mike

#### Michael J. Ellis, PE

Pennoni Associates Inc. Christiana Executive Campus 121 Continental Drive, Suite 207 Newark, DE 19713-4310 Office 302-655-4451 x5236 | Direct 302-351-5236 Fax 302-654-2895 | Mobile 302-561-4235 http://www.pennoni.com | mellis@pennoni.com

#### Consulting Engineers providing...

Environmental – Geotechnical – Inspection & Testing – Land Development – MEP Landscape Architecture – Structural – Survey – Transportation – Water/Wastewater

### EAST GOSHEN MUNICIPAL AUTHORITY EAST GOSHEN TOWNSHIP

1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199

May 10, 2013

To:

**Municipal Authority** 

From:

Mark Miller

Re:

April 2013 Monthly Report

Meters:

Meters were read on a daily basis. The Reservoir Road meter was

reading high due to debris on the probe. The portable flows are being

read on a weekly basis.

**Pump Stations:** 

Were visited on a daily basis

C.C. Collection:

We have been televising the interceptor line from Wilson Drive to Westtown Way. We found a large amount of inflow behind 905 Airport Road (pictures attached). The repair was done last week. We were able to locate another 20 to 30 thousand gallons. Due to poor weather conditions we were not able to do the area between Baldwin Drive and Reservoir Road; I hope to complete that section in next two weeks.

R.C. Collection:

The sewer lines in the Hunt Country development were cleaned and

televised; we found some minor inflow which we will correct.

All the pump stations were visited on a daily basis with no problems to report. Lenni Electric was utilized to replace the electric panel after we

found that the breakers were in bad shape.

R.C. Plant:

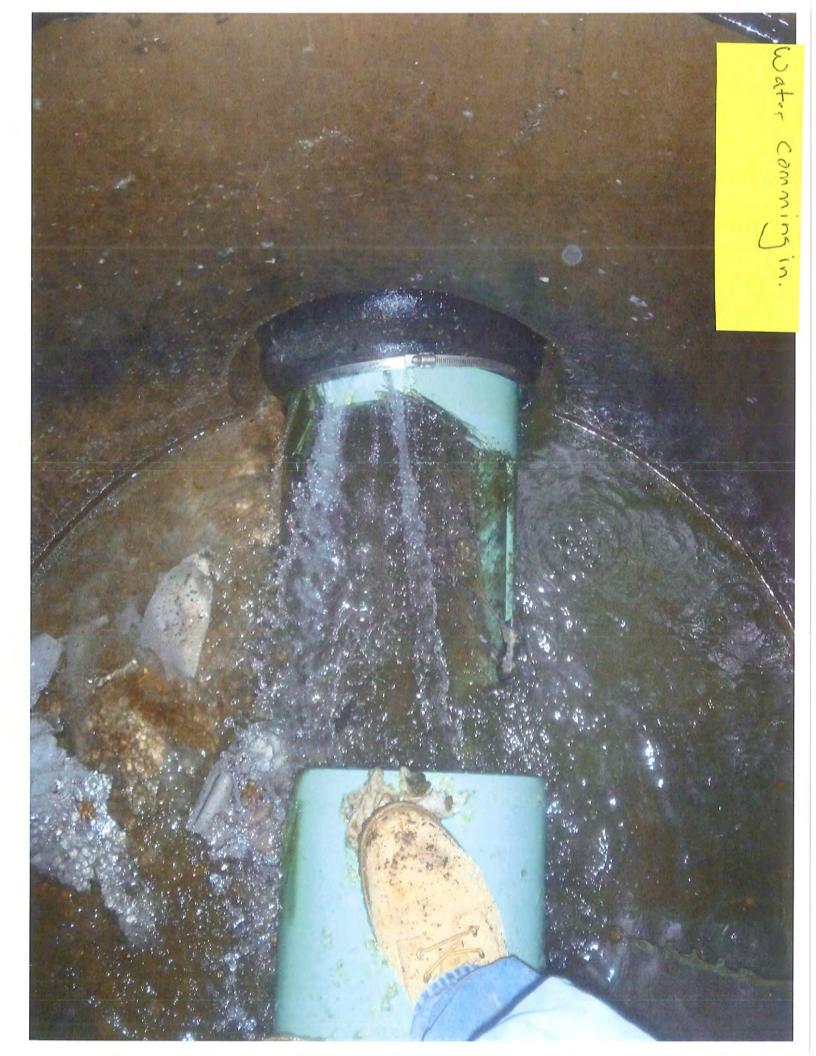
Nothing to report at this time.

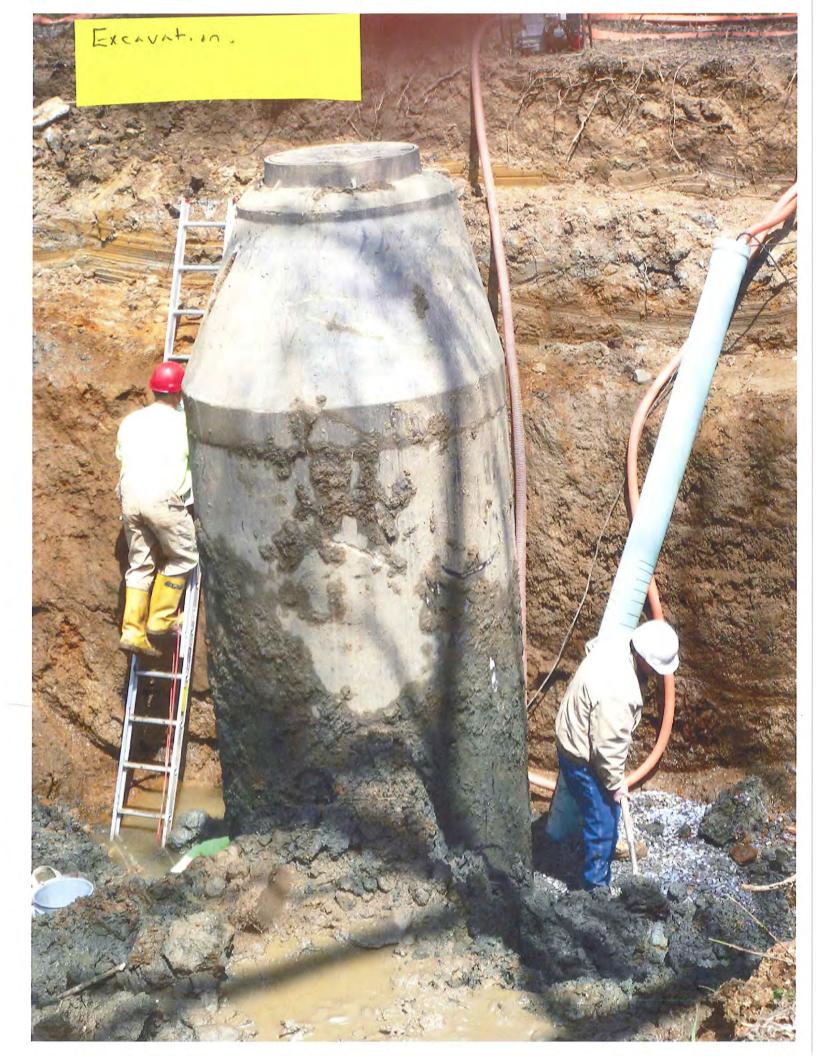
Alarms:

We received a total of 17 alarms.

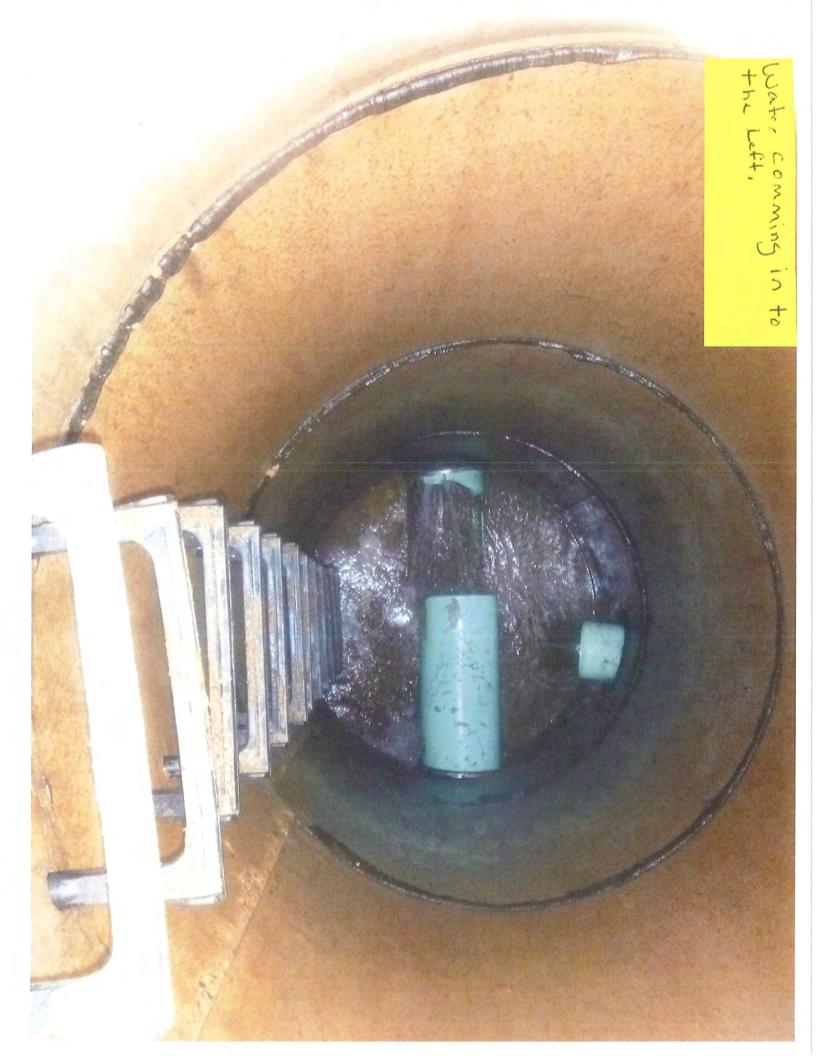
PA One Calls:

We received 48 PA One calls for the month of April.











#### MEMORANDUM

TO:

East Goshen Municipal Authority Board

Rick Smith, Township Manager

FROM:

Michael Ellis, P.E. for Daniel Barbato, P.E.

**Authority Engineer** 

DATE:

May 9, 2013

**SUBJECT:** 

Engineer's Report

#### Invoices

• Invoices with summaries are provided under separate cover.

#### Ridley Creek Sewage Treatment Plant (RCSTP)

• Pennoni continues to coordinate with the Plant Operator and will provide operations assistance as needed. No issues were brought to our attention in April.

#### **Marydell PS Elimination**

- We continued to perform office support and daily field observation of the sewer construction including shop drawing reviews, resolution of Paoli Pike jack and boring casing misalignment, evaluation of contractor request to increase depth of sewer along Paoli Pike to provide vertical flexibility on Boot Road jack and bore, coordination of extra construction measures to be taken on Boot Road jack and bore to minimize risk of misalignment, additional field meetings and coordination with PECO to brace utility poles, multiple field meetings with Sunoco to locate active gas mains along Boot Road and resolve requirements for protecting and observing mains during jacking and boring, multiple gas main locating test pits and an additional observation pit, and coordination with PennDOT regarding traffic control concerns.
- We also negotiated an agreed upon payment approach with the contractor, Ply-Mar Construction, for the Sunoco-required observation pit during jacking and boring which will include payment using bid items for "Miscellaneous Excavation and Backfill" and "Soft Dig Test Pits" in addition to limited Time and Materials (T&M) work for unforeseen conditions and new Sunoco requirements.
- Ply-Mar began construction on March 26. They originally estimated 6-8 weeks to complete the project; however, they have installed less than 50% of the sewer at the time of this report (installed approx. 428 l.f. out of 955 l.f. total). We anticipate another 5-6 weeks from the time of this report to complete the project, estimated completion in late June. The contract completion date is July 15.

• We reviewed the contractor's second payment request and forwarded our recommendation to the Township.

#### Hershey's Mill PS Diversion

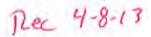
- We attended a pre-construction meeting with the Township and contractor, Delaware Valley Utility Contractors (DVUC), on April 18. We performed meeting follow-up tasks and pre-construction coordination including review of DVUC's tax exempt status request, preparation of a project contact list, notifications to Chester County Conservation District and PA Fish & Boat, review of DVUC's pre-construction video, and an additional pre-construction field meeting with DVUC regarding construction access and other matters.
- Construction began May 7. We are performing daily field observation of the work. DVUC directionally drilled approx. 600 feet from the Cornwallis Drive cul-de-sac to the existing force main point of connection on the first day of work. The HDPE pipe is expected to be pulled back through the drill hole by May 10, and cured-in-place manhole lining of the two existing manholes is scheduled to begin May 13. DVUC estimates 4 weeks (from the start of work on May 7) to complete the project. The contract completion date is July 29, 2013.
- We reviewed the remainder of shop drawings and construction submittals from the contractor. We also reviewed the contractor's proposed material change for a gate valve (from ductile iron to HDPE), and we negotiated a deduct change order with them. The change order will be forwarded to the Authority for review and approval.
- We also issued letters to unsuccessful bidders notifying them of the project award.

#### Reserve PS Elimination

• There has been no activity on our part since the last report. We submitted bid plans and near-final specifications to the Reserve at Spring Meadows HOA for review on April 8, but they have not provided a response or approval of the easement as of the time of this report. The project will be put out to bid after the HOA has granted the easement.

#### Semi-Annual I/I Report

• We received flow data from the first month of metering at new locations along the Chester Creek interceptor, and we are performing a cursory analysis of the data at the time of this report. Our findings will be informally provided to the Township via email.





April 8, 2012

EGMA1302

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

Re:

Semi-Annual Sewer System Status Report #09

East Goshen Municipal Authority

Dear Mr. Smith:

The following Semi-Annual Sewer System Status Report is a continuation of the reports previously required under the Consent Order & Agreement (CO&A) executed between the Pennsylvania Department of Environmental Protection and the East Goshen Municipal Authority in December 2008. Mandatory reporting to the PaDEP ended on March 31, 2012, so this report will serve as an internal document for the Township. This report continues to describe the progress made towards achieving the milestone events listed in the Corrective Action section of the CO&A including all of the actions taken within the previous six-month period and those which will be taken in the subsequent six-month period. The term "Corrective Action" is now replaced with "Action".

#### EXECUTIVE SUMMARY

Meter data from the past year indicates excessive inflow and infiltration (I/I) in area CC-2 as identified in the attached figure. Approximately 60% of the total flow in this area is continuous base flow. Portions of this area – North Lockwood, Marydell, and Pin Oaks – were televised in the past six months and only limited I/I was found. In the next six months, the Township will focus on identifying and eliminating I/I in this area by installing portable meters along the Chester Creek interceptor and televising the interceptor and certain collection sewers.

#### ACTIONS

#### 1. Action #1: Metering

Flow metering shall take place in the following subbasins for a minimum of four months out of the year, with metering conducted for a minimum of 60 days in the fall and 60 days in the spring.

Refer to the enclosed Figure #1 for a map of previous and future meter locations.

#### Previous 6 Months:

The current period analyzes meter data from September 2012 through mid-March 2013.

#### Goshen Valley

Based on the meter data, there does not appear to be a definitive relationship between precipitation and flow at this location. The continuous base flow at this temporary metering location averaged 5 gpm so there are no significant infiltration problems. Furthermore, the average daily metered flow of 57,600 gpd is less than the theoretical estimate of the expected flow coming from Goshen Valley (656 condos x 160 gpd/condo = 104,960 gpd).

There are no indications of I/I problems at this location since this meter was installed. Therefore, the meter will be removed.

#### Route 3 (West Chester Pike)

The average flow from late November through mid-December 2012 was 20,880 gpd and there was no dry weather continuous base flow. There was limited continuous base flow for one to three days following storm events. The continuous base flow suggests there is limited I/I in this system. The portable meter at this location appears to have malfunctioned in mid-December 2012 and was replaced with another meter in February.

Pennoni has not received any meter data since the temporary meter was replaced. The East Goshen Public Works Department confirmed that there is little to no dry weather continuous base flow at this location, indicating that infiltration is not a major problem in the upstream sewers. Therefore, the meter will be removed.

#### Waterview

The Waterview temporary meter is located on the Chester Creek Interceptor behind the Waterview Swim Club, just north of West Chester Pike. The eastern section of the Chester Creek Service Area is tributary to this meter location.

The average flow was 136 gpm in October through mid-November 2011. There was a significant continuous base flow during this period averaging 37 gpm, likely due to infiltration from the extreme wet weather in September and October 2011. The pipe flowed nearly full for over one week in mid-November 2011, possibly due to a downstream restriction.

Flow rates, including the continuous base flow and daily peaks, steadily decreased after a possible restriction was eliminated in late November 2011. From late January 2012 through March 12, 2012, during a period of fairly dry weather, the average flow was only 29 gpm, and there was no continuous base flow.

Flows have increased since March 2012 and the average flow from April through August 2012 was 101 gpm. The continuous base flow averaged 21 gpm from April through August 2012, and there was approximately 50,000 gpd inflow during storm events exceeding 1-inch precipitation.

The flows at this location increased further from September 2012 through early February 2013, with an average of 124 gpm. The average continuous base flow during this period was 22.6 gpm. The average flow from February 6, 2013 through mid-March 2013 fell to 55 gpm with an average continuous base flow of 1.3 gpm, which follows a similar trend of flow data from 2012. Peak flows during this current period appear to be correlated with high rainfall which suggests there continues to be inflow problems in the upstream sewers.

The steady base flow is evidence of dry weather infiltration in the upstream sewer system. There may also be a significant amount of rain-induced infiltration that occurs for a few days after storm events and may last up to one month during the wet season. Inflow also appears to be occurring during storms.

This temporary meter will remain at this location to continue monitoring flows from the eastern section of the Chester Creek Service Area.

#### Dam Interceptor

The temporary meter malfunctioned on December 7, 2012 and was sent out for repairs. The data that was captured before the meter malfunctioned is considered to be inaccurate since the average flow during this period from the upstream Reservoir Road permanent meter of 603 gpm was significantly higher than the average flow of 336 gpm that the Dam Interceptor temporary meter recorded.

No conclusions can be made because the available metered data for this period is considered erroneous. The temporary meter will therefore remain at this location.

#### Reservoir Road Interceptor

The average flow at this temporary meter location from late November 2012 through mid-March 2013 was 479 gpm. The continuous base flow average of 294 gpm comprises over 60% of the flow at this location. This indicates there is a severe I/I problem upstream of this location. The temporary meter will therefore remain at this location.

#### North Lockwood

Temporary meter data at this location is considered inaccurate from November 28, 2012 through December 18, 2012. Theoretically, the flowrate measured at the permanent Reservoir Road meter should equal the North Lockwood flow plus the temporary Reservoir Road Interceptor meter flow. Average flow data from all of these locations in December 2012 indicates that the North Lockwood temporary meter began to accurately measure flows around December 27, 2012.

Semi-Annual Sewer System Status Report #09

From December 27 to February 6 the average daily flow was 74,880 gpd, and the continuous base flow averaged 40,320 gpd. The continuous base flow is approximately 54% of the total flow and is believed to be primarily infiltration.

Significant rainfall is correlated with delayed peak flows which indicates there is infiltration in the upstream sewers. The Township televised the upstream sewers and did not find any major problems besides one illegal sump pump connection. The temporary meter was previously removed following the televising.

#### Baldwin Drive

The meter data at this location, from the end of November 2012 through mid-March 2013, fluctuates dramatically so we cannot provide any quantitative analysis for the current period. However, the average daily flow from late November 2012 through mid-January 2013 was 40,320 gpd. Although the accuracy of the meter is questioned, since February 6, 2013 flows have increased dramatically to an average flow of 174,096 gpd with a continuous base flow of 79,623 gpd.

The Township intends to clean and televise the sewers upstream of this location during the next six months, so this meter will be relocated one manhole upstream to meter flows from the interceptor.

#### Permanent Chester Creek Service Area Meters

Flow data from the 10 permanent meters throughout the Chester Creek Service Area were analyzed; six of the meters are in gravity interceptor sewers and four of the meters are on pump station discharge pipes. Instantaneous or hourly meter data is not recorded on these meters; therefore only a rough flow analysis can be performed because inflow peaks and continuous base flows are unknown. Additionally, there are no readings for the Hicks meter since May 2012; therefore an analysis could not be performed for this key location during this period.

Our conclusions for the current period, September 2012 through March 2013, maintain that I/I problems likely exist in the sanitary sewer system as indicated in previous periods. Metered data from this period did not indicate significant I/I within Area CC-1, but accurate data is needed from the temporary Dam Interceptor meter to confirm this. I/I continues to be a major problem in Area CC-2. I/I appears to be a problem within Area CC-3, as previously indicated in the Waterview temporary meter analysis.

#### Next 6 Months:

East Goshen Municipal Authority has found the temporary metering to be beneficial in identifying problems in their sewer system. Although not required by the CO&A, the Authority will continue temporary metering and flow analyses. Metering results and analyses will be utilized internally and for Chapter 94 Reporting but will no longer be reported semi-annually to DEP.

We recommend the following actions for the next six months:

- Clean and calibrate all meters.
- Discontinue metering at the Baldwin Drive, Goshen Valley, and Route 3 (West Chester Pike) locations.
- Continue metering at the Reservoir Road Interceptor, Dam Interceptor, and Waterview locations.
- Relocate meters on the Chester Creek Interceptor sewers in three other strategic locations to determine if I/I problems exist in Area CC-2: (1) one manhole upstream of the Baldwin Drive temporary meter to capture flows from the interceptor downstream of the Hicks permanent meter, (2) the manhole west of the interceptor on the Solsters property to capture flows from businesses along West Chester Pike and properties along Park Avenue, (3) one manhole upstream of the interceptor where Marydell connects.
- One portable meter will be maintained as a spare to replace another meter in the event of a malfunction.
- Metering data will be analyzed by Pennoni in May to identify any initial problems.

#### 2. Action #2: Televising

Televising and visual inspections should take place on an ongoing, as-needed basis in order to discover areas of excessive I/I and to measure the effectiveness of I/I rehabilitation measures.

#### Previous 6 Months:

Refer to the attached "2012 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work" and "2013 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work" for a summary of the televised sewers during the past six months.

#### Next 6 Months:

Ridley Creek Service Area

None

#### Chester Creek Service Area

- Televise the remainder of the Chester Creek Interceptor along Reservoir Road between West Chester Pike and Paoli Pike
- Televise collection sewers that are west of Baldwin Drive

#### 3. Action #3: System Hydraulic Characterization

The sanitary sewer collection system tributary to the Ridley Creek Sewage Treatment Plant should be modeled and hydraulically evaluated in order to determine if any physical constraints exist which would not allow for the conveyance of peak wet weather flow.

• The System Hydraulic Characterization was completed and submitted to DEP in November 2009 as required by the CO&A.

#### 4. Action #4: Rehabilitation

Areas within the sewer systems which have been identified as needing rehabilitation, per the investigations mentioned above, should be rehabilitated.

#### Previous 6 Months:

Refer to the attached documents "2012 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work" and "2013 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work" for a list of rehabilitation work performed during the previous period.

#### Next 6 Months:

- Continue to conduct rehabilitation of sewers, manholes, and laterals as determined by ongoing investigations, including possible isolated cured-in-place pipe lining and replacement of cleanout caps and cleanout pipes that have pulled out of lateral piping
- Replace castings and manhole lids with watertight lids in the Pin Oaks, Grand Oak, and Bittersweet developments.

#### 5. Action #5: Post-Rehabilitation Flow Metering

Flow metering should take place in areas that have been rehabilitated in order to document the effectiveness of the rehabilitative work. The metering should take place during both the fall and spring of the year.

#### Previous 6 Months:

There has not been any significant rehabilitation work performed in the Chester Creek

Collection System since temporary metering in this basin began.

#### Next 6 Months:

- Data from the various meters throughout the Chester Creek Service Area will be reviewed to evaluate the effectiveness of any repairs in Area CC-2.
- Data from the Ridley Creek Influent STP meter will continue to be reviewed to determine the effectiveness of any repairs in the Ridley Creek Service Area.

#### 6. Action #6: House Lateral Investigation Program

The House Lateral Investigation Program ("HLIP") was implemented in conformance with the provisions of the HLIP contained in the February 28, 2008, letter from East Goshen.

#### Previous 6 Months:

- Continued to replace cleanout caps at no charge to property owners in the Ridley Creek and Chester Creek Service Areas upon request by property owners or observation by Public Works or Codes Department staff. Refer to attached lists of "2012 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work" and "2013 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work".
- Continued to repair defective laterals and cleanouts for property owners to ensure that the work is done properly as indicated in Action #4. Refer to attached lists of "2012 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work" and "2013 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work".
- Re-occupancy inspections were performed at the sale of residences and commercial establishments throughout the Township looking for direct inflow from building sump pumps.

#### Next 6 Months:

- Continue to inspect sanitary sewer cleanouts/vents in conjunction with the televising efforts performed under Action #2.
- Continue Township policy regarding replacement of cleanouts, vent caps, and laterals.
- Continue re-occupancy inspections at the sale of properties including looking for direct inflow from building sump pumps.
- Repair of defective laterals and cleanouts by the Township for property owners to

ensure that the work is done properly.

#### 7. Action #7: Reporting

Semi-Annual Status Reports should be submitted to the East Goshen Municipal Authority to describe the progress made towards achieving the previous Corrective Action milestone events.

#### Previous 6 Months:

- Submitted Semi-Annual Sewer System Status #08 to the Municipal Authority on October 4, 2012.
- Submitted January 2013 Interim Portable Meter Analysis Summary to the Township on January 22, 2013.

#### Next 6 Months:

 Prepare and submit the Semi-Annual Sewer System Status #10 to the Municipal Authority by September 30, 2013.

If you should have any questions, please do not hesitate to contact me at (302) 655-4451.

Sincerely,

PENNONI ASSOCIATES INC.

Michael J. Ellis, P.E. Project Engineer

ajd/

Enclosures:

Figure 1

2012 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work Pipe 2013 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work Pipe

cc:

Rick Smith, Township Manager

Mark Miller, Public Works Director

Robert F. Adams, Solicitor

Dan Barbato, Pennoni Associates Inc., Authority Engineer

## 2012 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work

### West Goshen/Chester Creek Service Area

January 2012	Replaced dialers at the Ashbridge and Barkway Pump Stations
Junuary 2012	<ul> <li>Replaced dialers at the Ashbridge and Barkway I unip Stations</li> <li>Performed two excavated lateral replacements</li> </ul>
February 2012	
reditially 2012	Repaired main breaks in Supplee Valley  Repaired main breaks in Supplee Valley  Repaired main breaks in Supplee Valley
	Performed an excavated manhole cover replacement on  Streethous Road
	Strasburg Road
M - 1 2012	Pump #1 at the Ashbridge Pump Station was sent out for repair  Pump #1.
March 2012	Performed two excavated lateral repairs
April 2012	Repaired lateral stack on Heather Lane
	Cleared downstream blockage causing surcharge in manhole
	near the Hershey Mill Pump Station
	Replaced 12 lateral caps
May 2012	<ul> <li>Replaced 44 manhole castings in Marydell</li> </ul>
	<ul> <li>Televised the drop manhole in Hershey Mill</li> </ul>
	Repaired a lateral stack on Heather Lane
	Replaced four lateral caps
June 2012	Repaired leaky lateral
	<ul> <li>Cleared three lateral blockages</li> </ul>
	Replaced one lateral cap
July 2012	<ul> <li>Repaired Pump #2 at the Barkway Pump Station</li> </ul>
	<ul> <li>Increased impeller size on pumps</li> </ul>
	<ul> <li>Installed pressure gauges on the force main</li> </ul>
	<ul> <li>Cleaned and televised 870 LF of sewer and inspected manholes</li> </ul>
	along Grand Oak Lane
August 2012	<ul> <li>Replaced several lateral caps</li> </ul>
	<ul> <li>Cleared one blocked lateral</li> </ul>
	<ul> <li>Inspected manholes between Wilson Drive and Strasburg Road</li> </ul>
September 2012	<ul> <li>Replaced several sewer caps</li> </ul>
	<ul> <li>Repaired channel at Reservoir Road and Baldwin Drive</li> </ul>
October 2012	<ul> <li>Pump #2 was replaced after it stopped operating during the</li> </ul>
	peak of Hurricane Sandy
November 2012	Replaced two lateral caps
December 2012	Replaced the transducer at the Ashbridge Pump Station

# Ridley Creek Service Area

February 2012	Worked with Alfa Laval to get the centrifuge back in service at the Ridley Creek STP
March 2012	• Cleaned SBR #1
April 2012	<ul> <li>Cleaned and televised 2,700 LF of sewer from 1580 Paoli Pike to Charter School</li> </ul>
	<ul> <li>Cleaned and televised 12,340 LF of sewer from CVS to 1580</li> <li>Paoli Pike</li> </ul>
May 2012	<ul> <li>Cleaned and televised 8155 LF of sewer along Paoli Pike by Charter School and found 50,000 gpd I&amp;I</li> <li>Repaired leaky lateral</li> <li>Replaced three lateral caps</li> </ul>
August 2012	Replaced the auto dialer at the Hunt Country Pump Station
September 2012	Replaced two lateral caps
November 2012	Cleaned and televised sewers near Pulte
	Replaced one lateral cap
December 2012	Replaced lateral tee and 20 feet of pipe

# Meters

January 2012	<ul> <li>Re-calibrated the meters were due to problems with the transducer brackets</li> <li>Replaced the broken Reservoir Road meter bracket bolts</li> </ul>
August 2012	Westtown Way malfunctioned
September 2012	Westtown Way meter replaced
Topic Control of the	Reservoir Road meter back in service
	Installed new flow meter at RCSTP
November 2012	Relocated portable flow meters

# 2013 Sanitary Sewer Maintenance, Repair, Cleaning, and Televising Work

# Cleaning and Televising

Pin Oaks Farms – 8,600 LF

North Lockwood and Brooke Driver - 4,000 LF

Part of Strasburg Road - 1,200 LF

Apple Brook Pulte Homes – 2,000 LF

# Lateral Repairs

1560 Tanglewood Drive

930 Monta Vista Drive

1445-1448 Grand Oak Lane



# Monthly Operations Report: April 2013

## **Treatment Process Operation**

During March 2013, there were no exceedances of the final effluent discharge limitations for outfall 001. There was no discharge from outfall 002. Table 1 illustrates the final effluent composite sample data reported during March.

Table 1

	Mar	ch 20	13 - Fir	nal Ef	fluen	t-Ou	ıt Fall	001			
	Flow	СВ	$OD_s$	T	SS	NI	1 <sub>4</sub> -N	100 000 000	orus,Total ng/L	Fecal Co	oliform
NPDES Permit Discharge Limitations	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	21	131	7	44	0.5	3	200	1,000
	Instantaneous Maximum	40		42							
Sample Date											
March 5, 2013	0.288	2.0	4.8	5	12	0.10	0.24	0.16	0.38	1	0.0000
March 14, 2013	0.273	2.0	4.6	5	11	0.13	0.29	0.37	0.84	1	0.0000
March 19, 2013	0.283	2.0	4.7	5	12	0.10	0.24	0.29	0.68	1	0.0000
March 26, 2013	0.263	2.0	4.4	5	11	0.10	0.22	0.32	0,70	1	0.0000
Average	0.2768	2.0	5	5	12	0.107	0.25	0.29	0.65	1	0.0000
Minimum	0.2630	2,0	4	5	11	0.100	0.22	0.16	0.38	1	0.0000
Maximum	0.2880	2.0	5	5	12	0.127	0.29	0.37	0.84	1	0.0000

The monthly average total phosphorus concentration was 0.29 mg/L as compared to the discharge limitation of 0.5 mg/L. During the month, the final effluent total phosphorus concentration discharged ranged from 0.16 mg/L to 0.37 mg/L.

During the month of April 2013, there are no anticipated non-compliance issues with respect to the discharge permit limitations. It is noted that the final effluent CBOD<sub>5</sub> collected on April 23<sup>rd</sup> is under review due to suspected test error or contaminated sample. The sample is being retested for CBOD<sub>5</sub>, including additional analysis for COD.



Table 2 presents the available final effluent data for the month of April.

Table 2

				lable	-				-		
	Apr	il 201	.3 - Fin	al Eff	luent	- Out	t Fall	001			
	Flow	СВ	OD <sub>5</sub>	т	SS	NI	I <sub>4</sub> -N	1.00	orus,Total ng/L	Fecal C	oliform
NPDES Permit Discharge Limitations	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	21	131	7	44	0.5	3	200	1,000
	Instantaneous Maximum	40		42					II. I THE		
Sample Date											
April 2, 2013	0.207	2.0	3.5	5	9	0.100	0.17	0.24	0.41	1	0.0000
April 11, 2013	0.169	2.0	2.8	5	7	0.100	0.14	0.13	0.18	1	0.0000
April 16, 2013	0.188	2.0	3.1	13	20	0.187	0.29	0.12	0.19	1	0.0000
April 23, 2013	0.224			9	17	0.100	0.19	0.17	0.32	1	0.0000
April 30, 2013	0.071	2.0	1.2	5	3	0.159	0.09	0.10	0.06	1	0.0000
Average	0.1718	2.0	3	7	11	0.129	0.18	0.15	0.23	1	0.0000
Minimum	0.0710	2.0	1	5	3	0.100	0.09	0.10	0.06	1	0.0000
Maximum	0.2240	2.0	3	13	20	0.187	0.29	0.24	0.41	1	0.0000

Transfer of treated effluent to the Applebrook Golf Course was initiated on April 26, 2013. The Township Staff replaced the pump due to the original pump being seized and drawing excessive amperage. The replacement pump is discharging an average of 167,926 gallons per day.

Table 3 present the influent wastewater pollutant concentrations and loading entering the wastewater treatment facility. Composite samples are collected at the influent doghouse manhole. The influent flow meter reading is collected from the SBR influent flow meter due to in accuracies with the field influent flow meter.



3.1. 27.	Flow	ВС	OD₅	т	ss	NI	I <sub>A</sub> -N	TKN	, mg/L	Phospho m	rus,Total, g/L
Design Basis	Section 1	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											
April 2, 2013	0.2670	202	450	270	601	38	85	61.4	137	7.2	16
April 11, 2013	0.3534	193	569	140	413	29.4	87	54.1	159	5.2	15
April 16, 2013	0.3404	155	440	200	568	33.6	95	39.3	112	4.8	14
April 23, 2013	0.3143	254	666	240	629	34.1	89	44.1	116	5.4	14
April 30, 2013	0.2727	260	591	230	523	29.2	66	44.4	101	6.0	14

Sequencing batch reactors (SBRs) numbered 1, 3 and 4 were in service during the month of March. Process monitoring of each SBR included ammonia as N, nitrite as N, Nitrate as N, COD, SSV, MLSS and total phosphorus. Microscopic examinations and physical observation of the SBR MLSS and foam color is ongoing. Foam concentrations remained around the same concentration as during March. Present surface area coverage during React Phase ranges from approximately 85 to 95%. The foam remains as light brown in color and averages 2 to 4 inches in depth. The F:M ratios for SBR 3 and 4 were increased to a range of 0.05 to 0.08 as lbs COD/lbs. MLSS Increased sludge wasting rates were implemented during the month to lower MLSS and increase F:M ratios.

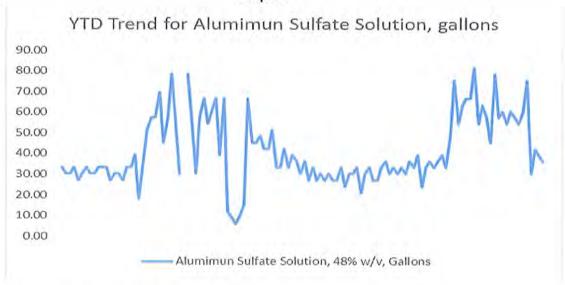
Daily monitoring of the influent and final effluent 24-hour composites samples for total phosphorus is ongoing. Daily analysis of the final effluent flow equalization grab sample is total phosphorus is ongoing.

Addition of aluminum sulfate solution to the SBRs to assist with phosphorus removal continued. The volume of aluminum sulfate solution to the SBRs was decreased at end of April as settleability of the SBR MLSS and total phosphorus removal through the disc filters improved. Graph 1 illustrates the daily volume of alum used from January 1<sup>st</sup> through April 30<sup>th</sup>. A year to date daily average of 41.2 gallons per day of aluminum sulfate solution has been used in the SBRs and addition prior to filtration.

SBR No. 2 remains out of service. Transfer of the mixed liquor was implemented during early April, however, removal of all of the tanks contents wasn't effective with the available equipment. The tank was partially filled to allow for the blower to operate to prevent odor production.



Graph 1



# **Process Monitoring On-Line Instrumentation:**

The ChemScan phosphate analyzer remains on line. Comparison testing for reactive (ortho) and total phosphorus is ongoing. On site comparison, monitoring is measuring a significant difference among the analyzer data as compared to the onsite laboratory data. Dave Kershner was contacted confirm calibration of the analyzer and adjust if needed. Suspended solids within the post final effluent feed to the flow floc tank and filters may be fouling the analyzer.

Presented below is a summary of the flow data for April 2013:

### Flow data:

	April 2013	
Flow Meter Location	Total Volume for Month, MGD	Average Daily Flow, gpd
Influent Wastewater to Screening Building – <i>Meter was repaired</i> on April 19, 2013	Incomplete	incomplete
Influent Wastewater to SBRs	10.419	347,282
Internal Recycle	incomplete	incomplete
Treated Effluent to Disc Filters	9.874	329,133
Final Effluent Discharge	5.704	190,133
Applebrook Golf Course	0.840	167,926



Chemical Usage:

At the Court of th	March 2013	and the Control of th
Chemical	Daily Average	Total Monthly
Soda Ash	216 lbs./day	6,480 pounds
Magnesium Hydroxide	0 gpd	0 gallons
Aluminum Sulfate solution	53.3 gpd	1,600 gallons
Polymer (centrifuge)	5.5*	50 gallons

<sup>\*</sup>Eleven (11) days of centrifuge operation

# Solids Dewatering and Disposal: March 2013

(March O&M report was incomplete)

Sludge Dew	atering Summary	
Gallons of sludge dewatered	176,271 gallons	
Average Dewatered Total Solids, %	18.53%*	
Wet Tons	32.15	
Dry Tons	5.958	
Number of dumpsters	3	

## Solids Dewatering and Disposal: April 2013

During the month, the centrifuge dewatering system was placed in service. Presented below is a summary of the solids processing activity:

Sludge Dew	atering Summary	
Gallons of sludge dewatered	216,196 gallons	
Average Dewatered Total Solids, %	18.85%*	
Wet Tons	28.64	
Dry Tons	5.398	
Number of dumpsters	3	

During the month, 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 at the beginning of the month was 14.54 feet and the level at the end of the month was 10.84 feet. The initial



total solids concentration was 0.81% and ended the month as 0.63% total solids. A total of 46,200 gallons of supernatant was decanted during the month.

Sludge holding tank No. 2 was placed in service. The level at the beginning of the month was 1.57 feet and the level at the end of the month was 12.19 feet. The initial total solids concentration was 0.53% and ended the month as 0.79% total solids. A total of 206,850 gallons of supernatant was decanted during the month.

### Significant Storm Events

During April there were no significant rainfall events contributing to excessive influent wastewater flows to the treatment facility.

### Minor Repairs and Preventative Maintenance

- Replaced the rear bearing, v-seal, and O-rings on the centrifuge. Assistance was provide to the Alfa-Laval technician.
- Jeff Bush from Worth & Company was provided the hour meter information or replacement of the failed analog hour meters (previous warranty issue left unresolved by Worth & Company).
- Investigated malfunction with centrifuge control panel UPS. Coordinating with Alfa-Laval to determine corrective action.
- Township removed and replaced Applebrook pump.
- Determined signal loss between soda ash feed pump and Siemens control panel. This pump is not in use, however, efforts to reinstate the communication will be investigated during the month of May.

5/1/20139;55 AM

Propies   AATE   Wilston Marker   Shall be   AAOL Prec   Propies   AAOL Prec			2013	APRIL 2N	2013 APRIL 2ND QUARTER- METERS FROM WEST GOSHEN - CC COLLECTION	R- METE	ERS FROM	WESTG	OSHEN - C	77000	ECTION	
Maintail	Precip		WESTTOM	VN WAY	ELLIS LA	ANE	PAOLIF	PIKE	WILSON	DRIVE	SUMMIT	NET
04/02/13 226.2867 1,158.000 477.580 477.580 28.00 10.04/02/13 72.28.000 24.000 10.04/02/13 226.2867 1,158.000 246.088 91,300 324.086 68.510 16.270.773 77.28.00 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.000 24.	Inches		READING	GPD	READING	GPD	READING	GPD	READING	GPD	GPD	FLOWS
04/06/13 222.887 1.186.000 447.565 91.540 23.03.45 65.10 16.220.143 7.1250 24.000 04/06/13 222.887 1.186.000 566.548 91.500 341.506 665.10 16.220.143 7.1300 24.000 04/06/13 226.539 1.186.000 566.549 92.510 341.506 665.10 16.220.143 7.1300 24.000 04/06/13 226.539 1.186.000 566.549 92.510 341.506 16.220.143 7.1300 24.000 04/06/13 226.535 1.086.000 567.529 81.140 385.731 16.220.143 16.220.143 7.1300 24.000 04/06/13 226.535 1.086.000 567.529 81.140 385.731 16.220.539 16.236.59 16.200 04/06/13 226.535 1.086.000 567.529 81.140 385.731 17.220 16.220.539 16.230.50 04/14/13 242.537 1.186.000 567.529 81.140 385.731 17.220 16.220.539 16.230.50 04/14/13 242.537 1.186.000 567.529 81.140 385.731 17.120 16.236.549 81.2400 04/14/13 242.537 1.186.000 567.529 81.140 385.731 17.140 16.236.549 81.2400 04/14/13 242.537 1.186.000 567.529 81.140 385.731 17.140 16.236.43 81.2400 04/14/13 242.537 1.186.000 665.529 81.100 387.301 16.236.43 81.2400 24.000 04/14/13 226.529 1.166.000 64.277 90.280 447.539 16.236.53 81.244.62 85.100 24.000 04/14/13 226.529 1.166.000 665.529 81.100 447.53 86.100 447.53 81.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.70 85.200 16.267 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.67 85.100 16.266.70 85.200 17.126 81.126.00 17.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126 81.126	00.0	-1	230,606	1,472,500	477,804	120,958	321,964	79,340	16,202,439	72,533	24,000	1,199,670
QMODINI         222,34159         1,189,000         549,686         91,390         341,385         68,100         16,210,107         7,290         24,000           QMODINI         226,2416         1,142,000         516,244         90,210         341,386         68,100         16,224,443         77,390         24,000           QMODINI         226,3416         1,142,000         516,244         90,210         341,326         66,200         16,220,173         82,000         24,000           QMODINI         226,346         1,162,000         562,382         91,140         386,770         16,243,525         41,897         24,000           QMODINI         226,344         1,084,000         556,389         90,520         386,703         17,140         16,223,452         61,820         24,000           QMODINI         226,344         1,084,000         556,389         90,520         380,731         17,140         16,271,244         77,530         24,000           QMODINI         226,344         1,084,000         556,389         90,520         380,531         17,140         16,271,244         77,530         24,000           QMODINI         226,346         1,082,000         556,389         90,520         380,531         17,	0.00		231,828	1,222,000	487,558	97,540	328,345	63,810	16,209,723	72,840		987,810
MONTH   224,159   1,152,000   515,040   92,610   341,550   68,050   16,224,153   71,320   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   24,000   2	00'0	-	232,997	1,169,000	496,688	91,300	334,855	65,100	16,217,013	72,900		939,700
Matchesia   2.55,309   1,150,000   515,040   90,910   346,311   86,060   16,20,775   66,300   24,000   14,0016913   236,500   542,322   81,144   368,779   86,207   16,246,354   41,537   24,000   14,0016913   236,679   10,24,000   542,322   87,000   375,944   71,269   16,246,256   86,410   24,000   14,111   241,980   1,128,000   559,887   88,700   375,944   71,269   16,246,256   86,410   24,000   14,111   241,980   1,128,000   578,989   90,320   375,944   71,269   16,246,256   86,410   24,000   14,111   241,980   1,128,000   578,989   90,320   360,551   171,780   16,246,256   86,410   24,000   14,111   241,980   1,128,000   578,989   90,320   360,551   86,410   16,246,146   86,410   24,000   14,111   241,980   1,128,000   671,835   88,410   16,246,146   88,410   14,128,000   14,128,144,142   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,128,144   1,044,000   14,12	0.03	100	234,159	1,162,000	505,949	92,610	341,506	66,510	16,224,143	71,300		931,580
04/06/13 228,585 1,082,000 542,382 91,140 388,779 68,227 16,243,354 41,357 24,000 04/09/13 240,282 61,082,000 559,887 08,700 377,994 71,296 16,249,599 64,1897 24,000 04/11/13 240,282 10,084,000 559,887 08,700 377,994 71,190 16,249,599 64,190 24,000 04/11/13 240,282 1,084,000 577,889 89,100 397,381 68,400 16,271,244 77,890 24,000 04/11/13 240,283 1,074,000 577,889 89,100 397,381 68,400 16,271,244 77,890 24,000 04/11/13 240,282 1,074,000 677,889 89,100 397,381 68,800 16,271,244 77,890 24,000 04/11/13 240,242 1,082,000 677,889 88,100 475,819 68,200 16,289,465 62,200 24,000 04/11/13 240,820 17,082,000 677,889 87,100 470,775 07,890 16,2789,627 24,000 04/11/13 240,820 17,082,000 677,825 88,900 68,900 16,271,841 77,890 16,271,244 77,890 24,000 04/11/13 240,820 17,082,000 677,825 88,700 447,573 68,900 16,271,841 77,100 24,000 04/11/13 240,820 17,082,000 68,220 87,900 447,573 68,900 16,271,841 77,100 24,000 04/11/13 226,820 17,082,000 68,220 87,100 447,573 68,900 16,271,841 77,100 24,000 04/11/13 256,529 17,082,000 68,220 87,100 447,573 68,900 16,271,841 77,100 24,000 04/21/13 256,529 17,082,000 68,427 87,100 447,573 68,900 16,371,871 77,100 24,000 04/21/13 256,529 17,082,000 68,427 87,100 447,573 68,900 16,371,871 77,100 24,000 04/21/13 256,529 17,082,000 170,441 77,100 18,390 18,391,471 77,100 24,000 04/21/13 256,529 17,082,000 170,441 77,100 18,390 18,391,471 77,100 24,000 04/21/13 256,529 17,082,000 170,441 77,100 18,390 18,391,471 77,100 24,000 04/21/13 256,239 17,100 18,390 18,391,471 77,100 24,000 04/21/13 256,239 17,100 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,390 18,3	0.00		235,309	1,150,000	515,040	90,910	348,311	68,050	16,230,773	66,300	i.	924,740
04/07/13 228,555 1,082,000 542,382 91,140 380,779 68,420 16,246,5364 41,937 24,000 04/07/13 228,679 1,086,000 551,252 88,700 377,504 71,250 16,246,536 61,850 24,000 04/10/13 228,679 1,086,000 551,252 88,700 377,504 71,250 16,246,536 16,246,536 16,240 24,000 04/10/13 241,856 1,086,000 558,989 89,100 390,251 75,289 16,261,600 16,201,244 77,850 16,246,500 16,241,277 17,850 16,246,530 16,246,540 17,244 77,850 16,240,000 04/10/13 242,837 1,074,000 577,889 89,100 390,251 77,780 16,226,630 16,201,244 77,850 16,240,000 04/10/13 242,837 1,074,000 577,889 89,100 390,251 77,780 16,226,632 12,000 04/10/13 246,540 16,085,000 656,239 87,340 447,533 68,340 16,303,864 74,100 24,000 04/10/13 246,540 16,085,000 656,239 88,100 442,570 16,304,000 644,277 80,380 447,533 68,380 16,314,87 16,340,00 644,277 80,380 447,533 68,380 16,314,87 16,340,00 644,277 80,380 147,530 16,340,00 14,340,00 644,277 80,380 147,530 16,340,00 14,340,00 644,277 80,380 14,47,533 68,380 16,314,87 17,100 24,000 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,00 14,240,	0.00	04/06/13									24,000	0
04/19/13 228-565 1092.000 5551.252 81.140 366.779 68.8277 16.243.554 41.537 24.000 04/19/13 228-5679 1.092.000 5551.252 88.400 37.5904 71.250 16.2456.180 64.410 24.000 04/19/13 249.5679 1.095.000 556.899 89.90.30 390.557 75.280 16.256.499 61.499 24.000 04/19/13 249.567 1.074.000 577.699 88.100 397.391 68.400 16.275.445 77.890 24.000 04/19/13 24.6367 1.074.000 577.699 88.100 397.391 68.400 16.275.445 82.200 24.000 04/19/13 24.6367 1.074.000 577.699 88.100 397.391 68.400 16.275.445 82.200 24.000 04/19/13 24.6367 1.074.000 577.699 88.100 47.5281 68.200 16.206.445 82.200 24.000 04/19/13 24.6367 1.085.000 64.4277 89.380 44.5581 68.400 16.206.445 82.200 24.000 04/19/13 224.6361 1.085.000 64.4277 89.380 44.5581 68.400 16.306.877 77.800 16.306.879 74.000 04/29/13 224.6361 1.085.000 64.4277 89.380 44.5581 62.3600 16.306.879 77.410 24.000 04/29/13 226.636 1.084.000 656.228 61.000 44.7533 62.800 16.306.879 77.410 24.000 04/29/13 226.636 1.085.000 770.4451 87.700 44.0575 77.860 16.306.879 77.410 24.000 04/29/13 226.636 1.085.000 770.4451 87.700 44.0575 77.860 16.306.897 62.400 16.306.897 64.207 04.207 16.286.289 16.306.897 62.400 16.306.897 62.400 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 16.206.440 1	00.00										24,000	0
04/10/13 240,736 1,084,000 551,252 88,700 377,804 71,250 16,246,529 61,850 24,000 04/10/13 240,736 1,084,000 556,829 88,400 380,202 71,160 16,256,149 72,400 04/10/13 241,882 1,128,000 556,829 88,400 387,381 68,400 16,256,349 72,400 24/10/13 241,882 1,138,000 556,829 88,100 387,381 68,400 16,271,244 77,890 24,000 04/14/13 241,425 1,084,000 577,899 88,100 47,521 16,271,244 77,890 24,000 04/14/13 241,425 16,084,000 526,529 88,100 47,521 16,271,244 77,890 24,000 04/14/13 241,425 16,084,000 526,529 88,100 44,577 16,085,100 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,286,870 16,2	0.00		238,585	1,092,000	542,382	91,140	368,779	68,227	16,243,354	41,937	24,000	890,697
Maintail	0.00		239,679	1,094,000	551,252	88,700	375,904	71,250	16,249,539	61,850	24,000	872,200
Mail	0.36		240,735	1,056,000	559,897	86,450	383,023	71,190	16,256,180	66,410	24,000	831,950
Mail	0.00	- 1	241,863	1,128,000	568,989	90,920	390,551	75,280	16,263,459	72,790	24,000	889,010
04/13/13         246,243         1,185,333         608,977         103,533         418,916         71,750         16,289,623         61,263         24,000           04/14/13         246,243         1,185,333         608,977         103,533         418,916         71,750         16,289,623         61,263         24,000           04/16/13         247,425         1,082,000         656,529         87,340         445,273         68,300         16,286,445         74,190         24,000           04/16/13         246,519         1,084,000         656,529         87,100         440,575         77,660         16,316,874         77,100         24,000           04/20/13         256,538         1,084,000         644,277         90,380         447,553         68,580         16,316,874         77,110         24,000           04/20/13         256,238         1,150,000         655,828         103,878         475,883         70,825         16,344,482         68,728         24,000           04/20/13         256,238         1,156,000         655,828         103,881         47,533         66,380         16,344,482         68,728         24,000           04/20/13         256,346         1,086,000         772,144         87,190	0.63	04/12/13	242,937	1,074,000	577,899	89,100	195,795	68,400	16,271,244	77,850	24,000	838,650
04/16/13         246,343         1,136,333         600,977         103,896         418,916         71,750         16,289,623         61,280         24,000           04/16/13         246,343         1,136,333         600,977         103,580         425,616         85,020         16,289,623         61,280         24,000           04/16/13         246,518         1,094,000         626,629         87,340         422,800         63,910         16,303,844         74,190         24,000           04/16/13         246,518         1,094,000         655,239         88,100         447,533         69,580         16,316,191         73,170         24,000           04/20/13         246,604         1,095,000         655,239         88,470         447,533         69,580         16,316,191         73,170         24,000           04/20/13         256,239         1,160,000         655,239         103,878         477,563         61,980         16,316,191         77,410         24,000           04/20/13         256,239         1,166,000         634,675         84,500         16,356,339         77,410         24,000           04/20/13         256,465         1,056,000         634,676         87,159         14,000         634,676	0.00	- 1									24,000	0
04/15/13         246,345         1,135,335         608,977         103,365         418,916         71,750         16,289,623         61,283         24,000           04/15/13         244,435         1,082,000         6517,835         88,360         435,818         68,020         16,289,624         74,180         24,000           04/12/13         248,519         1,094,000         626,229         88,190         447,535         68,580         16,318,191         73,170         24,000           04/12/13         256,688         1,094,000         644,277         90,380         447,535         68,580         16,318,191         73,170         24,000           04/12/13         256,688         1,094,000         685,828         103,878         475,683         16,318,191         73,170         24,000           04/22/13         256,388         1,085,000         694,675         84,700         16,318,191         73,170         24,000           04/22/13         256,368         1,086,000         772,164         87,180         16,386,687         16,310,874         77,160         24,000           04/22/13         256,465         1,086,000         772,164         87,180         16,386,687         16,340,87         14,000	0.00	- 1									24,000	0
04/16/13         247,426         1,082,000         617,835         88,560         425,616         69,020         16,296,445         68,220         24,000           04/16/13         248,516         1,084,000         652,239         87,340         442,806         68,910         16,310,874         77,100         24,000           04/16/13         229,686         1,084,000         644,277         90,380         447,533         68,580         16,310,874         70,100         24,000           04/20/13         220,686         1,084,000         644,277         90,380         447,533         68,580         16,310,874         70,100         24,000           04/20/13         226,296         1,160,000         685,826         1038,000         703,451         87,500         86,675         88,470         488,222         61,990         16,365,897         77,410         24,000           04/20/13         256,286         1,086,000         703,451         87,130         494,690         61,286,897         65,346         24,000           04/20/13         256,386         1,086,000         712,164         87,130         494,690         16,386,887         63,486         24,000           04/20/13         256,486         1,086,000         <	0.00	04/15/13	246,343	1,135,333	7.26,808	103,593	418,916	71,750	16,289,623	61,263	24,000	898,727
04/17/13         248,519         1,084,000         626,629         87,340         442,275         68,980         16,310,874         74,190         24,000           04/18/13         229,668         1,084,000         644,277         90,380         447,573         69,880         16,316,191         73,170         24,000           04/20/13         250,688         1,084,000         664,277         90,380         447,533         69,880         16,316,191         73,170         24,000           04/20/13         256,288         1,150,000         686,875         88,470         425,232         64,600         16,316,197         74,000           04/20/13         256,288         1,086,000         703,461         87,780         488,522         61,396,338         77,410         24,000           04/20/13         256,428         1,086,000         712,164         87,130         494,660         61,286,887         63,486         24,000           04/20/13         256,429         1,086,000         712,164         87,130         494,660         61,386,338         77,410         24,000           04/20/13         256,429         1,127,728         8,460         16,396,338         77,410         24,000           04/20/13	0.03	04/16/13	247,425	1,082,000	617,835	88,580	425,818	69,020	16,296,445	68,220	24,000	856,180
Q47/87/13         249,604         1,085,000         655,239         88,100         440,575         77,660         16,310,874         70,100         24,000           Q47/19/13         250,688         1,084,000         644,277         90,380         447,533         69,580         16,318,191         73,170         24,000           Q4/20/13         250,688         1,084,000         685,828         103,878         475,683         70,825         16,344,482         65,728         24,000           Q4/20/13         255,236         1,150,000         685,828         103,878         475,683         70,825         16,344,482         65,728         24,000           Q4/20/13         255,236         1,056,000         773,451         87,760         488,522         61,380         16,369,338         77,410         24,000           Q4/20/13         255,436         1,056,000         772,164         87,130         494,650         61,286,587         65,786         24,000           Q4/20/13         256,465         1,056,000         772,164         87,130         494,650         61,286,587         68,496         24,000           Q4/20/13         256,465         1,127,728         82,814         25,146         68,146         68,146	00.0	04/17/13	248,519	1,094,000	626,629	87,940	432,809	69,910	16,303,864	74.190	24,000	861.960
04/19/13         250,688         1,094,000         644,277         90,380         447,533         66,580         16,318,191         73,170         24,000           04/20/13         240,201         24,000         24,000         24,000         24,000         24,000           04/23/13         256,298         1,150,000         685,828         103,878         475,683         70,825         16,344,822         65,728         24,000           04/23/13         256,363         1,086,000         703,451         87,760         488,522         61,990         16,365,938         77,1150         24,000           04/22/13         258,465         1,086,000         712,164         87,780         464,650         16,365,838         77,1150         24,000           04/22/13         258,465         1,038,000         712,164         87,180         464,650         16,365,887         63,490         24,000           04/22/13         258,465         1,038,000         712,164         87,180         16,365,887         77,116         24,000           04/22/13         258,467         24,866         61,280         16,365,887         63,490         24,000           04/22/13         258,467         25,846         25,846         24,000 </td <td>0.05</td> <td>04/18/13</td> <td>249,604</td> <td>1,085,000</td> <td>635,239</td> <td>86,100</td> <td>440,575</td> <td>77,660</td> <td>16,310,874</td> <td>70,100</td> <td>24,000</td> <td>851,140</td>	0.05	04/18/13	249,604	1,085,000	635,239	86,100	440,575	77,660	16,310,874	70,100	24,000	851,140
04/20/13         256,288         1,150,000         685,828         103,878         475,683         70,825         16,344,482         65,728         24,000           04/23/13         256,383         1,065,000         684,675         88,470         442,323         64,600         16,334,482         65,728         24,000           04/23/13         256,383         1,065,000         694,675         88,470         442,323         64,600         16,335,338         77,410         24,000           04/23/13         258,465         1,036,000         712,164         87,130         494,650         61,280         16,385,687         63,490         24,000           04/28/13         258,465         1,036,000         712,164         87,130         494,650         61,280         16,385,687         63,490         24,000           04/28/13         258,465         1,036,000         712,164         87,130         494,650         61,280         16,385,687         63,490         24,000           04/28/13         258,416         25,814         86,146         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000 <td>0.95</td> <td>04/19/13</td> <td>250,698</td> <td>1,094,000</td> <td>644,277</td> <td>90,380</td> <td>447,533</td> <td>089'69</td> <td>16,318,191</td> <td>73,170</td> <td>24,000</td> <td>860,870</td>	0.95	04/19/13	250,698	1,094,000	644,277	90,380	447,533	089'69	16,318,191	73,170	24,000	860,870
04/21/13         04/21/13         24,000           04/22/13         255,296         1,150,000         685,828         103,878         475,863         70,825         16,344,482         65,728         24,000           04/25/13         256,296         1,160,000         694,875         88,470         482,323         64,800         16,359,338         77,416         24,000           04/25/13         257,429         1,066,000         702,451         87,750         488,522         61,380         16,356,587         83,490         24,000           04/25/13         258,455         1,036,000         712,164         87,130         494,650         61,280         16,365,687         83,490         24,000           04/25/13         258,455         1,036,000         712,164         87,130         494,650         61,280         16,365,687         83,490         24,000           04/28/13         26,002         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000	00.00	04/20/13									24,000	0
04/22/13         255,296         1.150,000         685,828         103,878         475,863         70,825         16,344,482         65,728         24,000           04/23/13         256,296         1.150,000         684,675         88,470         482,323         64,600         16,331,597         71,150         24,000           04/25/13         256,286         1,065,000         703,451         87,780         488,522         61,890         16,386,687         83,490         24,000           04/25/13         256,465         1,036,000         712,164         87,130         494,650         16,386,687         83,490         24,000           04/25/13         24,000         24,000         24,000         24,000         24,000         24,000           04/29/13         24,000         24,000         24,000         24,000         24,000         24,000           04/29/13         24,000         24,000         24,000         24,000         24,000         24,000           04/29/13         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000 <td>0.00</td> <td>04/21/13</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>24 000</td> <td>0</td>	0.00	04/21/13									24 000	0
04/23/13         256,296         1,150,000         685,828         103,878         475,863         70,825         16,344,482         65,728         24,000           04/24/13         256,363         1,065,000         694,675         88,470         482,323         64,600         16,361,597         77,150         24,000           04/25/13         256,429         1,065,000         712,164         87,130         484,650         61,280         16,365,687         63,490         24,000           04/27/13         258,465         1,035,000         712,164         87,130         484,650         61,280         16,365,687         63,490         24,000           04/27/13         24,001         1,127,728         2,101         1,127,728         2,11         2,100         1,127,728         2,101         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,126         1,1	00:00	04/22/13									24 000	C
04/26/13         256,383         1,085,000         694,675         88,470         482,323         64,600         16,381,597         71,150         24,000           04/26/13         257,429         1,086,000         712,164         87,780         488,522         61,390         16,385,687         77,410         24,000           04/26/13         258,465         1,036,000         712,164         87,130         494,650         61,280         16,385,687         83,490         24,000           04/26/13         268,465         1,036,000         712,164         87,130         494,650         61,280         16,385,687         83,490         24,000           04/29/13         04/29/13         1,127,728         32,814         89,146         88,496         24,000           04/30/13         1,127,728         32,814         89,146         88,496         24,000           04/30/13         1,127,728         32,814         89,146         86,496         24,000           04/30/13         1,127,728         32,814         89,146         86,496         24,000           04/30/13         1,127,728         11,156         78,814         86,146         11,156	000	04/23/13	255,298	1.150.000	685,828	103.878	475 863	70.825	18.344 482	85 728	24.000	909 570
04/26/13         257,429         1,086,000         712,164         87,130         484,650         61,280         16,365,687         63,490         24,000           04/26/13         258,465         1,036,000         712,164         87,130         494,650         61,280         16,365,687         63,490         24,000           04/29/13         04/29/13         64/29/13         82,814         68,446         68,496         24,000           04/39/13         11,127,728         92,814         69,146         68,496         24,000           MONTH TO DATE         251           NORMAL MONTH TO DATE         11,56           YEAR TO DATE         11,56           NORMAL YEAR TO DATE         11,56	0.03	04/24/13	256,363	1.065,000	694,675	88.470	482 323	64.600	16.351.597	74 150	24 000	840 780
04/26/13 258,465 1,036,000 712,164 87,130 494,650 61,286 16,386,687 63,430 24,000 04/20/13 64/26/2 61,286 61,286 61,286 61,286 24,000 04/29/13 64/26/2 61,286 61,286 61,286 24,000 04/29/13 64/26/2 61,286 61,286 24,000 04/29/13 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/24/2 65/2	000	1.7	257.429	1.066.000	703 451	87.780	488 522	61 990	16 350 338	77 440	24,000	020 070
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2013 FLOWMETERS

21	HERSHEY'S MILL	ASHBRIDGE	JGE	HICKS METER	TER	RESERVOIR	OIR	SHERMAN	MAN	BARKWAY	YAY
	GPD	READING	GPD	READING	GPD	READING	GPD	READING	GPD	READING	GPD
	32,046	1,630,981	25,460	1,674,759	438,513	16,709,376	1,101,153	1,021,087	2,200	2,738,786	4.106
				1,713,399	386,400	16,801,848	924,720				
				1,751,752	383,530	16,891,393	895,450				
				1,789,475	377,230	16,980,192	887,990				
				1,826,762	372,870	17,067,788	875,960				
				030 100 1	000 100	44.00					
				1,324,330	567,026	819,618,11	826,100				
				1,961,350	370,000	17,402,050	864,320				
				1,998,535	371,850	17,487,285	852,350				
ı				2,036,565	380,300	17,574,392	871,070				
				2,073,959	373,940	17,659,625	852,330				
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				2,175,750	339.303	17.918.032	881357				
				2,211,393	356.430	18.003.110	850.780				
				2,248,607	372.140	18 089 149	860 390				
	103,898	1,644,477	84,350	2.285.884	372.770	18 174 333	851 840	1 032 972	7 430	2760 075	40 070
				2323420	275.450	19 SED 044	4 000 040	1,0,200,1	074	4,100,310	0/0/01
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	80,266	1,647,848	67,420	2,463,189	349.400	18.611.478	173 590	1 035 785	5 586	7 788 184	40.979
				2,496,881	336,920	-	10.835.300		200	2,100,104	710,01
	76,770	1.649,062	60,700	2.530.924	340,430		9 ter sen	1 038 970	2002	0 750 445	0 100
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	73,245		59,483		365,108		1,030,755		5,310		9,527
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2013 SUMMARY OF METER READINGS

	WESTTOWN WAY	ELLIS	PAOLI PIKE	WILSON	SUMMIT	HERSHEY MILL	ASHBRIDGE	HICKS	RESERVOIR SHERMAN	SHERMAN	BARKWAY
JANUARY	1,277,069	120,481	60,165	63,671	20,400	89,992	70.106		922 377	7 363	11 147
FEBRUARY	1,297,700	101,955	56,216	77,811	20,400	89,500	64,950	387 898	936 368	7,669	10.147
MARCH	1,285,156	105,488	68,636	85.607	20.400	79.416	66 580	292 895	594 040	3 800	7 422
APRIL	1,127,728	92,814	69,146	68.496	20,400	73 245	59 483	365 108	1 030 755	2,033	7,122
MAY							20.	200, 100	200,000,1	0,0	3,02
JUNE											
אלחה											
AUGUST											
SEPTEMBER											
OCTOBER											
NOVEMBER											
DECEMBER											
Total Flows											
Control to Section 1.											
Monthly Ave	1,246,913 105,185	105,185	63,541	73,896	20,400	83,038	65,280	348.634	870.885	6.060	9 585

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1,004,292

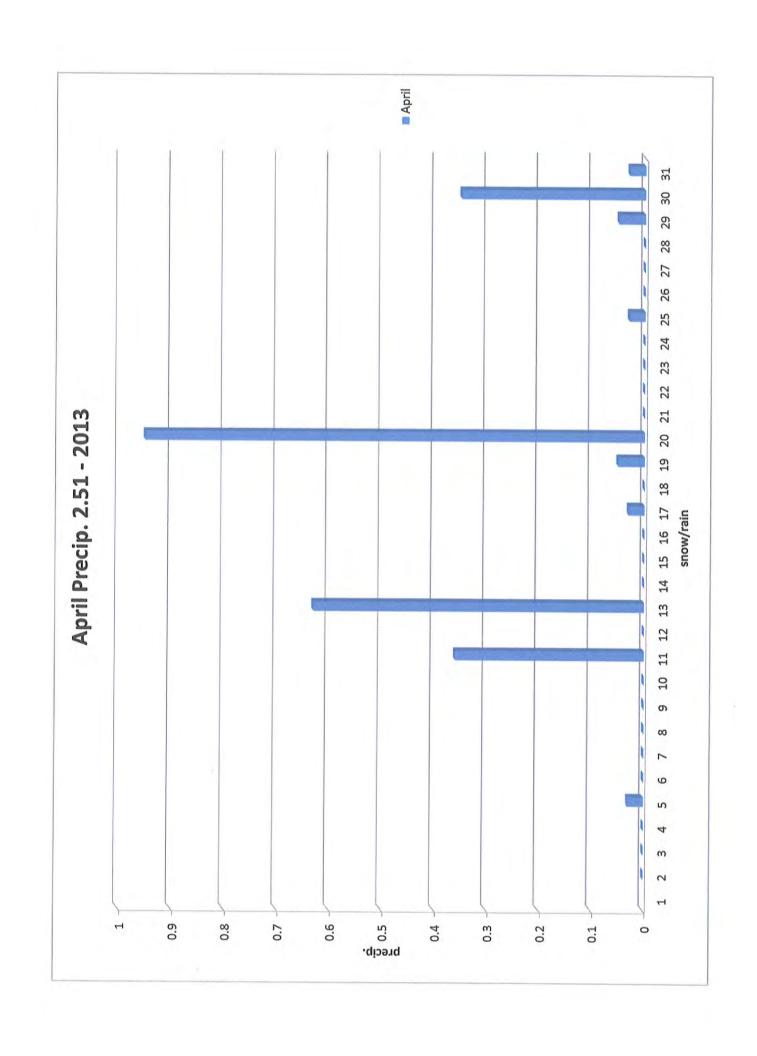
# 2013 SUMMARY OF METER READINGS

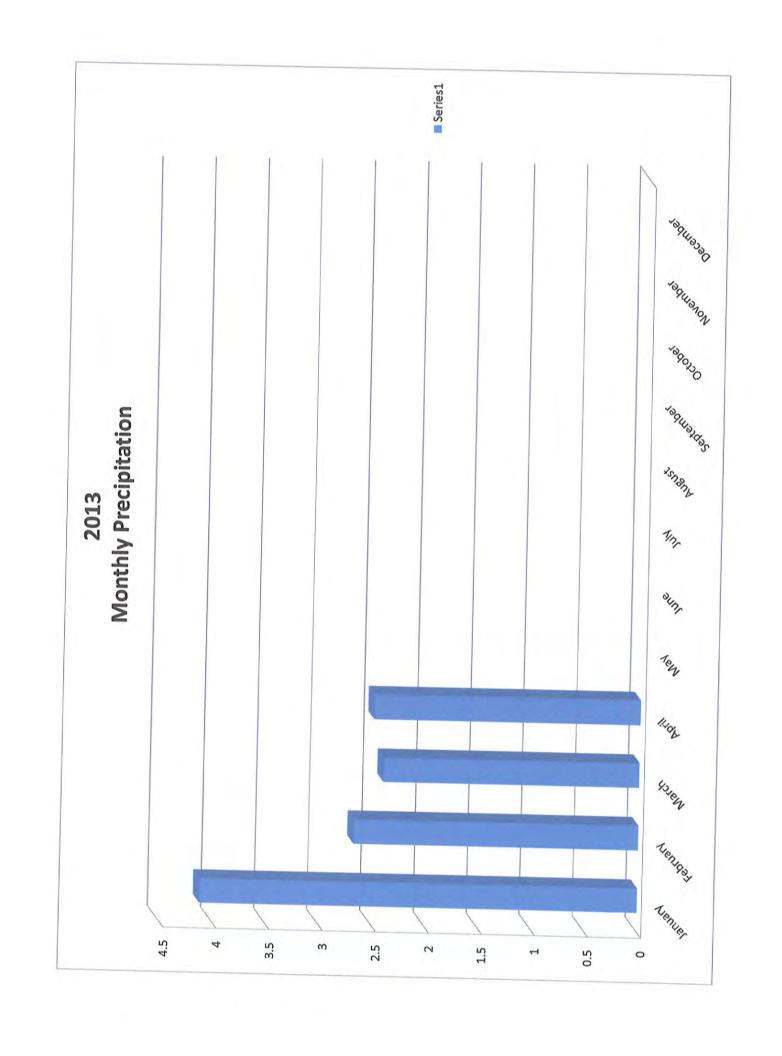
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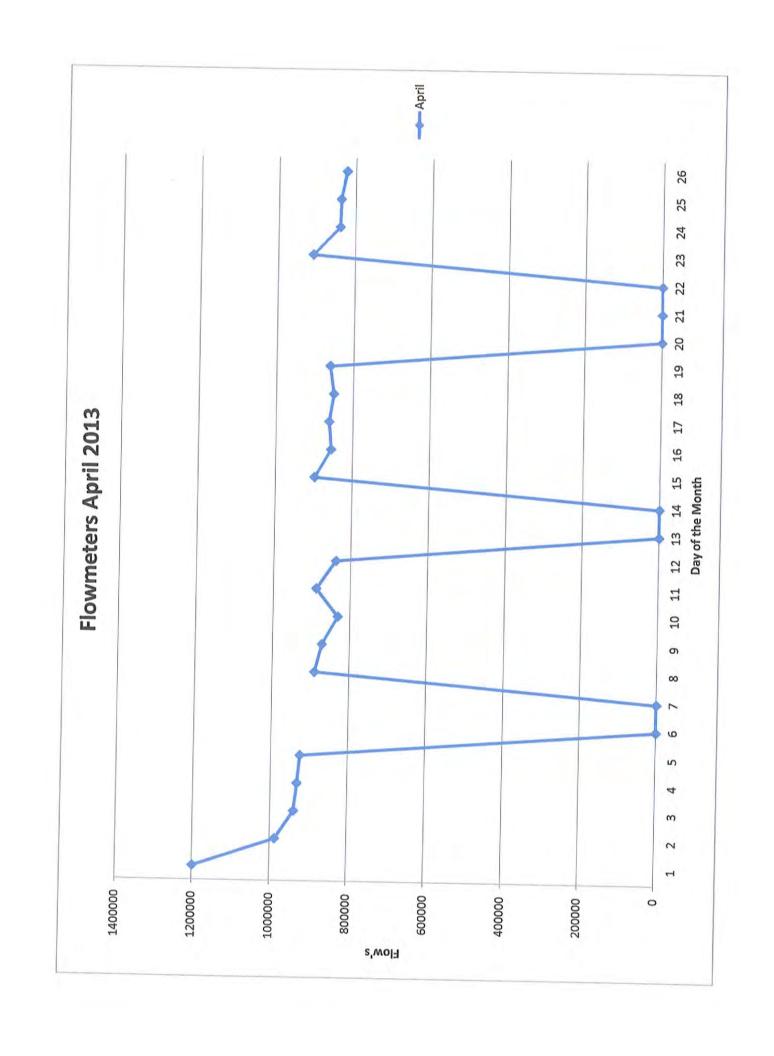
JANUARY	1,277,069	120,481	60,165	63,671	20,400
FEBRUARY	1,297,700	101,955	56,216	77,811	20,400
MARCH	1,285,156	105,488	68,636	85,607	20,400
APRIL	1,127,728	92,814	69,146	68,496	20,400
MAY					
SUNE					
JULY					
AUGUST					
SEPTEMBER					
OCTOBER					
NOVEMBER					
DECEMBER					

20,400	
73,896	
63,541	
105,185	
1,246,913	
Monthly Ave	

Total Flows







18941808Q \*equietdes SHORE The Month OUN Tell MOD 40, JEN Tienige y Tenuer 1400000 10000001 1200000 800000 400000 200000 600000 0 Flowmeters

Monthly Totals 2012 Jan-Dec

