

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2021-3026132

AQUA STATEMENT NO. 2-R

**REBUTTAL TESTIMONY OF
MARK J. BUBEL, SR.**

**With Regard To
Capital Projects
Public Benefits**

March 18, 2022

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AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Mark J. Bubel, Sr. My business address is 762 West Lancaster Avenue,
4 Bryn Mawr, Pennsylvania 19010.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Aqua Pennsylvania, Inc., (“Aqua PA”) as a Project Engineer III.

8
9 **Q. Are you the same Mark J. Bubel, Sr. who submitted direct testimony in this**
10 **proceeding?**

11 A. Yes. I submitted direct testimony with Aqua Pennsylvania Wastewater, Inc.’s (“Aqua”
12 or the “Company”) Application to the Pennsylvania Public Utility Commission (“PUC”
13 or the “Commission”) on July 23, 2021.

14
15 **Q. What is the purpose of your rebuttal testimony?**

16 A. The purpose of my rebuttal testimony is to address portions of the direct testimony of the
17 Office of Consumer Advocate (“OCA”) witness Noah Eastman.

18
19 **Q. Are you sponsoring any Exhibits with your rebuttal testimony?**

20 A. Yes. I am sponsoring MJB 2-R Exhibit 1.

21

22

AQUA PENNSYLVANIA WASTEWATER, INC.
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1 **II. RESPONSE TO OCA WITNESS NOAH EASTMAN**

2 **Q. Please summarize the portions of Mr. Eastman’s direct testimony you will address.**

3 A. On page 6 of Mr. Eastman’s direct testimony, he comments that Aqua’s projected capital
4 improvements do not appear to be urgent and are normal improvements expected as a
5 wastewater system ages. Mr. Eastman then concludes that East Whiteland Township
6 (“EWT” or the “Township”) would be likely to equally complete the improvements that
7 Aqua estimates. Mr. Eastman also states that there is no affirmative public benefit from
8 this transaction.

9

10 **Q. Please describe Aqua’s proposed deployment of capital for the EWT system.**

11 A. Aqua has planned capital improvements over the next ten years for the EWT system. The
12 planned capital improvement work includes safety related electrical Arc-Flash studies for
13 protection of operations personnel. During Aqua’s due diligence visit to the pump station
14 locations, there was no obvious indication that Arc-Flash study work was conducted as
15 would be otherwise indicated by the presence of appropriate Arc-Flash safety alert
16 stickers on electrical control panels.

17 In addition, Aqua has capital targeted for addressing inflow and infiltration
18 (“I&I”) within the EWT system. Aqua notes that, in the Pennsylvania Department of
19 Environmental Protection (“DEP”) 2019 Chapter 94 Report (attached to my rebuttal
20 testimony as MJB 2-R Exhibit 1), the 2015 Annual Average Flow (“AAF”) was 1.463
21 MGD and the 2019 AAF was 1.730 MGD, a 267,000 gallon per day (“GPD”) difference.
22 The 2018 AAF is noted to be 1.990 MGD, a 527,000 GPD increase in comparison to
23 2015. It is true that the increase could be due to the addition of customer connections,

AQUA PENNSYLVANIA WASTEWATER, INC.
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1 however, the AAF flow reported in the DEP 2020 Chapter 94 Report is 1.331 MGD, i.e.,
2 less than the 2015 AAF. This would dispute the noted difference as purely from new
3 customers. Based on the above information, I believe there is I&I within the EWT system
4 which Aqua would investigate and remediate to provide further benefits to customers and
5 the overall system. This I&I, aside from impacting the Township’s allocation for
6 treatment within the Valley Forge Sewer Authority (“VFSA”) wastewater treatment
7 plant, also impacts Township treatment cost and the VFSA plant itself in terms of the
8 plant’s available hydraulic capacity for the Township and member municipalities. It also
9 impacts conveyance capacity and cost within the Valley Creek Trunk Sewer system for
10 EWT and member municipalities.

11
12 **Q. Has the EWT system experienced Sanitary Sewer Overflows (“SSOs”)?**

13 A. Yes. The 2019 Chapter 94 Report indicates that the system experienced capacity related
14 by-passing, SSOs or surcharging during the report year. Certain system modifications
15 that are projected would mitigate the SSOs; however, it does not appear these items are
16 targeted at the root cause of the I&I.

17
18 **Q. On pages 13-14 of Mr. Eastman’s direct testimony, he comments that the existing**
19 **service provided by the Township is safe and reliable and a continuation of that**
20 **service is not a public benefit. Please respond.**

21 A. Through this transaction the Township system will have the benefit of a full-time
22 dedicated staff of water and wastewater professionals. As stated in my direct testimony,
23 Aqua has 27 wastewater operators who can assist in the operations of the system. Aqua

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1 facilities are operated by DEP Licensed Operators or are closely monitored by a
2 designated operator under the direction of the Licensed Operator. Aqua's operational
3 staff is supported by in-house engineers who assist with capital planning to improve
4 system efficiencies who are immediately available for system troubleshooting, if
5 required, and to ensure compliance with environmental regulations.

6 Aqua also has a staff of in-house environmental compliance experts that monitor
7 changing regulatory requirements and will be able to work closely with our engineering
8 and operational staff to implement changes to system processes and monitoring for
9 environmental compliance purposes. Moreover, the Company has an in-house laboratory
10 that would be able to process samples obtained from the Township system to assist in
11 quickly identifying potential substances that degrade the treatment process at the VFSA
12 plant. The Company also has formal emergency preparedness plans for its systems and a
13 business continuity plan which would be employed which provide a benefit of a known
14 plan if a significant emergency were to occur.

15
16 **Q. Does the Township currently have these same in-house dedicated engineering and
17 compliance staff, water quality laboratory, and formal plans?**

18 A. No.

19
20 **Q. Under Aqua's ownership, would these in-house services provide a benefit to
21 customers?**

22 A. Yes.

23

AQUA PENNSYLVANIA WASTEWATER, INC.
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1 **III. CONCLUSION**

2 **Q. Does this conclude your rebuttal testimony?**

3 A. Yes, it does. However, I reserve the right to supplement my testimony as additional
4 issues and facts arise during the course of this proceeding.



EWTPX 00030

March 11, 2020

Mr. Steve O'Neil, Chief, Operations Section
PA DEP, Clean Water
Southeast Regional Office
Two East Main Street
Norristown PA 19401-4915

**RE: Township of East Whiteland
2019 Chapter 94 Report**

Dear Mr. O'Neil:

On behalf of the Township of East Whiteland, please find enclosed two (2) copies of the 2019 Chapter 94 Annual Report for the Township's sewerage facilities.

Should you have any questions concerning this, please feel free to contact the undersigned.

Sincerely,

PENNONI

Charles Faulkner, PE
Township Wastewater Engineer

CF/rg

cc: Richard Taylor, Valley Forge Sewer Authority via email
William Steele, Director of Public Works – East Whiteland, via email



CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: **2019**

- Permittee is owner and/or operator of a POTW or other sewage treatment facility
 Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

| GENERAL INFORMATION | | | |
|---|--------------------------|-------------------|-------------------------|
| Permittee Name: | EAST WHITELAND TOWNSHIP | Permit No.: | PA N/A |
| Mailing Address: | 209 CONESTOGA ROAD | Effective Date: | N/A |
| City, State, Zip: | FRAZER, PA 19355 | Expiration Date: | N/A |
| Contact Person: | John Nagel | Renewal Due Date: | N/A |
| Title: | TOWNSHIP MANAGER | Municipality: | EAST WHITELAND |
| Phone: | 610-897-4205 | County: | CHESTER |
| Email: | JNAGEL@EASTWHITELAND.ORG | Consultant Name: | PENNONI ASSOCIATES INC. |
| CHAPTER 94 REPORT COMPONENTS | | | |
| <p>1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (<u>25 Pa. Code § 94.12(a)(1)</u>)</p> <p>Check the appropriate boxes:</p> <p><input type="checkbox"/> Line graph for flows attached (Attachment)</p> <p><input type="checkbox"/> DEP Chapter 94 Spreadsheet used (Attachment)</p> <p><input checked="" type="checkbox"/> Section 1 is not applicable (report is for a collection system).</p> | | | |
| <p>2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (<u>25 Pa. Code § 94.12(a)(2)</u>)</p> <p>Check the appropriate boxes:</p> <p><input type="checkbox"/> Line graph for organic loads attached (Attachment)</p> <p><input type="checkbox"/> DEP Chapter 94 Spreadsheet used (Attachment)</p> <p><input checked="" type="checkbox"/> Section 2 is not applicable (report is for a collection system).</p> | | | |

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

Attachment A shows the historic and projected hydraulic demand for the service area of East Whiteland Township. The hydraulic projections were calculated based on the 2019 annual average flow and the proposed connections for the next five years.

East Whiteland Township owns and operates a wastewater treatment plant associated with the Malvern Hunt subdivision. The WWTP consists of aerated lagoons and land application of effluent. A separate Chapter 94 report will be submitted which addresses this WWTP.

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

Check the appropriate boxes:

- Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment B**)
- List summarizing each extension or project attached (**Attachment C**)
- Schedules describing how each project will be completed over time and effects attached (**Attachment C**)

Comments:

Attachment B - East Whiteland Sanitary Sewer Collection System has been updated to include all sewer extensions completed in 2019.

Attachment C provides a list of projects which were constructed in 2019, under construction currently, or will be constructed and connect to the system within the next five years.

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

See Attachment D

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

Check the appropriate boxes:

- System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

See Attachment E

The completion of the new Planebrook Road Pump Station in November 2018, will redirect approximately 85,000 gpd of flow from the area tributary to the SSO's reported in the vicinity of 249 Lancaster Avenue. In addition, a proposed sewer extension through the Chester Valley Golf Course will redirect approximately 160,000 gpd from the Church Road Pump Station and further mitigate the issues with the SSO's associated with extreme precipitation events. This extension is scheduled to be completed by the 2nd Quarter of 2019.

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

Check the appropriate boxes:

- The collection system does not contain pump stations
- The collection system does contain pump stations (Number – 12)
- Discussion of condition of each pump station attached (**Attachment F**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

- a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.
- b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.
- c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

- Industrial waste report as described in 8 a., b. and c. attached (**Attachment G**)
- Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

9. Existing or Projected Overload.

Check the appropriate boxes:

- This report demonstrates an existing hydraulic overload condition.
- This report demonstrates a projected hydraulic overload condition.
- This report demonstrates an existing organic overload condition.
- This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

Corrective Action Plan attached (**Attachment**)

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

Sewage Sludge Management Inventory attached (**Attachment**)

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

Annual CSO Report attached (**Attachment**)

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

Flow calibration report attached (**Attachment**)

RESPONSIBLE OFFICIAL CERTIFICATION

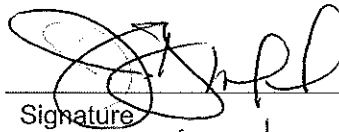
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

John Nagel

Name of Responsible Official

610-897-4205

Telephone No.



Signature

8/10/2020

Date

PREPARER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Charles Faulkner, P.E.

Charles Faulkner

Name of Preparer

Signature

215-254-7751

3/11/2020

Telephone No.

Date



CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT INSTRUCTIONS

This form has been developed to promote consistency in the development of annual municipal wasteload management reports ("Chapter 94 reports") required by 25 Pa. Code § 94.12. At least two copies of the complete report must be submitted to the appropriate regional office of the Department of Environmental Protection (DEP) by March 31.

Enter the calendar year that the report covers at the top of the form. Check the appropriate box to indicate whether the permittee is the owner/operator of a publicly owned treatment works (POTW) or other sewage treatment facility, or is the owner/operator of a sewage collection system that is tributary to a POTW owned/operated by a different entity.

General Information

Record the name of the permittee, the permittee's full mailing address, the permittee's contact person and this person's title, phone number and email address. Also record the permit number (NPDES or WQM), the effective date of permit coverage, the expiration date of permit coverage (if applicable), the date by which an application or NOI is due for reissuance (renewal) (if applicable), the municipality and county where the sewage treatment facility or collection system is located, and the name of the consultant (company name), if any, who assisted in the preparation of the form.

Chapter 94 Report Components

This section requests responses to 12 questions that, if applicable, must be addressed for a complete Chapter 94 report. Questions 1 – 9 and 12 come directly from the Chapter 94 regulations, i.e., 25 Pa. Code §§ 94.12(a)(1) – 94.12(a)(9) and 94.13(b). Some questions request that you check an appropriate box, attach the information requested, and specify the attachment number, while responses to other questions may be entered directly on the form.

For Questions 1 and 2, permittees may use DEP's Chapter 94 Spreadsheet to satisfy 25 Pa. Code §§ 94.12(a)(1) and 94.12(a)(2), respectively. DEP encourages use of the Chapter 94 Spreadsheet to provide consistency in the format and calculations associated with hydraulic and organic load evaluations (see www.depweb.state.pa.us/chapter94). If the Chapter 94 Spreadsheet was used, check the appropriate box(es) and attach printouts of the data and graphs to the Chapter 94 report. If this report is being used for a collection system only, these graphs are not needed.

For Question 6, if the permittee checks the box that there were capacity-related bypasses or SSOs during the report year, in general the box for existing hydraulic overload in Question 9 should be checked. If the permittee checks the box in Question 6 because surcharging occurred during the report year, in general the box for projected hydraulic overload in Question 9 should be checked.

For Question 8, if the permittee has an EPA-approved pretreatment program, attachment of an annual pretreatment report as required in an NPDES permit will satisfy the requirement for an industrial waste report.

For Question 10, if a permit requires a "Sewage Sludge Management" inventory, check the appropriate box if the inventory is attached to the Chapter 94 report.

For Question 11, if an NPDES permit (individual permit or, for satellite collection systems, PAG-06 General NPDES permit coverage) requires an Annual CSO (Status) report, attach the CSO report to the Chapter 94 report and check the appropriate box.

Certification

In accordance with 25 Pa. Code § 94.12(a), both the individual who prepared the report and (a responsible official of) the permittee must sign the report. The term "responsible official" for a municipality is a principal executive officer or ranking elected official.

Questions on the completion of Chapter 94 reports may be directed to DEP's Bureau of Point and Non-Point Source Management at (717) 787-8184 or to the appropriate DEP regional office (contact information available by visiting DEP's website, www.depweb.state.pa.us, and selecting Regional Resources).

ATTACHMENT A

MJB 2-R Exhibit 1

| ATTACHMENT A | | | | | | | | | | |
|---|----------------------------|---------------|----------------------------|---------------|----------------------------|---------------|----------------------------|---------------|----------------------------|---------------|
| East Whiteland Township | | | | | | | | | | |
| Historical Hydraulic Loading | | | | | | | | | | |
| | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | |
| | Average Monthly Flow (MGD) | Rainfall (in) | Average Monthly Flow (MGD) | Rainfall (in) | Average Monthly Flow (MGD) | Rainfall (in) | Average Monthly Flow (MGD) | Rainfall (in) | Average Monthly Flow (MGD) | Rainfall (in) |
| Jan | 1.377 | 4.03 | 1.524 | 3.15 | 1.665 | 3.25 | 1.521 | 2.43 | 2.179 | 4.48 |
| Feb | 1.419 | 1.92 | 2.155 | 5.14 | 1.772 | 1.57 | 1.833 | 6.18 | 2.111 | 3.23 |
| Mar | 1.843 | 5.17 | 1.840 | 1.83 | 1.373 | 5.22 | 1.992 | 4.09 | 2.256 | 5.22 |
| Apr | 1.490 | 1.95 | 1.814 | 2.49 | 1.587 | 2.78 | 1.782 | 3.76 | 1.654 | 3.09 |
| May | 1.369 | 1.19 | 1.803 | 4.49 | 1.600 | 5.30 | 1.926 | 6.36 | 1.823 | 6.21 |
| Jun | 1.422 | 8.85 | 1.678 | 1.46 | 1.608 | 4.81 | 1.979 | 6.04 | 1.834 | 8.29 |
| Jul | 1.493 | 4.32 | 1.640 | 4.63 | 1.387 | 5.46 | 1.852 | 6.13 | 1.788 | 5.66 |
| Aug | 1.175 | 2.45 | 1.620 | 3.05 | 1.569 | 4.79 | 2.043 | 9.82 | 1.493 | 1.95 |
| Sep | 1.272 | 5.07 | 1.720 | 4.88 | 1.638 | 1.84 | 2.417 | 9.53 | 1.391 | 2.25 |
| Oct | 1.513 | 4.72 | 1.451 | 1.29 | 1.515 | 4.54 | 2.041 | 2.48 | 1.428 | 6.05 |
| Nov | 1.438 | 1.82 | 1.513 | 3.76 | 1.538 | 1.83 | 2.205 | 8.32 | 1.360 | 1.72 |
| Dec | 1.748 | 5.40 | 1.659 | 3.48 | 1.512 | 1.96 | 2.291 | 5.99 | 1.448 | 4.81 |
| Annual Average | 1.463 | 46.89 | 1.701 | 39.65 | 1.564 | 43.35 | 1.990 | 71.13 | 1.730 | 52.96 |
| Max Month | 1.843 | | 2.155 | | 1.772 | | 2.417 | | | |
| Max 3 Month | 1.584 | | 1.936 | | 1.603 | | 1.603 | | | |
| Hydraulic Ratio | 1.083 | | 1.138 | | 1.025 | | 0.806 | | | |
| 5 - year Average Hydraulic Ratio (3-Month Max/Annual Average) | | | | | | | | | 1.062 | |
| 5 - year Hydraulic Annual Average Annual Flow | | | | | | | | | 1.690 | |

Monthly Rainfall data from recordings taken from USGS 01473169 Valley Creek water information collection station.

| East Whiteland Township Projected Hydraulic Loading | | | | | | | |
|---|-------------------------------------|-----------|----------------------|-------------------------------------|-----------------|---------------------------|--|
| Year | Previous Year's Annual Average Flow | New EDU's | Increased Flow (MGD) | Projected Annual Average Flow (MGD) | Hydraulic Ratio | Projected Max Month (MGD) | |
| 2020 | 1.730 | 400.1 | 0.091 | 1.822 | 1.062 | 1.935 | |
| 2021 | 1.822 | 737.1 | 0.168 | 1.989 | 1.062 | 2.114 | |
| 2022 | 1.989 | 658 | 0.150 | 2.139 | 1.062 | 2.273 | |
| 2023 | 2.139 | 605.5 | 0.138 | 2.277 | 1.062 | 2.419 | |
| 2024 | 2.277 | 193 | 0.044 | 2.321 | 1.062 | 2.466 | |

⁽¹⁾ Calculated Flow Rate Per EDU 227.64 (gal/EDU)

⁽²⁾ Calculated 5-year Hydraulic Ratio 1.062

ATTACHMENT B

Sanitary Sewer Collection System East Whiteland Township Chester County, PA

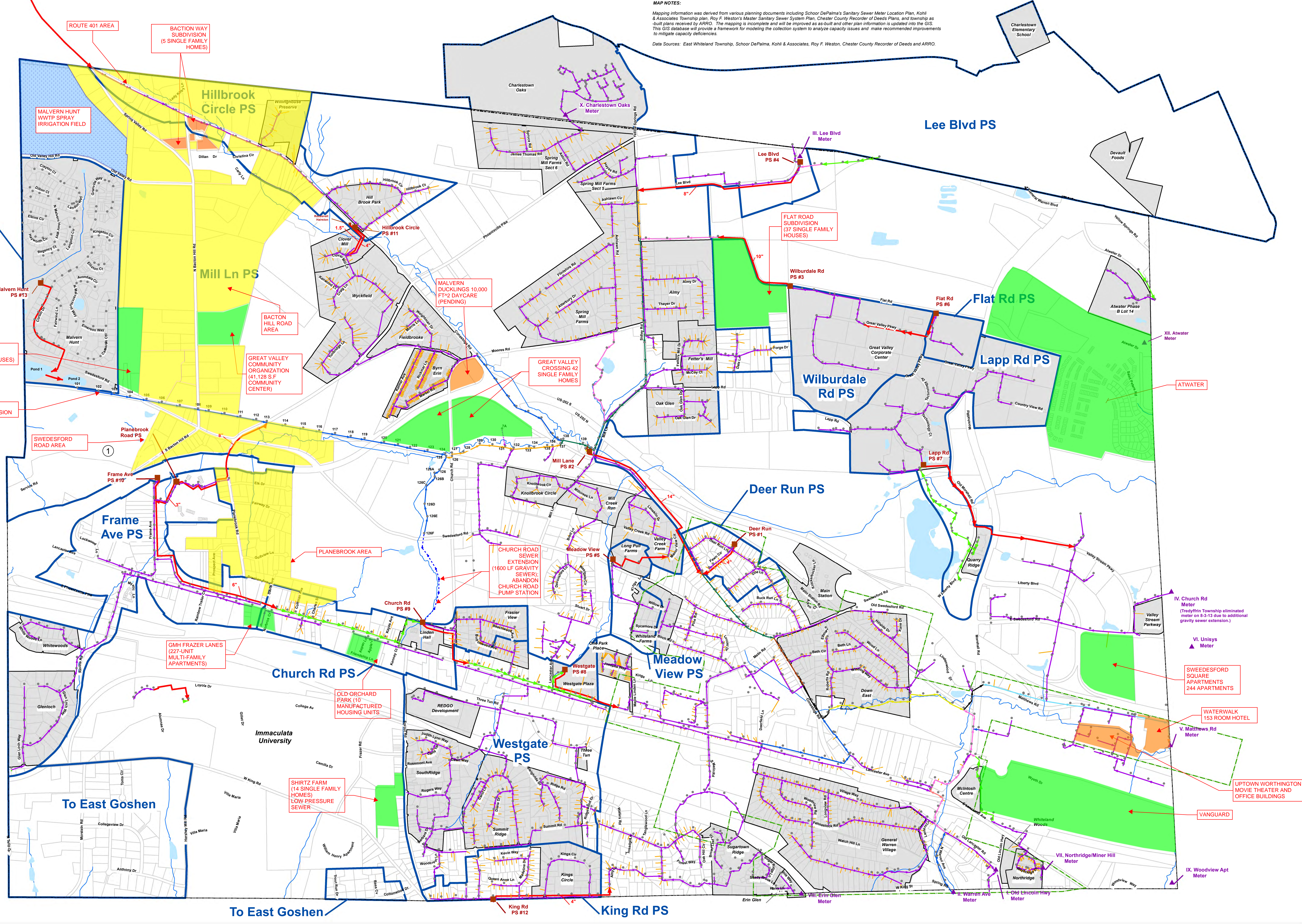
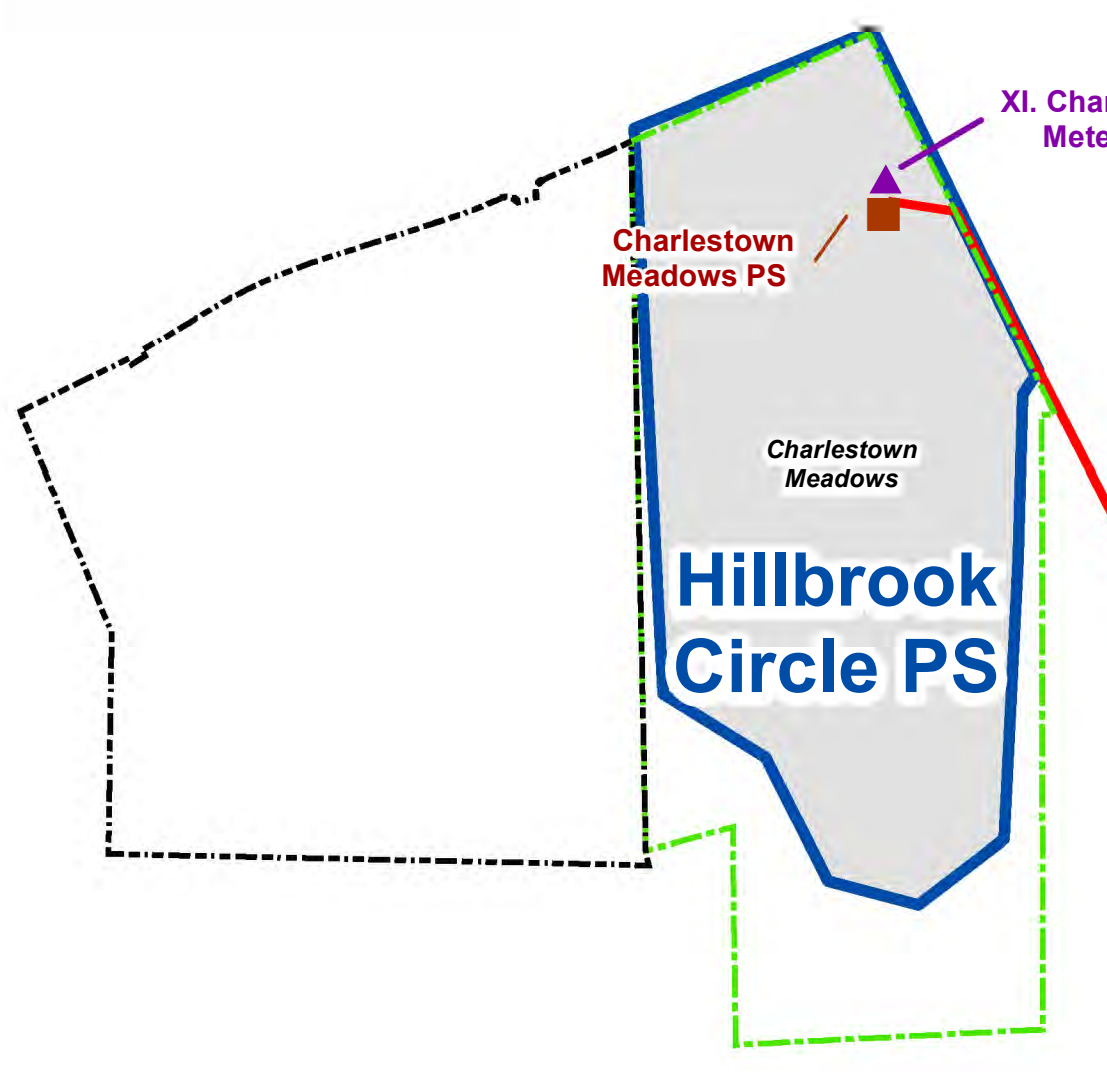
- Pump Stations**
1. Deer Run
 2. Mill Ln
 3. Wilburdale Rd
 4. Lee Blvd
 5. Meadow View
 6. Flat Rd
 7. Lapp Rd
 8. Westgate
 9. Church Rd
 10. Frame Ave
 11. Hillbrook Circle
 12. King Rd
 13. Malvern Hunt
- Meters**
- I. Old Lincoln Hwy
 - II. Warren Ave
 - III. Lee Blvd
 - IV. Church Rd
 - V. Matthews Rd
 - VI. Unisys
 - VII. Northridge/Miner Hill
 - VIII. Erin Glen
 - IX. Woodview Apt
 - X. Charlestown Oaks
 - XI. Charlestown Meadows
 - XII. Atwater

LEGEND

- Manholes
- Pump Stations
- Laterals
- Western Master Plan Area
- Municipal Boundaries
- Lakes & Ponds
- Streams
- Subdivisions
- Parcel Boundaries
- Valley Forge Service Area
- Valley Forge Service Area Proposed
- Force Mains & Size
- 8" Gravity Sewer
- 8" Proposed Gravity Sewer
- 10" Gravity Sewer
- 12" Gravity Sewer
- 15" Gravity Sewer
- 15" Proposed Gravity Sewer
- 16" Gravity Sewer
- 18" Gravity Sewer
- 18" Proposed Gravity Sewer
- 20" Gravity Sewer
- 21" Gravity Sewer
- 24" Gravity Sewer
- 27" Gravity Sewer
- 36" Gravity Sewer
- Unknown Pipe Diameter

0 600 1,200 Feet
1 inch = 600 feet
REVISION DATE: 3/3/2020

MAP NOTES:
Mapping information was derived from various planning documents including School DePalma's Sanitary Sewer Meter Location Plan, Kohl & Associates Township plan, Roy F. Weston's Master Sanitary Sewer System Plan, Chester County Recorder of Deeds Plans, and township as-built plans received by ARRO. The mapping is incomplete and will be improved as as-built and other plan information is updated into the GIS. This GIS database will provide a framework for modeling the collection system to analyze capacity issues and make recommended improvements to mitigate capacity deficiencies.
Data Sources: East Whiteland Township, School DePalma, Kohl & Associates, Roy F. Weston, Chester County Recorder of Deeds and ARRO.



- NOTES:**
1. PLANEBOOK ROAD PUMP STATION WAS PLACED IN SERVICE IN NOVEMBER OF 2018 AND THE FRAME AVENUE PUMP STATION WAS DECOMMISSIONED
- LEGEND: APPROVED/PENDING DEVELOPMENTS**
- APPROVED/UNDER CONSTRUCTION
 - PENDING APPROVAL
 - PROPOSED SEWER EXTENSION
 - PUBLIC SEWER FACILITIES CURRENTLY IN DESIGN

ATTACHMENT C

MJB 2-R Exhibit 1

ATTACHMENT C

EDU Tracking Summary: 5 Year Proposed EDU Connections

| DEVELOPMENT/EXTENSION | TOTAL COMMITMENT | NUMBER BUILT | BALANCE | PROPOSED | | | | |
|---|------------------|--------------|---------|----------|-------|-------|-------|------|
| | | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| McIntosh | 40 | 0.0 | 40.0 | 10.0 | 10.0 | 10.0 | 10.0 | - |
| RedGo Development - Lot 1 Site | 20.5 | 20.5 | 0.0 | - | - | - | - | - |
| Winthrop Corporation | 25 | 0.0 | 25.0 | 15.0 | 10.0 | - | - | - |
| Whiteland Village - Phase I | 200 | 0.0 | 200.0 | 50.0 | 50.0 | 50.0 | 50.0 | - |
| King/Carol/Summit | 250 | 238.0 | 12.0 | 3.0 | 3.0 | 3.0 | 3.0 | - |
| Uptown Worthington (O'Neill), 844 EDUs Total | 480 | 281.4 | 198.6 | - | 75.0 | 75.0 | 48.6 | - |
| Glasgow Tract | 23 | 0.0 | 23.0 | 8.0 | 5.0 | 5.0 | 5.0 | - |
| Swedesford/Church Road | 24 | 17.0 | 7.0 | - | 4.0 | 3.0 | - | - |
| Hillbrook Circle | 35 | 33.0 | 2.0 | 2.0 | - | - | - | - |
| Shirtz Farm Subdivision | 14 | 0.0 | 14.0 | 5.0 | 9.0 | - | - | - |
| Linden Hall | 60 | 60.0 | 0.0 | - | - | - | - | - |
| Liberty Property (Quarry Ridge) | 144 | 132.5 | 11.5 | 5.0 | 4.5 | 2.0 | - | - |
| Quarry Ridge - Additional | 15 | 2.0 | 13.0 | - | 5.0 | 5.0 | 3.0 | - |
| O'Neill Offices | 39.5 | 13.0 | 26.5 | - | 9.0 | 9.0 | 8.5 | - |
| O'Neill/Rubino (Deerfield Commons) | 40 | 0.0 | 40.0 | 10.0 | 10.0 | 10.0 | 10.0 | - |
| Veterans Life (Aegon) | 22 | 0.0 | 22.0 | - | 8.0 | 8.0 | 6.0 | - |
| Misc. EDUs from re-rate & agreed 1990 Capacity | 76.4 | 16.0 | 60.4 | 15.0 | 15.0 | 15.0 | 15.4 | - |
| Remaining EDUs from Rt. 30 Development | 142 | 92.0 | 50.0 | 15.0 | 15.0 | 10.0 | 10.0 | - |
| Poplar Development | 29 | 21.0 | 8.0 | 3.0 | 5.0 | - | - | - |
| Willinghouse Preserve (Tattersall Development) | 11 | 11.0 | 0.0 | - | - | - | - | - |
| Touchstone Office Complex | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Trinity Christian Complex | 11 | 0.0 | 11.0 | 5.0 | 6.0 | - | - | - |
| Micron technologies ** | 33 | 33.0 | 0.0 | - | - | - | - | - |
| JMP Malvern (19 Morehall Road) | 30 | 23.0 | 7.0 | - | 7.0 | - | - | - |
| Atwater Village - Singles, 2-Family & Townhouses (549 total) | 380.3 | 351.0 | 29.3 | 29.3 | - | - | - | - |
| Atwater Village - Commercial | 77 | 22.0 | 55.0 | 14.0 | 14.0 | 14.0 | 13.0 | - |
| Atwater Village - The Haven [326 ea. Apartments @ 190 gpd/275 gpd/EDU = 225.2 EDUs] | 225.2 | 225.2 | 0.0 | - | - | - | - | - |
| Townes at Malvern (Section 1 - Cockerham) | 52 | 51.0 | 1.0 | 1.0 | - | - | - | - |
| 8 Lee Boulevard - new EDUs (3 existing) | 5 | 3.0 | 2.0 | 2.0 | - | - | - | - |
| 80 Watch Hill Lane | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Raymour & Flanigan - 1 Lee Boulevard | 6.0 | 2.4 | 3.6 | 3.6 | - | - | - | - |
| EWT Fire Station #5 | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Swedesford 66 | 66 | 3.0 | 63.0 | 14.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| Chester Valley Golf Club | 38 | 0.0 | 38.0 | - | - | - | 38.0 | - |
| Ward (Ciorletti) Parcel (634 Lancaster Avenue) | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Malvern Court Mobile Home Park | 110 | 110.0 | 0.0 | - | - | - | - | - |
| 427 Conestoga Rd | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Janssen Pharmaceutical - Building M9 | 0 | 0.0 | 0.0 | - | - | - | - | - |
| Aldi | 0 | 0.0 | 0.0 | - | - | - | - | - |
| Veterinary Clinic | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Cubalmart | 20 | 20.0 | 0.0 | - | - | - | - | - |
| Public Works Building | 1 | 1.0 | 0.0 | - | - | - | - | - |
| 20 Moores Road (Office Building) | 1 | 1.0 | 0.0 | - | - | - | - | - |
| Frazer Mennonite (53 & 55 Maple Linden Lane) | 2 | 2.0 | 0.0 | - | - | - | - | - |
| Covenant Presbyterian Church Land Devel. | 1 | 1.0 | 0.0 | - | - | - | - | - |
| The Malvern School | 3 | 3.0 | 0.0 | - | - | - | - | - |
| The Vanguard Group | 59 | 0.0 | 59.0 | 15.0 | 15.0 | 15.0 | 14.0 | - |
| Liberty Property Trust - 6 Great Valley Parkway | 16.6 | 0.0 | 16.6 | - | 7.6 | 9.0 | - | - |
| Townes at Malvern (a.k.a. Section 2 - Malvern Walk) | 64 | 64.0 | 0.0 | - | - | - | - | - |
| Malin Road Development (Townhomes) (to be adjusted for) | 228 | 0.0 | 228.0 | 50.0 | 50.0 | 50.0 | 50.0 | 28.0 |
| Willetts Farm - 99 Church Road | 44 | 15.0 | 29.0 | 15.0 | 14.0 | - | - | - |
| RedGo Development - Lot 2 Site | 7.6 | 0.0 | 7.6 | 7.6 | - | - | - | - |
| RedGo Development - Lot 3 Site | 6.6 | 0.0 | 6.6 | 6.6 | - | - | - | - |
| Bacton Hill Subdivision | 6 | 0.0 | 6.0 | 2.0 | 3.0 | - | - | - |
| Exeter & Lee L.P. | 1 | 0.0 | 1.0 | 1.0 | - | - | - | - |
| Great Valley Corporate Center Redevelopment | 650 | 0.0 | 650.0 | - | 200.0 | 200.0 | 200.0 | 50.0 |
| Great Valley Community Organization Rec. Center | 1 | 0.0 | 1.0 | - | 1.0 | - | - | - |
| Accolade Properties | 1 | 0.0 | 1.0 | 1.0 | - | - | - | - |
| Swedesford Square Land Development | 244 | 0.0 | 244.0 | 55.0 | 55.0 | 45.0 | 45.0 | 44.0 |
| Lincoln Court Shopping Center | 8 | 8.0 | 0.0 | - | - | - | - | - |
| Aegon/St. Gobain (Office Buildings) | 22 | 0.0 | 22.0 | - | 11.0 | 11.0 | - | - |
| 401 Corridor Extension | 25 | 0.0 | 25.0 | - | 5.0 | 15.0 | 5.0 | - |
| Planebrook Road Sewer Extension | 75 | 0.0 | 75.0 | - | - | 25.0 | 25.0 | 25.0 |

MJB 2-R Exhibit 1

ATTACHMENT C

EDU Tracking Summary: 5 Year Proposed EDU Connections

| DEVELOPMENT/EXTENSION | TOTAL COMMITMENT | NUMBER BUILT | BALANCE | PROPOSED | | | | |
|---|---------------------|-----------------|----------------|--------------|--------------|--------------|--------------|--------------|
| | | | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Bacton Hill / Swedesford Road Sewer Extension | 100 | 0.0 | 100.0 | - | - | 34.0 | 33.0 | 33.0 |
| 6 Frame Avenue | 1 | 0.0 | 1.0 | - | - | - | - | - |
| 7 Frame Avenue | 1 | 0.0 | 1.0 | - | - | - | - | - |
| 15 Frame Avenue | 1 | 0.0 | 1.0 | - | - | - | - | - |
| Flat Road Subdivision | 37 | 0.0 | 37.0 | 15.0 | 15.0 | 7.0 | - | - |
| 473 Conestoga Road | 3 | 1.0 | 2.0 | - | - | - | - | - |
| 458 & 476 Lancaster Ave (Eadah) | 11 | 0.0 | 11.0 | - | - | - | - | - |
| Frazer Lanes (548-554 Lancaster Ave) | 115 | 0.0 | 115.0 | 20.0 | 80.0 | 15.0 | - | - |
| Loch- Aerie (700 Lancaster Ave) | 6 | 0.0 | 6.0 | - | - | - | - | - |
| East Side of 7 Frame Ave | 1.0 | 0.0 | 1.0 | 1.0 | - | - | - | - |
| 2 Frame Ave | 1.0 | 0.0 | 1.0 | 1.0 | - | - | - | - |
| 215 South Phoenixville Pike | 3.0 | 0.0 | 3.0 | - | 3.0 | - | - | - |
| | | | | | | | | |
| | | | | | | | | |
| COMMITTED EDU TOTALS | 4,496.8 | 1,883.0 | 2,613.8 | 400.1 | 737.1 | 658.0 | 605.5 | 193.0 |

| | |
|--------------------------------------|---------|
| Total EDUs in 2018 Chapter 94 Report | 7,427.6 |
| Total EDUs Connected in 2019 | 174 |
| Total EDUs in 2019 | 7,601.6 |
| Annual Average Flow (MGD) | 1.730 |
| Flow Rate Per EDU | 227.64 |

ATTACHMENT D

Program for Sanitary Sewer Monitoring, Maintenance and Repair

[25 Pa. Code § 94.12(a)(5)]

The Township monitors sewer flow leaving and entering the Township via flow meters on a daily basis. Flow Reports are compiled on a monthly basis. Any irregular patterns are investigated and corrected as soon as possible. Meter pits are checked on a routine basis to determine if the meters are functioning properly and that there is no debris accumulating within the flumes.

The Townships Public Works Department is responsible for normal daily maintenance and preventative maintenance of the sewage collection system including pump stations. The Public Works Department also is responsible for handling emergency conditions on a 24-hour basis. Ongoing visual inspections indicate the sewer is generally in good condition.

The Township Sewer Department uses video inspection equipment to inspect sewer mains for infiltration, roots and grease. The Township has purchased new software for its sewer inspection video equipment to allow the use of digital video and still frame pictures for better reporting and documentation for the sewer mains. The Township is using this new equipment to locate areas of I/I to be repaired. The Department is then able to determine areas of concern and clean the lines with a sewer jet and make any necessary repairs. As an on-going practice, the Township periodically flushes the sanitary sewer lines throughout the Township.

Manhole covers are being adjusted and/or watertight gaskets are being installed in low-lying areas. As part of the township's street resurfacing program, all manhole covers and frames are being replaced with new gaskets covers. These are installed in the new frames, which are adjusted up to the new pavement grades to help eliminate inflow. Manhole inserts have been added in areas that were experiencing inflow through manhole covers.

By ordinance, all new sewer lines, laterals and building sewer must be inspected and air tested by the Township Sewer Engineer or Code Official before the lines are put into service. This procedure had allowed the Township to detect potential defective workmanship and materials, and/or in the process eliminate any potential for future I/I.

The Township is continuing the corrective measures necessary to prevent unwanted runoff from entering into the system, thus reducing the I/I in the system. The Township has created a numbering system for all 1,452 manholes in its sanitary sewer system and located each manhole with a GPS locating device. A sewer system layer had been developed in its GIS data map with each manhole located and identified with its corresponding number. The Township is beginning to televise its system again and is inputting this information onto the new GIS layer to allow the Township to better detect and remedy excessive infiltration and inflow if encountered.

ATTACHMENT E

Condition of the Sewer System

[25 Pa. Code § 94.12(a)(6)]

The Mill Lane Sewer Main Replacement Phase 1 construction project was operational as of November 2013, and the Sidley Road Sewer Main Replacement Phase 2 construction project was operational as of March 2014. The completion of the Phase 1 and 2 projects eliminated the hydraulic restriction in the East Whiteland Township sewer mains in the Mill Lane and Sidley Road areas. Consequently, the connection restriction for East Whiteland has also been eliminated for the Mill Lane and Sidley Road areas.

The Improvements to the Mill Lane and Sidley Road sewer system also completed Phase 1 and 2 aspects of the Corrective Action Plan (CAP) currently on file with PaDEP. Phase 3 of the CAP related to improvements to the Lee Boulevard Pump Station are still to be implemented. The conditions of the Connection Management Plan Currently on file with PaDEP are still in effect for the contributory drainage areas from Charlestown that flows through the Mill Lane and Sidley Road Sewer Systems.

In 2016, upgrade improvements were made to the sanitary sewer within Conestoga Road. Approximately 3,780 L.F. of new 18-inch, 20-inch and 24-inch pipe were installed to replace existing deteriorating sewer.

During 2017, the following sanitary sewer system work was done.

- Wilburdale Pump Station and Force main improvements were completed,
- Planebrook Pump Station force main improvements were completed.
- Deer Run Pump Station emergency generator replacement was started and were completed in 2018

During 2018 , the following sanitary sewer system work was done.

- On August 23, 2018, a portion of a 10-inch sewer main collapsed on Warren Avenue. The repair consisted of replacing approximately 100 L.F. of the deteriorated main.
- Construction of Planebrook Pump Station was complete.
- On November 30, 2018, Frame Ave Pump Station was decommissioned and flow was diverted to the Planebrook Pump Station.

During 2019, the following sanitary sewer system work was done.

- Flat Road Pump Station was shut down by a sinkhole on January 24, 2019 due to a sinkhole which developed at the station and jeopardized the integrity of the station. A new pump station was built and put into service in October of 2019.
- Construction of the Chester Valley Golf Course Sewer Extension began in December of 2019. Work is anticipated to be completed in the 2nd quarter of 2020

There were no Sanitary Sewer Overflows (SSOs) in 2019.

ATTACHMENT F

Sewage Pumping Stations

[25 Pa. Code § 94.12(a)(7)]

There are currently thirteen (13) pumping station in operation that convey sanitary sewage flow within the Township. The Township owns and operates twelve (12) of these thirteen (13) pumping stations. In 2018 Frame Ave Pump Station was abandoned/demolished and all flow was diverted to the newly constructed Planebrook Pump Station. the thirteenth pump station is associated with the Malvern Hunt WWTP, which is covered under its own Chapter 94 Report

All pump stations, except Mill Lane, have two pumps that alternate lead-lag. Mill Lane Pump Station was upgraded to a variable speed three-pump system in October 2013 where two pumps operate and one pump is standby.

Only the Mill Lane, Wilburdale and newly constructed Planebrook Pump Station are equipped with a magnetic flow meter to measure the pump stations flow. Flow at the other nine (9) pump stations are calculated based on the monthly pump run-time data multiplied by the pump design capacity.

As an on-going practice, Township staff visits all of its pump stations on a regular basis to determine condition and amount of flow being pumped. If a discrepancy is noted during these visits, the Township investigates the cause and takes measures to correct the discrepancy. The maximum daily and peak instantaneous flows for the other pump station will be provided following such time as they become equipped with flow meters.

The Township's pump stations are routinely checked by Township personnel. Heavy maintenance and repairs are handled by outside personnel under contract with the Township. The emergency generators are checked for readiness by exercising the units once a week.

All of the Township's pump stations are equipped with emergency alarms. In the event of an alarm, an automatic dialer contacts Township personnel to alert them of the condition.

MJB 2-R Exhibit 1

| ATTACHMENT F | | | | | | | | | | | | | | | | | | | |
|--|------------------|--------------------------|-----------------------------|---|---|------------------------|---------------|-----------------------|---------------|-----------------------|---------------|-----------------------|-------------------|---------------------------|--|-----------------|----------------|----------------------------------|--|
| East Whiteland Township Pump Station Hydraulic Performance | | | | | | | | | | | | | | | | | | | |
| PUMP STATION | PUMP STATION NO. | WQM PART 2 PERMIT NUMBER | NO. OF PUMPS ⁽³⁾ | ANNUAL AVERAGE PERMITTED CAPACITY (gpd) | HYDRAULIC DESIGN CAPACITY (excluding capacity of backup pump) (gpm) | STATION CAPACITY (gpd) | PUMP #1 | | PUMP #2 | | PUMP #3 | | PUMP MAX RUN TIME | ANNUAL AVERAGE FLOW (gpd) | MAX DAILY FLOW (gpd) ⁽⁶⁾⁽⁷⁾ | HYDRAULIC RATIO | PEAKING FACTOR | 2-YEAR ANNUAL AVERAGE FLOW (gpd) | 2-YEAR MAX DAILY FLOW (gpd) ⁽⁸⁾ |
| | | | | | | | AVG. RUN TIME | YEARLY RUN TIME (MIN) | AVG. RUN TIME | YEARLY RUN TIME (MIN) | AVG. RUN TIME | YEARLY RUN TIME (MIN) | | | | | | | |
| Deer Run ⁽⁵⁾ | P.S. 1 | | 2 | 23,450 | 90 | 129,600 | 52.7 | 19,924 | 58.0 | 21,840 | | | 145 | 10,298 | 26,100 | 1.062 | 2.53 | 10,941 | 27,729 |
| Mill Lane ⁽⁴⁾ | P.S. 2 | | 3 | 2,073,600 | 1754 | 2,525,760 | 279.0 | | 261.0 | | 275.0 | | | 708,029 | 1,402,292 | 1.062 | 1.98 | 752,226 | 1,489,827 |
| Wilburdale ⁽⁴⁾ | P.S. 3 | | 2 | 623,502 | 930 | 1,339,200 | 81.3 | | 80.9 | | | | | 143,670 | 208,680 | 1.062 | 1.45 | 152,638 | 221,706 |
| Lee Boulevard ⁽⁵⁾ | P.S. 4 | | 2 | 350,000 | 470 | 676,800 | 116.3 | 43,728 | 117.7 | 44,380 | | | 281 | 113,454 | 264,140 | 1.062 | 2.33 | 120,536 | 280,628 |
| Meadowview ⁽⁵⁾ | P.S. 5 | | 2 | 115,200 | 80 | 115,200 | 146.7 | 54,976 | 162.7 | 60,766 | | | 799 | 25,368 | 127,840 | 1.062 | 5.04 | 26,952 | 135,820 |
| Flat Road ⁽⁵⁾⁽⁹⁾ | P.S. 6 | | 2 | 427,500 | 275 | 396,000 | | | | | | | | | | | | | |
| Lapp Road ⁽⁵⁾ | P.S. 7 | | 2 | 472,000 | 315 | 453,600 | 87.7 | 33,085 | 90.2 | 36,565 | | | 195 | 60,109 | 122,850 | 1.062 | 2.04 | 63,861 | 130,519 |
| Westgate ⁽⁵⁾ | P.S. 8 | | 2 | 890,000 | 700 | 1,008,000 | 85.7 | 32,290 | 88.4 | 33,223 | | | 198 | 125,641 | 277,200 | 1.062 | 2.21 | 133,484 | 294,504 |
| Church Road ⁽⁵⁾ | P.S. 9 | | 2 | 700,000 | 540 | 777,600 | 73.0 | 27,509 | 69.6 | 26,272 | | | 172 | 79,566 | 185,760 | 1.062 | 2.33 | 84,533 | 197,356 |
| Frame Avenue ⁽¹⁾ | P.S. 10 | | 2 | | | | | | | | | | | | | | | | |
| Hillbrook Circle ⁽⁵⁾ | P.S. 11 | | 2 | 250,000 | 295 | 424,800 | 125.0 | 47,003 | 116.3 | 42,463 | | | 281 | 72,308 | 165,790 | 1.062 | 2.29 | 76,822 | 176,139 |
| King Road ⁽⁵⁾ | P.S. 12 | | 2 | 250,000 | 258 | 371,520 | 158.6 | 59,709 | 136.5 | 51,291 | | | 501 | 78,460 | 258,516 | 1.062 | 3.29 | 83,358 | 274,653 |
| Malvern Hunt ⁽²⁾ | P.S. 13 | | 2 | | | | | | | | | | | | | | | | |
| Planebrook Road ⁽⁴⁾⁽⁵⁾ | P.S. 14 | | 2 | 151,325 | 394 | 567,360 | 68.3 | 19,258 | 57.4 | 16,192 | | | 194 | 67,406 | 152,872 | 1.062 | 2.27 | 71,614 | 162,415 |

⁽¹⁾ Pump Station Abandoned November 30, 2018; All flows were diverted to Planebrook Road Pump Station

⁽²⁾ Pump Station included under MVH Chapter 94 Report

⁽³⁾ Two pumps alternate lead-lag at each pump station, except Mill Lane Pump Station, which was upgraded to a three-pump system

⁽⁴⁾ Annual Average Flow based on meter data

⁽⁵⁾ Annual Average Flow based on pump run times

⁽⁶⁾ Maximum flow at each pump station with one pump out of service that can handle peak instantaneous flow.

⁽⁷⁾ Mill Lane Pump Station upgraded in October 2013 to three-pump system. Maximum flow with two pumps that can handle peak instantaneous flow.

⁽⁸⁾ 2-year Annual Average Flow x Peaking Factor (Present Maximum Daily Flow to Annual Average Flow ratio)

⁽⁹⁾ Existing Pump Station was taken out of service on January 24, 2019 as a result of a sink hole at the station; A temporary bypass was used from January 24, 2019 to October of 2019, when a replacement station was placed in operation. The flow data for this station is incomplete due to these circumstances.

ATTACHMENT G

Industrial Waste

[25 Pa. Code § 94.12(a)(8)]

- A. A copy of the Townships ordinance regulating industrial waste discharges to the sewer system is as follows

§154-107 Exclusion of industrial waste


Industrial wastes may be discharged into the sewer system only pursuant to written agreement with the Township and the Valley Forge Sewer Authority and upon obtaining an industrial waste discharge permit from Valley Forge Sewer Authority; provided that rules, regulations and acceptability standards which may from time to time be adopted by the Township and Valley Forge Sewer Authority prescribed for the pretreatment of Industrial Waste are fully complied with to the satisfaction of the Township and Valley Forge Sewer Authority. Industrial wastes to be acceptable for collection and/or treatment must not exceed the characteristics set forth in Part 2, Sewer Use, of this Chapter 154. Industrial waste surcharges will be imposed and collected by the Valley Forge Sewer Authority and will be in addition to the rentals imposed herein.

- B. The Township does not sample or test the discharge from the industrial customers or the sewage leaving the Township. Industrial customers monitor their own systems and send quarterly records to the Valley Forge Sewer Authority (VFSA) to verify compliance with the Authority's effluent guidelines. VFSA and the Township have agreements in place with each industrial customer which establishes their discharge guidelines, responsibilities for maintaining effluent quality and consequences should they fail to comply with the agreement. In addition, both entities have the right to spot check the industrial effluent at any time to verify compliance. VFSA samples the Township's effluent at such time it considers it necessary to check compliance with the inter-community agreement.
- C. The Township does not sample or test the discharge from the industrial customers or the sewage leaving the Township.

VERIFICATION

I, Mark J. Bubel, Sr., Project Engineer III, for Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 2R, at PaPUC Docket No. A-2021-3026132, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: March 30, 2022


Mark J. Bubel, Sr.
Project Engineer III
Aqua Pennsylvania, Inc.