BYPASS AREA #1 (DRAINS TO SANITARY INTERCEPTOR THAT BYPASSES METERS LOCATED IN THE BOROUGH OF GLENOLDEN)

TOTAL CONNECTIONS = 86

GLENOLDEN RES. CONNECTIONS = 67 (13,400 GPD)
GLENOLDEN COMM. CONNECTIONS = 19 (19,000 GPD)
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 86 (32,400 GPD)

45 CONNECTIONS TO RIDLEY TOWNSHIP

METERED AREA TO DARBY TOWNSHIP

TOTAL CONNECTIONS = 135

GLENOLDEN RES. CONNECTIONS = 135 (27,000 GPD)
GLENOLDEN COMM. CONNECTIONS = 0
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 135 (27,000 GPD)

3 HOUSE, 4 COMMERCIAL CONNECTIONS FROM BOROUGH OF COLLINGDALE

2 HOUSE, 1 COMMERCIAL CONNECTION FROM RIDLEY TOWNSHIP

METER #1

TOTAL CONNECTIONS = 1772

OUTSIDE RES. CONNECTIONS (RIDLEY TOWNSHIP) = 2 (400 GPD)
OUTSIDE COMM CONNECTIONS (RIDLEY TOWNSHIP) = 1 (1,000 GPD)

METERED IN RIDLEY TOWNSHIP
OUTSIDE RES. CONNECTIONS (RIDLEY TOWNSHIP) = 1,403 (280,600 GPD)
OUTSIDE COMM. CONNECTIONS (RIDLEY TOWNSHIP) = 182 (182,000 GPD)

GLENOLDEN RES. CONNECTIONS = 130 (26,000 GPD)
GLENOLDEN RES. CONNECTIONS = 45 (9,000 GPD -
FROM AREA IN GLENOLDEN TOWNSHIP THAT IS METERED IN RIDLEY TOWNSHIP)
GLENOLDEN COMM. CONNECTIONS = 9 (9,000 GPD)
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 184 (36,800 GPD)

METER #2

TOTAL CONNECTIONS = 86

OUTSIDE RES. CONNECTIONS = 0

GLENOLDEN RES. CONNECTIONS = 85 (17,200 GPD)
GLENOLDEN COMM. CONNECTIONS = 1 (1,000 GPD)
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 86 (18,200 GPD)

METER #3

TOTAL CONNECTIONS = 184

OUTSIDE RES. CONNECTIONS (BOROUGH OF NORWOOD) = 9 (1,800 GPD)

GLENOLDEN RES. CONNECTIONS = 172 (34,400 GPD)
GLENOLDEN COMM. CONNECTIONS = 3 (3,000 GPD)
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 175 (37,400 GPD)

9 HOUSE CONNECTIONS AT WILLOWS AVENUE FROM BOROUGH OF NORWOOD TO METER #3

15 HOUSE CONNECTIONS AT HARRISON AVENUE FROM BOROUGH OF NORWOOD TO BYPASS AREA #2

BYPASS AREA #2 (DRAINS TO SANITARY INTERCEPTOR THAT BYPASSES METERS LOCATED IN THE BOROUGH OF GLENOLDEN)

TOTAL CONNECTIONS = 37

OUTSIDE RES. CONNECTIONS (BOROUGH OF NORWOOD) = 15 (3,000 GPD)

GLENOLDEN RES. CONNECTIONS = 22 (4,400 GPD)
GLENOLDEN COMM. CONNECTIONS = 0
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 22 (4,400 GPD)

NOTES

1.) BASE DATA TAKEN FROM GLENOLDEN BOROUGH SANITARY SEWER MAP PREPARED BY CATANIA ENGINEERING ASSOCIATES, INC.

2.) ASSUMED 200 GPD PER RESIDENTIAL CONNECTION.

3.) ASSUMED 1,000 GPD PER COMMERCIAL/INDUSTRIAL CONNECTION.

4.) SCHOOLS, CHURCHES, FIREHOUSES, AND CEMETARIES WERE CLASSIFIED AS COMMERCIAL FOR SEWER FLOW GENERATION.

5.) CONNECTION TABULATION

TOTAL GLENOLDEN CONNECTIONS TO DELCORA: 2217
FLOW IN GPD:555,600

GLENOLDEN CONNECTIONS METERED IN BOROUGH: 1922 (86.7%)
FLOW IN GPD:469,200

GLENOLDEN CONNECTIONS METERED IN OTHER MUNICIPALITIES: 183 (8.2%)
FLOW IN GPD: 38,200

METERED AREAS TO BOROUGH OF FOLCROFT

TOTAL CONNECTIONS = 48

GLENOLDEN RES. CONNECTIONS = 46 (9,200 GPD)
GLENOLDEN COMM. CONNECTIONS = 2 (2,000 GPD)
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 48 (11,200 GPD)

20 HOUSE CONNECTIONS TO BOROUGH OF FOLCROFT

6 HOUSE CONNECTIONS TO BOROUGH OF FOLCROFT

METER #6

TOTAL CONNECTIONS = 109

GLENOLDEN RES. CONNECTIONS = 109 (21,800 GPD)
GLENOLDEN COMM. CONNECTIONS = 0
GLENOLDEN IND. CONNECTIONS = 0

TOTAL GLENOLDEN CONNECTIONS = 109 (21,800 GPD)

74 HOUSE, 15 COMMERCIAL CONNECTIONS FROM BOROUGH OF FOLCROFT

METER #4

TOTAL CONNECTIONS = 374

OUTSIDE RES. CONNECTIONS
(BOROUGH OF NORWOOD) = 0

GLENOLDEN RES. CONNECTIONS = 331 (66,200 GPD)
GLENOLDEN COMM. CONNECTIONS = 42 (42,000 GPD)
GLENOLDEN IND. CONNECTIONS = 1 (1,000 GPD)

TOTAL GLENOLDEN CONNECTIONS = 374 (109,200 GPD)

20 HOUSE, 2 COMMERCIAL CONNECTIONS TO BOROUGH OF FOLCROFT

METER #5

TOTAL CONNECTIONS = 951

OUTSIDE RES. CONNECTIONS (BOROUGH OF COLLINGDALE) = 3 (600 GPD)
OUTSIDE COMM. CONNECTIONS (BOROUGH OF COLLINGDALE) = 4 (4,000 GPD)
OUTSIDE RES. CONNECTIONS (TOWNSHIP OF DARBY) = 0
OUTSIDE RES. CONNECTIONS (BOROUGH OF FOLCROFT) = 89 (74 RESIDENTIAL, 15 COMM.) (29,800 GPD)

GLENOLDEN RES. CONNECTIONS = 797 (159,400 GPD)
GLENOLDEN COMM. CONNECTIONS = 58 (58,000 GPD)
GLENOLDEN IND. CONNECTIONS = 0

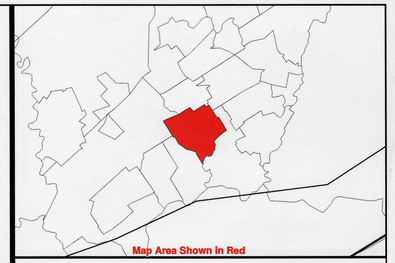
TOTAL GLENOLDEN CONNECTIONS = 855 (217,400 GPD)

BYPASS AREA #3 (DRAINS TO SANITARY INTERCEPTOR THAT BYPASSES METERS LOCATED IN THE BOROUGH OF GLENOLDEN)

TOTAL CONNECTIONS = 139
OUTSIDE RES. CONNECTIONS (BOROUGH OF NORWOOD) = 0

GLENOLDEN RES. CONNECTIONS = 138 (27,600 GPD)
GLENOLDEN COMM. CONNECTIONS = 0
GLENOLDEN IND. CONNECTIONS = 1 (1,000 GPD

TOTAL GLENOLDEN CONNECTIONS = 139 (28,600 GPD)



Location

Glenolden, PA

1 inch = 300 feet

300 150 0 300 600 900 Feet

Project Information

Project Number: 176710050
Last Modified: June 27, 2018

Legend

- DELCORA Meter Location
- Glenolden Borough Manhole
- Muckinipates Authority Manhole

Sanitary Sewer

- Glenolden Borough
- Muckinipates Authority
- Other Municipalities

Meter Areas

- Metered By Other Municipalities
- Meter Area #1
- Meter Area #2
- Meter Area #3
- Meter Area #4
- Meter Area #5
- Meter Area #6
- Bypass Area #1
- Bypass Area#2
- Bypass Area #3
- Streams

Figure 1
BOROUGH OF GLENOLDEN

DELCORA METER AND EDU MAP

Data Sources include: Stantec, Catania, Muckinipates Authority, Delaware County, USGS.
Orthophotography: None.

Path: G:\pa\delco\g_glenolden\mxd\glen_sanitary.mxd

Stantec

	Initials	Date
Prepared by	GKK	6.27.18
Peer Review by		
Final Review by		

Norwood Borough

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2018

☐ 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:	**Norwood Borough**	Permit No.:	**PA N/A**
Mailing Address:	**10 W. Cleveland Avenue**	Effective Date:	**N/A**
City, State, Zip:	**Norwood, PA 19074**	Expiration Date:	**N/A**
Contact Person:	**John J. Ryan**	Renewal Due Date:	**N/A**
Title:	**Borough Manager**	Municipality:	**Norwood Borough**
Phone:	**610-586-5800**	County:	**Delaware**
Email:	**jryan@norwood-boro.org**	Consultant Name:	**Catania Engineering Associates, Inc.**

CHAPTER 94 REPORT COMPONENTS

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. (25 Pa. Code § 94.12(a)(1))

   Check the appropriate boxes:

   ☐ Line graph for flows attached (**Attachment**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ Section 1 is not applicable (report is for a collection system).

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. (25 Pa. Code § 94.12(a)(2))

   Check the appropriate boxes:

   ☐ Line graph for organic loads attached (**Attachment**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ Section 2 is not applicable (report is for a collection system).

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))

Please note the Chapter 94 Spreadsheet was used to show monthly average flows and projects. It is understood this report is for a collection system only.

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**)
- ☐ List summarizing each extension or project attached (**Attachment**)
- ☐ Schedules describing how each project will be completed over time and effects attached (**Attachment**)

Comments:

No sewer extensions were constructed or approved within the past yeas. A copy of the existing sanitary sewer system is attached. See Attachment A.

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))

Outside contractors are utilized for sewer system opertion and maintenance on an as-needed basis. DELCORA is engaged to complete routine maintenance on the pump stations on behalf of the Borough. Video inspection is undertaken to address needs as problems arise. Sewer cleaning is contracted in known problem areas to mitigate potential surcharges.

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:

Based upon video inspections completed in the reporting year, the Borough intends to complete rehabilitation work on a section of the system along Seneca, Gesner that are showing signs of deterioration. Work is budget driven.

2018 SSO was experienced due to a construction project on Tasker Avenue. See attachment B.

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 – **3**)

☒ Discussion of condition of each pump station attached (**Attachment C**)

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 D**)

☐ 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).

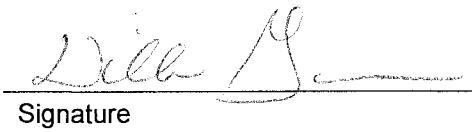
☐ Annual CSO Report attached (**Attachment**)

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).

William Gavin	
Name of Responsible Official	Signature
610-586-5800	2-19-2019
Telephone No.	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).

Elizabeth A. Catania	Elizabeth A Catania
Name of Preparer	Signature
610-532-2884	2/8/19
Telephone No.	Date

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PADEP Chapter 94 Spreads
Sewage Treatment Pl

Reporting Year: 2018

Facility Name: Norwood Borough - Muckinipates

Permit No.:

Persons/EDU: 3.5

Existing Hydraulic Design Capacity: MGD
Upgrade Planned in Next 5 Years? Year:
Future Hydraulic Design Capacity: MGD

Existing Organic Design Capacity: lbs BOD5/day
Upgrade Planned in Next 5 Years? Year:
Future Organic Design Capacity: lbs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Month	2014	2015	2016	2017	2018
January	0.87029	0.78174	0.7472	0.66735	0.59797
February	0.982	0.75206	0.90755	0.57699	0.84088
March	0.88926	0.93742	0.74277	0.72585	0.91963
April	0.8392	0.81439	0.69923	0.76271	0.67127
May	0.85744	0.67916	0.78297	0.75039	0.64461
June	0.6828	0.82835	0.62577	0.61711	0.57336
July	0.66284	0.7431	0.57784	0.67075	0.51917
August	0.639	0.67238	0.53277	0.66076	0.53087
September	0.61707	0.67692	0.53514	0.59446	0.69746
October	0.61467	0.72667	0.53194	0.57548	0.69441
November	0.66804	0.69842	0.52148	0.53064	0.98477
December	0.71077	0.81145	0.61791	0.53531	1.00792
Annual Avg	0.75278199	0.76017349	0.65187986	0.63898392	0.72352674
Max 3-Mo Avg	0.9138499	0.83462601	0.82206577	0.74631778	0.895699
Max : Avg Ratio	1.21	1.10	1.26	1.17	1.24
Existing EDUs	2,435.0	2,435.0	2,435.0	2,435.0	
Flow/EDU (GPD)	309.2	312.2	267.7	262.4	
Flow/Capita (GPD)	88.3	89.2	76.5	75.0	
Exist. Overload?					

Monthly Average BOD5 Loads for Past Five Years (lbs/day)

Month	2014	2015	2016	2017	2018
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Annual Avg					
Max Mo Avg					
Max : Avg Ratio					
Existing EDUs	2,435	2,435	2,435	2,435	
Load/EDU					
Load/Capita					
Exist. Overload?					

Projected Flows for Next Five Years (MGD)

	2019	2020	2021	2022	2023
New EDUs	1.0	1.0	1.0	1.0	1.0
New EDU Flow	0.0003	0.0003	0.0003	0.0003	0.0003
Proj. Annual Avg	0.70577	0.70607	0.70637	0.70667	0.70697
Proj. Max 3-Mo Avg	0.84395	0.84431	0.84466	0.84502	0.84538
Proj. Overload?					

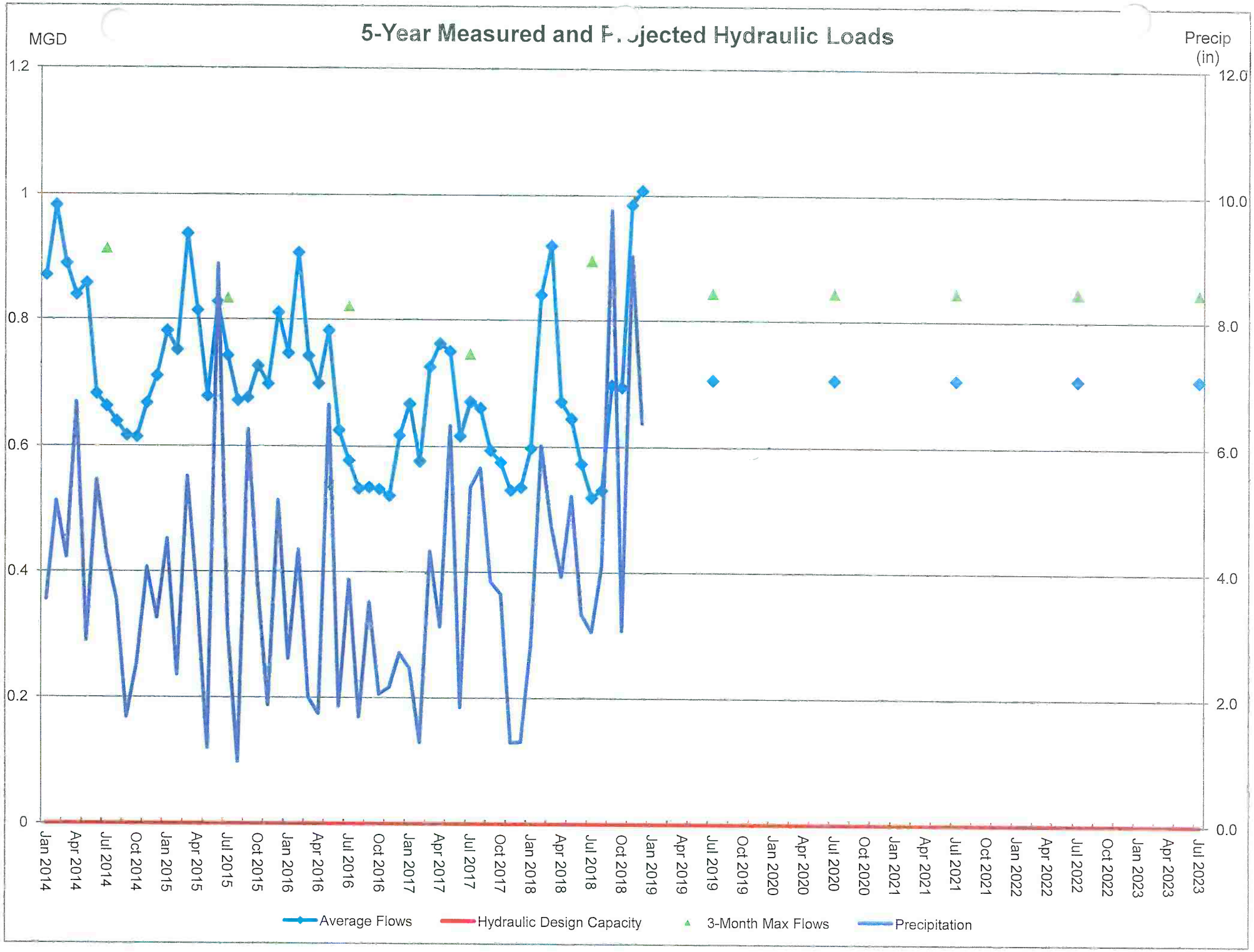
Projected BOD5 Loads for Next Five Years (lbs/day)

	2019	2020	2021	2022	2023
New EDUs	1	1	1	1	1
New EDU Load	0.000	0.000	0.000	0.000	0.000
Proj. Annual Avg	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Proj. Max Avg	#DIV/0!				
Proj. Overload?	#DIV/0!				

Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2014	2015	2016	2017	2018
January	3.56	4.52	2.63	2.48	2.85
February	5.12	2.36	4.36	1.3	6.02
March	4.23	5.52	2.01	4.33	4.74
April	6.69	3.58	1.75	3.15	3.94
May	2.91	1.2	6.65	6.33	5.21
June	5.46	8.89	1.87	1.86	3.34
July	4.3	3.16	3.88	5.35	3.06
August	3.55	0.98	1.7	5.66	4.11
September	1.69	6.27	3.52	3.86	9.76
October	2.54	3.76	2.06	3.66	3.08
November	4.07	1.89	2.17	1.3	9.03
December	3.27	5.14	2.72	1.31	6.38


5-Year Measured and Projected Hydraulic Loads
MGD
Precip (in)
1.2
1
0.8
0.6
0.4
0.2
0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Jan 2014
Apr 2014
Jul 2014
Oct 2014
Jan 2015
Apr 2015
Jul 2015
Oct 2015
Jan 2016
Apr 2016
Jul 2016
Oct 2016
Jan 2017
Apr 2017
Jul 2017
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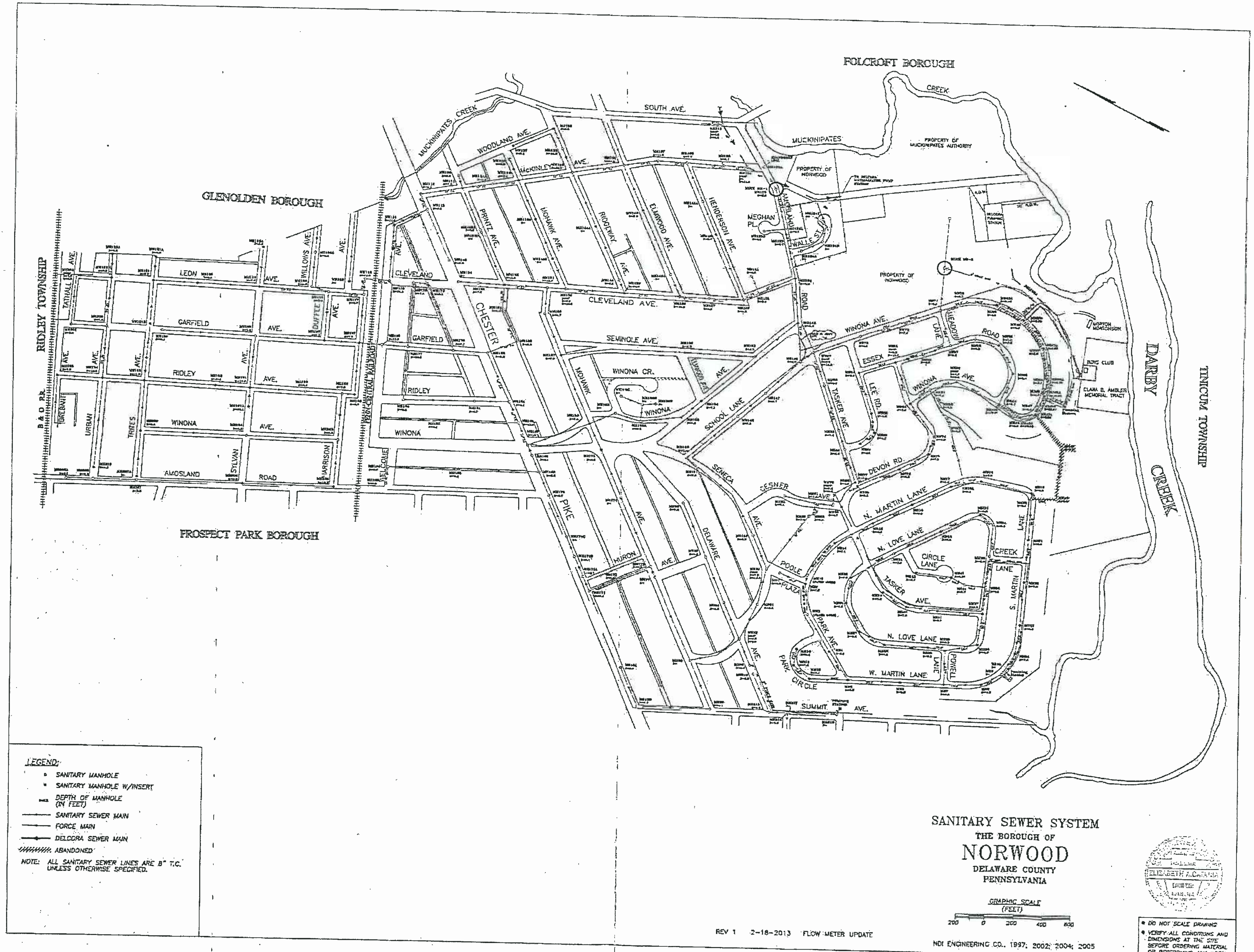
Jul 2020
Oct 2020
Jan 2021
Apr 2021
Jul 2021
Oct 2021
Jan 2022
Apr 2022
Jul 2022
Oct 2022
Jan 2023
Apr 2023
Jul 2023
Average Flows
Hydraulic Design Capacity
3-Month Max Flows
Precipitation

NORWOOD BOROUGH MONTHLY FLOW METER DATA

Meter No.	Meter Location	Total EDUs	Outside EDUs	January			February			March			April			May			June			Comments
				Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	
1	107 Amosland Road (in front)	885		5,383,345	196		6,527,397	263		9,041,021	330		5,798,628	218		5,851,166	213		5,084,838	192		
2	Norwood Borough Park	916		8327178	293		10,886,971	424		12,044,686	424		9,096,110	331		8,928,766	314		7,637,452	278		
	Unmetered Areas (average volume from all meters)	634		4,826,470	246		6,130,322	345		7,422,731	378		5,243,345	276		5,202,930	265		4,478,585	235		Use average EDU from all Propsect meters for estimate
	TOTAL	**2,435**	**0**	**18,536,993**			**23,544,690**			**28,508,438**			**20,138,083**			**19,982,862**			**17,200,875**			

Meter No.	Meter Location	Total EDUs	Outside EDUs	July			August			September			October			November			December			Comments
				Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	Recorded Volume	Gallons EDU/Day	Outside EDUs	
1	107 Amosland Road (in front)	885		4,900,779	179		4,763,548	*174*		6,464,883	243		6,610,850	241		9,448,983	356		9,773,144	356		
2	Norwood Borough Park	916		7,003,058	247		7,408,574	*261*		9,011,083	328		9,310,934	328		12,402,043	451		13,336,895	470		
	Unmetered Areas (average volume from all meters)	634		4,190,468	213		4,284,911	*218*		5,447,952	286		5,604,892	285		7,692,144	404		8,135,350	414		Use average EDU from all Propsect meters for estimate
	TOTAL	**2,435**	**0**	**16,094,305**			**16,457,033**			**20,923,918**			**21,526,676**			**29,543,170**			**31,245,389**			


FOLCROFT BOROUGH
GLENOLDEN BOROUGH
RIDLEY TOWNSHIP
PROSPECT PARK BOROUGH
TINICUM TOWNSHIP
DARBY CREEK
MUCKINIPATES CREEK
PROPERTY OF MUCKINIPATES AUTHORITY
PROPERTY OF NORWOOD
CLARA B. AMBLER MEMORIAL TRACT
SOUTH AVE.
WOODLAND AVE.
MCKINLEY AVE.
PRINTZ AVE.
MOHAWK AVE.
RIDGEWAY
ELMWOOD AVE.
HENDERSON AVE.
MEGHAN PL.
WALLE ST.
CLEVELAND AVE.
SEMINOLE AVE.
WINONA CR.
WINONA AVE.
LEON AVE.
GARFIELD AVE.
RIDLEY AVE.
AMOSLAND ROAD
CHESTER PIKE
SCHOOL LANE
TASKER AVE.
LEE RD.
DEVON RD.
ESSEX
SENECA
GESNER AVE.
N. MARTIN LANE
N. LOVE LANE
CIRCLE LANE
CREEK LANE
S. MARTIN LANE
W. MARTIN LANE
POWELL LANE
POOLE PLAZA
PARK AVE.
PARK CIRCLE
SUMMIT AVE.
DELAWARE AVE.
HURON AVE.
B & O RR.
URBAN
TRITES
SYLVAN
HARRISON
WILLOWS AVE.
LEGEND:
SANITARY MANHOLE
SANITARY MANHOLE W/INSERT
DEPTH OF MANHOLE (IN FEET)
SANITARY SEWER MAIN
FORCE MAIN
DELCORA SEWER MAIN
ABANDONED
NOTE: ALL SANITARY SEWER LINES ARE 8" T.C. UNLESS OTHERWISE SPECIFIED.
SANITARY SEWER SYSTEM
THE BOROUGH OF
NORWOOD
DELAWARE COUNTY
PENNSYLVANIA
GRAPHIC SCALE (FEET)
200 0 200 400 600
REV 1 2-18-2013 FLOW METER UPDATE
NDI ENGINEERING CO., 1997, 2002, 2004, 2005
DO NOT SCALE DRAWING
VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE BEFORE ORDERING MATERIAL OR PERFORMING ANY WORK.

Sanitary Sewer Overflow (SSO) Report to PADEP– Water Management **DEP fax: 484-250-5971**

Please check the appropriate box ☒ Dry Weather Overflow ☐ Wet Weather Overflow

1. Date, Name, Phone # of person completing this report	Date : March 6, 2018 Name : Elizabeth A. Catania, PE Phone #: 610-532-2884
2. Your organization name and address ?	Name: Norwood Borough County: Delaware Address: 10 W. Cleveland Ave. Township/Municipality: Norwood, PA 19074
Sewer system owner and permit number	Norwood Borough
3. Date found and specific location of SSO. Including Municipality/County (if different from #2) ?	Date: 2/27/18 Municipality: Norwood Borough Location(Street & #): Unit block Tasker Ave County: Delaware
4. How was SSO discovered? By whom ?	PECO called PA One Call after hitting line
5. Start and end time of SSO (actual or estimate?)	Start approximately 10:00 AM and stopped 3:20 PM
6. Date, time and name of person who notified PADEP originally to notify of SSO ?	Date : January 28, 2018 Time: 10:28AM (approx.) Name: Bill Gavin
7. Description and actual or estimated volume of SSO	Raw sewage from 10" Force Main. Volume estimated at 70,000 gallons.
8. Where, precisely, did SSO go ? (land, roadway, basement, swale, storm sewer, creek, etc) Please include creek name or street location.	Gray water entered the street (Tasker) and down the gutterline into the storm sewer. Sewer discharges into unnamed branch of Muckinipattis Creek. Within a half hour, the sewage was directed to manhole downstream via overland flow and finally pumps were turned off and pump and haul was utilized until repair completed.
9. What caused SSO ? How was it stopped ?	PECO using a gopher to bore new gas service to home. See above for method to stop.
10. Describe extent of contamination and how it was cleaned up	All sewage was cleaned up and lime spread to neutralize.
11. What actions will be taken to prevent a re-occurrence ? When ?	None. Council is considering permit procedure change to prohibit these types of construction methods.
12. Other Comments ?	
13. Downstream notifications made: (All downstream users such as public water supplies must be notified)	None

Pump Station Summary

Three pump stations service the Borough. These stations are located on Summit Avenue servicing five (5) units, Martin Lane servicing five hundred thirty three (533) units and Winona Avenue, servicing two hundred twenty-five (225) units. All pump stations are equipped with emergency generators. Pump stations are maintained under contract with DELCORA.

Industrial Waste Report

There are no known industrial permits for the Norwood Borough system and no known sewer problems related to industrial wastes are evident.

Ridley Township

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2018

☐ 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:	**Township of Ridley**	Permit No.:	**PAN/A**
Mailing Address:	**100 East MacDade Boulevard**	Effective Date:	**N/A**
City, State, Zip:	**Folsom, PA 19033**	Expiration Date:	**N/A**
Contact Person:	**Ed Pisani**	Renewal Due Date:	**N/A**
Title:	**Township Manager**	Municipality:	**Ridley Township**
Phone:	**610-534-4806**	County:	**Delaware**
Email:	**episani@ridleytwp.org**	Consultant Name:	**Catania Engineering Associates, Inc.**

CHAPTER 94 REPORT COMPONENTS

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. (25 Pa. Code § 94.12(a)(1))

   Check the appropriate boxes:

   ☐ Line graph for flows attached (**Attachment**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ Section 1 is not applicable (report is for a collection system).

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. (25 Pa. Code § 94.12(a)(2))

   Check the appropriate boxes:

   ☐ Line graph for organic loads attached (**Attachment**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ Section 2 is not applicable (report is for a collection system).

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))

Please note that the Chapter 94 Spreadsheet was used to show monthly average flows and projections; it is understood that this report is for a collection system only.

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**)

☐ List summarizing each extension or project attached (**Attachment**)

☐ Schedules describing how each project will be completed over time and effects attached (**Attachment**)

Comments:

No sewer extensions were constructed or approved within the past calendar year. A copy of the sanitary sewer system is attached.

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 Sanitary Sewer Monitoring Report attachment.

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:

No SSOs were reported for the 2018 calendar year.

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 –)

☐ Discussion of condition of each pump station attached (**Attachment**)

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**)

☐ 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).

Edmond Pisani	
Name of Responsible Official	Signature
610-534-4806	2/19/2019
Telephone No.	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 Catania Jr.	Charles Catania Jr.
Name of Preparer	Signature
610-532-2884	2/19/19
Telephone No.	Date