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EXHIBIT D

ASSET INVENTORY

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**EAST NORRITON TOWNSHIP  
SEWAGE FACILITIES ASSESSMENT  
FEBRUARY 2019  
(REV. MAY 2019)**

**PREPARED FOR:**

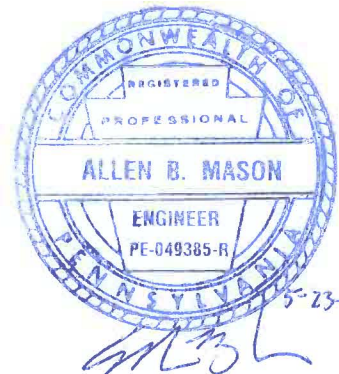


**EAST NORRITON TOWNSHIP  
2501 STANBRIDGE STREET  
EAST NORRITON, PA 19401**

**PREPARED BY:**



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949 EASTON ROAD  
WARRINGTON, PA 18976**



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## **1. INTRODUCTION**

This assessment of the tangible assets of facilities and equipment of the East Norriton sanitary sewer system has been prepared in accordance with PA Act 12 and following the guidelines of the “Uniform System of Accounts for Class A Wastewater Utilities.” Each facility and class of equipment has been coded per section 300 of the “Wastewater Utility Plant Accounts” section of the Guidelines. The Asset Survey includes nine (9) pump stations, and approximately 63 miles of gravity sewers and force mains. Information was obtained from sanitary sewer as-built plans and Chapter 94 mapping. Site visits were conducted at each pump station to inventory and assess equipment. Construction costs were obtained where available. Many historical costs were pulled from Helmuth J.H. Baerwald’s October 2000 report on the history of the sewer system from 1957 – 2000. A copy of this report is included in the background material.

## **2. OVERVIEW OF THE SEWER SYSTEM**

East Norriton Township, Montgomery County, PA is bordered by Plymouth Township to the east, Whitpain Township to the north, Worcester and Lower Providence Townships to the west and West Norriton Township and the Norristown Borough to the south. The Township covers an area of approximately 6.1 square miles and has a population of 13,590 as of the 2010 Census.

The wastewater system in the Township consists of approximately 59 miles of gravity sewer collection mains and interceptors in sizes ranging from eight (8) to twenty-four (24) inches. There are nine (9) dedicated pump stations and approximately four (4) miles of force mains, sized four (4) to sixteen (16) inches. A surge tank is located at the Einstein Pump Station to assist with managing flows during wet weather.

The majority of the sewer system was constructed under two phases in the 1960s and 1970s. These phases are shown on the enclosed map as Sewer System Phase I and Sewer System Phase 2. Phase I was completed by 1965, and Phase II was completed by the mid-1970s. The remainder of the sewer system was built over the intervening years mostly as new developments were built in the Township. An inventory of the physical assets of the sewer system is included in Section 3 of this report. The sewer mains have been categorized by development and the inventory includes street, pipe size, material and approximate age. The index also includes estimated original construction costs. These costs are based on 2018 unit prices indexed to the Installation Year using the Engineering News-Record's Construction Cost Index. The Construction Cost Index and details on the 2018 Unit Costs are included in Appedix A. The pump station inventory includes a description of each pump station, any available construction costs, and a list of equipment identified at each pump station.

Sewage flows from the Township are conveyed to the East Norriton-Plymouth-Whitpain Joint Sewer Authority (ENPWJSA) via a single connection at ENPWJSA's Sawmill Pump Station, located in the southeast corner of the Township. Flows are ultimately treated at the East Norriton-Plymouth-Whitpain Wastewater Treatment Plant. A map of the system is included in Appendix B.

### 3. SYSTEM INVENTORY

#### 3.1 PUMP STATIONS

##### A. STONY CREEK NO 1 (TIMBERLAKE)

###### Facility Description

Stony Creek No. 1 (Timberlake) Pump Station is located at 2501 Stanbridge Street. It was originally built in the 1960s as part of the original sewer system and rehabilitated in 1996. In 1999, an enclosure and air filtration system were installed to deal with odors related to gases emitting from the wet well. The northern half of the central third of the Township, an area bordered by Swede Road to the east, Germantown Pike to the south and Whitehall Road to the west, is tributary to this pump station via the Stony Creek Interceptor No. 1. The Stony Creek No. 3 (Germantown), Felton Road, Sandra Lane, Whitehall Road and Einstein pump stations are also tributary to this pump station.

Sewage is discharged through a 1,704 foot long, 12-inch diameter CIP force main to manhole 16, located at the intersection of Dogwood Lane and Stanbridge St.

The pump station is housed in a 21' x 22' brick building. The wet well is outside of the building and can be accessed via a 36" x 36" aluminum hatch. The pumps and valves are located in a dry well below the building.

The 300 kW Spectrum generator sits on a pad behind the pump station. It has an integral diesel tank and is controlled by an ASCO automatic transfer switch.

The property is surrounded by a chainlink and barbed wire fence. There are also an upright steel surge tank and an abandoned chlorine shed from a previously used chlorine dosing system on the property.

###### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1960 - 1970	Included in \$2,100,000 Sewer District No. 1 construction	Initial facility construction costs	Helmuth J.H. Baerwald report
1996	Approx. one third of \$2,450,913	Rehabilitation of Stony Creek PS No. 1, 2 & 3, including replacing pumps and installing generators at all three pump stations	Helmuth J.H. Baerwald report
1999	\$47,500	Modifications to wet well to treat odors	Helmuth J.H. Baerwald report

## Stony Creek No. 1 (Timberlake) Information Sheet

	Station Name	Stony Creek No. 1 (Timberlake)	
	Location	2501 Stanbridge St, Norristown, PA 19401	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>Pumps (Qty 3)</b>		
	Pump Manufacturer	A-C Pump	
	Pump Model Number	300	
	Type	NSWV	
	Pump GPM	2500	
	Pump TDH Ft.	120	
	Pump Size	8x6x17	
	Motor HP	125	
	Pump Control	LS 8000-2 Level Switch	
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Control Panels & Systems, Inc.	
	Model/Serial Number	96021D,E,	
	Manufacturer	AGM	
	Model	TA 5300-2	
	Serial No.	409-223	
371	<b>GRINDER</b>	Muffin Monster	
	Manufacture	JWC Environmental	
	Model	CMD1810-XDS2.0	
	HP	5	
371	<b>CRAIN/HOIST</b>		
	Manufacture	Columbus McKinnon Corp	
	Serial No.	L5076RW	
	Manufacture	Columbus McKinnon Corp	In pump room (roller bearing trolley)
	Model	3974	
360	<b>VALVES</b>		
	Type	Electronic Drain Valve	
	Manufacturer	Norgren	
	Model No.	17-020-202	
355	<b>GENERATOR</b>		
	Manufacturer	Spectrum	
	Generator KW	300	
	Serial No.	370992	
	ATS Manufacture	ASCO	
354.2	<b>BUILDING</b>		Pump Room
	Size	21' x 22'	
	Main Structure Material	Brick	
	Roof Type	Asphalt Shingles	
	Doors (number/material)	(1) Steel	
	Lighting		
	<b>ELECTRICAL</b>		
371.3	MCC	Allen-Bradley	
	Serial No.	B 811147/2	
396	Alarm System (Autodialer)	Sensaphone Express II	
	Model	FGD6700	
	Transient Voltage Surge Surpressor		
	Model No.	AORN-1S 120/240A-WX	
	Air Compressor	Speedaire	

**Stony Creek No. 1 (Timberlake) Information Sheet**

	Station Name	Stony Creek No. 1 (Timberlake)	
	Location	2501 Stanbridge St, Norristown, PA 19401	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
	Model No.	TWD58	
	Serial No.	DO73281	
	Utility Sink		
	Surge Arrestor		
	Manufacturer	Fluid Kinetics	
	Model No.	SAC 48	
	Serial No.	844	
354.3	<b>HVAC</b>		
	Type	Exhaust Fan (Effluent 1)	
	Manufacture	Greenheck	
	Model No.	SE1-20-428-B7	
	Type	Supply fan (SF-1)	
	Manufacture	Greenheck	
	Model No.	BSQ-160-10	
	Type	Supply fan ()SF-2	
	Manufacture	Greenheck	
	Model No.	AIS-18-B3	
364	<b>FLOW METER</b>		
	Manufacture	Krohne America, Inc	
	Size	12"	
	Model	Remote (NEMA6P)W/DS&Vulto	
	Product No.	VU204AA13311111-000	
	Ecograph Recorder		
	Manufacturer	Endress + Hauser	
	Model No.	RSG30	
354.3	Hydrants		
354.3	Fence (length and type)	227' Chain Link w/ 3 barbed wire strands	
354.3	Paving and Walkways	Long driveway from Stanbridge Rd	116" x 560" Paved in Fence
	<b>MISCELLANEOUS</b>		
	Annunciator	Panalarm	
	Heat Tracing Control Panel	HTD Heat Trace, Inc.	
	Rain guage		
	Outside Lights (6)		
	Flag Pole(1)		



B. STONY CREEK NO 2 (NORRIS CITY)

Facility Description

Stony Creek No. 2 (Norris City) Pump Station is located at 527 Norris City Avenue. It was originally built in the 1960s as part of the original sewer system and rehabilitated in 1996. Most of the eastern third of the Township is tributary to this pump station via the Stony Creek Interceptor No. 2. This area is between Stanbridge Street and Old Arch Road south of Germantown Pike and between Swede Road and Arch Road north of Germantown. The Stony Creek No. 1 (Timberlake) pump station is also tributary to this pump station.

Sewage is discharged through a 3,757 foot long, 16-inch diameter CIP force main to manhole 569 in Hartranft Avenue.

The pump station is housed in a 25' x 22' brick building. The wet well is outside of the building and can be accessed via a 36" x 36" aluminum hatch. The pumps and valves are located in a dry well below the building.

The 500 kW Spectrum generator sits on a pad behind the pump station. It has an integral diesel tank and is controlled by an ASCO automatic transfer switch.

The property is surrounded by a chainlink and barbed wire fence. There are also an upright steel surge tank and an abandoned chlorine shed from a previously used chlorine dosing system on the property.

Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1960 - 1970	Included in \$2,100,000 Sewer District No. 1 construction	Initial facility construction costs	Helmuth J.H. Baerwald report
1996	Approx. one third of \$2,450,913	Rehabilitation of Stony Creek PS No. 1, 2 & 3, including replacing pumps and installing generators at all three pump stations	Helmuth J.H. Baerwald report

## Stony Creek No. 2 (Norris City) Information Sheet

	Station Name	Stony Creek No. 2 (Norris City)	
	Location	527 Norris City Ave, Norristown, PA 19401	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>Pumps (Qty 3)</b>		
	Pump Manufacturer	A-C Pump	
	Pump Model Number	150	
	Type	PWO	
	Pump GPM	2600	
	Pump TDH Ft.	245	
	Pump Size	8x6x17	
	Motor HP	250	
	Pump Control	PRO-950824	Sigma Controls Myriad Model No. TPC-L
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Control Panels & Systems, Inc.	
	Model/Serial Number	96021A,B,	
	Manufacturer	AGM	
	Model	TA 5300-2	
	Serial No.	409-223	
371	<b>GRINDER</b>	Muffin Monster	
	Manufacture	JWC Environmental	
	Model	CMD1810-XDS2.0	
	HP	5	
355	<b>GENERATOR</b>		
	Manufacturer	Spectrum	
	Generator KW	500	
	Serial No.	370992	
	ATS Manufacture	ASCO	
354.2	<b>BUILDING</b>		
	Size	25' x 22'	
	Main Structure Material	Brick	
	Roof Type	Asphalt Shingles	
	Doors (number/material)	Front and Back Steel Doors (2)	
	Lighting	Flourescent	
	<b>ELECTRICAL</b>		
371.3	MCC	Allen-Bradley	
	Model	800 T	
396	Alarm System (Autodialer)	Sensaphone Express II Remote Monitoring System	
	Model	FGD6700	
	Surge Arrestor		
	Manufacturer	Fluid Kinetics	
	Model No.	SAC 72	
	Transient Voltage Surge Surpressor		
	Model No.	AORN-1S 120/240A-WX	
	Air Compressor	Speedaire	
	Model No.	TWD58	
	Serial No.	DO73281	
354.3	<b>HVAC</b>		
	Manufacture	York	
	Model No.	ZF060C00N4AAA2A	
	Type	Exhaust (Effluent 1)	
	Manufacture	Greenheck	
	Model No.	GWB-14-3	
	Type	Effluent 2	
	Manufacture	Greenheck	
	Model No.	SE1-18-429-A7	
	Type	Supply (SF-1)	
	Manufacture	Greenheck	
	Model No.	BSQ-160-10	

## Stony Creek No. 2 (Norris City) Information Sheet

	Station Name	Stony Creek No. 2 (Norris City)	
	Location	527 Norris City Ave, Norristown, PA 19401	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
	Type	Supply (SF-2)	
	Manufacture	Greenheck	
	Model No.	AIS-14-A	
364	<b>FLOW METER</b>		
	Manufacture	Krohne America, Inc	
	Size	16"	
	Model	Remote (NEMA6P)W/DS&Vulto	
	Product No.	VU220AA13391111-000	
364	Ecograph Recorder		
	Manufacturer	Endress + Hauser	
	Model No.	RSG30	
354.3	Hyrdants		
354.3	Fence (length and type)	227' Chain Link w/ 3 barbed wire strands	
354.3	Paving and Walkways	Paved inside fence	
	<b>MISCELLANEOUS</b>		
	Annunciator	Panalarm	
	Utility Sink		
	Heat Tracing Control Panel	HTD Heat Trace, Inc.	
	Rain guage		
	Outside Lights (8)		

### C. STONY CREEK NO 3 (GERMANTOWN)

#### Facility Description

Stony Creek No. 3 (Germantown) Pump Station is located at 821 W. Germantown Pike. It was originally built in the 1960s as part of the original sewer system and rehabilitated in 1996 and again in 2011. The western third of the Township, between Sandra Lane and Trooper Road, is tributary to this pump station via the Stony Creek Interceptor No. 3. The Schultz Road and Burnside Avenue pump stations are also tributary to this pump station.

During normal flow conditions, sewage is discharged through a 4,872 foot long, 12-inch diameter CIP force main to manhole 1020A in Germantown Pike. This main was sliplined in 2011. Due to the loss of capacity this created, in 2013 a parallel 931 foot long, 6-inch diameter force main was installed. This force main discharges into manhole 1212 at Sunset Avenue and Germantown Pike, and flows are carried to the Einstein pump station for storage in the surge tank located there. The 6-inch parallel main is controlled by a pinch valve, which opens based on wet well levels. It only operates during significant rain events.

The pump station is housed in a 24' x 15' brick building. The wet well is outside of the building and can be accessed via a 36" x 36" aluminum hatch. The pumps and valves are located in a dry well below the building. A second valve vault sits in the driveway to connect the parallel force main to the primary one.

The 250 kW Spectrum generator sits on a pad next to the pump station. It has an integral diesel tank and is controlled by an ASCO automatic transfer switch.

The property is surrounded by a chainlink and barbed wire fence. There are also an upright steel surge tank and an abandoned chlorine shed from a previously used chlorine dosing system on the property.

#### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1960 - 1970	Included in \$2,100,000 Sewer District No. 1 construction	Initial facility construction costs	Helmuth J.H. Baerwald report
1996	Approx. one third of \$2,450,913	Rehabilitation of Stony Creek PS No. 1, 2 & 3, including replacing pumps and installing generators at all three pump stations	Helmuth J.H. Baerwald report
2011	\$619,500.00	Slip lining force main	Damage Analysis Table
2013	\$298,095.84	Parallel force main project	Payment application

### Stony Creek No. 3 (Germantown) Information Sheet

	Station Name	Stony Creek No. 3 (Germantown)	
	Location	821 W Germantown Pike, East Norriton, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>Pumps (Qty 3)</b>		
	Pump Manufacturer	A-C Pump	
	Pump Model Number	300	
	Type	NSWV	
	Pump GPM	1050	
	Pump TDH Ft.	142	
	Pump Size	8x6x17	
	Motor HP	100	
	Pump Control	Sigma Controls Myriad Model No. TPC-L	
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Control Panels & Systems, Inc.	
	Model/Serial Number	96021G,H,	
	Manufacturer	AGM	
	Model	TA 5300-2	
	Serial No.	409-223	
371	<b>GRINDER</b>	Muffin Monster	
	Manufacture	JWC Environmental	
	Model	CMD1810-XDS2.0	
	HP	5	
371	<b>CRAIN/HOIST</b>		
	Manufacture	Columbus McKinnon Corp	
	Model	L5076RW	
355	<b>GENERATOR</b>		
	Manufacturer	Spectrum	
	Model No.	250DS60	
	Serial No.	371288	
	Generator KW	250	
	Serial No.	370992	
	ATS Manufacture	ASCO	
354.2	<b>BUILDING</b>		Pump Room
	Size	23.5' x 15'	
	Main Structure Material	Brick	
	Roof Type	Asphalt Shingles	
	Doors (number/material)	(1) Steel	
	Lighting	Flourescent	
	<b>ELECTRICAL</b>		
371.3	MCC	Allen-Bradley	
	Serial No.	B 811147/2	
396	Alarm System (Autodialer)	Sensaphone Express II	
	Model	FGD6700	
	Manufacturer	Allen Bradley PanelView Plus 700	
	Model No.	2711P-T7C4D8	
	Transient Voltage Surge Suppressor	(2)	
	Model No.	AORN-1S 120/240A-WX	
	Surge Arrestor		
	Manufacturer	Fluid Kinetics	
	Model No.	SAC 72	
	Serial No.	843	
	Manufacturer	Fluid Kinetics	
	Serial No.	A1130	
354.3	<b>HVAC</b>		
	Type	Effluent 1	
	Manufacture	Greenheck	
	Model No.	GWB-14-5	
	Type	SF-1	

## Stony Creek No. 3 (Germantown) Information Sheet

	Station Name	Stony Creek No. 3 (Germantown)	
	Location	821 W Germantown Pike, East Norriton, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
	Manufacture	Greenheck	
	Model No.	BSQ-130-7	
	Type	SF-2	
	Manufacture	Greenheck	
	Model No.	AIS-18-B3	
364	<b>FLOW METER</b>		
	Manufacture	Krohne America, Inc	
	Size	12"	
	Model	Remote (NEMA6P)W/DS&Vulto	
	Product No.	VU204AA13311111-000	
	Manufacture	Eastech Badger	
	Model No.	2200	
364	Ecograph Recorder		
	Manufacturer	Endress + Hauser	
	Model No.	RSG30	
354.3	Hydrants		
354.3	Fence (length and type)	292' Chain Link w/ 3 barbed wire strands	
354.3	Paving and Walkways	Driveway 24' x 49'	Entire Station Paved
	<b>MISCELLANEOUS</b>		
	Utility Sink		
	Heat Tracing Control Panel	HTD Heat Trace, Inc.	
	Rain Measurer		
	Outside Lights (6)		
	Hot Water Heater Manufacture	Rheemglas Electric	

#### D. SANDRA LANE

##### Facility Description

Sandra Lane Pump Station is located at Sandra Lane & Whitehall Road. It was originally built in 1975 as part of the Sheffield Village Development and rehabilitated in 1985. The area south of Germantown Pike, bounded by Sandra Lane and North Whitehall Road, is tributary to this pump station.

Sewage is discharged through a 2,671 foot long, 4-inch CIP force main to a manhole at Germantown Pike & Sandra Lane.

The pump station has a precast concrete wet well, valve vault and meter pit. Controls are housed in a covered enclosure.

Emergency power is supplied by a portable generator connection.

The property is surrounded by a wooden shadowbox fence. There is also an abandoned chlorine shed from a previously used chlorine dosing system on the property.

##### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1975	\$88,000.00	Constructed as part of the Sheffield Village development	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
1985	\$74,488.00	Rehabilitation of Sandra Lane PS	Helmuth J.H. Baerwald report

**Sandra Lane Information Sheet**

	Station Name	Sandra Lane	
	Location	525 N Whitehall Road, Eagleville, PA 19403	
<b>CODE</b>	<b>PUMP STATION</b>	<b>DESCRIPTION</b>	<b>COMMENTS</b>
371.3	Pump Manufacturer	KSB Pumps	
	Pump Model Number	5-M07-738316	
	Type	Submersible	
	Pump GPM		
	Pump TDH Ft.		
	Pump Size		
	Motor HP	31	
370.3	Wet Well Size	112" x 112"	
370.3	Hatchway	Aluminum	
370.3	Valve Vault Size	88" x 88"	
370.3	Meter Pit Size	60" x 60"	
371.3	Pump Control	Multitrode, backup floats	
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Sta-Con Inc.	
	Model/Serial Number	55108AE	
	<b>ELECTRICAL</b>		
396	Alarm System (Autodialer)	Sensaphone Express II Remote Monitoring System	
	Model	FGD6700	
354.3	<b>HVAC</b>		
	Manufacturer	YASKAWA	HVAC Drive
	Model No.	CIMR-ZU2A0088FAA	
	Serial no.	1W1345276890010	
364	<b>FLOW METER</b>		
354.3	Fence (length and type)	150.33'	Wooden
354.3	Paving and Walkways	Parking Lot	
371.3	<b>ODOR CONTROL</b>		
	50 gal poly drum		
	Metering Pump		
	Manufacturer	Flexflo	
	Model No.	A1N20F-6T	
	Serial No.	DB3546	
	<b>MISCELLANEOUS</b>		
	Plastic shed		
	Lighting	Outdoor Light (1)	



E. BURNSIDE AVENUE

Facility Description

The Burnside Avenue Pump Station is located at 2071 Potshop Lane. It was originally built in 1994. It serves the Norriton Business Campus, Pimlico Farms developments, and part of the Village of Caralea development.

Sewage is discharged through a 2,092 foot long, 6-inch diameter PVC force main to manhole 1624 at Germantown Pike & Burnside Avenue.

The pump station has a precast concrete wet well and valve vault. Controls are housed in a covered enclosure.

Emergency power is supplied by a portable generator connection.

The property is surrounded by a chainlink fence. There is also an abandoned chlorine shed from a previously used chlorine dosing system on the property.

Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1994	\$387,638.01	Constructed as part of the Norriton Business Campus	3/13/96 Ltr. From Robert E Blue Consulting Engineers, P.C.

### Burnside Avenue Information Sheet

	Station Name	Burnside Avenue	
	Location	2071 Potshop Ln, Norristown, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>PUMPS (Qty 2)</b>		
	Pump Manufacturer	Barnes Pumps, Inc.	
	Pump Model Number	4SE15034L	
	Type	Submersible	
	Pump GPM	210	
	Pump TDH Ft.	81	
	Pump Size	4 inch	
	Motor HP	15	
	Motor Voltage	230	
370.3	Wet Well Size	113"x113"	
370.3	Hatchway	Aluminum	
370.3	Valve Vault Size	6' x 9'	
371.3	Pump Control		
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Underwriters Laboratories, Inc.	
	Model/Serial Number	AA- 688637	
371	<b>CRAIN/HOIST</b>		
	Manufacture	Dutton-Lainson Company	
	Model	B1500	
355	<b>PORTABLE GENERATOR</b>		
	Manufacturer	Cummins Onan	
	Model No.	50DGCA	
	Generator KW	50	
	ATS Manufacturer	Cummins Onan	
	ATS Model No.	0T 150	
	Inside Model No.	306-3479-03	
	Generator Receptacle	Appleton Electric Company	
	CAT No.	AR20034	
	Amp	200	
	<b>ELECTRICAL</b>		
396	Alarm System (Autodialer)	Sensaphone Express II Remote Monitoring System	
	Model	FGD6700	
354.3	<b>HVAC</b>		
	Type/Manf./Model #	Dayton	
		Model No. 4YC 486	
		Serial No. 11385516 0806	
354.3	Fence (length and type)	151' Chain link w/barbed wire	
354.3	Paving and Walkways	Gravel Driveway	
371.3	<b>ODOR CONTROL</b>		
	50 gal poly drum		
	Metering Pump		
	Manufacturer	Flexflo	
	Model No.	A1N20F-6T	
	Serial No.	KA3831	

### Burnside Avenue Information Sheet

	Station Name	Burnside Avenue	
	Location	2071 Potshop Ln, Norristown, PA 19403	
<b>CODE</b>	<b>PUMP STATION</b>	<b>DESCRIPTION</b>	<b>COMMENTS</b>
	<b>MISCELLANEOUS</b>		
	Chemical Dosing Bldg		
	Spare Hose		
	Lighting	Outdoor Light (1)	

## F. SCHULTZ ROAD

### Facility Description

The Schultz Road Pump Station is located at 1031 Schultz Road. It was originally built in the 1970s and the pumps and controls were replaced in 1999. It serves Lena Lane, Lewis Lane, Doris Lane, Singer Lane, Schultz Road and the western end of Tanglewood Drive.

Sewage is discharged through a 2,343 foot long, 4-inch diameter CIP force main to manhole 952 at Woodland Avenue & Black Swift Road.

The pump station has a precast concrete wet well and valve vault. Controls are housed in an enclosure mounted on the wet well.

Emergency power is supplied by a portable generator connection.

The property is surrounded by a chainlink fence.

### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1970 - 1979	\$73,000.00	Initial facility construction costs	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
1999	\$24,000.00	Pumps/controls replaced	Helmuth J.H. Baerwald report

### Schultz Road Information Sheet

	Station Name	Schultz Road	
	Location	1031 Schultz Rd, East Norriton, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>PUMPS (Qty 2)</b>		
	Pump Manufacturer	Barnes	
	Pump Model Number		
	Type	Submersible	
	Pump GPM		
	Pump TDH Ft.		
	Pump Size		
	Motor HP	15	
370.3	Wet Well Size	85.5" Diameter	
370.3	Hatchway	Aluminum	
371.3	Pump Control	Flygt Multitrode	
	<b>CONTROL PANEL</b>		
371.3	Manufacturer	Sta-Con, Inc.	
	Model/Serial Number	99-0953	
	Manufacturer	Enclosed Industrial Control Panel	
	Model/Serial Number	No. AS629155	
371	<b>CRAIN/HOIST</b>		
	Manufacture	Dutton-Lainson Company	
	Model	B1200	
355	<b>GENERATOR RECEPTACLE</b>		
	Powertite Receptacle Manuf	Appleton Electric Company	
	CAT No.	AR20034	
	Amp	200	
	<b>ELECTRICAL</b>		
396	Alarm System (Autodialer)	Sensaphone Express II Remote Monitoring System	
	Model	FGD6700	
354.3	Fence (length and type)	91' Chain link	
354.3	Paving and Walkways	Paved Driveway	
	<b>MISCELLANEOUS</b>		
	Lighting	Outdoor Light (1)	

## G. WHITEHALL ROAD

### Facility Description

The Whitehall Road Pump Station is located at 619 Township Line Road. It was originally built in the 1970s. It serves the portion of Whitehall Road north of Heatherwood Drive.

Sewage is discharged through a 799 foot long, 4-inch diameter CIP force main to manhole 723 in Township Line Road.

The pump station has an abandoned steel dry pit pump station with two air compressor/ejector pumps. In 1999, repairs were made to the pump station. In around 2014, the dry-pit pumps were abandoned, a manhole on the property was converted into a wet well, and a submersible pump was installed. An above grade force main with air release valve was run across the ground and tied into the existing force main. Controls for the pump are housed in an enclosure mounted on the fence.

A new grinder pump packaged pump station was purchased in 2018. This pump station has not yet been installed. Estimates for the installation of this pump station were procured and are indicated in the construction costs below.

Emergency power is supplied by a portable generator connection.

The property is surrounded by a chainlink fence.

### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1970 - 1979	\$68,000.00	Initial facility construction costs	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
1999	\$6,925.76	Repairs to pump station	Helmuth J.H. Baerwald report
2014 - 2015	\$5,800.00	Pumps/controls replaced	Est. cost for pump
2018	\$35,769.00	Packaged pump station procurement	Payment application
Future	\$44,500.00	Installation of packaged pump station (GC, electrical and site work)	E-mail summary of quotes received

**Whitehall Road Information Sheet**

	Station Name	Whitehall Road	
	Location	619 Township Line Rd, East Norriton, PA 19403	
<b>CODE</b>	<b>PUMP STATION</b>	<b>DESCRIPTION</b>	<b>COMMENTS</b>
371.3	<b>PUMPS (Qty 1)</b>		
	Pump Manufacturer		
	Pump Model Number		
	Type	Submersible	
	Pump GPM		
	Pump TDH Ft.		
	Pump Size		
	Motor HP	5	
370.3	Wet Well Size		
370.3	Hatchway		
371.3	Pump Control		
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Hydromatic	
	Model/Serial Number	62021-826-7	
360	<b>VALVES</b>		
	Type	Air Release Valve	
	Manufacture/Model No.	Crspin Valve A11111S20AB	
355	<b>GENERATOR RECEPTACLE</b>		
	Receptacle Manufacturer	Appleton Electric Company	
	CAT No.	ADR1034	
	Amp	100	
354.3	<b>HVAC</b>		
	Type/Manf.	Dayton Electric Convection Heater	
	Model No.	3VU37B	
354.3	Fence (length and type)	100' Chain Link	
354.3	Paving and Walkways	Driveway 27' x 21'	

## H. EINSTEIN

### Facility Description

The Einstein Pump Station is located at 619 Township Line Road. It was built in 2012 as part of the Einstein Medical Center. It serves the medical center, the portion of Whitehall Road between Heatherwood Drive and Germantown Pike, the south end of Sunset Avenue, and the portion of Germantown Pike from Sunset Avenue to Whitehall Road. The Sandra Lane pump station and the Germantown Pike pump station's parallel force main are also tributary to this station. In addition to the pump station, this facility includes a buried, precast concrete surge tank capable of storing 286,515 gallons.

Sewage is discharged through a 2,286 foot long, 6-inch diameter DIP force main to manhole 265A in Germantown Pike.

The pump station has a precast concrete wet well containing four pumps, two to the surge tank and two to the force main. There are two precast concrete valve vaults, one on the line to the surge tank and the other on the force main. The controls are housed in a 17' x 17' concrete block building.

The 1250 kW Caterpillar generator sits on a pad behind to the pump station. It has an integral diesel tank and is controlled by an ASCO automatic transfer switch.

The pump station facility is surrounded by a chainlink fence. The surge tank is located below grade outside of the fence.

### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
2012	\$3,281,205.00	Initial facility construction costs, includes gravity sewer modifications in Germantown Pike, Sandra Lane, and Marion Ave.	Escrow release



### Einstein Information Sheet

	Station Name	Einstein (including Surge Tank)	
	Location	689 W Germantown Pike, East Norriton, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>PUMPS (Qty 2)</b>	To force main	
	Pump Manufacturer	FLYGT	
	Pump Model Number	NP-3171	
	Type	Submersible	
	Motor HP	34	
	Motor Voltage	460	
371.3	<b>PUMPS (Qty 2)</b>	To surge tank	
	Pump Manufacturer	FLYGT	
	Pump Model Number	NP-3127	
	Type	Submersible	
	Motor HP	7.5	
	Motor Voltage	460	
370.3	Wet Well Size	12'x12'	
370.3	Hatchway	87.5" x 63.5"	
371.3	Pump Control	Transducers w/float backup	
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	FLYGT	
	Serial Number	12-0074	
371.3	<b>RTU</b>		
	Manufacturer	Optimum Controls Corporation	
	OCC Job #	3966E	
371	<b>GRINDER</b>		
	Manufacture	Muffin Monster	
	Model Number	30005-0012-DI	
	HP	5	
	Motor Controller Model	PC2200	
671	<b>CRAIN/HOIST</b>		
	Manufacture	Halliday Products, Inc.	
	Model Number	D3B	
360	<b>VALVES</b>		
	Type	Check Valves	
	Manufacturer	Milliken Valve Company	
	Model #	Series 8501	
	Type	Plug Valve	
	Manufacturer	Milliken Valve Company	
	Model #	Series 600	
	Type	Universal Air Release Valve	
	Manufacturer	Crispin Valves	
	Type	Globe Surge Relief Valve	
	Manufacturer	APCO Valve and Primer Corp	
	Type	Valve Automation	
	Manufacturer	Auma	

### Einstein Information Sheet

	Station Name	Einstein (including Surge Tank)	
	Location	689 W Germantown Pike, East Norriton, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
	Model #	AO926914001	
355	<b>GENERATOR</b>		
	Manufacturer	Caterpillar	
	Model Number	C6.6	
	Generator KW	125	
	Generator HP		
	Fuel Tank (Gals)		
	ATS Manufacturer	ASCO	
	Serial Number	496599 RE	
354.2	<b>BUILDING</b>		
	Size	17'X17'	
	Main Structure Material	Concrete Block	
	Roof Type	Metal	
	Doors (number/material)	Double Doors	
	Lighting	Fluorescent	
	<b>ELECTRICAL</b>		
371.3	Power Panelboard		
	Manufacturer	GE	
	Model Number	APNB3304FHITA	
	Manufacturer	Allen Bradley PanelView Plus 700	
	Model No.	2711P-T7C4D8	
	Surge Protector	Ge Tranquell	
396	Alarm System (Autodialer)	Verbatim	
	Model No.	Series VSS	
354.3	<b>HVAC</b>		
364	Flow Meter	Endress + Hauser	
	Serial No.	E9041716000	
364	Flow Meter	Endress + Hauser	
	Serial No.	E9049216000	
364	Ecograph		
	Manufacturer	Endress + Hauser	
	Model No.	RSG30	
354.3	Fence (length and type)	217' Chain link\	
354.3	Paving and Walkways	Entire Site Paved	
354.3	Driveway	47.5'x16'	
371.3	<b>ODOR CONTROL</b>		
	Type	Metering pump	
	Manufacturer	FLEXFLO	
	Model No.	A1N20F-6T	
	Max PSI	100	
	Max Feed	24 GPD @ 0PSI	

### Einstein Information Sheet

	Station Name	Einstein (including Surge Tank)	
	Location	689 W Germantown Pike, East Norriton, PA 19403	
<b>CODE</b>	<b>PUMP STATION</b>	<b>DESCRIPTION</b>	<b>COMMENTS</b>
	Voltage	115/60Hz-80W	
	<b>MISCELLANEOUS</b>		
	Surge Tank	Precast concrete, buried Max Storage: 286,515 gal	
	Utility Sink		
	Light Poles (x2)	Outdoor Lights on Bldg (x3)	
	Rainwise		
	Household Storage Tank		
	Water Heater		
	Manufacturer	ARISTON	
	Model No.	GL 4Ti	

## I. FELTON ROAD

### Facility Description

The Felton Road Pump Station is located at 2940 Felton Road. It was originally built in the 1970s. It serves the northern end of Felton Road.

Sewage is discharged through a 441 foot long, 4-inch diameter CIP force main to manhole 298 in Felton Road.

The pump station has two air compressor/ejector pumps located in a steel dry pit.

Emergency power is supplied by a portable generator connection.

The property is surrounded by a chainlink and barbed wire fence.

### Facility Construction Costs

<b>Year</b>	<b>Cost</b>	<b>Description</b>	<b>Source</b>
1970 - 1979	\$68,000.00	Initial facility construction costs	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI

### Felton Road Information Sheet

	Station Name	Felton Road	
	Location	2940 Felton Rd, East Norriton, PA 19403	
CODE	PUMP STATION	DESCRIPTION	COMMENTS
371.3	<b>PUMPS (Qty 2)</b>		
	Pump Manufacturer	Gast Manufacturing	
	Pump Model Number	72-204461	
	Type	Air ejector/compressor	
	Air Compressor Motor Manufacturer	Century	
	Motor HP	2	
	Motor Voltage	250	
371.3	<b>CONTROL PANEL</b>		
	Manufacturer	Gast Manufacturing	
355	<b>GENERATOR RECEPTACLE</b>		
	Powerite Receptacle Manuf	Appleton Electric Company	
	CAT No.	ADR1034	
	Amp	100	
	<b>ELECTRICAL</b>	N/A	
396	Alarm System (Autodialer)	Sensaphone Express II Remote Monitoring System	
	Model	FGD6700	
	Fence (length and type)	60' Chain Link	

### 3.2 SEWER MAINS

The following inventories of sewer mains have been broken down by project. The first table is a summary showing the total of all mains by size, followed by lists for Phase I, Phase II, and individual developments within the Township.

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**TOTAL OF ALL SEWER MAINS**

	Quantity	Pipe Size & Material	Original Pipe Construction Cost	No. of Manholes	Original Manhole Construction Cost
Sewer District No. 1 Phase I	155,563	8" VCP	\$1,678,647	820	\$360,661
	78	8" CIP	\$1,429		
	6,723	10" VCP	\$33,403		
	138	10" CIP	\$3,069		
	4,616	12" VCP	\$25,566		
	5,271	15" VCP	\$41,727		
	1,317	18" RCP	\$8,582		
	3,809	21" RCP	\$50,570		
	1,240	24" RCP	\$9,646		
Sewer District No. 1 Phase II	45,148	8" VCP	\$700,070	249	\$167,862
	3,280	10" VCP	\$58,556		
	2,712	12" VCP	\$23,023		
	2,803	15" VCP	\$59,838		
Developments	37,356	8" VCP	\$1,132,258	433	\$1,044,803
	38,562	8" PVC	\$2,524,435		
	762	8" DIP	\$61,436		
	2,212	8" Unknown	\$64,852		
Force Mains	6,254	4" CIP	\$190,087		
	3,217	6" DIP	\$244,256		
	2,092	6" PVC	\$117,615		
	1,704	12" CIP	\$32,338		
	4,872	12" CIP (sliplined)	\$92,460		
	3,757	16" CIP	\$81,092		
Total Gravity Sewer (miles)	59	Total Manholes		1,502	
Total Force Mains (miles)	4				
Total (all mains)	63				

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**SEWER DISTRICT NO. 1 PHASE I**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST2	MH COST
Adams Ave (MH 180 - 177A)	1,126	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$12,381.22	\$1,759.32
Alan Rd (MH 46 - 44)	663	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,290.18	\$879.66
Arch Rd (MH 244 - 241)	1,039	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$11,424.59	\$1,319.49
Avon Rd (MH 291 - 288)	197	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,166.16	\$439.83
Baldwin Ave (MH 726 - 382A)	1,289	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$14,173.52	\$3,078.81
Barbara Dr (MH 272 - 266)	1,003	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$11,028.74	\$1,759.32
Barbara Dr (MH 415 - 420)	1,559	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$17,142.38	\$3,518.64
Barbara Dr (MH 677 - 415)	1,566	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$17,219.35	\$3,078.81
Barbara Dr (MH 679 - 678)	262	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,880.89	\$439.83
Beechwood Rd (MH 478 - 440)	1,275	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$14,019.58	\$3,078.81
Birchwood Cir (MH 632 - 631)	264	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,902.88	\$879.66
Birchwood Dr (MH 633A - 582)	1,562	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$17,175.36	\$3,518.64
Brenda Ln (MH 700 - 696)	682	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,499.10	\$1,759.32
Brenda Ln (MH 740 - 737)	534	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,871.73	\$1,319.49
Briar Ln (MH 37 - 22)	824	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$9,060.50	\$1,759.32
Bristol Ave (MH 605 - 602)	331	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,639.59	\$439.83
Brookside Rd (MH 485 - 439)	1,588	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$17,461.25	\$3,078.81
Bryans Rd (MH 512 - 498)	1,938	8	VCP	9	1960 - 1965	\$135.00	0.0815	\$11.00	\$21,309.77	\$3,958.47
Butchers Ln (MH 218 - 213)	1,345	8	VCP	5	1960 - 1965	\$135.00	0.0815	\$11.00	\$14,789.29	\$2,199.15
Carol Ln (MH 639 - 589A)	1,244	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$13,678.71	\$3,078.81
Central St (MH 610A - 610)	189	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,078.20	\$439.83
Coles Blvd (MH 544 - 543)	478	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,255.97	\$879.66
Coles Blvd (MH 555 - 548)	121	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$1,330.49	\$439.83
Coles Blvd (MH 564 - 557)	258	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,836.90	\$439.83
Coles Blvd (MH 655 - 92)	623	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,850.35	\$1,319.49
Coles Blvd (MH 86 - 84)	947	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$10,412.98	\$1,759.32
Coles Blvd Esmt (MH 765 - 768)	839	8	VCP	4	1960 - 1965	\$53.00	0.0815	\$4.32	\$3,621.84	\$1,759.32
Coles Blvd Esmt (MH 83 - 81)	547	8	VCP	1	1960 - 1965	\$53.00	0.0815	\$4.32	\$2,361.32	\$439.83
Colonial Cir (MH 108 - 107)	279	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,067.81	\$439.83
Colonial Dr (MH 101 - 109)	1,476	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$16,229.73	\$3,078.81
Conner St (MH 606 - 601)	287	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,155.78	\$439.83
Cottage Ln (MH 495 - 487)	821	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$9,027.51	\$1,759.32
Dekalb Pike (MH 113 - 110)	1,155	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$12,700.09	\$2,638.98
Dekalb Pike (MH 127 - 126)	275	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,023.83	\$879.66
Dekalb Pike (MH 190 - 171A)	2,464	8	VCP	11	1960 - 1965	\$135.00	0.0815	\$11.00	\$27,093.53	\$4,838.13
Dekalb Pike (MH 196A - 171)	399	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,387.30	\$879.66
Dekalb Pike (MH 566 - 567)	347	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,815.53	\$439.83
Dekalb Pike (MH 567 - 578)	1,129	21	RCP	9	1960 - 1965	\$163.00	0.0815	\$13.28	\$14,989.00	\$3,958.47



**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**SEWER DISTRICT NO. 1 PHASE I**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST2	MH COST
Dekalb Pike (MH 576 - 573B)	705	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,752.00	\$1,319.49
Denis Rd (MH 273 - 271)	400	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,398.30	\$439.83
Denis Rd (MH 431 - 423)	749	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,235.82	\$879.66
Dermon Rd (MH 294 - 283)	658	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,235.20	\$1,319.49
Dogwood Ln (MH 16 - 14)	468	15	VCP	2	1960 - 1965	\$171.00	0.0815	\$13.93	\$6,518.28	\$879.66
Dogwood Ln (MH 18 - 14)	536	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,893.72	\$879.66
Donna Dr (MH 749 - 747)	574	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,311.56	\$879.66
Dorp Ln (MH 316 - 307)	646	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,103.26	\$1,759.32
Dorp Ln (MH 39 - 37)	517	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,684.80	\$879.66
Evergreen Ave (MH 40A - 20)	347	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,815.53	\$879.66
Fairview Rd (MH 32 - 24)	751	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,257.81	\$1,319.49
Felton Rd (MH 298 - 256)	973	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$10,698.87	\$1,759.32
Felton Rd (MH 298D - 298A)	825	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$9,071.49	\$1,759.32
Fourth St (MH 534 - 527)	344	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,782.54	\$439.83
Francis Ave (MH 561 - 520)	1,676	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$18,428.88	\$2,638.98
Germantown Pike (MH 155 - 152)	372	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,090.42	\$879.66
Germantown Pike (MH 166 - 153)	3,859	8	VCP	19	1960 - 1965	\$135.00	0.0815	\$11.00	\$42,432.60	\$8,356.77
Germantown Pike (MH 205A - 160A)	2,508	8	VCP	11	1960 - 1965	\$135.00	0.0815	\$11.00	\$27,577.34	\$4,838.13
Germantown Pike (MH 207 - 205A)	275	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,023.83	\$879.66
Germantown Pike (MH 208 - 205)	235	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,584.00	\$879.66
Germantown Pike (MH 257A - 255C)	225	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,474.04	\$1,319.49
Germantown Pike (MH 258 - 257A)	78	8	CIP	1	1960 - 1965	\$225.00	0.0815	\$18.33	\$1,429.45	\$439.83
Germantown Pike (MH 265A - 258)	2,475	8	VCP	12	1960 - 1965	\$135.00	0.0815	\$11.00	\$27,214.48	\$5,277.96
Germantown Pk (MH 29 - 304)	2,012	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$22,123.45	\$3,518.64
Germantown Pk (MH 325 - 300)	2,721	8	VCP	14	1960 - 1965	\$135.00	0.0815	\$11.00	\$29,919.44	\$6,157.62
Halzelton Ave (MH 616 - 608)	337	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,705.57	\$439.83
Hancock Ave (MH 553 - 519)	2,230	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$24,520.53	\$3,518.64
Hancock Ave (MH 572 - 573)	505	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,552.85	\$879.66
Hannah Ave (MH 231 - 229A)	2,489	8	VCP	10	1960 - 1965	\$135.00	0.0815	\$11.00	\$27,368.42	\$4,398.30
Hanover Ln (MH 666 - 664)	367	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,035.44	\$879.66
Hartranft Ave (MH 533 - 518)	2,224	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$24,454.55	\$3,078.81
Hartranft Ave (MH 569 - 567)	530	21	RCP	2	1960 - 1965	\$163.00	0.0815	\$13.28	\$7,036.47	\$879.66
Heather Ln (MH 644 - 648)	633	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,960.31	\$1,319.49
Hemlock Dr (MH 647 - 248A)	969	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$10,654.88	\$1,319.49
Hemlock Dr (MH 248A - 238)	1,082	8	VCP	5	1960 - 1965	\$135.00	0.0815	\$11.00	\$11,897.40	\$2,199.15
Hilcrest Ave (MH 25 - 19)	1,722	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$18,934.68	\$3,078.81
Hilltop Rd (MH 75 - 67)	707	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,774.00	\$1,319.49
Jefferson Ave (MH 183 - 181A)	972	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$10,687.87	\$1,319.49

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**SEWER DISTRICT NO. 1 PHASE I**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST2	MH COST
Jefferson Ave Esmt (MH 181B - 181)	221	8	VCP	1	1960 - 1965	\$53.00	0.0815	\$4.32	\$954.02	\$439.83
Johnson Hwy (MH 526 - 521)	1,730	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$19,022.65	\$3,078.81
Johnson Hwy (MH 578 - Sawmill PS)	2,150	21	RCP	13	1960 - 1965	\$163.00	0.0815	\$13.28	\$28,544.16	\$5,717.79
Kenwood Rd (MH 290 - 276)	1,427	8	VCP	9	1960 - 1965	\$135.00	0.0815	\$11.00	\$15,690.94	\$3,958.47
Kenwood Rd (MH 764 - 290)	747	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,213.83	\$1,319.49
Knoeller Rd (MH 718 - 721)	761	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,367.77	\$1,319.49
Lafayette Rd (MH 122 - 114)	743	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,169.84	\$1,319.49
Lawnton Rd (MH 118 - 116)	324	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,562.62	\$439.83
Lawnton Rd (MH 123 - 126)	1,170	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$12,865.03	\$1,759.32
Lisa Rd (MH 759 - 751)	1,181	8	VCP	5	1960 - 1965	\$135.00	0.0815	\$11.00	\$12,985.98	\$2,199.15
Manchester Dr (MH 694 - 687)	1,529	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$16,812.50	\$3,078.81
Marcia Ln (MH 393 - 386)	442	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,860.12	\$1,319.49
Mark Ln (MH 741 - 744)	195	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,144.17	\$439.83
Markle Rd (MH 742 - 747)	1,530	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$16,823.50	\$3,518.64
Marsha Rd (MH 429 - 426)	146	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$1,605.38	\$439.83
Meadowbrook Ln (MH 671 - 662)	1,000	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$10,995.75	\$2,638.98
Meadowbrook Ln Esmt (MH 669 - 667)	262	8	VCP	2	1960 - 1965	\$53.00	0.0815	\$4.32	\$1,131.01	\$879.66
Meadowbrook Rd (MH 50 - 43)	635	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,982.30	\$1,319.49
Michele Dr (MH 274 - 270)	375	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,123.41	\$439.83
Michele Dr (MH 428 - 416)	1,270	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$13,964.60	\$3,078.81
Mill Rd (MH 133 - 190)	734	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,070.88	\$1,319.49
Mill Rd (MH 138 - 129)	1,648	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$18,121.00	\$3,518.64
Montgomery Ave (MH 542 - 534)	2,229	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$24,509.53	\$3,518.64
Montgomery Ave (MH 565 - 566)	241	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,649.98	\$439.83
Norris City Ave (MH 2 - 1)	167	24	RCP	2	1960 - 1965	\$163.00	0.0815	\$13.28	\$2,217.15	\$879.66
Norris City Ave (MH 5 - 2)	845	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$9,291.41	\$1,319.49
Norriton Dr (MH 760 - 762)	427	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,695.19	\$879.66
North Wales Rd (MH 269 - 390)	1,508	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$16,581.59	\$1,759.32
North Wales Rd (MH 365 - 390)	2,960	8	VCP	12	1960 - 1965	\$135.00	0.0815	\$11.00	\$32,547.42	\$5,277.96
Northampton Rd (MH 701 - 706)	953	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$10,478.95	\$1,759.32
Norwood Ln (MH 455 - 450)	293	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,221.76	\$439.83
Norwood Ln (MH 460 - 459)	354	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,892.50	\$879.66
Nottingham Rd (MH 712A - 684)	2,296	8	VCP	15	1960 - 1965	\$135.00	0.0815	\$11.00	\$25,246.24	\$6,597.45
Nottingham Rd (MH 713 - 1154)	271	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,979.85	\$439.83
Oak Dr (MH 651 - 248A)	480	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,277.96	\$879.66
Oak Dr (MH 652 - 239A)	785	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,631.66	\$1,319.49
Oak Tree Rd (MH 472 - 443)	849	8	VCP	5	1960 - 1965	\$135.00	0.0815	\$11.00	\$9,335.39	\$2,199.15
Old Arch Road (MH 597 - 581A)	4,566	8	VCP	16	1960 - 1965	\$135.00	0.0815	\$11.00	\$50,206.60	\$7,037.28

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**SEWER DISTRICT NO. 1 PHASE I**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST2	MH COST
Orchard Rd (MH 503 - 496)	1,424	8	VCP	7	1960 - 1965	\$135.00	0.0815	\$11.00	\$15,657.95	\$3,078.81
Overhill Rd (MH 47 - 46)	210	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,309.11	\$439.83
Pace Ln (MH 661 - 658)	393	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,321.33	\$879.66
Pace Ln Esmt (MH 659A - 2A)	397	8	VCP	3	1960 - 1965	\$53.00	0.0815	\$4.32	\$1,713.79	\$1,319.49
Pace Ln Esmt (MH 659B - 659C)	114	8	VCP	1	1960 - 1965	\$53.00	0.0815	\$4.32	\$492.12	\$439.83
Penn Square Rd (MH 329 - 323)	1,077	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$11,842.42	\$1,759.32
Penn Square Rd (MH 468 - 445)	616	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,773.38	\$879.66
Pinecrest Rd (MH 281 - 278)	597	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,564.46	\$879.66
Rahway Ave (MH 603 - 600)	814	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,950.54	\$1,319.49
Rahway Ave (MH 612 - 607)	1,017	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$11,182.68	\$2,638.98
Robin Ln (MH 641 - 638)	410	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,508.26	\$879.66
Robin Ln (MH 642 - 590A)	431	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,739.17	\$1,319.49
Roland Dr Esmt (MH 345A - 345)	114	8	VCP	1	1960 - 1965	\$53.00	0.0815	\$4.32	\$492.12	\$439.83
Rome St (MH 613 - 1)	589	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$6,476.50	\$1,319.49
Saint Vincent St (MH 412 - 402)	487	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,354.93	\$1,319.49
Sardaro Ln (MH 19 - 11)	235	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,584.00	\$439.83
Scenic Rd (MH 279 - 259)	1,059	8	VCP	5	1960 - 1965	\$135.00	0.0815	\$11.00	\$11,644.50	\$2,199.15
Second St (MH 562 - 561)	138	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$1,517.41	\$439.83
Shamokin Ave (MH 604 - 603)	348	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,826.52	\$439.83
Sharon Ln (MH 724 - 726)	450	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,948.09	\$879.66
Sharon Ln (MH 727 - 730)	669	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,356.16	\$1,319.49
Shirlene Rd (MH 407A - 394)	1,367	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$15,031.19	\$3,518.64
Shirlene Rd (MH 729 - 394)	849	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$9,335.39	\$2,638.98
Springview Rd (MH 117 - 102)	1,194	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$13,128.93	\$2,638.98
Springview Rd Esmt (MH 624 - 117)	990	8	VCP	4	1960 - 1965	\$53.00	0.0815	\$4.32	\$4,273.68	\$1,759.32
Springview Rd Esmt (MH 94 - 91)	527	8	VCP	2	1960 - 1965	\$53.00	0.0815	\$4.32	\$2,274.98	\$879.66
Stanbridge St (MH 304A - 312)	1,524	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$16,757.52	\$3,518.64
Stony Creek Interceptor 1 (MH 300 to Timberlake PS)	1,317	18	RCP	8	1960 - 1965	\$80.00	0.0815	\$6.52	\$8,581.57	\$3,518.64
Stony Creek Interceptor 1 (MH 331 - 300)	603	15	VCP	2	1960 - 1965	\$90.00	0.0815	\$7.33	\$4,420.29	\$879.66
Stony Creek Interceptor 1 (MH 342 - 331)	1,745	12	VCP	9	1960 - 1965	\$68.00	0.0815	\$5.54	\$9,664.86	\$3,958.47
Stony Creek Interceptor 1 (MH 372 - 342)	2,649	10	VCP	14	1960 - 1965	\$61.00	0.0815	\$4.97	\$13,161.43	\$6,157.62
Stony Creek Interceptor 1 (MH 373 - 372)	138	10	CIP	1	1960 - 1965	\$273.00	0.0815	\$22.24	\$3,068.55	\$439.83
Stony Creek Interceptor 1 (MH 381 - 373)	1,279	10	VCP	7	1960 - 1965	\$61.00	0.0815	\$4.97	\$6,354.65	\$3,078.81
Stony Creek Interceptor 2 (MH 14 - 42)	1,507	15	VCP	8	1960 - 1965	\$90.00	0.0815	\$7.33	\$11,047.06	\$3,518.64
Stony Creek Interceptor 2 (MH 167 - 91)	2,871	12	VCP	14	1960 - 1965	\$68.00	0.0815	\$5.54	\$15,901.32	\$6,157.62
Stony Creek Interceptor 2 (MH 223 - 167)	2,795	10	VCP	15	1960 - 1965	\$61.00	0.0815	\$4.97	\$13,886.82	\$6,597.45
Stony Creek Interceptor 2 (MH 42 - 2)	1,073	24	RCP	3	1960 - 1965	\$85.00	0.0815	\$6.92	\$7,428.65	\$1,319.49
Stony Creek Interceptor 2 (MH 91 - 42)	2,693	15	VCP	12	1960 - 1965	\$90.00	0.0815	\$7.33	\$19,741.04	\$5,277.96

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**SEWER DISTRICT NO. 1 PHASE I**

STREET	PIPE			MANHOLES	YEAR INSTALLED	2018 PIPE UNIT COST	ENR RATIO	INDEXED UNIT COST2	TOTAL PIPE COST2	TOTAL MH COST
	LENGTH	SIZE	MATERIAL							
Stony Creek Rd (MH 514 - 454)	5,205	8	VCP	24	1960 - 1965	\$135.00	0.0815	\$11.00	\$57,232.89	\$10,555.92
Stony Creek Rd Esmt (MH 432 - 331)	333	8	VCP	2	1960 - 1965	\$53.00	0.0815	\$4.32	\$1,437.51	\$879.66
Swede Rd (MH 194 - 192)	473	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,200.99	\$1,319.49
Swede Rd (MH 518 - 515)	651	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,158.23	\$1,759.32
Swede Rd (MH 521 - 519)	653	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,180.23	\$1,759.32
Swede Rd (MH 72 - 50)	6,246	8	VCP	24	1960 - 1965	\$135.00	0.0815	\$11.00	\$68,679.46	\$10,555.92
Sycamore Ln (MH 458 - 466)	1,973	8	VCP	9	1960 - 1965	\$135.00	0.0815	\$11.00	\$21,694.62	\$3,958.47
Third St (MH 537A - 537)	226	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,485.04	\$439.83
Third St (MH 546 - 545)	397	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,365.31	\$879.66
Third St (MH 554 - 549)	166	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$1,825.29	\$439.83
Third St (MH 563 - 559)	218	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,397.07	\$439.83
Township Line Rd (MH 192 - 190)	709	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,795.99	\$439.83
Township Line Rd (MH 241 - 234)	3,092	8	VCP	12	1960 - 1965	\$135.00	0.0815	\$11.00	\$33,998.86	\$5,277.96
Township Line Rd (MH 370 - 365)	1,483	8	VCP	5	1960 - 1965	\$135.00	0.0815	\$11.00	\$16,306.70	\$2,199.15
Township Line Rd (MH 723 - 370)	683	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$7,510.10	\$1,319.49
Valleyview Cir (MH 100 - 97)	197	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$2,166.16	\$439.83
Valleyview Rd (MH 99 - 95)	760	8	VCP	4	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,356.77	\$1,759.32
Warsaw St (MH 615 - 609)	326	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,584.61	\$439.83
Washington Ave (MH 186 - 187)	741	8	VCP	3	1960 - 1965	\$135.00	0.0815	\$11.00	\$8,147.85	\$1,319.49
Wellington Rd (MH 409 - 404)	1,411	8	VCP	8	1960 - 1965	\$135.00	0.0815	\$11.00	\$15,515.00	\$3,518.64
Wellington Rd (MH 678 - 409)	1,335	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$14,679.33	\$2,638.98
Wellington Rd Esmt (MH 413 - 407)	430	8	VCP	1	1960 - 1965	\$53.00	0.0815	\$4.32	\$1,856.25	\$439.83
Windsor Dr (MH 715 - 710)	477	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$5,244.97	\$879.66
Windsor Dr (MH 716 - 717)	369	8	VCP	2	1960 - 1965	\$135.00	0.0815	\$11.00	\$4,057.43	\$879.66
Woodlawn Rd (MH 491 - 433)	1,124	8	VCP	6	1960 - 1965	\$135.00	0.0815	\$11.00	\$12,359.22	\$2,638.98
Woodlyn Ave (MH 33 - 23)	302	8	VCP	1	1960 - 1965	\$135.00	0.0815	\$11.00	\$3,320.72	\$439.83

Totals:	155,563	8" VCP	\$1,678,646.89
	78	8" CIP	\$1,429.45
	6,723	10" VCP	\$33,402.90
	138	10" CIP	\$3,068.55
	4,616	12" VCP	\$25,566.18
	5,271	15" VCP	\$41,726.67
	1,317	18" RCP	\$8,581.57
	3,809	21" RCP	\$50,569.63
	1,240	24" RCP	\$9,645.80
	820	Manholes	\$360,660.64
		Total	\$2,213,298.28

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**SEWER DISTRICT NO. 1 PHASE II**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Black Swift Rd (MH 911 - 907)	733	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$12,353.72	\$2,022.44
Black Swift Rd (MH 952 - 836)	949	8	VCP	4	1965 - 1975	\$135.00	0.1248	\$16.85	\$15,994.11	\$2,696.58
Black Swift Rd Esmt (MH 902 - 901)	182	8	VCP	1	1965 - 1975	\$53.00	0.1248	\$6.62	\$1,204.22	\$674.15
Brambling Ln (MH 906 - 892)	1,863	8	VCP	8	1965 - 1975	\$135.00	0.1248	\$16.85	\$31,398.34	\$5,393.17
Bunting Rd (MH 908 - 905)	379	8	VCP	2	1965 - 1975	\$135.00	0.1248	\$16.85	\$6,387.53	\$1,348.29
Capital Rd (MH 1007 - 1004)	778	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$13,112.13	\$2,022.44
Congress Rd (MH 884 - 856)	267	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$4,499.92	\$674.15
Congress Rd (MH 885 - 887)	293	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$4,938.12	\$674.15
Doris Ln (MH 944 - 947)	730	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$12,303.16	\$3,370.73
Doris Ln (MH 953 - 954)	187	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$3,151.63	\$674.15
Doris Ln Esmt (MH 940 -938)	423	8	VCP	2	1965 - 1975	\$53.00	0.1248	\$6.62	\$2,798.83	\$1,348.29
Doris Ln Esmt (MH 946 - 944)	343	8	VCP	2	1965 - 1975	\$53.00	0.1248	\$6.62	\$2,269.50	\$1,348.29
Eisenhower Dr (MH 871 - 854)	1,502	8	VCP	6	1965 - 1975	\$135.00	0.1248	\$16.85	\$25,314.17	\$4,044.87
Embassy Cir (MH 859 - 773)	665	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$11,207.67	\$2,022.44
Faith Dr (MH 973 - 969)	283	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$4,769.58	\$674.15
Filmore Rd (MH 1011 - 1009)	526	8	VCP	2	1965 - 1975	\$135.00	0.1248	\$16.85	\$8,865.02	\$1,348.29
Germantown Pike (MH 1020A - 1033)	2,803	15	VCP	15	1965 - 1975	\$171.00	0.1248	\$21.35	\$59,838.30	\$10,112.19
Germantown Pike (MH 1205 - 1175)	1,055	8	VCP	6	1965 - 1975	\$135.00	0.1248	\$16.85	\$17,780.59	\$4,044.87
Germantown Pike (MH 1212 - 1210)	920	8	VCP	6	1965 - 1975	\$135.00	0.1248	\$16.85	\$15,505.35	\$4,044.87
Germantown Pike (MH 961 - 959)	587	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$9,893.09	\$2,022.44
Hayes Rd (MH 789 - 783)	1,540	10	VCP	6	1965 - 1975	\$143.00	0.1248	\$17.85	\$27,492.66	\$4,044.87
Hayes Rd (MH 817 - 802)	705	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$11,881.82	\$2,022.44
Hayes Rd (MH 818 - 789)	2,372	8	VCP	10	1965 - 1975	\$135.00	0.1248	\$16.85	\$39,976.84	\$6,741.46
Independence Rd (MH 870 - 863)	1,246	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$20,999.64	\$3,370.73
Kelly Dr (MH 839 - 838)	235	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$3,960.61	\$674.15
Kennedy Rd (MH 816 - 792)	1,598	8	VCP	7	1965 - 1975	\$135.00	0.1248	\$16.85	\$26,932.12	\$4,719.02
Kinglet Dr (MH 891 - 894)	762	8	VCP	4	1965 - 1975	\$135.00	0.1248	\$16.85	\$12,842.48	\$2,696.58
Kinglet Dr (MH 914 - 913)	182	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$3,067.36	\$674.15
Lena Ln (MH 948 - 951)	517	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$8,713.33	\$2,022.44
Lewis Ln (MH 958 - 955)	456	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$7,685.26	\$2,022.44
Pierce Rd (MH 795 - 789)	1,493	10	VCP	6	1965 - 1975	\$143.00	0.1248	\$17.85	\$26,653.60	\$4,044.87
Pierce Rd (MH 833 - 789)	492	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$8,291.99	\$674.15
Polk Rd (MH 805 - 794)	1,412	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$23,797.34	\$3,370.73
Potshop Rd (MH 851-1 - 851)	733	8	VCP	4	1965 - 1975	\$135.00	0.1248	\$16.85	\$12,353.72	\$2,696.58
Potshop Rd (MH 915 - 913)	546	8	VCP	2	1965 - 1975	\$135.00	0.1248	\$16.85	\$9,202.09	\$1,348.29
Potshop Rd Esmt (MH 890 - 883)	583	8	VCP	4	1965 - 1975	\$53.00	0.1248	\$6.62	\$3,857.49	\$2,696.58

Potshop Rd Esmt (MH 919 - 915)	888	8	VCP	3	1965 - 1975	\$53.00	0.1248	\$6.62	\$5,875.55	\$2,022.44
Sandra Ln (MH 962 - 961)	155	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$2,612.31	\$674.15
Sandra Ln (MH 972 - 963)	2,137	8	VCP	9	1965 - 1975	\$135.00	0.1248	\$16.85	\$36,016.24	\$6,067.31
Senator Rd (MH 886A - 861)	1,122	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$18,909.79	\$3,370.73
Schultz Rd (MH 921 - 925)	761	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$12,825.62	\$3,370.73
Singer Ln (MH 938 - 924)	274	8	VCP	2	1965 - 1975	\$135.00	0.1248	\$16.85	\$4,617.90	\$1,348.29
Singer Ln (MH 949 - 954)	810	8	VCP	4	1965 - 1975	\$135.00	0.1248	\$16.85	\$13,651.45	\$2,696.58
Singer Ln Esmt (MH 932 - 927)	1,007	8	VCP	6	1965 - 1975	\$53.00	0.1248	\$6.62	\$6,662.93	\$4,044.87
Singer Ln Esmt (MH 936 - 933)	421	8	VCP	3	1965 - 1975	\$53.00	0.1248	\$6.62	\$2,785.60	\$2,022.44
Stony Creek Interceptor 3 (MH 781 - Germantown PS)	2,712	12	VCP	15	1965 - 1975	\$68.00	0.1248	\$8.49	\$23,022.83	\$10,112.19
Sunset Ave (MH 1215 - 1212)	777	8	VCP	3	1965 - 1975	\$135.00	0.1248	\$16.85	\$13,095.28	\$2,022.44
Sunset Ave (MH 842 - 829)	3,768	8	VCP	13	1965 - 1975	\$135.00	0.1248	\$16.85	\$63,504.53	\$8,763.89
Taft Rd (MH 1009 - 1000)	1,168	8	VCP	4	1965 - 1975	\$135.00	0.1248	\$16.85	\$19,685.06	\$2,696.58
Taft Rd (MH 851 - 865)	2,694	8	VCP	15	1965 - 1975	\$135.00	0.1248	\$16.85	\$45,403.71	\$10,112.19
Taft Rd Esmt (MH 864 - 780)	228	8	VCP	1	1965 - 1975	\$53.00	0.1248	\$6.62	\$1,508.59	\$674.15
Taft Rd Esmt (MH 883 - 853)	1,868	8	VCP	7	1965 - 1975	\$53.00	0.1248	\$6.62	\$12,359.84	\$4,719.02
Tollgate Rd (MH 843 - 857)	1,258	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$21,201.88	\$3,370.73
Woodland Ave (MH 1002A - 781)	963	8	VCP	5	1965 - 1975	\$135.00	0.1248	\$16.85	\$16,230.06	\$3,370.73
Woodland Ave (MH 783 - 781)	247	10	VCP	2	1965 - 1975	\$143.00	0.1248	\$17.85	\$4,409.54	\$1,348.29
Woodland Ave (MH 783A - 783)	345	8	VCP	1	1965 - 1975	\$135.00	0.1248	\$16.85	\$5,814.51	\$674.15

Totals:	45,148	8" VCP	\$700,069.62
	3,280	10" VCP	\$58,555.80
	2,712	12" VCP	\$23,022.83
	2,803	15" VCP	\$59,838.30
	249	Manholes	\$167,862.29
		Total	\$1,009,348.84

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**AUTUMN RIDGE**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Crimson Dr (MH 1744 - 2728)	1,810	8	PVC	10	2000	\$128.00	0.5624	\$71.98	\$130,291.20	\$30,368.29
Sienna Dr (MH 1732 - 1728)	684	8	PVC	4	2000	\$128.00	0.5624	\$71.98	\$49,237.12	\$12,147.32
Amber Cir (MH 1737 - 1733)	532	8	PVC	4	2000	\$128.00	0.5624	\$71.98	\$38,295.54	\$12,147.32
Totals:				3,026	8" PVC				\$217,823.86	
				18	Manholes				\$54,662.92	

**OLD ARCH CROSSING**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Carol Ln (MH 1438 - 1441)	1,282	8	PVC	9	1986	\$128.00	0.5624	\$71.98	\$92,283.60	\$27,331.46
Teardrop Terr (MH 1443 - 1440)	369	8	PVC	2	1986	\$128.00	0.5624	\$71.98	\$26,562.13	\$6,073.66
Carol Ln Esmt (MH 1433 - 354)	424	8	PVC	2	1986	\$46.00	0.5624	\$25.87	\$10,968.58	\$6,073.66
Totals:				2,075	8" PVC				\$129,814.31	
				13	Manholes				\$39,478.77	

**NEW HOPE VILLAGE**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Sawmill Ct (MH 354 - 356)	352	8	VCP	3	1980	\$135.00	0.2926	\$39.50	\$13,905.46	\$4,740.50
Sawmill Ct (MH 357 - 360)	222	8	VCP	4	1980	\$135.00	0.2926	\$39.50	\$8,769.92	\$6,320.67
Sawmill Ct Esmt (MH 355 - 362)	287	8	VCP	2	1980	\$53.00	0.2926	\$15.51	\$4,451.09	\$3,160.33
Totals:				861	8" VCP				\$27,126.48	
				9	Manholes				\$14,221.50	

**VILLAGE EAST**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Carol Ln (MH 1112 - 1115)	756	8	VCP	3	1978	\$135.00	0.2509	\$33.88	\$25,611.87	\$4,065.38
Carol Ln (MH 1111 - 1109)	295	8	VCP	3	1978	\$135.00	0.2509	\$33.88	\$9,994.05	\$4,065.38
Carol Ln Esmt (MH 1115 - 109)	1,028	8	VCP	6	1978	\$53.00	0.2509	\$13.30	\$13,672.72	\$8,130.75
Carol Ln Esmt (MH 1119 - 1120)	124	8	VCP	1	1978	\$53.00	0.2509	\$13.30	\$1,649.24	\$1,355.13
Totals:				2,203	8" VCP				\$50,927.88	
				13	Manholes				\$17,616.63	

**EAST NORRITON TOWNSHIP  
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**FOX HUNT**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Marielle Ln (MH 1472 - 604)	695	8	PVC	5	1994	\$128.00	0.4889	\$62.58	\$43,490.84	\$13,199.78
Megann Ct (MH 1470 - 1464)	657	8	PVC	4	1994	\$128.00	0.4889	\$62.58	\$41,112.92	\$10,559.83
Totals:				1,352	8" PVC				\$84,603.76	
				9	Manholes				\$23,759.61	

**RESERVE AT PENNS CROSSING**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Penn Crossing Dr (MH 1490 - 597)	645	8	PVC	5	2003	\$128.00	0.6051	\$77.46	\$49,959.92	\$16,338.64
Penn Crossing Dr (MH 1489 - 1481)	345	8	PVC	3	2003	\$128.00	0.6051	\$77.46	\$26,722.75	\$9,803.18
William Ct (MH 1493 - 1492)	148	8	PVC	1	2003	\$128.00	0.6051	\$77.46	\$11,463.67	\$3,267.73
Vincent Wy (MH 1486 - 1491)	137	8	PVC	1	2003	\$128.00	0.6051	\$77.46	\$10,611.64	\$3,267.73
Vincent Wy (MH 1485 - 1485A)	283	8	PVC	2	2003	\$128.00	0.6051	\$77.46	\$21,920.40	\$6,535.45
Brownstone Dr (MH 1483 - 595)	543	8	PVC	3	2003	\$128.00	0.6051	\$77.46	\$42,059.28	\$9,803.18
Brownstone Dr (MH 1482 - 1477)	972	8	PVC	8	2003	\$128.00	0.6051	\$77.46	\$75,288.44	\$26,141.82
Brownstone Dr Esmt (MH 1475 - 1117)	775	8	PVC	3	2003	\$46.00	0.6051	\$27.84	\$21,573.05	\$9,803.18
Totals:				3,848	8" PVC				\$259,599.15	
				26	Manholes				\$84,960.91	

**KIMBERLY KNOLL**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Kimberly Dr (MH 1093 - 1098)	1,195	8	VCP	6	1979	\$135.00	0.2715	\$36.65	\$43,794.88	\$8,795.62
Kimberly Dr (MH 1099 - 1104)	935	8	VCP	6	1979	\$135.00	0.2715	\$36.65	\$34,266.29	\$8,795.62
Jennifer Dr (MH 1095 - 1104)	798	8	VCP	3	1979	\$135.00	0.2715	\$36.65	\$29,245.45	\$4,397.81
Patricia Cir (MH 1092 - 1107)	497	8	VCP	2	1979	\$135.00	0.2715	\$36.65	\$18,214.27	\$2,931.87
Kristin Ct (MH 1108 - 1101)	189	8	VCP	1	1979	\$135.00	0.2715	\$36.65	\$6,926.55	\$1,465.94
Kory Ln (MH 1104 - 1090)	354	8	VCP	1	1979	\$135.00	0.2715	\$36.65	\$12,973.55	\$1,465.94
Totals:				3,968	8" VCP				\$145,420.99	
				19	Manholes				\$27,852.81	





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**MARION AVENUE SEWER EXTENENSION**

STREET	PIPE			MANHOLES	YEAR INSTALLED	2018 PIPE UNIT COST	ENR RATIO	INDEXED UNIT COST2	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL						PIPE COST	MH COST
Marion Ave (MH 1165 - 1043)	904	8	PVC	3	2009	\$128.00	0.7747	\$99.16	\$89,644.90	\$12,550.53
Marion Ave (MH 1043 - 673)	484	8	PVC	3	2009	\$128.00	0.7747	\$99.16	\$47,995.72	\$12,550.53
Totals:				1,388	8" PVC				\$137,640.61	
				6	Manholes				\$25,101.07	

**WHITEHALL ROAD PROJECT**

STREET	PIPE			MANHOLES	YEAR INSTALLED	2018 PIPE UNIT COST	ENR RATIO	INDEXED UNIT COST2	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL						PIPE COST	MH COST
Whitehall Rd (MH 1159 - Whitehall PS)	2,217	8	VCP	10	1980	\$135.00	0.2926	\$39.50	\$87,580.72	\$15,801.66
Whitehall Rd (MH 1160 - 1222)	3,419	8	VCP	15	1980	\$135.00	0.2926	\$39.50	\$135,064.72	\$23,702.50
Whitehall Rd (MH 1175 - 972)	2,143	8	VCP	12	1980	\$135.00	0.2926	\$39.50	\$84,657.41	\$18,962.00
Totals:				7,779	8" VCP				\$307,302.85	
				37	Manholes				\$58,466.15	

**WOODLANDS AT WHITEHALL**

STREET	PIPE			MANHOLES	YEAR INSTALLED	2018 PIPE UNIT COST	ENR RATIO	INDEXED UNIT COST2	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL						PIPE COST	MH COST
Irenic Cir (MH 1431 - 1171A)	614	8	PVC	4	1993	\$128.00	0.4710	\$60.29	\$37,015.40	\$10,173.21
Woodland Ave (MH 1432 - 1168A)	415	8	PVC	4	1993	\$128.00	0.4710	\$60.29	\$25,018.55	\$10,173.21
Totals:				1,029	8" PVC				\$62,033.95	
				8	Manholes				\$20,346.41	

**SUNSET KNOLL**

STREET	PIPE			MANHOLES	YEAR INSTALLED	2018 PIPE UNIT COST	ENR RATIO	INDEXED UNIT COST2	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL						PIPE COST	MH COST
Woodland Ave (MH 1419 - 1422)	681	8	PVC	3	1986	\$128.00	0.3883	\$49.70	\$33,844.38	\$6,289.91
Sunset Ave (MH 1427 - 829)	531	8	PVC	3	1986	\$128.00	0.3883	\$49.70	\$26,389.67	\$6,289.91
James Cir (MH 1425 - 1423)	450	8	PVC	2	1986	\$128.00	0.3883	\$49.70	\$22,364.13	\$4,193.27
Totals:				1,662	8" PVC				\$82,598.18	
				8	Manholes				\$16,773.10	

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**HEATHERWOOD**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Heatherwood Dr (MH 1707 - 1710)	1,406	8	PVC	8	2006	\$128.00	0.7007	\$89.69	\$126,101.24	\$30,269.68
Heatherwood Dr Esmt(MH 1703 - 834)	657	8	PVC	3	2006	\$46.00	0.7007	\$32.23	\$21,176.16	\$11,351.13
Totals:				2,063	8" PVC				\$147,277.41	
				11	Manholes				\$41,620.81	

**LINFOOT WALKER**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Baker Dr (MH 1427 - 1428)	244	8	VCP	1	1985	\$135.00	0.3792	\$51.20	\$12,491.71	\$2,047.82
Baker Dr Esmt (MH 1428 - 838A)	772	8	VCP	4	1985	\$53.00	0.3792	\$20.10	\$15,516.42	\$8,191.29
Totals:				1,016	8" VCP				\$28,008.13	
				5	Manholes				\$10,239.11	

**PIMLICO FARMS**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Bridlepath Rd (MH 1569 - 1554)	656	8	PVC	5	2007	\$128.00	0.7201	\$92.18	\$60,467.28	\$19,443.32
Bridlepath Rd (MH 1554 - 1553)	139	8	DIP	1	2007	\$167.00	0.7201	\$120.26	\$16,716.21	\$3,888.66
Pimlico Dr (MH 1574 - 1567)	1,418	8	PVC	10	2007	\$128.00	0.7201	\$92.18	\$130,705.19	\$38,886.64
Equestrian Wy (MH 1559 - 1556)	274	8	PVC	3	2007	\$128.00	0.7201	\$92.18	\$25,256.15	\$11,665.99
Equestrian Wy Esmt (MH 1556 - 1554)	319	8	PVC	2	2007	\$46.00	0.7201	\$33.13	\$10,567.08	\$7,777.33
Germantown Pike (MH 1553 - 1550)	458	8	PVC	4	2007	\$128.00	0.7201	\$92.18	\$42,216.49	\$15,554.66
Totals:				3,125	8" PVC				\$269,212.20	
				139	8" DIP				\$16,716.21	
				25	Manholes				\$97,216.60	

**EAST NORRITON TOWNSHIP  
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**WHITEHALL ESTATES**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Faith Dr (MH 1614 - 973)	705	8	VCP	3	1985	\$135.00	0.3792	\$51.20	\$36,092.85	\$6,143.46
Faith Dr (MH 1615 - 1622)	702	8	VCP	5	1985	\$135.00	0.3792	\$51.20	\$35,939.27	\$10,239.11
Faith Dr Esmt (MH 1619 - 1183)	354	8	VCP	2	1985	\$53.00	0.3792	\$20.10	\$7,115.04	\$4,095.64
Totals:				1,761	8" VCP				\$79,147.16	
				10	Manholes				\$20,478.21	

**VILLAGE OF CARALEA**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Caralea Dr (MH 1579 - 1624)	1,334	8	PVC	7	2007	\$128.00	0.7201	\$92.18	\$122,962.43	\$27,220.65
Dutch Dr (MH 1580 - 1577)	329	8	PVC	1	2007	\$128.00	0.7201	\$92.18	\$30,325.82	\$3,888.66
Dutch Dr (MH 1586 - 1587)	297	8	PVC	2	2007	\$128.00	0.7201	\$92.18	\$27,376.19	\$7,777.33
Blue Meadow Dr (MH 1585 - 1584)	193	8	PVC	1	2007	\$128.00	0.7201	\$92.18	\$17,789.92	\$3,888.66
Blue Meadow Dr (MH 1584 - 1583)	50	8	DIP	1	2007	\$167.00	0.7201	\$120.26	\$6,013.03	\$3,888.66
Germantown Pike (MH 1576 - 1551)	370	8	PVC	2	2007	\$128.00	0.7201	\$92.18	\$34,105.02	\$7,777.33
Totals:				2,523	8" PVC				\$232,559.38	
				50	8" DIP				\$6,013.03	
				14	Manholes				\$54,441.29	

**NORRITON BUSINESS CAMPUS**

STREET	PIPE			MANHOLES	YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
	LENGTH	SIZE	MATERIAL		INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Potshop Ln (MH 1637 - 1645)	1,324	8	PVC	7	2007	\$128.00	0.7201	\$92.18	\$122,040.68	\$27,220.65
Potshop Ln (MH 1650 - 1647)	572	8	PVC	3	2007	\$128.00	0.7201	\$92.18	\$52,724.52	\$11,665.99
Campus Ln Esmt (MH 1655 - 1651)	1,003	8	PVC	4	2007	\$46.00	0.7201	\$33.13	\$33,225.03	\$15,554.66
Foundry Ln (MH 1535 - 1534)	277	8	PVC	2	2007	\$128.00	0.7201	\$92.18	\$25,532.68	\$7,777.33
Foundry Ln Esmt (MH 1533 - Burnside Ave PS)	2,411	8	PVC	14	2007	\$46.00	0.7201	\$33.13	\$79,865.96	\$54,441.29
Germantown Pike (MH 1624 - Germantown PS)	1,146	8	PVC	8	2007	\$128.00	0.7201	\$92.18	\$105,633.39	\$31,109.31
Totals:				6,733	8" PVC				\$419,022.26	
				38	Manholes				\$147,769.23	

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**STONEBRIDGE ESTATES**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Cresswell Dr (MH 1600 - 1603)	720	8	PVC	3	1994	\$128.00	0.4889	\$62.58	\$45,055.26	\$7,919.87
Crossing Cir (MH 1603 - 1610)	918	8	PVC	5	1994	\$128.00	0.4889	\$62.58	\$57,445.46	\$13,199.78
Crossing Cir (MH 1608 - 1610)	436	8	PVC	2	1994	\$128.00	0.4889	\$62.58	\$27,283.46	\$5,279.91
Crossing Cir (1610 - 959)	407	8	DIP	2	1994	\$167.00	0.4889	\$81.64	\$33,228.74	\$5,279.91
Totals:				2,074	8" PVC				\$129,784.18	
				407	8" DIP				\$33,228.74	
				12	Manholes				\$31,679.48	

**ELIZABETH MYERS**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Embassy Cir (MH 1631 - 1634)	683	8	VCP	3	1985	\$135.00	0.3792	\$51.20	\$34,966.55	\$6,143.46
Embassy Cir Esmt (MH 1634 - 770)	452	8	VCP	3	1985	\$135.00	0.3792	\$51.20	\$23,140.38	\$6,143.46
Rosa Ln (MH 1635B - 1635)	279	8	PVC	2	2000	\$128.00	0.5624	\$71.98	\$20,083.56	\$6,073.66
Totals:				1,135	8" VCP				\$58,106.93	
				279	8" PVC				\$20,083.56	
				8	Manholes				\$18,360.59	

**GLEN MOORE**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Sunset Ave (MH 1428 - 1656)	199	8	VCP	1	1978	\$135.00	0.2509	\$33.88	\$6,741.75	\$1,355.13
Marna Court (MH 1656 - 1658)	675	8	VCP	2	1978	\$135.00	0.2509	\$33.88	\$22,867.75	\$2,710.25
Marna Court Esmt (MH 1658 - 773)	435	8	VCP	2	1978	\$53.00	0.2509	\$13.30	\$5,785.63	\$2,710.25
Totals:				1,309	8" VCP				\$35,395.13	
				5	Manholes				\$6,775.63	

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**WOODLAND MANOR**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Green Ridge Dr Esmt (MH 1045 - 1044)	153	8	VCP	1	1975	\$53.00	0.1909	\$10.12	\$1,548.20	\$1,030.99
Green Ridge Dr (MH 1044 - 1035)	1,890	8	VCP	10	1975	\$135.00	0.1909	\$25.77	\$48,714.23	\$10,309.89
Bunting Rd (MH 1034 - 1038)	241	8	VCP	1	1975	\$135.00	0.1909	\$25.77	\$6,211.71	\$1,030.99
Totals:				2,284	8" VCP				\$56,474.14	
				12	Manholes				\$12,371.87	

**NICK & LES**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Green Ridge Dr (MH 1035 - 1450)	926	8	PVC	5	1996	\$128.00	0.5080	\$65.03	\$60,217.62	\$13,717.23
Brambling Ln (MH 1450 - 1449)	203	8	PVC	1	1996	\$128.00	0.5080	\$65.03	\$13,201.06	\$2,743.45
Brambling Ln Esmt (MH 1449 - 851)	816	8	PVC	3	1996	\$46.00	0.5080	\$23.37	\$19,070.00	\$8,230.34
Brambling Ln Esmt (MH 1447 - 1445)	307	8	PVC	2	1996	\$46.00	0.5080	\$23.37	\$7,174.62	\$5,486.89
Totals:				2,252	8" PVC				\$99,663.30	
				11	Manholes				\$30,177.91	

**TANGLEWOOD**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Tanglewood Ln (MH 1508 - 1511)	883	8	VCP	3	1975	\$135.00	0.1909	\$25.77	\$22,759.08	\$3,092.97
Tanglewood Ln Esmt (MH 1511 - 928)	273	8	VCP	3	1975	\$53.00	0.1909	\$10.12	\$2,762.48	\$3,092.97
Tanglewood Ln (MH 1504 - 1497)	1,234	8	VCP	7	1975	\$135.00	0.1909	\$25.77	\$31,806.01	\$7,216.92
Tanglewood Ln Esmt (MH 1500 - 987)	232	8	VCP	1	1975	\$53.00	0.1909	\$10.12	\$2,347.60	\$1,030.99
Potshop Rd (MH 987 - 978)	386	8	VCP	2	1975	\$135.00	0.1909	\$25.77	\$9,949.04	\$2,061.98
Totals:				3,008	8" VCP				\$69,624.21	
				16	Manholes				\$16,495.82	

**VALLEY FORGE GREENE**

	PIPE				YEAR	2018 PIPE	ENR	INDEXED	TOTAL	TOTAL
STREET	LENGTH	SIZE	MATERIAL	MANHOLES	INSTALLED	UNIT COST	RATIO	UNIT COST2	PIPE COST	MH COST
Tanglewood Ct Esmt (MH 1507 - 1504)	534	8	PVC	3	1996	\$46.00	0.5080	\$23.37	\$12,479.63	\$8,230.34
Totals:				534	8" PVC				\$12,479.63	
				3	Manholes				\$8,230.34	







#### 4. ORIGINAL CONSTRUCTION COSTS

4.1 The following table summarizes original construction costs available at the time of the report and indicates the sources for this information.

DESCRIPTION	YEAR	COST	SOURCE
Sewer District No. 1 - includes both Phase I & II sewer mains, and the three Stony Creek Pump Stations	1960 - 1970	\$2,100,000.00	Helmuth J.H. Baerwald report
Estimated Whitehall Road Pump Station Construction Cost	1970 - 1979	\$68,000.00	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
Estimated Schultz Road Pump Station Construction Cost	1970 - 1979	\$73,000.00	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
Estimated Felton Road Pump Station Construction Cost	1970 - 1979	\$68,000.00	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
Estimated Sandra Lane Pump Station Construction Cost	1975	\$88,000.00	Replacement cost from 2015 Comprehensive Report, adjusted by ENR CCI
Whitehall Road Sewer Project (gravity sewer extension)	1980	\$765,000.00	Helmuth J.H. Baerwald report
Sandra Lane Pump Station Upgrade	1985	\$74,488.00	Helmuth J.H. Baerwald report
Burnside Road Pump Station Construction	1994	\$387,638.01	3/13/96 Ltr. From Robert E. Blue, Consulting Engineers, P.C.
Pump Station Rehabilitation - pump and generator replacement at the three Stony Creek Pump Stations	1996	\$2,450,913.00	Helmuth J.H. Baerwald report
Schultz Road Pump Station Repairs	1999	\$24,000.00	Helmuth J.H. Baerwald report
Whitehall Pump Station Repairs	1999	\$6,925.76	Helmuth J.H. Baerwald report
Timberlake wet well enclosure and air filter	1999	\$47,500.00	Helmuth J.H. Baerwald report

Germantown Pump Station Force Main Sliplining	2011	\$619,500.00	Damage Analysis table
Einstein Pump Station	2012	\$3,281,205.00	Escrow report
Germantown Pump Station Parallel Force Main	2013	\$298,095.84	Payment Application
Estimated Whitehall Pump Station Submersible Pump Cost	2014 - 2015	\$5,800.00	Est. cost for pump
Whitehall Road Packaged Pump Station Procurement	2018	\$35,769.00	Payment Application

4.2 The following tables contain the Summaries of Original Construction Costs, broken down by NARUC Account. These tables use the prices listed in the table in Paragraph 4.1 in conjunction with estimated costs, which have been indexed to the installation year using the ENR Construction Cost Index.

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost

Acct. No.	Description	Original Cost
<u>Non-Depreciable</u>		
353.10	Pump Station Land/Land Rights	\$ 275
		-----
<b>Total Non-Depreciable Plant</b>		<b>\$ 275</b>
<u>Depreciable</u>		
354.10	Structure - Pump Station	\$ 2,350,000
355.00	Power Generator Equipment	\$ 472,449
<u>Collection Mains - Force</u>		
360.10	Collection Mains, Force - 4" - 16" CIP	\$ 395,977
360.20	Collection Mains, Force - 6" PVC	\$ 117,615
360.30	Collection Mains, Force - 6" DIP	\$ 244,256
		-----
Total Account 360		\$ 757,848
<u>Collection Mains - Gravity</u>		
361.10	Collection Mains, Gravity - 8" - 15" VCP	\$ 3,753,088
361.20	Collection Mains, Gravity - 8" - 10" CIP	\$ 4,498
361.30	Collection Mains, Gravity - 8" PVC	\$ 2,524,435
361.40	Collection Mains, Gravity - 8" DIP	\$ 61,436
361.50	Collection Mains, Gravity - 18" - 24" RCP	\$ 68,798
361.60	Collection Mains, Gravity - 8" Unknown	\$ 64,852
361.70	Manholes	\$ 1,573,326
		-----
Total Account 361		\$ 8,050,433
363.00	Service Laterals	\$ 1,790,222
364.00	Flow Meter	\$ 201,724
371.00	Pumping Equipment	\$ 2,388,085
396.00	Communication Equipment	\$ 201,724
		-----
<b>Total Non-Depreciable Plant</b>		<b>\$ 16,212,485</b>
Total Plant		<b>\$ 16,212,760</b>

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 353.10 - Pump Station Land/Land Rights

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
Stony Creek No. 1 (Timberlake) Pump Station	1963	Lot	1	\$1.00	\$ 1.00
Stony Creek No. 2 (Norris City) Pump Station	1963	Lot	1	\$1.00	\$ 1.00
Stony Creek No. 3 (Germantown) Pump Station	1963	Lot	1	\$1.00	\$ 1.00
Sandra Lane Pump Station	1981	Lot	1	\$1.00	\$ 1.00
Burnside Avenue Pump Station	1995	Lot	1	\$1.00	\$ 1.00
Schultz Road Pump Station	1981	Lot	1	\$1.00	\$ 1.00
Whitehall Road Pump Station	1982	Lot	1	\$1.00	\$ 1.00
Felton Road Pump Station	1975	Easement	1	\$1.00	\$ 1.00
Einstein	2012	Lot	1	\$1.00	\$ 1.00
Easements (year installed is average age of sewer system)	1971	Easement	266	\$1.00	\$ 266.00
Total Account 353.10					<u><u>\$ 275.00</u></u>

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 354.10 - Structure - Pump Station

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
Stony Creek No. 1 (Timberlake) Pump Station	1960	LS	1	\$86,000.00	\$ 86,000.00
Stony Creek No. 2 (Norris City) Pump Station	1960	LS	1	\$127,000.00	\$ 127,000.00
Stony Creek No. 3 (Germantown) Pump Station	1960	LS	1	\$62,000.00	\$ 62,000.00
Sandra Lane Pump Station	1975	LS	1	\$67,000.00	\$ 67,000.00
Burnside Avenue Pump Station	1994	LS	1	\$310,000.00	\$ 310,000.00
Schultz Road Pump Station	1975	LS	1	\$55,000.00	\$ 55,000.00
Whitehall Road Pump Station	1975	LS	1	\$52,000.00	\$ 52,000.00
Felton Road Pump Station	1975	LS	1	\$52,000.00	\$ 52,000.00
Einstein	2012	LS	1	\$1,539,000.00	\$ 1,539,000.00
Total Account 354.10					\$ 2,350,000.00

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 355.00 - Power Generator Equipment

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
Stony Creek No. 1 (Timberlake) Pump Station	1960	LS	1	\$8,000.00	\$ 8,000.00
1996 Upgrade	1996	LS	1	\$77,000.00	\$ 77,000.00
Stony Creek No. 2 (Norris City) Pump Station	1960	LS	1	\$12,000.00	\$ 12,000.00
1996 Upgrade	1996	LS	1	\$113,000.00	\$ 113,000.00
Stony Creek No. 3 (Germantown) Pump Station	1960	LS	1	\$6,000.00	\$ 6,000.00
1996 Upgrade	1996	LS	1	\$55,000.00	\$ 55,000.00
Sandra Lane Pump Station	1975	LS	1	\$6,000.00	\$ 6,000.00
1985 Upgrade	1985	LS	1	\$7,449.00	\$ 7,449.00
Burnside Avenue Pump Station	1994	LS	1	\$29,000.00	\$ 29,000.00
Schultz Road Pump Station	1975	LS	1	\$5,000.00	\$ 5,000.00
Whitehall Road Pump Station	1975	LS	1	\$5,000.00	\$ 5,000.00
Felton Road Pump Station	1975	LS	1	\$5,000.00	\$ 5,000.00
Einstein	2012	LS	1	\$144,000.00	\$ 144,000.00
Total Account 355.00					\$ 472,449.00

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 363.00 - Service Laterals

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
4" VCP Laterals in the cartway (3,715 connections @ 15 ft long)	1971	LF	55,725	\$16.15	\$ 899,958.75
4" VCP Laterals out of the cartway (3,715 connections @ 10 ft long)	1971	LF	37,150	\$5.28	\$ 196,152.00
6" VCP Laterals in the cartway (650 connections @ 15 ft long)	1971	LF	9,750	\$16.72	\$ 163,020.00
6" VCP Laterals out of the cartway (650 connections @ 10 ft long)	1971	LF	6,500	\$5.86	\$ 38,090.00
4" PVC Laterals in the cartway (485 connections @ 15 ft long)	1990	LF	7,275	\$46.20	\$ 336,105.00
4" PVC Laterals out of the cartway (485 connections @ 10 ft long)	1990	LF	4,850	\$13.69	\$ 66,396.50
6" PVC Laterals in the cartway (105 connections @ 15 ft long)	1990	LF	1,575	\$47.48	\$ 74,781.00
6" PVC Laterals out of the cartway (105 connections @ 10 ft long)	1990	LF	1,050	\$14.97	\$ 15,718.50
Total Account 363.00					\$ 1,790,221.75

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 364.00 - Flow Meter

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
Stony Creek No. 1 (Timberlake) Pump Station	1960	LS	1	\$3,000.00	\$ 3,000.00
1996 Upgrade	1996	LS	1	\$38,000.00	\$ 38,000.00
Stony Creek No. 2 (Norris City) Pump Station	1960	LS	1	\$4,000.00	\$ 4,000.00
1996 Upgrade	1996	LS	1	\$57,000.00	\$ 57,000.00
Stony Creek No. 3 (Germantown) Pump Station	1960	LS	1	\$2,000.00	\$ 2,000.00
1996 Upgrade	1996	LS	1	\$28,000.00	\$ 28,000.00
Sandra Lane Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
1985 Upgrade	1985	LS	1	\$3,724.00	\$ 3,724.00
Burnside Avenue Pump Station	1994	LS	1	\$10,000.00	\$ 10,000.00
Schultz Road Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
Whitehall Road Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
Felton Road Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
Einstein	2012	LS	1	\$48,000.00	\$ 48,000.00
Total Account 364.00					<u>\$ 201,724.00</u>



**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 371.00 - Pumping Equipment

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
Stony Creek No. 1 (Timberlake) Pump Station 1996 Upgrade	1960	LS	1	\$11,000.00	\$ 11,000.00
	1996	LS	1	\$614,000.00	\$ 614,000.00
Stony Creek No. 2 (Norris City) Pump Station 1996 Upgrade	1960	LS	1	\$16,000.00	\$ 16,000.00
	1996	LS	1	\$907,000.00	\$ 907,000.00
Stony Creek No. 3 (Germantown) Pump Station 1996 Upgrade	1960	LS	1	\$8,000.00	\$ 8,000.00
	1996	LS	1	\$440,000.00	\$ 440,000.00
Sandra Lane Pump Station 1985 Upgrade	1975	LS	1	\$8,000.00	\$ 8,000.00
	1985	LS	1	\$59,590.00	\$ 59,590.00
Burnside Avenue Pump Station	1994	LS	1	\$39,000.00	\$ 39,000.00
Schultz Road Pump Station 1999 Pumps replaced	1975	LS	1	\$7,000.00	\$ 7,000.00
	1999	LS	1	\$24,000.00	\$ 24,000.00
Whitehall Road Pump Station 1999 Repairs 2014 Pump replacement 2018 Procurement of packaged station (not installed)	1975	LS	1	\$7,000.00	\$ 7,000.00
	1999	LS	1	\$6,926.00	\$ 6,926.00
	2014	LS	1	\$5,800.00	\$ 5,800.00
	2018	LS	1	\$35,769.00	\$ 35,769.00
Felton Road Pump Station	1975	LS	1	\$7,000.00	\$ 7,000.00
Einstein	2012	LS	1	\$192,000.00	\$ 192,000.00
Total Account 371.00					\$ 2,388,085.00

**East Norriton Township  
Sanitary Sewer System**

Summary of Original Cost  
Account 396.00 - Communication Equipment

Item	Year Installed	Unit	Qty	Unit Cost	Total Cost
Stony Creek No. 1 (Timberlake) Pump Station 1996 Upgrade	1960	LS	1	\$3,000.00	\$ 3,000.00
	1996	LS	1	\$38,000.00	\$ 38,000.00
Stony Creek No. 2 (Norris City) Pump Station 1996 Upgrade	1960	LS	1	\$4,000.00	\$ 4,000.00
	1996	LS	1	\$57,000.00	\$ 57,000.00
Stony Creek No. 3 (Germantown) Pump Station 1996 Upgrade	1960	LS	1	\$2,000.00	\$ 2,000.00
	1996	LS	1	\$28,000.00	\$ 28,000.00
Sandra Lane Pump Station 1985 Upgrade	1975	LS	1	\$2,000.00	\$ 2,000.00
	1985	LS	1	\$3,724.00	\$ 3,724.00
Burnside Avenue Pump Station	1994	LS	1	\$10,000.00	\$ 10,000.00
Schultz Road Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
Whitehall Road Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
Felton Road Pump Station	1975	LS	1	\$2,000.00	\$ 2,000.00
Einstein	2012	LS	1	\$48,000.00	\$ 48,000.00
Total Account 396.00					\$ 201,724.00

**EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
ASSET INVENTORY REPORT**

**FORCE MAINS**

PUMP STATION	PIPE			YEAR	2018	ENR	INDEXED	TOTAL
	LENGTH	SIZE	MATERIAL	INSTALLED	UNIT COST	RATIO	UNIT COST2	COST
Stony Creek No. 1 (Timberlake)	1,704	12	CIP	1960 - 1965	\$233.00	0.0815	\$18.98	\$32,338.26
Stony Creek No. 2 (Norris City)	3,757	16	CIP	1960 - 1965	\$265.00	0.0815	\$21.58	\$81,092.04
Stony Creek No. 3 (Germantown)	4,872	12	CIP (Sliplined)	1960 - 1965 (Sliplined 2011)	\$233.00	0.0815	\$18.98	\$92,460.10
Stony Creek No. 3 (Germantown)	931	6	DIP	2012				\$104,470.56
Felton Road	441	4	CIP	1970 - 1979	\$152.00	0.2000	\$30.39	\$13,403.98
Sandra Lane	2,671	4	CIP	1975	\$152.00	0.2000	\$30.39	\$81,183.72
Burnside Road	2,092	6	PVC	1994	\$115.00	0.4889	\$56.22	\$117,614.96
Schultz Road	2,343	4	CIP	1970 - 1979	\$152.00	0.2000	\$30.39	\$71,214.32
Whitehall Rd	799	4	CIP	1970 - 1979	\$152.00	0.2000	\$30.39	\$24,285.21
Einstein	2,286	6	DIP	2012				\$139,785.00

Totals:	6,254	4" CIP	\$190,087.23
	3,217	6" DIP	\$244,255.56
	2,092	6" PVC	\$117,614.96
	1,704	12" CIP	\$32,338.26
	4,872	12" CIP (sliplined)	\$92,460.10
	3,757	16" CIP	\$81,092.04

**APPENDIX A**

CONSTRUCTION COST INDEX AND  
ESTIMATED UNIT COSTS

**ENR'S CONSTRUCTION COST INDEX HISTORY (1908-2018)**

<b>YEAR</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>AVG.</b>
<b>2018</b>	10878	10889	10959	10971	11013	11069	11116	11124	11170	11183	11184	11186	11062
<b>2017</b>	10542	10559	10667	10678	10692	10703	10789	10826	10823	10817	10870	10873	10737
<b>2016</b>	10132	10181	10242	10279	10315	10337	10379	10385	10403	10434	10442	10530	10338
<b>2015</b>	9972	9962	9972	9992	9975	10039	10037	10039	10065	10128	10092	10152	10035
<b>2014</b>	9664	9681	9702	9750	9796	9800	9835	9846	9870	9886	9912	9936	9806
<b>2013</b>	9437	9453	9456	9484	9516	9542	9552	9545	9552	9689	9666	9668	9547
<b>2012</b>	9176	9198	9268	9273	9290	9291	9324	9351	9341	9376	9398	9412	9308
<b>2011</b>	8938	8998	9011	9027	9035	9053	9080	9088	9116	9147	9173	9172	9070
<b>2010</b>	8660	8672	8671	8677	8761	8805	8844	8837	8836	8921	8951	8952	8799
<b>2009</b>	8549	8533	8534	8528	8574	8578	8566	8564	8586	8596	8592	8641	8570
<b>2008</b>	8090	8094	8109	8112	8141	8185	8293	8362	8557	8623	8602	8551	8310
<b>2007</b>	7880	7880	7856	7865	7942	7939	7959	8007	8050	8045	8092	8089	7966
<b>2006</b>	7660	7689	7692	7695	7691	7700	7721	7722	7763	7883	7911	7888	7751
<b>2005</b>	7297	7298	7309	7355	7398	7415	7422	7479	7540	7563	7630	7647	7446
<b>2004</b>	6825	6862	6957	7017	7065	7109	7126	7188	7298	7314	7312	7308	7115
<b>2003</b>	6581	6640	6627	6635	6642	6694	6695	6733	6741	6771	6794	6782	6694
<b>2002</b>	6462	6462	6502	6480	6512	6532	6605	6592	6589	6579	6578	6563	6538
<b>2001</b>	6281	6272	6279	6286	6288	6318	6404	6389	6391	6397	6410	6390	6343
<b>2000</b>	6130	6160	6202	6201	6233	6238	6225	6233	6224	6259	6266	6283	6221
<b>1999</b>	6000	5992	5986	6008	6006	6039	6076	6091	6128	6134	6127	6127	6059
<b>1998</b>	5852	5874	5875	5883	5881	5895	5921	5929	5963	5986	5995	5991	5920
<b>1997</b>	5765	5769	5759	5799	5837	5860	5863	5854	5851	5848	5838	5858	5826
<b>1996</b>	5523	5532	5537	5550	5572	5597	5617	5652	5683	5719	5740	5744	5620
<b>1995</b>	5443	5444	5435	5432	5433	5432	5484	5506	5491	5511	5519	5524	5471
<b>1994</b>	5336	5371	5381	5405	5405	5408	5409	5424	5437	5437	5439	5439	5408
<b>1993</b>	5071	5070	5106	5167	5262	5260	5252	5230	5255	5264	5278	5310	5210
<b>1992</b>	4888	4884	4927	4946	4965	4973	4992	5032	5042	5052	5058	5059	4985
<b>1991</b>	4777	4773	4772	4766	4801	4818	4854	4892	4891	4892	4896	4889	4835
<b>1990</b>	4680	4685	4691	4693	4707	4732	4734	4752	4774	4771	4787	4777	4732

**ANNUAL AVERAGE For ENR'S CONSTRUCTION COST INDEX**

<b>YEAR</b>	<b>AVG</b>	<b>YEAR</b>	<b>AVG</b>	<b>YEAR</b>	<b>AVG</b>	<b>YEAR</b>	<b>AVG</b>
<b>1989</b>	4615	<b>1988</b>	4519	<b>1987</b>	4406	<b>1986</b>	4295
<b>1985</b>	4195	<b>1984</b>	4146	<b>1983</b>	4066	<b>1982</b>	3825
<b>1981</b>	3535	<b>1980</b>	3237	<b>1979</b>	3003	<b>1978</b>	2776
<b>1977</b>	2576	<b>1976</b>	2401	<b>1975</b>	2212	<b>1974</b>	2020
<b>1973</b>	1895	<b>1972</b>	1753	<b>1971</b>	1581	<b>1970</b>	1381
<b>1969</b>	1269	<b>1968</b>	1155	<b>1967</b>	1074	<b>1966</b>	1019
<b>1965</b>	971	<b>1964</b>	936	<b>1963</b>	901	<b>1962</b>	872
<b>1961</b>	847	<b>1960</b>	824	<b>1959</b>	797	<b>1958</b>	759
<b>1957</b>	724	<b>1956</b>	692	<b>1955</b>	660	<b>1954</b>	628
<b>1953</b>	600	<b>1952</b>	569	<b>1951</b>	543	<b>1950</b>	510
<b>1949</b>	477	<b>1948</b>	461	<b>1947</b>	413	<b>1946</b>	346
<b>1945</b>	308	<b>1944</b>	299	<b>1943</b>	290	<b>1942</b>	276
<b>1941</b>	258	<b>1940</b>	242	<b>1939</b>	236	<b>1938</b>	236
<b>1937</b>	235	<b>1936</b>	206	<b>1935</b>	196	<b>1934</b>	198
<b>1933</b>	170	<b>1932</b>	157	<b>1931</b>	181	<b>1930</b>	203
<b>1929</b>	207	<b>1928</b>	207	<b>1927</b>	206	<b>1926</b>	208
<b>1925</b>	207	<b>1924</b>	215	<b>1923</b>	214	<b>1922</b>	174
<b>1921</b>	202	<b>1920</b>	251	<b>1919</b>	198	<b>1918</b>	189
<b>1917</b>	181	<b>1916</b>	130	<b>1915</b>	93	<b>1914</b>	89
<b>1913</b>	100	<b>1912</b>	91	<b>1911</b>	93	<b>1910</b>	96
<b>1909</b>	91	<b>1908</b>	97				

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 8" diameter gravity sewer in roadways					\$ 115.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.148	\$ 6.44
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.783	\$ 17.83
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
8" DIP gravity main located in roadways					\$ 167.00
8" DIP	33 14 13.15 2060	LF	\$ 52.00	1.000	\$ 52.00
Excavation, testing and restoration		LS	\$ 115.00	1.000	\$ 115.00
8" PVC gravity main located in roadways					\$ 128.00
8" SDR-35 PVC	33 31 13.25 2080	LF	\$ 12.25	1.000	\$ 12.25
Excavation, testing and restoration		LS	\$ 115.00	1.000	\$ 115.00
8" CIP gravity main located in roadways					\$ 225.00
8" CIP	33 31 11.13 2028	LF	\$ 110.00	1.000	\$ 110.00
Excavation, testing and restoration		LS	\$ 115.00	1.000	\$ 115.00
8" VCP gravity main located in roadways					\$ 135.00
8" VCP	33 31 11.30 5040	LF	\$ 19.35	1.000	\$ 19.35
Excavation, testing and restoration		LS	\$ 115.00	1.000	\$ 115.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 8" diameter gravity sewer out of roadways					\$ 33.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.147	\$ 6.39
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.321	\$ 4.00
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.160	\$ 1.54
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
8" DIP gravity main located out of roadways					\$ 85.00
8" DIP	33 14 13.15 2060	LF	\$ 52.00	1.000	\$ 52.00
Excavation, testing and restoration		LS	\$ 33.00	1.000	\$ 33.00
8" PVC gravity main located out of roadways					\$ 46.00
8" SDR-35 PVC	33 31 13.25 2080	LF	\$ 12.25	1.000	\$ 12.25
Excavation, testing and restoration		LS	\$ 33.00	1.000	\$ 33.00
8" CIP gravity main located out of roadways					\$ 143.00
8" CIP	33 31 11.13 2028	LF	\$ 110.00	1.000	\$ 110.00
Excavation, testing and restoration		LS	\$ 33.00	1.000	\$ 33.00
8" VCP gravity main located out of roadways					\$ 53.00
8" VCP	33 31 11.30 5040	LF	\$ 19.35	1.000	\$ 19.35
Excavation, testing and restoration		LS	\$ 33.00	1.000	\$ 33.00



EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 10" diameter gravity sewer in roadways					\$ 116.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.167	\$ 7.26
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.747	\$ 17.47
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
10" CIP gravity main located in roadways					\$ 273.00
10" CIP	33 31 11.13 2030	LF	\$ 157.00	1.000	\$ 157.00
Excavation, testing and restoration		LS	\$ 116.00	1.000	\$ 116.00
10" VCP gravity main located in roadways					\$ 143.00
10" VCP	33 31 11.30 5060	LF	\$ 26.50	1.000	\$ 26.50
Excavation, testing and restoration		LS	\$ 116.00	1.000	\$ 116.00
Excavation, testing, and restoration for 10" diameter gravity sewer out of roadways					\$ 34.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.167	\$ 7.26
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.294	\$ 3.92
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.187	\$ 1.80
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
10" CIP gravity main located out of roadways					\$ 191.00
10" CIP	33 31 11.13 2030	LF	\$ 157.00	1.000	\$ 157.00
Excavation, testing and restoration		LS	\$ 34.00	1.000	\$ 34.00
10" VCP gravity main located out of roadways					\$ 61.00
10" VCP	33 31 11.30 5060	LF	\$ 26.50	1.000	\$ 26.50
Excavation, testing and restoration		LS	\$ 34.00	1.000	\$ 34.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 12" diameter gravity sewer in roadways					\$ 116.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.187	\$ 8.13
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.708	\$ 17.08
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
12" VCP gravity main located in roadways					\$ 149.00
12" VCP	33 31 11.30 5080	LF	\$ 33.00	1.000	\$ 33.00
Excavation, testing and restoration		LS	\$ 116.00	1.000	\$ 116.00
Excavation, testing, and restoration for 12" diameter gravity sewer out of roadways					\$ 35.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.187	\$ 8.13
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.265	\$ 3.83
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.216	\$ 2.07
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
12" VCP gravity main located out of roadways					\$ 68.00
12" VCP	33 31 11.30 5080	LF	\$ 33.00	1.000	\$ 33.00
Excavation, testing and restoration		LS	\$ 35.00	1.000	\$ 35.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 15" diameter gravity sewer in roadways					\$ 117.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.218	\$ 9.48
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.645	\$ 16.45
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
15" VCP gravity main located in roadways					\$ 171.00
15" VCP	33 31 11.30 5100	LF	\$ 54.00	1.000	\$ 54.00
Excavation, testing and restoration		LS	\$ 117.00	1.000	\$ 117.00
Excavation, testing, and restoration for 15" diameter gravity sewer out of roadways					\$ 36.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.218	\$ 9.48
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.218	\$ 3.69
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.263	\$ 2.52
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
15" VCP gravity main located out of roadways					\$ 90.00
15" VCP	33 31 11.30 5100	LF	\$ 54.00	1.000	\$ 54.00
Excavation, testing and restoration		LS	\$ 36.00	1.000	\$ 36.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 18" diameter gravity sewer in roadways					\$ 118.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.249	\$ 10.83
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.575	\$ 15.75
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
18" RCP gravity main located in roadways					\$ 160.00
18" RCP	33 42 11.60 2230	LF	\$ 42.00	1.000	\$ 42.00
Excavation, testing and restoration		LS	\$ 118.00	1.000	\$ 118.00
Excavation, testing, and restoration for 18" diameter gravity sewer out of roadways					\$ 38.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.249	\$ 10.83
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.167	\$ 3.54
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.314	\$ 3.01
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
18" RCP gravity main located out of roadways					\$ 80.00
18" RCP	33 42 11.60 2230	LF	\$ 42.00	1.000	\$ 42.00
Excavation, testing and restoration		LS	\$ 38.00	1.000	\$ 38.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 21" diameter gravity sewer in roadways					\$ 118.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.282	\$ 12.27
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.499	\$ 14.99
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
21" RCP gravity main located in roadways					\$ 163.00
21" RCP	33 42 11.60 2235	LF	\$ 45.00	1.000	\$ 45.00
Excavation, testing and restoration		LS	\$ 118.00	1.000	\$ 118.00
Excavation, testing, and restoration for 21" diameter gravity sewer out of roadways					\$ 40.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.282	\$ 12.27
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.110	\$ 3.36
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.371	\$ 3.56
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
21" RCP gravity main located out of roadways					\$ 85.00
21" RCP	33 42 11.60 2235	LF	\$ 45.00	1.000	\$ 45.00
Excavation, testing and restoration		LS	\$ 40.00	1.000	\$ 40.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 24" diameter gravity sewer in roadways					\$ 119.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.316	\$ 13.75
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.417	\$ 14.17
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.481	\$ 14.22
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
24" RCP gravity main located in roadways					\$ 176.00
24" RCP	33 42 11.60 2240	LF	\$ 57.00	1.000	\$ 57.00
Excavation, testing and restoration		LS	\$ 119.00	1.000	\$ 119.00
Excavation, testing, and restoration for 24" diameter gravity sewer out of roadways					\$ 42.00
Excavate Trench (8' deep)	31 23 16.13 0110	CY	\$ 6.35	1.481	\$ 9.40
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.316	\$ 13.75
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	1.049	\$ 3.18
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.432	\$ 4.15
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Televising	Bid results	LF	\$ 2.00	1.000	\$ 2.00
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
24" RCP gravity main located out of roadways					\$ 99.00
24" RCP	33 42 11.60 2240	LF	\$ 57.00	1.000	\$ 57.00
Excavation, testing and restoration		LS	\$ 42.00	1.000	\$ 42.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 4" diameter gravity laterals in roadways					\$ 101.00
Excavate Trench (6' deep)	31 23 16.13 0110	CY	\$ 6.35	1.111	\$ 7.05
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.110	\$ 4.79
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.347	\$ 13.47
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.111	\$ 10.67
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
4" VCP lateral piping located in roadways					\$ 113.00
4" VCP	33 31 11.30 5000	LF	\$ 11.65	1.000	\$ 11.65
Excavation, testing and restoration		LS	\$ 101.00	1.000	\$ 101.00
4" PVC lateral piping located in roadways					\$ 108.00
4" PVC	33 31 11.25 2000	LF	\$ 6.15	1.000	\$ 6.15
Excavation, testing and restoration		LS	\$ 101.00	1.000	\$ 101.00
Excavation, testing, and restoration for 4" diameter gravity laterals out of roadways					\$ 25.00
Excavate Trench (6' deep)	31 23 16.13 0110	CY	\$ 6.35	1.111	\$ 7.05
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.110	\$ 4.79
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	0.998	\$ 3.02
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.113	\$ 1.08
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
4" VCP lateral piping located out of roadways					\$ 37.00
4" VCP	33 31 11.30 5000	LF	\$ 11.65	1.000	\$ 11.65
Excavation, testing and restoration		LS	\$ 25.00	1.000	\$ 25.00
4" PVC lateral piping located out of roadways					\$ 32.00
4" PVC	33 31 11.25 2000	LF	\$ 6.15	1.000	\$ 6.15
Excavation, testing and restoration		LS	\$ 25.00	1.000	\$ 25.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 6" diameter gravity laterals in roadways					\$ 102.00
Excavate Trench (6' deep)	31 23 16.13 0110	CY	\$ 6.35	1.111	\$ 7.05
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.129	\$ 5.61
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.317	\$ 13.17
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.111	\$ 10.67
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
6" VCP lateral piping located in roadways					\$ 117.00
6" VCP	33 31 11.30 5020	LF	\$ 15.00	1.000	\$ 15.00
Excavation, testing and restoration		LS	\$ 102.00	1.000	\$ 102.00
6" PVC lateral piping located out of roadways					\$ 111.00
6" PVC	33 31 11.25 2040	LF	\$ 8.50	1.000	\$ 8.50
Excavation, testing and restoration		LS	\$ 102.00	1.000	\$ 102.00
Excavation, testing, and restoration for 6" diameter gravity laterals out of roadways					\$ 26.00
Excavate Trench (6' deep)	31 23 16.13 0110	CY	\$ 6.35	1.111	\$ 7.05
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.129	\$ 5.61
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/suitable materials	31 23 16.13 3020	CY	\$ 3.03	0.975	\$ 2.95
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.136	\$ 1.31
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Finish grading & seeding	32 91 19.13 0900	SY	\$ 3.92	1.111	\$ 4.36
6" VCP lateral piping located out of roadways					\$ 41.00
6" VCP	33 31 11.30 5020	LF	\$ 15.00	1.000	\$ 15.00
Excavation, testing and restoration		LS	\$ 26.00	1.000	\$ 26.00
6" PVC lateral piping located in roadways					\$ 35.00
6" PVC	33 31 11.25 2040	LF	\$ 8.50	1.000	\$ 8.50
Excavation, testing and restoration		LS	\$ 26.00	1.000	\$ 26.00



EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 4" diameter force mains					\$ 95.00
Excavate Trench (4.83' deep)	31 23 16.13 0110	CY	\$ 6.35	0.894	\$ 5.68
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.110	\$ 4.79
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.055	\$ 10.55
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.894	\$ 8.58
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
4" DIP force mains					\$ 152.00
4" DIP	33 14 13.15 2020	LF	\$ 57.00	1.000	\$ 57.00
Excavation, testing and restoration		LS	\$ 95.00	1.000	\$ 95.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 6" diameter force mains					\$ 96.00
Excavate Trench (5' deep)	31 23 16.13 0110	CY	\$ 6.35	0.926	\$ 5.88
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.129	\$ 5.61
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.067	\$ 10.67
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	0.926	\$ 8.89
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
6" DIP force mains					\$ 166.00
6" DIP	33 14 13.15 2020	LF	\$ 69.50	1.000	\$ 69.50
Excavation, testing and restoration		LS	\$ 96.00	1.000	\$ 96.00
6" PVC force mains					\$ 115.00
6" PVC	33 14 13.25 4530	LF	\$ 18.35	1.000	\$ 18.35
Excavation, testing and restoration		LS	\$ 96.00	1.000	\$ 96.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 12" diameter force mains					\$ 101.00
Excavate Trench (5.5' deep)	31 23 16.13 0110	CY	\$ 6.35	1.019	\$ 6.47
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.187	\$ 8.13
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.083	\$ 10.83
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.019	\$ 9.78
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
12" DIP force mains					\$ 233.00
12" DIP	33 14 13.25 2100	LF	\$ 132.00	1.000	\$ 132.00
Excavation, testing and restoration		LS	\$ 101.00	1.000	\$ 101.00

EAST NORRITON TOWNSHIP  
SANITARY SEWER SYSTEM  
UNIT PRICES IN 2018 DOLLARS

Description	Source / Means No.	Unit	Unit Price	Qty/System Unit	Price/System
Excavation, testing, and restoration for 16" diameter force mains					\$ 103.00
Excavate Trench (5.83' deep)	31 23 16.13 0110	CY	\$ 6.35	1.080	\$ 6.86
Crushed stone bedding	31 23 23.16 0100	CY	\$ 43.50	0.228	\$ 9.92
Compact bedding	31 23 23.23 7040	CY	\$ 3.72	0.058	\$ 0.22
Backfill trench w/2A stone	Eurka Quarries	TN	\$ 10.00	1.079	\$ 10.79
Compact fill material	31 23 23.23 7040	CY	\$ 3.72	0.093	\$ 0.34
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Dispose of excess fill material	31 23 23.20 1676	CY	\$ 9.60	1.080	\$ 10.37
Temp paving (5' wide)	32 12 16.13 0120	SY	\$ 10.25	0.556	\$ 5.70
Temp paving hauling	31 23 23.20 1676	CY	\$ 9.60	0.031	\$ 0.30
Pressure testing	23 05 93 0340	LF	\$ 3.75	1.000	\$ 3.75
Sawcut pavement	02 41 19.25 0015/0020	LF	\$ 4.66	2.000	\$ 9.32
Excavate (7' W x 8.5" D x 1' L)	31 23 16.13 0110	CY	\$ 6.35	0.184	\$ 1.17
Dispose of excess material	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
Compact trench surface	31 23 23.23 7040	CY	\$ 3.72	0.129	\$ 0.48
1.5" Wearing course (7' wide)	32 12 16.13 0340	SY	\$ 7.70	0.778	\$ 5.99
3" Binder course (7' wide)	32 12 16.13 0160	SY	\$ 13.45	0.778	\$ 10.46
4" Base course (7' wide)	32 11 26.13 0500	SY	\$ 18.00	0.778	\$ 14.00
Seal	32 12 16.13 3000	SY	\$ 3.01	0.111	\$ 0.33
Hauling	31 23 23.20 1676	CY	\$ 9.60	0.184	\$ 1.77
16" DIP force mains					\$ 265.00
16" DIP	33 14 13.25 2140	LF	\$ 162.00	1.000	\$ 162.00
Excavation, testing and restoration		LS	\$ 103.00	1.000	\$ 103.00
Manhole					\$ 5,400.00
Precast Manhole 4' I.D., 8' deep	G3030 210 5880	EA	\$ 5,400.00	1.000	\$ 5,400.00

**APPENDIX B**

**SEWAGE FACILITIES MAP**