

Special Study

FOR

Goshenhoppen Watershed Sewage Facilities Planning

June 13, 2023

Last Revised September 15, 2023

Prepared For:

Lower Frederick Township
Montgomery County, Pennsylvania

Prepared in collaboration by



1578 State Road
Coopersburg PA 18036

1-888-346-8673
www.value.engineering



Glenmoore..PA..19343

610-942-3000

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Plan Summary

A. Proposed Service Areas and Major Problems Evaluated by the Plan

Lower Frederick Township's current, township-wide Official Sewage Facilities Plan, entitled Lower Frederick Township Act 537 Plan 2013, as published May 2014, was approved by the PA Department of Environmental Protection on October 29, 2014.

This is a Special Study to re-evaluate sewage disposal options, select an alternative, and provide updated sewage planning for the properties that were previously planned to be served by the Goshenhoppen Interceptor and pump station in the 2014 Act 537 Plan.

The needs areas identified within the special study planning area include properties near the intersection of Schwenk Road and Salford Station Road and a cluster of seven (7) existing properties on Zieglerville Road near Goshenhoppen Creek.

B. Selected Disposal Alternative

1. Selected Alternative for Salford Station at Schwenk Road Area (Option C)

Wastewater needs for properties fronting Salford Station Road between Fulmer Road and Gravel Pike, and for properties on Schwenk Road and Cepp Road near Salford Station Road, are to be served by low-pressure force main. The force main will convey flows to an existing collection system manhole in Zieglerville Road. Each property on Salford Station, Schwenk and Cepp Roads will use a grinder pump to push wastewater into the low pressure main.

2. Selected Alternative for Zieglerville Road Area (Option G)

Wastewater needs for properties fronting Zieglerville Road just east of the Goshenhoppen Creek are to be served by a low-pressure sewer force main. Each property will use a grinder pump to push wastewater into the main, up the hill on Zieglerville Road to the existing collection system manhole west of Goshen Road.

C. Estimated Costs (in 2023 dollars)

1. Costs for Selected Alternative for Salford Station at Schwenk Road Area

Preliminary estimates of probable costs yield a construction cost of \$2.7 million dollars to install the low-pressure force main proposed. The project will provide public sewer access for 56 properties. Project cost per property is about \$48,000.

Most of the connecting properties will require a grinder pump to connect. Connection costs for those property owners are expected to be about \$24,400 each.

2. Costs for Selected Alternative for Zieglerville Road Area

Estimated costs for this project are \$542,000 dollars to install the low-pressure force main and connection to an existing manhole in Zieglerville Road. The project will provide public sewer access for 16 properties. Project cost per property is about \$34,000. All the connecting properties will require a grinder pump to connect. Connection costs for those property owners are expected to be about \$24,400 each.

D. Municipal Commitments to Implement Plan

Township officials must proceed with the following tasks to implement this plan:

- Develop and fund a Capital Improvement Program for the selected alternatives.
- Complete survey and design for selected alternatives.
- Obtain permits for selected alternatives.
- Obtain loans, grants, and/or financing for the selected alternatives.
- Adjust quarterly sewer rates and consider establishment of benefit assessment amounts for collection system extensions.
- Develop bid documents and construction specifications and publicly bid the construction projects.
- Oversight of construction.
- Continued operation and maintenance of the Township sewer system.

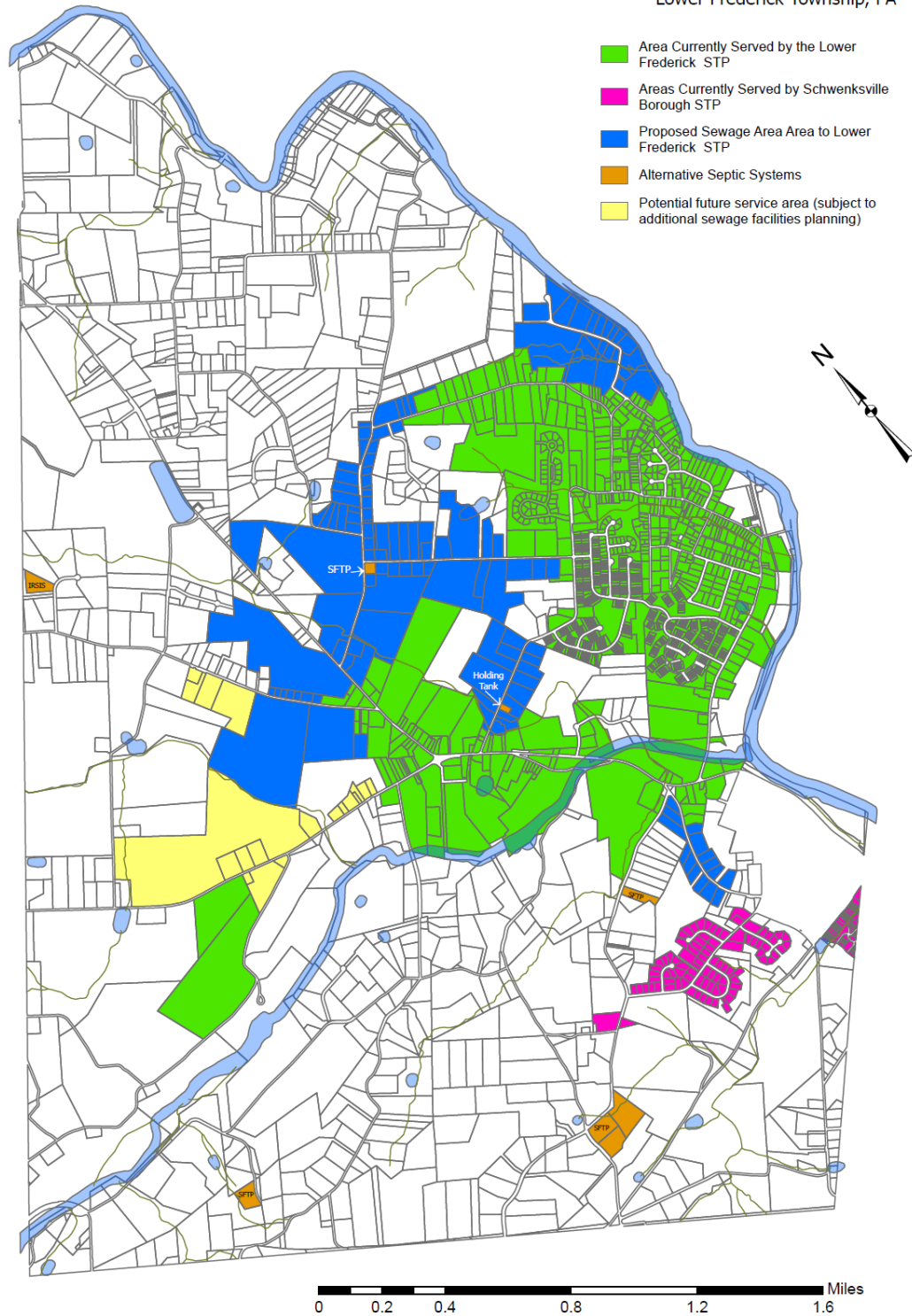
E. Schedule of Implementation

Target Date for Completion*	Major Project Milestones
Year 1	Develop Capital Improvement Program
Years 2-10	Fund capital improvement program for Zieglerville Road Area Project
Years 8-9	Survey, Design and Permitting of Zieglerville Road Area Project
Years 9-10	Pursue any available grant funding for Zieglerville Road Area Project
Year 9-10	Prepare Bid Documents and Specifications and Bid for construction of Zieglerville Road Area Project
Year 10	Construction of Zieglerville Road Area Project
Years 11-20	Fund capital improvement program for Salford Station at Schwenk Road Project
Years 18-19	Survey, Design and Permitting of Salford Station at Schwenk Road Project
Years 19-20	Pursue any available grant funding for Salford Station at Schwenk Road Project
Year 19-20	Prepare Bid Documents and Specifications and Bid for construction of Salford Station at Schwenk Road Project
Year 20	Construction of Salford Station at Schwenk Road Project

* Following DEP approval of this Special Study

F. Updated Map of Lower Frederick's Existing and Proposed Sewer Service Area:

Existing and Proposed Sewer Service Area for 2023 Sewage Facilities Planning
Lower Frederick Township, PA



September 2023



I. Previous Wastewater Planning

The selected alternative from the previous planning for the Goshenhoppen Watershed planning area was gravity sewer service by a proposed interceptor along the Goshenhoppen Creek. A pump station was planned along Goshenhoppen Creek, upstream of Zieglerville Road.

The interceptor and pump station along the Goshenhoppen Creek was planned to service both existing and proposed residential properties in the watershed. To construct the selected alternative, an easement from the Schwenksville Borough Authority would be necessary to allow construction of a pump station on their land adjacent to the creek. A gravity collection system would connect 6 or 7 homes on Zieglerville Road. A gravity interceptor along the creek could drain a collection system for the properties of concern in the vicinity of Salford Station and Schwenk Roads. The previously planned gravity interceptor would have also served the proposed Melbourne Hill Development.

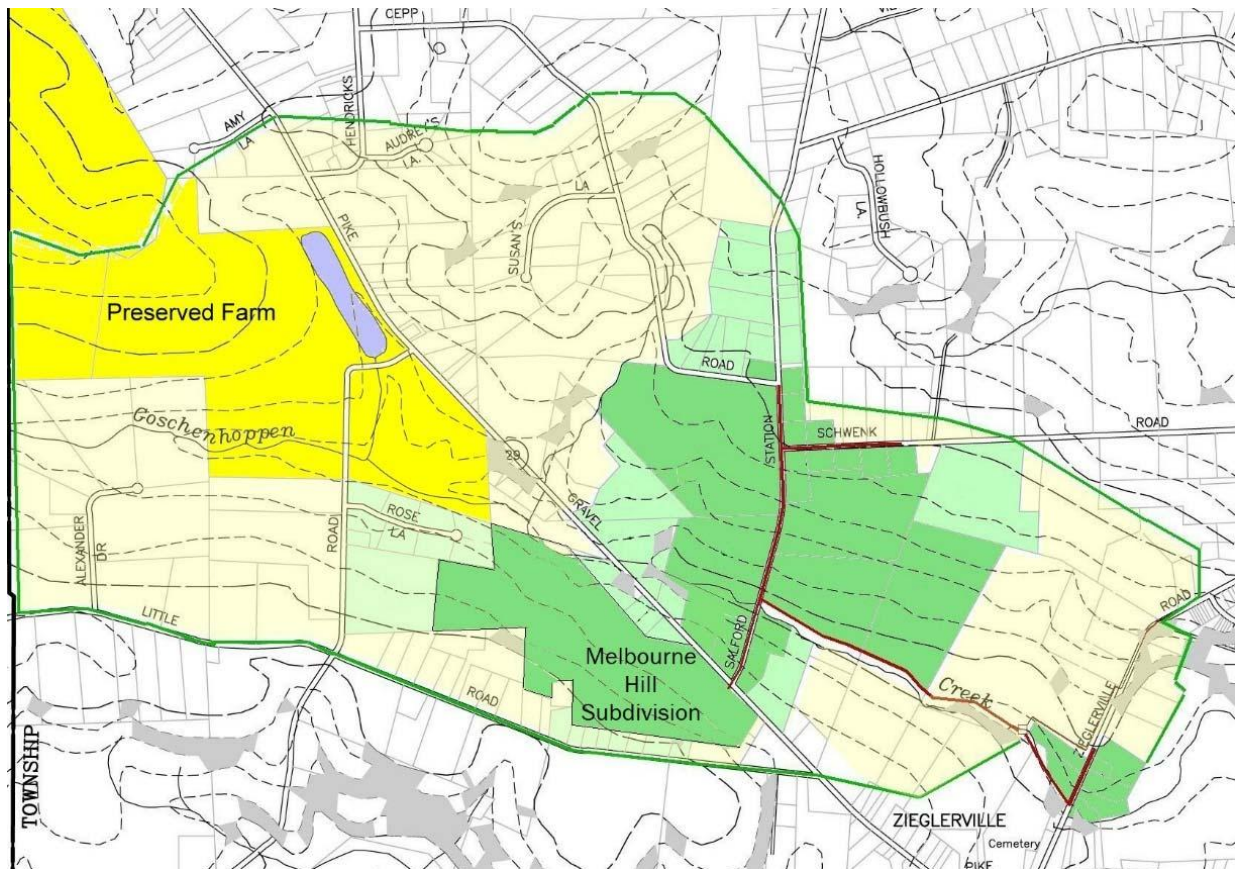


Image from Previous Sewer Planning - the Goshenhoppen Interceptor

The planned interceptor and pump station were intended to serve the existing large tracts in the immediate vicinity (shaded dark green on map above) if they were developed to potential in accordance with current zoning (approximately 116 EDUs). This dark green area is the focus of this Special Study Planning. As planned, further extension of the collection system could

serve another 43 homes in this watershed (shown in lighter green shade). The remaining portions of the Goshenhoppen watershed within the township limits are not expected to experience significant development as they are in the R-1 zoning district and might require construction of a pump station to access the collection system and were therefore not included to be served by the interceptor. The limits of the watershed upstream from a suggested pump station location are indicated below (pale yellow with a green boundary).

Land development did not occur at the rate expected in the original planning; thus, the interceptor and pump station were not constructed in accordance with the previously proposed implementation schedule. No new development has occurred in the Goshenhoppen Planning Area since the approval of the 2014 Act 537 Plan.

The Melbourne Hill development described has recently been provided conditional final approval by the Township. While the 2014 Act 537 Plan called for this development to connect via the Goshenhoppen interceptor, the interceptor has not been constructed. The plan also projected the interceptor would be funded in part by the developer and in part by the Township. However, the Township does not have funding available for such construction. Funds have been borrowed to support construction of the new wastewater treatment plant, installed in recent years, and installation of the Fulmer Road Collection System Extension, which is currently under construction. The Township is unwilling and unable to incur additional debt to construct the Goshenhoppen Interceptor.

The lots within the proposed Melbourne Hill residential subdivision will instead be connected by a combination of low-pressure force main and gravity main to the existing collection lines in Little Road. This changes the equation of numbers of lots that can connect to a gravity line along the Goshenhoppen and requires reevaluation of sewage service to existing lots in the watershed. A settlement agreement has been executed between the developers and Lower Frederick Township in which Lower Frederick Township has agreed to prepare and submit this Special Study.

Melbourne Hill proposes construction of 43 single-family homes to be served by the existing public sewer system. The new homes will be connected through a combination of grinder pumps and gravity laterals to a new, gravity sewer main which will connect to the existing gravity sewer in Little Road. From this point, wastewater will flow by gravity to the existing Delphi Pump Station. An evaluation of the pump station was performed, and it was determined that this station has adequate capacity to serve the Melbourne Hill development.

The previously selected alternative relied on funds from the development of the Melbourne Hill property to construct the interceptor and pump station, and this funding source is no longer viable. This Special Study is to identify and re-evaluate all potential alternatives for sewage disposal in the Special Study Planning Area.

II. Physical and Demographic Analysis

The physical and demographic analysis remains unchanged from the previously approved 2014 Act 537 Plan. See the previously approved plan for reference.

III. Existing Sewage Facilities in the Planning Area - Identifying the Existing Needs

A. Existing Facilities within the Planning Area

The properties within the special study planning area are served by individual, on lot, land-based sewage disposal systems with the exception of two lots which have retaining tanks and a single lot served by a small flow treatment facility. Each is further described below.

Existing septic systems are owned and maintained by individual property owners. All existing onlot sewage disposal systems in the Special Study Planning Area, including holding tanks and small flow treatment facilities, are subject, through ordinance, to the Township's Sewage Management Program. The ordinance requires routine maintenance and reporting for all systems. The ordinance also allows for the Township to abate an imminent health hazard from an onlot septic system if the owner fails to do so when identified and documented by the Montgomery County Health Department. Lower Frederick also has an ordinance specific to holding/retaining tank usage and maintenance. These ordinances are attached in Appendices F thru H.

There are no existing public wastewater facilities within the special study planning area.

B. Existing Needs Identified within the Planning Area

While the Montgomery County Health Department reports no known active sewage malfunctions that require immediate action, the township identified two needs areas in the special study planning area in the approved 2014 Act 537 Plan. The first area is a cluster of lots at the intersection Salford Station Road and Schwenk Road, where there is an existing small flow treatment facility and property using a holding tank. The second area is a small cluster of seven (7) low-lying lots on Zieglerville Road near the Goshenhoppen Creek where there is a property using a holding tank.

These are further described below:

1. 101 Salford Station Road

Located at the eastern corner of the intersection of Salford Station Road and Schwenk Road. This is a 0.92-acre property, also known as Parcel #380002155003, served by a retaining tank since May 2012 through permit #Z096545 issued by the Montgomery County Health Department.

2. 210 Schwenk Road

Located at the southern corner of the intersection of Salford Station Road and Schwenk Road. This is a 0.92-acre property, also known as Parcel #380002365009, served by a small flow treatment facility since May 2012 through permit #PA0057983 issued by the Department of Environmental Protection. This facility discharges treated wastewater to the roadside swale along Salford Station Road which flows by gravity to the Goshenhoppen Creek.

3. 211 Schwenk Road

Located on Schwenk Road, approximately 300 feet southeast of its intersection with Salford Station Road. This is a 0.92-acre property, also known as Parcel #380002338009. Montgomery County Health Department reports records of a gray water discharge complaint on this property in 2016 which was since resolved. There are no active health department complaints or investigations on this property.

4. 11 Zieglerville Road

Located on Zieglerville Road, approximately 900 feet east of its intersection with Gravel Pike. This is a 0.46-acre property, also known as Parcel #380003034006, served by a retaining tank since December 2003 through permit #R12188 issued by the Montgomery County Health Department. The property was previously served by a cesspool with a malfunctioning seepage trench. The current property owner reports frequent pumping of the retaining tank. The Montgomery County Health Department has not since identified any further malfunctions or hazards at this property.

C. Lower Frederick Township's Existing Public Wastewater Treatment Facilities

Various alternatives to serve the identified needs area will include options for connecting the properties to the existing public sewer system. A summary of the existing public sewer system is provided below. A map of the Lower Frederick Township public sewer system is attached in Appendix E for reference.

1. Treatment Plant

Lower Frederick's Treatment Plant is located at 133 Spring Mount Road. The plant was upgraded in 2018 through Permit #PA50105 (Clean Streams Law #4697403) to have a 500,000 gpd capacity.

The plant uses sequencing batch reactor (SBR) treatment, with filtration, post-equalization, and ultraviolet light (UV) disinfection. The plant has a single outfall to Perkiomen Creek.

In the 2022 Chapter 94 Wasteload Management Report, the wastewater plant averaged a sewage flow of 137,000 gpd. The plant has no existing or projected hydraulic or organic overloads. The plant is operating in compliance with all

permit requirements. There are no upgrades or expansions currently proposed to the plant.

Sludge generated at the treatment plant is removed by a hauling contractor through an annual contract. The 2022 Chapter 94 Wasteload Management Report reports a monthly average removal of 82,667 gallons of sludge in 2022. The hauled sludge is processed at permitted facilities. In 2022, sludge was processed at the Pottstown Sewage Treatment Plant, Delaware County Regional Authority (DELCORA), and the Naval Air Warfare Center (NAWC) treatment facility.

2. Collection & Conveyance System

The bulk of the existing sanitary sewer system which collects and conveys raw wastewater to the new Lower Frederick Township Sewerage Treatment Plant was constructed in the early 1980s and is predominately 8" PVC. Delphi Pump Station and its tributary collection system was constructed in the late 1990s. There are no areas within the collection and conveyance system where capacity or surcharging is a concern.

The Delphi Pump Station has a design pumping capacity of 175 GPM (run time of 1/3 on and 2/3 off) providing a daily pumping capacity of 84,000 gals/day. At continuous run, the station can pump 252,000 gals/day. In the 2022 Chapter 94 Wasteload Management Report, the pump station has an annual average sewage flow of 13,380 gpd. Farm View Estates, a recently approved planning module under code#1-46933-118-3J, will add an additional average daily flow to the Delphi Pump Station of 14,840 gpd for a total average sewage flow of 28,220 gpd once the land development is constructed. This pump station has the capacity to accept additional sewage flows. As new land developments are proposed, the capacity of the pump station is evaluated through the planning module approval process. At this time, there are no expansions or upgrades proposed to this pump station that would alter station capacity.

As of June 2023, the Township is constructing an extension to the public sewer collection system to serve existing homes along Fulmer Road, B Avenue, and Riverside Avenue. The construction of a new pump station along Riverside Avenue is also underway (Permit #WQG02461609). The new Riverside Pump Station has a design pumping capacity of 188 GPM (run time of 1/3 on and 2/3 off) providing a daily pumping capacity of 90,240 gals/day. At continuous run, the station can pump 270,720 gals/day. The projected average sewage flow of all properties that drain to this pump station through the collection system currently under construction is 22,960 gpd (82 units at 280 gpd/EDU). This pump station has the capacity to accept additional sewage flows.

Lower Frederick has an active Inflow and Infiltration (I&I) Reduction Program to reduce wet weather flows. The program includes manhole inspections, video

inspection of sewer main, smoke testing, manhole lining, and repairs to identified sources of I&I.

IV. Future Growth and Land Development

Other than the Melbourne Hill land development, there are no proposed subdivisions or land development projects proposed within the Special Study Project Area.

Since the previously approved 2014 Act 537 Plan, Lower Frederick has added Natural Resources Protection Standards to their Zoning Ordinance. The additional resource protections are expected to further protect the environment and reduce the number of lots which could be created within the Special Study Project Area.

A. Municipal and County Planning Documents

1. Lower Frederick Township Comprehensive Plan February 2022

The comprehensive plan notes that roughly half the homes in the Township are served by public sewer, and half by on-lot systems.

From the plan, “Private, on-lot systems serve over 700 properties throughout the township. Most of these systems consist of conventional in-ground septic systems or sand mounds. Despite this, much of the soils in Lower Frederick are characterized as having low suitability for these types of systems. Unfavorable soil conditions can reduce the effectiveness of on-lot systems, increase operating costs, and limit their useful lifespan. The Act 537 Plan must account for failing on-lot systems and analyze potential service extensions to provide them with public sewer service.”

This special study analyzes potential service extensions, consistent with the recently updated plan.

2. Central Perkiomen Valley Regional Comprehensive Plan Update Feb. 2014

The regional plan of 2014 proposed to, *“Use public sewer and water systems efficiently by extending these systems only within growth areas, unless otherwise noted in this Plan.”*

The lots proposed for service on Zieglerville Road are all within the growth area as designated in the plan. Only a few of the lots on Salford Station Road addressed by this planning are within the growth area. The growth area does not include lots on Cepp Road or Schwenk Road. However, planning for these areas containing small lots with unsuitable soil conditions must be addressed for public health and welfare.

3. MONTCO 2040: A Shared Vision Revised 2021

The County plan states:

“Generally, sewer and water service areas should;

- *Serve Designated Growth Areas, as shown in the county's Future Land Use Map.*
- *Only be extended into Rural Resource Areas because those areas are already served by either public sewer or water, have concentrations of failing on-lot sewage systems, have water supply problems, or contain cluster development with significant open space preservation."*

As noted above, lots proposed for service on Zieglerville Road are all within the designated growth. A few of the lots on Salford Station Road addressed are within the growth area. However, lots on Cepp Road, Schwenk Road and many of the lots along Salford Station Road are not. However, planning for these areas containing small lots with unsuitable soil conditions is addressed in this plan.

B. Land Use and Future Growth

1. Development Plans

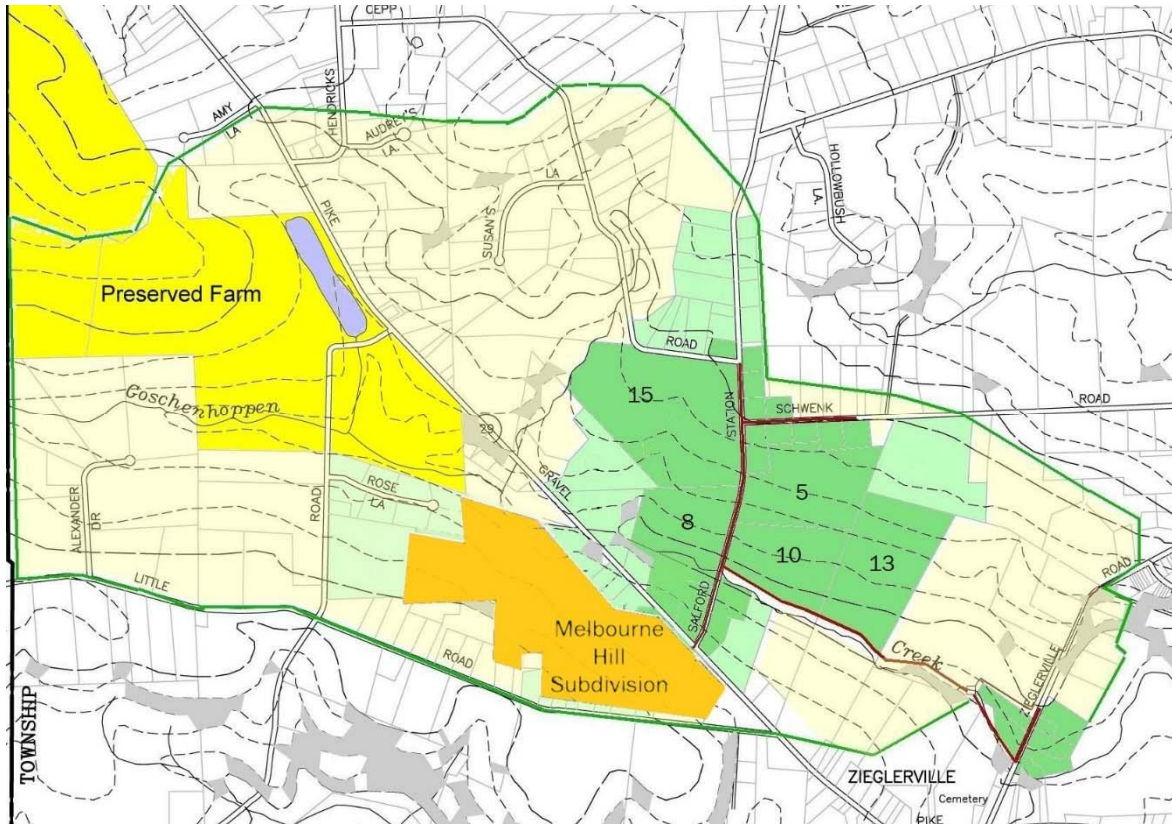
The only current development plan in the study area is the Melbourne Hill Development.

2. Land Use Designations

Land Uses are identified in the Land Uses Map, Appendix B. Primary land uses in the study area are agriculture and single-family homes.

3. Future Growth

No development is currently proposed or anticipated in the study area. Evaluation of maximum potential development under current Zoning for lots over 10 acres in size with access to public sewer yields a maximum build-out under current zoning of 51 additional homes. (See map below.) Sizing of any sewer collection system must consider the potential for future development.



Future Growth – Potential for Build-out

4. Zoning Regulations

The properties in the study area are Primarily Zoned R-1 and R-2. Lots over 10 acres in size in the R-1 or R-2 zoning district may be developed under Neighborhood lotting, The maximum development potential computations assume application of neighborhood lotting on these parcels, incorporating the environmental adjustment factors of the Zoning Code. The Township Zoning Map is included as Appendix A.

V. Identify Alternatives to Provide New or Improved Wastewater Disposal Facilities

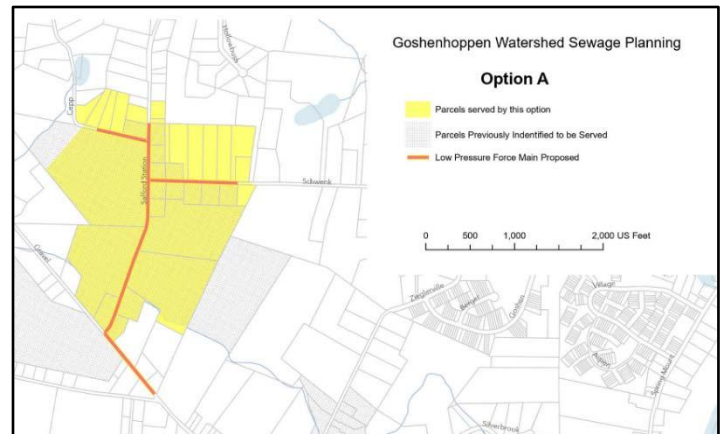
A. Alternatives Identified for New Wastewater Disposal Facilities

Potential new disposal alternatives were identified to serve the special study planning area which are described below. Options A through E address the Salford Station at Schwenk properties separate from the Zieglerville properties. Option F represents the previously selected alternate, less the Melbourne Hill land development, which includes both the Salford Station at Schwenk Road and the Zieglerville Road properties. Options G through J address only the Zieglerville Road properties. Scaled maps for each alternative are provided in Appendix D.

1. Salford Station Road at Schwenk Road Area

a) *Option A- Low Pressure Force Main to Manhole on Gravel Pike*

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main to be installed in Cepp Road, Schwenk Road, and Salford Station Road. The force main will continue onto Gravel Pike to an existing manhole #801 near the intersection of Gravel Pike and Little Road. From this point, wastewater will flow by gravity to the Delphi pump station and then pumped to the plant.



Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual grinder pumps and the sewer lateral and force main outside of the public road right-of-way. The low-pressure force main within the road right-of-way will be owned and maintained by Lower Frederick Township.

Low pressure systems can be designed to allow for a minimal amount of expansion to maintain sufficient scour velocity. At the time of detailed design, the low-pressure force main can be sized to allow for capacity for reasonable future development.

Option A requires crossing the Goshenhoppen Creek.

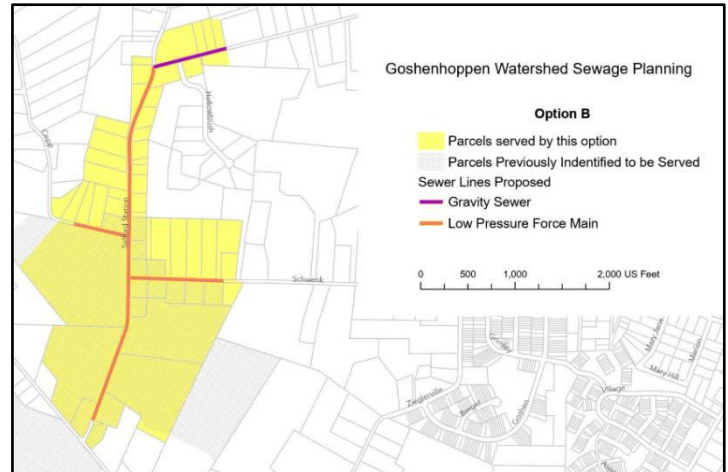
This option requires construction within Salford Station Road and Gravel Pike, which are PennDOT roads.

Properties served: 31

Average Sewage Flow: 8,680 gpd (at 280 gpd/EDU)

b) Option B - Low Pressure Force Main to Manhole on Fulmer Road

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main installed in Cepp Road, Schwenk Road, and Salford Station Road. At the intersection with Fulmer Road, the force main will discharge into a new manhole that will be installed at the intersection.



A new gravity sewer will be installed on Fulmer Road and connected to the gravity sewer main on Fulmer Road at manhole #938 that is currently under construction. Properties on Fulmer Road may connect through gravity sewer laterals, if grades allow.

From this point, the wastewater will flow by gravity to the pump station currently under construction on Riverside Avenue. There is adequate capacity within this new pump station to support the properties that would be connected.

Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual grinder pumps and the sewer lateral and force main outside of the public road right-of-way. The low-pressure force main within the road right-of-way and new gravity sewer in Fulmer Road will be owned and maintained by Lower Frederick Township.

Low pressure systems can be designed to allow for a minimal amount of expansion to maintain sufficient scour velocity. At the time of detailed design, the force main can be sized to allow for capacity for reasonable future development.

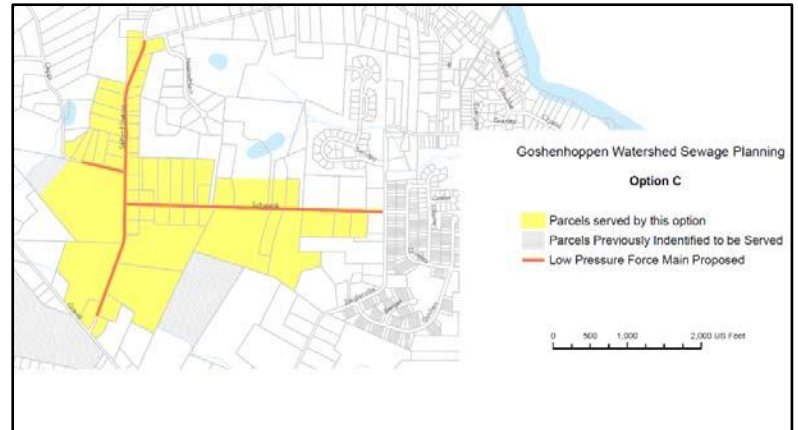
Option B requires crossing the Goshenhoppen Creek.

This option requires construction within Salford Station Road, a PennDOT road.

Properties served: 52
Average Sewage Flow: 14,560 gpd (at 280 gpd/EDU)

c) *Option C - Low Pressure Force Main to Manhole on Zieglerville Road*

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main installed in Cepp Road, Schwenk Road, and Salford Station Road. The force main will discharge into an existing manhole #703 located in Zieglerville Road near the intersection with Schwenk Road.



From this point, the wastewater will flow by gravity to the existing treatment plant.

Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual grinder pumps and the sewer lateral and force main outside of the public road right-of-way. The force main within the road right-of-way will be owned and maintained by Lower Frederick Township.

Low pressure systems can be designed to allow for a minimal amount of expansion to maintain sufficient scour velocity. At the time of detailed design, the low-pressure force main can be sized to allow for capacity for reasonable future development.

This option requires crossing the Goshenhoppen Creek.

This option requires construction within Salford Station Road, a PennDOT road.

Properties served: 56
Average Sewage Flow: 15,680 gpd (at 280 gpd/EDU)

d) *Option D – Above Options with STEP system*

A Septic Tank Effluent System (STEP) involves the use of individual septic tanks on individual properties to settle solid waste and the use of individual grinder pumps to pump liquid wastes to the public sewer system. This is an option that is sometimes considered for wastewater plants that can accept additional flows, but which have an existing or projected organic overload. The Lower Frederick Township Sewage Treatment Plant does not have any existing or projected overloads.

From the individual grinder pumps, the path of conveyance and properties served will follow options A, B, and C as described above. Please refer to above maps.

Property owner direct costs will include septic tank and grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the septic tank, individual grinder pumps and the sewer lateral and force main outside of the public road right-of-way. The STEP system alternative requires that homeowners maintain the septic tank portion of the system through routine pumping as well pay for public sewer treatment.

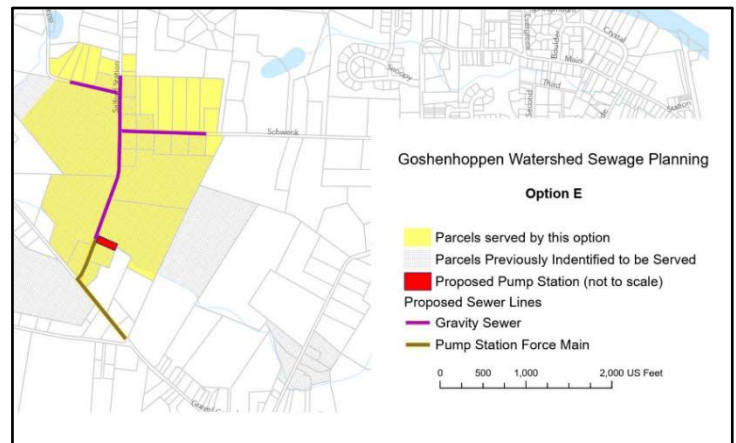
Any low-pressure force main or gravity sewer within the road right-of-way will be owned and maintained by Lower Frederick Township.

e) *Option E - Gravity Flow to Pump Station where Goshenhoppen Crosses Salford Station*

For this alternative, gravity sewer main would be installed on Cepp Road, Schwenk Road, and Salford Station Road on each side of the Goshenhoppen Creek. The gravity sewer will drain toward Goshenhoppen Creek where a pump station will be constructed. From the pump station, a

force main will be installed to the intersection of Salford Station Road and Gravel Pike and will continue onto Gravel Pike to an existing manhole #801 near the intersection of Gravel Pike and Little Road. From this point, wastewater will flow by gravity to the Delphi pump station and then pumped to the plant.

Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual sewer laterals outside of the



public road right-of-way. The gravity main and force main within the road right-of-way will be owned and maintained by Lower Frederick Township.

This option can be sized to accommodate future land development potential.

This option requires crossing the Goshenhoppen Creek.

This option requires construction within Salford Station Road and Gravel Pike, which are PennDOT roads.

This option requires land acquisition for the proposed pump station.

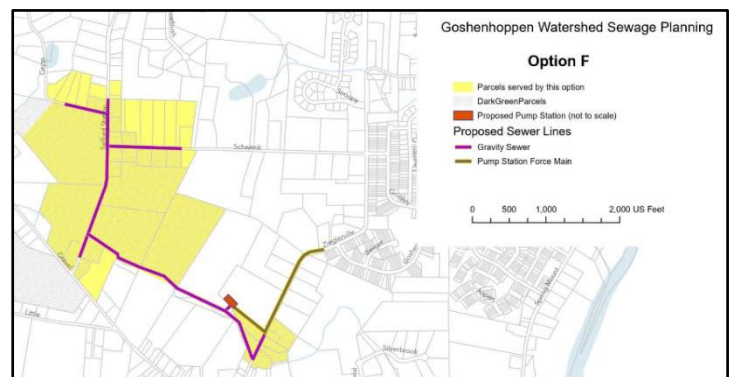
Properties served: 31

Average Sewage Flow: 8,680 gpd (at 280 gpd/EDU)

2. Entire Special Study Planning Area (previously selected alternative)

a) *Option F - Gravity Line along Goshenhoppen Creek (previously selected alternative)*

For this alternative, gravity sewer main would be installed on Cepp Road, Schwenk Road, Salford Station Road, and Zieglerville Road. The gravity sewer will drain toward Goshenhoppen Creek where a pump station will be constructed near the intersection with Zieglerville Road. From the pump station, a force main will be installed in Zieglerville Road. The force main will connect to an existing manhole #600 at the top of the hill on Zieglerville Road approximately 250 feet west of the intersection of Zieglerville and Goshen Roads. From this point, wastewater will flow by gravity to the plant.



Property owner direct costs will include sewer lateral installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual sewer laterals outside of the public road right-of-way. The gravity main and force main within the road right-of-way will be owned and maintained by Lower Frederick Township.

This option can be sized to accommodate future land development potential.

This option requires crossing the Goshenhoppen Creek.

This option requires construction within Salford Station Road and Gravel Pike, which are PennDOT roads.

Option F requires land and/or easement acquisitions.

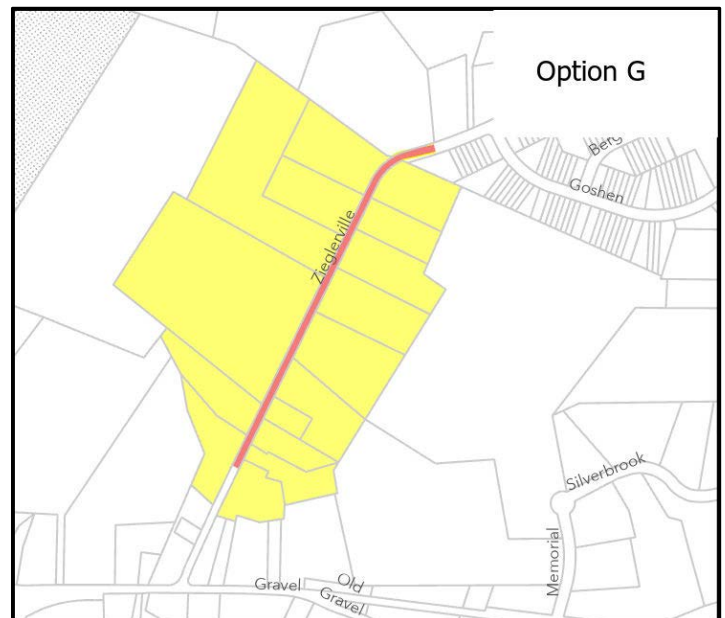
Properties served: 38

Average Sewage Flow: 10,640 gpd (at 280 gpd/EDU)

3. Zieglerville Road Area

a) *Option G – Low Pressure Force Main to Manhole at top of hill on Zieglerville Road*

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main to be installed in Zieglerville Road. The force main will connect to an existing manhole #600 at the top of the hill on Zieglerville Road approximately 250 feet west of the intersection of Zieglerville and Goshen Roads. From this point, wastewater will flow by gravity to the plant.



Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual grinder pumps and the sewer lateral and force main outside of the public road right-of-way. The low-pressure force main within the road right-of-way will be owned and maintained by Lower Frederick Township.

This option can be sized to accommodate future land development potential.

No stream crossing is required.

This option does not require construction within any PennDOT roads.

Properties served: 16

Average Sewage Flow: 4,480gpd (at 280 gpd/EDU)

b) *Option H – Low Pressure Force Main to Manhole in Gravel Pike*

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main to be installed in Zieglerville Road. The force main will connect to an existing manhole #812 at the intersection of Gravel Pike and Zieglerville Road. From this point, wastewater will flow by gravity to the Delphi pump station and then pumped to the plant.

Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. Property owners will own and maintain the individual grinder pumps and the sewer lateral and force main outside of the public road right-of-way. The force main within the road right-of-way will be owned and maintained by Lower Frederick Township.

Low pressure systems can be designed to allow for a minimal amount of expansion to maintain sufficient scour velocity. At the time of detailed design, the low-pressure force main can be sized to allow for capacity for reasonable future development.

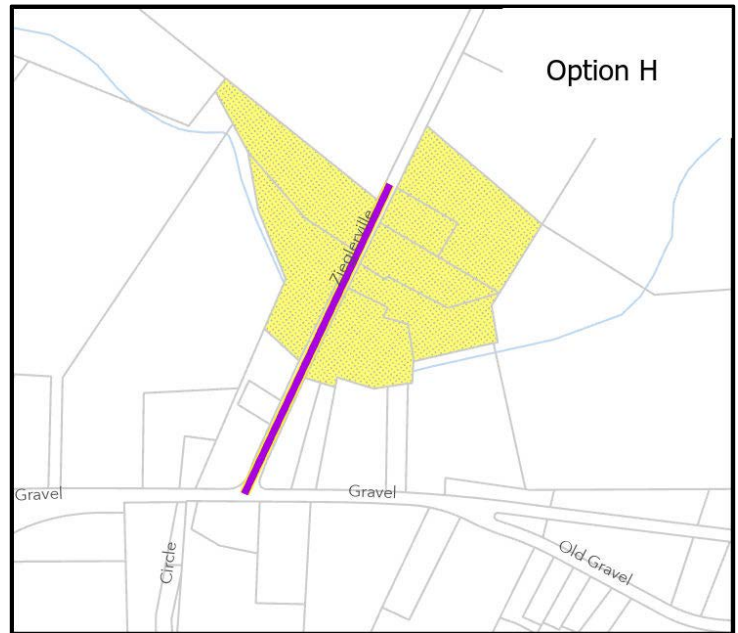
This option requires crossing the Goshenhoppen Creek.

This option requires construction within Gravel Pike, a PennDOT road.

This option requires land or easement acquisition for crossing the Goshenhoppen Creek.

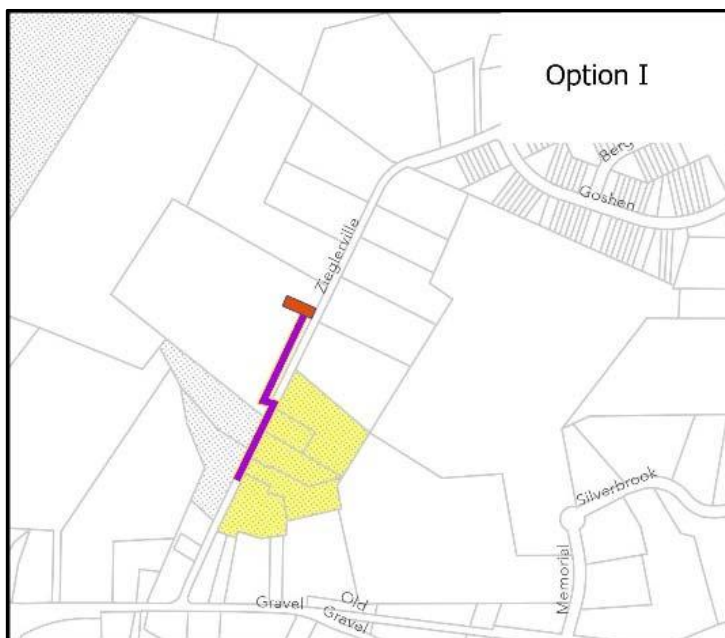
Properties served: 7

Average Sewage Flow: 1,960 gpd (at 280 gpd/EDU)



c) *Option I – Community System on SBA Lands*

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main to be installed in Zieglerville Road. The force main will carry the wastewater to the Schwenksville Borough Authority's property on Zieglerville Road where septic tanks and a dosing tank will be located. From the dosing tank, wastewater will be disposed in a community on-lot elevated sand mound system.



Soil testing would be required to verify soil and site conditions meet the requirements for land-based disposal. Designation of a tested sewage disposal replacement area that must be protected from disturbance may be required. Due to the system size, permeability testing may also be required. Given the property's use as a public water supply well and wellhead protection area, hydrogeologic evaluation may be necessary.

Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. The low-pressure force main within the road right-of-way, septic tanks, dosing tank, and disposal area will be owned and maintained by Lower Frederick Township.

This option could not be expanded to serve any potential future developments.

No stream crossing is required.

This option does not require construction within any PennDOT roads.

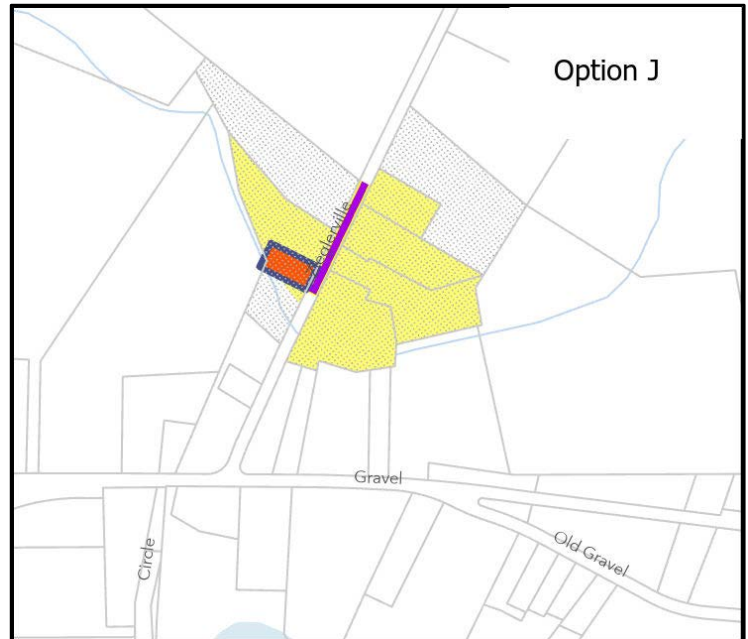
This option requires land or easement acquisition. An easement would be required on the SBA property.

Properties served: 5

Peak Sewage Flow: 2,000 gpd at (400 gpd/property)

d) *Option J - SFTF to serve small number of homes.*

For this alternative, grinder pumps would be installed on each individual property and connected to a new low-pressure force main to be installed in Zieglerville Road. The force main will carry the wastewater to a private property along the Goshenhoppen Creek where a small flow treatment facility will be located. The treatment facility will discharge to the Goshenhoppen creek on the SBA property.



Property owner direct costs will include grinder pump installation, decommissioning existing septic system, and sewer tap in fees. The low-pressure force main within the road right-of-way and treatment facility will be owned and maintained by Lower Frederick Township.

This option does not require construction within any PennDOT roads.

This option could not be expanded to serve any potential future developments.

A stream discharge permit will be required.

This option requires land or easement acquisition. An easement would be required on private property.

Properties served: 5

Average Sewage Flow: 1,400 gpd (at 280 gpd/EDU)

B. Retaining Tanks

Lower Frederick Township does have a holding/retaining tank ordinance that allows for retaining tanks in the following instances:

- Institutional, recreational, or commercial establishments and which have a sewage flow of 800 gallons per day or less; or
- When the SEO has certified that an existing residential system has failed and that the site is unsuitable for any replacement system so that a holding tank is necessary to remedy the existing system failure or abate a nuisance or public health hazard; or
- When the property will be connected to a community sewage system within one year of the installation of the holding tank so that said holding tank will be for a temporary measure only. If connection does not occur within one year, the permit may be extended by the SEO, upon approval by the Board, for an additional one-year period. In no case shall the permit be extended more than three times.

The ordinance specifies maintenance requirements for holding tanks and penalties for violating the ordinance. The ordinance allows the Township to perform any work necessary to abate public nuisance.

While the use of retaining tanks is a good option to abate a public hazard, it is a maintenance intensive system requiring frequent pumping and not a preferred method for long-term sewage disposal, when it can be avoided.

C. Sewage Management Plans

Lower Frederick Township implemented a sewage management ordinance in March of 2011 that is currently in effect.

D. No Action Alternative

Under a no action alternative, public sewers would not be extended to the needs areas identified on Zieglerville Road or Salford Station at Schwenk Road. Failure to proceed with wastewater planning and implementation of selected alternatives would have numerous potential adverse consequences, including:

- Failing on-lot systems are potential sources of pollution to surface and ground waters.
- Homeowners who must pump holding tanks frequently may face economic hardship.
- Real estate values may be impacted, and home sales halted by on-lot systems that are not adequate.
- Growth and development of the proposed regional growth area will be hindered by lack of wastewater solutions.

- Developers may force acceptance of community systems or package plants in the study area to proceed with their projects. This would increase the liabilities and responsibilities of the township.

VI. Evaluation of Alternatives

Each of the potential alternatives listed above has been evaluated for consistency with applicable planning documents, water quality standards, effluent limitations, and other technical, legislative or legal requirements. A table summary of the consistency evaluations is provided for each alternative.

The total cost for Township construction was estimated for each alternative as well as the direct costs to each property owner. For per property cost estimates, one connection per property was assumed to not underestimate the per property costs as there are no developments currently proposed.

Cost estimating spreadsheets are provided for each option in Appendix C.

1. Salford Station Road at Schwenk Road Properties

a) Option A- Low Pressure Force Main to Manhole on Gravel Pike

OPTION A - LOW PRESSURE FORCE MAIN TO MANHOLE ON GRAVEL PIKE				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		Construction involves a stream crossing and may impact wetlands within the work area. Necessary permits will be obtained following wetlands delineation.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		A stream crossing is proposed. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		A stream crossing is proposed. A PHMC submission will be necessary.

Properties served: 31

Average Sewage Flow: 8,680 gpd (at 280 gpd/EDU)

Township Construction Cost: \$1,567,631.25*

Township Cost per Property: \$50,568.75*

Property Owner Costs: \$24,405.26

Total Cost per Property: \$74,974.01*

* Does not include land or easement acquisition costs

The Option A evaluation is summarized as follows:

- Does not have the least expensive cost per property to serve the Salford Station Road at Schwenk Road Area.
- Does not allow for the connection of additional properties near the Salford Station and Fulmer Road intersection not currently served by the public sewer system.
- Will increase the flow at the Delphi pump station.
- Will require a stream crossing and the acquisition of an easement on private property to cross the stream at the Goshenhoppen Creek bridge.
- Additional evaluation would be needed to determine if any wetlands or threatened and endangered species will be impacted.
- Involves construction within a PennDOT road.
- An easement on private property may be required for the creek crossing.

Option A was not determined to be the best alternative to address the sewage disposal needs in the Salford Station Road at Schwenk Road Area.

b) Option B - Low Pressure Force Main to Manhole on Fulmer Road

OPTION B - LOW PRESSURE FORCE MAIN TO MANHOLE ON FULMER ROAD				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		Construction involves a stream crossing and may impact wetlands within the work area. Necessary permits will be obtained following wetlands delineation.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		A stream crossing is proposed. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		A stream crossing is proposed. A PHMC submission will be necessary.

Properties served:

52

Average Sewage Flow:

14,560 gpd (at 280 gpd/EDU)

Township Construction Cost:	\$2,453,544.79*
Township Cost per Property:	\$ 47,183.55*
Property Owner Costs:	\$ 23,059.11
Total Cost per Property:	\$ 70,242.66*

* Does not include land or easement acquisition costs

The Option B evaluation is summarized as follows:

- Has the least expensive cost per property to serve the Salford Station Road at Schwenk Road Area.
- Allows for the connection of additional properties along Salford Station Road not currently served by the public sewer system which would not be addressed by the other alternatives evaluated to serve the area.
- Does not increase the flow at the Delphi pump station.
- Additional evaluation would be needed to determine if any wetlands or threatened and endangered species will be impacted.
- Involves construction within a PennDOT road.
- An easement on private property may be required for the creek crossing.
- Adds flow to a new pump station on Riverside Avenue.

Option B has been determined to be a feasible alternative to address the sewage disposal needs in the Salford Station Road at Schwenk Road Area but was not the selected alternative.

c) *Option C - Low Pressure Force Main to Manhole on Zieglerville Road*

OPTION C - LOW PRESSURE FORCE MAIN TO MANHOLE ON ZIEGLERVILLE ROAD				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		Construction involves a stream crossing. No wetland disturbance is proposed.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		A stream crossing is proposed. A PNDI database search was performed and is attached in Appendix I. No potential conflicts were identified.
11	Historic and archaeological resource protection.	✓		A stream crossing is proposed. A PHMC submission was made, and the response is attached in Appendix I. No potential conflicts were identified.

Properties served:

56

Average Sewage Flow:

15,680 gpd (at 280 gpd/EDU)

Township Construction Cost:	\$2,692,172.92*
Township Cost per Property:	\$48,074.52*
Property Owner Costs:	\$24,405.26
Total Cost per Property:	\$72,479.78*

* Does not include land or easement acquisition costs

The Option C evaluation is summarized as follows:

- Does not have the least expensive cost per property to serve the Salford Station Road at Schwenk Road Area.
- Allows for the connection of additional properties along Schwenk Road not currently served by the public sewer system which would not be addressed by the other alternatives evaluated to serve the area.
- Does not increase the flow at the Delphi pump station.
- Submissions have been made to verify there are no conflicts with protection of rare, endangered or threatened species or historic and archaeological resource protection.
- Involves construction within a PennDOT road.
- An easement on private property may be required for the creek crossing.
- Sends flow to the wastewater treatment plant headworks without utilization of another sewage pump station.

Option C was determined to be a feasible alternative and is the selected alternative to address the sewage disposal needs in the Salford Station Road at Schwenk Road Area.

d) *Option D – Above Options with STEP system*

See consistency evaluations for each option above.

While these options are technically feasible, each of these options add the cost of septic tank installation and maintenance for each property owner with no benefit to the wastewater system from settling the solids in a septic tank.

Costs: Option A + STEP

Township Construction Cost:	\$1,567,631.25
Township Cost per Property:	\$50,568.75
Property Owner Costs:	\$29,405.26
Total Cost per Property:	\$79,974.01

Option B + STEP =

Township Construction Cost:	\$2,453,544.79
Township Cost per Property:	\$ 47,183.55
Property Owner Costs:	\$ 29,071.93
Total Cost per Property:	\$ 76,588.81

Option C + STEP =

Township Construction Cost:	\$2,692,172.92
Township Cost per Property:	\$48,074.52
Property Owner Costs:	\$29,405.26
Total Cost per Property:	\$77,479.78

The Option D evaluation is summarized as follows:

- See the evaluation for Options A, B, and C above.
- STEP systems add additional costs to the property owners for septic installation and maintenance in addition to the costs to connect to the public sewer system and quarterly sewer fees.
- The existing treatment plant does not have a projected overload that would necessitate the use of a STEP system.
- STEP systems only reduce the amount of settled and floatable solids pumped. Low-pressure grinder pumps macerate all solids in the system into a slurry, allowing transport in small-diameter pipes. Pipe sizing is determined by the pressure and velocities required to convey waste within the system, removing solids would not alter the volume of raw wastewater pumped. Therefore, STEP systems would not affect pipe sizing.
- STEP systems require a larger footprint than a traditional low pressure grinder pump station.

Option D was not determined to be the best alternative to address sewage disposal needs in the Salford Station Road at Schwenk Road Area. Considering the additional maintenance, cost, and footprint involved, the STEP System alternative “Option D” would not benefit the Township or its individual residents.

e) *Option E - Gravity Flow to Pump Station where Goshenhoppen Crosses Salford Station*

OPTION E - GRAVITY FLOW TO PUMP STATION WHERE GOSHENHOPPEN CROSSES SALFORD STATION				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		Proposed construction along the stream may impact wetlands within the work area. Necessary permits will be obtained following wetlands delineation.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		Construction near a stream will be necessary. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		Construction near a stream will be necessary. A PHMC submission will be necessary.

Properties served:

31

Average Sewage Flow:

8,680 gpd (at 280 gpd/EDU)

Township Construction Cost:	\$2,908,757.50*
Township Cost per Property:	\$93,831.85*
Property Owner Costs:	\$14,405.26
Total Cost per Property:	\$1108,237.11*

* Does not include land or easement acquisition costs

The Option E evaluation is summarized as follows:

- Does not have the least expensive cost per property to serve the Salford Station Road at Schwenk Road Area.
- Serves fewer properties not currently served by the public sewer system.
- Will increase the flow at the Delphi pump station.
- Will require a stream crossing and the acquisition of an easement on private property to cross the stream at the Goshenhoppen Creek bridge.
- Additional evaluation would be needed to determine if any wetlands or threatened and endangered species will be impacted.
- Involves construction within a PennDOT road.
- Easements and/or property acquisitions would be required.

Option E was not determined to be the best alternative to address the sewage disposal needs in the Salford Station Road at Schwenk Road Area.

2. Entire Special Study Planning Area (previously selected alternative)

a) *Option F - Gravity Line along Goshenhoppen Creek (previously selected alternative)*

OPTION F - GRAVITY LINE ALONG GOSHENHOPPEN CREEK (PREVIOUSLY SELECTED ALTERNATIVE)				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		Proposed construction along the stream may impact wetlands within the work area. Necessary permits will be obtained following wetlands delineation.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		Construction near a stream will be necessary. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		Construction near a stream will be necessary. A PHMC submission will be necessary.

Properties served:

38

Average Sewage Flow:

10,640 gpd (at 280 gpd/EDU)

Township Construction Cost:	\$3,809,402.08
Township Cost per Property:	\$100,247.42*
Property Owner Costs:	\$14,405.26
Total Cost per Property:	\$114,652.68*

* Does not include land or easement acquisition costs

The Option F evaluation is summarized as follows:

- Does not have the least expensive cost per property to serve the special study planning area.
- Serves fewer properties not currently served by the public sewer system.
- Will increase the flow at the Delphi pump station.
- Will require a stream crossing and the acquisition of an easement on private property to cross the stream at the Goshenhoppen Creek bridge.
- Additional evaluation would be needed to determine if any wetlands or threatened and endangered species will be impacted.
- Involves construction within a PennDOT road.
- Easements and/or property acquisitions would be required.

Option E was not determined to be the best alternative to address the sewage disposal needs in the Special Study Area.

3. Zieglerville Road Properties

a) Option G – Low Pressure Force Main to Manhole at top of hill on Zieglerville Road

OPTION G – LOW PRESSURE FORCE MAIN TO MANHOLE AT TOP OF HILL ON ZIEGLERVILLE ROAD				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		No wetlands or streams will be impacted by this alternative
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species			NA – All construction will occur within existing road rights-of-way
11	Historic and archaeological resource protection.			NA – All construction will occur within existing road rights-of-way

Properties served:

16

Average Sewage Flow:

4,480 gpd (at 280 gpd/EDU)

Township Construction Cost:	\$542,153.25
Township Cost per Property:	\$33,884.58
Property Owner Costs:	\$24,405.26
Total Cost per Property:	\$58,289.84

The Option G evaluation is summarized as follows:

- Has the least expensive cost per property to serve the Zieglerville Road Area.
- Allows for the connection of nine (9) additional properties along Zieglerville Road not currently served by the public sewer system which would not be addressed by the other alternatives evaluated to serve the area.
- Does not increase the flow at the Delphi pump station.
- Will not require a stream crossing or acquisition of an easement on private property to cross the stream at the Goshenhoppen Creek bridge.
- Does not involve construction within a PennDOT road.
- All work will be completed within existing road rights-of-way.

Option G has been determined to be the best alternative to address the sewage disposal needs in the Zieglerville Road Area.

b) *Option H – Low Pressure Force Main to Manhole in Gravel Pike*

OPTION H – LOW PRESSURE FORCE MAIN TO MANHOLE IN GRAVEL PIKE				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Potential service extension is consistent with the plan dated February 2022.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		Construction involves a stream crossing and may impact wetlands within the work area. Necessary permits will be obtained following wetlands delineation.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		Construction near a stream will be necessary. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		Construction near a stream will be necessary. A PHMC submission will be necessary.

Properties served:

7

Average Sewage Flow:

1,960 gpd (at 280 gpd/EDU)

Township Construction Cost:

\$415,510.42*

Township Cost per Property:

\$59,358.63*

Property Owner Costs:

\$24,405.26

Total Cost per Property: \$83,763.89*

* Does not include land or easement acquisition costs

The Option H evaluation is summarized as follows:

- Does not have the lowest cost per property to serve the Zieglerville Road Area.
- Does not allow for the connection of additional properties along Zieglerville Road not currently served by the public sewer system.
- Will increase the flow at the Delphi pump station.
- Will require a stream crossing and the acquisition of an easement on private property to cross the stream at the Goshenhoppen Creek bridge.
- Additional evaluation would be needed to determine if any wetlands or threatened and endangered species will be impacted.
- Involves construction within a PennDOT road.
- An easement on private property would need to be obtained.

Option H was not determined to be the best alternative to address the sewage disposal needs in the Zieglerville Road Area.

c) *Option I – Community System on SBA Lands*

This option was determined to not be a technically feasible alternative as an easement cannot be obtained onto Schwenksville Borough Authority (SBA) lands. The SBA Board has indicated that the land they own on Zieglerville Road is for their existing and future water supply wells as well as protection of those groundwater sources. The board, after considerable discussion, decided that they would not consider allowing a community or individual on-lot disposal systems on their property.

As this alternative was determined to be not technically feasible, no additional consistency evaluations are warranted.

Properties served:	5
Peak Sewage Flow:	2,000 gpd at (400 gpd/property)
Township Construction Cost:	\$318,418.30*
Township Cost per Property:	\$63,683.66*
Property Owner Costs:	\$17,000.00
Total Cost per Property:	\$80,683.66*

* Does not include land or easement acquisition costs

The Option I evaluation is summarized as follows:

- Not technically feasible.

Option I was not determined to be the best alternative to address the sewage disposal needs in the Zieglerville Road Area.

d) *Option J - SFTF to serve a small number of homes.*

While this option may be feasible, an easement would be required to construct and maintain the treatment facility on private property. The Township has not approached any property owners along the creek about obtaining an easement. Without an easement, this option is not feasible. In addition, as the existing treatment facility has excess capacity, the Township prefers not to operate and maintain a separate, small, treatment facility.

OPTION J - SFTF TO SERVE SMALL NUMBER OF HOMES				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Alternative will comply with any applicable Wasteload Management Requirements.
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Comprehensive Plan	✓		Consistent with the directives of the Regional Plan of 2014.
5	Antidegradation Requirements	✓		Implementation of these measures will benefit water quality.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection.	✓		As the SFTF will discharge to the Goshenhoppen Creek, wetlands may be impacted within the work area. Necessary permits will be obtained following wetlands delineation.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		Construction near a stream will be necessary. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		Construction near a stream will be necessary. A PHMC submission will be necessary.

Properties served:

5

Average Sewage Flow:

1,400 gpd (at 280 gpd/EDU)

Township Construction Cost:	\$451,504.30 *
Township Cost per Property:	\$90,300.86*
Property Owner Costs:	\$17,000.00
Total Cost per Property:	\$107,300.86*

* Does not include land or easement acquisition costs

The Option J evaluation is summarized as follows:

- Does not have the lowest cost per property to serve the Zieglerville Road Area.
- Does not allow for the connection of additional properties along Zieglerville Road not currently served by the public sewer system.
- Will require a permit to discharge treated effluent to the Goshenhoppen Creek.
- Additional evaluation would be needed to determine if any wetlands or threatened and endangered species will be impacted.
- An easement on private property would need to be obtained.

Option J was not determined to be the best alternative to address the sewage disposal needs in the Zieglerville Road Area.

VII. Institutional Evaluation

The township collection and treatment systems are owned and operated by Lower Frederick Township. Four township employees perform daily maintenance and plant operations in addition to their other public works duties to maintain roads, parks and other Township facilities. The Township sets users fees, negotiates agreements, and raises capital for construction and maintenance projects. The Township also has an employee that devotes much of her time to sewer billing and collections.

The township employs a consulting firm to assist with plant testing and operations compliance, and the township wastewater engineer prepares the annual Chapter 94 report.

The Township has a history of operating the system in compliance with the permit requirements. Township employees perform routine maintenance. Other operation and maintenance duties such as sludge hauling, manhole lining, etc. are contracted through approved bidding processes.

Income and expenses for the collection, conveyance and wastewater treatment system are tabulated separately in the township budget. Revenue for 2023 is projected at \$1,00,605.00, generated primarily by quarterly sewer rental fees and anticipated connection fees from the collection system extension project currently under construction. Sewer account expenditures in 2023 are budgeted at \$976,210.00 including \$289,000.00 of debt principal and \$218,660.00 of debt interest.

The public portion of the selected alternatives for the Special Study Planning Area will be operated and maintained by the Township as are other portions of their system. The implementation of the selected alternatives will not result in the need for new municipal departments or authorities.

No new ordinances are required to be developed to implement the selected alternatives. Lower Frederick has a grinder pump ordinance that specifies the powers, duties, and responsibilities of the Township and property owners using grinder pumps. The Township also has an ordinance prohibiting the discharge of potentially damaging waste into the sewer system.

VIII. Implementation Schedule and Justification for Selected Technical & Institutional Alternatives

A. Selected Wastewater Disposal Alternatives

1. Selected Alternative for Salford Station at Schwenk Road Area

Wastewater needs for properties fronting Salford Station Road between Fulmer Road and Gravel Pike, and for properties on Schwenk Road and Cepp Road near to Salford Station Road, are to be served by low-pressure force main. The force main will convey flows east along Schwenk Road Road to an existing gravity main in Zieglerville Road. Each property on Salford Station, Schwenk and Cepp Roads will use a grinder pump to push wastewater into the low pressure main.

2. Selected Alternative for Zieglerville Road Area

Wastewater needs for properties fronting on Zieglerville Road just east of the Goshenhoppen Creek are to be served by a low-pressure sewer force main. Each property will use a grinder pump to push wastewater into the main, up the hill on Zieglerville Road to the existing manhole wets of Goshen Road.

B. Selected Capital Financing Plan

Lower Frederick Township will finance the selected alternatives through the development of a capital improvement program. The program will be developed to set aside funds annually to finance these future improvements.

It is anticipated that each project area, Zieglerville Road Area and Salford Station at Schwenk Road Area, will require approximately 10 years of annual contributions to the capital improvement program to support each project. It is anticipated that the Zieglerville Road Area will be the first project funded with contributions to the capital improvement program. The Salford Station at Schwenk Road area funds would then start to accrue on the completion of the Zieglerville Road Area project.

In addition to the financing through the capital improvement program, the township will pursue all available grant funding.

C. Implementation Schedule

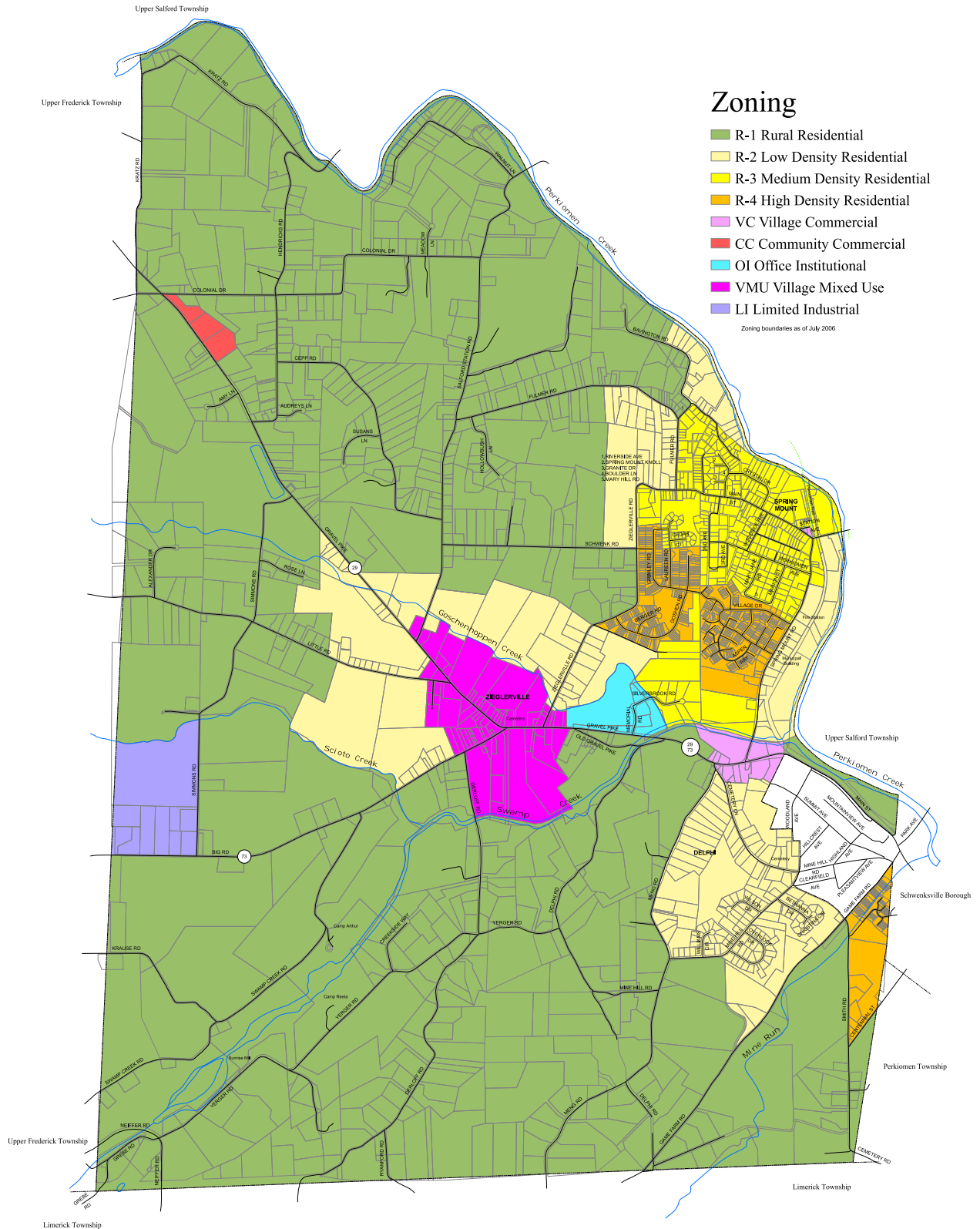
There are no identified public health hazards that require immediate abatement. In consideration of the costs of the selective alternatives and available funding, the Township has elected to phase these projects with the Zieglerville Road Area Project being funded and constructed first followed by the Salford Station at Schwenk Road Project.

Target Date for Completion*	Major Project Milestones
Year 1	Develop Capital Improvement Program
Years 2-10	Fund capital improvement program for Zieglerville Road Area Project
Years 8-9	Survey, Design and Permitting of Zieglerville Road Area Project
Years 9-10	Pursue any available grant funding for Zieglerville Road Area Project
Year 9-10	Prepare Bid Documents and Specifications and Bid for construction of Zieglerville Road Area Project
Year 10	Construction of Zieglerville Road Area Project
Years 11-20	Fund capital improvement program for Salford Station at Schwenk Road Project
Years 18-19	Survey, Design and Permitting of Salford Station at Schwenk Road Project
Years 19-20	Pursue any available grant funding for Salford Station at Schwenk Road Project
Year 19-20	Prepare Bid Documents and Specifications and Bid for construction of Salford Station at Schwenk Road Project
Year 20	Construction of Salford Station at Schwenk Road Project

* Following DEP approval of this Special Study

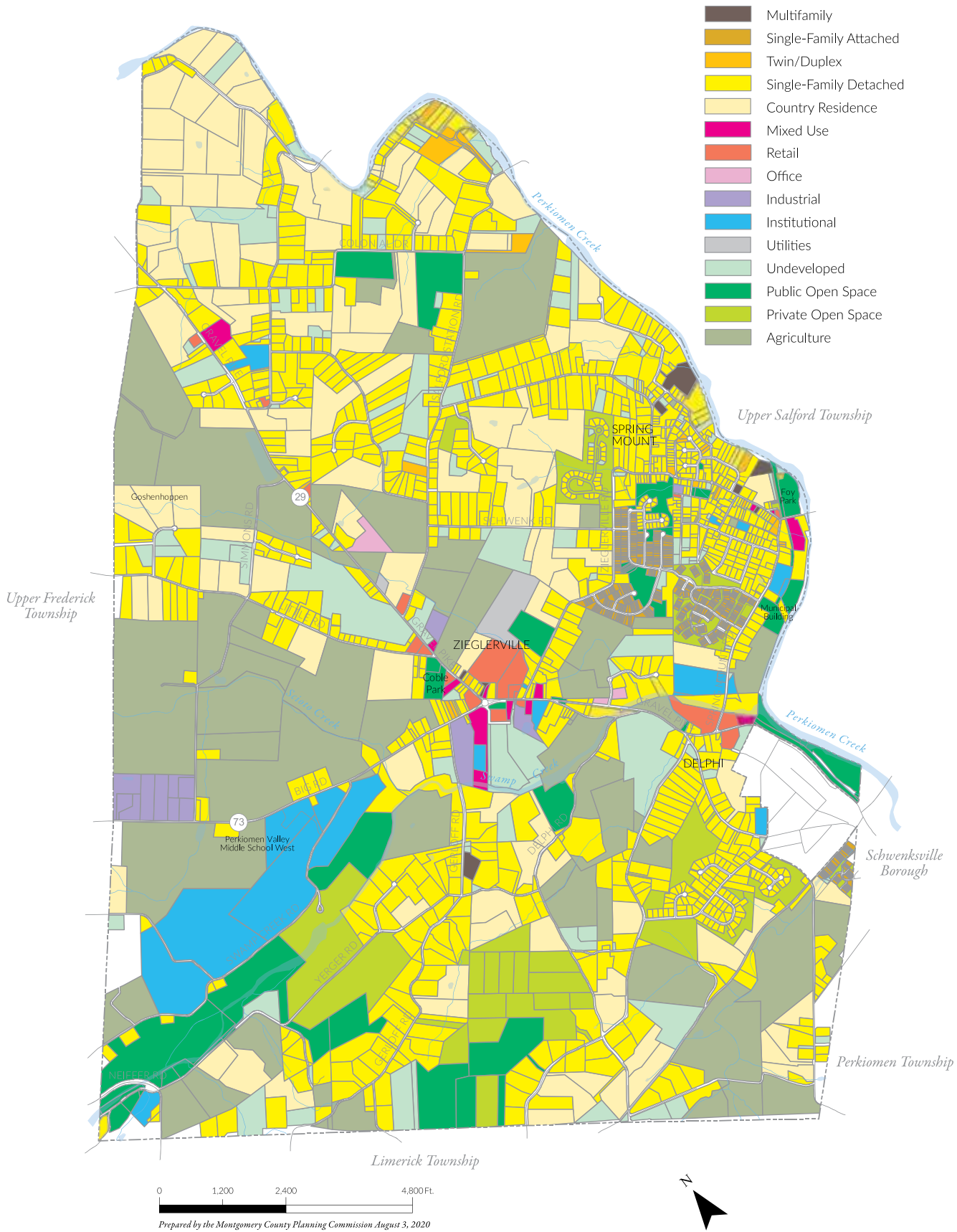
Appendix A - Zoning Map

Lower Frederick Township Montgomery County, Pennsylvania



Appendix B - Land Use Map

Figure 1.18 | Land Uses, July 2020



Appendix C - Estimate of Probable Costs for Alternatives

Goshenhoppen Creek Watershed Sewage Planning Study

Option	Description	Projected Project Costs			Projected Property Owner Costs						Total Cost per property served
		Projected Construction Cost	Properties Served	Project Cost per property served	STEP System	Individual Grinder Pumps	Gravity Connect	LFT Tapping Fee	Property Owner direct costs		
LPS Salford Station at Schwenk											
A	LPS, Salford Station to MH in Gravel Pike	\$ 1,567,631.25	31	\$ 50,568.75		\$ 17,000		\$7,405.26	\$ 24,405.26	\$ 74,974.01	
B	LPS, Salford Station to MH in Fulmer Road	\$ 2,453,544.79	52	\$ 47,183.55		\$ 17,000	\$ 7,000	\$7,405.26	\$ 23,059.11	\$ 70,242.66	
C	LPS, Salford Station to Schwenk to MH in Ziegerville	\$ 2,692,172.92	56	\$ 48,074.52		\$ 17,000		\$7,405.26	\$ 24,405.26	\$ 72,479.78	
LPS Salford Station at Schwenk W/STEP											
D1	A-LPS, Salford Station to MH in Gravel Pike W/STEP	\$ 1,567,631.25	31	\$ 50,568.75	\$ 22,000			\$7,405.26	\$ 29,405.26	\$ 79,974.01	
D2	B-LPS, Salford Station to MH in Fulmer Road W/STEP	\$ 2,453,544.79	52	\$ 47,183.55	\$ 22,000			\$7,405.26	\$ 29,405.26	\$ 76,588.81	
D3	C-LPS, Salford Station to Schwenk to MH Zieg. W/STEP	\$ 2,692,172.92	56	\$ 48,074.52	\$ 22,000			\$7,405.26	\$ 29,405.26	\$ 77,479.78	
Pump Station along Goshenhoppen Creek											
E	PS on Salford Station *	\$ 2,908,787.50	31	\$ 93,831.85			\$ 7,000	\$7,405.26	\$ 14,405.26	\$ 108,237.11	
F	PS near Ziegerville Road *	\$ 3,809,402.08	38	\$ 100,247.42			\$ 7,000	\$7,405.26	\$ 14,405.26	\$ 114,652.68	
Ziegerville Road											
G	LPS in Ziegerville Road to MH in Ziegerville Road	\$ 542,153.25	16	\$ 33,884.58		\$ 17,000		\$7,405.26	\$ 24,405.26	\$ 58,289.84	
H	LPS in Ziegerville Road to MH in Gravel Pike *	\$ 415,510.42	7	\$ 59,358.63		\$ 17,000		\$7,405.26	\$ 24,405.26	\$ 83,763.89	
I	LPS in Ziegerville Road to Community System *	\$ 318,418.30	5	\$ 63,683.66		\$ 17,000				\$ 80,683.66	
J	LPS in Ziegerville Road to SFTF *	\$ 483,976.30	5	\$ 96,795.26		\$ 17,000				\$ 113,795.26	

* Property Acquisition Costs not included

Preliminary Estimate of Probable Construction Costs: Force main to existing MH, Lower Frederick Township

Low pressure force main in Twp Road	1590	LF
Low pressure main in Salford Station	2500	LF
Low Pressure main in Gravel Pike	830	LF

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	1	\$ 12,000.00	\$ 12,000.00
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 2,500.00	\$ 2,500.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 18,000.00	\$ 18,000.00
5	Force main in Township Road	LF	1590	\$ 80.00	\$ 127,200.00
6	Force main in Salford Station Road	LF	2460	\$ 95.00	\$ 233,700.00
7	Force main in Gravel Pike	LF	830	\$ 95.00	\$ 78,850.00
8	Lateral Connections	Each	31	\$ 2,400.00	\$ 74,400.00
9	Terminal Flushing Connection	Each	3	\$ 10,000.00	\$ 30,000.00
10	Air release chamber	LS	1	\$ 20,000.00	\$ 20,000.00
11	Temporary Pavement	LF	4290	\$ 22.00	\$ 94,380.00
12	Trench Restoration in Twp Road	LF	1000	\$ 75.00	\$ 75,000.00
13	Trench Restoration in State Highway	LF	3290	\$ 85.00	\$ 279,650.00
14	Mill and Wearing Course Overlay	SY	5720	\$ 22.00	\$ 125,840.00
15	Force Main Connection to Existing MH	Each	1	\$ 5,000.00	\$ 5,000.00
16	Stream Crossing	Each	1	\$ 35,000.00	\$ 35,000.00
17	Joint Seal	LF	4290	\$ 6.50	\$ 27,885.00
18	Fine grade, seed and mulch or mat.	LS	1	\$ 5,000.00	\$ 5,000.00
19	Pavement Markings	LS	1	\$ 8,500.00	\$ 8,500.00
20					

Total Construction Estimate \$ 1,254,105.00

Subtotal: \$ 1,254,105.00

Contingencies (10%): \$ 125,410.50

Project Design and Permitting (7%): \$ 87,787.35

Contract Administration and Inspection (8%): \$ 100,328.40

Total Probable Cost: \$ 1,567,631.25

Preliminary Estimate of Probable Construction Costs: Force main to Fulmer MH, Lower Frederick Township

Low pressure force main in Twp Road	1590	LF
Low pressure main in Salford Station	3875	LF
Gravity Line in Fulmer	1100	LF

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	1	\$ 10,000.00	\$ 10,000.00
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 5,000.00	\$ 5,000.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 18,000.00	\$ 18,000.00
5	Force main in Township Road	LF	1590	\$ 80.00	\$ 127,200.00
6	Force main in Salford Station Road	LF	3875	\$ 95.00	\$ 368,125.00
7	Gravity Line in Fulmer Road	LF	1100	\$ 200.00	\$ 220,000.00
8	Lateral Connections	Each	52	\$ 2,400.00	\$ 124,800.00
9	Terminal Flushing Connection	Each	3	\$ 10,000.00	\$ 30,000.00
10	Air release chamber	Each	2	\$ 20,000.00	\$ 40,000.00
11	Manholes	Each	4	\$ 4,200.00	\$ 16,800.00
12	Temporary Pavement	LF	6565	\$ 22.00	\$ 144,430.00
13	Trench Restoration in Twp Road	LF	2006	\$ 75.00	\$ 150,450.00
14	Trench Restoration in State Highway	LF	4975	\$ 85.00	\$ 422,875.00
15	Mill and Wearing Course Overlay	SY	8753	\$ 22.00	\$ 192,573.33
16	Connection to Existing MH	Each	1	\$ 210.00	\$ 210.00
17	Stream Crossing	Each	1	\$ 35,000.00	\$ 35,000.00
18	Joint Seal	LF	6565	\$ 6.50	\$ 42,672.50
19	Fine grade, seed and mulch or mat.	LS	1	\$ 5,000.00	\$ 5,000.00
20	Pavement Markings	LS	1	\$ 8,500.00	\$ 8,500.00
23					

Total Construction Estimate \$ 1,962,835.83

Subtotal: \$ 1,962,835.83

Contingencies (10%): \$ 196,283.58

Project Design and Permitting (7%): \$ 137,398.51

Contract Administration and Inspection (8%): \$ 157,026.87

Total Probable Cost: \$ 2,453,544.79

Preliminary Estimate of Probable Construction Costs: Force main to Zieglerville Rd. MH, Lower Frederick Township

Low pressure force main in Schwenk Road
and Cepp Road 4440 LF

Low pressure main in Salford Station 3850 LF

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	1	\$ 8,000.00	\$ 8,000.00
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 8,000.00	\$ 8,000.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 18,000.00	\$ 18,000.00
5	Force main in Township Road	LF	4440	\$ 80.00	\$ 355,200.00
6	Force main in Salford Station Road	LF	3850	\$ 95.00	\$ 365,750.00
7	Gravity Line	LF	0	\$ 200.00	\$ -
8	Lateral Connections	Each	56	\$ 2,400.00	\$ 134,400.00
9	Terminal Flushing Connection	Each	3	\$ 10,000.00	\$ 30,000.00
10	Air release chamber	Each	2	\$ 20,000.00	\$ 40,000.00
11	Manholes	Each		\$ 4,200.00	\$ -
12	Temporary Pavement	LF	8290	\$ 22.00	\$ 182,380.00
13	Trench Restoration in Twp Road	LF	4440	\$ 75.00	\$ 333,000.00
14	Trench Restoration in State Highway	LF	3850	\$ 85.00	\$ 327,250.00
15	Mill and Wearing Course Overlay	SY	11053	\$ 22.00	\$ 243,173.33
16	Force Main Connection to Existing MH	Each	1.00	\$ 5,000.00	\$ 5,000.00
17	Stream Crossing	Each	1	\$ 35,000.00	\$ 35,000.00
18	Joint Seal	LF	8290	\$ 6.50	\$ 53,885.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 5,000.00	\$ 5,000.00
20	Pavement Markings	LS	1	\$ 8,500.00	\$ 8,500.00
23					

Total Construction Estimate \$ 2,153,738.33

Subtotal: \$ 2,153,738.33

Contingencies (10%): \$ 215,373.83

Project Design and Permitting (7%): \$ 150,761.68

Contract Administration and Inspection (8%): \$ 172,299.07

Total Probable Cost: \$ 2,692,172.92

Preliminary Estimate of Probable Construction Costs: PS On Salford Station to MH in Gravel Pike, Lower Frederick Township

Gravity Main In Cepp (Twp Road)	600	LF
Gravity Main In Schwenk (Twp Road)	1000	LF
Gravity Main In Salford Station (State Road)	2240	LF
Force Main in State Roads	1450	LF

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	1	\$ 10,000.00	\$ 10,000.00
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 2,500.00	\$ 2,500.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 18,000.00	\$ 18,000.00
5		LF		\$ 80.00	\$ -
6	Force main in State Roads	LF	1450	\$ 95.00	\$ 137,750.00
7	Gravity Line	LF	3840	\$ 200.00	\$ 768,000.00
8	Lateral Connections - gravity	Each	31	\$ 1,600.00	\$ 49,600.00
9		Each		\$ 10,000.00	\$ -
10	Air release chamber	Each	1	\$ 20,000.00	\$ 20,000.00
11	Manholes	Each	20	\$ 4,200.00	\$ 84,000.00
12	Temporary Pavement	LF	3840	\$ 22.00	\$ 84,480.00
13	Trench Restoration in Twp Road	LF	1600	\$ 75.00	\$ 120,000.00
14	Trench Restoration in State Highway	LF	2240	\$ 85.00	\$ 190,400.00
15	Mill and Wearing Course Overlay	SY	5120	\$ 22.00	\$ 112,640.00
16	Force Main Connection to Existing MH	Each	1.00	\$ 5,000.00	\$ 5,000.00
17	Stream Crossing	Each	1	\$ 35,000.00	\$ 35,000.00
18	Joint Seal	LF	3840	\$ 6.50	\$ 24,960.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 5,000.00	\$ 5,000.00
20	Pavement Markings	LS	1	\$ 8,500.00	\$ 8,500.00
21	Pump Station	LS	1	\$ 650,000.00	\$ 650,000.00

Total Construction Estimate **\$ 2,327,030.00**

Subtotal: \$ 2,327,030.00

Contingencies (10%): \$ 232,703.00

Project Design and Permitting (7%): \$ 162,892.10

Contract Administration and Inspection (8%): \$ 186,162.40

Total Probable Cost: **\$ 2,908,787.50**

Preliminary Estimate of Probable Construction Costs: Gravity Sewer to Pump Station near to Zieglerville Rd. Lower Frederick Township

Gravity Main In Schwenk, Cepp and Zieglerville (Twp Roads)	2000	LF
Gravity Main In Salford Station (State Road)	2240	LF
Gravity Main off-road	4200	LF
Force Main off road	1580	LF

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 35,000.00	\$ 35,000.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	1	\$ 12,000.00	\$ 12,000.00
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 8,000.00	\$ 8,000.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 25,000.00	\$ 25,000.00
5	Force main in Township Road	LF	850	\$ 90.00	\$ 76,500.00
6	Force main outside Township Road	LF	1580	\$ 50.00	\$ 79,000.00
7	Gravity Line Off-road	LF	4200	\$ 95.00	\$ 399,000.00
8	Gravity Line	LF	4240	\$ 200.00	\$ 848,000.00
9	Lateral Connections - gravity	Each	38	\$ 1,600.00	\$ 60,800.00
10	Air release chamber	Each	1	\$ 20,000.00	\$ 20,000.00
11	Manholes	Each	16	\$ 4,200.00	\$ 67,200.00
12	Temporary Pavement	LF	5090	\$ 22.00	\$ 111,980.00
13	Trench Restoration in Twp Road	LF	2850	\$ 75.00	\$ 213,750.00
14	Trench Restoration in State Highway	LF	2240	\$ 85.00	\$ 190,400.00
15	Mill and Wearing Course Overlay	SY	6787	\$ 22.00	\$ 149,306.67
16	Force Main Connection to Existing MH	Each	1.00	\$ 5,000.00	\$ 5,000.00
17	Stream Crossing	Each	1	\$ 35,000.00	\$ 35,000.00
18	Joint Seal	LF	5090	\$ 6.50	\$ 33,085.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 20,000.00	\$ 20,000.00
20	Pavement Markings	LS	1	\$ 8,500.00	\$ 8,500.00
20	Pump Station	LS	1	\$ 650,000.00	\$ 650,000.00

Total Construction Estimate	\$ 3,047,521.67
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Subtotal: \$ 3,047,521.67

Contingencies (10%): \$ 304,752.17

Project Design and Permitting (7%):	\$	213,326.52
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Contract Administration and Inspection (8%): \$ 243,801.73

Total Probable Cost: \$ 3,809,402.08

Preliminary Estimate of Probable Construction Costs: Force main In Zeiglerville Road to top of Hill, Lower Frederick Township

Low pressure force main in Twp Road 1650 LF
No PennDOT Roads

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	0	\$ 10,000.00	\$ -
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 5,000.00	\$ 5,000.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 5,000.00	\$ 5,000.00
5	Force main in Township Road	LF	1650	\$ 80.00	\$ 132,000.00
6		LF	0	\$ 95.00	\$ -
7		LF	0	\$ 200.00	\$ -
8	Lateral Connections	Each	16	\$ 2,400.00	\$ 38,400.00
9	Terminal Flushing Connection	Each	1	\$ 10,000.00	\$ 10,000.00
10	Air release chamber	Each	1	\$ 20,000.00	\$ 20,000.00
11		Each	0	\$ 4,200.00	\$ -
12	Temporary Pavement	LF	1650	\$ 22.00	\$ 36,300.00
13	Trench Restoration in Twp Road	LF	1650	\$ 75.00	\$ 123,750.00
14	Trench Restoration in State Highway	LF	0	\$ 85.00	\$ -
15	Mill and Wearing Course Overlay	SY	2200	\$ 22.00	\$ 48,400.00
16	Force Main Connection to Existing MH	Each	1	\$ 5,000.00	\$ 5,000.00
17				\$ 35,000.00	\$ -
18	Joint Seal	LF	1650	\$ 6.50	\$ 10,725.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 3,000.00	\$ 3,000.00
20	Pavement Markings	LS	1	\$ 2,000.00	\$ 2,000.00
Total Construction Estimate					\$ 440,775.00

Subtotal:	\$ 440,775.00
Contingencies (10%):	\$ 44,077.50
Project Design and Permitting (5%):	\$ 22,038.75
Contract Administration and Inspection (8%):	\$ 35,262.00

Total Probable Cost: \$ 542,153.25

Preliminary Estimate of Probable Construction Costs: Force main in Z Rd to Rt 29 MH, Lower Frederick Township

Low pressure force main in Twp Road 850 LF
Stream crossing
Connect to MH in Gravel Pike

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 5,000.00	\$ 5,000.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	1	\$ 10,000.00	\$ 10,000.00
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 5,000.00	\$ 5,000.00
4	Erosion and Sediment Control facilities, including stream crossing below Bridge	LS	1	\$ 25,000.00	\$ 25,000.00
5	Force main in Township Road	LF	850	\$ 80.00	\$ 68,000.00
6		LF	0	\$ 95.00	\$ -
7		LF	0	\$ 200.00	\$ -
8	Lateral Connections	Each	7	\$ 2,400.00	\$ 16,800.00
9	Terminal Flushing Connection	Each	1	\$ 10,000.00	\$ 10,000.00
10	Air release chamber	Each	1	\$ 20,000.00	\$ 20,000.00
11		Each	0	\$ 4,200.00	\$ -
12	Temporary Pavement	LF	850	\$ 22.00	\$ 18,700.00
13	Trench Restoration in Twp Road	LF	850	\$ 75.00	\$ 63,750.00
14	Trench Restoration in State Highway	LF	20	\$ 85.00	\$ 1,700.00
15	Mill and Wearing Course Overlay	SY	1133	\$ 22.00	\$ 24,933.33
16	Force Main Connection to Existing MH	Each	1	\$ 5,000.00	\$ 5,000.00
17	Stream Crossing	Each	1	\$ 35,000.00	\$ 35,000.00
18	Joint Seal	LF	850	\$ 6.50	\$ 5,525.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 6,000.00	\$ 6,000.00
20	Pavement Markings	LS	1	\$ 2,000.00	\$ 2,000.00
20	ROW acquisition outside bridge	LS	1	\$ 10,000.00	\$ 10,000.00

Total Construction Estimate \$ 332,408.33

Subtotal: \$ 332,408.33
Contingencies (10%): \$ 33,240.83
Project Design and Permitting (7%): \$ 23,268.58
Contract Administration and Inspection (8%): \$ 26,592.67

Total Probable Cost: \$ 415,510.42

Preliminary Estimate of Probable Construction Costs: Community System, Lower Frederick Township

Low pressure force main in Twp Road 380 LF
Low Pressure Force Main off road 440 LF

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	0	\$ 10,000.00	\$ -
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 5,000.00	\$ 5,000.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 5,000.00	\$ 5,000.00
5	Force main in Township Road	LF	380	\$ 80.00	\$ 30,400.00
6	Force main outside Township Road	LF	480	\$ 50.00	\$ 24,000.00
7		LF	0	\$ 200.00	\$ -
8	Lateral Connections	Each	5	\$ 2,400.00	\$ 12,000.00
9	Terminal Flushing Connection	Each	1	\$ 10,000.00	\$ 10,000.00
10	Air release chamber	Each	0	\$ 20,000.00	\$ -
11		Each	0	\$ 4,200.00	\$ -
12	Temporary Pavement	LF	380	\$ 22.00	\$ 8,360.00
13	Trench Restoration in Twp Road	LF	380	\$ 75.00	\$ 28,500.00
14	Trench Restoration in State Highway	LF	480	\$ 85.00	\$ 40,800.00
15	Mill and Wearing Course Overlay	SY	507	\$ 22.00	\$ 11,146.67
16	Force Main Connection to Existing MH	Each	0	\$ 5,000.00	\$ -
17				\$ 35,000.00	\$ -
18	Joint Seal	LF	380	\$ 6.50	\$ 2,470.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 5,000.00	\$ 5,000.00
20	Pavement Markings	LS		\$ 2,000.00	\$ -
20	Community system on SBA Lands	LS	1	\$ 75,000.00	\$ 75,000.00
21	SFTF serve small number of homes	LS	0	\$ 250,000.00	
22					

Total Construction Estimate \$ 258,876.67

Subtotal: \$ 258,876.67
Contingencies (10%): \$ 25,887.67
Project Design and Permitting (5%): \$ 12,943.83
Contract Administration and Inspection (8%): \$ 20,710.13
Total Probable Cost: \$ 318,418.30

Preliminary Estimate of Probable Construction Costs: Small Flow Treatment Facility (SFTF), Lower Frederick Township

Low pressure force main in Twp Road 380 LF
No PennDOT Roads

Construction Item		Units	Est. Quantity	Unit Cost	Total Cost
1	Clearing and Grubbing, complete, in place.	LS	1	\$ 1,200.00	\$ 1,200.00
2	Traffic Control State Road - Lane closure, cones, barricades and flagging	LS	0	\$ 10,000.00	\$ -
3	Traffic Control Local Road - Lane closure, cones, barricades and flagging	LS	1	\$ 5,000.00	\$ 5,000.00
4	Erosion and Sediment Control facilities.	LS	1	\$ 5,000.00	\$ 5,000.00
5	Force main in Township Road	LF	380	\$ 80.00	\$ 30,400.00
6		LF	0	\$ 95.00	\$ -
7		LF	0	\$ 200.00	\$ -
8	Lateral Connections	Each	16	\$ 2,400.00	\$ 38,400.00
9	Terminal Flushing Connection	Each	1	\$ 10,000.00	\$ 10,000.00
10	Air release chamber	Each	0	\$ 20,000.00	\$ -
11		Each	0	\$ 4,200.00	\$ -
12	Temporary Pavement	LF	380	\$ 22.00	\$ 8,360.00
13	Trench Restoration in Twp Road	LF	380	\$ 75.00	\$ 28,500.00
14	Trench Restoration in State Highway	LF	0	\$ 85.00	\$ -
15	Mill and Wearing Course Overlay	SY	507	\$ 22.00	\$ 11,146.67
16	Force Main Connection to Existing MH	Each	0	\$ 5,000.00	\$ -
17				\$ 35,000.00	\$ -
18	Joint Seal	LF	380	\$ 6.50	\$ 2,470.00
19	Fine grade, seed and mulch or mat.	LS	1	\$ 3,000.00	\$ 3,000.00
20	Pavement Markings	LS		\$ 2,000.00	\$ -
20	Community system on SBA Lands	LS	0	\$ 75,000.00	\$ -
21	SFTF serve small number of homes	LS	1	\$ 250,000.00	\$ 250,000.00

Total Construction Estimate \$ 393,476.67

Subtotal: \$ 393,476.67
Contingencies (10%): \$ 39,347.67
Project Design and Permitting (5%): \$ 19,673.83
Contract Administration and Inspection (8%): \$ 31,478.13

Total Probable Cost: \$ 483,976.30

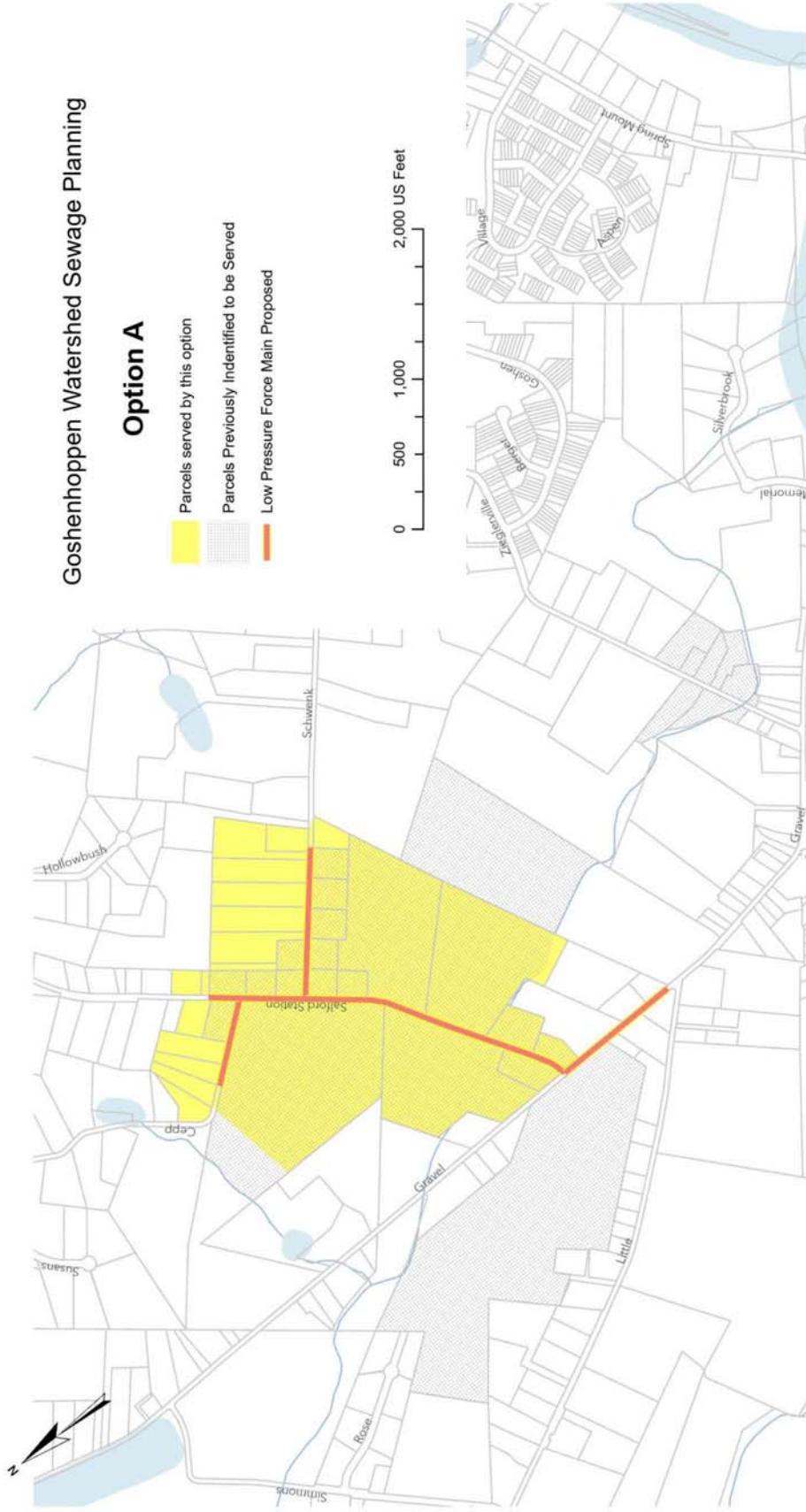
Appendix D - Alternative Maps

Goshenhoppen Watershed Sewage Planning

Option A

- Parcels served by this option
- Parcels Previously Identified to be Served
- Low Pressure Force Main Proposed

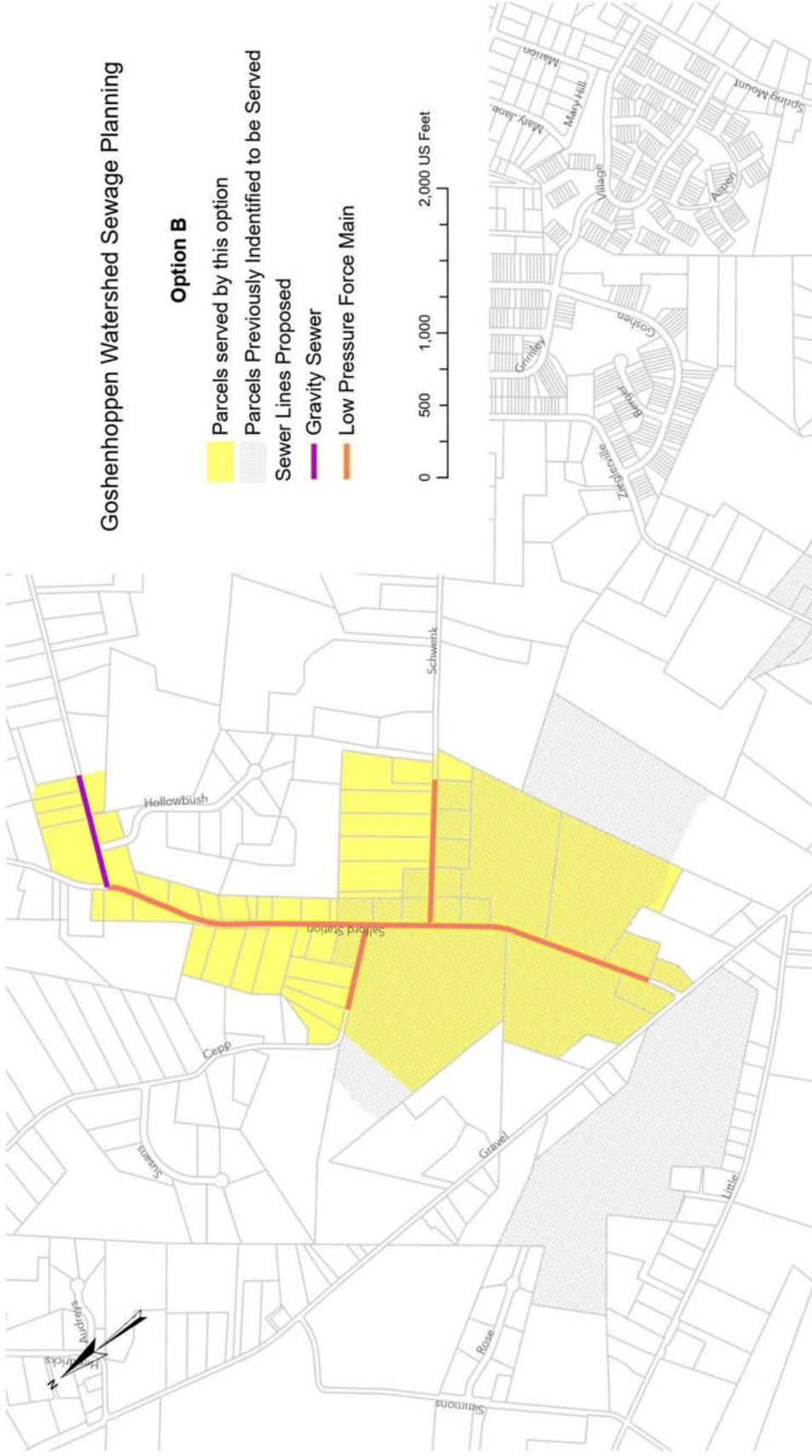
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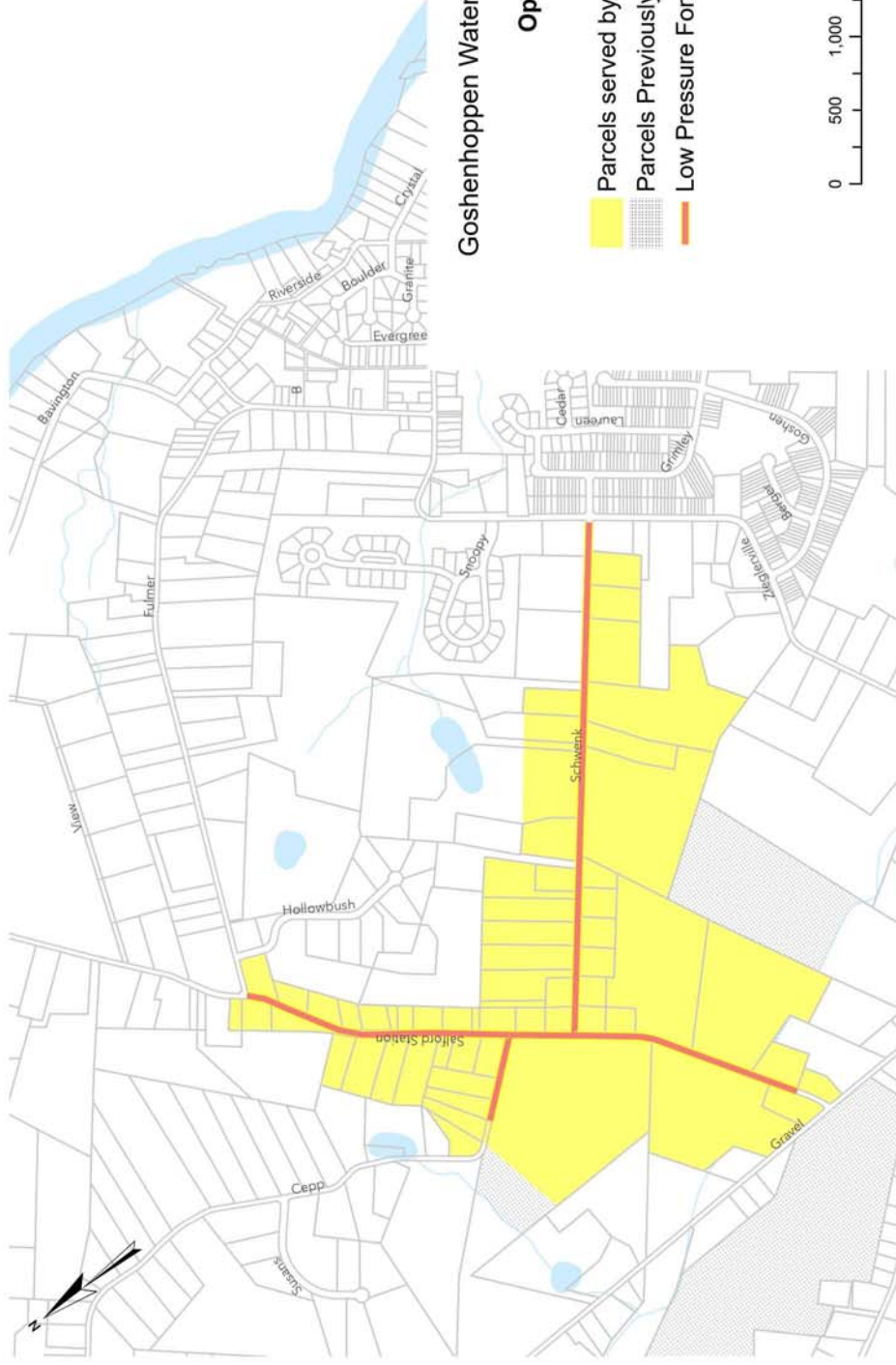


Goshenhoppen Watershed Sewage Planning

Option B

- Parcels served by this option
- Parcels Previously Identified to be Served
- Sewer Lines Proposed
- Gravity Sewer
- Low Pressure Force Main





Goshenhoppen Watershed Sewage Planning

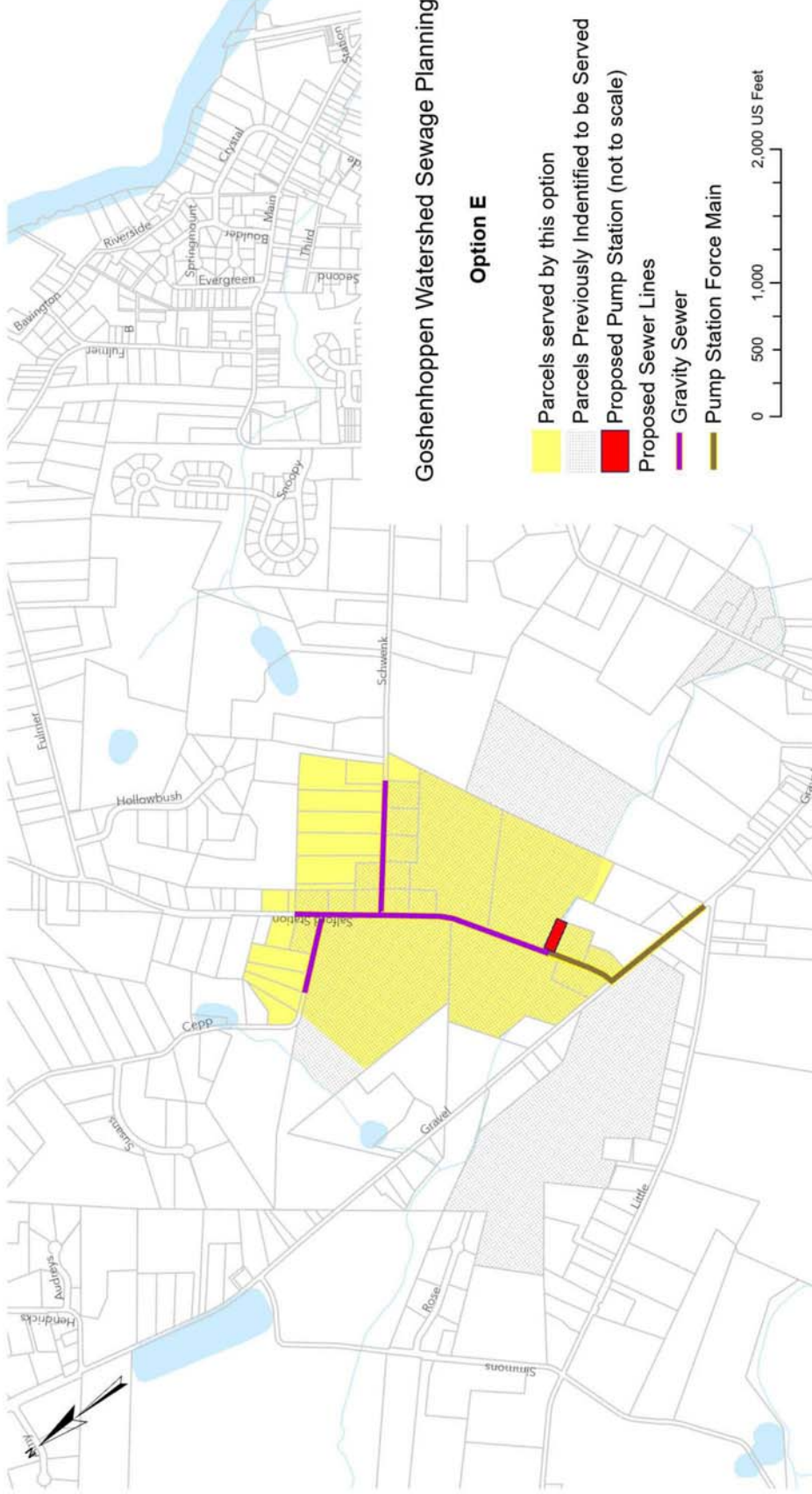
Option C

Parcels served by this option

Parcels Previously Identified to be Served

Low Pressure Force Main Proposed

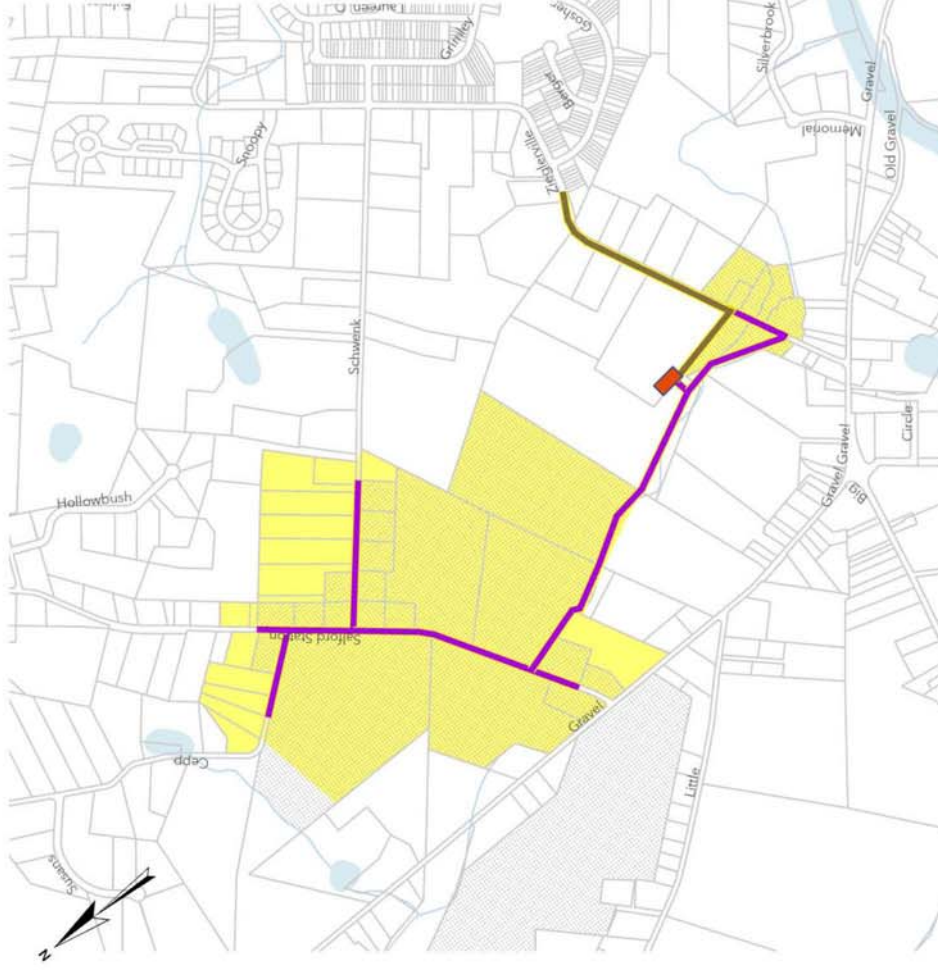
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Goshenhoppen Watershed Sewage Planning

Option F

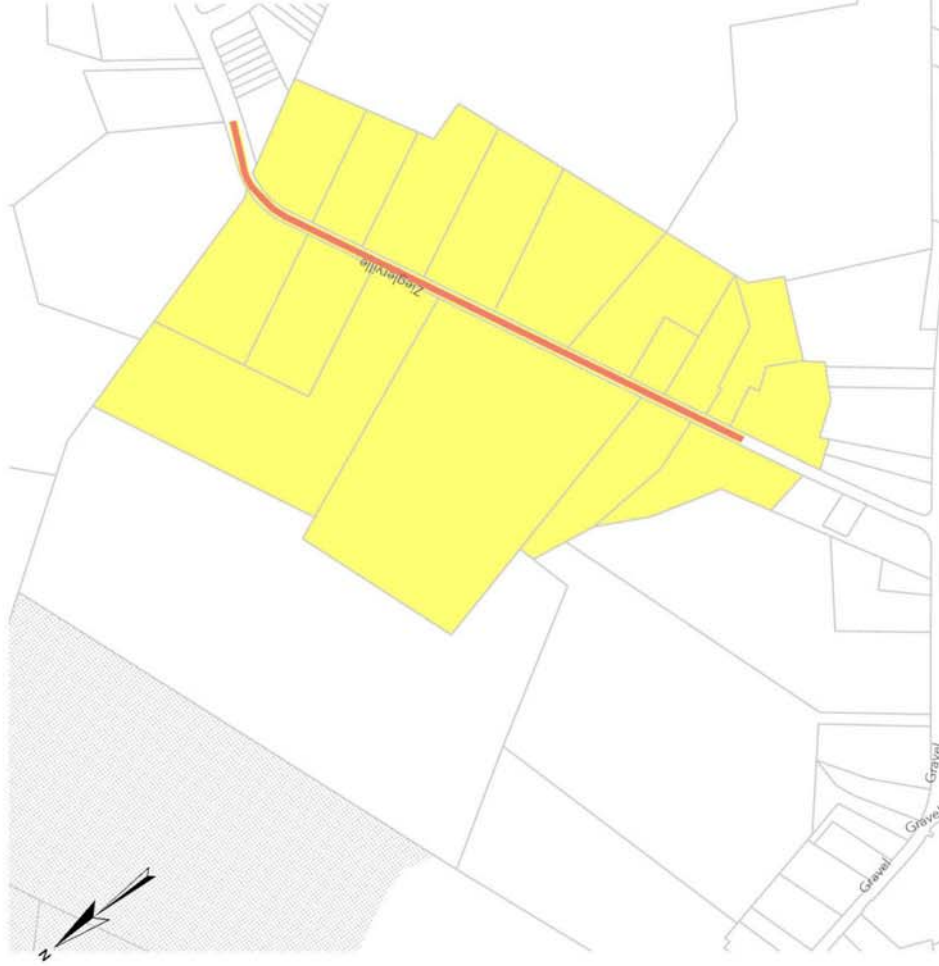
- Parcels served by this option
- DarkGreenParcels
- Proposed Pump Station (not to scale)
- Proposed Sewer Lines
- Gravity Sewer
- Pump Station Force Main



Goshenhoppen Watershed Sewage Planning

Option G

- Parcels served by this option
- Parcels Previously Identified to be Served
- Low Pressure Force Main Proposed

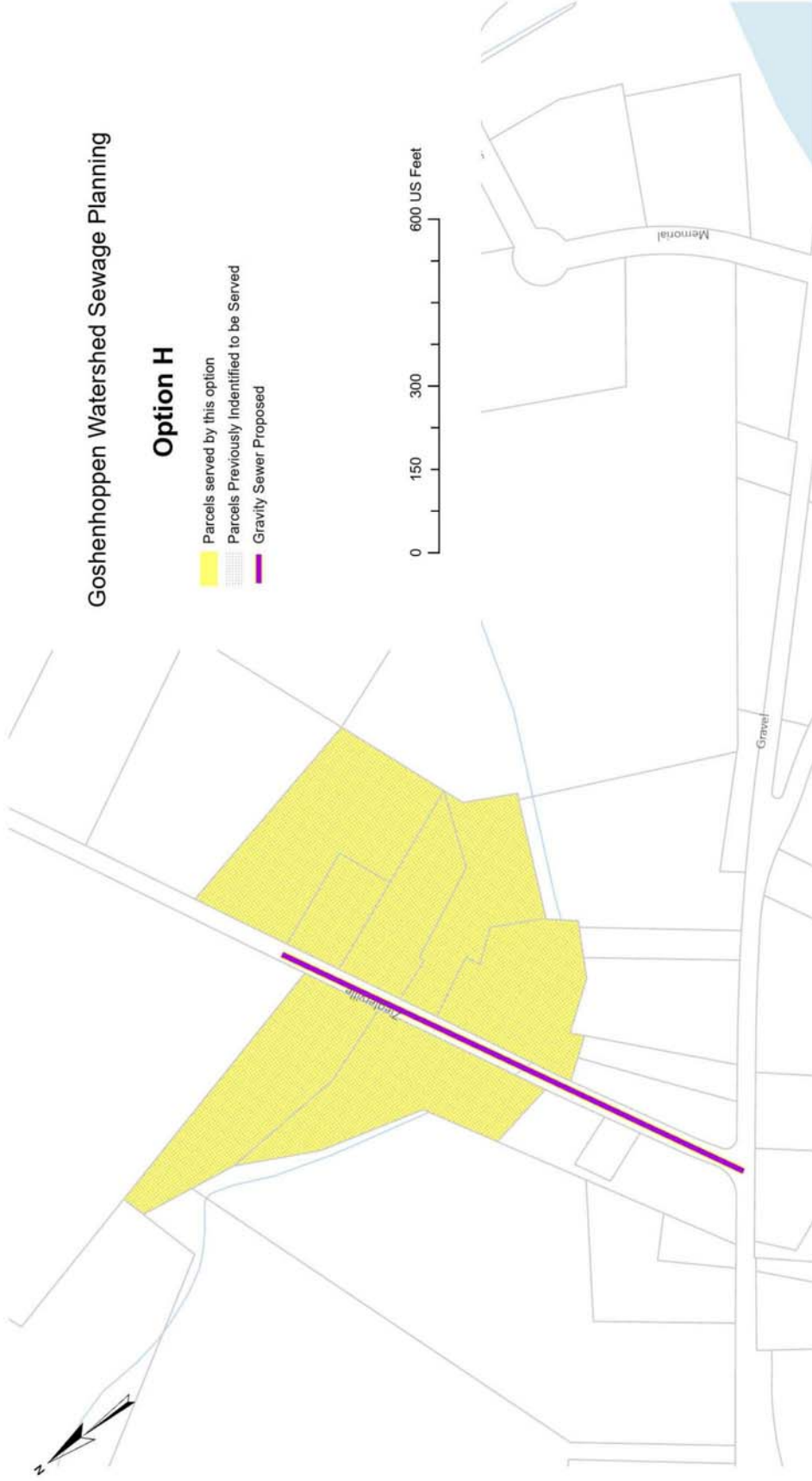


0 250 500 1,000 US Feet

Goshenhoppen Watershed Sewage Planning

Option H

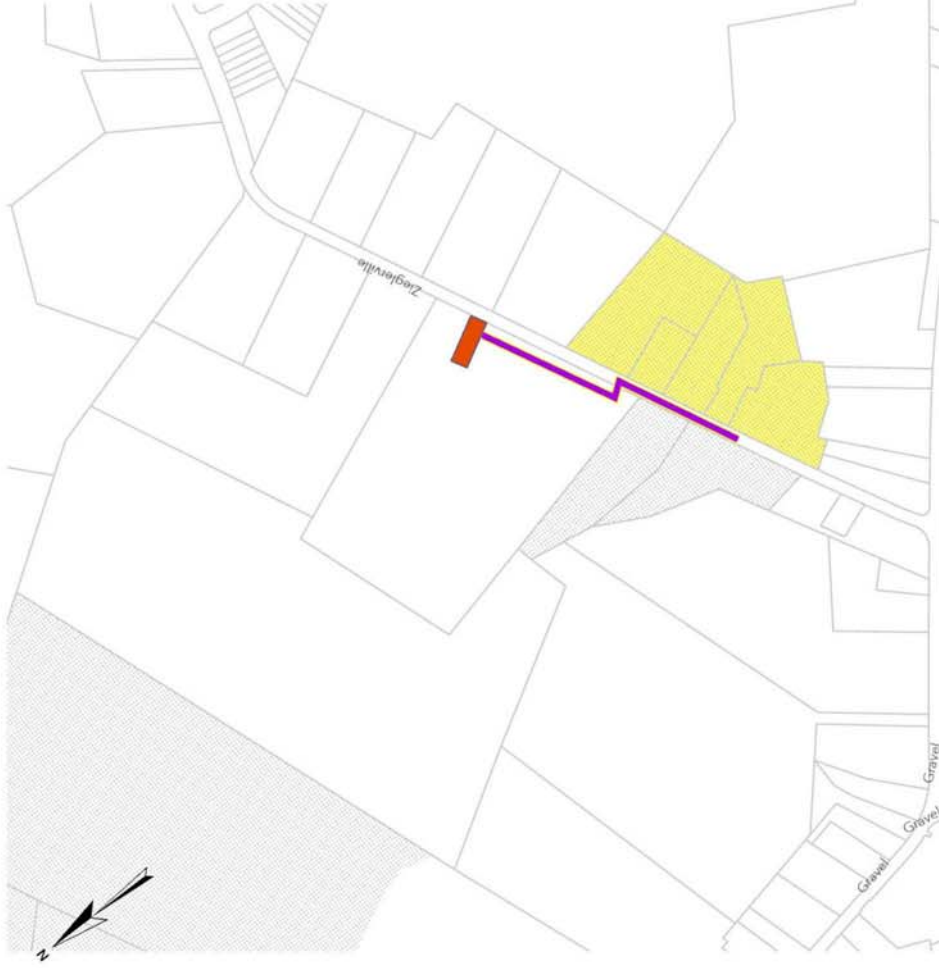
- Parcels served by this option
- Parcels Previously Identified to be Served
- Gravity Sewer Proposed



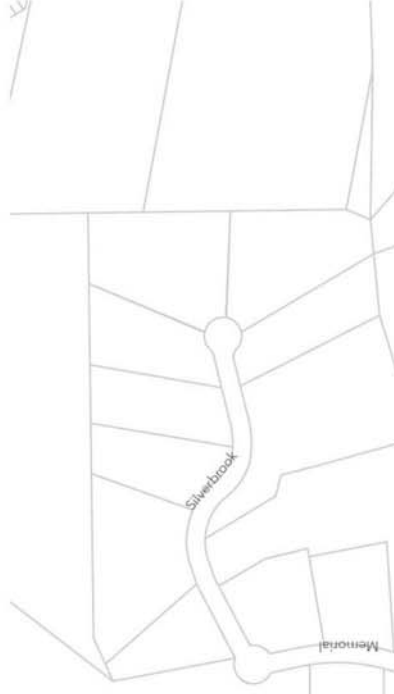
Goshenhoppen Watershed Sewage Planning

Option I

- Parcels served by this option
- Parcels Previously Identified to be Served
- Community Sand Mound
- Gravity Sewer Line Proposed



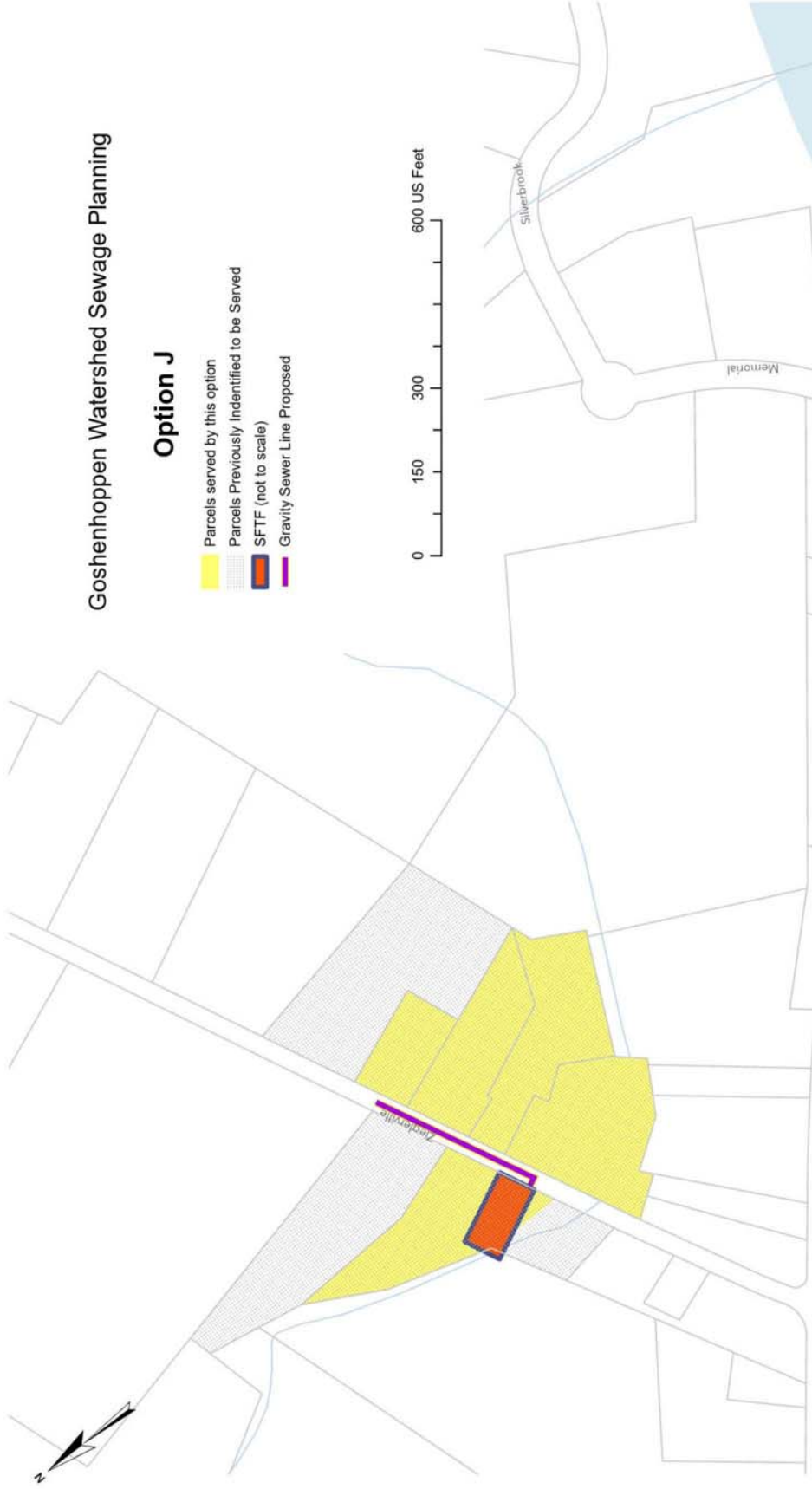
0 250 500 1,000 US Feet



Goshenhoppen Watershed Sewage Planning

Option J

- Parcels served by this option
- Parcels Previously Identified to be Served
- SFTF (not to scale)
- Gravity Sewer Line Proposed



Appendix E - Existing Collection System Map

LF0513 / LFTW22001

BASE MAP PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION
PROPERTY LINES AS OF MARCH 2002

The underlying map is based on 2000 ortho photographs, Montgomery County Board of Assessment, Appeal tax maps, Township officials, and field surveys conducted by the Montgomery County Planning Commission. All attempts were made to maintain relative accuracy; however, this map should not be used for engineering purposes. Property lines are a compilation of individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties.

Map data through 2015 from plan prepared by Jovetel & Waller, Inc. dated February 15, 2006, last revised November 12, 2015.

LINE#	YEAR	WH	UNID	CONTRACTOR
1	2010			
2	2010			
3	2010			
4	2010			
5	2010			
6	2010			
7	2010			
8	2010			
9	2010			
10	2010			
11	2010			
12	2010			
13	2010			
14	2010			
15	2010			
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117	2010			
118	2010			
119	2010			
120	2010			
121	2010			
122	2010			



Appendix F - Sewage Management Ordinance

*Township of Lower Frederick, PA
Thursday, April 27, 2023*

Chapter 123. Sewers

Article VIII. On-Lot Sewage Systems

[Adopted 3-1-2011 by Ord. No. 11-02]

§ 123-69. Title; purpose.

- A. This article shall be known and may be cited as the "On-Lot Sewage System Management Ordinance for Lower Frederick Township."
- B. In accordance with Municipal Codes, the Clean Streams Law (Act of June 22, 1937, P.L. 1987, No. 394, as amended, 35 P.S. §§ 691.1 to 691.1001), and the Pennsylvania Sewage Facilities Act (the "Act" or "PSFA")(Act of January 24, 1966, P.L. 1535, as amended, 35 P.S. § 750.1, et seq., known as Act 537), it is the power and the duty of Lower Frederick Township to provide for adequate sewage treatment facilities and for the protection of the public health by preventing the discharge of untreated or inadequately treated sewage. The Official Sewage Facilities Plan for Lower Frederick Township indicates that it is necessary to formulate and implement a sewage management program to effectively prevent and abate water pollution and hazards to the public health caused by improper treatment and disposal of sewage.
- C. The purpose of this article is to provide for the regulation, inspection, maintenance and rehabilitation of on-lot sewage disposal systems; to further permit intervention in situations which may constitute a public nuisance or hazard to the public health; and to establish penalties and appeal procedures necessary for the proper administration of a sewage management program.

§ 123-70. Definitions.

- A. Unless the context specifically and clearly indicates otherwise, the meaning of terms used in this article shall be as follows:

AUTHORIZED AGENT

An employee of the Township, Professional Engineer, Plumbing Inspector, Sewage Enforcement Officer or any other qualified or licensed person who is authorized to function within specified limits as an agent of Lower Frederick Township to administer or enforce the provisions of this article.

BOARD

The Board of Supervisors of Lower Frederick Township, Montgomery County, Pennsylvania.

COMMUNITY SEWAGE SYSTEM

A sewage system, whether publicly or privately owned, for the collection of sewage from two or more lots, or two or more equivalent dwelling units, and the treatment of disposal, or both, of the sewage on one or more of the lots or at another site.

DEPARTMENT

The Department of Environmental Protection of the Commonwealth of Pennsylvania (DEP).

INDIVIDUAL SEWAGE SYSTEM

A system of piping, tanks or other facilities serving a single lot and collecting and disposing of sewage, in whole or in part, into the soil or into waters of this commonwealth, or by means of conveyance to another site for final disposal.

LOT

A designed parcel, tract, or area of land established by a plat or otherwise permitted by law and to be used, developed or built upon as a unit.

MALFUNCTION

A condition which occurs when an on-lot sewage disposal system discharges sewage onto the surface of the ground, into surface waters of this commonwealth, backs up into a building connected to the system or in any manner causes a nuisance or hazard to the public health or pollution of groundwater or surface water or contamination of public or private drinking-water wells. Systems shall be considered to be malfunctioning if any condition noted above occurs for any length of time during any period of the year.

MUNICIPALITY

Lower Frederick Township, Montgomery County, Pennsylvania.

OFFICIAL SEWAGE FACILITIES PLAN

A comprehensive plan for the provisions of adequate sewage disposal systems, adopted by the Board and approved by the Pennsylvania Department of Environmental Protection, pursuant to the Pennsylvania Sewage Facilities Act.

ON-LOT SEWAGE DISPOSAL SYSTEM

Any sewage system which uses a system of piping, tanks or other facilities for collecting, treating or disposing of sewage into a soil absorption area or spray field, or by retention in a retaining tank; this term includes both individual sewage systems and community sewage systems.

OWNER

Any person vested with ownership, legal or equitable, sole or partial, of any property located in the Township.

PERSON

Any individual, association, public or private corporation for profit or not for profit, partnership, firm, trust, estate, department, board, bureau or agency of the commonwealth, political subdivision, municipality, district, authority or any other legal entity whatsoever which is recognized by law as the subject of rights and duties. Whenever used in any clause prescribing and imposing a penalty or imposing a fine or imprisonment, the term "person" shall include the members of an association, partnership or firm and the officers of any local agency or municipal, public or private corporation for profit or not for profit.

REHABILITATION

Work done to modify, alter, repair, enlarge or replace an existing on-lot sewage disposal system.

SEPTAGE

The liquid and solid materials removed from a treatment tank or tanks.

SEWAGE

Any substance that contains of the waste products or excrement or other discharge from the bodies of human beings or animals and any noxious or deleterious substances being harmful or inimical to the public health, or to animal or aquatic life or to the use of water for domestic water supply or for recreation or which constitutes pollution under the Clean Streams Law (Act of June 22, 1937, P.L. 1987, No. 394, as amended, 35 P.S. §§ 691.1 to 691.1001).

SEWAGE ENFORCEMENT OFFICER (SEO)

A person certified by DEP who is employed by the Township or County Health Department. Such person is authorized to conduct investigations and inspections, review permit applications and do all other activities as may be provided for such person in the Sewage Facilities Act, the rules and regulations promulgated thereunder, and this or any other ordinance adopted by the Township or County Health Department. Only the Sewage Enforcement Officer employed by the County Health Department is authorized to administrate the sewage facilities permitting program under Chapter 72 of the regulations.

SEWAGE MANAGEMENT PROGRAM

A comprehensive set of legal and administrative requirements encompassing the requirements of this article, the Sewage Facilities Act, the Clean Streams Law, the regulations promulgated thereunder, and such other requirements adopted by the Board to effectively enforce and administer this article.

SUBDIVISION

The division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels, or other divisions of land, including changes in existing lot lines, for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership, or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than 10 acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

TOWNSHIP

Lower Frederick Township, Montgomery County, Pennsylvania.

TREATMENT TANK

A tank that provides for aerobic or anaerobic (septic) decomposition of sewage to take place prior to discharge to an absorption area. This term shall also include cesspools.

- B. For the purposes of this article, any term which is not defined herein shall have that meaning attributed to it under the Sewage Facilities Act and the regulations promulgated thereto.

§ 123-71. Applicability.

From the effective date of this article, its provisions shall apply to all persons owning any property within Lower Frederick Township serviced by an on-lot sewage disposal system and to all persons installing or rehabilitating on-lot sewage disposal systems.

§ 123-72. Maintenance requirements.

- A. Each person owning a building served by an on-lot sewage disposal system which contains a treatment tank shall have the treatment tank pumped within six months of the effective date of this article by a sewage pumper/hauler licensed by DEP and authorized by the Board or its agent. Thereafter, that person shall have the tank pumped at least once every three years or whenever an inspection reveals that the treatment tank is filled with solids or with scum in excess of 1/3 of the liquid depth of the tank. Receipts from the pumper/hauler shall be submitted to the Township within the prescribed six months and three-year pumping periods. Receipt shall include gallons pumped.
- B. The required pumping frequency may be increased at the discretion of an authorized agent if the treatment tank is undersized, if solids buildup in the tank is above average, if the hydraulic load on the system increases significantly above average, if a garbage grinder is used in the building, if the system malfunctions or for other good cause shown. If any person can prove that such person's treatment tank had been pumped within three years of the six-month anniversary of the effective date of this article, then that person's initial required pumping may be delayed to conform to the

general three-year frequency requirement, except where an inspection reveals a need for more frequent pumping frequencies.

- C. Any person owning a property served by a treatment tank shall submit, with each required pumping receipt, a written statement from the pumper/hauler or from any other qualified individual acceptable to the Township, that the baffles in the treatment tank have been inspected and found to be in good working order, and the treatment tank lid is properly placed so as not to accept surface water runoff. Any person whose treatment tank baffles are determined to require repair or replacement shall first contact the Montgomery County Health Department's Sewage Enforcement Officer for approval of the necessary repair.
- D. Any person owning a building served by an individual residential spray irrigation system (IRSIS), small flow treatment facility (SFTF), holding tank, community sewage system or other alternative treatment systems shall be required to maintain those systems in compliance with the existing maintenance and operations agreement for the system.
- E. Additional maintenance activity may be required as needed, including, but not necessarily limited to, cleaning and unclogging of piping, servicing and the repair of mechanical equipment, leveling of distribution boxes, tanks and lines, removal of obstructing roots or trees, the diversion of surface water away from the disposal area, etc.

§ 123-73. System rehabilitation.

- A. No person shall operate or maintain an on-lot sewage disposal system in such a manner that it malfunctions. All liquid wastes, including kitchen and laundry wastes and water softener backwash, shall be discharged to a treatment tank. No sewage system shall discharge untreated or partially treated sewage to the surface of the ground or into the waters of the commonwealth unless a permit for such discharge has been obtained from DEP.
- B. A written notice of violation shall be issued to any person who is the owner of any property which is found to be served by a malfunctioning on-lot sewage disposal system or which is discharging sewage without a permit.
- C. Within 14 days of notification by the Township that a malfunction has been identified, the property owner shall make contact with the Montgomery County Health Department's Sewage Enforcement Officer. Within 30 days of initial notification by the Township, the property owner shall submit a plan of action to the Township.
- D. The Montgomery County Health Department's Sewage Enforcement Officer and the municipality's authorized agent shall both have the authority to require the repair of any malfunction by the following methods; cleaning, repair or replacement of components of the existing system, adding capacity or otherwise altering or replacing the system's treatment tank, replacing the existing disposal area, replacing a gravity distribution system with a pressurized system, replacing the system with a holding tank, or any other alternative appropriate for the specific site.
- E. In lieu of, or in combination with, the remedies described in Subsection **D** above, the Montgomery County Health Department's Sewage Enforcement Officer and the municipality's authorized agent may require the installation of water conservation equipment and the institution of water conservation practices in structures served. Water using devices and appliances in the structure may be required to be retrofitted with water saving appurtenances, or they may be required to be replaced by water conserving devices.
- F. Should none of the remedies described in this section be totally effective in eliminating the malfunction of an existing on-lot sewage disposal system, the property owner is not absolved of responsibility for that malfunction. The Township and the Montgomery County Health Department may require whatever action is necessary to lessen or mitigate the malfunction to the extent necessary.

§ 123-74. Sewage management fee.

Prior to the issuance of a use and occupancy permit involving new construction, resale, or change of tenants in a dwelling using an individual on-lot sewage system, the owner shall pay to the Township a sewage management fee and, except for new construction, provide the Township with a receipt documenting the date the treatment tank was cleaned by a licensed sewage hauler. Sewage management fees shall be established by the Board.

§ 123-75. Municipal claim.

The Township, upon written notice from the authorized agent or from the Montgomery County Health Department's Sewage Enforcement Officer that an imminent health hazard exists due to failure of property owner to maintain, repair or replace an on-lot sewage disposal system, as provided under the terms of this article, shall have the authority to perform, or contract to have performed, the work required by the authorized agent or the Montgomery County Health Department's Sewage Enforcement Officer. The owner shall be charged for the work performed and the municipal claim may be pursued in assumpsit against the person or as a lien against the property or both.

§ 123-76. Disposal of septage.

- A. All septage originating within the Township shall be disposed of in accordance with the requirements of the Solid Waste Management Act (Act 97 of 1980, 35 P.S. §§ 6018.101 et seq.) and all other applicable laws and at sites or facilities approved by DEP. Approved sites or facilities shall include the following: septage treatment facilities, wastewater treatment plants, composting sites and approved farm lands.
- B. Pumper/haulers of septage operating within the Township shall operate in a manner consistent with the provisions of the Pennsylvania Solid Waste Management Act (Act 97 of 1980, 35 P.S. §§ 6018.101-6018.1003) and all other applicable laws.

§ 123-77. Violations and penalties.

Any person who violates or permits a violation of this chapter shall, upon conviction in a summary proceeding brought before a District Justice under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not more than \$1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 30 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this chapter that is violated shall constitute a separate offense.

Appendix G -Holding Tank Ordinance

*Township of Lower Frederick, PA
Thursday, April 27, 2023*

Chapter 123. Sewers

Article VII. Holding Tanks

[Amended 12-7-1999 by Ord. No. 99-7]

§ 123-50. Title.

This article shall be known as the "Lower Frederick Township Holding Tank Ordinance."

§ 123-51. Statutory authority.

This article is authorized by the Pennsylvania Clean Streams Law, Act of 1937, June 22, P.L. 1987, as amended, 35 P.S. § 691.1 et seq.; the Pennsylvania Sewage Facilities Act, Act of 1966, Jan. 24, P.L. (1965) 1535, as amended, 35 P.S. § 750.1 et seq.; and by the applicable regulations of the Department of Environmental Protection including, specifically, 25 Pa. Code, Section 71.63.

§ 123-52. Purpose.

The purpose of this article is to provide for the installation, maintenance, and removal of holding tanks; and to provide a means of assuring the proper security is provided to enable the Township of Lower Frederick to properly remove such tanks should the owner thereof default on his responsibilities and to establish penalties for violations of said article.

§ 123-53. Definitions.

When used in this article, the following words shall have the meanings ascribed to them herein:

ACT 537

The Act of January 24, 1966, P.L. 1535, as amended, 35 P.S. § 750.1 et seq., also known as the "Pennsylvania Sewage Facilities Act."

BOARD

The Board of Supervisors of Lower Frederick Township, Montgomery County, Pennsylvania.

DEP

The Department of Environmental Protection of the Commonwealth of Pennsylvania.

HOLDING TANK

A tank, whether permanent or temporary, to which sewage is conveyed by a water-carrying system.

MCHD

The Montgomery County Health Department.

OFFICIAL SEWAGE FACILITY PLAN

The Lower Frederick Township Act 537 Sewage Facilities Plan as approved by the DEP.

PERSON

Any individual, association, public or private corporation for profit or not for profit, partnership, firm, trust, estate, department, board, bureau, or agency of the commonwealth or other political subdivision, municipality, district, authority, or any other legal entity whatsoever recognized by law. Whenever used in any clause prescribing or imposing a penalty or imposing a fine or imprisonment, the term "person" shall include the members of an association, partnership or firm and the officers of any local agency or municipality, public or private corporation whether for profit or not for profit.

RETAINING TANK

A watertight receptacle which receives and retains sewage and is designed and constructed to facilitate ultimate disposal of the sewage at another site.

SEWAGE

A substance that contains the waste products or excrement or other discharge from the bodies of human beings and noxious or deleterious substances being harmful or inimical to the public health, or to animal or aquatic life, or to the use of water for domestic water supply or for recreation, or which constitutes pollution under the Pennsylvania Clean Streams Law.^[1]

SEWAGE ENFORCEMENT OFFICER (SEO)

The SEO is an official appointed by Lower Frederick Township or assigned by the Montgomery County Health Department (MCHD) who issues permits, reviews permit applications, sewage facilities planning modules, and conducts investigations and inspections necessary to implement the Sewage Facilities Act and the regulations thereunder.

[1] *Editor's Note: See 35 P.S. § 691.1 et seq.*

§ 123-54. Applicability.

The provisions of this article shall apply to all persons owning any property within Lower Frederick Township serviced by a holding tank for the first time after the effective date of this article and to all persons within Lower Frederick Township installing, repairing, altering, or removing a holding tank. This article shall not apply to existing holding tanks lawfully in use at the time of the enactment of this article.

§ 123-55. Qualified sites.

A. Holding tank permits may only be issued by the SEO for:

- (1) Institutional, recreational, or commercial establishments and which have a sewage flow of 800 gallons per day or less; or
- (2) When the SEO has certified that an existing residential system has failed and that the site is unsuitable for any replacement system so that a holding tank is necessary to remedy the existing system failure or abate a nuisance or public health hazard; or
- (3) When the property will be connected to a community sewage system within one year of the installation of the holding tank so that said holding tank will be for a temporary measure only. If connection does not occur within one year, the permit may be extended by the SEO, upon approval by the Board, for an additional one-year period. In no case shall the permit be extended more than three times.

B. A permit for a temporary residential holding tank may be issued by the SEO for a period of up to one year, upon Board approval that there are unusual circumstances which make it impractical on a temporary basis for the owner to connect to the permanent approved system to be constructed.

§ 123-56. Permit requirements.

All permits issued by the SEO shall meet the following requirements:

- A. No person shall install, construct, or alter a holding tank system without first obtaining a permit indicating that the site and the plans and specifications of such system are in compliance with the provisions, standards, and regulations adopted pursuant to Act 537.
- B. No holding tank shall be covered from view until approval to cover the same has been given by the SEO. If 72 hours have elapsed, excepting Sundays and holidays, since the SEO received notification of completion of construction, the applicant may cover said system or structure unless permission has been specifically refused by the SEO.
- C. The holding tank permittee shall notify the Township's SEO of the scheduled construction of the holding tank so that inspections in addition to the final inspection required by Act 537 may be scheduled and performed by the SEO.
- D. No zoning permit, building permit or occupancy permit shall be issued by Lower Frederick Township or its designated Zoning Officer for a building which will contain a holding tank until a valid permit under this article and Act 537 has been obtained from the SEO.
- E. No zoning, building, or occupancy permit shall be issued and no work shall begin on any alteration or conversion of any existing structure if served by a holding tank if said alteration or conversion will result in an increase or potential increase in sewage flows from the structure until the structure's owner receives from the SEO either a permit for alteration or replacement of the existing holding tank or written notification that such a permit will not be required. The SEO shall determine whether the proposed alteration or conversion of the structure will result in increased sewage flows.
- F. No building or occupancy permit shall be issued for any structure to be served by a holding tank until the owner of said structure has entered into an agreement and provided the security required under this article.

§ 123-57. Inspections.

The SEO shall have the right to conduct inspections of holding tanks as follows:

- A. The SEO may conduct, at a minimum, an annual inspection of each holding tank within the Township and prepare a written inspection report, one copy of which shall be delivered to the owner of the property and one copy shall be retained by the SEO.
- B. In addition to required yearly inspections, any holding tank may be inspected by the SEO or a designated Township official at any reasonable time.
- C. All inspections may include a physical tour of property, the taking of samples from surface water, wells, other groundwater sources, the sampling of the contents of the holding tank itself and/or the introduction of a traceable substance into the interior plumbing of the structure served to ascertain the path and ultimate destination of wastewater generated in the structure.
- D. The SEO shall have the right to enter upon all land for the purpose of inspections described above.

§ 123-58. Restrictions on discharge.

Only normal domestic wastes shall be discharged into any holding tank. The following shall not be discharged into a holding tank system:

- A. Industrial waste.

- B. Automobile oil and/or other nondomestic oil.
- C. Toxic and/or hazardous substances and/or chemicals, including but not limited to pesticides, disinfectants, acids, paints, paint thinners, herbicides, gasoline and/or other solvents.
- D. Surface or ground water, including water from roof and/or cellar drains, springs, basement sump pumps and/or trench drains.

§ 123-59. Maintenance duties.

Every owner of a lot with a holding tank shall have the following duties of maintenance:

- A. Any person owning a lot served by a holding tank shall have said holding tank shall have said holding tank pumped by a qualified pumper/hauler at least once every year. The person must submit documentation to both Lower Frederick and the SEO illustrating that the holding tank has been pumped according to this requirement. This required pumping frequency may be increased at the discretion of the SEO based upon the officer's inspection of the holding tank.
- B. Any person owning a lot served by a holding tank shall have said holding tank pumped by a qualified pumper/hauler when the tank is filled to within 75% of tank capacity. The holding tank shall be equipped with a warning device that creates an audible and visual signal when the tank reaches 75% of capacity. The warning device shall be placed in a location frequented by the property owner or tenants.
- C. Any person owning property served by a holding tank shall submit, with each required pumping receipt, a written statement, from the pumper/hauler or from any other qualified individual acceptable to the Township, that the tank has been found to be in good working order. Any person whose tank has been determined to require repair or replacement shall first contact the SEO for approval of the necessary repair.
- D. In the event that the person who is the property owner of any property containing a holding tank has failed to submit the above-required receipts to Lower Frederick Township and the SEO evidencing that the tank has been pumped at the required frequency, the Township shall have the ability to have the tank pumped by a licensed pumper/hauler with the cost to be billed to the person owning the property upon which the tank is installed. In the event that said person refuses to pay said bill the Township may draw upon the security provided under this article to pay for said pumping, revoke any municipal permits issued in conjunction with and including the holding tank permit, and avail itself of any other remedy afforded the Township by law or statute.

§ 123-60. Security.

- A. No person shall operate a holding tank system and no building, zoning or occupancy permit shall be issued for the occupancy of any structure if said structure will be served by a holding tank system until said person has posted security as required under this article.
- B. Said security shall consist of \$3,000, to be placed in escrow.
- C. In addition to financial security, a holding tank maintenance agreement shall be entered into by the person owning and/or installing said tank and Lower Frederick Township. Said agreement shall be prepared by the Township Solicitor.
- D. Said agreement and escrow shall permit the Township to draw upon said escrow in order to undertake required maintenance which the owner of the holding tank has not undertaken including pumping the holding tank, other maintenance and/or repairs, and the removal of said holding tank.

§ 123-61. Malfunctioning systems.

- A. No person shall operate and maintain a holding tank in such a manner that it malfunctions. All liquid wastes, including kitchen and laundry wastes and water softener backwash shall be discharged to a tank. No holding tank shall discharge untreated or partially treated sewage to the surface of the ground or into the waters of the commonwealth unless a permit to discharge has been obtained from DEP.
- B. The Township may issue a written notice of violation to any person who is the owner of property in the Township which is found to be served by a malfunctioning holding tank or which is discharging raw or partially treated sewage without a permit.
- C. Within seven days of notification by the Township that a malfunction has been identified, the property owner shall make application to the SEO for a permit to repair or replace the malfunctioning tank. Within 30 days of issuance of the permit, construction of the permitted repair or replacement shall commence. Within 60 days of the issuance of a permit by the Township, the construction shall be completed unless the Township shall extend the period.
- D. Failure to apply for a permit or to complete the repair or replacement within the times specified in Subsection **C** shall constitute a violation of this article.
- E. The Township's SEO shall have the authority to require the repair of any malfunction by the following methods: cleaning, repair or replacement of components of the existing system, adding capacity or otherwise altering or replacing the system's treatment tank, or other alternatives as appropriate for the specific site.
- F. In lieu of, or in combination with, the remedies described in Subsection **E** above, the SEO may require the installation of water conservation equipment and the institution of water conservation practices in structures served. Water using devices and appliances in the structure may be required to be retrofitted with water saving appurtenances or they may be required to be replaced by water conserving devices and appliances. Wastewater generation in the structure may also be reduced by requiring changes in water usage patterns in the structure served.
- G. Should none of the remedies described above prove totally effective in eliminating the malfunction of any existing holding tank, the property owner is not absolved of responsibility for that malfunction. The Township may require whatever action is necessary to lessen or mitigate the malfunction to the extent that such is necessary.
- H. Failure of the landowner to take the actions required in this § **123-61** relating to malfunctioning systems shall constitute a public nuisance and a violation of this article.
- I. Should the remedies provided above not prove effective in eliminating the malfunction of any existing holding tank, the Township shall have the remedy of requiring the property owner to remove said system. Should the property owner refuse to remove said system then the Township shall have the ability to accomplish the removal drawing upon the funds provided under the security agreement entered into between the property owner and the Township.

§ 123-62. Fees.

The Board of Supervisors shall establish by resolution a schedule of fees. Costs for the completion of required water quality testing and Township SEO inspections shall be assessed to the property owner. It shall be each individual property owner's responsibility to contract with a qualified pumper/hauler for the pumping of the owner's holding tank.

§ 123-63. Township may repair malfunctioning system.

Where a property owner or other person fails to maintain, repair or replace a holding tank system after notice pursuant to the terms of this article, such failure shall constitute a public nuisance and a violation of this article. The Township may abate the nuisance by performing the work needed, or by contracting

to perform the work needed to abate the nuisance, and may charge the landowner or other responsible person for the cost thereof plus a penalty of 20%. Said cost plus penalty may be collected by civil action or by the filing of a lien according to law. Such costs, plus penalty, may also be drawn from the financial security provided for in this article and posted in accordance with the holding tank maintenance agreement.

§ 123-64. Disposal of contents of holding tanks.

The contents of holding tanks shall be disposed of as follows:

- A. The contents of all holding tanks originating within the Township shall be disposed of at sites or facilities approved and permitted by DEP. Approved sites or facilities shall include the following: septage treatment facilities, wastewater treatment plants, composting sites, and approved farm lands.
- B. Pumper/haulers operating within the Township shall operate in a manner consistent with the provisions of the Act of July 28, 1988, P.L. 556, No. 101, as amended, 53 P.S. 4000.101 et seq., known as the "Municipal Waste Planning, Recycling and Waste Reduction Act."

§ 123-65. Agricultural uses.

Nothing contained in this article is intended to regulate any existing or future agricultural activities conducted in the Township.

§ 123-66. Administration.

The Township shall fully utilize those powers it possesses through enabling statutes and ordinances to effect the purposes of this article.

§ 123-67. Appeals.

Any person aggrieved by any notice, action, or determination may appeal to the Board within 30 days in writing and pursuant to the Act of 1978, April 28, P.L. 202, No. 53, as amended, 2 Pa.C.S.A. §§ 105 and 551 et seq., known as the "Local Agency Law."

§ 123-68. Violations and penalties.

[Amended 10-4-2005 by Ord. No. 05-09]

Any person who shall violate any of the provisions of this article, or who shall fail to act upon notice or determination of the SEO or other authorized agent of the Township within the time stated in the notice on determination, shall, upon conviction in a summary proceeding brought before a District Justice under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not less than \$100 nor more than \$1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 30 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this chapter that is violated shall also constitute a separate offense. It is further provided as follows:

- A. Failure to appeal a notice or determination pursuant to § **123-67** and the Local Agency Law shall constitute an admission of the violation and a failure to utilize administrative remedies.

- B. This article constitutes an ordinance enacted for the purposes of property maintenance, public health and safety, and for water and air pollution violations, for the purposes of 53 P.S. § 66601.
- C. In addition to all other remedies, the Township may institute suits in equity to restrain or prevent violations of this article, or to abate public nuisances.
- D. The Township may file municipal liens for abatement of nuisances in accordance with Pennsylvania law.
- E. The Township may revoke any zoning permit, building permit and/or occupancy permit which was issued in conjunction with and including the holding tank permit.

Appendix H - Grinder Pump Ordinance

*Township of Lower Frederick, PA
Thursday, April 27, 2023*

Chapter 123. Sewers

Article IX. Grinder Pumps

[Adopted 11-5-2014 by Ord. No. 14-01]

§ 123-78. Definitions.

Unless the context specifically and clearly indicates otherwise, the meaning of terms used in this article shall be as follows:

ACT 537 PLAN

A municipality's official plan as defined in the Pennsylvania Sewage Facilities Act, Act of January 24, 1966, P.L. 1535 (1965), No. 537, as amended, 35 P.S. §§ 750.1 through 750.20a ("Sewage Facilities Act" or "Act 537").

DEPARTMENT

The Pennsylvania Department of Environmental Protection.

GRINDER PUMP

Any electric, motor-driven, submersible, centrifugal pump capable of macerating all material found in normal domestic sanitary sewage, including reasonable amounts of objects, such as plastics, sanitary napkins, disposable diapers, rubber and the like, to a fine slurry, and pumping this material through a small-diameter discharge.

IMPROVED PROPERTY

Any property within the Township upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which structure sewage shall or may be discharged.

OFFICIAL PLAN REVISION

A change in the municipality's Act 537 Plan to provide for additional or newly identified future or existing sewage facilities needs, as defined fully in Section 1 of the Sewage Facilities Act, 35 P.S. § 750.1, which may include one or more of the following:

A. UPDATE REVISION

A comprehensive revision to an existing official plan required when the Department or municipality determines the official plan or one or more of its parts is inadequate for the existing or future sewage facilities needs of a municipality or its residents or landowners.

B. SPECIAL STUDY

A study, survey, investigation, inquiry, research report or analysis which is directly related to an update revision. The studies provide documentation or other support necessary to solve specific problems identified in the update revision.

C. REVISION FOR NEW LAND DEVELOPMENT

A revision to a municipality's official plan resulting from a proposed subdivision as defined in the act.

D. SPECIAL STUDY

A study, survey, investigation, inquiry, research report or analysis which is directly related to an update revision. The studies provide documentation or other support necessary to solve specific problems identified in the update revision.

PROPERTY OWNER

Any person vested with ownership, legal or equitable, sole or partial, of any property located in the Township.

SEWAGE

Any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or animals and any noxious or deleterious substance being harmful or inimical to the public health, or to animal or aquatic life or to the use of water for domestic water supply or for recreation or any substance which constitutes pollution under the Clean Streams Law, 35 P.S. §§ 691.1 through 691.1001, as amended.

§ 123-79. Planning requirements.

The connection of existing properties or proposed new land development to an existing or proposed sewerage system through the use of sewage grinder pumps and any associated force mains or low-pressure laterals to an existing sewerage system shall occur only after an official plan revision to the Township's Act 537 Plan, or an exemption from sewage facilities planning, has been approved by both the Township and Department that designates that the proposed properties be served by such a connection. A connection may also occur if DEP has determined that sewage facilities planning is not required for the connection.

§ 123-80. Powers of Township.

- A. The Township is hereby authorized and empowered to adopt such rules and regulations concerning sewage which it may deem necessary from time to time to effect the purposes herein.
- B. The Township is hereby authorized and empowered to take such other actions as are necessary, including, but not limited to, entering into agreements with property owners that assure proper operation and maintenance of sewage facilities within the Township's borders, including but not limited to, sewage grinder pumps and any associated force mains or low-pressure laterals.

§ 123-81. Duties and responsibilities of Township.

- A. The Township shall exercise its powers and legal authority set forth herein, and under all applicable statutes, ordinances, and other laws, to effect the purposes of this article.
- B. The Township may enter into an agreement with each property owner proposing to install or who has installed a sewage grinder pump or low-pressure sewage system to assure the short- and long-term operation and maintenance, use, service, repair or replacement of such systems.
- C. All grinder pumps and low-pressure sewer systems (and the installation, use, operation, maintenance, service, repair service and replacement thereof) shall comply with the rules and regulations of the Township in effect from time to time.
- D. All grinder pumps and low-pressure sewer systems shall be connected to the sewage collection and conveyance system in full compliance with the rules and regulations of the Township in effect from time to time.
- E. The Township shall bear no responsibility for the purchase, installation, use, operation, repair, maintenance, service, repair, or replacement of the grinder pump and/or its low-pressure force

main or lateral, except as otherwise set forth herein.

§ 123-82. Duties and responsibilities of others.

- A. Each property owner served by a grinder pump shall bear full responsibility for providing, installing, using, operating, maintaining, servicing, repairing and replacing his/her grinder pump and/or its low-pressure force main or lateral, unless otherwise set forth herein.
- B. Each property owner served by a grinder pump shall have full responsibility for using the pump consistent with the manufacturer's instructions and shall avoid introducing into the sewerage system materials that may damage the impellers on the pump, including, but not limited to, items designated as not biodegradable in septic tanks.
- C. Each property owner served by a grinder pump shall close the sewage system and cease operations during any period when the grinder pump and/or low-pressure system serving a property is inoperable for more than two days.

§ 123-83. Abatement of nuisances.

In addition to any other remedies provided in this article, any violation of §§ **123-81** and **123-82** above shall constitute a nuisance and shall be abated by the Township by seeking either mitigation of the nuisance or appropriate equitable or legal relief from a court of competent jurisdiction.

§ 123-84. Rules and regulations to conform with applicable law.

All such rules and regulations adopted by the Township to effectuate this article shall be in conformity with the provisions herein, all other ordinances of the Township, and all applicable laws, and applicable rules and regulations of administrative agencies of the Commonwealth of Pennsylvania.

**Appendix I – PNDI & PHMC Clearances for Option C – Selected Alternative to
Serve Salford Station Road at Schwenk Road Area**

1. PROJECT INFORMATION

Project Name: **Salford Station Road Sewer Extension Concept**

Date of Review: **6/8/2023 07:13:49 PM**

Project Category: **Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewage module/Act 537 plan**

Project Area: **13.56 acres**

County(s): **Montgomery**

Township/Municipality(s): **LOWER FREDERICK TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **PERKIOMENVILLE**

Watersheds HUC 8: **Schuylkill**

Watersheds HUC 12: **Swamp Creek; Upper Perkiomen Creek**

Decimal Degrees: **40.285285, -75.476944**

Degrees Minutes Seconds: **40° 17' 7.249" N, 75° 28' 36.9975" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Salford Station Road Sewer Extension Concept

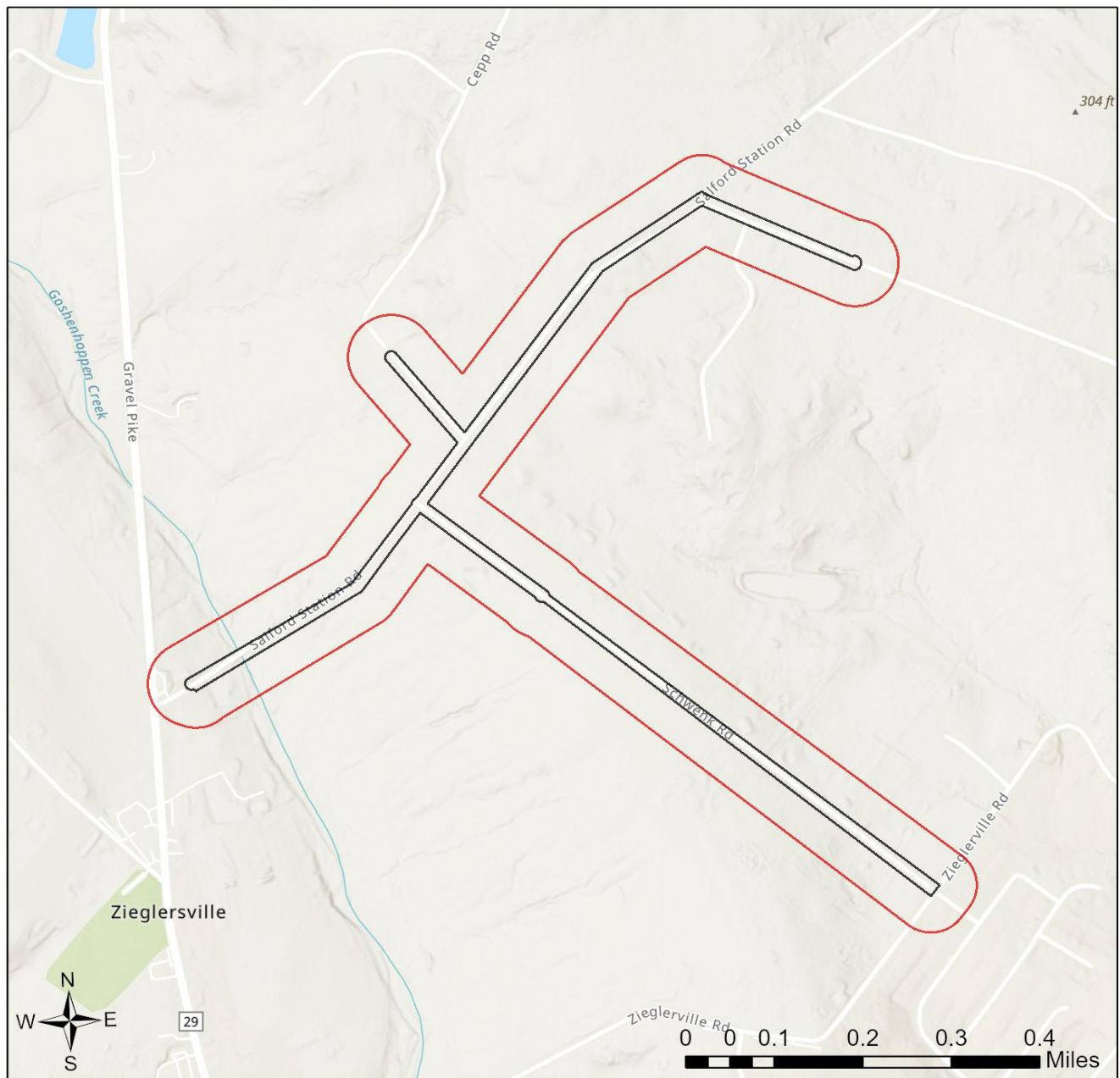




- Buffered Project Boundary
- Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Salford Station Road Sewer Extension Concept



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

RESPONSE TO QUESTION(S) ASKED

Q1: Describe how wastewater (effluent) will be handled (select one). For the purpose of this question, wastewater/effluent does not include stormwater runoff. If the project involves solely the renewal or modification of an existing discharge permit (e.g., NPDES permit), select from options 3, 4, 5, or 6 below.

Your answer is: All wastewater/effluent from this project/activity will be routed to an existing municipal wastewater treatment plant.

Q2: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands (holding a natural resource degree or equivalent work experience) has investigated the site, and determined that NO wetlands are located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Jamie Sundermier
Company/Business Name: Value Engineering Inc.
Address: 1578 State Rd
City, State, Zip: Coopersburg, PA 18036
Phone: () 267-664-9965 Fax: ()
Email: jamie@value.engineering

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.


applicant/project proponent signature

6/9/23

date



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

June 9, 2023

Jamie Sundermier
Value Engineering Inc
1578 State Rd
Coopersburg PA 180360000

RE: ER Project # 2023PR02849.001, Salford Station at Schwenk Rd Sewer Extension - Option C, Department of Environmental Protection, Lower Frederick Township, Montgomery County

Dear Jamie Sundermier:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

No Above Ground Concerns - Environmental Review - No Effect - Above Ground

Based on the information received and available within our files, it is our opinion that the proposed project will have No Effect on above ground historic properties, including historic buildings, districts, structures, and/or objects, should they exist. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Sara-Ladd Manley at samanley@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Our analysis indicates that archaeological resources are potentially located in this project area. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Sara-Ladd Manley at samanley@pa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Emma Diehl". The signature is fluid and cursive, with a long horizontal stroke at the end.

Emma Diehl
Environmental Review Division Manager

Appendix J – Planning Agency Comments

This special study was submitted to the Lower Frederick Township Planning Commission, Montgomery County Planning Commission, and Montgomery County Health Department for comments. Comments from each agency are attached.

In response to the Lower Frederick Township Planning Commission's review, revisions were made to the special study making consistent the cost within the Evaluation of Alternatives section of the document and Estimate of Probable Costs for Alternatives summary chart in Appendix #C.

In response to the Montgomery County Planning Commission review, the overall Existing and Proposed Sewer Service Area Plan for the township has been updated and added to the Plan Summary section of this special study.

As the Montgomery County Health Department had no comments, no revisions to the special study were made to address this review.

LOWER FREDERICK TOWNSHIP PLANNING COMMISSION

53 Spring Mount Rd. Schwenksville, Pa. 19473

Meeting Minutes of July 20, 2023

Meeting called to order at 7:01 pm.

Attendance Roll Call:

Members:

Mr. Greg Pocius- Chairperson (absent)
Ms. Linda Jansson- Vice Chairperson
Mr. Philip A. Smith- Recording Secretary
Mr. Rainer Keown
Mrs. Crystal Gilchrist
Mr. Tarek Osman
Mr. Ernie Schmitt

Mr. Richard Parke, Alternate Member (absent)

Associated Township Staff:

Ms. Carol Schuehler, Township Engineer

MCPC Community Planner:

Mr. John Miklos, MCPC Community Planner (attended via Zoom)

LFT Manager:

Mr. Jason Wager

Note: the July 20, 2023 LFTPC meeting was held in person at the Lower Frederick Township Municipal Building and on Zoom.

Note: with Mr. Pocius's absence Ms. Linda Jansson, Vice Chair presided over the meeting.

1. Motion to adopt the May 18, 2023 Lower Frederick Township Planning Commission meeting minutes.

** Mr. Keown noted that a typographic error appeared within Item #13 of the Sacks and Sons Sketch Plan Review. Mr. Smith, LFTPC Recording Secretary will make the needed correction.

Motion: Mr Schmitt

Second: Mrs. Gilchrist

The motion carried unanimously by 6 to 0 votes.

2. Omnibus Zoning Amendment Part #2: Discussion and Review

The Lower Frederick Township Board of Supervisors tasked the LFTPC with revisiting the Omnibus Zoning Amendment Part #2 proposed text as a result of discussions at their July 11, 2023 general meeting. Suggested new edits by the Township Solicitor, Mr. Peter Nelson were the basis for this document to be revisited. Ms. Schuehler explained, the Board of

Supervisors directed, Value Engineering to create an approved systems and hierarchy listing that detailed the preferred types of non public sewage management systems from first choice to last choice. The LFTPC was asked to offer its comments on this as part of the Omnibus Zoning Amendment Part #2 review.

As a first article of the PC's review of the Omnibus Zoning Amendment Part #2, Ms. Carol Schuehler, LFT Engineer led the membership thru Value Engineering and her firm's associated consultants' "Proposed On-Lot Sewage Disposal" (OLDS), Ordinance Amendment #LF23011, memo dated July 18, 2023. It was noted, that the memo was provided to the Township Solicitor for his considerations, comments, and recommendations as well. All eight items within the Value Engineering memo were explained in detail by Ms. Schuehler. The LFTPC's comments and positions were:

*** Memo Item #1- Repair of Failed Systems**

The LFTPC concurs with the position of Value Engineering concerning the now enacted ordinance's encumbrance on existing property owners needing to repair their on-lot septic systems. The PC membership supports the recommendation to exempt existing property owners from the repair/replacement requirements as is levied on new construction or properties expanding their sewage capacity needs. Existing properties that are proposed to increase the sewage flow rate within the property will be evaluated and regulated by the County Health Department and DEP, therefore they should not be considered repairable.

*** Memo Item #2- Review Process**

The LFTPC concurs with Value Engineering's position that the ordinance should clearly define and indicate who is responsible for the review of on-site sewage for new construction on an existing building lot.

*** Memo Item #3- Resource Protection**

The LFTPC agrees that the On-lot Sewage Disposal Ordinance should absolutely be consistent and aligned to Township's natural resource protection regulations. It concurs with Value Engineering in supporting the recommendation to permit the choice of a lower ranking on-lot sewage system when and if the protection of natural resources would benefit by such a choice. The LFTPC too feels that the Township Solicitor should review and revise the proposed ordinance document to make certain of its consistency and alignment with the Natural Resource Protection Ordinance.

*** Memo Item #4- Ranking Community Systems**

The LFTPC concurs with Value Engineering's recommendation to prioritize individual on-lot systems as being a higher preferred choice as opposed to community type of systems.

*** Memo Item #5- Classification**

The LFTPC supports Value Engineering's recommendation to have the proposed ordinance clearly define how the DEP identifies on-lot system types, conventional, alternative, and experimental.

*** Memo Item #6- Greenhouse Systems**

The LFTPC supports the recommendation of Value Engineering to remove the option of using the once available, “Greenhouse On Lot Sewage Systems”, but to also indicate in the final text that the since the DEP changes permissible systems from time to time, therefore the proposed document should include language stating this possibility.

*** Memo Item #7- Planning vs. Permitting**

The LFTPC agrees with Value Engineering’s recommendations that for planning and eventual permitting purposes there should be flexibility in the enacted regulations to account for a best end result(s) for the community, as well as the property owner with individual site considerations.

The LFTPC’s discussion of ranking on-lot and community (non municipal) systems led to it recommending Value Engineering’s prioritized list with the following proposed changes:

* Mr. Keown, LFTPC member expressed that in his opinion in a private resident’s situation where there is a malfunctioning or failing on lot system he is perfect comfortable with enabling the resident to have the system repaired if deemed so by the regulating authorities. The LFTPC membership concurred with Mr. Keown.

* Mr. Keown expressed that in his opinion individual stream discharge systems should be placed at the bottom of the permissible ranking list just ahead of holding tanks. His rationale is that such a system places its discharge onto or along other properties associated with that property thus making them at risk should the system fail or malfunction by lack of proper maintenance. Further, he feels that the ordinance should state that individual stream discharge on-lot systems should be prohibited if public sewer is added at that location, and all properties having stream discharge systems would have to tie into the public sewer system regardless of their distance from the road as is permissible under the Township’s current zoning code. The LFTPC agrees with Mr. Keown’s position.

Notable Positions and Planning Commission Actions:

1. The LFTPC recommends adopting Value Engineering’s, Sewage Management Priority Rating ranking system as presented at the July 20, 2023 meeting with the exception of “Individual Stream Discharge Systems” which should appear at the second to the last position above “Holding Tanks”.

Motion: Mrs. Gilchrist
Second: Ms. Jansson

The motion carried unanimously by 6 to 0 votes.

* Ms. Jansson, LFTPC Vice Chairperson noted that Mr. Yeiser, LFT BoS member spoke at the recent meeting stating that the placement of the Solicitor’s proposed relocation, placement, and mention of the regulatory Environmental Adjustment Factors (EAF- Section #170-41) is obscure and should be more easily identified by users of the Zoning Code. He recommend perhaps a more visible placement in the text. Ms. Jansson suggested placing the EAF requirements to a location at the top of each applicable individual code text section for easier identification and use. This would entail changing R1 zoning §170-44 “D”, R2 zoning

§170-50 “D”, R3 zoning §170-56 “H”, and R4 zoning §170-61 “J” to section “A” of their respective codes.

2. The LFTPC recommendation that the reference paragraph to Environmental Adjustment Factors be positioned within each applicable section of the proposed zoning text in a first item/top of the list position.

Motion: Mrs. Gilchrist

Second: Mr. Smith

The motion carried unanimously by 6 to 0 votes.

* Ms. Jansson raised a concern about the proposed ordinance tables, #170-56 C and #170-61 C. These tables (charts) appear to have been mistakenly adopted by the Township Solicitor from previously reviewed material generated for the proposed Omnibus Zoning Amendment. An ensuing discussion took place. The PC concluded this issue warrants enough significance that a recommendation to adopt the complete Omnibus Zoning Amendment Part #2 without a correction of the charts/tables should only be done by excluding these tables from the final draft. The PC membership felt the doubling of building and impervious coverage in these charts warranted more discussion and requested that Mr. John Miklos, MCPC Community Planner, update his previously submitted lot size/zoning charts of surrounding municipalities to also include comparable building and impervious coverage percentages. His prior comparison charts only referenced lot sizes as they related to Neighborhood Lotting and other cluster development zoning options. Mrs. Dyanne Jurin, resident Zieglerville Road commented that in her opinion, “This is yet another good reason for the Township Solicitor to be present at PC meetings when an issue(s) of such importance is being considered for recommendation to adopt by the BoS.” Mr. Robert Burns, resident of Zieglerville Road publicly agreed with Mrs. Jurin’s comment. Both residents also thanked LFTPC membership for their due diligence in reviewing these proposed ordinance changes.

Action:

The LFTPC recommends the adoption of the Omnibus Zoning Amendment Part # 2 as reviewed and discussed at its July 20, 2023 meeting excluding the Tables- #170-56C and Table #170-61C.

Motion: Mrs. Gilchrist

Second: Ms. Jansson

The motion carried unanimously by 6 to 0 votes.

Noted: Mr. Wager, LFT Manager will ensure that a review of Tables #170-56C and #17061C will be placed as an agenda item for the PC’s August 2023 meeting.

3. Goshenhoppen Watershed Special Study Review and Discussion

The Lower Frederick Township Planning Commission was tasked with revisiting its review and considerations for the adoption of the Goshenhoppen Watershed Special Study as a integral part of the legal settlement for the proposed Melbourne Hill Subdivision and Land Development project. Under the terms of the settlement the developer funded the costs for this required study as an amendment to the Township’s existing Pa. Act 537 plan. The LFTPC had previously reviewed and discussed the proposed text at past meetings, however the past PC

recommendations and comments provided to the LFT Board of Supervisors once again made the document in need of yet another review.

Ms. Jansson gave a brief summary of the notable Goshenhoppen Watershed best choice public sewerage options changes that came about from the Board of Supervisors.

Ms. Carol Schuehler, Township Engineer read aloud Mr. Smith, LFTPC member's suggested text changes presented to her and Mr. Bob Preston, LFT Sewage Consultant at the May 2023 LFTPC meeting. After reviewing Mr. Smith's suggested edits her and her engineering firm's consultants included two of the three edits within the revised study document. The PC members were informed that the Goshenhoppen Watershed Special Study was only a planning document, therefore it was felt that Mr. Smith's third suggested edit's wording, ***"However, planning for these areas containing small lots with unsuitable soil conditions will be addressed for public health and welfare when the documentation of malfunctioning and failed on lot systems are made known by the Montgomery County Health Department or other regulatory agencies."*** would be too restrictive since final study is no more than a planning document, thus can be changed at a future time if needed.

Ms. Jansson noted that the revised text still does not have the cost figures adjusted and aligned. She cited the residential "tie in costs" on pages 31 thru 34 as needing to be corrected to match the figures given in the Appendix #C Chart, "Estimate of Probable Costs for Alternatives".

Action:

The Lower Frederick Township Planning Commission recommends the adoption of the Goshenhoppen Watershed Special Study by the LFT Board of Supervisors once revisions are completed making consistent the estimated cost figures for impacted residents found on pages #31 thru 34 and within the Appendix #C Chart.

Motion: Mrs. Gilchrist
Second: Mr. Osman

The motion carried unanimously, 6 to 0 votes.

4. Public Comment

A. Mr. Smith, LFTPC member provided the membership with a brief informational summary about attending the Montgomery County Parks, Trails, and Historic Sites Advisory Board meeting at Sunrise Mill earlier in the day. The MC Parks, Trails, and Historic Site meeting was not an official business meeting, but simply a site tour, board discussion, and general topic conversation by the attending members. Mr. Smith was accompanied by Ms. Lee Ann Manning, a co-member of the Schwenksville Borough to Delphi Village Connection Working Group. Ms. Manning and Mr. Smith provided the advisory board members and County Region #2 Manager with some background and insights in what is being proposed to make the pedestrian connection and answered questions. The Advisory Board was appreciative for the awareness of this project proposal and will take up this matter as an official discussion for action at its October 2023 meeting.

B. Mrs. Gilchrist, LFTPC member gave an information summary of the status of the Upper Perkiomen Creek Flood Mitigation Study. This is a study involving the four counties (Bucks, Berks, Lehigh, and Montgomery) that compose the Perkiomen Creek Watershed. The study is in its second year and much progress has been made towards completion.

C. Mr. Smith also provided the LFTPC members with a brief summary of a phone conversation that he had concerning the status of the restoration and repurposing of the Old Gravel Pike Stone Arch Bridge. Mr. Smith stated that Mr. David Clifford, Administrator, MC Department. of Assets and infrastructure informed him the work on the bridge has been temporarily halted since more extensive degeneration of the bridge revealed itself during early construction. Mr. Clifford stated the expense for additional engineering and construction cost are currently being taken up by his department, the contractors, and the County Commissioners. Though delayed, he felt confident that the bridge work will be resumed shortly, however it might entail some revisions in the plan due to additional funding needs and rescheduling of the contracting.

5. Motion to Adjourn

Motion: Mrs. Gilchrist

Second: Ms. Jansson

The motion carried unanimously, by a 6 to 0 vote.

The meeting concluded at 8:40 pm.

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

KENNETH E. LAWRENCE, JR., CHAIR
JAMILA H. WINDER, VICE CHAIR
JOSEPH C. GALE, COMMISSIONER



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY COURTHOUSE • PO Box 311
NORRISTOWN, PA 19404-0311
610-278-3722 • FAX: 610-278-3941
WWW.MONTGOMERYCOUNTYPA.GOV
SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

**SEWAGE FACILITIES PLANNING MODULE
COMPONENT 4b - COUNTY PLANNING AGENCY REVIEW**

July 24, 2023

Jason Wager, Township Manager
Lower Frederick Township
53 Spring Mount Rd.
Schwenksville, PA 19473

MCPC 537 Number: 23-2354
Lower Frederick Goshenhoppen Study
Lower Frederick Township
Date revision received by MCPC: 6/14/23

Dear Mr. Wager:

We have reviewed this application for a revision to the municipality's Sewage Facilities Plan in accordance with regulations issued under Act 537, "The Pennsylvania Sewage Facilities Act," as requested. We are forwarding this letter as a report of our review and recommendations.

BACKGROUND

The purpose of the Lower Frederick Goshenhoppen Study is to re-evaluate the sewage disposal needs of multiple properties which were previously planned to be served by the Goshenhoppen Interceptor and Pump Station, included in the 2014 Lower Frederick Township Act 537 Plan. The ultimate goal of the study will be to provide updated sewage planning for the properties through the selection of preferred alternatives. The relevant properties identified in the study area include ones near the intersection of Schwenk Road and Salford Station Road, along with 7 existing properties on Zieglerville Road near Goshenhoppen Creek. The selected alternative for the area near the intersection of Schwenk Road and Salford Station Road will provide public sewer access for 56 properties. The selected alternative for the Zieglerville Road area will provide public sewer access for 16 properties.

COMMENTS/ISSUES

1. The Township sewer facilities map should be revised to reflect the chosen alternatives.

RECOMMENDATION

Once these issues have been addressed to the satisfaction of the municipality and DEP, we have no objection to this 537 Planning Module. Should there be any questions regarding the content of this letter, please contact me at Ryan.Lamberti@montgomerycountypa.gov.

Sincerely,

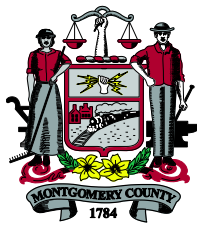
A handwritten signature in black ink that reads "Ryan Lamberti". The signature is written in a cursive, slightly slanted style.

Ryan Lamberti
Environmental Planner
Montgomery County Planning Commission
Ryan.Lamberti@montgomerycountypa.gov | www.montgomerycountypa.gov/planning
P: 610.278.3729 F: 610.278.3941
PO Box 311, Norristown, PA 19404-0311
425 Swede St., Suite 201, Norristown, PA 19401

c: Elizabeth Mahoney, DEP Southeast Regional Office
Jamie Sundermier, Value Engineering, Inc.

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**MONTGOMERY COUNTY DEPARTMENT
OF HEALTH & HUMAN SERVICES**

OFFICE OF PUBLIC HEALTH
PO Box 311
NORRISTOWN, PA 19404-0311

610-278-5117
FAX: 610-278-5167
WWW.MONTCOPA.ORG/HHS

CHRISTINA MILLER
ADMINISTRATOR

RICHARD S. LORRAINE, MD, FACP
MEDICAL DIRECTOR

August 23, 2023

Lower Frederick Township
Attn: Jason Wager
53 Spring Mount Rd
Schwenksville, PA 19473

Re: Special Study for the Goshenhoppen Watershed
Update to Official Act 537 Sewage Facilities Plan
Lower Frederick Township, Montgomery County, PA

Dear Mr. Wager:

The Montgomery County Department of Health & Human Services, Office of Public Health (OPH) has reviewed the Special Study for the Goshenhoppen Watershed update to the Official Act 537 Sewage Facilities Plan in Lower Frederick Township. The module was prepared by Value Engineering Inc. and a complete copy was received by OPH on June 16th, 2023.

OPH has no objections at this time to the proposed revision to this official plan.

If you have any further questions, please contact me at (610)970-5040 ext. 4217.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel Oskiera".

Daniel Oskiera
Environmental Health Specialist/SEO
Division of Water Quality Management
daniel.oskiera@montgomerycountypa.gov

Enclosures

XC: Department of Environmental Protection
Value Engineering Inc

OFFICE OF PUBLIC HEALTH LOCATIONS

1430 DEKALB STREET • NORRISTOWN, PA 19404-0311 • PHONE: 610-278-5145 • FAX: 610-278-5166
364 KING STREET • POTTSTOWN, PA 19464 • PHONE: 610-970-5040 • FAX: 610-970-5048
102 YORK ROAD, SUITE 401 • WILLOW GROVE, PA 19090 • PHONE: 215-784-5415 • FAX: 215-784-5524

Appendix K – Proof of Public Notice

INSERT PROOF OF PUBLIC NOTICE HERE

NOTICE

In accordance with Pennsylvania Department of Environmental Protection regulations, Section 71.31(c) of PA Code, Title 25, Act 537, Lower Frederick Township, Montgomery County is accepting comments for the next thirty (30) days on the proposed adoption of an Act 537 Special Study for the Goshenhoppen Watershed in Lower Frederick Township. This special study updates the sewage planning for the Goshenhoppen planning area which includes the Melbourne Hill 43-lot residential subdivision on Gravel Pike, properties near the intersection of Schwenk Road and Salford Station Road, and a cluster existing properties on Zieglerville Road near Goshenhoppen Creek.

Notice is hereby given that an application to the Pennsylvania Department of Environmental Protection for the approval an Act 537 Special Study for the Goshenhoppen Watershed in Lower Frederick Township has been prepared by Value Engineering Inc. and Hydraterra Professionals, LLC on behalf of Lower Frederick Township.

The plan proposes to serve Melbourne Hill through connection to the existing gravity sewer system and to extend the existing collection system using low-pressure force mains and individual grinder pumps to serve both the Salford Station at Schwenk Road Area and the Zieglerville Road Area. Proposed work will be funded with user fees, available grant funding, and a Capital Improvement Program to be developed as part of this plan.

There is a thirty-day period during which the Act 537 Special Study for the Goshenhoppen Watershed in Lower Frederick Township is available to be viewed at the Lower Frederick Township Municipal Building at 53 Spring Mount Rd., Schwenksville, PA 19473 during the normal hours of operation. The review period shall extend until the close of business on the thirtieth day after the date of this public notice. Written comments on the proposed Act 537 Official Sewage Facilities Plan for Lower Frederick Township may be submitted to Township Manager, Jason Wager at the above address.

Appendix L – Public Comments and Responses

INSERT PUBLIC COMMENTS RECEIVED AND RESPONSES TO THOSE COMMENTS HERE

Appendix M – Municipal Resolution of Adoption

RESOLUTION OF ADOPTION

RESOLUTION OF THE SUPERVISORS OF LOWER FREDERICK TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted thereunder, Chapter 71 of Title 25 of the **Pennsylvania Code**, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, Value Engineering Inc. and Hydraterra Professionals, LLC, on behalf of Lower Frederick Township, has prepared Act 537 Special Study for the Goshenhoppen Watershed. The study provides planning for sewage facilities needs for the Goshenhoppen planning area of Lower Frederick Township which includes the Melbourne Hill 43-lot residential subdivision on Gravel Pike, properties near the intersection of Schwenk Road and Salford Station Road, and a cluster existing properties on Zieglerville Road near Goshenhoppen Creek, and

WHEREAS, the alternatives of choice are to serve Melbourne Hill through connection to the existing gravity sewer system and to extend the existing collection system using low-pressure force mains and individual grinder pumps to serve both the Salford Station at Schwenk Road Area and the Zieglerville Road Area.

WHEREAS, Lower Frederick Township finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Supervisors of the Township of Lower Frederick hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

I, _____, Secretary, Lower Frederick Township Board of Supervisors hereby certify that the foregoing is a true copy of the Township's Resolution No. _____, adopted _____, 20 ____.

AUTHORIZED SIGNATURE

TOWNSHIP SEAL