



# SWAMP PIKE TODAY

## STUDY AREA

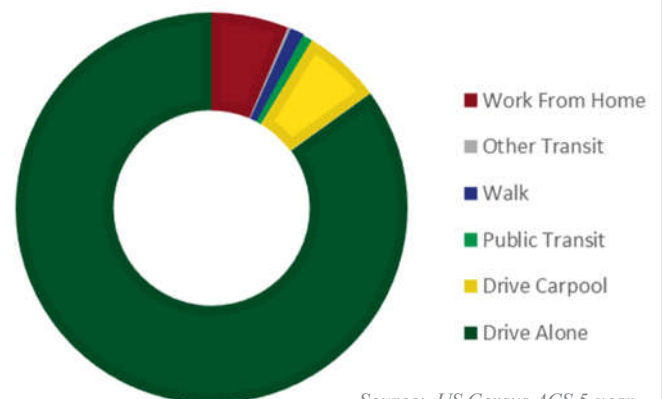
This study focuses on a 7.5 mile long segment of Swamp Pike from the intersection with Gilbertsville Road to the intersection with Ridge Pike; passing through the municipalities of Douglass, New Hanover and Limerick Townships. Swamp Pike functions as an east-west oriented Minor Arterial and supports regional mobility. To the east, Swamp Pike provides a connection to Limerick Township and Ridge Pike. To the west, Swamp Pike provides a connection to Gilbertsville.



Swamp Pike passes through varying communities with specific transportation needs.

The demographics within one mile of this segment of Swamp Pike are as follows: On average, commuters along Swamp Pike are more likely to drive alone and less likely to commute by public transportation than the average commuter in Montgomery County. Commute travel times are about 4 minutes longer than the county average, but there are fewer houses without access to a vehicle.

Demographic Indicator	Swamp Pike	Montgomery County Average
Commute Mean Travel Time	32.76 minutes	28.99 minutes
Housing Units without Access to a Vehicle	2.19%	5.51%



Source: US Census ACS 5-year

## PREVIOUS PLANS AND ONGOING PROJECTS

Swamp Pike is referenced in various planning studies throughout the corridor. Safety, capacity and multimodal deficiencies have been identified in municipal comprehensive plans, Act 209 (Transportation Impact Fees) Capital Improvement Plans and special studies.

Municipality	Comprehensive Plan Year	Act 209 Plan Year
New Hanover Township	2021	2019
Limerick Township	2009	In process

Swamp Pike is referenced in New Hanover Township’s Act 209 (Transportation Impact Fee) Roadway Sufficiency and Capital Improvement Plan completed in 2019.

The plan highlighted capacity problems at the intersections with Romig Road and with Rosenberry Road/Reifsnyder Road. It was noted that installing a traffic signal at each intersection is currently not warranted. It recommended that both intersection be monitored by the township to determine if a signal would be warranted sometime in the future. The plan proposed that by 2030, the intersection with Middle Creek Road should have a traffic signal installed and turn lanes added. The intersection with Dotterer Road should have turn lanes installed and all traffic signals along Swamp Pike should have timing improvements completed.

Limerick Township’s Comprehensive Plan completed in 2009 also mentions Swamp Pike. The plan notes that Swamp Pike has poor access management. The plan recommended adding turn lanes and traffic signal modifications at the intersection with Neiffer Road. These improvements have been constructed. The plan also recommended adding turn lanes and signaling the intersection with Kugler Road. To date these improvements have not been constructed. The plan also recommended reconfiguring the intersection with Lewis Road. This has been accomplished with the recent construction of a roundabout.

The bridge on Swamp Pike in New Hanover Township over an unnamed tributary to Swamp Creek (Montgomery County Bridge #166) will be replaced in 2021.

The western end of the Swamp Pike corridor is contained within the DVRPC Congestion Mitigation Process (CMP). Very appropriate strategies for this corridor include: signal improvements, circulation improvements, walking and bicycling improvements, modifications to existing transit routes and services. At the time of this report there are no major transportation improvement projects along Swamp Pike. The 2019 Traffic Impact Study for the proposed New Hanover Town Center recommended the following:



*Intersection at Gilbertsville Road*

- Signal timing/phasing changes at the intersection with Gilbertsville Road. It also recommended lengthening turn lanes at the intersection.
- Signal timing/phasing changes at the intersection with North Charlotte Street. It also recommended lengthening turn lanes at the intersection and widening Swamp Pike in each direction to provide an additional through lane at the intersection
- Provide a two-way center left turn lane on Swamp Pike between Township Line Road and Dotterer Road.

## LAND USE CONTEXT

Swamp Pike can be described as a suburban commercial/residential Principal Arterial. Much of the existing land use along Swamp Pike is residential. The are commercial uses surrounding the intersections with Gilbertsville Road, North Charlotte Street, Neiffer Road and Ridge Pike. A large recreational use, Limerick Community Park, is located at the eastern end of the corridor. Traveling from the east to west, the roadway generally gains elevation as it travels over rolling countryside.

Features listed as eligible for the National Register of Historic Place are listed below:

- **McGee Tract House & Outbuilding** - between Dotterer Road and Charlotte Street in New Hanover Township
- **Parsonage, Falkner Swamp Reformed Church** - Leidy Road intersection in New Hanover Township

A large mixed use commercial development, New Hanover Town Center, has been proposed southeast of the intersection with North Charlotte Street in New Hanover Township. This is expected to have a significant impact to Swamp Pike. Additional potential developments include a possible second Spring Ford High School west of Neiffer Road and expansion of Limerick Community Park. A mixed use development is currently under construction at Lewis Road.

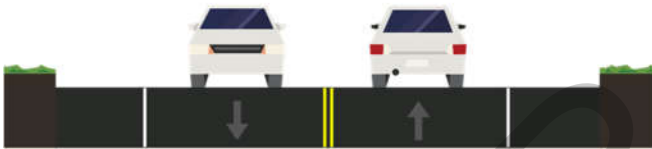
Existing and Future Land Use maps can be found in Appendix B of this report.

## TRANSPORTATION CONTEXT

### Typical Sections

The typical section of Swamp Pike is consistent throughout the corridor. The main configuration is one lane in each direction. The graphic below depicts the typical section that be found along Swamp Pike. Shoulder widths vary along the corridor, with wider shoulders in areas with more recent land development activity, and narrower shoulders in historic areas.

#### Ridge Pike to Gilbertsville Road



### Transportation Features

There are six traffic signals along Swamp Pike from Gilbertsville Road to Ridge Pike. Montgomery County owns and maintains three bridge structures along this segment of Swamp Pike. The bridge over the tributary to Swamp Creek is posted for 34 tons. The other two bridges are not posted. There is a recently constructed roundabout at Lewis Road.

The transportation features are depicted on the Corridor Overview Map.



*Utility poles near road make widening difficult to achieve*

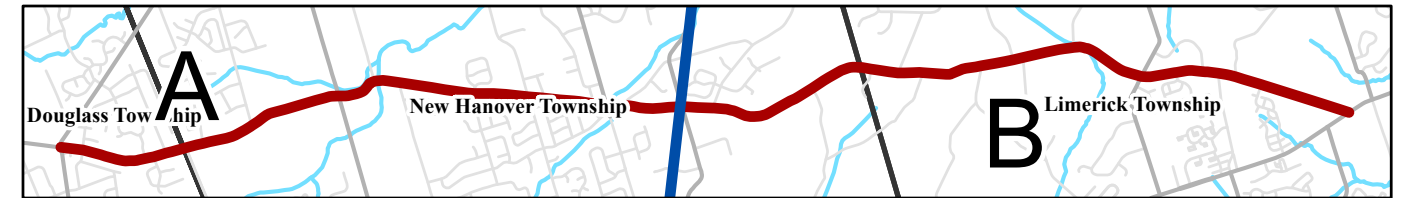
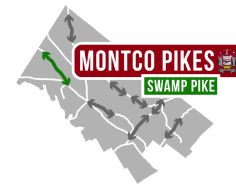
### Multimodal Connections

Sidewalk connections are limited to short sections associated with development. There are short segments of sidewalk along the corridor. There are not any major regional trails that cross Swamp Pike. New Hanover Township has identified Swamp Pike as a potential primary trail corridor. The proposed West County Trail would cross Swamp Pike near Lutheran Road. There is a trail running through Limerick Community Park.

There no bike lanes along the corridor. Swamp Pike was identified as Priority Bike Route in Bike Montco—The Bicycle Plan for Montgomery County approved in 2018. Given the classification of Swamp Pike as a Minor Arterial and a speed limit of 35 mph to 45 mph the plan recommends providing at least a paved shoulder that is at least 6 feet wide. Other options are a buffered or protected bicycle lane.

Walk Montco—Montgomery County Walkability Study approved in 2016 stated that these areas should have sidewalks installed. This designation also applies to the eastern end of the

# Swamp Pike, Corridor Overview

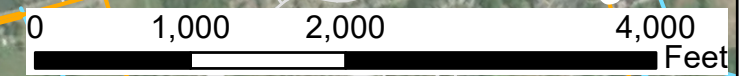


**Legend**

- Swamp Pike
- Streams
- Bridges
- Traffic Signals

**Intersecting Road Ownership**

- PennDOT Roads
- Local Roads
- Municipal Boundaries

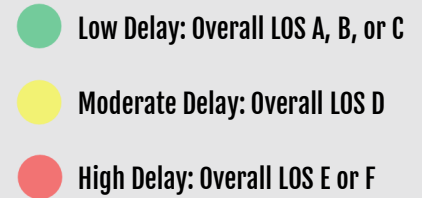


Source: Municipal Boundaries (2020), PennDOT Roads (2020), Local Roads (2020), Streams (2004) - PASDA | Traffic Volumes (2020) - PennDOT

corridor near Ridge Pike

There are no bus routes along Swamp Pike. SEPTA Bus Route 93 runs along Ridge Pike at the intersection with Swamp Pike. There are no passenger rail facilities in the corridor.

Multimodal connections are depicted on the Multimodal Transportation Features Map found in Appendix B.



## Traffic Volumes and Congestion

The highest traffic volumes along Swamp Pike are found east of Gilbertsville Road. Some intersections have been identified by previous plans and studies for operating at Moderate to High delay; those intersection are listed below. High Delay is characterized as intersections operating at an overall level of service E or F. Moderate Delay is characterized as intersection operating at an overall level of service D. Intersections operating at a level of service A, B, or C are considered to have Low Delay.

- **Gilbertsville Road** - High Delay
- **Middle Creek Road** - High Delay
- **Leidy Road** - High Delay
- **Rosenberry/Reifsnyder Road** - High Delay
- **Wagner Road** - High Delay
- **Faust Road** - High Delay

A Traffic and Intersection Operations Map containing additional about traffic volumes and intersection operations can be found in Appendix B.

## Safety

For the period between 2015-2019, the Swamp Pike corridor between Ridge Pike and Gilbertsville Road had 48 crashes. The most common crash types are angle and rear-end crashes. This could indicate the crashes are related to congestion and turning movement geometry at numerous intersections. Only one crash resulted in a fatality.

A Safety Map depicting Crash Densities along Swamp Pike can be found in Appendix B.



*Historic church building and parking lot located close to roadway*

## KEY ISSUES

### Safety and operational issues at key locations

There are several key locations along Swamp Pike that have safety and operational issues:

- Gilbertsville Road
- Between Lutheran Road and Leidy Road
- Between Kurtz Road and Smith Road

The intersection at Gilbertsville Road has congestion that causes traffic to divert to alternate routes in the area. Between Lutheran and Leidy Road the horizontal alignment of Swamp Pike has s-curves that present safety concerns. There is a historic church parking lot close to the road at the Leidy Road intersection, making any widening of the road difficult. Between Kurtz Road and Smith Road there are s-curves that present



*Narrow and winding roadway near Lutheran Road*

safety concerns. There are also sight distance restrictions that make left turns onto Swamp Pike difficult in this section of the corridor.

### **Narrow, winding, and hilly nature of the corridor poses safety concerns and impacts feasibility of improvements**

Community members expressed interest in adding left turn lanes at key intersections. Swamp Pike, however, has narrow shoulders, sharp curves, and steep topography in some locations that can make it challenging to navigate, particularly given truck traffic. These safety issues are exacerbated during inclement weather, which heightens the need for responsive winter maintenance. Additionally, the roadway width and geometry impacts the feasibility of some roadway improvements or providing dedicated facilities for bicyclists and pedestrians.

### **Development along the corridor will increase traffic**

There are several developments proposed along the Swamp Pike corridor:

- Large Town Center mixed use development west of Charlotte Street
- Possible second Spring Ford High School location west of Neiffer Road
- Expansion of Limerick Community Park
- Mixed use development at Lewis Road (under construction)

If all of these potential developments are constructed, it will put a strain on the existing cross section of Swamp Pike. Most of Swamp Pike is only one lane in each direction. There are numerous locations along the corridor with homes/buildings close to the road. This would make widening Swamp Pike difficult to accomplish. Roadway and pedestrian improvements are planned as a part of the expansion of Limerick Community Park. An extension of Lewis Road including a roundabout at Swamp Pike, have recently been completed to mitigate traffic concerns associated with the new mixed use development in that area.

### **Flooding and maintenance issues due to the lack of drainage features, topography, and creek crossings**

There is limited stormwater management infrastructure in some sections on Swamp Pike. Today, most stormwater runs off the roadway into roadside ditches, which require routine maintenance. In addition, there are approximately three locations where Swamp Pike crosses a creek or stream. In some of these locations, roadway flooding can occur during storm events. In particular, the segment of Swamp Pike that crosses Minster Creek near Lutheran Road and the segment of Swamp Pike that crosses Hartenstine Creek near Sankey Road often flood during major weather events.



*Erosion and deterioration of roadway pavement near Sankey Road intersection*

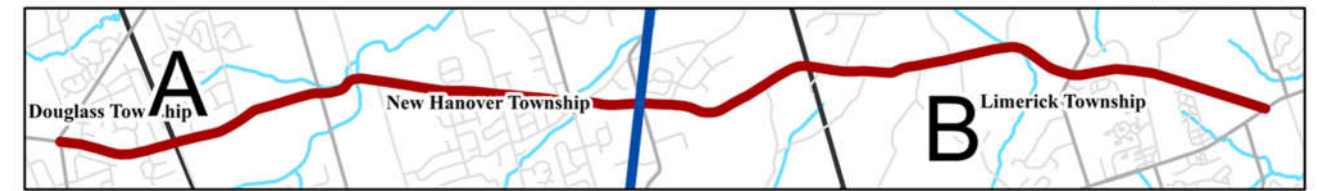
### **Interest and support for bicycle and pedestrian accommodations, but constraints to providing dedicated infrastructure along the corridor**

Community members expressed an interest in providing improved bicycle and pedestrian connections, particularly at the western and eastern ends of the corridor, but may not be safe for pedestrians and bicyclists given the lack of dedicated facilities. The horizontal and vertical geometry, as well as structures, utility poles, residential fences/decorative walls and heavily wooded and vegetated areas close to the roadway, may impact the feasibility of providing dedicated bicycle and pedestrian facilities along Swamp Pike.

# Swamp Pike | Key Issues

## Corridor-Wide Issues

- Constrained right-of-way with structures close to roadway
- Development planned at several locations along corridor
- Desire for increased bicycle and pedestrian connections and crossings



## Between Lutheran Road & Leidy Road

- Poor drainage leads to water pooling in the roadway
- Safety concerns due to S-curve in roadway geometry
- Limited space to expand infrastructure due to historic church with parking up against roadway

## Intersection with Gilbertville Road

- Congestion at intersection causes traffic to divert to local roads for alternate routes

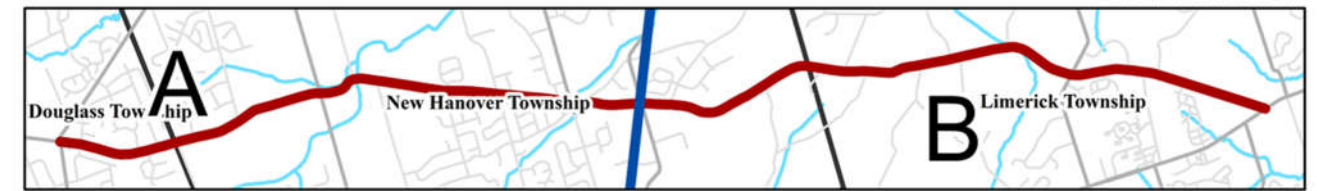
## Area west of Charlotte Street

- Large town center development proposed

## Legend

- Swamp Pike
- Bridges
- 🚦 Traffic Signals
- Intersecting Road Ownership**
- PennDOT
- Local Roads
- ▭ Municipal Boundaries

# Swamp Pike | Key Issues



## Corridor-Wide Issues

- Constrained right-of-way with structures close to roadway
- Development planned at several locations along corridor
- Desire for increased bicycle and pedestrian connections and crossings

### Between Fruitville Road & Smith Road

- Difficulty making left turns at intersections

### Limerick Community Park

- Significant expansion of the park planned, including Swamp Pike traffic and pedestrian improvements

### Intersection with Lewis Road

- Development under construction
- Lewis Road extension recently constructed, including roundabout on Swamp Pike



### Between Kurtz Road & Fruitville Road

- Safety concerns due to S-curve in roadway geometry

### Between Hartenstine Creek & Presidential Drive

- Poor drainage leads to water pooling in the roadway
- Possible second Spring Ford High School location

## Legend

- Swamp Pike
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# SWAMP PIKE TOMORROW

## CORRIDOR EVALUATION

Swamp Pike provides access to suburban residential communities in western Montgomery County that are growing in population and employment. The corridor evaluation focused on improvements such as a two-way center left turn lane to improve operations and safety and add new bicycle and pedestrian facilities along significant stretches of the corridor. A more detailed evaluation of Swamp Pike can be found in the corridor evaluation worksheets located in Appendix C.

### Traffic Operations

Lower traffic volumes and a lack of heavily congested intersections preclude the need for additional through travel lanes for the corridor.

The entire corridor between the Gilbertsville Road and Ridge Pike should be evaluated to provide a two-way center left turn lane.

Turn lanes exist at some signalized intersections. Additional turning lanes at key intersections with local roads, such as Leidy Road, should be considered based on turning movements and safety considerations.

### Multimodal Connections

From Gilbertsville Road to Leidy Road, sidewalk and bike lanes should be considered based on the proposed new developments near the PA 663—Charlotte Street intersection.

From Leidy Road to Neiffer Road, a consistent shoulder width should be developed. Sidewalks and bike lanes in this segment are not practical given little commercial development. If additional development occurs the sidewalk & bike should be considered.

From Neiffer Road to Ridge Pike sidewalks and bike lanes should be provided. This will improve multimodal connections to the numerous commercial developments and Limerick Community Park.

### Constraints

Geometric, right-of-way, environmental, potential historical, roadside obstructions, and structure features were reviewed and constraints were identified and taken into consideration for the development potential improvements for Swamp Pike.

Utilities are predominantly above-ground throughout the corridor alternating between the west and east sides of the corridor. A regional overhead electric transmission line crosses the corridor to the south of Ridge Pike.



*Intersection with Charlotte Street (PA 663),  
New Hanover Township*



*Utilities and buildings near edge of roadway,  
New Hanover Township*

It is very common along many areas of Swamp Pike for several types of obstructions to be located close to the paved cartway including areas of trees/heavy vegetation, fences, decorative walls, utility poles, and building structures.

Potential historical property constraints exist at between Dotterer Road and Charlotte Street in New Hanover Township (McGee Tract House & Outbuilding) and at the intersection of Leidy Road (Parsonage & Falkner Swamp Reformed Church).

The table below highlights some of key geometric, environmental and potential historical features along the study limits of Swamp Pike.



*Intersection with Dotterer Road, New Hanover Township*



*Recent townhome development Limerick Township*

Type	Corridor Constraint
Geometry	<ul style="list-style-type: none"> <li>•Horizontal &amp; Vertical curves between Lutheran Road and Leidy Road</li> <li>•Horizontal curves between Kurtz Road and Fruitville Road</li> <li>•Horizontal &amp; Vertical curves between Hartenstine Creek &amp; Presidential Drive</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>•Limerick Community Park</li> </ul>
Potential Historical	<ul style="list-style-type: none"> <li>•McGee Tract Housing &amp; Outbuilding</li> <li>•Parsonage &amp; Falkner Swamp Reformed Church</li> </ul>

## FUTURE VISION

### Cross Sections

Sumneytown Pike is a Community Arterial with a mix of Rural and Suburban Corridor land use contexts. The standard design criteria should be generally followed, except at locations when constraints limit the ability to meet the standard criteria.

#### Gilbertsville Road to Leidy Road

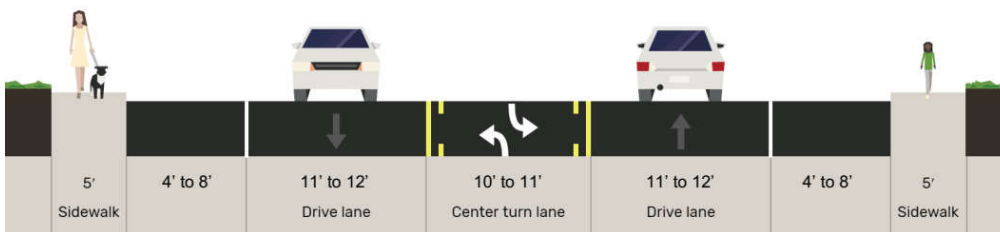
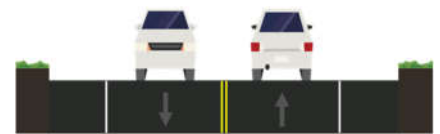
Pedestrian and bicycle accessibility will be improved by adding sidewalks and bike lanes in each direction.

A two-way center left turn lane should be installed to provide a safer means for vehicles to make left turns at the numerous driveways. In addition, traffic signal upgrades should be made at Gilbertsville Road to improve capacity.

The focus in the immediate area west of the Charlotte Street intersection should be on improvements such as adding turn lanes, traffic signal upgrades and pedestrian access/connectivity. Any modifications to the existing roadway approaches and turning lanes should be in coordination with the proposed development on the south side of Swamp Pike west of Charlotte Street.

Between Lutheran Road & Leidy Road improvements to the drainage facilities should be made to reduce flooding on the roadway. These improvements could include storm sewer inlets and pipes and providing curb on the roadway.

*Existing Cross Section:  
Gilbertsville Road to Ridge Pike*



## Leidy Road to Neiffer Road

This cross section would be improved with a center two-way left turn lane. This will provide a safer means for vehicles to make left turns at the numerous driveways.

While bike lanes are not recommended in this segment, a consistent widened shoulder should be provided. Between Hartenstine Creek and Presidential Drive drainage facilities should be improved to reduce flooding on the roadway.



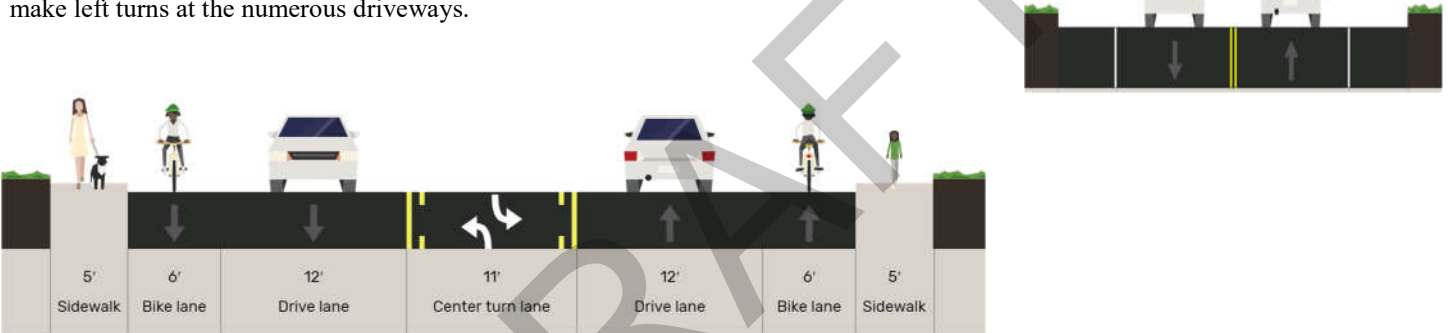
## Neiffer Road to Ridge Pike

Pedestrian and bicycle accessibility will be improved by adding sidewalks and bike lanes on each side of the roadway. This will improve multimodal access to Limerick Community Park and the commercial developments at Ridge Pike.

A two-way center left turn lane should be installed to provide a safer means for vehicles to make left turns at the numerous driveways.

Existing Cross Section:

Gilbertsville Road to Ridge Pike



## Corridor Improvements

The Corridor Improvement Map for Swamp Pike identifies multimodal improvements at a total of six intersections and corridor segments to address issues for traffic operations, safety considerations and bicycle and pedestrian travel, and maintenance. The Corridor Improvement Map on the following pages identifies the improvement categories to address future needs, estimated range of construction costs, and general priority levels.

The following general corridor-wide improvement strategies apply to Swamp Pike.

### *Add Bicycle and pedestrian facilities and fill in the gaps between existing facilities*

There are short segments of sidewalk along the corridor. The gaps in this network may be filled through small projects or potentially through land development projects. The county should work with New Hanover and Limerick Townships to develop a pedestrian facility master plan to implement the bike lanes & sidewalks on the future cross section. The master plan can provide a conceptual scope by identifying the alignment, crossings and right-of-way needs.

### *Access management in commercial areas*

A large commercial development is proposed on the south side of Swamp Pike west of Charlotte Street. Best access management practices should be implemented in this area along the corridor.

### *Add shoulders and widen existing shoulders to preferred width*














Each of the future cross sections along the corridor recommend preferred shoulder width based on the preferred design criteria. The preferred shoulder width for most of the Swamp Pike corridor is 4 to 8 feet. Some segments of Swamp Pike may be constrained from the preferred shoulder width. In these areas, the retrofit criteria of 2–4 foot shoulders may be more practical and appropriate.

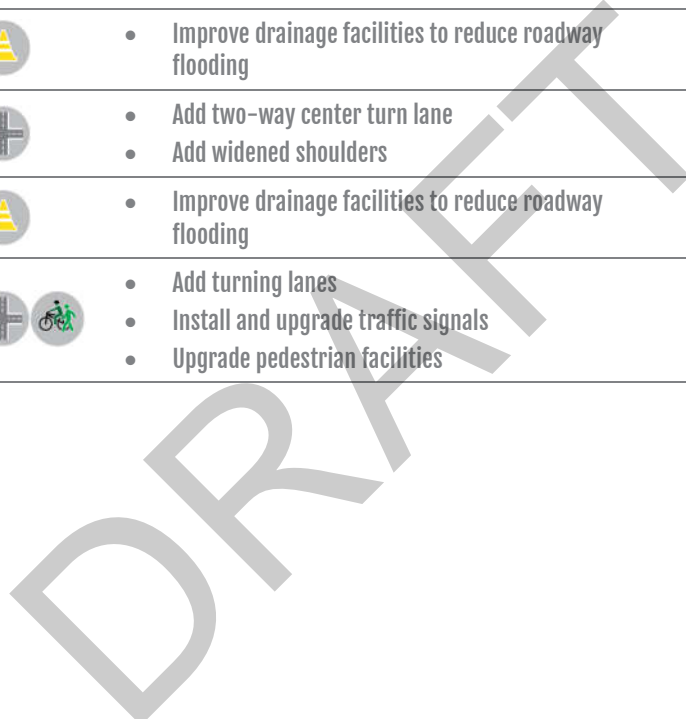
***Upgrade traffic signals and provide improved coordination systems between closely spaced intersections***

Swamp Pike from Gilbertsville Road to Ridge Pike includes 5 signalized intersections through New Hanover and Limerick Townships. The townships and county should work cooperatively to implement upgrades.

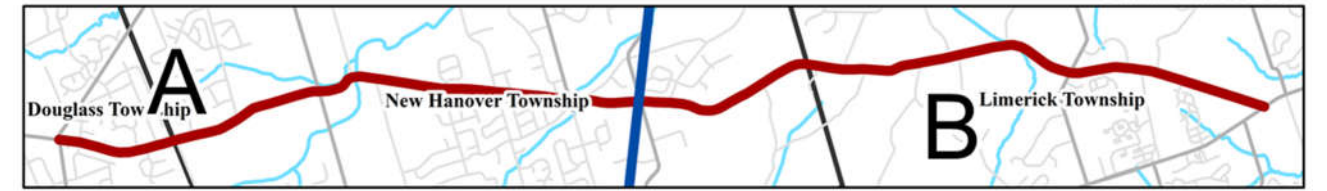
***Improve stormwater management facilities***

Specific locations with stormwater management issues were not identified by the key stakeholders or the public, but was a common general issue identified by municipalities that should be addressed throughout the corridor when improvements are implemented by the county or developers.

Location	Improvement Categories	Potential Improvements	Relative Priority	Relative Cost
Area West of Charlotte Street	  	<ul style="list-style-type: none"> <li>Add turning lanes</li> <li>Install and upgrade traffic signals</li> <li>Upgrade pedestrian facilities</li> </ul>	High	\$\$\$\$\$
Intersection with Gilbertsville Road		<ul style="list-style-type: none"> <li>Traffic signal upgrades</li> </ul>	Medium	\$
Between Lutheran Road & Leidy Road	 	<ul style="list-style-type: none"> <li>Improve drainage facilities to reduce roadway flooding</li> </ul>	Medium	\$\$\$\$
Between Leidy Road & Neiffer Road	 	<ul style="list-style-type: none"> <li>Add two-way center turn lane</li> <li>Add widened shoulders</li> </ul>	Medium	\$\$\$\$\$
Between Hartenstine Creek & Presidential Drive	 	<ul style="list-style-type: none"> <li>Improve drainage facilities to reduce roadway flooding</li> </ul>	Medium	\$
Neiffer Road to Ridge Pike	  	<ul style="list-style-type: none"> <li>Add turning lanes</li> <li>Install and upgrade traffic signals</li> <li>Upgrade pedestrian facilities</li> </ul>	Medium	\$\$\$\$\$



# Swamp Pike | Corridor Improvements



## Corridor-Wide Improvement Strategies

- Add bicycle and pedestrian facilities and fill in the gaps between existing facilities
- Improve access management in commercial areas
- Upgrade storm water management facilities
- Add shoulders and widen existing shoulders to preferred width

### Between Lutheran Road & Leidy Road



**Priority: Medium**  
**Cost: \$\$\$\$**

- Improve drainage facilities to reduce roadway flooding

### Between Leidy Road & Neiffer Road



**Priority: Medium**  
**Cost: \$\$\$\$\$**

- Add two-way center left turn lane
- Add widened shoulders



### Intersection with Gilbertsville Road


**Priority: Medium**  
**Cost: \$**

- Traffic signal upgrades










### Area west of Charlotte Street




**Priority: High**  
**Cost: \$\$\$\$\$**

- Add turning lanes
- Install & upgrade traffic signals
- Upgrade pedestrian facilities

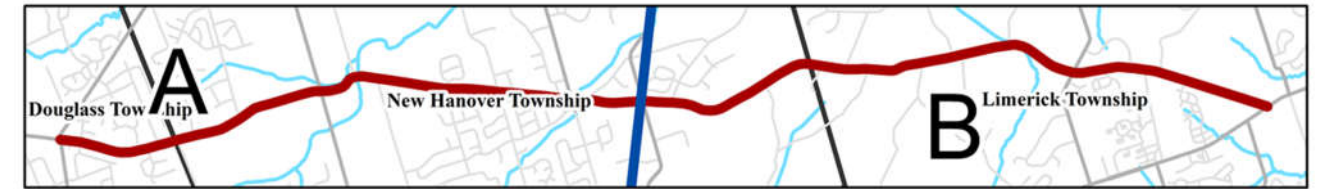
## Legend

-  Swamp Pike
-  Bridges
-  Traffic Signals
- Improvement Type**
-  Intersection
-  Roadway
-  Pedestrian/Bicycle
-  Transit
-  Parking
-  Maintenance

## Relative Project Costs

**\$** \$0—\$1,000,000  
 **\$\$** \$1,000,000—\$2,000,000  
 **\$\$\$** \$2,000,000—\$5,000,000  
 **\$\$\$\$** \$5,000,000—\$10,000,000  
 **\$\$\$\$\$** \$10,000,000+

# Swamp Pike | Corridor Improvements



## Corridor-Wide Improvement Strategies

- Add bicycle and pedestrian facilities and fill in the gaps between existing facilities
- Improve access management in commercial areas
- Upgrade storm water management facilities
- Add shoulders and widen existing shoulders to preferred width

### Between Leidy Road & Neiffer Road



**Priority: Medium**  
**Cost: \$\$\$\$**

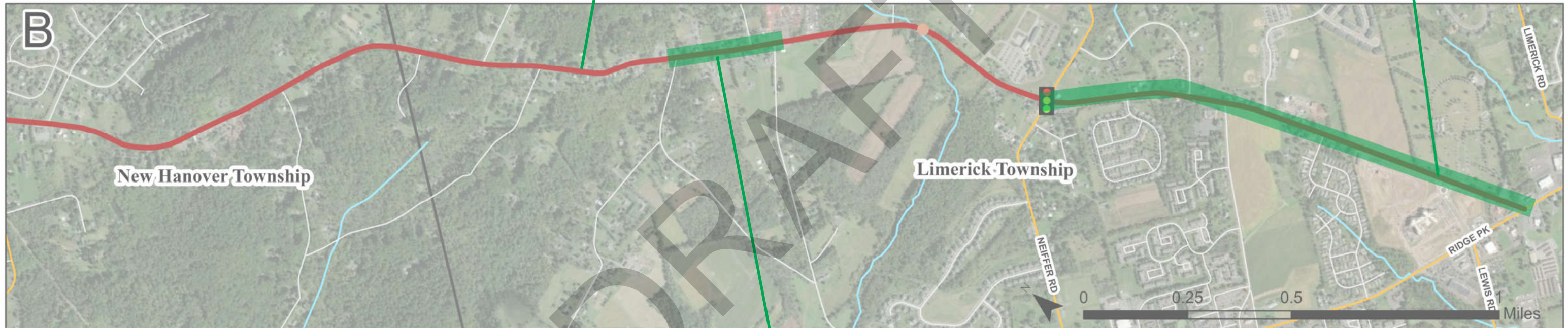
- Add two-way center left turn lane
- Add widened shoulders

### Neiffer Road to Ridge Pike




**Priority: Medium**  
**Cost: \$\$\$\$**

- Add two-way center left turn lane
- Add bike lanes
- Add sidewalks






### Between Hartensine Creek & Presidential Drive









**Priority: Medium**  
**Cost: \$**

- Improve drainage facilities to reduce roadway flooding

### Legend

-  Swamp Pike
-  Bridges
-  Traffic Signals

### Improvement Type

-  Intersection
-  Roadway
-  Pedestrian/Bicycle
-  Transit
-  Parking
-  Maintenance

Relative Project Costs	
\$	\$0—\$1,000,000
\$\$	\$1,000,000—\$2,000,000
\$\$\$	\$2,000,000—\$5,000,000
\$\$\$\$	\$5,000,000—\$10,000,000
\$\$\$\$\$	\$10,000,000+