



Village of Fowlerville

Capital Improvement Plan

Fiscal Year

2019-2024

Village of Fowlerville Capital Improvement Plan- Fiscal Year 2019-2024

- Introduction:

The Village of Fowlerville 2019-2024 Capital Improvement Plan (CIP) is presented on the following pages. The CIP is a rolling six (6) year planning instrument used to identify needs and financing sources for capital improvements throughout the Village of Fowlerville. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements, to maintain, preserve and protect the Village's existing infrastructure system. The CIP is also utilized to ensure that capital improvements are fiscally sound and consistent with the goals and policies of the governing body and the residents of the Village.

Continue introduction

- The CIP informs Village residents and stakeholders how the municipality plans to address significant capital needs over the next six (6) years. The CIP provides visual representation of the community's needs. The CIP can also influence growth because infrastructure can impact development patterns.

Street Capital Projects:

The Village of Fowlerville has 7.22 miles of Major Street and 7.25 of Local Streets, for a total of 14.47 miles of streets that the Village is entirely responsible for maintaining. This includes routine maintenance (plowing, sweeping, right-of-way work) preventative maintenance and reconstruction. The majority of the streets within the Village are asphalt and the majority have curb and gutter, with some streets without curb and gutter.

Project Name	Year 1 18/19	Year 2 19/20	Year 3 20/21	Year 4 21/22	Year 5 22/23	Year 6 23/24
National Park Drive Reconstruction Phase I & II	\$350,000 Phase I	\$1,000,000 Phase II				
Garden Lane Reconstruction	\$1,200,000					
Van Riper Road Reconstruction		\$420,000				
Garden Lane Bridge Improvements	\$15,000					
Benjamin/Church Streets Reconstruction		\$850,000				
N Benj/D-shire/Pinewood				\$1,500,000	\$1,500,000	

Continued Street Capital Projects

Project Name:	Year 1 18/19	Year 2 19/20	Year 3 20/21	Year 4 21/22	Year 5 22/23	Year 6 23/24
Hale, Collins, Daily Streets Reconstruction				\$882,000		
Church Street Reconstruction					\$1,600,000	
North Street			\$1,400,000			
North Grand Avenue			\$1,800,000			
Power Street						\$1,700,000

Continued Street Capital Projects

Project Name	Year 1 18/19	Year 2 19/20	Year 3 20/21	Year 4 21/22	Year 5 22/23	Year 6 23/24
Water Tower Upgrades		\$150,000		\$150,000		\$150,000
Gregory Road Reconstruction Phase I & II					\$500,000	\$500,000
Garden Lane Bridge Improvements	\$20,000				\$250,000	
Grand River Ave Bridge Improvements	\$20,000				\$250,000	
Water Treatment Plant						\$4,000,000

Street Capital Project Description

National Park Drive:

- Phase I consists of 0.16 miles of concrete pavement removal, concrete curb and gutter replacement, concrete drives, storm sewer, utility repairs, aggregate base, HMA pavement, slope restoration and pavement markings on National Park Drive to Grand River Avenue.
- Phase II consists of reconstruction of remaining roadway, curb, gutter, driveways and restoration not completed in Phase I

Garden Lane:

- This project consist of resurfacing and reconstruction approximately 3,350 linear feet of Garden Lane. Quantities include approximately 3,760 linear feet of curb and gutter removal, new curb and gutter, removal and replacement of guardrail, new driveway approaches, asphalt paving, topsoil, seeding and other miscellaneous work.

Van Riper Road:

- Reconstruction of curb and roadway including milling 6 inches of HMA. Adding curb and gutter, driveway approaches and sidewalk ramp replacement. Placing new pavement, striping and restoration

Benjamin/Church Streets:

- The water main is 1927 4-inch cast iron and is in very poor condition. The water main has recently experienced three (3) major breaks that were repaired by the Village DPW.
- Smoke testing showed it is highly probably that storm water is draining into the Village's sanitary sewer system. Eliminating storm water filtration into the Village's sanitary sewer system will provide relief for the Village's wastewater treatment plant during rain events.
- The sanitary sewer main is 1963 8-inch clay pipe of unknown condition.
- There is very little storm sewer infrastructure.
- There is public sidewalk on the east side of Benjamin Street south of Church Street. The existing sidewalk does not meet current Village standards and the sidewalk ramps are not Americans with Disabilities Act compliant.
- The roadway is in poor condition and temporary patching is ongoing.

North Benjamin Street/Devonshire Road/Pinewood Drive

- The Water main on North Benjamin Street is 1927 4-inch cast iron and is in poor condition. The water main has experienced one (1) break that was repaired by Fowlerville DPW. Upsizing the water main to 8 to 12 inches will increase capacity of the system in this quadrant of the Village.
- The water main on Devonshire is also 1927 4-inch cast iron and is in very poor condition. The water main has experienced three (3) breaks that were repaired by the Fowlerville DPW. Upsizing the water main to 8 or 12 inch will increase capacity of the system in this quadrant of the Village.
- Water main on North Benjamin can be looped to North Maple Street and connected to the water main stub that was installed as part of the North Maple Street reconstruction project. Looping the water main to North Maple Street will significantly increase capacity of the system.
- The sanitary sewer main is 1963 8-inch clay pipe of unknown condition and primarily located within the 100 year floodplain.
- There is very little storm sewer infrastructure.
- The existing sidewalk does not meet current Village standards and the sidewalk ramps are not American with Disabilities Act compliant.

Continued Street Capital Project Description

- Hale, Collins, Dailey Streets
 - The water main is 1927 4-inch cast iron and is in very poor condition. The Fowlerville DPW is aware of six (6) breaks that have had to be repaired over the years. Upsizing the water main to 8-inch will eliminate the 4-inch bottleneck between Hale Street and Christopher.
 - The sanitary sewer system main is 1963 8-inch clay pipe of unknown condition.
 - The sanitary sewer force main is 1963 6-inch cast iron. There have been two force main breaks that were repaired by Fowlerville DPW. Upsizing the force main to 8-inch will provide additional capacity to help accommodate peak flows into the Dailey Street pump station..
 - There is very little storm sewer infrastructure. The storm sewer system will improve by connecting to the Livingston County drain.
 - There is no public sidewalk on either side of the street- installing sidewalk will improve pedestrian access.
 - The roadway is in poor condition and temporary patching is ongoing. This section of roadway is a collector street serving development north of the CSX Railroad and South of Frank Street.
- Church Street
 - The water main is 1927 4-inch cast iron. There are at least two (2) water valves that do not work anymore, which is an issue during both scheduled and emergency water main shut downs.
 - The sanitary sewer main is 1963 8-inch clay pipe of unknown condition.
 - There is very little storm sewer infrastructure.
 - The existing sidewalk does not meet the Village standards and the sidewalk ramps are not Americans with Disabilities Act compliant. There is no sidewalk on the north side of the Street between Benjamin Street and East Street.
 - The roadway is in poor condition and temporary patching is ongoing. This section of Church Street is a collector street that act similarly to an arterial street providing a secondary means of east-west travel through the Village.
- North Street
 - The water main is 1927 4 and 6-inch cast iron. The Fowlerville DPW has repaired multiple water main breaks throughout the years.
 - The sanitary sewer main is 1963 8-inch clay pipe of unknown condition. There is an existing cross lot sanitary sewer main between South Street and North Street that can be eliminated as part of this project or during reconstruction of North Grand Avenue. Eliminating this section of pipe will provide the Village with better access to the sanitary sewer main for cleaning and maintenance.
 - There is very little storm sewer infrastructure.
 - There is not any sidewalk on the north side of South Street between Second Street and North Grand Avenue nor is there any sidewalk on the south side of North Street between Collins Street and North Grand Avenue. Installing sidewalk will improve the pedestrian access. The existing sidewalk does not meet current Village standards and the sidewalk ramps are not American with Disabilities Act compliant.
 - The Roadway is in poor condition and temporary patching is ongoing. North Street is an arterial street as it is one of the main access roads to the Fowlerville Schools.

Continued Street Capital Project Description

- North Grand Avenue
 - The water mains are 1991 and 2006 12-inch ductile iron pipe. Replacement is not necessary at this time other than possibly some of the main line valves. Meter pits are to be added.
 - The sanitary sewer main is 1963 8-inch clay of unknown condition.
 - The storm sewer manholes are old style block structures that are deteriorating and should be replaced. Storm sewer piping will likely need to be replaced to facilitate installation of new sanitary sewer.
 - The existing sidewalk does not meet current Village standards and the sidewalk ramps are not American with Disabilities Act compliant.
 - The roadway is in poor condition and temporary patching is ongoing.
 - The property at the North East corner of South Street and North Grand Avenue presents a challenge to install Americans with Disability Act compliant sidewalk ramps. A retaining wall along the length of this property may be required.
- Power Street
 - The water main is 1958 8-inch transite (asbestos) pipe. The Fowlerville DPW has repaired multiple water main breaks throughout the years.
 - The sanitary sewer main is 1963 8-inch clay that is in poor condition and the Fowlerville DPW has experienced difficulties during routine pipe cleaning work. There is a probable storm water infiltration into the sanitary sewer main on Jackson Street. The sanitary sewer to the businesses on the south side of Power Street between North Grand Avenue and North Ann Street has already been replaced as part of the Downtown Development Project a few years ago.
 - There is very little storm sewer infrastructure west of the Downtown Development Project. New storm sewer was installed on Power Street between North Grand Avenue and the Downtown Development Project as part of the 2013 North Grand Avenue Reconstruction Project. There is probable storm water infiltration into the sanitary sewer main on Jackson Street. Eliminating storm water infiltration into the Village's sanitary sewer system will provide relief at the Waste Water Treatment Plant during rain events.
 - There is not any sidewalk on Jackson Street. Installing sidewalk will improve pedestrian access. The existing sidewalk (not including the sidewalk that was installed as part of the DDA Project) does not meet the current Village standards and the sidewalk ramps are not American with Disabilities Act compliant.
 - The roadway on Jackson Street is in poor condition and temporary patching is ongoing. The roadway on Power Street is in fair condition.
- Water Tower Upgrades
 - Includes reconditioning, regular inspections, exterior and interior painting to maintain and extend the life of the tower.
- Gregory Road Reconstruction

Continued Street Capital Project Description

- Garden Lane Bridge Improvements
 - Penetrating Healer/Sealer
 - Quality Control
- Grand River Ave. Bridge Improvements
 - Penetrating Healer/Sealer
 - Quality Control
- Water Treatment Plant
 - Improved Water Quality.
 - Cost-Savings in the Long Run.
 - Environmentally Friendly.
 - No Shortage of Water.
 - Improve Taste and Water Clarity.

Village of Fowlerville

213 South Grand Avenue
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Phone (517) 223-3771 Fax (517) 223-7435
Police (517) 223-8711
website www.fowlerville.org



Road Maintenance plan

Preventative Maintenance: these procedures are inexpensive treatment of the pavement which provide protection, decrease the rate of deterioration and add service life to the pavement. Examples as follows :

1. With any new road project we look for any cracks that might appear in the first year of the new blacktop and do a crack and seal program. If there are any linear cracks a router is used to open them up to $\frac{3}{4}$ " deep, then they are power cleaned of any debris with oil compressed air and then filled with hot rubber.
2. The roads are looked at yearly for the crack and seal program.
3. Monthly they are looked at to find any small holes that need to be cold patched, when found they are filled immediately.
4. All curb and gutter streets are swept monthly to keep them free from debris.

5. In the fall all curb and gutters are cleaned before winter with the leaf vac machine to makes sure that debris doesn't freeze on them and cause issues.

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Storm Sewer Maintenance Plan

Preventative maintenance: these procedures are inexpensive and keep the storms sewers running freely.

Examples as follows:

1. Storm sewers are jetted and cleaned bi-annual to keep them free of sediment and debris.
2. Storm sewer covers are checked weekly for blockage of debris to keep the water off the roads.
3. Roads/curbs/gutters are swept monthly in the warmer months to remove all debris.
4. In the fall we use the leaf vac to remove all debris (leaves) from the curbs/gutters to prevent blockage and sediment from entering the system.

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Sanitary sewer maintenance plan

Preventative maintenance: these procedures are inexpensive and keep the system functioning properly.

Examples as follows:

1. Sewer lines are jetted on a bi-annual basis to clean them of any debris and to check for any line problems, such as settling pipe, possible blockage with roots or any other debris.
2. Manholes are looked at on a yearly basis to check for cracks, breaks or any physical damage and repaired as needed.
3. Lift stations are checked on a regular basis. The pumps are pulled yearly and the oil changed to assure they are performing at their best possible use.

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Water maintenance plan

Preventative Maintenance: these procedures are inexpensive and crucial to the well-being of the water system, decreases the chance of stagnant water in the system and adds life to the system.

Examples as follows:

1. All hydrants all flushed in the spring and fall for at least 5 minutes or longer depending on the visual appearance of the water.
2. Water valves are exercised on an alternating basis with hard turning valves done annual, this helps with isolating the system for potential problems.
3. Curb stops are located, inspected for any problems and repaired if necessary.