



**VILLAGE OF BROOKLYN, MICHIGAN**  
**CAPITAL IMPROVEMENTS PLAN**  
**FY 2022 – FY 2027**

**Approved by Village Council \_\_\_\_\_, 2021**

This Capital Improvements Plan update covering fiscal years 2022 – 2027 was developed by the Planning Commission for the Village of Brooklyn. On a motion by Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, and unanimously approved by the Planning Commission at a regular meeting held on September 1, 2021, the Capital Improvements Plan FY 2022 – FY 2027 is recommended for approval to the Village Council.

**Planning Commission members:**

- Robert Stockton, Chairperson
- Greg Goings, Vice-Chairperson
- Misty Bliven, Member
- Crystal Buter, Member
- Stacy Hicks, Ex-officio member
- Bob Jenson, Ex-officio member
- Debbie Powell, Member

On a motion by Trustee \_\_\_\_\_, seconded by Trustee \_\_\_\_\_, the Capital Improvements Plan FY 2022 – FY 2027 is approved by Village Council at a regular meeting held on \_\_\_\_\_, 2021.

Yeas: \_\_\_\_\_  
Nays: \_\_\_\_\_  
Absent: \_\_\_\_\_

**Village Council members:**

- Estella Roberts, Village President
- Patricia Robinson, Village President Pro Tempore
- Phil Bliven, Trustee
- Stacy Hicks, Trustee
- Bob Jenson, Trustee
- Phil Krauss, Trustee
- Gabriella Tacket, Trustee

**Document created with the assistance of:**  
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## **Introduction**

The Village of Brooklyn Capital Improvements Plan (CIP) is a multi-year planning instrument used to identify needs and financial resources for significant public infrastructure improvements to facilitate the orderly planning of said improvements; to maintain, preserve, and protect Brooklyn's existing infrastructure system; and to provide for the acquisition or scheduled replacement of assets to ensure the efficient delivery of services to the community. The CIP is also utilized to ensure that capital improvements are fiscally sound and consistent with the goals and policies of the Planning Commission, the Village Council and the residents and business owners of the community.

A comprehensive CIP is an essential tool for the planning a development of the social, physical, and economic wellbeing of the community. This process is a necessary step in an organized effort to strengthen the quality of public facilities and services; provide a framework for the realization of community goals and objectives; and provide a sound basis from which to build and maintain a healthy and vibrant community.

The CIP informs the Village of Brooklyn residents, business owners and stakeholders on the municipality's plans to address significant capital needs over the next six years. Thereafter, the CIP is reviewed annually and another year's projects are added to the CIP. The CIP provides visual representations of the community's needs and may include maps that detail the timing, sequence, and location of capital projects. The CIP may also influence growth as infrastructure projects often impact development patterns.

The benefits the CIP provides for residents, business owners and stakeholders may include, but are not limited to:

- Optimizing the use of revenue
- Focusing attention on community goals, needs and capabilities
- Guiding future growth and development
- Encouraging efficient government
- Improving intergovernmental and regional cooperation
- Maintaining a sound and stable financial program
- Enhancing opportunities for participation in federal and/or state grant programs

Projects identified in the CIP represent the community's plan to serve both residents and businesses and anticipate the needs of a dynamic community. Projects are guided by various development plans and policies established by the Planning Commission, Village Council and Village administration.

Plans and policies may include, but are not limited to:

- Master land use plan
- Redevelopment plan
- Downtown development plan
- Corridor improvement plan
- Recreation plan

- Transportation plan
- Non-motorized transportation plan
- Goals and objectives of Village Council
- Administrative policies

### **Mission Statement**

Preparation of the CIP is done under the authority of the Michigan Planning Enabling Act (PA 33 of 2008), as amended. The goal of the CIP is to implement the Master Plan (formerly the Comprehensive Plan) and to assist in the community's financial planning.

The CIP is dynamic. Each year all projects included within the CIP are reviewed, a call for new projects is made, and adjustments are made to existing projects arising from changes in the amount of funding required, conditions, or timeline. A new year of programming is also added each year to replace the prior year funded in the annual operating budget.

The CIP program should continue to develop over time by adding features to gradually improve quality and sophistication. Greater attention shall be devoted to providing more detailed information about individual project requests, program planning, fiscal analysis, fiscal policies, and developing debt strategy.

### **CIP and the Budget Process**

The CIP plays a significant role in the implementation of the Master Plan by providing the link between planning and budgeting for capital projects. The CIP process precedes the budget process and is used to develop the capital project portion of the annual budget. Approval of the CIP by the Planning Commission does not mean that they grant final approval of all projects contained within the plan. Rather by approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the community and that projects contained in the first year of the plan are suitable for inclusion in the upcoming budget.

Priority ranking does not necessarily correspond to funding sequence. For example, a street project that is ranked lower than a park project may be funded prior to the park project because the street project has access to a restricted revenue source, whereas a park project may have to compete for funding from other revenue sources. A project's funding depends upon many factors – not only its merit, but also its location, cost, funding source, and logistics.

Brooklyn strives to maximize resources by maintaining a balance between operating and capital budgets. A continuous relationship exists between the CIP and the annual budget as should be expected in a properly managed strategic planning environment. Budget appropriations lapse at the end of each fiscal year as the operating budget is funded with recurring annual revenues, such as taxes, licenses, fines, user fees, and interest income.

The Village has adopted a “pay-as-you-go” philosophy in developing the initial budget for the CIP. However, this does not preclude Village Council from authorizing execution of other sources of funding to address emergency situations or to take advantage of economies of scale by accelerating completion of multiyear projects. There may be instances in which federal or state requirements may necessitate the Village to obtain debt funding to remain in compliance with regulations. In addition, the availability of grants or gifts by the Village may enable projects to be implemented earlier than planned or the scope of such projects to be expanded.

### **CIP Process**

*CIP Policy Group.* Responsibility for development of the CIP rests with the Planning Commission. In the absence of a separate CIP Policy Group, the Planning Commission in collaboration with the Village Manager provides those functions which include review of the policies, development of project rating and weighting criteria, review of funding options and presentation of recommendations to Village Council. Current Planning Commission members include two ex-officio members who are Village Trustees which will strengthen the connection between the two entities and the CIP.

*Administrative Group.* The Administrative Group consists of the Village Manager who is responsible to clarify issues, finalize the rating and weighting process, develop the draft CIP for discussion with the Planning Commission and presentation at a Public Hearing with either the Planning Commission or Village Council.

*Planning Commission.* The Planning Commission acts as the Policy Group with the Village Manager during plan development, conducts workshops (if necessary), reviews recommendations, receives public input, conducts Public Hearings, adopts the plan, and requests Village Council to consider incorporating funding for each year’s projects into the budget document.

*Governing Body.* The Village Council is encouraged to use the CIP as a tool in the adoption of the annual budget in accordance with Village goals and objectives. Whenever funding for significant capital improvement projects is considered, Village Council should verify that the project has been included in the CIP and, if not, the reasons for circumventing the CIP process are appropriately documented.

*Residents.* Though not included in the development of the initial CIP due to logistics and time constraints, residents are encouraged to review the CIP (available online) and offer comments to or participate in discussion with the Planning Commission or Village Council in the process of making annual amendments to the CIP prior to adoption of the annual budget by Village Council. Village Council encourages open communication with residents and business owners by staff, Planning Commissioners and Village Council members.

## **CIP Policy**

The Village of Brooklyn CIP defines a capital improvement project as a major, nonrecurring expenditure that includes one or more of the following:

1. Construction of any new facility (i.e.: public building, water or sanitary sewer mains, storm sewers, major and local roadways, recreational facilities), an addition to or extension of such a facility, provided that the cost is at least \$15,000 and that the improvement will have a useful of life of at least three years.
2. Nonrecurring rehabilitation of all or a part of a Village-owned building, its grounds, a facility, or equipment, provided that the cost is at least \$15,000 and the improvement will have a useful of life of at least three years.
3. Purchase or replacement of major equipment to support community programs provided that the cost is at least \$15,000 and will be coded to a capital asset account.
4. A planning, feasibility, engineering, or design study related to an individual capital improvements project or to a program that is implemented through individual capital improvements projects provided the cost is at least \$15,000 and will have a useful of life of at least three years.
5. A planning, feasibility, engineering, or design study that is not related to an individual capital improvements project or program that is implemented through individual capital improvement projects for which the cost is at least \$25,000.
6. Acquisition of land for a public purpose that is not part of an individual capital improvement project or a program that is implemented through individual capital improvements projects provided that the cos is at least \$25,000.

## **Program Funding**

Capital improvement projects often involve the outlay of substantial funds necessitating access to numerous sources to provide financing for greater than one fiscal year and frequently for the life of the project. Capital funding sources are often earmarked for specific purposes and cannot be transferred from one capital program to another. For example, millage funds raised by the Village for streets must be used for the purposes that were stated when the voters approved the millage. The CIP must be prepared with some projections as to the amount of funding available. The following is a summary of the funding sources for projects included in the CIP.

*Enterprise Funds.* In enterprise financing, funds are accumulated in advance for capital requirements. Enterprise funds not only pay for capital improvement, but also for the day-to-day operations of community services and the debt payment on revenue bonds. The community can set levels for capital projects; however, increases in capital expenditures for water mains, for example, could result in increased rates. Enterprise fund dollars can only be used on projects related to that enterprise fund (i.e.: water system funds can only be used on the water system).

*Bonds.* When the Village of Brooklyn sells bonds, purchasers are, in effect, lending the community money. The money is repaid, with interest, from taxes or fees over several years. The logic behind issuing bonds (or “floating a bond issue”) for capital projects is that the citizens who benefit from the capital improvement should help the community pay for them. Brooklyn issues bonds in two forms:

- **General Obligation Bonds:** Perhaps the most flexible of all capital funding sources, General Obligation Bonds can be used for the design or construction of any capital project. These bonds are financed through property taxes. In financing through this method, the taxing power of the community is pledged to pay interest and principal to retire the debt. Voter approval is required if the community wants to increase the taxes that it levies and the amount is included in Brooklyn’s state-imposed debt limit. To minimize the need for property tax increases, the community makes every effort to coordinate new bond issues with the retirement of previous bonds. General Obligation bonds are authorized by a variety of state statutes.
- **Revenue Bonds:** Revenue bonds are sold for projects that produce revenues, such as water and sewer system projects. Revenue bonds depend on user charges and other project-related income to cover their costs. Unlike General Obligation bonds, revenue bonds are not included in the state-imposed debt limits because the full faith and credit of the community back them. Revenue bonds are authorized Public Act 94 of 1933.

*Act 51 Funds:* Based on a formula set by the State of Michigan, the Village receives a portion of the tax placed on motor fuel, vehicle registration fees and highway usage in the state. The restrictions placed on the expenditure of these funds ensure that they will be spent on transportation-related projects or operations and services, specifically through the Major and Local Street Funds.

*Tax Increment Financing (TIF):* Tax Increment Financing is a municipal financing tool that may be used to renovate or redevelop declining areas while improving their tax base. TIF applies the increase in various state and local taxes that result from a redevelopment project to pay for project-related public improvements. For purposes of financing activities with the Village’s downtown district, the Corridor Improvement Authority (CIA) approved a 20-year TIF plan which was adopted by Village Council on April 8, 2019. Public Act 281 of 1986, the Local Development Finance Authority Act, and Public Act 450 of 1980, the Tax Increment Financing Act, authorizes TIF.

*Millages:* The property tax is a millage that is one of the most important sources of community revenue. The property tax rate is stated in mills (one dollar per \$1,000 of valuation). This rate is applied to a property’s net value, following the application of all exemptions and a 50 percent equalization ratio. Millages are either authorized by state statute or are voter-approved and are specifically earmarked for a particular purpose. For example, the street millage provides funding dedicated to the maintenance of the Village’s streets beyond the revenue received from the state (Act 51 funds). The community is authorized to utilize millages under Public Act 279 of 1909, the Home Rule Cities Act.



*State and Federal Funds:* The state and federal governments make funds available to communities through numerous grants and aid programs. Funds are often tied directly to a specific program while the community may have discretion in the expenditure of other funds, within certain parameters. For the most part, the community has no direct control over the amount of money received under these programs.

*Special Assessments:* Capital improvements that benefit particular properties, rather than the entire community, may be financed more equitably by special assessment (i.e.: by those who directly benefit). Local improvements often financed by this method include new street improvements (pavement, curb and gutter, sidewalks), sanitary and storm sewers and water mains.

*Developer Contributions:* Occasionally, capital improvements are required to serve new development. Should funding not be forthcoming from the community to construct such improvements, developers may agree to voluntarily contribute their share or to install the facilities themselves so the development can proceed.

## **CIP BUDGET**

The budget for the updated Capital Improvement Plan FY 2022 – FY 2027 is included on the following page. It is the intent of the Village that the CIP budget spread sheet will be updated annually to reflect changes in the projects as some projects are completed, others are amended, and new projects are added.

## VILLAGE OF BROOKLYN, MICHIGAN

### Capital Improvements Plan Budget FY 2022 (Approved 08/09/2021)

A	B	C	D	E	F	G	H	I
Projects	Priority	Years to Start	Target FY Year	Total Estimated Cost	Fund Source(s)	Grant Type	Grant Amount	Annual Reserve Required
M-50 Lift Station Replacement (See note 4.)	High	0	2020	\$ 717,000	Sewer			\$ -
Mill Street Bridge Replacement (See note 5.)	High	3	2024	\$ 800,000	Major Street	MDOT	TBD	\$ 266,667
N. King, S. King, Tiffany Streets Milling/Resurface	High	0	2019	\$ 219,533	Major Street	STP	\$ 175,626	\$ -
Marshal Street Reconstruction	High	0	2020	\$ 600,000	Major Street	STP	\$ 516,000	\$ -
Street rehabilitation (All streets) (See note 6.)	Medium	1	2021-22	\$ 1,250,000	Major/Local St.	Bond	\$ 1,250,000	\$ 1,250,000
Lansing Street Lift Station Upgrade	Low	3	2024	\$ 75,000	Sewer			\$ 25,000
Water Main Replacement	Medium	5	2021-25	\$ 250,000	Water			\$ 50,000
Sanitary Sewer Main Replacement	Low	4	2025	\$ 150,000	Sewer			\$ 37,500
Water Main Extension to unserved areas	Medium	3	2024	\$ 240,000	Water			\$ 80,000
Sanitary Sewer Main Extension to unserved areas	Medium	3	2024	\$ 150,000	Sewer			\$ 50,000
Connection to Trails	Medium	5	2026	\$ 75,000	General			\$ 15,000
Sidewalk Extension ( See note 7.)	Medium	2	2023	\$ 50,000	Major/Local St.	SRTS	\$ 660,000	\$ 25,000
Constitution Ave. & Mill St. milling/resurfacing	High	1	2022	\$ 360,000	Major St.	STP	\$ 300,000	\$ 360,000
Monroe St. reconstruction	High	2	2023	\$ 600,000	Major St.	STP	\$ 500,000	\$ 300,000
<b>Total Capital Improvement reserve required in the current year:</b>				<b>\$ 600,000</b>	<b>Major St.</b>	<b>STP</b>	<b>\$ 500,000</b>	<b>\$ 300,000</b>

**Notes**

1. Appearance of any project on the CIP does not necessarily mean that a project will be funded in the year indicated.
2. See individual project summaries for priority rationale.
3. Projects included in the CIP must have a total estimated cost of at least \$15,000. The annual reserve amount may be less.
4. Bids were opened on May 22, 2019. Though the low bid was more than the engineering estimate, Village Council accepted the bid.
5. An application to the MDOT local bridge program has been submitted four consecutive years. If awarded, funds are not encumbered for three years.
6. Capital Improvement Bonds were received in 2021 to fund street rehabilitation projects, except for N. King, S. King, Tiffany, Marshal, Constitution, and Mill Streets which will be/have been funded by rural transportation funds. If recognized as federal aid eligible, Monroe St. may also be funded by rural transportation funds during 2023.
7. A Safe Routes to School grant application will be submitted during 2021. If awarded, up to \$660,000 may be available to connect Columbia High School/ Middle School to the Elementary Schools. Only the portion of cost attributed to sidewalk improvements within the Village is shown.

## PROJECT SUMMARIES

The intent of the Capital Improvements Plan is to include priority projects for the Village during the immediate six-year period following approval of the initial CIP. Since the CIP is dynamic by design, each subsequent year will see completed projects from the previous year removed from the CIP and inclusion of new projects for each subsequent year. In addition, upon completion of a comprehensive street maintenance program the CIP will likely reflect street projects being included as a perpetual project in the CIP although project activities may occur less frequently than annually should the scope of such a project require accumulation of revenue for more than one year.

The following project summaries are intended to provide stand-alone information for each project. Since the CIP may contain projects funded by allocations from the same fund source, information may often appear to be repetitive. However, this repetition is necessary since completed projects will be removed from the CIP each year. For this reason, project summaries are attached to the CIP as appendices so that the entire CIP only requires annual updates rather than a complete rewrite. However, the budget spread sheet will be updated each year to reflect annual changes as projects are completed, funding sources and costs are updated and new projects are added.

The format for the following appendices reflects the year in which a given project summary was included in the CIP. Should a project continue for subsequent years of the CIP, the appendix number will reflect its initial year in the CIP. New project submissions will reflect the year in which they were included in the amended CIP even though the letter assigned to the year may duplicate a previous year. Such duplication does not necessarily imply any connection with a previous project summary with an identical letter.

## **Appendix 2017A: M-50 Lift Station Replacement (completed)**

*Project Status:* Tentatively scheduled for FY 2019. (Completed during FY 2020.)

*Project Description:* Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own wastewater treatment plant, a lagoon system, from property at Turk Road, approximately two miles outside of the Village. The Michigan Department of Environmental Quality had cited the Village for deficiencies that would have required a considerable investment in capital to bring the Village up to MDEQ standards. In consideration of financial and time constraints, combined with possible repercussions in the event of surface water pollution, the decision was made by Village Council to connect through Columbia Township to the regional treatment facility operated by Leoni Township.

At a cost of approximately \$1,550,000, the Village connected to the regional system in 1996. This included up-front connection fees paid to Columbia Township. Since the original sanitary sewer system functioned as a gravity system, lift stations were required to transmit wastewater to the pressurized force main through Columbia Township. The primary lift station is the M-50 lift station located on North Main Street between Wesco and Guthrie Ford's used car lot (adjacent to Swain Memorial Park).

*Priority Status:* The M-50 lift station's operational life is twenty (20) years, at which time the Village would typically expect to either extensively rehabilitate or replace the facility. The lift station consists of two, high-capacity pumps through which most of the Village's wastewater is transmitted. Failure of the lift station's two pumps would require connection of bypass pumps for an indefinite period and would present a risk of surface water pollution, a critical concern considering the proximity of the River Raisin and Goose Creek.

Ideally, the M-50 lift station should have been replaced in 2016. However, with some equipment repairs and a history of receiving quality maintenance during its useful life by the Department of Public Works staff, the lift station's life has been extended at least two years. The plan is to replace the entire lift station, including the concrete container, both pumps and the electrical control components. Building the new lift station adjacent to the current lift station will require only minimal use of bypass pumps while the final connections to the sewer mains are made. Once the new lift station is brought online, the original lift station will be demolished.

For the reasons cited above, replacement of the lift station is considered the top priority in the Village's initial CIP.

*Timeline:* For financial reasons, replacement of the M-50 lift station was delayed until fiscal year 2019 (July 1, 2018). Preliminary engineering was done previously to determine the estimated cost of the project and the feasibility of locating a new lift station adjacent to the current one. Though some additional preliminary work and staging may begin prior to July 1, 2018, the intent is to allocate funds for the project from FY 2019 in anticipation of the receipt of the majority of tax revenue between July 1 and September 14, 2018. Therefore, construction will likely take place beginning in September 2018 with completion by December 31, 2018.

**Funding Source and Cost:** The total estimated cost for replacement of the M-50 lift station is \$250,000 which will be paid from reserves and budget allocation from the Sewer Funds from the FY 2019 budget. No bond funds or loans are anticipated to complete this project. The two-year delay in scheduling the project relates to the cumulative impact of the Village's failure to collect sufficient revenue to cover the final two years of a Sewer Bond obligation associated with connection to the regional sewer system in 1996. Collection of the bond millage will continue through FY 2020 to replace reserve funds that would otherwise have been available to complete this project in 2016.

Typically, reserve funds are accumulated over several years from monthly Readiness-to-Serve charges paid by the Village's customers. These funds would then be allocated for long-term projects, such as replacement of the M-50 lift station, or for expansion of the system to areas of the Village that are not currently served by the sewer system. As an enterprise fund, Sewer Fund revenues may only be allocated to operation of or capital projects for the sanitary sewer system.

**Community Goal:** It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the wastewater disposal needs of the community indefinitely.

**Update:** Since the initial CIP for FY 2019 (implemented July 1, 2018) was approved by Village Council on January 8, 2018, nearly six months prior to its implementation date, the engineering estimate had increased to \$350,000 for this project and the completion date was delayed until December 31, 2019. However, when the three bids received from potential contractors were opened on May 22, 2019, the lowest bid received was in excess of \$717,000. The Director of the Department of Public Works and the Village Manager will be working with the Village Engineer to determine the following:

1. The nature of the disparity between the engineering estimate and the actual estimates
2. Potential cost savings from purchasing materials and equipment by the Village prior to the project being scheduled
3. Potential cost savings from mobilization and labor by delaying completion of the project an additional year (December 2021)
4. Whether state or federal grant funds may be accessed to defray the cost to the Village
5. Whether to recommend Village Council reject all bids and pursue new quotes from a potentially larger field of prospective contractors

**Update 2021:** The M-50 lift station replacement was delayed until 2020 due to contractor scheduling following the need to address the shortfall of funding for the project of \$367,000. The Village was able to negotiate with Kennedy Industries, the supplier for the mechanical equipment, a five-year payment plan. This allowed the project to move forward rather than requiring a delay until additional financial resources were accumulated.

## **Appendix 2017B: Mill Street Bridge Replacement**

*Project Status:* Tentatively planned to commence during FY 2020 (now 2024).

*Project Description:* On or about 1920, the Ford Motor Company purchased property in the Village at the headwaters of the River Raisin, formerly occupied by early grist and sawmills which utilized the river as a mechanical power source. Henry Ford's plan was to decentralize much of his manufacturing operations to reduce risks that may disrupt automobile manufacturing if all operations had been consolidated in one location. Doing so enabled access to a labor force that was often lacking motorized transportation. The two water sluices were consolidated into one behind a new dam and mill pond with a sluice that fed a hydroelectric generator which powered the plant. Reportedly, the bridge over the River Raisin on Mill Street was built at the same time, considering that the exit point for water from the generating sluice is adjacent to the bridge.

Though manufacturing by Ford at this location ceased in 1988, the facility has since had numerous tenants, but has been vacant for several years. The property was purchased by Daniel and Samantha Ross in 2014 with plans to convert the facility to commercial use under the Old Irish Mill concept with a bar and restaurant being the anchor businesses. Ross' plans estimated the potential of 500,000 visitors to the Mill per year. This customer load will place an extreme traffic load on the aging bridge and it is likely that construction traffic will need to be routed to the location from the east due to load restrictions.

With its age approaching 100 years, the Mill Street bridge was designated as a historic structure in 2002. It consists of three separate culverts covered with fill and topped by asphalt. The roadway surface is just 22 feet in width and does not include shoulders or pedestrian walkways. Due to age, the weight capacity has been gradually reduced to the present 17 tons. It is reevaluated every two years with the most recent being November 2017. Should replacement of the bridge occur, the bridge would (minimally) be widened to 36 feet to accommodate two, 12-foot lanes, shoulders, and a pedestrian walkway.

*Priority Status and Timeline:* Though the bridge remains functional, due to a progressively declining load capacity for the bridge coupled with an anticipated significant increase in traffic associated with the redevelopment of the Ford facility as the Old Irish Mill, replacement of the Mill Street bridge is rated as a high priority. A secondary concern, after safety, is impact on the Old Irish Mill. It would be desirable to schedule the replacement project prior to the Old Irish Mill completing its renovation and opening for business. Currently, it is uncertain when the funding package for the Old Irish Mill will be secured by the Ross' to allow the renovation project to begin.

Contingent upon identifying potential funding from federal or state grants, this project appears on the CIP as occurring within two years. Certain state funding sources are allocated three years in advance of a project. If dependent upon a state grant, the project might not be scheduled prior to 2021.

*Funding Source and Cost:* In October 2017, Village Council approved development of a Request for Qualifications & Quote package to solicit concept designs and costs from qualified bridge engineering firms. That process will be initiated by January 2018 and should

address funding for and timing of the project. While the CIP uses a \$300,000 cost estimate for replacement, initiating the RFQ process should provide an accurate cost estimate for this project.

As a street project, funding would come from the Major Street fund. Project funds are available for bridge replacement through the Michigan Department of Transportation; however, the application requires three years lead time prior to construction. While the RFQ package will require engineering firms to delineate any experience they have in securing relevant grants, it is uncertain whether grant funds will be available when needed for this project.

*Community Goal:* Replacement of the Mill Street bridge is consistent with the community goal of maintaining a viable transportation system in the Village. However, with the possibility of the Old Irish Mill becoming a landmark destination for the Village, replacement of the bridge becomes more of an economic development priority. The success of the Old Irish Mill will be a catalyst for other commercial development, as well as residential development, that will impact the entire community.

*Update:* The engineering firm of Fleis & Vandenbrink was selected by the Village through a competitive bid process in April 2018 as the project engineer for both design and construction of the Mill Street bridge. As a condition of approval, F & V completed and submitted an application on behalf of the Village to the Michigan Department of Transportation for its local bridge program by the May 1, 2018 deadline. Unfortunately, the grant was not awarded to the Village. F & V renewed the application by May 1, 2019 and a determination will be made prior to December 31, 2019. Given the limited funding available and the large number of applicant municipalities, chances for approval are not improved over that in 2018.

The Village Manager has engaged with the Economic Development Administration of the U.S. government through the Region 2 Planning Commission to determine if the Village may be eligible for a federal grant of up to 50% of the projected cost of construction. It may be feasible to combine this application for grant funds with the M-50 lift station replacement to improve the Village's chances of approval on the basis of the economic impact and potential growth of commercial development from the impact of the Old Irish Mill project.

**Update 2021:** Fleis & Vandenbrink submitted applications on behalf of the Village to the Michigan Department of Transportation for its local bridge program during 2020 and 2021. This marks four consecutive years that F & V have submitted applications. Each year, the Village has increased the number of points assigned during the award process. During July 2021, the Michigan Legislature approved \$1.5 billion toward bridge and roads that will hopefully increase the Village's chances of this project being funded.



## **Appendix 2019A: N. King, S. King and Tiffany Streets Milling and Resurfacing (completed)**

*Project Status:* The initial CIP was completed by the Planning Commission in November 2017, prior to consideration for inclusion of the N. King St., S. King St., and Tiffany St. project. Initially scheduled to occur after the Marshall St. rehabilitation project, the Village was able to switch the order for receipt of Surface Transportation Project (STP) funds allocated through the Rural Transportation Task Force to enable accumulation of additional funds for Marshall St. in FY 2020 and move the N. King St., S. King St., and Tiffany St. project to FY 2019.

*Project Description:* With the exception of the north half of N. King St., which will require minimal surface treatment, the south half of N. King St., S. King St., and Tiffany St. will be completely milled, the base reshaped and 3"-4" of asphalt installed. Due to receipt of STP funds, the project is subject to the bid process through the State of Michigan and has been delayed in the latter part of the 2019 paving season. The STP funds have been committed to the project by the Michigan Department of Transportation, so may be utilized after the end of the state's fiscal year on September 30, 2019, if necessary.

*Priority Status and Timeline:* As mentioned above, the priority with the Marshall St. project was reversed due to a need to identify more funding for Marshall St. enabling the N. King St., S. King St., and Tiffany St. project to be accelerated to calendar year 2019. This project will also be advanced to occur prior to the start of rehabilitation of other Village streets in 2020 and 2021.

*Funding Source and Cost:* The primary funding source for the N. King St., S. King St. and Tiffany St. project is STP funds through the State of Michigan as allocated by the Rural Transportation Task Force. STP funds consist of \$175,626 with a Village match of \$43,907 (minimum) for a total project cost estimate of \$219,533. However, since this project is subject to the state's bid process after July 1, 2019, the cost of the project may increase with the difference likely being the responsibility of the Village to be covered by Street Bond revenue and General Fund transfers to the Major and Local Street Funds.

*Community Goal:* As with the Village's other street projects, the goal is to rehabilitate all of the streets by 2021 and be in a financial position to properly maintain the streets indefinitely after the General Obligation Bonds are repaid on or about 2030. The combination of Act 51 funds (supposedly a proportionate share of state sales tax revenue), the Village's Street Millage (reduced by the Headlee Amendment from 5.0 mills in 1978 to 3.6408 mills in 2019), and General Fund transfers as a result of the 2.0 mill increase implemented July 1, 2018, is anticipated to allow the Village to repay the bond debt and, afterward, maintain the streets.

**Update 2021:** The N. King/S. King/Tiffany St. project was completed during 2019. This project included an extension of the sidewalk along the west side of N. King St. to connect the sidewalk to those on Marshall St.

## **Appendix 2017C: Marshall Street Reconstruction (completed)**

*Project Status:* Tentatively scheduled for FY 2019 (Now 2020).

*Project Description:* Marshall Street is a primary arterial street connecting the Village with Jefferson Road in Columbia Township. It is one-half (1/2) mile in length terminating at North Main Street (M-50) within the Village. During its life, sections of Marshall Street have been resurfaced corresponding to several infrastructure improvements creating an uneven surface and altering the flow of storm water into the storm sewer system that serves only part of Marshall Street. The project would consist of milling the existing surface to expose the full height of existing curbs to improve storm water drainage followed by resurfacing of the driving surface with three inches of asphalt.

Marshall Street contains narrow shoulders from North Main Street to approximately Ernest Street on both sides of the street. Widening the street to accommodate two full-width parking lanes is not an option, for budgetary reasons, as this would require replacement of curbs and shifting of water and sewer mains. Consideration should be given to allowing parking on one side of Marshall Street. Ideally, Marshall Street should have a dedicated left-turn lane at North Main Street which would require 36 feet of width.

*Priority Status and Timeline:* The Marshall Street project was initially scheduled for 2015, but was delayed due to a reduction in the funding allocation by the State of Michigan. Though Marshall St. remains functional, due to its status as a primary arterial street, it is considered a medium level priority with an anticipated timeline of implementation after July 1, 2018 (FY 2019).

*Funding Source and Cost:* The estimated total cost of the project is \$270,000 with federal and state funds amounting to \$216,000 of that cost. This does not include water and sanitary sewer improvements completed in 2015 when this project was originally scheduled. The local match of \$54,000 would come from reserves and budget funds from the Major Street Fund in the FY 2019 allocation. However, receipt of federal and state funds for this project may require expenditures for nonmotorized walkways which must be completely funded with local funds. Specifically, the steps at Delamater and Marshall Street would need to be removed, the grade changed and a retaining wall installed. If there are insufficient local funds available to complete this and other mandatory improvements, the project may need to be delayed indefinitely.

*Community Goal:* Though the Village has not yet completed a comprehensive street maintenance plan, resurfacing of Marshall Street is consistent with the community goal of maintaining a viable transportation system in the Village. Ideally, the Village would receive sufficient revenue annually to plan for long-term maintenance of the streets on a twenty (20) year cycle. Since the state's Act 51 funds and the Village's dedicated street millage (reduced from 5.0 mills to 3.6551 mills by the Headlee Amendment of 1978) do not generate sufficient funds to achieve a continual street maintenance program, significant street projects will be limited in scope and mostly to major streets.

*Update:* Though initially scheduled to occur during FY 2019 (July 1, 2018 – June 30, 2019), since the initial CIP was developed, this project has since been delayed until FY 2020 or FY

2021 with completion prior to December 31, 2020, in favor of completion of the N. King St., S. King St. and Tiffany St. project. This was done to enable shifting of the Surface Transportation Program grant funds for this project ahead of the Marshall St. project which has also resulted in the Village acquiring an additional \$300,000 in STP funds that would have been allocated to Jackson County.

Preliminary engineering estimates for Marshall St. ranged from \$300,000 for a "band-aid" approach to \$900,000 for the "Cadillac" approach. A more realistic estimate for a "Chevy" approach for rehabilitation of Marshall St. of \$600,000 consists of milling of 8"-12" of the surface to reclaim the existing curb which would restore the intended storm water control, regrading of the base, and installing 4"-6" of asphalt.

**Update 2021:** This project was substantially completed during 2020 with the exception of ground restoration and issues with curb at Delamater St. that was installed incorrectly and a storm drain issue at West St. which is above the grade of the intersection. The ground restoration was not completed in the spring due to drought conditions, so may not be completed until spring 2022. The two corrections will be done in July 2021.

## **Appendix 2019B: Street Rehabilitation (All Streets)**

*Project Status:* Initially scheduled to occur during FY 2019, the tentative schedule has been moved to FY 2020 with a two-year completion due to the Village's interest in coordinating with the Jackson County Department of Transportation to share construction services as a means of cost saving. Contractors have been scheduling nearly a year in advance.

*Project Description:* Frequently a topic of discussion throughout the budget development process from April through June 2018, prior to the start of FY 2019, Village Council approved a 2.0 mill increase in the General Fund effective with the July 1, 2018 tax bills in anticipation of funding a comprehensive street rehabilitation plan that would touch nearly every street in the Village over a two-year period. A resolution to approve the Notice of Intent for Capital Improvement Bonds was approved on July 9, 2019, after the initial CIP had been implemented.

Assessment of all Village streets has occurred to determine the extent of rehabilitation that may be required ranging from crack filling to complete reconstruction. Excluding N. King St., S. King St., Tiffany St., and Marshall St. which are eligible for funding through the Surface Transportation Program (STP), estimates range from \$875,000 to \$2.3 million for rehabilitation of the remaining Village streets. The larger number reflects complete reconstruction of all Village streets. A more realistic estimate of \$1.5 million reflects the full range of rehabilitation including crack sealing, chip/seal, wedge and fog seal, mill and fill, and reconstruction.

*Priority Status and Timeline:* As Village Council considered options for rehabilitating the Village's streets, several factors were considered, including:

1. The increasingly deteriorating condition of the Village's streets primarily from the effects of water infiltration (exacerbated by Michigan's freeze/thaw cycles each winter) due to the age of the streets and lack of prior maintenance.
2. The increasing costs of materials apparently related to petroleum products being refined for fuel consumption rather than asphalt emulsions.
3. The increasing cost of mobilization and labor (due to a nationwide labor shortage) from the demand on contractors to rehabilitate roads and streets across Michigan.
4. The cumulative effect of decades of reductions in the allocation of funds from the State of Michigan, including revenue sharing and Act 51 funds, and the lack of any apparent legislative solution that would direct greater funding to rural areas.
5. The cumulative impact of reductions in revenue since passage of the Headlee Amendment in 1978 that has reduced the Village's street millage from 5.0 mills to the current 3.6408 mills, a factor representing approximately \$50,000 per year (in 2019 dollars).

*Funding Source and Cost:* With likely costs ranging from \$875,000 to \$1.5 million for rehabilitating the Village's streets, General Obligation Bonds of \$1 million to \$1.2 million are being pursued with repayment over a 10-year period at up to \$120,000 per year. Village Council's approval of the FY 2019 budget included a 2.0 mill increase in the General Fund that will generate approximately \$75,000 per year to be transferred to the two street funds. Those funds will accumulate for up to two years prior to completion of the street rehabilitation plan. If estimates for rehabilitation exceed \$1.2 million, it will be necessary to

obtain other sources of funding (grants) or reduce the scale of the rehabilitation to some streets.

An application for a Transportation Economic Development Fund program grant for 2020 in the amount of \$250,000, applicable to five of the Village's major streets with an equivalent local match, was denied. The TEDF program specifically targets communities of less than 10,000 population. An application for 2021 will be submitted when the application period is announced by the Michigan Department of Transportation. Other than N. King St., S. King St., Tiffany St. and Marshall St., the Village's streets are not eligible for additional Surface Transportation Program (STP) funding.

*Community Goal:* Though rehabilitation of all of the Village's streets within a two-year period is an ambitious goal and would require securing the maximum amount of General Obligation Bonds available to the Village, this would prevent the further deterioration in the streets and, once the bonds are redeemed at the end of ten years, enable the Village to utilize existing revenue from all sources to maintain the streets indefinitely. In addition, though the General Fund millage was increased by 2.0 mills effective with FY 2019, the total millage rate for the Village will decrease by 3.55 mills effective with the FY 2021 tax bill (July 1, 2020), when the Sewer Bond millage will expire, resulting in an overall decrease in the tax millage rate for all property owners.

**Update 2021:** Though the Village had tentatively secured bond funds during 2020, the closing on the bonds was delayed until April 1, 2021, due to the street projects not commencing until 2021. \$1.25 million in bond funds has been secured at an interest rate of 1.5% for 12 years. Tri-State Paving will be doing the crack sealing, milling, and paving. Jackson County Department of Transportation will be doing wedge patching, chip, and fog seal. It is not anticipated that all of the streets will be completed until 2022 due to delays in obtaining engineering and quotes for the water main replacements on Jackson and Lane Streets.

## **Appendix 2017D: Lansing Street Lift Station Upgrade**

*Project Status:* Tentatively scheduled for FY 2021 (now FY 2024).

*Project Description:* Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own wastewater treatment plant, a lagoon system, from property at Turk Road, approximately two miles outside of the Village. The Michigan Department of Environmental Quality had cited the Village for deficiencies that would have required a considerable investment in capital to bring the Village up to MDEQ standards. In consideration of financial and time constraints, combined with possible repercussions in the event of surface water pollution, the decision was made by Village Council to connect through Columbia Township to the regional treatment facility operated by Leoni Township.

At a cost of approximately \$1,550,000, the Village connected to the regional system in 1996. This included up-front connection fees paid to Columbia Township. Since the original sanitary sewer system functioned as a gravity system, lift stations were required to transmit wastewater to the pressurized force main through Columbia Township. The primary lift station is the M-50 lift station located on North Main Street between Wesco and Guthrie Ford's used car lot (adjacent to Swain Memorial Park). The Lansing Street lift station was installed to transmit a portion of the Village's wastewater into the primary interceptor that connects the Village to Columbia Township.

The Lansing Street lift station is currently located at the east end of Lansing Street, which dead ends at that point. Future development in the Village should include vacant land between the east end of Lansing Street and Monroe Street. Ideally, when the lift station is replaced, it would be moved from within the right-of-way of a possible extension of Lansing Street. Building the new lift station adjacent to the current lift station will require only minimal use of bypass pumps while the final connections to the sewer mains are made. Once the new lift station is brought online, the original lift station will be demolished.

*Priority Status and Timeline:* Though the lift station would normally be considered as approaching its planned useful life of 20 years, that timeframe has been extended due to the limited service area of the Village the lift station provides and the quality of maintenance it has received during its useful life by the Department of Public Works staff. Replacement of the lift station is considered a medium priority in the Village's initial CIP with an anticipated timeline of 2021 for completion.

*Funding Source and Cost:* The total estimated cost for replacement of the Lansing Street lift station is \$150,000 which will be paid from reserves and budget allocation from the Sewer Funds from the FY 2021 budget. No bond funds or loans are anticipated to complete this project. The two-year delay in scheduling the project relates to the cumulative impact of the Village's failure to collect sufficient revenue to cover the final two years of a Sewer Bond obligation associated with connection to the regional sewer system in 1996. Collection of the bond millage will continue through 2020 to replace reserve funds that would otherwise have been available to complete this project sooner.

Typically, reserve funds are accumulated over several years from monthly Readiness-to-Serve charges paid by the Village's customers. These funds would then be allocated for

long-term projects, such as replacement of the Lansing Street lift station, or for expansion of the system to areas of the Village that are not currently served by the sewer system. As an enterprise fund, Sewer Fund revenues may only be allocated to operation of or capital projects for the sanitary sewer system.

*Community Goal:* It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the needs of the community indefinitely.

**Update 2021:** Delaying replacement of the Lansing St. lift station was necessitated by the unexpected cost increase of replacing the M-50 lift station to allow for the Sewer Fund to accumulate sufficient funds to allow the Village to “pay as we go” for this project. The project has been modified from “replacement” to “upgrade.” The lift station has been properly maintained to enable relining of the collection well, replacement of rails for the pumps, and replacement of other components that have outlived their design lives. Though the Village has not yet obtained quotes for the upgrade, the cost would not likely exceed \$75,000.

## **Appendix 2017E: Water Main Replacement**

*Project Status:* Tentatively planned to commence during FY 2020.

*Project Description:* The public water distribution system for the Village of Brooklyn dates to 1955 and consists of a variety of sizes of water mains and materials. Current standards are to replace all ductile iron and cast iron pipe with plastic. 36 sections (56%) of water main are constructed with ductile iron or cast iron pipe. At least 13 sections (20%) are of 4" diameter pipe which, by current standards, is obsolete. 17 sections (27%) are of 1955 vintage and, due to size or materials, should be replaced. 17 sections (27%) are rated "unserviceable" which would require replacement should there be a water main break. Five other sections (8%) are rated as showing "significant deterioration," eight (8 or 13%) with "moderate deterioration," and six (6 or 9%) with "minor deterioration." Only 31 (48%) are rated as "new or excellent condition."

It is the Village's intent to eventually replace all ductile iron, cast iron or undersized water mains with properly sized plastic water mains. Though not considered a perpetual replacement project, since plastic water mains are rated to 100 years of service, the CIP may include water main replacements as ongoing projects for several years until all inadequate mains have been replaced. The water main projects may vary from year to year based on annual allocation and the cost of replacing each section (considering size or length of each section). The CIP may require adjustment for water main replacement since breaks in any of the deteriorated sections may shift a given section to a higher priority level.

*Priority Status and Timeline:* For the initial CIP, water main replacement is considered a medium level of priority simply because the water system continues to be functioning. However, consideration should be given to those higher priority sections due to age and those with a rating of unserviceable or with significant deterioration. Though the initial CIP suggests a water main replacement program begins in year five, it is likely risk of or actual breaks in the system may elevate implementation of a replacement program earlier. The annual allocation of funds for this project would allow the Village to budget for replacement sooner and more frequently through the subsequent years of the CIP.

*Funding Source and Cost:* Water main replacement is generally more expensive than sewer main replacement since it requires excavation of existing lines rather than directional boring with sewer mains. The initial CIP budget for the first five years is \$250,000 from the Water Fund. However, with the annual allocation at \$50,000, water main replacement may occur sooner than in year five as funds accumulate. To realize total replacement of 52% of the water mains in the Village will require that the CIP extend the program for several years beyond the initial six years. Future updates to the CIP will include a detailed replacement cost associated with each section.

*Community Goal:* It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the water supply system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the drinking water needs of the community indefinitely.



*Update:* With the scheduling of the N. King St., S. King St., and Tiffany St. rehabilitation project advanced to occur during 2019, approximately 400 feet of water main replacement has occurred during 2019 at a cost of approximately \$80,000 paid from Water Funds. This project included new service taps for each residential unit along the new section of water main. This project consists of replacement of an original 4" water main with an 8" water main that will improve water pressure in the area and increase capacity to new fire hydrants installed during the project. The remaining water main projects will be coordinated with the scheduling of street rehabilitation projects during the next two years concluding in 2021.

*Update 2021:* The Village is waiting on Jack Ripstra to complete the engineering and project cost estimates for water main upgrades on Jackson and Lane Streets before these projects can be let out for bid. Both sections of water mains consisting of ductile iron have incurred several breaks in recent years. The water main projects must be completed prior to street rehabilitation on those two streets. It is still anticipated that the water main replacement projects will be completed during 2021.

## **Appendix 2017F: Sanitary Sewer Main Replacement**

*Project Status:* Tentatively planned to commence during FY 2020 (now 2025).

*Project Description:* Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own wastewater treatment plant, a lagoon system, from property at Turk Road, approximately two miles outside of the Village. The Michigan Department of Environmental Quality had cited the Village for deficiencies that would have required a considerable investment in capital to bring the Village up to MDEQ standards. In consideration of financial and time constraints, combined with possible repercussions in the event of surface water pollution, the decision was made by Village Council to connect through Columbia Township to the regional treatment facility operated by Leoni Township.

At a cost of approximately \$1,550,000, including up-front connection fees paid to Columbia Township, the Village connected to the regional system in 1996. The original sanitary sewer system functioned as a gravity system, much of it original from the inception of the public sanitary sewer system in the Village. Connection to the regional sewer treatment plant required installation of three lift stations to transmit wastewater to the pressurized force main through Columbia Township.

Though not considered a perpetual replacement project, since plastic sewer mains are rated at 100 years of service, the CIP may include sanitary sewer main replacements as ongoing projects for several years until all inadequate mains have been replaced. The sewer main projects may vary from year to year based on annual allocation and the cost of replacing each section (considering condition and length of each section). The CIP may require adjustment for sewer main replacement since breaks in any of the deteriorated sections may shift a given section to a higher priority level.

*Priority Status and Timeline:* For the initial CIP, sanitary sewer main replacement is considered a medium level of priority simply because the sewer system continues to be functioning. However, consideration should be given to those higher priority sections due to age and those with a rating of unserviceable or with significant deterioration. Though the initial CIP suggests a sewer main replacement program begins in year five, it is likely risk of or actual breaks in the system may elevate implementation of a replacement program earlier. The annual allocation of funds for this project would allow the Village to budget for replacement sooner and more frequently through the subsequent years of the CIP.

*Funding Source and Cost:* Sewer main replacement is generally less expensive than water main replacement since it is often accomplished through directional boring rather than through excavation as with water mains. The initial CIP budget for the first five years is \$150,000 from the Sewer Fund. However, with the annual allocation at \$30,000, sewer main replacement may occur sooner than in year five as funds accumulate. To realize total replacement of deficient sewer mains in the Village will require that the CIP extend the program for several years beyond the initial six years. Future updates to the CIP will include a detailed replacement cost associated with each section.

*Community Goal:* It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to

operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the sanitation needs of the community indefinitely.

**Update 2021:** Though the increased cost associated with replacement of the M-50 lift station will delay other upgrades to the sanitary sewer system, there currently are no critical sections that would demand urgent repair or replacement. However, timing for future upgrades coincides with completing the payments on the equipment costs associated with replacement of the M-50 lift station.

## **Appendix 2017G: Water Main Extension**

*Project Status:* Tentatively planned to commence during FY 2024.

*Project Description:* Though most parcels within the Village currently have access to the public water supply system, there are a small number of parcels that remain on private wells. Upon failure of those wells, the Village requires that they connect to the water system. There are also several areas of undeveloped property that would be more marketable with access to the public water supply. If the Village is expected to grow within the current footprint, the Village must be prepared to extend water service. Parcels include the undeveloped area south of the Department of Public Works garage, the former lumber yard, an undeveloped area west of Detroit Street to Constitution Avenue and parcels within Lighthouse Village. There also is a possibility of extending water service to commercial areas outside of the Village should it be requested and annexation occurs.

*Priority Status and Timeline:* For the initial CIP, water main extension is considered a medium level of priority below that of maintaining the existing the water system. However, development of areas of the Village not presently served would require elevation to a higher priority. The initial CIP suggests a water main extension program begins in year six. It is likely commercial/industrial and/or residential growth in the Village may elevate implementation of an extension program sooner. The annual allocation of funds for this project would allow the Village to budget for extension sooner and continue, as needed, through subsequent years of the CIP.

*Funding Source and Cost:* Extension of water mains to unserved areas of the Village is relatively expensive since it requires excavation. It may also require expansion in the size of existing feeder water mains that may not have been included among the water main replacement projects. Funding for extension of water mains is initially estimated at \$240,000 from the Water Fund. However, it is anticipated that a significant portion of funding may come from developers for certain properties, especially in undeveloped areas of Lighthouse Village. If so, funding should be allowed to accumulate in the Water Fund reserves in anticipation of future expansion to the water supply system.

*Community Goal:* It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the water supply system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the drinking water needs of the community indefinitely.

**Update 2021:** During 2020, Village Council has considered the feasibility of extending water mains through the undeveloped sections of Lighthouse Village since the development is experiencing a building boom. This would likely entail implementing a Special Assessment District to finance the extension, though this is unlikely unless or until the 24 parcels that under the control of the Jackson County Treasurer's Office are either purchased by the Village or a developer since Jackson County does not pay special assessments. Extension of the water main along M-50 south of the Village would be

considered if Country Market requested annexation to access the public water supply. Beyond an initial inquiry, Country Market has not yet made a formal request for annexation.

## **Appendix 2017H: Sanitary Sewer Main Extension**

*Project Status:* Tentatively planned to commence during FY 2024 (now 2025).

*Project Description:* Though most parcels within the Village currently have access to the public sanitary sewer system, there are a small number of parcels that remain on private septic systems. Upon failure of those systems, the Village requires that they connect to the Village system. There are also several areas of undeveloped property that would be more marketable with access to the public sewer system. If the Village is expected to grow within the current footprint, the Village must be prepared to extend sewer service. Parcels include the undeveloped area south of the Department of Public Works garage, the former lumber yard, an undeveloped area west of Detroit Street to Constitution Avenue and parcels within Lighthouse Village. There also is a possibility of extending sewer service to commercial areas outside of the Village should it be requested and annexation occurs.

*Priority Status and Timeline:* For the initial CIP, sewer main extension is considered a medium level of priority below that of maintaining the existing the sewer system. However, development of areas of the Village not presently served would require elevation to a higher priority. The initial CIP suggests a sewer main extension program begins in year six. It is likely commercial/industrial and/or residential growth in the Village may elevate implementation of an extension program sooner. The annual allocation of funds for this project would allow the Village to budget for extension sooner and continue, as needed, through subsequent years of the CIP.

*Funding Source and Cost:* Extension of sewer mains to unserved areas of the Village is estimated to be less expensive than extending water mains since it may often be accomplished through directional boring rather than excavation. Funding for extension of sewer mains is initially estimated at \$150,000 from the Sewer Fund. However, it is anticipated that a significant portion of funding may come from developers for certain properties, especially in undeveloped areas of Lighthouse Village. If so, funding should be allowed to accumulate in the Sewer Fund reserves in anticipation of future expansion to the sanitary sewer system.

*Community Goal:* It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the sanitation water needs of the community indefinitely.

**Update 2021:** During 2020, Village Council has considered the feasibility of extending sanitary sewer mains through the undeveloped sections of Lighthouse Village since the development is experiencing a building boom. This would likely entail implementing a Special Assessment District to finance the extension, though this is unlikely unless or until the 24 parcels that under the control of the Jackson County Treasurer's Office are either purchased by the Village or a developer since Jackson County does not pay special assessments.

## **Appendix 2017I: Connection to Trails**

*Project Status:* Tentatively planned to commence during FY 2023.

*Project Description:* The Heart of the Lakes Area Recreational Plan 2007 – 2012, which expired in 2018, was adopted by the Village of Brooklyn on February 22, 2007. Though the plan is in the process of being replaced by the Greater Irish Hills Regional Recreation Plan, the included goals may still be relevant to the Village. Included in the original plan is connection of the Village to existing trails. The Clark Lake Spirit Trail terminates approximately four miles west of the Village along Jefferson Road in Columbia Township. Currently, there is discussion of creating a trail system around Lake Columbia and extension of a trail along Goose Creek to the Village of Brooklyn. There is also discussion of creating a trail system from the recently created Watkins Lake State Park (in collaboration with the Michigan Department of Natural Resources and Washtenaw County) to the Village of Manchester.

The Michigan Department of Transportation has recently delayed resurfacing M-124 (Wamplers Lake Road in the Village) from M-50 (South Main Street) to U.S.-12 until 2019 in hopes of expanding existing bike paths on the shoulders of M-124 from four feet to eight feet. This \$1.3 million expansion would essentially provide a nonmotorized connection along M-124 to Vineyard Lake, Wamplers Lake and Hayes State Park. Though this project would be an MDOT project, as a stakeholder, the Village is encouraged to contribute nominal local funding to this project to strengthen the likelihood of receiving a federal grant.

Trail projects within the Village would consist of providing access along Marshall Street or Goose Creek to connect the Village to the Spirit Trail, terminating at Swain Memorial Park. A separate trail from Swain Memorial Park would connect to Watkins State Park along a route that is yet to be determined. The Village's role in connecting to the nonmotorized pathway along M-124/Wamplers Lake Road would be minimal, though a likely trail connection from Swain Memorial Park would follow Tecumseh Street to Water Street to Monroe Street to M-124/Wamplers Lake Road.

*Priority Status and Timeline:* Since a trail system is not considered a critical service, it has been rated a low priority in the initial CIP. Emphasis on healthier lifestyles and reshaping the Village as a destination could elevate the priority in future years. Rural areas have not rebounded as quickly from the Great Recession of 2008-2015 as have cities, largely due to the attraction the cities offer to the millennial generation. As such, rural areas are compelled to promote their attributes as a destination, including trails and the associated recreational activities. The timeline, dependent on completion of other segments of the trail system outside of the parameters of the Village, is slated for FY 2023. Once the described connections are completed, the Village would be able to maintain its connections to the larger trail system within the annual budget.

*Funding Source and Cost:* The Village may apply for grant funds for expansion of nonmotorized pathways and trails from several sources including the Michigan Department of Natural Resources and the Michigan Department of Transportation. Contingent on the timeline for trails to reach the Village, the Village should consider setting aside funds in anticipation of connecting to those trails. The initial CIP budget would allow for

accumulation of \$15,000 per year for five years from the General Fund, though, if combined with sidewalk expansions along the Village's streets, Major or Local Street Funds may be considered.

*Community Goal:* Adoption of the Heart of the Lakes Area Recreational Plan 2007 – 2012 is an indication of the Village's commitment to connect to trail systems outside of the Village. It is a continuing goal of the Village to promote healthy lifestyles for its residents and visitors, to promote and connect to recreational activities adjacent to the Village and to promote the natural attributes of the Irish Hills area and the Village as a recreational destination for visitors.

**Update 2021:** The Intermunicipality Committee, created in 2018 and consists of representatives from the Villages of Addison, Brooklyn, Cement City, and Onsted, and the townships of Cambridge, Columbia, Franklin, Liberty, Manchester, Napoleon, Norvell, Rollin, Somerset, and Woodstock, contracted with Region 2 Planning Commission to develop the Greater Irish Hills Regional Recreation Plan in 2020. It is anticipated the plan will be completed by spring 2022. Existing, proposed and wish list trails will be included in the plan.

The Legacy Committee for the Irish Hills Regional Chamber of Commerce has coordinated commitments by the Village of Brooklyn, Jackson County Parks Department, and Columbia and Norvell Townships, along with a community donation, to secure the matching funds with the Michigan Department of Natural Resources to obtain a feasibility study for the Brooklyn to Watkins Lake State Park trail. Carlisle Wortman & Associates along with Stantec were the selected contractors to complete the feasibility study.

The Village is also participating with the Safe Routes to School (SRTS) committee to secure a grant of up to \$660,000 for a non-motorized pathway between Columbia Middle School and the two elementary schools. The likely route is along Turk Road to Cement City Road to Tiffany/South King Streets to Chicago Street to Monroe Street to Broad Street. The Village will be working with Jackson County Department of Transportation to submit a joint application since the route would include both county roads and Village streets. The volunteer organization that plans to connect Lake Columbia with the Village via a trail would also benefit from the proposed SRTS trail.



## **Appendix J: Sidewalk Extension**

*Project Status:* Tentatively planned to commence during FY 2023.

*Project Description:* Replacement and expansion of the Village's sidewalks (aka: nonmotorized pathways) is a required activity to receive Act 51 funds through the Michigan Department of Transportation. Currently, the Village's system of sidewalks is incomplete resulting in entire areas of the Village not being connected by sidewalks or there being gaps between sections of sidewalks. Future amendments to the CIP will include specific locations and dimensions for expansion of the system of sidewalks to unserved areas of the Village.

*Priority Status and Timeline:* Since sidewalks are not considered a critical component of the Village's infrastructure, extension of the system of sidewalks is considered a low priority. Annual allocations should be accumulated to allow for extension of sidewalks, especially to areas in which street construction may occur. As a low priority activity, the initial CIP identifies FY 2023 when a sidewalk extension program would commence.

*Funding Source and Cost:* The CIP budget suggests a budget of \$50,000 for a sidewalk extension program, accumulating at the rate of \$10,000 per year. This would be in addition to the current sidewalk replacement program which address condition issues with an emphasis on replacing tripping hazards. Both Major and Local Street Funds could include funding for sidewalk extensions along sections identified by priority based on accessibility and safety. The General Fund may also contribute funds, especially in areas not covered by street funds. In addition, the Village may apply for funding through the Safe Routes to School program through MDOT for areas not presently served by sidewalks from residential areas to the local elementary schools.

*Community Goal:* In compliance with state guidelines to increase accessibility within the Village, the Village is committed to extending sidewalks to unserved areas of the community to increase accessibility by persons with all levels of mobility. In addition, it is the Village's goal to provide safe routes for pedestrians and others using nonmotorized forms of transportation and, wherever possible, to be separated from the streets and motor vehicles.

*Update:* On June 27, 2019, the Village Manager participated in a preliminary discussion with the Columbia School District, members of a trail committee associated with Lake Columbia and a representative of the Safe Routes to School Program, a federal government initiative to improve safety for children walking and biking to school. While the trail association would like to connect Lake Columbia with the Spirit Trail and the Village of Brooklyn, the Safe Routes to School Program would only be applicable to sections of a route between the Junior High School (housed with the High School) and the elementary schools in the Village. Safe Routes to School Program funding could conceivably provide up to \$220,000 per school (Upper and Lower Elementary and Junior High) for a total of \$660,000 toward construction costs with no local match requirement. Funds could be allocated in the Village to upgrade existing sidewalks or install new sidewalks along the proposed Safe Routes to School Program route.

## **Appendix 2017K: DPW Garage Fencing (completed)**

*Project Status:* Tentatively scheduled for FY 2019.

*Project Description:* The Department of Public Works garage project completed in 2015 did not include installation of fencing of the grounds. Though considered as a one-year project scheduled for 2018, it is within the parameters of the CIP with a total cost estimated at \$15,000. This would provide security for materials and equipment outside of the DPW garage and define the perimeter of the property to reduce to potential for trespassing, vandalism, and theft. The project consists of attaching an eight-foot chain-link fence from the west corners of the building to the property line with a gate to allow entry of DPW vehicles.

*Priority Status and Timeline:* The CIP classifies installation of fencing at the DPW garage as a low priority project since it does not impact on critical services of the Village. It is anticipated this will be a one-year project to be included in the FY 2019 budget.

*Funding Source and Cost:* Based on initial estimates, fencing of the DPW grounds will cost \$15,000 and will be included in the General Fund appropriations for FY 2019.

*Community Goal:* Consistent with the goal of protecting the Village's assets by enclosing equipment and most materials within the DPW garage, the Village would protect other materials stored outside and the grounds from trespassing, vandalism, and theft by enclosing the area adjacent to the structure. In addition, this project reduces possible risk to nonemployees from inadvertently venturing onto the grounds while employees are using Village equipment.

*Update:* The DPW garage fence was installed during FY 2019 and has, therefore, been removed from the current CIP budget.

## **Appendix 2017L: DPW Garage Covered Storage (completed)**

*Project Status:* Tentatively scheduled for FY 2020.

*Project Description:* The Department of Public Works garage project completed in 2015 did not include installation of covered storage for materials on the grounds of the DPW. Though considered as a one-year project scheduled for 2019, it is within the parameters of the CIP with a total cost estimated at \$25,000. This would provide security for materials stored outside of the DPW garage (including road salt, sand, mulch, and patch material) to protect materials from the weather, comply with the Michigan Department of Environmental Quality requirements and provide improved aesthetics for the DPW grounds. The project consists of installing a covering over the existing salt storage structure and construction of a series of covered bins for the other loose materials.

*Priority Status and Timeline:* The CIP classifies installation of covered storage at the DPW garage as a low priority project since it does not impact on critical services of the Village. It is anticipated this will be a one-year project to be included in the FY 2020 budget.

*Funding Source and Cost:* Based on initial estimates, covered storage on the DPW grounds will cost \$25,000 and will be included in the General Fund appropriations for FY 2020.

*Community Goal:* Consistent with the goal of protecting the Village's assets by enclosing equipment and most materials within the DPW garage, the Village would protect other materials stored outside and the grounds from the weather by installing covered storage bins or covering existing bins. In addition, this project improves the aesthetics of the DPW grounds by containing loose materials within a durable structure.

*Update:* The covered and enclosed salt barn was completed during FY 2019 along with open bins for other materials stored outside. The salt barn project consists of the most significant allocation of funds with only covering the bins remaining at a cost of less than \$15,000, the threshold for inclusion in the CIP. Therefore, this item has been removed from the current CIP budget having been substantially completed.

## **Appendix 2022A: Constitution Avenue and Mill Street Milling and Resurfacing**

*Project Status:* Tentatively scheduled for FY 2022.

*Project Description:* Constitution Ave. and Mill St. are primary arteries that are designated as federal aid eligible. Constitution Ave. connects S. Main St. (M-50) with Tiffany St./Cement City Rd. Mill St. connects N. Main St. (M-50) with Case Rd. at the east Village boundary. Both projects are anticipated to consist of milling and resurfacing and do not require to the street base or reshaping. Since both projects would be funded up to 80% with STP funds through the Michigan Department of Transportation, professional engineering will be required.

*Priority Status and Timeline:* Both projects would have typically been included in the street rehabilitation plan (See Appendix 2019B) which anticipates having most of the Village's streets rehabilitated by 2022 using capital improvement bonds. However, with the availability of CARES (Coronavirus Aid, Relief, and Economic Security) Act funds, funds were allocated to Jackson County Department of Transportation which has made approximately \$300,000 in STP funds available in 2022. Due to the streets being primary arterial streets, the projects are considered to medium level priorities.

*Funding Source and Cost:* The funding source will be Surface Transportation Program (STP) funds which are federal funds that are allocated by the State of Michigan through the Rural Task Force Program. Since the Village has not yet obtained the required engineering for these projects, the estimate is based only on the availability of the STP funds.

*Community Goal:* Though the Village anticipates most of the streets will be rehabilitated by 2022, primarily with \$1.25 million in capital improvement bonds, Constitution Ave. and Mill St. were not initially planned to be rehabilitated with STP funds. Since the CARES Act has provided an unexpected windfall, the diversion of STP funds to these two projects makes it more likely the Village will be able to complete rehabilitation of all of its streets by 2022, with the exception of Monroe St. (See Appendix 2022B.). It is anticipated the Village will be able to properly maintain its streets going forward following repayment of the bond debt from proceeds from the Street Millage (currently 3.6408 mills), Act 51 revenue sharing from gasoline taxes, 2 mills of General Fund proceeds.

## **Appendix 2022B: Monroe Street Reconstruction**

*Project Status:* Tentatively scheduled for FY 2023.

*Project Description:* Though Monroe St. is not currently designated as a federal aid eligible street, it is a primary arterial street that connects Main St. (M-50) with M-124 through a short section of Monroe Pike Rd. The Village has submitted documents to the Michigan Department of Transportation to request such designation that would potentially allow street reconstruction to be funded up to 80% with Surface Transportation Program funds through the State of Michigan. Such designation would require the approval by the Jackson County Department of Transportation to agree to also designate .2 mile of Monroe Pike Rd. that is between the Village boundary and M-124. According to Angela Kline, the JCDOT engineer, her agency appears to be agreeable for such designation.

The project would consist of complete milling of the existing asphalt surface, reshaping of the base to facilitate improved stormwater control and resurfacing with 3"-4" of asphalt. With the exception of the first block east of Main St., there is no curb and gutter along the length of Monroe St. which makes the project less expensive.

*Priority Status and Timeline:* Monroe St. is in poor condition with a very rough surface and crumbling edges that are exacerbated by unauthorized parking in the right-of-way adjacent to both sides of the street. Due to the current condition and the nature of it being a primary artery, this project would be considered a high priority. Should MDOT approve its designation as federal aid eligible, Monroe St. would not likely be funded from STP funds until 2023.

*Funding Source and Cost:* Once Monroe St. has received designation as a federal aid eligible street, the Village will be able to obtain an engineering estimate of the cost. Based on the cost for other streets, it is likely this project could cost upwards of \$500,000. It would be funded 80% from STP funds through the Rural Task Force Program and 20% from the Village's street funds.

*Community Goal:* The community goal for Monroe St. is consistent with that for the other street rehabilitation projects; that is to rehabilitate all of the streets and be in a position to properly maintain all streets to provide a viable transportation system, all from existing fiscal resources. Those resources include the Village's street millage (currently 3.6408 mills), Act 51 funds from gasoline sale tax revenue, and two mills of General Funds.

