



# City of Rochester Hills, Michigan



# 2017 - 2022 Capital Improvement Plan Adopted April 19, 2016



Riverbend Park Conceptual Design

# 2017-2022 Capital Improvement Plan

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## **2017-2022 Capital Improvement Plan Transmittal Letter**

April 21, 2015

To the Rochester Hills community:

The public, committee, board, commission, and administrative participation in the City's *annual* (CIP) Capital Improvement Plan process is greatly appreciated and always encouraged. A Forum to solicit requests for projects, receive comments and gain input was conducted on April 19, 2016. After prudent review and discussion of the draft, the Rochester Hills Planning Commission approved the plan on April 19, 2016.

The CIP continues to be an exceptional tool that benefits our community by identifying municipal capital needs and desires throughout the City. The CIP incorporates projects identified in the City's many adopted plans and policies. Projects that will continue the delivery of services to our residents include: drainage, pathways, major roads, local streets, parks, City-owned facilities, and water and sewer infrastructure. Professional services needed for future planning and projects that involve acquisition of new equipment are also part of the process.

This year's CIP process generated 21 new projects with a 2017-2022 City share cost of \$8.9 million. In addition to the new projects, 17 projects were removed (12 completed, 3 reclassified to the Pending section, and 2 deleted) from this year's CIP document.

This year's CIP includes a grand total of over \$126 million in identified projects (the City's share is \$87.1 million) over the next six years. For FY 2017, \$27.4 million in projects are included (the City's share is \$22.9 million). This first year of the CIP is anticipated be included as part of departmental FY 2017 proposed budget requests. The financial feasibility of these requests will be considered as part of the upcoming budget process with the Mayor and City Council.

In accordance with the State of Michigan Planning Act 285, we are pleased to present the City of Rochester Hills 2017-2022 CIP.

Respectfully Submitted,

The City of Rochester Hills

**2017-2022 Capital Improvement Plan  
Planning Commission – Resolution of Adoption**

**MOTION** by Kaltsounis, seconded by Reece, that the Rochester Hills Planning Commission Approves the Capital Improvement Plan that has been proposed for the years 2017-2022. The Rochester Hills Planning Commission has determined the following:

**WHEREAS**, the Municipal Planning Act, Act 285 of Public Acts of 1931, as amended, requires the Rochester Hills Planning Commission to annually accept a Capital Improvement Plan for the benefit of the health, safety and welfare of the community as those criteria relate to the physical development of Rochester Hills; and

**WHEREAS**, the Rochester Hills Fiscal Office has consulted with the City's professional staff who carry out the business of planning for and providing for the present and future needs and desires of the citizens of Rochester Hills; and

**WHEREAS**, the Capital Improvement Plan is meant to consider the immediate and future needs and goals of Rochester Hills, as identified by the public, City Boards and Commissions, and the Mayor's staff, in light of existing projects and plans and anticipated resources; and

**WHEREAS**, the Capital Improvement Plan is a flexible document, necessarily meant to be reevaluated and amended each year, to project into the six (6) succeeding years, and further amended as needed to address practical realities as they relate to policies and philosophies of relevant Boards, the City Council and the Mayor's Office; and

**WHEREAS**, the Capital Improvement Plan is a guide and forum to aid the Rochester Hills Mayor's Office and the Rochester Hills City Council in making decisions regarding the physical development and infrastructure maintenance of the City and determining what, if any, resources can or should be available to carry out City Council's policies and budgetary decisions; and

**WHEREAS**, the components of the Capital Improvement Plan have been subject to a Public Hearing, public review, and committee reviews over the course of several years and a duly noticed full Public Hearing on April 4, 2016; and

**WHEREAS**, the components of the Capital Improvement Plan were arrived at through a point system using variables that included, among other things, whether the project has begun, funds committed, sources of funds, prior City Council decisions, Planning Commission or administrative recommendations and decisions; and

**RESOLVED**, that the Capital Improvement Plan presented for review on April 19, 2016, is adopted by the Rochester Hills Planning Commission with corrections per the Meeting Minutes on April 19, 2016; and

**BE IT FURTHER RESOLVED**, that this Plan should be published and attested to according to law.

**Voice Vote:**

Ayes: Brnabic, Dettloff, Hooper, Kaltsounis, Morita, Reece, Schroeder, Yukon

Nays: None

Absent: None

# **2017-2022 Capital Improvement Plan**

## **Introduction**

A Capital Improvement Plan (CIP) is a multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the City's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment in order 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 City Council and residents of Rochester Hills.

### **CIP & the Community**

A comprehensive Capital Improvement Plan is an essential tool used in the planning and development of the social, physical, and economic well being of the City of Rochester Hills. This process is a necessary step in an organized effort to strengthen the quality of public facilities and services; to provide a framework for the realization of community goals and objectives; and to provide a sound basis on which to build a healthy and vibrant community.

The CIP informs residents and stakeholders on how the City plans to address significant capital needs over the next six-years. The CIP provides visual representations of the City's needs including maps which detail the timing, sequence, and location of capital projects. The CIP can also influence community growth as infrastructure improvements can impact development patterns.

Some of the many benefits that the CIP provides for the residents and stakeholders of Rochester Hills include:

- Optimize the uses of revenue
- Focus attention on community goals, needs, and capabilities
- Guide future growth and development
- Encourage efficient government
- Improve intergovernmental and regional cooperation
- Help maintain a sound and stable financial program
- Enhance opportunities for the participation in federal and/or state grant programs

### **Overview**

Projects identified in the CIP represent the City of Rochester Hills' plan to serve residents and anticipate the needs of a dynamic community. Projects are guided by various development plans and policies established by the Planning Commission, City Council, and City Administration. Plans and policies include:

Components of the City's Strategic Plan  
City of Rochester Hills' Mission Statement  
City Council Goals & Objectives  
Administrative Policies  
Storm Water Management System Plan

Master Land Use Plan  
Master Transportation Plan  
Master Pathway Plan  
Master Recreation Plan  
LDFA Master Plan

## **2017-2022 Capital Improvement Plan CIP Process**

### **CIP Process**

Preparation of the CIP is done under the authority of the Municipal Planning Commission Act (PA 285 of 1931). It is the City of Rochester Hills Planning Commission's goal that the CIP be used as a tool to implement the City Master Plan and to assist in the City's financial planning process.

The CIP is dynamic. Each year all projects included within the CIP are reviewed, a call for new projects is made, requests for new projects are considered, 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 year funded in the annual operating budget. A status report on the prior 2016-2021 CIP can be found in the Appendix section located at the end of this book.

The CIP program will continue to develop over time by adding processes to improve quality and efficiencies. Greater attention shall be devoted to provide more detailed information regarding individual project requests, program planning, fiscal analysis, fiscal policies, and debt strategy (if applicable).

### **CIP & the Budget Process**

The CIP plays an increasingly significant role in the implementation of a 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 upcoming annual budget. Approval of the CIP by the Planning Commission does not mean final approval of all projects contained within the plan is granted. Rather by approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the City and that projects contained in the plan are suitable for inclusion in future budgets.

Project priority rankings do not necessarily correspond to funding sequence. For example, a road-widening project which is ranked lower than a park project may be funded before the park project because the road project may have 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 a number of factors – not only its merit, but also its location, cost, funding source, and logistics.

The City of Rochester Hills strives to maximize resources by maintaining a balance between operating and capital budgets. A continuous relationship exists between the CIP and the annual budget. A direct link can be seen between the two documents, as there should be in a strategic planning environment.

## 2017-2022 Capital Improvement Plan CIP Policy

As used in the City of Rochester Hills' Capital Improvement Program, a capital improvement project is defined as a major, nonrecurring expenditure that includes one or more of the following:

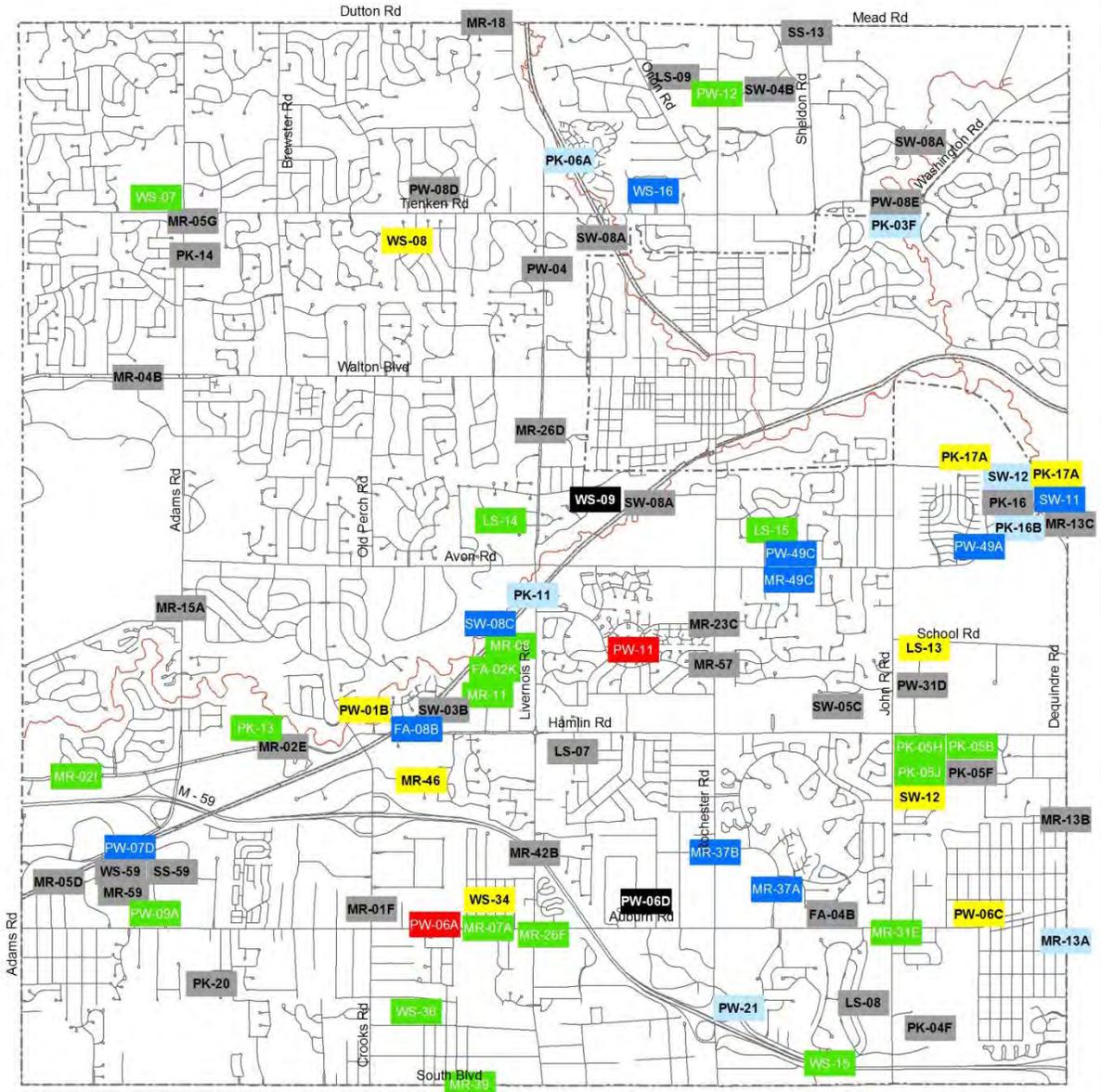
1. Any construction of a new facility (i.e., major/local roadways, water/sanitary sewer mains, storm water management, pathways\*, recreational facilities, or public buildings), an addition to, or extension of such a facility, provided that the cost is \$25,000 or more and that the improvement will have a useful life of three years or more.
2. Any non-recurring rehabilitation of all or a part of a building, its grounds, a facility, or equipment, provided that the cost is \$25,000 or more and the improvement will have a useful life of three years or more.
3. Any purchase or replacement of major equipment to support City programs provided that the cost is \$25,000 or more and will be coded to a capital asset account.
4. Any planning, feasibility, engineering, or design study related to an individual capital improvement project or to a program that is implemented through individual capital improvement projects provided that the cost is \$25,000 or more and will have a useful life of three years or more.
5. Any planning, feasibility, engineering, or design study costing \$50,000 or more that is not part of an individual capital improvement project or a program that is implemented through individual capital improvement projects.
6. Any 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 improvement projects provided that the cost is \$25,000 or more. \*\*

\* = Note: Beginning in FY 2008, pathway projects are reviewed and rated by the Pathway Ad-hoc Committee as opposed to the CIP raters.

\*\* = Note: Land acquisition funded by the Green Space Preservation millage has not been included in the CIP process

*Adopted March 10, 1997 by the CIP Policy Group  
Revised February 25, 2011 by the CIP Policy Group*

# 2017-2022 Capital Improvement Plan Aggregate Citywide Project Locations



**LEGEND**

Projects that may begin construction in:

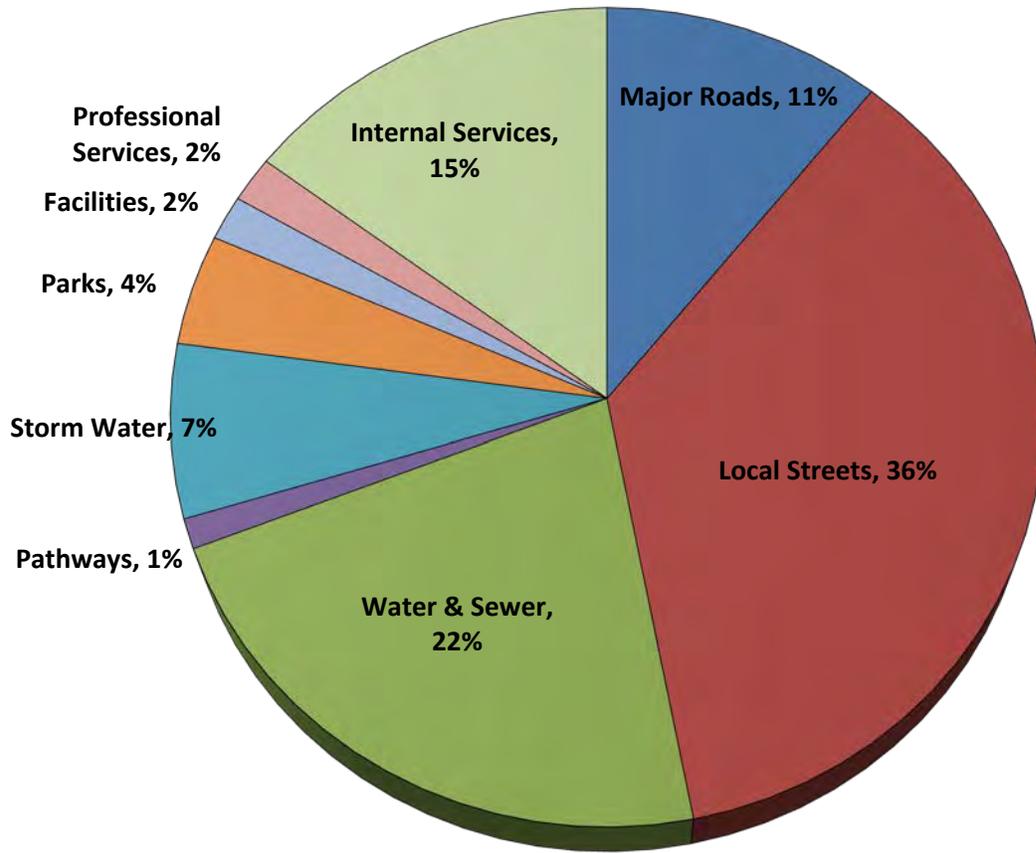
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- Pending Project

- FA-00 = City-Owned Facility Improvements
- LS-00 = Local Road Improvements
- MR-00 = Major Road Improvements
- PK-00 = Parks & Recreation System Improvements
- PW-00 = Pathway System Improvements
- SS-00 = Sanitary Sewer Improvements
- SW-00 = Storm Water Management Improvements
- WS-00 = Water System Improvements



5/4/2016  
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**2017-2022 Capital Improvement Plan  
Aggregate City Share Summary**



2017-2022 CIP City Share Breakdown			
Major Roads	\$	9,298,700	11%
Local Streets	\$	31,084,280	36%
Water & Sewer	\$	19,065,410	22%
Pathways	\$	1,025,500	1%
Storm Water Management	\$	5,885,270	7%
Parks	\$	3,777,890	4%
Facilities	\$	1,531,000	2%
Professional Services	\$	1,575,000	2%
Internal Services	\$	12,754,100	15%
	\$	<b>85,997,150</b>	



innovative *by* nature

## **2017-2022 Capital Improvement Plan Street Improvements**

The purpose of the Street Improvement Program is to preserve and maintain safe neighborhoods in an effort to sustain the quality of life that Rochester Hills residents expect. The Street Improvement Program is part of a long-term solution aimed at the systematic maintenance, repair, and rehabilitation of City streets. This program provides a consistent standard and maintenance level over a period of years for both the major road and local street systems.

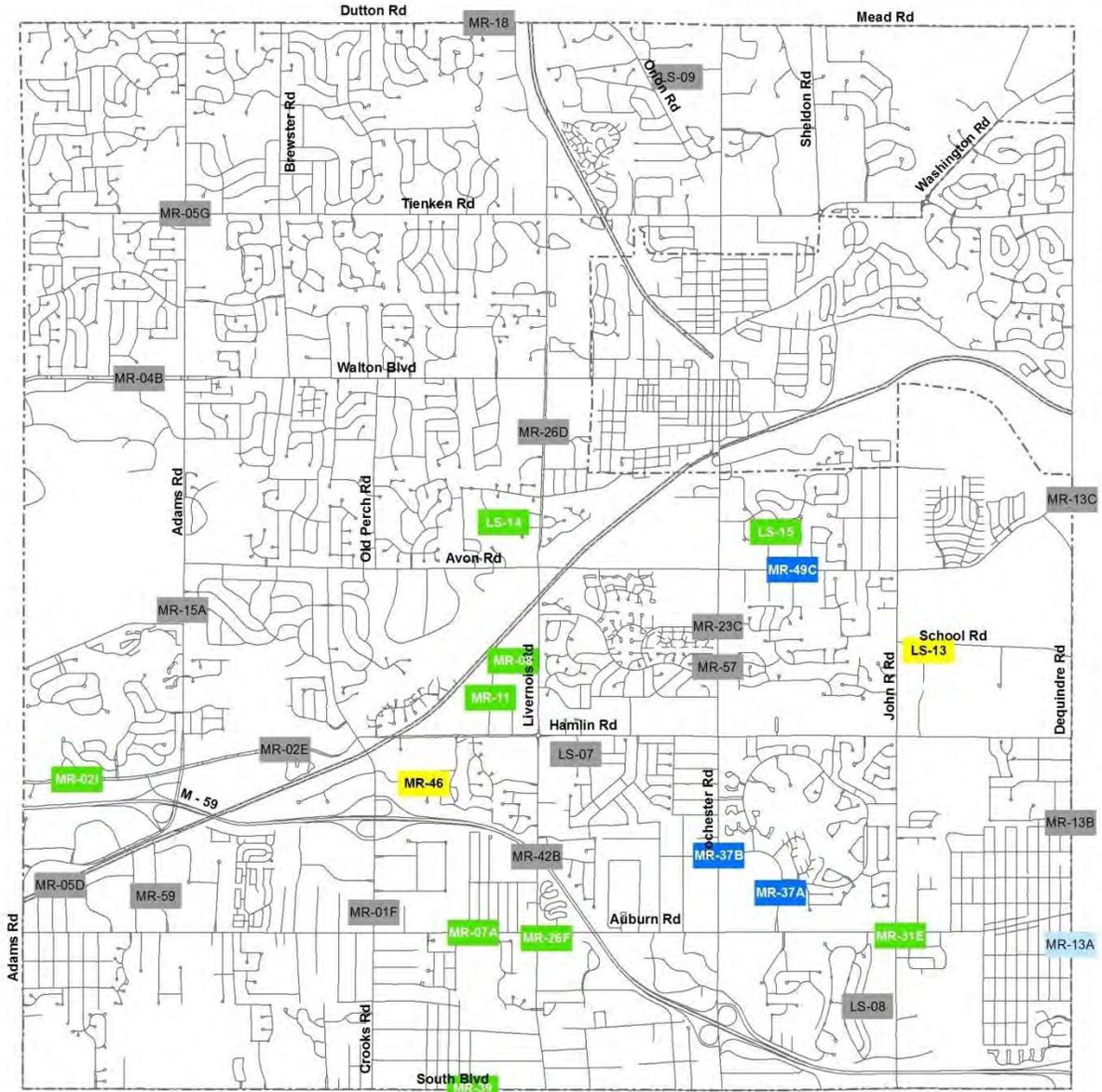
Local streets in Rochester Hills came under the City's jurisdiction in 1985. Prior to then the City was known as Avon Township and the responsibility for designing, maintaining, repairing, and replacing our streets fell upon the Road Commission of Oakland County (RCOC). Design standards were much different 30 years ago, and streets in neighborhoods which were built during the 1960's, 1970's, and early 1980's were constructed based upon design standards that have since become outdated.

In 1998, the Planning Commission adopted the Master Thoroughfare Plan to provide a better understanding of current and projected traffic trends in the community, using traffic forecasts through the year 2015. This plan presented a comprehensive program of solutions to address the problems identified by the traffic forecasts. Components of the plan have been incorporated into the Capital Improvement Plan. An update to the plan began in 2007 consisting of monthly Technical Review Committee meetings along with several public information meetings, which allowed the citizens of Rochester Hills to provide invaluable input. The Planning Commission adopted the current Master Thoroughfare Plan Update on October 21, 2008.

The City of Rochester Hills contains both public and private roadways. Public roads are owned and operated by the Michigan Department of Transportation (MDOT), the Road Commission of Oakland County (RCOC), and the City of Rochester Hills. Private roads are owned and operated by private developments and homeowner groups.

The City currently maintains approximately 39-miles of paved major roads, 214-miles of paved local streets, and 23-miles of gravel local streets. In order to define priorities and establish a course of action for the local street and major road rehabilitation programs, a Pavement Management System using Pavement Surface Evaluation and Rating (PASER) is used. PASER is a visual survey method for evaluating the condition of roads with the corresponding data serving as the foundation on which to build cost-effective pavement maintenance strategies. This information is a valuable tool when combined with an engineer's knowledge and experience to plan for and to prioritize reconstruction, rehabilitation, and traffic enhancement projects.

# 2017-2022 Capital Improvement Plan Street Improvements



**LEGEND**  
Projects that may begin construction in:

2017	MR-00
2018	MR-00
2019	MR-00
2020	MR-00
2021	MR-00
2022	MR-00
Pending Project	MR-00



4/27/2016  
Published by MIS Dept.

**2017-2022 Capital Improvement Plan  
Street Improvements**

<b>MR-01A</b>	<b>Major Road System: Rehabilitation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$3,000,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Rehabilitation or reconstruction of failed concrete and asphalt sections within the Major Road network, as identified through the City's Pavement Management System and based upon field inspections. Work also to include rehabilitating storm water structures and installing edge drains as needed. The annual Major Road Rehabilitation Program allows for greater flexibility in coordinating activities with those of DPS crews and also allows for spreading work over a wider area rather than focusing on street specific repairs. Operating costs are anticipated to decrease by \$15,000 per year for each 0.5 miles proposed to be replaced annually. This program is proposed to be funded at \$500,000 per year and is on-going.</p>			

<b>MR-01B</b>	<b>L DFA Road System: Rehabilitation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$1,200,000</b>	<b>Estimated LDFA Share:</b>	<b>100%</b>
<p>Rehabilitation or reconstruction of failed concrete and asphalt sections within the LDFA District Road network, as identified through the City's Pavement Management System and based upon field inspections. The annual LDFA Concrete &amp; Asphalt Rehabilitation Program allows for greater flexibility in coordinating activities with those of DPS crews. This program assists in maintaining road infrastructure and the viability of industrial and technology parks within the LDFA District. Operating costs are anticipated to decrease by \$6,000 per year for each 0.3 miles proposed to be replaced annually. This program is proposed to be funded at \$200,000 per year and is on-going.</p>			

<b>MR-02I</b>	<b>** Hamlin Boulevard [Adams Road – West City Limit]: Irrigation System **</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$50,000</b>	<b>Estimated LDFA Share:</b>	<b>100%</b>
<p>Installation of an automatic irrigation system along the Hamlin Boulevard median islands between Adams Road and the City westerly boundary. Rochester Hills has previously decided that installation of irrigation systems for boulevard roadways is justified to maintain an appealing median. Increased operating costs are estimated at \$6,500 per year include routine seasonal start-up and shut-down of the irrigation system, water usage, electrical usage, applications of weed killer and fertilizer, and future sprinkler head and line repairs. METRO Act funding is proposed to be utilized for construction and operational costs. Construction is planned to begin in 2017.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Street Improvements**

<b>MR-07A</b>	<b>** Auburn Road: Turn-Lane Improvements **</b>		
<b>Estimated Total Project:</b>	<b>\$3,151,190</b>	<b>2017-2017</b>	
<b>Estimated City Cost:</b>	<b>\$53,400</b>	<b>Estimated City Share:</b>	<b>1.7%</b>
<p>Construction of a dedicated center left-turn lane along Auburn Road from east of Alexander Avenue to Livernois Road. City share of the center turn-lane construction is 1.25%. Project also includes constructing Auburn Road right turn lanes at (1) EB/WB at Livernois Road; (2) EB/WB at John R Road; (3) EB at Culbertson Avenue, and constructing a WB right/thru lane at Barclay Circle. Work also involves installing new traffic signals along Auburn Road at its intersections with Livernois Road, Barclay Circle, John R Road, and Culbertson Avenue. City share of the right turn-lane construction and traffic installation work is 2.27%. No operating costs are anticipated, due to this section of roadway being owned and operated by MDOT. Construction is planned to begin in 2017.</p>			

<b>MR-08</b>	<b>** Horizon Court Rehabilitation **</b>		
	<b>2017-2017</b>		
<b>Estimated City Cost:</b>	<b>\$257,500</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Mill and resurface 4" of existing HMA pavement on Horizon Court which serves as the main access for Fire Station #1 out to Livernois Road. Per the latest PASER rating completed in 2015, the existing pavement condition rated 3 out of a scale of 1 to 10, which is in the POOR condition range. It is anticipated that (FA-02K) Fire Station #1: Rear Access Drive as well as (MR-11) Rochester Industrial Drive will be reconstructed first in order to provide a temporary entrance/exit for fire apparatus during the rehabilitation of Horizon Court. Operating costs of approximately \$5,000 per year are anticipated to decrease to \$2,500 per year due to reconstruction. Construction is planned to begin in 2017.</p>			

<b>MR-11</b>	<b>Rochester Industrial Drive Reconstruction</b>		
	<b>2017-2017</b>		
<b>Estimated City Cost:</b>	<b>\$1,120,630</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Reconstruction of approximately 2,800' of Rochester Industrial Drive concrete roadway. It is anticipated to coordinate the timing of this reconstruction along with (FA-02K) Fire Station #1: Rear Access Drive first in order to provide a temporary entrance/exit for fire apparatus during the rehabilitation of (MR-08) Horizon Court. Operating costs of approximately \$15,000 per year are anticipated to decrease to \$12,000 per year due to reconstruction. Construction is planned to begin in 2017.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Street Improvements**

<b>MR-12</b>	<b>Major Road System: Traffic Calming Program</b>		
<b>Estimated Total Project:</b>	<b>\$120,000</b>	<b>2017-2022</b>	
<b>Estimated City Cost:</b>	<b>\$60,000</b>	<b>Estimated City Share:</b>	<b>50%</b>
<p>The City receives many traffic related concerns from subdivision homeowner's associations (HOA) regarding speeding along residential streets. After performing in-depth traffic studies, City staff bring forth recommendations to the Advisory Traffic and Safety Board (ATSB). Often speed humps or other traffic calming devices are recommended as a solution. This program allows for 'seed' money to offer a 50/50 match between the HOA and the City to provide assistance for the implementation of traffic-calming devices along residential collector type roads which are classified as major roads. This program is proposed to be funded at a City share of \$10,000 per year and is on-going.</p>			

<b>MR-13A</b>	<b>Dequindre Road Reconstruction [Clovelly Avenue – South Boulevard]</b>		
<b>Estimated Total Project:</b>	<b>\$32,428,400</b>	<b>2015-2018</b>	
<b>Estimated City Cost:</b>	<b>\$810,710</b>	<b>Estimated City Share:</b>	<b>2.5%</b>
<p>Reconstruction of Dequindre Road as a 5-lane road section between Clovelly Avenue and South Boulevard. This improvement is part of a larger Road Commission of Oakland County (RCOC) project to widen Dequindre Road as a 5-lane road southbound to Long Lake Road in the City of Troy. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC. Phase #1 roadway segment from South Boulevard to Melville Drive is planned to begin in 2016. Phase #2 roadway segment from Melville Drive to Clovelly Drive is planned to begin in 2018.</p>			

<b>MR-26F</b>	<b>** Livernois Road: NB Right-Turn Lane @ Auburn Road **</b>		
<b>Estimated Total Project:</b>	<b>\$218,750</b>	<b>2017-2017</b>	
<b>Estimated City Cost:</b>	<b>\$72,920</b>	<b>Estimated City Share:</b>	<b>33%</b>
<p>Construction of a north-bound right turn-lane for Livernois Road at Auburn Road. MDOT would include the design and construction with their project for (MR-07A) Auburn Road: Turn-Lane Improvements. The addition of the right turn-lane will increase the capacity of Livernois Road and minimize congestion during peak traffic times. Livernois Road is under the jurisdiction of RCOC and they propose to share the project cost with the City through the use of Tri-Party program funding. No operating costs are anticipated, due to this section of roadway being owned and operated by RCOC. Construction is planned to begin in 2017.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Street Improvements**

<b>MR-27</b>	<b>Major Road System: Bridge Rehabilitation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$228,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Performance of maintenance and rehabilitation type work to the four (4) existing City-owned bridges: 1) Shagbark Road over Sargent Creek; 2) Butler Road over Galloway Creek; 3) Rochdale Road over Sargent Creek; 4) King's Cove Drive over Paint Creek. Repairs are based upon the City's latest Biennial Bridge Structure Inventory Report, as required by the Federal Highway Administration (FHWA) and the Michigan Department of Transportation (MDOT). Bridge Rehabilitation Study is to occur every "even-year" with Bridge Rehabilitation to occur every "odd-year". This program is on-going.</p>			

<b>MR-31E</b>	<b>** John R Road: NB Right-Turn Lane @ Auburn Road **</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$218,750</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of a north-bound right-turn lane for John R Road at Auburn Road. MDOT would include the design and construction with their project for (MR-07A) Auburn Road: Turn-Lane Improvements. The addition of the right turn-lane will increase the capacity of John R Road as congestion of the through lane has been an issue. In addition, the increased capacity will help to reduce cut-through traffic at Collingwood Drive through the Avon Manor Estates Subdivision as drivers realize better north bound traffic flow. Operating costs of approximately \$750 per year are anticipated due to the right-turn lane extension. Construction is planned to begin in 2017.</p>			

<b>MR-37A</b>	<b>** Barclay Circle Rehabilitation **</b>		
<b>2020-2020</b>			
<b>Estimated City Cost:</b>	<b>\$1,025,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Rehabilitate approximately 4,000' of asphalt section of Barclay Circle from Rochester Road to Auburn Road. The existing road is 60,' wide from back of curb to back of curb. The 2015 City PASER Rating was 3 out of a scale of 10 from Rochester Road to Ashley Circle and 4 out of a scale of 10 from Ashley Circle to Auburn Road. The proposed pavement rehabilitation strategy is a 3" asphalt mill &amp; fill (final determination upon geotechnical testing &amp; recommendation) with selective base repairs and concrete curb and gutter repairs as deemed necessary. Will coordinate project timing with (MR-37B) Rochester Road @ Barclay Circle: Traffic Signal Improvements. Operating costs of approximately \$15,000 per year are anticipated to decrease to \$9,000 per year due to reconstruction. Construction is planned to begin in 2020.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Street Improvements**

<b>MR-37B</b>	<b>** Barclay Circle @ Rochester Road: Traffic Signal Improvements **</b>		
<b>Estimated Total Project:</b>	<b>\$375,000</b>	<b>2019-2020</b>	
<b>Estimated City Cost:</b>	<b>\$125,000</b>	<b>Estimated City Share:</b>	<b>33%</b>
<p>Upgrade of the existing traffic signal to a modern box span design. Work would also include upgrading non compliant pathway ramps to meet ADA compliance along with associated pedestrian countdown signals. The Barclay Circle median island will also be reworked to allow for the proper alignment between the left turn movements off Barclay Circle and Wabash Drive. This will eliminate the need for split time phasing, thus improving the traffic flow and capacity through the intersection. The traffic signal upgrade would be primarily funded via CMAQ funds. The City would be responsible for the costs associated with reconfiguring the Barclay Circle median island in order to allow for proper left turn offset with Wabash Road. Potentially minor cost savings to annual traffic signal operations and maintenance costs. Construction is planned to begin in 2020.</p>			

<b>MR-39</b>	<b>** South Boulevard Rehabilitation [East of Crooks – West of Livernois] **</b>		
<b>Estimated Total Project:</b>	<b>\$922,500</b>	<b>2017-2017</b>	
<b>Estimated City Cost:</b>	<b>\$461,250</b>	<b>Estimated City Share:</b>	<b>50%</b>
<p>Cold-mill the existing pavement (3" depth) and resurface with 3" of asphalt to match existing grades along the edge of pavement. Three foot wide paved shoulders added in areas where they don't exist and as existing conditions allow. New aggregate placed outside of the paved shoulder to complete the shoulder section. The 2014 road condition PASER rating was a 3 out of 10 (POOR). The new asphalt pavement surface would tie into Crooks Road boulevard on the west end, and tie into the new asphalt pavement surface to be constructed in 2016 as part of the South Boulevard [East of Livernois Road – East of Rochester Road] improvements. The total length of the project would be approximately 4,200'. No operating costs are anticipated, due to this section of roadway being owned and operated by RCOC. Construction is planned to begin in 2017.</p>			

<b>MR-46</b>	<b>Industro Plex Industrial Park Reconstruction</b>		
	<b>2019-2019</b>		
<b>Estimated City Cost:</b>	<b>\$833,750</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Reconstruction of Star Batt Drive; approximately 2,300' asphalt road (final road repair strategy is contingent on results of geotechnical pavement cores). Operating costs of approximately \$15,000 per year are anticipated to decrease to \$12,000 per year due to reconstruction. Construction is planned to begin in 2019.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Street Improvements**

<b>MR-49C</b>	<b>Avon Road Widening [Princeton Avenue – Grovecrest Avenue]</b>		
<b>Estimated Total Project:</b>	<b>\$577,500</b>	<b>2019-2020</b>	
<b>Estimated City Cost:</b>	<b>\$192,500</b>	<b>Estimated City Share:</b>	<b>33%</b>
<p>Widen approximately 1,300 feet of Avon Road between Princeton Avenue and Grovecrest Avenue to accommodate an 11' wide center left-turn lane. The proposed project will provide safety benefits by allowing vehicles to exit the through lanes and enter a dedicated center left-turn lane. No operating costs are anticipated, due to this section of roadway being owned and operated by the RCOC. Construction is planned to begin in 2020.</p>			

<b>LS-01</b>	<b>Local Street System: Rehabilitation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$30,000,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Rehabilitation or reconstruction of failed concrete and asphalt sections within the Local Street network, as identified through the City's Pavement Management System and based upon field inspections. Operating costs of approximately \$57,000 per year are anticipated to decrease to \$42,000 per year for each 9.0 miles of the local street network that is proposed to be rehabilitated or reconstructed annually. This program is proposed to be funded at \$5,000,000 per year and is on-going.</p>			

<b>LS-12</b>	<b>Local Street System: Traffic Calming Program</b>		
<b>Estimated Total Project:</b>	<b>\$300,000</b>	<b>2017-2022</b>	
<b>Estimated City Cost:</b>	<b>\$150,000</b>	<b>Estimated City Share:</b>	<b>50%</b>
<p>The City receives many traffic related concerns from subdivision homeowner's associations (HOA) regarding speeding through residential streets. After performing in-depth traffic studies, City staff bring forth recommendations to the Advisory Traffic and Safety Board (ATSB). Often speed humps or other traffic calming devices are recommended as a solution. This program would allow for 'seed' money to offer a 50/50 match between the HOA and the City to provide assistance for the implementation of approximately twenty (20) traffic-calming devices per year along residential streets. This program is proposed to be funded at a City share of \$25,000 per year and is on-going.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Street Improvements**

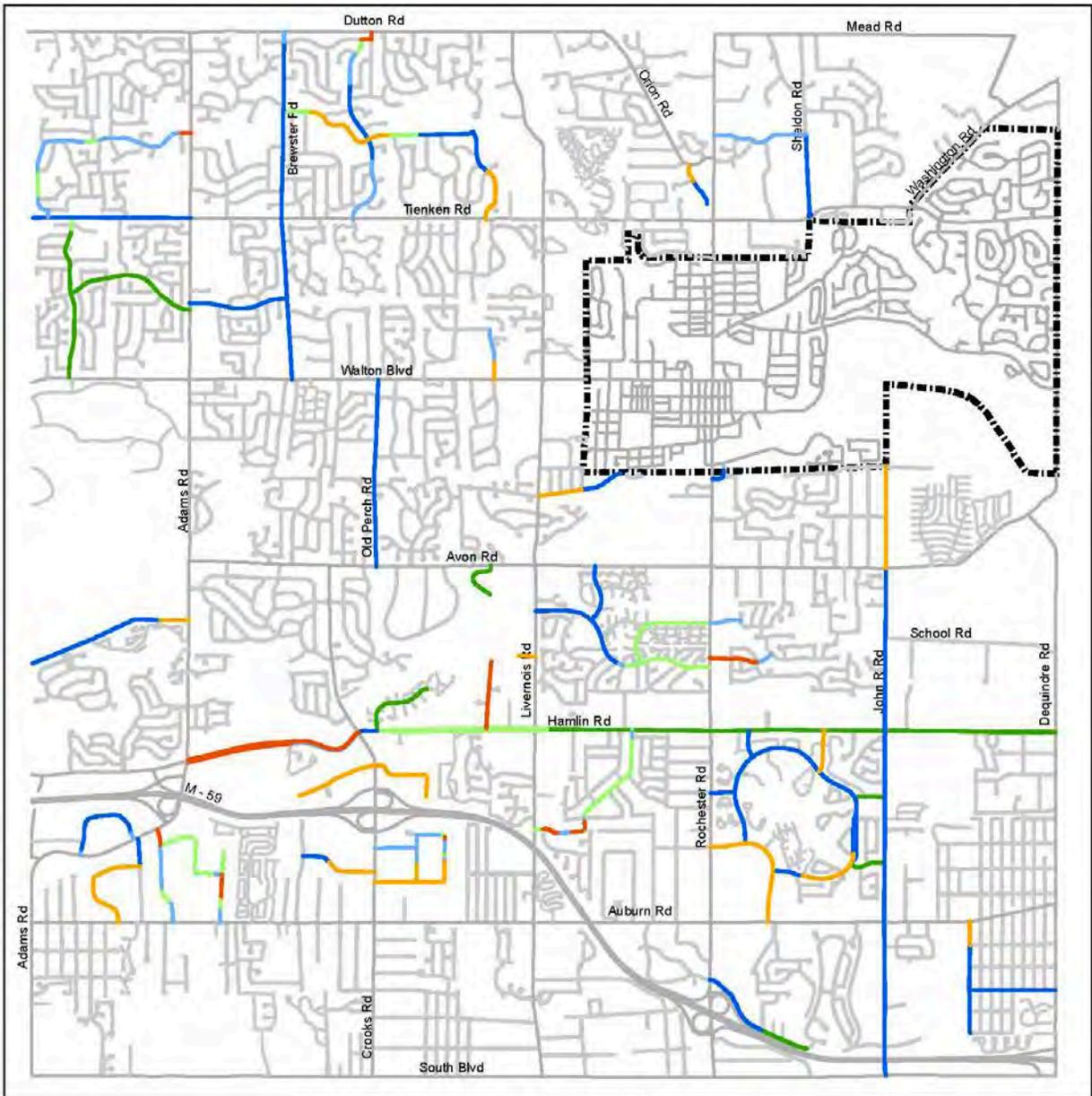
LS-13	School Road Paving (John R Road – 1,700' Eastbound)	
<b>Estimated Total Project:</b>	<b>\$360,500</b>	<b>2018-2019</b>
<b>Estimated City Cost:</b>	<b>\$287,600</b>	<b>Estimated City Share: 100 / 73%</b>
<p>Pave approximately 1,700' of School Road from John R Road easterly to the existing pavement at the culvert crossing. The road is currently gravel. As part of the Harvard Place PUD agreement, the developer will contribute 1/2 of the road cost for the portion across the development's 900' of frontage. This equates to an approximate 27 percent contribution of the project cost. The proposed road cross section is 22' of travel width with shoulders. A future proposed project would also construct a passing lane for southbound John R Road to turn left onto School Road. Operating costs are anticipated to decrease for a period of time by approximately \$1,360 per year due to gravel road grading/chloride operations being eliminated. Construction is planned to begin in 2019.</p>		

LS-14	** Kingsview Avenue Paving (SAD) **	
<b>Estimated Total Project:</b>	<b>\$816,500</b>	<b>2017-2017</b>
<b>Estimated City Cost:</b>	<b>\$489,900</b>	<b>Estimated City Share: 60%</b>
<p>Pave approximately 2,100' of Kingsview Avenue from Livernois Road to Springwood Lane through the adopted City Policy for Special Assessment District gravel to pavement projects. The road is currently gravel. A majority of residents living on Kingsview Avenue submitted petition signatures to request the paving of Kingsview Avenue in accordance with the SAD policy adopted by City Council on October 1, 2013. This project does not include the paving of Kingsview Avenue Court since 3 out of 4 residents were against participation. Operating costs are anticipated to decrease for a period of time by approximately \$1,680 per year due to gravel road grading/chloride operations being eliminated. Construction is planned to begin in 2017.</p>		

LS-15	** Bolinger Street Paving (SAD) **	
<b>Estimated Total Project:</b>	<b>\$261,300</b>	<b>2017-2017</b>
<b>Estimated City Cost:</b>	<b>\$156,780</b>	<b>Estimated City Share: 60%</b>
<p>Pave approximately 600' of Bolinger Street north of Avon Road through the adopted City Policy for Special Assessment District gravel to pavement projects. The road is currently gravel. A majority of residents living on Bolinger Street submitted petition signatures to request the paving of Bolinger Street in accordance with the SAD policy adopted by City Council on October 1, 2013. Operating costs are anticipated to decrease for a period of time by approximately \$480 per year due to gravel road grading/chloride operations being eliminated. Construction is planned to begin in 2017.</p>		

\*\* = New project to the 2017-2022 CIP

# 2017-2022 Capital Improvement Plan City Map – Major Road Conditions



## 2015 MAJOR ROAD CONDITIONS (PUBLIC PAVED ROADS)

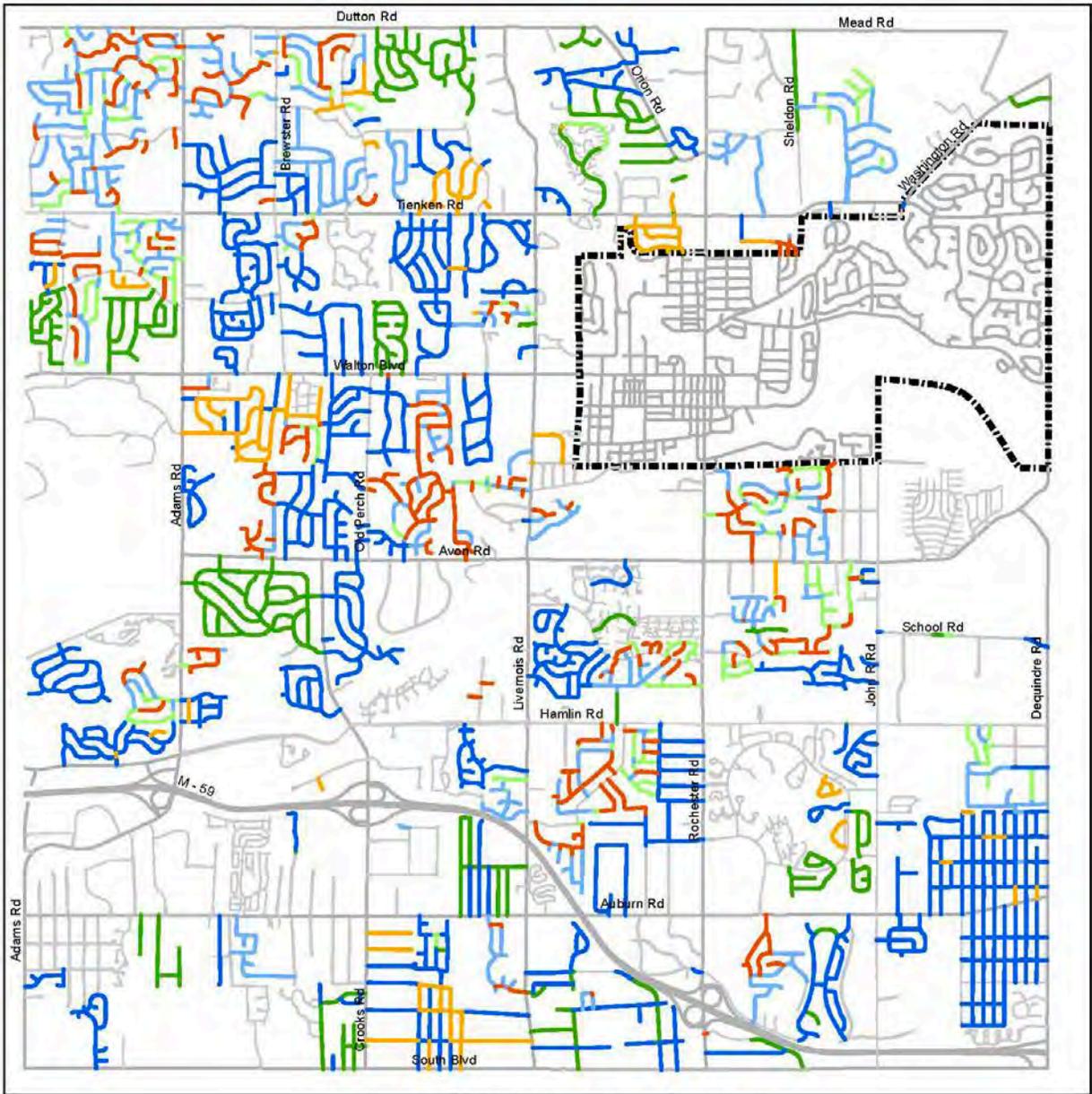
<b>1-4 (POOR)</b>			
	Asphalt	6.14 mi	➤ 22%
	Concrete	2.91 mi	
<b>5-7 (FAIR)</b>			
	Asphalt	16.21 mi	➤ 50%
	Concrete	4.51 mi	
<b>8-10 (GOOD)</b>			
	Asphalt	6.09 mi	➤ 28%
	Concrete	5.64 mi	
		<b>41.51 mi</b>	

Others  
 City of Rochester



Note: ACT 51 mileage is 39.10 centerline miles. Roadsoft ACT 51 mileage includes both sides of Hamlin Rd boulevard and cross overs in total mileage.

# 2017-2022 Capital Improvement Plan City Map – Local Street Conditions



## 2015 LOCAL ROAD CONDITIONS (PUBLIC PAVED ROADS)

<b>1-4 (POOR)</b>		
	Asphalt	12.13 mi
	Concrete	20.86 mi
> 17%		
<b>5-7 (FAIR)</b>		
	Asphalt	83.52 mi
	Concrete	34.96 mi
> 61%		
<b>8-10 (GOOD)</b>		
	Asphalt	27.93 mi
	Concrete	14.21 mi
> 22%		
193.61 mi		

Others  
 City of Rochester

Notes:  
 1) Actual travel length (214.16 miles)  
 2) ACT 51 certified length (196.65 miles)  
 3) Roadsoft length (193.61 miles)



## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Abington Ct	Tower Hill Ln	Dead End or Start	4: Fair	264	Concrete
Alida	Ruby	Alsdorf	4: Fair	813	Asphalt
Alsdorf	Alida	Samuel	4: Fair	327	Asphalt
Alsdorf	Samuel	Mildred	4: Fair	333	Asphalt
Alsdorf	Mildred	Cone	4: Fair	306	Asphalt
Antler Ct	Stag Rdg	Dead End or Start	4: Fair	322	Concrete
Arlington Dr	Dalton Dr	Bolinger	3: Poor	327	Concrete
Arlington Dr	Bolinger	Whitney Dr	3: Poor	312	Concrete
Arlington Dr	Dalton Dr	Dalton Dr	4: Fair	317	Concrete
Arms Ct	Thames Dr	Dead End or Start	4: Fair	618	Concrete
Avoncrest Dr	Old Perch Rd		4: Fair	63	Asphalt
Avoncrest Dr		Dead End or Start	4: Fair	180	Concrete
Avonstoke Rd		W Hamlin Rd	3: Poor	391	Concrete
Axford Pl		Winry	3: Poor	26	Asphalt
Aynsley Dr	Kingspath Dr	Wedgewood Dr	3: Poor	401	Concrete
Barneswood Ct	Barneswood Ln	Dead End or Start	3: Poor	359	Asphalt
Barneswood Ln	W Tienken Rd	Barneswood Ct	4: Fair	649	Asphalt
Barneswood Ln	Barneswood Ct	W Fairview Ln	4: Fair	871	Asphalt
Barneswood Ln	W Fairview Ln	W Horseshoe Bnd	4: Fair	327	Asphalt
Baypoint Dr		Doral Dr	4: Fair	169	Concrete
Bembridge Dr			4: Fair	496	Concrete
Berry Nook Ln	Whitney Dr & Arlington Dr	Bloomer	4: Fair	322	Concrete
Biggers	Bridgestone Dr	Allston	3: Poor	517	Asphalt
Bolinger	Arlington Dr		3: Poor	634	Concrete
Bolinger		Arlington Dr	4: Fair	808	Concrete
Bowdoin Hill	Bowdoin Hill Ct	Rhineberry	4: Fair	713	Asphalt
Bowdoin Hill Ct	Bowdoin Hill	Dead End or Start	3: Poor	180	Asphalt
Box Canyon	Stanford Cir		3: Poor	554	Concrete
Box Canyon		Dead End or Start	3: Poor	132	Concrete
Braeburn	Randolph	W Maryknoll	4: Fair	702	Asphalt
Brandon Ct		Dead End or Start	2: Very Poor	206	Concrete
Brittany Ct	Springwood Ln	Dead End or Start	4: Fair	269	Concrete
Bromley Ln	Chelsea Ct	Dead End or Start	4: Fair	275	Concrete
Burgoyne	S Livernois Rd	S Livernois Rd	2: Very Poor	69	Asphalt
Burlington Dr	Salem Dr		3: Poor	322	Concrete
Burlington Dr		Dead End or Start	3: Poor	401	Concrete
Buttercup Dr	Daylily Dr	Goldenrod Dr	4: Fair	935	Concrete
Cal Ave	Culbertson	Emmons	4: Fair	285	Asphalt
Campus	Old Perch Rd		3: Poor	79	Asphalt
Campus	Campus Ct	Baylor	4: Fair	840	Concrete
Campus		Campus Ct	4: Fair	407	Concrete
Campus Ct	Campus	Dead End or Start	3: Poor	591	Concrete
Canterbury Trl	Hillendale Dr	Hillendale Dr	4: Fair	169	Asphalt
Canterbury Trl	Hillendale Dr	Walton Blvd	4: Fair	1,130	Asphalt
Canterbury Trl		Hillendale Dr	4: Fair	42	Asphalt
Canterbury Trl			4: Fair	42	Asphalt
Cascade Cir			4: Fair	79	Concrete
Catalpa	City/Twp Line	Red Oak & Catalpa Ct	4: Fair	312	Concrete
Catalpa	Red Oak & Catalpa		4: Fair	132	Concrete
Cedar Shake Dr	Falcon Dr & Firewood Dr		4: Fair	1,167	Concrete
Cedaredge	Grandview	Ridgecrest	4: Fair	649	Asphalt
Cedaredge	Ridgecrest		4: Fair	216	Asphalt
Chalet Dr	Dead End or Start	Kimberly Fair	3: Poor	280	Concrete
Chalet Dr	Kimberly Fair	Canterbury Trl	4: Fair	523	Concrete
Chalet Dr	Canterbury Trl		4: Fair	317	Concrete
Chalet Dr		Longford	4: Fair	42	Concrete
Chancery Ct	N Kilburn Rd	Dead End or Start	4: Fair	618	Concrete

## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Chelsea Ct	Bromley Ln	Dead End or Start	4: Fair	222	Concrete
Cherrywood Ln	Crestwood		3: Poor	665	Concrete
Cherrywood Ln		Falcon Dr & Cherrywood Ct	4: Fair	164	Concrete
Clear Point Ct	Grandview	Dead End or Start	4: Fair	502	Asphalt
Clovelly	Weaverton	Bridget	4: Fair	322	Asphalt
Cobridge Ct	Cobridge Dr	Dead End or Start	4: Fair	222	Concrete
Cobridge Dr	Royal Doulton Blvd & Chaffer Dr	Cobridge Ct	4: Fair	523	Concrete
Cone	Grace	Ruby	4: Fair	924	Asphalt
Cone	Ruby	Alsdorf	4: Fair	708	Asphalt
Corbin	Kentucky Dr	Dead End or Start	4: Fair	132	Concrete
Courtfield	Lexham Ln		4: Fair	391	Concrete
Crestline	Crestline Ct	Drexelgate Pkwy	4: Fair	428	Concrete
Crestline Ct	Crestline	Crestline Ct @ Crestline	3: Poor	37	Concrete
Crestline Ct	Cul-de-sac	Dead End or Start	3: Poor	58	Concrete
Croydon Rd	Lake Forest	Spartan Dr	3: Poor	348	Concrete
Croydon Rd	Spartan Dr	Dead End or Start	3: Poor	206	Concrete
Croydon Rd		Lake Forest	3: Poor	454	Concrete
Croydon Rd		Baylor	3: Poor	16	Concrete
Cypress		Sumac Dr	3: Poor	53	Concrete
Dalton Dr	Arlington Dr	Hadley Rd	4: Fair	1,241	Concrete
Dawson Dr	Cumberland Dr	Highsplint Dr	4: Fair	348	Concrete
Dearborn	Grace	Ruby	4: Fair	903	Asphalt
Deerfield Ct	Springwood Ln	Dead End or Start	3: Poor	180	Concrete
Devonwood	Stonington Ln	Westwood Dr	4: Fair	306	Asphalt
Devonwood		Foresthill Dr	4: Fair	333	Concrete
E Fairview Ct	E Fairview Ln	Dead End or Start	4: Fair	238	Asphalt
E Horseshoe Bnd	Barneswood Ln	Whispering Knoll & E Horseshoe Bnd	4: Fair	1,056	Asphalt
E Horseshoe Bnd	W Horseshoe Bnd & Whispering Knoll	Horseshoe Bend Ct & E Fairview Ln	4: Fair	1,389	Asphalt
E Maryknoll		Maryknoll Ct & E Maryknoll	3: Poor	681	Asphalt
E Maryknoll	Maryknoll Ct & W Maryknoll	Randolph	3: Poor	375	Asphalt
E Maryknoll	Randolph	Hillendale Dr	4: Fair	1,267	Asphalt
Eagle Ct	Eagle Dr	Dead End or Start	3: Poor	285	Concrete
Eagle Dr	Dead End or Start	Eagle Ct	3: Poor	248	Concrete
Eagle Dr	Eagle Ct	Pheasant Ring Dr	3: Poor	660	Concrete
Edmunton Dr	Hartford Ct	Salem Dr	4: Fair	264	Concrete
Edmunton Dr	Salem Dr	McCormick Dr	4: Fair	871	Concrete
Edmunton Dr		Salem Dr	3: Poor	280	Concrete
Englewood Dr	Brandon Ct		3: Poor	607	Concrete
Englewood Dr			2: Very Poor	48	Concrete
Essex Dr	Eddington		3: Poor	327	Concrete
Essex Dr	Lexington Dr	Pembroke Dr	3: Poor	280	Concrete
Essex Dr	Pembroke Dr		4: Fair	354	Concrete
Essex Dr		Lexington Dr	3: Poor	190	Concrete
Evergreen Ct	Stanford Cir	Dead End or Start	4: Fair	227	Concrete
Fair Oak Dr	Yale Ct	Dead End or Start	4: Fair	190	Concrete
Fawn Ct	Stag Rdg	Dead End or Start	4: Fair	201	Concrete
Fielding Dr	Drexelgate Pkwy	Glenbrooke Ct	3: Poor	433	Concrete
Fielding Dr	Glenbrooke Ct	Meadowfield Dr	2: Very Poor	190	Concrete
Flanders Dr	Highsplint Dr		4: Fair	671	Concrete
Ford Croft Dr	Stonetree Cir	Raintree Dr	3: Poor	966	Concrete
Forest View Ct	Woodfield Way		4: Fair	116	Concrete
Foresthill Dr	Devonwood	Pleasant View Dr	3: Poor	1,294	Concrete
Fox Woods Ln		Woodfield Way	3: Poor	211	Concrete
Fulham Dr	Fulham Ct	Brompton Rd & Tottenham Ct	4: Fair	227	Concrete
Fulham Dr	Brompton Ct	S Livernois Rd & Sierra Blvd	4: Fair	539	Concrete
Gallaland	Dakota Dr		4: Fair	275	Concrete
Gerald	Dawes	E Auburn Rd	4: Fair	512	Asphalt

## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Glen Meadow Ct	Colony Dr	Glen Meadow Ct to CulDeSac	3: Poor	422	Concrete
Glen Meadow Ct	Glen Meadow Ct to CulDeSac	Dead End or Start	3: Poor	74	Concrete
Goldenrod Dr	Buttercup Dr	Primrose Dr	4: Fair	697	Concrete
Grace	Crooks Rd	Alida	4: Fair	1,600	Asphalt
Grace	Cone	Dearborn	4: Fair	327	Asphalt
Grace	Dearborn	S Livernois Rd	4: Fair	2,196	Asphalt
Greenleaf Dr		Rochdale	4: Fair	174	Concrete
Greenleaf Dr			4: Fair	227	Concrete
Greenspring Ln	Heron Ridge Dr	Hickory Trl	4: Fair	111	Asphalt
Greenspring Ln			4: Fair	760	Concrete
Greenspring Ln			4: Fair	95	Concrete
Grovecrest	Slumber	Misty Brook Ln	4: Fair	470	Concrete
Hadley Rd	E Avon Rd	Dalton Dr	4: Fair	882	Concrete
Harlan Ct	Warrington Rd	Flanders Dr	4: Fair	296	Concrete
Harlan Ct	Flanders Dr	Dead End or Start	4: Fair	216	Concrete
Harvard Dr	intersection Harvard& Grosvenor	intersection Harvard& Grosvenor	3: Poor	5	Concrete
Heritage Hill Ct	Dutton Rd		4: Fair	21	Asphalt
Heritage Hill Ct		Dead End or Start	4: Fair	153	Concrete
Hessel	E Auburn Rd	Dawes	4: Fair	375	Asphalt
Hidden Ln	Springwood Ln	Dead End or Start	4: Fair	697	Concrete
Highsplint Dr	Kentucky Dr	Flanders Dr	4: Fair	496	Concrete
Highsplint Dr	Flanders Dr		4: Fair	290	Concrete
Highsplint Dr	Warrington Rd		3: Poor	412	Concrete
Highsplint Dr	Dawson Dr		4: Fair	422	Concrete
Highsplint Dr		Dead End or Start	3: Poor	148	Concrete
Highsplint Dr		Dawson Dr	3: Poor	428	Concrete
Highsplint Dr			3: Poor	243	Concrete
Hillcrest Dr	Pleasant View Dr	Devonwood	3: Poor	253	Concrete
Hillcrest Dr	Devonwood		3: Poor	343	Concrete
Hillendale Dr	Adams Rd & Meadowbrook Rd	Vreeland	4: Fair	919	Asphalt
Hillendale Dr	Vreeland	Bowdoin Hill	4: Fair	380	Asphalt
Hillendale Dr	Bowdoin Hill	W Maryknoll	4: Fair	396	Asphalt
Hillendale Dr	W Maryknoll	Randolph	4: Fair	1,299	Asphalt
Hillendale Dr	E Maryknoll	Canterbury Trl	4: Fair	375	Asphalt
Hillendale Dr	Canterbury Trl	Longford	4: Fair	1,003	Asphalt
Hillside Ln	Hillside to Sandalwood	Drexelgate Pkwy	3: Poor	544	Concrete
Holiday Ct	Summit Rdg	Dead End or Start	3: Poor	359	Concrete
Huntington Ct	Stonecrest Dr	Dead End or Start	4: Fair	306	Concrete
Innsbrook Ct	Innsbrook Dr	Dead End or Start	4: Fair	280	Asphalt
Innsbrook Dr	Innsbrook Ct	Raintree Dr	4: Fair	797	Asphalt
Innsbrook Dr	Innsbrook Ct	Raintree Dr	4: Fair	750	Asphalt
Ivy Wood Ct	Arlington Dr	Dead End or Start	3: Poor	459	Concrete
Jason Cir	Snowden Cir	Quincy Dr	4: Fair	259	Concrete
June	Crooks Rd	Dead End or Start	4: Fair	1,315	Asphalt
Keats Dr	Shelley Dr	Shelley Dr	4: Fair	549	Asphalt
Kendal Ln	Bellshire Ln	Dead End or Start	3: Poor	359	Concrete
Kentucky Dr		Cumberland Dr	4: Fair	887	Concrete
Kentucky Dr			4: Fair	422	Concrete
Kimberly Fair	Chalet Dr		4: Fair	507	Concrete
Kimberly Fair			4: Fair	53	Concrete
Kimberly Fair		Sussex Fair	4: Fair	58	Concrete
Kings Cove Dr	Kings Cove Dr & Ravine		3: Poor	16	Asphalt
Kingsview	Springwood Ln		3: Poor	238	Concrete
Kirkton Ct		Dead End or Start	3: Poor	211	Concrete
Lake Forest	Croydon Rd	Rutgers	4: Fair	285	Concrete
Lake Forest	Rutgers	Campus	4: Fair	280	Concrete
Lake Forest	Campus	Lake Forest Ct	4: Fair	692	Concrete

## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Lake Forest	Lake Forest Ct	Bucknell Ct	3: Poor	306	Concrete
Lake Forest	Sumac Dr	Ansal	4: Fair	781	Concrete
Lake Forest	Ansal	Spartan Dr	4: Fair	781	Concrete
Lake Forest		Sumac Dr	4: Fair	570	Concrete
Lake Forest			4: Fair	90	Concrete
Lake Forest			4: Fair	211	Concrete
Lambeth Park		Dead End or Start	4: Fair	544	Concrete
Lambeth Park			4: Fair	26	Concrete
Langley Ct	Langley Rd	Dead End or Start	3: Poor	269	Concrete
Langley Rd	Beacon Hill Dr	Langley Ct	4: Fair	296	Concrete
Langley Rd	Langley Ct	Lassiter Dr	3: Poor	882	Concrete
Lassiter Dr		Langley Rd	4: Fair	264	Concrete
Lexington Dr	Ternbury Dr	Essex Dr	4: Fair	1,410	Concrete
Lion St	Hampton Cir	Hampton Cir	4: Fair	1,214	Asphalt
Live Oak Dr	Ulster	Munster	4: Fair	333	Concrete
Live Oak Dr	Munster	Dead End or Start	4: Fair	296	Concrete
Long Meadow Ln	Twin Oaks Ct	Woodfield Way	4: Fair	401	Concrete
Long Meadow Ln		Long Meadow Ln & Twin Oaks Ct	3: Poor	269	Concrete
Longford	Chalet Dr	Hillendale Dr	4: Fair	259	Asphalt
Longford	Hillendale Dr	Dead End or Start	4: Fair	866	Asphalt
Maple	City/Twp Line	Red Oak	3: Poor	190	Concrete
Mapleridge Ct		Dead End or Start	4: Fair	486	Asphalt
Maryknoll Ct	W Maryknoll	Dead End or Start	4: Fair	164	Asphalt
Maryknoll Ct	Ulster	Dead End or Start	3: Poor	354	Concrete
Mayapple Ct	Daylily Dr	Dead End or Start	3: Poor	496	Concrete
Meadowbrook Dr	Adams Rd	Country Club Dr	4: Fair	502	Concrete
Meadowbrook Dr	Country Club Dr	Trailwood Dr	4: Fair	290	Concrete
Meadowview Ct	Brewster Rd & Rusk		4: Fair	69	Asphalt
Meadowview Ct		Dead End or Start	4: Fair	391	Concrete
Michele Ct	Charlwood	Dead End or Start	4: Fair	333	Concrete
Michelson	S Rochester Rd		4: Fair	90	Concrete
Middlebury	Plum Ridge Dr	Plum Ridge Dr	4: Fair	845	Asphalt
Mildred	Ruby	Als Dorf	4: Fair	734	Asphalt
Millbrook Ct	Grandview		3: Poor	79	Concrete
Millbrook Ct			3: Poor	100	Concrete
Millbrook Ct			3: Poor	253	Concrete
Millbrook Ct		Dead End or Start	4: Fair	90	Concrete
Millbrook Ct			4: Fair	79	Concrete
Millbrook Ct			3: Poor	5	Concrete
Misty Brook Ln	Grovecrest	Rambling Dr	4: Fair	649	Concrete
Morley	Longview	Harrison	4: Fair	333	Asphalt
Morley	Harrison	Eastern	3: Poor	327	Asphalt
Muirwood Ct	Hollensshade	Dead End or Start	4: Fair	348	Concrete
Munster	Live Oak Dr	Stanford Cir	4: Fair	1,220	Concrete
N Oak	City/Twp Line	Winry	3: Poor	164	Asphalt
New Kent Rd	N Kilburn Rd	Lambeth Park	3: Poor	586	Concrete
Norton Lawn		Norton Rd & Cumberland Dr	4: Fair	1,927	Concrete
Notre Dame Rd	Spartan Dr	Ten Point Dr	3: Poor	322	Concrete
Oakrock		Dead End or Start	1: Failed	100	Asphalt
Old Homestead	Merriweather	Salem Dr	2: Very Poor	148	Concrete
Old Homestead		Merriweather	4: Fair	845	Concrete
Orchardale		Walton Blvd	4: Fair	48	Concrete
Park Creek Ct	Quail Ridge Cir	Dead End or Start	2: Very Poor	290	Concrete
Parkland Dr	Parkland to Sandalwood	Drexelgate Pkwy	3: Poor	296	Concrete
Parsons Ln			3: Poor	771	Concrete
Pembroke Dr	Essex Dr	Bembriidge Dr	3: Poor	1,030	Concrete
Pheasant Ring Ct	Pheasant Ring Dr	Dead End or Start	3: Poor	153	Concrete

## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Pheasant Ring Dr	Pheasant Ring Ct	Eagle Dr	4: Fair	1,251	Concrete
Pine	Winry	Reitman	3: Poor	343	Asphalt
Pine	Reitman	Thalia	3: Poor	449	Asphalt
Pine	Thalia	Tienken Ct & W Tienken Rd	3: Poor	327	Asphalt
Pinehurst Dr	Raintree Dr	Doral Dr	4: Fair	602	Concrete
Pleasant View Dr	Foresthill Dr	Grandview	4: Fair	1,140	Concrete
Poco Ct	Winchester	Dead End or Start	4: Fair	449	Concrete
Preswick		Pine Trl	4: Fair	53	Asphalt
Preswick			4: Fair	206	Concrete
Primrose Ct	Primrose Dr	Dead End or Start	3: Poor	127	Concrete
Primrose Dr	Daylily Dr	Primrose Ct	4: Fair	375	Concrete
Primrose Dr	Primrose Ct	Goldenrod Dr	4: Fair	1,146	Concrete
Primrose Dr	Goldenrod Dr	E Auburn Rd	3: Poor	533	Concrete
Prospect Dr	Cumberland Dr	Elkhorn Dr	4: Fair	312	Concrete
Quail Ridge Cir	Glengrove Dr	Park Creek Ct	4: Fair	808	Concrete
Quincy Dr	Jason Cir	Salem Dr	4: Fair	972	Concrete
Randolph	E Maryknoll	Braeburn	4: Fair	517	Asphalt
Randolph	Braeburn	Hillendale Dr	4: Fair	1,045	Asphalt
Randolph	Hillendale Dr	Rhineberry	4: Fair	892	Asphalt
Ravine Terrace Ct	Ravine Terrace Dr	Dead End or Start	3: Poor	449	Concrete
Ravine Terrace Dr	Ravine Terrace Ct	Dead End or Start	4: Fair	285	Concrete
Red Oak	Courtland		3: Poor	1,093	Asphalt
Red Oak	Sycamore	Catalpa Ct & Catalpa	4: Fair	269	Concrete
Red Oak	Catalpa Ct & Catalpa	Maple	3: Poor	232	Concrete
Red Oak		Sycamore	3: Poor	100	Concrete
Reitman	Thalia	Pine	3: Poor	1,315	Asphalt
Rhineberry	Vreeland	Bowdoin Hill	4: Fair	354	Asphalt
Rhineberry	Bowdoin Hill	W Maryknoll	4: Fair	903	Asphalt
Rhineberry	W Maryknoll	Randolph	4: Fair	660	Asphalt
Ridgecrest		Cedaredge	4: Fair	855	Asphalt
Ridgefield Ct	Grandview	Dead End or Start	4: Fair	771	Concrete
Rochdale	Streamview Ct	Greenleaf Dr	4: Fair	333	Concrete
Rochester Industrial Ct	Rochester Industrial Dr	Dead End or Start	2: Very Poor	338	Concrete
Rochester Industrial Ln	Rochester Industrial Dr	Dead End or Start	2: Very Poor	359	Concrete
Rocky Crest Dr	Charlwood	Tacoma Dr	4: Fair	924	Concrete
Rocky Crest Dr	Tacoma Dr & Rocky Crest Dr	Dead End or Start	4: Fair	222	Concrete
Ruby	Alida	Samuel	3: Poor	322	Asphalt
Ruby	Samuel	Mildred	4: Fair	327	Asphalt
Ruby	Mildred	Cone	4: Fair	322	Asphalt
Ruby	Cone	Dearborn	4: Fair	348	Asphalt
Rutgers	Lake Forest	Spartan Dr	4: Fair	1,373	Concrete
Salem Ct	Salem Dr	Dead End or Start	3: Poor	195	Concrete
Salem Dr	Burlington Dr	Saratoga Dr	3: Poor	597	Concrete
Samuel	South Blvd W	Grace	4: Fair	882	Asphalt
Sandalwood Ct	Sandalwood Ct to CuldeSac	Dead End or Start	3: Poor	121	Concrete
Sandalwood Ct		Sandalwood Ct to CuldeSac	4: Fair	285	Concrete
Sandalwood Dr	Drexelgate Pkwy	Parkland Ct	4: Fair	306	Concrete
Shellbourne Dr	Raintree Dr		2: Very Poor	871	Concrete
Shellbourne Dr			4: Fair	201	Concrete
Shelley Dr	Hampton Cir	Keats Dr	4: Fair	201	Asphalt
Shelley Dr	Keats Dr	Keats Dr	4: Fair	892	Asphalt
Shelley Dr	Keats Dr	Dead End or Start	4: Fair	253	Asphalt
Slade Ct	Winchester	Dead End or Start	3: Poor	444	Concrete
Snowden Ct	Salem Dr	Dead End or Start	4: Fair	227	Concrete
Spartan Dr	Croydon Rd	Notre Dame Rd	4: Fair	1,104	Concrete
Spartan Dr	Notre Dame Rd	Rutgers	4: Fair	354	Concrete
Spartan Dr	Rutgers	Lake Forest	4: Fair	723	Concrete

## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Stag Rdg	W Avon Rd	Antler Ct	3: Poor	222	Concrete
Stag Rdg	Antler Ct	Fawn Ct	4: Fair	121	Concrete
Stag Rdg	Fawn Ct	Ten Point Dr	4: Fair	148	Concrete
Stanford Cir	W Avon Rd		3: Poor	243	Concrete
Stanford Cir	Dead End or Start	Box Canyon	3: Poor	549	Concrete
Stanford Cir	Box Canyon	Stanford Ct	3: Poor	164	Concrete
Stanford Cir	Stanford Ct		3: Poor	385	Concrete
Stanford Ct	Stanford Cir	Dead End or Start	3: Poor	201	Concrete
Starr Ct	Avon Industrial Dr	Dead End or Start	4: Fair	370	Asphalt
Stonecrest Dr	Drexelgate Pkwy	Huntington Ct	3: Poor	232	Concrete
Stonecrest Dr	Huntington Ct	Dead End or Start	3: Poor	512	Concrete
Stonetree Cir			3: Poor	729	Concrete
Stonetree Cir			3: Poor	238	Concrete
Stonington Ln	N Fairview Ln	Devonwood	4: Fair	554	Asphalt
Stonington Ln	Devonwood	Grandview & Stonington Ct	4: Fair	338	Asphalt
Sumac Dr	Cypress	Tanglewood Dr	3: Poor	649	Concrete
Summit Ct	Summit Rdg	Dead End or Start	4: Fair	253	Concrete
Summit Rdg	East Pointe Ct	W Kilburn Rd	4: Fair	898	Concrete
Summit Rdg	McCormick Dr	Wales Dr	3: Poor	850	Concrete
Summit Rdg	Wales Dr	Holiday Ct	3: Poor	259	Concrete
Summit Rdg	Holiday Ct	Old Homestead	3: Poor	1,135	Concrete
Sunbury Ct		Dead End or Start	2: Very Poor	407	Concrete
Sussex Fair	Chalet Dr	Kimberly Fair	4: Fair	296	Concrete
Sussex Fair	Kimberly Fair	Dead End or Start	4: Fair	739	Concrete
Sycamore	City/Twp Line	Red Oak	4: Fair	375	Concrete
Tamm	Crooks Rd	Dead End or Start	4: Fair	1,357	Asphalt
Tanglewood Ct	Tanglewood Dr	Dead End or Start	4: Fair	539	Concrete
Tanglewood Dr	Black Maple Dr		4: Fair	528	Concrete
Tanglewood Dr	Sugar Pine	Lake Forest	4: Fair	227	Concrete
Tanglewood Dr	Lake Forest	Sumac Dr	4: Fair	412	Concrete
Tanglewood Dr		Sugar Pine	4: Fair	69	Concrete
Tanglewood Dr		Black Maple Dr	4: Fair	238	Concrete
Tanglewood Dr		Dead End or Start	3: Poor	206	Concrete
Teakwood	Falcon Dr	Cherrywood Ln & Crestwood	4: Fair	1,188	Concrete
Teakwood	Cherrywood Ln	Coachwood Ln	3: Poor	232	Concrete
Ten Point Dr	Stag Rdg	Stag Rdg	4: Fair	766	Concrete
Ten Point Dr	Stag Rdg	Notre Dame Rd	4: Fair	1,278	Concrete
Ten Point Dr	Notre Dame Rd		3: Poor	95	Concrete
Ternbury Dr	Lexington Dr	Dead End or Start	4: Fair	158	Concrete
Ternbury Dr		Lexington Dr	4: Fair	301	Concrete
Thalia	Dead End or Start	Winry	3: Poor	306	Asphalt
Thalia	Winry	Reitman	3: Poor	317	Asphalt
Thalia	Reitman	Pine	3: Poor	876	Asphalt
Thames Dr	Thames to Arms Ct	E Avon Rd	3: Poor	876	Asphalt
Thames Dr	Thames to Arms Ct	Thames to Arms Ct	2: Very Poor	58	Asphalt
Thornridge Ct	Thornridge Dr	Dead End or Start	3: Poor	301	Concrete
Tienken Ct		Dead End or Start	3: Poor	486	Asphalt
Torrent Ct	Elkhorn Dr	Dead End or Start	3: Poor	649	Concrete
Tower Hill Ln	N Kilburn Rd	Charm	4: Fair	496	Concrete
Tower Hill Ln	Charm	Abington Ct	4: Fair	744	Concrete
Tower Hill Ln		Brewster Rd	4: Fair	74	Asphalt
Twin Oaks Ct	Long Meadow Ln	Dead End or Start	4: Fair	359	Concrete
Ulster	W Maryknoll & E Maryknoll	Ulster	3: Poor	348	Concrete
Ulster	Maryknoll Ct	Live Oak Dr	3: Poor	312	Concrete
Valley Stream Ct	Valley Stream Dr	Dead End or Start	4: Fair	201	Concrete
Valley Stream Dr	Dead End or Start	Valley Stream Ct	4: Fair	190	Concrete
Vreeland	Hillendale Dr	Rhineberry	4: Fair	1,288	Asphalt

## 2017-2022 Capital Improvement Plan Local Street Conditions [Poor Only]

2015 Local Streets in Poor Condition [Paser Rating Between 1-4]					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
W Kilburn Rd	Summit Rdg		3: Poor	333	Concrete
W Kilburn Rd	Summit Rdg	N Adams Rd & N Kilburn Rd	4: Fair	243	Concrete
W Maryknoll	Hillendale Dr	Braeburn	4: Fair	449	Asphalt
W Maryknoll	Braeburn	Maryknoll Ct	3: Poor	290	Asphalt
W Maryknoll	Maryknoll Ct		3: Poor	132	Asphalt
Wakefield Ct	Charlwood & Olympia Dr	Parkwood Dr	4: Fair	412	Concrete
Warrington Rd			4: Fair	628	Concrete
Warrington Rd			4: Fair	84	Concrete
Wedgewood Dr	Arbor Creek Dr	Chaffer Dr	4: Fair	74	Concrete
Whispering Knoll	W Tienken Rd	W Horseshoe Bnd & E Horseshoe Bnd	4: Fair	549	Asphalt
Whispering Knoll	W Horseshoe Bnd & E Horseshoe Bnd	E Fairview Ln	4: Fair	1,294	Asphalt
White Water Dr	Portage Trl	River Trl	4: Fair	660	Asphalt
Whitehouse Ct	Charlwood	Dead End or Start	4: Fair	586	Concrete
Whitney Dr	Berry Nook Ln & Arlington Dr	Pioneer Dr	4: Fair	1,135	Concrete
Whitney Dr	Arlington Dr		3: Poor	232	Concrete
Willow Grove Ln	S Livernois Rd	Willow Grove Ct	3: Poor	792	Asphalt
Willow Grove Ln	Burgoyne	Willow Grove Ct	4: Fair	876	Asphalt
Wimpole		Walton Blvd	3: Poor	58	Concrete
Windrift Ln		Eddington	3: Poor	560	Concrete
Winry	W Tienken Rd	Thalia	3: Poor	327	Asphalt
Winry	Thalia	Axford Pl	3: Poor	818	Asphalt
Winry	Axford Pl	N Oak	3: Poor	840	Asphalt
Winry	N Oak	Pine	3: Poor	354	Asphalt
Winry	Winry		3: Poor	211	Asphalt
Woodfield Way	Lake Ridge Rd	Oak View Ct	4: Fair	882	Concrete
Woodfield Way	Forest View Ct	Fox Woods Ln	4: Fair	380	Concrete
Woodfield Way	Fox Woods Ln	Long Meadow Ln	4: Fair	317	Concrete
Woodford Cir	N Kilburn Rd	N Kilburn Rd	4: Fair	1,468	Concrete
Woodridge Ct	Woodridge Dr	Dead End or Start	4: Fair	238	Concrete
Yale Ct	Fair Oak Dr	Dead End or Start	4: Fair	370	Concrete

### Notes to Local Street Conditions:

- *Pavement Surface Evaluation and Rating System (PASER) is a visual survey method for evaluating the condition of roads. This data serves as the foundation of which to build cost-effective pavement maintenance strategies.*
- *Local Street conditions are depicted on the map. The PASER condition ratings are grouped by the following categories: POOR (1-4); FAIR (5-7); and GOOD (8-10). Only streets in POOR condition are listed in the table.*
- *Local Streets are presented by segment (not by total average PASER rating). The same street may be listed as both Fair and Poor because different segments are at different quality levels.*
- *Streets degrade at different rates due to a variety of factors such as traffic volume, road cross-section, drainage, etc... The PASER rating listed in the tables only represent today's current street condition and **does not** guarantee that the ranking of roads will remain the same after subsequent street evaluation surveys are conducted. The entire Local Street system is re-evaluated and PASER figures updated each year.*

## **2017-2022 Capital Improvement Plan Water & Sanitary Sewer System Improvements**

The mission of the Water Supply and Sanitary Sewage Disposal System Plan is to preserve the integrity of the water and sanitary sewer systems; to implement a capital maintenance program that sustains reliability; and (if justified) to extend the distribution and collection systems throughout the remainder of the City.

The extension of the sanitary sewage disposal system throughout the City will eventually eliminate private septic systems, thereby preserving the environment as well as the water source for private well systems, which some residents are dependent upon as their source of potable water.

The development of the proposed water and sanitary sewer projects were based upon system deficiencies and needs obtained from area residents, business owners, and City staff. These projects are coordinated with storm water management, roadway, and pathway improvements whenever possible to maximize cost savings through economies of scale, resulting in a more effective and efficient process to implement the construction projects.

The proposed water and sanitary sewer projects are flexible, allowing for the addition of new improvements to address specific needs without deferring other projects along the way. Studies and analysis of the existing system is an on-going program that, when coupled with new technologies, provides for improved system capabilities and reliability.

Water and sanitary sewer projects identified as urgent are not subject to the rating/weighting scale required of capital improvement projects as these projects are deemed necessary for the health, safety, and welfare of our customers.

# 2017-2022 Capital Improvement Plan Sanitary Sewer System Improvements



**LEGEND**

Projects that may begin construction in:

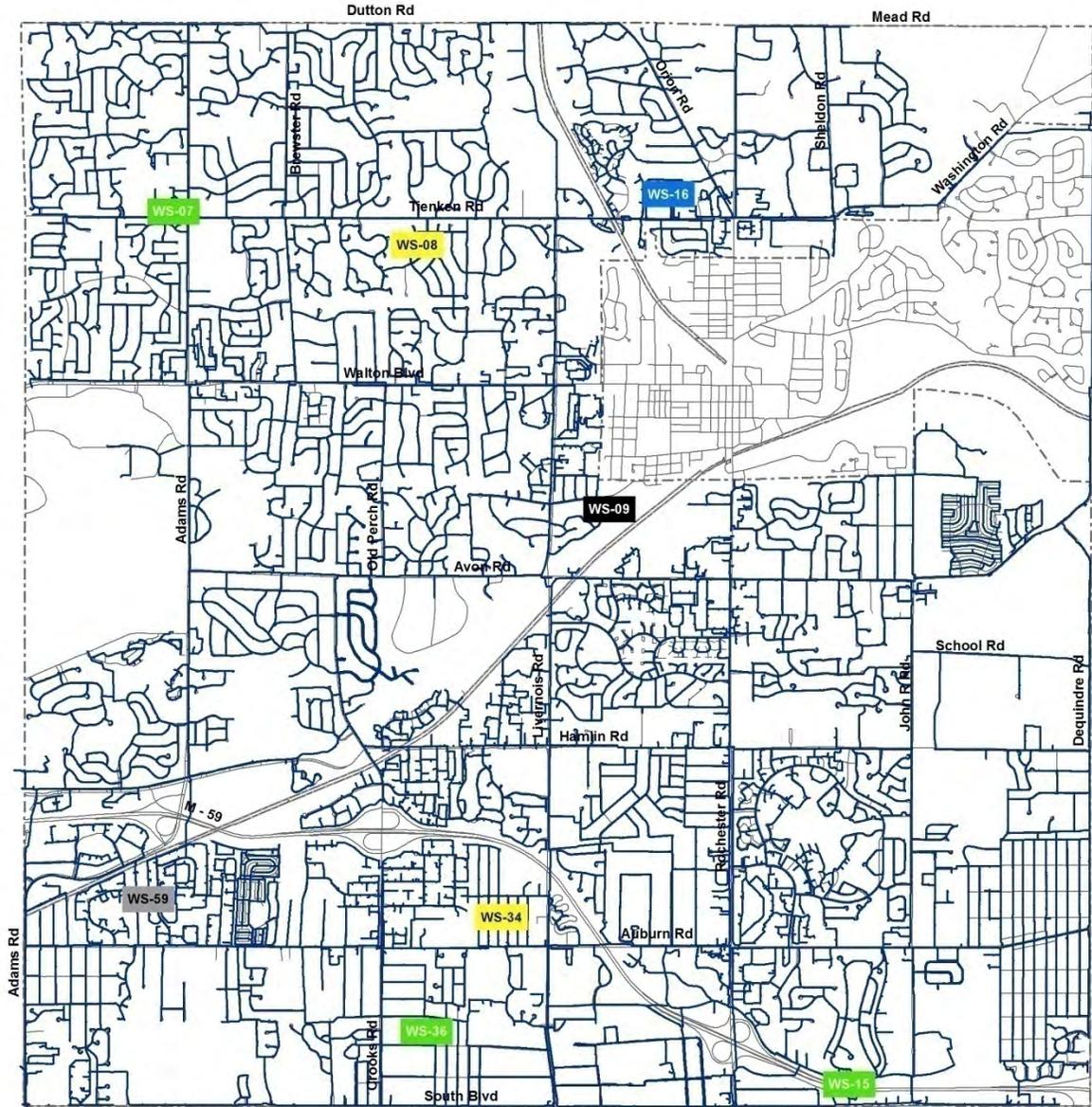
- 2017 SS-00
- 2018 SS-00
- 2019 SS-00
- 2020 SS-00
- 2021 SS-00
- 2022 SS-00
- Pending Project SS-00

Existing Sanitary Sewer



Date: 3/28/2016  
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# 2017-2022 Capital Improvement Plan Water System Improvements



**LEGEND**

Projects that may begin construction in:

- 2017 WS-00
- 2018 WS-00
- 2019 WS-00
- 2020 WS-00
- 2021 WS-00
- 2022 WS-00
- Pending Project WS-00



3/31/2016  
Published by MIS Dept.

<b>2017-2022 Capital Improvement Plan</b> <b>Water &amp; Sanitary Sewer System Improvements</b>	
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<b>SS-01B</b>	<b>SCADA System Upgrade Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$893,410</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Regular replacement of servers and other SCADA hardware components (including radio system) scheduled to occur approximately every 5 years. Servers and other SCADA hardware/software components are scheduled for replacement in 2016. The communications (radio) system is scheduled to be replaced in 2020. Annual operating costs of \$60,000 are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. This project is on-going.</p>			

<b>SS-02B</b>	<b>Sanitary Sewer Rehabilitation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$1,500,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Rehabilitation of the existing sanitary sewer system in various areas of the City as determined through an in-house sanitary sewer system evaluation study that occurs every other year. Selective rehabilitation is planned to occur in the years following the sanitary sewer system evaluation study. This program is proposed to be funded at \$500,000 every other year and is on-going.</p>			

<b>SS-30</b>	<b>** Sanitary Sewer Easement Machine **</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$60,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Purchase of a self-propelled all-terrain easement cleaning machine with hose reel assembly to be used in conjunction with a high pressure hydraulic sewer cleaner. The purpose of this unit is to extend the use of the City's high-pressure sewer cleaner into normally inaccessible areas such as easements, hillsides, wooded area and/or behind/between homes and/or buildings. Increased level of service to the City's sanitary sewer system and it's customers by potentially reducing the number of sanitary sewer backups. Annual equipment maintenance costs of \$2,500 per year are anticipated. Purchase is planned for 2017.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Water & Sanitary Sewer System Improvements**

<b>WS-07</b>	<b>Booster Station #2: Replacement</b>		
<b>2016-2017</b>			
<b>Estimated City Cost:</b>	<b>\$1,500,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Booster Station #2 is an important component within the City's water system, as this booster station is responsible for providing customers located in sections 5, 6, &amp; 7 adequate water pressure. The existing station is approximately 25 years old and has been deteriorating over the last few years. This station consists of four pumps located in an underground vault. The pumps have been in need of repair continually over the last few years, and it is recommended to replace/update the entire station. The station will require less maintenance due to updated technology and the operating costs will be lower due to improved efficiency. Our fire fighting capabilities will be more dependable as well. The City is currently performing a feasibility study to determine the best design for the replacement of the water booster station. Construction is planned to begin in 2017.</p>			

<b>WS-08</b>	<b>** Fieldstone &amp; Ironstone: Water Main Replacement **</b>		
<b>2019-2019</b>			
<b>Estimated City Cost:</b>	<b>\$1,298,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Replace approximately 1,640' of 6" and 2,025' of 8" cast iron water main located along Fieldstone Drive and Ironstone Drive in Section 9 of the City. Cast iron pipe is no longer installed in our water system and 6" water main does not meet the minimum size requirement (8" pipe is the minimum public water main size per the MDEQ and Ten State Standards). The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2019.</p>			

<b>WS-09</b>	<b>** Flora Valley Court – River Bend Drive: Water Main Connection **</b>		
<b>2021-2021</b>			
<b>Estimated City Cost:</b>	<b>\$536,900</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Install approximately 1,300' of 8" water main between River Bend Drive and Flora Valley Court (Proposed Drive) in Section 15 to complete a water main loop and eliminate two long dead end mains. The City discourages dead end water mains that extend more than 600'. A looped system eliminates the need for flushing and creates a more redundant system. Impact on future operating costs minimal as this would be a small addition to our water main system, will save on the need for flushing dead end water mains. Construction is planned to begin in 2021.</p>			

**2017-2022 Capital Improvement Plan  
Water & Sanitary Sewer System Improvements**

<b>WS-15</b>	<b>** Michelson Road: Water Main Extension **</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$495,600</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Due to a failure of the City water main crossing M-59 just east of Winter Creek Road, the existing water main on the south side of M-59 is now an 1,800' dead end. This project will extend 8" ductile iron pipe or high density polyethylene (HDPE) pipe along Michelson Road approximately 1,200' to create a looped system. The City discourages dead end water mains that extend more than 600'. A looped system eliminates the need for flushing and creates a more redundant system. Impact on future operating costs minimal as this would be a small addition to our water main system, will save on the need for flushing dead end water mains. Construction is planned to begin in 2017.</p>			

<b>WS-16</b>	<b>** Bedford Square Apartments: Water Main Replacement **</b>		
<b>2020-2020</b>			
<b>Estimated City Cost:</b>	<b>\$1,695,660</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Replace approximately 2,040' of 6" and 2,750' of 8" cast iron water main located at the Bedford Square Apartment Complex in Section 3 of the City. Cast iron pipe is no longer installed in our water system and 6" water main does not meet the minimum size requirement (8" pipe is the minimum public water main size per the MDEQ and Ten State Standards). The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2020.</p>			

<b>WS-34</b>	<b>Glidewell Subdivision: Water Main Replacement</b>		
<b>2018-2019</b>			
<b>Estimated City Cost:</b>	<b>\$4,803,340</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Replace approximately 16,700' of 6" and 8" cast iron water main located in the Glidewell Subdivision in Section 28 of the City. Cast iron pipe is no longer installed in our water system and 6" water main does not meet the minimum size requirement (8" pipe is the minimum public water main size per the MDEQ and Ten State Standards). The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2019.</p>			

**2017-2022 Capital Improvement Plan  
Water & Sanitary Sewer System Improvements**

<b>WS-36</b>	<b>Section #33: Water Main Replacement</b>
<b>2016-2017</b>	
<b>Estimated City Cost:</b>	<b>\$6,432,500</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>Replace approximately 25,730' of 6" and 8" cast iron water main located in the Belle Cone Gardens, Sunnydale Gardens, and Homestead Acres Subdivisions in section 33 of the City. Cast iron pipe is no longer installed in our water system and 6" water main does not meet the minimum size requirement (8" pipe is the minimum public water main size per the MDEQ and Ten State Standards). The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2017.</p>	



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## **2017-2022 Capital Improvement Plan Storm Water Management**

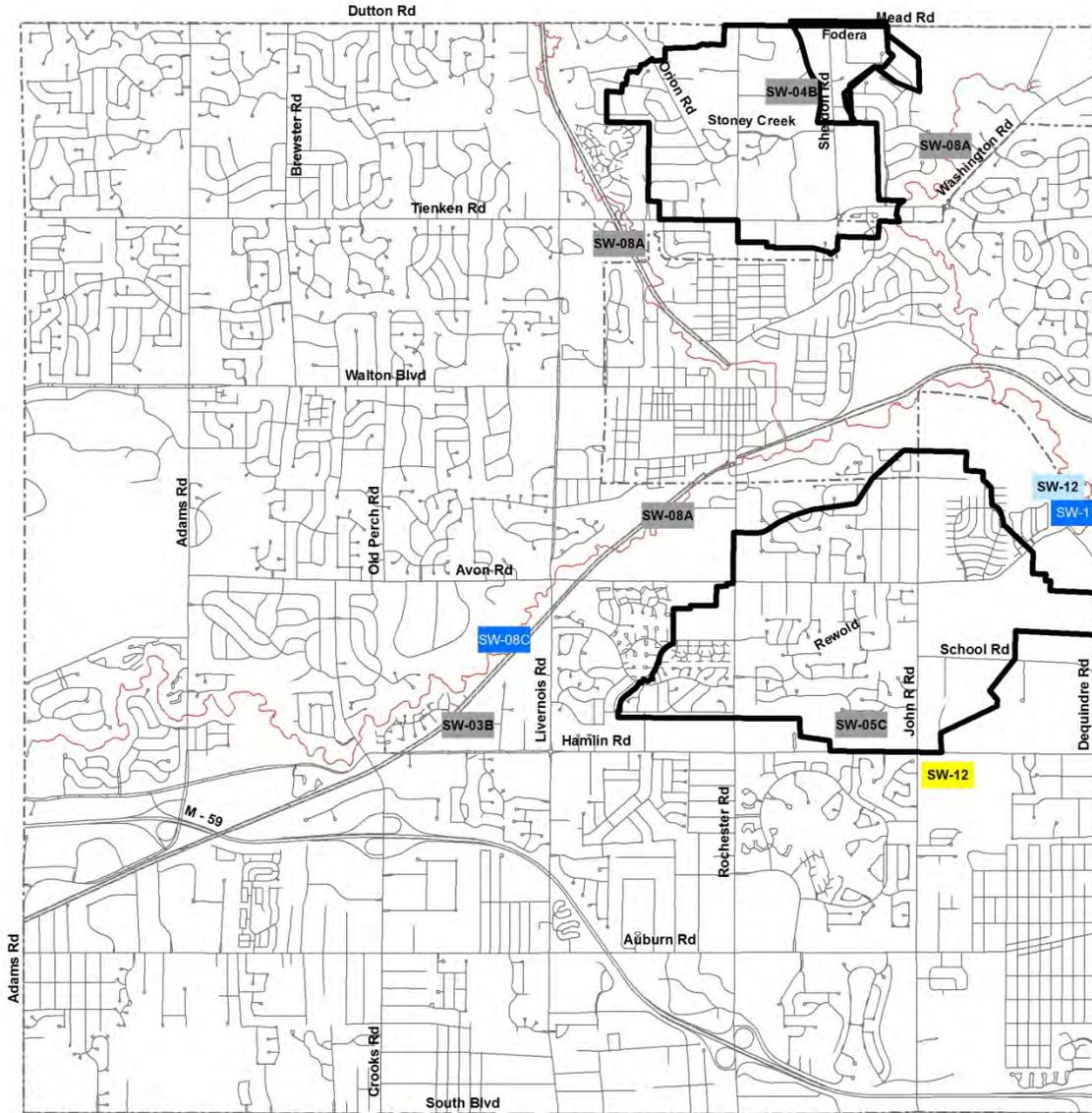
Prior to FY 2000, the primary focus of Storm Water Management in Rochester Hills was to develop a storm water system adequate to provide for storm water runoff in existing flood-prone areas. Much of the storm water management improvements made were financed and constructed through the use of Chapter 20 of the Drain Code. The improvements were made in parts of the City that were developed prior to the 1970s without drainage improvements. More recently it has become apparent that rain water from smaller, more common storms pass water through detention basins un-detained and are an untreated source of surface water pollution.

The mission of the Storm Water Management Plan is to provide the City with a method of managing storm water runoff in order to provide for adequate drainage in existing flood-prone areas. In addition, the plan addresses water quality standards, minimizes impacts associated with land improvements, and complies with the NPDES Phase II rule and the City's MDEQ Municipal Separate Storm Systems Permit (MS4). The main goal is to protect the health, safety, and welfare of the public and to better protect the surface waters and natural environment of the City of Rochester Hills and downstream communities.

To accomplish this mission it is necessary to:

- Develop a comprehensive storm water management policy that clearly defines the role of the City in storm water management issues, along with a mechanism for funding capital improvements and operations/maintenance of all drainage systems within the City
- Plan and implement the actions identified in the City's Storm Water Pollution Prevention Initiative (SWPPI) and when necessary, update the SWPPI with more cost effective and efficient actions to meet the goals and objectives of the storm water management plans
- Continue to participate and support the activities of the Storm Water Advisory Groups (SWAG) for the Red Run, Clinton Main, Stoney/Paint Creeks, Rouge Main 1-2 Sub-Watersheds, the Alliance of Rouge Communities (ARC), and the Clinton River Public Advisory Council (PAC)
- Cooperate with the Oakland County Water Resources Commission to reach compliance requirements of the Soil Erosion and Sedimentation Act
- Continue the planning, design, construction, and if necessary, right-of-way acquisition for improvements based on the projects listed in the CIP
- Continue to search for and pursue alternative funding sources to help accomplish our mission
- Work cooperatively with other cities, townships, and villages to efficiently and cost effectively comply with the mandates of the NPDES Phase II rule

# 2017-2022 Capital Improvement Plan Storm Water Management



**LEGEND**  
Projects that may begin construction in:

2017	SW-00
2018	SW-00
2019	SW-00
2020	SW-00
2021	SW-00
2022	SW-00
Pending Project	SW-00



4/4/2016  
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**2017-2022 Capital Improvement Plan  
Storm Water Management**

<b>SW-08C</b>	<b>Clinton River: Natural Channel Restoration</b>		
<b>Estimated Total Project:</b>	<b>\$840,000</b>	<b>2020-2022</b>	
<b>Estimated City Cost:</b>	<b>\$420,000</b>	<b>Estimated City Share:</b>	<b>50%</b>
<p>Significant bank erosion and channel widening exists along the Clinton River within the City property between Livernois Road and Crooks Road. In 2010, as part of Phase I (SW-08B), the City restored approximately 500' of the channel and stabilized the bank to protect the Clinton River Trail from collapse due to the bank's failure. The whole project area consists of approximately one mile of river through City property. It is proposed that the balance of the project (Phase II) be improved in phases as grants (up to a 50% match) become available. The City has applied for several grants and will continue to apply for additional grants to allow the City's match dollars to go further toward the goal of restoring the natural riverbank and flow characteristics of the river, and provide in-stream habitat, as well as adjacent riparian habitat within the City property. In addition to the reduction in erosion, the project will improve fish and insect habitat with the intent to create a self-sustaining fishery. Angling and paddling access to the river is also proposed to be added to protect the banks from access and use disturbance. Construction for Phase II is planned to begin in 2020.</p>			

<b>SW-11</b>	<b>Clinton River / Yates Park: Riverbank Stabilization</b>		
<b>Estimated Total Project:</b>	<b>\$400,000</b>	<b>2020-2022</b>	
<b>Estimated City Cost:</b>	<b>\$230,000</b>	<b>Estimated City Share:</b>	<b>50% / 100%</b>
<p>Angler traffic at Yates Park, the adjacent dam, and the Cider Mill area has caused bank erosion resulting in pool filling, over-widening, and lack of holding water for steelhead trout. This project seeks to utilize the latest science to design and then restore habitat and provide suitable access along the river at this trout fishery. Partnership with Clinton River Watershed Council for monitoring and public involvement will convey results. The design phase will create a master plan for future construction phases. The construction phases will be broken into smaller projects as those that can be performed with volunteers and those that would require heavy equipment/contractors. Once the planning phase is completed, construction projects will be more attractive for receiving grant support. The Great Lakes Restoration Initiative (GLRI) has been a source of grants for similar projects. Construction is planned to begin in 2020.</p>			

<b>SW-12</b>	<b>** Watertowns Storm Water Improvements **</b>		
<b>2018-2019</b>			
<b>Estimated City Cost:</b>	<b>\$150,500</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Incorporate recommendations of the Clinton River Watershed Council (CRWC) Watertowns Green Infrastructure Community Report to improve storm water runoff at Yates Park and Borden Park through the addition of parking lot swales, rain gardens, permeable pavers, and bio-retention cells. Improved water quality and controlled runoff of storm water would reduce the load on storm water infrastructure. Construction is planned to begin in 2018.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Storm Water Management**

SW-13	Storm Water Best Management Practices (BMP) Retrofitting		
<b>Estimated Total Project:</b>	<b>\$450,000</b>	<b>2020-2022</b>	
<b>Estimated City Cost:</b>	<b>\$225,000</b>	<b>Estimated City Share:</b>	<b>50%</b>
<p>Retrofit up to 10 city-owned properties with storm water Best Management Practices (BMP) which include methods, measures, or practices to prevent or reduce surface runoff and/or water pollution, including but not limited to, structural and non-structural storm water management practices and operational / maintenance procedures. Construction is planned to begin in 2020.</p>			

## **2017-2022 Capital Improvement Plan Pathway System**

In the mid 1970's the City of Rochester Hills (formerly Avon Township) initiated a pathway program that planned for approximately 125-miles of pathways along major roads. To date, approximately 94 miles of pathways have been constructed by private development and/or through public funding. Approximately 31 miles of pathways are needed to complete the pathway system. Additionally, approximately 4.5 miles of the Clinton River Trailway was surfaced utilizing recycled asphalt materials in 2015.

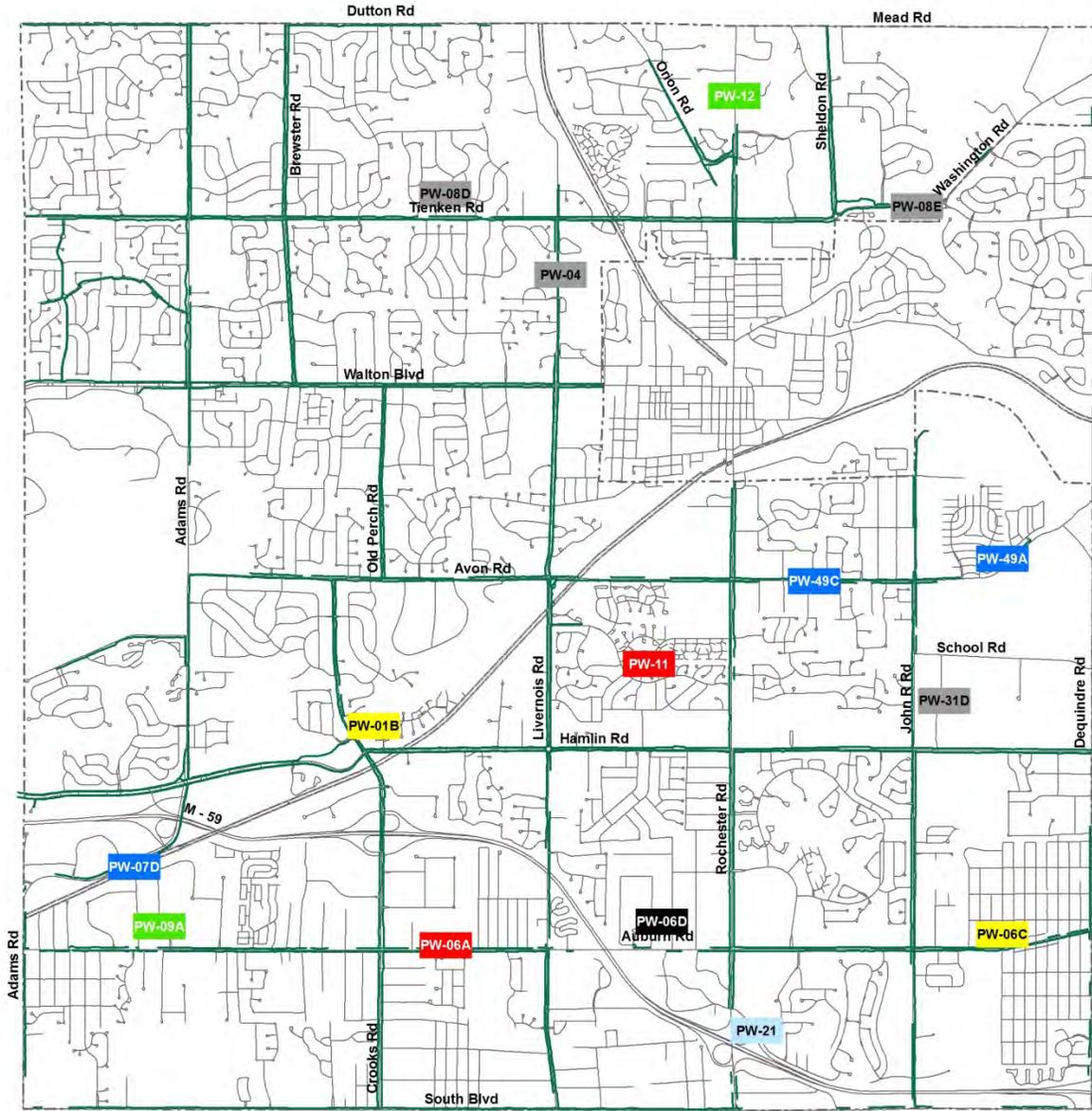
The scope of the pathway program has gone beyond the initial goal of just extending the system to both sides of all arterial roads in the City. In November of 2006, a twenty-year 0.1858 mill ballot proposal was approved by the residents of Rochester Hills to fund the continuation of new pathways, rehabilitation and maintenance of existing pathways, and to preserve the system for the public's use and enjoyment. The current pathway program has evolved through the continuation of the development of the City along with a heightened awareness of the value of a non-motorized transportation facility.

The pathway program is comprised of the following elements:

- Construction of new pathways to fulfill the goal of pathways along both sides of all arterial streets.
  - The pathway millage language allows for construction along school routes, connectivity for high volume pedestrian generator sites, and along the Clinton River Trailway.
- Rehabilitation of existing pathways to maintain an adequate level of service for pathway users.
  - Each year, more segments of the pathway system exceed their service life and require some form of rehabilitation. Additionally, any pathway upgrades or rehabilitations must now comply with current Americans with Disabilities Act (ADA) requirements.
- Maintenance of the existing pathway system to protect and extend the condition of the pathway segments to the end of their service life.
  - Beyond routine winter maintenance, other maintenance activities such as pothole patching, crack sealing, and vegetation control need to be done system-wide on a routine basis to preserve the integrity of the system.

Starting in FY 2008, the Pathway Ad-hoc Committee began reviewing and rating the pathway projects.

# 2017-2022 Capital Improvement Plan Pathway System



**LEGEND**

Projects that may begin construction in:

- |                 |                                                                                              |                     |
|-----------------|----------------------------------------------------------------------------------------------|---------------------|
| 2017            | <span style="background-color: #90EE90; border: 1px solid black; padding: 2px;">PW-00</span> | — Existing Pathways |
| 2018            | <span style="background-color: #ADD8E6; border: 1px solid black; padding: 2px;">PW-00</span> |                     |
| 2019            | <span style="background-color: #FFD700; border: 1px solid black; padding: 2px;">PW-00</span> |                     |
| 2020            | <span style="background-color: #0000FF; border: 1px solid black; padding: 2px;">PW-00</span> |                     |
| 2021            | <span style="background-color: #808080; border: 1px solid black; padding: 2px;">PW-00</span> |                     |
| 2022            | <span style="background-color: #FF0000; border: 1px solid black; padding: 2px;">PW-00</span> |                     |
| Pending Project | <span style="background-color: #808080; border: 1px solid black; padding: 2px;">PW-00</span> |                     |



5/4/2016  
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**2017-2022 Capital Improvement Plan  
Pathway System**

<b>PW-01A</b>	<b>Pathway System Rehabilitation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$1,500,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Rehabilitation of the existing City asphalt pathway system by performing bituminous overlays or large section repairs in order to maintain the integrity of the overall pathway system. In 2008, the City initiated a pedestrian bridge inspection program to be performed on a four (4) year cycle. Every fourth year following the inspection, the City may perform pedestrian bridge rehabilitation work as identified in the consultants' bridge inspection inventory and report. Operating costs of approximately \$3,400 per year for each 2.0-mile section are anticipated to decrease to \$2,950 per year due to this rehabilitation program. This program is proposed to be funded at \$250,000 per year and is on-going.</p>			

<b>PW-01B</b>	<b>** Crooks Road Pathway Gap [Clinton River – Bonnie Brae Street] **</b>		
<b>2018-2019</b>			
<b>Estimated City Cost:</b>	<b>\$155,130</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 770' of 8' wide asphalt pathway along the east side of Crooks Road from the Clinton River to Bonnie Brae Street to fill in the existing pathway gap. Constructing this portion of pathway will connect the gap in the pathway along Crooks Road from Bonnie Brae Street to the Clinton River. Connectivity of the pathway system provides an increased level of service to pedestrians, especially considering the Clinton River Trail access is just south of this area. Operating costs of approximately \$200 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2019.</p>			

<b>PW-06A</b>	<b>Auburn Road Pathway Gaps [Alexander Avenue – Livernois Road]</b>		
<b>2021-2022</b>			
<b>Estimated City Cost:</b>	<b>\$239,500</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 1,000' of 8' wide asphalt pathway along the north side of Auburn Road between Alexander Avenue and Livernois Road to fill in the pathway gaps. Operating costs of approximately \$280 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2022.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Pathway System**

<b>PW-06C</b>	<b>Auburn Road Pathway Gaps [John R Road – Dequindre Road]</b>		
<b>2018-2019</b>			
<b>Estimated City Cost:</b>	<b>\$221,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construct 8' wide asphalt pathway to fill in gaps along the north side of Auburn Road between John R Road and Dequindre Road. Three locations include: NW corner of Auburn Road and Dequindre Road (approx. 70'); Fronting 1825 and 1845 Auburn Road (approx. 260'); Between Emmons Avenue and Eastern Avenue (approx. 950' if proposed pathway is constructed between the existing buildings and Auburn or 1,250-feet if the pathway is directed north of the buildings along the existing alley). This project should occur after the Auburn Road Corridor Study plan is completed. The corridor study is currently being overseen by the Planning Department. Operating costs of approximately \$800 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2019.</p>			

<b>PW-06D</b>	<b>Auburn Road Pathway Gaps [Walbridge Road – Hickory Lawn Road]</b>		
<b>2020-2021</b>			
<b>Estimated City Cost:</b>	<b>\$498,950</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 2,100' of 8' wide asphalt pathway along the north side of Auburn Road between Walbridge Road and 500' east of Hickory Lawn Road to fill in the pathway gaps. Operating costs of approximately \$590 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2021.</p>			

<b>PW-07D</b>	<b>Adams Road @ Clinton River Trailway: Pathway Crossing</b>		
<b>2019-2020</b>			
<b>Estimated City Cost:</b>	<b>\$180,330</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of a mid-block pedestrian crossing at Adams Road near Leach Drive and Marketplace Circle to connect the Clinton River Trailway to the nearby shopping center. The proposed crossing would incorporate the use of eight (8) solar powered push-button rapid flasher beacons (RFBs), four (4) in each direction. The project would also include the installation of two (2) steel poles and mast arms with overhead signage at the crossing. Approximately 500' of asphalt and concrete pathway would be required to be extended in order to provide connection. Note: The project is located within the Road Commission for Oakland (RCOC) county's right-of-way and will require prior approval by the RCOC demonstrating that pedestrian/bicycle volume warrants are met. Operating costs of approximately \$1,000 per year are anticipated due to routine and winter maintenance requirements. Construction is planned to begin in 2020.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Pathway System**

<b>PW-09A</b>	<b>Technology Drive Pathway [Auburn Road – 2,250’ North]</b>
<b>2016-2017</b>	
<b>Estimated City Cost:</b>	<b>\$418,260</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 2,250' of 8' wide asphalt pathway along the west side of Technology Drive between Auburn Road and the pathway connection to Adams Road. Operating costs of approximately \$540 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2017.</p>	

<b>PW-11</b>	<b>** Drexelgate Pathway Gap [Wexford Way – Rochester Road]</b>
<b>2021-2022</b>	
<b>Estimated City Cost:</b>	<b>\$1,054,250</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>Construct approximately 5,100' of eight (8) foot wide pathway along the north side of Drexelgate Parkway between Wexford Way and Rochester Road. Contributes to the connectivity of the City's pathway network and to the goal of having pathway constructed along all major section line roads. Provides additional segments of pathway for residents and pedestrians to utilize. Operating costs of approximately \$3,000 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2022.</p>	

<b>PW-12</b>	<b>** Rochester Road Pathway Gaps [Orion Road &amp; Wimberly Drive] **</b>
<b>2016-2017</b>	
<b>Estimated City Cost:</b>	<b>\$186,250</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>The project consists of constructing 8' wide pathway at two (2) locations along the east side of Rochester Road as follows: (1.) South of the Orion Road intersection, fronting the undeveloped parcel across from the Beaumont Medical Center, at approximately 280' in length. (2.) From Wimberly Drive south approximately 700' to the proposed Rochester Enclaves development. This project would connect the pathway gaps on the east side of Rochester Road between Wimberly Drive and Tienken Road, providing an improved level of service to access the several different "shopping plazas" at the corners of Rochester Road and Tienken Road. Also, improved pedestrian access to Hart Middle School and Stoney Creek High School. Operating costs of approximately \$3,000 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2017.</p>	

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Pathway System**

<b>PW-21</b>	<b>East Nawakwa Pathway [Rochester Road – Joshua Drive]</b>
<b>2017-2018</b>	
<b>Estimated City Cost:</b>	<b>\$431,450</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 2,100' of 8' wide asphalt pathway along the north side of East Nawakwa Road between Rochester Road and Joshua Drive. Operating costs of approximately \$590 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2018.</p>	

<b>PW-49A</b>	<b>Avon Road Pathway [LeGrande Boulevard – Cider Mill Boulevard]</b>
<b>2019-2020</b>	
<b>Estimated City Cost:</b>	<b>\$311,750</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 1,500' of 8' wide asphalt pathway along the north side of Avon Road between Le Grande Boulevard and Cider Mill Boulevard. Operating costs of approximately \$420 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2020.</p>	

<b>PW-49C</b>	<b>Avon Road Pathway [Rainier Avenue – Bembridge Drive]</b>
<b>2019-2020</b>	
<b>Estimated City Cost:</b>	<b>\$703,400</b>
<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of approximately 3,200' of 8' wide asphalt pathway along the south side of Avon Road between Rainier Avenue and Bembridge Drive. Operating costs of approximately \$890 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2020.</p>	

\*\* = New project to the 2017-2022 CIP

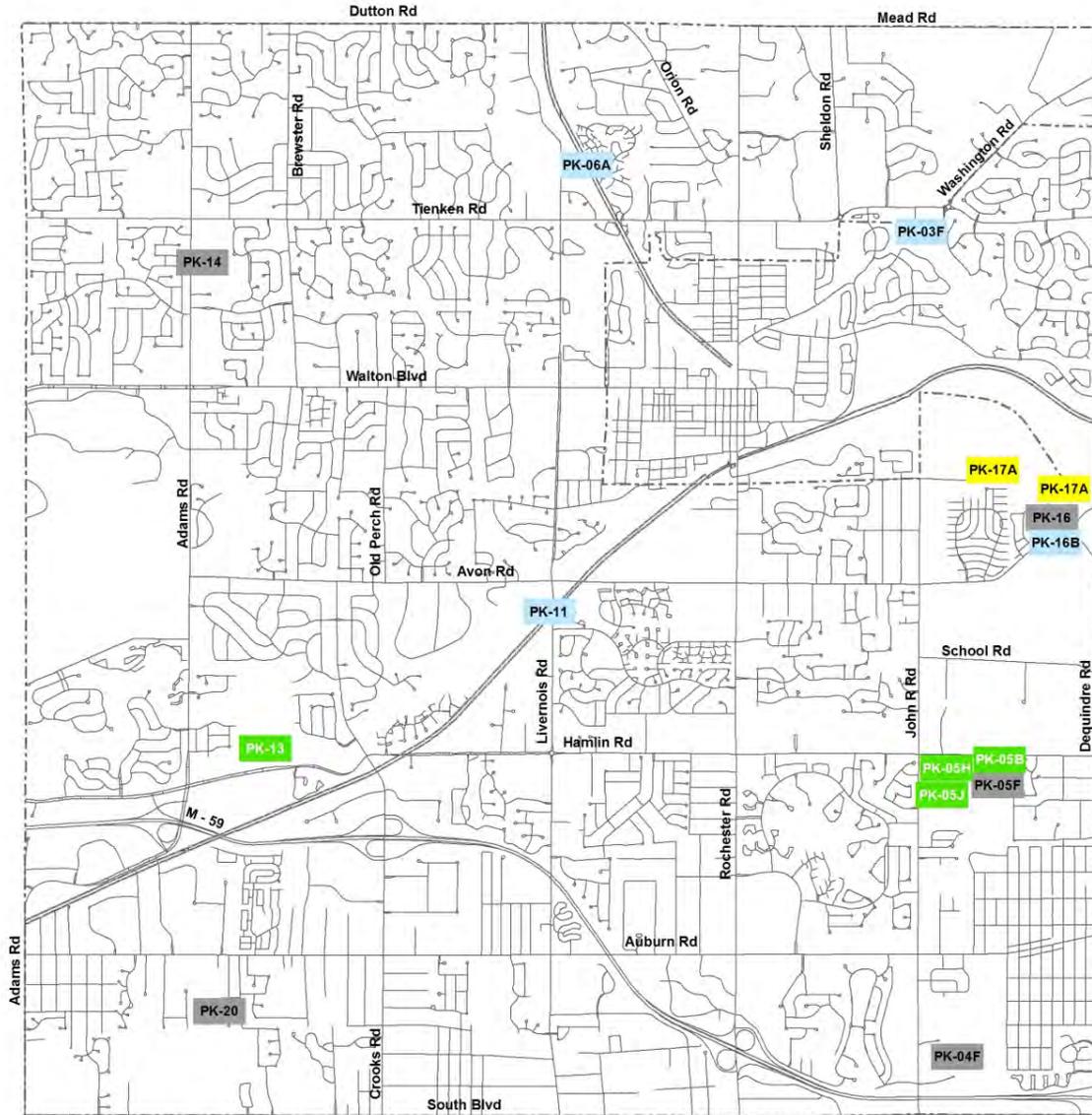
## **2017-2022 Capital Improvement Plan Parks and Recreation**

The City of Rochester Hills' Parks provide active and passive recreational opportunities for its residents. The City operates 2 regional trails and 14 parks that cover over 1,100 acres and vary in purpose, size, and development.

Every five years the Parks and Recreation Master Plan is updated. Once the Plan is adopted by the Planning Commission it is incorporated into the City's Master Land Use Plan. The Parks and Recreation Master Plan, which was last updated in 2016, provides an overview of regional recreational opportunities, identifies long and short-term objectives for park development, and meets criteria for Michigan Department of Natural Resources (MDNR) grant eligibility.

Park development and operational costs are supported primarily by the City's General Fund and Capital Improvement Fund and are supplemented by user fees, charges, grants, and donations.

# 2017-2022 Capital Improvement Plan Parks and Recreation



**LEGEND**

Projects that may begin construction in:

2017	PK-00
2018	PK-00
2019	PK-00
2020	PK-00
2021	PK-00
2022	PK-00
Pending Project	PK-00



3/29/2016  
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**2017-2022 Capital Improvement Plan  
Parks and Recreation**

<b>PK-03F</b>	<b>Van Hoosen Museum: Equipment Barn Replacement</b>		
<b>Estimated Total Project:</b>	<b>\$500,000</b>	<b>2018-2018</b>	
<b>Estimated City Cost:</b>	<b>\$375,000</b>	<b>Estimated City Share:</b>	<b>75%</b>
<p>The Equipment Barn was once an integral part of the Van Hoosen Farm operation. Built in 1912, it was torn down in 1999 due to its deteriorated condition. The Museum has a full set of photographs and drawings of this facility and would like to rebuild it to continue restoring the Van Hoosen Farm facility, while creating space for storage and maintenance activities. The Equipment Barn will help the Museum more accurately recreate the historic farm setting at the Van Hoosen Farm. The building will be located on the exact footprint of the original building and would replicate the original building in nearly all details. At one time, the Van Hoosen Farm was a world class dairy operation and the equipment barn will allow us to create a broader interpretive story, create an on-site maintenance space, and bring valuable items and equipment indoors during the winter to avoid deterioration from weather and vandalism. Construction is planned to begin in 2018.</p>			

<b>PK-05B</b>	<b>Borden Park: Roller Hockey Rink Board &amp; Tile Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$194,810</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>There are two (2) roller hockey rinks located at Borden Park. The dasher boards are molded plastic and the skating surface is made up of plastic tiles. Due to age and damage from use, the boards and tiles are in need of replacement every 6-8 years. Operating costs are anticipated to decrease due to newer materials which should not require as much maintenance for the first few years. It is planned to upgrade Roller Hockey Rink #2 in 2017. This program is on-going.</p>			

<b>PK-05H</b>	<b>Borden Park: Office Relocation</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$529,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Relocation of the Borden Office and its operations to a more central location in the park; in order to provide better safety, security, and customer service. While doing administrative/reservation work at the current location it is not possible to observe and/or quickly react to the needs of activities in the park. The existing building used as an office is an old residential house at the eastern boundary of Borden Park, initially purchased along with the Borden Park property and converted to office use. The existing building is inefficient for office use, is poorly insulated, lacks adequate electrical power, and requires significant improvements to the heating system, windows, doors and floors. The building also has ADA compliance issues. Construction is planned to begin in 2017.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Parks and Recreation**

<b>PK-05J</b>	<b>Borden Park: Maintenance Yard</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$552,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construction of a secure fenced storage yard for the park maintenance operations housed at Borden Park. Development is to include a garage to house Forestry Division equipment as well as an outdoor storage area for materials such as infield mix, topsoil, and aggregates, and a fuel storage tank. Operating costs of approximately \$1,000 per year are anticipated for this facility. Construction is planned to begin in 2017.</p>			

<b>PK-06A</b>	<b>Paint Creek Trailway: Resurfacing Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$50,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>The Paint Creek Trail is surfaced with limestone fines which require major maintenance approximately every fifteen (15) years. As a member of the Paint Creek Trailway Commission, the City is responsible for the maintenance of its portion of the trail located within the City. The project will be coordinated by the Paint Creek Trailway Commission staff. No changes to operating costs are anticipated. Construction is planned to begin in 2018.</p>			

<b>PK-11</b>	<b>Clinton River Access: Parking Lot &amp; Canoe/Kayak Launch</b>		
<b>Estimated Total Project:</b>	<b>\$300,000</b>	<b>2018-2018</b>	
<b>Estimated City Cost:</b>	<b>\$150,000</b>	<b>Estimated City Share:</b>	<b>50%</b>
<p>Construction of a small parking area (approximately 20 spaces), an accessible pathway, and an accessible canoe/kayak launch into the Clinton River. Cooperation with the Clinton River Watershed Council, the City of Rochester and/or the City of Auburn Hills could provide for additional river access points in their cities and possible grant opportunities. Operating costs of approximately \$1,000 per year are anticipated for this facility. Construction is planned to begin in 2018.</p>			

<b>PK-13</b>	<b>Riverbend Park: Development</b>		
<b>Estimated Total Project:</b>	<b>\$3,352,220</b>	<b>2013-2020</b>	
<b>Estimated City Cost:</b>	<b>\$1,757,220</b>	<b>Estimated City Share:</b>	<b>Approx. 50%</b>
<p>Development of Riverbend Park including parking lot, entrance road, nature and fitness trails, improvements to the wetlands, and invasive vegetation control. Future development may include fitness stations, restrooms, playgrounds, water features, pavilion, sensory garden, support structures, and educational facilities. Private donations and grant funding will be pursued to offset overall project costs. Construction began in 2014.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Parks and Recreation**

<b>PK-16B</b>	<b>** Yates Park: Clinton River Access Improvements **</b>		
<b>2018-2018</b>			
<b>Estimated City Cost:</b>	<b>\$141,600</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Construct an accessible path and kayak/canoe launch at Yates Park and a universally accessible portage around the Cider Mill Dam. Yates Park is heavily used for kayak and canoe launching into the Clinton River. The path and launch would provide ADA compliant access to the river as well as to protect the stream bank. The dam for Yates Cider Mill is a dangerous impediment for canoes and kayaks in the Clinton River as the dam separates the river as it runs from Auburn Hills to Lake St. Clair. This project would provide a safe, accessible portage around the dam with a rail system so that canoe/kayakers would not have to get out of their boats. Operating costs of approximately \$1,000 per year are anticipated for this facility. Construction is planned to begin in 2018.</p>			

<b>PK-17A</b>	<b>Playground Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$577,980</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled replacement and/or upgrades of existing playground equipment at City Parks to comply with Federal and State Laws by adding surfacing and equipment, or replacing existing equipment. Design and/or surfacing needs to meet ADA/CPSC/ASTM standards and guidelines. Playground Equipment is scheduled to be replaced after 20-years. It is planned to upgrade the playground equipment at Bloomer and Yates Parks in 2019, Wabash Park in 2021, and Bloomer Park in 2022. Operating costs of approximately \$10,000 per year are anticipated to remain consistent with the new equipment. This program is on-going.</p>			

\*\* = New project to the 2017-2022 CIP



innovative *by* nature

## **2017-2022 Capital Improvement Plan City-Owned Facilities**

The City of Rochester Hills owns 34 buildings totaling over 288,000 square feet of space with a replacement cost of over \$55.8 million. These buildings support the ability of departments to provide services to the public. The rehabilitation, renovation, and/or replacement of the City's facilities is inevitable. Changes in services required by residents, changes in local government regulations, Federal and State mandated programs for health, safety or building access, changes in technology, as well as securing the investment of our taxpayers, requires systematic improvements and varying degrees of maintenance. Improvements are planned to address these issues as well as indoor air quality, ergonomics, energy conservation, and customer service.

The Capital Improvement Plan addresses the on-going deterioration of City-owned facilities caused by age and use. The Capital Reinvestment Program, as a component of the Capital Improvement Plan, involves a number of rehabilitation projects, which contain strategies to increase the useful life-span of individual facilities while reducing their maintenance and operational costs. A Facility Condition Index, a measure of repair costs as a percentage of replacement cost, determines the course of action to rehabilitate a facility; redevelop the site; or evaluate the loss of the facility to the community.

# 2017-2022 Capital Improvement Plan City-Owned Facilities



**LEGEND**

Projects that may begin construction in:

2017	FA-00
2018	FA-00
2019	FA-00
2020	FA-00
2021	FA-00
2022	FA-00
Pending Project	FA-00



3/29/2016  
Published by MIS Dept.

**2017-2022 Capital Improvement Plan  
City-Owned Facilities**

<b>FA-02K</b>	<b>** Fire Station #1: Rear Access Drive Reconstruction **</b>		
<b>2017-2017</b>			
<b>Estimated City Cost:</b>	<b>\$440,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>The rear access drive located on the western portion of Fire Station #1 property which leads out to Rochester Industrial Drive is extremely deteriorated and is currently impassable for fire apparatus attempting to travel out Rochester Industrial Drive towards Hamlin Road. This project will allow quicker access for emergency vehicle towards the area of Hamlin Road and Crooks Road as well as a direct access to the rear of the station, making it easier and safer to pull fire apparatus back into the station bays. This project would remove the existing asphalt pavement and reconstruct with a new surface. It is anticipated to coordinate the timing of this reconstruction along with (MR-11) Rochester Industrial Drive Reconstruction first in order to provide a temporary entrance/exit for fire apparatus during the rehabilitation of (MR-08) Horizon Court. Construction is planned to begin in 2017.</p>			

<b>FA-08B</b>	<b>Interchange Technology Park: Site Preparation</b>		
<b>2020-2021</b>			
<b>Estimated City Cost:</b>	<b>\$751,000</b>	<b>Estimated LDFA Share:</b>	<b>100%</b>
<p>Potentially provide for a public road/boulevard to service the business park; water, sewer, and fiber optics extensions along the road; construction of a landscaped entrance and monument sign; as well as a provision for site fill to promote building development; soil testing; and the design and construction of a storm water detention pond. Operating costs of \$1,000 per year are anticipated due to the infrastructure development. Construction is planned to begin in 2020.</p>			

<b>FA-09</b>	<b>IT Infrastructure Capacity Funding</b>		
<b>2020-2022</b>			
<b>Estimated City Cost:</b>	<b>\$100,000</b>	<b>Estimated LDFA Share:</b>	<b>100%</b>
<p>One of the goals of the State of Michigan's SmartZone program is to provide local communities, through an LDFA, with the capability to improve Information Technology (IT) Infrastructure within Certified Technology Parks. Capacity improvements would be on a case-by-case basis, often associated with the needs of specific companies. Funding for these projects must occur in public right-of-ways or in a deeded easement only. It is not known when these individual requests will arise, and the improvement must be constructed within a short period of time. A pool of funding set aside from the LDFA's TIF capture would allow for a quick response, and improve the competitiveness of the City's technology parks for the attraction and/or retention of companies. There are no operating cost impacts associated with these improvements since the LDFA will not own the infrastructure, but rather would only pay the installation costs.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
City-Owned Facilities**

<b>FA-11</b>	<b>ADA Compliance Implementation Program</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$240,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>In 2010, the City contracted an outside Compliance Specialist to perform ADA (Americans with Disabilities Act) inspections of all City Facilities. A transition plan was completed identifying a full description of work areas needing ADA adjustments in order to comply with the State and Federal guidelines. This project will involve coordination with the Facilities Division, Department of Public Services, and Parks Department to coordinate similar projects for efficiency and cost savings. Examples of ADA compliance improvements include: concrete replacement, inside and outside signage upgrades, handrail installation/upgrades, wrapping of plumbing fixtures, handicap push pads on doors, accessible pathways, trailways, shelters, picnic tables, grills, boat launches, beaches, shower areas, restrooms, etc... This program is proposed to be funded at \$40,000 per year and is on-going.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Professional Services**

Professional services are solicited when technical expertise or knowledge of a specialized field is critical to the performance of a service that cannot be efficiently performed in-house by City staff. Professional services involve extended analysis, discretion, and independent judgment and an advanced or specialized type of knowledge, expertise, or training which is customarily acquired either by a prolonged course of study or equivalent level of experience in the field. These services include, but are not limited to: attorneys, engineers, planning consultants, architects, and other similar professionals.

<b>PS-07</b>	<b>Master Land Use Plan Update Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$75,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Contract with a planning consultant to prepare scheduled updates to the City's Master Land Use Plan (MLUP). The MLUP is the policy tool used as a guide in the physical development of the community. By State Law (PA 33 of 2008) the Master Land Use Plan must be reviewed and if necessary updated every 5-years. The current MLUP was adopted in 2007 and the required 5-year review was completed in 2012. That review resulted in minor updates which were completed in-house by City Staff. The next update is planned to begin in 2017.</p>			

<b>PS-08</b>	<b>Master Thoroughfare Plan Update Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$150,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>The Master Thoroughfare Plan is an important coordinating document that helps guide regional transportation planning by providing adjacent and regional communities with an understanding of our transportation vision, and vice versa. The current Master Thoroughfare Plan was adopted in 2008 and it is anticipated that priority projects recommended therein will be completed in the next few years. At that point, it will be time to prepare a new or updated Master Thoroughfare Plan to guide future City transportation improvements. It is anticipated that the new plan will incorporate Complete Streets concepts as required by State Law, in addition to other motorized and non-motorized transportation planning for infrastructure and right of way needs. The next update is planned to begin in 2018.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Professional Services**

**PS-15B**

**Green Space Stewardship: Implementation**

**2017-2022**

**Estimated City Cost:      \$1,350,000                      Estimated City Share:      100%**

The City has adopted the “Rochester Hills Natural Features Stewardship Program Long Term Management Plan” as the guide for setting priorities and timelines for the management of Green Space properties, City open space, and significant natural resources such as the Clinton River and other named watercourses. Elements of the work will include: Invasive species removal, natural features restoration, and educational programs to promote stewardship. We will continue to work with a consultant and the Green Space Advisory Board (GSAB) to review the management plan and make budget recommendations. This stewardship program is proposed to be funded at \$225,000 per year and is on-going.

**2017-2022 Capital Improvement Plan  
Internal Service Support Programs**

Internal Service Support Programs play a pivotal role in the City’s ability to deliver services to its residents. These programs involve a wide range of support services for functions that interact directly with residents. Individual components of support programs are not normally considered to be capital expenditures; however, the Capital Improvement Plan Policy includes purchases of major equipment (i.e., items with a cost individually or in total of \$25,000 or more and will be coded to a capital asset account).

Internal Service Support Program projects are funded internally by user charges to City departments or directly by millage levy. Projects in this category directly and/or indirectly affect a broad range of services including Management Information Systems (MIS); Geographic Information Systems (GIS); Fleet Equipment and Vehicles; Fire Equipment, Vehicles and Apparatus; as well as Communication Systems.

<b>IS-02B</b>	<b>City Website Update Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$35,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled improvements in functionality and design to the City's current website configuration. Improvements may require changes to the current content management system as well as Internet hosting provider. Upgrades to the City's website are anticipated to occur every 5 years. Operating costs are anticipated to remain consistent as current website processes are already in place. The next website upgrade is planned to begin in 2017. This update schedule is on-going.</p>			

<b>IS-04D</b>	<b>SCBA Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$956,830</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled replacement of Self Contained Breathing Apparatus (SCBA) gear for fire suppression personnel. SCBA is an essential part of a firefighter's protective equipment as it allows a firefighter to enter smoke filled, toxic areas while providing clean air to breathe. SCBA gear is scheduled to be replaced every 8-10 years and air compression equipment every 16-20 years. The Fire Department looks to grants from the Department of Homeland Security as well as other possible grants to cover all or a percentage of the costs associated with replacement. The next replacement is planned to begin in 2022. This replacement program is on-going.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Internal Service Support Programs**

<b>IS-04G</b>	<b>Heart Monitor Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$129,450</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled replacement of Heart Monitors. A Heart ECG Monitor allows paramedics to monitor possible life threatening heart rhythms, provide defibrillation capabilities, along with vital sign monitoring. This piece of equipment is used on approximately 60-70% of all patients treated. Heart monitors are anticipated to be replaced every 5-7 years. Operating costs are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. The next replacement is planned to begin in 2022. This replacement program is on-going.</p>			

<b>IS-05</b>	<b>Citywide Fleet Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$7,305,280</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled replacement of various Fleet Department vehicles and equipment. Operating costs (fuel, maintenance, supplies) of approximately \$600,000 per year for the entire City Fleet are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. A detailed schedule is provided on pages 73-77 in the Appendix Section. This replacement program is on-going.</p>			

<b>IS-08</b>	<b>Fire Vehicle &amp; Apparatus Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$3,173,530</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled replacement of various Fire Department vehicles and apparatus. Operating costs (fuel, maintenance, supplies) of approximately \$100,000 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. A detailed schedule is provided on page 78 in the Appendix Section. This replacement program is on-going.</p>			

\*\* = New project to the 2017-2022 CIP

**2017-2022 Capital Improvement Plan  
Internal Service Support Programs**

<b>IS-10B</b>	<b>Computer Network Upgrade Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$630,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Regularly scheduled network computer system upgrade(s). Items to be evaluated for periodic replacement include servers, storage, firewalls, switches, and software such as operating systems, back-up, anti-virus, and network management. Operating costs of approximately \$9,000 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep the network operational. This update schedule is on-going.</p>			

<b>IS-10D</b>	<b>Office Software Suite Upgrade Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$134,010</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled upgrade of existing office productivity software suite to current version. Using the product after support ends would pose a significant security risk. The next replacement is planned to begin in 2022. This replacement program is on-going.</p>			

<b>IS-18</b>	<b>Election Equipment Replacement Schedule</b>		
<b>2017-2022</b>			
<b>Estimated City Cost:</b>	<b>\$390,000</b>	<b>Estimated City Share:</b>	<b>100%</b>
<p>Scheduled replacement of voting equipment for City administered elections. In FY 2005, the City received election equipment from the State of MI through the Federal Help America Vote Act (HAVA) grant program at a discounted rate. The City currently has 38 voting tabulators, 27 Auto mark Handicap Accessible tabulators, as well as related software for programming the equipment. Operating costs of approximately \$3,500 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. The next replacement and/or upgrade of election equipment is planned for 2017. This replacement program is on-going.</p>			

\*\* = New project to the 2017-2022 CIP



innovative *by* nature

**2017-2022 Capital Improvement Plan  
Projects Pending**

Projects pending are projects that may be deemed as potentially worthy and viable; however they are not included as part of the active 2017-2022 Capital Improvement Plan. Projects pending may require additional information, studies, research, review, or City Council policies to be in place before more accurate timelines and/or funding levels can be identified. It is possible that these projects may not fall under the City’s jurisdiction and will require other agencies to move the project forward, while some projects may not fall within the 2017-2022 timeframe.

<b>FA-04B</b>	<b>DPS Facility: Alternative Energy</b>
<p><i>Provide an alternative electrical energy source for the Department of Public Services (DPS) Facility. Alternative sources could include, but are not limited to, solar and wind power. Annual operating costs for electricity at the DPS Facility are anticipated to be reduced by a minimum of 75% and/or possibly eliminated. The City intends to seek out grant funding sources to be used towards project implementation. If grant funding is secured for this project which will bring the Return on Investment (ROI) within acceptable levels.</i></p>	

<b>MR-01F</b>	<b>Crooks Boulevard: Street Lighting</b>
<p><i>Installation of street lighting along Crooks Boulevard between South Boulevard and the M-59 Interchange to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately \$15,000 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.</i></p>	

<b>MR-02E</b>	<b>Hamlin Boulevard: Street Lighting</b>
<p><i>Installation of street lighting along Hamlin Boulevard between the West City Limit and Livernois Road to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately \$28,000 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.</i></p>	

<b>MR-04B</b>	<b>Walton Boulevard: Street Lighting</b>
<p><i>Installation of street lighting along Walton Boulevard between the West City Limit and just east of Adams Road to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately \$10,800 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.</i></p>	

**2017-2022 Capital Improvement Plan  
Projects Pending**

**MR-05D**

**Adams Boulevard: Street Lighting**

*Installation of street lighting along Adams Boulevard between Marketplace Circle and just north of Hamlin Boulevard to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately \$10,400 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.*

**MR-05G**

**Adams Road @ Tienken Road: Intersection Improvements**

*Extension of the northbound Adams Road right-turn lane and the southbound Adams Road right-turn lane to increase storage capacity. Work also involves upgrading the existing traffic signal from a "span-wire" to a "box-span" configuration. This improvement is recommended based upon the City's Master Thoroughfare Plan Update and a previous joint traffic study between the cities of Rochester Hills and Auburn Hills. This project may assist with minimizing southbound Adams Road cut-through traffic through the Judson Park Subdivision, which has been brought forth to the Advisory Traffic and Safety Board on several occasions. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.*

**MR-13B**

**Dequindre Road Reconstruction (Hamlin Road - Auburn Road)**

*Reconstruction of Dequindre Road as a 5-lane road between Auburn Road and Hamlin Road. This improvement is part of a larger Road Commission of Oakland County (RCOC) project to widen Dequindre Road as a 5-lane road southbound to Long Lake Road in the City of Troy. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.*

**MR-13C**

**Dequindre Road Realignment (South of Avon – 23 Mile Road)**

*Construction of Dequindre Road on a new alignment behind the Yates Cider Mill to eliminate the Dequindre Road offset at Avon Road. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.*

**2017-2022 Capital Improvement Plan  
Projects Pending**

**MR-15A**

**Adams Road @ Butler Road: Traffic Signal & Road Improvement**

*Installation of a new traffic signal at the Adams Road @ Butler Road intersection. Corresponding center left-turn lane improvements are required to facilitate the proposed traffic signal. Pathway ramps meeting ADA compliance will also be installed, including push button and countdown signals. The City has received confirmation from RCOC that the intersection meets signal warrants #2 for installation with the condition that the University Presbyterian Church's (UPC) existing drive be removed and relocated to align with Butler Road and that UPC perform on-site parking lot improvements at their cost. The traffic signal installation is also conditioned upon restricting the turning movements in and out of the UPC's southerly drive and the existing drive for the Brookfield Academy to the north. The City and RCOC would share the costs for the installation of the traffic signal and construction of road improvements. The future operations and maintenance costs of the traffic signal would be shared by the City (25%), RCOC (50%), and the University Presbyterian Church (25%). Operating costs of approximately \$6,000 per year are anticipated due to the widened roadway section and the operation of an additional traffic signal.*

**MR-18**

**Dutton Road Paving (Rainbow Drive – Arthurs Way)**

*Pave and improve approximately 4,200' of Dutton Road between approximately 3,000' west of Livernois Road (just east of Rainbow Drive) and the existing Dutton Road pavement just east of Livernois Road (approximately 1,200'). Proposed road improvements include placing concrete curb & gutter along both sides of Dutton Road to thereby eliminate extensive erosion of existing open ditching and abrupt side embankments adjacent to tree areas. Paving this segment of Dutton Road as a 2-lane roadway would improve road safety by providing a uniform paved road surface for steep road grade and improve safety for Dutton Road at its intersections: Tall Oaks Boulevard, Acorn Glen, Livernois Road, and the Paint Creek Trailway. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.*

**MR-23C**

**Meadowfield Drive @ Yorktowne Drive: Traffic Signal Installation**

*Installation of a traffic signal along Rochester Road at its intersection with Meadowfield Drive and Yorktowne Drive in order to provide for easier turning movements both in and out of Meadowfield Drive and Yorktowne Drive. The City of Rochester Hills is currently awaiting final warrant study results from MDOT to move forward with this project. Operating costs of approximately \$6,000 per year are anticipated due to the operation of an additional traffic signal.*

**MR-26D**

**Livernois Boulevard: Street Lighting**

*Installation of street lighting along Livernois Boulevard between Avon Road and just north of Walton Boulevard to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately \$12,500 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.*

**2017-2022 Capital Improvement Plan  
Projects Pending**

**MR-42B**

**Livernois Road @ M-59 Highway: Bridge Expansion**

*Participate in a cost share agreement for expanding the Livernois Road @ M-59 Highway Bridge. The City and RCOC may have the option to construct a complete expansion to the 5-lane bridge, or construct and have abutments placed. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.*

**MR-57**

**Drexelgate/Eddington @ Rochester Road: Traffic Signal**

*Installation of a traffic signal at the intersection of Rochester Road, Drexelgate Parkway, and the potentially realigned Eddington Boulevard. A traffic signal has been requested for a number of years at this location and will serve the public's interest in safety. Many subdivision residents within the area use Drexelgate Parkway and Eddington Boulevard. The proposed traffic signal will improve the ingress and egress for vehicles entering Rochester Road. Due to the large traffic volumes along Rochester Road, acceptable gaps to make left turns are infrequent during the day. A traffic signal would also provide a signalized crossing for pedestrians and bicyclists to utilize. The traffic signal design would incorporate a "box-span" design. The schedule is dependent upon meeting traffic signal warrants as outlined in the MMUTCD and approval from MDOT and is contingent upon Eddington Boulevard being realigned with Drexelgate Parkway to create a four-way intersection. Operations and maintenance costs of approximately \$3,000 per year for the City's cost share of the traffic signal are anticipated as the City's share will be 50% since two legs of the intersection are under City jurisdiction.*

**MR-59**

**LDFA Major Road Upgrades**

*One of the primary purposes for completing the M-59 Corridor Plan was to identify what infrastructure would be needed to support an increase in the intensity of development in the study area. It is unknowable at this time where such intensification will occur, so no specific timeframe or dollar value is being assigned. The M-59 Corridor Plan's infrastructure projects are not being prioritized at this point in time as implementation will occur opportunistically as part of a private/public partnership or to support a specific commitment by the private sector.*

**LS-07**

**Hamlin Court Drainage Improvements**

*Hamlin Court has had poor drainage and has been difficult to maintain for years. This project would extend storm water piping southbound down Hamlin Court to a point that an open ditch could be installed in order to provide drainage for the balance of the road. Any increased operating costs for maintenance would be offset by road and ditch maintenance cost savings.*

**2017-2022 Capital Improvement Plan  
Projects Pending**

**LS-08**

**Bendelow Road Ditching (East Side)**

*Provide drainage for the east side of Bendelow Road including the front yards and road base. The spring thaws and heavy rains can cause water to pond in the yards and adjacent to the Bendelow roadway. In 1996, drainage for Bendelow Road was planned to be improved as part of the west branch of the East Ferry Drain. In 2004, the developer of the Country Club Village Subdivision agreed to install storm sewers that would provide drainage for the west side of Bendelow Road. In 2006, the East Ferry Drain project (SW-06A) was designed and constructed without the Bendelow Road improvements. The change in the project saved the City approximately \$420,000. This project would utilize the improvements previously installed by the developer to provide for catch basins and ditching to the east side of Bendelow Road. No additional operating costs are anticipated for site maintenance.*

**LS-09**

**Hillview Street Drainage Improvements**

*Install ditches along Hillview Street. Hillview Street is a gravel local street, 595' in length which runs east to west and slopes steeply at the eastern end. The roadway was constructed without a design and has experienced drainage problems throughout its life. The problem has gotten worse in the last few years as a result of the ditch's loss of definition. Most storm water travels down the roadway causing erosion and depositing the gravel material in a residential front yard. After heavy rains, residents routinely use a wheelbarrow and shovel to manually return the sand and gravel.*

**PK-04F**

**Splash Pad / Spray Park**

*Add new water play feature (Splash Pad) to Spencer Park and/or Bloomer Park. This project can also address some ADA features for lake access and increase the offerings at Spencer Park. It would add a water feature to Bloomer Park. The project would generate additional attendance and revenue in either park.*

**PK-05F**

**Borden Park: Soccer Field Renovations**

*Renovation of three (3) existing soccer fields at Borden Park. Correct drainage, grading, and re-sod to improve performance and safety under high traffic and use. Operating costs of approximately \$10,000 per year per field are anticipated to remain consistent with timely renovations, before more extensive service levels are required to keep the fields in a suitable condition for play.*

**PK-14**

**Nowicki Park: Development**

*Development of the 35-acre park located on Adams Road to include both active and passive recreational opportunities.*

**2017-2022 Capital Improvement Plan  
Projects Pending**

**PK-16**

**Yates Park: Parking Lot Rehabilitation**

*Reconstruction and resurfacing of the Yates Park parking lot in order to make it safer for patrons exiting the park. The existing gravel parking surface and lot angle makes it difficult for patrons to safely merge into traffic on the main roadway.*

**PK-20**

**Avondale Park: Field Rehabilitation**

*Growing demand for field rental is greater than available resources. Improved turf and irrigation will aid in the recovery of a field after use, allowing additional games to be played at the park to help meet demand and to generate additional revenue. Private Local League support will be sought to offset some of the costs to rehabilitate the field. Operating costs of approximately \$10,000 per year per field are anticipated to remain consistent with timely renovation, before more extensive service levels are required to keep the field in a suitable condition for play.*

**PW-04**

**Livernois Road Pathway (New Life Lane – Tienken Road)**

*Construction of approximately 4,000' of 8' wide pathway along the west side of Livernois Road between New Life Lane and Tienken Road. Project is also to include a bridge crossing over Sargent Creek. Operating costs of approximately \$1,120 per year are anticipated due to the additional pathway section added.*

**PW-08D**

**Tienken Road Pathway Gaps [Tiverton Trail Drive – E of Whispering Knoll Lane]**

*Construction of approximately 810' of 8' wide asphalt pathway along the north side of Tienken Road between Tiverton Trail Drive and 400' east of Whispering Knoll Lane to fill in the pathway gaps. Operating costs of approximately \$250 per year are anticipated due to the additional pathway sections added.*

**PW-08E**

**Tienken Road Pathway [Van Hoosen Road – Washington Road]**

*Construction of approximately 1,100' of 8' wide pathway along the south side of Tienken Road between Van Hoosen Road and Washington Road, including ramps at the SE and NW corners of the roundabout. Operating costs of approximately \$600 per year are anticipated due to the additional pathway section added.*

**PW-31D**

**John R Road Pathway [Hamlin Road – School Road]**

*Construction of approximately 4,350' of 8' wide asphalt pathway along the east side of John R Road between Hamlin Road and School Road. Operating costs of approximately \$1,220 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2023.*

**2017-2022 Capital Improvement Plan  
Projects Pending**

**SS-13**

**Sheldon Road: Sanitary Sewer Metering Equipment**

*Installation of new sanitary sewer metering equipment in existing manhole location on Sheldon Road to monitor the amount of Oakland Township sanitary sewer flows entering the City of Rochester Hills Sanitary Sewer System. The installation of this equipment will allow the City to monitor Oakland Township's sanitary sewer flow in order to insure that they are not exceeding their allotted capacity. The sanitary sewer installation on Sheldon Road was constructed with the District 21 Sanitary Sewer Interlocal Agreement approved by City Council. The City is currently visually monitoring Oakland Township flow and proposes to install the equipment when additional homes are connected to the system. Annual operating costs are anticipated to be covered by the Oakland County Water Resources Commissioner.*

**SS-59**

**LDFA Sanitary Sewer Main Upgrades**

*One of the primary purposes for completing the M-59 Corridor Plan was to identify what infrastructure would be needed to support an increase in the intensity of development in the study area. It is unknowable at this time where such intensification will occur, so no specific timeframe or dollar value is being assigned at this time. The M-59 Corridor Plan's infrastructure projects are not being prioritized at this point in time as implementation will occur opportunistically as part of a private/public partnership or to support a specific commitment by the private sector.*

**SW-03B**

**Karas Creek Bank Stabilization**

*Perform bank stabilization along the Karas Creek (Section 21) from Hamlin Road north to the Clinton River. The existing open ditch is badly eroded and is very sinuous. Soil from the bank is eroding away and is being transported to the Clinton River. If allowed to continue, adjacent lands are at risk of falling into the creek and continued sediment deposits into the river could cause negative impacts to this channel and the Clinton River bank improvements. No additional operating costs are anticipated for site maintenance.*

**SW-04B**

**Stoney Creek Drain Extension**

*In the northeast section of Rochester Hills there are three (3) main tributary branches of Stoney Creek referred to as the Fodera Drain (the Sheldon Road Branch, the Mead Road Branch, and the Tienken Road Branch). These branches service a drainage area of approximately 1,230 acres that extend into Oakland Township. The Mead Road Branch is intended to address the drainage of Mead Road and areas between Blue Beech Road and Wimberly Road. The Tienken Road Branch is intended to address drainage along Rochester Road north of Tienken Road including Perrydale Street and along Orion Road between Ann Maria Drive and Cherry Tree Lane. The Tienken Road branch is also intended to include local drainage for the adjacent streets along Orion Road.*

**2017-2022 Capital Improvement Plan  
Projects Pending**

**SW-05C**

**Rewold Drain (Phase C)**

*Construction of a regional detention basin north of Hamlin Road and west of John R Road on the Christian Memorial Cultural Center site. According to the Rewold Drain Study, floodwaters can flood over John R Road during a significant rain event, while water currently floods over Hamlin Road near John R Road. This project will correct both of these conditions except during an extreme rain event. Operating costs of approximately \$5,000 per year are anticipated for site maintenance. The City will pursue cost-sharing options for this project and also for the on-going operations.*

**SW-08A**

**Major Waterway Preservation**

*Project to identify areas along the Clinton River, Paint Creek, and Stony Creek that could benefit from a variety of actions such as stream bank stabilization and/or land acquisition to protect the natural features of the waterways and adjacent tributary areas such as floodplains and wetlands. This project is intended to be funded entirely through grant sources. The City is continuing to seek grant support for preservation.*

**SW-10**

**Sump Line Collection System**

*Provide a permanent connection point for sump pump discharge for subdivisions that do not have sump collection systems. Many of the subdivisions developed in the 1970's and early 1980's do not have sump pump collection systems designed to capture footing drain discharge from residential homes. Many complaints are received of icing in roadways and yards from being saturated by excess sump water. This project proposes to install approximately 83,000 lineal feet of sump collection lines along roadways and will require that homeowners connect. In addition to icing and wet ground complaints, there is a concern that some homeowners may have violated city code by connecting footing drains to the sanitary sewer system, which reduces capacity in the sanitary sewer system and increases the amount of discharge to the county interceptor which increases overall sanitary sewer disposal costs.*

**WS-59**

**LDFA Water Main Upgrades**

*One of the primary purposes for completing the M-59 Corridor Plan was to identify what infrastructure would be needed to support an increase in the intensity of development in the study area. It is unknowable at this time where such intensification will occur, so no specific timeframe or dollar value is being assigned at this time. The M-59 Corridor Plan's infrastructure projects are not being prioritized at this point in time as implementation will occur opportunistically as part of a private/public partnership or to support a specific commitment by the private sector.*

## 2017-2022 Capital Improvement Plan CIP Role Identification

The Capital Improvement Plan **Policy Group** reviews the policy, develops the project rating and weighting criteria, rates project applications, reviews funding options, and presents the six-year recommendation to the Administrative Group.

Planning Commission Representative (2)  
City Council Representative  
City Treasurer / Assessor  
Director of Finance  
Director of Planning & Development  
Director of Public Services

The Capital Improvement Plan **Project Group** prepares new project applications, reviews existing CIP projects, and serves as support staff to departments and the Policy Group as needed.

City Clerk	Manager of Planning
Crew Leader – Facilities	Media Specialist
Deputy Director DPS / City Engineer	Park Operations Manager
Deputy Director MIS / Network Administrator	Public Utilities Engineer
Director of Building	Senior Financial Analyst
Fire Chief	Supervisor of Communications
Fleet Supervisor	Transportation Engineer
Manager of Economic Development	

The **Administrative Group** brings the CIP Draft forward at the Planning Commission Workshop and presents the CIP at the Planning Commission Public Hearing.

Director of Finance  
Director of Planning & Development

The **Planning Commission** works with the Policy Group during the plan development, conducts workshops, reviews the Policy Group's recommendation, receives public input, conducts public hearings, adopts the plan, and requests City Council to consider incorporating funding for projects into the upcoming three-year Budget Plan.

The **City Council** is encouraged to use the CIP as a tool in the adoption of the three-year Budget Plan in accordance with City Council goals and objectives.

**Residents** are encouraged to participate in plan development by working with various Boards and Commissions at the Planning Commission workshops, the Planning Commission public hearings, and at City Council budget workshops and public hearings. As always, communication is open between residents, Council representatives, Planning Commission representatives, and staff.

**2017-2022 Capital Improvement Plan  
Project Application Forms**

**2017-2022 Capital Improvement Plan – Project Application**

Project Title: \_\_\_\_\_ Program Area: \_\_\_\_\_

Prepared By: \_\_\_\_\_ Date Prepared: \_\_\_\_\_

CIP ID #: \_\_\_\_\_

---

**Project Description:** Provide a brief (1-2 paragraph) description of project:

---

**Planning Context:** Is the project part of an Adopted Program, Policy or Plan?

Yes (Must Identify): \_\_\_\_\_

No

**Must List** the adopted program or policy, and how this project directly or indirectly meets these objectives:

---

**Legal Context:** Is the City Legally Obligated to perform this service?

Yes

No

Please describe City's Obligation:

---

**Schedule:** Estimated project beginning and ending dates. If project will take several years to complete, please fill out Form 2. If applicable, be sure to include any work done in prior years, including studies or other planning:

---

**Coordination:** Please identify if this project is dependant upon one or more other CIP projects, and please describe what the relationship is:

---

**Project Priority:** Low, Medium, High

\_\_\_\_\_ Priority within Program Area

\_\_\_\_\_ Priority Citywide

## 2017-2022 Capital Improvement Plan Project Application Forms

### 2017-2022 Capital Improvement Plan – Project Application

**Prior Approval:** Is this project included the 2016 Adopted or prior year's budget? Has this project been approved by any Board, Commission or City Council?

- Yes (Please check appropriate box(es) below)
  No
- City Council
  Planning Commission
- 2016 Budget
  Prior Year Budget: \_\_\_\_\_

**Total Estimated Cost:** In 2016 dollars (Amount shown here should agree with total on Form 2)

\$ \_\_\_\_\_

List all funding options available for this project?

Recommended funding option(s) to be used? (i.e: Operating Revenues, Fund Balance, Bond Issue etc...)

**Basis of Cost Estimate:** Please check one of the following

- Cost of comparable facility / equipment
  Rule of thumb indicator / unit costs
- Cost estimate from engineer / architect
  Preliminary estimate
- Ballpark "guesstimate"

**Budget Impact (Costs):** Any and all future operating costs this project/item will create: Payroll/Staffing; Maintenance; Supplies etc... (\* *Details Required*)

**Budget Impact (Savings):** Any and all future operating savings this project/item will create: Payroll/Staffing; Maintenance; Supplies etc... (\* *Details Required*)

**If Cost Impact Exceeds Saving Impact:** Please explain in detail the increased level of services that will be provided with the implementation of this project (\* *Details Required*)

*\* Projects submitted without thorough future cost/savings projections may not be accepted*

## 2017-2022 Capital Improvement Plan Project Application Forms

### 2017-2022 Capital Improvement Plan – Equipment Application

Equipment: \_\_\_\_\_ Date Prepared: \_\_\_\_\_

Department: \_\_\_\_\_

**Form of Acquisition:** Please check one of the following

Purchase

Rental / Lease

Number of Units Requested: \_\_\_\_\_

Estimated Service Life (Years): \_\_\_\_\_

<b>Total Net Impact Over Service Life</b>	<b>Per Unit (\$):</b>	<b>Total Cost (\$):</b>
<i>Plus: Purchase Price:</i>	_____	_____ <b>\$0.00</b>
<i>Plus: Installation or Related Charges:</i>	_____	_____ <b>\$0.00</b>
<i>Less: Trade-in, Salvage Value, Discount:</i>	_____	_____ <b>\$0.00</b>
<b>Net Purchase Cost / Annual Rent:</b>	<b>\$0.00</b>	<b>\$0.00</b>
<i>Plus: Annual Operational – After:</i>	_____	_____ <b>\$0.00</b>
<i>Less: Annual Operational – Savings:</i>	_____	_____ <b>\$0.00</b>
<b>Net Annual Operational Impact:</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Net Operational Impact Over Service Life:</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Total Net Impact Over Service Life:</b>	<b>\$0.00</b>	<b>\$0.00</b>

**Purpose of Expenditure:** Please check appropriate box(es):

Scheduled Replacement

Present Equipment Obsolete

Replace Worn-Out Equipment

Reduce Personnel Time

Expanded Service Life

New Operation

Increased Safety

Improved Service to Community, Procedures etc...

Other: \_\_\_\_\_

**Replaced Item(s):** Attach Separate Sheet if Necessary

<i>Item</i>	<i>Make</i>	<i>Age</i>	<i>Maintenance</i>	<i>Prior Year's Rental Cost</i>
			\$	\$
			\$	\$
			\$	\$

## 2017-2022 Capital Improvement Plan Project Application Forms

Project Title: \_\_\_\_\_ CIP ID #: \_\_\_\_\_

Project Construction	Cost before 2016	ADOPTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	2019	2020	2021	2022	Total	City Share	TOTAL CITY
		2016	2017	2018							
Preliminary Engineering									\$0	100%	\$0
Right-of-Way Services									\$0	100%	\$0
Land Acquisition (ROW)									\$0	100%	\$0
Geotechnical Engineering									\$0	100%	\$0
Construction									\$0	100%	\$0
Construction Engineering									\$0	100%	\$0
Other Construction Costs									\$0	100%	\$0
Equipment / Vehicle Purchase									\$0	100%	\$0
<b>Total Project Construction</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>100%</b>	<b>\$0</b>

Future Net Operating Costs / Savings	Cost before									Total	City Share	TOTAL CITY	
Est. Staffing Impact											\$0	100%	\$0
Est. Operational Impact											\$0	100%	\$0
Est. Maintenance Impact											\$0	100%	\$0
Est. Other Impact											\$0	100%	\$0
<b>Total Operating Impact</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>100%</b>	<b>\$0</b>
<b>Grand Total Project</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>\$0</b>

\* Coordinate with: \_\_\_\_\_

## 2017-2022 Capital Improvement Plan Project Rating Form

2017-2022 CAPITAL IMPROVEMENT PROJECT RATING FORM				
Project Name: _____		Project #: _____		
Department: _____		Total Score: <b>0</b>		
Rater Name:	Score Range	Rater Score	Weight	Total Points
<b>1 Contributes to Health, Safety and Welfare</b> Eliminates a known hazard (accident history) Eliminates a potential hazard Materially contributes Minimally contributes No impact	5		5	<b>0</b>
	4			
	3			
	1			
	0			
<b>2 Project Needed to Comply with Local, State or Federal Law</b> Yes No	5		5	<b>0</b>
	0			
<b>3 Project Conforms to Adopted Program, Policy or Plan</b> Project is consistent with adopted City Council policy or plan Project is consistent with Administrative policy No policy / plan in place	5		4	<b>0</b>
	3			
	0			
<b>4 Project Remediates an Existing or Projected Deficiency</b> Completely Remedy Problem Partially Remedy Problem No	5		3	<b>0</b>
	3			
	0			
<b>5 Will Project Upgrade Facilities</b> Rehabilitates / upgrades existing facility Replaces existing facility New facility	5		3	<b>0</b>
	3			
	1			
<b>6 Contributes to Long-term Needs of Community</b> More than 30 years 21 - 30 years 11 - 20 years 4 - 10 years 3 years or less	5		2	<b>0</b>
	4			
	3			
	2			
	1			
<b>7 Annual Impact on Operating Costs Compared to Operating Costs Absent the Project</b> Net Cost Savings No Change Minimal Increase (<\$25,000) Moderate Increase (\$25,000 - \$100,000) Major Increase (>\$100,000)	5		2	<b>0</b>
	4			
	3			
	2			
	1			
<b>8 Impact Measures - Net Present Value &amp; Internal Rate of Return / # of Years to Recoup Costs</b> High / 0-3 Years Medium-High / 4-7 Years Medium / 8-11 Years Medium-Low / 12-15 Years Low / 16 - 20 Years Never	5		2	<b>0</b>
	4			
	3			
	2			
	1			
	0			
<b>9 Service Area of Project</b> Regional City-Wide Several neighborhoods One neighborhood or less	5		2	<b>0</b>
	4			
	3			
	1			
<b>10 Department Priority</b> High Medium Low	5		2	<b>0</b>
	3			
	1			
<b>11 Project Delivers Level of Service Desired by Community</b> High Medium Low	5		2	<b>0</b>
	3			
	1			

**2017-2022 Capital Improvement Plan  
Fleet Replacement Schedule**

<b>2017 FLEET EQUIPMENT PURCHASES BREAKDOWN</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
Wheel Load Weigher	<i>OCSO</i>	#1122	8	\$ 6,030
Wheel Load Weigher	<i>OCSO</i>	#1123	8	\$ 6,030
Service Hoist	<i>Parks</i>	#2431	10	\$ 15,590
Dump Body Vehicle Insert	<i>Parks</i>	#6134	5	\$ 7,270
Sign Shop Cutter	<i>DPS</i>	#6163	5	\$ 6,830
Zero-Turn Mower	<i>Cemetery</i>	#6265	5	\$ 12,920
Equipment Trailer	<i>DPS</i>	39-224	10	\$ 21,990
Equipment Trailer	<i>DPS</i>	39-226	12	\$ 23,550
Equipment Trailer	<i>OCSO</i>	39-230	5	\$ 8,260
Asphalt Roller	<i>DPS</i>	39-303	8	\$ 26,110
Stump Grinder	<i>Forestry</i>	39-317	10	\$ 41,920
Utility Structure: Trailer	<i>DPS</i>		8	\$ 7,500
Service Truck	<i>Fleet</i>	39-015	12	\$ 60,000
Water System Truck	<i>DPS</i>	39-042	12	\$ 228,190
Road Grader	<i>DPS</i>	39-082	12	\$ 292,510
Pickup 4wd w\ Plow	<i>Cemetery</i>	39-154	6	\$ 32,630
Crew Truck	<i>DPS</i>	39-179	12	\$ 198,850
Cargo Van	<i>DPS</i>	39-275	7	\$ 23,320
Cargo Van	<i>DPS</i>	39-278	7	\$ 25,000
Pickup 4wd	<i>DPS</i>	39-280	7	\$ 27,130
Pickup 4wd	<i>DPS</i>	39-282	7	\$ 32,000
Pickup 2wd	<i>Building</i>	39-285	7	\$ 27,500
Pickup 4wd	<i>Ordinance</i>	39-288	7	\$ 23,230
Pickup 4wd w\ Plow	<i>DPS</i>	39-289	7	\$ 47,430
Pickup 4wd w\ Plow	<i>Parks</i>	39-290	7	\$ 32,020
Pickup 4wd w\ Plow	<i>Parks</i>	39-291	7	\$ 32,020
<b>TOTAL 2017 FLEET VEHICLE / EQUIPMENT COSTS:</b>				<b>\$ 1,265,830</b>

**2017-2022 Capital Improvement Plan  
Fleet Replacement Schedule**

<b>2018 FLEET EQUIPMENT PURCHASES BREAKDOWN</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
Transmission Fluid Exchanger	<i>Fleet</i>	#1115	6	\$ 5,890
Top Dresser	<i>Parks</i>	#2432	8	\$ 34,870
Deep Tine Aerator	<i>Parks</i>	#4526	10	\$ 44,250
Wheel Balancer	<i>Fleet</i>	#5282	8	\$ 4,740
Concrete Power Screed	<i>DPS</i>	#5877	10	\$ 7,200
De-Icing Vehicle Insert	<i>Parks</i>	#6133	5	\$ 5,040
Dump Body Vehicle Insert	<i>Parks</i>	#6135	5	\$ 10,150
Rotary Broom	<i>Parks</i>	#6155	4	\$ 9,270
Dump Truck Body Insert	<i>Parks</i>	#6185	7	\$ 13,820
Utility Vehicle	<i>Parks</i>	#6606	4	\$ 8,580
Finish Machine	<i>Fleet</i>	#902547	5	\$ 8,190
Tractor/Loader/Backhoe	<i>DPS</i>	39-084	12	\$ 138,230
Wheeled Excavator	<i>DPS</i>	39-148	12	\$ 260,530
Intergrated Tool Carrier	<i>DPS</i>	39-169	12	\$ 240,070
Forklift	<i>DPS</i>	39-188	10	\$ 31,140
Hydroseeder	<i>DPS</i>	39-208	10	\$ 30,170
Trash Pump	<i>Fleet</i>	39-212	10	\$ 56,100
Steam Generating Unit/Trailer	<i>DPS</i>	39-225	12	\$ 26,220
Air Compressor	<i>Fleet</i>	39-228	10	\$ 20,010
Floor Scrubber	<i>Fleet</i>	39-276	12	\$ 58,470
Tractor/Loader	<i>Cemetery</i>	39-277	12	\$ 67,670
Concrete Saw	<i>DPS</i>	39-323	10	\$ 15,010
Smart Cart	<i>OCSO</i>	39-324	5	\$ 11,290
Sewer Camera Truck	<i>DPS</i>	39-158	12	\$ 56,230
Pickup 4wd	<i>Forestry</i>	39-160	7	\$ 31,090
Pickup 4wd w\ Plow	<i>DPS</i>	39-292	7	\$ 33,300
Pickup 4wd w\ Plow	<i>DPS</i>	39-293	7	\$ 33,300
Pickup 4wd w\ Plow	<i>Facilities</i>	39-298	7	\$ 35,940
Pickup 4wd w\ Plow	<i>DPS</i>	39-299	7	\$ 35,940
Passenger Car	<i>City Pool</i>	39-525	7	\$ 22,970
Passenger Car	<i>DPS</i>	39-526	7	\$ 22,970
Pickup 4wd w\ Plow	<i>DPS</i>	39-527	7	\$ 35,940
Pickup 4wd w\ Plow	<i>Parks</i>	39-528	7	\$ 35,940
Pickup 4wd w\ Plow	<i>DPS</i>	39-529	7	\$ 33,000
Pickup 4wd w\ Plow	<i>DPS</i>	39-530	7	\$ 33,000
<b>TOTAL 2018 FLEET VEHICLE / EQUIPMENT COSTS:</b>				<b>\$ 1,516,530</b>

**2017-2022 Capital Improvement Plan  
Fleet Replacement Schedule**

<b>2019 FLEET EQUIPMENT PURCHASES BREAKDOWN</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
Utility Tractor	<i>Parks</i>	#5999	10	\$ 65,730
Zero-Turn Mower	<i>Parks</i>	#6736	4	\$ 10,930
Zero-Turn Mower	<i>Parks</i>	#6737	4	\$ 10,930
Utility Vehicle	<i>Parks</i>	#6778	4	\$ 14,790
Utility Vehicle	<i>Parks</i>	#6779	4	\$ 20,160
Asphalt Roller	<i>DPS</i>	39-231	10	\$ 8,030
Tractor / Loader	<i>DPS</i>	39-286	10	\$ 143,970
Wood Chipper	<i>Forestry</i>	39-335	8	\$ 42,780
Pickup 4wd	<i>DPS</i>	39-533	7	\$ 28,160
Pickup 4wd w\ Plow	<i>DPS</i>	39-534	7	\$ 33,250
Pickup 4wd w\ Plow & Platform	<i>DPS</i>	39-535	7	\$ 37,410
Pickup 4wd w\ Plow	<i>DPS</i>	39-536	7	\$ 33,250
Pickup 4wd w\ Plow	<i>DPS</i>	39-537	7	\$ 33,250
Pickup 4wd w\ Plow & Platform	<i>DPS</i>	39-538	7	\$ 37,410
Sport Utility 4wd	<i>Media</i>	39-555	7	\$ 24,070
<b>TOTAL 2019 FLEET VEHICLE / EQUIPMENT COSTS:</b>				<b>\$ 544,120</b>

<b>2020 FLEET EQUIPMENT PURCHASES BREAKDOWN</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
Fuel Management System	<i>Fleet</i>	#6143	10	\$ 30,710
Zero Turn Mower	<i>Parks</i>	#6263	4	\$ 14,540
Zero Turn Mower	<i>Parks</i>	#6264	4	\$ 14,540
Pressure Washer	<i>Fleet</i>	#6743	5	\$ 10,520
Utility Vehicle	<i>Parks</i>	#6776	4	\$ 9,340
Utility Vehicle	<i>Parks</i>	#6777	4	\$ 9,340
Utility Vehicle	<i>Parks</i>	#6780	4	\$ 9,260
Trailer Mounted Hot Pathcer	<i>DPS</i>	29-235	8	\$ 33,320
Wheel Loader	<i>DPS</i>	39-296	10	\$ 201,710
Radar Smart Cart	<i>OCSO</i>	39-324	5	\$ 16,120
Crash Attenuator	<i>Fleet</i>	39-327	10	\$ 23,310
Tandem-Axle Dump Truck	<i>DPS</i>	39-189	12	\$ 228,060
Tandem-Axle Dump Truck	<i>DPS</i>	39-190	12	\$ 228,060
Tandem-Axle Dump Truck	<i>DPS</i>	39-270	12	\$ 228,060
Tandem-Axle Dump Truck	<i>DPS</i>	39-271	12	\$ 228,060
Tandem-Axle Dump Truck	<i>DPS</i>	39-272	12	\$ 228,060

**2017-2022 Capital Improvement Plan  
Fleet Replacement Schedule**

<b>2020 FLEET EQUIPMENT PURCHASES BREAKDOWN (Continued)</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
Pickup 4wd	<i>Building</i>	39-543	7	\$ 27,580
Pickup 2wd	<i>Parks</i>	39-544	7	\$ 30,750
Pickup 4wd w\ Plow	<i>Parks</i>	39-547	6	\$ 35,170
Pickup 4wd w\ Dump	<i>Parks</i>	39-548	6	\$ 38,440
Pickup 4wd w\ Platform	<i>Parks</i>	39-560	7	\$ 47,320
<b>TOTAL 2020 FLEET VEHICLE / EQUIPMENT COSTS:</b>				<b>\$ 1,692,270</b>
<b>2021 FLEET EQUIPMENT PURCHASES BREAKDOWN</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
Dump Body Vehicle Insert	<i>Parks</i>	#6134	5	\$ 8,500
Rotary Broom	<i>Parks</i>	#6155	4	\$ 10,420
Sign Shop Cutter	<i>DPS</i>	#6163	5	\$ 7,990
Field Rake	<i>Parks</i>	#6168	5	\$ 14,910
Municipal Tractor	<i>DPS</i>	39-287	12	\$ 165,070
Concrete Saw	<i>DPS</i>	39-336	10	\$ 25,450
Pickup 4wd	<i>DPS</i>	39-297	10	\$ 42,830
2-Yard Dump Truck	<i>DPS</i>	39-531	10	\$ 54,350
Sanitary Sewer Truck	<i>DPS</i>	39-532	10	\$ 544,210
Sport Utility 4wd	<i>DPS</i>	39-550	7	\$ 25,720
Passenger Car	<i>Assessing</i>	39-551	7	\$ 25,220
Pickup 4wd w\ Plow	<i>DPS</i>	39-567	6	\$ 39,030
Pickup 4wd w\ Plow	<i>DPS</i>	39-568	6	\$ 39,030
Pickup 4wd w\ Crane Body	<i>DPS</i>	39-569	6	\$ 72,260
<b>TOTAL 2021 FLEET VEHICLE / EQUIPMENT COSTS:</b>				<b>\$ 1,074,990</b>

**2017-2022 Capital Improvement Plan  
Fleet Replacement Schedule**

<b>2022 FLEET EQUIPMENT PURCHASES BREAKDOWN</b>				
<b>VEHICLE TYPE</b>	<b>DEPARTMENT</b>	<b>VEHICLE #</b>	<b>REPLACEMENT CYCLE</b>	<b>ESTIMATED COST</b>
De-Icing Vehicle Insert	<i>Parks</i>	#6133	5	\$ 5,890
Dump Body Vehicle Insert	<i>Parks</i>	#6135	5	\$ 11,880
Zero Turn Mower	<i>Parks</i>	#6265	4	\$ 15,720
Municipal Tractor	<i>Parks</i>	#6270	10	\$ 66,260
Utility Vehicle	<i>Parks</i>	#6606	4	\$ 10,040
Finish Machine	<i>Fleet</i>	#902547	5	\$ 9,580
Equipment Trailer	<i>OCSO</i>	39-230	5	\$ 10,050
Dump Body Vehicle Insert	<i>Parks</i>	39-232	10	\$ 9,700
Dump Body Vehicle Insert	<i>Cemetery</i>	39-233	10	\$ 8,670
Dump Body Vehicle Insert	<i>Parks</i>	39-234	10	\$ 11,610
Equipment Trailer	<i>DPS</i>	39-236	10	\$ 10,240
Equipment Trailer	<i>DPS</i>	39-237	10	\$ 10,240
Pickup 4wd w\ Plow	<i>Parks</i>	39-281	6	\$ 38,450
Pickup 4wd w\ Plow	<i>Parks</i>	39-290	7	\$ 38,950
Pickup 4wd w\ Plow	<i>Parks</i>	39-291	7	\$ 38,950
Tandem-Axle Dump Truck	<i>DPS</i>	39-294	12	\$ 255,650
Tandem-Axle Dump Truck	<i>DPS</i>	39-295	12	\$ 255,650
2-Yard Dump Truck	<i>Parks</i>	39-549	8	\$ 95,590
Forestry Chipper Truck	<i>Forestry</i>	39-552	8	\$ 76,460
Sport Utility 4wd	<i>Building</i>	39-561	7	\$ 27,830
Pickup 4wd	<i>Ordinance</i>	39-563	7	\$ 31,570
Pickup 4wd	<i>DPS</i>	39-564	7	\$ 31,570
Pickup 4wd	<i>DPS</i>	39-565	7	\$ 31,570
Pickup 4wd	<i>DPS</i>	39-566	7	\$ 31,570
Cargo Van	<i>DPS</i>	39-570	7	\$ 25,010
Cargo Van	<i>DPS</i>	39-571	7	\$ 25,010
Sport Utility 4wd	<i>Building</i>	39-592	7	\$ 27,830
<b>TOTAL 2022 FLEET VEHICLE / EQUIPMENT COSTS:</b>				<b>\$ 1,211,540</b>

## 2017-2022 Capital Improvement Plan Fire Replacement Schedule

2017 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Sport Utility 4wd	Administration	<i>Chief 1</i>	10	\$ 49,230
Ambulance	EMS	<i>Alpha 21</i>	7	\$ 211,740
Sport Utility 4wd	Administration	<i>127</i>	10	\$ 49,230
Sport Utility 4wd	Fire Prevention	<i>101</i>	10	\$ 49,230
Pickup 4wd	Fire Prevention	<i>104</i>	10	\$ 33,760
Sport Utility 4wd	Training	<i>107</i>	10	\$ 49,230
<b>2017 TOTAL FIRE DEPARTMENT VEHICLE &amp; APPARATUS COSTS:</b>				<b>\$ 442,420</b>

2018 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Pickup 4wd	Fire Suppression	<i>Utility 1</i>	10	\$ 46,930
Rescue Pumper	Fire Suppression	<i>Engine 1</i>	7	\$ 497,730
Rescue Pumper	Fire Suppression	<i>Engine 4</i>	7	\$ 497,730
<b>2018 TOTAL FIRE DEPARTMENT VEHICLE &amp; APPARATUS COSTS:</b>				<b>\$ 1,042,390</b>

2019 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Sport Utility 4wd	Fire Suppression	<i>Utility 3</i>	10	\$ 41,740
Sport Utility 4wd	Fire Suppression	<i>Utility 4</i>	10	\$ 42,890
Sport Utility 4wd	Fire Prevention	<i>106</i>	10	\$ 35,260
<b>2019 TOTAL FIRE DEPARTMENT VEHICLE &amp; APPARATUS COSTS:</b>				<b>\$ 119,890</b>

2020 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Rescue Pumper	Fire Suppression	<i>Engine 2</i>	10	\$ 538,350
<b>2020 TOTAL FIRE DEPARTMENT VEHICLE &amp; APPARATUS COSTS:</b>				<b>\$ 538,350</b>

2021 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
None Scheduled				\$ -
<b>2021 TOTAL FIRE DEPARTMENT VEHICLE &amp; APPARATUS COSTS:</b>				<b>\$ -</b>

2022 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Ambulance	EMS	<i>Alpha 22</i>	7	\$ 257,620
Ambulance	EMS	<i>Alpha 24</i>	7	\$ 257,620
Ambulance	EMS	<i>Bravo 23</i>	7	\$ 257,620
Ambulance	EMS	<i>Bravo 25</i>	7	\$ 257,620
<b>2022 TOTAL FIRE DEPARTMENT VEHICLE &amp; APPARATUS COSTS:</b>				<b>\$ 1,030,480</b>



NEW PROJECTS ADDED TO 2017-2022 CIP AGGREGATE

2017-2022 CAPITAL IMPROVEMENT PLAN AGGREGATE SPREADSHEET

PROJECT NUMBER AND NAME	PROJECT COORDINATION	AVERAGE RATING	POTENTIAL FUNDING SOURCE(S)	TOTAL PROJECT COST	CITY SHARE	TOTAL CITY COST	FUTURE CITY COST (2017-2022)	2017		2018		2019		2020		2021		2022	
								PROJECT COST	CITY COST										
<b>Professional Services:</b>																			
PS-08	Master Thoroughfare Plan Update	None	Major Road Fund	150,000	100%	150,000	150,000	-	-	150,000	150,000	-	-	-	-	-	-	-	-
PS-07	Master Land Use Plan Update Schedule	None	City Funds	75,000	100%	75,000	75,000	75,000	75,000	-	-	-	-	-	-	-	-	-	-
PS-15B	Green Space Stewardship: Implementation	PS-15A	Green Space Fund	1,350,000	100%	1,350,000	1,350,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000
<b>Subtotal</b>				<b>\$ 1,575,000</b>		<b>\$ 1,575,000</b>	<b>\$ 1,575,000</b>	<b>\$ 300,000</b>	<b>\$ 300,000</b>	<b>\$ 375,000</b>	<b>\$ 375,000</b>	<b>\$ 225,000</b>							
<b>Internal Services:</b>																			
IS-04D	SCBA Replacement Program	None	Fire Capital Fund / Grants	956,830	100%	956,830	956,830	-	-	-	-	-	-	-	-	-	-	-	956,830
IS-04G	Heart Monitor Replacement Schedule	None	Fire Capital Fund	129,450	100%	129,450	129,450	-	-	-	-	-	-	-	-	-	-	-	129,450
IS-10D	Office Software Suite Update Schedule	None	MIS Fund	134,010	100%	134,010	134,010	-	-	-	-	-	-	-	-	-	-	-	134,010
IS-08	Fire Vehicle & Apparatus Replacement Schedule	None	Fire Capital Fund	3,173,530	100%	3,173,530	3,173,530	442,420	442,420	1,042,390	1,042,390	119,890	119,890	538,350	538,350	-	-	-	1,030,480
IS-10B	Computer Network Upgrade Schedule	IS-10C	MIS Fund	630,000	100%	630,000	630,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	330,000	330,000	-	60,000
IS-18	Election Equipment Replacement Schedule	None	City Funds / Grants	390,000	100%	390,000	390,000	390,000	390,000	-	-	-	-	-	-	-	-	-	-
IS-05	Citywide Fleet Replacement Schedule	None	Fleet Equipment Fund	7,305,280	100%	7,305,280	7,305,280	1,265,830	1,265,830	1,516,530	1,516,530	544,120	544,120	1,692,270	1,692,270	1,074,990	1,074,990	1,211,540	1,211,540
IS-02B	City Website Upgrade Schedule	None	MIS Fund	35,000	100%	35,000	35,000	35,000	35,000	-	-	-	-	-	-	-	-	-	-
<b>Subtotal</b>				<b>\$ 12,754,100</b>		<b>12,754,100</b>	<b>\$ 12,754,100</b>	<b>\$ 2,193,250</b>	<b>\$ 2,193,250</b>	<b>\$ 2,618,920</b>	<b>\$ 2,618,920</b>	<b>\$ 724,010</b>	<b>\$ 724,010</b>	<b>\$ 2,290,620</b>	<b>\$ 2,290,620</b>	<b>\$ 1,404,990</b>	<b>\$ 1,404,990</b>	<b>\$ 3,522,310</b>	<b>\$ 3,522,310</b>
<b>GRAND TOTAL ALL CITY PROJECTS</b>				<b>\$ 126,479,160</b>		<b>87,122,580</b>	<b>\$ 85,997,150</b>	<b>\$ 27,469,730</b>	<b>\$ 22,928,740</b>	<b>\$ 27,033,220</b>	<b>\$ 10,873,220</b>	<b>\$ 16,283,230</b>	<b>\$ 15,787,830</b>	<b>\$ 14,719,050</b>	<b>\$ 13,656,550</b>	<b>\$ 11,448,350</b>	<b>\$ 11,085,850</b>	<b>\$ 11,994,960</b>	<b>\$ 11,664,960</b>
15-Apr-14																			

## **2017-2022 Capital Improvement Plan CIP Schedule**

January 19	CIP Project Group receives CIP schedule and instructions. Planning Commission representative (at Planning Commission meeting) announces request for public submission of any eligible project. Project Application form will be available on City website for public.
January 25	Mayor or City Council representative (at City Council meeting) announces request for public submission of any eligible project.
February 26	Deadline to submit new CIP project applications/re-evaluations.
March 22	CIP Project group & CIP Policy group meeting (Q & A opportunity for CIP Policy group).
March 31	CIP Project ratings due from Policy Group.
April 19	Planning Commission Workshop and public hearing to review Draft 2017-2022 CIP and to provide an opportunity for public input.

**2017-2022 Capital Improvement Plan  
Notice of Public Hearing**



**NOTICE OF PUBLIC HEARING  
ON THE PROPOSED  
2017-2022 CAPITAL IMPROVEMENT PLAN  
ROCHESTER HILLS PLANNING COMMISSION**

Notice is hereby given that the City of Rochester Hills Planning Commission will hold a Public Hearing at 1000 Rochester Hills Drive, Rochester Hills, Oakland County, Michigan 48309, on Tuesday, April 19, 2016 at 7:00 p.m. to receive public comments regarding the City of Rochester Hills 2017-2022 Capital Improvement Plan as a component of the City's Comprehensive Plan.

Information regarding the Capital Improvement Plan may be obtained from the Fiscal Department during regular business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, or by calling (248) 656-4660. Written comments concerning this matter will be received by the Planning and Economic Development Department prior to the Public Hearing or by the Planning Commission at the Public Hearing.

William F. Boswell, Chairperson  
Rochester Hills Planning Commission

Note: Anyone planning to attend the meeting who has need of special assistance under the Americans Disabilities Act (ADA) is asked to contact the Facilities Division (248) 656-2560 forty-eight (48) hours prior to the meeting. Staff will be pleased to make the necessary arrangements.

Dated this 30th day of March 2016  
at Rochester Hills, Michigan.  
Publish Monday, April 4, 2016

## 2017-2022 Capital Improvement Plan Capital Improvement Plan Review

2017-2022 Capital Improvement Plan / Projects Added				
		<i>Page #</i>	<i>Year</i>	
<b>FA-02K</b>	Fire Station #1: Rear Access Drive Reconstruction	<b>51</b>	2017-2017	New Project Submittal
<b>LS-14</b>	Kingsview Avenue Paving (Gravel to Asphalt)	<b>15</b>	2017-2017	New Project Submittal
<b>LS-15</b>	Bolinger Street Paving (Gravel to Asphalt)	<b>15</b>	2017-2017	New Project Submittal
<b>MR-02I</b>	Hamlin Boulevard: Irrigation [Adams - City Limit]	<b>9</b>	2017-2017	New Project Submittal
<b>MR-07A</b>	Auburn Road: Turn-Lane Improvements	<b>10</b>	2017-2017	New Project Submittal
<b>MR-08</b>	Horizon Court Rehabilitation	<b>10</b>	2017-2017	New Project Submittal
<b>MR-26F</b>	Livernois Road: NB Right-Turn Lane @ Auburn Road	<b>11</b>	2017-2017	New Project Submittal
<b>MR-31E</b>	John R Road: NB Right-Turn Lane @ Auburn Road	<b>12</b>	2017-2017	New Project Submittal
<b>MR-37A</b>	Barclay Circle Rehabilitation	<b>12</b>	2020-2020	New Project Submittal
<b>MR-37B</b>	Rochester Road @ Barclay Circle: Traffic Signal Improvement	<b>13</b>	2019-2020	New Project Submittal
<b>MR-39</b>	South Boulevard Rehabilitation [E of Crooks - West of Livernois]	<b>13</b>	2017-2017	New Project Submittal
<b>PK-16B</b>	Yates Park: Clinton River Access Improvements	<b>47</b>	2018-2018	New Project Submittal
<b>PW-01B</b>	Crooks Road Pathway Gap [Clinton River - Bonnie Brae Street]	<b>39</b>	2018-2019	New Project Submittal
<b>PW-11</b>	Drexelgate Pathway Gap [Wexford Way - Rochester Road]	<b>41</b>	2017-2018	New Project Submittal
<b>PW-12</b>	Rochester Road PW Gaps [Orion & Wimberly]	<b>41</b>	2017-2017	New Project Submittal
<b>SS-30</b>	Sanitary Sewer Easement Machine	<b>28</b>	2017-2017	New Project Submittal
<b>SW-12</b>	Watertowns Storm Water Improvements	<b>35</b>	2018-2019	New Project Submittal
<b>WS-08</b>	Fieldstone & Ironstone: Water Main Replacement	<b>29</b>	2019-2019	New Project Submittal
<b>WS-09</b>	Flora Valley Court - Riverbend Drive: Water Main Connection	<b>29</b>	2021-2021	New Project Submittal
<b>WS-15</b>	Michelson Road: Water Main Extension	<b>30</b>	2017-2017	New Project Submittal
<b>WS-16</b>	Bedford Square Apartments: Water Main Replacement	<b>30</b>	2020-2020	New Project Submittal

**2017-2022 Capital Improvement Plan  
Capital Improvement Plan Review**

<b>2017-2022 Capital Improvement Plan / Projects Deleted</b>		
		<i><b>Reason Not Included</b></i>
<b>FA-03F</b>	Van Hoosen / Jones Cemetery: Chapel Glass Enclosed Niches	Project Deleted
<b>FA-04B</b>	DPS Facility: Alternative Energy	Defer to Pending
<b>IS-10C</b>	AS/400 Upgrade/Replacement Schedule	Project Deleted
<b>MR-05F</b>	Adams Boulevard: Irrigation System Installation	Project Complete
<b>MR-15C</b>	Butler Road: Right-Turn Lane @ Adams Road	Project Complete
<b>MR-24C</b>	Brewster Road: Right-Turn Lane @ Walton Boulevard	Project Complete
<b>MR-35B</b>	Rochdale Drive Rehabilitation	Project Complete
<b>MR-45</b>	Northfield & Tan Industrial Park Reconstruction	Project Complete
<b>MR-52</b>	Research Drive Reconstruction	Project Complete
<b>MR-56</b>	North Fairview Lane Rehabilitation	Project Complete
<b>MR-57</b>	Drexelgate/Eddington @ Rochester Road: Traffic Signal	Defer to Pending
<b>PS-10</b>	Energy Efficiency Analysis	Project Complete
<b>PS-15A</b>	Green Space Stewardship: Master Plan	Project Complete
<b>PW-08E</b>	Tienken Road Pathway [Van Hoosen Road - Washington Road]	Defer to Pending
<b>SS-10B</b>	Wimberly Drive: Sanitary Sewer Replacement	Project Complete
<b>WS-35</b>	North Hill Subdivision: Water Main Replacement	Project Complete
<b>WS-40</b>	Tienken Court: Water Main Replacement	Project Complete

## 2017-2022 Capital Improvement Plan Capital Improvement Plan Review

2017-2022 Capital Improvement Plan / Project Timeline Changes			
		<i>Project Timelines:</i>	
		<i>Prior</i>	<i>Revised</i>
<b>FA-08B</b>	Interchange Technology Park: Site Preparation	2019-2020	2020-2021
<b>FA-09</b>	IT Infrastructure Capacity Funding	2019-2020	2020-2021
<b>MR-13A</b>	Dequindre Road Reconstruction [Clovelly Avenue - South Boulevard]	2015-2016	2015-2018
<b>MR-49C</b>	Avon Road Widening [Princeton Avenue - Grovecrest Avenue]	2018-2019	2019-2020
<b>PK-05H</b>	Borden Park: Office Relocation	2016-2016	2017-2017
<b>PK-05J</b>	Borden Park: Maintenance Yard	2016-2016	2017-2017
<b>PK-11</b>	Clinton River Access: Parking Lot & Canoe/Kayak Launch	2019-2019	2018-2018
<b>PK-13</b>	Riverbend Park: Development	2013-2016	2013-2020
<b>PW-06A</b>	Auburn Road Pathway Gaps [Alexander Avenue - Livernois Road]	Pending	2021-2022
<b>SW-08C</b>	Clinton River: Natural Channel Restoration	2019-2021	2020-2022
<b>SW-11</b>	Clinton River / Yates Park: Riverbank Stabilization	2019-2021	2020-2022
<b>SW-13</b>	Storm Water Best Management Practices	2019-2021	2020-2022
<b>WS-07</b>	Booster Station #2 Replacement	2016-2016	2016-2017

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