



City of Rochester Hills, Michigan

2021 - 2026 Capital Improvement Plan

Proposed June 2, 2020



2021-2026 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	Master Land Use Plan
City of Rochester Hills' Mission Statement	Master Transportation Plan
City Council Goals & Objectives	Master Pathway Plan
Administrative Policies	Master Recreation Plan
Storm Water Management System Plan	LDFP Master Plan

2021-2026 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 2021-2026 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.

2021-2026 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:

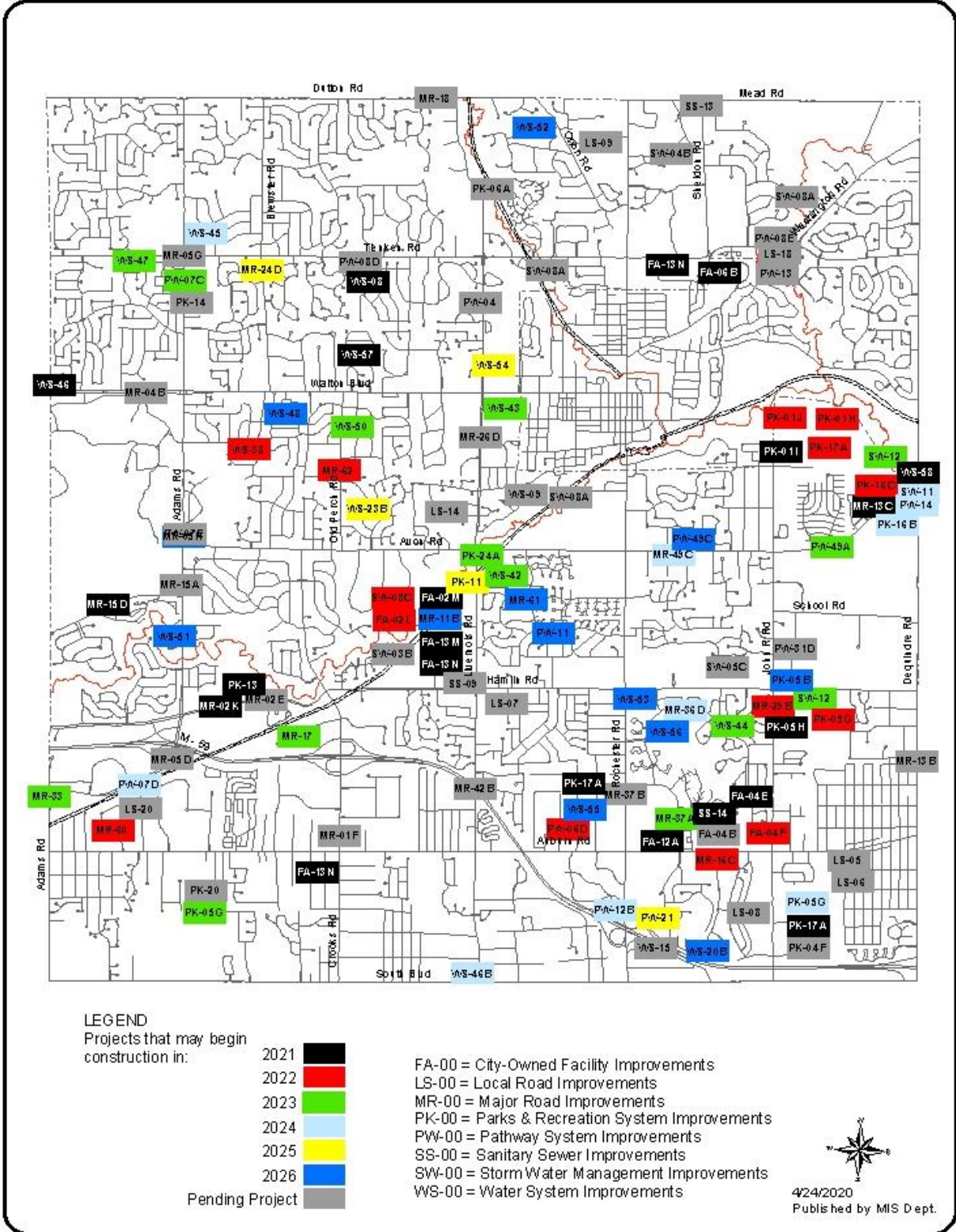
1. Any construction of a new facility (i.e., major/local roadways, water/sanitary sewer mains, storm water management, pathways*, recreational facilities, or public buildings), an addition to, or extension of such a facility, provided that the cost is \$25,000 or more and that the improvement will have 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.

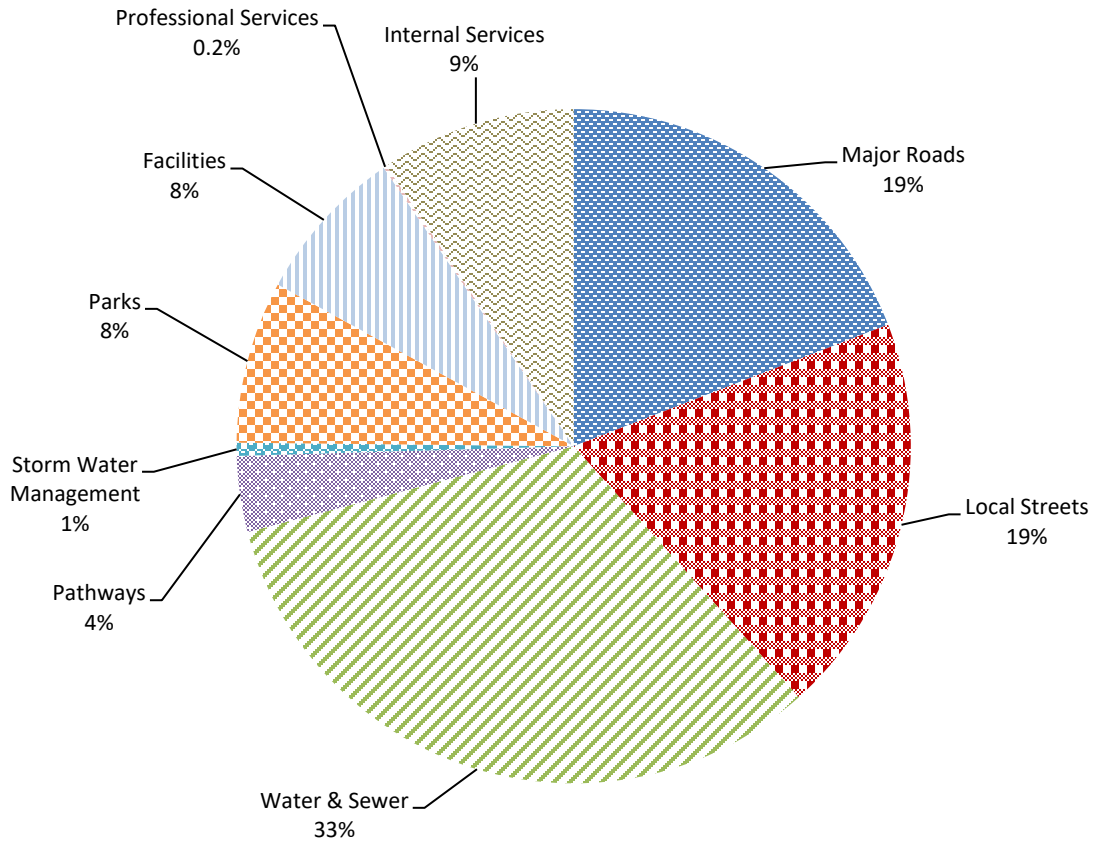
** = Note: Land acquisition funded by the Green Space Preservation millage has not been included in the CIP process

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

2021-2026 Capital Improvement Plan Aggregate Citywide Project Locations



2021-2026 Capital Improvement Plan Aggregate City Share Summary



2021-2026 CIP City Share Breakdown		
Major Roads	\$ 29,980,129	19%
Local Streets	\$ 30,150,000	19%
Water & Sewer	\$ 51,009,051	33%
Pathways	\$ 5,706,330	4%
Storm Water Management	\$ 983,250	1%
Parks	\$ 12,212,580	8%
Facilities	\$ 11,776,000	8%
Professional Services	\$ 250,000	0.2%
Internal Services	\$ 14,683,560	9%
	\$ 156,750,900	



innovative *by* nature

2021-2026 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.

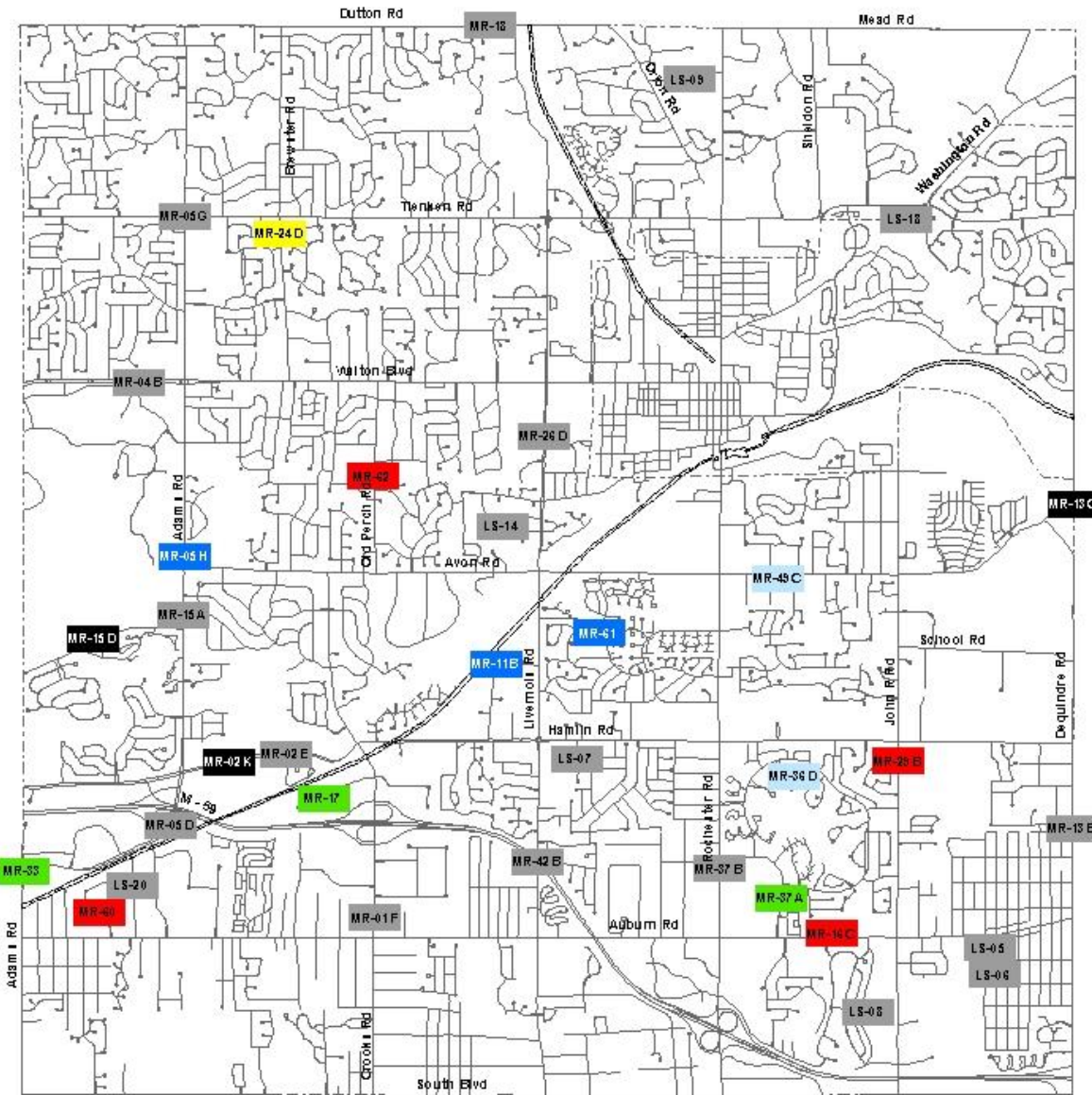
Local streets in Rochester Hills came under the City's jurisdiction in 1985. Prior to then the City was known as Avon Township and the responsibility for designing, maintaining, repairing, and replacing our streets fell upon the Road Commission of Oakland County (RCOC). Design standards were much different 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 48-miles of major roads, 218-miles of paved local streets, and 22-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.

2021-2026 Capital Improvement Plan Street Improvements



LEGEND
Projects that may begin construction in:

2021	MR-00
2022	MR-01
2023	MR-02
2024	MR-03
2025	MR-04
2026	MR-05
Pending Project	MR-00



4/24/2020
Published by MIS Dept.

**2021-2026 Capital Improvement Plan
Street Improvements**

MR-01A	Major Road System: Rehabilitation Program			
	2021-2026			
	Estimated City Cost:	\$3,000,000	Estimated City Share:	100%
<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>				

MR-02K	**Hamlin Road Reconstruction [East of Adams to Crooks]**			
	Estimated Total Project:	\$4,080,000	2021-2021	
	Estimated City Cost:	\$4,080,000	Estimated City Share:	100%
<p>Pavement reconstruction of approximately 4,250-feet of existing road from about 500 feet east of Adams Road to 370 feet west of Crooks Road. Since Hamlin Road west of Adams was recently reconstructed, Innovation Hills is nearly complete, Legacy development is underway it makes sense to complete Hamlin Road east of Adams. Not only because the PASER rating is poor but to create a new concrete road along this stretch to enhance the amenities around it. The pavement reconstruction strategy is a complete removal and replacement of the existing concrete pavement, including edge drain, aggregate base, undercuts, etc. Final determination upon geotechnical testing & recommendation. Construction is proposed to begin in 2021.</p>				

MR-05H	**Adams Road Widening [Hamlin to Walton Blvd]**			
	Estimated Total Project:	\$51,254,005	2020-2026	
	Estimated City Cost:	\$5,125,401	Estimated City Share:	10%
<p>Adams Rd widening project from just north of Hamlin Rd to Walton Blvd, including completing existing pathway gaps. Both NB and SB directions will include 2 thru lanes of traffic, and may incorporate roundabouts, narrow medians, traffic signals and 5 lane road sections along corridor. The final road cross-section(s) will be developed thru the Environmental Assessment (EA) process. This is a Road Commission of Oakland County project and is dependent on receiving the BUILD Grant from the U.S. Department of Transportation.</p>				

MR-11B	**Rochester Industrial Drive Extension**			
	Estimated Total Project:	\$232,050	2025-2026	
	Estimated City Cost:	\$232,050	Estimated City Share:	100%

** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan Street Improvements

Convert approximately 700 feet of existing private driveway to Public Industrial Road standards. The portion of driveway begins at the end of Rochester Industrial to the east property line of Fire Station #1. Construction is proposed to begin in 2026.

MR-12	Major Road System: Traffic Calming Program		
Estimated Total Project:	\$120,000	2021-2026	
Estimated City Cost:	\$60,000	Estimated City Share:	50%
<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>			

MR-13C	Avon/Dequindre Corridor Improvements		
Estimated Total Project:	\$10,063,333	2019-2022	
Estimated City Cost:	\$875,000	Estimated City Share:	7.5%
<p>Avon and Dequindre road will be improved by the Road Commission for Oakland County (RCOC) and the Great Lakes Water Authority (GLWA). Design work has commenced by both agencies and construction is proposed to affect the area starting in late 2021 and continuing through 2024. The first construction project will be from RCOC and include the replacement of the Avon Road bridge over the Clinton River and the reconstruction of the westerly Avon/Dequindre intersection to a roundabout. The GLWA project is currently planned to start installing 96-inch diameter water main pipe in late 2022 and continue until late 2024. The GLWA work will also include the reconstruction of the easterly Avon/Dequindre Road intersection to a roundabout and pavement replacement will occur along Avon and Dequindre from Hamlin Road to the Macomb Orchard Trailway crossing of Dequindre.</p>			

MR-15D	**Butler Road Rehabilitation**		
Estimated Total Project:	\$956,250	2021-2021	
Estimated City Cost:	\$956,250	Estimated City Share:	100%
<p>Rehabilitate approximately 5,300 feet of HMA along the segment of Butler Road (Adams to west City limits). The existing road is 25 foot wide from back of curb to back of curb. The 2019 City PASER Rating was a 3 out of a scale of 10 from River Oaks Blvd to Adams and a 5 out of 10 from River Oaks Blvd to west City limits. The proposed pavement strategy is a complete removal and replacement of existing 9 inch HMA pavement with 4 inch stone base for segment from Adams to River Oak Blvd. The segment from River Oak Blvd to west City limits is proposed for 2 inch HMA mill and overlay (final determination upon geotechnical testing and</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Street Improvements**

recommendation) with selective base and curb & gutter repairs as deemed necessary. Construction is proposed to begin in 2021.

MR-16C	Auburn Road Rehabilitation [Rochester Road to Culbertson Avenue]		
Estimated Total Project:	\$1,298,000	2021-2022	
Estimated City Cost:	\$1,298,000	Estimated City Share:	100%
<p>Perform a 2-inch mill and overlay of Auburn Road between Rochester Road and Culbertson Avenue. The jurisdiction transfer of Auburn Road between Rochester Road and Dequindre Road included a project contribution of funding from the Michigan Department of Transportation (MDOT). The acceptance of funding is conditioned upon the City using the funds to improve Auburn Road within five years. The corridor improvement project between Culbertson Avenue and Dequindre Road coupled with this project will meet the requirement. Construction is planned to begin in 2022.</p>			

MR-17	Avon Industrial Drive		
Estimated Total Project:	\$838,750	2025-2026	
Estimated City Cost:	\$838,750	Estimated City Share:	100%
<p>Rehabilitation of approximately 2,600 feet of asphalt section of Avon Industrial Drive and 370 feet of Star Court (a side street off Avon Industrial Drive). The existing road is 36-foot wide asphalt with concrete curb and gutter. The 2016 Paser rating was a 4 out of a scale of 10. The pavement rehabilitation strategy is a 4-inch asphalt mill and overlay (final determination upon geotechnical testing & recommendation) with selective base and curb repairs. Operating costs are anticipated to decrease by \$6,000 per year due to rehabilitation. Construction is planned to begin in 2026.</p>			

MR-24D	**Brewster Road Rehabilitation [Walton Blvd to Dutton]**		
Estimated Total Project:	\$1,310,017	2024-2025	
Estimated City Cost:	\$1,310,017	Estimated City Share:	100%
<p>Rehabilitate approximately 11,000 feet of HMA along the segment of Brewster Road between Walton Blvd and Dutton The existing road is variable width ranging from 27 foot wide from edge of pavement to edge of pavement with curb and gutter. The proposed pavement strategy is a 3.5 inch HMA mill and overlay (final determination upon geotechnical testing and recommendation) with selective base repairs as deemed necessary. Construction is proposed to begin in 2025.</p>			

MR-27	Major Road System: Bridge Rehabilitation Program		
	2021-2026		
Estimated City Cost:	\$228,000	Estimated City Share:	100%

** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan Street Improvements

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.

MR-29B	**John R Rehabilitation [Avon to Auburn]**		
Estimated Total Project:	\$3,000,000	2021-2022	
Estimated City Cost:	\$3,000,000	Estimated City Share:	100%
<p>Rehabilitate approximately 11,000 feet of HMA along the segment of John R Road between Avon Road and Auburn Road. The existing road is variable width ranging from 24 foot to 56 foot wide from edge of pavement to edge of pavement, curb and gutter, roadside ditches, and 3 foot shoulders. The 2019 City PASER Rating was a 5 out of a scale of 10. The proposed pavement strategy is installing a continuous center left turn lane and a 6 inch HMA mill and overlay (final determination upon geotechnical testing and recommendation) with selective base repairs as deemed necessary. Construction is proposed to begin in 2022.</p>			

MR-33	Old Adams & Forester Reconstruction		
Estimated Total Project:	\$1,150,000	2022-2023	
Estimated LDFA Cost:	\$1,150,000	Estimated LDFA Share:	100%
<p>Pavement reconstruction of approximately 200 feet of existing Forester Blvd and 1,300 feet of Old Adams Road south of M-59 to Forester. Operating costs are expected to decrease because of the new roadway surface. This project is funded by the LDFA. Construction is planned to begin in 2023.</p>			

MR-36D	**Hampton Circle Rehabilitation**		
Estimated Total Project:	\$2,167,500	2023-2024	
Estimated City Cost:	\$2,167,500	Estimated City Share:	100%
<p>Rehabilitate approximately 11,300 feet of HMA along the segment of Hampton Circle from Barclay to Barclay Circle. The existing road is 36 foot wide from edge of pavement to edge of pavement with curb and gutter. The 2019 City PASER Rating was a 5 out of a scale of 10. The proposed pavement strategy is a 3.5 inch HMA mill and overlay (final determination upon geotechnical testing and recommendation) with selective base repairs as deemed necessary. Construction is proposed to begin in 2024.</p>			

MR-37A	Barclay Circle Rehabilitation		
2022-2023			
Estimated City Cost:	\$1,597,750	Estimated City Share:	100%

** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan Street Improvements

Rehabilitate approximately 4,000 feet of asphalt section of Barclay Circle from Rochester Road to Auburn Road. The existing road is 60 feet 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-inch asphalt mill & fill (final determination upon geotechnical testing & 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 2023.

MR-49C	Avon Road Widening [Princeton Avenue – Grovecrest Avenue]		
Estimated Total Project:	\$635,250	2023-2024	
Estimated City Cost:	\$211,750	Estimated City Share:	33%

Widen approximately 1,300 feet of Avon Road between Princeton Avenue and Grovecrest Avenue to accommodate an 11-foot 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 2024.

MR-60	Waterview Reconstruction		
Estimated Total Project:	\$2,500,000	2021-2022	
Estimated LDFA Cost:	\$2,500,000	Estimated LDFA Share:	100%

Pavement reconstruction of approximately 3,200 feet of existing road that is 36 feet wide from back of curb to back of curb. Construction of a 5-foot wide sidewalk along one side of Waterview is also included. Operating costs are expected to decrease because of the new roadway surface. This project is funded by the LDFA. Construction is planned to begin in 2022.

MR-61	**Drexelgate Rehabilitation [Livernois to Dancer]**		
Estimated Total Project:	\$698,062	2025-2026	
Estimated City Cost:	\$698,062	Estimated City Share:	100%

Rehabilitate approximately 3,400 feet of HMA along the segment of Drexelgate Pkwy between Livernois and Dancer Rd. The existing road is 36 foot wide from edge of pavement to edge of pavement with curb and gutter. The 2019 City PASER Rating was a 5 out of a scale of 10. The proposed pavement strategy is a 3.5 inch HMA mill and overlay (final determination upon geotechnical testing and recommendation) with selective base repairs as deemed necessary. Construction is proposed to begin in 2026.

**2021-2026 Capital Improvement Plan
Street Improvements**

MR-62	**Old Perch Rehabilitation**		
Estimated Total Project:	\$1,185,750	2021-2022	
Estimated City Cost:	\$1,185,750	Estimated City Share:	100%
<p>Rehabilitate approximately 5,800 feet of HMA along the segment of Old Perch Road between Walton and Avon Rd. The existing road is 40 foot wide from edge of pavement to edge of pavement, primarily no curb and gutter, roadside ditches, and 3 foot shoulders. The 2019 City PASER Rating was a 5 out of a scale of 10. The proposed pavement strategy is a 3.5 inch HMA mill and overlay (final determination upon geotechnical testing and recommendation) with selective base repairs as deemed necessary. Construction is proposed to begin in 2022.</p>			

LS-01	Local Street System: Rehabilitation Program		
	2021-2026		
Estimated City Cost:	\$30,000,000	Estimated City Share:	100%
<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>			

LS-12	Local Street System: Traffic Calming Program		
Estimated Total Project:	\$300,000	2021-2026	
Estimated City Cost:	\$150,000	Estimated City Share:	50%
<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>			

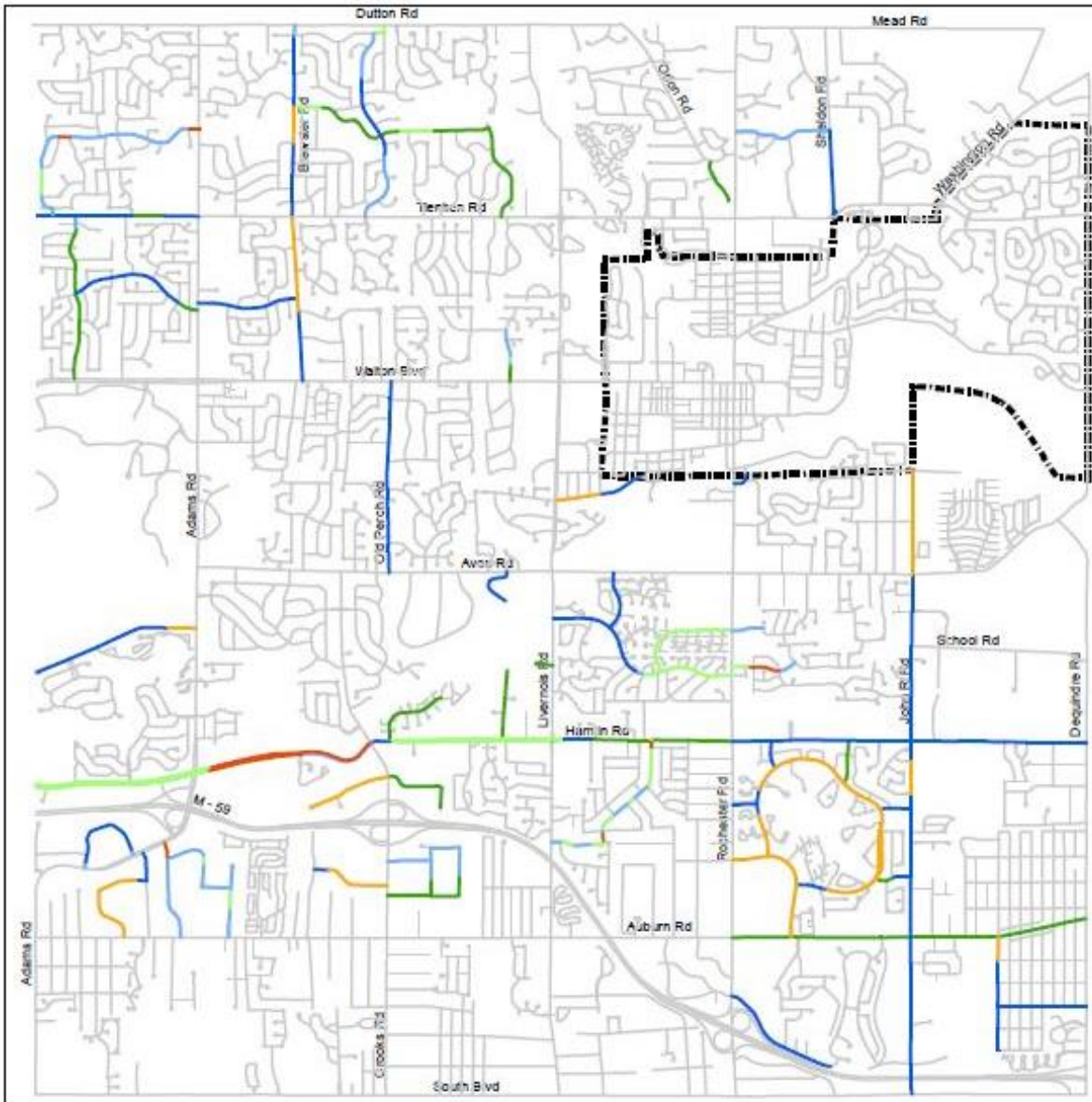
** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan
Street Improvements



innovative *by* nature

2021-2026 Capital Improvement Plan City Map – Major Road Conditions



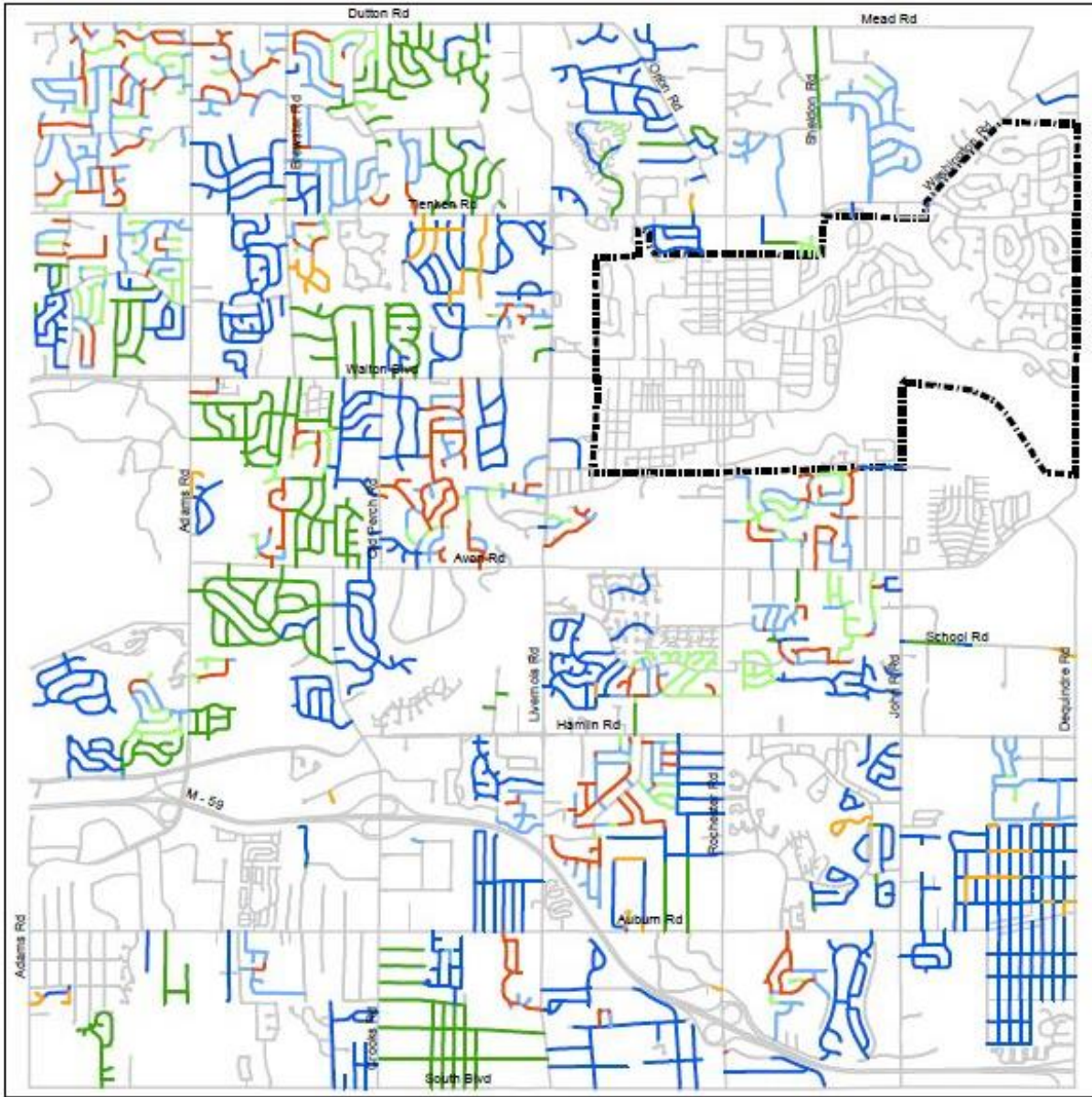
2019 MAJOR ROAD CONDITIONS (PUBLIC PAVED ROADS)

1-4 (POOR)		
Asphalt	6.36 mi	> 18%
Concrete	1.95 mi	
5-7 (FAIR)		
Asphalt	16.32 mi	> 49%
Concrete	5.80 mi	
8-10 (GOOD)		
Asphalt	8.19 mi	> 33%
Concrete	6.74 mi	
	45.36 mi	

— Others
 City of Rochester



2021-2026 Capital Improvement Plan City Map – Local Street Conditions



**2019 LOCAL ROAD CONDITIONS
(PUBLIC PAVED ROADS)**

1-4 (POOR)		
Asphalt	4.82 mi	}> 12%
Concrete	19.75 mi	
5-7 (FAIR)		
Asphalt	82.78 mi	}> 60%
Concrete	33.83 mi	
8-10 (GOOD)		
Asphalt	37.44 mi	}> 28%
Concrete	16.40 mi	
	195.02 mi	

— Others
 City of Rochester



2021-2026 Capital Improvement Plan Local Street Conditions [Poor Only]

2019 = 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	3: Poor	264	Concrete
Allston	W Tienken Rd	Biggers	4: Poor	1,753	Asphalt
Allston	Biggers	Dead End or Start	4: Poor	850	Asphalt
Ansal		Lake Forest	3: Poor	195	Concrete
Antler Ct	Stag Rdg	Dead End or Start	3: Poor	322	Concrete
Arlington Dr	Whitney Dr		2: Very Poor	491	Concrete
Arms Ct	Thames Dr	Dead End or Start	4: Poor	618	Concrete
Avoncrest Dr	Old Perch Rd		4: Poor	63	Asphalt
Avoncrest Dr		Dead End or Start	4: Poor	180	Concrete
Aynsley Dr	Kingspath Dr	Wedgewood Dr	3: Poor	401	Concrete
Aynsley Dr	Wedgewood Dr	Chaffer Dr	4: Poor	370	Concrete
Baypoint Dr		Doral Dr	4: Poor	169	Concrete
Beacon Hill Dr		Beacon Hill Ct	4: Poor	227	Concrete
Beechcrest	Adams Rd	Paddington Ct	3: Poor	475	Asphalt
Bembridge Dr	x	y	3: Poor	195	Concrete
Berry Nook Ln	Arlington Dr	Bloomer	4: Poor	322	Concrete
Bolinger			4: Poor	502	Concrete
Box Canyon		Dead End or Start	4: Poor	132	Concrete
Bridgestone Dr	Fieldstone Dr	Biggers	4: Poor	681	Asphalt
Brilliance	Empire Dr	Honor Dr	4: Poor	486	Concrete
Brittany Ct	Springwood Ln	Dead End or Start	4: Poor	269	Concrete
Bromley Ln	N Kilburn Rd	Chelsea Ct	4: Poor	259	Concrete
Bromley Ln	Chelsea Ct	Dead End or Start	4: Poor	275	Concrete
Brunswick	Brunswick	Waverly	3: Poor	280	Concrete
Burgoyne	S Livernois Rd	S Livernois Rd	2: Very Poor	69	Asphalt
Buttercup Dr	Daylily Dr	Goldenrod Dr	4: Poor	935	Concrete
Cal Ave	Gerald	Melvin	4: Poor	333	Concrete
Cal Ave	Culbertson	Emmons	4: Poor	285	Asphalt
Campus	Old Perch Rd		3: Poor	79	Asphalt
Campus		Campus Ct	3: Poor	407	Concrete
Campus	Campus Ct	Baylor	4: Poor	840	Concrete
Campus Ct	Campus	Dead End or Start	3: Poor	591	Concrete
Canterbury Trl	Chalet Dr		3: Poor	296	Concrete
Cascade Cir	Shortridge		3: Poor	449	Concrete
Cascade Cir			3: Poor	90	Concrete
Cascade Cir			3: Poor	79	Concrete
Cedar Shake Dr	Firewood Dr		3: Poor	1,135	Concrete
Cedar Shake Dr	Firewood Dr		3: Poor	32	Concrete
Cedar Shake Dr		Dead End or Start	4: Poor	502	Concrete
Chaffer Dr	Cobridge Dr		3: Poor	470	Concrete
Chaffer Dr	Aynsley Dr	Wedgewood Dr	3: Poor	713	Concrete
Chalet Dr	Kimberly Fair	Canterbury Trl	4: Poor	523	Concrete
Chalet Dr	Canterbury Trl		4: Poor	317	Concrete
Chelsea Ct	Bromley Ln	Dead End or Start	4: Poor	222	Concrete
Cherrywood Ln	Cherrywood Ln	Dead End or Start	3: Poor	164	Concrete
Clovelly	Weaverton	Bridget	4: Poor	322	Asphalt
Clovelly	Bridget	Culbertson	4: Poor	338	Asphalt
Clovelly	Culbertson	Emmons	4: Poor	327	Asphalt
Clovelly	Emmons	Longview	4: Poor	333	Asphalt
Clovelly	Longview	Harrison	4: Poor	327	Asphalt
Cobblestone Dr	Millstone Dr	Cobblestone Ct	4: Poor	718	Asphalt
Cobridge Ct	Cobridge Dr	Dead End or Start	3: Poor	222	Concrete
Cobridge Dr	Chaffer Dr	Cobridge Ct	4: Poor	523	Concrete
Cobridge Dr	Baroque Ct	Wedgewood Dr	4: Poor	449	Concrete

2021-2026 Capital Improvement Plan Local Street Conditions [Poor Only]

2019 = Local Streets in Poor Condition (PASER Rating between 1 - 4)					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Corbin	Kentucky Dr	Dead End or Start	4: Poor	132	Concrete
Courtfield	Lexham Ln		4: Poor	391	Concrete
Courtfield		Lexham Ln	4: Poor	908	Concrete
Crestline	Parkland Dr	Crestline Ct	3: Poor	433	Concrete
Crestline	Crestline Ct	Drexelgate Pkwy	3: Poor	428	Concrete
Crestline Ct	Crestline	Crestline	3: Poor	37	Concrete
Crestline Ct	Crestline	Cul-de-sac	4: Poor	322	Concrete
Crestline Ct	Cul-de-sac	Dead End or Start	4: Poor	58	Concrete
Cypress		Sumac Dr	3: Poor	53	Concrete
Dalton Dr	Arlington Dr	Hadley Rd	4: Poor	1,241	Concrete
Dawes	Gerald	Melvin	4: Poor	327	Asphalt
Dawes	Hessel	Dequindre Rd	4: Poor	333	Asphalt
Daylily Dr	Buttercup Dr	Mayapple Ct	4: Poor	855	Concrete
Daylily Dr	Mayapple Ct	Vardon St	4: Poor	296	Concrete
Devonwood		Foresthill Dr	3: Poor	333	Concrete
Dressler Ln	Parkland Dr	Dennett Ln	2: Very Poor	364	Asphalt
Edmunton Dr	Salem Dr		3: Poor	348	Concrete
Elkhorn Dr	Torrent Ct		4: Poor	100	Concrete
Englewood Dr	Brandon Ct		4: Poor	607	Concrete
Englewood Dr			2: Very Poor	48	Concrete
Essex Dr		Eddington	4: Poor	428	Concrete
Essex Dr	Essex	Essex	4: Poor	206	Concrete
Essex Dr	Lexington	Pembroke	3: Poor	280	Concrete
Essex Dr	Pembroke	Essex Ct	4: Poor	354	Concrete
Evergreen Ct	Stanford Cir	Dead End or Start	4: Poor	227	Concrete
Fair Oak Dr	Yale Ct	Dead End or Start	4: Poor	190	Concrete
Fawn Ct	Stag Rdg	Dead End or Start	4: Poor	201	Concrete
Fieldstone Dr	Bridgestone Dr	Biggers	4: Poor	454	Asphalt
Fieldstone Dr	Biggers Ct	Cobblestone Dr & Cobblestone Ct	4: Poor	343	Asphalt
Fieldstone Dr	Cobblestone Dr	Ironstone Dr	4: Poor	370	Asphalt
Fieldstone Dr	Ironstone Dr		4: Poor	201	Asphalt
Fieldstone Dr	Millstone Dr	Bridgestone Dr	4: Poor	359	Asphalt
Flanders Dr	Highsplint Dr		4: Poor	671	Concrete
Forest View Ct	Woodfield Way	x	3: Poor	116	Concrete
Fox Woods Ln	Woodfield Way	Fox Wood	3: Poor	211	Concrete
Fulham Dr	Lexham Ln	Fulham Ct	4: Poor	1,125	Concrete
Fulham Dr	Fulham Ct	Brompton Rd & Tottenham Ct	4: Poor	227	Concrete
Fulham Dr	Brompton Ct	S Livernois Rd & Sierra Blvd	3: Poor	539	Concrete
Gallaland	Dakota Dr		4: Poor	275	Concrete
Gallaland	Pioneer Dr	Dead End or Start	3: Poor	285	Concrete
Goldenrod Dr	Buttercup Dr	Primrose Dr	4: Poor	697	Concrete
Greenleaf Dr			3: Poor	227	Concrete
Greenleaf Dr		Rochdale	4: Poor	174	Concrete
Grosvenor Dr	Harvard	intersection	3: Poor	11	Concrete
Grosvenor Dr	intersection	Harvard Dr	3: Poor	5	Concrete
Grosvenor Dr	Harvard Dr	intersection Grosvenor&Harvard	4: Poor	5	Concrete
Grovecrest	E Avon Rd	Slumber	4: Poor	829	Concrete
Grovecrest	Slumber	Misty Brook Ln	3: Poor	470	Concrete

2021-2026 Capital Improvement Plan Local Street Conditions [Poor Only]

2019 = Local Streets in Poor Condition (PASER Rating between 1 - 4)					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Harlan Ct	Warrington Rd	Flanders Dr	4: Poor	296	Concrete
Harlan Ct	Flanders Dr	Dead End or Start	3: Poor	216	Concrete
Harrington		Dead End or Start	3: Poor	517	Asphalt
Harvard Dr	Grosvenor Dr	intersection	3: Poor	26	Concrete
Harvard Dr	intersection	Harvard	3: Poor	5	Concrete
Hathaway Rising	Chevy Circuit	Lomas Verdes	4: Poor	444	Concrete
Heidelberg Dr	Cambridge	Dead End or Start	3: Poor	1,082	Asphalt
Hessel	E Auburn Rd	Dawes	4: Poor	375	Asphalt
Hidden Ln	Springwood Ln	Dead End or Start	4: Poor	697	Concrete
Highsplint Dr	Kentucky Dr	Flanders Dr	4: Poor	496	Concrete
Highsplint Dr	Flanders Dr		4: Poor	290	Concrete
Highsplint Dr	Warrington Rd		3: Poor	412	Concrete
Highsplint Dr			3: Poor	243	Concrete
Highsplint Dr		Dawson Dr	3: Poor	428	Concrete
Highsplint Dr	Dawson Dr		4: Poor	422	Concrete
Highsplint Dr		Dead End or Start	3: Poor	148	Concrete
Hillcrest Dr	Pleasant View Dr	Devonwood	3: Poor	253	Concrete
Hillcrest Dr	Devonwood		3: Poor	343	Concrete
Holiday Ct	Summit Rdg	Dead End or Start	3: Poor	359	Concrete
Hollensshade	Olympia Dr	Muirwood Ct	4: Poor	950	Concrete
Independence Dr	Independence Ct	Dutton Rd	4: Poor	465	Concrete
Ironstone Dr	Fieldstone Dr	Fieldstone Dr	4: Poor	1,114	Asphalt
Ironstone Dr	Fieldstone Dr	W Tienken Rd	4: Poor	459	Asphalt
Ivy Wood Ct	Arlington Dr	Dead End or Start	2: Very Poor	459	Concrete
Jason Cir	Snowden Cir	Quincy Dr	4: Poor	259	Concrete
Kentucky Dr		Cumberland Dr	4: Poor	491	Concrete
Kentucky Dr			4: Poor	422	Concrete
Kentucky Dr		Cumberland Dr	3: Poor	887	Concrete
Kilburn Ct		Dead End or Start	3: Poor	143	Concrete
Kimberly Fair		Sussex Fair	4: Poor	58	Concrete
Kirkton Ct		Dead End or Start	2: Very Poor	211	Concrete
Lake Forest	Croydon Rd	Rutgers	4: Poor	285	Concrete
Lake Forest	Rutgers	Campus	4: Poor	280	Concrete
Lake Forest	Campus	Lake Forest Ct	3: Poor	692	Concrete
Lake Forest	Lake Forest Ct	Bucknell Ct	3: Poor	306	Concrete
Lake Forest			4: Poor	90	Concrete
Lake Forest		Sumac Dr	4: Poor	570	Concrete
Lake Forest	Sumac Dr	Ansal	4: Poor	781	Concrete
Lake Forest	Ansal	Spartan Dr	3: Poor	781	Concrete
Langley Rd	Beacon Hill Dr	Langley Ct	4: Poor	296	Concrete
Langley Rd	Langley Ct		3: Poor	359	Concrete
Langley Rd		Wellington Cir	4: Poor	428	Asphalt
Langley Rd	Wellington Cir	Wellington Cir	4: Poor	364	Asphalt
Langley Rd	Wellington Cir	Dead End or Start	4: Poor	396	Asphalt
Lassiter Dr			4: Poor	539	Concrete
Lexham Ln	Woodelm & W Auburn Rd	Courtfield	4: Poor	306	Concrete
Lexham Ln	Courtfield	Fulham Dr	4: Poor	993	Concrete
Lexham Ln	Fulham Dr	Courtfield	4: Poor	180	Concrete
Lexham Ln	Courtfield	Dead End or Start	4: Poor	153	Concrete
Lexington Dr	Essex Dr	Ternbury Dr	4: Poor	1,410	Concrete
Live Oak Dr	Ulster	Munster	4: Poor	333	Concrete
Live Oak Dr	Munster	Dead End or Start	4: Poor	296	Concrete
Lockmoore Ct	Hampton Cir		3: Poor	913	Asphalt
Lockmoore Ct			3: Poor	375	Asphalt
Lockmoore Ct			3: Poor	876	Asphalt

2021-2026 Capital Improvement Plan Local Street Conditions [Poor Only]

2019 = Local Streets in Poor Condition (PASER Rating between 1 - 4)					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Lomas Verdes	Hathaway Rising	N Fairview Ln	4: Poor	1272	Concrete
Long Meadow Ln	Twin Oaks Ct	Lake Ridge	3: Poor	269	Concrete
Long Meadow Ln	Twin Oaks Ct	Woodfield Way	4: Poor	401	Concrete
Long Meadow Ln	Woodfield Way		3: Poor	121	Concrete
Meadowbrook Dr	Adams Rd	Country Club Dr	3: Poor	502	Concrete
Meadowbrook Dr	Country Club Dr	Trailwood Dr	3: Poor	290	Concrete
Meadowbrook Dr		Walton Blvd	3: Poor	63	Concrete
Meadowview Ct	Brewster Rd		3: Poor	69	Asphalt
Merriweather		Old Homestead	3: Poor	127	Concrete
Michelson	S Rochester Rd		3: Poor	90	Concrete
Millbrook Ct		Dead End or Start	3: Poor	90	Concrete
Millstone Dr	Fieldstone Dr	Shagbark	4: Poor	375	Asphalt
Misty Brook Ln	Grovecrest	Rambling Dr	3: Poor	649	Concrete
Morley	Culbertson	Emmons	4: Poor	327	Asphalt
Morley	Emmons	Longview	4: Poor	327	Asphalt
Morley	Longview	Harrison	4: Poor	333	Asphalt
Morley	Harrison	Eastern	4: Poor	327	Asphalt
Muirwood Ct	Hollensshade	Dead End or Start	4: Poor	348	Concrete
Munster	Live Oak Dr	Stanford Cir	4: Poor	1220	Concrete
Munster	Stanford Cir		4: Poor	158	Concrete
N Kilburn Rd	Tower Hill Ln	Chancery Ct	4: Poor	438	Concrete
N Kilburn Rd	Kilburn Ct	Bromley Ln	4: Poor	612	Concrete
Nawakwa	S Rochester Rd		4: Poor	306	Asphalt
New Kent Rd	N Kilburn Rd	Lambeth Park	4: Poor	586	Concrete
Norton Lawn		Norton Rd	4: Poor	201	Concrete
Norton Lawn		Cumberland Dr	4: Poor	1727	Concrete
Nottingham Blvd	Brewster Rd	Wellington Cir	4: Poor	259	Asphalt
Oakrock		Dead End or Start	3: Poor	42	Asphalt
Old Homestead		Merriweather	4: Poor	845	Concrete
Old Homestead	Merriweather	Salem Dr	2: Very Poor	148	Concrete
Old Homestead	Salem Dr	Summit Rdg	4: Poor	681	Concrete
Orchardale		Walton Blvd	4: Poor	48	Concrete
Paddington Ct	Beechcrest	Dead End or Start	4: Poor	259	Asphalt
Parkland Dr	Crestline	Treeside Dr	4: Poor	401	Concrete
Parkwood Dr	Wakefield Ct	Arbor Creek Dr	4: Poor	1573	Concrete
Pheasant Ring Dr	Pheasant Ring Ct	Eagle Dr	4: Poor	1251	Concrete
Pleasant View Dr	Hillcrest Dr		4: Poor	1119	Concrete
Poco Ct	Winchester	Dead End or Start	3: Poor	449	Concrete
Preswick			3: Poor	206	Concrete
Primrose Ct	Primrose Dr	Dead End or Start	4: Poor	127	Concrete
Primrose Dr	Daylily Dr	Primrose Ct	4: Poor	375	Concrete
Primrose Dr	Primrose Ct	Goldenrod Dr	4: Poor	1146	Concrete
Primrose Dr	Goldenrod Dr	E Auburn Rd	4: Poor	533	Concrete
Prospect Dr	Cumberland Dr	Elkhorn Dr	4: Poor	312	Concrete
Quail Ridge Cir	Glengrove Dr	Park Creek Ct	3: Poor	808	Concrete
Quincy Dr	Jason Cir	Salem Dr	3: Poor	972	Concrete
Rambling Dr	Slumber	Misty Brook Ln	4: Poor	348	Concrete
Ridgefield Ct	Grandview	Dead End or Start	4: Poor	771	Concrete
River Bend Dr	S Livernois Rd	Woodridge Dr	4: Poor	1600	Concrete
Rochdale	Oakrock	Streamview Ct	4: Poor	100	Concrete
Rochdale	Streamview Ct	Greenleaf Dr	3: Poor	333	Concrete
Rocky Crest Dr	Charlwood	Tacoma Dr	3: Poor	924	Concrete
Rocky Crest Dr	Tacoma Dr	Dead End or Start	4: Poor	222	Concrete
Rosewood Ln	Falcon Dr	Dead End or Start	4: Poor	507	Concrete
Rutgers	Lake Forest	Spartan Dr	4: Poor	1373	Concrete
Salem Dr	Salem Ct	Edmunton Dr	4: Poor	523	Concrete

2021-2026 Capital Improvement Plan Local Street Conditions [Poor Only]

2019 = Local Streets in Poor Condition (PASER Rating between 1 - 4)					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Sandalwood Ct		Sandalwood Ct	4: Poor	285	Concrete
Sandalwood Ct	Sandalwood Ct	Dead End or Start	4: Poor	121	Concrete
Sandalwood Dr	Parkland Ct	Sandalwood to Park	4: Poor	407	Concrete
Sandalwood Dr	Sandalwood	Parkland Dr	4: Poor	100	Concrete
Sarsfield	Harrington	Walbridge	4: Poor	908	Asphalt
School Rd			4: Poor	100	Asphalt
School Rd		Dequindre Rd	4: Poor	649	Asphalt
Slade Ct	Winchester	Dead End or Start	3: Poor	444	Concrete
Snowden Cir	Albany Dr	Salem Dr	4: Poor	824	Concrete
Snowden Ct	Salem Dr	Dead End or Start	3: Poor	227	Concrete
Spartan Dr	Croydon Rd	Notre Dame Rd	3: Poor	1104	Concrete
Spartan Dr	Notre Dame Rd	Rutgers	3: Poor	354	Concrete
Spartan Dr	Rutgers	Lake Forest	4: Poor	723	Concrete
Stag Rdg	W Avon Rd	Antler Ct	2: Very Poor	222	Concrete
Stag Rdg	Antler Ct	Fawn Ct	4: Poor	121	Concrete
Stag Rdg	Fawn Ct	Ten Point Dr	4: Poor	148	Concrete
Stanford Cir	W Avon Rd		4: Poor	243	Concrete
Stanford Cir	Stanford Ct		3: Poor	385	Concrete
Stanford Cir	Evergreen Ct	Munster	4: Poor	1104	Concrete
Starr Ct	Avon Industrial D	Dead End or Start	4: Poor	370	Asphalt
Stonetree Cir			4: Poor	729	Concrete
Stonetree Cir		Shellbourne Dr	3: Poor	1177	Concrete
Sugar Pine	Tanglewood Dr	Black Maple Dr	3: Poor	507	Concrete
Sugar Pine	Black Maple Dr	Walton Blvd	4: Poor	533	Concrete
Sumac Dr	Lake Forest	Cypress	4: Poor	348	Concrete
Sumac Dr	Cypress	Tanglewood Dr	3: Poor	649	Concrete
Summit Ct	Summit Rdg	Dead End or Start	2: Very Poor	253	Concrete
Summit Rdg	East Pointe Ct	W Kilburn Rd	4: Poor	898	Concrete
Summit Rdg	McCormick Dr	Wales Dr	3: Poor	850	Concrete
Sussex Fair	Chalet Dr	Kimberly Fair	3: Poor	296	Concrete
Sussex Fair	Kimberly Fair	Dead End or Start	4: Poor	739	Concrete
Tanglewood Ct	Tanglewood Dr	Dead End or Start	4: Poor	539	Concrete
Tanglewood Dr		Black Maple Dr	4: Poor	238	Concrete
Tanglewood Dr	Black Maple Dr		3: Poor	528	Concrete
Tanglewood Dr		Sugar Pine	4: Poor	69	Concrete
Tanglewood Dr	Sugar Pine	Lake Forest	4: Poor	227	Concrete
Tanglewood Dr	Sumac Dr	Tanglewood Ct	4: Poor	660	Concrete
Tanglewood Dr		Dead End or Start	3: Poor	206	Concrete
Teakwood	Falcon Dr	Cherrywood Ln & Cre	4: Poor	866	Concrete
Ten Point Dr	Stag Rdg	Stag Rdg	4: Poor	766	Concrete
Ten Point Dr	Stag Rdg		3: Poor	554	Concrete
Ternbury Dr	Ternbury Dr	Ternbury Dr	4: Poor	158	Concrete
Thornberry Ct	Beechcrest	Dead End or Start	4: Poor	523	Asphalt
Thornridge Ct	Thornridge Dr	Dead End or Start	3: Poor	301	Concrete
Tienken Ct		Dead End or Start	2: Very Poor	486	Asphalt
Tiverton Trl	W Tienken Rd	Royal Crescent	4: Poor	1056	Concrete
Tower Hill Ln	Charm	Abington Ct	4: Poor	744	Concrete
Tower Hill Ln		Brewster Rd	3: Poor	74	Asphalt
Twin Oaks Ct	Long Meadow Ln	Twin Oaks Ct	3: Poor	359	Concrete
Valley Stream Ct	Valley Stream Dr	Dead End or Start	4: Poor	201	Concrete
Valley Stream Dr	Dead End or Start	Valley Stream Ct	4: Poor	190	Concrete
W Kilburn Rd	Summit Rdg		3: Poor	333	Concrete
W Kilburn Rd		Summit Rdg	4: Poor	787	Concrete
W Kilburn Rd	N Adams Rd & W		3: Poor	639	Concrete
Wagner Dr	Woodridge Dr	Dead End or Start	3: Poor	95	Concrete

2021-2026 Capital Improvement Plan Local Street Conditions [Poor Only]

2019 = Local Streets in Poor Condition (PASER Rating between 1 - 4)					
Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Wakefield Ct	Charlwood & Oly	Parkwood Dr	4: Poor	412	Concrete
Walbridge	W Auburn Rd		4: Poor	169	Asphalt
Warrington Rd			4: Poor	84	Concrete
Waverly	Brunswick	Covington	3: Poor	195	Concrete
Weaverton	Dawes	Clovelly	4: Poor	781	Asphalt
Wedgewood Dr	Arbor Creek Dr	Chaffer Dr	3: Poor	74	Concrete
Wellington Cir	Langley Rd	Nottingham Blvd	4: Poor	570	Asphalt
Wellington Cir	Nottingham Blvd	Dead End or Start	4: Poor	216	Asphalt
Wellington Cir	Langley Rd	Langley Rd	4: Poor	1616	Asphalt
Whitney Dr	Berry Nook Ln & A	Pioneer Dr	3: Poor	1135	Concrete
Whitney Dr	Arlington Dr		2: Very Poor	232	Concrete
Wimpole		Walton Blvd	3: Poor	58	Concrete
Woodfield Way	Lake Ridge Rd	Oak View Ct	3: Poor	882	Concrete
Woodfield Way	Oak View Ct	Forest View Ct	4: Poor	333	Concrete
Woodfield Way	Forest View Ct	Fox Woods Ln	3: Poor	380	Concrete
Woodfield Way	Long Meadow Ln	Fox Woods Ln	3: Poor	317	Concrete
Woodford Cir	N Kilburn Rd	N Kilburn Rd	4: Poor	1468	Concrete
Woodridge Ct	Woodridge Dr	Dead End or Start	4: Poor	238	Concrete
Woodridge Dr	Wagner Dr	Woodridge Ct	3: Poor	290	Concrete
Wortham	Dorfield	Hampton Cir	4: Poor	84	Asphalt
Yale Ct	Fair Oak Dr	Dead End or Start	4: Poor	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.*



innovative *by* nature

2021-2026 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.

2021-2026 Capital Improvement Plan Sanitary Sewer System Improvements



LEGEND

Projects that may begin construction in:

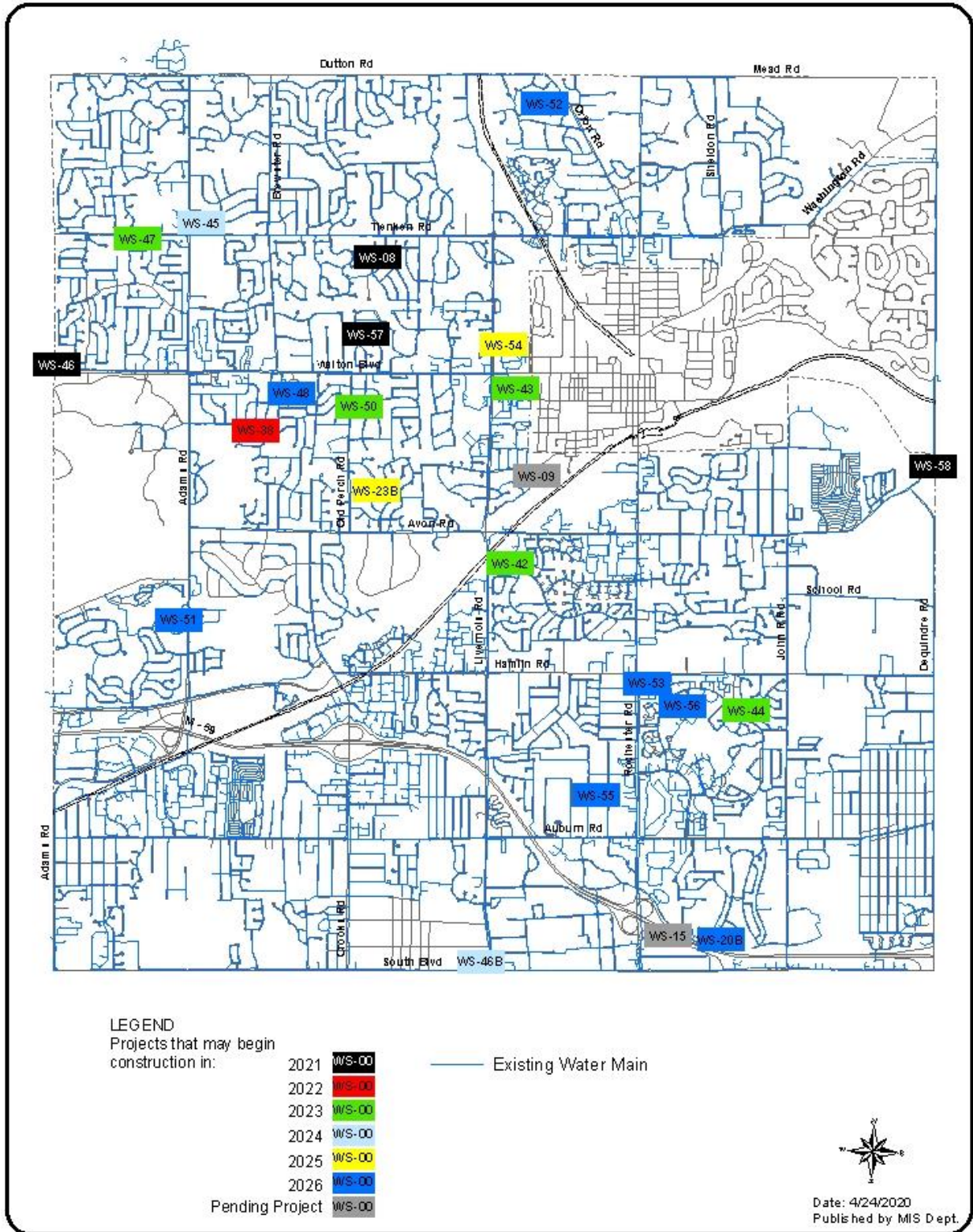
- 2021 SS-00
- 2022 SS-00
- 2023 SS-00
- 2024 SS-00
- 2025 SS-00
- 2026 SS-00
- Pending Project SS-00

— Existing Sanitary Sewer



Date: 4/24/2020
Published by MIS Dept.

2021-2026 Capital Improvement Plan Water System Improvements



**2021-2026 Capital Improvement Plan
Water & Sanitary Sewer System Improvements**

SS-01B	SCADA System Upgrade Schedule		
	2021-2026		
	Estimated City Cost:	\$574,340	Estimated City Share: 100%
<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 2020. 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>			

SS-02B	Sanitary Sewer Rehabilitation Program		
	2021-2026		
	Estimated City Cost:	\$3,000,000	Estimated City Share: 100%
<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. This program is proposed to be funded at \$500,000 every year and is on-going.</p>			

SS-11	Oakland Macomb Interceptor Drain Improvements		
	2020-2023		
	Estimated City Cost:	\$10,259,430	Estimated City Share: 100%
<p>The Oakland Macomb Interceptor Drain (OMID) is a large diameter interceptor sewer that serves approximately 830,000 residents of Macomb and Oakland Counties. The City is a part of OMID and as the Oakland County Water Resource Commission (OCWRC) does improvements on OMID, the City is assessed its percentage of the project. The City has been notified of upcoming costs (City portion) for 2020 through 2023.</p>			

SS-14	**Sewer Truck Dewatering/Disposal Pad**		
	2021-2021		
	Estimated City Cost:	\$259,000	Estimated City Share: 100%
<p>One of the functions of a sewer truck is to collect liquids and solids from sanitary and storm sewers during routine maintenance or emergency response. This project will construct an area to dewater liquids and transfer directly into the sanitary sewer. Solids can then be loaded and delivered to an appropriate landfill for disposal. Construction is planned to begin 2021.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Water & Sanitary Sewer System Improvements**

SS-24B	**Sewer Televising Equipment**		
2021-2021			
Estimated City Cost:	\$115,000	Estimated City Share:	100%
<p>The City of Rochester Hills currently owns one sanitary sewer televising equipment for use to document current conditions and to assist in identifying problems in the sanitary sewer lines with the City. The existing equipment is approximately nine (9) years old and now requiring more maintenance and repairs. This purchase will include a new camera and associated equipment to replace the existing televising equipment. The existing camera will be used as a backup camera if possible. The purchase is planned for 2021.</p>			

WS-08	Tienken Manor Subdivision: Water Main Replacement		
2021-2021			
Estimated City Cost:	\$2,681,250	Estimated City Share:	100%
<p>Replace approximately 1,350 feet of 6-inch and 5,300 feet of 8-inch cast iron/AC water main located in Tienken Manor Subdivision in Section 9 of the City. Cast iron and AC pipe are no longer installed in our water system and 6" water main does not meet the minimum size requirement (8-inch pipe is the minimum public water main size per the MDEQ and Ten State Standards). The water main will be replaced with 8-inch ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). PRV Improvements will be included with this project as well. Construction is planned to begin in 2021.</p>			

WS-12B	**PRV Upgrade Program**		
2025-2026			
Estimated City Cost:	\$175,000	Estimated City Share:	100%
<p>The City has approximately 30 pressure reducing valves (PRV's) located throughout the City. The prv's vary in age and in size. The scope of work would include, but is not limited to, vault renovations, scada equipment replacement/update, plumbing modifications/repairs/updates, and gate valve repair/replacements, etc. Upgrades are planned to begin in 2026.</p>			

WS-20B	**E. Nawakwa Road Water Main Replacement		
2025-2026			
Estimated City Cost:	\$312,500	Estimated City Share:	100%
<p>Replace approximately 1,000 feet of 8-inch cast iron water main (installed in 1965) located on E. Nawakwa Road, section 35 of the City. The Cast Iron water main will be replaced with ductile iron or high Density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.</p>			

WS-23B	**University Hills Subdivision Water Main Replacement**		
2024-2025			
Estimated City Cost:	\$6,726,563	Estimated City Share:	100%

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Water & Sanitary Sewer System Improvements**

Replace approximately 6,240 feet of 6-inch, 10,320 feet of 8-inch and 4,965 feet of 12-inch asbestos cement (AC) water main (installed in 1960) located in the University Hills Subdivision, section 16 of the City. The water main will be replaced with 8-inch and 12-inch ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2025.

WS-38	Springhill Subdivision Water Main Replacement		
2021-2022			
Estimated City Cost:	\$5,312,500	Estimated City Share:	100%
<p>Replace approximately 6,000 feet of 6-inch and 11,000 feet of 8-inch AC water main located in the Springhill Subdivision in Section 17 of the City. The water main will be replaced with 8-inch ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2022.</p>			

WS-41	Advanced Metering Infrastructure (AMI)		
2025-2026			
Estimated City Cost:	\$1,250,000	Estimated City Share:	100%
<p>Advanced Metering Implementation (AMI) is an integrated system of meters, communications networks, and data management systems that enables two-way communication between utilities and customers. The City would no longer be required to drive routes and obtain meter reads on a monthly basis. The benefits include timely data delivery, access to more data, and low operational costs. Implementation is planned to begin in 2025.</p>			

WS-42	Bellbrook Water Main Replacement		
2022-2023			
Estimated City Cost:	\$890,625	Estimated City Share:	100%
<p>Replace approximately 2,850 feet of 8-inch ductile iron water main located along Wexford Way and the drive serving the Bellbrook Facility in Section 22 of the City. The water main in this location is approximately 33 years old and has been repaired in multiple locations. The water main will be replaced with new 8-inch ductile iron pipe. Construction is planned to begin in 2023.</p>			

WS-43	Ascension Providence Rochester Hospital Water Main Improvement		
2022-2023			
Estimated City Cost:	\$1,093,750	Estimated City Share:	100%
<p>Replace approximately 2,400 feet of 12-inch asbestos cement (AC) water main and install approximately 1,100 feet of 8-inch water main near Ascension Providence Rochester Hospital in section 15 of the City. The AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. The proposed water main along Walton Blvd is to loop the water system around</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Water & Sanitary Sewer System Improvements**

Ascension Providence Rochester Hospital to provide sufficient redundancy to the hospital. Construction is planned to begin in 2023.

WS-44	London Bridge Drive Water Main Replacement		
	2022-2023		
	Estimated City Cost:	\$1,406,250	Estimated City Share: 100%
<p>Replace approximately 4,500 feet of 8-inch asbestos cement (AC) water main located along London Bridge Drive in section 26 of the City. The AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2023.</p>			

WS-45	Judson Park & Brabach Orchards Water Main Replacement		
	2023-2024		
	Estimated City Cost:	\$5,843,250	Estimated City Share: 100%
<p>Replace approximately 18,700 feet of 6-inch and 8-inch asbestos cement (AC) water main located in Judson Park Subdivision and Brabach Orchards in Section 5 of the City. The water main will be replaced with 8-inch ductile iron pipe or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2024.</p>			

WS-46	RC-02 Improvements		
	2020-2021		
	Estimated City Cost:	\$437,500	Estimated City Share: 100%
<p>The City of Rochester Hills receives water from the Great Lakes Water Authority at four different locations. The water feed located on the north side of Walton Blvd, west of Waltonshire Ct, is called RC-02, and is the City's largest feed. The feed is approximately 25 feet deep and 45 years old. The GLWA owns the vault and is planning on making improvements in 2021 and it may be beneficial for the City to upgrade equipment at the same time. Construction is planned to begin in 2021.</p>			

WS-46B	**RC-01 Improvements**		
	2024-2024		
	Estimated City Cost:	\$150,000	Estimated City Share: 100%
<p>The City of Rochester Hills receives water from the Great Lakes Water Authority (GLWA) in four different locations. The water feed located on the northwest corner of South Boulevard / Livernois Roads is called RC-01. The feed is approximately 50 years old. The improvements may vary depending on work the GLWA proposes on the vault. The work could include, but is not limited to, a new access hatch, replacement of gate valves, updating of plumbing, etc. Construction is planned to begin in 2024.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Water & Sanitary Sewer System Improvements**

WS-47	Tienken Road Water Main		
2022-2023			
Estimated City Cost:	\$113,750	Estimated City Share:	100%
Install approximately 260 feet of 8-inch water main on the southeast corner of Tienken and Medinah Drive in section 7 of the City. The water main adds redundancy to the feed that serves the booster station on Adams Road. Construction is planned to begin in 2023.			

WS-48	**Stratford Manor Townhouses Water Main Replacement**		
2025-2026			
Estimated City Cost:	\$1,475,000	Estimated City Share:	100%
Replace approximately 965 feet of 6-inch and 3,755 feet of 8-inch asbestos cement (AC) water main (installed in 1971) located in Stratford Manor Townhouses, section 17 of the City. The AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.			

WS-50	**Rochester Knoll Subdivision Water Main Replacment**		
2022-2023			
Estimated City Cost:	\$3,240,625	Estimated City Share:	100%
Replace approximately 2,840 feet of 6-inch, 4,030 feet of 8-inch, 2,875 feet of 12-inch and 625 feet of 16" asbestos cement (AC) water main (installed in 1972) located in Rochester Knoll Subdivision, section 16 of the City. The water main will be replaced with 8-inch, 12-inch & 16-inch ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2023.			

WS-51	**Oakwood Park Condos Water Main Replacement**		
2025-2026			
Estimated City Cost:	\$1,062,500	Estimated City Share:	100%
Replace approximately 1,750 feet of 6-inch and 1,650 feet of 8-inch asbestos cement (AC) water main (installed in 1972) located in Oakwood Park Condominiums, section 19 of the City. The AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.			

WS-52	**Knorrwood Hills Subdivision Water Main Replacement**		
2025-2026			
Estimated City Cost:	\$2,203,125	Estimated City Share:	100%
Replace approximately 1,990 feet of 6-inch, 3,000 feet of 8-inch and 2,060 feet of 12-inch asbestos cement (AC) water main (installed in 1966) located in Knorrwood Hills Subdivision, section 3 of the City. The AC			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Water & Sanitary Sewer System Improvements**

water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.

WS-53	**Hampton Plaza Water Main Replacement**		
	2025-2026		
	Estimated City Cost:	\$800,000	Estimated City Share: 100%
<p>Replace approximately 30 feet of 6-inch, 1,735 feet of 8-inch and 795 feet of 16 inch cast iron water main (installed in 1973) located in Hampton Plaza, section 26. The Cast Iron water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.</p>			

WS-54	**Fairwood Villas Condos Water Main Replacement**		
	2024-2025		
	Estimated City Cost:	\$703,125	Estimated City Share: 100%
<p>Replace approximately 1,250 feet of 6-inch and 1,000 feet of 8-inch asbestos cement (AC) water main (installed in 1972) located in Fairwood Villas Condominiums, section 10 of the City. The water main will be replaced with 8-inch ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2025.</p>			

WS-55	**Eyster's Avon Gardens Subdivision Water Main Replacement**		
	2025-2026		
	Estimated City Cost:	\$1,093,750	Estimated City Share: 100%
<p>Replace approximately 80 feet of 6-inch and 520 feet of 12-inch cast iron water main and 490 feet of 8 inch and 2,410 feet of 12-inch asbestos cement (AC) water main (installed in 1966) located in Eyster's Avon Gardens Subdivision, section 27 of the City. The Cast Iron and AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.</p>			

WS-56	**Charles Hamlet & Woodside Apartments Water Main Replacement**		
	2025-2026		
	Estimated City Cost:	\$1,625,000	Estimated City Share: 100%
<p>Replace approximately 2,720 feet of 6-inch and 2,480 feet of 8-inch asbestos cement (AC) water main located in Charles Hamlet Apartments (installed in 1974), section 26 and Woodside Apartments (installed in 1973), section 26 of the City. The AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2026.</p>			

** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan Water & Sanitary Sewer System Improvements
--

WS-57	**Grosse Pines Subdivision Water Main Replacement**		
2021-2021			
Estimated City Cost:		\$3,185,938	Estimated City Share: 100%
<p>Replace approximately 150 feet of 6-inch and 10,045 feet of 8-inch asbestos cement (AC) water main (installed in 1977) located in Grosse Pine Subdivision, section 9 of the City. The AC water main will be replaced with ductile iron or high density polyethylene (HDPE) pipe, depending on the installation method. Construction is planned to begin in 2021.</p>			

WS-58	**Dequindre/Avon Roundabout Water & Sewer Relocation**		
2021-2021			
Estimated City Cost:		\$150,000	Estimated City Share: 100%
<p>The Road Commission for Oakland County (RCOC) is proposing to construct a roundabout at Dequindre/Avon. The City of Rochester Hills has water main and low pressure sanitary sewer main located within the RCOC's right-of-way. The utilities will need to be relocated once the project commences and are a non-participating cost. Construction is planned to begin in 2021.</p>			

** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan Storm Water Management

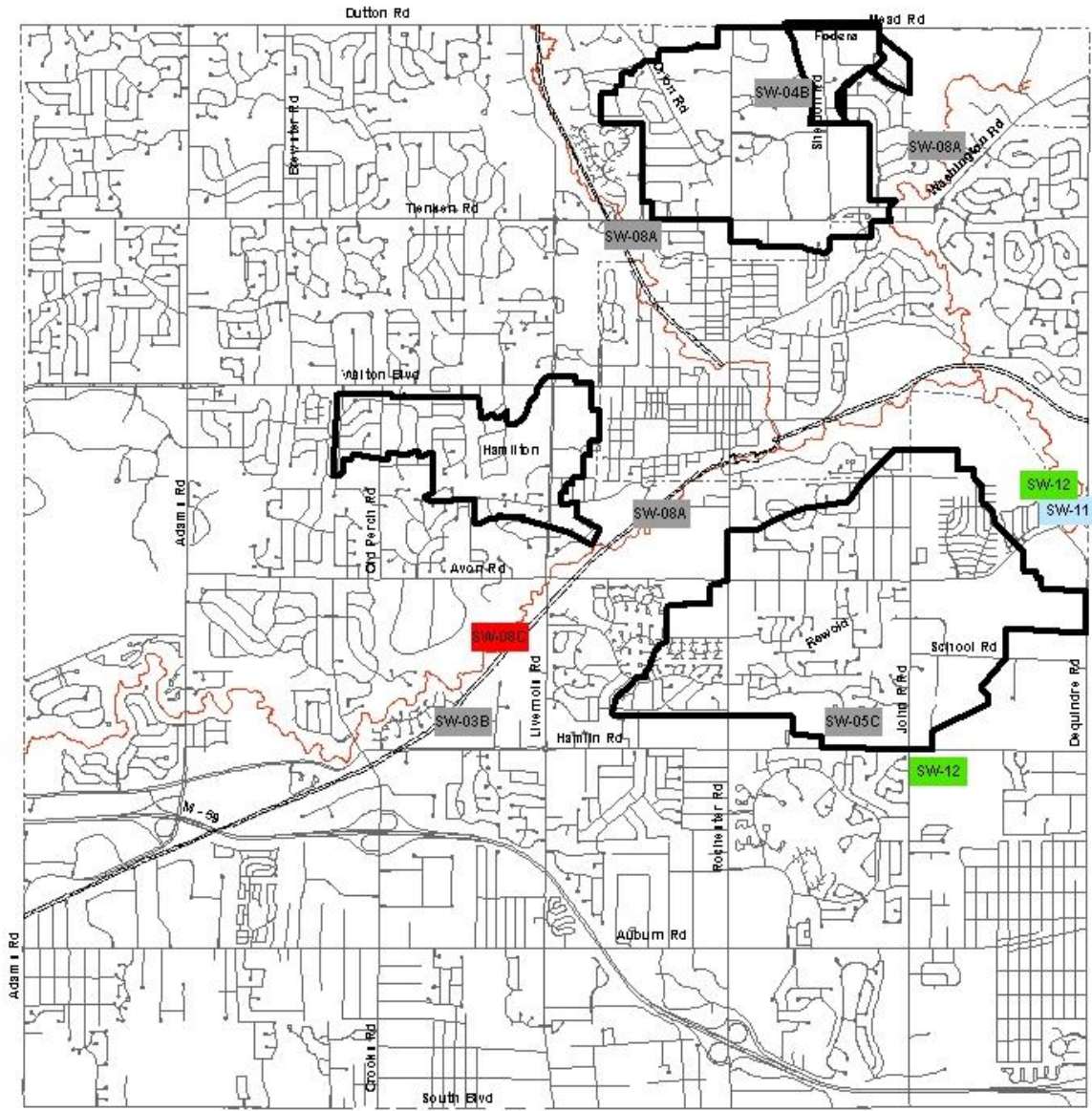
Prior to FY 2000, the primary focus of Storm Water Management in Rochester Hills was to develop a storm water system adequate to provide for storm water runoff in existing flood-prone areas. Much of the storm water management improvements made were financed and constructed through the use of Chapter 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

2021-2026 Capital Improvement Plan Storm Water Management



LEGEND
Projects that may begin construction in:

2021	SW-00
2022	SW-00
2023	SW-00
2024	SW-00
2025	SW-00
2026	SW-00
Pending Project	SW-00



4/23/2020
Published by MIS Dept.

**2021-2026 Capital Improvement Plan
Storm Water Management**

SW-08C	Clinton River: Natural Channel Restoration		
Estimated Total Project:	\$840,000	2022-2026	
Estimated City Cost:	\$420,000	Estimated City Share:	50%
<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 2022, pending a funding source/grant award, or if erosion increases dramatically.</p>			

SW-11	Clinton River / Yates Park: Riverbank Stabilization		
Estimated Total Project:	\$400,000	2022-2024	
Estimated City Cost:	\$230,000	Estimated City Share:	50% / 100%
<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. Now that the City has a Natural Resources Division, some of these efforts may be shared. Construction is planned to begin in 2022.</p>			

SW-12	Watertowns Storm Water Improvements		
Estimated Total Project:	\$146,500	2024-2024	
Estimated City Cost:	\$73,250	Estimated City Share:	50%
<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 2023. Funding could move this project up to coincide with any of their park improvements for these locations.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Storm Water Management**

SW-13	Storm Water Best Management Practices (BMP) Retrofitting		
Estimated Total Project:	\$450,000	2023-2024	
Estimated City Cost:	\$225,000	Estimated City Share:	50%
<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 2023, or if funding becomes available.</p>			

SW-15	Infra-Red Aerial Photography Survey		
	2023-2023		
Estimated City Cost:	\$65,000	Estimated City Share:	100%
<p>The infra-red aerial survey provides the impervious/non-impervious surface usage for all properties in Rochester Hills. This survey will be the basis to define the Residential Equalized Units (REU) ratio to base costs relating to a Stormwater Utility. The Stormwater Utility is currently being proposed through a Public Safety & Infrastructure sub-committee, and as the process moves forward, this aerial survey is part of the requirements needed to meet implementation goals. If approved, the goal is to have the Stormwater Utility in place by 2023 and to have full utility operations by 2025. Implementation of the aerial survey is proposed to begin in 2023.</p>			

** = New project to the 2021-2026 CIP

2021-2026 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 98 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.

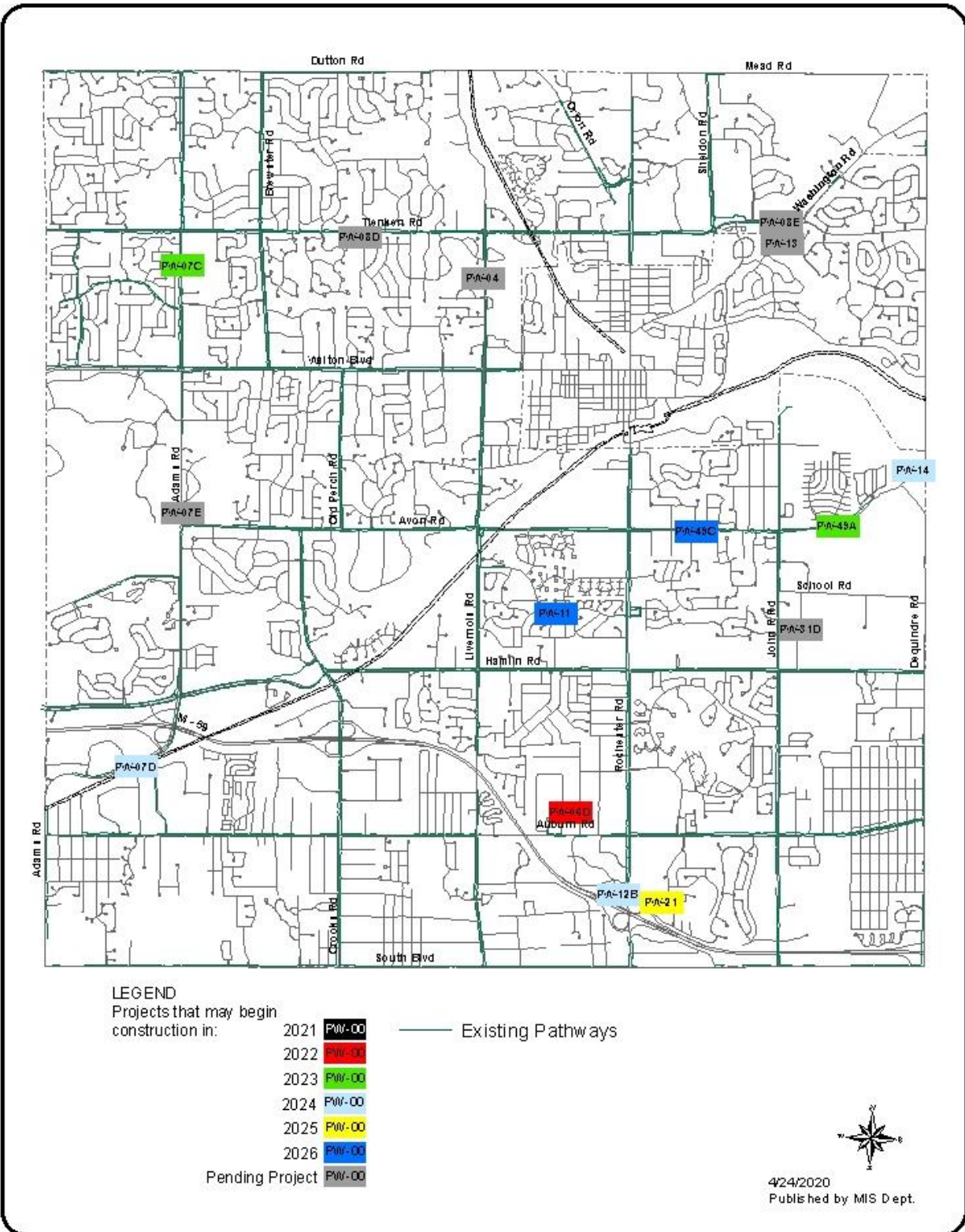
The scope of the pathway program has gone beyond the initial goal of just extending the system to both sides of all arterial roads in the City. In November of 2006, a twenty-year 0.1858 mill ballot proposal was approved by the residents of Rochester Hills to fund the continuation of new pathways, rehabilitation 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.

2021-2026 Capital Improvement Plan Pathway System



**2021-2026 Capital Improvement Plan
Pathway System**

PW-01A	Pathway System Rehabilitation Program		
2021-2026			
Estimated City Cost:	\$1,500,000	Estimated City Share:	100%
<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>			

PW-06D	Auburn Road Pathway Gaps [Walbridge Road – Hickory Lawn Road]		
2023-2024			
Estimated City Cost:	\$464,950	Estimated City Share:	100%
<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 2024.</p>			

PW-07C	Adams Road Pathway [Powderhorn Ridge Road – Tienken Road]		
2021-2022			
Estimated City Cost:	\$429,250	Estimated City Share:	100%
<p>Construction of approximately 2,400' of 8' wide pathway along the east side of Adams Road between Powderhorn Ridge Road and the Premier Academy site. Also, construct a key walk along the north side of Powderhorn Ridge Road to allow pedestrians to safely cross Adams Road at the traffic intersection. Operating costs of approximately \$730 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2022.</p>			

PW-07D	Adams Road @ Clinton River Trailway: Pathway Crossing		
2023-2024			
Estimated City Cost:	\$180,330	Estimated City Share:	100%
<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)</p>			

** = New project to the 2021-2026 CIP

2021-2026 Capital Improvement Plan Pathway System

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 2024.

PW-11	Drexelgate Pathway Gap [Wexford Way – Rochester Road]		
2025-2026			
Estimated City Cost:	\$1,018,500	Estimated City Share:	100%
<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 2026.</p>			

PW-12B	Rochester Road Pathway at M-59		
2023-2024			
Estimated City Cost:	\$1,110,000	Estimated City Share:	100%
<p>Construction of approximately 3,200 feet of new 8-foot wide pathway on each side of Rochester Road and connecting to existing ends of pathway. The resulting pathway configuration would resemble the existing version at the Crooks and M-59 interchange. New pathway would not be constructed along the 325-foot bridge section but the City would coordinate with MDOT to re-purpose the paved shoulder into a 10-foot wide pathway protected by Jersey barriers. Constructing this portion of pathway will improve the level of service for pedestrians by providing a paved north-south route through the interchange at M-59. Residents that walk or cycle will benefit from the proposed travel route. Operating costs are expected to increase for maintenance and repairs. This project is dependent on grant funding. Construction is planned to begin in 2024.</p>			

PW-14	Yates Pathway [Yates Park to North of Avon]		
2023-2024			
Estimated City Cost:	\$233,500	Estimated City Share:	100%
<p>Construct two stretches of pathway: The first being approximately 1,200' from the Yates Park parking area heading east and north along Avon and Dequindre to the City of Rochester corporate limit south of the Clinton River Trailway crossing of Dequindre; The second being approximately 200' from the southwest quadrant of the Dequindre/Avon intersection and heading west of Avon Road towards Yates Cider Mill. Construction is planned to begin in 2024.</p>			

**2021-2026 Capital Improvement Plan
Pathway System**

PW-21	East Nawakwa Pathway [Rochester Road – Joshua Drive]
2024-2025	
Estimated City Cost:	\$401,050
Estimated City Share:	100%
<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 2025.</p>	

PW-49A	Avon Road Pathway [LeGrande Boulevard – Cider Mill Boulevard]
2022-2023	
Estimated City Cost:	\$311,750
Estimated City Share:	100%
<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 2023.</p>	

PW-49C	Avon Road Pathway [Rainier Avenue – Bembridge Drive]
2025-2026	
Estimated City Cost:	\$652,000
Estimated City Share:	100%
<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 2026.</p>	

** = New project to the 2021-2026 CIP



innovative *by* nature

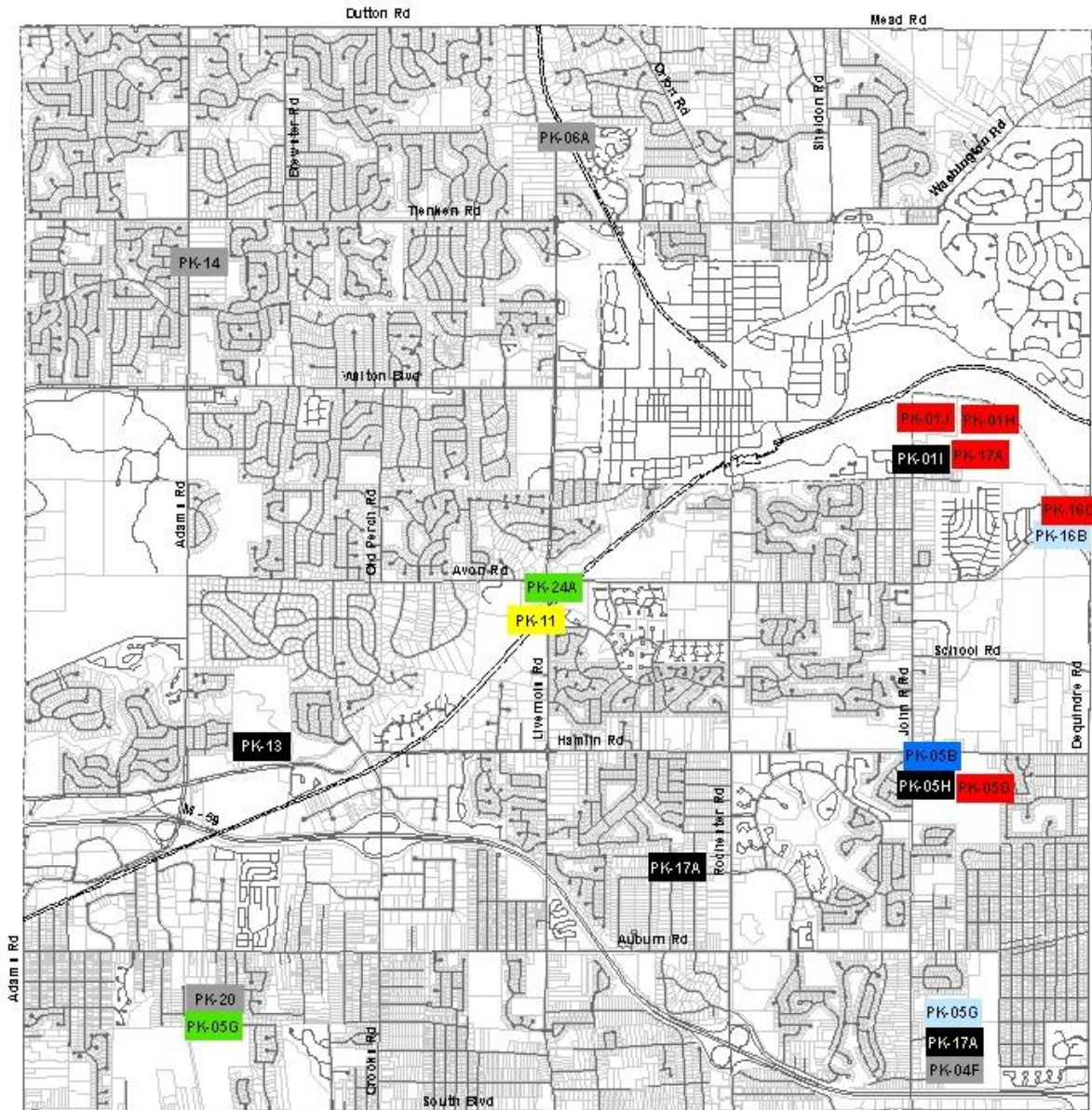
2021-2026 Capital Improvement Plan Parks and Recreation

The City of Rochester Hills' Parks provide active and passive recreational opportunities for its residents. The City operates 2 regional trails and 14 parks, Museum and Green Space that cover over 1,123 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.

2021-2026 Capital Improvement Plan Parks and Recreation



LEGEND

Projects that may begin construction in:

2021	PK-00
2022	PK-00
2023	PK-00
2024	PK-00
2025	PK-00
2026	PK-00
Pending Project	PK-00



4/24/2020
Published by MIS Dept

**2021-2026 Capital Improvement Plan
Parks and Recreation**

PK-01H	**Bloomer Park: Pinegrove & Hilltop Shelter Restroom Upgrades**		
2021-2022			
Estimated City Cost:	\$180,000	Estimated City Share:	100%
<p>The restrooms at the Pinegrove and Hilltop Shelters within Bloomer Park are in need of upgrades. The upgrades will include leveling the floors and changing plumbing fixtures for ADA compliance, as well as, improving lighting and painting. It is important to update current facilities within the park to preserve the quality of the park experience for visitors. Upgrades are estimated to begin in 2022.</p>			

PK-01I	**Bloomer Park: Office Building Water Hook-up**		
2021-2021			
Estimated City Cost:	\$78,000	Estimated City Share:	100%
<p>The office building at Bloomer Park is currently on a private well. The well water has been determined to be unsafe for drinking water. It is planned to connect to City water to provide employees working in this office safe drinking water. Construction is estimated to begin in 2021.</p>			

PK-01J	**Bloomer Park: Stone Building Upgrades**		
2021-2022			
Estimated City Cost:	\$360,000	Estimated City Share:	100%
<p>A project to add heat in the restrooms and kitchen area, improve lighting, replace restroom stall walls and seasonally enclose the fireplace room at the Stone Shelter at Bloomer park. These improvements would allow for year-round use of the building, provide public restrooms for fitness groups, walkers, and other park visitors and provide a winter location for Outdoor Engagement programming. Currently there are no restrooms available during the colder months anywhere within close proximity of the Stone Shelter, our newly added exercise pad, or the front of the park. This will not only provide a needed and basic level of service to general park users, but also for staff as we continue to build our outdoor programming and look for ways to provide programs year round; increasing the number of residents/families we reach and program revenue. Construction is estimated to begin in 2022.</p>			

PK-05B	Borden Park: Roller Hockey Rink Board & Tile Replacement Schedule		
2021-2026			
Estimated City Cost:	\$104,810	Estimated City Share:	100%
<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 #1 in 2026. This program is on-going.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Parks and Recreation**

PK-05G	Basketball, Tennis, and Pickle Ball Court Renovation Program		
Estimated Total Project:		\$405,190	2021-2024
Estimated City Cost:		\$405,190	Estimated City Share: 100%
<p>Renovation of the 3 basketball courts at Borden Park, 2 basketball and 2 tennis courts at Avondale Park, and 2 tennis courts at Spencer Park. The courts currently have many cracks, drainage issues, and several have a plastic tile surface meant as a temporary fix until repairs can be made. Both the asphalt and tiles are beyond their useful life expectancy. The courts are currently considerably below industry standards and residents' expectations. This project would be a complete rebuild of the asphalt courts and fencing that would recreate the courts as they were when they were first opened. This program is on-going.</p>			

PK-05H	Borden Park Office Relocation		
		2020-2021	
Estimated City Cost:		\$1,500,000	Estimated City Share: 100%
<p>Relocation of the Borden Park Office to a more central location in order to provide better safety, security and customer service as well as eliminate a no longer functional old house currently serving as the office building. While working 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 is an old residential house at the eastern park boundary. It is not an acceptable office environment, 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 for customer access. Construction is planned to begin in 2021.</p>			

PK-07B	Compact Loader		
		2021-2021	
Estimated City Cost:		\$60,000	Estimated City Share: 100%
<p>Purchase of a compact loader and attachments to support City-wide landscaping functions to improve overall appearance of City-wide landscapes. Compact loaders can be used in very tight areas including planting beds, gardens and landscape features where traditional equipment will not fit or would cause damage. Attachments would include auger for tree planting, tiller for bed preparation, bucket for working with mulch, forks for large plants and a trencher for irrigation work. Purchase is planned for 2021.</p>			

PK-07C	Fraize Mower		
		2021-2021	
Estimated City Cost:		\$40,000	Estimated City Share: 100%
<p>Purchase of a fraize mower. Fraize mowing is a maintenance process to help clean up and minimize thatch and to control organic build-up. This process also controls and removes weed seed accumulation while leaving the crown of the plant intact ready for regeneration. Fraize mowing will be used for our major field renovations (1-2 fields a year). It will increase quality, safety and available hours of play on our sports fields.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Parks and Recreation**

It can also be used in high traffic areas other than sports fields. This equipment will save money through reduced manpower and materials needed for renovation. Purchase is planned for 2021.

PK-11	Clinton River Access: Parking Lot & Canoe/Kayak Launch		
Estimated Total Project:	\$300,000	2025-2025	
Estimated City Cost:	\$150,000	Estimated City Share:	50%
<p>Construction of a small parking area (approximately 20 spaces), an accessible pathway, and an accessible canoe/kayak launch into the Clinton River at Eagle’s Landing. 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 2025.</p>			

PK-13	Innovation Hills: Park Development		
Estimated Total Project:	\$14,206,736	2018-2024	
Estimated City Cost:	\$7,610,930	Estimated City Share:	Approx. 50%
<p>Development of Innovation Hills park including parking lot, trails and boardwalks, improvements to the wetlands, invasive vegetation control, fitness stations, restrooms, playgrounds, water features & ponds, pavilion(s), sensory garden, observation areas, support structures, bridges across Clinton River, community gathering areas, & community building. Private donations and grant funding will be pursued to offset overall project costs. Construction began in 2014. Over \$1,000,000 in grants and private funding has been raised over the last year. Construction plans are currently under way for trail system, invasive vegetation control, two boardwalks, restroom, kayak landing, parking lot, water features & ponds, playground entrance, & sensory garden.</p>			

PK-16B	Yates Park: Clinton River Access Improvements		
	2024-2024		
Estimated City Cost:	\$141,600	Estimated City Share:	100%
<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. Project also includes rain gardens and storm water improvements and paving the existing parking lot. Operating costs of approximately \$1,000 per year are anticipated for this facility. Construction is planned to begin in 2024.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Parks and Recreation**

PK-16C	**Yates Park: Playground Development**		
2021-2022			
Estimated City Cost:	\$360,000	Estimated City Share:	100%
<p>Install a universally accessible play structure with connecting paths and accessible surfacing at Yates Park. Yates is our 4th busiest park and currently has picnic tables, access to the Clinton River and a vault toilet as its only amenities. A play structure would greatly enhance the park offerings. Operating costs of approximately \$2,000 per year are anticipated with the new equipment. Construction is planned to begin in 2022.</p>			

PK-17A	Playground Replacement Schedule		
2021-2026			
Estimated City Cost:	\$527,980	Estimated City Share:	100%
<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 Wabash Park and Spencer Park in 2021 and Bloomer Park in 2023. Operating costs of approximately \$10,000 per year are anticipated to remain consistent with the new equipment. This program is on-going.</p>			

PK-24A	**Veterans Memorial Pointe: Gazebo Replacement**		
2022-2023			
Estimated City Cost:	\$175,000	Estimated City Share:	100%
<p>The Gazebo within Veterans Memorial Pointe is an integral part of the park's experience. Many use it for photo opportunities or to rest and reflect. The current gazebo is original to the park and is in need of replacement. This would include a full tear down and rebuild. Maintenance costs would continue to be approximately \$1,500 per year. Replacement is scheduled to begin in 2023.</p>			

PK-25A	**Community Pool**		
2026-2026			
Estimated City Cost:	\$5,500,000	Estimated City Share:	100%
<p>A community request for an outdoor community pool. The pool location is unknown at this time. Staffing costs would be approximately \$350,000 per year. Operational costs would be approximately \$50,000 per year and maintenance costs would be approximately \$100,000 per year. Insurance and liability costs would also increase approximately \$100,000 per year. Grants will be pursued for this project. Construction is estimated for 2026.</p>			

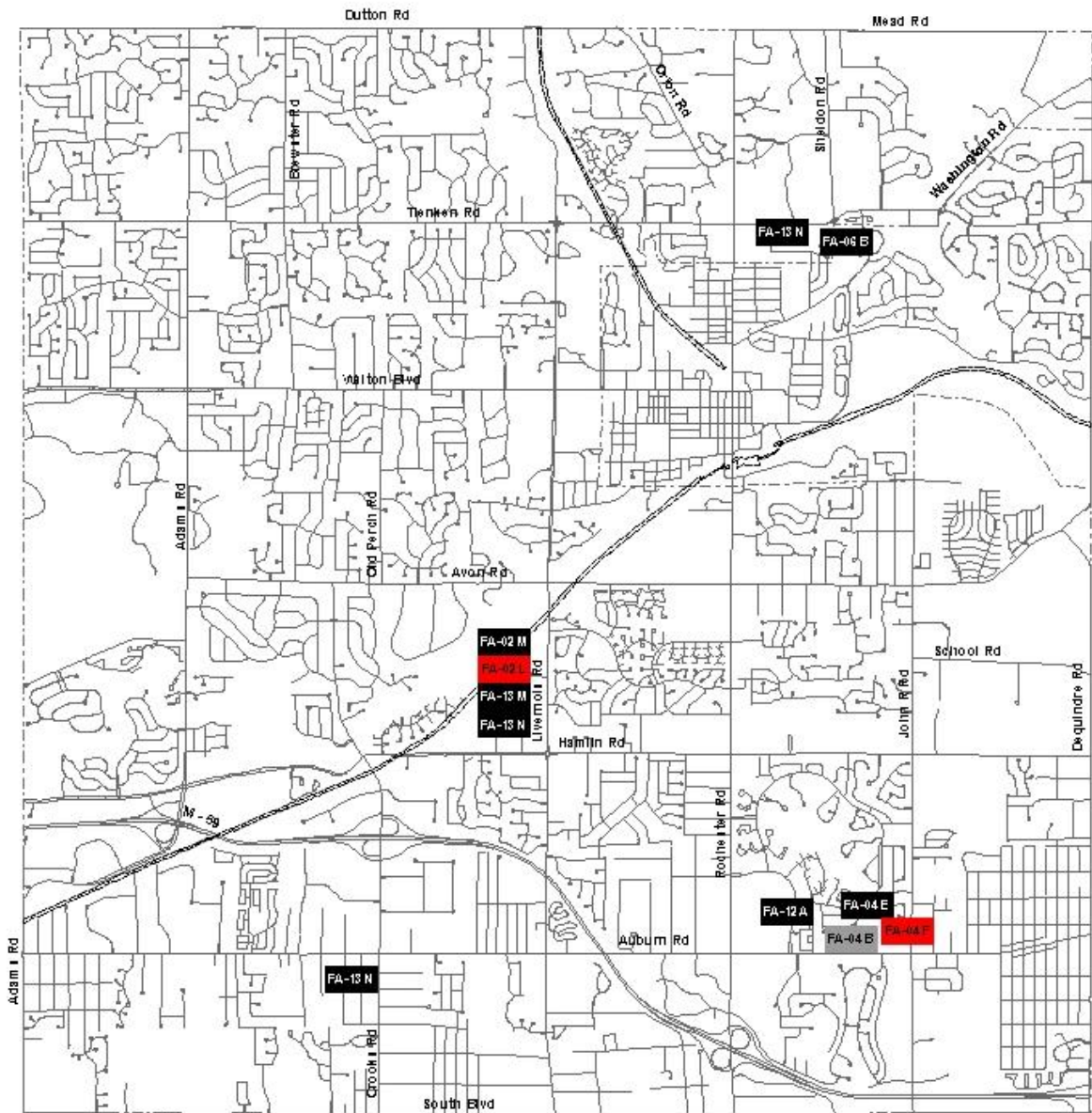
** = New project to the 2021-2026 CIP

2021-2026 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 \$63.3 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.

2021-2026 Capital Improvement Plan City-Owned Facilities



LEGEND

Projects that may begin construction in:

2021	FA-00
2022	FA-00
2023	FA-00
2024	FA-00
2025	FA-00
2026	FA-00
Pending Project	FA-00



4/24/2020
Published by MIS Dept.

**2021-2026 Capital Improvement Plan
City-Owned Facilities**

FA-02L	Fire Station 1: Carports		
2021-2022			
Estimated City Cost:	\$256,000	Estimated City Share:	100%
<p>Install a new carport structure at Fire Station #1 to cover twelve (12) spaces where the Fire Department command vehicles park. The command vehicles will stay clear during snow and ice conditions which will allow for a quicker response time. This will also extend the life of the vehicles and allow the replacement time frame to be extended. Maintenance costs will increase approximately \$7,500 every 5 years for painting. Construction is planned to begin in 2022.</p>			

FA-02M	Training Tower Gas-Fired Prop		
2021-2021			
Estimated City Cost:	\$200,000	Estimated City Share:	100%
<p>Installation of a gas-fired burn prop into existing Training Tower at Fire Station 1. Prop would be used to simulate actual fire conditions in a safe and effective manner. Interior fire training props deliver the realism sought in an advanced fire training program and fire events that can be used in addition to the fire training tower to provide the most advanced fire training simulation currently available. Having a gas-fired prop in the training tower would allow members to train on duty, eliminate OT costs and be able to train in live fire conditions more often. The prop provides decreased carcinogen production compared to Class A materials (pallets and hay). Several safety controls include temperature control, the ability to instantly “shut off” the fire and the ability to rapidly vent the area. Installation is planned for 2021.</p>			

FA-04E	**Fleet Services Garage Ventilation**		
2021-2021			
Estimated City Cost:	\$25,000	Estimated City Share:	100%
<p>The Fleet Services garage has no air conditioning and minimal hot weather ventilation. In the summer months both the temperature and humidity levels in the garage routinely become excessively high, especially while vehicles and equipment are running inside, negatively affecting the well being and productivity of the fleet team members. Replacing existing skylight(s) with roof mounted ventilation fan(s) will significantly improve internal working conditions reducing both internal temperature and humidity levels resulting in a healthier work environment. The upgrades are estimated to begin in 2021.</p>			

FA-04F	**DPS Wash Bay: Catch Basin**		
2021-2022			
Estimated City Cost:	\$72,000	Estimated City Share:	100%
<p>Currently, DPS equipment is being washed outside in the freezing temperatures instead of using the wash bay to try and keep the dirt out of the lines. Then the trucks have to drive through all of the dirt and debris to get into the wash bay. The trucks end up tracking a ton of the dirt and debris in with them. To improve the wash bay so it can use it as designed, it is planned to install a large catch basin interceptor with larger intake pipes. The upgrades are estimated to begin in 2022.</p>			

**2021-2026 Capital Improvement Plan
City-Owned Facilities**

FA-06B	**Cemetery: Columbarium II**		
	2021-2021		
	Estimated City Cost:	\$70,000	Estimated City Share: 100%
<p>Construction of a second columbarium at the Van Hoosen-Jones Stoney Creek Cemetery to allow individuals the option to have their loved ones ashes placed in a respectful place of remembrance. The columbarium proposed would consist of 72 niches in a hexagon shape. The enclosure of the columbarium would require a foundation. Niches would have moisture prevention measures, and the metal joints welded. Granite face plates are to be mechanically attached. The cost of the columbarium construction, in relation to the revenue generated through sales, will be slightly over break even. Construction is planned for 2021.</p>			

FA-07C	Citywide HVAC Maintenance & Repairs Schedule		
	Estimated Total Project:	\$1,037,350	2021-2026
	Estimated City Cost:	\$1,037,350	Estimated City Share: 100%
<p>Scheduled replacement of units based on estimated life expectancy. HVAC systems require continual maintenance, repairs and upgrades to keep to City buildings safe and comfortable for all residents, visitors and employees. This program is on-going.</p>			

FA-07D	Citywide Energy Management Systems		
	Estimated Total Project:	\$216,000	2021-2026
	Estimated City Cost:	\$216,000	Estimated City Share: 100%
<p>Replacement of existing Energy Management Systems to the current system used by other City locations. Energy Management Systems allow us to use our HVAC systems with the greatest efficiency and control when functioning properly with minimal errors or delay. Upgrading to the uniform system will grant us a higher level of control over building environments. This program is on-going.</p>			

FA-09	IT Infrastructure Capacity Funding		
	2024-2026		
	Estimated City Cost:	\$100,000	Estimated LDFA Share: 100%
<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>			

**2021-2026 Capital Improvement Plan
City-Owned Facilities**

FA-10B	**Citywide Parking Lot Replacements**		
Estimated Total Project:	\$7,868,520	2021-2026	
Estimated City Cost:	\$7,868,520	Estimated City Share:	100%
<p>Scheduled replacement of parking lots at City-owned buildings. This is a multi-year project to maintain and replace damaged parking lots. A study was conducted to determine the condition of each parking lot. Replacement costs include preliminary design engineering, geo-technical engineering and construction engineering. Replacements are planned to begin in 2021.</p>			

FA-10C	**Citywide Roof Replacements**		
Estimated Total Project:	\$1,752,000	2021-2025	
Estimated City Cost:	\$1,752,000	Estimated City Share:	100%
<p>Scheduled replacement of roofs at City-owned buildings. This is a multi-year project to replace roofs at the end of their useful life, before they require a high cost of maintenance and repairs. A study was conducted to determine the condition of each roof. Replacement costs include preliminary engineering and construction engineering. Replacements are planned to begin in 2021.</p>			

FA-11	ADA Compliance Implementation Program		
	2021-2026		
Estimated City Cost:	\$240,000	Estimated City Share:	100%
<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>			

FA-12A	OCSO Substation Water Heater		
Estimated Total Project:	\$38,000	2021-2021	
Estimated City Cost:	\$38,000	Estimated City Share:	100%
<p>Replacement of the water heater at the Oakland County Sheriff Office (OCSO) Substation. The unit is reaching the end of its useful life and more efficient options are now available. Replacement is planned in 2021.</p>			

**2021-2026 Capital Improvement Plan
City-Owned Facilities**

FA-13M	Fire Station #1 Concrete Approach Replacement		
Estimated Total Project:	\$260,000	2020-2021	
Estimated City Cost:	\$260,000	Estimated City Share:	100%
<p>Replacement of cracked concrete approach to Fire Station #1 in front of apparatus bays. This project will provide a safe and reliable concrete drive for Fire Department vehicles to respond to emergencies. Construction is planned to begin in 2020.</p>			

FA-13N	Fire Station Bay Heaters		
Estimated Total Project:	\$130,000	2021-2021	
Estimated City Cost:	\$130,000	Estimated City Share:	100%
<p>Replacement of the bay heaters in the Fire Station #1, 3 and 5 Apparatus Bays. They are essential to keeping the Fire vehicles and Ambulance supplies at optimal temperature for their life-saving capabilities. Without working bay heaters, emergency services can be slowed or interrupted by low temperatures. Replacement is planned in 2020.</p>			

**2021-2026 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.

PS-07	Master Plan Update Schedule		
	2021-2026		
	Estimated City Cost:	\$100,000	Estimated City Share: 100%
Contract with a planning consultant to prepare scheduled updates to the City's Master Plan. The Master Plan is the policy tool used as a guide in the physical development of the community. By State Law (PA 33 of 2008) the Master Plan must be reviewed and updated every five years. The Master Plan was updated in 2018 and the next required five year review and update is planned to begin in 2023.			

PS-08	Master Thoroughfare Plan Update Schedule		
	2021-2026		
	Estimated City Cost:	\$150,000	Estimated City Share: 100%
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 Master Thoroughfare Plan was updated in 2020 and the next update is planned to be completed in 2025.			



innovative *by* nature

**2021-2026 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.

IS-02B	City Website Update Schedule		
2021-2026			
Estimated City Cost:	\$35,000	Estimated City Share:	100%
<p>Scheduled improvements in functionality and design to the City's current website configuration. Improvements would likely 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 2023. This update schedule is on-going.</p>			

IS-04A	Fire – Turnout Gear Replacement Schedule		
2021-2026			
Estimated City Cost:	\$720,000	Estimated City Share:	100%
<p>Scheduled replacement of turnout gear for fire suppression personnel. Turnout gear is an essential part of a firefighter's protective equipment. Turnout gear is scheduled to be replaced every 8-10 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 for 2021, however would need to begin in 2020 for a 2021 delivery. This replacement program is on-going. Additionally, with new studies as related to Firefighter Health and Wellness, Firefighters have a higher risk of cancer. The current recommendation is that members have two (2) sets of turnout gear so that after a fire a member can decontaminate completely, including washing of their turnout gear. Many studies on firefighters with cancer, dermal absorption studies, biochemical studies of firefighters with cancer, and University studies of dirt deposits on turnout gear have been done. There have also been ongoing studies and questions about turnout gear contamination, decontamination, cleaning, and the role turnout gear plays in carcinogen/health hazards exposure. Having the second set of turnout gear allows for immediate laundering. Finally, when repairs are being made to a set of turnout gear a member has a second set available to wear.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Internal Service Support Programs**

IS-04D	SCBA Replacement Schedule		
2021-2026			
Estimated City Cost:	\$1,180,000	Estimated City Share:	100%
<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 2024. This replacement program is on-going.</p>			

IS-04G	Heart Monitor Replacement Schedule		
2021-2026			
Estimated City Cost:	\$235,000	Estimated City Share:	100%
<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>			

IS-05	Citywide Fleet Replacement Schedule		
2021-2026			
Estimated City Cost:	\$9,231,260	Estimated City Share:	100%
<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 79-82 in the Appendix Section. This replacement program is on-going.</p>			

IS-07	Citywide Copier Replacement Schedule		
2021-2026			
Estimated City Cost:	\$200,000	Estimated City Share:	100%
<p>Scheduled replacement of City copier machines when they have reached the end of their useful service lives. Operating costs of approximately \$18,000 per year for all City copiers are anticipated to remain consistent with timely replacement. All City copier machines were replaced in 2018, the next replacement is planned for 2023. This project is on-going.</p>			

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Internal Service Support Programs**

IS-08	Fire Vehicle & Apparatus Replacement Schedule		
2021-2026			
Estimated City Cost:	\$1,369,150	Estimated City Share:	100%
<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 83 in the Appendix Section. This replacement program is on-going.</p>			

IS-10B	Computer Network Upgrade Schedule		
2021-2026			
Estimated City Cost:	\$760,000	Estimated City Share:	100%
<p>Regularly scheduled network computer system upgrade(s). Items to be evaluated for replacement include servers, storage, firewalls, switches, and software such as operating systems, back-up, anti-virus, and network management. Operating costs 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>			

IS-10D	Office Software Suite Upgrade Schedule		
2021-2026			
Estimated City Cost:	\$134,010	Estimated City Share:	100%
<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>			

IS-12A	Financial Software System Replacement Schedule		
2021-2026			
Estimated City Cost:	\$200,000	Estimated City Share:	100%
<p>Scheduled upgrade of existing financial system to current version. An upgrade will be completed in 2020. The next upgrade is anticipated to be in 2025. Annual maintenance costs are anticipated to remain consistent at \$40,000 per year. This replacement program is on-going.</p>			

IS-18	Election Equipment Replacement Schedule		
2021-2026			
Estimated City Cost:	\$400,000	Estimated City Share:	100%

** = New project to the 2021-2026 CIP

**2021-2026 Capital Improvement Plan
Internal Service Support Programs**

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 election equipment was replaced in 2017, the next replacement is planned for 2023. This replacement program is on-going.

IS-19B	Auditorium / Media Equipment Replacement Schedule		
	2021-2024		
	Estimated City Cost:	\$135,000	Estimated City Share: 100%
Replacement of auditorium and media equipment to avoid interruptions in the service they provide. Keeping computer-based equipment up to date will reduce emergency expenditures brought on by equipment failure and leverage the continued improvements and advances in that technology. This project is on-going.			

IS-20	Electronic Document Management System		
	2021-2023		
	Estimated City Cost:	\$430,000	Estimated City Share: 100%
Digital records management project covering all city departments and records. This project will enable simple and accurate access to and retrieval of city records for staff. This will also simplify responses to records for FOIA and court requests. This system will also facilitate adherence to the Records Retention Policy and the paperless office with forms processing. Implementation would be completed over an approximately three year period, bringing on several departments per year. It is proposed that this will be a cloud based system, limiting up front capital and management costs. Implementation is planned to begin in 2021.			

**2021-2026 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 2021-2026 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 2021-2026 timeframe.

FA-04B	DPS Facility: Alternative Energy
<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>	

MR-01B	LDFA Road System: Rehabilitation Program
<p><i>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 & 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.</i></p>	

MR-01F	Crooks Boulevard: Street Lighting
<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>	

MR-02E	Hamlin Boulevard: Street Lighting
<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>	

MR-04B	Walton Boulevard: Street Lighting
<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>	

**2021-2026 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-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.

**2021-2026 Capital Improvement Plan
Projects Pending**

MR-18	Dutton Road Paving (Rainbow Drive – Arthurs Way)
<p><i>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.</i></p>	
MR-26D	Livernois Boulevard: Street Lighting
<p><i>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.</i></p>	
MR-37B	Barclay Circle @ Rochester Road: Traffic Signal Improvements
<p><i>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.</i></p>	
MR-42B	Livernois Road @ M-59 Highway: Bridge Expansion
<p><i>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.</i></p>	
LS-05	Reuther Middle School Area Street Lighting
<p><i>Installation of approximately 20 street lights along the walking routes, i.e., Culbertson Ave and Marlowe Ave near Reuther Middle School. Funding will be sought from Safe Routes to School for the installation of the street lights. The ongoing operations and maintenance would be funded 50/50 between Rochester Community School (RCS) District and the City. The installations would be coordinated with DTE Energy.</i></p>	

**2021-2026 Capital Improvement Plan
Projects Pending**

LS-06

Reuther Middle School Area Sidewalks

Installation of approximately 5,900' of 5' wide concrete sidewalk along the walking routes, i.e., Culbertson Ave and Marlowe Ave, near Reuther Middle School. Funding will be sought from Safe Routes to School for the installation of the sidewalks. The on-going operations and maintenance will be the responsibility of the adjacent property owners.

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.

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.

LS-14

Kingsview Avenue Paving (SAD)

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.

**2021-2026 Capital Improvement Plan
Projects Pending**

LS-18	Runyon Road Paving
<i>Pave approximately 1,130 feet of Van Hoosen, Runyon and Washington Roads south of Tienken Road. The roads are currently gravel. This project could be coordinated with the proposed Runyon Road pathway project and would offset some of the storm water sewer and ditch enclosure costs that are currently in the new pathway project.</i>	
LR-20	Leach Road Paving SAD
<i>Pave approximately 1,650 feet of existing gravel road with hot mix asphalt and curb and gutter north of Auburn Road to the existing pavement at Waterview. Pavement width will be 36 feet from back of curb to back of curb to match the existing paved section between Waterview and Adams. This project is funded by the LDFA. This is also subject to the City's SAD Policy.</i>	
PK-04F	Splash Pad / Spray Park
<i>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.</i>	
PK-06A	Paint Creek Trailway: Resurfacing Schedule
<i>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 was last done in 2019.</i>	
PK-14	Nowicki Park: Development
<i>Development of the 35-acre park located on Adams Road to include both active and passive recreational opportunities.</i>	
PK-20	Avondale Park: Field Rehabilitation
<i>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.</i>	
PW-04	Livernois Road Pathway (New Life Lane – Tienken Road)
<i>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.</i>	

**2021-2026 Capital Improvement Plan
Projects Pending**

PW-07E	Adams Road Pathway – East Side [Avon Road – S of Hillendale]
<i>Construction of approximately 3,330 feet of 8 foot wide asphalt pathway along the east side of Adams Road between Avon Rd and just south of Hillendale Dr. Project also includes a bridge or culvert crossing over the stream. Operating costs of approximately \$1,200 per year due to the additional pathway section added.</i>	
PW-08D	Tienken Road Pathway Gaps [Tiverton Trail Drive – E of Whispering Knoll Lane]
<i>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.</i>	
PW-08E	Tienken Road Pathway [Van Hoosen Road – Washington Road]
<i>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.</i>	
PW-13	Runyon Road Pathway
<i>Construction of approximately 1,700' of 8' wide concrete pathway along the west side of Van Hoosen, south side of Runyon and east side of Washington Road. The pathway will fill an existing pathway system gap while also providing a pedestrian link to the City Museum at the Van Hoosen Farm. Construction is planned to begin in 2023.</i>	
PW-31D	John R Road Pathway [Hamlin Road – School Road]
<i>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.</i>	
SS-09	Livernois Sanitary Sewer Extension
<i>Extend the sanitary sewer approximately 540 linear feet south on Livernois to provide access for properties currently not connected to public sewer.</i>	
SS-13	Sheldon Road: Sanitary Sewer Metering Equipment
<i>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.</i>	

**2021-2026 Capital Improvement Plan
Projects Pending**

SW-03B	Karas Creek Bank Stabilization
<p><i>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.</i></p>	

SW-04B	Stoney Creek Drain Extension
<p><i>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.</i></p>	

SW-05C	Rewold Drain (Phase C)
<p><i>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.</i></p>	

SW-08A	Major Waterway Preservation
<p><i>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.</i></p>	

SW-10	Sump Line Collection System
<p><i>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.</i></p>	

**2021-2026 Capital Improvement Plan
Projects Pending**

WS-09	Flora Valley Court – River Bend Drive: Water Main Connection
<p><i>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.</i></p>	

WS-15	Michelson Road: Water Main Extension
<p><i>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 a 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.</i></p>	

2021-2026 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
- Building/Ordinance/Facilities Director
- Chief Financial Officer
- Parks & Natural Resources Director
- Planning & Economic Development Director
- Department of Public Services Director

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	Planning Manager
Facilities Manager	Media Production Leader
Deputy Director DPS / City Engineer	Park Manager
Deputy Information Systems Director	Public Utilities Engineering Manager
Fire Chief	Senior Financial Analyst
Fleet Manager	Communication Systems Administrator
Economic Development Manager	Transportation Engineering Manager

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

- Chief Financial Officer
- Planning & Economic Development Director

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.

**2021-2026 Capital Improvement Plan
Project Application Forms**

2021-2026 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

2021-2026 Capital Improvement Plan Project Application Forms

2021-2026 Capital Improvement Plan – Project Application

Prior Approval: Is this project included the 2020 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
- 2020 Budget
 Prior Year Budget: _____

Total Estimated Cost: In 2020 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*

2021-2026 Capital Improvement Plan Project Application Forms

2021-2026 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):

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

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

- | | |
|--|---|
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Present Equipment Obsolete |
| <input type="checkbox"/> Replace Worn-Out Equipment | <input type="checkbox"/> Reduce Personnel Time |
| <input type="checkbox"/> Expanded Service Life | <input type="checkbox"/> New Operation |
| <input type="checkbox"/> Increased Safety | <input type="checkbox"/> Improved Service to Community, Procedures etc... |
| <input type="checkbox"/> Other: <input type="text"/> | |

Replaced Item(s): Attach Separate Sheet if Necessary

Item	Make	Age	Prior Year's	
			Maintenance	Rental Cost
			\$	\$
			\$	\$
			\$	\$

2021-2026 Capital Improvement Plan Project Application Forms

Project Title: _____

CIP ID #: _____

Project Construction	Cost Before 2020	ADOPTED BUDGET 2020	PROJECTED BUDGET 2021	PROJECTED BUDGET 2022	2023	2024	2025	2026	Total	City Share	TOTAL CITY
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
Total Project Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100%	\$0

Future Net Operating Costs / Savings	Cost Before	ADOPTED BUDGET 2020								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
Total Operating Impact	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Grand Total Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	

* Coordinate with:

* Note:

2020-2025 Capital Improvement Plan Project Rating Form

2021-2026 CAPITAL IMPROVEMENT PROJECT RATING FORM				
Project Name: <input style="width: 100%;" type="text"/>		Project #: <input style="width: 100%;" type="text"/>		
Department: <input style="width: 100%;" type="text"/>		Total Score: 0		
Rater Name: <input style="width: 100%;" type="text"/>	Score Range	Rater Score	Weight	Total Points
1 Contributes to Health, Safety and Welfare Eliminates a known hazard (accident history) Eliminates a potential hazard Materially contributes Minimally contributes No impact	5	5	5	0
	4			
	3			
	1			
	0			
2 Project Needed to Comply with Local, State or Federal Law Yes No	5	5	5	0
	0			
3 Project Conforms to Adopted Program, Policy or Plan Project is consistent with adopted City Council policy or plan Project is consistent with Administrative policy No policy / plan in place	5	4	4	0
	3			
	0			
4 Project Remediates an Existing or Projected Deficiency Completely Remedy Problem Partially Remedy Problem No	5	3	3	0
	3			
	0			
5 Will Project Upgrade Facilities, Equipment, Vehicle or Apparatus Rehabilitates / upgrades existing facility, equipment, vehicle or apparatus Replaces existing facility, equipment, vehicle or apparatus New facility, equipment, vehicle or apparatus	5	3	3	0
	3			
	1			
6 Contributes to Long-term Needs of Community More than 30 years 21 - 30 years 11 - 20 years 4 - 10 years 3 years or less	5	2	2	0
	4			
	3			
	2			
	1			
7 Annual Impact on Operating Costs Compared to Operating Costs Absent the Project Net Cost Savings No Change Minimal increase (<\$25,000) Moderate increase (\$25,000 - \$100,000) Major increase (> \$100,000)	5	2	2	0
	4			
	3			
	2			
	1			
8 Impact Measures - Net Present Value & Internal Rate of Return / # of Years to Recoup Costs 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	2	0
	4			
	3			
	2			
	1			
	0			
9 Service Area of Project Regional City-Wide Several neighborhoods One neighborhood or less	5	2	2	0
	4			
	3			
	1			
10 Department Priority High Medium Low	5	2	2	0
	3			
	1			
11 Project Delivers Level of Service Desired by Community High Medium Low	5	2	2	0
	3			
	1			

**2021-2026 Capital Improvement Plan
Fleet Replacement Schedule**

2021 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	DEPARTMENT	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Field Rake	<i>Parks - Borden</i>	#6841	5	\$ 14,240
Cert Trailer	<i>OCSO</i>	39-230	5	\$ 9,660
Radar Smart Cart	<i>OCSO</i>	39-324	5	\$ 16,600
Fraize Mower	<i>Parks - Borden</i>		10	\$ 40,000
Compact Loader	<i>Parks - Borden</i>		10	\$ 60,000
2-Yard Dump Truck	<i>DPS</i>	39-531	10	\$ 54,350
Sport Utility 4wd	<i>DPS - W&S</i>	39-550	7	\$ 25,720
Passenger Car	<i>Assessing</i>	39-551	7	\$ 25,220
Pickup 4wd w\ Plow	<i>DPS</i>	39-536	7	\$ 35,960
Passenger Car	<i>City Pool</i>	39-525	7	\$ 25,840
Passenger Car	<i>DPS - Traffic</i>	39-526	7	\$ 25,840
Tandem-Axle Dump Truck	<i>DPS</i>	39-271	12	\$ 245,590
Tandem-Axle Dump Truck	<i>DPS</i>	39-272	12	\$ 245,590
Crew Truck	<i>DPS - W&S</i>	39-179	12	\$ 232,630
Service Truck	<i>Fleet</i>	39-015	12	\$ 75,000
TOTAL 2021 FLEET VEHICLE / EQUIPMENT COSTS:				\$1,132,240

2021-2026 Capital Improvement Plan Fleet Replacement Schedule

2022 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	DEPARTMENT	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Dump Body Vehicle Insert	<i>Parks - Borden</i>	#6942	5	\$ 6,560
Fuel Management System	<i>Fleet</i>	#6143	10	\$ 33,220
Rotary Broom	<i>Parks - Spencer</i>	#6155	4	\$ 7,170
Zero Turn Mower	<i>Cemetery</i>	#6998	5	\$ 12,880
Municipal Tractor	<i>Parks - Borden</i>	#6270	10	\$ 55,160
Utility Vehicle	<i>Parks - Borden</i>	#6606	4	\$ 9,410
Integrated Tool Carrier	<i>DPS</i>	39-169	12	\$ 280,850
Forklift	<i>DPS</i>	39-188	10	\$ 36,430
Trash Pump	<i>DPS - Fleet</i>	39-212	10	\$ 65,630
Municipal Tractor	<i>DPS</i>	39-287	12	\$ 171,670
Equipment Trailer	<i>DPS - Roads</i>	39-231	10	\$ 9,030
Crash Attenuator	<i>Fleet</i>	39-327	10	\$ 25,220
Concrete Saw	<i>DPS - Roads</i>	39-336	10	\$ 26,470
Equipment Trailer	<i>Parks - Borden</i>	39-232	10	\$ 9,700
Equipment Trailer	<i>Cemetery</i>	39-233	10	\$ 8,670
Equipment Trailer	<i>Parks - Borden</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 - Borden</i>	39-579	6	\$ 34,830
Tandem-Axle Dump Truck	<i>DPS</i>	39-294	12	\$ 255,650
Tandem-Axle Dump Truck	<i>DPS</i>	39-295	12	\$ 255,650
Tool Truck - Concrete Crew	<i>DPS - Roads</i>	39-297	10	\$ 44,540
2-Yard Dump Truck	<i>Parks - Borden</i>	39-549	8	\$ 95,590
Forestry Chipper Truck	<i>Forestry</i>	39-552	8	\$ 76,460
Sport Utility 4wd	<i>Media</i>	39-555	7	\$ 27,080
Pickup 4wd w\ Plow	<i>Facilities</i>	39-530	7	\$ 38,610
Pickup 4wd Dump/Tool Body	<i>Natural Resources</i>	39-543	7	\$ 33,260
Pickup 4wd w\ Plow	<i>Parks - Borden</i>	39-547	6	\$ 38,040
Pickup 4wd w\ Dump	<i>Parks - Borden</i>	39-548	6	\$ 51,180
Sport Utility 4wd	<i>Building</i>	39-561	7	\$ 27,830
Pickup 4wd	<i>DPS</i>	39-563	7	\$ 31,570
Pickup 4wd	<i>DPS/Engineering</i>	39-564	7	\$ 31,570
Pickup 4wd	<i>DPS /Engineering</i>	39-565	7	\$ 31,570
Pickup 4wd	<i>Building</i>	39-566	7	\$ 31,570
Pickup 4wd w\ Plow	<i>DPS</i>	39-567	6	\$ 40,590
Pickup 4wd w\ Plow	<i>DPS</i>	39-568	6	\$ 40,590
Pickup 4wd w\ Crane Body	<i>DPS</i>	39-569	6	\$ 75,160
Cargo Van	<i>DPS - W&S</i>	39-570	7	\$ 25,010
Cargo Van	<i>DPS - W&S</i>	39-571	7	\$ 25,010
Sport Utility 4wd	<i>Building</i>	39-562	7	\$ 27,830
TOTAL 2022 FLEET VEHICLE / EQUIPMENT COSTS:				\$2,129,350

2021-2026 Capital Improvement Plan Fleet Replacement Schedule

2023 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	DEPARTMENT	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Sign Shop Cutter	DPS - Roads	#7036	5	\$ 6,890
Slide-In Aluminum Dump Unit	DPS	#6526	10	\$ 8,090
Zero-Turn Mower	Parks - Borden	#7189	4	\$ 12,750
Zero-Turn Mower	Parks - Borden	#7190	4	\$ 12,750
Utility Vehicle	Parks - Spencer	#6778	4	\$ 14,620
Utility Vehicle	Parks - Borden	#7226	4	\$ 19,550
Traffic Arrowboard	DPS	39-325	7	\$ 5,780
Traffic Arrowboard	DPS	39-326	7	\$ 5,780
Pickup 4wd w/Plow	DPS	39-575	7	\$ 51,080
Jeep Patriot FWD	DPS	39-582	7	\$ 25,130
Pickup 4wd w/Plow & Dump Body	Cemetery	39-586	6	\$ 41,540
GMC TS15653	Building	39-576	7	\$ 34,690
GMC Savanna	Facilities	39-574	7	\$ 29,500
2 WD EXT CAB PICKUP	Building	39-577	7	\$ 34,690
4X4 CREW CAB PICKUP	Building	39-578	7	\$ 34,500
GMC SIERRA 4X4 PICKUP w\ Plow	Parks - Borden	39-589	6	\$ 33,250
GMC SIERRA 4X4 PICKUP w\ Plow	Parks - Borden	39-590	6	\$ 33,250
VACTOR 2115 COMBINATION	DPS	39-546	10	\$ 577,050
TOTAL 2023 FLEET VEHICLE / EQUIPMENT COSTS:				\$ 980,890

2024 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	DEPARTMENT	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Zero-Turn Mower	Parks - Borden	#6832	4	\$ 13,800
Zero-Turn Mower	Parks - Borden	#6833	4	\$ 13,800
Slide IN Combination Unit	DPS	#6375	12	\$ 55,880
Slide IN Combination Unit	DPS	#6376	12	\$ 55,880
Four Mobile Lift Column	DPS	#6607	10	\$ 57,140
TIG Welder	DPS - Fleet	#6882	8	\$ 8,150
4X4 CREW CAB PICKUP	Building	39-590	7	\$ 37,820
Cargo Van	DPS - Meters	39-591	7	\$ 29,090
Cargo Van	Facilities	39-592	7	\$ 29,090
4X4 CREW CAB PICKUP	DPS	39-586	7	\$ 37,820
2 WD EXT CAB PICKUP	Parks - Bloomer	39-585	7	\$ 28,550
Pickup 4wd w\ Crane Body	DPS	39-593	7	\$ 63,850
Street Sweeper	DPS	39-029	7	\$ 355,710
Pickup 4wd w\ Plow	DPS	39-606	7	\$ 42,060
GMC Cut Away Van/Cube w\ Interior Package	DPS	39-442	10	\$ 75,810
Tandem Axle Dump Truck	DPS	39-556	10	\$ 275,780
Tandem Axle Dump Truck	DPS	39-557	10	\$ 275,780
Tandem Axle Dump Truck	DPS	39-558	10	\$ 275,780
Tandem Axle Dump Truck	DPS	39-559	10	\$ 275,780
Pickup 4wd w\ Platform	Parks - Borden	39-560	7	\$ 44,970
Freightliner	DPS	39-542	12	\$ 267,450
Freightliner	DPS	39-541	12	\$ 271,870
Freightliner	DPS	39-540	12	\$ 274,820
TOTAL 2024 FLEET VEHICLE / EQUIPMENT COSTS:				\$2,866,680

2021-2026 Capital Improvement Plan Fleet Replacement Schedule

2025 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	DEPARTMENT	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Tri-Wave 60 inch Overseeder	<i>Parks - Borden</i>	#2432	8	\$ 17,330
Pressure Washer	<i>DPS - Fleet</i>	#6743	5	\$ 12,800
John Deere Gator	<i>Parks - Borden</i>	#6776	5	\$ 11,360
John Deere Gator	<i>Parks - Borden</i>	#6777	5	\$ 11,360
EZ Go Utility Vehicle	<i>Parks - Museum</i>	#6780	5	\$ 11,260
Asphalt Roller: Multiquip	<i>DPS</i>	39-303	8	\$ 19,150
Equipment Trailer	<i>OCSO</i>	39-230	5	\$ 11,300
Radar Speed Display Trailer	<i>OCSO</i>	39-337	5	\$ 17,280
Utility Vehicle	<i>DPS - Pathways</i>	39-344	7	\$ 45,710
Utility Vehicle	<i>DPS - Pathways</i>	39-345	7	\$ 45,710
John Deere Backhoe	<i>DPS</i>	39-572	10	\$ 173,320
Electric Utility Vehicle	<i>Cemetery</i>	39-331	7	\$ 15,460
Cargo Van	<i>Facilities</i>	39-604	7	\$ 30,120
Dump Truck	<i>DPS - Roads</i>	39-282	7	\$ 60,060
Pickup 4wd	<i>Building</i>	39-598	7	\$ 32,810
Pickup 4wd	<i>Building</i>	39-599	7	\$ 32,810
Pickup 4wd	<i>Building</i>	39-600	7	\$ 32,810
Pickup 4wd	<i>Building</i>	39-601	7	\$ 32,810
Passenger Vehicle	<i>Building</i>	39-597	7	\$ 34,340
Cargo Van	<i>Facilities</i>	39-602	7	\$ 30,120
Passenger Vehicle	<i>DPS - Admin</i>	39-596	7	\$ 34,340
Pickup 4wd w\ Plow	<i>Parks</i>	39-529	7	\$ 43,080
TOTAL 2025 FLEET VEHICLE / EQUIPMENT COSTS:				\$ 755,340
2026 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	DEPARTMENT	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
John Deere Gator	<i>Parks - Borden</i>	#6006	4	\$ 11,010
Rotary Broom	<i>Parks - Spencer</i>	#6155	4	\$ 8,390
Utility Vehicle	<i>Parks - IH</i>		7	\$ 15,780
Utility Vehicle	<i>Parks - Spencer</i>		7	\$ 14,600
Wheel Balancer	<i>DPS - Fleet</i>	#5282	8	\$ 6,260
John Deere Bunker & Field Rake	<i>Parks - Borden</i>	#6841	5	\$ 17,320
Wheeled Excavator	<i>DPS - Roads</i>	39-581	10	\$ 347,320
Pickup 4wd w/Utility Body	<i>DPS - Fleet</i>	39-015	8	\$ 91,250
Green Vehicle	<i>Parks - IH</i>		7	\$ 63,270
Pickup 2500 4wd w\ Plow	<i>DPS</i>	39-292	6	\$ 45,570
Pickup 2500 4wd w\ Plow	<i>DPS</i>	39-293	6	\$ 45,570
Pickup 2500 4wd w\ Plow	<i>Parks - Borden</i>	39-547	6	\$ 44,510
Ford F350 Platform	<i>Parks - Borden</i>	39-560	10	\$ 48,640
Pickup 2500 4wd w\ Plow & Dump Body	<i>Parks - Borden</i>	39-548	6	\$ 59,870
Passenger Car	<i>DPS - Traffic</i>	39-525	7	\$ 31,440
Passenger Car	<i>City Hall Pool</i>	39-526	7	\$ 31,440
Passenger SUV	<i>Media</i>	39-555	7	\$ 31,680
Pickup 4wd	<i>DPS - W/S</i>	39-533	7	\$ 37,060
Pickup 4wd	<i>Natural Resources</i>	39-160	7	\$ 42,540
Pickup 4wd w\ Plow	<i>Facilities</i>	39-530	7	\$ 45,170
Pickup 4wd w\ Plow	<i>DPS</i>	39-534	7	\$ 43,750
Pickup 4wd w\ Plow	<i>DPS</i>	39-536	7	\$ 43,750
Pickup 4wd w\ Plow	<i>DPS</i>	39-537	7	\$ 43,750
Pickup 4wd w\ Plow	<i>DPS</i>	39-298	7	\$ 49,180
Pickup 4wd w\ Plow	<i>DPS</i>	39-527	7	\$ 49,180
Pickup 4wd w\ Plow & Platform	<i>DPS</i>	39-535	7	\$ 49,230
Pickup 4wd w\ Plow & Platform	<i>DPS</i>	39-538	7	\$ 49,230
TOTAL 2026 FLEET VEHICLE / EQUIPMENT COSTS:				\$1,366,760

2021-2026 Capital Improvement Plan Fire Replacement Schedule

2021 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Pickup 4wd	Fire Suppression	<i>Utility 1</i>	10	\$ 51,250
Pickup 4wd	Fire Suppression	<i>Utility 3</i>	10	\$ 51,250
Pickup 4wd	Fire Suppression	<i>Utility 2</i>	10	\$ 51,250
Fire Safety Trailer	Fire Prevention	<i>Public Education</i>	15	\$ 100,000
2021 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:				\$ 253,750

2022 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Ambulance	EMS	<i>Alpha 24</i>	6	\$ 330,000
Ambulance	EMS	<i>Alpha 23</i>	6	\$ 330,000
Ambulance	EMS	<i>Alpha 25</i>	6	\$ 330,000
2022 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:				\$ 990,000

2023 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
None Scheduled				\$ -
2023 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:				\$ -

2024 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Sport Utility 4wd	Fire Suppression	<i>Battalion 1</i>	10	\$ 33,000
Sport Utility 4wd	Fire Suppression	<i>Inspector 2</i>	10	\$ 33,000
Sport Utility 4wd	Fire Suppression	<i>Battalion 1</i>	5	\$ 59,400
2024 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:				\$ 125,400

2025 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
None Scheduled				\$ -
2025 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:				\$ -

2026 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	VEHICLE #	REPLACEMENT CYCLE (Years)	ESTIMATED COST
None Scheduled				\$ -
2026 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:				\$ -



innovative *by* nature

**2021-2026 Capital Improvement Plan
Aggregate Spreadsheet**

Aggregate Spreadsheet (page #1)

**2021-2026 Capital Improvement Plan
Aggregate Spreadsheet**

Aggregate Spreadsheet (page #2)

2021-2026 Capital Improvement Plan CIP Schedule

January 21	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 21	CIP Project Group receives CIP schedule and instructions.
January 27	Mayor or City Council representative (at City Council meeting) announces request for public submission of any eligible project.
February 28	Deadline to submit new CIP project applications/re-evaluations.
April 8th	CIP Policy Group reviews new CIP projects and submits questions.
April 20th	CIP Project Group answers questions of Policy Group
April 30th	CIP Project ratings due from Policy Group.
June 2nd	Planning Commission Workshop and public hearing to review Draft 2021-2026 CIP and to provide an opportunity for public input.

**Please note timeline is different from past years due to COVID19 pandemic.

**2021-2026 Capital Improvement Plan
Notice of Public Hearing**



**NOTICE OF PUBLIC HEARING
ON THE PROPOSED
2021-2026 CAPITAL IMPROVEMENT PLAN
*VIA ZOOM VIDEO CONFERENCE MEETING**

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, June 2, 2020 at 7:00 p.m. to receive public comments regarding the City of Rochester Hills 2021-2026 Capital Improvement Plan as a component of the City's Comprehensive Plan.

To view and participate in the meeting you will need to join the Zoom video conference meeting at address <https://us02web.zoom.us/j/87445715228?pwd=Q0Z1Z2FwZVpDT3kwcmJPNU0wd3VRQT09> and use the password 720323. Public comment will be accepted via email before or during the meeting at planning@rochesterhills.org or during the meeting by telephone at 1-929-205-6099 using Webinar ID 874 4571 5228 or by joining the meeting as indicated above. In compliance with Governor Whitmer's Executive Orders 2020-21 and 2020-75, members will be logging in Zoom via their home computers. There will also be some City personnel at City Hall overseeing this meeting.

Information regarding the Capital Improvement Plan may be obtained from the Fiscal Department beginning on May 18, 2020 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.

Deborah Brnabic, 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 13th day of May 2020
at Rochester Hills, Michigan.
Publish Monday, May 18, 2020

**2021-2026 Capital Improvement Plan
Capital Improvement Plan Review**

2021-2026 Capital Improvement Plan / Projects Added			
		<u>Year</u>	
FA-04E	Fleet Services Garage Ventilation	2021-2021	New Project
FA-04F	Catch Basin in DPS Wash Bay	2021-2022	New Project
FA-06B	Cemetery Columbarium II	2021-2021	New Project
FA-10B	Citywide Parking Lot Replacements	2021-2026	New Project
FA-10C	Citywide Roof Replacements	2021-2025	New Project
MR-02K	Hamlin Road [East of Adams to Crooks]	2021-2021	New Project
MR-05H	Adams Road Widening [Hamlin to Walton Blvd]	2020-2026	New Project
MR-11B	Rochester Industrial Drive Extension	2025-2026	New Project
MR-15D	Bulter Road Rehabilitation	2021-2021	New Project
MR-24D	Brewster Road [Walton Blvd to Dutton]	2024-2025	New Project
MR-29B	John R Rehab [Avon to Auburn]	2021-2022	New Project
MR-36D	Hampton Circle Rehabilitation	2023-2024	New Project
MR-61	Drexelgate Rehab [Livernois to Dancer]	2025-2026	New Project
MR-62	Old Perch Rehabilitation	2021-2022	New Project
PK-01H	Bloomer Park: Pinegrove & Hilltop Shelter Restroom Upgrades	2021-2022	New Project
PK-01I	Bloomer Park: Office Water Hook-up	2021-2021	New Project
PK-01J	Bloomer Park: Stone Building Upgrades	2021-2022	New Project
PK-16C	Yates Park: Playground Development	2021-2022	New Project
PK-24A	Veterans Memorial Pointe: Gazebo Replacement	2022-2023	New Project
PK-25A	Community Pool	2026-2026	New Project
SS-14	Sewer Truck Dewatering/Disposal Pad	2021-2021	New Project
SS-24B	Sewer Televising Equipment	2021-2021	New Project

**New CIP Projects Continued on Next Page

**2021-2026 Capital Improvement Plan
Capital Improvement Plan Review**

2021-2026 Capital Improvement Plan / Projects Added			
		<u>Year</u>	
WS-12B	PRV Upgrade Program	2025-2026	New Project
WS-20B	E. Nawakwa Road Water Main Replacement	2025-2026	New Project
WS-23B	University Hills Subdivision Water Main Replacement	2024-2025	New Project
WS-46B	RC-01 Improvements	2024-2024	New Project
WS-48	Stratford Manor Townhouses Water Main Replacement	2025-2026	New Project
WS-50	Rochester Knoll Subdivision Water Main Replacement	2022-2023	New Project
WS-51	Oakwood Park Condos Water Main Replacement	2025-2026	New Project
WS-52	Knorrwood Hills Subdivision Water Main Replacement	2025-2026	New Project
WS-53	Hampton Plaza Water Main Replacement	2025-2026	New Project
WS-54	Fairwood Villas Condos Water Main Replacement	2024-2025	New Project
WS-55	Eyster's Avon Gardens Subdivision Water Main Replacement	2025-2026	New Project
WS-56	Charles Hamlet & Woodside Apts Water Main Replacement	2025-2026	New Project
WS-57	Grosse Pines Subdivision Water Main Replacement	2021-2021	New Project
WS-58	Dequindre/Avon Roundabout: Water & Sewer Relocation	2021-2021	New Project

**2021-2026 Capital Improvement Plan
Capital Improvement Plan Review**

2021-2026 Capital Improvement Plan / Projects Deleted		
		<i>Reason Not Included</i>
MR-03	Harding Avenue Rehabilitation	Project Complete
MR-10B	Austin Avenue Improvements	Project Complete
MR-28	John R Road Rehab [Avon to Bloomer]	Project Complete
MR-37B	Barclay Circle @ Rochester Rd: Traffic Signal Improvements	Moved to Pending
LS-15	Bolinger Street Paving (SAD)	Project Complete
LS-17	Michelson [West of John R] (SAD)	Project Complete
LS-18	Runyon Road Paving	Moved to Pending
WS-34	Glidewell Sub: Water Main Replacement	Project Complete
PW-01B	Crooks Rd Pathway Gap [Clinton River to Bonnie Brae]	Project Complete
PK-03F	Van Hoosen Museum: Equipment Barn Replacement	Project Complete
IS-05C	Mobile Lift Columns	Project Complete
IS-21	Trailer Mounted Generator	Project Complete
WS-15	Michelson Road Water Main Extension	Moved to Pending

**2021-2026 Capital Improvement Plan
Capital Improvement Plan Review**

2021-2026 Capital Improvement Plan / Project Timeline Changes			
		<i>Project Timelines:</i>	
		<i>Prior</i>	<i>Revised</i>
MR-16C	Auburn Road Rehab [Rochester Rd to Culbertson]	2020	2021-2022
MR-13C	Avon/Dequindre Corridor Improvements	Pending	2021-2024
MR-17	Avon Industrial Drive	2021	2023
MR-33	Old Adams & Forester Reconstruction	2020-2021	2025-2026
MR-37A	Barclay Circle Rehabilitation	2020	2022-2023
MR-60	Waterview Reconstruction	2020-2021	2021-2022
PK-05H	Borden Office Relocation	2020	2021
PK-07C	Fraize Mower	2020	2021
PK-11	Clinton River Access: Parking Lot & Canoe/Kayak Launch	2023	2025
SW-11	Clinton River / Yates Parks: Riverbank Stabilization	2020-2022	2022-2024
SW-15	Infra-Red Aerial Photography Survey	2021	2023
PW-07D	Adams Road @ Clinton River Trailway: Pathway Crossing	2021	2023-2024
PW-11	Drexelgate Pathway	2023-2024	2025-2026
PW-12B	Rochester Road Pathway @ M-59	2020-2021	2023-2024
PW-14	Yates Pathway [Yates Park to North of Avon]	2020-2021	2023-2024
PW-21	East Nawakwa Pathway [Rochester Rd to Joshua Drive]	2023-2024	2024-2025
PW-49C	Avon Pathway [Rainier - Bembridge]	2023-2024	2025-2026
WS-41	Advanced Metering Infrastructure (AMI)	2024-2025	2025-2026
FA-02L	Fire Station #1 Carports	2020-2021	2021-2022
FA-02M	Training Tower Gas-Fired Prop	2020	2021
FA-09	IT Infrastructure Capacity Fundings	2023-2025	2024-2026
FA-13M	Fire Station #1 Concrete Approach Replacement	2020	2021
FA-13N	Fire Station Bay Heaters	2020	2021

2021-2026 Capital Improvement Plan Index

Capital Improvement Plan: Aggregate City Share Summary	5
Capital Improvement Plan: Aggregate Project Spreadsheet	83-84
Capital Improvement Plan: Introduction	1
Capital Improvement Plan: Notice of Public Hearing	86
Capital Improvement Plan: Policy	3
Capital Improvement Plan: Process	2
Capital Improvement Plan: Project Application Forms	72-76
Capital Improvement Plan: Schedule	85
Capital Improvement Plan: Status Review	87-90
Capital Improvement Plan: Support and Role Identification	71
City-Owned Facility Improvements	51-56
Fire Vehicle & Apparatus Replacement Schedule	81
Fleet Vehicle & Equipment Replacement Schedule	77-80
Internal Service Support Programs	59-62
Parks & Recreation Improvements	45-50
Pathway System Improvements	39-43
Professional Services	57
Projects Pending	63-70
Storm Water Management Improvements	35-38
Street Improvements	7-23
Water Supply and Sanitary Sewer System Improvements	25-34

PROJECT LOCATION MAPS:

Citywide Aggregate	4
Street Improvements	8
Major Road System: Conditions	16
Local Street System: Conditions	17
Sanitary Sewer System Improvements	26
Water System Improvements	27
Storm Water Management Improvements	36
Pathway System Improvements	40
Parks & Recreation Improvements	46
City-Owned Facility Improvements	52