



CITY OF CLAWSON DEPARTMENT OF PUBLIC WORKS

INFRASTRUCTURE REVIEW & BUDGET DISCUSSION

CLAWSON INFRASTRUCTURE REVIEW

Major & Local Streets

Overall Water Systems

Storm & Sanitary Sewer System

INFRASTRUCTURE REPAIR HISTORY.....

MAJOR INFRASTRUCTURE REPAIRS prior to 2022

Last Street Reconstruction Projects

- Major Street Project
 - Re-surfacing of W. 14 Mile Road
 - Completed 2019
- Local Street Project
 - Reconstruction of N. Selfridge
 - Completed 2013

Last Water Main Installation Project

- N. Selfridge Completed in 2013

Last Sewer Repair/Replacement Project

- State Revolving Fund (SRF) Sewer Rehabilitation completed in 2014



Major & Local Street Infrastructure



Major & Local Street Information

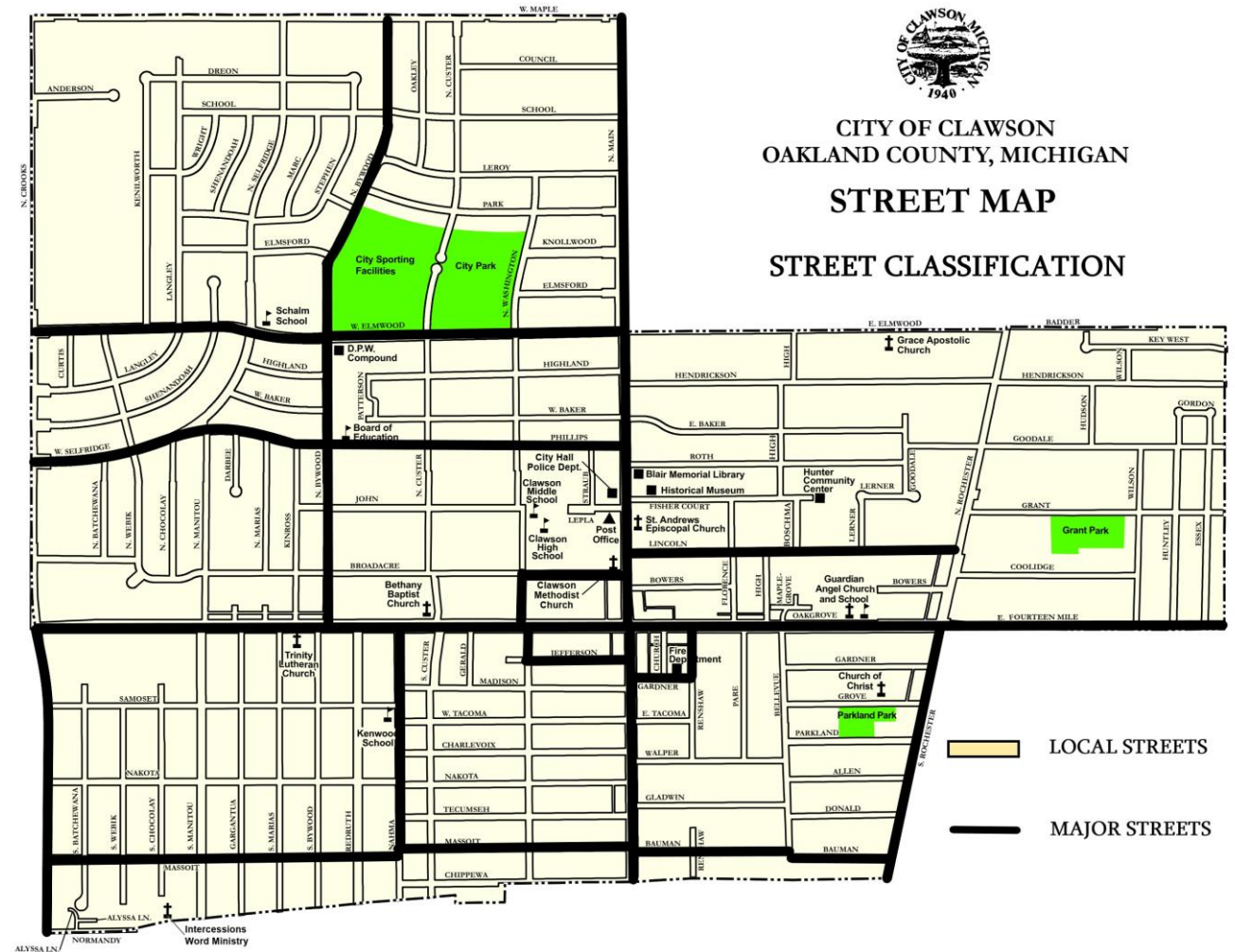
Major Streets

9.62 Miles (24.4%)

Local Streets

29.78 Miles (75.6%)

Total: 39.4 Miles



Street Jurisdiction

City of Clawson Responsibility

All Local Roads

North & South Main Street

Crooks South of 14 Mile

Rochester South of 14 Mile

14 Mile Crooks to Rochester

Road Commission of Oakland County

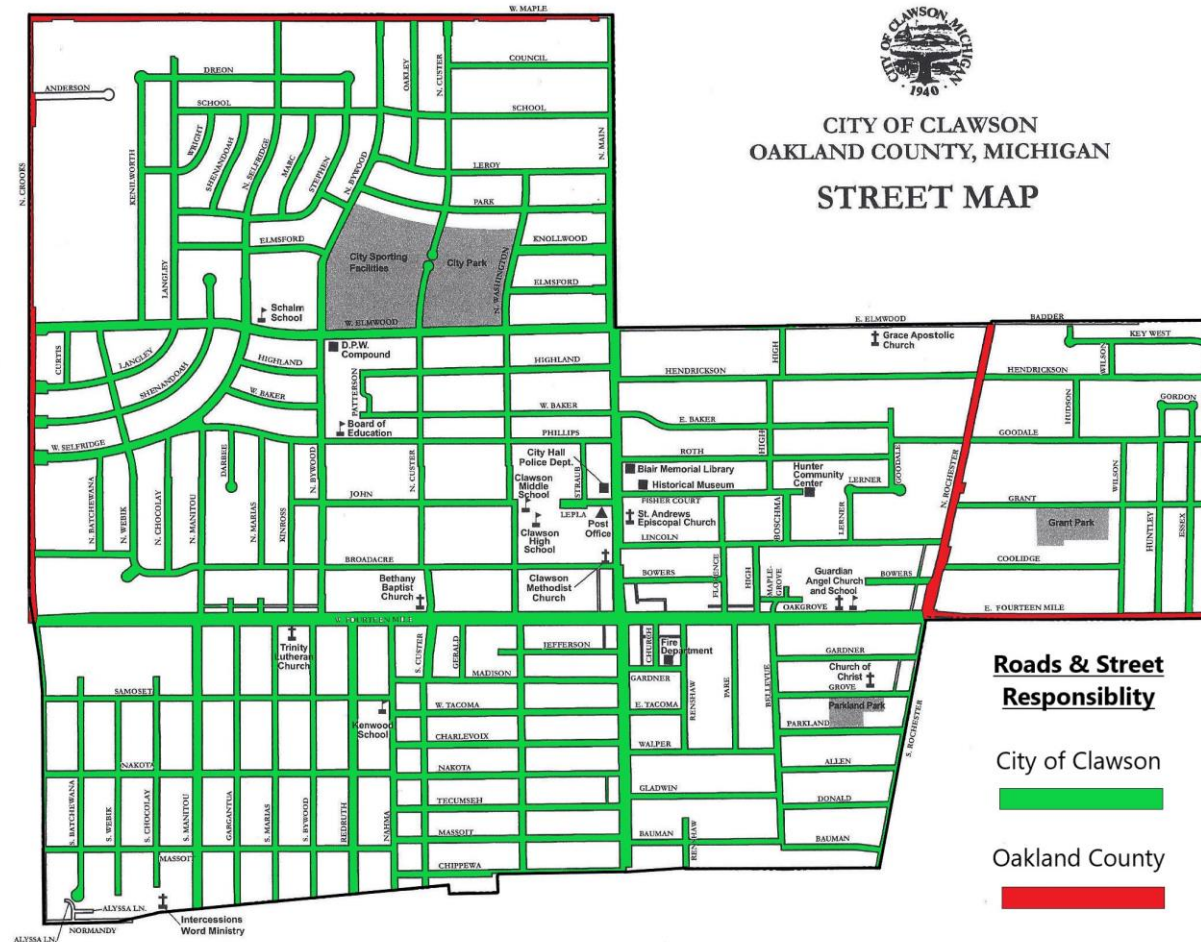
(RCOC) Responsibility


Maple Road

Crooks North of 14 Mile

Rochester North of 14 Mile

14 Mile East of Rochester

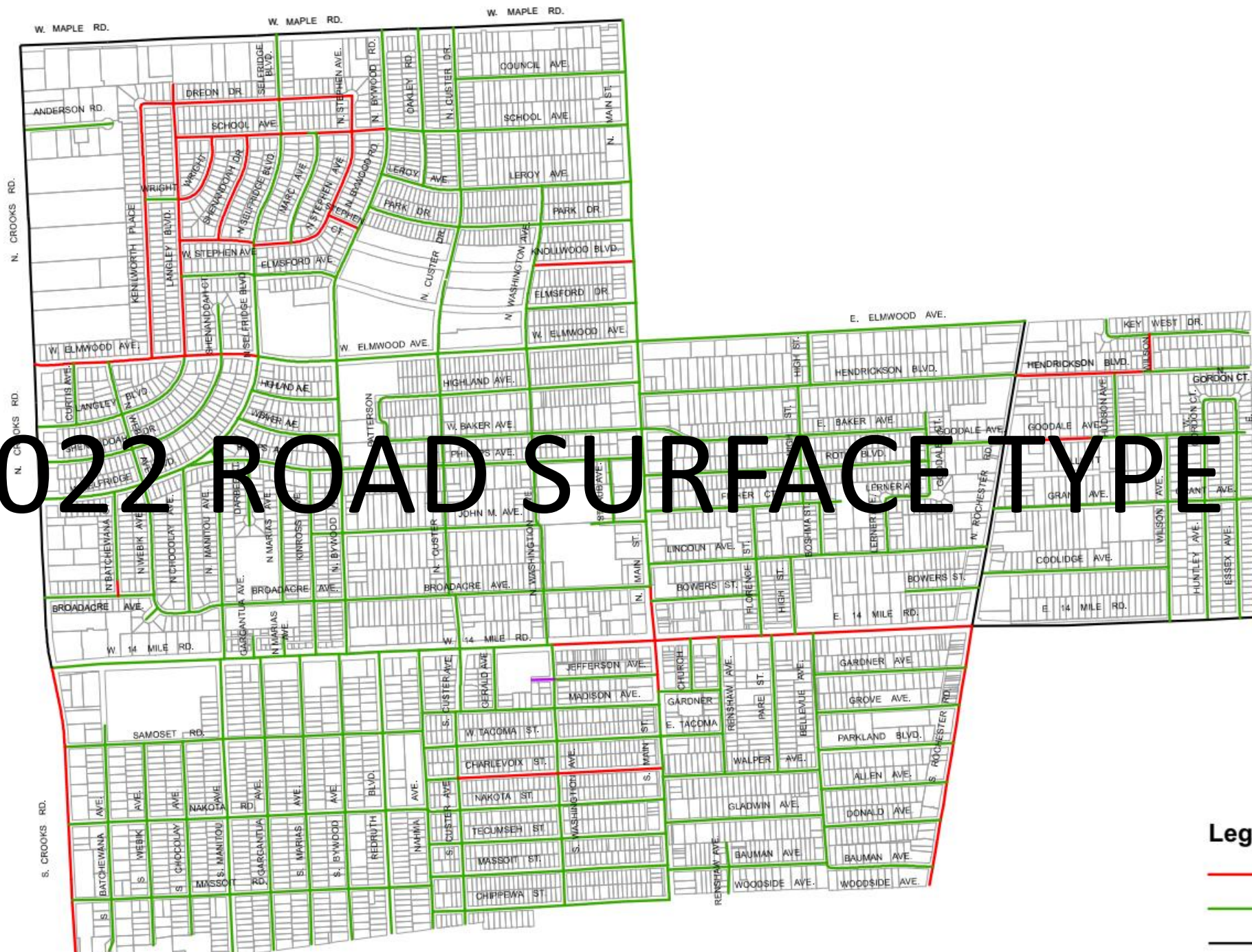




2022 Pavement and Surface Evaluation Rating (PASER) Review



2022 ROAD SURFACE TYPE MAP

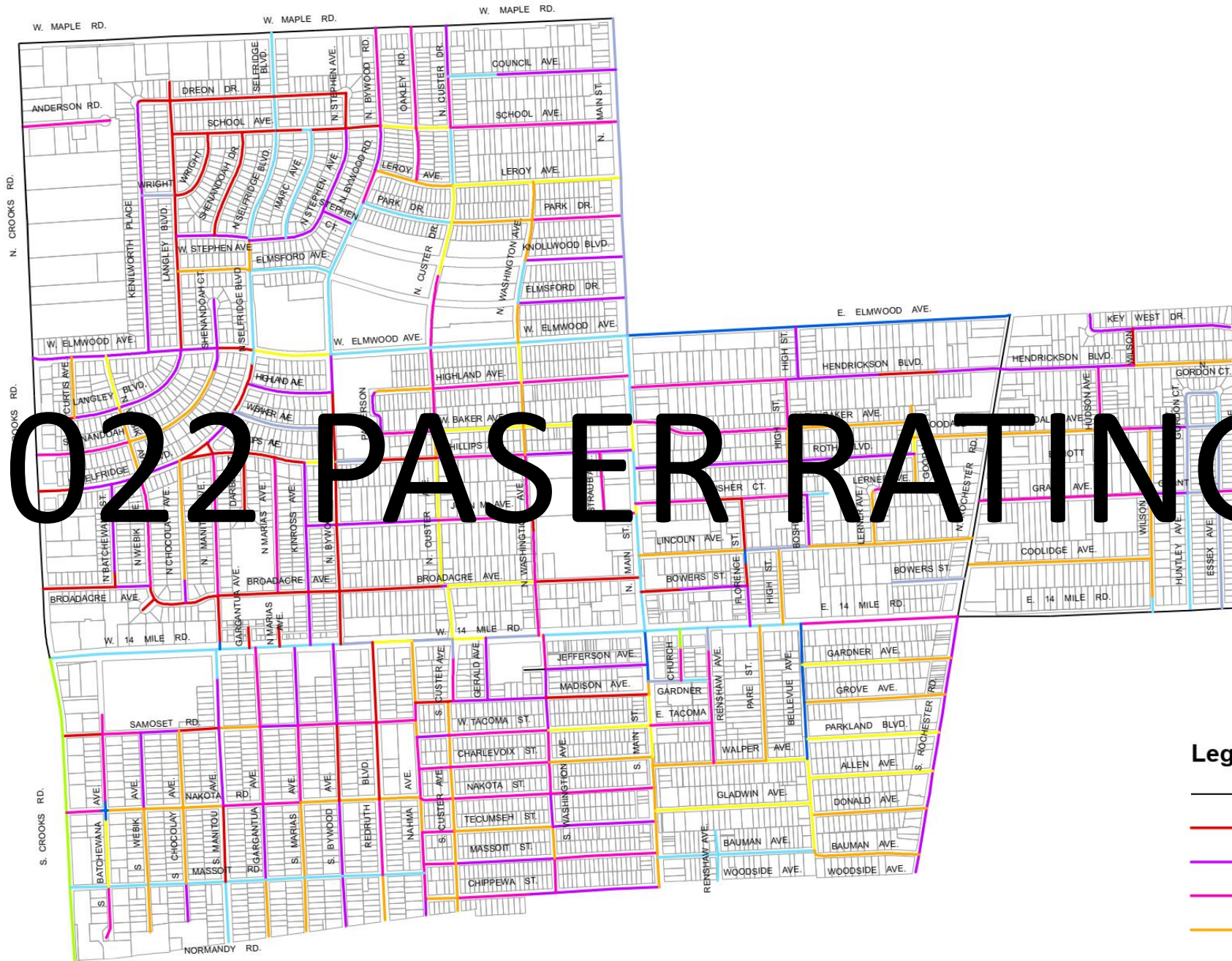


Legend

- Bituminous
- JPCP - Jointed Plain Concrete
- Undefined

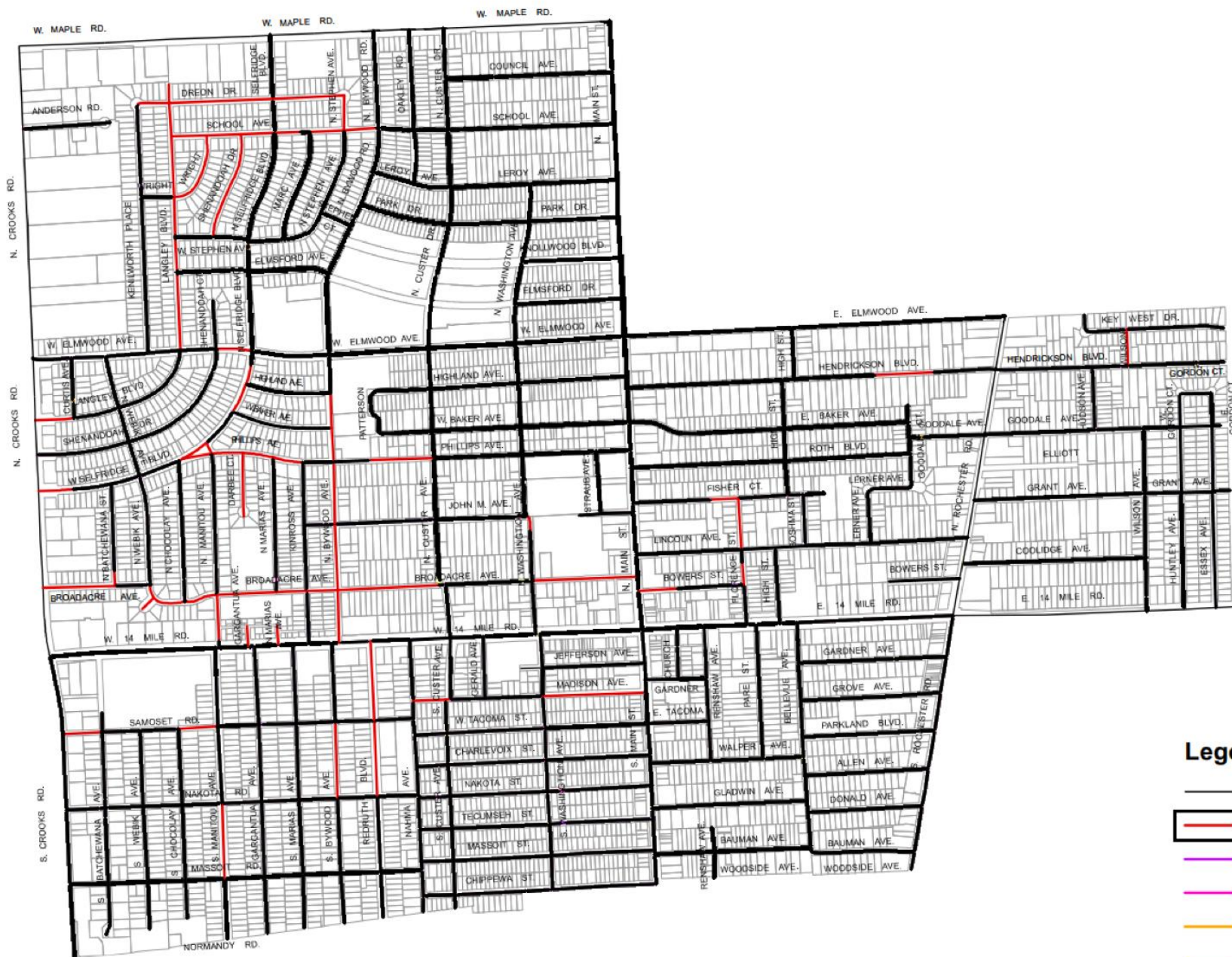


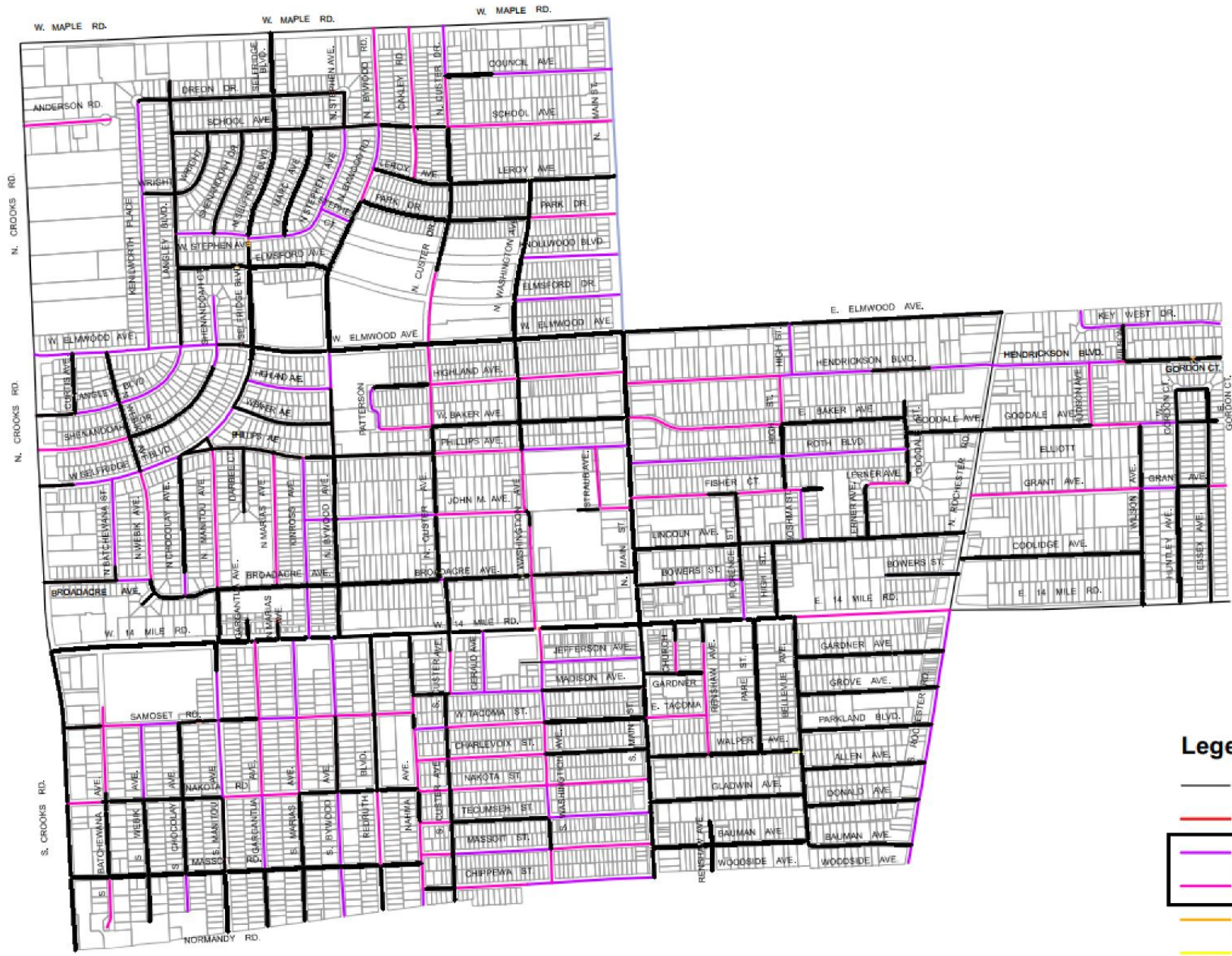
2022 PASER RATING



Legend

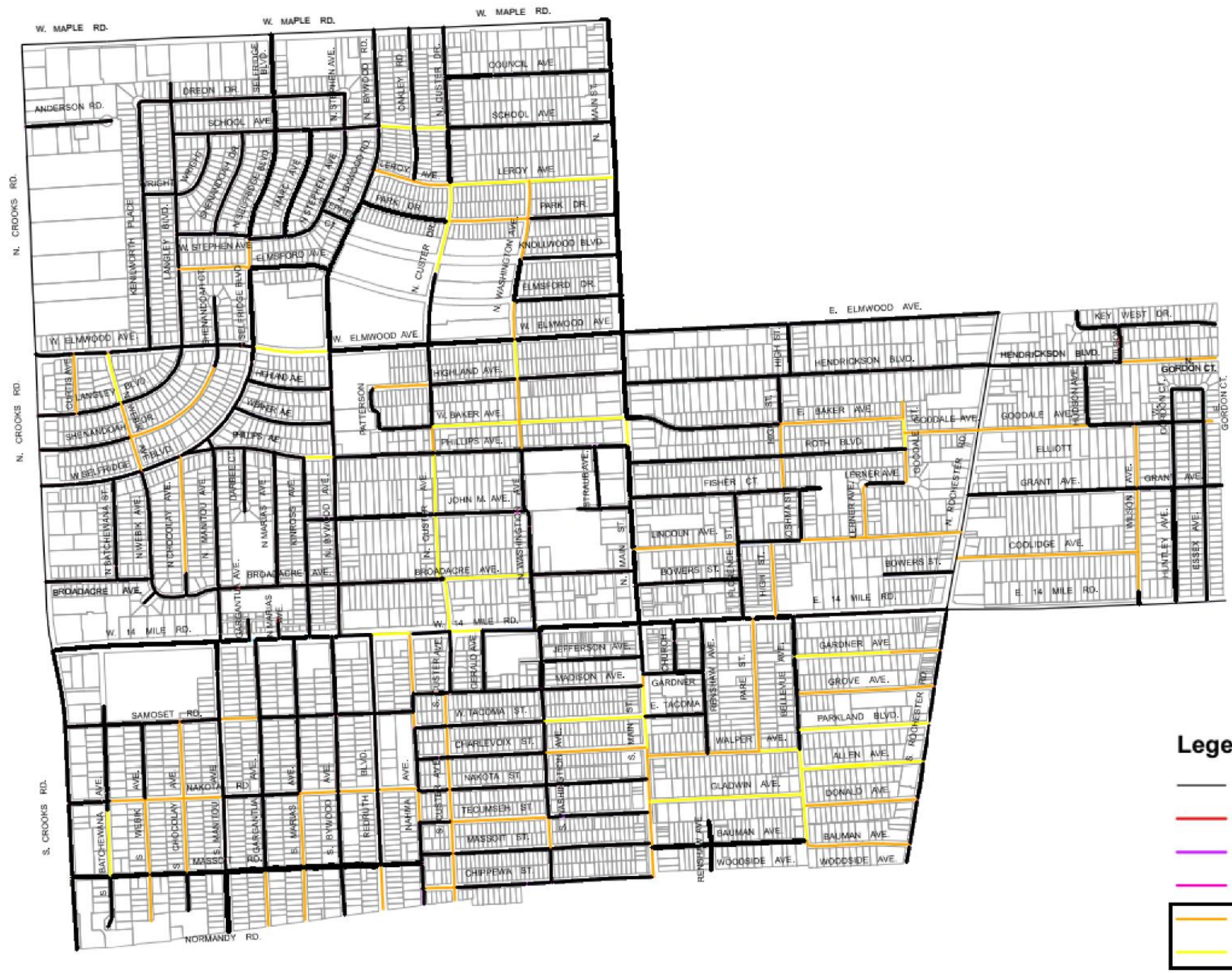
- | | |
|-----------|------------|
| — Unrated | — Rated 6 |
| — Rated 1 | — Rated 7 |
| — Rated 2 | — Rated 8 |
| — Rated 3 | — Rated 9 |
| — Rated 4 | — Rated 10 |
| — Rated 5 | |





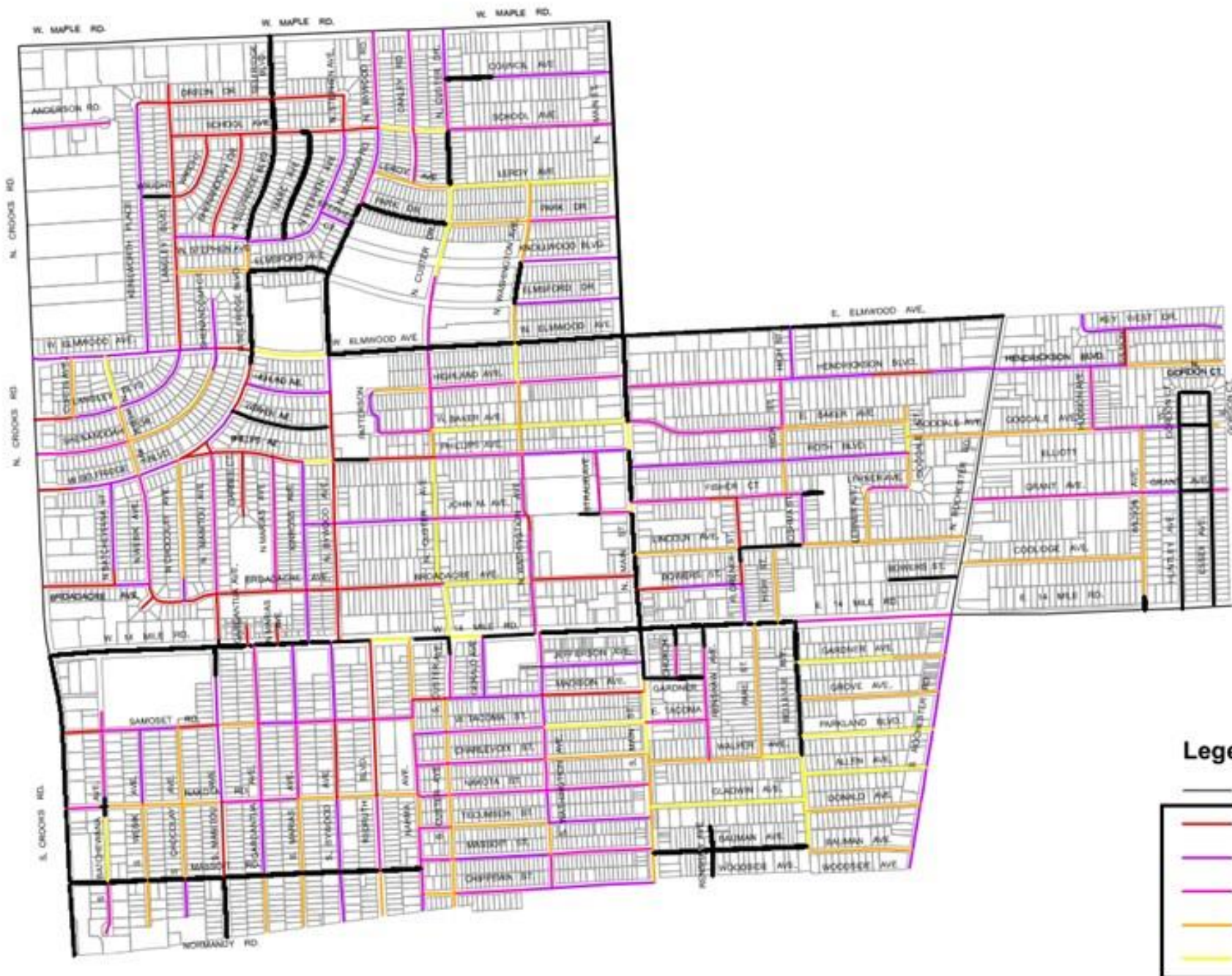
Legend

- | | |
|-----------|------------|
| — Unrated | — Rated 6 |
| — Rated 1 | — Rated 7 |
| — Rated 2 | — Rated 8 |
| — Rated 3 | — Rated 9 |
| — Rated 4 | — Rated 10 |
| — Rated 5 | |



Legend

- | | |
|-----------|------------|
| — Unrated | — Rated 6 |
| — Rated 1 | — Rated 7 |
| — Rated 2 | — Rated 8 |
| — Rated 3 | — Rated 9 |
| — Rated 4 | — Rated 10 |
| — Rated 5 | |



Legend

- | | |
|---------|----------|
| Unrated | Rated 6 |
| Rated 1 | Rated 7 |
| Rated 2 | Rated 8 |
| Rated 3 | Rated 9 |
| Rated 4 | Rated 10 |
| Rated 5 | |

Local & Major Streets Maintenance & Repair Options

Temporary Repair Options

Cold Patch

Hot Patch

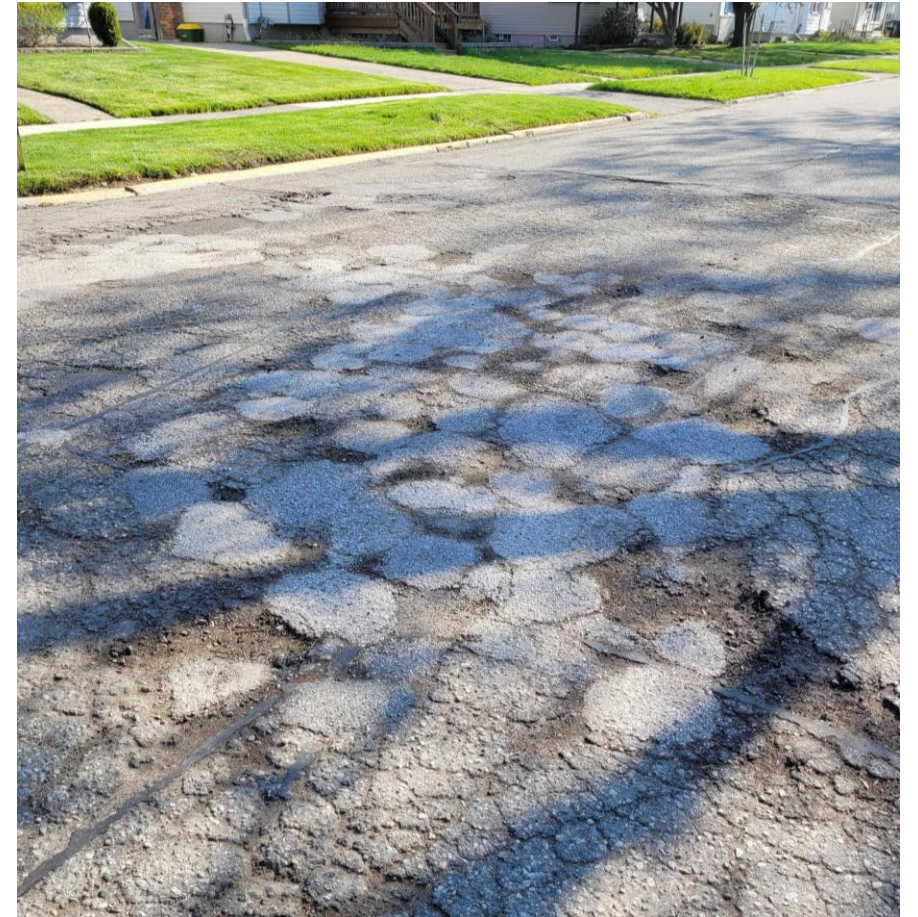
Spray Patch

Permanent Repair Options

Concrete Replacement

Mill & Fill Replacement

Complete Reconstruct



UPM COLD PATCH

- Temporary fix
 - Pavement Break / WMB
 - Can be used all year
- Pothole filling
- Cost effective
 - \$135 /ton (2024)
- Ordered 95 ½ T in 2023
- Varied Durability
 - Worse in winter months





HOT PATCH

Temporary repair, that is:

More durable,

Longer lasting,

More expensive,

than cold patch

Can only be used in warmer
temperatures

Needs specialized equipment
(Hot Box Trailer)

DPW currently does not own

SPRAY PATCH

COST EFFECTIVE

CONTRACTED REPAIR



QUICK PROCESS



LONGER
LASTING



SPRAY PATCH

DPW did a pilot program at 3 locations at a total cost of \$28,975.00

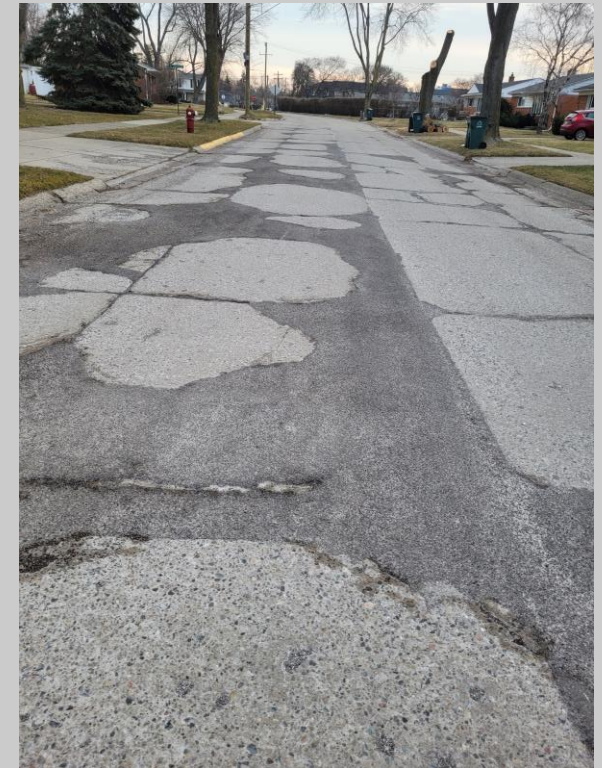
**CITY HALL
PARKING LOTS**



**SCHOOL STREET
BYWOOD TO STEPHEN**



**BROADACRE AVE
WEBIK TO CHOCOLAY**



PERMANENT REPAIRS
CONCRETE REPLACEMENT

MISCELLANEOUS

CONCRETE ROAD REPAIR

PROGRAM

CURRENT MISCELLANEOUS CONCRETE ROAD REPAIR PROGRAM

Fall of 2022 through current

54 Locations

47,109 sqft

\$419,282.91

On average per location

~ 872 sqft

~ \$7,764.50

Goals of the Miscellaneous Concrete Road Repair Program

Making significant upgrades to pavement
Choosing locations that do not need other utility work
(Water & Sewer)
Choosing locations to possibly improve PASER ratings
Spreading work throughout the community

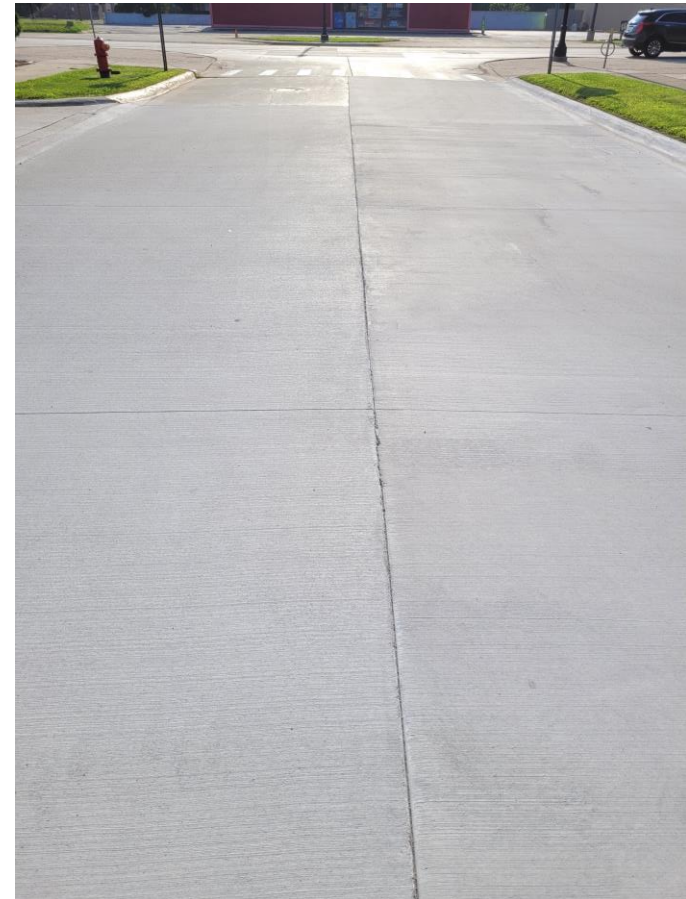
311 Remaining Locations
&
Growing

Examples of Miscellaneous Concrete Repairs

BEFORE



AFTER



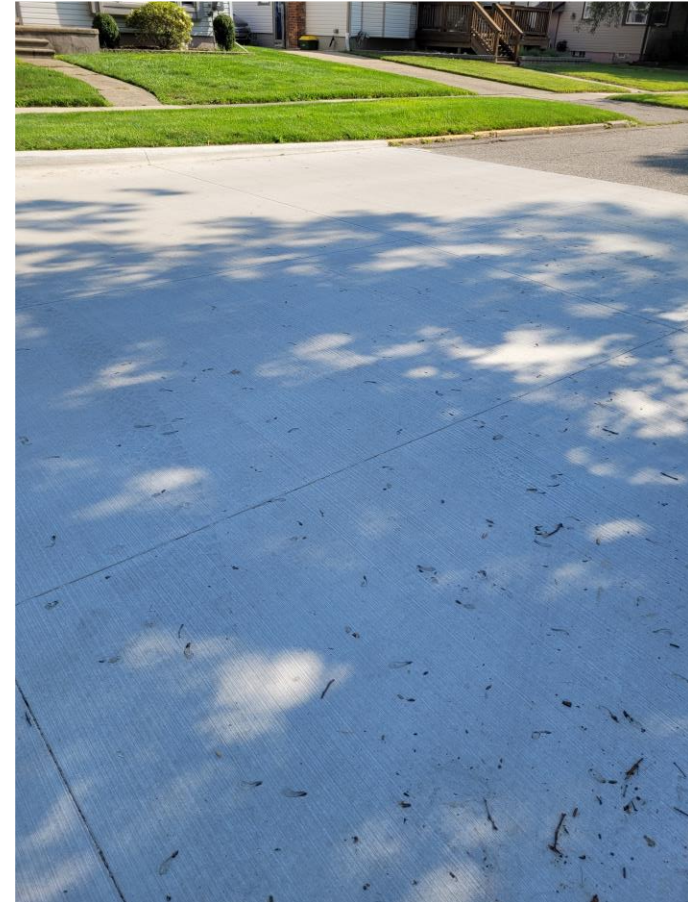
Madison
&
S. Main St.

Examples of Miscellaneous Concrete Repairs

BEFORE



AFTER



Charlevoix
&
S. Washington

Examples of Miscellaneous Concrete Repairs

BEFORE



AFTER



Madison
&
S. Custer

MILL & FILL REPLACEMENT

Process of milling down asphalt road to a
solid base

Replacing with new asphalt

Life span is approximately 10 years

Potential Location
E. 14 Mile
Bellevue to Rochester

All remaining asphalt roads are beyond the
mill & fill replacement technique, would
recommend full reconstruction to concrete



COMPLETE ROAD RECONSTRUCTION

Complete removal and replacement of
roadway

Complete reconstruction would normally
involve other infrastructure (water/sewer)

Selfridge / Phillips project did not involve
water or sewer so the reconstruction of
just the road was approved and completed
in 2023

Selfridge / Phillips Project

\$1,045,289.73



Joint & Crack Sealing

Maintaining our current streets

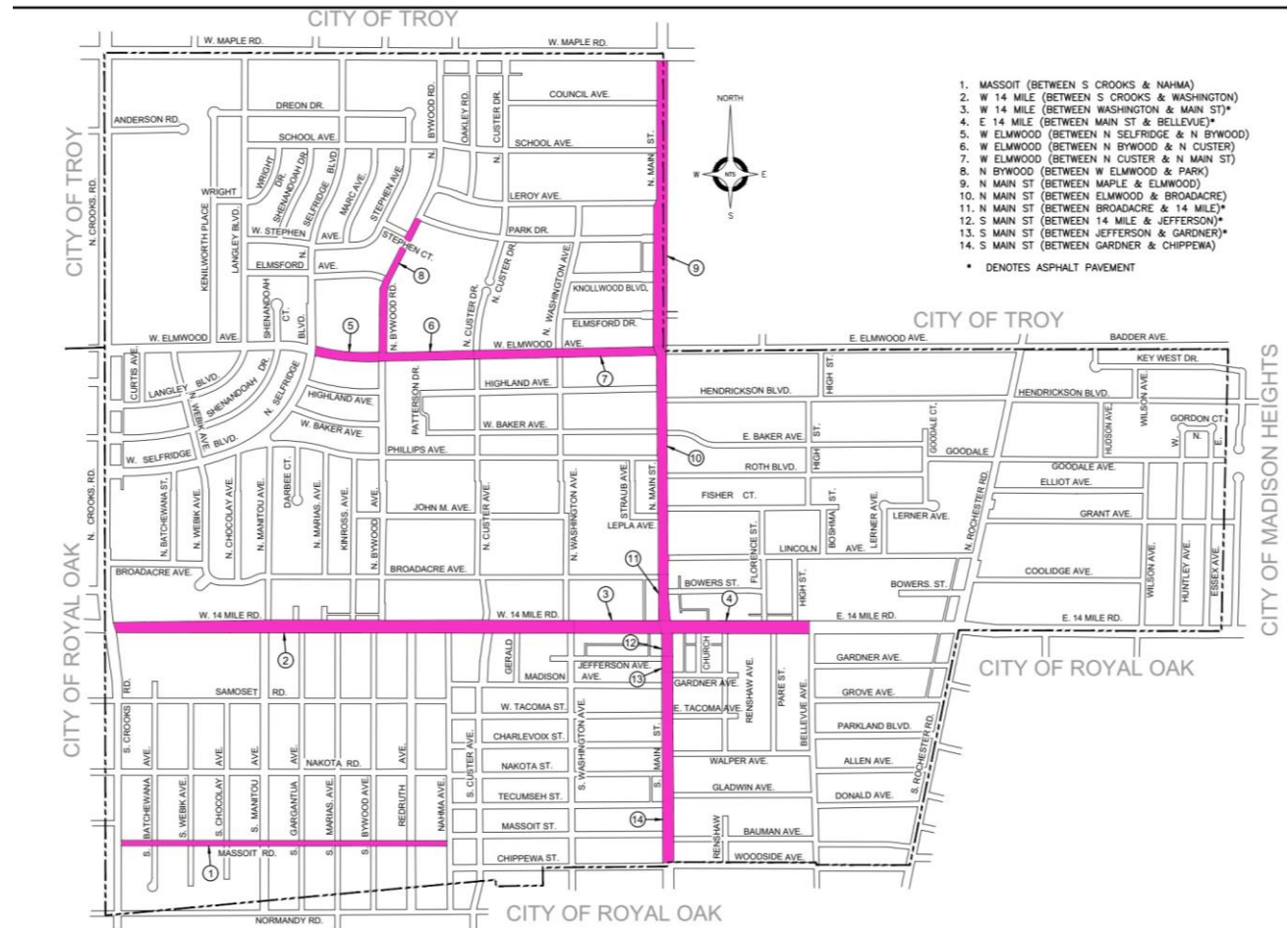
Keeps streets better longer

Injects rubberized material into the joints, seams, and cracks to repel water and lengthen the life span of the street

Last Joint and Crack Sealing was performed in the city in 2016

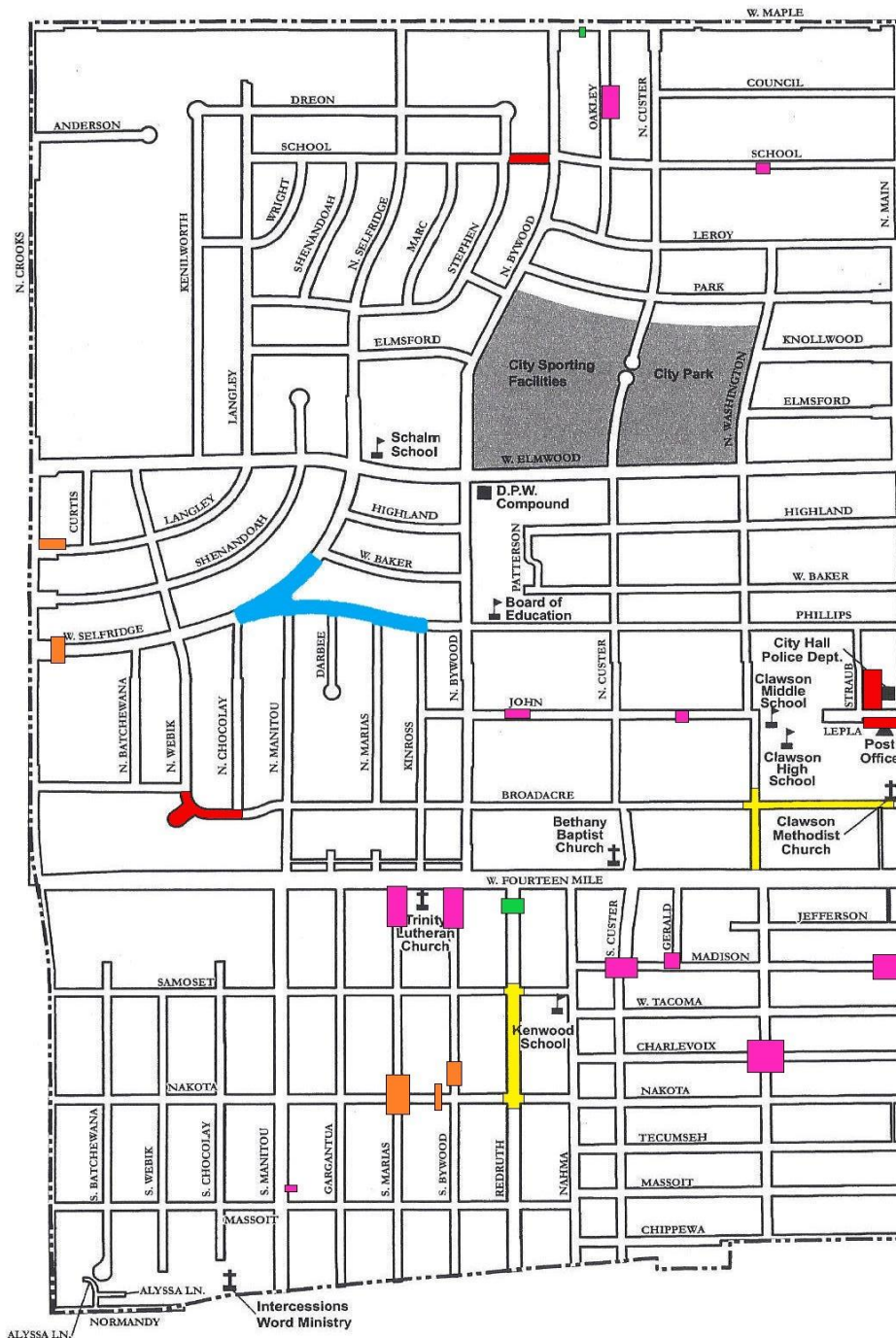
Joint and Crack Sealing is scheduled for Spring 2024

Implementing an annual budget of \$50,000



Current Road Projects in the works.....

- **Broadacre / Washington**
 - COMPLETE ROAD RECONSTRUCTION
 - Broadacre from Main Street to just west of N. Washington
 - N. Washington from W. 14 Mile to just north of Broadacre
 - Will also include water main
- **Redruth**
 - COMPLETE ROAD RECONSTRUCITON
 - Redruth from Samoset to Nakota, including intersections
 - No water main replacement, main located in easement
- **S. Rochester**
 - Working with City of Royal Oak
 - S. Rochester, 14 Mile to the city limit
 - Will include water main to be completed before road work



CITY OF CLAWSON OAKLAND COUNTY, MICHIGAN

ROAD PROJECTS & MISCELLANEOUS CONCRETE

- Completed Road Project ■
- Current Road Projects ■
- 2022-2023 Misc. Concrete ■
- Spring 2023 Misc. Concrete ■
- Fall 2023 Misc. Concrete ■
- Fall 2023 Spray Patch ■

KEEPING THE MOMENTUM!!!!!!!

Miscellaneous Road Concrete Program

Increased Spray Patch Locations

Major Road Reconstruction Projects

Re-establishing Joint and Crack Sealing



Overall Water System Infrastructure

What is our water infrastructure?

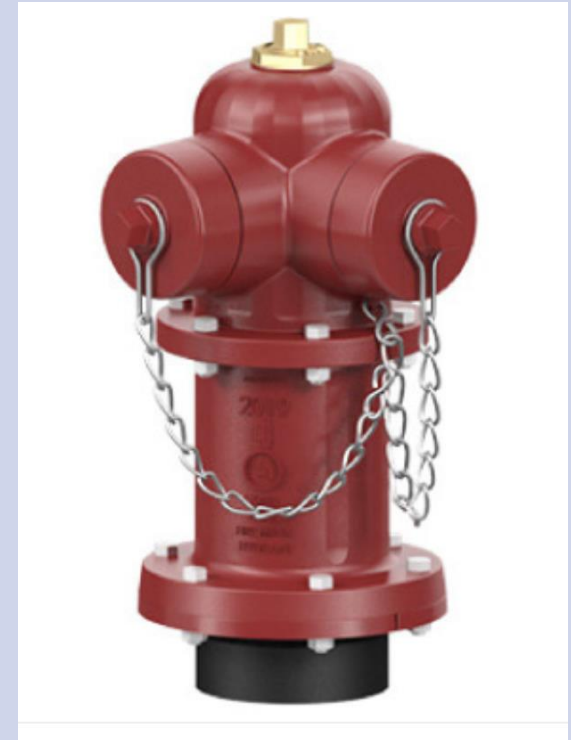
WATER MAIN



VALVES



HYDRANTS



Clawson Water Infrastructure

45.90 Miles of Water Main

6" Main – 16.44 Miles 8" Main – 15.23 Miles
12" Main – 12.22 Miles 16" Main – 1.54 Miles

450 Gate Valves

569 Hydrants

Serving 4,930 water customers

Current Water Main Project

Badder WM Installation

Working with City of Troy on Project

Keeping Construction Costs Down

Utilizing Troy's Right-of-Way

Looping Our Distribution System

Improve Water Quality & Pressure

Improve Fire Fighting Capabilities



Clawson's
Estimated Construction Cost
\$412,950



Failures of the
Water System

Water Main Breaks

Top 6 Reasons Water Mains Fail

- Temperature Changes
- Pressure Changes
- Excavation Work
- Improper Bedding
- Corrosive Soil
- Age of the Pipe

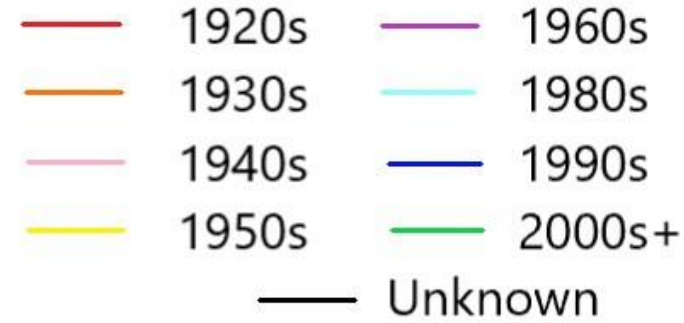


Age of Water Main by Install Date

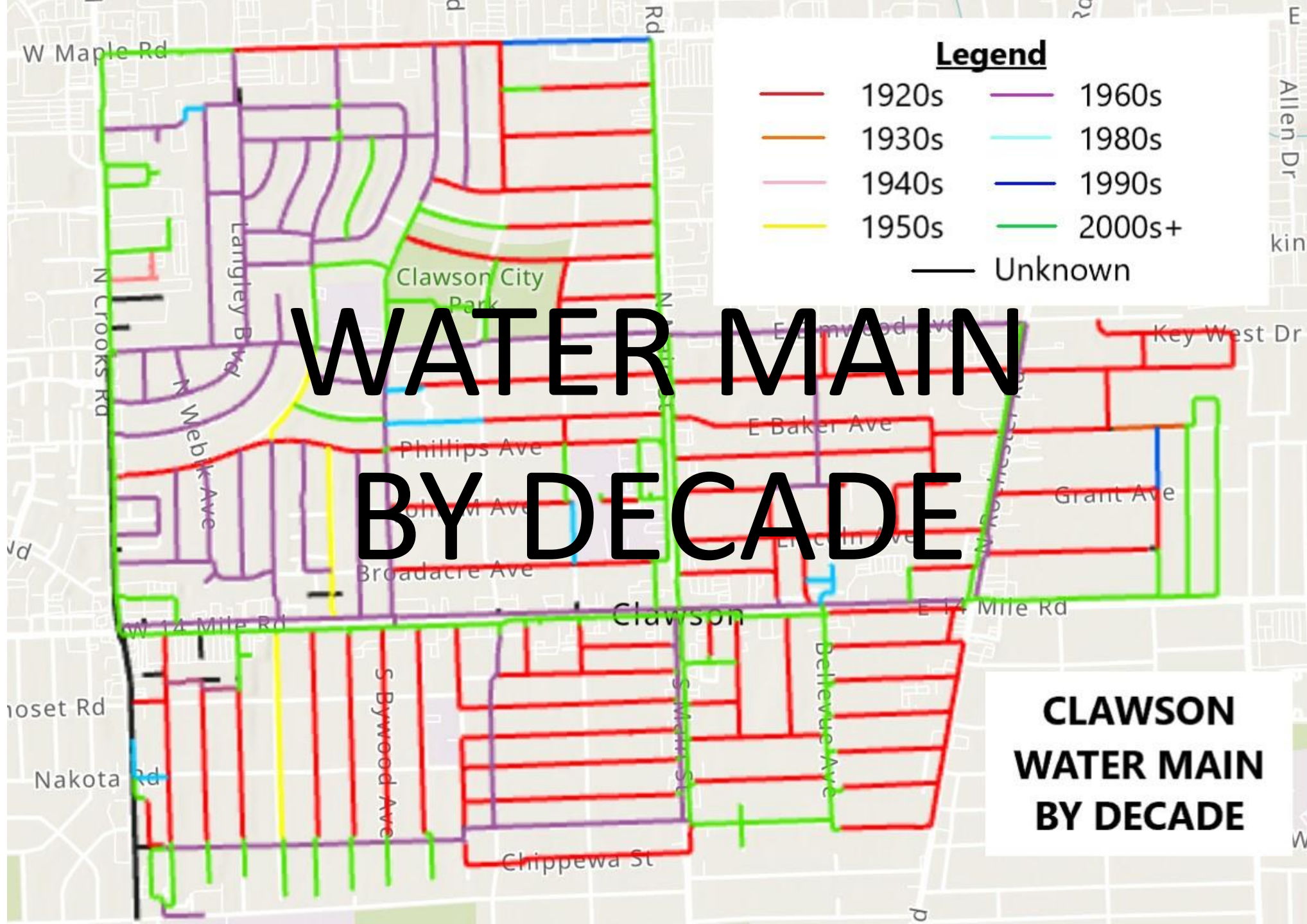
Install Date	Total Length (ft)	Total Length (Miles)	% of City
Unknown	3,798	0.72	1.57%
1920-1929	98,668	18.69	40.71%
1930-1939	682	0.13	0.28%
1940-1949	811	0.15	0.33%
1950-1959	5,334	1.01	2.20%
1960-1969	68,570	12.99	28.29%
1980-1985	3,681	0.70	1.52%
1990-1995	1,988	0.38	0.82%
2000-2009	53,338	10.10	22.01%
2010-2019	5,419	1.03	2.24%
2020 & Newer	70	0.01	0.03%
Totals	242,361	45.90	100.00%

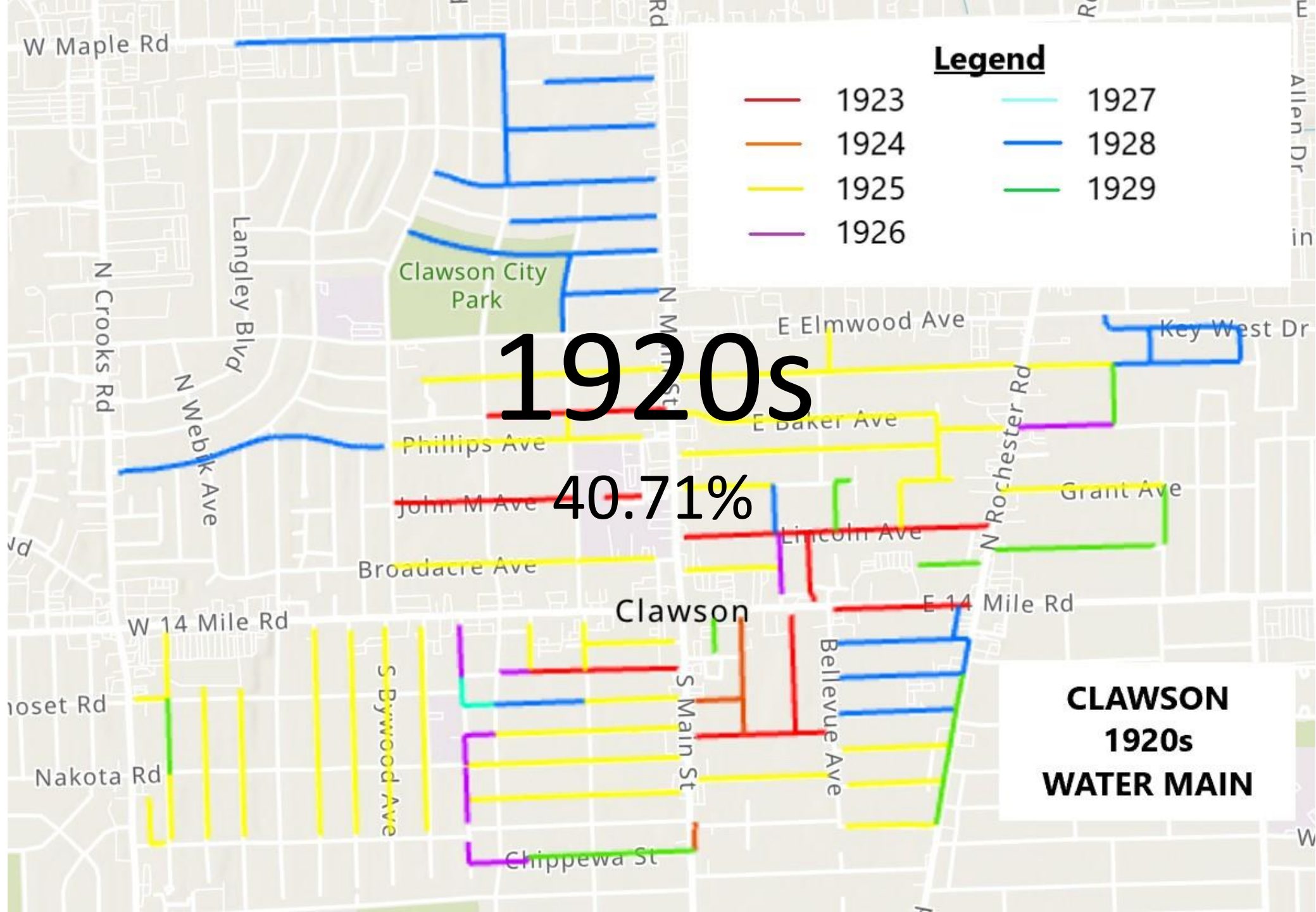
WATER MAIN BY DECADE

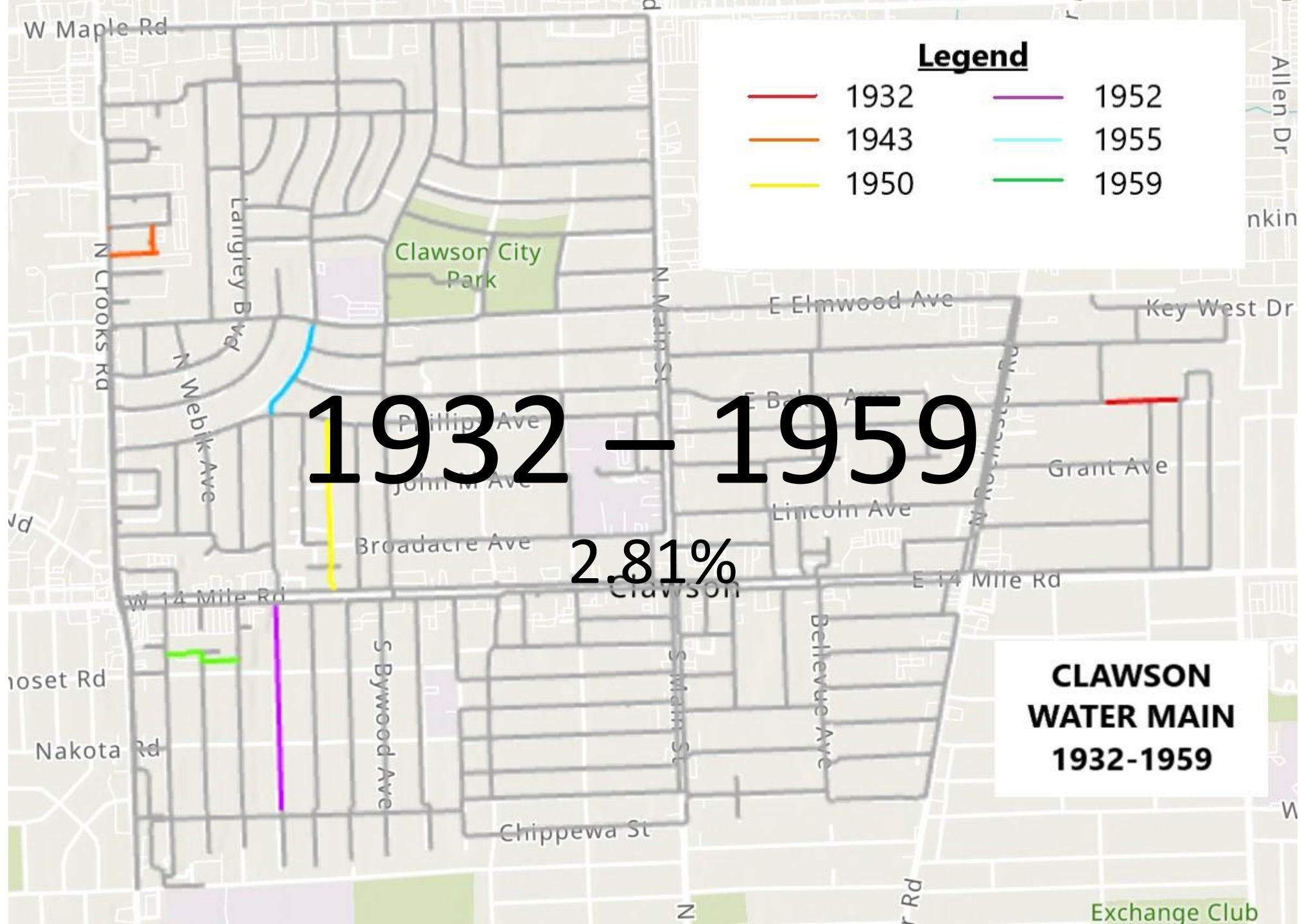
Legend

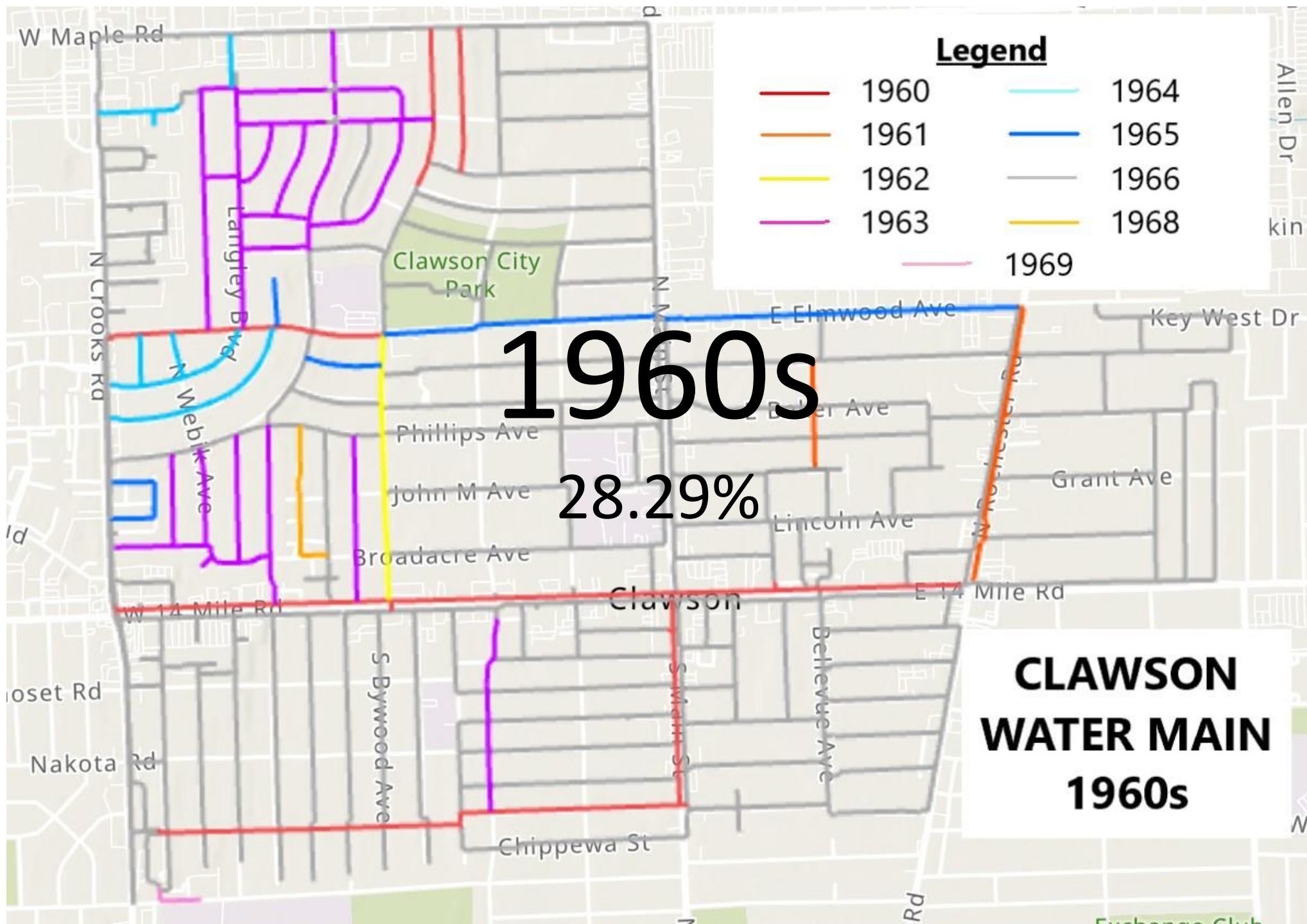


**CLAWSON
WATER MAIN
BY DECADE**









Clawson Water Main Break Facts

55 Years of Documented Water Main Breaks

Starting in Fiscal year 1969-1970

Total Number of Breaks is 747

Average Breaks per year over this time is 13.58

Water Main Breaks by Decade

DECADE	AVERAGE
1970-1979	13.20
1980-1989	17.00
1990-1999	15.10
2000-2009	13.80
2010-2019	10.40
<i>2020-2023</i>	<i>11.25</i>

Water Main Breaks by Month

MONTH	# OF BREAKS	PERCENTAGE
January	162	21.69%
February	105	14.06%
March	39	5.22%
April	13	1.74%
May	12	1.61%
June	23	3.08%
July	38	5.09%
August	34	4.55%
September	47	6.29%
October	55	7.36%
November	94	12.58%
December	125	16.73%

Top 10 Streets for WMBs

1.	W. Maple	39	6.	N. Selfridge	21
2.	N. Crooks	31	7.	W. Elmwood	21
3.	Broadacre	27	8.	Stephen	20
4.	N. Marias	26	9.	Dreon	18
5.	W. 14 Mile	26	10.	E. Elmwood	18

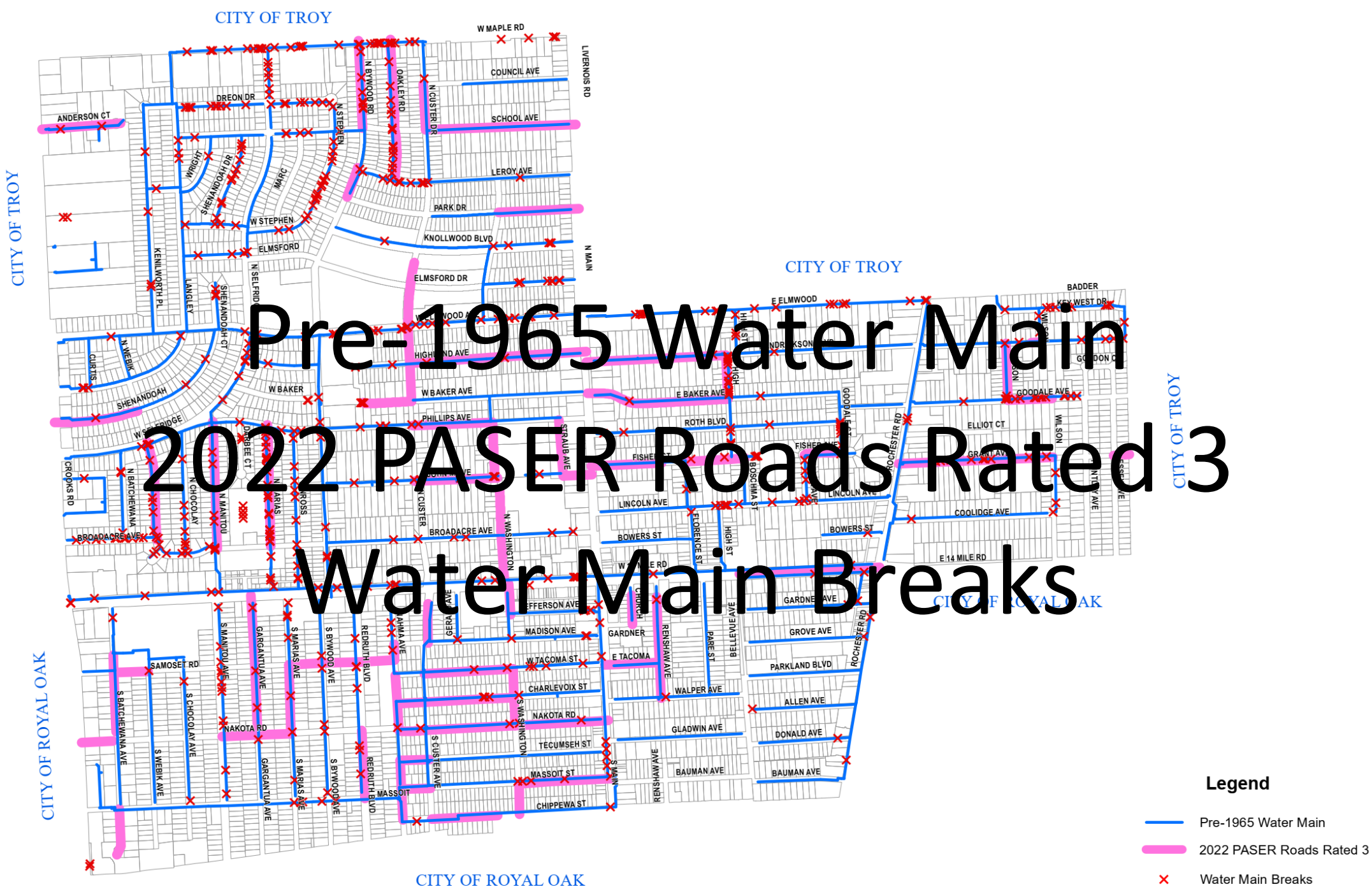
CITY OF TROY



CITY OF TROY



CITY OF ROYAL OAK



Water Distribution Maintenance Programs

Hydrant Flushing Program



Valve Exercising Program



Hydrant Flushing Program

Multiple Benefits

Water Quality Control

Preventative Maintenance

Water Quality Control

Flow water at high velocity to scour pipe surfaces and remove loose sediment.

Preventative Maintenance

Inspection of hydrants during flushing and the ability to conduct our own flow tests.



Valve Exercising Program

- Reliability, Water Quality, & Preventative Maintenance
- Being able to inspect, operate, and perform maintenance checks on valves to ensure proper operation in case of an emergency.
- The key to properly functioning valves is being able to isolate a section of main in case of emergencies.

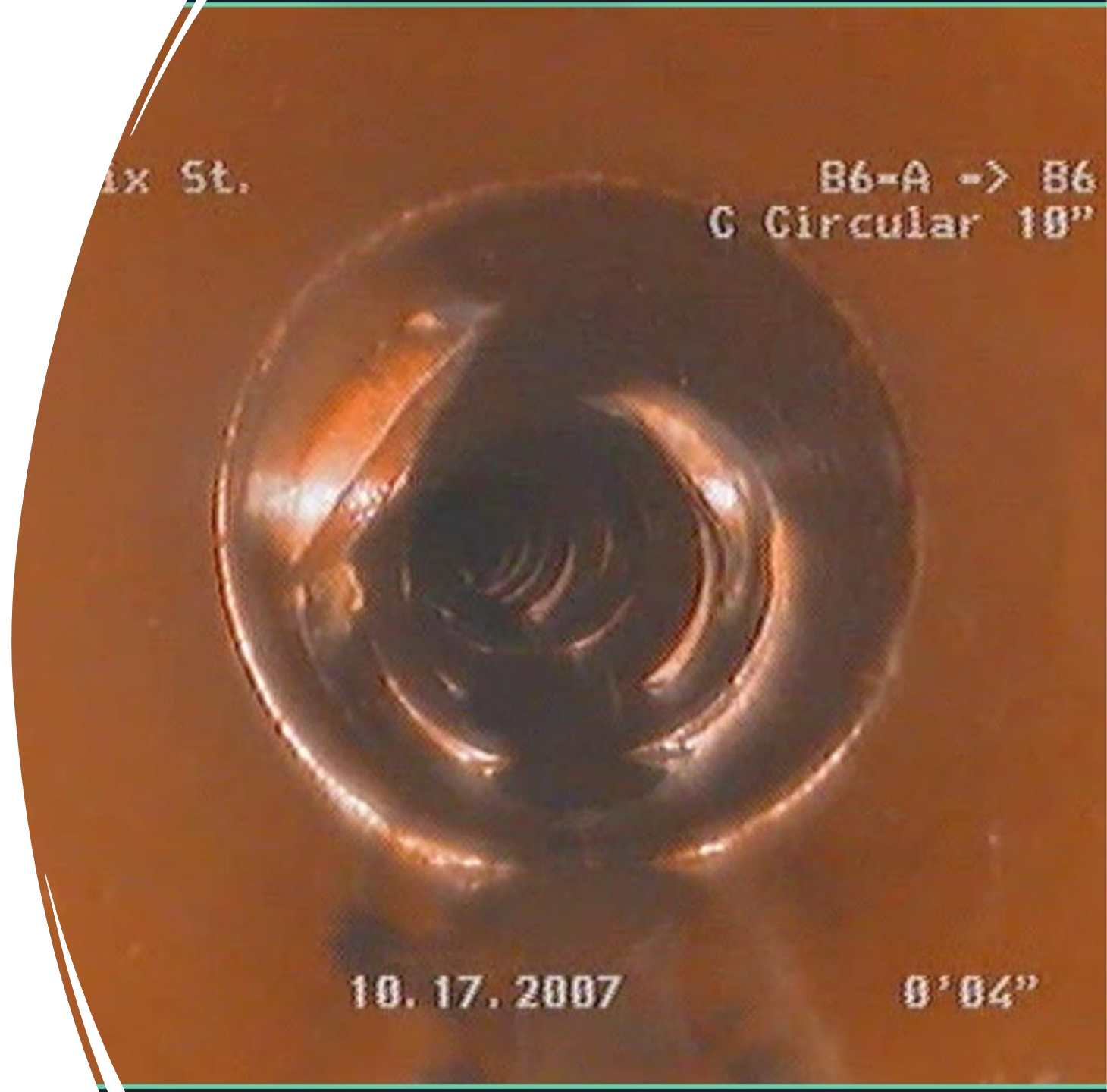


Implementing New Programs into Water Dept.




- Clawson's DPW Water Department is actually our Water & Sewer Department
- Currently we have 3 full time personnel in our Water Dept
- Job Tasks Consist of:
 - Work Orders (in 2023 we completed 1001 Work Order)
 - MissDigs (in 2023 we completed 1017 MissDigs)
 - Catch Basin Cleaning
 - Catch Basin & Manhole Structure Rebuilds
 - Sewer Camera Operation
 - General Plumbing at Municipal Buildings
 - Lead Line replacements
 - Other tasks – Snow removal, leaf pick-up,

Storm & Sanitary Infrastructure

Combined Sewer System



What is our combined sewer infrastructure?

COMBINED SEWER MAIN	MANHOLE STRUCTURES	CATCH BASIN STRUCTURES
		

Responsibility

City of Clawson Responsibility

Sewer Main
Manhole Structures
Catch Basin Structures

Resident / Business Responsibility

Any interior plumbing
Any Private Property Edge Drain /
Drain Tile
Any Private Property Catch Basins
Sanitary and Storm leads
Up to and including the Tap

Clawson's Sanitary Sewer Infrastructure

42.76 Miles of Combined Sewer

10"-12" – 17.64 Miles (41.3%)

15"-21" – 16.75 Miles (39.2%)

24"-48" – 8.12 Miles (19%)

42"-48" – 0.25 Miles (0.5%)

Manholes

1,000+/-

Catch Basins

1,300+/-

2007 Sewer Cleaning / CCTV

- Entire Combined Sewer Mains were cleaned, televised, and inspected
- Locations were chosen for maintenance, repair, or replacement
- Total Cost: \$530,851.00
 - S2 Grant through State Revolving Fund (SRF) Program
 - 90% Federal & 10% Local match



2012 SRF Sewer Rehabilitation and Replacment

- FCIPP – 77 Liners – 19,528 ft
- SCIPP – 89 Liners – 665 ft
- OCR – 75 Locations - 1,010 ft
- Pipe Burst – 5 Locations –
1,765 ft
- Full Sewer Replacement
3 Locations – 1,530 ft

TOTALS

249 Locations – 24,498 ft

\$3,289,836.00



The image is a detailed street map of a residential neighborhood. The map features a grid of streets with various names, including Anderson Rd., Crooks Rd., Maple Rd., Elmwood Ave., and others. Red and green dots are placed along the streets, indicating the locations of SRF As-Built. The text "SRF As-Built Map Locations" is overlaid in large, bold, black font across the center of the map.



Sewer Issues

- Too many significant weather events to truly know the complete status of our sewer system
- Will need the complete cleaning and inspecting of our current system to consider fixes



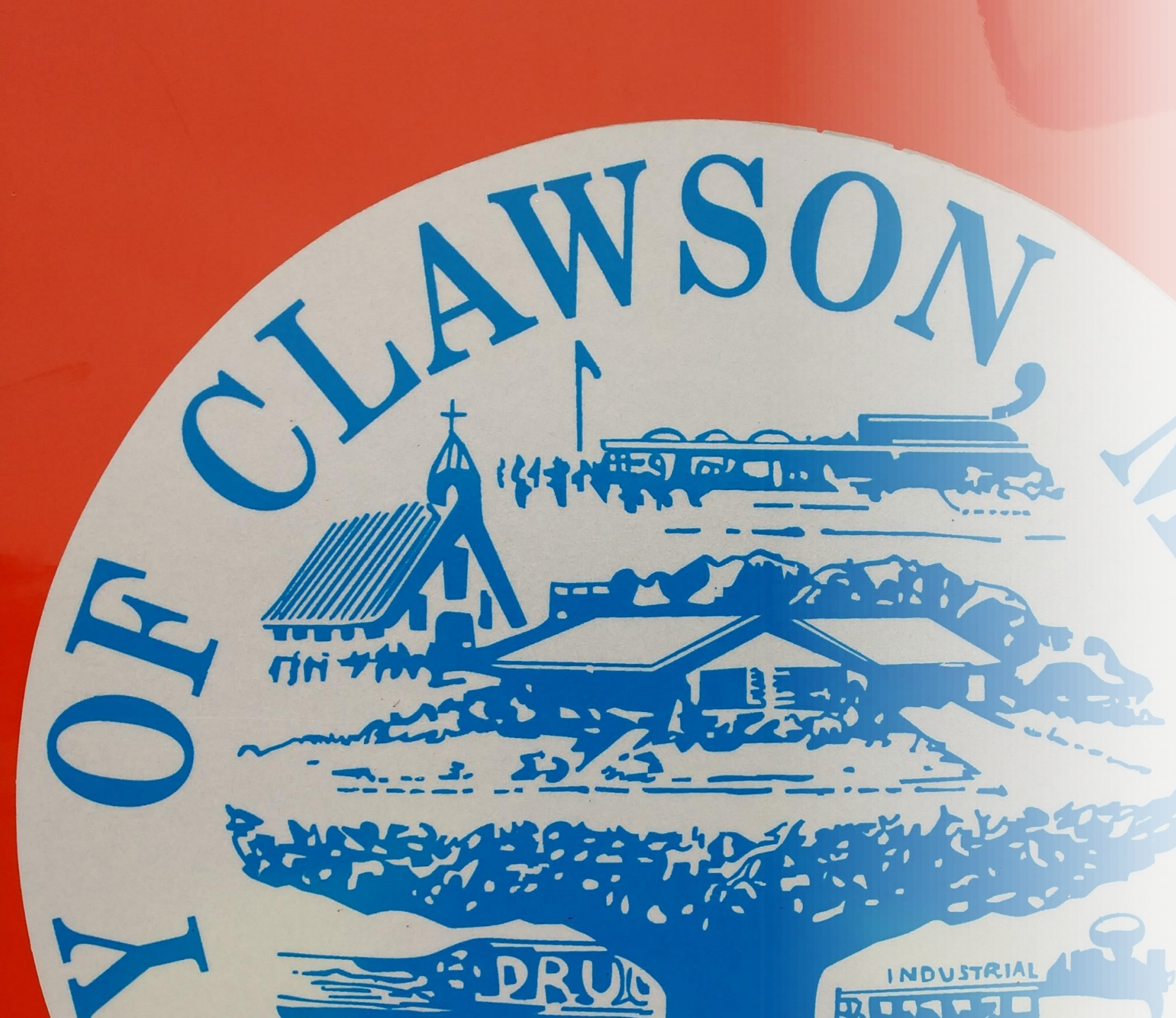


Current Process of Addressing Sewer Issues

Pinning Problem Locations & Investigating Complaints

LOCATIONS RECENTLY INVESTIGATED FOR FLOODING & SEWER COMPLAINTS

Elmsford	N. Bywood & Broadacre	E. Baker & High	Park Dr. & N. Custer	Leroy & Oakley
Langley & Dreon	14 Mile & Manitou	Broadacre Cul-De-Sac	Langley & Curtis	Tecumseh & S. Washington
N. Chocelay & W. Selfridge	Roth & High	N. Batchewana & Crooks	John M & N. Custer	S. Custer & Madison



Department of Public Works

Budget Discussion



Thinking outside the Budget.....

- EPA Grant – Broadacre / Washington Project
\$710,000 towards water main
- HUD Grant – Redruth Project
\$424,000 towards road reconstruction
- Coordination with surrounding communities.....
 - City of Troy
Badder Water Main
 - City of Royal Oak
S. Rochester Water Main & Roadway
Grant for \$1,900,000 for water main
- State Appropriations Requests
 - 5 Proposed Projects

To: Representative Sharon MacDonell, Senator Stephanie Chang,
Senator Mallory McMorro

From: City Manager, Joe Rheker

Date: February 8th, 2024

Re: City of Clawson FY 2025 Appropriations Request

Small-Dollar Projects (Less than \$2 Million)

Project Name: City-wide Sewer Clean and Closed-Circuit Television (CCTV)

Estimated Project Cost: \$1,300,000.00

Project Description: The city last had its sewer lines visually inspected via CCTV back in 2007 and 2008. That inspection directly supported various open cut point repairs, sewer linings, cure in place and sewer line replacement projects. Since the 2014 weather event that caused massive Detroit Metro-Area flooding issues the city has had increased flooding issues in residential yards and basements. The frequency of this is irregular but recurring enough to the point that it causes residents to live with the anxiety of potential flooding issues every time there is a severe precipitation event or shift in the weather. Having all of the city sewer lines visually inspected would allow the city to properly identify problem areas, prioritize a response plan and also assist in the estimation of cost to repair. This estimated project cost includes bid preparation, permits, engineering administration/observations, reviews, recommendations, GIS updates and contingency costs. This is our top small-small dollar project that we believe would be the most impactful to the city in assessing its infrastructure needs and is equitable city-wide.

Project Name: John M Ave. Road Watermain Replacement and Road Reconstruction

Estimated Cost: \$1,400,000.00

Project Description: This project consists of watermain replacement and road reconstruction for an estimated length of 920 feet. This water main for replacement is over 100 years old as it's from 1923. This road is adjacent to the Clawson Public School main campus which starting in the 2024/2025 school year will comprise all students in one location for the entire district.

Project Name: City-wide Miscellaneous Concrete Road Repair Program

Estimated Project Cost: \$1,000,000.00 - \$2,000,000.00

Project Description: Per the city of Clawson 2022 PASER report, which rates road conditions and a 10-1 scale (10 best, 1 worst), the composite city-wide average for road conditions is 3.73 which is in the poor category. To equitably address the city-wide road conditions, we developed a Miscellaneous Concrete Road Repair Program that currently has identified 311 locations. This list ebbs and flows from year to year. To date we have completed 51 locations at a total cost of \$507,400.52. The city believes we could complete 110-220 miscellaneous concrete road repairs and equitably improve the road conditions throughout the city. Any appropriation to our City-Wide Miscellaneous Concrete Road Repair Program would be greatly appreciated and be easily amendable to the program.



State Appropriations Requests



The City Manager with coordination from the Department of Public Works and AEW has submitted the following projects to State Representatives Sharon MacDonell, Senator Stephanie Chang, and Senator Mallory McMorrow for their consideration.

Small Dollar Projects (< \$2 Million)

City Wide Sewer Cleaning & CCTV

\$1,300,000

John M Watermain & Road Reconstruction

\$1,400,000

City Wide Miscellaneous Concrete Road Repair Program

\$1,000,000 - \$2,000,000

Large Dollar Projects (< \$5 Million)

Stephen/Dreon/School Watermain & Road Reconstruction

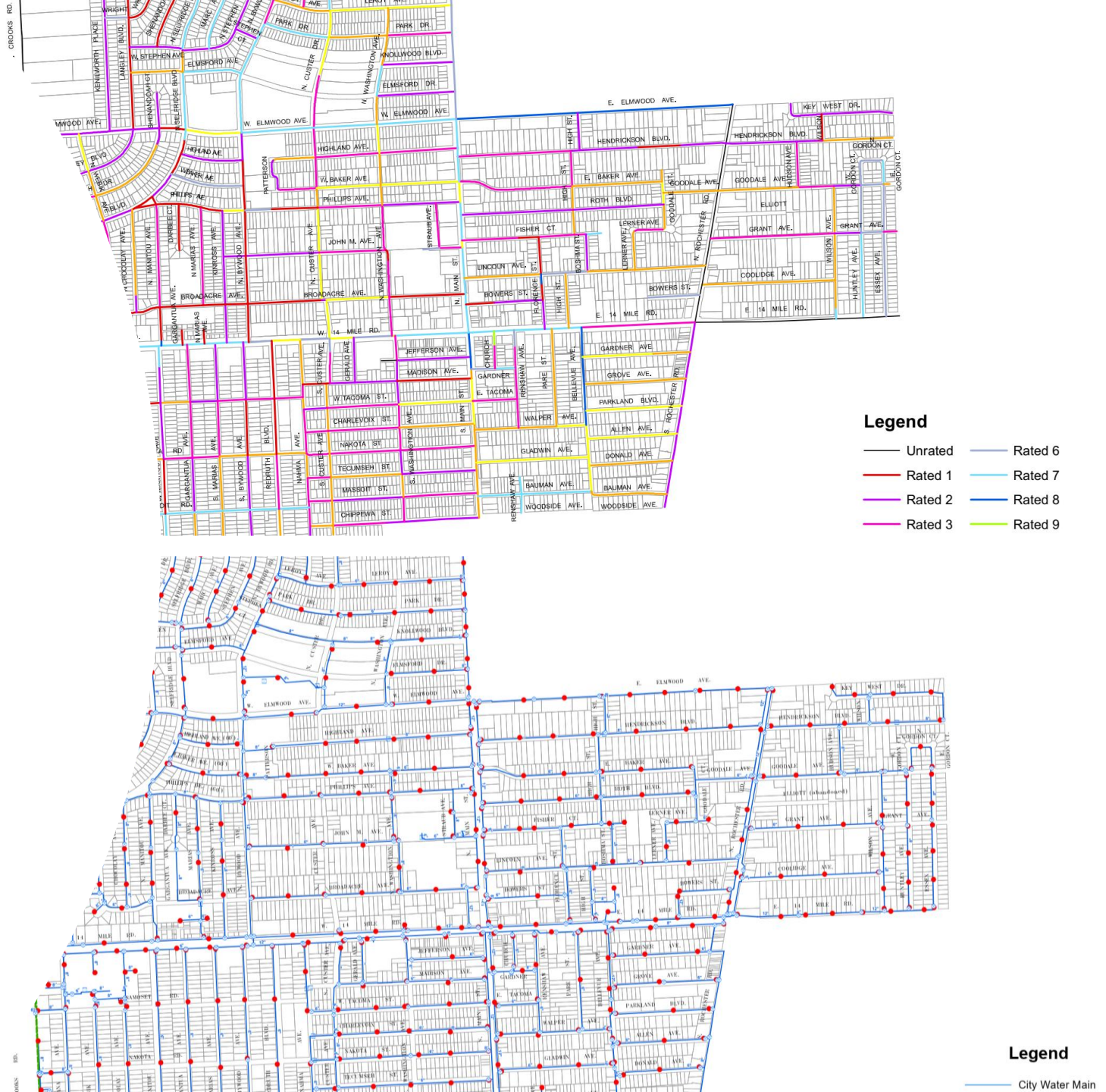
\$5,000,000

Elmwood Road Reconstruction

\$2,500,000

Capital Improvement Plan

Infrastructure Priority





Complete Sewer Cleaning and CCTV

Fully cleaning our combined sewer system

Televising and inspecting our sewer system

Determining problem spots for repairs & coordinating projects

Estimated Cost: \$1,300,000

Infrastructure Priority List

A list was created from what we know:

PASER Rating

Age of Water Main

Water Main Breaks

Taking into account residential
impact

Underlying unknown is sewers

List consists of 37 Projects ranging from road reconstruction, water main installation, and a combination of both.

These projects combine have an estimated cost of

\$62,588,850

<u>Priority</u>	<u>Street</u>	<u>Limits</u>	<u>Street</u>	<u>Water Main</u>	<u>Est. Cost</u>
1	W. Elmwood	Crooks to N. Selfridge	Yes	No	\$2,520,500
2	Dreon	Kenilworth to Stephen	Yes	Yes	\$2,575,150
3	School	Langley to N. Bywood	Yes	Yes	\$2,618,500
4	Maple	(Langley) to N. Custer	No	Yes	\$1,491,750
5	Elmwood	N. Custer to N. Rochester	No	Yes	\$3,059,500
6	Broadacre	Crooks to N. Bywood	Yes	Yes	\$3,783,600
7	N. Marias	Broadacre to Phillips	Yes	Yes	\$1,712,750
8	Key West	Dead end to City Limit	Yes	Yes	\$1,980,100
9	Roth	N. Main to Goodale Ct.	Yes	Yes	\$3,505,750
10	Kenilworth	W. Elmwood to Dreon	Yes	No	\$2,104,250

Capital Improvement Plan

Equipment Needs



2014 Freightliner Vactor Jet Guzzler 2100+

- Critical piece of equipment for our Water & Sewer Department
- Sewer & Catch Basin Cleaning
- Hydro excavation
- Emergency applications for water main breaks and water service and stop box repairs
- Typical Life Span is 7 Years
- Outside maintenance costs since 2016 is \$57,129.76



Estimated Cost
\$525,000

2005 Sterling 12 yd Dump

2003 Sterling 10 yd Dump

Replacing both vehicles with:
10 yd Dump Trucks w/Salt & Plow Package

These vehicles are used by all departments
for the purpose of hauling materials.

Vital pieces of equipment for our ice and
snow removal and leaf collection season

Estimated Cost
\$250,000



Estimated Cost
\$250,000



2005 GMC Equipment Step Van

Replacing with a utility box truck

Water Dept. Vehicle used for transportation of tools and equipment.

Associated jobs include:

Water main breaks, sewer repairs, water and sewer structure repairs, & service line replacements

Parts are no longer available for this vehicle.

Estimated Cost
\$95,000



A photograph of a fleet of orange snowplows parked in a lot. In the background, there is a large warehouse with a high roof. The ground is covered in snow and ice. The sky is overcast. The text "Budget Considerations for 2024-25" is overlaid in white, and "STAFFING" is overlaid in white below it.

Budget Considerations for 2024-25

STAFFING

Staffing Improvements

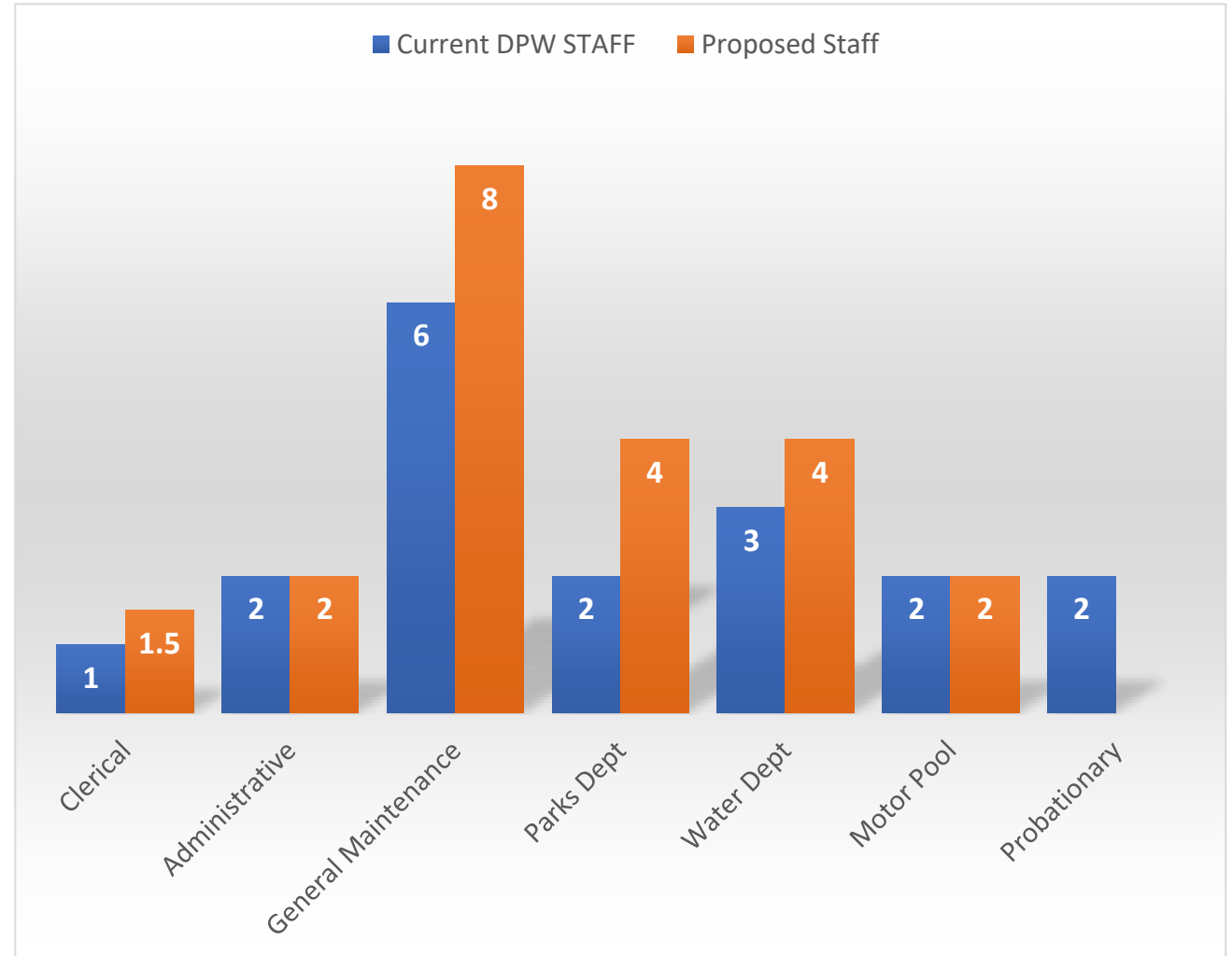
Current Staffing Levels do not allow for the implementation of new programs

Current programs must halt depending on time of year due to staffing

Department of Public Works will be taking on massive infrastructure needs over the next few decades

Addition of 1 Part Time Clerical

Addition of 3 Full Time DPW



DPW Office Personnel

PRE-COVID

Full Time Staff

Superintendent DPW

Assistant Superintendent DPW

AFSCME Clerical

Part Time Staff

Director of Engineering Services

Engineering Services Clerical

Front Office Clerical

CURRENT

Full Time Staff

Superintendent DPW

Assistant Superintendent DPW

AFSCME Clerical

Part Time Staff

None

**Addition of 1 Part Time
Clerical would be \$30,730**

Addition of 3 Full Time DPW Staff

Continuing current programs without delay due to low staffing and changing of seasons

- Tree Trimming / Removal
- Catch Basin Cleaning
- Cold Patch

Re-instituting old programs

- Sewer Jetting & Cleaning

Implementing NEW programs into the DPW

- Hydrant Flushing Program
- Valve Turning Program
- Sidewalk grinding Program

Upcoming projects

- Lead/Copper Replacements
- Approx. \$177 Million of infrastructure work

Addition of 3 Full Time DPW Staff would be \$76,320 per

Purpose & Benefits

The Clawson DPW strives to provide the best quality services for the residents and business owners of the City of Clawson.

These projects, equipment and manpower are key to improving and keeping our infrastructure in an acceptable condition for the community.



Financing Details



Finance Director

Mark Pollock



LEGAL DEBT LIMITATIONS

- Limited to 10% of SEV
- Can include equiv. IFT value and equiv. value of State Shared Revenues
- Obligations exempt from limitation:
 - Revenue Bonds
 - Special Assessment Bonds
 - MTF Bonds/Notes
 - Mortgage Bonds
 - Pollution abatement Bonds
 - Court ordered bonds
 - Refunding bonds (additional amount due to ref.)
 - No full faith and credit pledged bonds





LEGAL DEBT CAPACITY

- The City's current legal debt capacity is \$34 million, as shown below.

LEGAL DEBT MARGIN - As of July 2021		
2021 State Equalized Value (SEV)		\$578,633,240
Plus: Equivalent SEV of State Revenue Sharing*		56,384,222
Total Valuation		\$635,017,462
Legal Debt Limit - 10% of SEV		\$63,501,746
Total Bonded Debt Outstanding	\$32,586,166	
Less: Revenue Bonds & MTF Bonds	<u>(3,140,000)</u>	
Net Amount Subject to Legal Debt Limit		\$29,446,166
LEGAL DEBT MARGIN AVAILABLE		<u>\$34,055,580</u>

Source: Oakland County Equalization Departments and Municipal Advisory Council of Michigan

*As authorized in section 117.49 of the Home Rule City (act 279 of 1909). Represents projected 2021 state shared revenue of \$1,286,344 divided by the City's total millage rate of 22.8139 times \$1,000.



FUTURE LEGAL DEBT CAPACITY

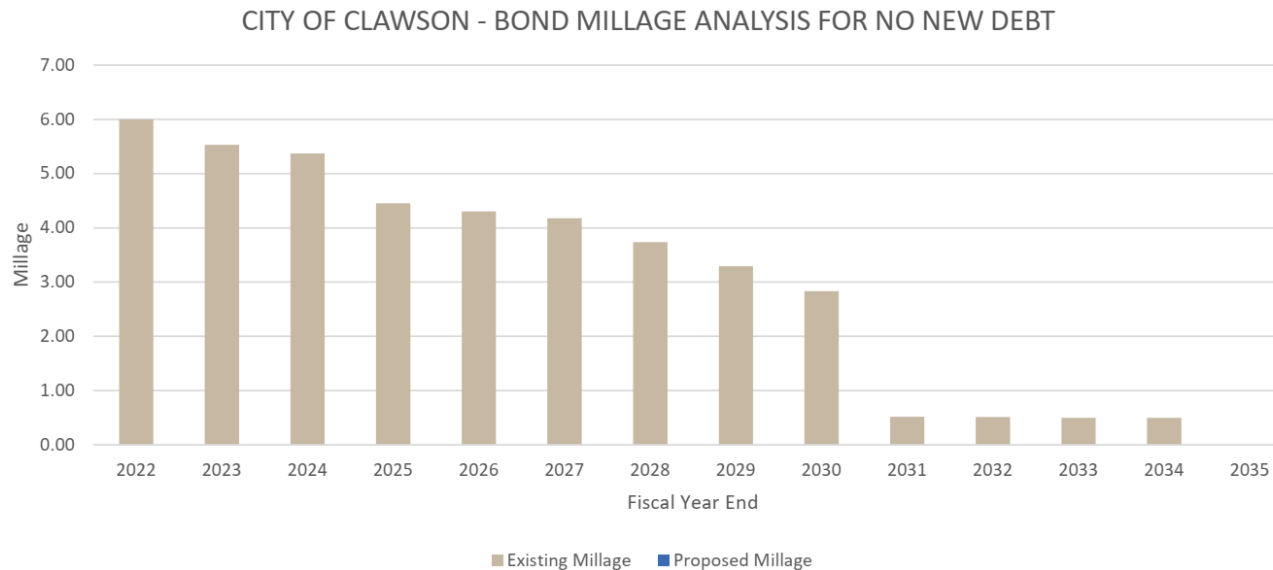
- As the City's State Equalized Value increases, and the existing debt is repaid, the legal debt capacity should increase.
- Future debt issuance will impact the legal debt capacity available, as will changes in the amount of State shared revenues.

Debt Capacity Projection						
June 30th Fiscal Year	State Equalized Value	State Shared Revenue	Legal Debt Limit	Total Debt Outstanding	Less: Debt Exempt from Capacity	Projected Debt Capacity
2022	\$578,633,240	\$56,384,222	\$63,501,746	\$32,586,166	\$3,140,000	\$34,055,580
2023	584,419,572	56,384,222	64,080,379	29,761,154	2,880,000	37,199,225
2024	590,263,768	56,384,222	64,664,799	26,841,825	2,615,000	40,437,974
2025	596,166,406	56,384,222	65,255,063	23,717,156	2,340,000	43,877,907
2026	602,128,070	56,384,222	65,851,229	20,840,900	2,060,000	47,070,329
2027	608,149,351	56,384,222	66,453,357	17,769,060	1,775,000	50,459,297
2028	614,230,844	56,384,222	67,061,507	14,586,343	1,480,000	53,955,164
2029	620,373,153	56,384,222	67,675,737	11,358,043	1,175,000	57,492,694
2030	626,576,884	56,384,222	68,296,111	8,185,000	950,000	61,061,111
2031	632,842,653	56,384,222	68,922,687	5,080,000	720,000	64,562,687
2032	639,171,079	56,384,222	69,555,530	3,010,000	485,000	67,030,530
2033	645,562,790	56,384,222	70,194,701	760,000	245,000	69,679,701
2034	652,018,418	56,384,222	70,840,264	265,000	-	70,575,264
2035	658,538,602	56,384,222	71,492,282	-	-	71,492,282



VOTED UTGO DEBT OUTSTANDING

- The City has **\$15.95 million** of voted unlimited tax general obligation bonds outstanding for which it levies debt millage annually.
- The graph below depicts the projected millage required to be levied for the existing unlimited tax general obligation bonds assuming an annual growth in taxable value of 3% and estimated exempt personal property tax reimbursements.
- The debt millage required over the next few years is projected to decrease, providing potential capacity for additional voted UTGO debt within the existing **6 mill debt millage**.

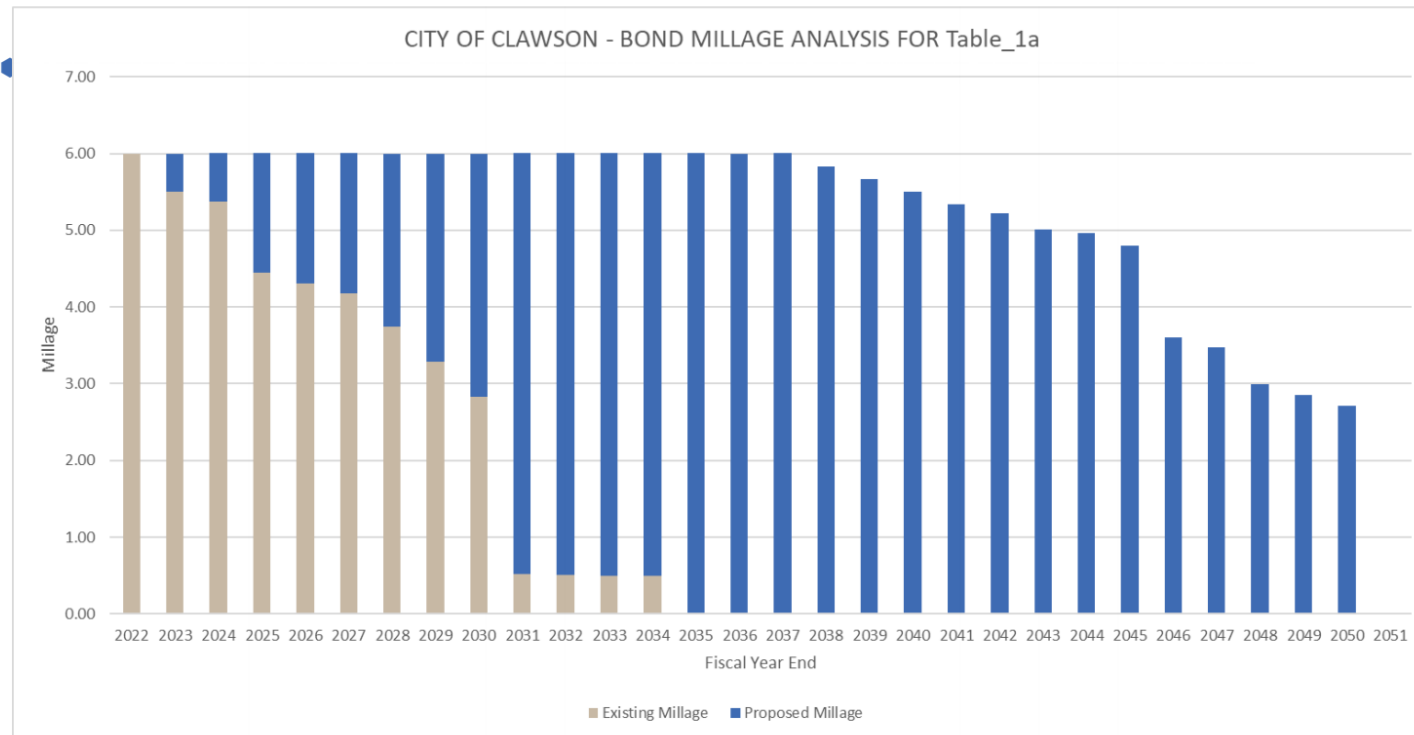




ESTIMATED NEW MONEY UTGO BOND CAPACITY

- We estimate the City could issue approximately **\$45 million** sold in series between 2022 and 2030, wrapped around the existing debt, without increasing its debt millage over its current **6 mill** debt millage rate.

Series 2022 or 2023	\$5,650,000	Series 2027	\$10,000,000
Series 2024	\$13,750,000	Series 2030	\$15,750,000



Preliminary subject to change – for illustrative purposes only
Projections assume 3% growth in taxable value, as well as estimated interest rates and State exempt personal property tax reimbursements.



Thank you for your time
QUESTIONS?