


Michigan Department of Environmental Quality  
Rick Snyder, Governor  
Dan Wyant, Director

<http://www.michigan.gov/deq>

## Drinking Water Revolving Fund Project Plan Submittal

<b>Name of the Project</b> City of Hamtramck Watermain Replacement Program		<b>Applicant's Federal Employer Identification Number (EIN)</b> 38-6004617	
<b>Legal Name of Applicant</b> (The legal name of the applicant may be different than the name of the project. For example, a county may be the applicant for bonding purposes, while the project may be named for the particular village or township it serves.) City of Hamtramck		<b>Areas Served by this Project</b> Counties <u>Wayne</u>	
<b>Address of Applicant</b> (Street, PO Box, City, State & Zip) 3401 Evaline St, Hamtramck, MI 48212		<b>Congressional Districts</b> <u>MI-14</u> <b>State Senate Districts</b> <u>2</u> <b>State House Districts</b> <u>4</u>	
<b>Population Served by the Water Supplier</b> <u>23,313</u> If you are interested in an interim planning loan for the immediate reimbursement of project planning costs, check here <input type="checkbox"/> (An interim planning loan is available only to a municipality serving a population of less than 10,000.)			
<b>Brief Description of the Project</b> <b>LEAD SERVICE LINE AND WATERMAIN REPLACEMENT PROGRAM</b>			
<b>Disadvantaged Community Determination</b> <input type="checkbox"/> The applicant is requesting a disadvantaged community determination, and a completed <i>Disadvantaged Community Status Determination Worksheet</i> is attached.			
<b>Estimated Total Cost of the Project</b> \$7,404,131.20		<b>Construction Start Target Date</b> MARCH 2022	
<b>Name and Title of Applicant's Authorized Representative</b> Rodney Johnson		<b>Telephone</b> 313.800.5233	<b>E-mail Address</b> rjohnson@hamtramckcity.com
<b>Address of Authorized Representative</b> if same as address above, check here <input checked="" type="checkbox"/>			
<b>Signature of Authorized Representative</b> 			<b>Date</b> 5-6-21
State approval of the water supplier's Surface Water Intake Protection Program is attached (if applicable) check here <input type="checkbox"/> State approval of the water supplier's Wellhead Protection Program is attached (if applicable) check here <input type="checkbox"/> Joint Resolution of Project Plan Adoption/Authorized Representative Designation is attached check here <input type="checkbox"/>			

A final project plan, prepared and adopted in accordance with the Department's *Drinking Water Revolving Fund Program Project Plan Preparation Guidance*, must be submitted by May 1st in order for a proposed project to be considered for placement on Michigan's Project Priority List for the next fiscal year. Please send your final project plan with this form to:

REVOLVING LOAN SECTION  
OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE  
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
PO BOX 30241  
LANSING MI 48909-7741

(EQP 3528 REV 2/2015)

## Fiscal Sustainability Plan Certification Form

Describe SRF Project to be Funded: OR SRF Project Number \_\_\_\_\_

City of Hamtramck Watermain Replacement Program

Check one box below:

☐ FSP does not apply because:

- ☐ The project is for a new treatment works system.
- ☐ The project involves an upgrade that does not involve repair/replacement or expansion of a treatment works system.
- ☐ The project is for nonpoint source work.
- ☐ Other (explain)

☒ FSP is complete for the SRF-funded project and is available for review by contacting:

Tiffany T. Neubig

(Name)

734.759.1600

(Phone)

Hennessey Engineers, 13500 Reeck Road

Southgate, MI 48195

I certify that City of Hamtramck has developed and implemented a plan that meets  
(Applicant's Name)  
the requirements of Section 603(d)(1)(E)(i) of the Water Resources Reform and Development Act of 2014. The FSP includes an inventory of critical assets, an evaluation of the condition and performance of inventoried assets, a plan for maintaining, repairing, and as necessary, replacing the treatment works, and a plan for funding such activities. The applicant also certifies that the water and energy conservation efforts have been evaluated and will be implemented.

Rodney Johnson, Director of Public Services  
Name and Title of Authorized Representative (Please Print or Type)

Rodney Johnson 5-6-21  
Signature of Authorized Representative Date

**Disadvantaged Community Status Determination Worksheet**

The following data is required from each municipality in order to assess the disadvantaged community status. Please provide the necessary information and return to:

Robert Schneider  
Revolving Loan Section  
Drinking Water and Municipal Assistance Division  
P.O. Box 30817  
Lansing, MI 48909-8311  
[Schneiderr@michigan.gov](mailto:Schneiderr@michigan.gov)

If you have any questions please contact Robert Schneider at 517-388-6466

Please check the box this determination is for:

☐ DWRF    ☒ SRF

1. Total amount of anticipated debt for the proposed project, if applicable.

\$3,000,000 -

2. Annual payments on the existing debt for the system.

Fiscal year 6/30/21 - \$435,304.43.  
2 Debt issues with principal changing annually.

3. Total operation, maintenance and replacement expenses for the system on an annual basis.

\$6,742,816 Fiscal year 6/30/2020.

4. Number of "residential equivalent users" in the system.

5,350.

**For determinations made using anticipated debt, a final determination will be made based upon the awarded loan amount.**

## **Disadvantaged Community Status Determination Worksheet DWSRF**

The following data is required from each municipality in order to assess the disadvantaged community status. Please provide the necessary information and return to:

Robert Schneider  
Water Infrastructure Financing Section  
Finance Division  
P.O. Box 30457  
Lansing, MI 48909-7957

Or fax at 517-335-0743.

If you have any questions, please contact Robert Schneider at 517-388-6466.

1. Total amount of anticipated debt, including the DWSRF loan on the water system for proposed project.

\$3,896,000.00

2. Annual payments on the existing debt for the water system.

\$435,304.43 Fiscal Year 6/30/21  
2 debt issues with principal changing annually

3. Total operation, maintenance and replacement expenses for the water system on an annual basis once the proposed work is completed.

\$6,742,816 Fiscal Year 6/30/2020

4. Number of "residential equivalent users" in the system.

5,350

**The provisional determination is based on an anticipated loan amount. Final determination will be based upon awarded loan amount.**





# **DRINKING WATER REVOLVING FUND (DWRF) PROJECT PLAN**

for the  
**City of Hamtramck**  
Wayne County, Michigan

**DRAFT** Project Plan  
May 7, 2021

Prepared By:  
Hennessey Engineers, INC.  
13500 Reek Rd.  
Southgate, Michigan 48195  
734.759.1600  
734.282.6566 (fax)



**Table of Contents**  
**Submittal of Drinking Water Revolving Fund Project Plan to MDEQ**  
**City of Hamtramck**

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<b>I.</b>	<b>INTRODUCTION .....</b>	<b>1</b>
<b>II.</b>	<b>PROJECT BACKGROUND.....</b>	<b>4</b>
A.	Study Area Characteristics .....	4
B.	Economic Characteristics .....	6
C.	Existing Facilities .....	7
D.	Need for the Project .....	9
E.	Population Data .....	11
F.	Environmental Setting .....	12
<b>III.</b>	<b>ANALYSIS OF ALTERNATIVES.....</b>	<b>16</b>
A.	Identification of Potential Alternatives.....	18
B.	Analysis of Principal Alternatives.....	26
<b>IV.</b>	<b>SELECTED ALTERNATIVES.....</b>	<b>31</b>
A.	Description of the Selected Alternative.....	31
B.	Authority to Implement the Selected Alternative .....	37
C.	User Costs .....	37
<b>V.</b>	<b>EVALUATION OF ENVIRONMENTAL IMPACTS.....</b>	<b>39</b>
A.	Description of the Impacts.....	39
B.	Analysis of the Impacts .....	41
<b>VI.</b>	<b>MITIGATION.....</b>	<b>48</b>
A.	Short-Term Construction Related Impacts .....	48
B.	Operational Impacts .....	55
<b>VII.</b>	<b>PUBLIC PARTICIPATION .....</b>	<b>57</b>
A.	Public Meetings on Project Alternatives.....	57
B.	The Formal Public Hearing .....	57
C.	Adoption of the Project Plan .....	59

# List of Appendices

## **DWRF Project Plan City of Hamtramck**

- A. Map of the City of Hamtramck with Study Area
- B. Water Main Maps of Proposed Work
- C. USGS Topographical Map of the City of Hamtramck
- D. Land Use Map
- E. Soils Report
- F. Map of Parks and Recreational Facilities
- G. Summary of Underground Storage Tanks for the City of Hamtramck
- H. Preliminary Engineer's Cost Estimates of Alternatives and Present Worth Analysis
- I. Public Meeting Advertisement and Affidavit
- J. **Public Hearing Sign-In Sheet – Not included in Draft Project Plan**
- K. **Public Hearing Transcript – Not included in Draft Project Plan**
- L. **Public Hearing Presentation – Not included in Draft Project Plan**
- M. **Resolution Adopting Final Project Plan – Not included in Draft Project Plan**

## **I. Introduction**

The City of Hamtramck is a well-established City of approximately 22,934 residents surrounded by the City of Detroit, established as a Village in 1901 and incorporated as a City in 1922 with a population of nearly 50,000 people. The Village of Hamtramck grew rapidly after the opening of the Dodge Brothers Main Plant at the south end of the Village in 1910. The City of Hamtramck experienced its peak population in 1930 of 56,268 people with a steady decline following to a low of 18,443 people in 1990. Since 1990, the population has slowly increased to a current population of 23,313 people.

The water distribution system for the City of Hamtramck was established as the City was being developed as a Village in the late 1890s and early 1900s and was mostly installed prior to the Village becoming a City. Water is treated and provided from GLWA and at one time was distributed through 10 master meters located throughout the City; however, has been decreased to 8 master meters with only 6 master meters continuously operating at the time flow testing was last conducted in 2017. The current distribution network follows the City's street network and consists of approximately 41.9 miles of pipes. City-owned and maintained water mains range in size from 4 inches to 24 inches in diameter with most water mains constructed as cast iron pipes, however, there are a few ductile iron pipes that have been installed in more recent years.

Due to changes implemented in June 2018 of the Lead and Copper Rules within the Safe Drinking Water Act 399 of 1976, the City of Hamtramck along with all communities within the State of Michigan operating drinking water systems are now required to complete full water service line replacements where lead or galvanized water services exist from the existing water main or newly installed water main into the existing dwelling for each property regardless of if public or private property. Previously, for new water main installations, the City would replace the portion of the water service line from the

new or existing water main to the curb stop box located at the right-of-way line, typically called a partial service line replacement. The portion of the service line from the right-of-way line to the dwelling was the responsibility of the homeowner to maintain.

The changes to the LCR requirements effective in June 2018 require communities to replace all lead and galvanized water service lines at an average rate of 5 percent per year beginning in 2021, not to exceed 20 years, or in accordance with an alternate schedule incorporated into an asset management plan and approved by the MDEQ. The full lead or galvanized service line must be replaced by the water supply at the water supply's expense, regardless of ownership. The city has begun creating a water service lead Capital Improvement Plan (CIP) to identify locations to replace water services for each year. Some of these areas are in conjunction with watermain replacements within the City.

The City has water mains that are greater than 100 years old and are located directly underneath the roads. However, due to the recent changes to lead and galvanized service line replacements as part of the Lead and Copper Rule, the City is now required to replace all lead and galvanized water service lines affected by these projects, a cost not budgeted for or affordable to the City at this time. Therefore, the City is applying for a DWRF loan to complete lead service line replacements along various routes as one (1) separate project. They are looking to replace approximately 600 water services that exist throughout the City assuming all water services are lead or galvanized as records do not exist. This will also allow the City to conform to the requirement to replace service leads at a rate of five (5) percent per year at a minimum and allow the City to better budget for future service lead replacements. In addition, the city has a 5-year capital improvement plan with areas of watermain to be upgraded. The DWRF project plan will focus on the projects scheduled in 2022-2025.

These projects include:

1. Replacement of Lead and Galvanized Steel Service Lines at a minimum of 5% a Year for a 3-year period.
2. Watermain replacement along Goodson St. from Joseph Campau to Lumpkin via open cut.
3. Watermain replacement along Caniff Ave. from Joseph Campau to Buffalo via pipe bursting.
4. Watermain replacement along Dan St. from Joseph Campau to Veterans Park via pipe bursting.
5. Watermain replacement along Prescott St. from Ellery St. to Conant St. via pipe bursting.
6. Watermain replacement along Conant St. from Evaline St. to Jacob St. via pipe bursting.
7. Watermain Looping on the south side of the city connecting Joseph Campau to Conant St.

Therefore, the City of Hamtramck has developed this project plan for Drinking Water Revolving Fund (DWRF) loan assistance to complete the replacement of lead and galvanized water service lines and water main replacement projects listed above.

## **II. Project Background**

### ***A. Study Area Characteristics***

The City of Hamtramck was established as a Village in 1901 with a population under 1,000 people and was incorporated as a City in 1922 with a population of nearly 50,000 people incorporated from Hamtramck Township. Prior to being established as a Village, the area within the limits of present-day Hamtramck was mostly a rural farming community within Hamtramck Township, a large Township covering areas now consisting of the east side of the City of Detroit, the City of Harper Woods, and the Grosse Pointe Communities. The Village of Hamtramck grew rapidly after the opening of the Dodge Brothers Main Plant at the south end of the Village in 1910. The population of the Village exploded from 3,559 residents to 48,615 people within a 2.1 square mile area. The average residential density of the Village by 1920 was 23,150 people per square mile; however, the Village's residential area is 35 percent of the Village limits; therefore, the population of 48,615 was within a 0.75 square mile area. The City of Hamtramck experienced its peak population in 1930 of 56,268 people with a steady decline following to a low of 18,443 people in 1990. Since 1990, the population has slowly increased to a current population of 22,934 people. The sharp decline of residents is due to the large suburban flight of the 1950s and 1960s, the closing of the Dodge Brothers Main Plant in 1980, and the result of individual homeownership as many original inhabitants rented portions of houses within the City; many families originally living within the same residence.

The City of Hamtramck has been a built-out community for several decades consisting of 2.1 square miles mostly surrounded by the City of Detroit with the extreme northwestern corner of the City bordering the City of Highland Park. The City is bounded by Carpenter Avenue to the north, roughly Saint Aubin Avenue to the west, the General Motors Poletown Assembly Plant property to the south

(between Hamtramck Drive and I-94), and Conant Avenue north of Caniff Avenue and south of Hamtramck Drive to the east and Vincent Street/Alpena Street between Hamtramck Drive and Caniff Avenue to the east. The City consists of a variety of single-family residential properties with commercial properties along the major thoroughfares being Joseph Campau Avenue, Holbrook Avenue, Caniff Avenue, and Conant Avenue, and industrial corridors along the western and southern boundaries of the City.

The City of Hamtramck has municipal water and sanitary sewer services throughout the entire City. The water distribution and wastewater collection systems within the City are owned and maintained by the City's Department of Public Services. Water is purchased through the Great Lakes Water Authority and provided through transmission mains running through the City of Detroit. Sewage is discharged into the City of Detroit's wastewater system and treated at their wastewater treatment facility on the Detroit River in Southwest Detroit. Both the drinking water and sanitary sewer collection systems were established as the City was developing between 1890 and 1930. Little to no replacement of either system has taken place since the development of these systems. A City-wide sewer rehabilitation project took place through a Clean Water State Revolving Fund Loan in 2015-2016. Lead service line replacement has been taking place through a Drinking Water Revolving Fund Loan beginning in 2019 and will be finalized in 2021.



The land use for the City per the Southeast Michigan Council of Governments consists of the following:

Single Family Residential	30.6%
Multiple Family Residential	1.9%
Commercial	4.5%
Industrial	16.9%
Governmental/Institutional	6.1%
Parks and Recreation	1.2%
Transportation, Communication and Utility Infrastructure	28.1%
Vacant	10.7%

Table 1 – Percentage of Land Use

### ***B. Economic Characteristics***

Prior to 1980, the City of Hamtramck was home to the Dodge Brothers Main Automobile Assembly plant located at the south end of the City. This plant was the reason for the large population boom within the City from 1910 to 1930 and was by far the largest employer within the City until the closing of the plant in 1980. Since this time, the economy has been sluggish within the City. In the late 1980s to early 1990s General Motors Corporation developed the Poletown Assembly Plant straddling the City of Hamtramck on its south end with the City of Detroit. Another General Motors Corporation assembly plant, later to become an American Axle plant, existed along the western edge of the City; however, has recently closed and was recently demolished. Large employers currently within the City are Hamtramck Public Schools, Kowalski Sausage Company, Metropolitan Bakery Company, and the Wayne County Department of Corrections. Per SEMCOG, as of 2019, the median household income was \$28,420, and the per capita income at \$11,172.

Daytime population per SEMCOG is estimated at 18,956 people. There are 917 people employed by a company within the City of Hamtramck. Approximately 5.61 percent of the population is unemployed. 42 percent of the population lives in poverty.

SEMCOG estimates the current jobs held in Hamtramck as the following:

Natural Resources, Mining, and Construction	183
Manufacturing	265
Trade, Transportation, Utilities, Warehousing	397
Retail	408
Information and Financial Services	303
Professional and Technical Services	552
Education	603
Health Care	302
Leisure and Hospitality	341
Other Services	250
Government	264
Total	3,892

Table 2 – Jobs Summary

It is estimated the City of Hamtramck will see a decrease of approximately 129 jobs by 2045.

### ***C. Existing Facilities***

The water distribution system for the City of Hamtramck was established as the City was being developed as a Village in the late 1890s and early 1900s and was mostly installed prior to the Village becoming a City. The Village became a City in 1922 and by 1922 was nearly built out

with a population of over 50,000 people, in addition to large industrial centers, particularly the Dodge Brothers Main plant all within a 2.1 square mile area. Water is treated and provided from GLWA and at one time was distributed through 10 master meters located throughout the City; however, has been decreased to 8 master meters with only 6 master meters continuously operating at the time flow testing was last conducted in 2017. There are also several emergency connections with the City of Detroit.

The current distribution network follows the City's street network and consists of approximately 41.9 miles of pipes. City-owned and maintained water mains range in size from 4 inches to 24 inches in diameter with most water mains constructed as cast iron pipes, however, there are a few ductile iron pipes that have been installed in more recent years. Based upon the age and the sizing of the distribution network, it is obvious hydraulic designs were not previously performed during the development of the water distribution network beyond a basic population demand. Rules and regulations to comply with water works standards have changed dramatically over time since the inception of the water distribution network and have become more stringent along with the rules and regulations of the Safe Drinking Water Act. Most recently, in 2018, the Lead and Copper Rules were revised requiring communities to complete full replacement of lead and galvanized water services from the water main into the dwelling at each property where these services exist. It is believed due to the age of the existing water main infrastructure and due to the fact that the majority of the homes in Hamtramck were built prior to 1930, the majority of water service lines are considered to be lead or galvanized pipes. Unfortunately, few records of original water main installation and installation of water service lines to dwellings exist for the City of Hamtramck.

As part of the new Lead and Copper Rules, the City will begin to compile a record of water service lines that exist with a preliminary review completed in 2020 and a final record of service lines completed prior to 2025.

#### ***D. Need for the Project***

Due to recent changes of the Lead and Copper Rules within the Safe Drinking Water Act 399 of 1976, the City of Hamtramck is now required to complete full water service line replacements where lead or galvanized water services exist from the existing water main or newly installed water into the existing dwelling for each property regardless of public or private property. Previously, for new water main installations, the City would replace the portion of the water service line from the new or existing water main to the curb stop box located at the right-of-way line, typically called a partial service line replacement. The portion of the service line from the right-of-way line to the dwelling was the responsibility of the homeowner to maintain.

The purpose of the Lead and Copper Rule (LCR) is to protect public health by minimizing lead and copper levels in drinking water. Lead and copper can enter drinking water mainly from corrosion of lead and copper plumbing materials if proper corrosion protection chemicals are not introduced into the drinking water system. The rule establishes action levels for lead and copper based on a 90th percentile level of tap water samples. All community water supplies are subject to the LCR requirements.

The changes to the LCR requirements effective in June 2018 require communities to replace all lead and galvanized water service lines at an average rate of 5 percent per year beginning in 2021, not to exceed 20 years, or in accordance with an alternate schedule incorporated into an

asset management plan and approved by the MDEQ. The full lead service line must be replaced by the water supply at the water supply's expense, regardless of ownership.

The City of Hamtramck (City) developed an Asset Management Plan (AMP) for its water system through the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Part of the AMP includes completing an inventory of assets associated with the wastewater facilities and performing a condition assessment of the assets to identify the current condition, useful life, value, and capital improvement plan (CIP).

Through the capital improvement plan, the City has elected to replace 5 watermains and install a new watermain looping project utilizing the City's water and sewer funds as the existing mains are greater than 100 years old and are areas that have had multiple watermain breaks. However, due to the recent changes to lead service line replacements as part of the Lead and Copper Rule, the City is now required to replace all lead and galvanized water service lines affected by these projects, a cost not budgeted for affordable to the City at this time. Therefore, the City is applying for a DWRF loan to complete lead service line replacements through various locations in the city and in conjunction with watermain replacement projects as one (1) separate project. There are approximately 600 water services that exist along various watermain projects identified, all water services are lead or galvanized as records do not exist. This will also allow the City to be in accordance with the requirement to replace service leads at a rate of five (5) percent per year at a minimum and allow the City to better budget for future service lead replacements. As a result of the CIP the city is applying to obtain a Drinking Water State Revolving Fund (DWRF) loan to assist in completing further improvements to the water system. The watermain improvements will increase water quality, as these mains are well above their useful life and many have experienced multiple breaks. The Goodson Watermain will be replaced in conjunction with the Phase 1B sewer relief project being installed along Goodson St. from Joseph Campu to Lumpkin. The

The major

#### ***D. Population Data***

Per SEMCOG, the past, current and projected population and housing data for the City of Hamtramck are as follows:

Year	Population	Existing Housing Units	Occupied Housing Units
2000	22,976	8,894	8,033
2010	22,417	8,690	7,061
July 2020	22,934	8,051	7,081
2025	22,879	N/A	N/A
2030	23,038	N/A	N/A
2035	23,135	N/A	N/A
2040	23,186	N/A	N/A
2045	23,349	N/A	7,331

Table 3 – Historical and Projected Population Data

As can be seen in the above table, the population for the City of Hamtramck has mostly remained steady over time since 2000; however, is anticipated to slightly increase for the next 25 years. More interesting is the number of existing housing units compared to occupied housing units. In 2010, the residential occupancy rate for the City of Hamtramck was 81.3 percent. Between 2010 and 2020, several unoccupied homes have been demolished and in July 2020, the occupancy rate has improved to a rate of 88.0 percent.

The average household size for the City of Hamtramck is currently 3.13 residents per home.

## ***F. Environmental Setting***

### 1. Climate

Below is a table providing the average temperature range, average precipitation, and average snowfall for the Detroit Metropolitan Area, measured at the Detroit-Wayne County Metropolitan International Airport in Romulus, Michigan.

Month	Avg. Max. Temp.	Avg. Min. Temp.	Avg. Precip. (in.)	Avg. Snowfall (in.)
January	32	18	2.0	12.9
February	35	19	2.0	11
March	45	28	2.5	6.6
April	59	38	3.1	1.6
May	71	49	3.4	0.0
June	79	58	3.4	0.0
July	84	63	3.3	0.0
August	82	62	3.1	0.0
September	75	54	3.1	0.0
October	62	43	2.3	0.1
November	49	33	2.7	2.3
December	37	24	2.5	10.4

Table 4 – Historical Climate Data

The total average precipitation is 33.4 inches, and the average snowfall is 44.9 inches for one (1) year.

## 2. Air Quality

Adverse impacts to air quality during construction will relate to dust and soil erosion and sedimentation which will be temporary and not be an impact following construction.

## 3. Wetlands

There are no wetlands within the study area. A map of the wetlands within Southeastern Michigan is attached in Appendix E.

## 4. Coastal Zones

The City of Hamtramck does not have any bodies of water; therefore, there are no coastal zones.

## 5. Floodplains

There are no floodplains within the study area. A map of the floodplains areas within Southeastern Michigan is attached in Appendix E.

## 6. Natural or Wild and Scenic Rivers

There are no rivers within the City of Hamtramck boundaries.

## 7. Major Surface Waters

There are no surface waters within the City of Hamtramck boundaries.

## 8. Recreational Facilities

The City owns and maintains the following parks:



- Veterans Park – East of Joseph Campau Avenue between Holbrook Avenue and Hamtramck Drive
- Zussman Park – Adjacent to City Hall between Evaline Street and Yemans Street west of Conant Avenue
- Pope Park – Southwest corner of Joseph Campau Avenue and Belmont Street

The City recently received a grant to study and potential complete improvements to Veterans Park in the near future. No other park improvements are anticipated at this time. A map showing parks and recreational facilities is provided in Appendix F.

#### 9. Topography

The topography of the City is practically flat ranging from 525 feet to 528 feet above sea level.

#### 10. Soils and Geology

The soils within the City of Hamtramck consist primarily of clayey soils. A soil report has been included in Appendix C.

#### 11. Agricultural Resources

There are no farmlands remaining in the City of Hamtramck. Farmlands have not existed in the City of Hamtramck since 1920.

#### 12. Fauna and Flora and Unique Features

It is not anticipated that any sensitive environments or habitats will be disturbed as a part of this project as the study area is completely built out. There are endangered species that exist within Wayne County per the United States Fish and Wildlife Service and are as follows:

- Indiana Bat
- Eastern Massasauga Rattlesnake
- Northern Riffleshell
- Rayed Bean Mussel
- Eastern Prairie Fringed Orchid

### **III. Analysis of Alternatives**

Due to the recent changes to lead service line replacements as part of the Lead and Copper Rule, the City is now required to replace all lead and galvanized water service lines affected by these projects from the new water main to the dwelling at each property, regardless of property ownership, a cost not budgeted for or affordable to the City at this time. Therefore, the City is applying for a DWRF loan to complete lead service line replacements along sixteen (16) routes as one (1) separate project. In addition, the city would like to replace five (5) Watermains that tie in with the service line replacement projects within the city and a watermain looping project on the south side of the city to connect two areas of watermain from Conant to Joseph Campau.

Due to recent changes of the Lead and Copper Rules within the Safe Drinking Water Act 399 of 1976, all communities in the State of Michigan are now required to complete full water service line replacements where lead or galvanized water services exist from the existing water main or newly installed water into the existing dwelling for each property regardless public or private property. Previously, for new water main installations, the City would replace the portion of the water service line from the new or existing water main to the curb stop box located at the right-of-way line, typically called a partial service line replacement. The portion of the service line from the right-of-way line to the dwelling was the responsibility of the homeowner to maintain.

The purpose of the Lead and Copper Rule (LCR) is to protect public health by minimizing lead and copper levels in drinking water. Lead and copper can enter drinking water mainly from corrosion of lead and copper plumbing materials if proper corrosion protection chemicals are not introduced into the drinking water system. The rule establishes action levels for lead and copper based on a 90th percentile level of tap water samples. All community water supplies are subject to the LCR requirements.

The changes to the LCR requirements effective in June 2018 require communities to replace all lead and galvanized water service lines at an average rate of 5 percent per year beginning in 2021, not to exceed 20 years, or in accordance with an alternate schedule incorporated into an asset management plan and approved by the MDEQ. The full lead service line must be replaced by the water supply at the water supply's expense, regardless of ownership.

There are over 600 water services that exist along these fifteen (15) routes assuming all water services are lead or galvanized as records do not exist. The number of services was determined based upon the number of accounts located within the project limits of all six (6) water main replacement projects listed above, 277 service leads, and an additional 323 service leads in locations throughout the city. It is assumed because of the age of the structures, mostly being built prior to 1930, that all locations have lead or galvanized water services unless the private owner replaced the water service at some point in time. The City is beginning to develop an inventory of the water services and an exploratory excavation by hydro-excavation may need to be performed prior to start construction verifying the material type of services. If a water service is a material other than lead or galvanized, the water service will not be replaced within the limits of private property and will only be replaced to the right-of-way line as part of the water main replacement project as part of the typical water service transfer to the new water main. The water service replacement program proposed will allow the City to in compliance with the requirement to replace service leads at a rate of five (5) percent per year at a minimum and allow the City to better budget for future service lead replacements.

This section of the project plan analyzes the alternatives available to address the existence of lead or galvanized water service along water main replacement projects proposed.

## ***A. Identification of Potential Alternatives***

### **1. No Action**

#### **A. Lead Service Lead Replacement**

Taking no action to replace lead and galvanized water service lines would result in the City not complying with the current drinking water standards and Safe Drinking Water Act 399 of 1976 and the current Lead and Copper Rules and would allow the City to continue operating an antiquated and potentially unreliable system potentially creating a future health hazard. No action could adversely impact public health with the existence of lead water service lines. In addition, as the useful life of existing water mains is approximately 50-80 years, the existing water distribution system along the proposed routes have surpassed their useful lives and needs to be replaced. Therefore, not to complete any improvements at this time, in the long run, will create a significant increase in capital improvement costs in the future risking water main failures pavement, creates an increase in repair and maintenance costs and at some point, the maintenance and repairs will be too great to handle with the current staffing levels. Most importantly though, not completing the replacement of lead and galvanized service lines remove the City from complying with current Drinking Water laws and standards.

Therefore, it is not in the best interest of the City of Hamtramck to take no action on the existing water distribution system along the proposed routes.

#### **B. Watermain Replacement and Looping**

No Action: A “No Action” plan would result in a situation of existing City water main continuing to be sub-standard, unreliable, and undesirable for carrying high-quality drinking water.

Completing “No Action” would adversely impact public health due to the advanced age of the system, and its increasing unreliability to deliver safe drinking water. Main breaks can occur in new water mains as well as old mains. With the older mains such as the 8-inch main located along Caniff breaks seem to occur at a higher frequency. This just means that with older pipe the frequency of breaks tends to increase with age.

The number of people affected by a given main break can vary widely from area to area. Population affected by such main breaks can range from a few hundred with a main break to over 1,000 people depending on a break location.

As for the length of time, a given water main may be out of service is hard to tell. It is dependent on the type of break, where it is located, how long it would take to excavate the area by the break, etc. If a break occurs under pavement, it could take 6 hours to 12 hours or more to repair by the time the leak is located, and the area excavated to make the needed repair.

One major ramification that takes place during a water main break is putting residents out of water for a given time during the repair of a break. In addition to no water, there is the possibility of contamination of the system if the break is not fixed properly by the repair crew. Placing one resident or thousands of residents out of water is an alternative the City of Hamtramck would prefer not to do, but when a break occurs it is an inconvenience to all involved.

Beneficial environmental impacts of “No Action” are minor. They include the avoidance of typical, temporary, and relatively insignificant disruptions associated with water main replacement, such as dust, construction traffic, noise, and brief service interruption. These disruptions are typical during the construction phase of a new water main within a built-out community. During construction, it can be anticipated that the contractor may hit a service lead

that may be mismarked and/or not marked at all. If this occurs a brief interruption of service may happen to repair the damaged service.

## 2. Optimum Performance of Existing Facilities

### A. Lead Service Lead Replacement

Based upon the analysis of water mains that have experienced multiple watermain breaks or align with a road or sewer relief project, it has been identified to replace the aging water mains along these routes which will require the full replacement of lead and galvanized water service lines to all dwellings served by these mains where lead and galvanized service lines exist. These routes are as follows:

Street	Limits		Service Leads	Replacement Year
Goodson Street	Joseph Campau to Lumpkin Street	North and South Side	79	2022
Caniff Avenue	Joseph Campau to Buffalo Street	North and South Side	142	2022/23
Dan Street	Joseph Campau to Veterans Park	North and South Side	13	2022
Prescott Street	Conant Street to Ellery Street	North and South Side	60	2023
Conant Street	Jacob Street to Evaline Street	East and West Side	39	2024

Table 5 – Water Service Summary in conjunction with Watermain Replacement Areas

The locations of just the proposed water service lead replacement include:

Street	Limits		Service Leads	Replacement Year
Yemans Street	Dequindre Street to Lumpkin Street	North and South Side	46	2022
Evaline Street	Joseph Campau to Gallagher Street	North and South Side	38	2022
Yemans Street	Gallagher Street to Buffalo Street	North and South Side	89	2023
Goodson Street	Joseph Campau to Gallagher Street	North and South Side	51	2023
Denton Street	St. Aubin Street to Joseph Campau	North Side	22	2024
Grayling Street	Lumpkin Street to Joseph Campau	North and South Side	41	2024
Lumpkin Street	Denton Street to Goodson Street	East and West Side	11	2024
Grand Haven	Commor Street to Caniff Avenue	East and West Side	13	2024
Dyar Street	Commor Street to Caniff Avenue	East and West Side	34	2024
Niebel Street	Fleming Street to Joseph Campau	North and South Side	34	2024
Buffalo Street	Holbrook Street to Edwin Street	East and West Side	38	2024

Table 6 – Water Service Summary

The number of water services that exist was obtained based upon the number of accounts being served by water along the project limits listed in the above table. Typically for a DWRF project plan, three (3) alternatives are analyzed for the proposed project. However, based upon the new Lead and Copper Rules, there is only one (1) other alternative other than the No Action alternative and that is to completely replace the lead or galvanized water service line.

This would involve the complete replacement of existing lead and galvanized water services from the existing water main to at least 18 inches inside of the dwelling or the water meter inside the dwelling. New services would be tapped into the new water main being installed and a new curb stop box provided at the right-of-way line. As the section from the right-of-way line to the dwelling is on private property, permission will need to be granted from each property owner to work within a private property in addition to entering the structure to make the connection to existing plumbing within the structure. The City of Hamtramck would prepare a waiver, reviewed and approved by the City Attorney, to be signed by the property owner to allow work to take place on private property similar to how the City of Detroit operates with the replacement of full-service line replacements. Photos would be taken both inside the structure and outside the structure within the limits of a private property prior to and after the replacement of service line to minimize the risk of damage claims by property owners. If property owners do not comply with allowing access to the property and refuse to sign off on the waiver, the property owner will risk having water service shut off to their property until compliance is met. All new water service material, including the tap and curb stop box, would be of Type K copper material. Services would be installed using directional drilling with minimal excavations required. New services would be placed parallel to existing services and the existing service disconnected from the structure and abandoned in place. New services would be placed at a minimum five-foot distance in the front yard of each structure and the location of existing



services marked out through the MISS DIG system to prevent any damage to the existing lead or galvanized service. Access pits would be located at the tap to the new water main, at the right-of-way line for the curb stop box, and in close proximity to the dwelling to allow for the service to enter into the dwelling. All existing lead or galvanized materials that are removed at connection points would be disposed of properly per requirements of lead disposal and at a certified disposal site or recycled at a facility that allows for the recycling of lead materials. A maximum of 600 water services would be replaced if all water services are identified as being lead or galvanized. If existing services are identified as being a material other than lead or galvanized, the service will not be replaced within the limits of private property.

It is estimated that each service replacement will cost approximately \$5,000.00 to complete. The total cost in summary for this alternative is as follows and is provided in greater detail in Appendix H. The average cost per service is presumed less than most communities as structures within the City of Hamtramck have little setback from the right-of-way line; therefore, the length of new water services are far less than found in most residential neighborhoods. The total project cost includes costs for engineering design, contract administration, construction inspection, bond attorney fees, and financial advisor consultant fees:

Project	Construction Cost	Total Project Cost
Water Service Replacements	\$3,000,000	\$3,510,000

Table 7 – Summary of Water Service Replacement Alternative Total Project Costs

#### B. Watermain Replacement

Optimum Performance of existing facilities: Existing facilities are not operating at optimum efficiency. The City of Hamtramck system is well past the useful life of 50 years old, the existing facilities are not working to its full potential. This can be due to several reasons, but

due to the number of watermain breaks the city repairs per year and low water pressure, we know areas of repair that is needed. Refer to Table 5 for the watermain replacement project areas. Some of these areas have experienced multiple watermain breaks, as we begin replacing water service leads in these areas, there is risk associated if we do not replace the entire main. If we do not replace the main we could face several watermain breaks in these areas while exposing the main to make the necessary service taps. This could cause many water quality issues if we have to start repairing multiple sections of main and could be more costly than just replacement of the existing watermain. It is recommended on Goodson to upgrade the watermain with a 12-inch pipe via open cut, this project will be constructed in conjunction with the City of Hamtramck Phase 1B Sewer Relief project that will be installed down Goodson Street. The other 4 watermain projects are recommended to be installed via pipe bursting, we can install with minimal disturbance to the roads and increase the size by one pipe size as needed. This will increase the flow and water quality throughout the city.

Project	Construction Cost	Total Project Cost
Watermain Replacement Projects	\$2,750,690.00	\$3,520,883.20

Table 8 – Summary of Water Replacement Projects Alternative Total Project Costs

#### C. Watermain Looping

The proposed project would provide a new 12-inch water main to connect with the 24-inch water main that exists on Joseph Campau Avenue north of the railroad tracks and would be directionally drilled underneath the railroad viaduct and connect with the dead-end 12-inch water main that exists on Denton Avenue, east of Joseph Campau Avenue. By reinstating this loop, redundancy will exist; therefore, water service can remain in service for the majority of the south end district of the City if a water main break were to occur and based

upon the model conducted of the water reliability study, adequate pressures would be provided meeting minimum fire flow requirements.

Existing facilities are not operating at optimum efficiency. This is due to the lack of redundancy and the age resulting in the existing facilities are not working to its full potential. This can be due to several reasons, but for the most part with a number of areas that the grid is not completed will affect the performance of the overall system. As for the water main along Denton Road, it is not working to the full potential since it is a 2,260 lineal foot long dead-end water main. The proposed addition of the loop located along Joseph Campau will help eliminate the 2,260 lineal foot long dead-end and help with the redundancy issue and increase pressure.

Project	Construction Cost	Total Project Cost
Watermain Looping Project	\$291,600.00	\$373,248.00

Table 9 – Summary of Water Looping Project Alternative Total Project Costs

### 3. Rehabilitation of Existing Facilities

#### A. Lead Service Lead Replacement

This alternative would consist of rehabilitating the existing lead service leads. However, there is not a method to rehabilitate the lead service leads and due to the nature of these materials, these service leads in their entirety must be removed.

#### B. Watermain Replacement

Sliplining the existing watermain is completed by installing a smaller, carrier pipe into a larger host pipe, grouting the annular space between the two pipes and sealing the ends. The trenchless method is generally a cost-effective rehabilitation method to replace watermains. This would be not a viable option, this method will reduce the size of the existing main, thus reducing flow rates and capacity. In addition, due to age of the existing pipes, the slip lining

process can break and shatter the pipe when trying to prepare them for lining and that will raise the cost associated with this alternative.

C. Watermain Looping

There is not a second alternative for watermain looping.

4. Regional Alternatives

D. Lead Service Lead Replacement

For this proposed project there are no regional alternatives available to consider as the City maintains and operates its water distribution system and the work proposed is within Hamtramck City limits.

E. Watermain Replacement and Watermain Looping

Currently, the City of Hamtramck along with over 80 other customers purchase water from Great Lakes Water Authority (GLWA). The City has no intention of leaving the DWSD\GLWA system as a customer to either create his or her own water system. If the City wanted to break away from GLWA\DWSD the costs associated with creating the City's own system would be quite expensive and very uneconomical for the community. The City would have to have a new treatment plant designed and constructed along with disconnecting the current feed from the City of Detroit. Additional costs associated with creating their own system is hiring staff to operate the plant on a 24-hour a day schedule. If the City were to leave the GLWA\DWSD system while under contract they would face penalties for leaving and would have to pay GLWA and the City of Detroit for leaving the system.

At the present time, the City could not afford to construct their own treatment plant and associated transmission mains along with the staff required to operate the system, nor do they have the available vacant land to construct a facility. Overall, the costs to the City would

outweigh the benefits in owning of their own treatment facility and leaving the GLWA\DWSD system.

## ***B. Analysis of Principal Alternatives***

### **1. The Monetary Evaluation**

#### **a. Sunk Costs**

The sunk costs involved with this project consist of the effort involved with preparing this DWRF project plan of approximately \$10,000.

#### **b. Present Worth**

##### **i. Lead Service Lead Replacement**

An analysis of costs for the total project yields a total present worth of approximately \$135,400.20 per year. An interest rate of 4.125 percent was used based upon the interest rate used this fiscal year.

##### **ii. Watermain Replacement and Looping**

An analysis of costs for the total project yields a total present worth of approximately \$154,041.49 per year. An interest rate of 4.125 percent was used based upon the interest rate used this fiscal year.

#### **c. Salvage Value**

As the useful life of the water services is approximated at 50 years, the salvage value is negligible. This project plan and the DWRF loan is for a 20-year period; therefore, the useful life far surpasses the DWRF planning period.

#### **d. Escalation**

No costs were escalated in the present worth analysis as only energy costs and land value can be escalated in the monetary value per the requirements of EGLE. No land value is associated with the proposed project as all work is proposed is within the existing right-of-way, existing utility easements, or proposed construction easements to install copper water service lines up to each dwelling within private property, and energy costs associated with this project involve construction equipment normally part of the bid prices during the bidding process.

#### **e. Interest During Construction**

As the construction period for this project is less than four (4) years, interest is one-half of the product of the construction period, the total capital expenditures, and the discount rate and is not calculated on a yearly basis.

#### **f. Mitigation Costs**

Mitigation costs involved with this project would be any costs associated with soil erosion and sedimentation control, traffic maintenance and control, an audio-visual record of the construction site, and any other costs associated with maintaining access for residents and commercial businesses at all times during construction. These costs will be included in the bid prices received by potential contractors; therefore, mitigation costs do not need to be included in the present worth analysis.

#### **g. User Costs**

It is anticipated that all water main improvements will be funded through a 20-year, 1.875 percent interest DWRF loan. It is estimated that the recommended projects will

cost users approximately an additional \$76.70 per year or \$6.39 per month for the next 20 years. User costs are discussed further in Chapter IV of this project plan.

## 2. Staging Construction

The proposed project would be bid out and constructed as multiple projects. It is possible that multiple crews could be working at different locations throughout the duration of the projects. Once the new water main has been installed, the water service contractor would at that time begin to install the new water services along the particular route. The water main replacement projects, because of the federal aid assistance must meet Made in the USA and American Iron and Steel requirements for water main materials and the labor for the project paid according to Davis Bacon wage rate schedules.

## 3. Partitioning the Project

No partitioning of the project will take place for the proposed alternative.

## 4. The Environmental Evaluation

For water service replacement and watermain replacement through pipe bursting, the environmental impact associated with this project is basically negligible. The majority of the work involved will utilize trenchless technologies with minimal open-cut excavations for access pits, typically located at the connection to the new water main, at the right-of-way line for the installation of the curb stop box, and within close proximity to the dwelling.

The Watermain looping project will be open-cut excavation and will be installed with the City of Hamtramck Sewer Relief Phase 1B.

The environmental evaluation of this project is provided in greater detail in Chapter V of this project plan and the mitigation of environmental impacts presented in Chapter VI of this project plan.

## 5. Implementability and Public Participation

The City of Hamtramck and Hennessey Engineers accepted comments and concerns from the general public during a 30-day public comment period that commenced on May 7, 2021 and ended upon the completion of a public hearing being held in conjunction with the City of Hamtramck Council meeting on June 8, 2021. Public input and information regarding the public hearing, including the transcript from the public hearing, is discussed further in Chapter VII of this project plan. Once the project has been approved to proceed, the City of Hamtramck will notify all affected residences and businesses, a minimum of 45 days in advance, that their water service will be replaced, and that access will be required onto private property and into their property to complete the full water service replacement. Additional notifications of when work will begin will also be provided at least one week in advance.

## 6. Technical and Other Considerations

### **a. System Reliability**

To meet the Safe Water Drinking Standards, the City of Hamtramck must provide a reliable water distribution network and continually maintain and properly operate the system to protect the health and well-being of the residents of the City. In addition, to meet recently updated Lead and Copper Rule standards and Drinking Water Act regulations, all lead and galvanized service leads must be replaced in their entirety regardless of ownership where new construction of water mains take place.



**b. Residuals**

This project does not involve improvements at a treatment facility; therefore, residuals does not apply to this project plan.

**c. Growth Capacity**

The proposed work area is completely built out and has been for several years. No additional users will be connected to the water distribution system as a part of this project.

**d. Alternative Sites and Routings**

As this project involves the replacement of water service lines, alternative sites and routings were not considered.

**e. Contamination of the Project Site**

Provided in Appendix G is a list of open and closed underground storage tank and leaking underground storage tank sites registered through the MDEQ throughout the City of Hamtramck. Four (9) locations are located adjacent to the proposed work areas, five (5) being on Conant Street, one (1) being on Norwalk St, one (1) on Joseph Campau, one (1) on Hamtramck Drive, and one (1) on Joseph Campau. It is not anticipated that contamination will be encountered as a part of this project as minimal excavation is required and will not be in the vicinity of where underground storage tanks exist or used to exist.

## **IV. Selected Alternative**

### ***A. Description of the Selected Alternative***

#### **1. Relevant Design Parameters**

##### **a. Lead Service Lead Replacement**

Due to recent changes of the Lead and Copper Rules within the Safe Drinking Water Act 399 of 1976, the City of Hamtramck is now required to complete full water service line replacements where lead or galvanized water services exist from the existing water main or newly installed water into the existing dwelling for each property regardless of if public or private property. Previously, for new water main installations, the City would replace the portion of the water service line from the new or existing water main to the curb stop box located at the right-of-way line, typically called a partial service line replacement. The portion of the service line from the right-of-way line to the dwelling was the responsibility of the homeowner to maintain.

The changes to the LCR requirements effective in June 2018 require communities to replace all lead and galvanized water service lines at an average rate of 5 percent per year beginning in 2021, not to exceed 20 years, or in accordance with an alternate schedule incorporated into an asset management plan and approved by the MDEQ. The full lead service line must be replaced by the water supply at the water supply's expense, regardless of ownership. Therefore, the City is applying for a DWRF loan to complete lead service line replacements along these five (5) routes and eleven (11) other locations as one (1) separate project.

The lead service recommended project consists of the replacement of up to 600 water service lines along the routes stated below. If existing water services are identified as being materials other than lead or galvanized piping, the water service will not be replaced within the limits of

private property. It is desired that ground disturbance shall be kept to a minimum to keep commercial businesses open without interruptions, continue the constant flow of traffic throughout along these busy thoroughfares and provide little inconvenience to the residents and general public along these corridors; therefore, new water services will be installed by directional drilling methods. Due to the recent changes to lead service line replacements as part of the Lead and Copper Rule, the City is now required to replace all lead and galvanized water service lines affected by these projects, a cost not budgeted for affordable to the City at this time.

The City is to replace a portion of the 600-lead service leads in coordination with watermain replacements located throughout the City. The Watermain Projects area as follows:

- Goodson Street from Joseph Campau to Lumpkin Street – Upgrade to one 12-inch main
- Caniff Avenue from Joseph Campau to Buffalo Street – Upgrade to 12-inch and 8-inch main.
- Dan Street from Joseph Campau to Veterans Park – Upgrade to 12-inch main
- Prescott Street from Conant Street to Ellery Street – Upgrade to 12-inch main
- Conant Street from Jacob Street to Evaline Street – Upgrade to 12-inch main

**b. Watermain Replacement**

The City is applying for a DWRF loan to complete five (5) watermain replacement projects through pipe bursting. The preliminary design for the current plans will include the replacement of aged, problematic watermain within the limits listed above. These mains are greater than 100 years old and are located directly underneath the roads. . The 12-inch water main is designed to improve flows within the system and make the system more reliable and reduce the number of

businesses and residents who would be without water in the event of a main break at each of the five (5) replacement locations.

An attached map details the water main distribution system for the City.

Residuals management, wells, and intakes are not applicable.

The attached map of the City of Hamtramck depicts the existing water distribution system. The selected project areas are highlighted on this map. In addition, summary and detailed lists for each area proposed, by location are provided in Appendix A

**c. Watermain Looping Project**

The City is applying for a DWRf loan to complete one (1) looping project. The preliminary design for the current plans will include the installation of 240 LF of watermain to connect Joseph Campau to the Denton Road Watermain, this will eliminate an extremely long dead-end main along Denton Road and create a redundancy in this southern portion of the City. The current main along Denton Road experiences low pressure at various times. This main is greater than 100 years old and are located directly underneath the roads. This 12-inch water main will help to improve flows within the system and make the system more reliable and reduce the number of residents who would be without water in the event of a main break along Will-Carleton Road.

An attached map details the water main distribution system for the City.

The attached map of the City of Hamtramck depicts the existing water distribution system. The selected project area is highlighted on this map. In addition, summary and detailed lists for each area proposed, by location are provided in Appendix A.

## 2. Controlling Factors

The City of Hamtramck's water distribution system services the entire population of approximately 22,934 people based upon recent population figures from the Southeast Michigan Council of Governments (SEMCOG) along with commercial and industrial users. Residents and businesses that will be affected by this project will be those residents and businesses along and adjacent to the sixteen (16) lead service line replacement areas and the five (5) water main replacement projects listed on page 20 of this report. Replacement will begin in 2022 and go through 2025. Residents and businesses affected by this project will be notified of the upcoming project at a minimum 45 days prior to the start of any work taking place and will require granting of permission through a waiver to replace the water service line on their private property. Residents and businesses will also be notified at least 48 hours of when the contractor will be on site to perform proposed replacements to provide sufficient time for the property owner to prepare for a temporary water shut off to complete the water service replacement and for the contractor to allow access into the dwelling to make the final connection within the home.

The City is not under any administrative consent orders (ACO) or any other Federal or State court ordered enforcement actions; however, is required to comply with current drinking water standards and the Safe Drinking Water Act 399 of 1976 and the recent changes to the Lead and Copper Rule within this Act.

The proposed project will require permit approvals from the Michigan Department of Environmental Quality (MDEQ) as part of Act 399, 1976, Water Supply Improvements permit for improvements to the water distribution system. No work is proposed within Wayne County or Michigan Department of Transportation right-of-ways.

Soil erosion and sedimentation controls that will be used include catch basin silt sacks and silt fencing, if necessary. As part of the SESC plan, the Contractor(s) will be required to sweep adjacent streets to the construction site daily to remove any soil that have been deposited during the workday.

Other environmental and mitigation efforts for this project are described in greater detail in Chapters V and VI of this project plan.

### 3. Project Maps

Several maps and schematics are provided in the Appendices of this project plan. Appendix A provides an overall map of the City of Hamtramck. Appendix B provides maps of the City's water distribution system along the proposed routes. Appendix D provides the zoning established for the City.

### 4. Sensitive Features

As the area where work is to take place is completely built out consisting mostly of residential and commercial properties, no sensitive features such as wetlands, floodplains, surface waters or natural habitats will be affected by the proposed projects. Greater detail regarding sensitive features and the findings through the MDEQ and USFWS for the City of Hamtramck are included in Chapters V and VI of this project plan.

### 5. Mitigation of Environmental Impacts

As there are no sensitive areas within the study area, the proposed projects will have short term environmental impacts related to construction and general inconvenience to the public. Mitigation of environmental impacts are provided in greater detail within Chapter VI of this project plan.

## 6. Schedule for Design and Consideration

If a DWRF loan is approved for the 2nd quarter FY 2022, to complete the rehabilitation program, the proposed schedule would be as follows:

Topographic Survey	September – October 2021
Prepare Plans and Specification Development	October-December 2021
Obtaining Necessary Permits	December 2021-February 2022
Bid Award of Project	March 2022
Start Construction of Project	April 2022

## 7. Cost Summary

Preliminary Cost Estimates of the selected alternative can be found in Appendix H. However, in summary, the total construction cost estimate is a follow:

PROJECTS	Estimated Construction Costs	Soft Costs (Engineering design, inspection, construction administration, bond attorney fees and financial advisor service fees, the total project cost)	Total Project Cost
Lead Service Line Replacement	\$3,000,000.00	\$510,000.00	\$3,510,000.00
Watermain Replacement Projects	\$2,750,690.00	\$770,193.20	\$3,520,883.20
Watermain Looping Project	\$291,600.00	\$81,648.00	\$373,248.00

Table 10 – Summary of Water Projects Estimated Construction and Total Project Costs

A present worth analysis has also been provided in Appendix H.

### ***B. Authority to Implement the Selected Alternative***

The City of Hamtramck is a municipal unit organized under the State of Michigan Constitution and statutes. The City is legally able to own and operate public utilities. The City does own and operate the public water system and sanitary sewer system; however, water is distributed to the City owned system by the Great Lakes Water Authority (GLWA) and all sewage is discharged into the City of Detroit wastewater system. All rehabilitative work proposed as a part of this project will be completed within the City owned water distribution system within City right-of-way and within temporary construction easements on private properties.

### ***C. User Costs***

A user charge system (UCS) will be developed consistent with EPA and MDEQ guidance documents. The adequacy of funding for operation, maintenance and replacement by the adopted user fees will be verified. The debt service for the DWRF loan has been discussed with the City of Hamtramck officials. The UCS for debt service is anticipated to be a fixed monthly charge proportional to the potential demands on the system by each customer.

The total cost of all the DWRF funded projects is estimated to be approximately \$7,404,131.20. Based on a 20-year SRF loan period, at a 1.875 percent interest rate, the required annual debt service is estimated at \$444,234.73.

Breaking this down for the two projects is as follows:



PROJECTS	Total Project Cost	Loan Period	Percent Interest Rate	Required Annual Debt
Lead Service Line Replacement	\$3,510,000.00	20 Years	1.875	\$210,594.00
Watermain Replacement Projects and Watermain Looping Project	\$3,894,131	20 Years	1.875	\$233,640.73

Table 11 – Summary of Water Projects Required Annual Debt

A 100% forgivable loan was applied for under the Disadvantaged Community Lead Service Line Replacement (DCLSLR) Grant that is awarded through the DWRF Loan.

The City applied for the Drinking Water Infrastructure (DWI) Grant for the Watermain Replacement Projects and Watermain Looping Project, this grant is for 30% of the project costs up to \$2 Million.

The costs noted in Table may be fully eliminated or reduced if these grants are awarded.

Based upon the total cost financed, the increase in user costs with approximately 5,792 user accounts; would be approximately \$76.70 per year or \$6.39 per month per account.

#### ***D. Disadvantaged Community***

The City of Hamtramck qualifies as a disadvantaged community according to Part 54, 1994 PA 451.

#### **E. Ability to Implement the Selected Alternative**

Ability to Implement the Selected Alternative: The City of Hamtramck is a Michigan Municipal Corporation with a current license for water system operations. With contractual engineering, financial, legal and construction arrangements, the proposed project is well within its capabilities.

## **V. Evaluation of Environmental Impacts**

The projects involve the replacement of lead and galvanized water service lines from the water main into the dwelling in conjunction with the replacement of five (5) watermain projects and a watermain looping project in the City of Hamtramck. The lead service line replacement is per the revised Lead and Copper Rules within the Safe Drinking Water Act 399 of 1976 pertaining to the full or complete replacement of known lead and galvanized water services regardless of ownership.

### ***A. Description of the Impacts***

#### **1. Beneficial and Adverse Impacts**

##### **a. Lead Service Replacement**

The positive, long term, beneficial impacts of the proposed projects are the following:

- Improve the quality of drinking water distributed to the residents and businesses of the City of Hamtramck along sixteen (16) areas
- Improve the reliability of the water distribution network.
- Replace aging drinking water system infrastructure and remove potential lead contaminants from the existing system.
- Comply with the Safe Drinking Water Act 399 of 1976 and current Lead and Copper Rules.
- Removal of potential lead contaminants from the drinking water supply

The negative impacts of this project are only short term and include temporary inconvenience to the general public who reside or frequent businesses along the proposed routes.

The work proposed involves directional drilling of new water services therefore there are no adverse impacts to environmentally sensitive features and the State Historical Preservation

Office is in concurrence that no cultural or historical significance will be encountered during this project.

b. Watermain Replacement Projects

- Improve the quality of drinking water distributed to the residents and businesses of the City of Hamtramck along five (5) areas.
- Improve the reliability of the water distribution network.

The negative impacts of this project are only short term and include temporary inconvenience to the general public who reside or frequent businesses along the proposed routes.

The work proposed involves pipe bursting of new watermain therefore there are no adverse impacts to environmentally sensitive features and the State Historical Preservation Office is in concurrence that no cultural or historical significance will be encountered during this project.

c. Watermain Looping Project

- Improve the quality of drinking water distributed to the residents and businesses of the City of Hamtramck along these three (3) major road reconstruction projects.
- Improve the reliability of the water distribution network.
- Adding Redundancy to the system to allow the southern portion of the city to remain online if a break occurs.
- Adequate pressures would be provided, meeting minimum fire flow requirements.

The negative impacts of this project are only short term and include temporary inconvenience to the general public who reside or frequent businesses along the proposed routes.

The work proposed involves pipe bursting of new watermain therefore there are no adverse impacts to environmentally sensitive features and the State Historical Preservation Office is in concurrence that no cultural or historical significance will be encountered during this project.

## 2. Short Term and Long-Term Impacts

Even though the short term impacts can be a nuisance to the general public, including noise pollution, air pollution, temporary road and driveway closures and so forth, the long term impacts greatly exceed the short term impacts as the long term impacts are seen as positive, beneficial impacts improving the water distribution system, public health and the quality of life for residents and businesses along and adjacent to proposed mains and water services being replaced and will provide for greater reliability of the distribution system.

## 3. Irreversible or Irretrievable Resources

This project will not impact any water resources, wetlands, floodplains, coastal zones or environmentally sensitive habitats. The proposed project is within completely built out areas with residential and commercial development along and adjacent to the proposed construction sites. Therefore, irreversible nor irretrievable resources are not applicable to this project.

# ***B. Analysis of the Impacts***

## 1. Direct Impacts

### **a. Air Quality**

During the course of construction, maintaining good air quality will be of importance for the safety and health of the citizens of Hamtramck. Mitigation of the impacts of air

quality are described in detail within Section VI of this project plan. Short term impacts to air quality will include:

- Emissions from Construction Equipment
  - Several pieces of equipment will be on site for the proposed projects. For open cut excavations where access pits will be installed to allow for the installation of new water services by means of directional drilling and pipe bursting, at a minimum, an excavator, dozer, loader and pickup trucks will be on site running throughout the day while work is taking place. For trenchless rehabilitation work, far less equipment will be required on the site. All equipment on site during all phases of construction will produce emissions into the air.
- Dust and Particulate Matter
  - For areas involving excavation of the site, dust and particulate matter may enter the air as the ground is disturbed and either stockpiled or transferred to trucks to be hauled away. In addition, sand and stone materials being brought to the site and stockpiled for bedding and backfill material may also allow dust and particulates to enter the air when winds increase.

There are no long term impacts to air quality for this project.

#### **b. Archeological, Historical and Culturally Significant Resources**

The City of Hamtramck submitted a State Historical Preservation Office (Section 106) Application in 2019 and has submitted requests to 14 tribal agencies throughout the State of Michigan to obtain information about any historical or cultural significance known throughout the City of Hamtramck that may impact the proposed construction.

Based upon the information we have received back from certain agencies, it does not appear any historical or cultural resources will be impacted by the proposed project. However, Section VI of this project plan presents the procedures if historical or cultural artifacts or significance is identified during the course of the project.

In addition, the proposed project does not involve any work within or adjacent to any parks or recreational facilities within the City.

### **c. Groundwater and Surface Waters**

The existing groundwater within the City of Hamtramck is typically identified to be within a several feet below the surface. There are no surface waters or shorelines located in Hamtramck. Impacts involving the proposed projects include the following and the mitigation efforts for these impacts described in detail in Chapter VI of this project plan.

- Dewatering
  - Replacement of water services and mains will utilize trenchless technologies with access pits located at the connection to the water main, at the location of the water shut off box at the right-of-way line and nearest the structure being provided service. It is not anticipated dewatering will be required for access pits, as it is assumed access pits will be no more than approximately six (6) feet in depth.
- Soil Erosion and Sedimentation Control
  - For any necessary open cut excavation, special attention will be required when stockpiling excavated materials in addition to other material

stockpiles and their locations to not interfere with existing drainage patterns and transfer particulates into the drainage system.

#### **d. Sensitive Features**

The City of Hamtramck has submitted correspondence to the United States Fish and Wildlife Service in 2019. The Michigan Natural Features Index and the Michigan Department of Environmental Quality to identify any endangered species that may exist within the City that may be impacted during construction and to identify any floodplains or wetlands within the City. Furthermore, the City has researched current Federal Emergency Management Agency floodplain maps for Wayne County updated in February 2012 and consulted recent wetlands inventories to identify existing wetlands and floodplains. It does not appear based upon the information compiled that any of the proposed work will take place in a designated floodplain or wetland. In addition, no agricultural lands exist within the City of Hamtramck. However, if endangered species would become impacted, the procedures to mitigate are presented in Chapter VI of this project plan.

#### **e. People and the Economy**

The largest impact of the proposed projects is the inconvenience to the general public and to commercial businesses within the City. The proposed projects will create several short-term impacts and are listed below. The mitigation efforts to prevent as much inconvenience as possible to local residents and business owners is presented in detail in Chapter VI of this report.

- Noise

- During the course of construction, the noise level will be increased with the amount of equipment on site and power tools being used. Truck traffic, at times, can be continuous hauling material in and out of the job site throughout the day.
- Traffic Closures and Detours
  - Where water service and watermain replacement work is taking place within or near road right-of-ways, roads may have to be partially or completely closed to vehicular and/or pedestrian traffic. In addition, for trenchless technology installation, equipment and vehicles will have to be parked within the road right-of-way for a specified period of time.
- Proximity to Schools and School Bus Routing
  - Special consideration will have to take place with road closures, barricading of the site and cleanliness of the site when working in the vicinity of a school. In addition, revised routing of school buses and pedestrian traffic to school will have to be addressed.
- Proximity to Nearby Businesses
  - Special considerations will have to take place with road closures, drive approach closures and parking lot entrance closures, barricading of the site and cleanliness of the site when working in front of or adjacent to a business to prevent any loss of business to the establishment during the course of construction and to provide a safe route to the business. Temporary access may be needed for certain businesses during construction.
- Service Delivery



- Closures may result in the re-routing or postponement of garbage pick-up, mail delivery, parcel delivery and other deliveries to residences and businesses. Access for emergency vehicles and access for handicapped or disabled persons will also need attention.
- Haul Routes
  - Consideration must be taken to establish haul routes that impact the least amount of residents and businesses.
- Temporary Loss of Service
  - During the replacement of the water service line and the watermain, there will be a period when service is interrupted to the dwelling being serviced by that service lead or main. Homeowners will be notified at least 48 hours in advance of any water shut offs.
- Temporary Loss of Driveway Access
  - Dependent upon the location of work taking place, driveway access may be temporarily unavailable until all work is complete.
- Private Property Access
  - To complete this work, the City will have to gain access to private property and enter all structures to make the connection of the new water service to the existing plumbing within the structure. A waiver will have to be signed by the property owner to allow this work to take place on private property.
- Aesthetics
  - To keep complaints to a minimum, and allow for people to find residences and businesses easily without being distracted, the job site must be kept as

clean as possible and disturb as little as possible of the existing surface features.

**f. Operational Impacts**

Operational impacts for this project will be minimal. While the water service is being replaced from the existing main to the dwelling; there will be a brief interruption of water service for those directly affected. The shutoff will be within one working day. Otherwise, water service will remain in service without interruption throughout the City's system.

2. Indirect Impacts

The indirect impacts of the proposed projects are the improvements to the existing infrastructure to extend the useful service life of the water distribution system and provide for a more reliable water distribution network. The proposed work will improve the quality of life, improve public health, increase value of real estate properties, and comply with the Safe Drinking Water Act 399 of 1976.

3. Cumulative Impacts

The adverse cumulative impact of the project is the costs associated with the project to be borne by the City through their water and sewer funding.

## **VI. Mitigation**

### ***A. Short Term Construction Related Mitigation***

#### **1. Air Quality**

The following efforts will be made to mitigate air pollution and release of dust, particulates and odors into the atmosphere:

- Emissions from Construction Equipment
  - Several pieces of equipment will be on site for each location of the proposed project. For open cut excavations where access pits must be installed, at a minimum, an excavator, dozer, loader and pickup trucks will be on site running throughout the day while work is taking place. In addition, pumps and generators may be running continuously throughout the project for dewatering purposes or to provide power to the site. For trenchless rehabilitation work, far less equipment will be required on the site. All equipment on site during all phases of construction will produce emissions into the air.
- Dust and Particulate Matter
  - For locations involving excavation of the site for access pit installation, dust and particulate matter may enter the air as the ground is disturbed and either stockpiled or transferred to trucks to be hauled away. In addition, sand and stone materials being brought to the site and stockpiled for bedding and backfill material may also allow dust and particulates to enter the air when winds increase. For trenchless technology operations, dust and particulates should not be an impact. To control

the amount of dust and particulates entering the atmosphere from a construction site, the following efforts will be made:

- Stockpiling of backfill materials should be kept to a minimum and should not be onsite for an extended period of time.
  - Stockpiles shall be placed away from catch basins, manholes and any streams.
  - Excavated material shall be stockpiled neatly and away from catch basins and manholes and should be hauled away by trucks to appropriate dumping sites or landfills at the Contractor's discretion as soon as possible.
  - Any contaminated soils encountered shall be properly stockpiled and covered until the appropriate landfill allows for the dumping of this material through a manifest.
  - Silt fencing shall be placed around the perimeter of all construction sites to prevent soil erosion and silt sacks or filter fabrics placed in all catch basins and any manhole covers with perforated lids to prevent sedimentation entering the sewer system.
- Odors
    - Odors should not be of concern for this project.

## 2. Archeological, Historical and Culturally Significant Resources

The City of Hamtramck submitted a State Historical Preservation Office (Section 106) Application in 2019 and has submitted requests to 14 tribal agencies throughout the State of Michigan to obtain information about any historical or cultural significance known throughout the City of Hamtramck that may impact the proposed construction. Based upon the information we have

received back from all agencies at that time, it does not appear any historical or cultural resources will be impacted by the proposed projects. However, if archeological, historical or culturally significant artifacts are uncovered during excavations all work will be stopped and the State Historical Preservation Office and any tribal organizations with influence in the area will be contacted to come to the site and identify the artifacts and determine if additional artifacts may be uncovered. The State Historical Preservation Office and tribal organizations will be allowed to obtain the artifacts and direct us on how to proceed with construction.

The proposed project does not involve any work within or adjacent to any parks or recreational facilities within the City.

### 3. Groundwater and Surface Waters

The existing groundwater within the City of Hamtramck is typically identified to be several feet below the surface. The following mitigation will be provided to maintain surface water quality:

- Dewatering
  - Dewatering is not expected for the proposed projects. Excavation required will be minimal for installation of access pits. However, if groundwater is encountered, groundwater will be pumped out of the excavation, treated through necessary filters and discharged into the existing storm sewer system not allowing any silt or sediment into the storm sewer system.
- Soil Erosion and Sedimentation Control
  - For those locations involving excavations, all necessary soil erosion and sedimentation control measures will be put in place. These measures include:

- Silt fence along the grading limits of the project. Silt fence will be trenched in at least 6 inches into the ground to prevent any sedimentation from leaving the construction site.
- Silt sacks will be placed in all catch basins and perforated manholes within the grading limits and in all adjacent structures to the construction site to prevent silt and sedimentation from directly entering the storm sewer system.
- Stockpiles will be kept neat at all times and if necessary, silt fence or erosion eels placed around the perimeter.
- Adjacent streets and haul routes will be swept cleaned on a regular basis to prevent the tracking of silt and sedimentation away from the construction site. Water will be used to spray the streets prior to being swept to mitigate dust control.

#### 4. Sensitive Features

The City of Hamtramck submitted correspondence to the United States Fish and Wildlife Service in 2019. The Michigan Natural Features Index and the Michigan Department of Environmental Quality to identify any endangered species that may exist within the City that may be impacted during construction and to identify any floodplains or wetlands within the City. Furthermore, the City has researched current Federal Emergency Management Agency floodplain maps for Wayne County updated in February 2012 and consulted recent wetlands inventories to identify existing wetlands and floodplains. It does not appear based upon the information compiled that any of the proposed work will take place in a designated floodplain or wetland. No surface

waters exist in the City of Hamtramck. In addition, no agricultural lands exist within the City of Hamtramck.

However, if endangered species are encountered all work for that particular project will be stopped until further notice so that the City can consult with the United States Fish and Wildlife Service and the Michigan Department of Environmental Quality to identify alternative solutions to construct the proposed project without interruption or destroying an endangered species habitat.

#### 5. People and the Economy

The largest impact of the proposed projects is the inconvenience to the general public and to commercial businesses within the City. The proposed project will create several short-term inconveniences to the general public and are detailed as follows:

- Noise
  - During the course of construction, heavy equipment will be operating continuously during the workday. In addition, several power tools, generators and potentially dewatering pumps could be running continuously throughout the workday. The City has an ordinance in place that will allow the Contractor to only operate during the hours of 7am and 7pm Monday through Saturday to allow residents to have quiet time when the majority residents are at their homes. No work will be allowed on Sundays or holidays recognized by the City.
- Traffic Closures and Detours
  - It is only anticipated for full street closure along Goodson Street, this project will be coordinate with the Phase 1B Sewer Relief project. All other project areas it is not anticipated full closures of streets will be required. Lane closures may take place

briefly and traffic control signage will be placed upon entering the construction site per the current manual of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD). Construction sites will be properly barricaded to not allow vehicular or pedestrian traffic into the construction site.

- Proximity to Schools and School Bus Routing
  - For any projects adjacent or nearby a school, the sites will be properly barricaded to prevent pedestrian traffic from entering the construction site. Detour signs will be placed for pedestrian traffic to schools if warranted.
  - For school bus routing, the contractor will be required to contact the local school district to coordinate the re-routing of buses if necessary and relocate bus stops within the construction site away from the construction site. The Contractor, City and local school district will work cooperatively to inform residents of any changes to bus stops with several days' notice.
- Proximity to Nearby Businesses
  - Driveways and pedestrian access to businesses will be provided at all times. It is not anticipated that any of the proposed work will affect the access to any local businesses.
- Service Delivery
  - Mail delivery service will be provided to residents and businesses at all times.
  - Garbage collection will resume during construction. Garbage collection takes place within the alleys at these locations.
- Temporary Loss of Service
  - During the replacement of water services and watermains, there will be a temporary loss of water service prior to remove and replace the service lines and



mains. The loss of water service should be no greater than one (1) working day. Notices to residents affected with temporary loss of service will be passed out 48hours prior to construction letting residents know of the upcoming interruption.

- Temporary Loss of Driveway Access
  - Driveway access will be provided as much as possible. There may be brief periods of time where driveways will not be accessible, particularly if new concrete driveway approaches are poured and must be cured for a minimum of five (5) days. Residents whose driveways are inaccessible for a brief period of time will be required to park on side streets. The City will provide additional police presence during times when several cars must be parked in the street.
  - Emergency access will be provided at all times for fire and rescue apparatus. During non-working hours, all equipment will be placed off to the side of a construction site to allow for through access. In addition, those residents that are disabled or handicapped that need direct access to their homes will be provide special access.
- Private Property Access
  - To complete this work, the City will have to gain access to private property and enter all structures to make the connection of the new water service to the existing plumbing within the structure. A waiver will have to be signed by the property owner to allow this work to take place on private property.
- Aesthetics
  - The Contractor will be required to keep the construction site as clean and neat as possible. The Contractor will be asked to sweep clean the adjacent streets to the construction site on a regular basis, provide access as much as possible at all times

and backfill trenches as much as possible at the end of every day. Stockpiling will be kept to a minimum.

### ***B. Operational Impacts***

During the operations of construction projects, the most important concern is obviously the safety of the construction workers and the safety of nearby residents and businesses. The Contractor for these projects will be required to follow safety procedures per the Occupational Safety and Health Administration (OSHA) and provide the City and Engineer with a Contractor's Safety Program. The Contractor's will also have to be bonded and insured. The City and the Engineer will not be responsible as the safety officer for the site; however, shall make note of any unsafe conditions and immediately report to the Contractor. The Contractor will be responsible for safety and name a safety officer for the site responsible for all safety issues that arise. The Contractor will be responsible to provide safety training regularly during the course of construction. The following provides the mitigation required for operational impacts during the course of construction:

- Chemical Spills
  - If a chemical spill were to occur, all construction shall be stopped, and the chemicals cleaned up appropriately. If the chemical poses a dangerous threat to the public, the fire department must be immediately called to the site.
- Vehicular Accidents
  - If a vehicular accident occurs within the construction site, police and fire shall be called immediately to assist and provide a police report of the incident.
- Damage to Franchise Utilities
  - The Contractor will be required to call MISS DIG or 811 to mark all underground utilities three (3) business days prior to starting construction. Where underground utilities exist,

the Contractor will be required to hand dig to expose the utility prior to excavation with equipment.

- If a gas main is damaged during the excavation, the fire department shall be immediately called to the site and the local gas company immediately called to assess the situation and have repaired. All work must come to a stop and all equipment shut off when a gas main is damaged. If a large main is damaged, the construction site shall be evacuated.
  - If a water main is damaged during the excavation, the City water department shall be immediately notified to shut off the water main at the next nearest gate valves and to allow the City to make repairs. All work shall be stopped until the water main is repaired.
  - The Contractor will be responsible for all costs incurred to damaged utilities that were marked by MISS DIG or 811.
  - If MISS DIG marks begin to fade away or disappear during the course of construction, the Contractor will be responsible to have MISS DIG re-stake the utilities. Markings are typically only good for 21 days; therefore, they may need to be re-staked at time for the duration of construction.
- Personal Injury
    - Any serious injuries that take place during construction operations shall immediately be reported and the fire department contacted to provide a rescue unit.

## **VII. Public Participation**

### ***A. Public Meetings on Project Alternatives***

No public meetings were conducted regarding this plan prior to the formal public hearing held on June 8, 2021. However, meetings took place with City officials and City officials were continually updated as to the progress of developing this project plan and proposed work to be incorporated into the project plan.

### ***B. The Formal Public Hearing***

Per the requirements of the MDEQ, a formal public hearing was scheduled and conducted during the regular City Council meeting on June 8, 2021. The public hearing allowed the City Council, City officials and the general public an opportunity to provide input and/or comments regarding the proposed DWRF project.

#### **1. Public Hearing Advertisement**

Per the requirements of the MDEQ, a notice for the public hearing held on June 8, 2021 was published in the Hamtramck Review newspaper on April 23, 2021 to allow for a minimum 30-day public comment period. The public comment period allowed for input and/or comments from the general public prior to the public hearing and to allow the general public to review the draft DWRF project plan available for viewing at the City of Hamtramck's Clerk Office starting on May 7, 2021. A copy of the advertisements and affidavits acknowledging the publishing of the advertisements are provided in Appendix L.

## 2. Public Hearing Transcript

A stenographer from On the Record Court Reporting of Dearborn, Michigan was hired to provide a written record of the public hearing and is provided in Appendix N.

## 3. Public Hearing Contents

Tiffany Neubig from Hennessey Engineers provided a handout to all in attendance at the public meeting included in Appendix O of this project plan and provided a brief overview of how the City proceeded with developing a DWRf project plan, how the proposed work locations were identified, the identified work plan, the costs associated with the construction and the monthly costs incurred to the residents over a 20-year period and the social and environmental considerations for this project. Following the presentation, the public hearing was opened to comments by the City Council and the general public.

## 4. Comments Received and Answered

The draft DWRf project plan was made available for the general public to view in the City of Hamtramck Clerk's Office from May 7, 2021 to June 8, 2021.

### ***C. Adoption of the Project Plan***

# Appendix A

## Appendix A

### Lead Service Line Replacment Areas List

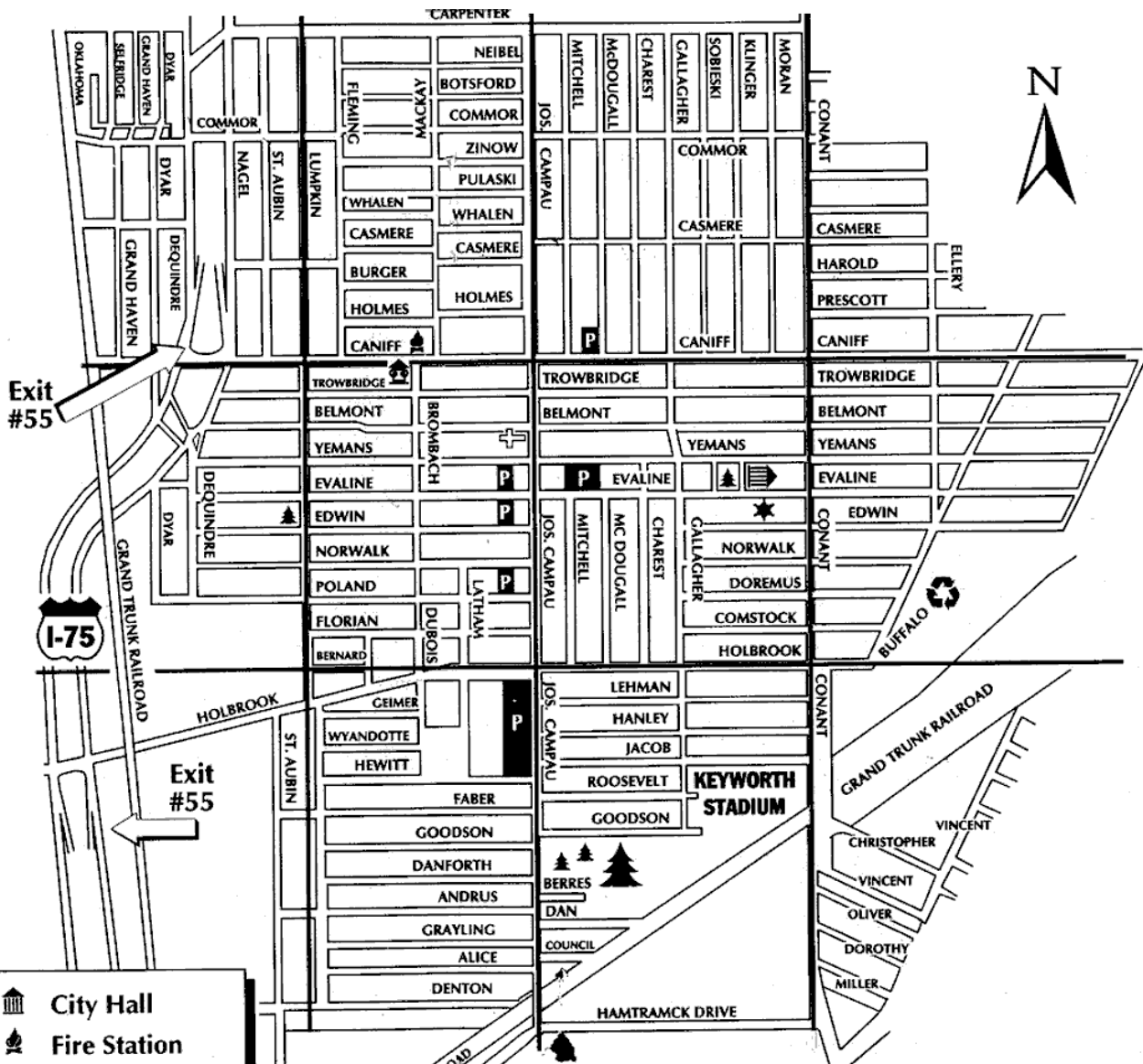
Location	Street	Limits		Service Leads	Replacement	Water Main Replacment
					Year	
1	Goodson Street	Joseph Campau to Lumpkin Street	North and South Side	79	2022	X
2	Caniff Avenue	Joseph Campau to Buffalo Street	North and South Side	142	2022/23	X
3	Dan Street	Joseph Campau to Veterans Park	North and South Side	13	2022	X
4	Prescott Street	Conant Street to Ellery Street	North and South Side	60	2023	X
5	Conant Street	Jacob Street to Evaline Street	East and West Side	39	2024	X
6	Yemans Street	Dequindre Street to Lumpkin Street	North and South Side	46	2022	
7	Evaline Street	Joseph Campau to Gallagher Street	North and South Side	38	2022	
8	Yemans Street	Gallagher Street to Buffalo Street	North and South Side	89	2023	
9	Goodson Street	Joseph Campau to Gallagher Street	North and South Side	51	2023	
10	Denton Street	St. Aubin Street to Joseph Campau	North Side	22	2024	
11	Grayling Street	Lumpkin Street to Joseph Campau	North and South Side	41	2024	
12	Lumpkin Street	Denton Street to Goodson Street	East and West Side	11	2024	
13	Grand Haven	Commor Street to Caniff Avenue	East and West Side	13	2024	
14	Dyar Street	Commor Street to Caniff Avenue	East and West Side	34	2024	
15	Niebel Street	Fleming Street to Joseph Campau	North and South Side	34	2024	
16	Buffalo Street	Holbrook Street to Edwin Street	East and West Side	38	2024	

## Appendix A

### Watermain Replacment Areas List

Location	Street	Limits	Replacement
			Year
A	Goodson Street	Joseph Campau to Lumpkin Street	2022
B	Caniff Avenue	Joseph Campau to Buffalo Street	2022/23
C	Dan Street	Joseph Campau to Veterans Park	2022
D	Prescott Street	Conant Street to Ellery Street	2023
E	Conant Street	Jacob Street to Evaline Street	2024
F	Lumpkin Street	Poland Street to Caniff Avenue	2025



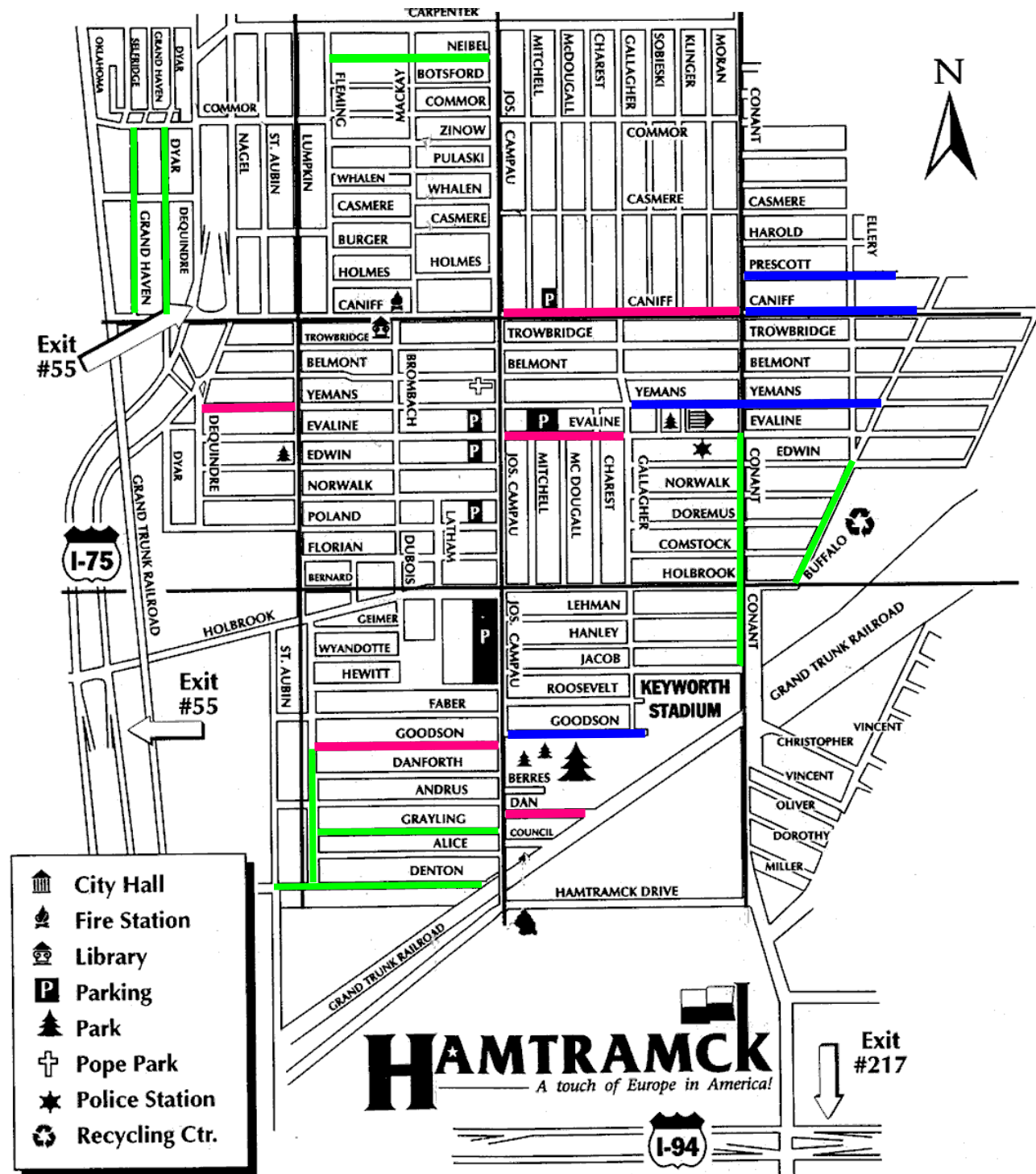


**HAMTRAMCK**  
A touch of Europe in America!

**I-94**

Exit #217

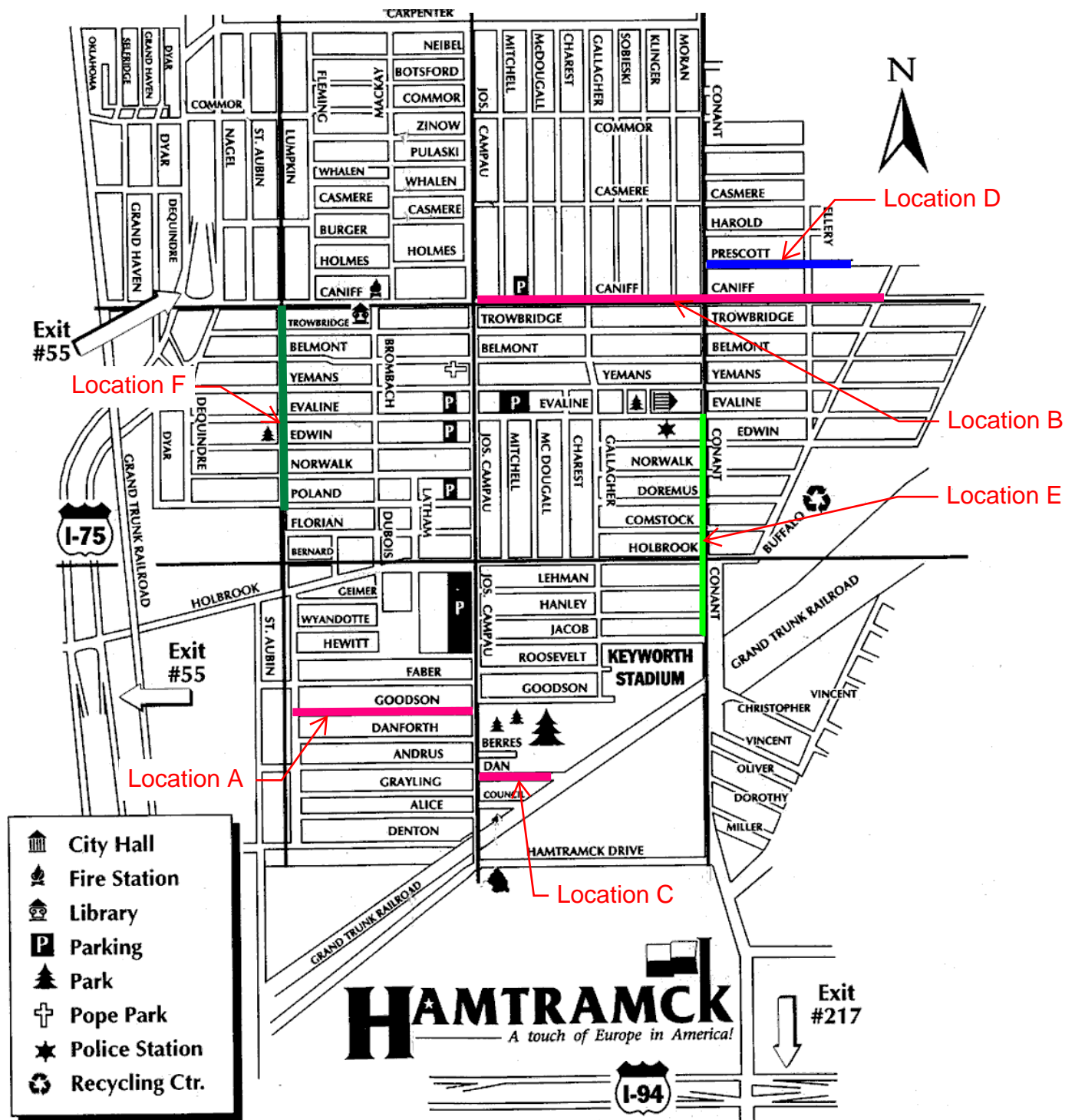
**AREA OF STUDY**



## DWRF LEAD WATER SERVICE REPLACEMENT PROGRAM

### LEGEND

- 2022
- 2023
- 2024



## DWRF WATERMAIN REPLACEMENT PROGRAM

### LEGEND

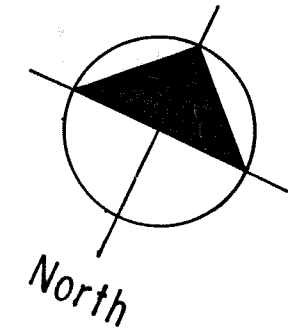
- 2022
- 2023
- 2024
- 2025

# Appendix B

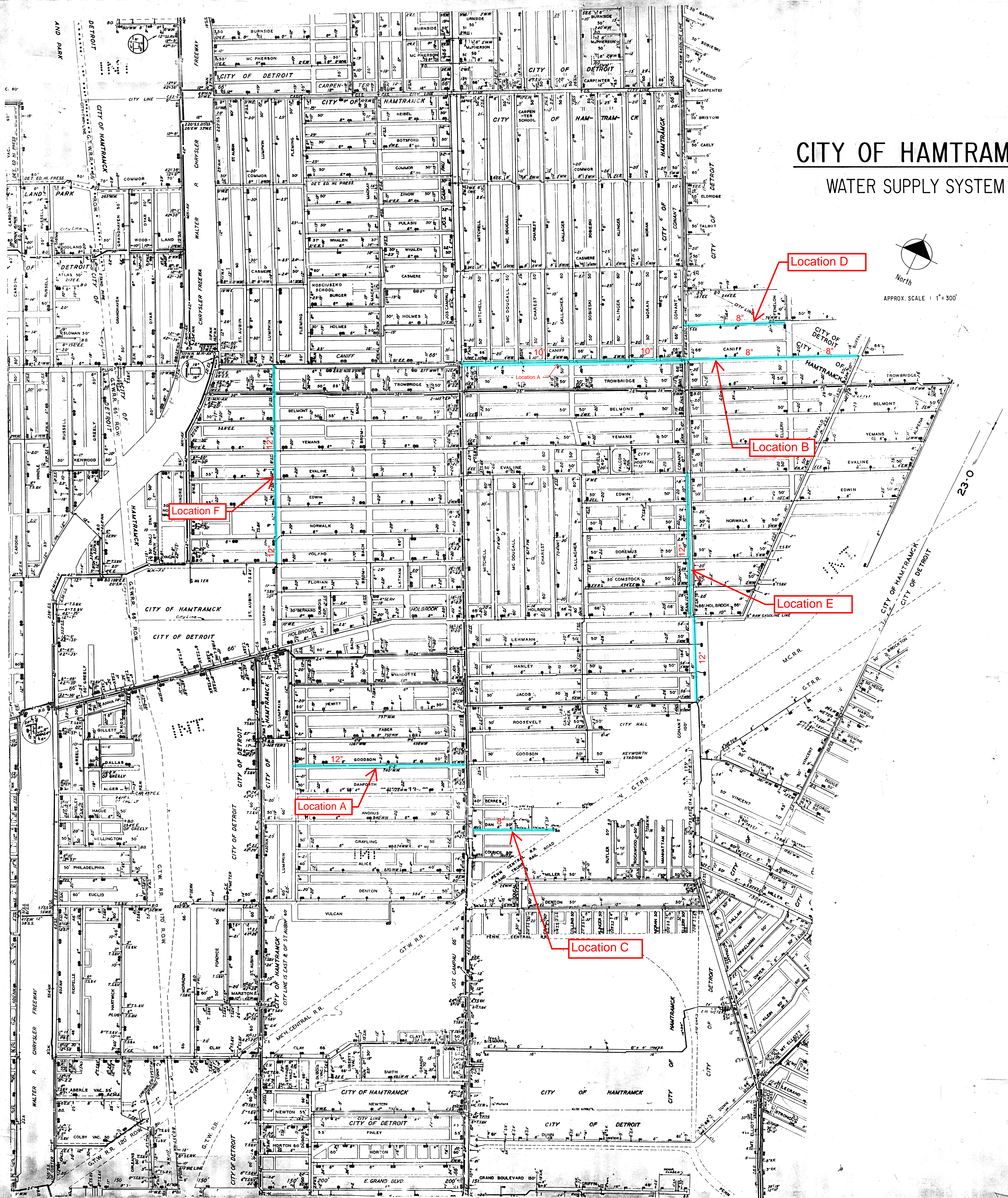


# CITY OF HAMTRAMCK

## WATER SUPPLY SYSTEM



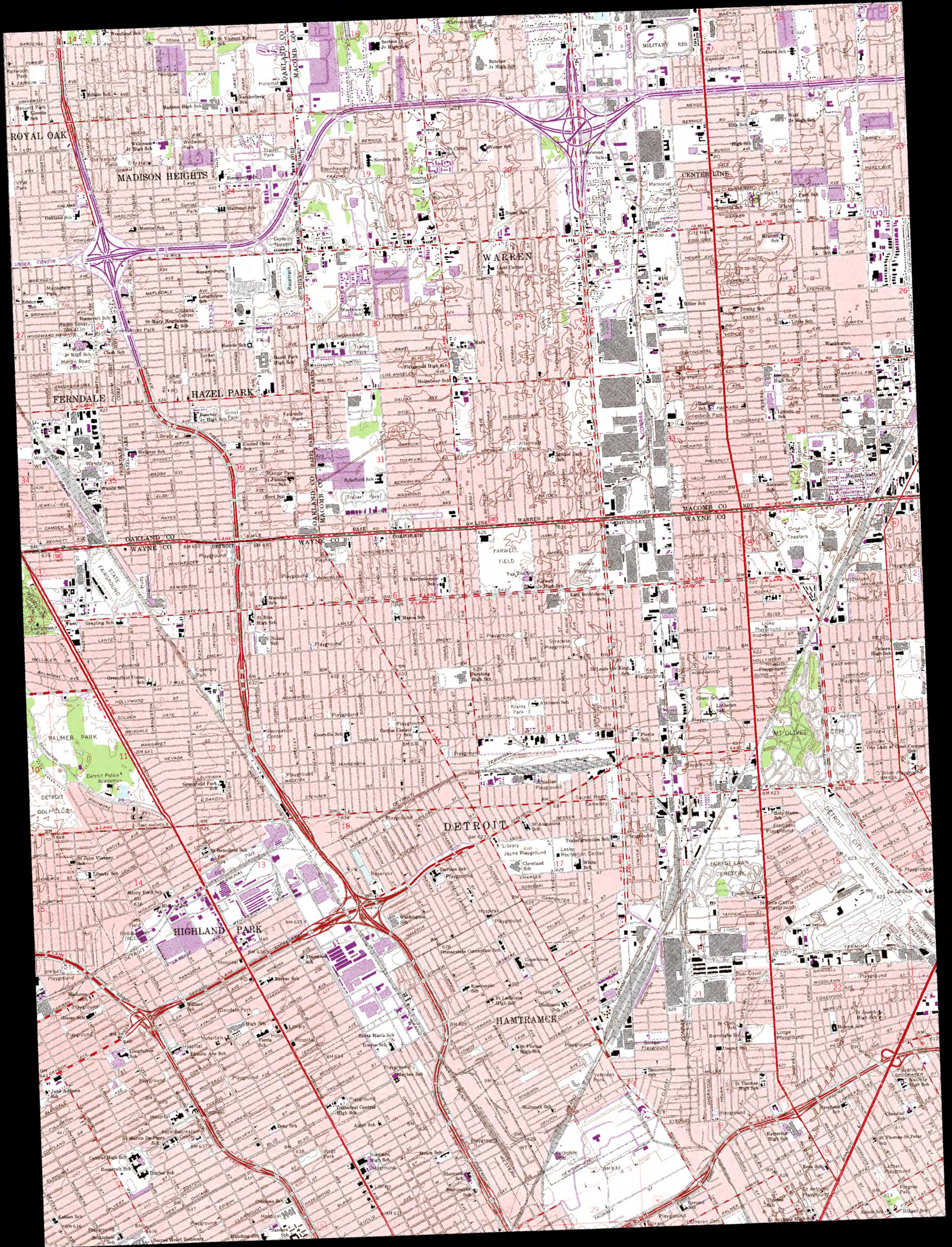
APPROX. SCALE : 1" = 300'





# Appendix C





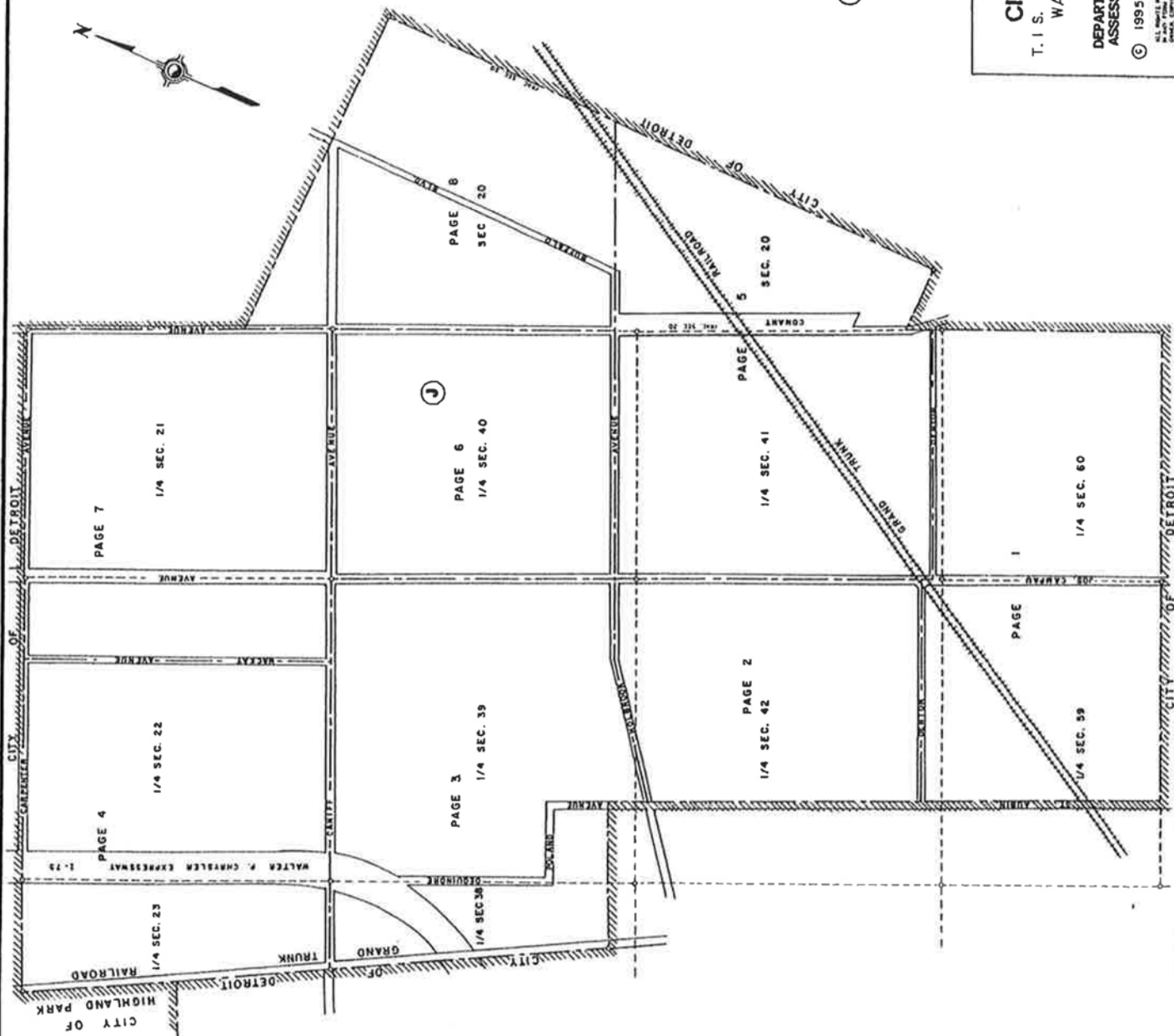


# Appendix D



# APPENDIX A – ZONING MAP

White – R  
Orange – RM  
Blue – C2  
Pink – CBD  
Green – I



**INDEX MAP**  
**CITY OF HAMTRAMCK**  
T. 1 S. R. 12 E. & 10,000 ACRE TRACT  
WAYNE COUNTY, MICHIGAN

SCALE 1 INCH = 600 FEET

**DEPARTMENT OF MANAGEMENT and BUDGET  
ASSESSMENT and EQUALIZATION DIVISION**

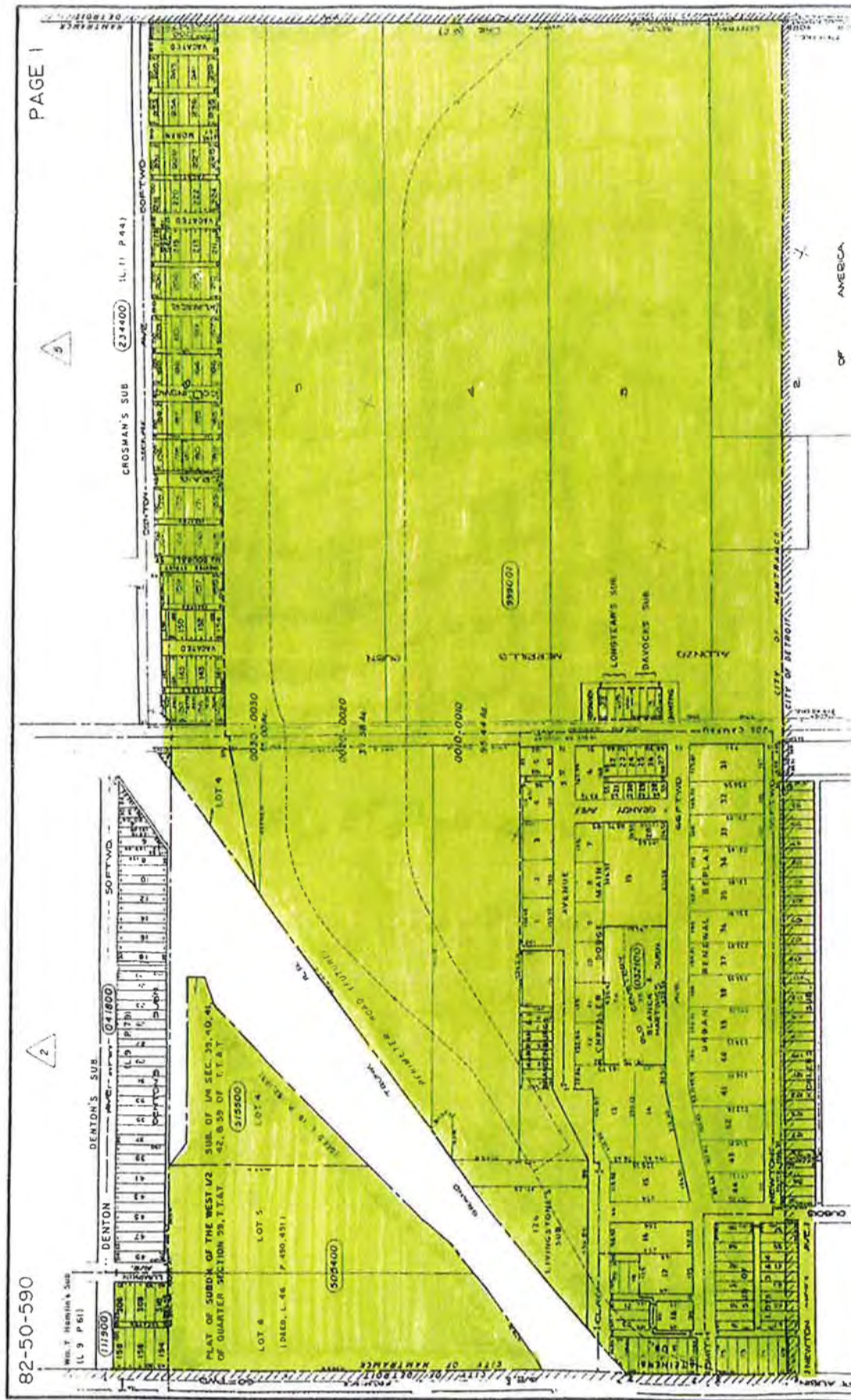
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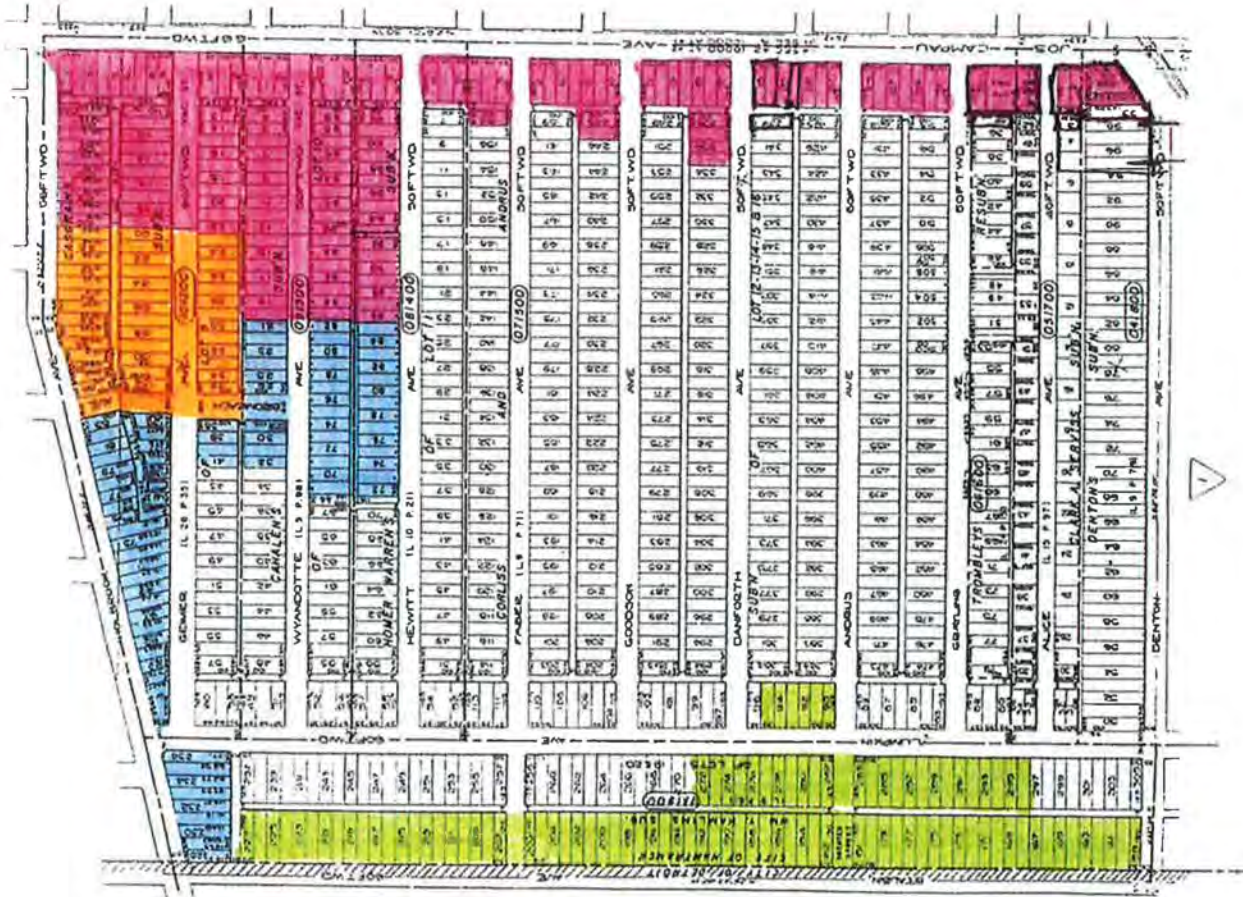
# CITY OF HAMTRAMCK

## SUBDIVISION INDEX

SUBDIVISION	Item No.	Liber Page	Map Page	SUBDIVISION	Item No.	Liber Page	Map Page
ADOLPH SLOMAN'S MILWAUKEE JUNCTION SUB	39b	21-100	3	LIVINGSTONE'S SUB	58f	1-312	1
AUSTIN'S (Private Plat)	41d	19-25	5	LONGTEARS SUB (CHOTSLER)	59	12-17	1
BASLER & KICELON'S SUB (School & Stadium)				MONMIG'S SUB (RECREATION FIELD)	41j	15-72	5
BAYER'S KATHLENE SUB				MORAN & CROOK'S SUB	22a	29-39	4-7
BEESDORFER & MOORE'S SUB	23a	27-84	4	MULL'S SUB	40a	10-13	6
BLANCE & HARTIG'S SUB	59b	15-94	1	O'CONNOR'S SUB	22b	28-73	3
C. W. BARNAN'S RESUB	21a	12-83	2	O'CONNOR'S SUB NO. 1	22c	24-81	2
CAMALLEN'S SUB	42b	9-88	2	RACE & HAAS SUB	21b	29-8	3
CASERLIN'S SUB	42a	28-35	2	SHIPMAN'S SUB	20b	23-43	8
CHALBERT'S SUB	40e	9-84	9	STEINER'S SUB	59c	7-40	1
CLARE A SERVICE'S SUB	42f	15-97	2	SUBDIVISION - OUTLOTS 3 & 4	59d	22-6	1
CORLISS AND ANDRES SUB	42d	9-71	2	SYNDICATE ADDITION NO. 1	41f	15-12	5
CROSMAN'S SUB	41p	11-44	5				
CRTSLER DODGE MAIN URBAN RENEWAL SUB	99g	87-46, 47	1	TAYLOR & CORLEIN'S SUB	41e	14-10	5
D. W. SIMONS' HIGHLAND SUB	21e	11-46	2	TROBLY'S RESUB	42a	24-15	2
DAYCOCK'S SUB (CHOTSLER)		16-42	1	TYLER'S SUB	41m	11-68	5
DEWITT'S SUB	42h	9-79	1	VILSON & FARLEY'S SUB	20d	21-2	5
DYAN SUB	38b	33-23	3	VILSON FARLEY AND SCHWITZEL'S SUB	41n	16-75	5
EATON LAND COMPANY SUB	20c	39-48	5	WETNET'S SUB	39a	23-77	3
FEDERSON PARK SUB	41b	18-82	5	WH. T. HANLIN'S SUB	42h	9-61	2
FLETCHER'S SUB	22d	28-70	4				
BAKEMAN'S SUB	40d	9-72	6				
BARNAN & BRYANT SUB	41c	27-99	5				
BARNAN AND BRANDENBURG'S CHENE STREET SUB	41a	18-77	5				
BARNAN & BRANDENBURG'S SUB	59a	13-46	1				
BART'S SUB	41h	13-81	5				
ROVER HUBBARD'S SUB	42c	10-21	2				
BUDSON AND BARNAN SUB	22a	27-85	4				
J. L. INGERS COMPANY SUB	20a	32-38	8				
JOHN H. DRYER'S SUB	40b	10-24	6				
KENWOOD ADDITION	38e	18-64	3				
KOHLERS SUB	59a	13-15	1				
LEHMAN AND EICHBAUER'S SUB	41a	15-10	5				
L. CRANDY'S SUB	41a	15-9	5				
L'WOMMEDIU SUB	22b	20-15	4				





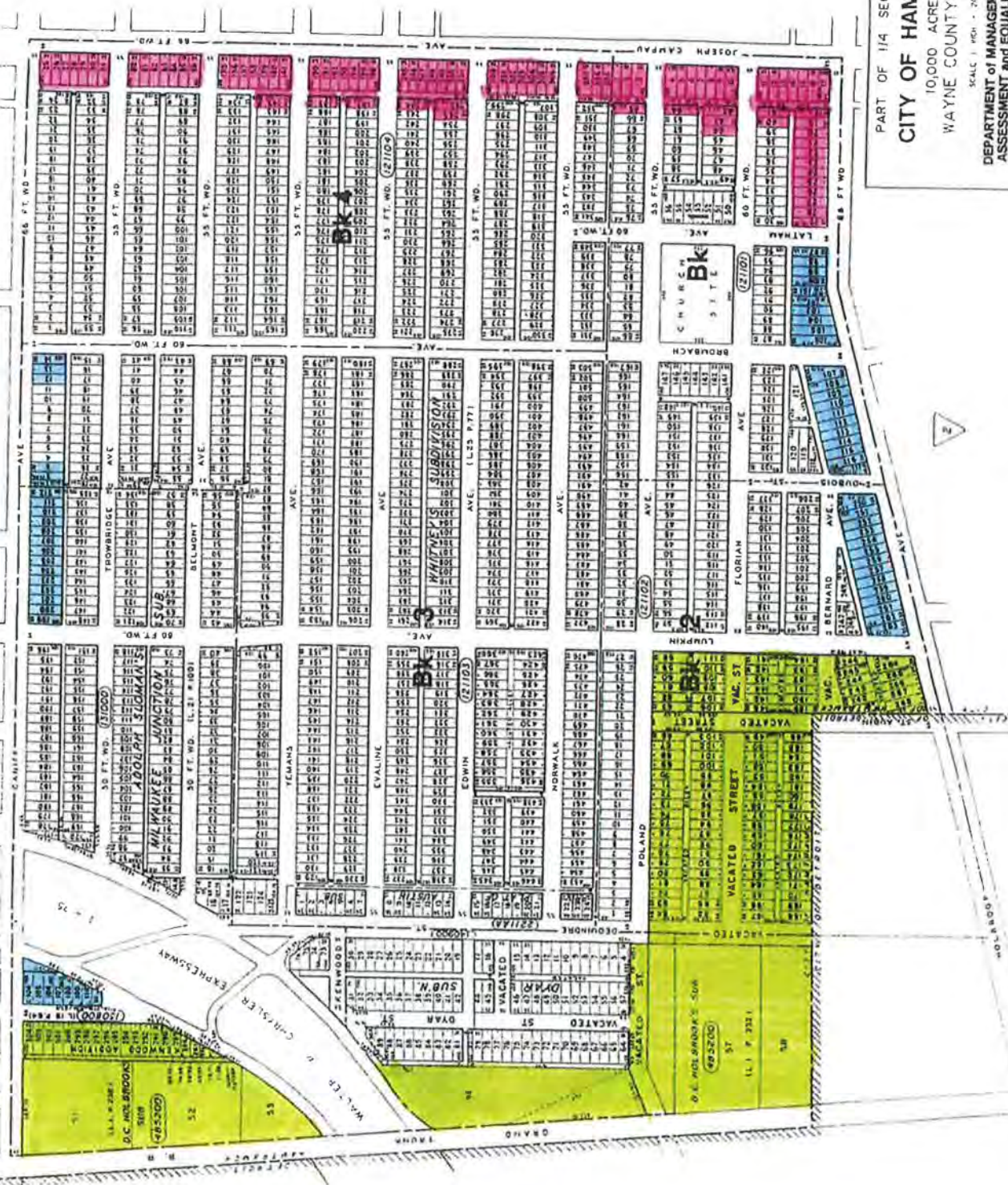


PART OF 1/4 SEC. 42  
**CITY OF HAMTRAMCK**  
 10,000 ACRE TRACT  
 WAYNE COUNTY, MICHIGAN  
 SCALE 1" = 200' FEET  
 DEPARTMENT OF MANAGEMENT AND BUDGET  
 ASSESSMENT AND EQUALIZATION DIVISION  
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1-23-88  
 ANSWER  
 4-27-85  
 6-23-80  
 8-18-91

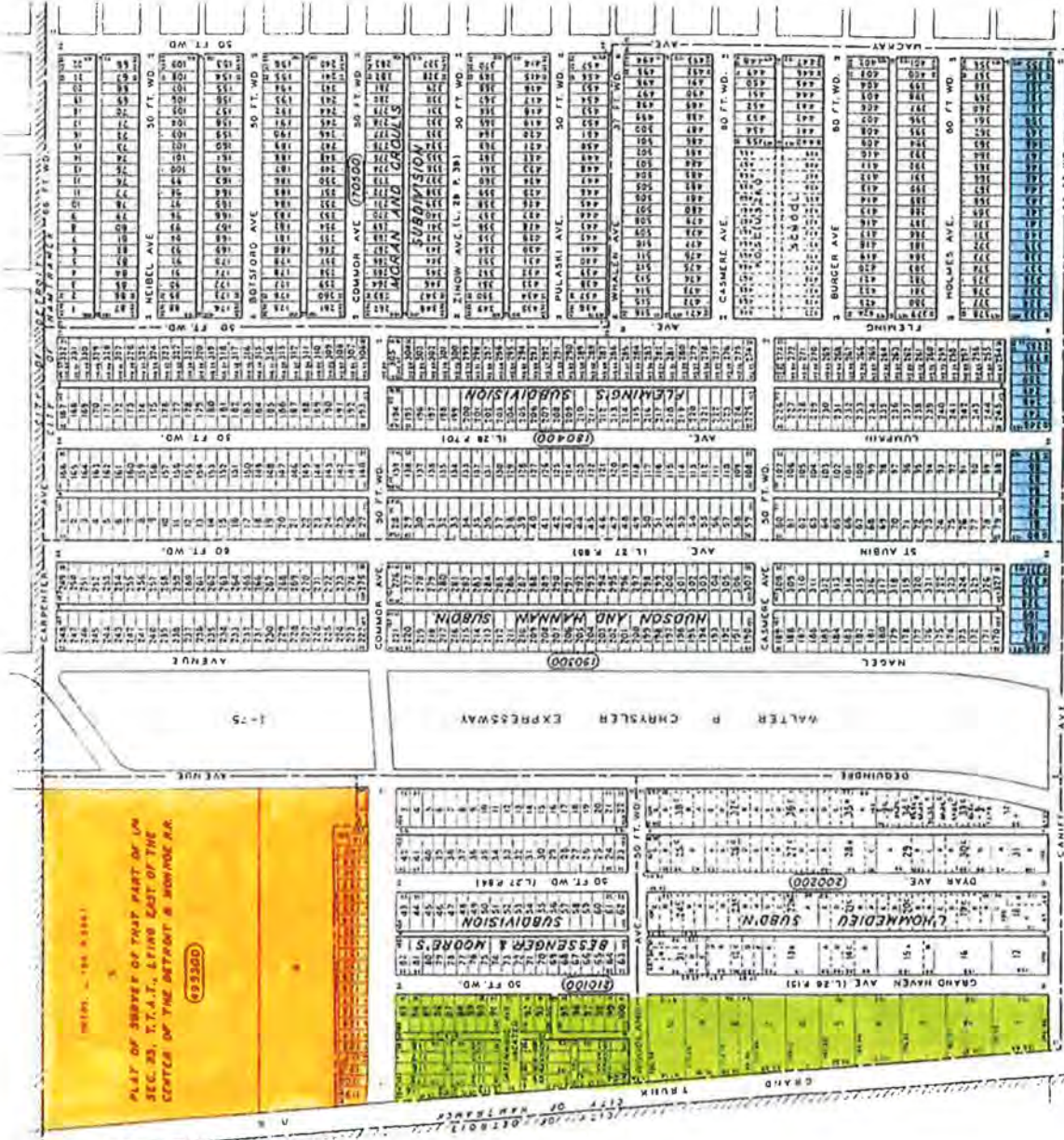


82-50-380



PART OF 1/4 SEC. 39 & 39  
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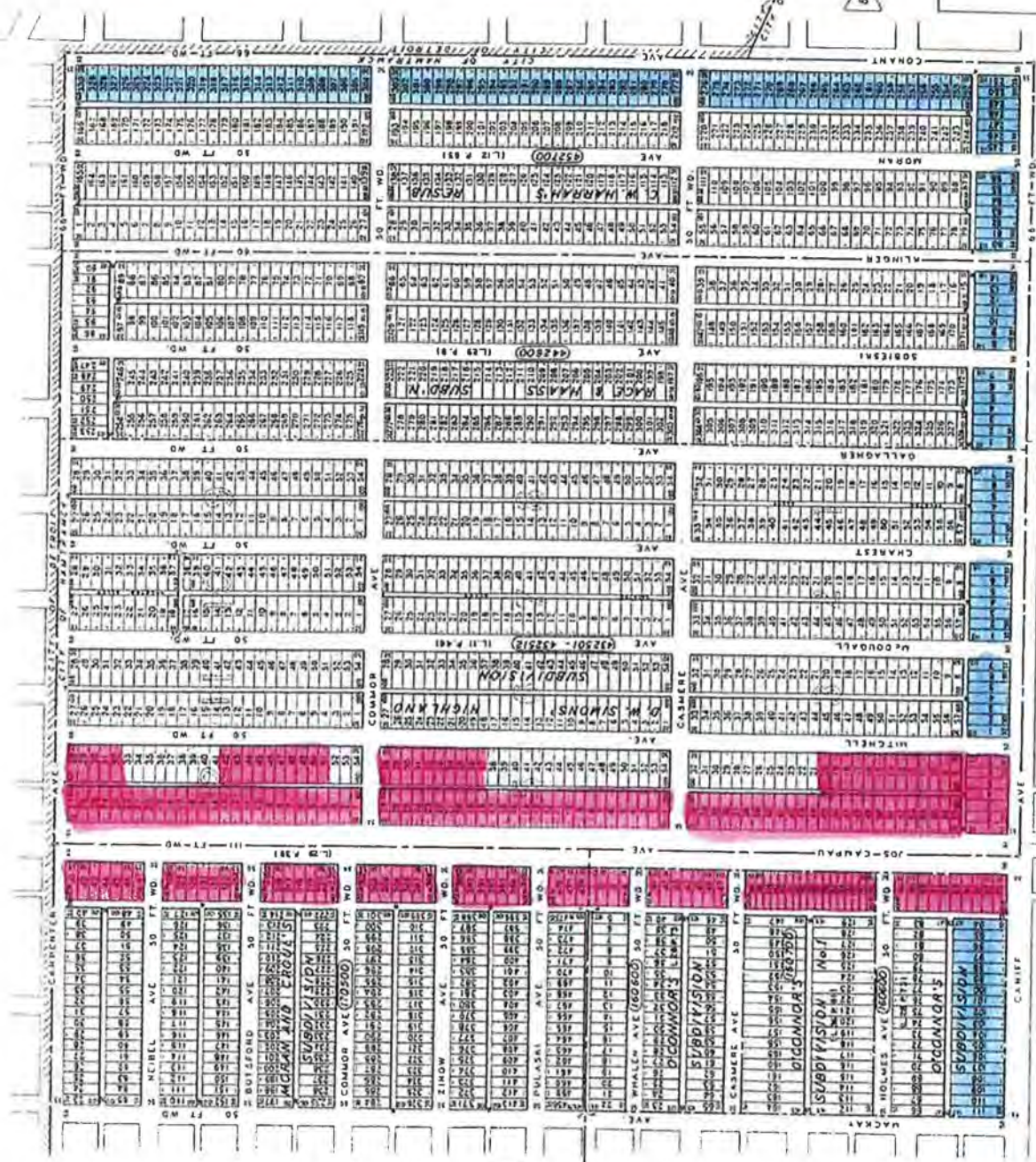






PART OF 1/4 SEC. 40  
**CITY OF HAMTRAMCK**  
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PART OF 1/4 SEC. 21  
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 This plat was prepared by the Department of Management and Budget, Assessment and Equalization Division, in accordance with the provisions of the Michigan Constitution and the Michigan Platting Act, MCL 207.1 to 207.24. The plat was prepared by the Department of Management and Budget, Assessment and Equalization Division, in accordance with the provisions of the Michigan Constitution and the Michigan Platting Act, MCL 207.1 to 207.24. The plat was prepared by the Department of Management and Budget, Assessment and Equalization Division, in accordance with the provisions of the Michigan Constitution and the Michigan Platting Act, MCL 207.1 to 207.24.



82-05-200



PART OF FRAC. SEC. 20  
**CITY OF HAMTRAMCK**  
T. 1 S. R. 12 E.  
WAYNE COUNTY, MICHIGAN  
SCALE: 1" = 200' FEET  
DEPARTMENT OF MANAGEMENT AND BUDGET  
ASSESSMENT AND EQUALIZATION DIVISION  
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23-46  
10/11/89  
5-20-93  
6-23-90

# Appendix E



Measure

LEGEND

### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrubland Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

### Areas of Interest

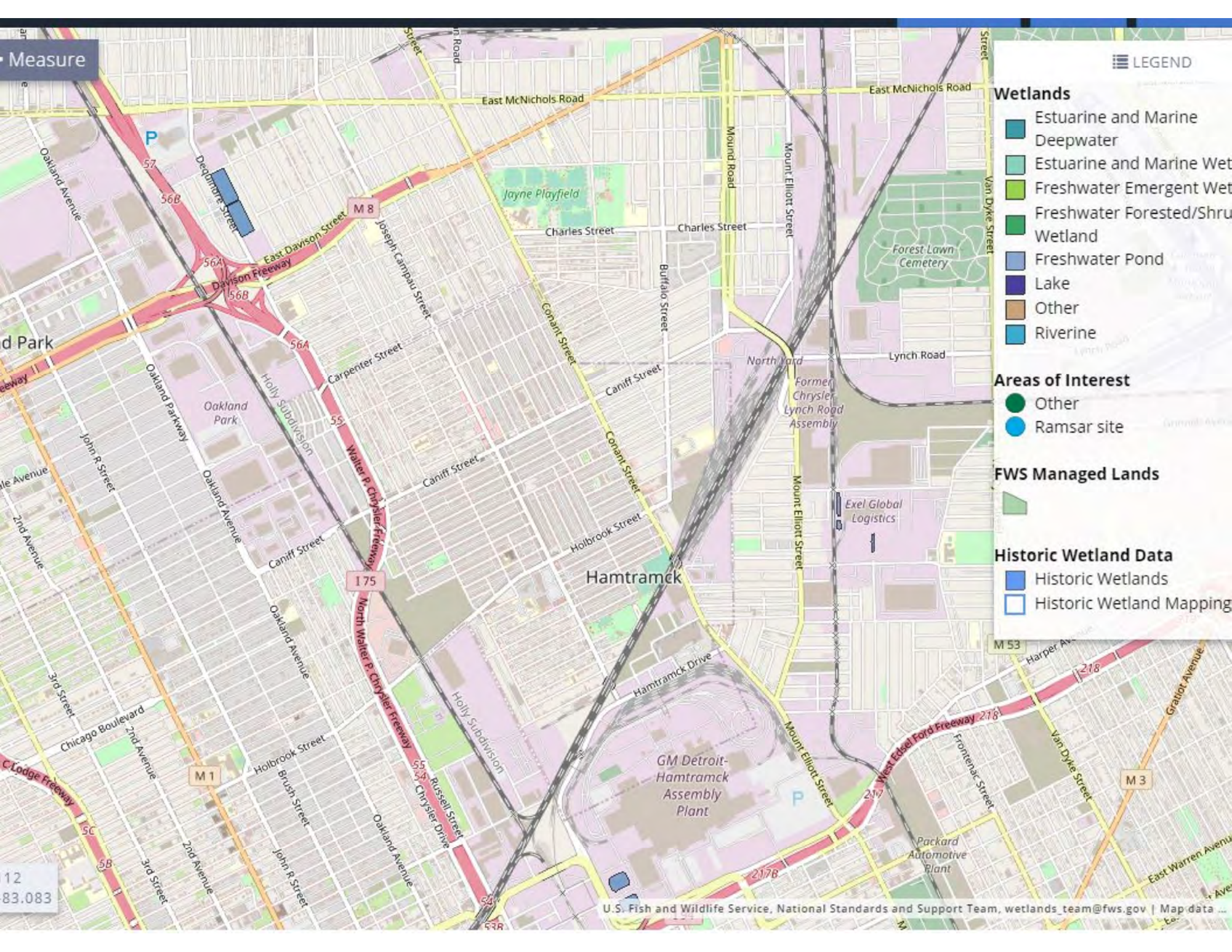
- Other
- Ramsar site

### FWS Managed Lands



### Historic Wetland Data

- Historic Wetlands
- Historic Wetland Mapping



12  
83.083

U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands\_team@fws.gov | Map data ...









United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Wayne County Area, Michigan**

**Hamtramck**





# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Contents

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<b>Preface.....</b>	<b>2</b>
<b>How Soil Surveys Are Made.....</b>	<b>5</b>
<b>Soil Map.....</b>	<b>7</b>
Soil Map.....	8
Legend.....	9
Map Unit Legend.....	10
Map Unit Descriptions.....	10
Wayne County Area, Michigan.....	12
NM—Area not mapped.....	12

# How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

## Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

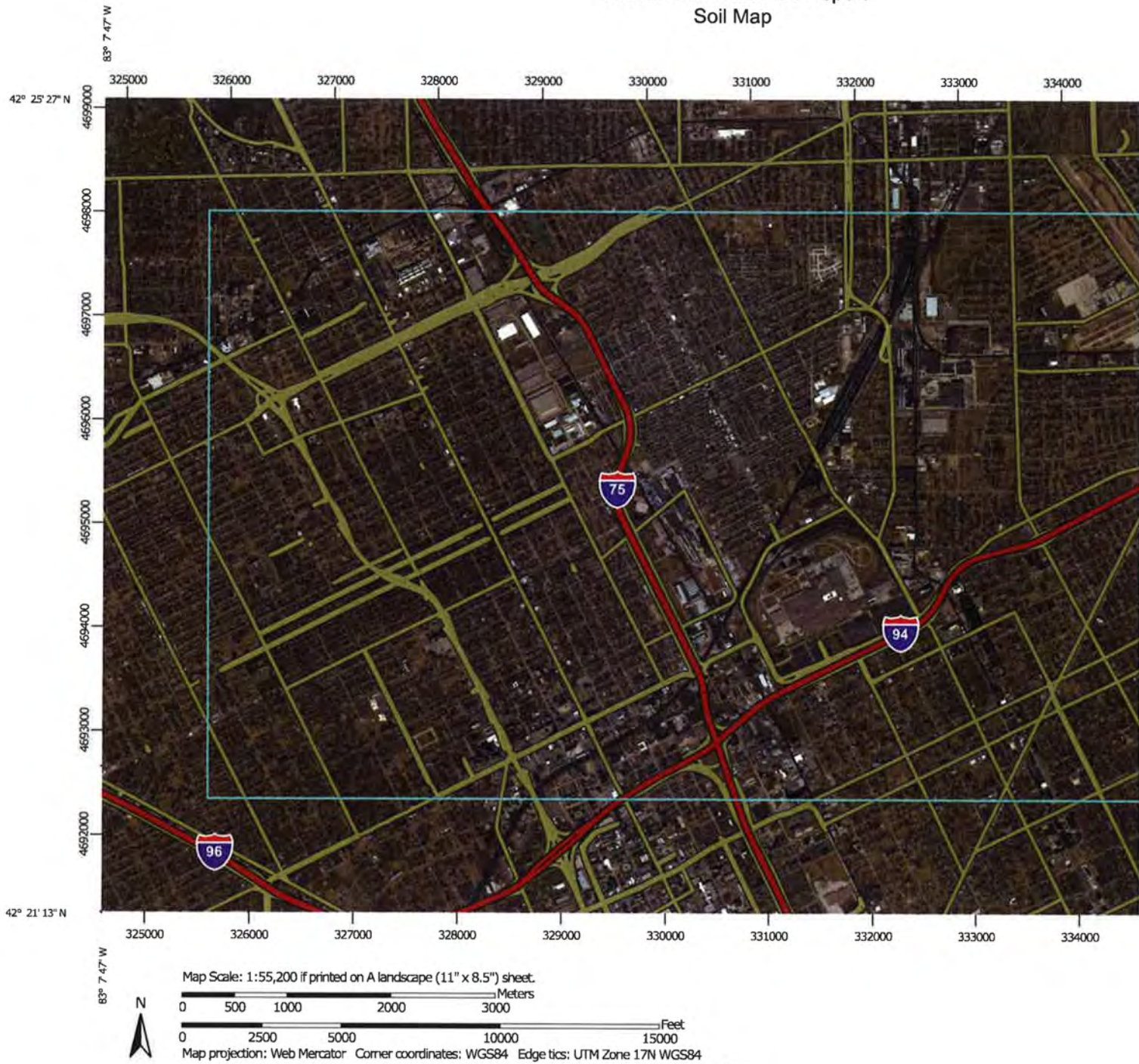
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report  
Soil Map






## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

### Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

### Water Features

 Streams and Canals

### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your report are:

Please rely on the bar scale on each map for distance measurements.

Source of Map: Natural Resources  
Web Soil Survey URL: <http://websoilsurvey.sc.egov.usda.gov/>  
Coordinate System: Web Mercator

Maps from the Web Soil Survey are in the Web Mercator projection, which preserves direction and area. A projection that is not an Albers equal-area conic projection, so calculations of distance or area are not accurate.

This product is generated from the US National Map Accuracy Standards (NMAS) version date(s) listed below.

Soil Survey Area: Wayne County, North Carolina  
Survey Area Data: Version 10, December 2012

Soil map units are labeled (as space allows) with the name of the soil or larger.

Date(s) aerial images were photographed: 2012

The orthophoto or other base map or compiled and digitized probably differ from the imagery displayed on these maps. As a result, map unit boundaries may be evident.

## Map Unit Legend

Wayne County Area, Michigan (MI602)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NM	Area not mapped	14,100.5	100.0%
<b>Totals for Area of Interest</b>		<b>14,100.5</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.



## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Wayne County Area, Michigan

### **NM—Area not mapped**

#### **Map Unit Setting**

*Elevation: 570 to 720 feet*

*Mean annual precipitation: 28 to 34 inches*

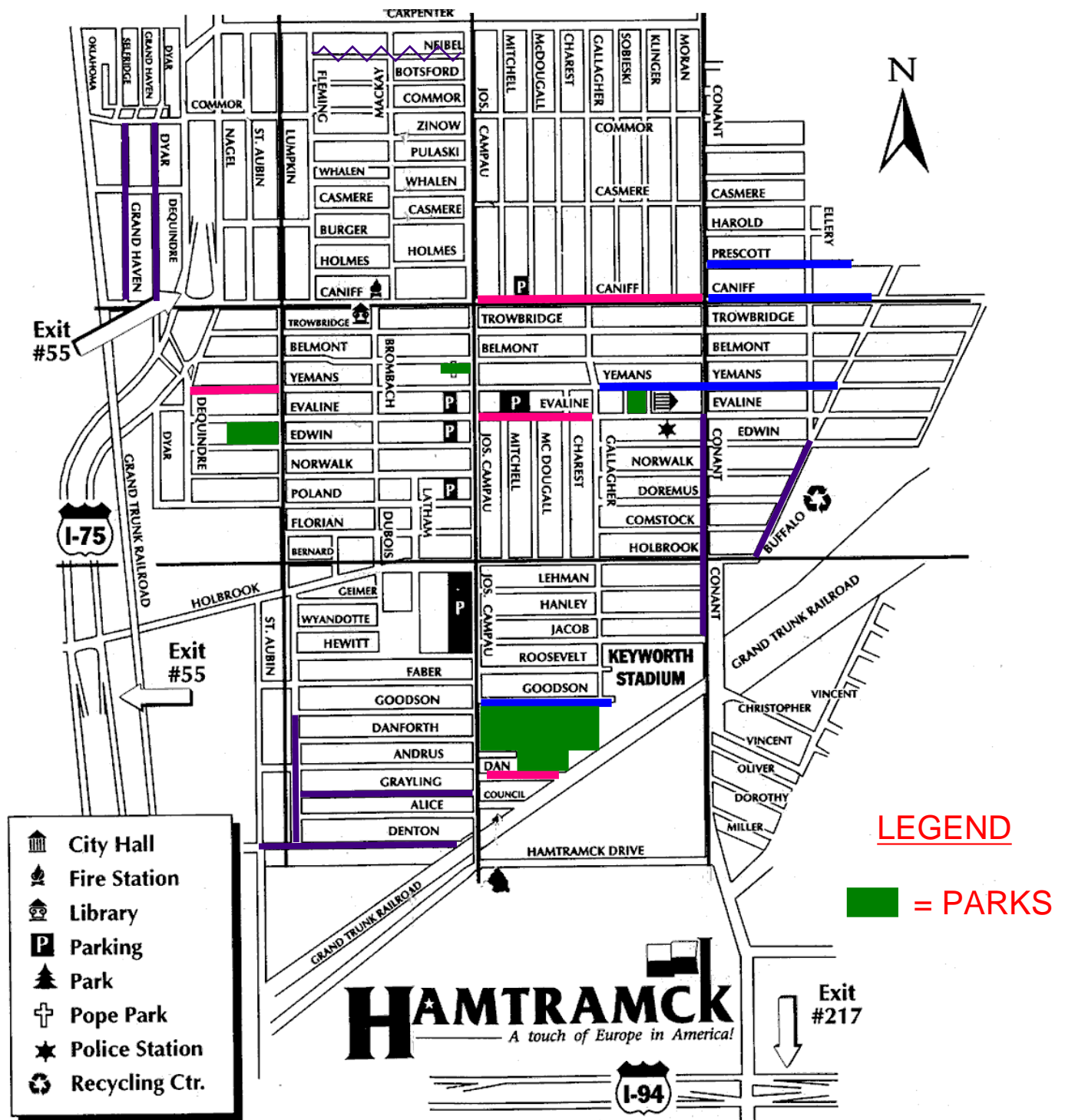
*Mean annual air temperature: 45 to 52 degrees F*

*Frost-free period: 140 to 160 days*

#### **Map Unit Composition**

*Area not mapped: 100 percent*

# Appendix F



## CITY PARK LOCATIONS

# Appendix G

<b><i>SUMMARY OF UNDERGROUND STORAGE TANK FACILITIES - CITY OF HAMTRAMCK</i></b>					
Facility Name	Facility Address	Active UST	Closed UST	Active LUST	Closed LUST
Amoco Oil Station #5286	11469 Joseph Campau		x		
BASF Corporation	1700 Caniff		x		
Bearcat Investment LLC	10340 Conant	x			x
Campau Botsford Service, Inc.	12045 Joseph Campau	x			x
Century Chevrolet	12101 Joseph Campau		x		
City of Hamtramck	9600 Buffalo		x	x	
Denton Auto Recovery	3301 Holbrook		x		
East Yard Car Department	8900 Conant		x	x	
Former Allen Lumber Compnay	9334 Conant		x		x
Former Boron Station	9050 Joseph Campau			x	
Garrity Motor Sales, Inc.	11500 Joseph Campau		x		
Hamtramck Marketing Terminal	3884 Holbrook		x		x
Judith Velleman Revocable Trust	8717 Joseph Campau		x		x
Kamax LP	3120 Denton	x			x
Kowalski Sausage Company	2270 Holbrook	x			x
Liberty Super Service	8405 Conant			x	
Midwest Mortgage Investment Inc.	8825 Vincent		x	x	
Mobil Gas Station	2000 Caniff	x			x
Moslah Zokari	9500 Conant	x		x	
Omni Properties	3901 Christopher			x	
Portage Garage	2060 Norwalk		x		
Rich Petroleum of Michigan, Inc.	3300 Holbrook	x			x
St. Florian Church	2626 Poland		x		
Stan and Stan Sales and Service	10241 Conant		x	x	
Sterling Services, Ltd.	1530 Commor		x		
Ted Slupczewski	11543 Conant		x		x
Towne Center Service, Inc.	8926 Joseph Campau	x		x	
Vincent Properties, Inc.	9045 Vincent		x	x	
Wayne County	3501 Hamtramck Drive		x		x
Yazan's Service Plaza LLC	9240 Conant	x			
Yetta Dubrinsky	1641 Caniff		x	x	

Within Study Area

# Appendix H



**CITY OF Hamtramck**  
**LEAD WATER SERVICE REPLACEMENT PROGRAM (DWRF)**  
**Various Locations**  
**PRELIMINARY ENGINEERS ESTIMATE**

April 26, 2021

Item	Quantity	Unit	Unit Price	Total
Removal and Replacement of Water Services	600	EACH	\$ 5,000.00	\$ 3,000,000.00
<i>CONSTRUCTION TOTAL</i>				<i>\$ 3,000,000.00</i>
ENGINEERING AND DESIGN (2%)				\$ 60,000.00
BONDING AND FINANCIAL ADVISOR SERVICES (1%)				\$ 30,000.00
CONSTRUCTION OBSERVATION AND INSPECTION (2%)				\$ 60,000.00
CONSTRUCTION ADMINISTRATION (2%)				\$ 60,000.00
CONTINGENCY (10%)				\$ 300,000.00
<b><i>GRAND TOTAL</i></b>				<b><i>\$ 3,510,000.00</i></b>

**CITY OF Hamtramck**  
**WATERMAIN REPLACEMENT PROGRAM (DWRF)**  
**Various Locations**  
**PRELIMINARY ENGINEERS ESTIMATE**

April 26, 2021

Item	Quantity	Unit	Unit Price	Total
Water Main Replacement Goodson	1690	LF	\$ 651.85	\$ 1,101,630.00
Watermain Replacement Caniff - JC to Buffalo Pipe Bursting	3800	LF	\$ 215.00	\$ 817,000.00
Water Main Replacement Dan - Jos Campau to Park (Pipe Bursting)	765	LF	\$ 215.00	\$ 164,480.00
Water Main Replacement Prescott - Elery to Conant Pipe bursting	980	LF	\$ 215.00	\$ 210,700.00
Water Main Replacement Conant Avenue - Evaline to Jacob (Pipe Bursting)	2125	LF	\$ 215.00	\$ 456,880.00
Water Main Loop South End Joseph Campau Avenue to Conant	240	LF	\$ 1,215.00	\$ 291,600.00
<b>CONSTRUCTION TOTAL</b>				<b>\$ 3,042,290.00</b>
ENGINEERING AND DESIGN (5.5%)				\$ 167,325.95
BONDING AND FINANCIAL ADVISOR SERVICES (5%)				\$ 152,114.50
CONSTRUCTION OBSERVATION AND INSPECTION (5%)				\$ 152,114.50
CONSTRUCTION ADMINISTRATION (2.5%)				\$ 76,057.25
CONTINGENCY (10%)				\$ 304,229.00
<b>GRAND TOTAL</b>				<b>\$ <u>3,894,131.20</u></b>

# Appendix I





# School Bell

## From the Superintendent

HPS Superintendent sent a letter to student families regarding the recent murder trial of George Floyd and the Tuesday conviction of former Minneapolis police officer Derek Chauvin. Her letter, read in part: “We encourage you to talk to your children about this issue, if appropriate. We know that these can be difficult conversations, so should you or your children need additional support, please contact our staff and counselors. “Our primary objective is, and will always remain, to ensure the safe and well-being of our students, as we are committed to their academic, social and emotional growth.”

## Enrollment

Kindergarten enrollment at Hamtramck Public Schools (HPS) is now open. Parents can enroll their children Monday through Friday from 9 a.m. to 3 p.m. at the HPS Admin building, located on Roosevelt St., next to Keyworth Stadium. If parents register now, they will receive a free backpack with the following:

- A workbook for at-home activities called, ‘Getting Ready for Kindergarten’
- A doodle book to express themselves and channel creativity
- School supplies, including crayons, scissors, glue sticks and writing utensils, and a mini frisbee to encourage time outdoors

HPS offers small class sizes, a culturally diverse environment of staff and students, 1:1 Chromebooks, certified teaching staff, lunch, and a free health clinic for residents available at the high school.

## SUPPORT LOCAL BUSINESS

## HAMTRAMCK SPRING CLEAN-UP

APRIL 24, 2021 | 9:30 am  
Meet @ Zussman Park / City Hall  
3401 Evaline St, Hamtramck

Join the Beautification Commission for the annual spring clean-up! Gloves, Bags, Hand Sanitizer, Snacks and Water Provided

There are a limited number of trash grabbers. If you can bring tools for yourself or to share with others, please do so!

\*Masks required\*

Visit <https://www.facebook.com/HamtramckBeautification> for more info.

## RECYCLE IN HAMTRAMCK

24 Hour Drop off  
3900 Christopher St, Hamtramck MI, 48212



The recycling bins are located just before the entrance to Priority Waste. ITS bright yellow, you can't miss it.

MATERIALS ACCEPTED

- #1 - #7 rigid Plastic
- Paper
- Cardboard

REDUCE → REUSE → RECYCLE

First: Reduce the amount of plastic, paper, or cardboard you are using/buying.

Next: Reuse the materials you already have, over, and over again.

Finally: Recycle when you cannot use those materials anymore.



## Villa Realty & Associates

31800 Northwestern Hwy, Suite 200  
Farmington Hills, MI 48334  
248-866-1110



### John Ulaj

Commercial Broker/Owner

A HUD Certified Agent

JohnUlaj@comcast.net

**Drowning in Mortgage Debt? I Can Help... I buy properties in as-is condition for CASH!**

**Looking to buy single & multi-family dwellings - CASH!**

## HPS students once again shine in oratory competition

Continued from page 3

Three pulled out from the eight, leaving five, who persevered and wowed everyone! First place: Nura Uddin, second place: Taufiq Islam, third place: Shayera Choudhury, fourth place: Karima Ahmed, and fifth place: Maha Uddin. All attend KMS except Karima, who attends Dickinson East. The next level will take place April 24 at the state semi-finals.

**Review: How did COVID-19 impact your students this year, and the oratory program in general?**

Housey-Johnson: I did not recruit new participants, opting to draw from

established participants who already knew our LMS Google Classroom. I switched to an all-digital participation and submission a few years ago, so these students were already well-versed with the LMS before they had to use it daily for school! Unfortunately, we will again miss out on the annual Winners' Circle Luncheon as a fun outing, with what would have been a photo shoot at the Riverwalk! That has been a tradition that students have looked forward to for many years (and me also). We will have that, via Zoom, on May 5.



Karima Ahmed



Nura Uddin



Maha Uddin



Shayera Choudhury



Taufiq Islam

### NOTICE OF PUBLIC HEARING

#### CITY OF HAMTRAMCK

### PROPOSED WATER IMPROVEMENTS PROGRAM

The City of Hamtramck will hold a public hearing for the Drinking Water State Revolving Fund (DWRFF) loan for the City of Hamtramck lead service line replacement and water system improvements program. The purpose of the meeting is to present the Water System Improvements and to receive comments from interested parties. The hearing will be held during the Hamtramck City Council starting at 7:00pm on Tuesday, June 8, 2021 using Zoom, interested persons may attend either on-line or by phone.

Topic: City of Hamtramck City Council - Public Hearing  
Time: June 8, 2021 07:00 PM Eastern Time (US and Canada)  
Join Zoom Meeting online at: <https://us02web.zoom.us/j/87011747074>  
Dial by your location  
Meeting ID: 870 1174 7074  
+1 312 626 6799 US (Chicago)  
+1 929 205 6099 US (New York)

The purpose of the proposed project is to provide lead service line replacement as required by the Lead and Copper Rule (LCR) in June 2018 requiring all cities in Michigan to replace all lead water service lines. The water service lines must be replaced from the City-owned water mains within the street to 18 inches inside individual houses. The water projects will involve water main replacement in through open cut in one (1) location and pipe bursting of the existing watermain in four (4) locations to upgrade the main in areas and not to disturb large sections of road, this work includes upgrading valves and hydrants in these areas. In addition, a looping water main project on the south end of the city from Joseph Campau to Conant will be installed to provide continuity within the water system. The estimated cost of all the projects is approximately \$6,896,000.00.

Copies of the project plan detailing the proposed projects will be available for inspection by the general public at the Office of the City Clerk, 3401 Evaline St, Hamtramck, Michigan starting Friday, May 7, 2021. Written comments received before the public hearing is closed on June 8, 2021 will be reviewed for incorporation into the final project plan. Written comments should be sent to the City of Hamtramck's Clerk's Office located at 3401 Evaline St, Hamtramck, Michigan.

August Gitschlag  
City Clerk

## Quick Hits

Cont. from front page

down the toilet. That waste goes into our water system eventually. The list of things you can't – yes, can't – drop off includes: anything sharp (like old needles), liquids, ointments or inhalers. To find out more, go online to [hamtramckdrug-free.com](http://hamtramckdrug-free.com). The drop-off will be available from 10 a.m. to 2 p.m. Dollar Tree is located at 9215 Jos. Campau Ave.

### FREE NEIGHBORHOOD TESTING

Wayne County Community College District Northwest Campus  
8200 Outer Dr. W.  
Detroit, MI 48219

### FREE NEIGHBORHOOD TESTING

Southwestern Church of God  
3032 Fort Street  
Detroit, MI 48217



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