



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



LIESL EICHLER CLARK
DIRECTOR

May 24, 2022

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: **FINDING OF NO SIGNIFICANT IMPACT**
City of Muskegon, Muskegon County
Water Distribution System Improvements and Lead Water Services Replacement
Drinking Water State Revolving Fund Project Numbers 7565-01 & 7566-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a water supply project plan submitted by the applicant mentioned above.

HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Part 54, Safe Drinking Water Assistance, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.5401 to 324.5418 of the Michigan Compiled Laws Annotated, requires EGLE to evaluate all environmental implications of a proposed water supply project. EGLE has done this by incorporating a detailed analysis of the environmental impact of the proposed alternatives in its review and approval process. A project plan was prepared by the applicant and reviewed by the State. EGLE has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project plan or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

HOW DO I GET MORE INFORMATION?

A map depicting the location of the proposed project is attached. This information is also available on our website at Michigan.gov/DWSRF under "Related Links." The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing one of the contact people listed below.

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at EGLE, Constitution Hall, P.O. Box 30457, Lansing, Michigan 48909-7957. We will not take any action on this project plan for 30 calendar days from the date of this notice in order to receive and consider any comments.

WHAT HAPPENS NEXT?

In the absence of substantive comments during this period, our preliminary decision will become final. The applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by EGLE should be brought to our attention. If you have any questions, please contact Mr. David J. Worthington, the senior project manager, at 517-554-1835, by email at Worthingtond@michigan.gov, or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,



Eric Pocan, Unit Supervisor
Water Infrastructure Financing Section
Finance Division
517-284-5433

Attachment

**DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
DRINKING WATER STATE REVOLVING FUND (DWSRF)
CITY OF MUSKEGON, MUSKEGON COUNTY
WATER MAIN AND LEAD WATER SERVICES REPLACEMENT
ENVIRONMENTAL ASSESSMENT
May 2022**

I. PROJECT IDENTIFICATION

Applicant: City of Muskegon

Address: 1350 East Keating
Muskegon, Michigan 49442

Authorized Representative: Mr. Leo Evans, Director of Public Works

DWSRF Project Numbers: 7565-01 and 7566-01

The city of Muskegon (Muskegon) is proposing to sell bonds to finance the construction of water main upgrades and lead service line replacement (LSLR) in various districts throughout Muskegon. Muskegon is the largest city in Muskegon County, which is located on Lake Michigan to the west. Muskegon Lake and the Muskegon River form its northern boundary.

A study area has been delineated that incorporates the entire city limits (See Figure 1).

The following projects are targeted for construction in 2022:

- Sanford Street Water Main and LSLR
- Glenside Neighborhood-Phase II Water Main and LSLR
- City-Wide LSLR (approximately 600)

The total project cost is estimated to be \$5,730,000 which would result in average monthly water rates increasing from a current estimated rate of \$14.71 per month to approximately \$15.56 per month. This is a worst-case scenario. Actual rate changes may be smaller since Muskegon qualifies for up to \$4,745,410 in grants and principal loan forgiveness.

II. PROJECT BACKGROUND

A. Existing Facilities

An intake located in Lake Michigan draws water to the Muskegon Water Filtration Plant. Three elevated tanks provide storage for the city's water. The Muskegon water distribution network consists of 215 miles of water mains ranging in size from 2-inches to 48-inches in diameter. A majority of the water mains are cast iron or ductile iron material, with a great quantity of pipe dating back to the 1920s or earlier. Of the approximately 12,900 water services in the city, it is estimated that 89 percent may be composed of lead, have a lead gooseneck, or is constructed with galvanized pipe that was once connected to a lead pipe but did not previously get a full-length service line replacement to the residence.

B. Project Need

Michigan's Lead and Copper Rule places a priority on removing lead from the distribution system. To comply, Muskegon will embark on a campaign of water main upgrades and full-length LSLR to protect public health. This document focuses on work targeted to begin construction in 2022 to coordinate water main work with already planned sewer projects to maximize efficiency.

C. Population Projections

Muskegon's population is approximately 38,500, which is a slight decline from 2000 when it was a little over 40,000. Table I shows the projected population figures provided by the West Michigan Shoreline Regional Development Commission. There is some seasonal summer growth, but not enough to have noticeable impact on water demand.

Year	Population
2000	40,105
2010	38,401
2020	38,529
2030	38,983
2040	39,442

III. PROPOSED ACTION

The following distribution system alternatives were considered:

A. No Action

Under the no action scenario, the distribution system would not be improved, and lead service lines (LSLs) would remain in service. Public health would be at risk and Muskegon would not be in noncompliance with the Lead and Copper Rule. No action is unacceptable.

B. Distribution System Improvements

Muskegon has proposed the following construction for 2022:

1. Sanford Street Water Main and Water Services

The water mains in this area are old, undersized, and susceptible to breakage. This project consists of switching the water services from the existing 6-inch diameter water main to the existing 16-inch diameter water main from Laketon Avenue (Laketon) to Southern Avenue (Southern). Existing hydrants, if connected to the 6-inch diameter main, would be connected to the 16-inch and all intersecting road mains would likewise be connected to the 16-inch diameter main. The existing 6-inch diameter water main from Southern to Isabella Avenue would be replaced with a new 8-inch diameter water main. All LSLs from Laketon to Merrill Avenue would be replaced (See Figures 3A, 3B, and 3C). This work is planned to be combined with the city's sanitary sewer replacement project to be financed by Clean Water State Revolving Fund (CWSRF) project number 5767-01.

2. Glenside Neighborhood Water Main and Water Services

This project consists of relocating the existing water main from the alleys to the roadways. A 12-inch diameter water main is proposed on Westwood Street, Randolph Avenue, Hadden Street, Ridge Avenue, and Cumberland Street, to connect with a 48-inch diameter transmission line on Winchester Drive at both ends. All other roads in the neighborhood would have 8-inch diameter water main installed (See Figure 2). This work is planned to be combined with the city’s sanitary sewer replacement project to be financed by CWSRF project number 5767-01.

3. Lead Water Service Replacements

Replacement of LSLs throughout the city would consist of tapping the new or existing water main with a new corporation stop and installing a new copper water service pipe up to the property line with a new curb stop valve and box. A new polyethylene or copper service pipe would be installed from the property line into the residences. Open cut, directional drilling, or pipe bursting would be used for construction depending on the site-specific configuration. Any existing lead goosenecks on the mains would be removed from the tap sites. Approximately 600 LSLs would be replaced over a three-year construction period, pending actual costs and project budget constraints.

IV. DESCRIPTION OF PROPOSED PROJECT

Muskegon intends to implement the distribution system improvements for eliminating LSLs and replacing water mains as described in the previous section (See Figure 2 and Figures 3A, 3B, and 3C for a map of the projects).

A. Project Cost Breakdown

Table II shows the breakdown of the project cost, which totals \$5,730,000.

Table II.	
Description	Estimated Cost
Sanford Street– Water Main and LSLR	\$1,447,000
Glenside Neighborhood Phase II – Water Main and LSLR	\$1,043,000
City-Wide LSLR	\$3,240,000
Total	\$5,730,000

B. Project Schedule and Implementation

The proposed project is expected to be financed with two 20-year loans at 1.875 percent interest from the DWSRF administrated by the Department of Environment, Great Lakes, and Energy and the Michigan Finance Authority. The first loan will cover the costs associated with LSLR totaling \$3,240,000. Muskegon is expected to receive \$3,000,000 in Water Infrastructure Fund Transfer Act principal loan forgiveness as the DWSRF is offering loan forgiveness to disadvantaged applicants’ construction portion of the LSLR project. The second DWSRF loan is expected to be for \$2,429,000. This project has also qualified for a Drinking Water Infrastructure Grant not to exceed \$1,041,000 as well

as up to \$704,410 in principal loan forgiveness for being designated as a disadvantaged community.

Typical average rates for a water customer are about \$14.71 per month. A rate increase of approximately \$0.85 a month would be needed to service the DWSRF debt and pay for operation and maintenance, resulting in an average monthly cost of \$15.56 for a typical residential user. However, this is a worst-case scenario that does not account for the grant and loan forgiveness Muskegon is eligible to receive.

Muskegon anticipates starting construction shortly after the DWSRF loan closing on September 20, 2022. Water main construction is expected to require one to two years to complete, with improvements operational by late 2023 or early 2024. LSLR city-wide will be spread out over a three-year construction period and may be performed in part by city staff in addition to hired contractors.

V. ENVIRONMENTAL CONSEQUENCES OF PROPOSED ACTION

A. Description of Affected Environment

Cultural Resources

In an earlier phase of the DWSRF project plan, the State Historic Preservation Officer determined that no historic properties would be affected by the proposed project. Tribal Historic Preservation Officers were likewise notified about the proposed project in an earlier phase, and none expressed any specific concerns. There are no changes to the project scope or area that would suggest these prior conclusions would no longer be valid.

Wetlands/Floodplains/Surface Waters

All projects are located above the high-water mark. No adverse impacts on wetlands, floodplains or surface waters are anticipated.

Endangered Species

The United States Fish and Wildlife Service and Michigan Natural Features Inventory reviewed the proposed projects in a prior phase of the project plan and determined that no threatened or endangered species, critical habitat, or special natural features would be adversely affected. These conclusions are expected to remain valid for the project area and scope of the 2022 project.

Social Impacts

The proposed project will have a small cost impact to residents. Muskegon carefully weighed all alternatives to select the most cost-effective solution for correcting the problems occurring in the areas described. Public health will be protected by eliminating LSLs. The creation of jobs during construction phase would be a short-term benefit.

B. Mitigation Measures

Impacts of construction activities associated with the project are considered short-term disruptions, that for the most part, will not extend beyond the construction period. Structural and non-structural measures that avoid, eliminate, or mitigate adverse impacts

to the environment have been identified. Work will be confined to designated work hours, minimized on weekends or holidays, and all equipment will be required to have proper exhaust systems and mufflers to mitigate noise impacts. Mitigation measures to minimize the negative effect of dust from construction will be utilized. A soil erosion and sedimentation control permit from Muskegon County will be required. All areas disturbed by construction will be restored to existing conditions with compacted backfill, sand, gravel, and asphalt or concrete surfacing. Seeding and mulching will be performed promptly following land disturbance. Significant plants, such as trees and shrubs, will be protected from damage or replaced if damage is unavoidable.

VI. PUBLIC PARTICIPATION

A public hearing on the DWSRF project plan was held on June 22, 2021. The hearing was advertised in the *Muskegon Chronicle* and on the city's web site. A copy of the draft plan was made available for a 30-day period at the Muskegon City Hall, 933 Terrace Street, and on the city's web site, prior to the hearing. Due to the COVID-19 pandemic, the hearing was held by virtual Zoom conference. No changes were made to the project because of the hearing. After closing the hearing, the city commission passed a resolution adopting the final project plan and its selected alternatives.

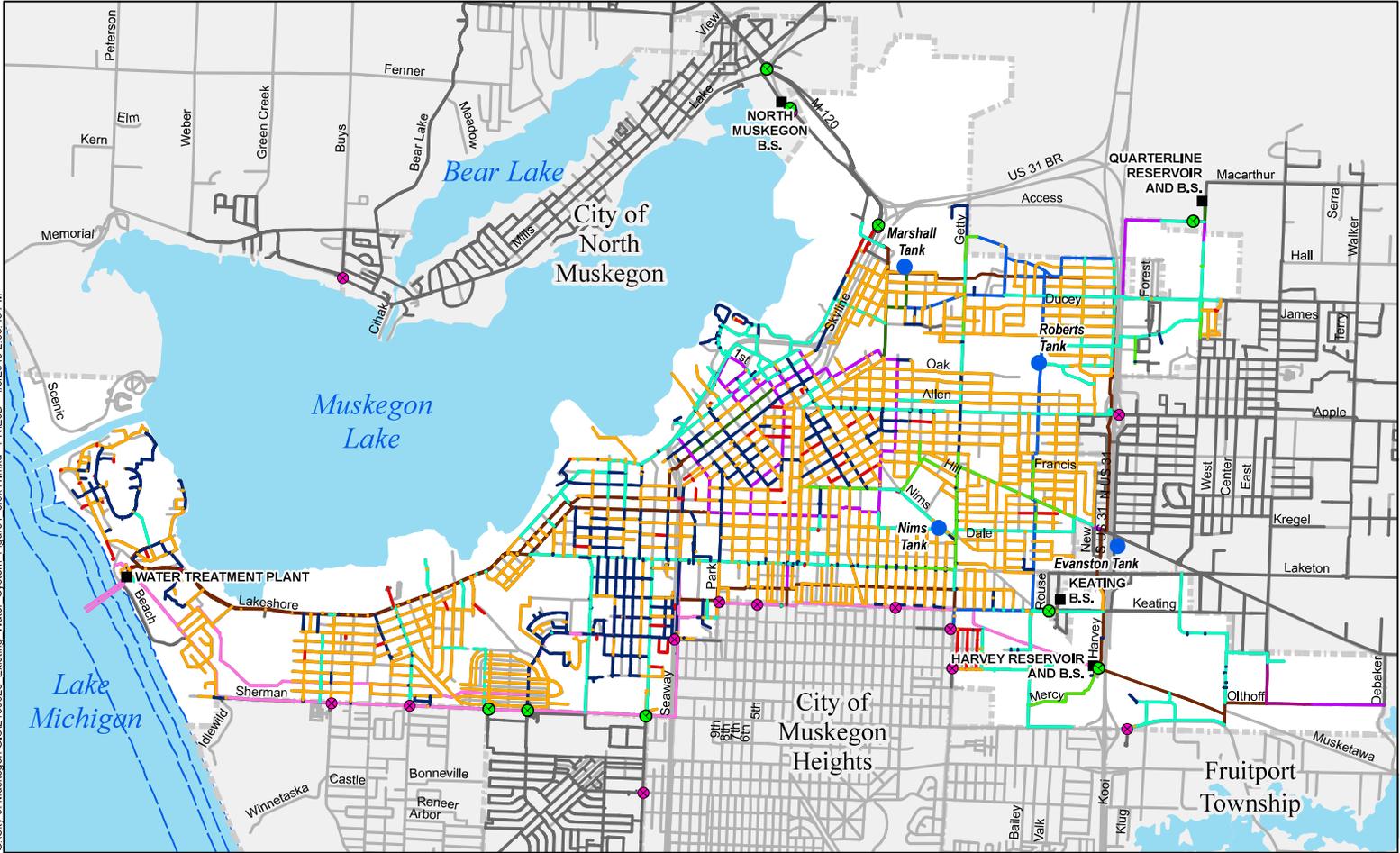
VII. REASONS FOR CONCLUDING NO SIGNIFICANT IMPACTS

Expected adverse impacts from the proposed project appear to be minor or largely temporary in nature. There is a social cost to paying for the water system upgrade and operating and maintaining the system. However, completing this upgrade results in increased reliability and minimizes risk to public health and the environment from lead contamination, and protects drinking water quality. It is believed that these beneficial impacts significantly outweigh the minor temporary negative impacts.

Questions regarding this Environmental Assessment should be directed to:

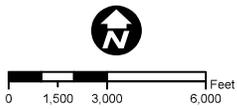
Mr. David J. Worthington, Senior Project Manager
Water Infrastructure Financing Section
Finance Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30457
Lansing, Michigan 48909-7957
Telephone: 517-554-1835
E-Mail: Worthingtond@michigan.gov

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LEGEND

- | | | |
|--------------------------------|------------------|-------------------|
| Municipal Boundaries | 4 INCH and BELOW | 16 INCH |
| Master Meters | 6 INCH | 18 INCH |
| Water Storage Tank | 8 INCH | 20 INCH |
| Pump Stations | 10 INCH | 24 INCH |
| Interconnections | 12 INCH | 30 INCH and ABOVE |
| Water Main Outside of the City | 14 INCH | |



CITY OF MUSKEGON
 MUSKEGON COUNTY, MI
 DRINKING WATER REVOLVING FUND (DWRFF)
 PROJECT PLAN
EXISTING WATER SYSTEM MAP
FIGURE 1
 Prein&Newhof
 2180628

Figure 1

CITY OF MUSKEGON
 MUSKEGON COUNTY, MICHIGAN
CONCEPTUAL DESIGN
GLENSIDE NEIGHBORHOOD
FIGURE 2

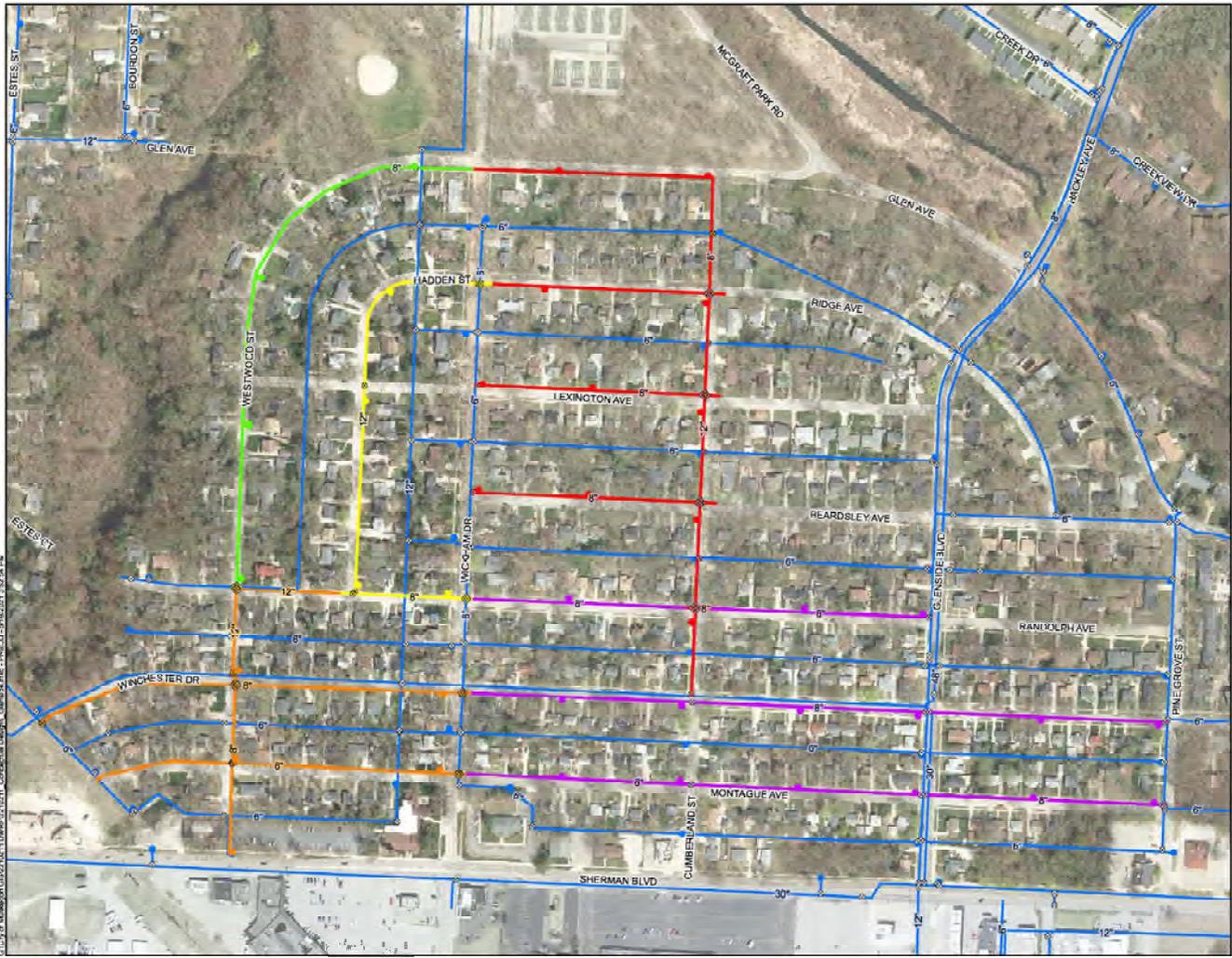
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LEGEND

- Proposed Hydrant - Phasing
 - Glenside Ph 1 (Constructed 2020)
 - Glenside Ph 2
 - Glenside Ph 3
 - Glenside Ph 4
 - Glenside Ph 5
- Proposed Main Valve - Phasing
 - ⊗ Glenside Ph 1 (Constructed 2020)
 - ⊗ Glenside Ph 2
 - ⊗ Glenside Ph 3
 - ⊗ Glenside Ph 4
 - ⊗ Glenside Ph 5
- Proposed Water Main - Phasing
 - Glenside Ph 1 (Constructed 2020)
 - Glenside Ph 2
 - Glenside Ph 3
 - Glenside Ph 4
 - Glenside Ph 5
 - ⊗ Existing Valve
 - Existing Hydrant
 - Existing Water Main



SCALE: 1" = 250'



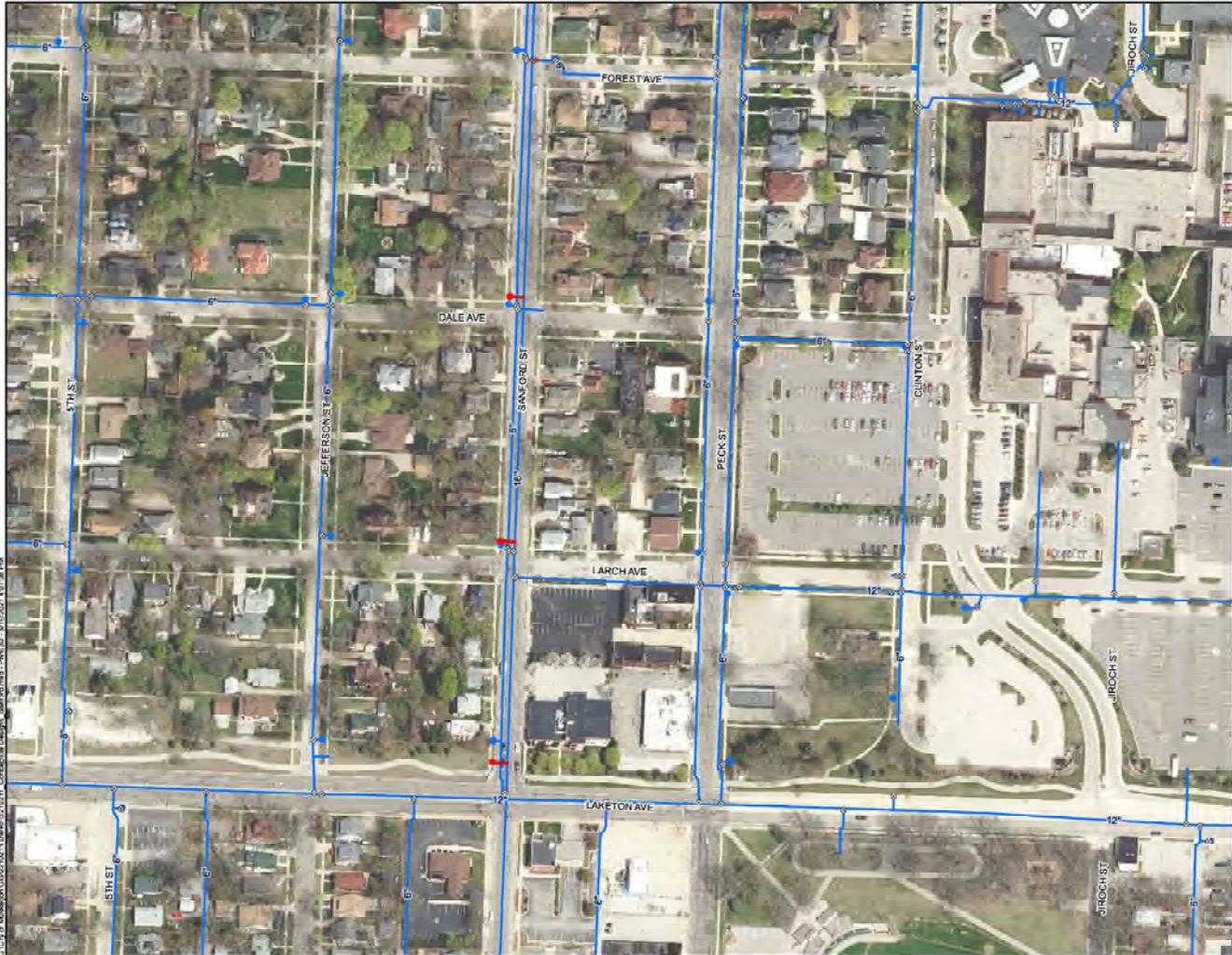
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CITY OF MUSKEGON
 MUSKEGON COUNTY, MICHIGAN
CONCEPTUAL DESIGN
SANFORD STREET
 FIGURE 3A
 Prein&Newhof
 2/1/21

- LEGEND**
- Proposed Hydrant
 - Proposed Main Valve
 - Proposed Water Main
 - Existing Valve
 - Existing Hydrant
 - Existing Water Main



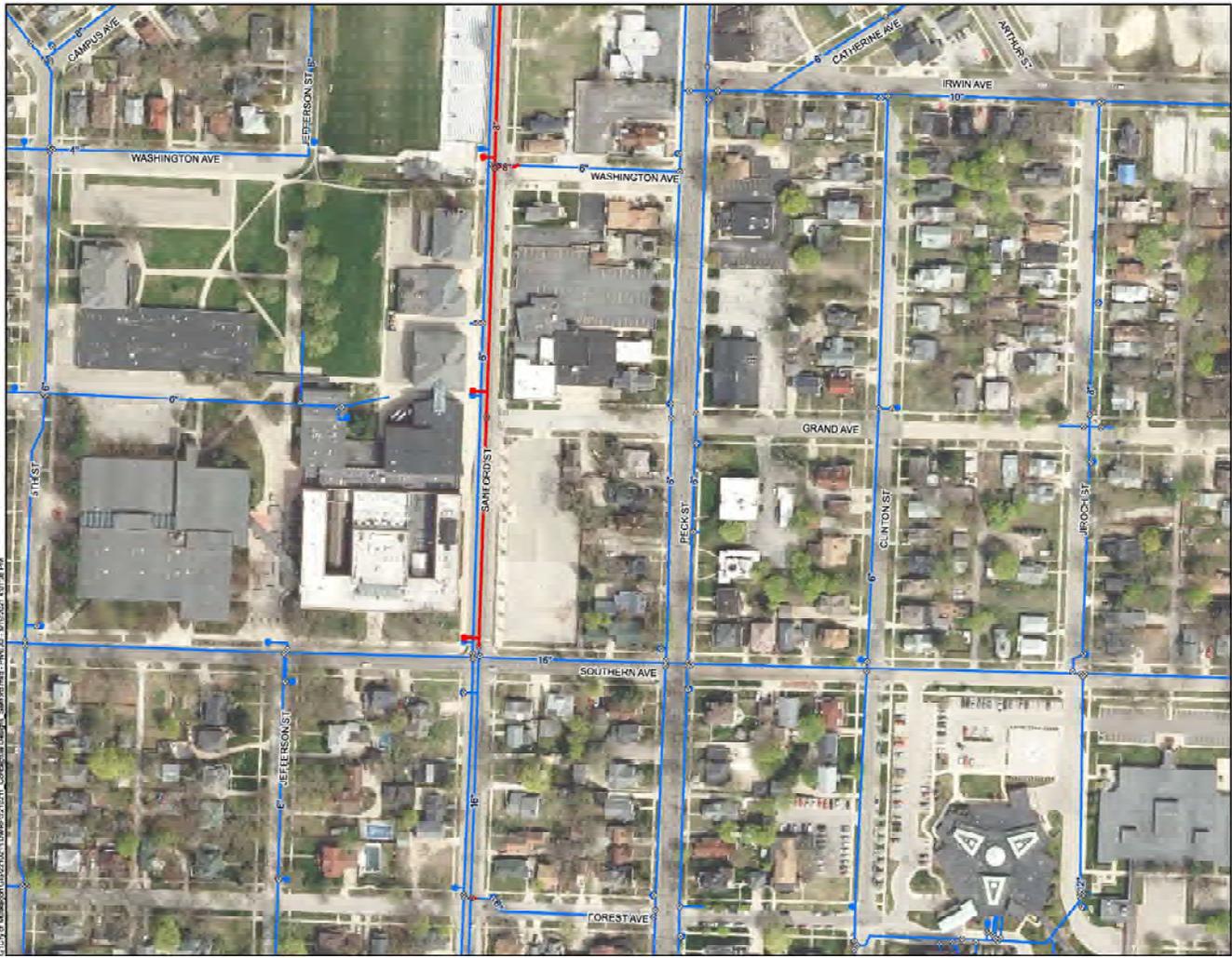
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CITY OF MUSKEGON
 MUSKEGON COUNTY, MICHIGAN
CONCEPTUAL DESIGN
SANFORD STREET
 FIGURE 3B
 Prein&Newhof
 2/1/2021

- LEGEND**
- Proposed Hydrant
 - ⊙ Proposed Main Valve
 - Proposed Water Main
 - ⊙ Existing Valve
 - Existing Hydrant
 - Existing Water Main



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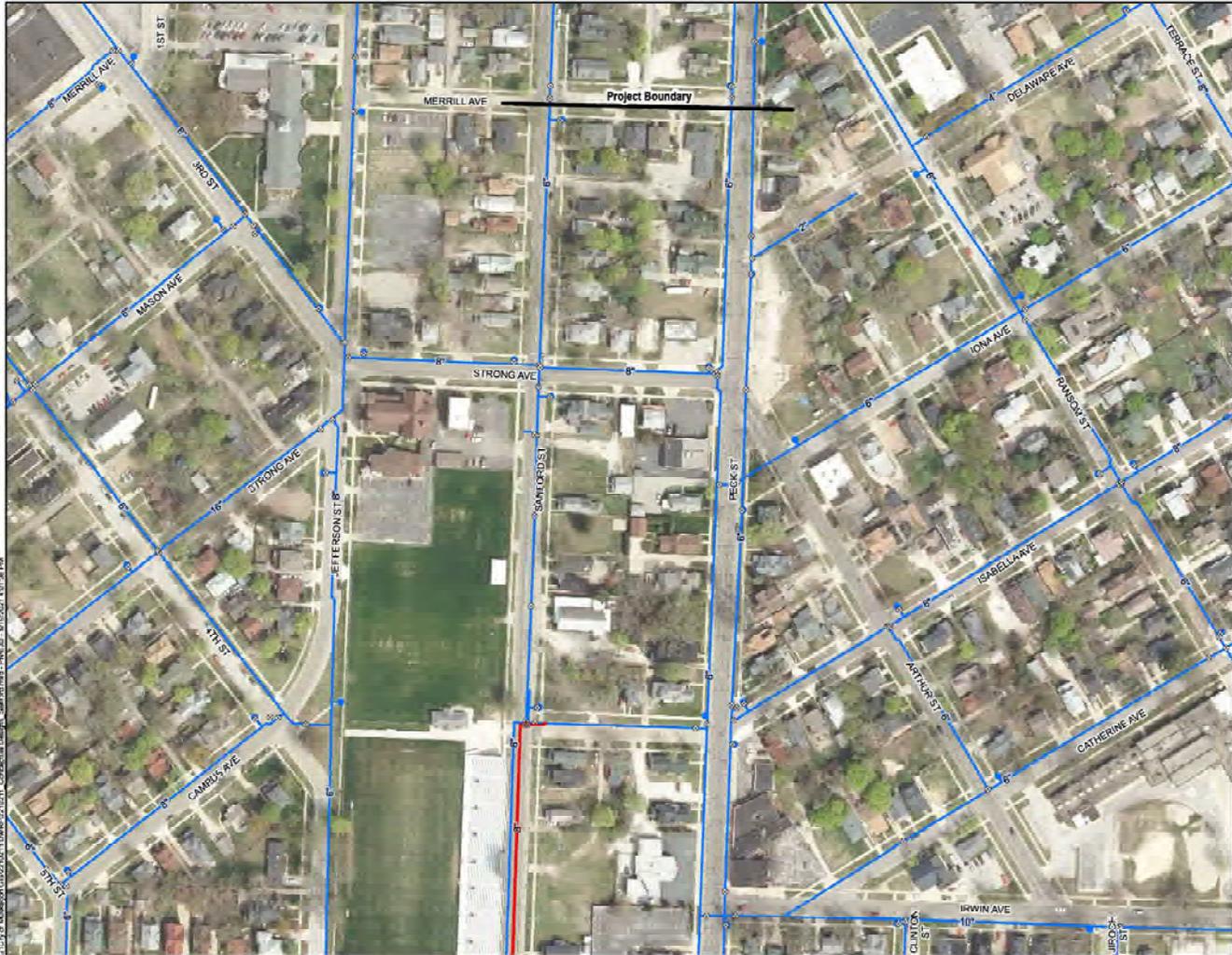
CITY OF MUSKEGON
 MUSKEGON COUNTY, MICHIGAN
CONCEPTUAL DESIGN
SANFORD STREET
 FIGURE 3C
 Prein&Newhof
 2/1/21

LEGEND

- Proposed Hydrant
- ⊙ Proposed Main Valve
- Proposed Water Main
- ⊙ Existing Valve
- Existing Hydrant
- Existing Water Main



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