



GLWA 96-inch Water Main Relocation Project

Project Description

The Great Lakes Water Authority (GLWA) will install a new 96-inch diameter water transmission main along a new route and is decommissioning approximately 2.5 miles of existing water transmission main to improve access for future operations and maintenance. **Exhibit A** (attached) shows a Project Overview Schematic. GLWA's project includes the following major project elements:

- A new 2.5-mile segment of 96-inch water transmission main outside of the closed G&H industrial landfill, Detroit Sportsmen's Congress Gun Club and residential properties;
- Four new isolation valves to reduce time to perform future maintenance;
- Several project facilities to maintain water services during the project, including:
 - Three dechlorination/discharge facilities;
 - A temporary booster pump station;
 - New small diameter inter-tie water main;
- Roadway improvements, pedestrian safety improvements, and trail landscaping and hard-scaping enhancements.

The relocated portion of the 96-inch water transmission main will connect to the existing regional water system near the intersection of 24 Mile Road and the Macomb Orchard Trail on the north, and near the intersection of Dequindre Road and Hamlin Road on the south. **Exhibit B** (attached) shows the 96-inch water transmission main route selected by GLWA, member partner communities, and other project stakeholders.

The first phase of construction is included in the Avon Road Infrastructure Improvements. **Exhibit C** (attached) shows the coordinated Road Commission for Oakland County (RCOC) and GLWA projects that comprise the Avon Road Infrastructure Improvements.

Project Objectives

The main objectives of the GLWA 96-Inch Water Transmission Main Project include:

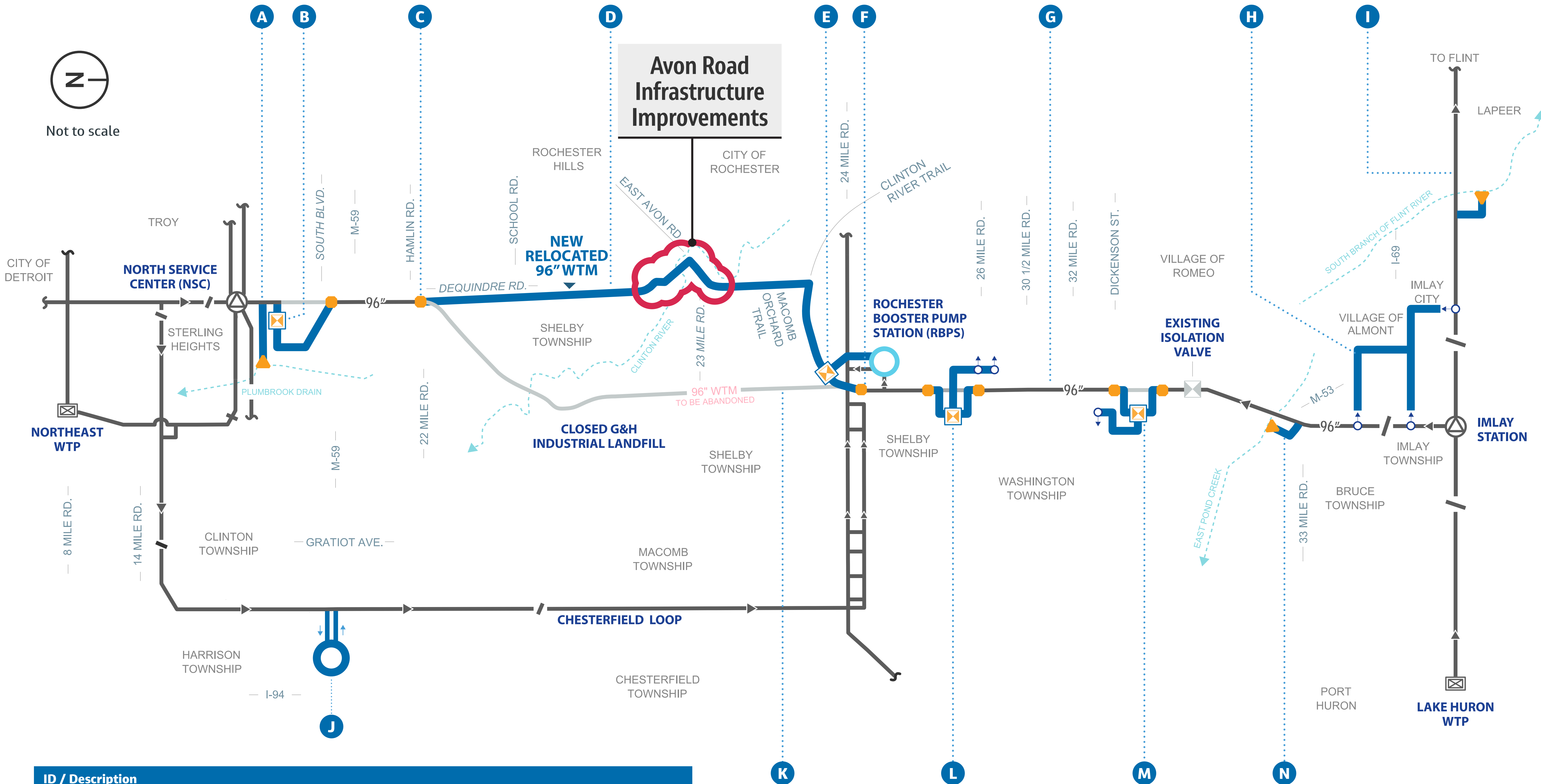
- Relocating a portion of 96-inch water transmission main to outside of a closed landfill and commercial and residential properties to improve access for future operations and maintenance;
- Continuing to provide essential, uninterrupted drinking water throughout construction;
- Installing improvements to traffic flow and pedestrian safety, in coordination with other area infrastructure projects;

History of Existing 96-inch Water Transmission Main

The existing 96-inch water transmission main is part of GLWA's regional drinking water transmission system that conveys treated water from the Lake Huron Water Treatment Facility to several member partner communities in Lapeer County, as well as many other member partner communities in Macomb and Oakland Counties. The 96-inch water transmission main was constructed in the mid-1960s and was placed into service in December 1967. It is approximately 32 miles long and is prestressed concrete cylinder pipe.

For more information on the project, please visit: www.glwater.org/96inchwatermain, or email 96inchwatermain@glwater.org.

Exhibit A – Project Overview Schematic



| ID / Description | | | |
|------------------|---|---|--|
| A | Plumbrook Drain Discharge Facility (PDDF) | F | 96" WTM 24 Mile Tie-in |
| B | New NSC Valve | G | 96" WTM Critical Appurtenances (Multiple Locations NSC to DDV) |
| C | 96" WTM Hamlin Tie-in | H | Intertie Water Mains Imlay City, Almont and Imlay Township |
| D | New 96" WTM | I | South Branch Flint River Discharge Facility (SBFRDF) |
| E | 24 Mile Valve with Bypass to Rochester Booster Pump Station | J | Chesterfield Loop Temporary Booster Pump Station (CLTBPS) |
| | | K | Abandoned 96" WTM |
| | | L | 26 Mile Valve with Bypass to Metered Connections |
| | | M | Romeo Valve with Bypass to Metered Connections |
| | | N | East Pond Creek Discharge Facility (EPCDF) |

LEGEND:

Existing Water Main (Water Transmission Main or "WTM")

Abandoned Water Main

New Water Main

Existing Water Treatment Plant (WTP)

Booster Pump Station with Reservoir

Existing Booster Pump Station

Flow Direction During Shutdown

New Isolation Valve

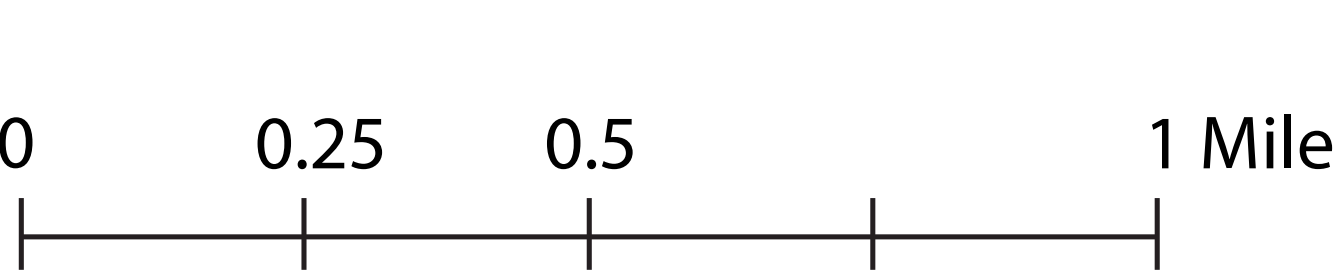
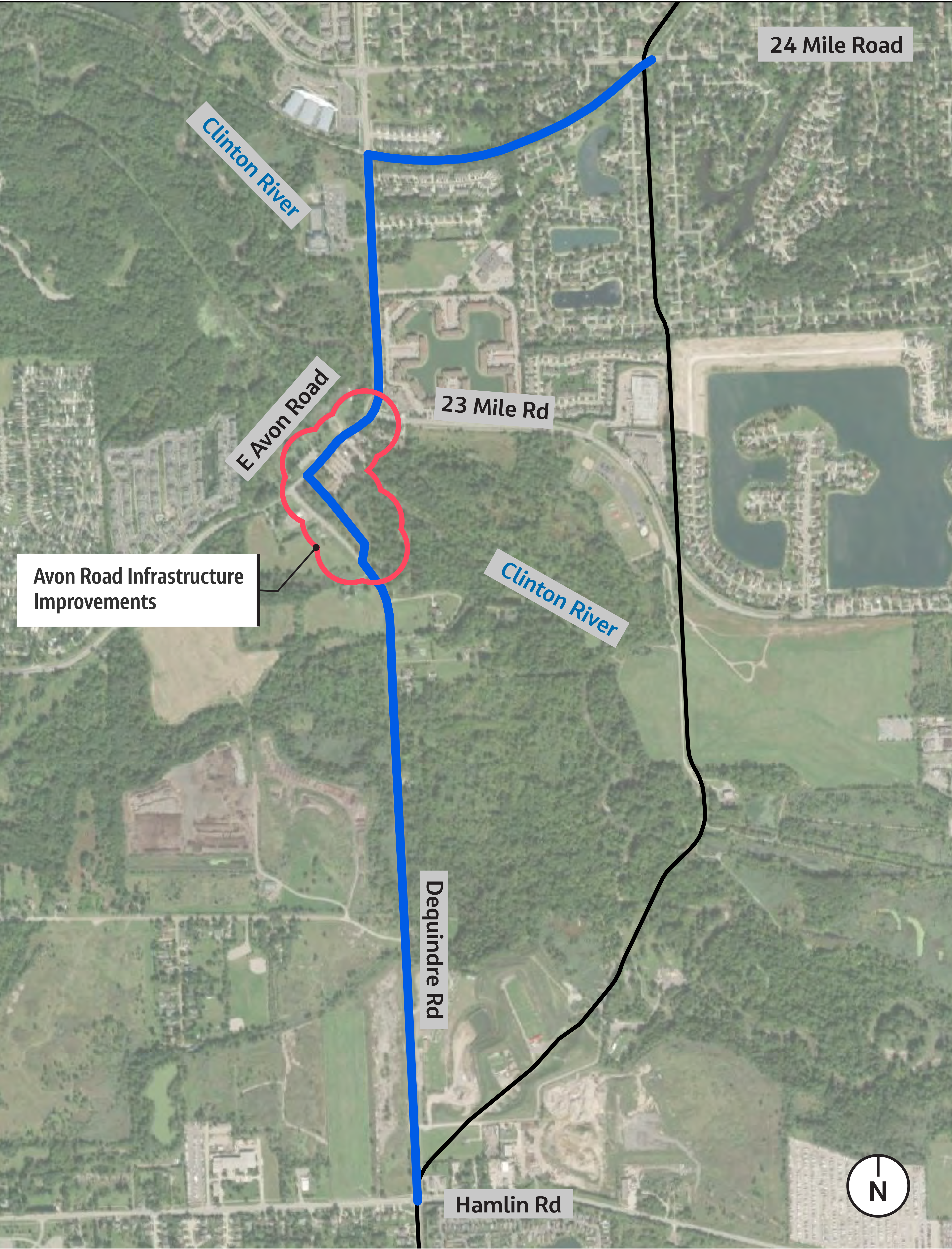
Abandoned Isolation Valve

New Tie In

New Discharge Facility

Existing Metered Connection

Exhibit B – GLWA Proposed 96-inch Water Transmission Main Relocation



- Legend:
- Existing 96-Inch WTM
 - Relocated 96-Inch WTM

Exhibit C – Avon Road Infrastructure Improvements

