



# 96-inch Diameter Water Transmission Main Relocation

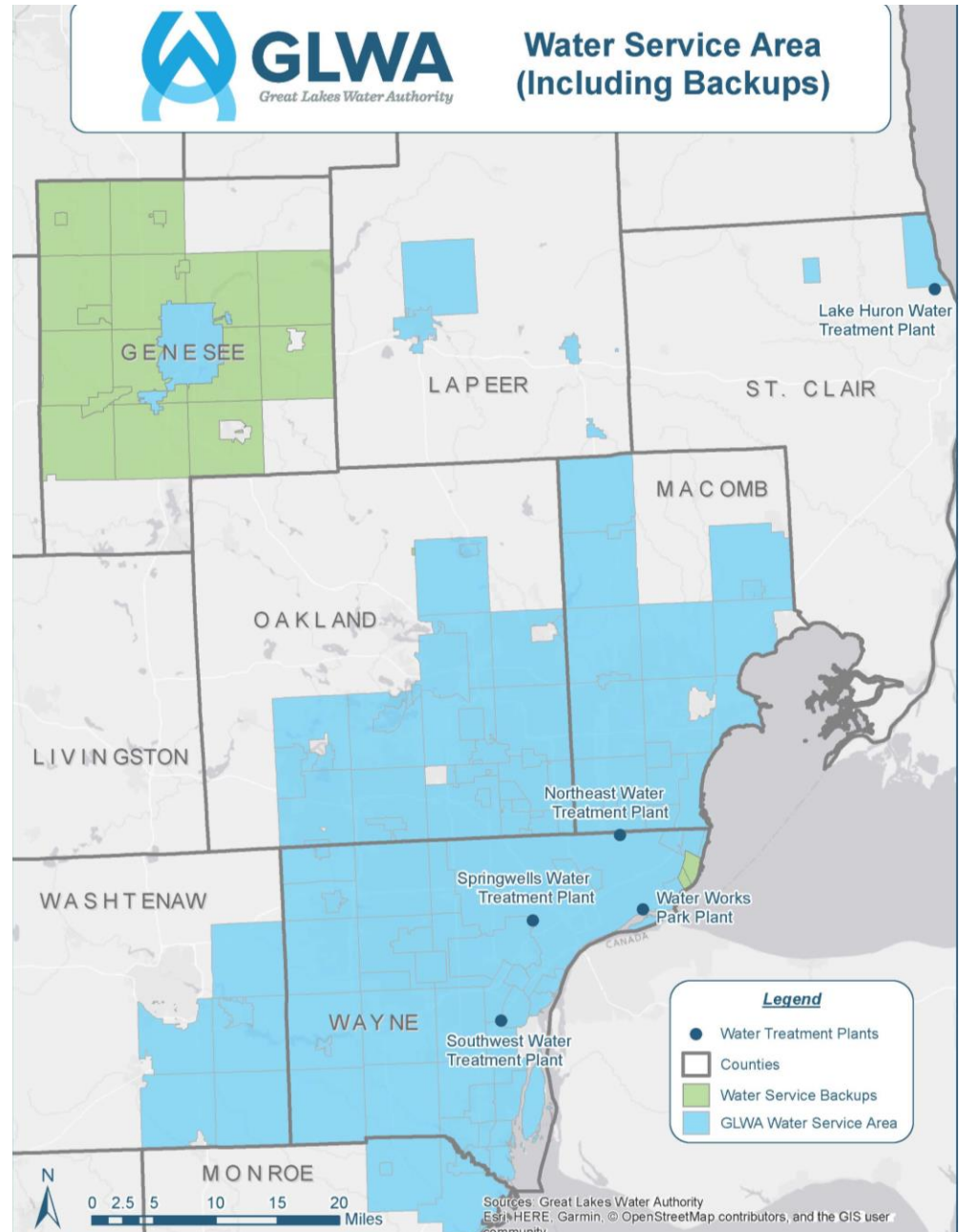
## *Project Overview*

Dated 10/14/2021. Content will be updated  
as new information becomes available.



# GLWA Overview

- The Great Lakes Water Authority (GLWA) draws water from Lake Huron and the Great Lakes tributary, the Detroit River.
- GLWA's five water treatment facilities provide high quality, safe drinking water for regional distribution.
- GLWA operates and maintains 816 miles of water transmission mains.
- GLWA provides water to 112 communities in eight Southeast Michigan counties.



# Highlights: 96-inch Water Transmission Main



North Service Center  
Pumping Station,  
Oakland County

**32 miles** of  
96-inch  
water  
transmission  
main

Serving more  
than  
**1,000,000**  
people

Supplies  
water to **3**  
counties

Placed in  
service  
**over 50**  
years ago



Imlay Pumping  
Station, Lapeer  
County

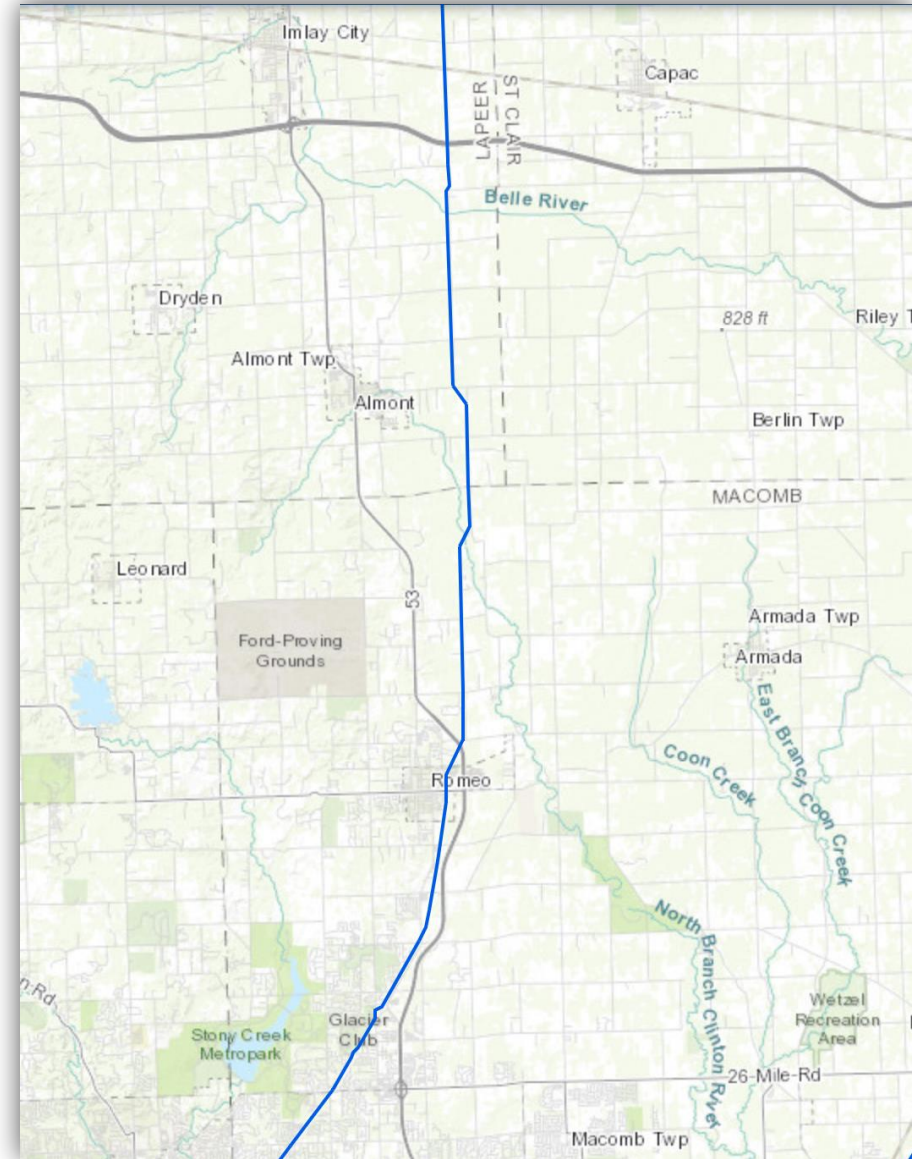


Rochester Booster  
Pump Station,  
Macomb County



# Project Overview

- Construct and relocate a new 2.5-mile segment of the 96-inch Water Transmission Main (WTM) outside of private property.
- Safely close and seal the segment of existing WTM within private property.
- Improve operations and maintenance of the 96-inch diameter WTM that runs from Oakland County to Lapeer County.
- Install new isolation valves to reduce the time to perform maintenance and repair.
- Construct permanent and temporary project facilities required to maintain drinking water services.
- Coordinate with large infrastructure projects to reduce the impact of construction on the local communities.
- Restore roadways to improve traffic flow and pedestrian safety at critical intersections.



# Project Objectives

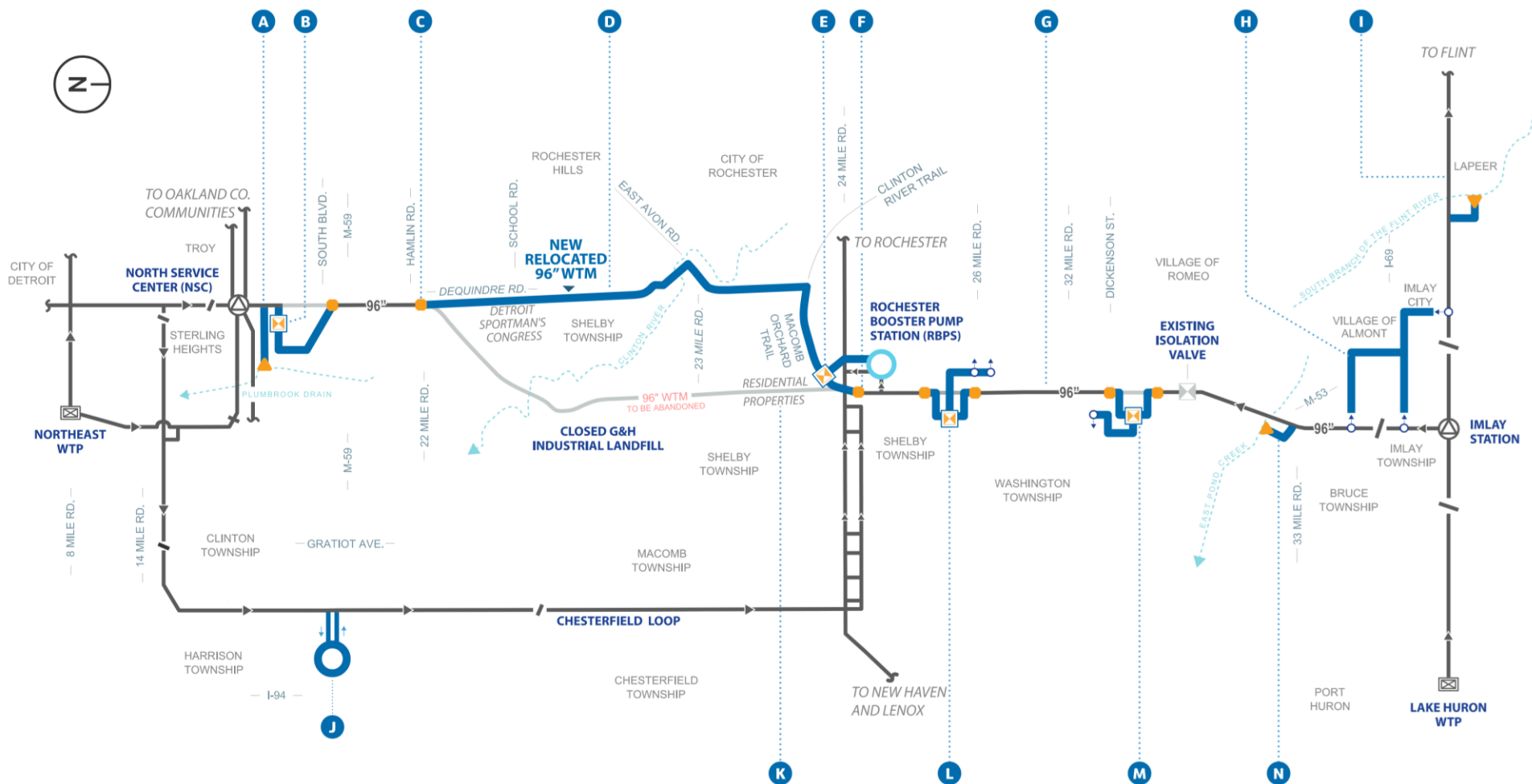
## Primary Objectives:

- Relocate 96-inch water transmission main (WTM) outside of closed G&H Industrial Landfill, Detroit Sportsmen's Congress Gun Club, and residential properties to improve access for future operations and maintenance.
- Continue providing essential, uninterrupted drinking water throughout construction.

## Other Project Objectives Include:

- Coordinate with other area infrastructure projects to minimize impacts.
- Improve traffic flow and pedestrian safety by making transportation enhancements.
- Design and construct infrastructure to support temporary shutdown of 96-inch WTM.

# Project Overview Schematic



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

LEGEND:		
Existing Water Transmission Main (WTM)	Existing Water Treatment Plant (WTP)	Flow Direction During Shutdown
Existing WTM to be Abandoned	Existing Booster Pump Station with Reservoir	New Isolation Valve
New WTM	Existing Booster Pump Station	Isolation Valve to be Abandoned
		New Tie-In
		Existing Metered Connection



# Project Scope - Water

- Design and construct a new 2.5 mile 96-inch water transmission main and other project facilities.
- Shutdown 96-inch water transmission main during the Off-Peak Season (October 15 to April 15) to connect the new water main and valves.
- Coordinate with GLWA Member Partners and Stakeholders throughout design and construction.
- Work with communities to maintain water service during construction via water main interconnections.



# Project Scope – Transportation

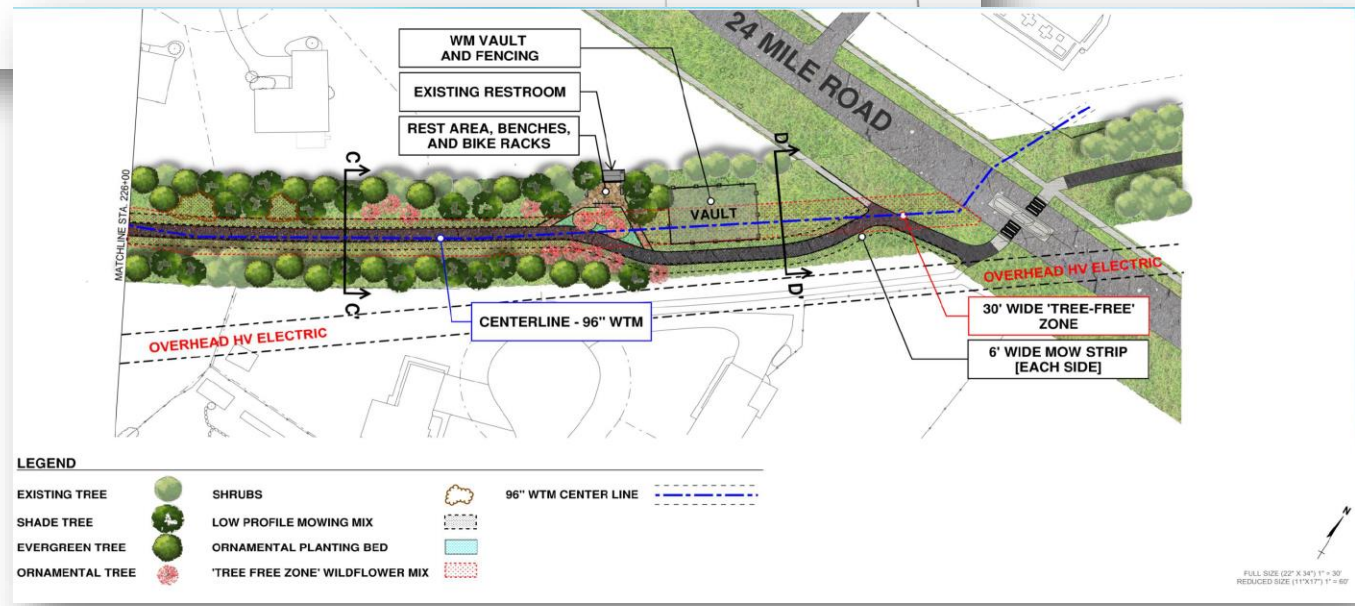
Long-term benefits to Avon-Dequindre-23 Mile Road corridor include improved traffic flow, additional non-motorized facilities for pedestrian mobility, and aesthetic enhancements.

Improvements being coordinated with Road Commission for Oakland County (RCOC) and Macomb County Department of Roads (MCDR):

- Roadway reconstruction along Dequindre Road between Hamlin Road and East Avon Road.
- Roadway widening of Dequindre Road between 23 Mile Road and Macomb Orchard Trail.
- A new roundabout at 23 Mile Road and Dequindre Road with related pedestrian crossing safety improvements.
- Reconstruction of the Macomb Orchard Trail between Dequindre Road and 24 Mile Road.
- Roadway widening of East Avon Road by adding a center turn lane.
- Intersection improvements at Dequindre Road and School Road by adding a center turn lane.
- Intersection improvements at Dequindre Road at Hamlin Road by upgrading traffic signaling.

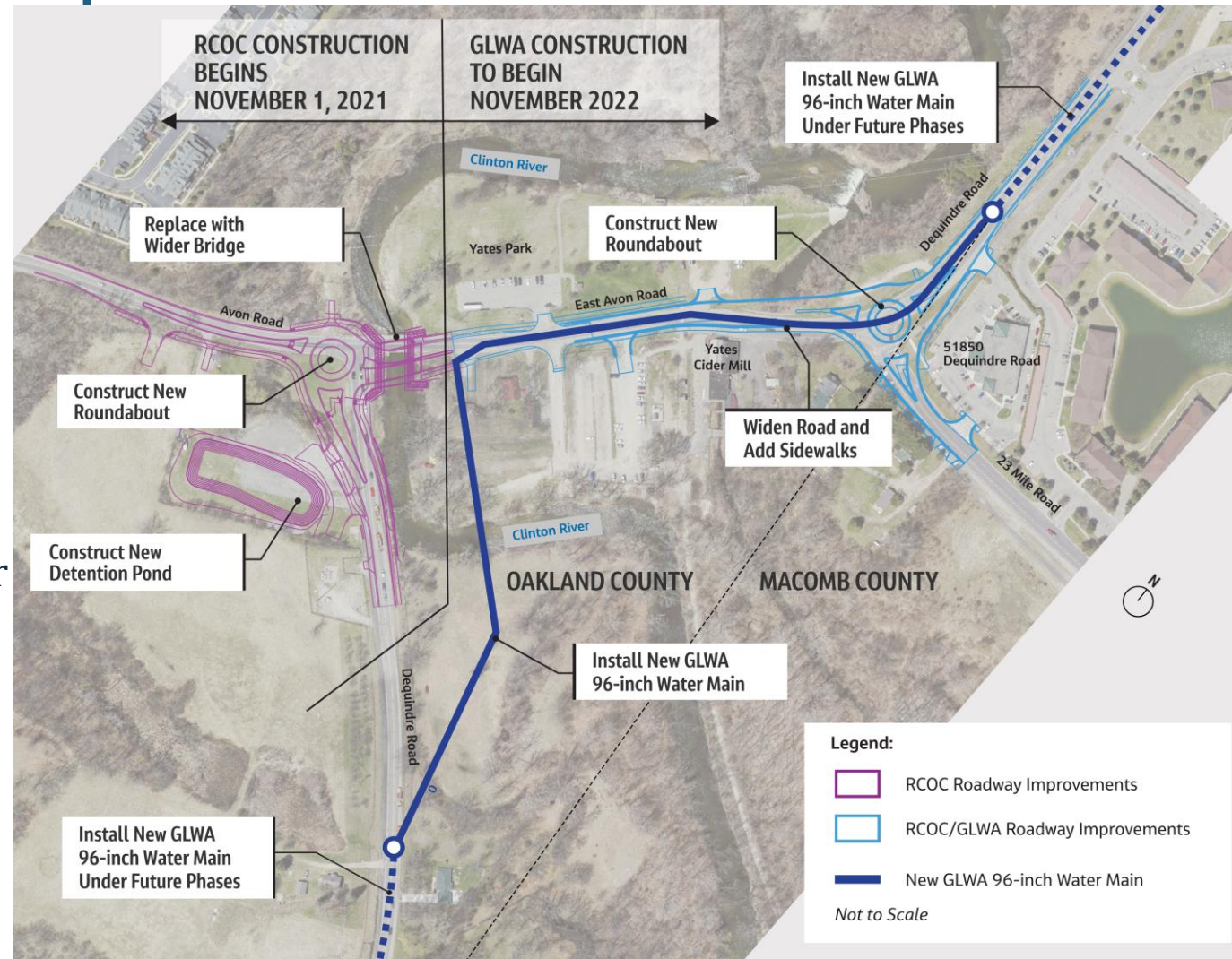


# Project Scope – Macomb Orchard Trail



# Phase 1 Construction – Proposed Avon Road Infrastructure Improvements

- Avon Road Infrastructure Improvements is a coordinated effort with Road Commission for Oakland County (RCOC) Avon roadway and bridge project to reduce traffic impact.
- Construct 2,220 feet of new 96-inch water transmission main along Dequindre Road and East Avon Road.
- Improve and restore roadway on East Avon Road.



# Avon Road Infrastructure Improvements Proposed Timeline





# Stakeholder Coordination and Public Engagement

- **Stakeholder Coordination:** Coordination and communication with communities, regulatory agencies, utility providers, and local businesses directly impacted. The primary goal is to allow all groups to provide input through design and construction phases.
- **Public Engagement:** All aspects of communication with the public indirectly impacted by the project with the goal to ensure all groups receive important communications and status updates throughout entire duration.



# Stakeholder Coordination and Public Engagement Activity

**Project Web Page:** Project content will be updated as new project information becomes available. Frequently Asked Questions will be revised as project progresses. A web form is available to register for email updates. The project email address is [96inchwatermain@glwater.org](mailto:96inchwatermain@glwater.org).

**Stakeholder Advisory Committee:** Quarterly meetings are held to update key project stakeholders on design status, permitting efforts, and project coordination activities.

**Project Progress Updates:** The Project Team coordinates consistently with key project stakeholders and provides design progress updates at key design milestones.



# Project Schedule Key Milestones

Key Milestone	Approximate Completion Deadline
Complete 30% Design	March 2021
Complete Avon Road Infrastructure 90% Design	July 2021
Select Construction Firm	December 2021
Begin Construction (Avon Road Infrastructure Improvements)	November 2022
Begin First 96-inch Main Shutdown	October 15, 2025
Place Entire New, Relocated 96-inch Main into Full Permanent Service	April 15, 2026
Complete Professional Engineering Services (Close-Out)	November 2027





**GLWA**

*Great Lakes Water Authority*