



42" WATER MAIN BREAK

CITY OF NOVI - CITY COUNCIL

JODY CALDWELL, PE - CHIEF PLANNING OFFICER
PETE FROMM- DIRECTOR OF WATER TRANSMISSION
October 6, 2025



Initial Response

SEPTEMBER 25



42" WATER MAIN REPAIR TIMELINE



6:30am 42" main broke

GLWA arrived at 8:00 am

GLWA started isolating at 9:00 am

16" Insertion valve installed at 11 pm

Isolation continued throughout the night

September 25



At 3:00 am, Novi (NV-04) started to receive flow again.

At 1:30 pm, GLWA isolated at break site

At 2:00 pm, break site dewatered and repair started

Field crew worked to broken main

September 26



42" damaged pipe was removed and new pipe section installed

Installed linestop on 24" main and replaced 16" valve

Inspection of existing 42" pipe at break site

Bac-T Sample on 24" main

September 27



42" repair continued

Prepared for inspection of 42" pipe

16" valve replacement started

Prepared for 30" valve replacement

Bac-T samples taken for the GLWA 24" main and Novi System

September 28



42" repair continued

Started Inspection on existing 42" pipe

30" valve replacement began

2nd round of Bac-T samples were taken from the Novi System

Bac-T samples passed for the 24" watermain

September 29



42" repair with man-way access

30" valve replacement continued

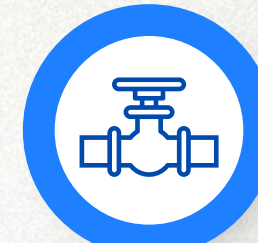
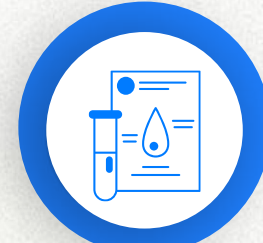
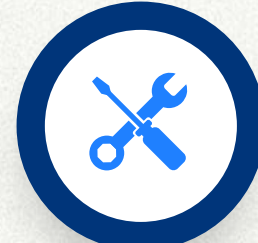
Water Quality lifted Boil Water Advisory in Novi

Valve Maintenance continues at WA-01

Inspection of existing 42" continued

September 30

42" WATER MAIN REPAIR TIMELINE (CONT'D)



Repair on 42"
continued

30" valve replacement
continued

Repair completed on
valve to Walled Lake
(WA-01)

Review initial
inspection data
began

42" repair site
backfilled

30" valve replacement
continued

Review of initial
inspection data
continued

Prepared for second
inspection of existing
42"

Water Quality samples
at WA-01 and CM-01

BWA lifted at Walled
Lake & Commerce

Backfilled at 42" repair
site

30" valve replacement
continued with
installation starting

BWA lifted in Wixom

Water Quality samples
at WA-01 and CM-01

Inspection of existing
42" main

Repair Novi
watermain at 30"
valve location

Restoration Prep. at
42" repair site

30" valve replacement
continued

Water Quality samples
passed at WA-01 and
CM-01

Prepare for new 42"
valve cut-in east of
break location

Site Clean-up

Dewatering Pump
Watch

Restoration Prep. at
42" repair site

30" valve installation
completed

Mob. to new 42" valve
cut-in east of break
location

GLWA continues to
review inspection data

October 1

October 2

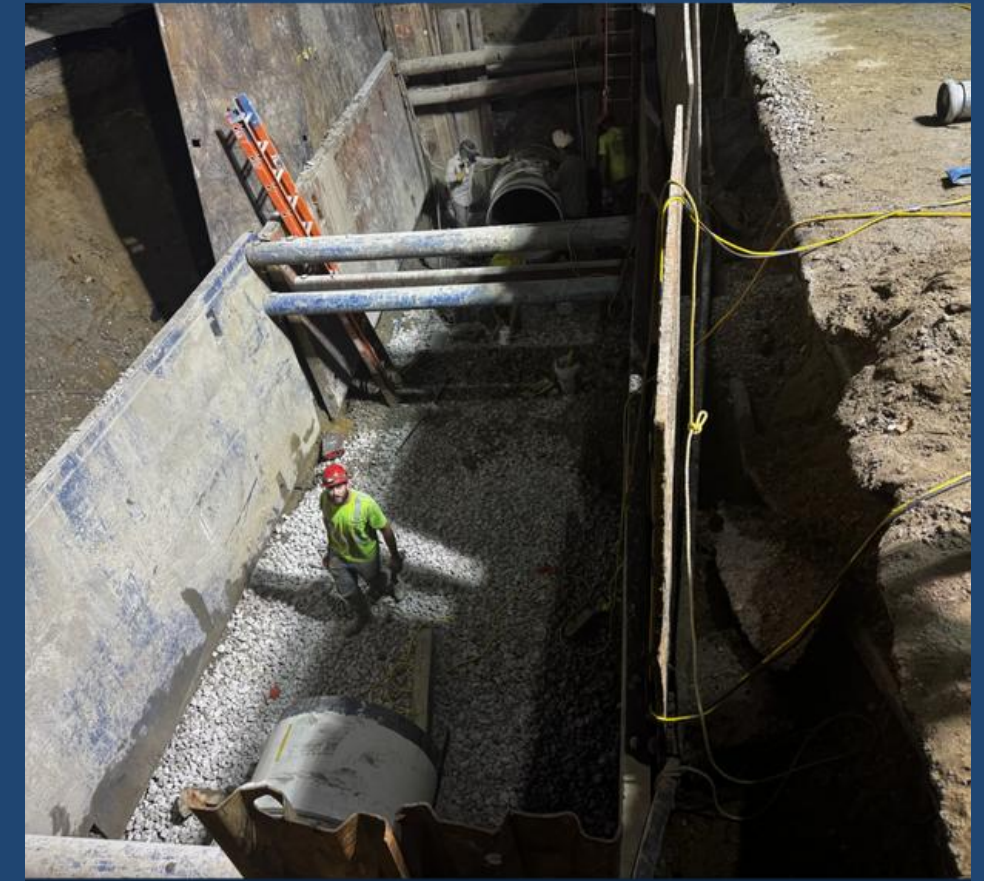
October 3

October 4

October 5

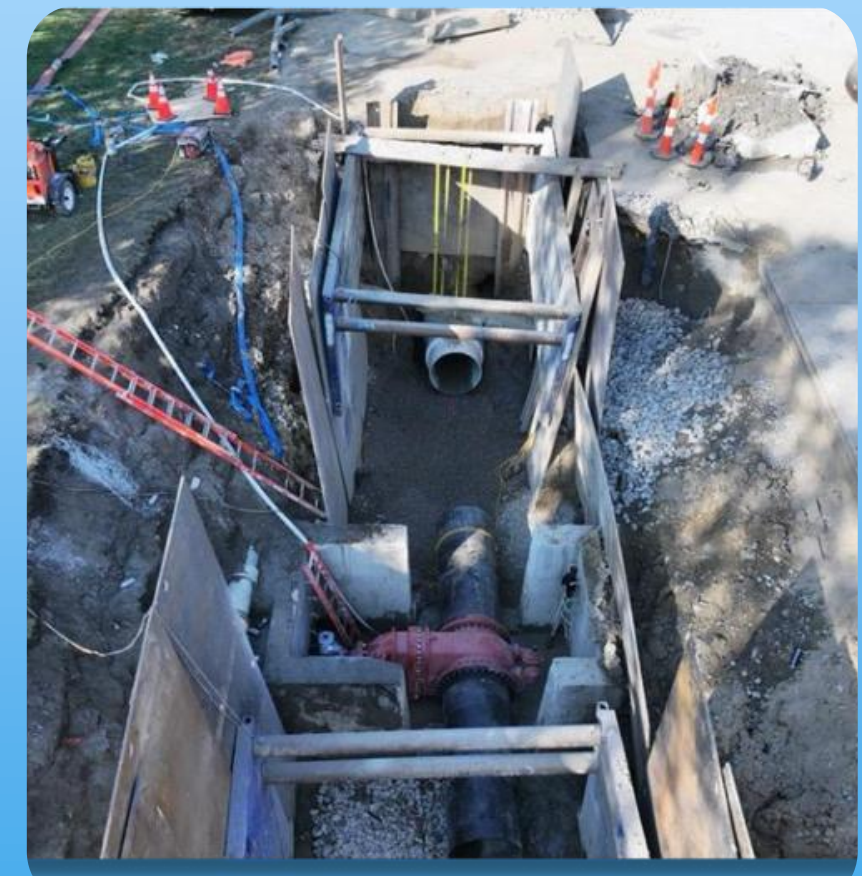
October 6

42" MAIN REPAIR VISUAL TIMELINE

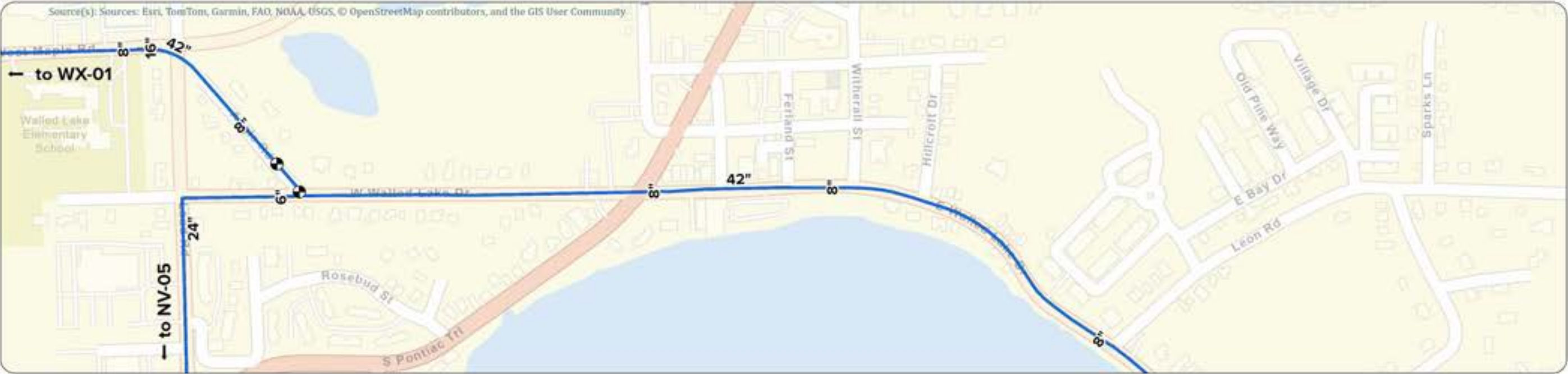


42" BREAK REPAIR

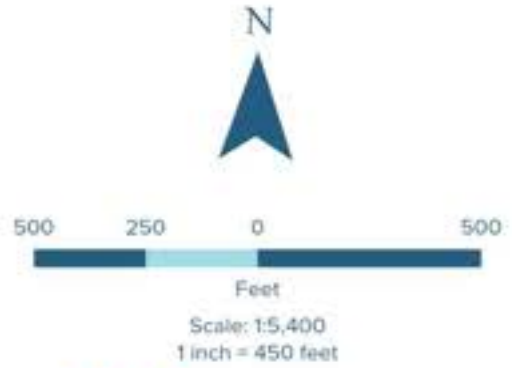
VISUAL TIMELINE



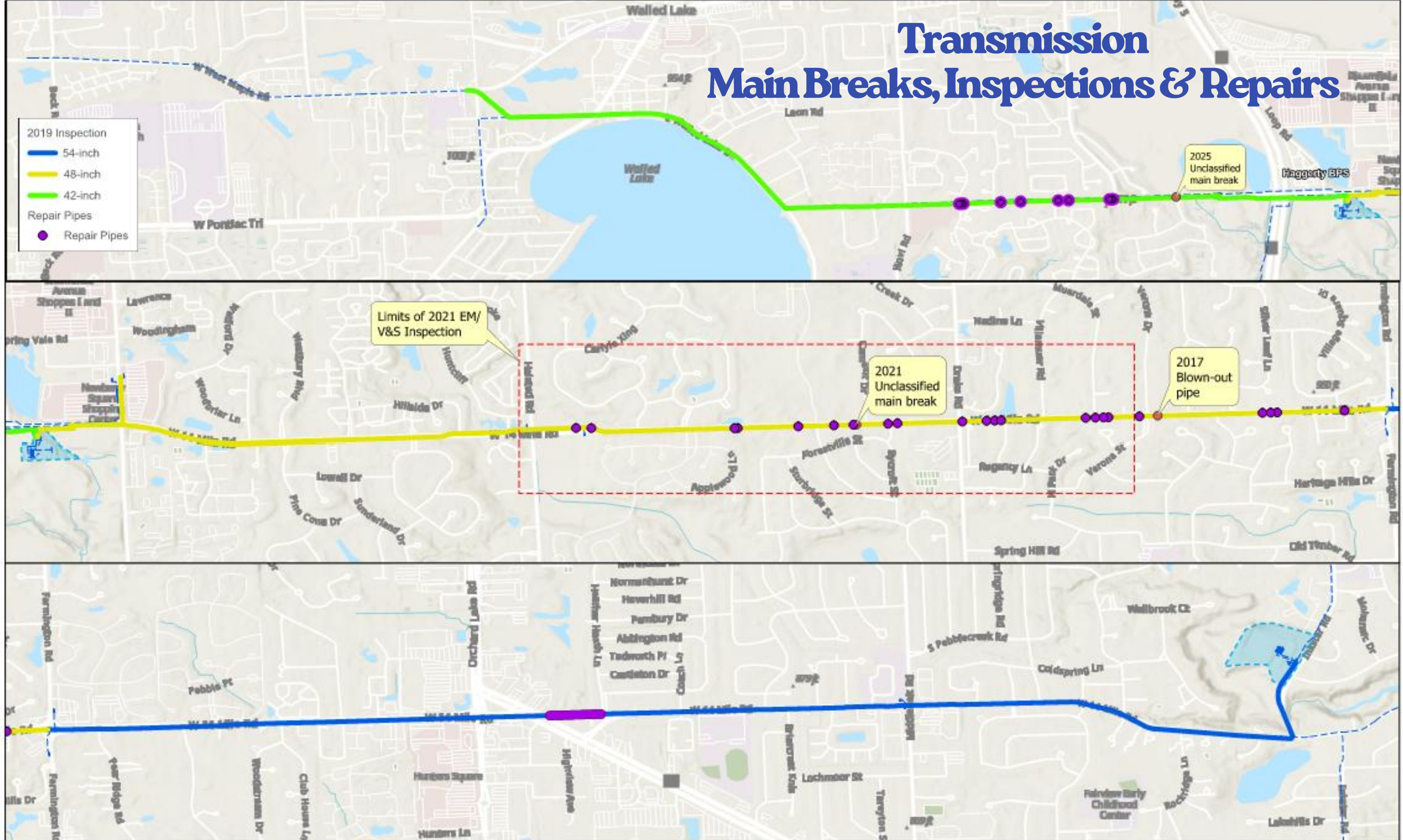
42" Water Main Break



- ✕ Main Break Location
- Ⓜ WAMR Site
- ⦿ Gate Valve
- ⦿ Tapping Sleeve Valve
- GLWA Transmission Main
- GLWA Outlet Main
- GLWA Meter Inlet Main



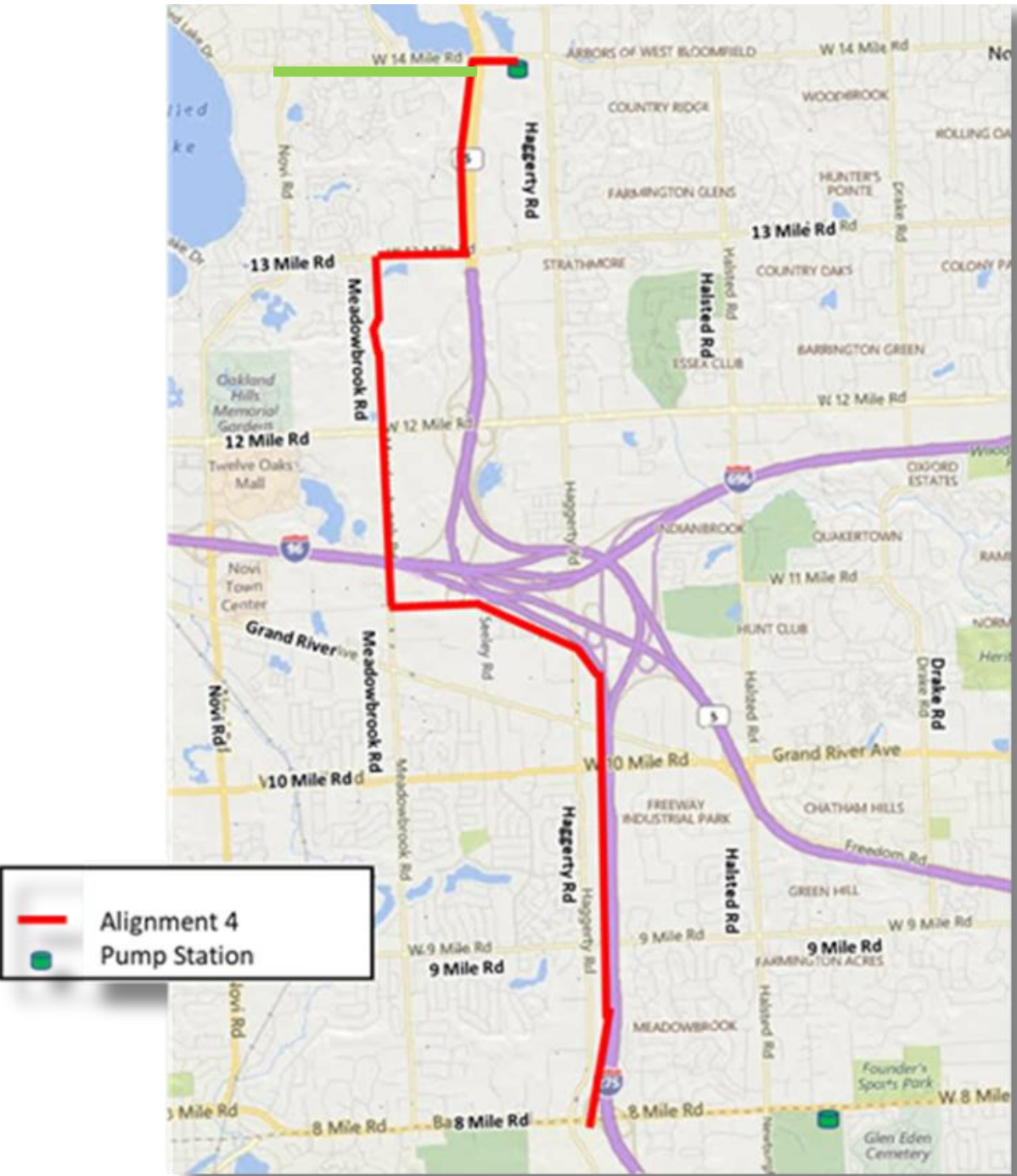
Transmission Main Breaks, Inspections & Repairs



GLWA IMPROVEMENTS

(Since 2019)

14-Mile Loop Project



WATER MAIN DESIGN

Start Date:
March 12, 2019
Completion Date:
January 12, 2025

TRANSMISSION MAIN PHASE I

Start Date:
August 10, 2020
Completion Date:
December 15, 2022

- 24-inch Transmission Main
- Approximately 1 Mile on 14 Mile West of M-5 to West of Novi Road

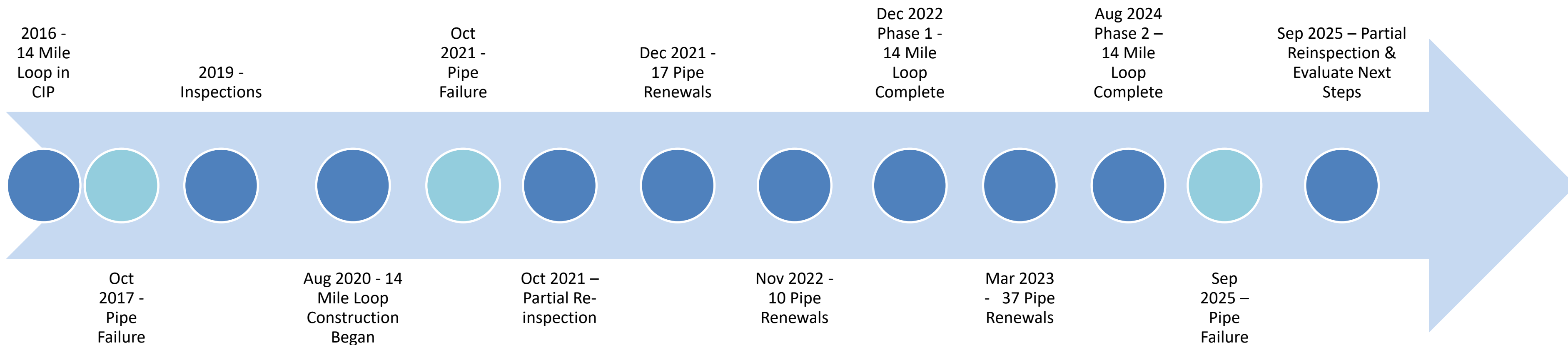
TRANSMISSION MAIN PHASE II

Start Date:
October 18, 2021
Completion Date:
August 30, 2024

- 54-inch Transmission Main
- Approximately 7.5 miles from 8 Mile to 14 Mile

14 Mile Road

Timeline of Activities



Since 2019, Inspections, Renewals & Looping Investment = \$129.2M



**THANK
YOU**