



## **PUBLIC MEETING TO SHARE INFORMATION ABOUT UPCOMING US-127 CORRIDOR CONSTRUCTION ACTIVITIES**

*January 31, 2023 Agenda:*

- 7:02 p.m. Welcome and Introduction**
- 7:05 p.m. Presentation**
- 7:45 p.m. Q&A**
- 8:00 p.m. Meeting Adjourn**

**All questions and answers will be published on the MDOT website.**

**Please visit the project website for more information: <https://www.michigan.gov/127Corridor>**



# Public Meeting: I-496 and US-127

January 31, 2023





# Title VI of the Civil Rights Act

Title VI of the Civil Rights Act of 1964 requires MDOT to provide the opportunity for everyone to comment on transportation programs and activities that may affect their community.

**Please take the three-question survey at the link in the chat.**

You can help MDOT comply with Title VI and related statutes, which require the collection of statistical data to aid in assessing MDOT's outreach efforts among those who are affected or interested in this project.



# Agenda

## I-496/US-127 from I-96 to I-69

- Introductions
- Project Overview
- Proposed Operational Improvements
- Preliminary Maintenance of Traffic scheme
- Environmental / Stakeholder Engagement Updates



# I-496 & US-127 Construction Work

## I-496 & US-127 proposed construction work by year:

### 2023 Construction (begin work in February):

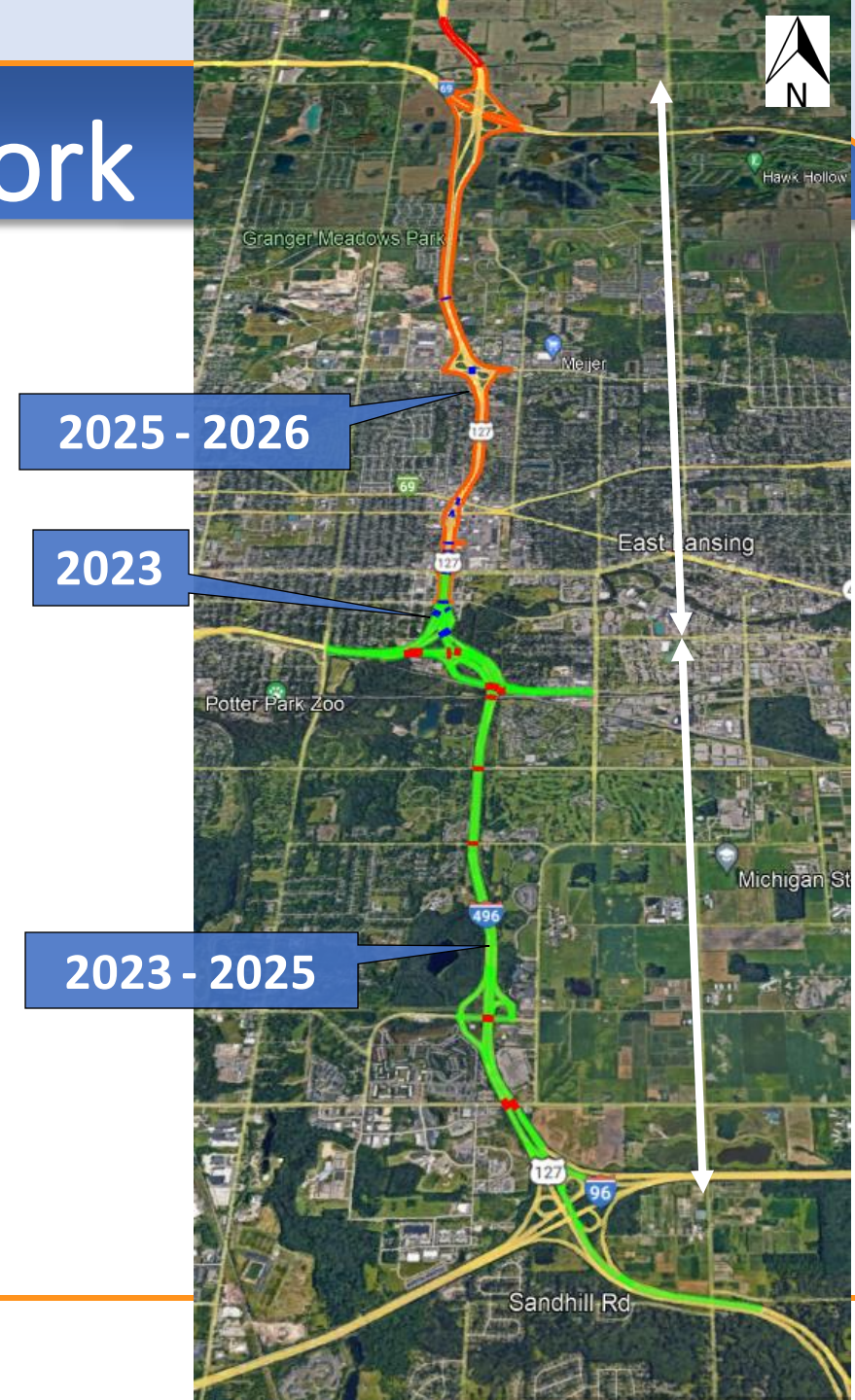
EB I-496 to NB US-127 Ramp and SB US-127 to WB I-496 Ramp bridge and roadway reconstruction

### 2023 to 2025 Construction (begin work late in 2023):

Reconstruction of I-496/US-127 from I-96 to I-496

### 2025 to 2026 Construction (begin work early in 2025):

Rehabilitation of US-127 from I-496 to I-69





# Bridge Replacements in 2023

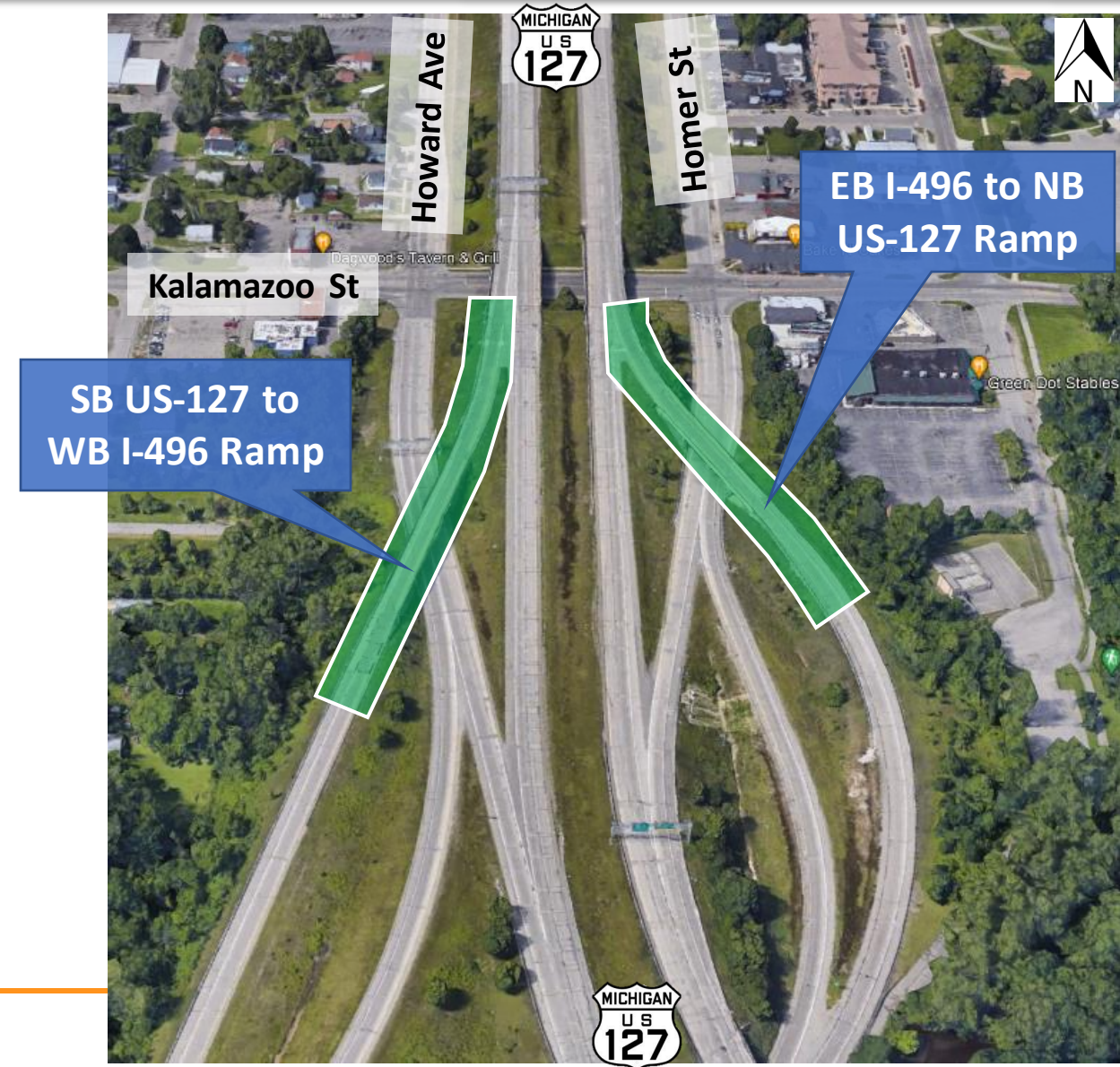
## Construction Activities:

Construction to begin in February 2023  
and end in mid to late 2023

Two bridge replacements

Ramp roadway reconstruction work  
near the bridges

Traffic signing and pavement marking  
replacement



# Bridge Replacements in 2023

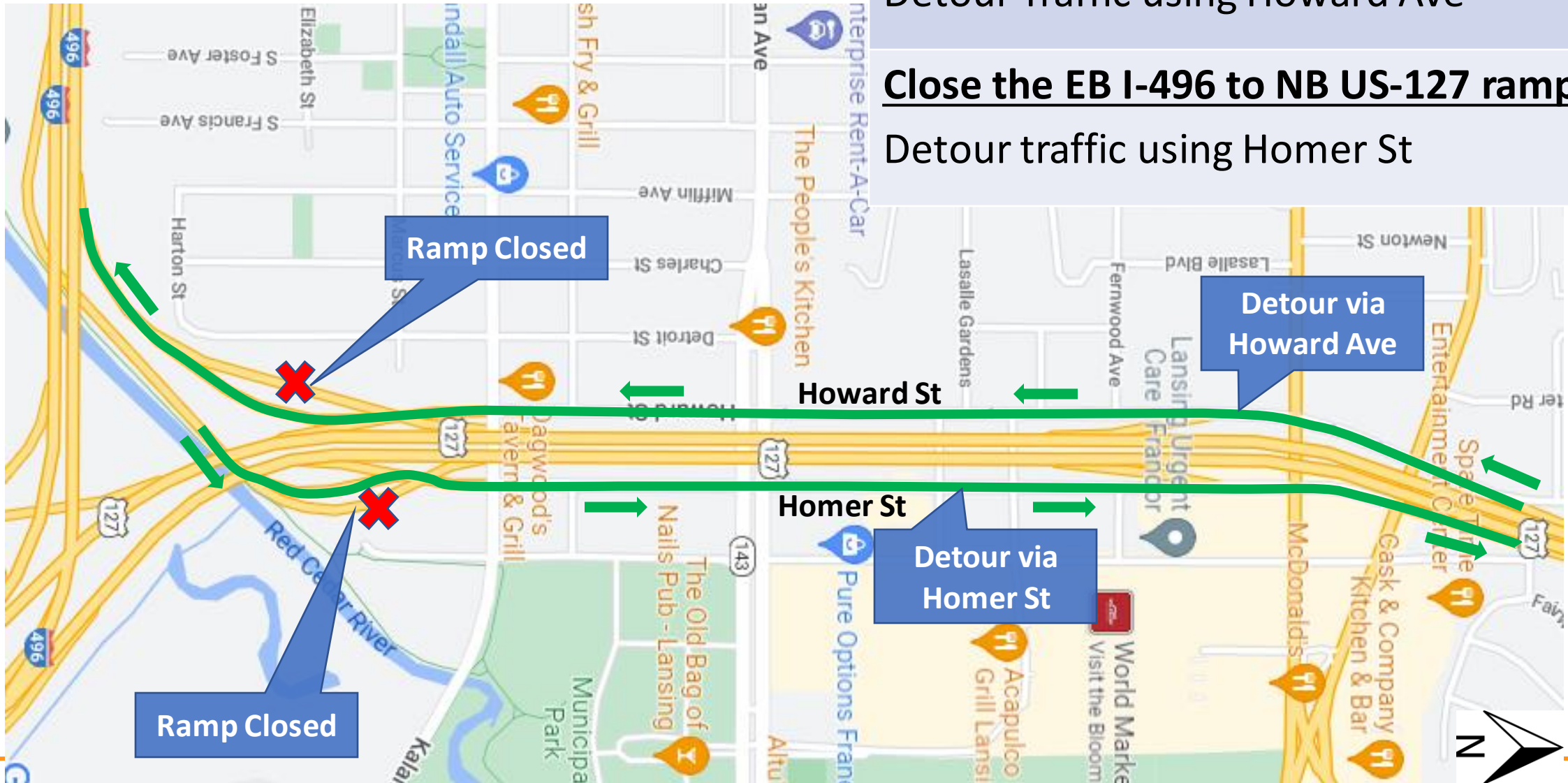
## Maintenance of Traffic Operations:

**Close the SB US-127 to WB I-496 ramp:**

Detour Traffic using Howard Ave

**Close the EB I-496 to NB US-127 ramp:**

Detour traffic using Homer St





# I-496/US-127 Reconstruct from I-96 to I-496

## Project information:

Reconstruction of 3.7 miles of roadway from I-96 to I-496

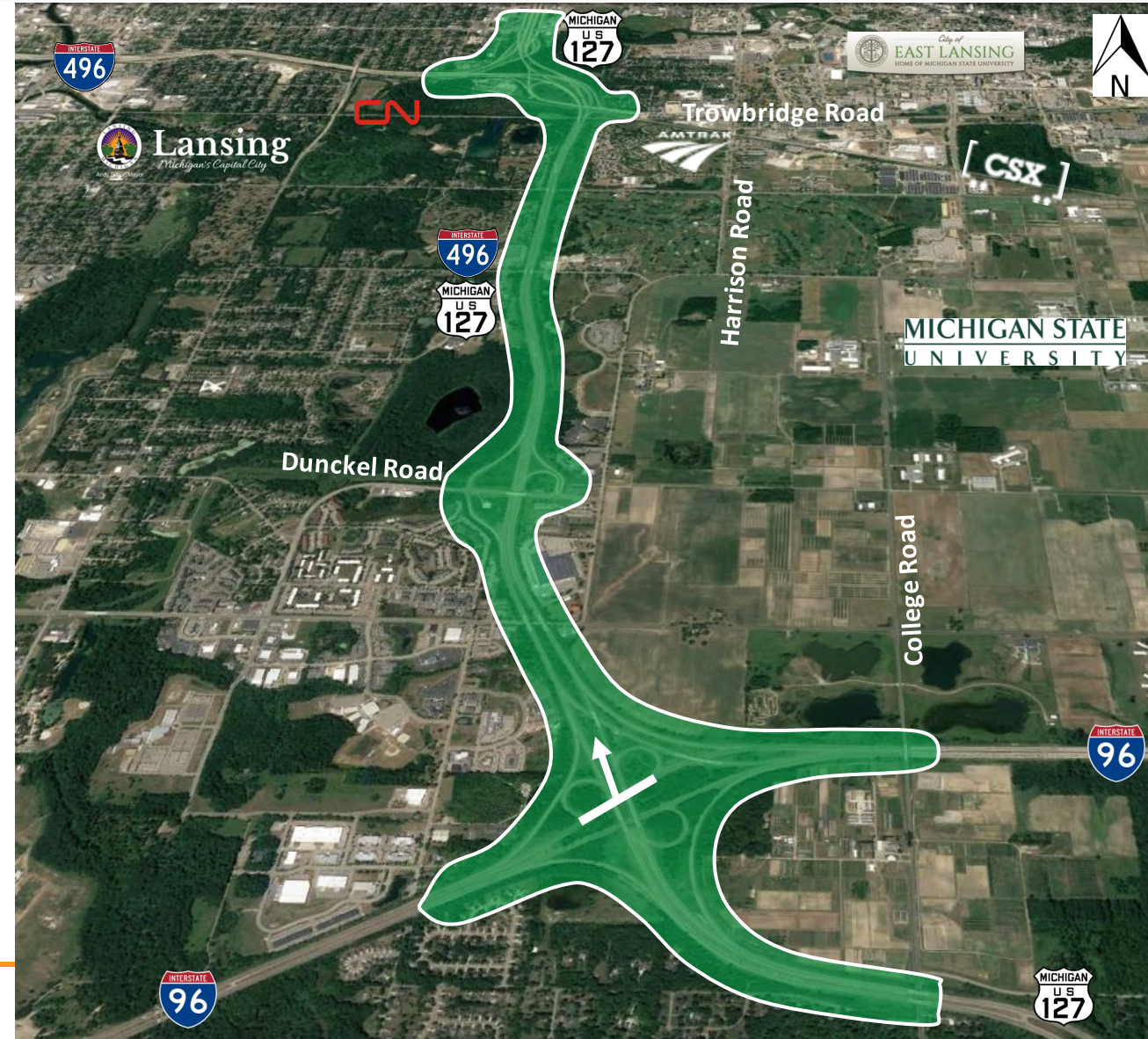
Reconstruction of the Dunckel Rd and Trowbridge Rd interchange ramps

Work on 18 bridges

Reconstruction of Trowbridge Rd

Addition of freeway lighting from Dunckel Rd to Trowbridge Rd

Rebuilding to occur from late 2023 through the end of 2025





# US-127 Rehabilitation from I-496 to I-69

## Project information:

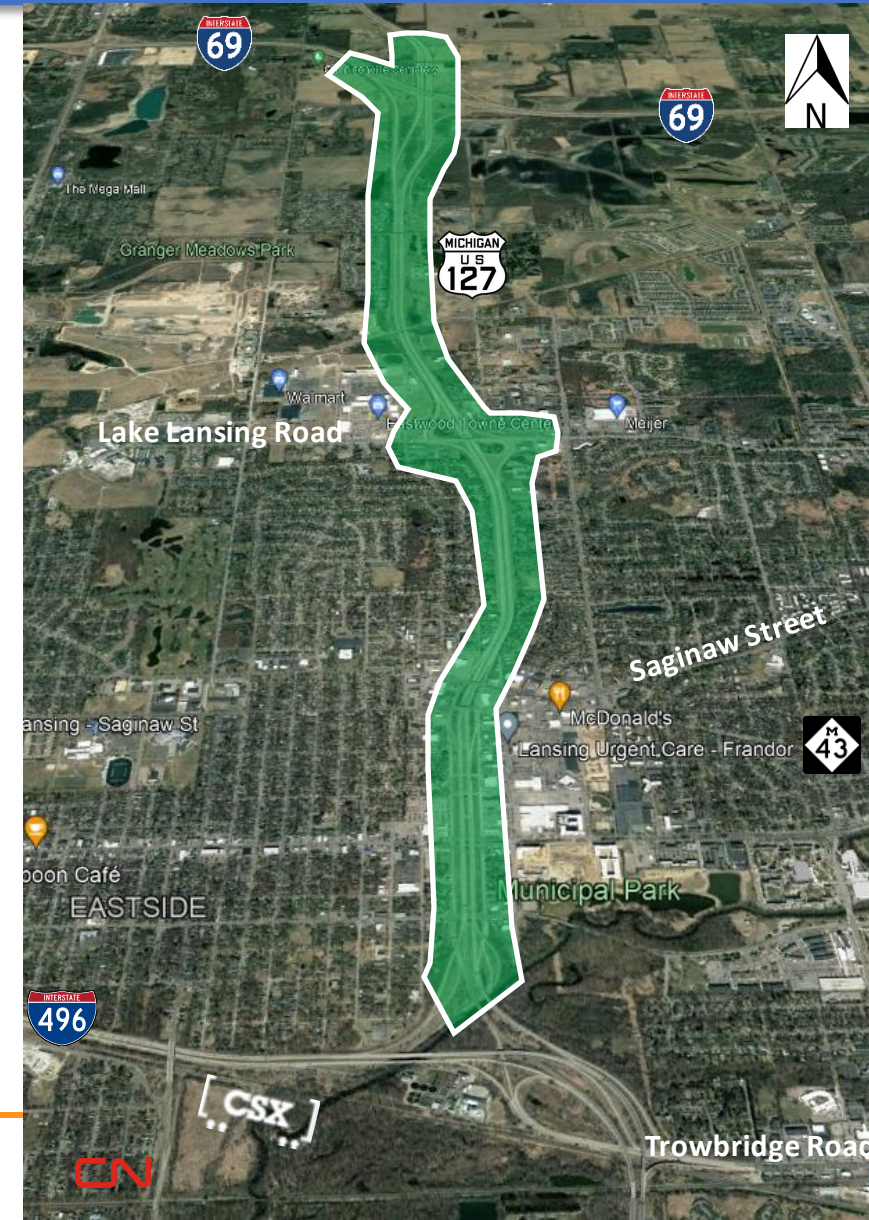
Reconstruction and rehabilitation of 6.1 miles of roadway from I-496 to I-69

Rehabilitation of the Saginaw Hwy and I-69 interchange ramps

Work on 17 bridges

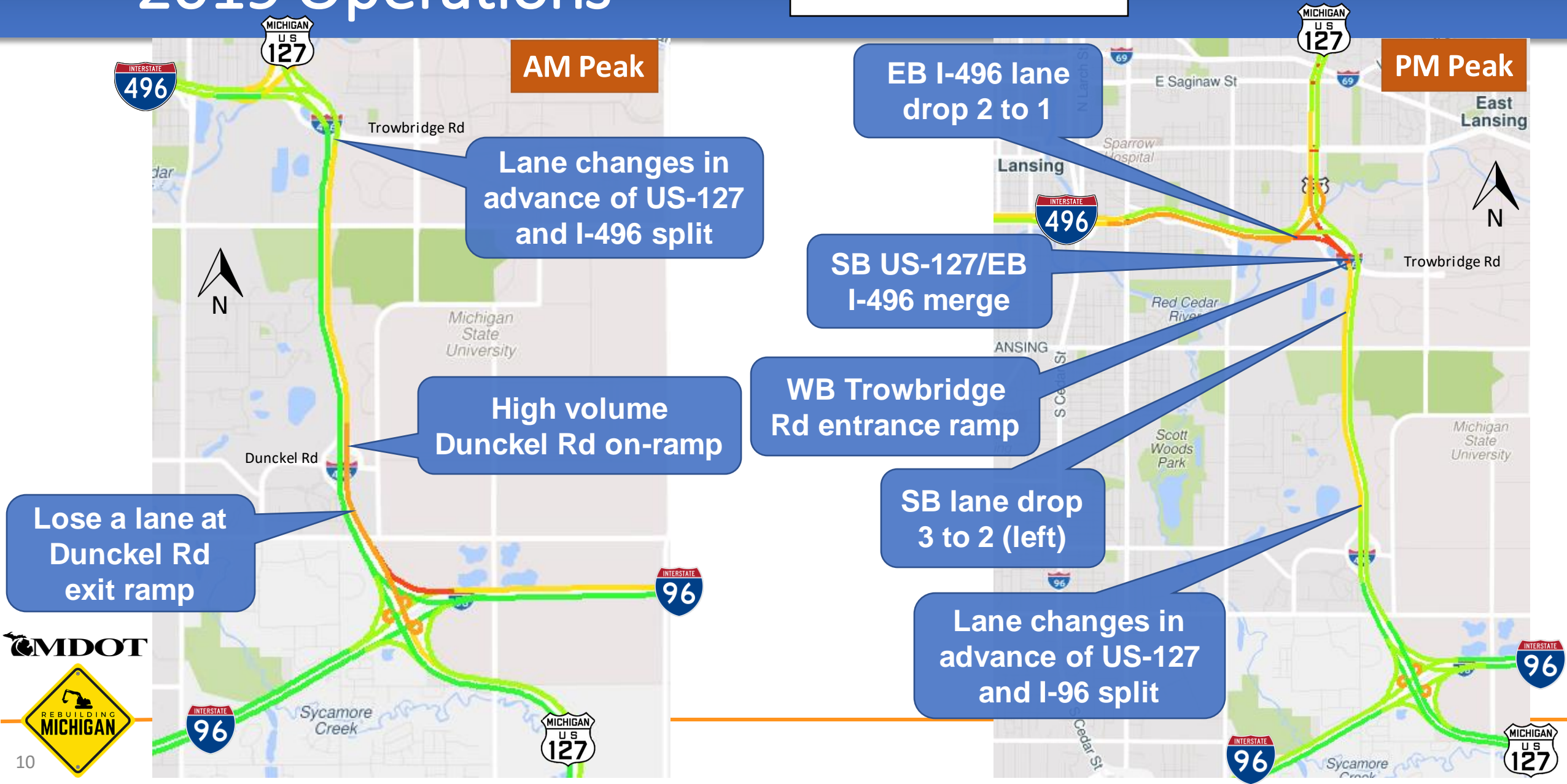
Replacement of traffic signing and pavement markings

Rebuilding is anticipated to occur from 2025 through the end of 2026



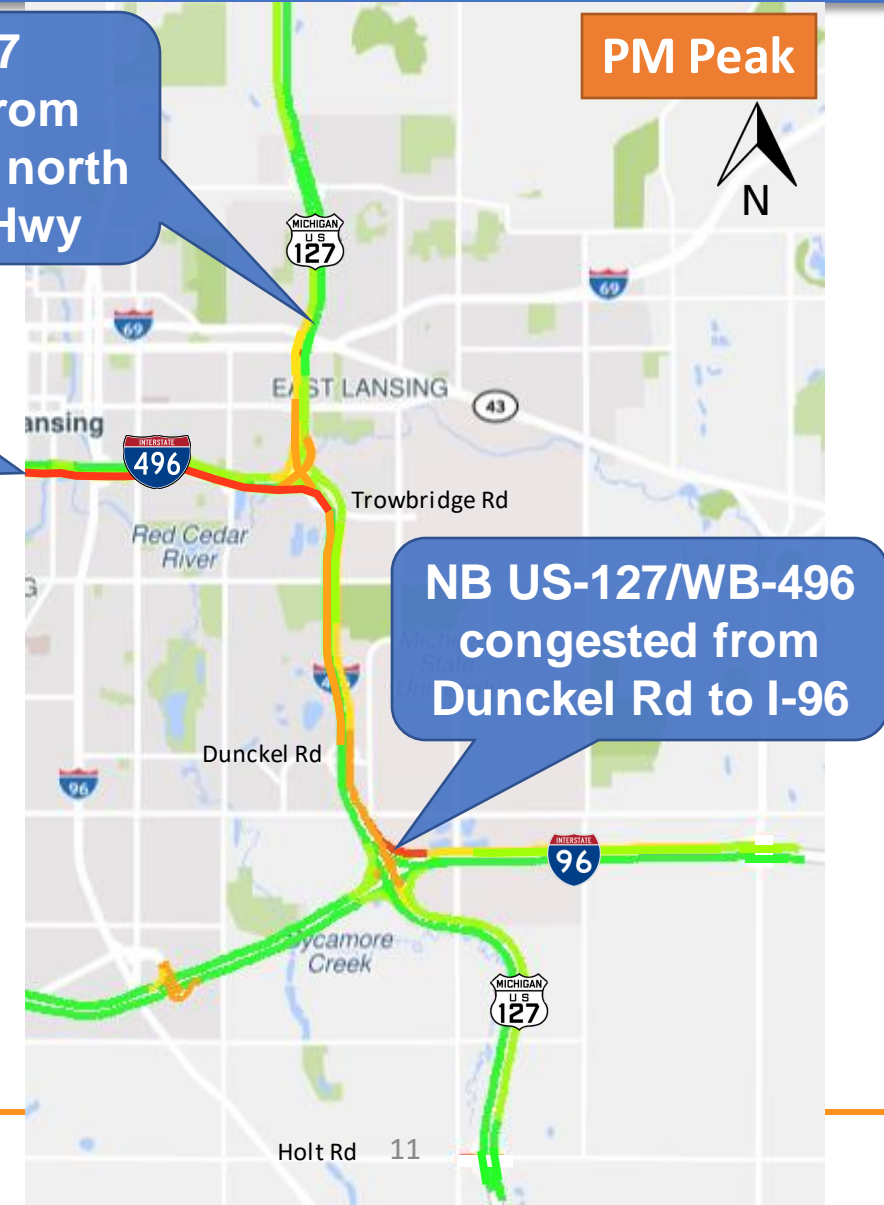
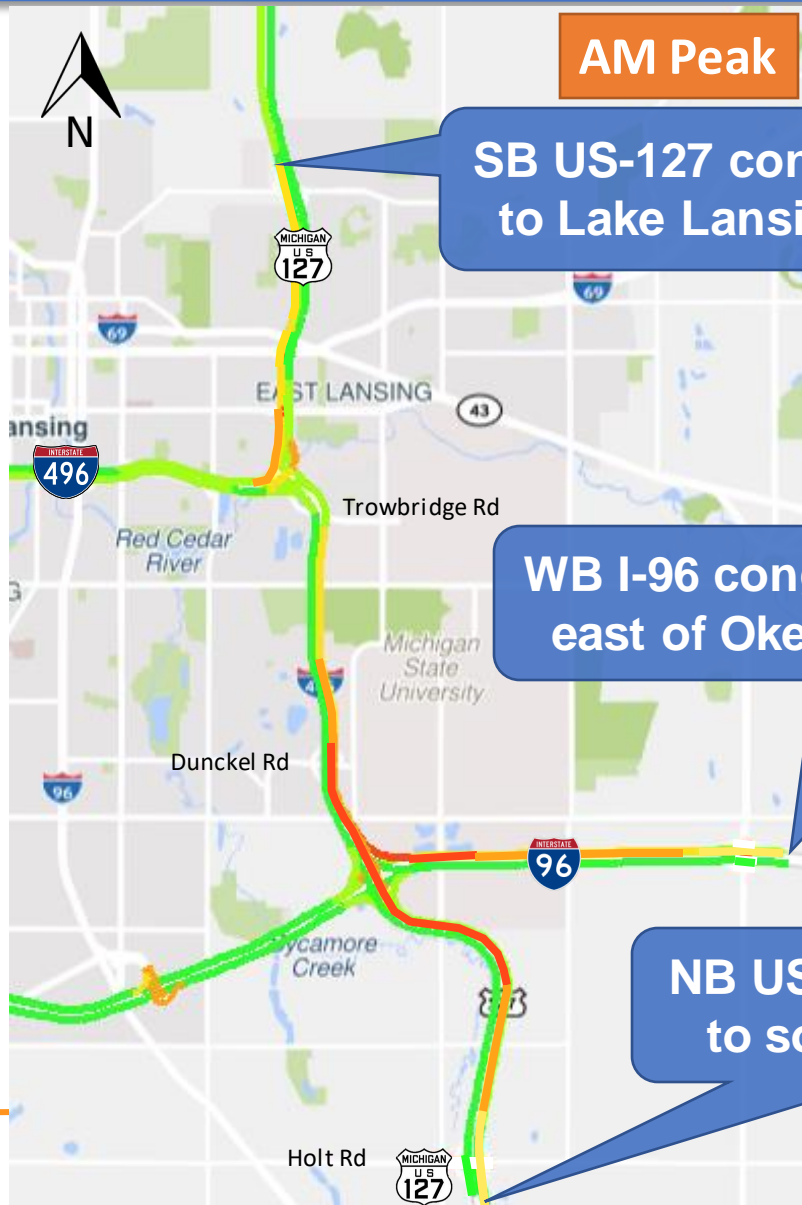
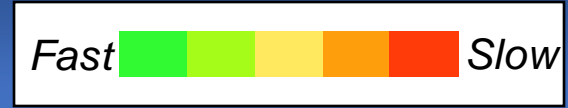
# 2019 Operations

Fast  Slow





# 2045 Operations (No-Build)



# Key takeaways from the “Operations” slides

## “Operations” slide key takeaways:

AM Peak issues are due to lane drops at Dunckel Rd, high traffic volumes entering NB US-127 from Dunckel Rd and lane configuration issues at I-496 and US-127 split.

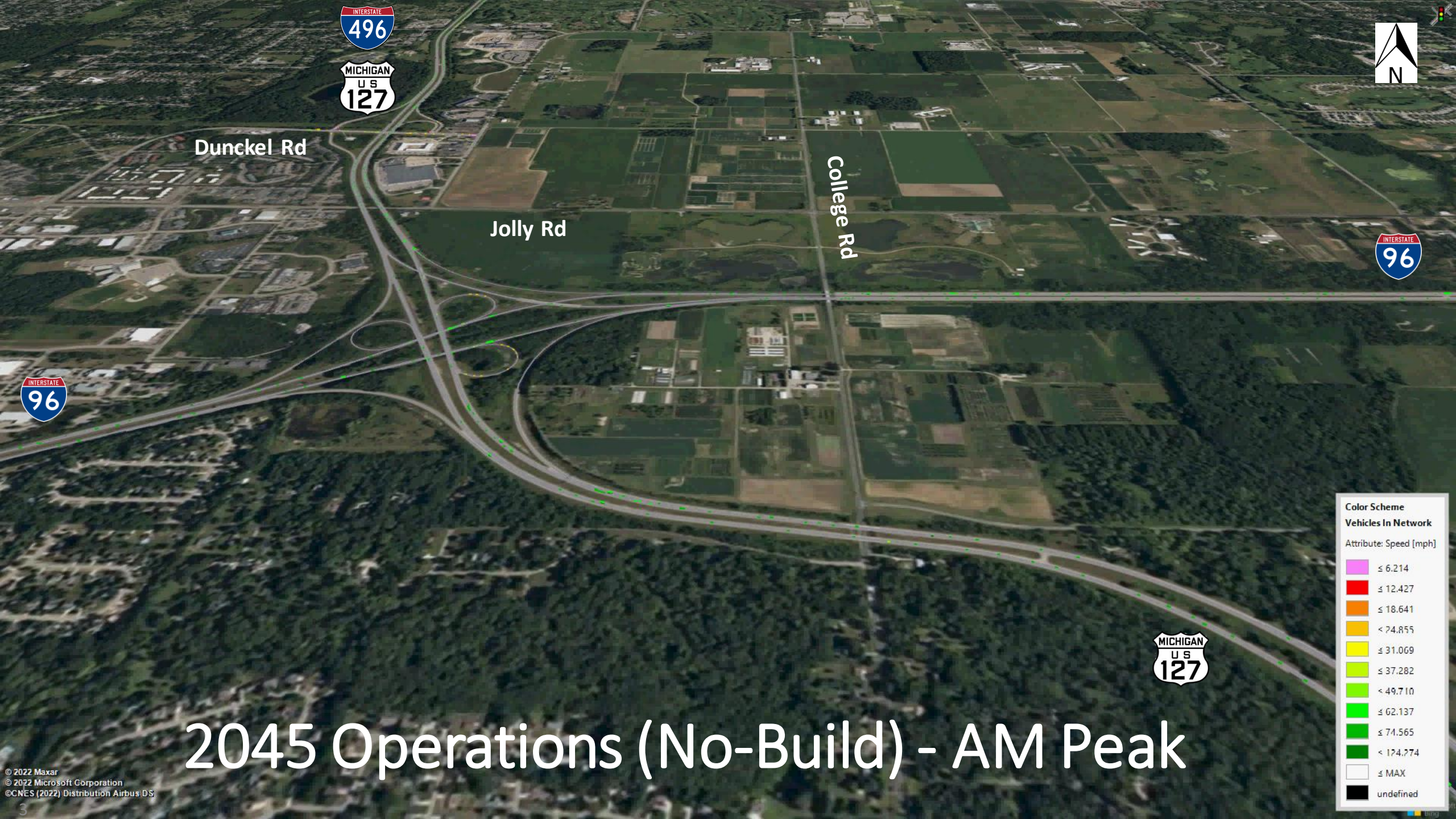
PM Peak issues are due to lanes drops along EB I-496 and SB US-127 and freeways merging in with each other.

Traffic operations worsen if the roadway is not upgraded in future years.

NB US-127 begins to see congestion at Dunckel Rd in the PM Peak in the future.







Dunckel Rd

Jolly Rd

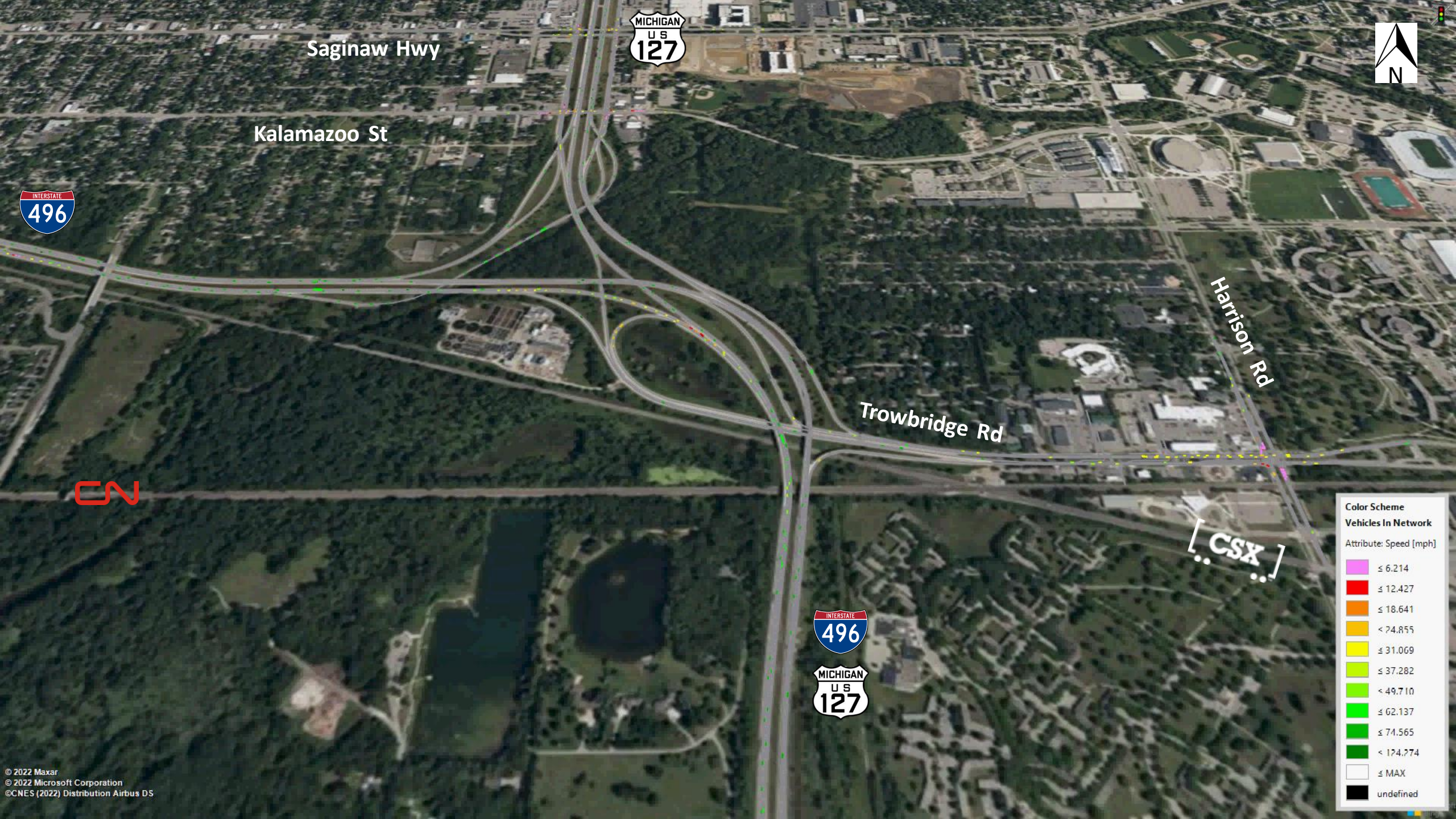
College Rd



# 2045 Operations (No-Build) - AM Peak

Color Scheme	
Vehicles In Network	
Attribute: Speed [mph]	
≤ 6.214	
≤ 12.427	
≤ 18.641	
< 24.855	
≤ 31.069	
≤ 37.282	
< 49.710	
≤ 62.137	
≤ 74.565	
< 124.274	
≤ MAX	
undefined	





Saginaw Hwy

Kalamazoo St

Harrison Rd

Trowbridge Rd

[CSX]



Color Scheme	
Vehicles In Network	
Attribute: Speed [mph]	
	≤ 6.214
	≤ 12.427
	≤ 18.641
	< 24.855
	≤ 31.069
	≤ 37.282
	< 49.710
	≤ 62.137
	≤ 74.565
	< 124.274
	≤ MAX
	undefined



# Geometrics

## Roadway and Bridge Geometric Review

Horizontal alignment

Vertical alignment

Bridge underclearance

Ramp configurations

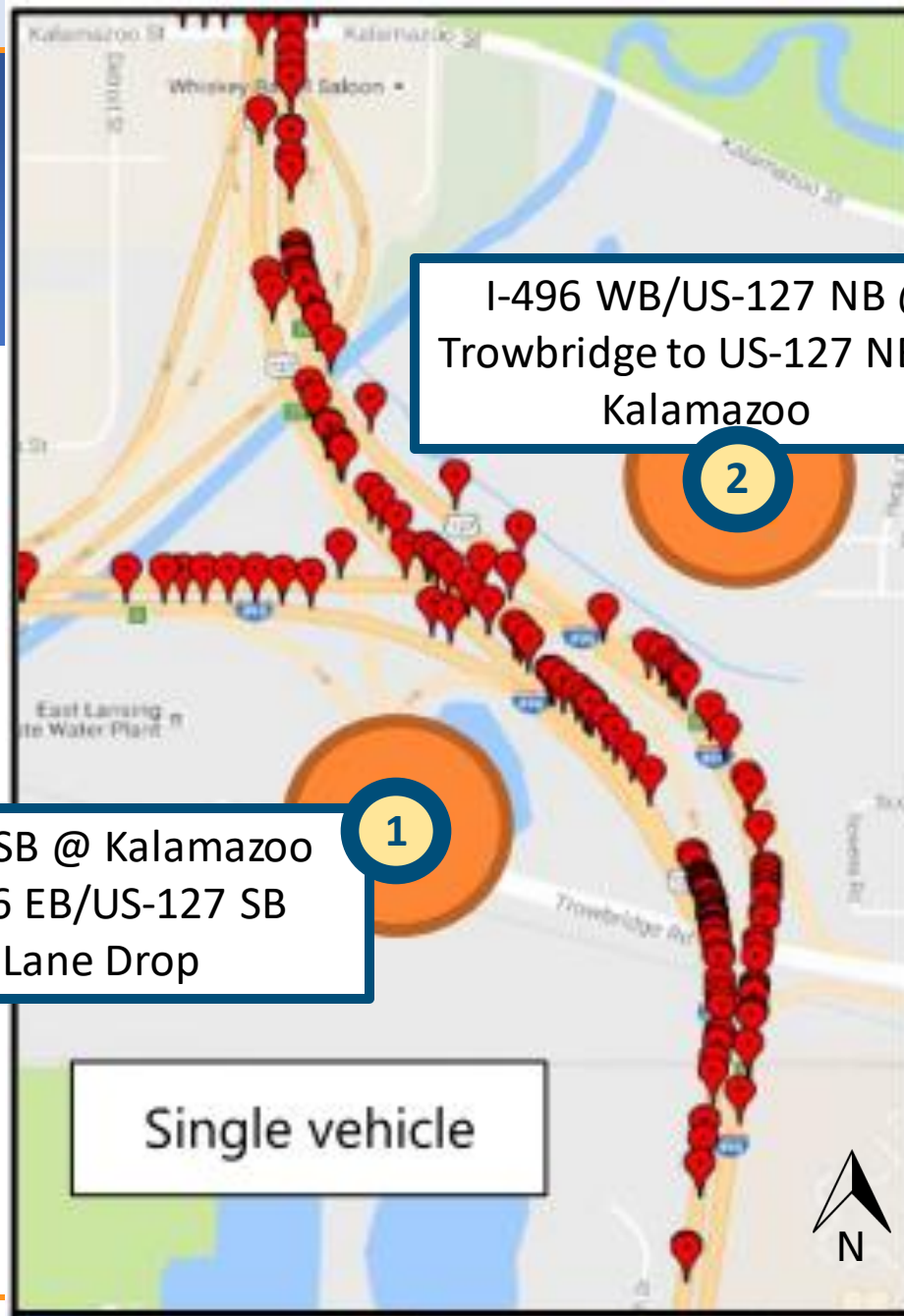


# Crash Analysis

## Details

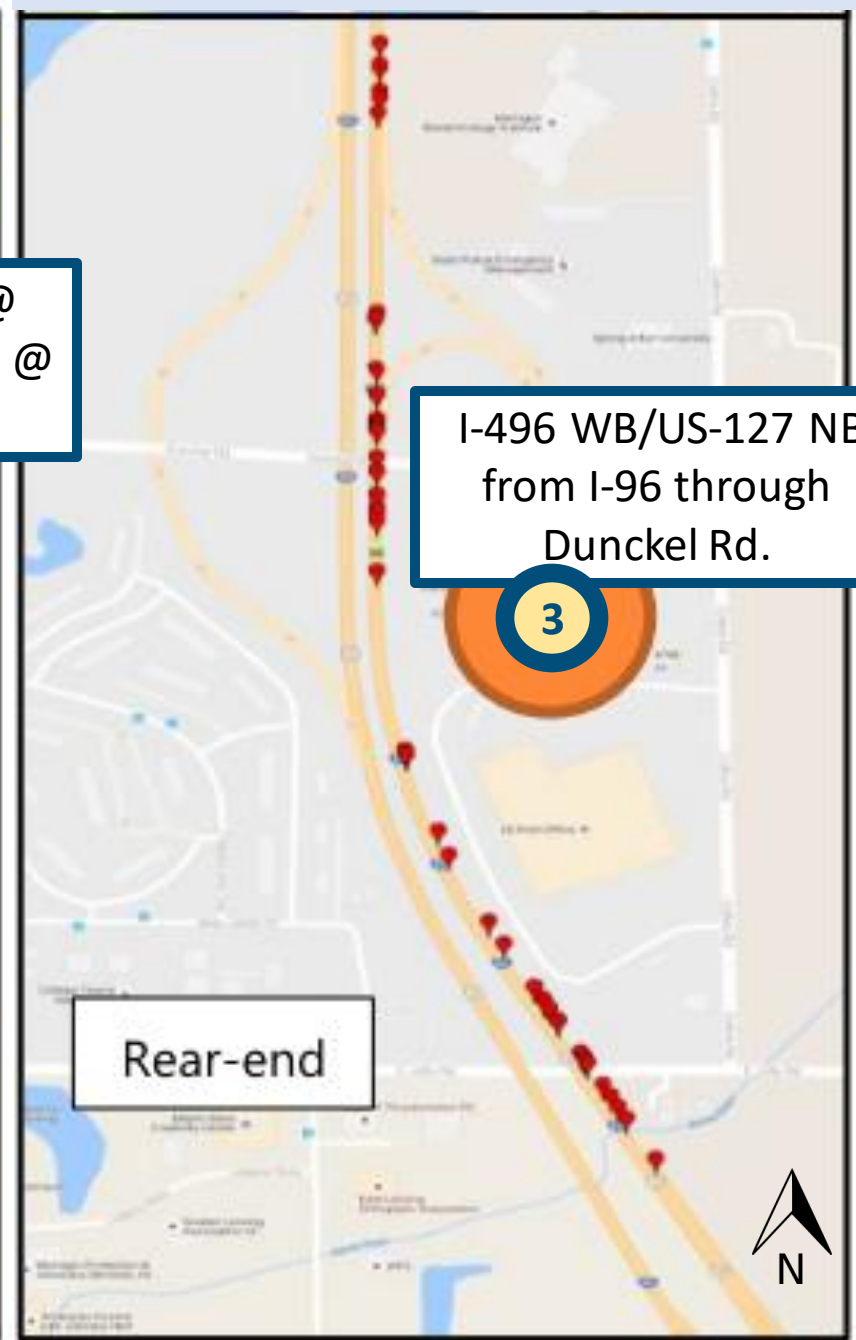
5-year review period

Does not include the Covid-19 timeframe



I-496 WB/US-127 NB @  
Trowbridge to US-127 NB @  
Kalamazoo

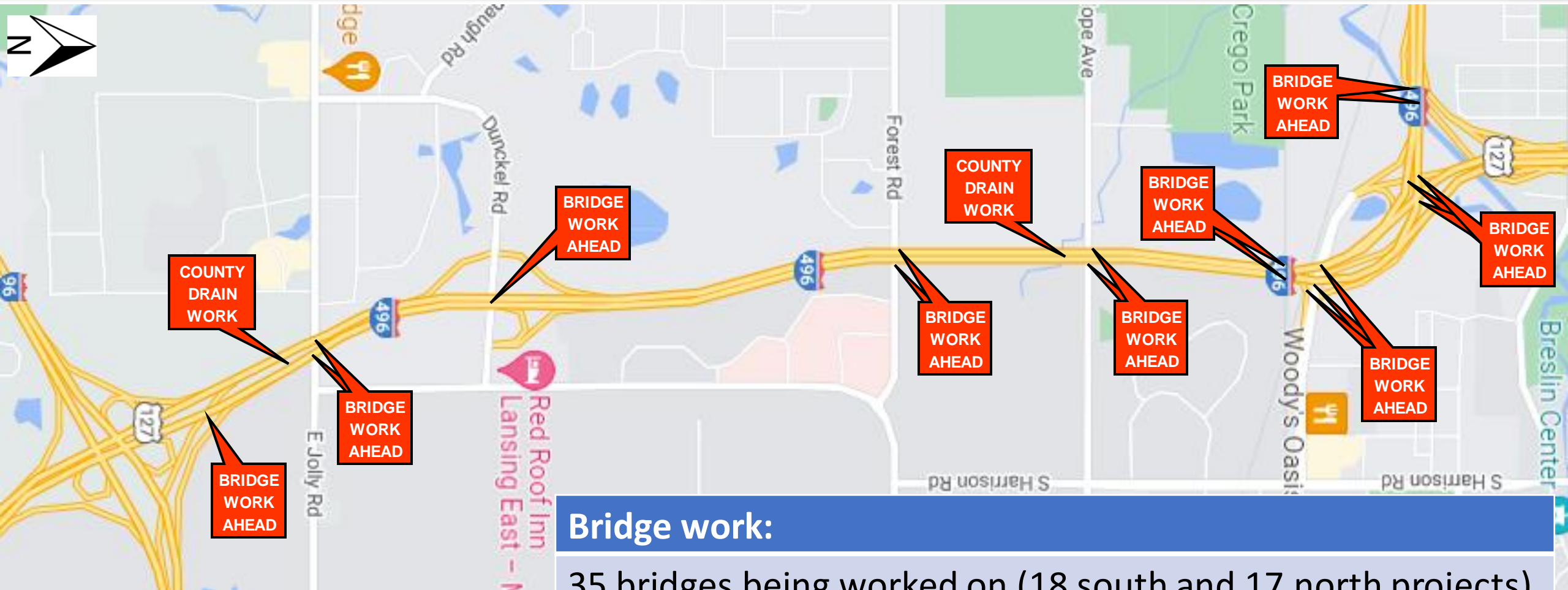
2



3



# Bridge Work



## Bridge work:

35 bridges being worked on (18 south and 17 north projects)

Fix types vary from full reconstruction to rehabilitation

2 drain crossings are being replaced



# Proposed Roadway Fix

## Roadway fix based on Operational Analysis

### WB I-496 / NB US-127:

- Add a 3<sup>rd</sup> lane from Dunckel Rd to I-496
- Extend the NB Dunckel on-ramp acceleration lane
- 2 dedicated lanes to both NB US-127 & WB I-496

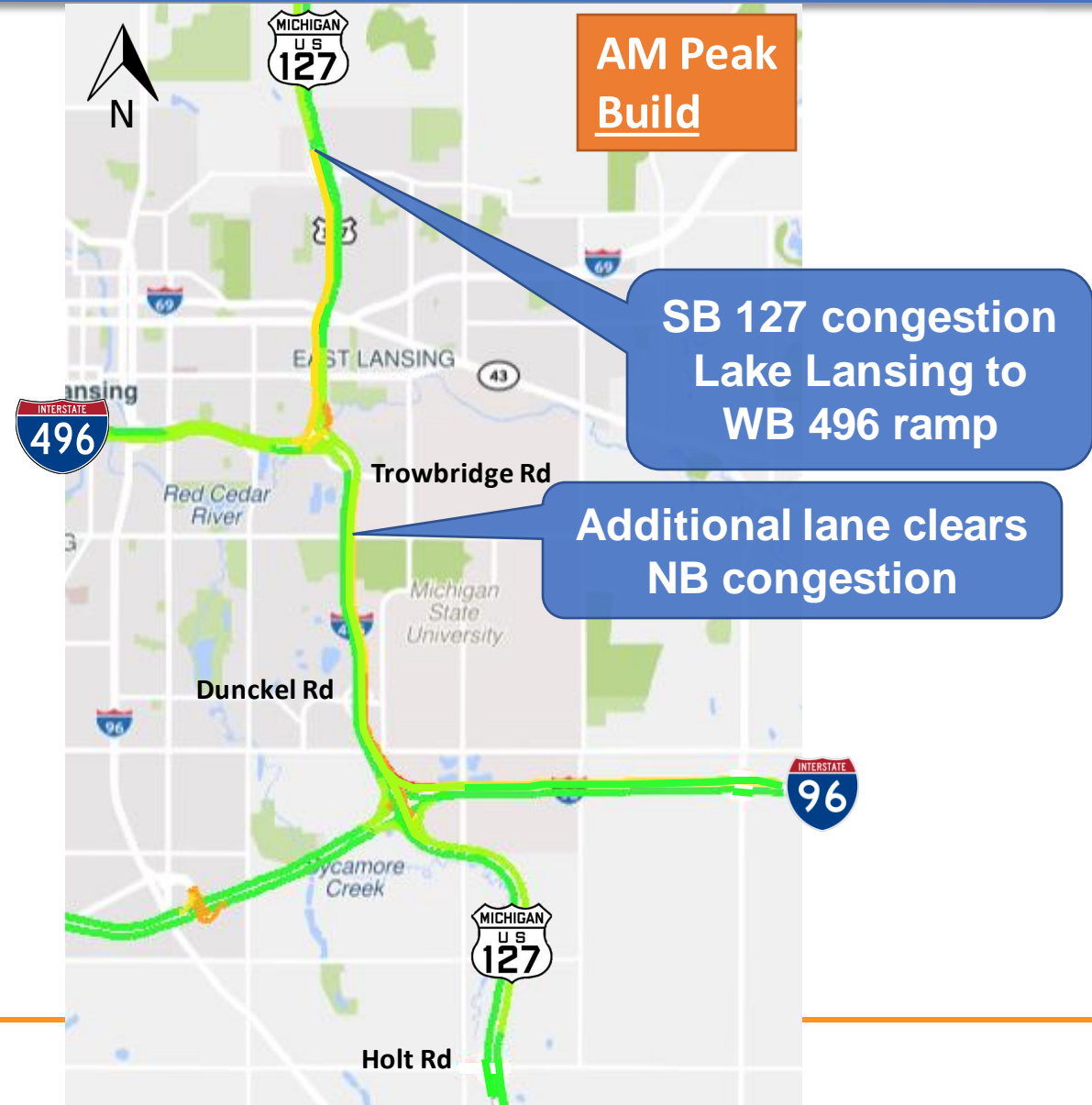
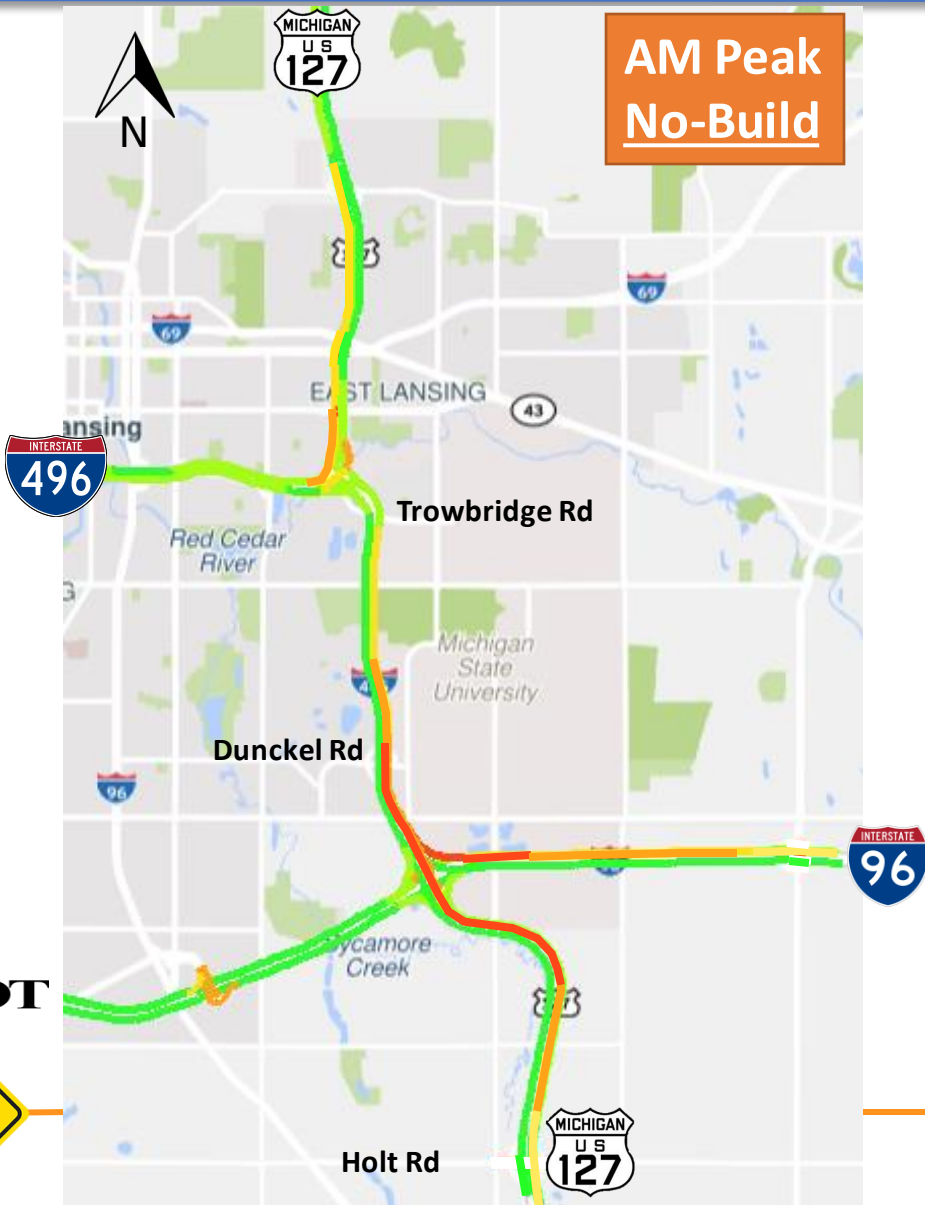
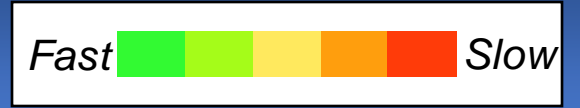
### EB I-496 / SB US-127:

- Add a 3<sup>rd</sup> lane from EB I-496 to Dunckel Rd
- Extend the SB US-127 median lane drop
- 2 dedicated lanes to both SB US-127 & EB I-96

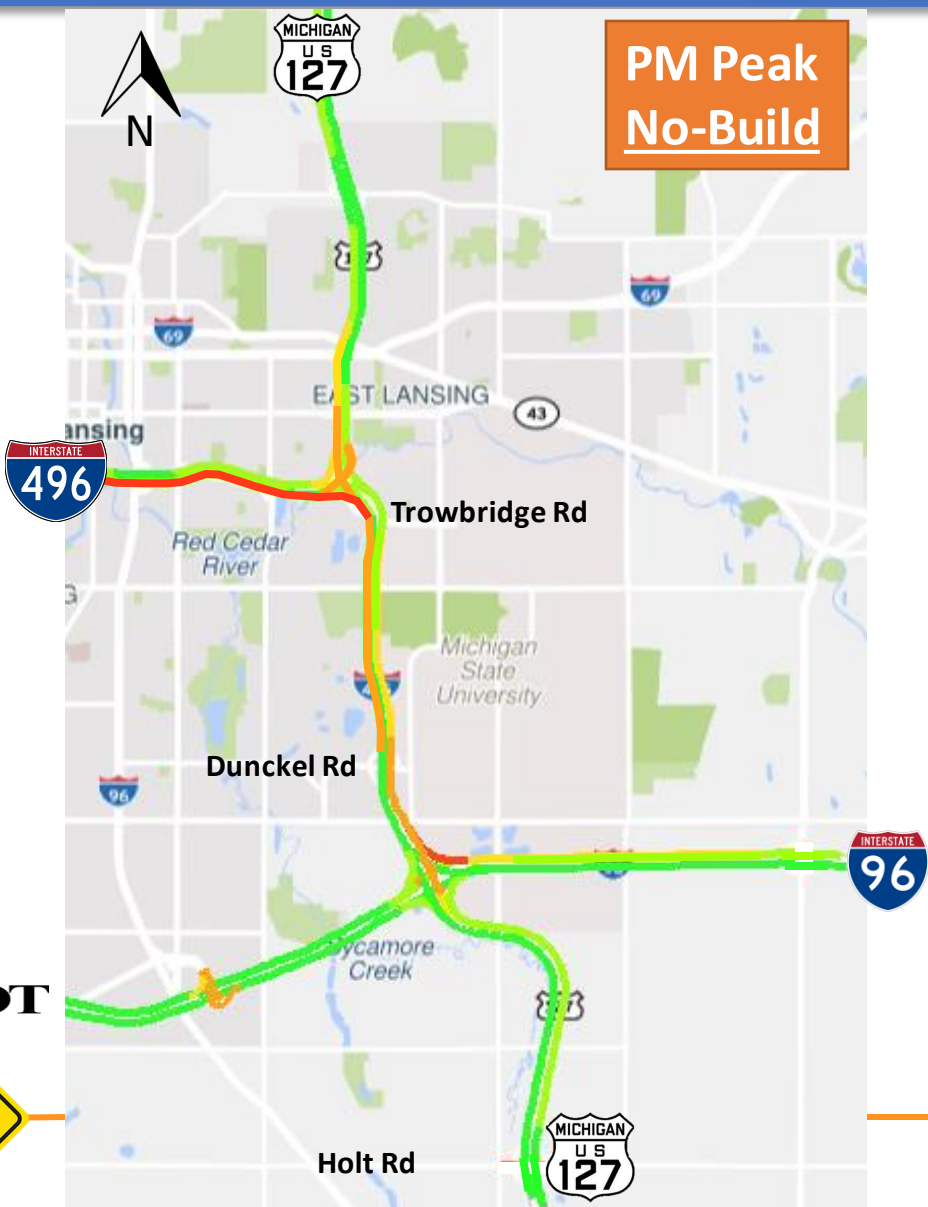
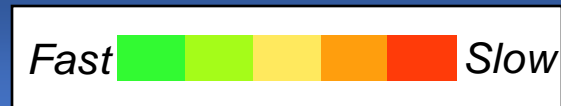




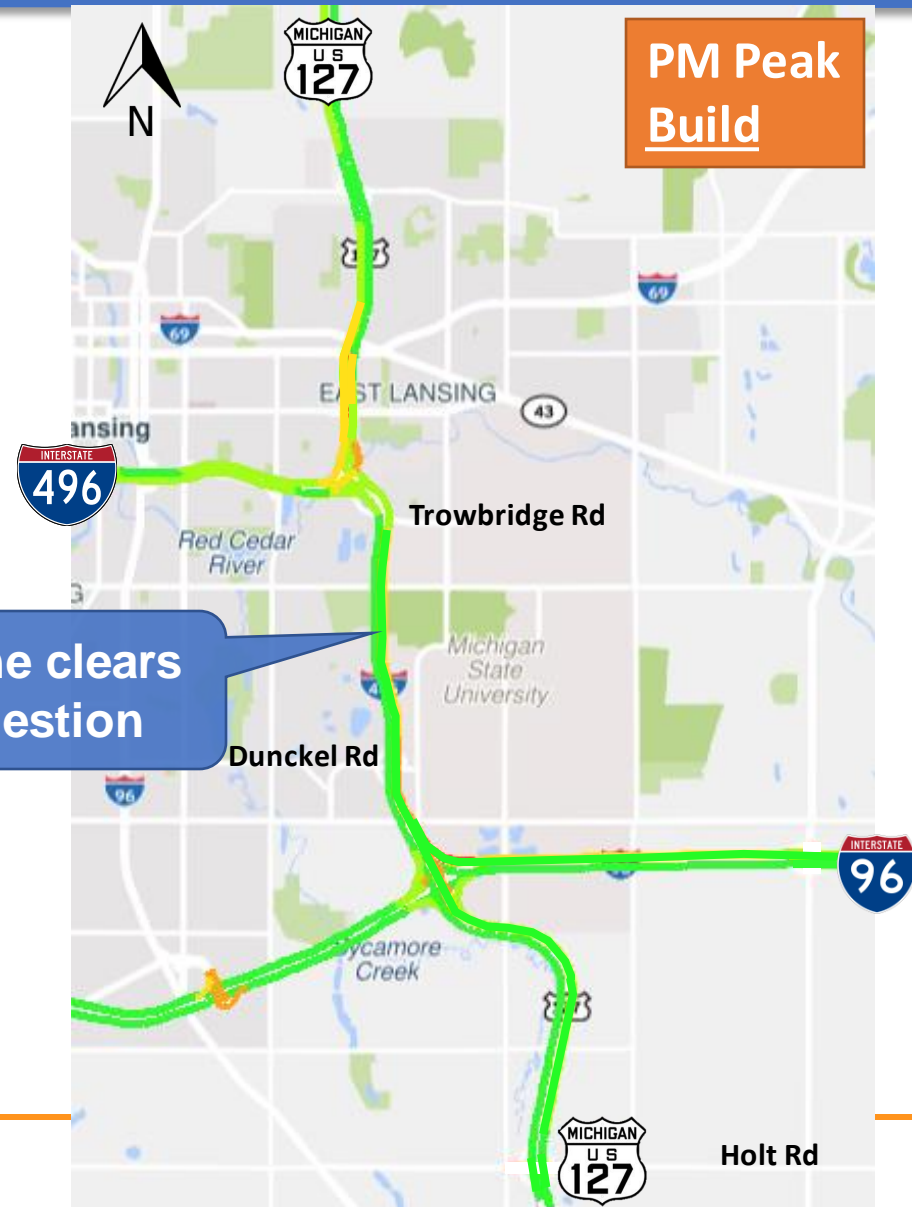
# 2045 Operations (No-Build vs Build)



# 2045 Operations (No-Build)



Additional lane clears  
SB/NB congestion





# NB US-127 & WB I-496 exit ramp to Trowbridge Rd

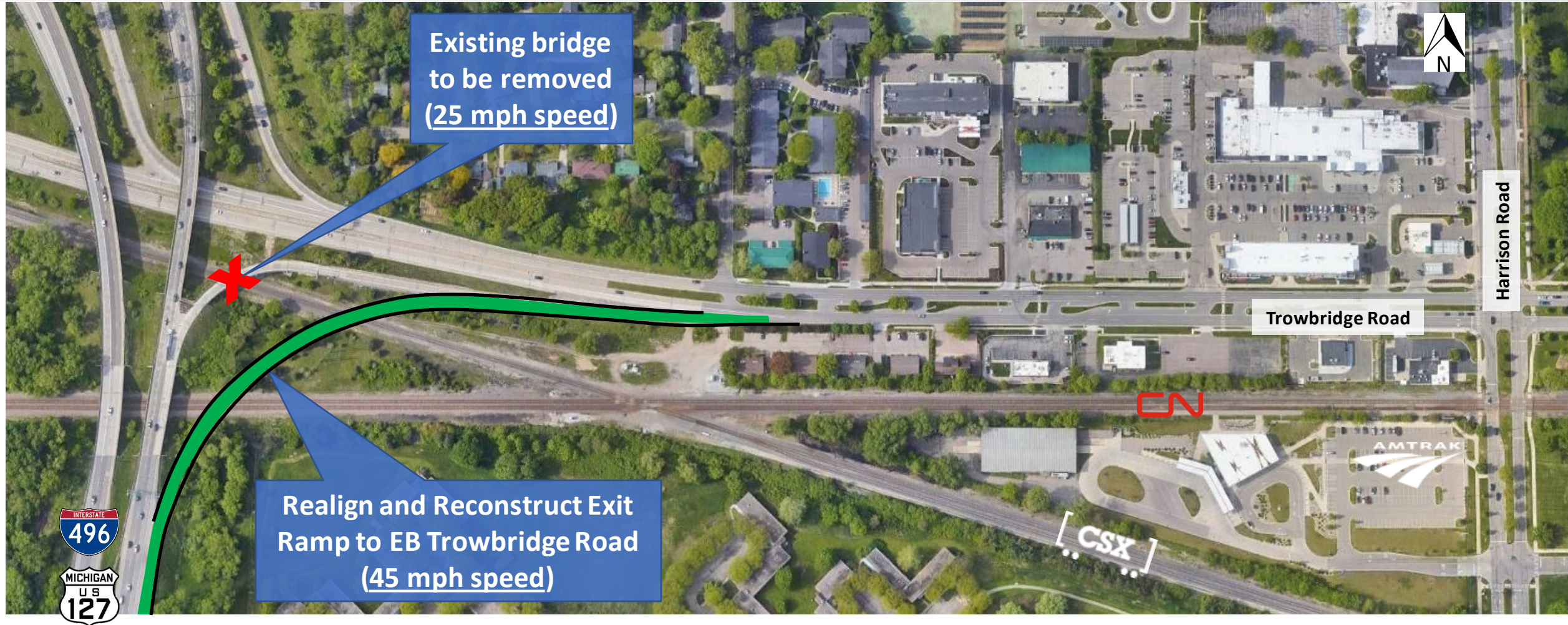


Existing ramp and  
bridge to be removed  
(25 mph speed)





# NB US-127 & WB I-496 exit ramp to Trowbridge Rd





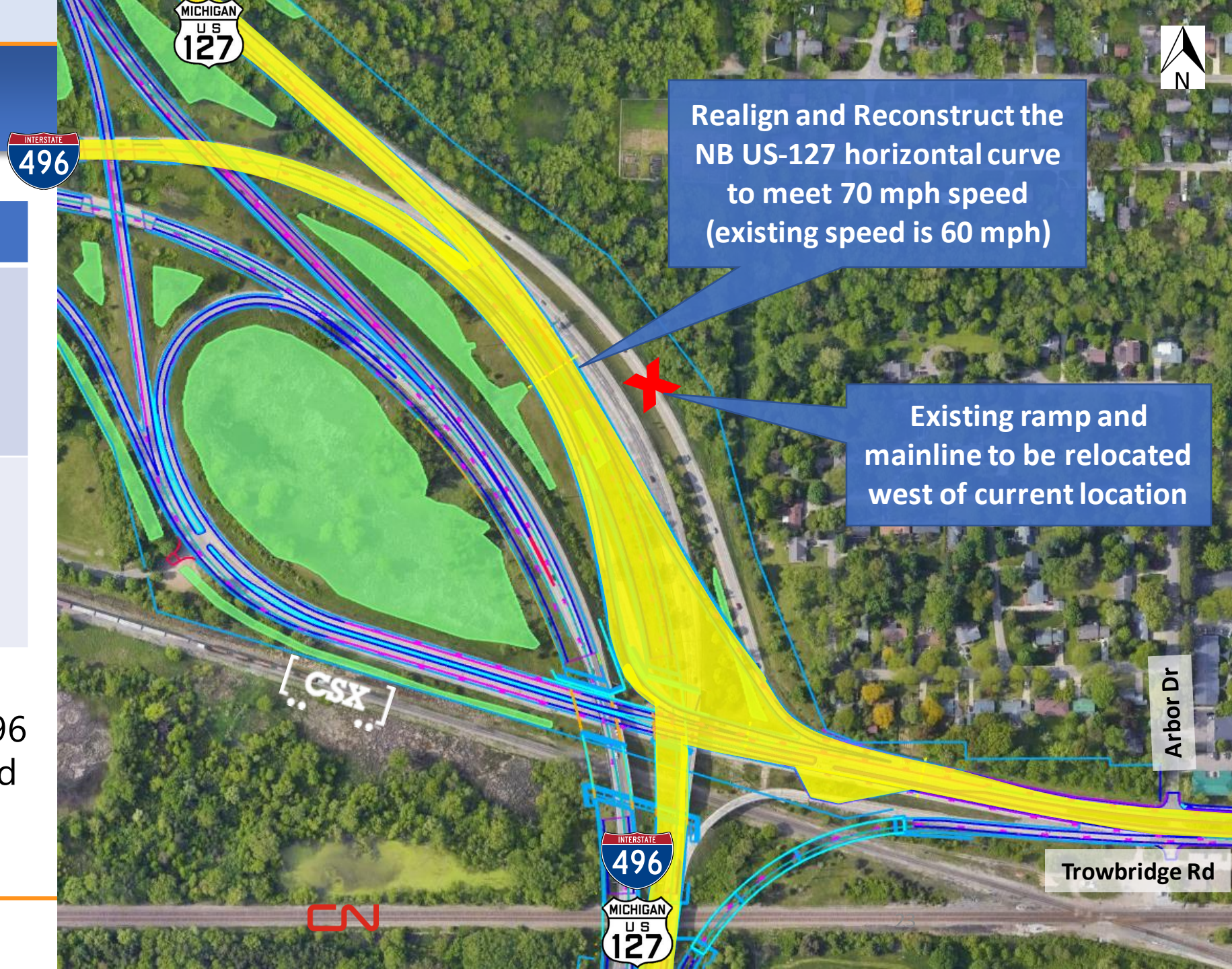
# NB US-127

## Project information:

NB US-127 horizontal curve to meet 70 mph design speed

WB Trowbridge ramp to NB US-127 to move approx. 150 ft west

Note: NB US-127 and WB I-496 proposed roadway highlighted in yellow.



Realign and Reconstruct the NB US-127 horizontal curve to meet 70 mph speed (existing speed is 60 mph)

Existing ramp and mainline to be relocated west of current location

Arbor Dr

Trowbridge Rd



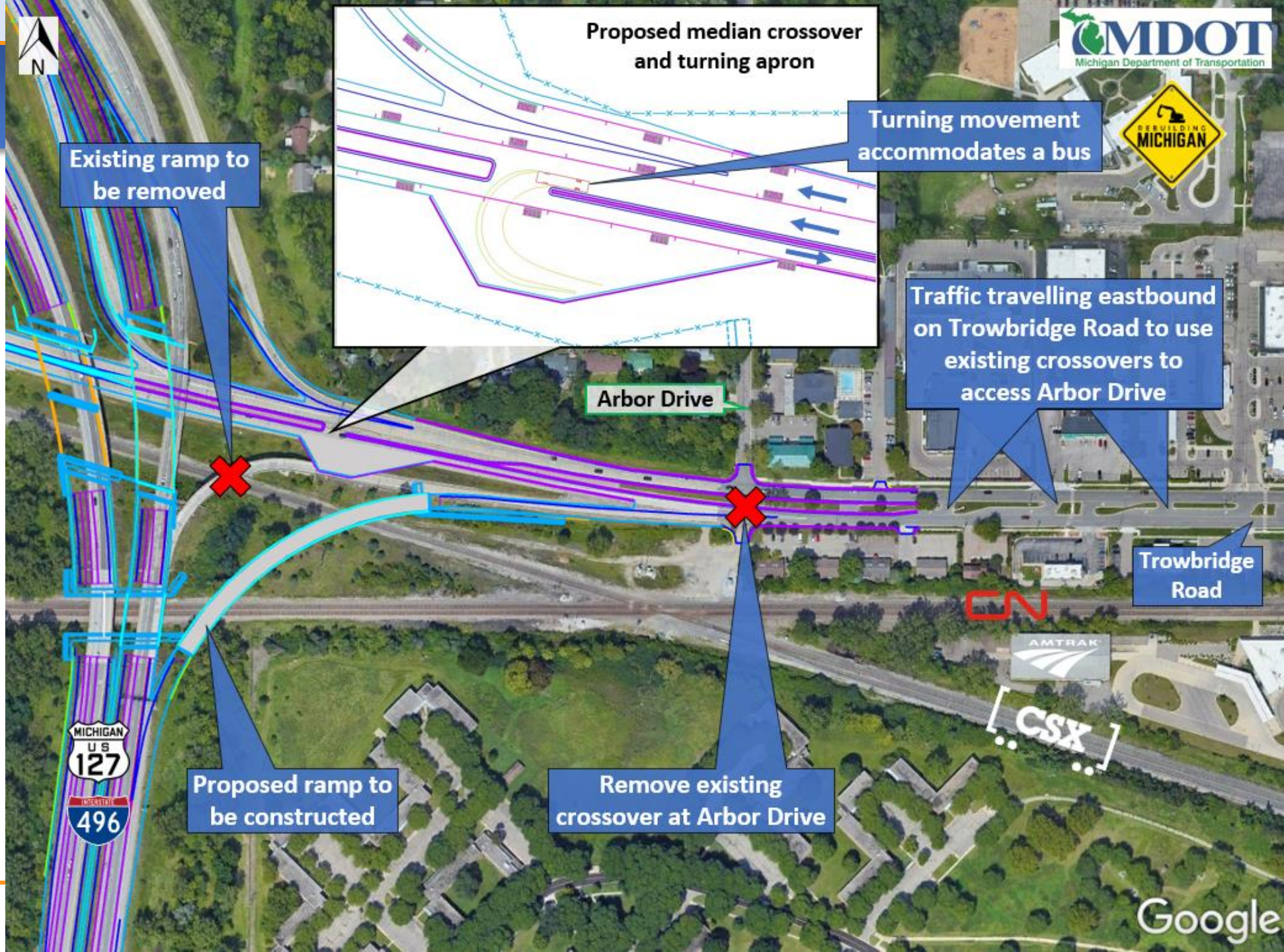
# Arbor Drive

## Project information:

# On site public meeting held on July 19, 2022

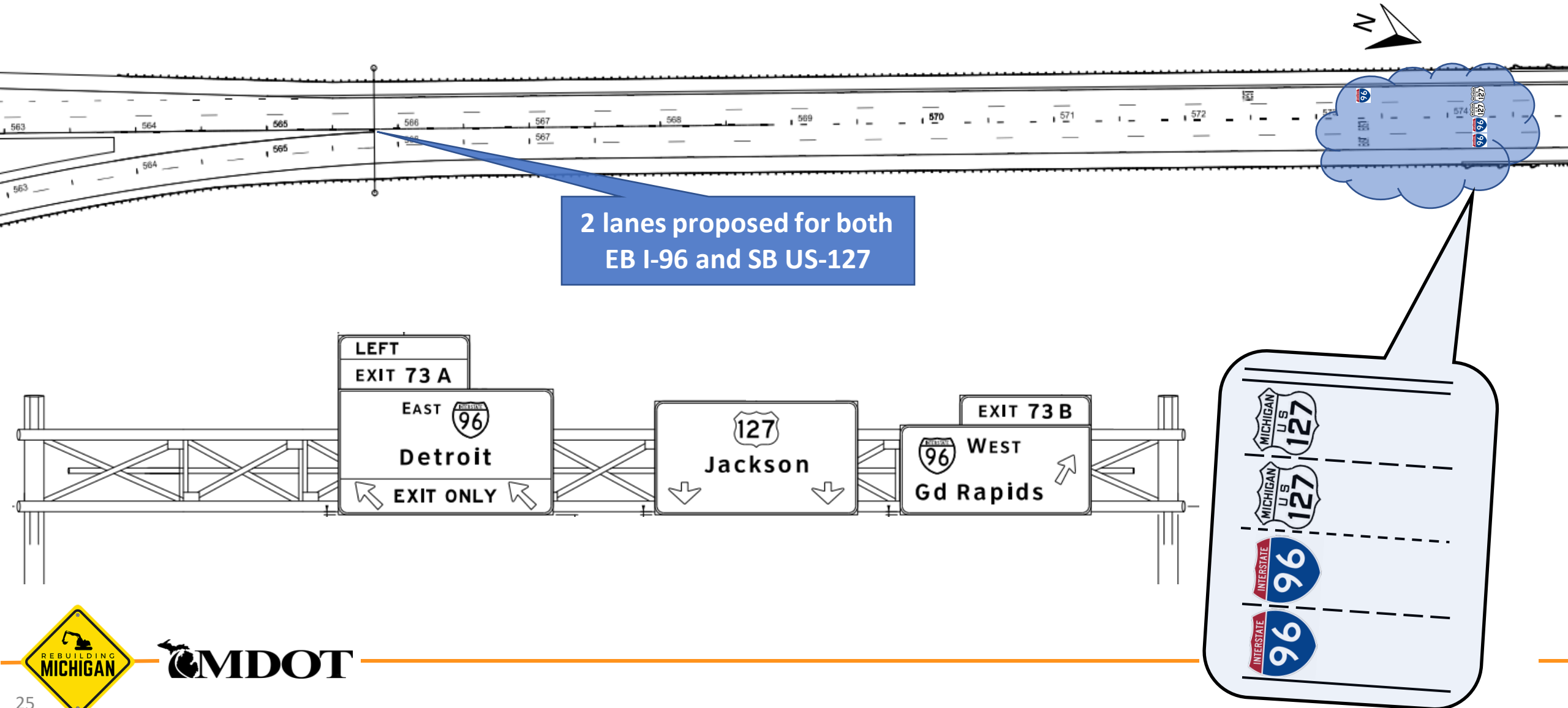
# Meeting with Tri County Bicycle Assoc. held on Sept. 14, 2022

# Meeting with Red Cedar Community Assoc. held on Sept. 15, 2022

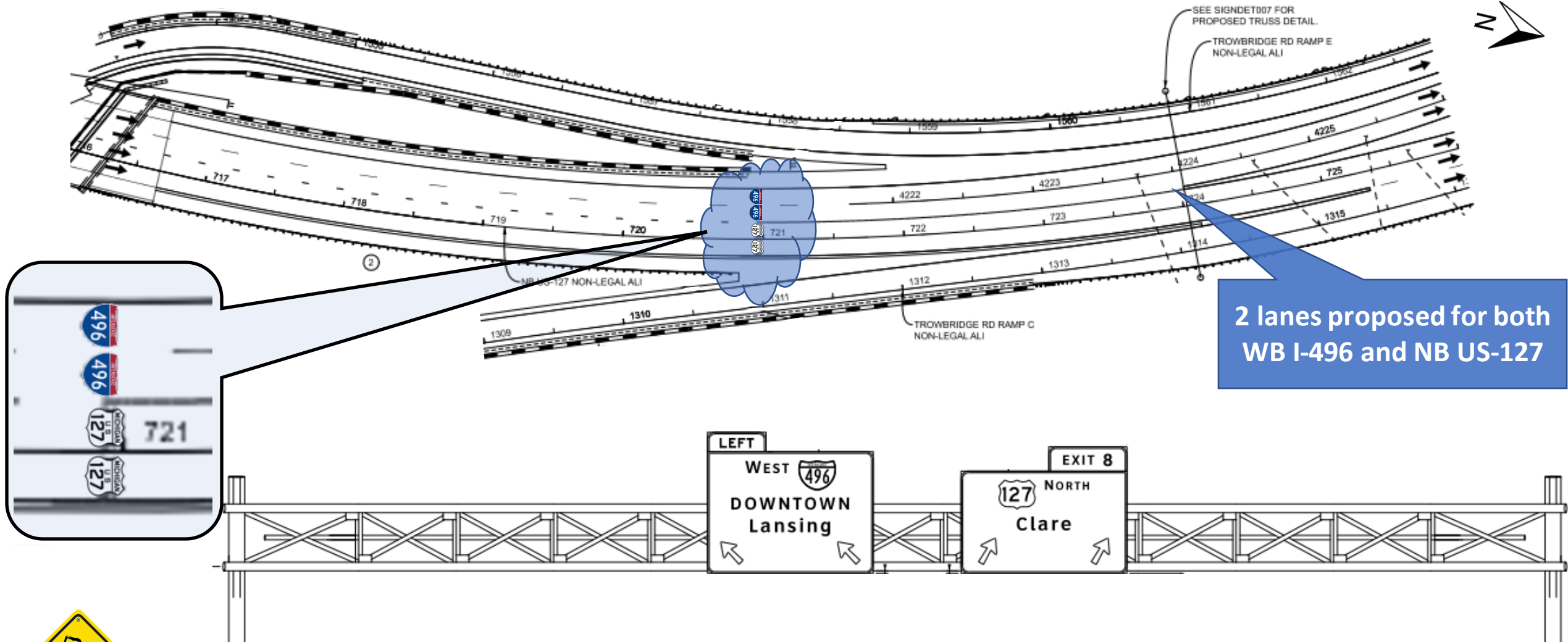




# SB US-127/EB I-496 and EB I-96 split



# NB US-127 and WB I-496 split





# Dunckel Interchange Improvements



Convert center lane from dedicated left turn lane to shared left/right turn lane

Lengthen NB entrance ramp taper along the NB mainline

Widen NB entrance ramp to 2 lanes for ~600 ft

Convert shared left/right turn lane to right turn only

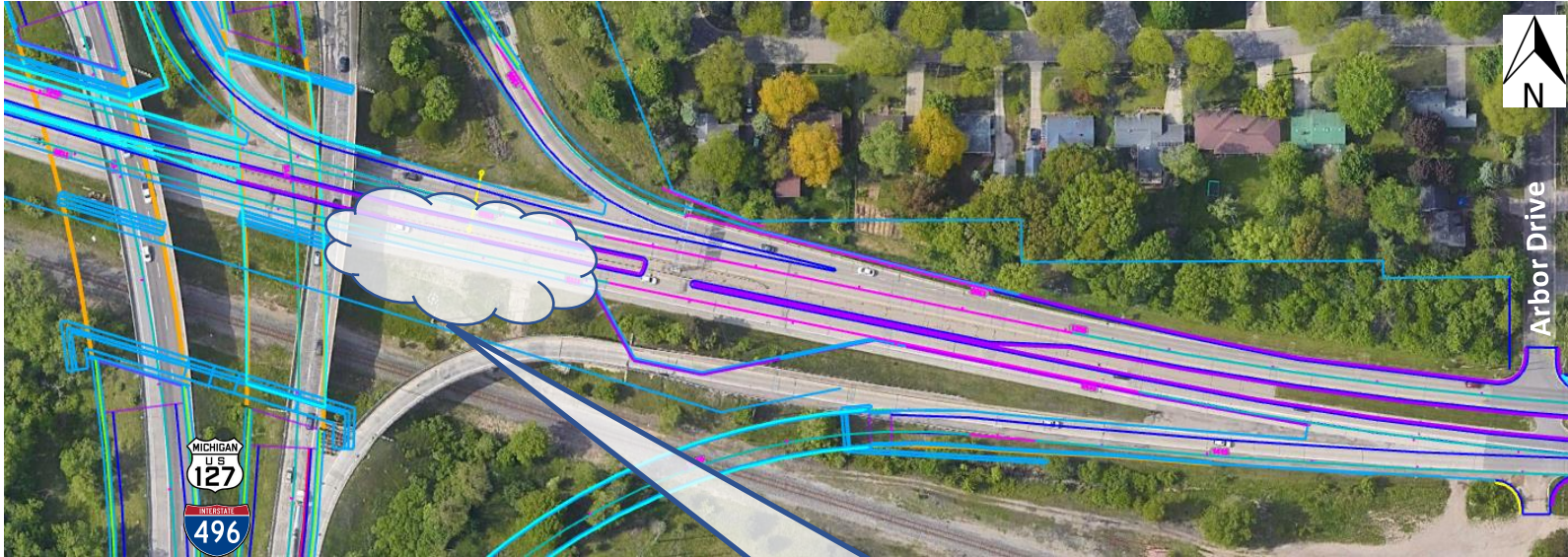
Traffic signal work

Note: Construction at the Dunckel interchange will include DO NOT ENTER enhancements to reduce wrong way drivers (including traffic signing, pavement markings, etc.) from entering the freeway.

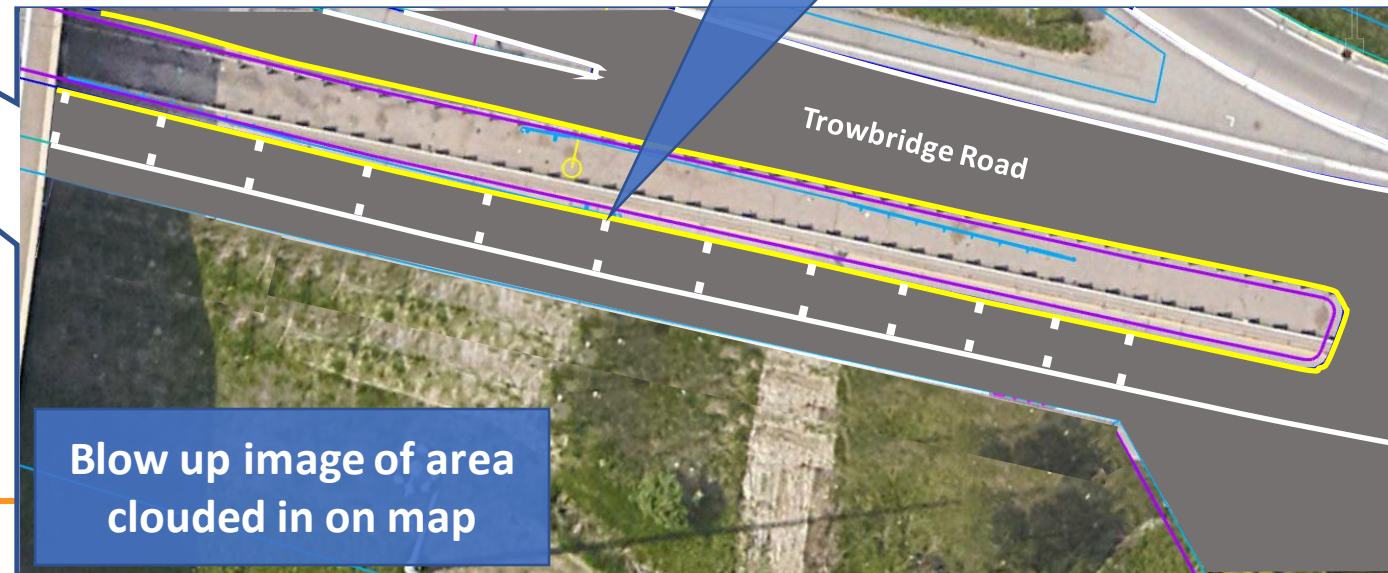




# Optical Speed Bars



Proposed optical speed bars, spaced per MDOT standards



Blow up image of area clouded in on map

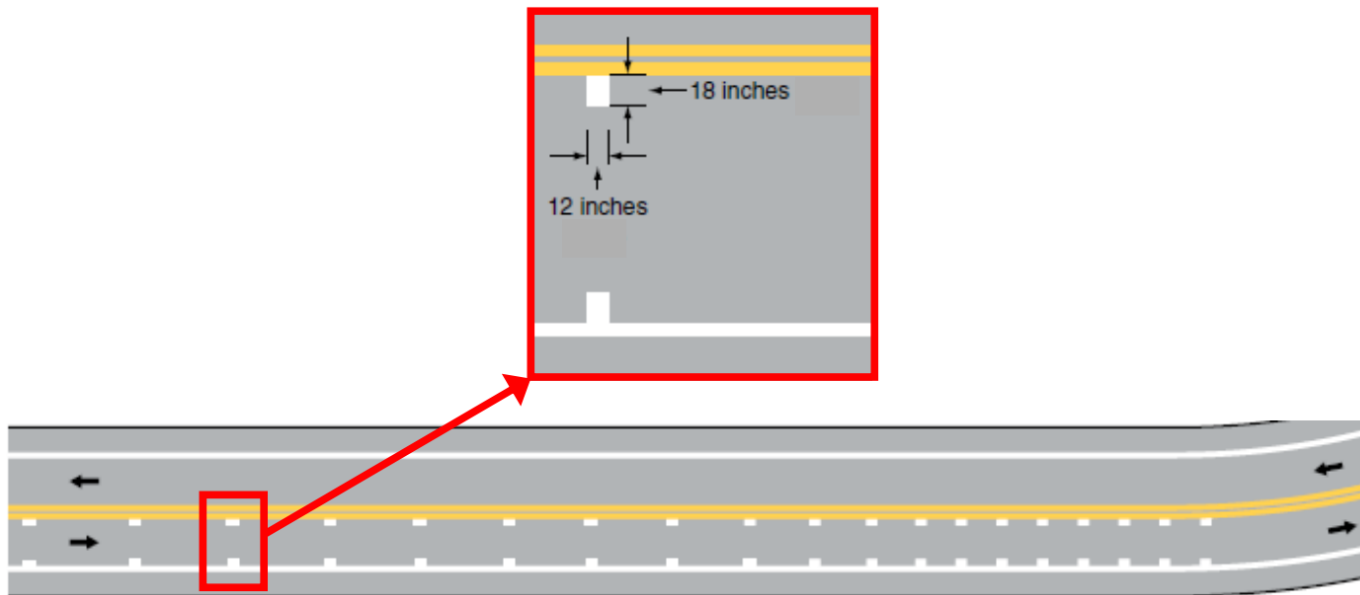


# Optical Speed Bars

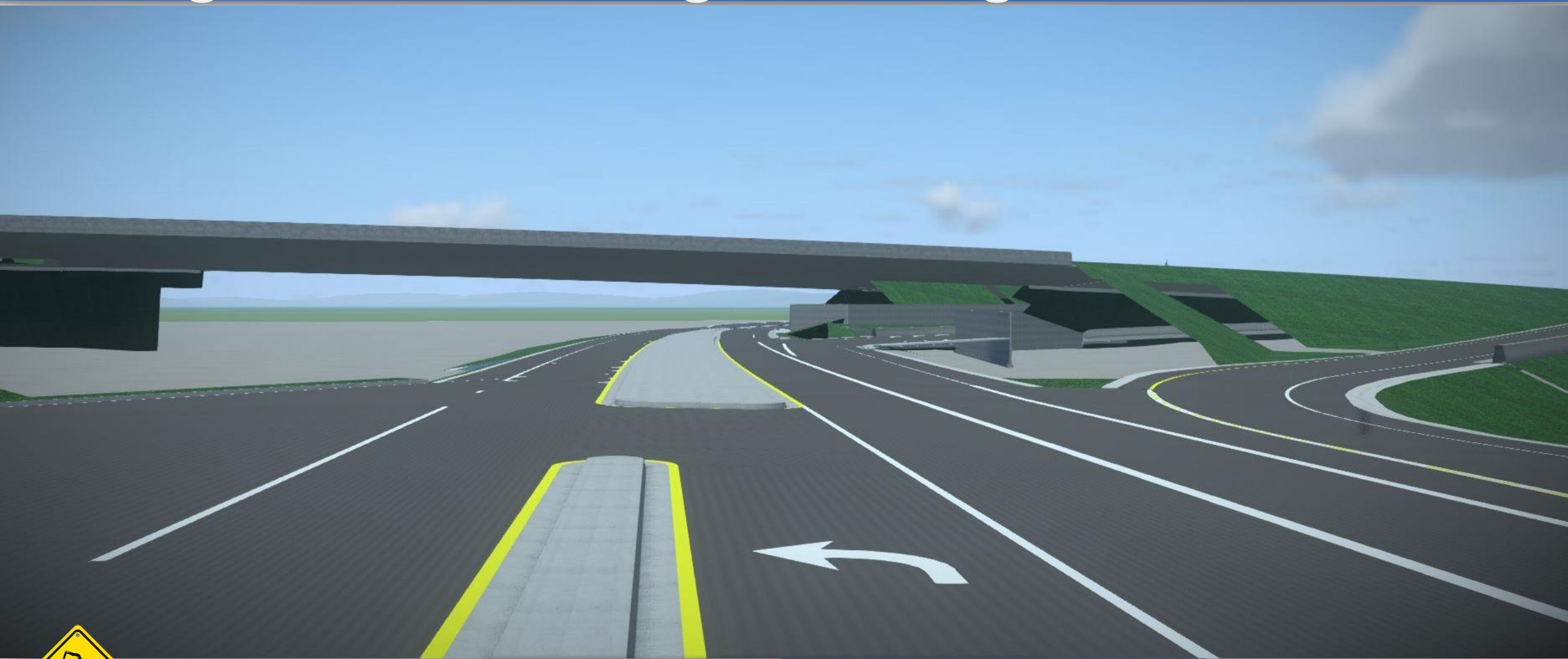
## Project information:

Optical Speed Bars are transverse stripes spaced at gradually decreasing distances to increase drivers' perception of speed and cause them to reduce speed

Proposed along the SB US-127 ramp to EB Trowbridge Rd



# Sight Distance Along Trowbridge Rd

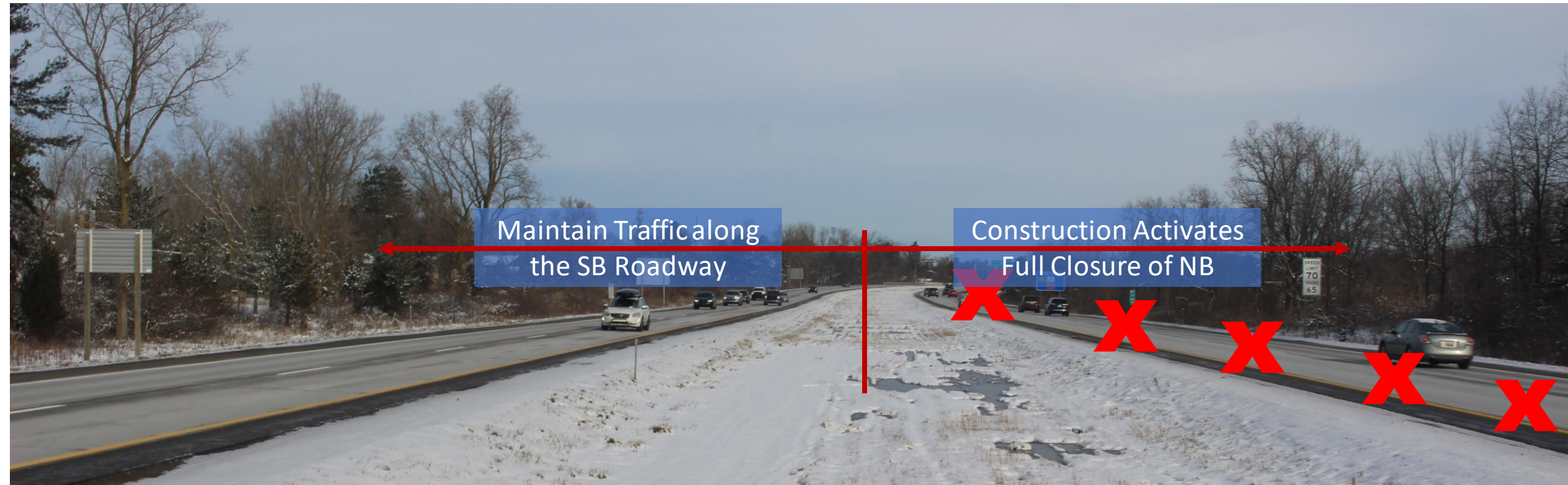




# Maintenance of Traffic during Construction



# Maintenance of Traffic during Construction





# Maintenance of Traffic during Construction

Temporary Median  
Zipper Barrier

NB Fully Closed  
for Construction

AM Peak





# Maintenance of Traffic during Construction

Temporary Median  
Zipper Barrier

NB Fully Closed  
for Construction

PM Peak





# Maintenance of Traffic during Construction



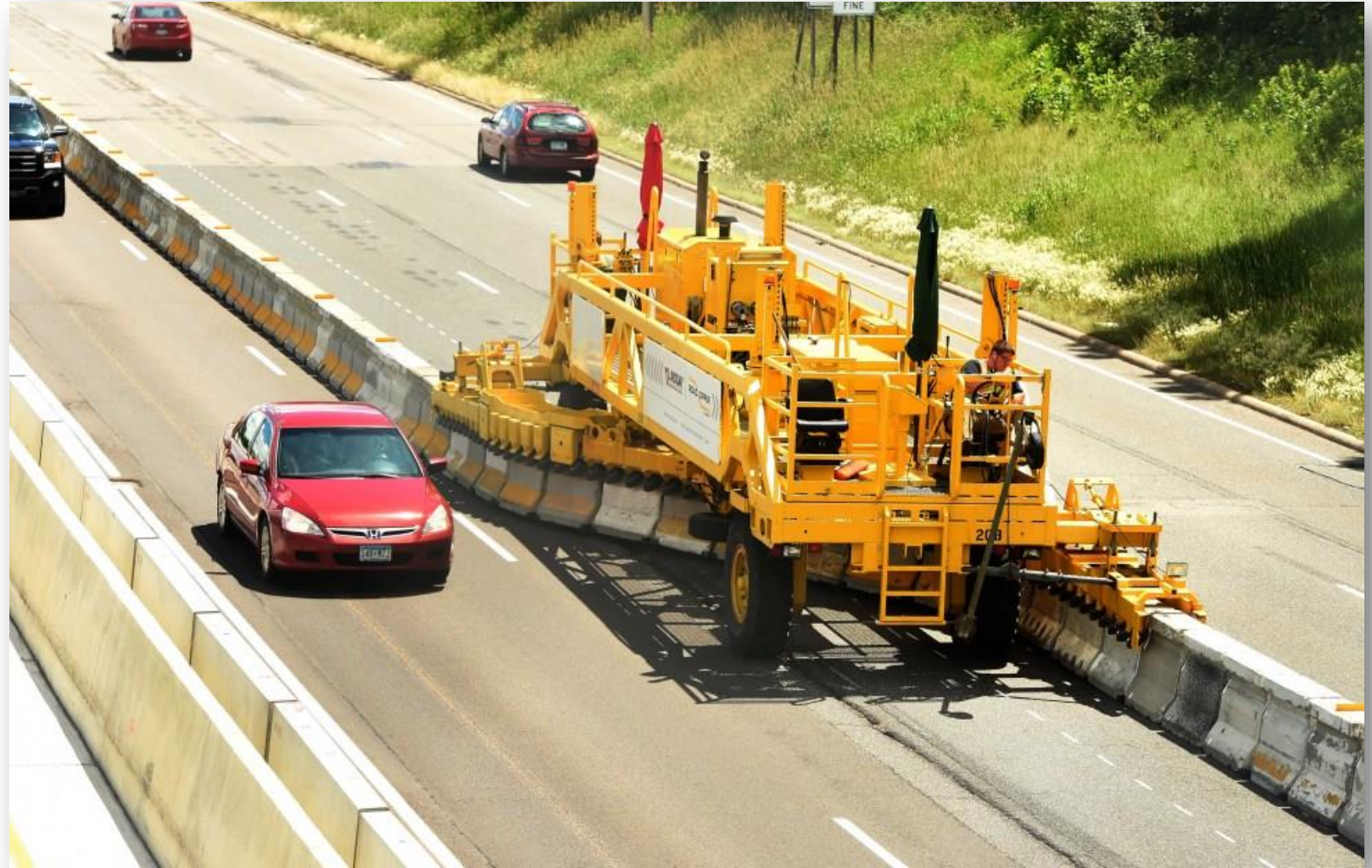
# Maintenance of Traffic during Construction





# Zipper Barrier

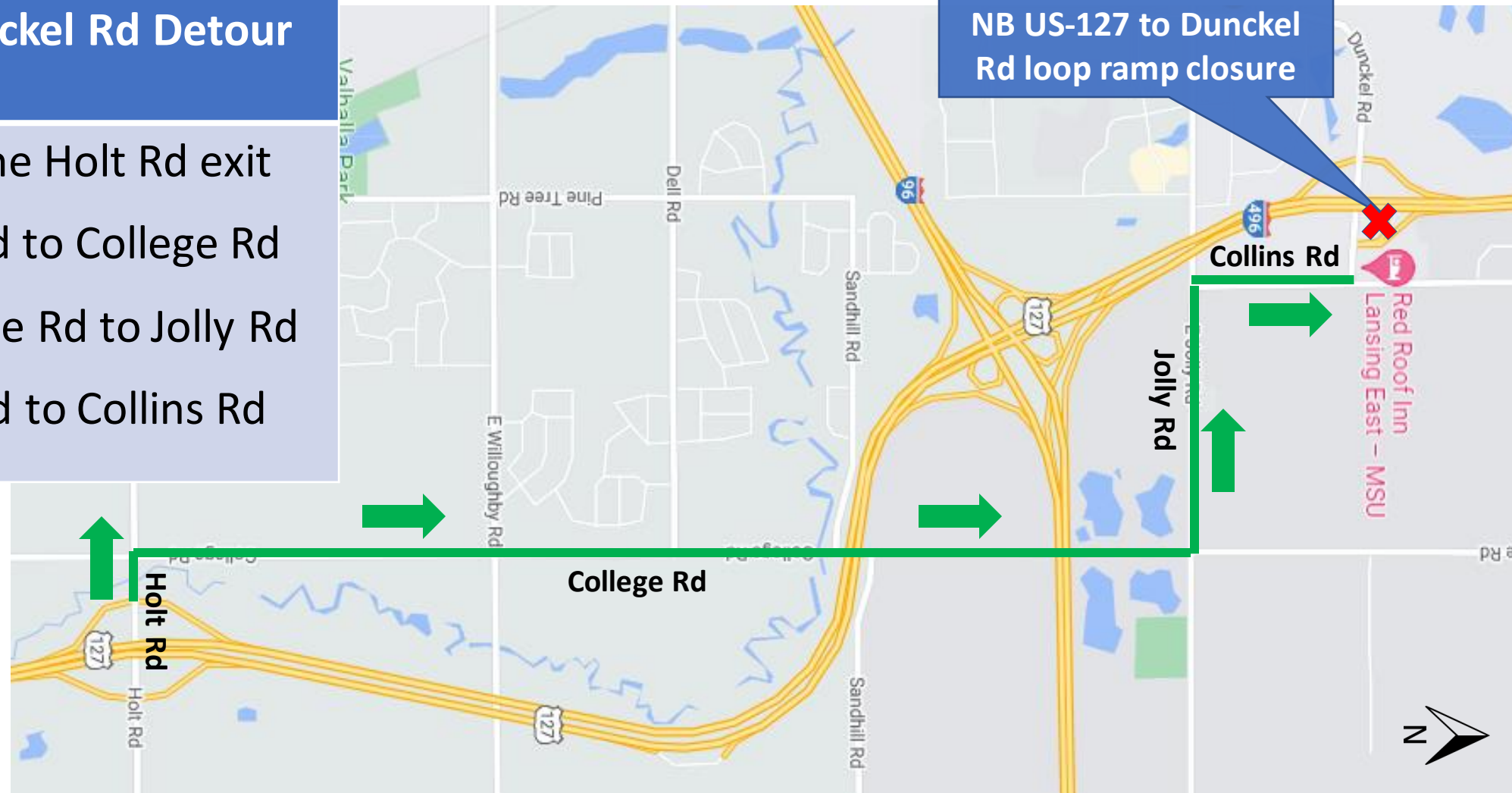
[video of how zipper barrier works - Google Search](#)



# NB US-127 to Dunckel Rd Exit Ramp Detour

## NB US-127 to Dunckel Rd Detour (Hospital Route):

- NB US-127 to the Holt Rd exit
- West on Holt Rd to College Rd
- North on College Rd to Jolly Rd
- West on Jolly Rd to Collins Rd

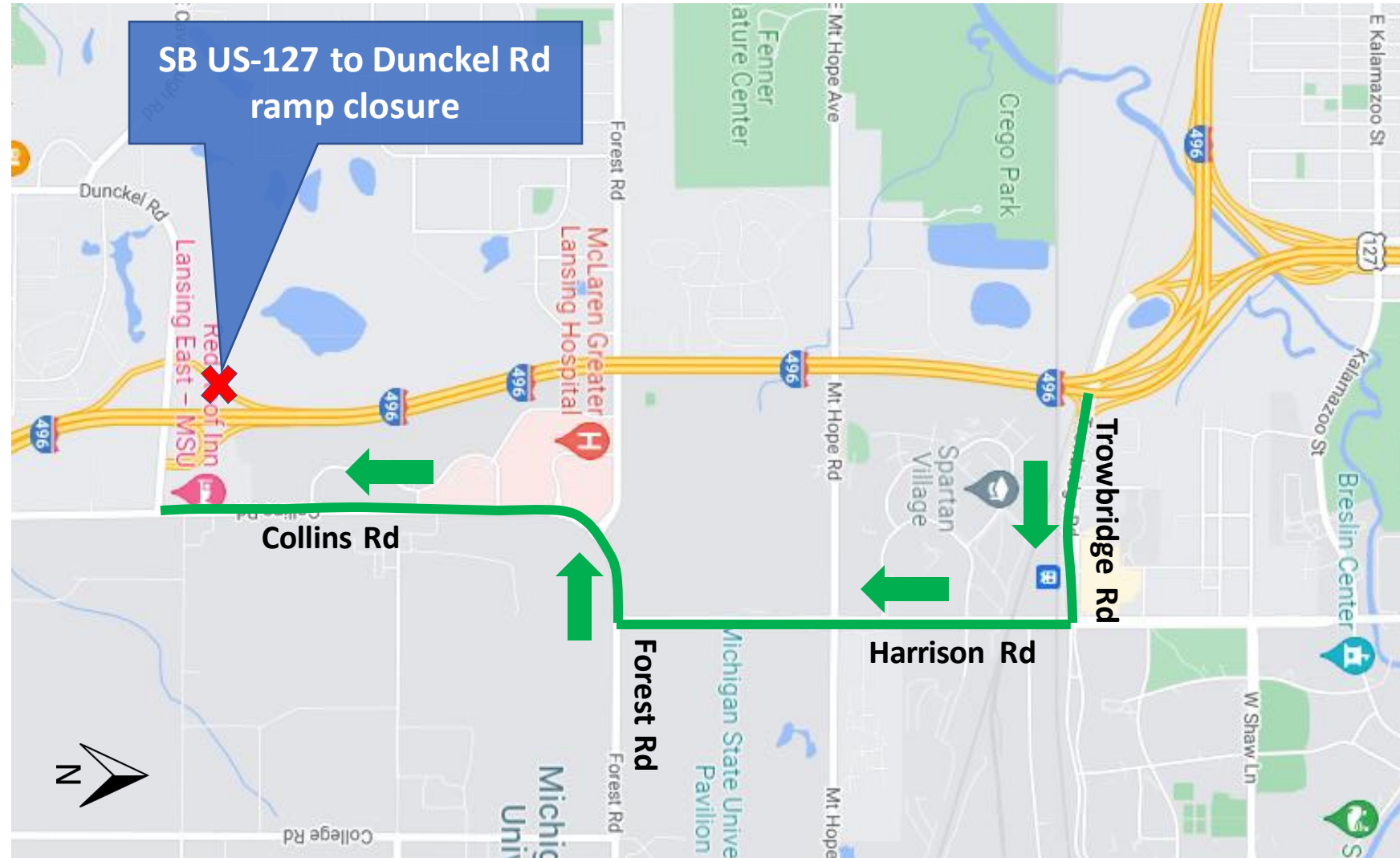




# SB US-127 to Dunckel Rd Exit Ramp Detour

## SB US-127 to Dunckel Rd Detour:

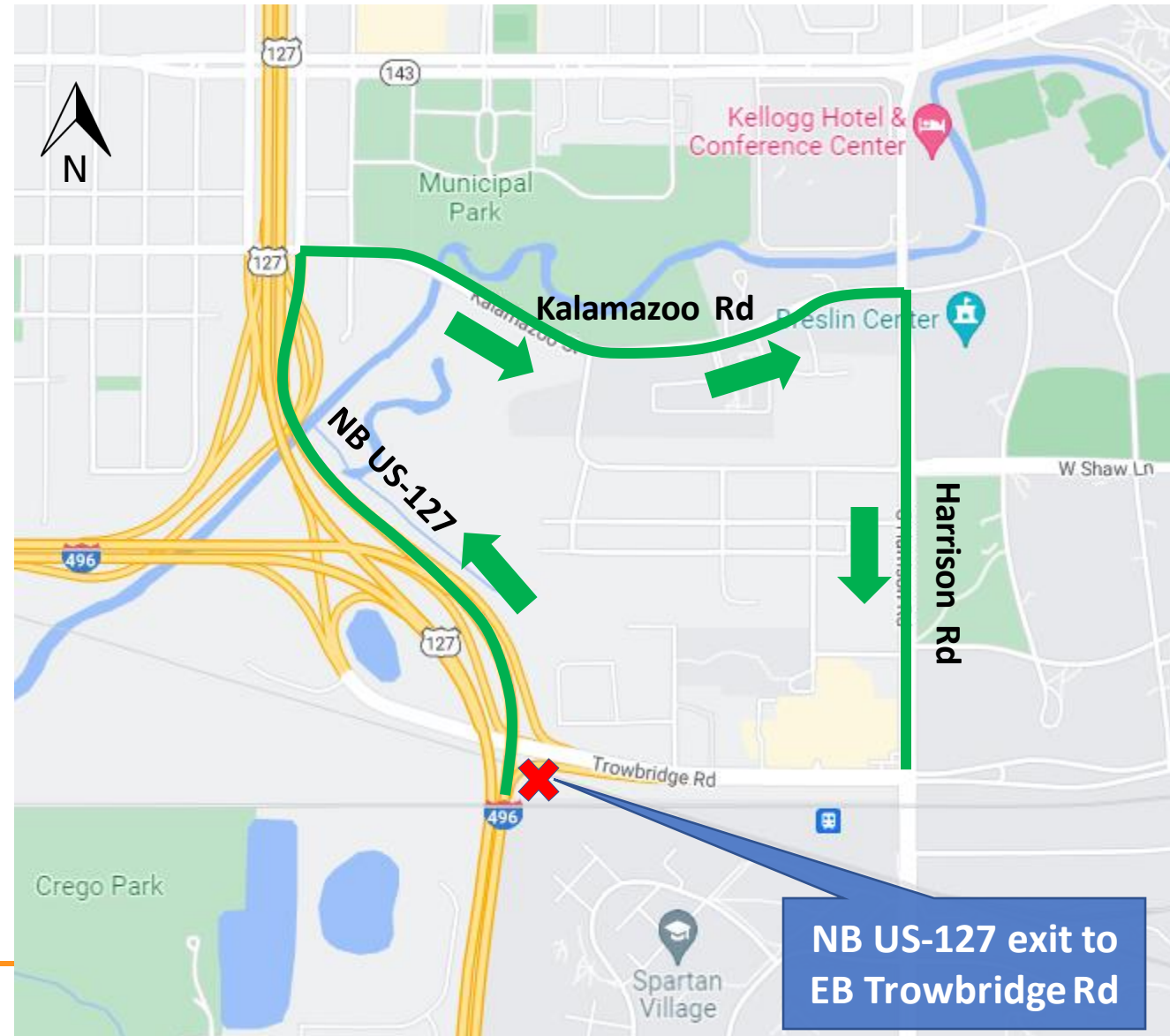
- SB US-127 to Trowbridge Rd
- East on Trowbridge Rd to Harrison Rd
- South on Harrison Rd to Forest Rd
- West on Forest Rd to Collins Rd



# NB US-127 to EB Trowbridge Exit Ramp Detour

## NB US-127 to Trowbridge Rd Detour:

- NB US-127 to Kalamazoo Rd
- East on Kalamazoo Rd to Harrison Rd
- South on Harrison Rd to Trowbridge Rd





# NB US-127 to EB Trowbridge Exit Ramp Detour

## SB US-127 to EB I-96 Detour:

- SB US-127 to the Holt Rd exit ramp
- Holt Rd to the NB US-127 entrance ramp
- NB US-127 to EB I-96

SB US-127 to EB I-96  
Ramp Closure



# Lansing River Trail Detour

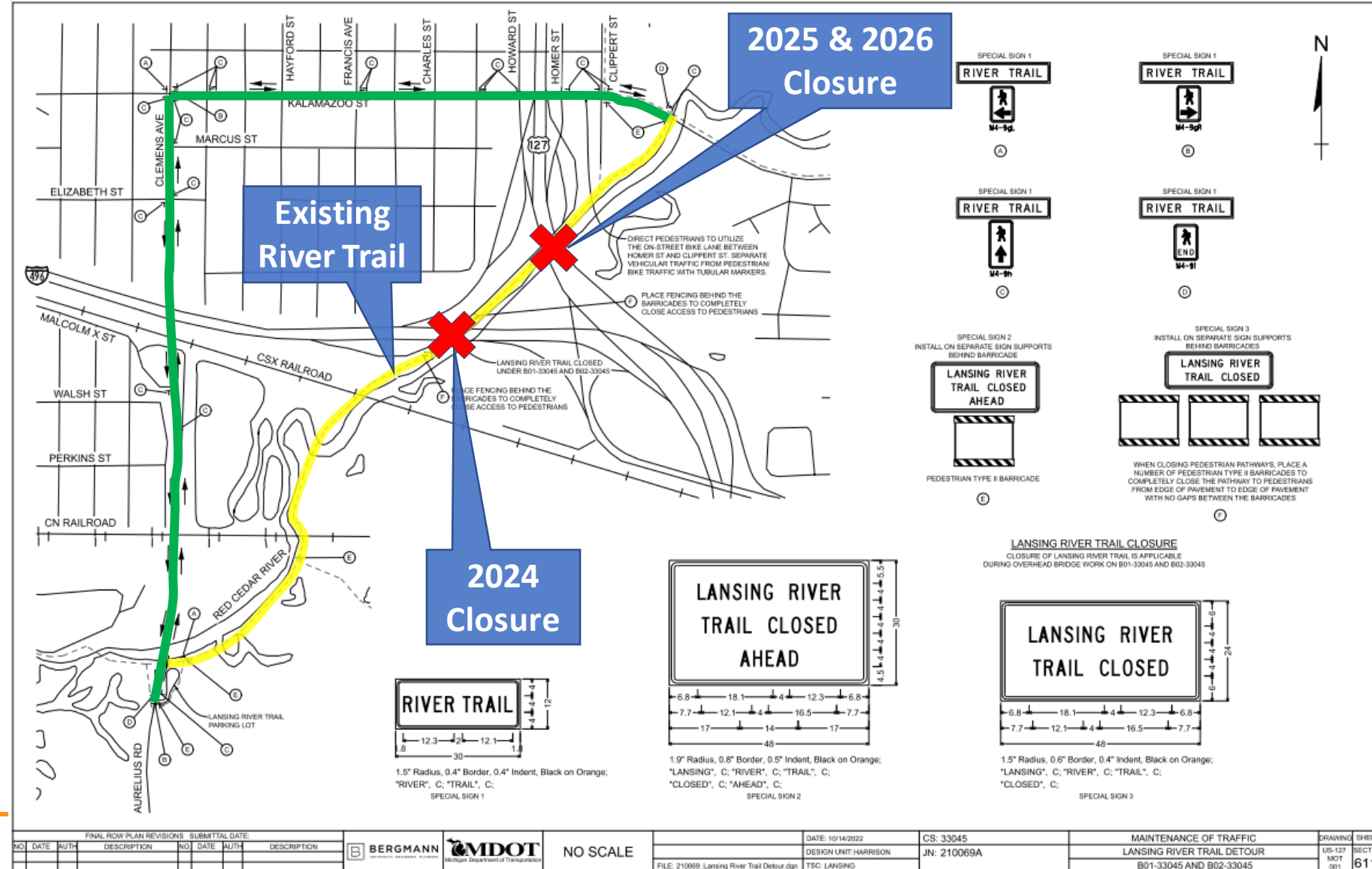
Estimated closure by construction season:

**2024:** 2 to 3 months

**2025:** 5 to 6 months

**2026:** 6 to 7 months

Work which impacts the Lansing River Trail includes bridge rehabilitation and reconstruction





# Environmental Process

## Environmental process information:

### Wetlands:

- Less than 1 acre of disturbance of regulated wetlands is anticipated
- There are more that 51 acres of wetland through this project

### Tree removals:

- Proposed to replace 2 to 1 for any removals
- Removals are anticipated for noise barriers, utility works, road widening



# Environmental Process

## Noise Analysis environmental process

Draft noise report posted on MDOT website for public review (October 2022)  
[www.michigan.gov/mdot/Programs/highway-programs/Environmental-Efforts/noise-abatement](http://www.michigan.gov/mdot/Programs/highway-programs/Environmental-Efforts/noise-abatement)

Hold public meeting regarding noise analysis report (November 3, 2022)

30-day public comment period (October 18, 2022 through November 17, 2022)

Ballots mailed to eligible residences to vote on noise walls (November 30, 2022)

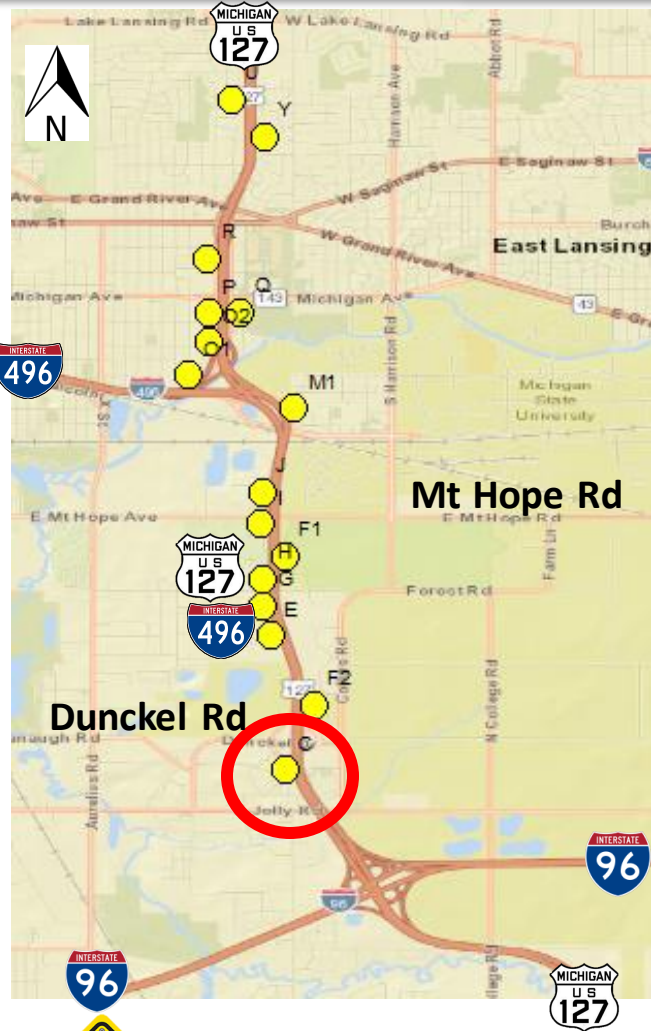
Benefited receptor meeting (December 8, 2022)

Ballots due to MDOT (December 23, 2022)



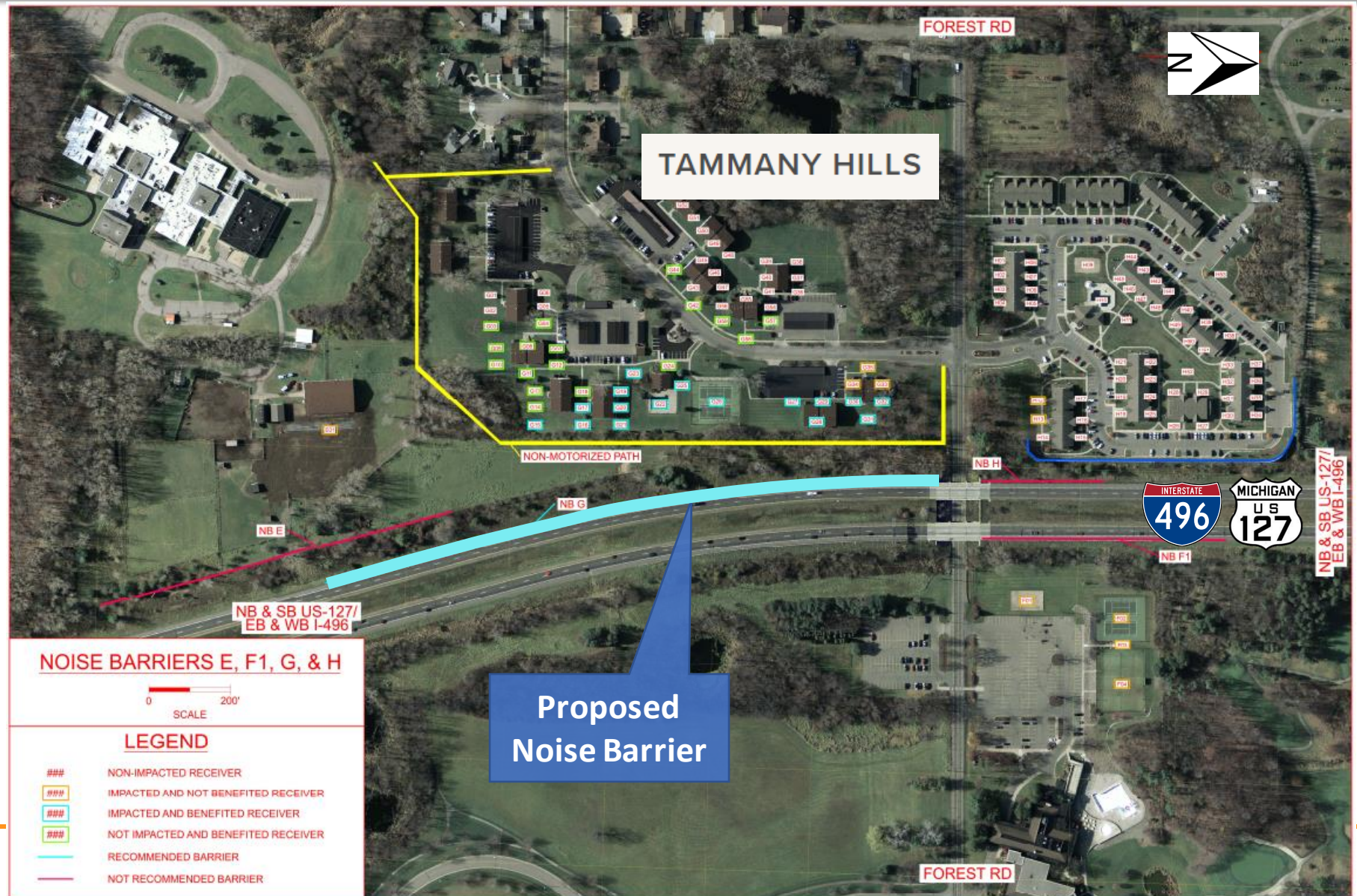
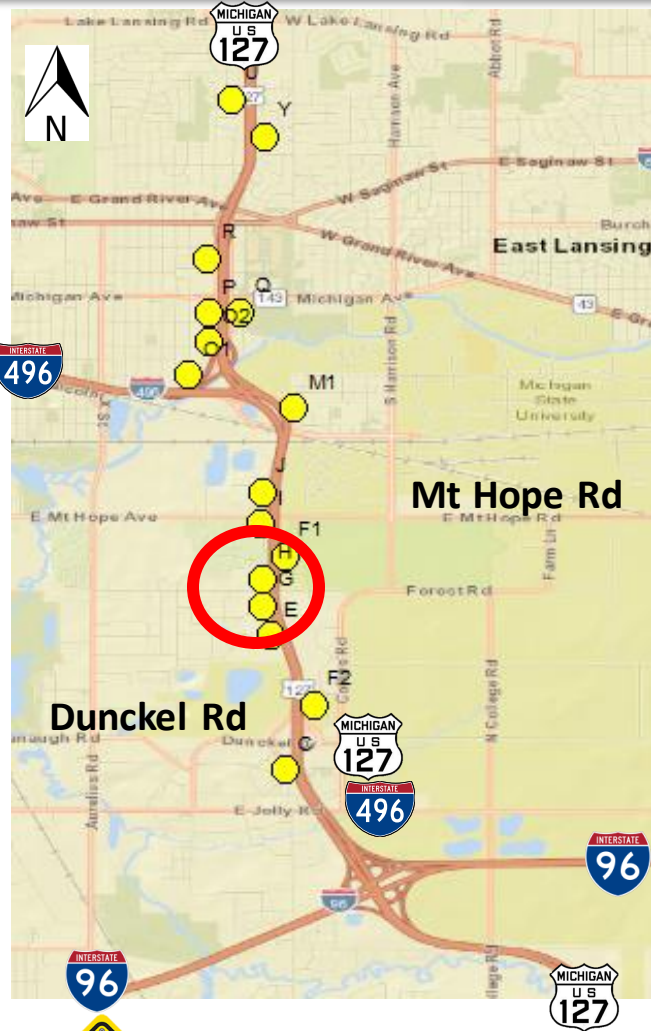


# Noise Analysis – Jolly Rd to Dunckel Rd





# Noise Analysis – South of Forest Rd





# Noise Analysis – South of State Rd





# Noise Analysis – North of State Rd





# Proposed Project Images





# Proposed Project Images



ment  
designer



 **MDOT**





# Tentative Construction Schedule

Construction Project	2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SB US-127 to WB I-496 & EB I-496 to NB US-127 bridge/ramp repl.																
US-127/I-496 Reconstruction from I-96 to I-496																
US-127 Reconstruction & Rehabilitation from I-496 to I-69 (anticipated)																





# Future Outreach

## Future Public Outreach:

- Additional meetings as-needed/requested throughout the project and based on the proposed construction schedule.
- Other ways of connecting on this project include:
  - Website: <https://www.michigan.gov/127Corridor>
  - Check website for updates, presentation slides, future meeting links, dates and times, and other additional information.
  - Subscribe to US-127 updates on the website above



# Questions?

## Project contact:

Dave Harrison, PE

248-234-2569

[Harrisonsd7@michigan.gov](mailto:Harrisonsd7@michigan.gov)

Website: <https://www.michigan.gov/127Corridor>

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