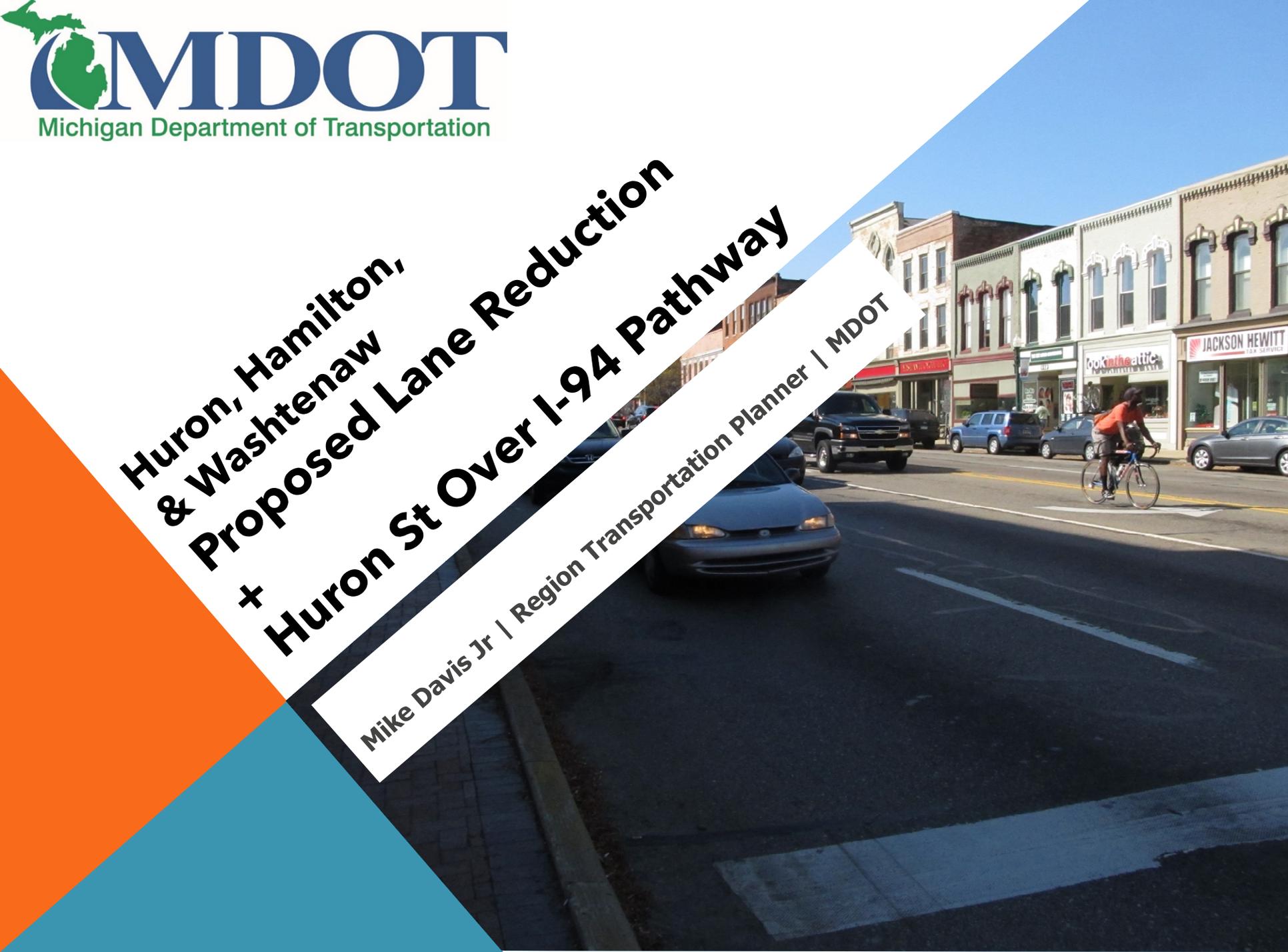


**Huron, Hamilton,  
& Washtenaw  
+  
Proposed Lane Reduction  
Huron St Over I-94 Pathway**

Mike Davis Jr | Region Transportation Planner | MDOT



# Background

- Background
- Why
- Current Conditions
- Proposed Concepts
- Next Steps



# Background

2011-12: Michigan State Police perform a speed study on the trunklines; speed limits are raised  
City Council directs staff to research ways to reduce travel speeds & speed limits

2013-14: WATS/County perform feasibility study of a nonmotorized crossing of I-94 at Huron

2018: MDOT performs Road Safety Audit (RSA) on M-17 between Normal and Harriet at City's request; road diet and pedestrian crossing improvements noted as important safety improvement

2019: City completes Lane Reduction Feasibility study.

TAP Grant awarded for design and construction of a pedestrian/bike crossing of I-94 at Huron

2020: MDOT completes road diet review and approves concept.

MDOT, City, and WATS agree to additional local funding for non-motorized enhancements.

2021: MDOT detailed design begins, and non-motorized enhancements will be evaluated for feasibility.

Second public meeting will be held to review any road diet changes.



# Reasoning - City of Ypsilanti

- The City has long had as part of its Master Plan and various other visioning documents to switch back to two-way traffic to improve safety and legibility
- At current speeds, pedestrian travel, local vehicle travel (to/from driveways and parking lots/alleys/side streets), and bike travel can be dangerous; risk of death and serious injury for pedestrians/bicyclists is very likely
- Currently no bicycle facility on these roads; important north-south connectors; dangerous, especially for novice/casual riders, to ride in traffic due to speeds



Graphic source: *Speed as a Safety Problem*. Institute of Transportation Engineers, <https://www.ite.org/technical-resources/topics/speed-management-for-safety/speed-as-a-safety-problem/>.

# Reasoning - MDOT

- MDOT's update Multi-Modal Development and Delivery and Context Sensitive Solutions approach is aimed at forming partnerships with local agencies and communities to develop multi-modal solutions based upon community needs, desires, and values.
- MDOT and the City of Ypsilanti formed a partnership approach very early in the project development that allowed adequate time to identify community needs and desires and funding requirements and opportunities, based upon a future MDOT project (rehabilitation project scheduled 2022).
- MDOT is committed to its Towards Zero Deaths vision that strives to increase safety for all transportation users. Increasing safety of the system's most vulnerable users is a special emphasis of the University Region.

 Multiflane roads can take longer to cross and vehicle speeds may be high.

 Road Diets can decrease the lane crossing distance and reduce vehicle speeds.



Road Diets can reduce total crashes by **19-47%\***

\*19% in urban areas, 47% in suburban areas.

- FEATURES:**
- Reduced crossing distance and exposure.
  - Reduced vehicle speeds.
  - Promote Complete Streets.
  - Provide space for installing curb extensions and widening sidewalks.
  - Create space for bicycle, transit, and/or parking lanes.

# Proposal Goals

## Make it safer for bikes

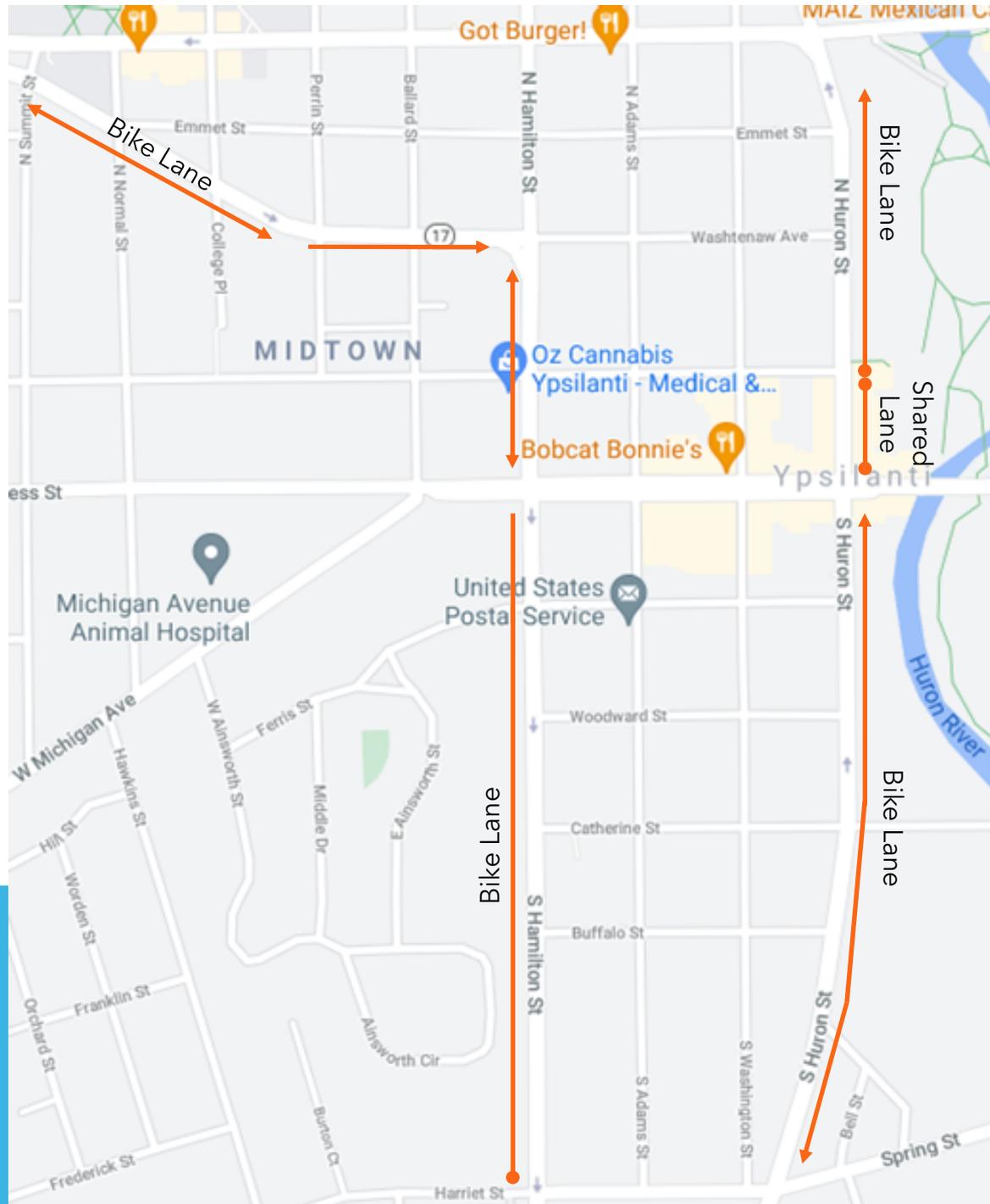
- Add bike lanes & bike boxes

## Make pedestrian crossings safer

- Add curb ramps, signage, and new crosswalks

## Make it safer for drivers

- Reduce the risk of injury in a crash



# Current Conditions: Washtenaw Ave

## Speed

- 35 mph

## Traffic

- Average daily traffic (2012-17):  
16,350 vehicles/day

## Configuration

- 3 lanes
- Sidewalk on both sides
- Pedestrian crossing at Ballard
- No bike facilities
- No parking



# Current Conditions: Hamilton Ave

## Speed

- Washtenaw to Ferris: 35 mph
- Ferris to 94: 40 mph

## Traffic

- Average daily traffic (2012-17): 13,240

## Configuration

- 3+lanes throughout
- Sidewalk both sides Washtenaw to Harriet; sidewalk one side Harriet to 94, no sidewalk across 94.
- Pedestrian crossings at Michigan and Harriet.
- No bike facilities.
- No parking.



# Current Conditions: Huron St

## Speed

- Harriet to Ferris: 40 mph
- Ferris to Pearl: 30 mph
- Pearl to Cross: 35 mph

## Traffic

- Average daily traffic (2012-17): 12,243

## Configuration

- 3+ lanes throughout
- Sidewalk both sides
- Pedestrian crossings at Michigan and Harriet.
- No bike facilities
- Parking only between Michigan and Pearl (1 block, both sides)



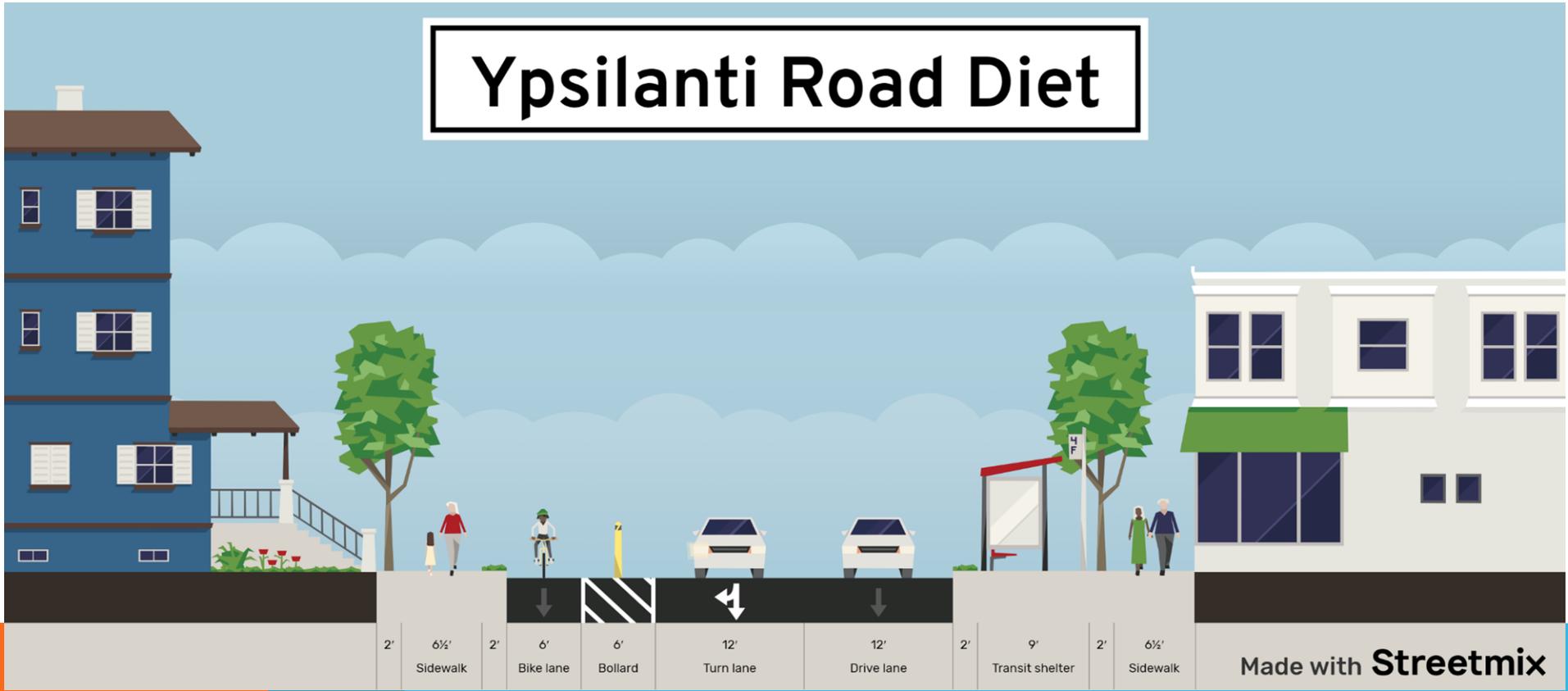
# Average Current Conditions

## Ypsilanti Road Diet



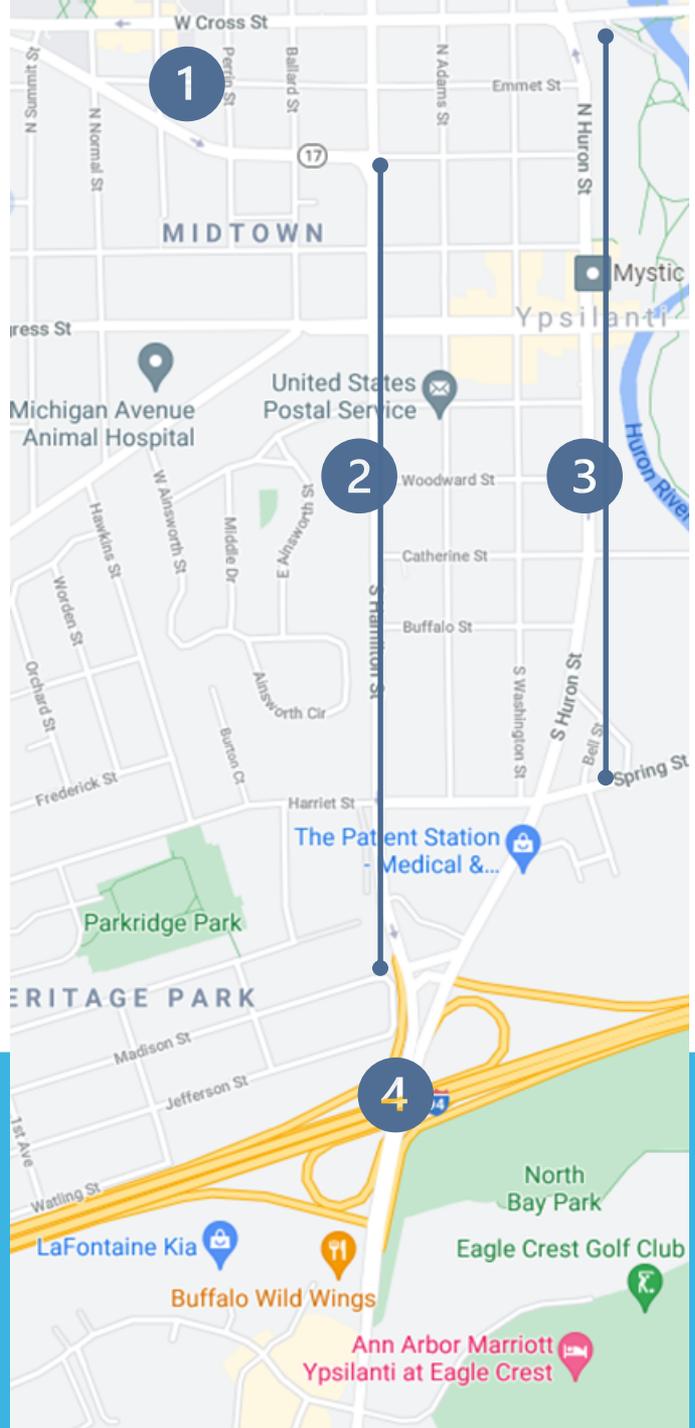
# Proposed Average Road Diet Section

## Ypsilanti Road Diet



# Proposed Concepts

- Washtenaw Ave
- Hamilton Ave
- I-94 Pathway
- Huron St



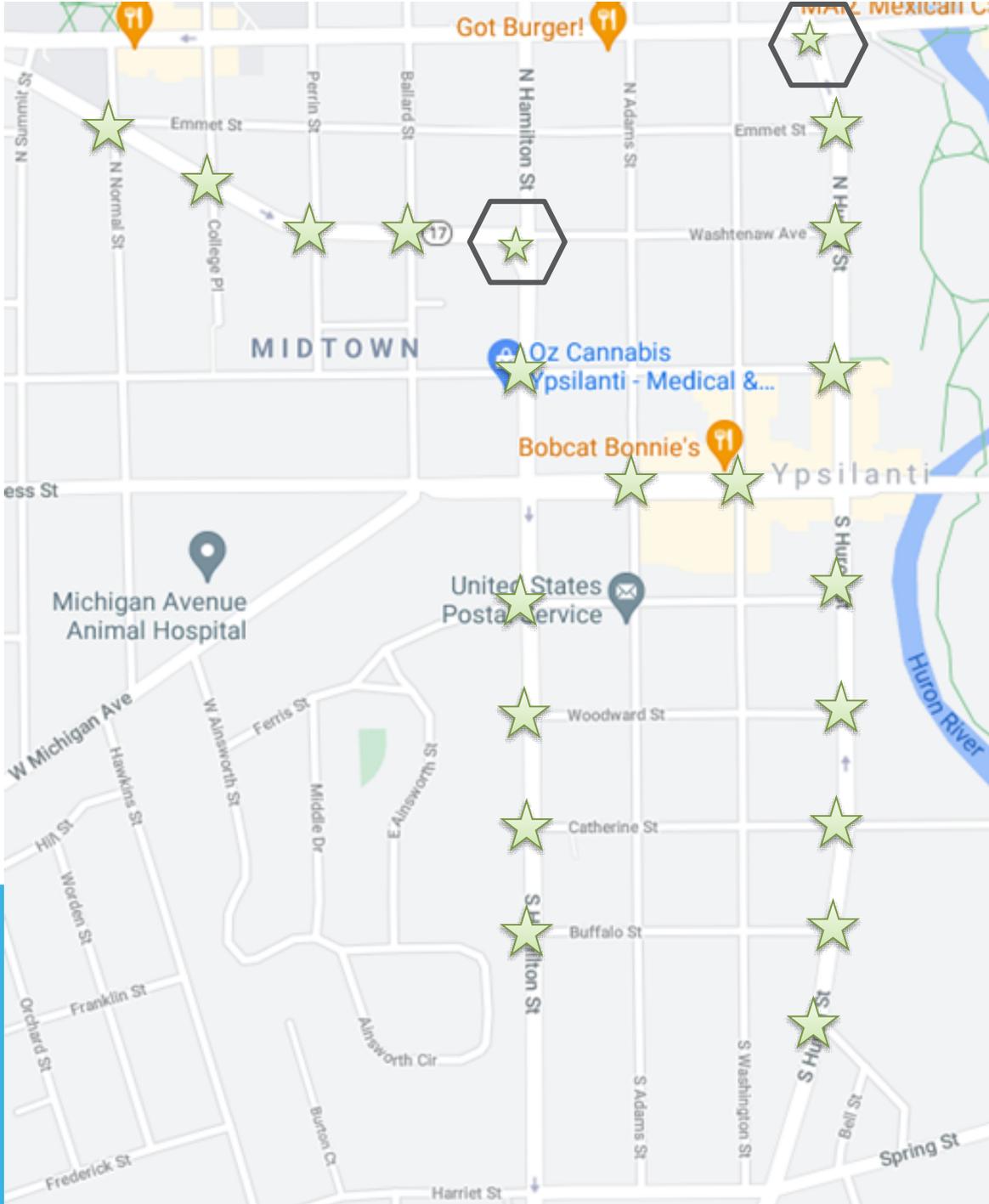
# Upgraded Crosswalks



Intersection Modifications



ADA Compliant Curbs and New Crosswalks

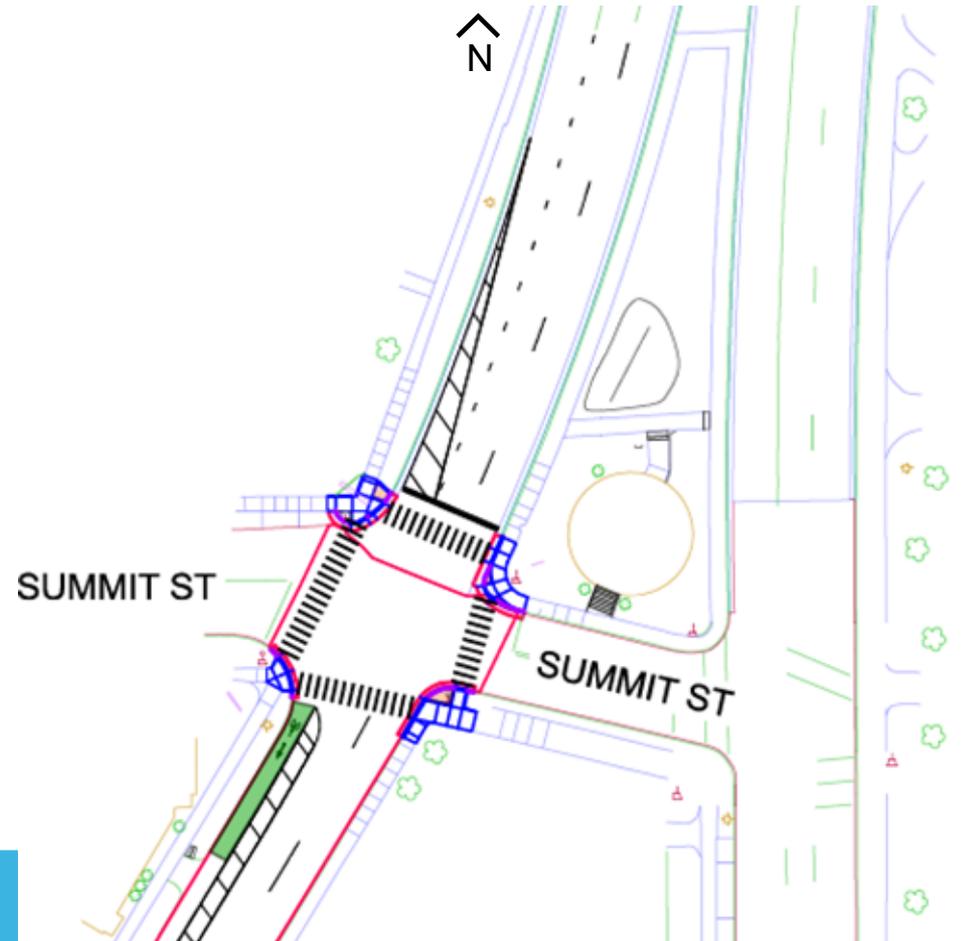


# Washtenaw Ave: Summit to Normal (1/4)

- North of Summit: rightmost lane (west side) to be tapered and reduced in preparation of new bike lane
- Summit to Normal: rightmost lane (west side) becomes bike lane

## Level of Service

Washtenaw/Summit (EB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	A	A	A
PM	B	B	C

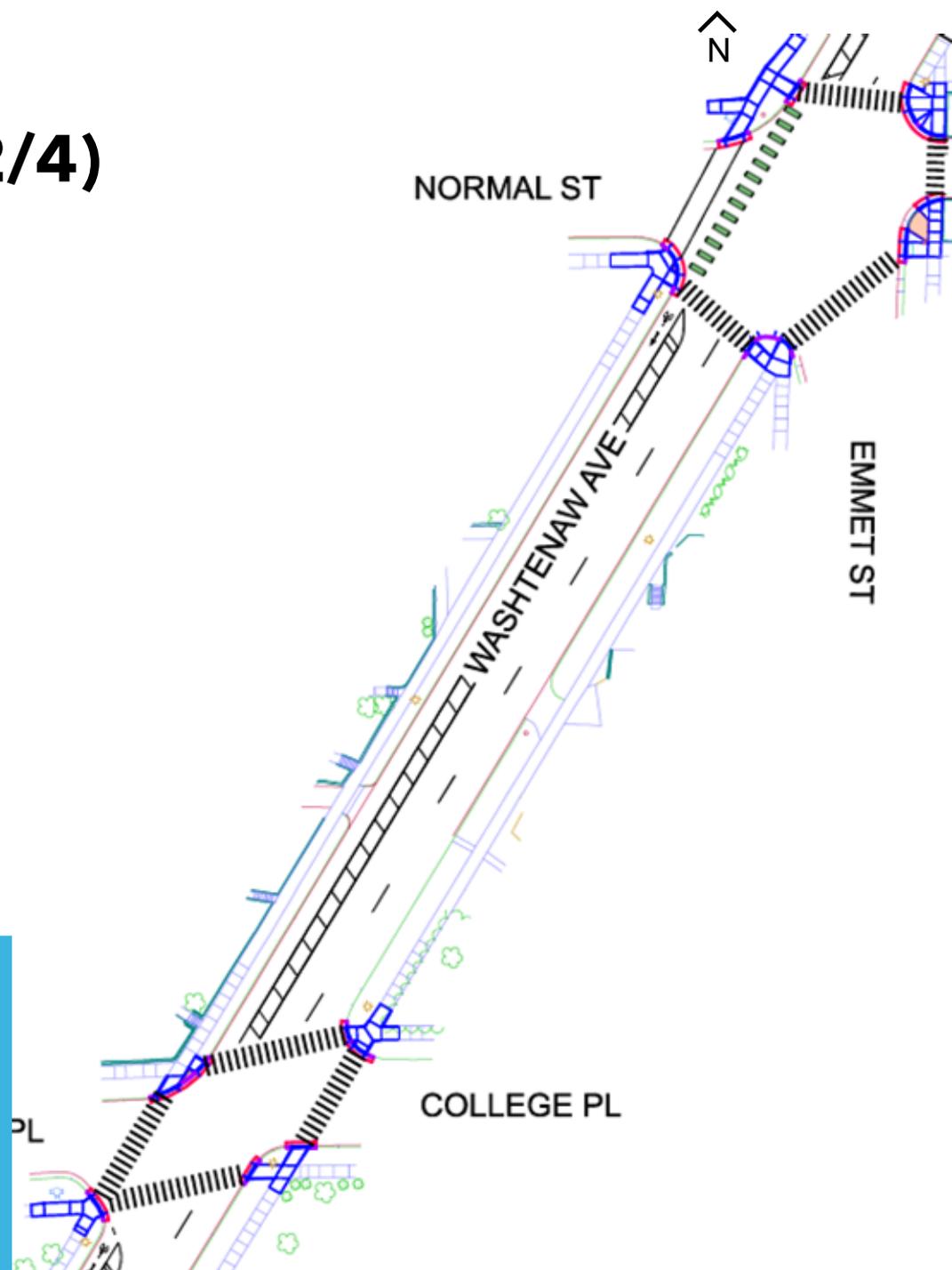


# Washtenaw Ave: Normal to College Pl (2/4)

- Normal to Ballard: rightmost lane (west side) becomes bike lane

## Level of Service

Washtenaw/Ballard (EB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	A	A	A
PM	A	A	A

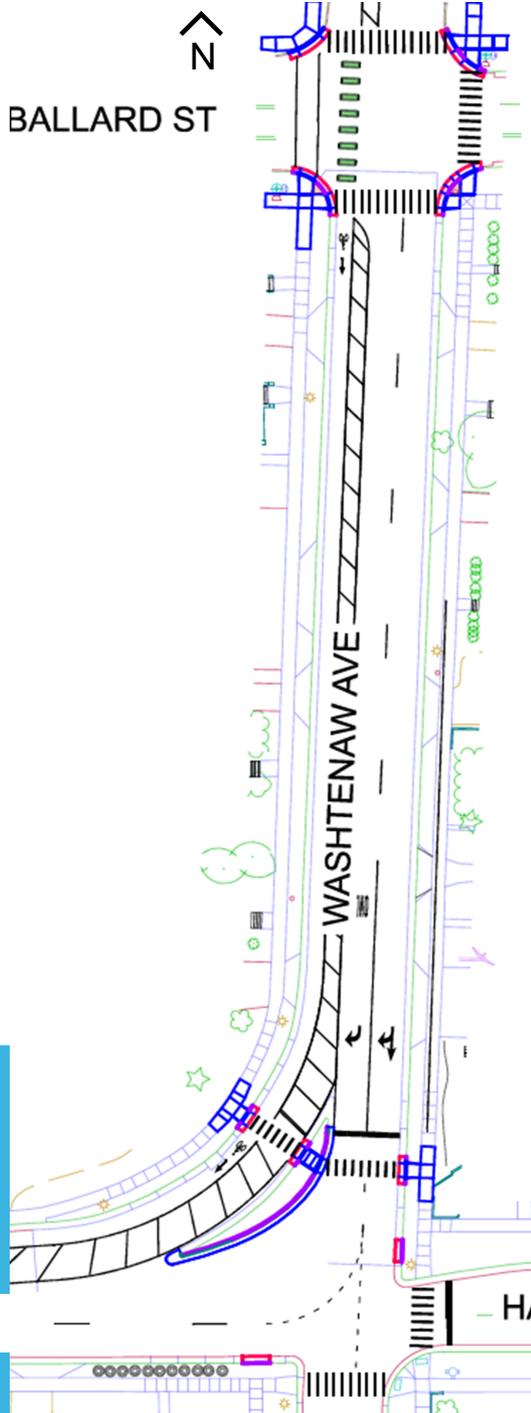


# Washtenaw Ave: Ballard to Hamilton (3/4)

- Ballard to Hamilton: rightmost lane (west side) becomes bike lane
- At Hamilton: rightmost bike lane continues through intersection using existing "slip-lane"

### Level of Service

Hamilton/Michigan (SB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	C	C	C
PM	C	D	D

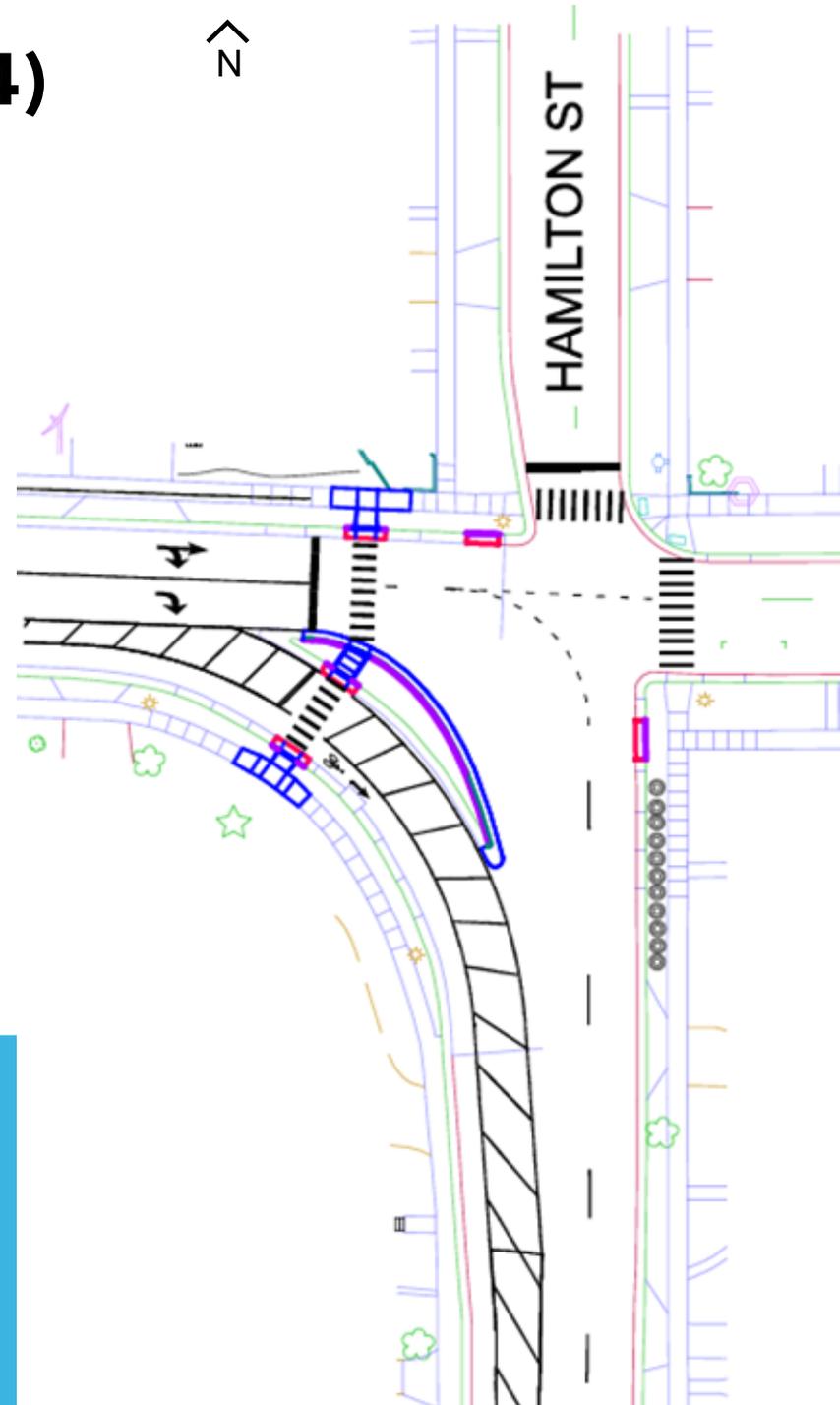


# Washtenaw & Hamilton: (4/4) Intersection Modification

- Modified to become a fully signalized intersection
- Repurpose existing "slip-lane" to a bike lane that continues to Pearl
- Pedestrian island will be shrunk to accommodate vehicle turns
- Southern most pedestrian crosswalk will be removed

## Level of Service

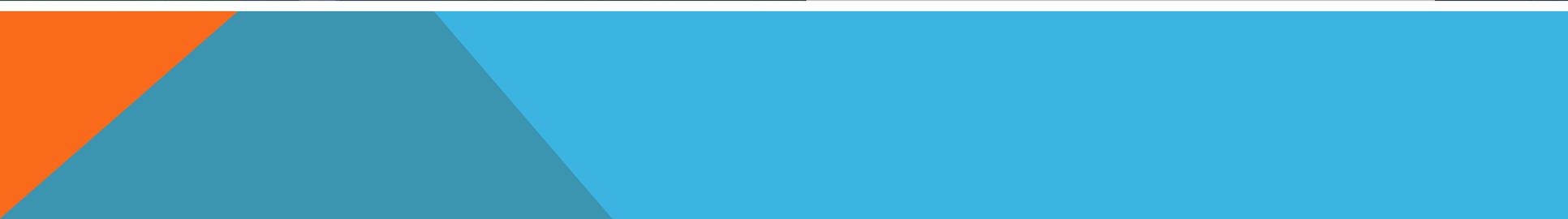
Washtenaw/Hamilton Intersection			
Peak Hour (PM)	Current	2038 Unchanged	2038 Lane Reduction
Washtenaw EB	A	B	B
Hamilton SB	D	D	D
Overall	A	A	B



# Washtenaw & Hamilton Intersection Modification



# Washtenaw & Hamilton Intersection Modification

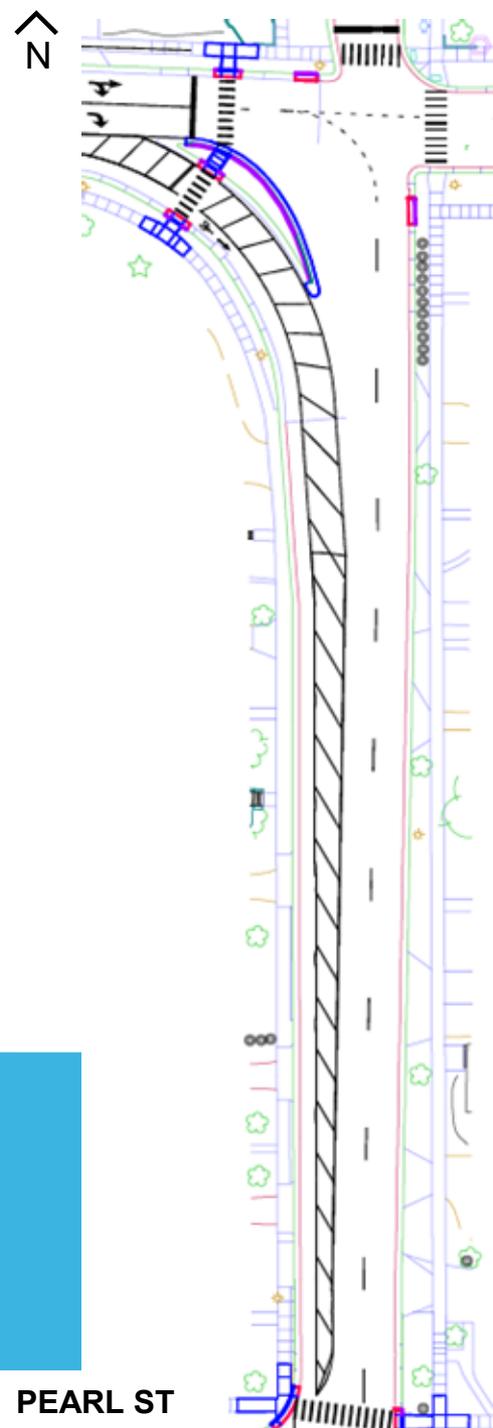


# Hamilton: Washtenaw to Pearl (1/5)

- Washtenaw-Pearl: existing "slip-lane" is repurposed to a bike lane and rightmost (west side) lane becomes bike lane through Pearl

## Level of Service

Peak Hour	Hamilton/Michigan (SB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM	C	C	C
PM	C	D	D



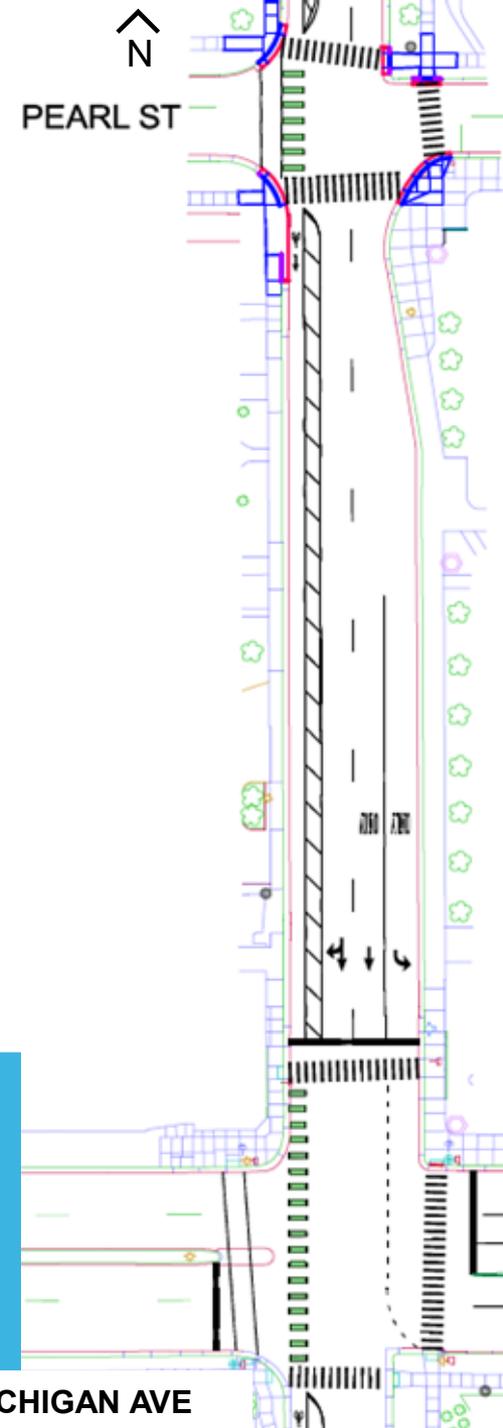
# Hamilton:

## Pearl to Michigan (2/5)

- Pearl-Michigan: rightmost lane (west side) becomes bike lane and continues through intersection; conflict pavement markings added
- Existing dual left-turn lane onto Michigan will be removed and replaced with single left-turn lane

### Level of Service

Hamilton/Michigan (SB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	C	C	C
PM	C	D	D

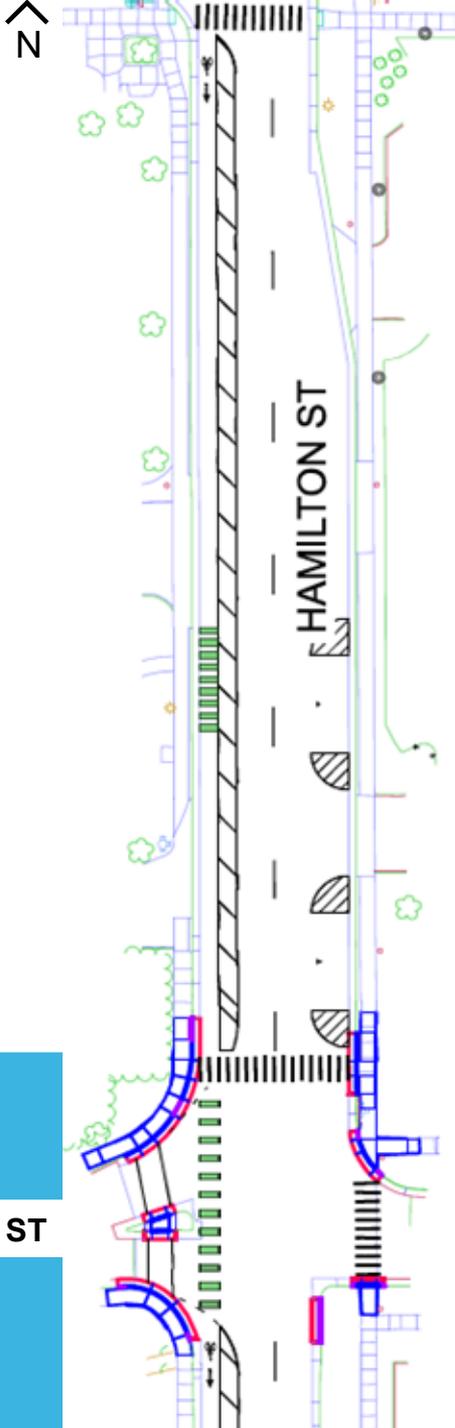


# Hamilton: Michigan to Ferris (3/5)

- Michigan-Ferris: Rightmost lane (west side) becomes bike lane; left-only lane to Ferris (east side) becomes on-street parking
- Ferris intersection is improved with ADA ramps and striping; pedestrians only cross 2 lanes of traffic (from four)

### Level of Service

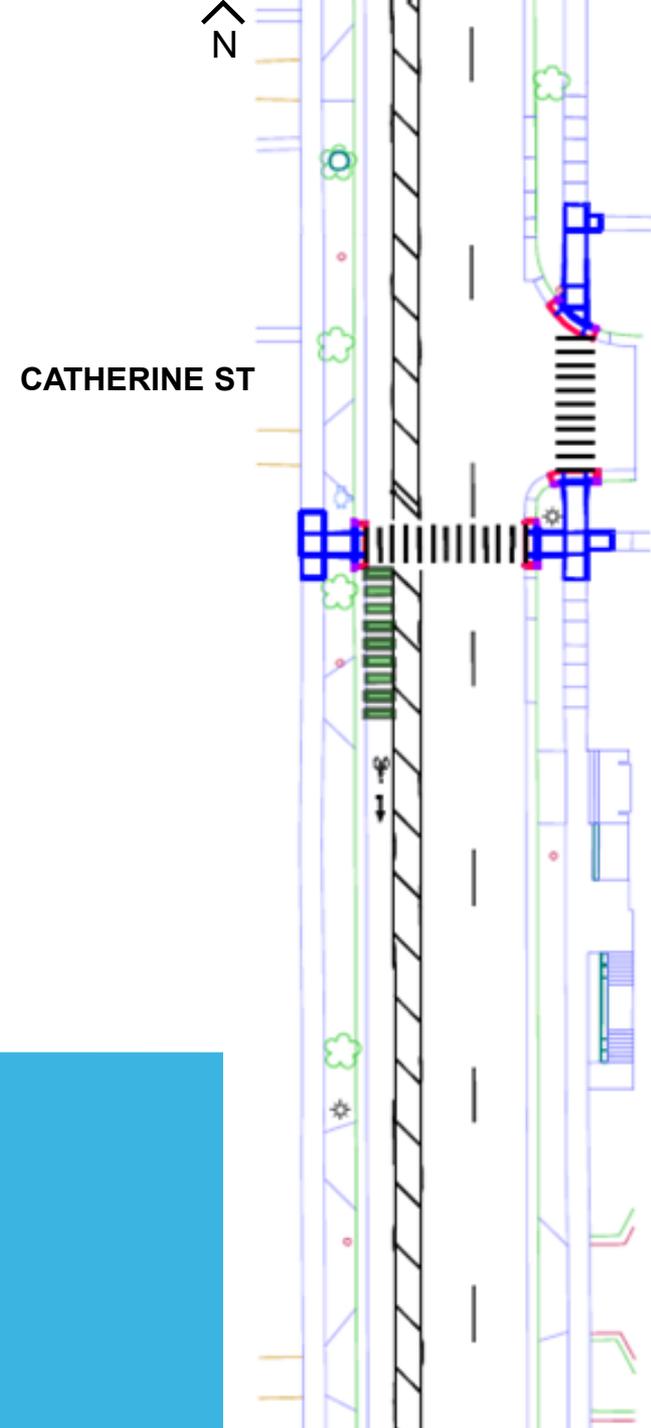
Peak Hour	Hamilton/Ferris (SB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM		N/A – Free-flow	
PM		N/A – Free-flow	



FERRIS ST

# Hamilton: At Catherine (4/5)

- Rightmost lane (west side) becomes bike lane
- Catherine intersection is improved with ADA ramps and striping; pedestrians only cross 2 lanes of traffic (from four)

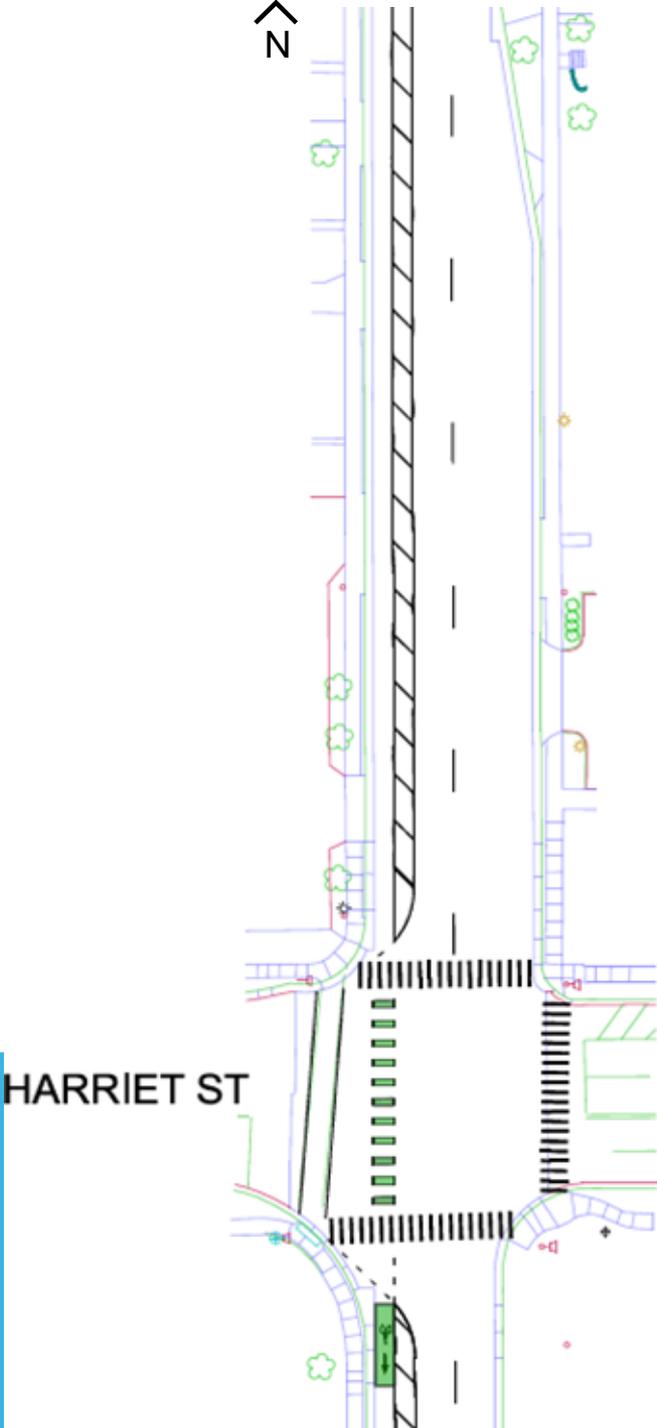


# Hamilton: Ferris to Harriet (5/5)

- Ferris-Harriet: Rightmost lane (westside) becomes bike lane
- New ADA-compliant crosswalk at Woodward, Catherine, and Buffalo

### Level of Service

Hamilton/Harriet (SB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	B	B	A
PM	C	D	D



# 2014 Proposed Huron St Over I-94 Pathway

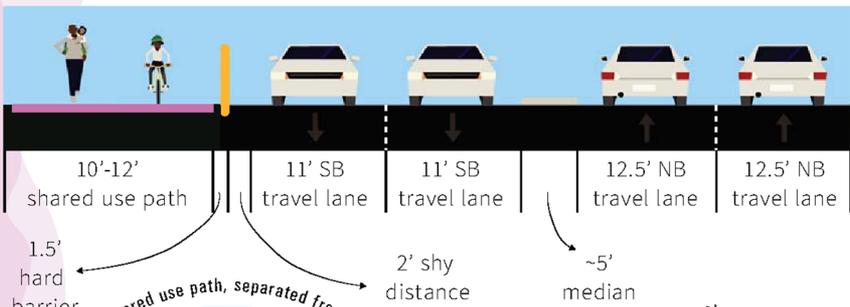
## Preferred Alternative

### Shared Use Path on West Side

#### Key Improvements

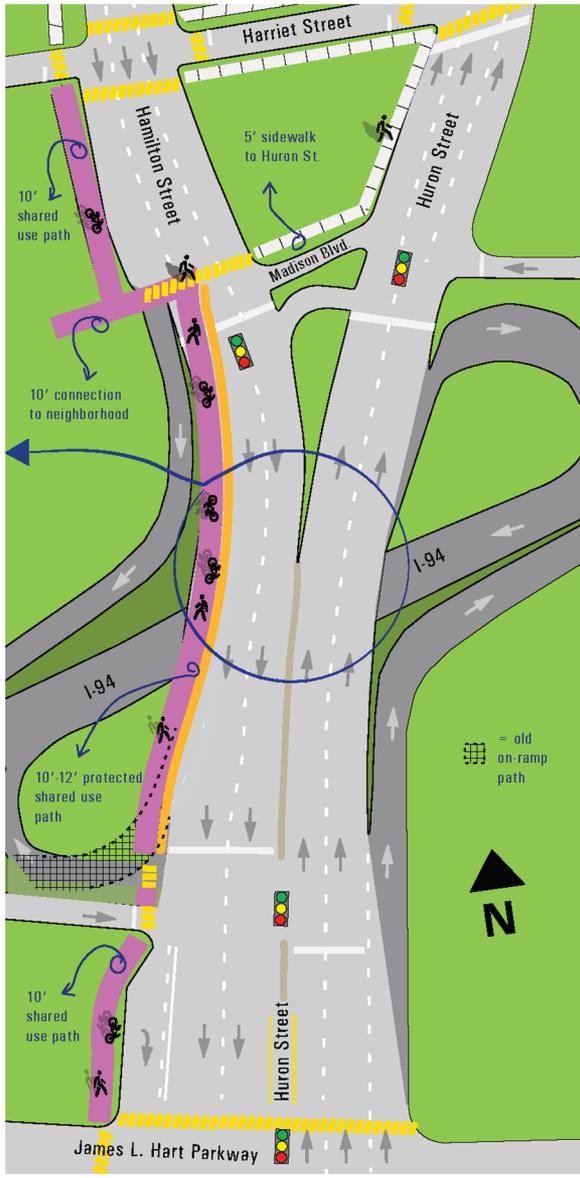
- \* 10'-12' shared use path
- \* Hard barrier on outside of path
- \* Pedestrian signals
- \* Reconfigured southwest on-ramp
- \* Better sidewalk connections

#### Cross section at center of bridge



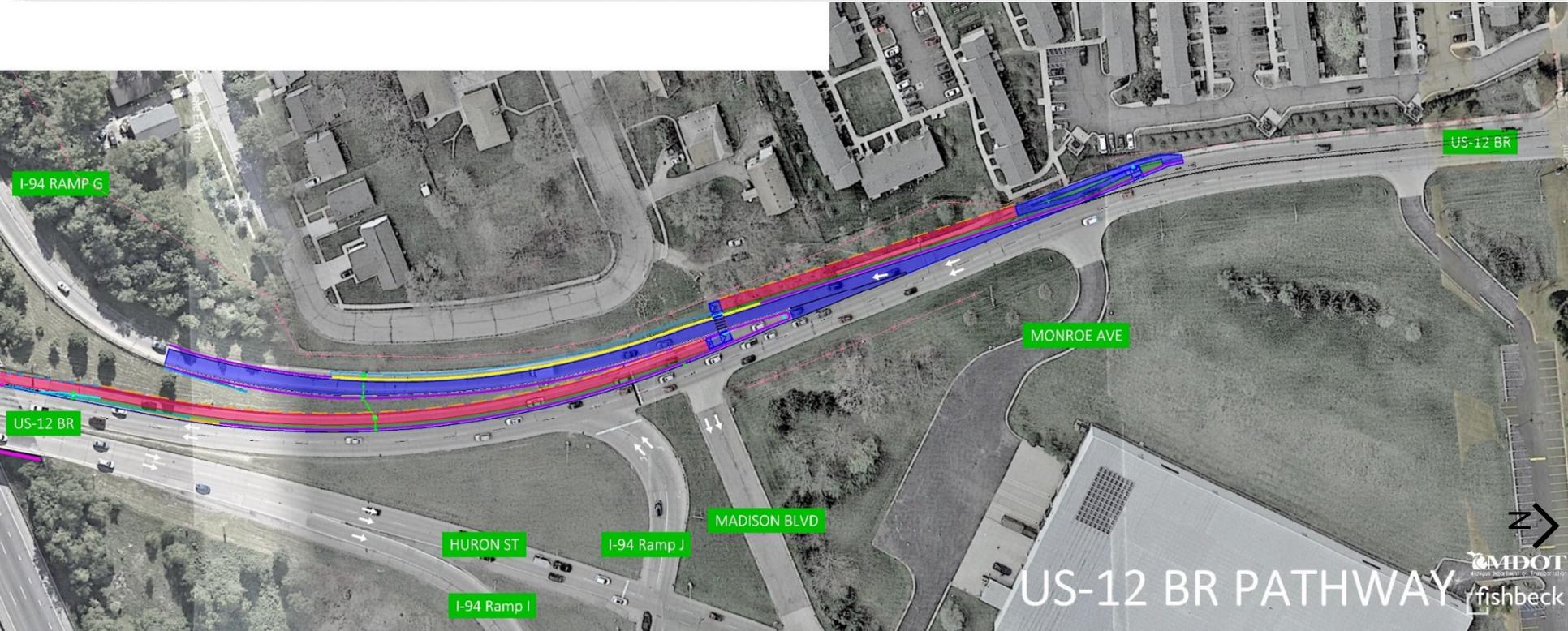
Washtenaw Area  
Transportation Study  
miwats.org

WASHTENAW COUNTY  
OFFICE OF COMMUNITY &  
ECONOMIC DEVELOPMENT



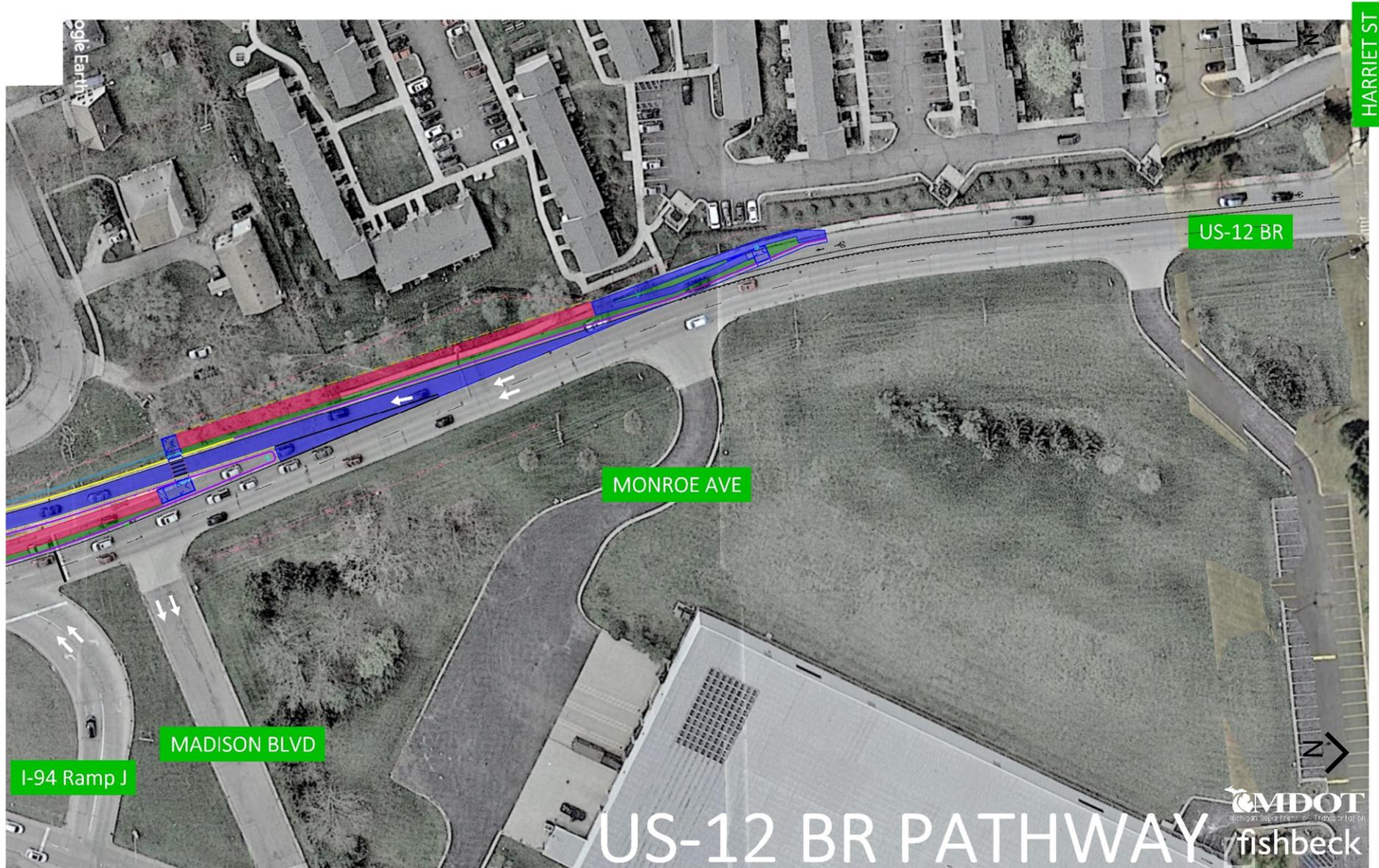
# 2021 Stakeholder Selected Design (1/4)

## North of Bridge - City of Ypsilanti



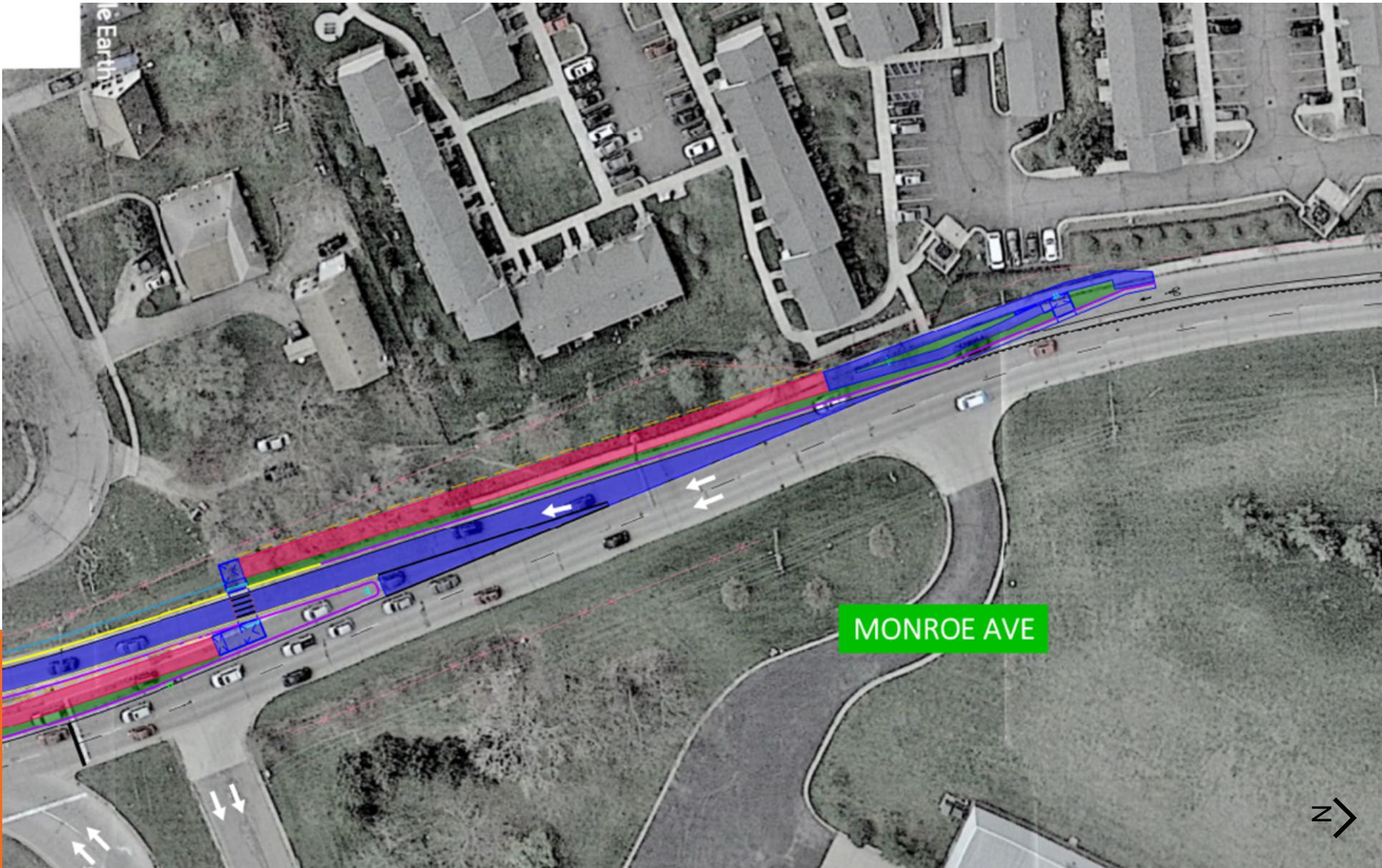
# 2021 Stakeholder Selected Design (2/4)

## North of Bridge - City of Ypsilanti



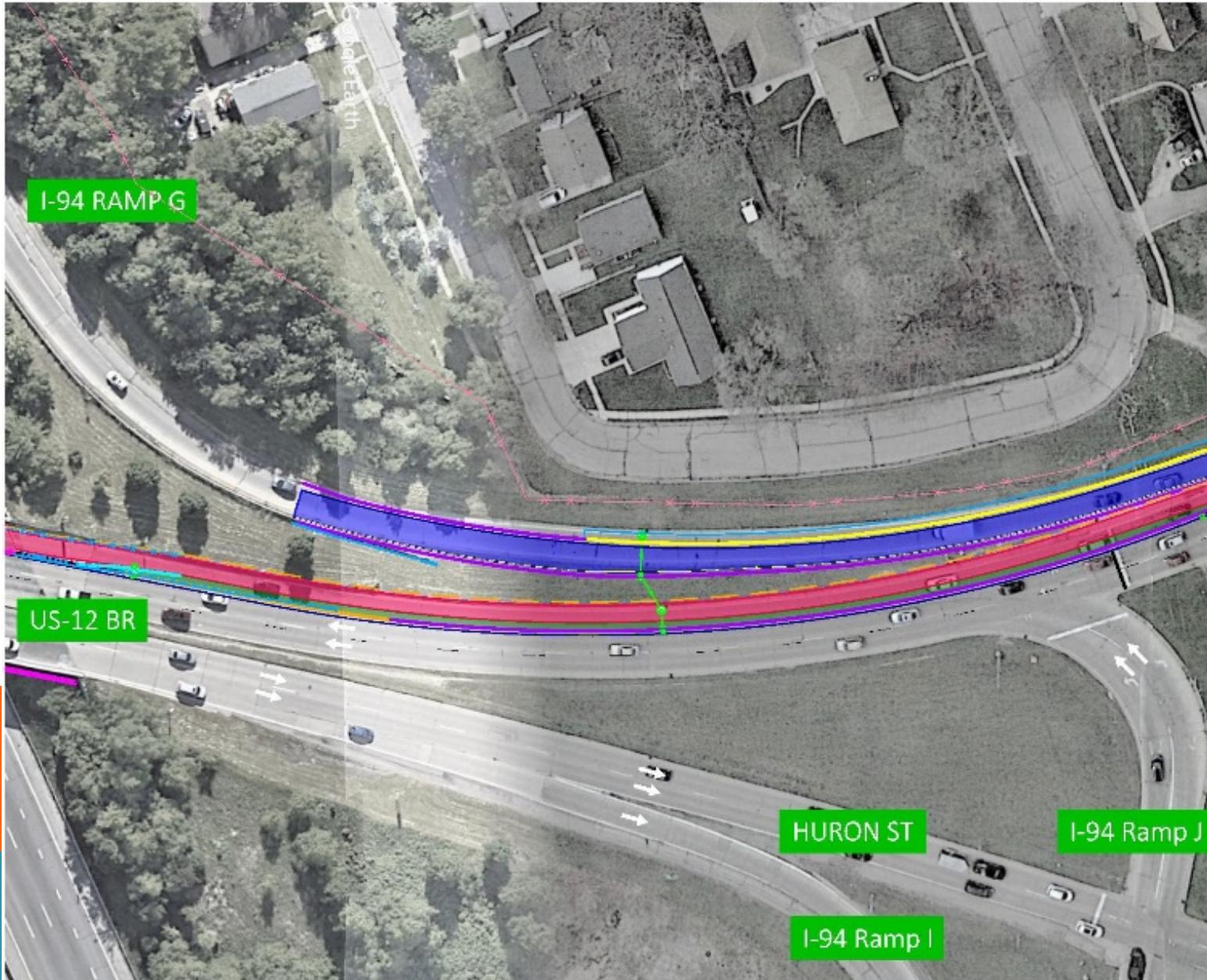
# North of Bridge - City of Ypsilanti (3/4)

## Closer Look



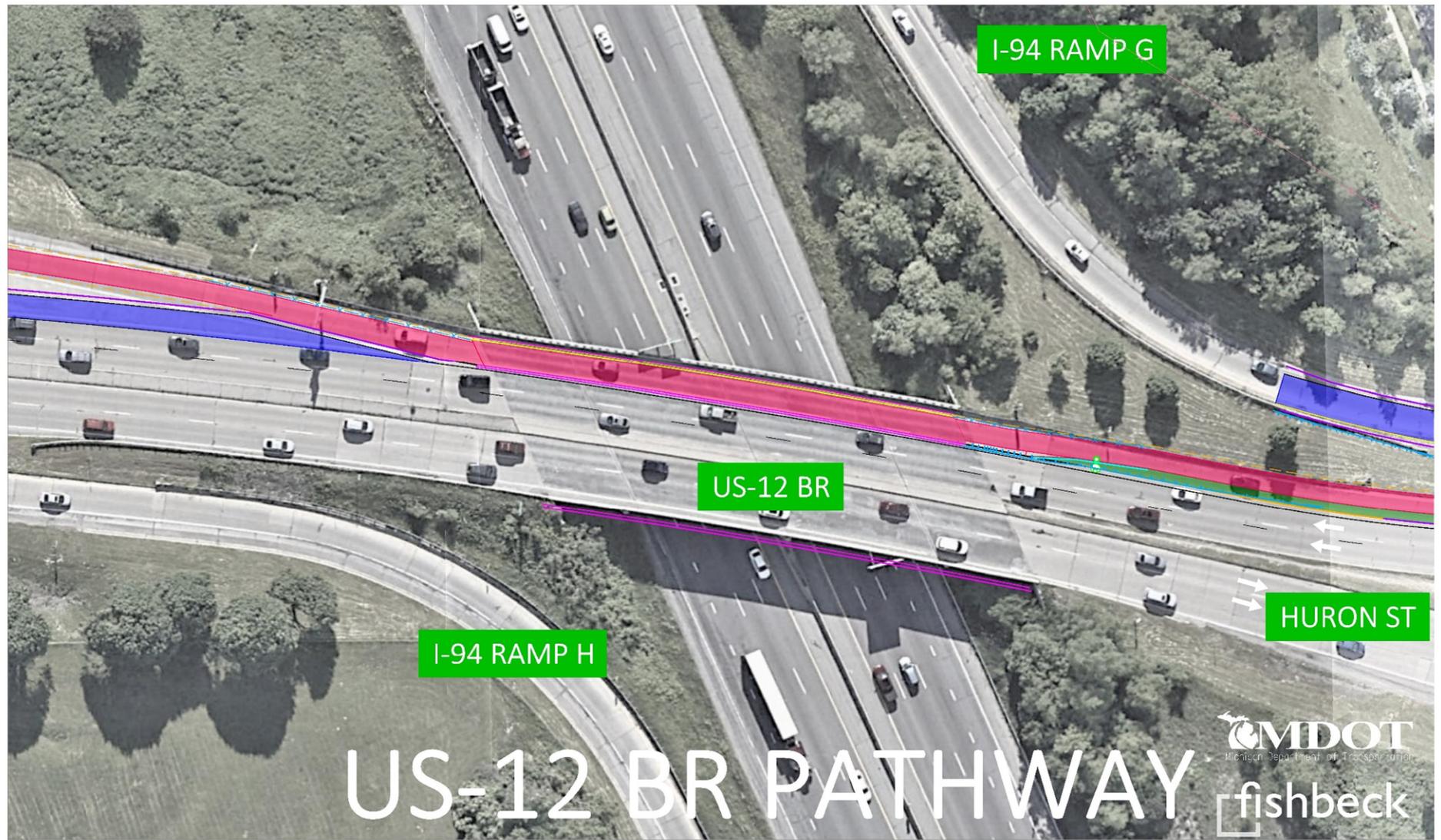
# 2021 Stakeholder Selected Design (4/4)

## North of Bridge - City of Ypsilanti



# 2021 Stakeholder Selected Design (1/1)

## Bridge over I-94



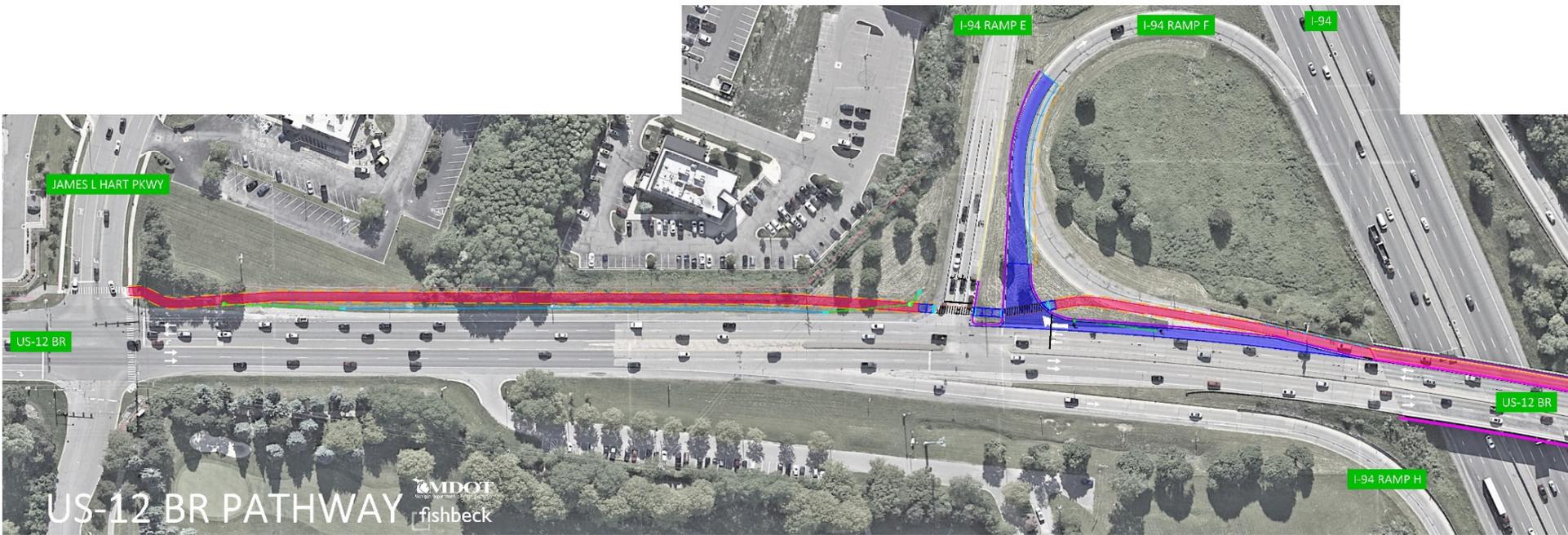
US-12 BR PATHWAY





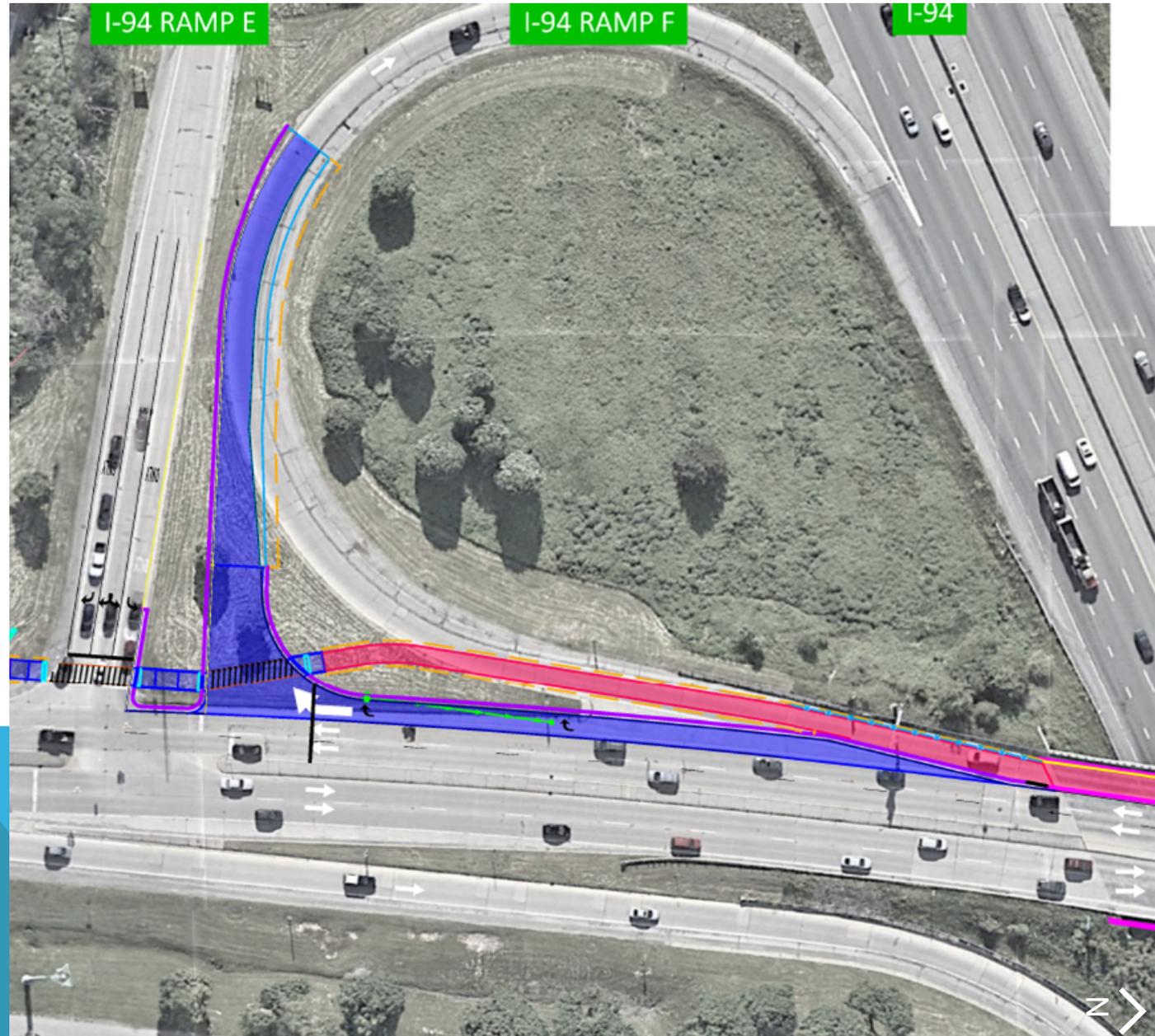
# 2021 Stakeholder Selected Design (1/3)

## South of Bridge - Ypsilanti Township



# South of Bridge - Ypsilanti Township (2/3)

## Closer Look

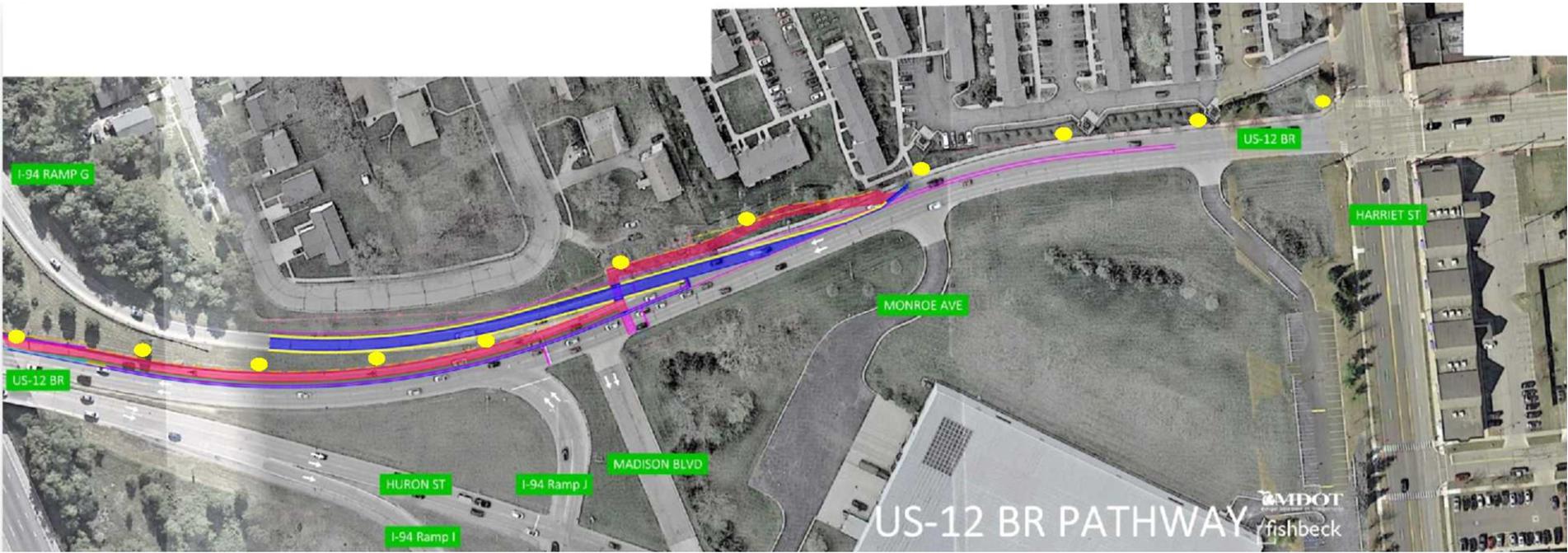


# South of Bridge - Ypsilanti Township (3/3)

## Closer Look



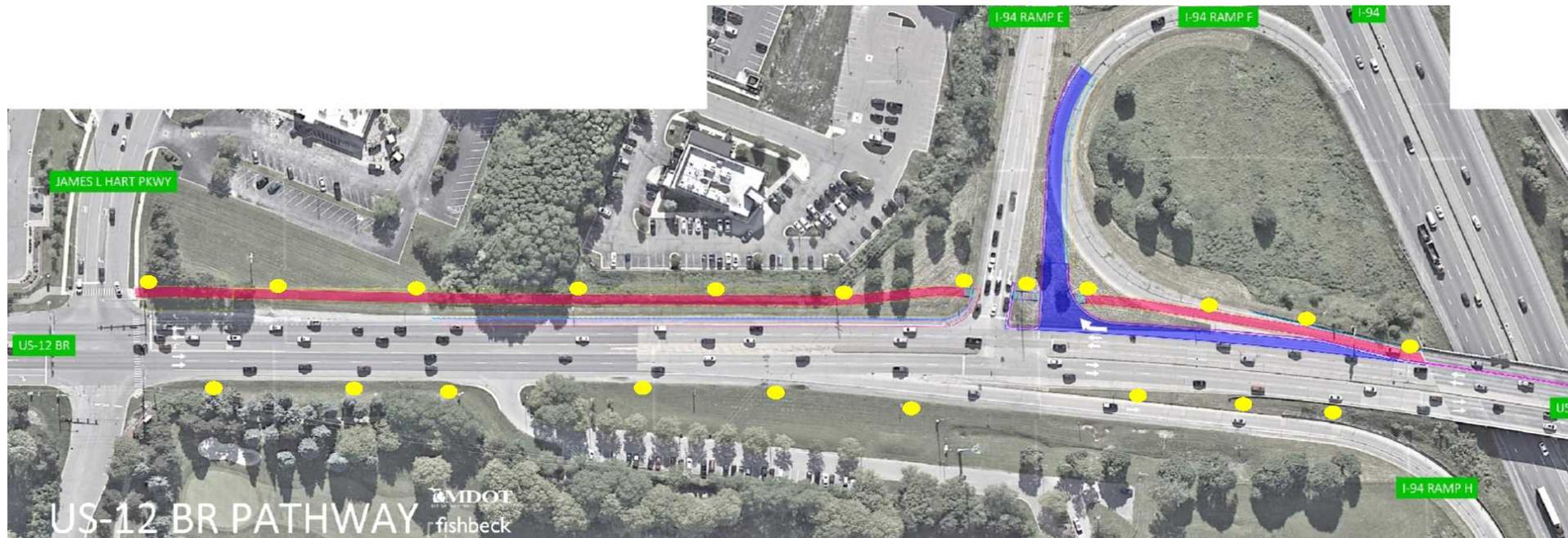
# Pathway - New Lighting Locations



● New Light Poles/Fixture



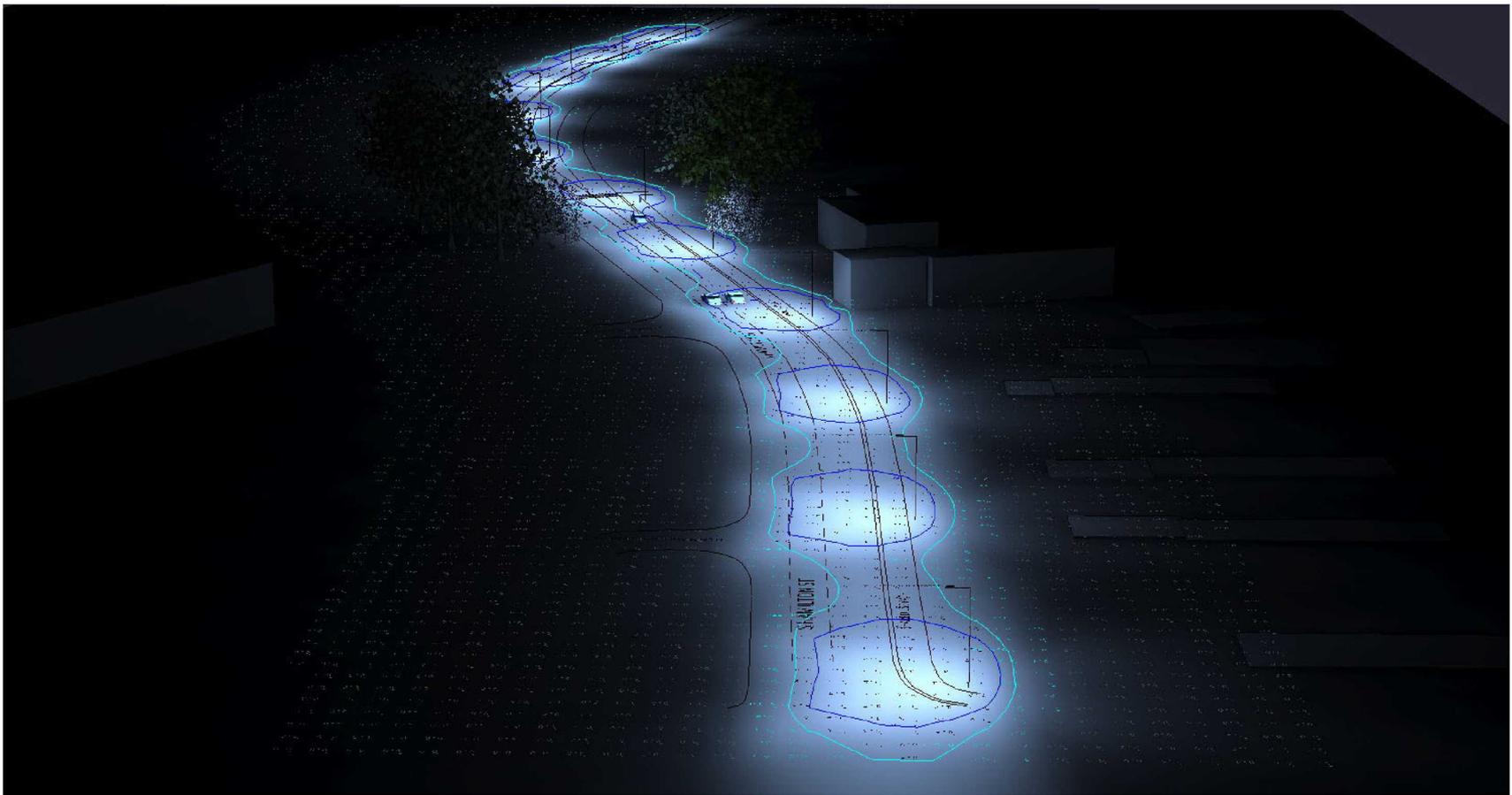
# Pathway - New Lighting Locations



● New Light Poles/Fixture



# Pathway - New Lighting Renderings



RENDERING\_SOUTH FACING\_1



#	Date	Comments

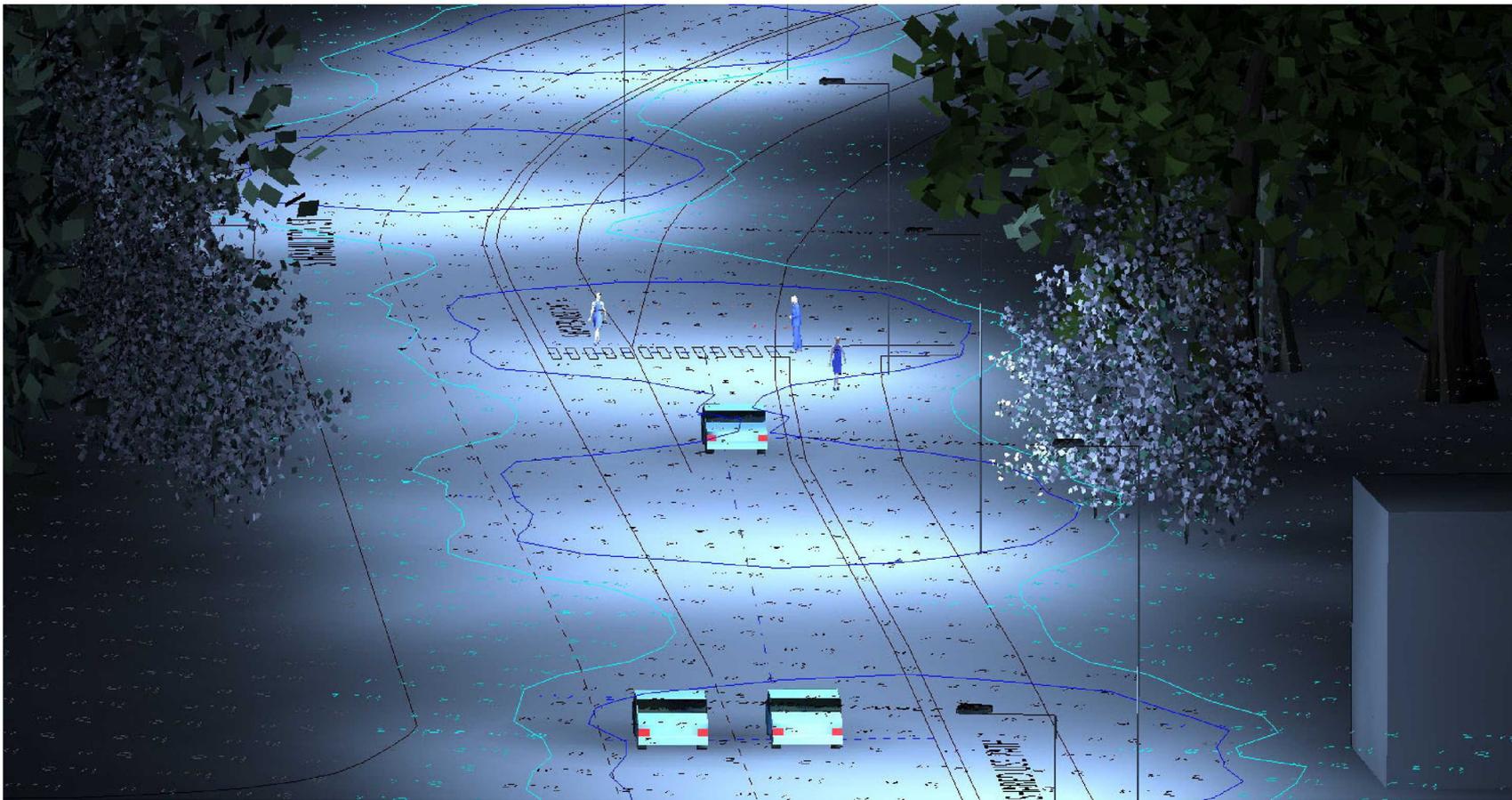
Drawn By: M. Valascho  
 Checked By:  
 Date: 8/27/2020  
 Scale: No Scale

Roadway & Shared Use Path Lighting Project  
 Hamilton Street - Ypsilanti



# Pathway - New Lighting Renderings

## Ramp Crossing #1



RENDERING\_SOUTH\_FACING\_CROSSWALK



#	Date	Comments

Drawn By: M. Valascho
Checked By:
Date: 8/27/2020
Scale: No Scale

Roadway & Shared Used Path Lighting Project  
 Hamilton Street - Ypsilanti



# Pathway - New Lighting Renderings

## Ramp Crossing #1



RENDERING\_NORTH\_FACING\_CROSSWALK

**DTE**

Comments

Date

#

Revisions

Drawn By: M. Valascho

Checked By:

Date: 8/27/2020

Scale: No Scale

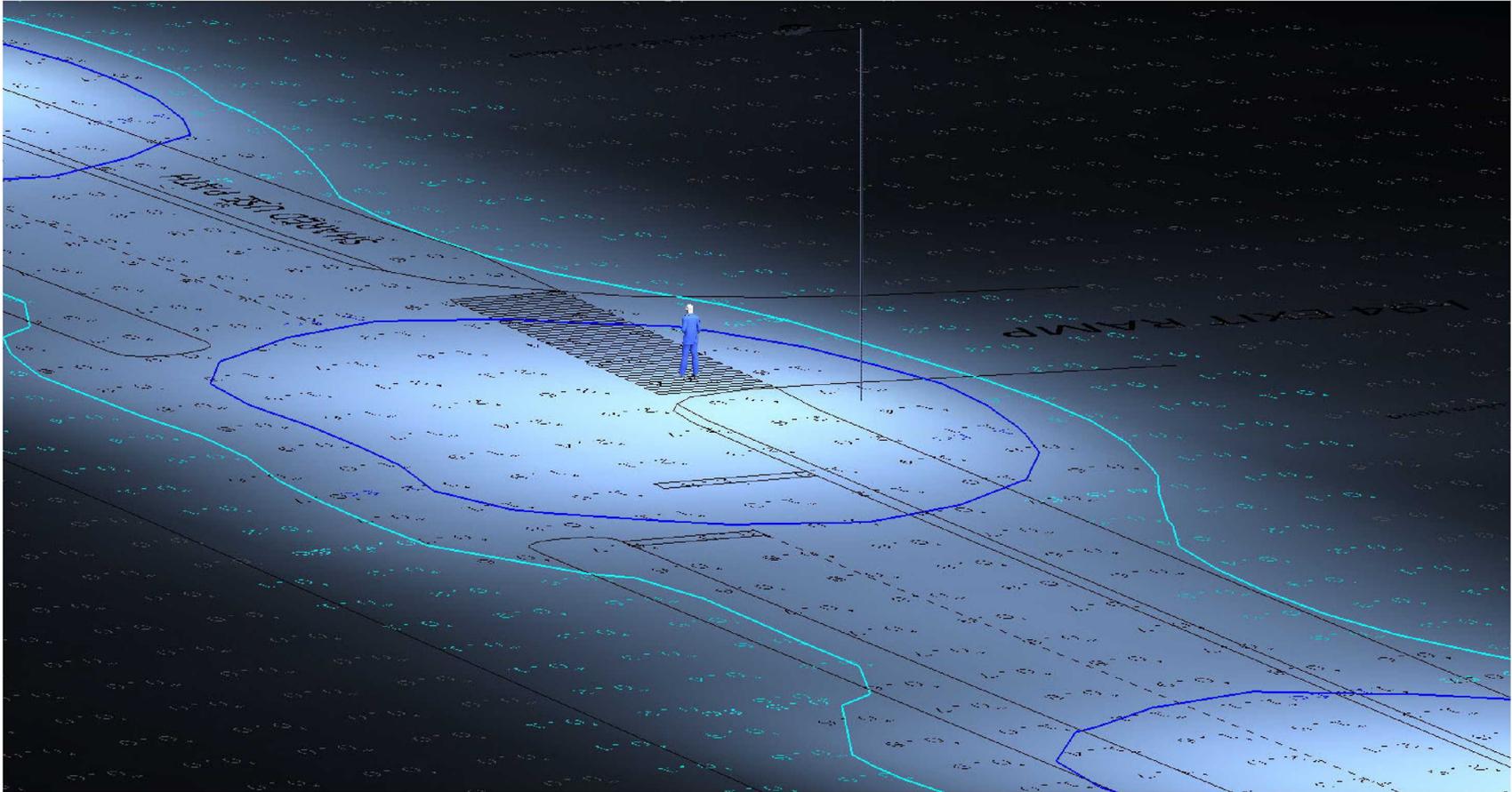
Roadway & Shared Use Path Lighting Project

Hamilton Street - Ypsilanti



# Pathway - New Lighting Renderings

## Ramp Crossing #2



RENDERING\_CROSSWALK\_104 EXIT RAMP



#	Date	Comments

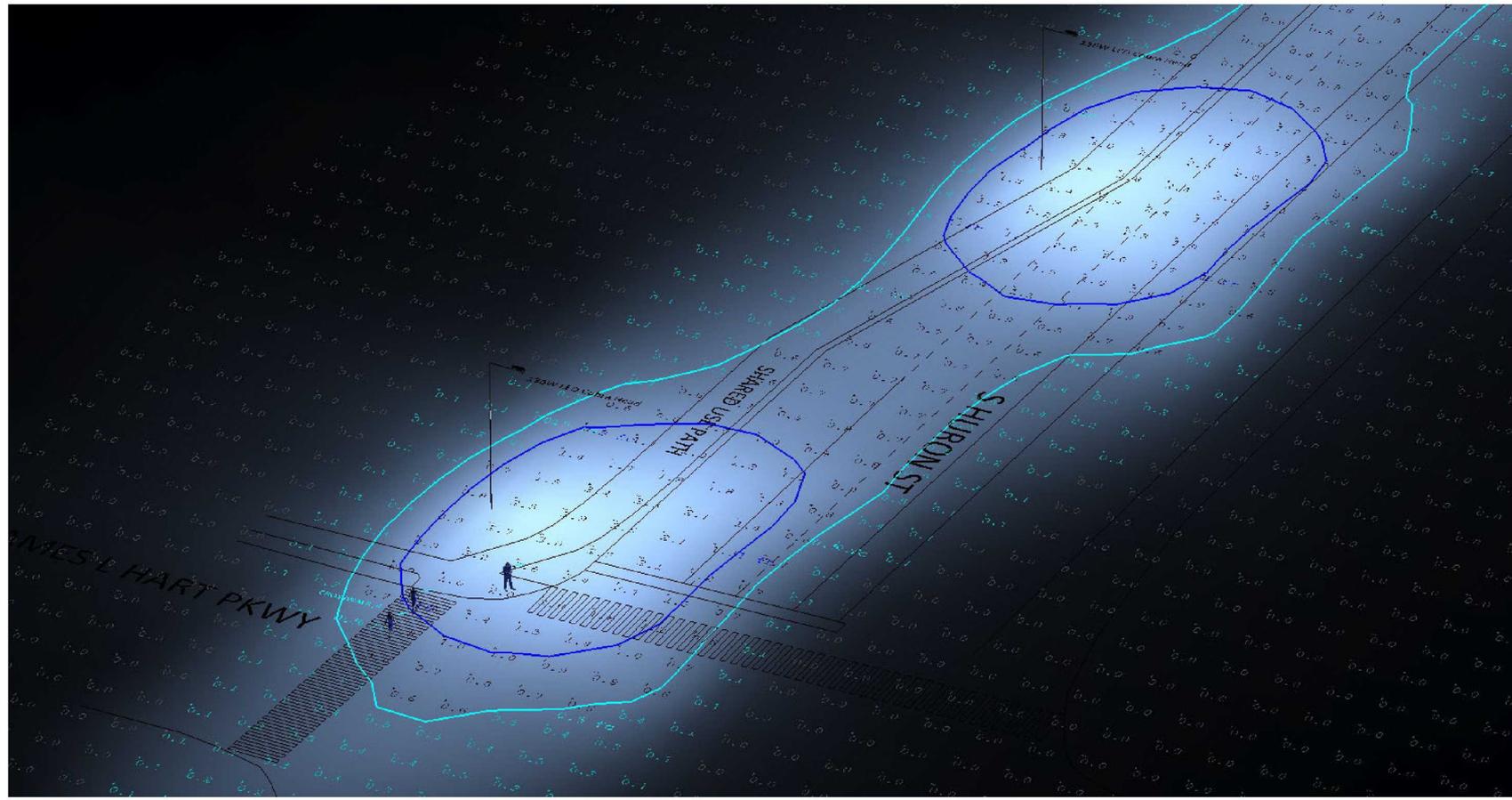
Drawn By: M. Valascho
Checked By:
Date: 8/7/2020
Scale: No Scale

Roadway & Shared Used Path Lighting Project  
**Huron Street - Ypsilanti**



# Pathway - New Lighting Renderings

## Crossing #3



RENDERING\_CROSSWALK\_JAMES E HART PKWY



#	Date	Comments

Drawn By: M. Valascho
Checked By:
Date: 8/7/2020
Scale: No Scale

Roadway & Shared Use Path Lighting Project  
 Huron Street - Ypsilanti

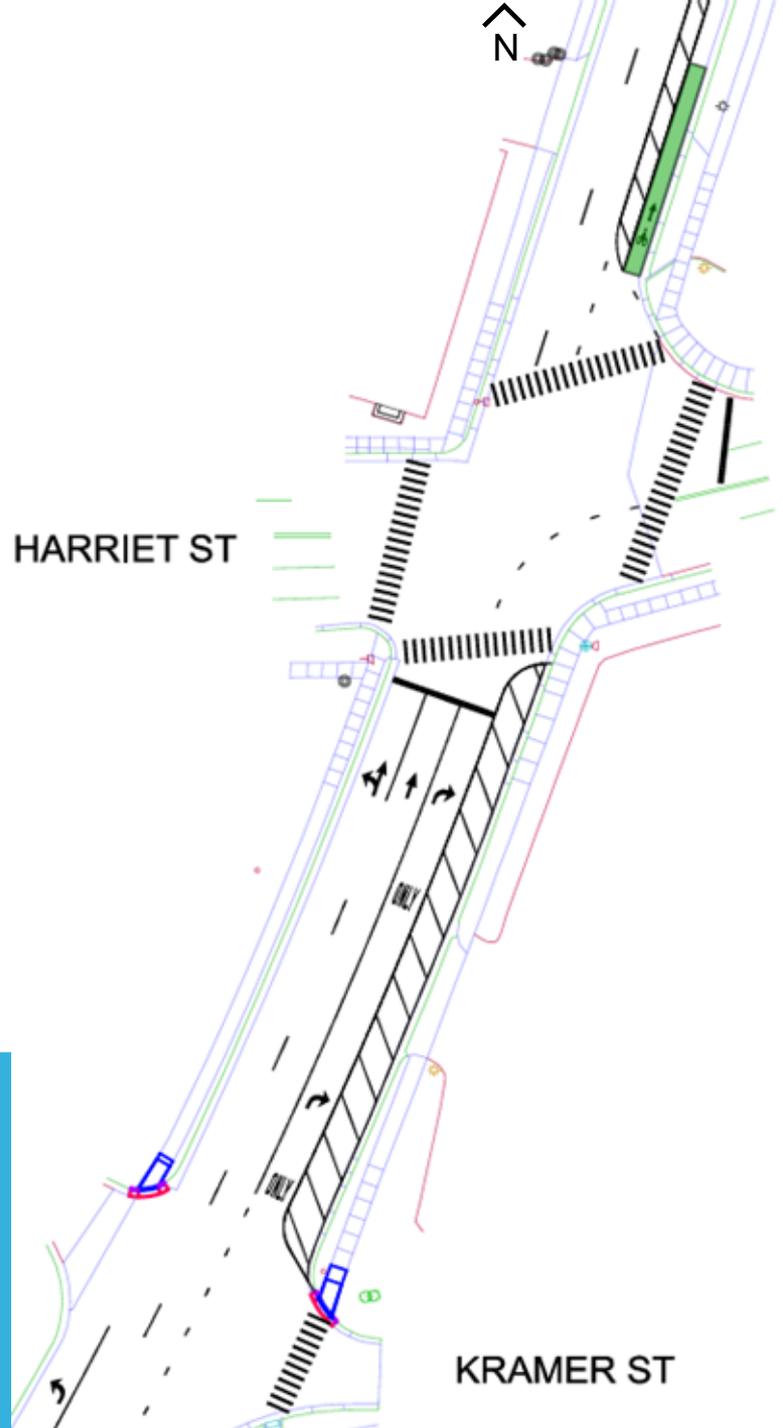


# Huron: Harriet to Ferris (1/4)

- South of Harriet: current right-only lane is removed (replace with streetscaping); rightmost lane becomes right-only
- Harriet - Ferris: rightmost lane (east side) becomes bike lane
- New ADA-compliant crosswalk at Kramer, Casler, Buffalo, Catherine, and Woodward

### Level of Service

Huron/Harriet (NB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	B	B	C
PM	A	A	B

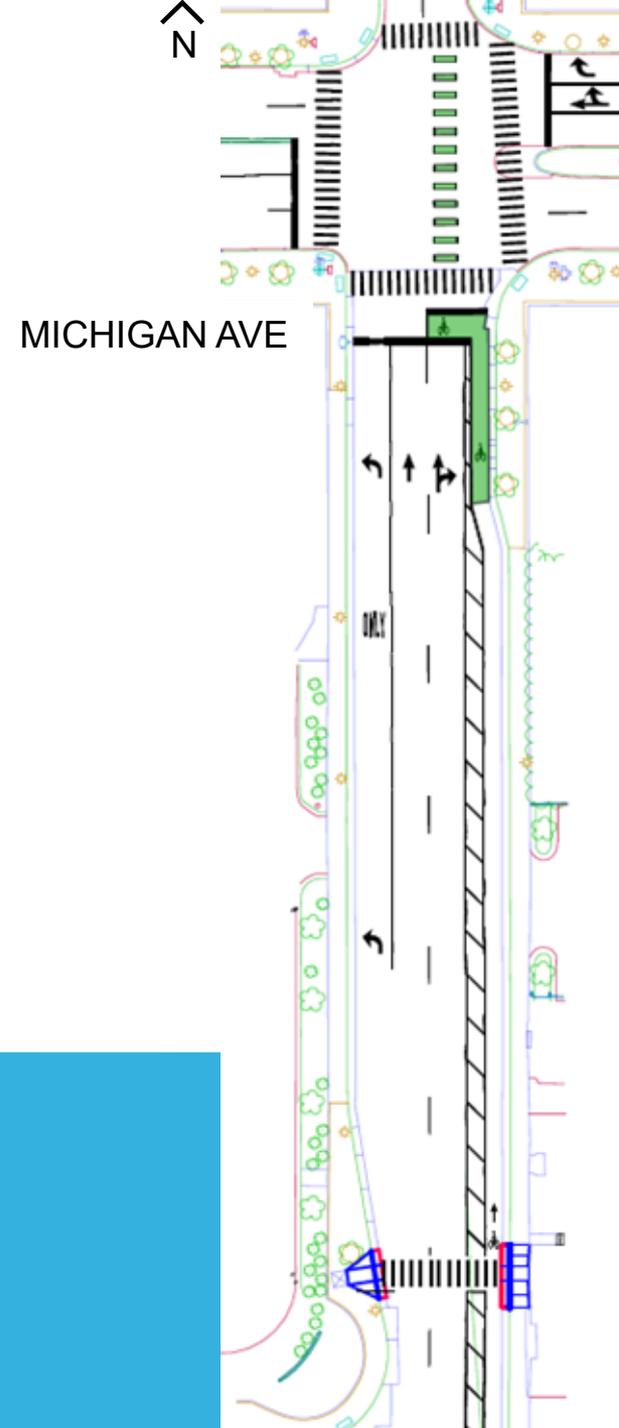


# Huron: Ferris-> Michigan (2/4)

- Ferris-Michigan: current no-parking area becomes bike lane
- Bike box at Michigan: [https://www.youtube.com/watch?v=tQKK\\_AynF2pg](https://www.youtube.com/watch?v=tQKK_AynF2pg)
- New ADA-compliant crosswalk at Ferris
- No vehicle lanes removed

## Level of Service

Huron/Michigan (NB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	B	C	C
PM	B	B	C



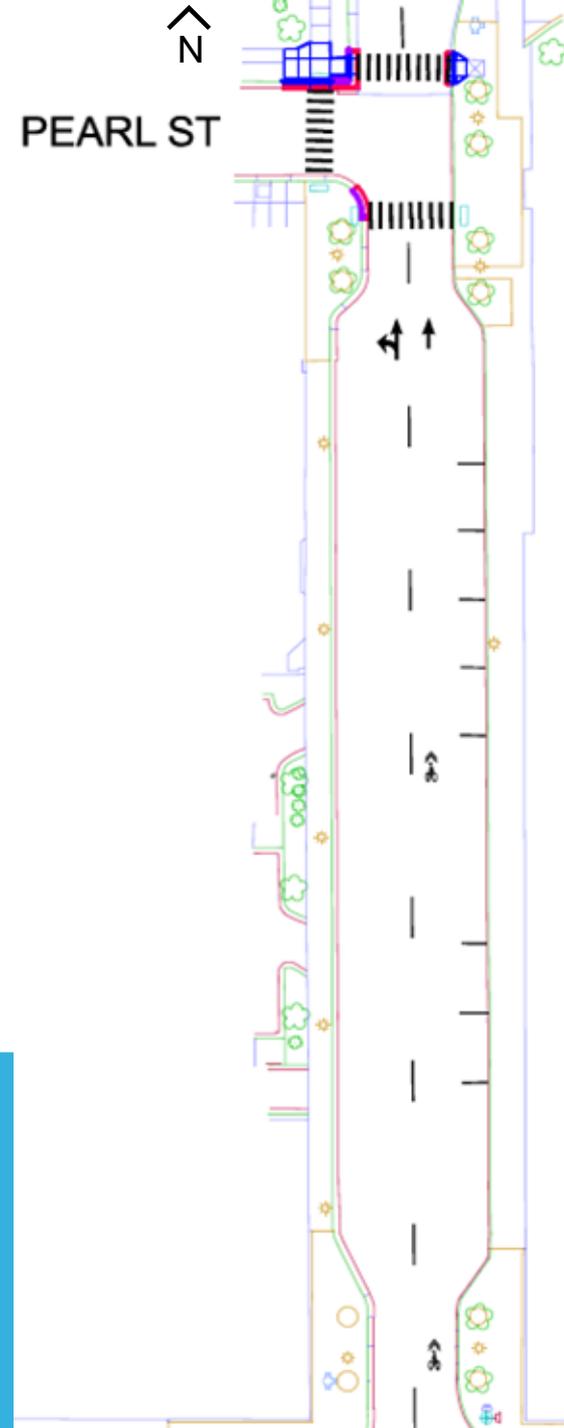
# Huron & Michigan: Bicycle Box

- Bike boxes improve intersection safety for everyone by giving people biking a dedicated space to wait in front of cars at a red traffic light.
- Bike box at Michigan:  
[https://www.youtube.com/watch?v=tQKK\\_AynF2pg](https://www.youtube.com/watch?v=tQKK_AynF2pg)



# Huron: Michigan -> Pearl (3/4)

- Michigan to Pearl: no changes to lanes; add "share the road" signage and pavement markings; parking preserved

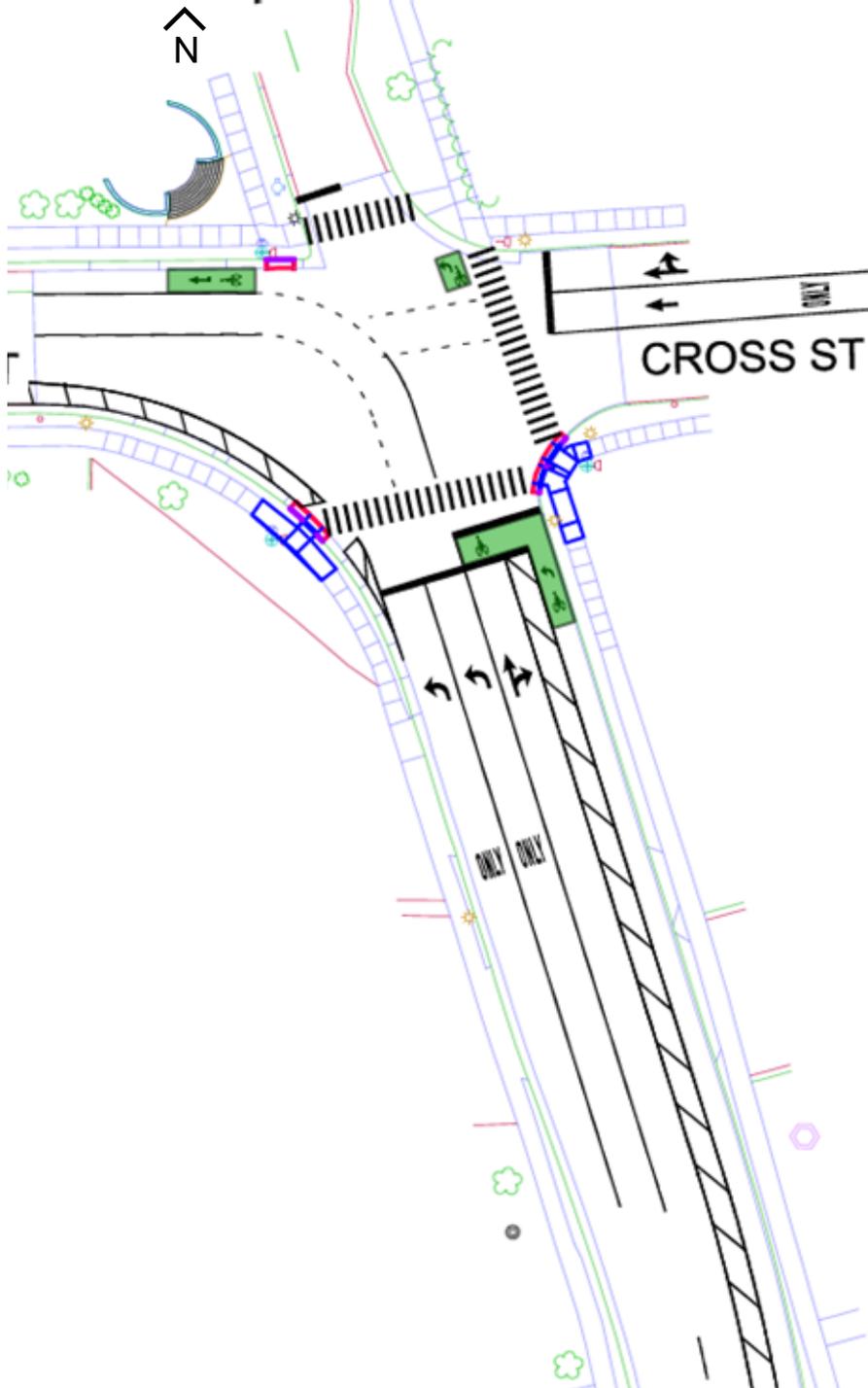


# Huron: Pearl to Cross (4/4)

- Pearl-Cross: rightmost lane (east side) becomes bike lane
- At Cross: 2-stage left for bikes to make turning left to W Cross bike lane easier for bikes and more predictable for vehicle traffic  
[https://www.youtube.com/watch?v=5S\\_JjsxZGU](https://www.youtube.com/watch?v=5S_JjsxZGU)
- New ADA-compliant crosswalk at Washtenaw St, and Emmet
- Modified to operate like a "typical" intersection

## Level of Service

Peak Hour	Huron/Cross (NB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM	C	C	D
PM	C	C	C



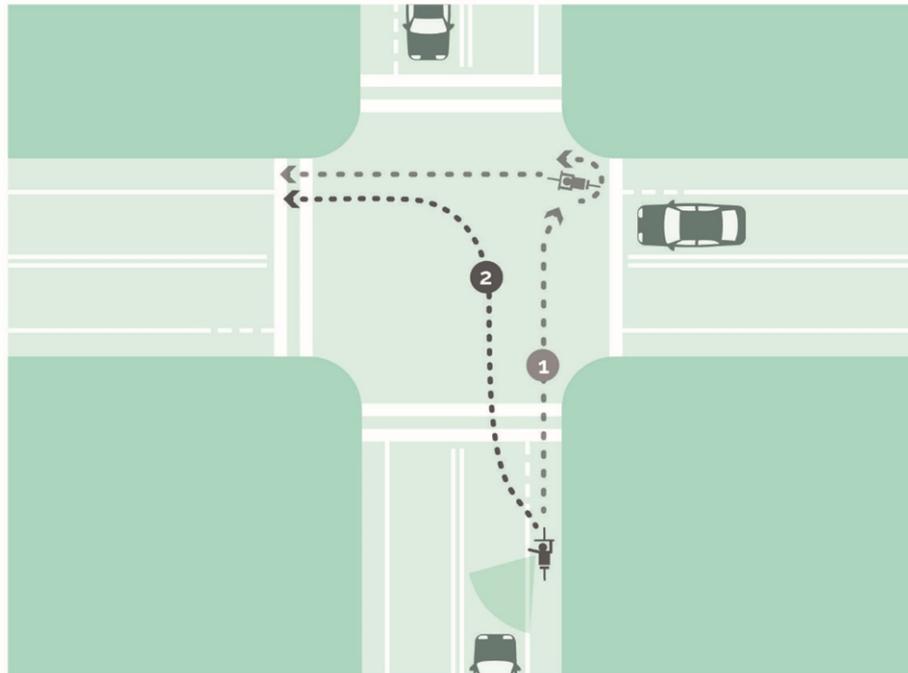
# Huron & Cross: Bicycle Two-Stage Turn Box

## TURNING LEFT

When you're approaching a signalized intersection and turning left means merging across busy traffic, you've got two options...

### 1 TWO STAGE TURN

### 2 VEHICULAR TURN

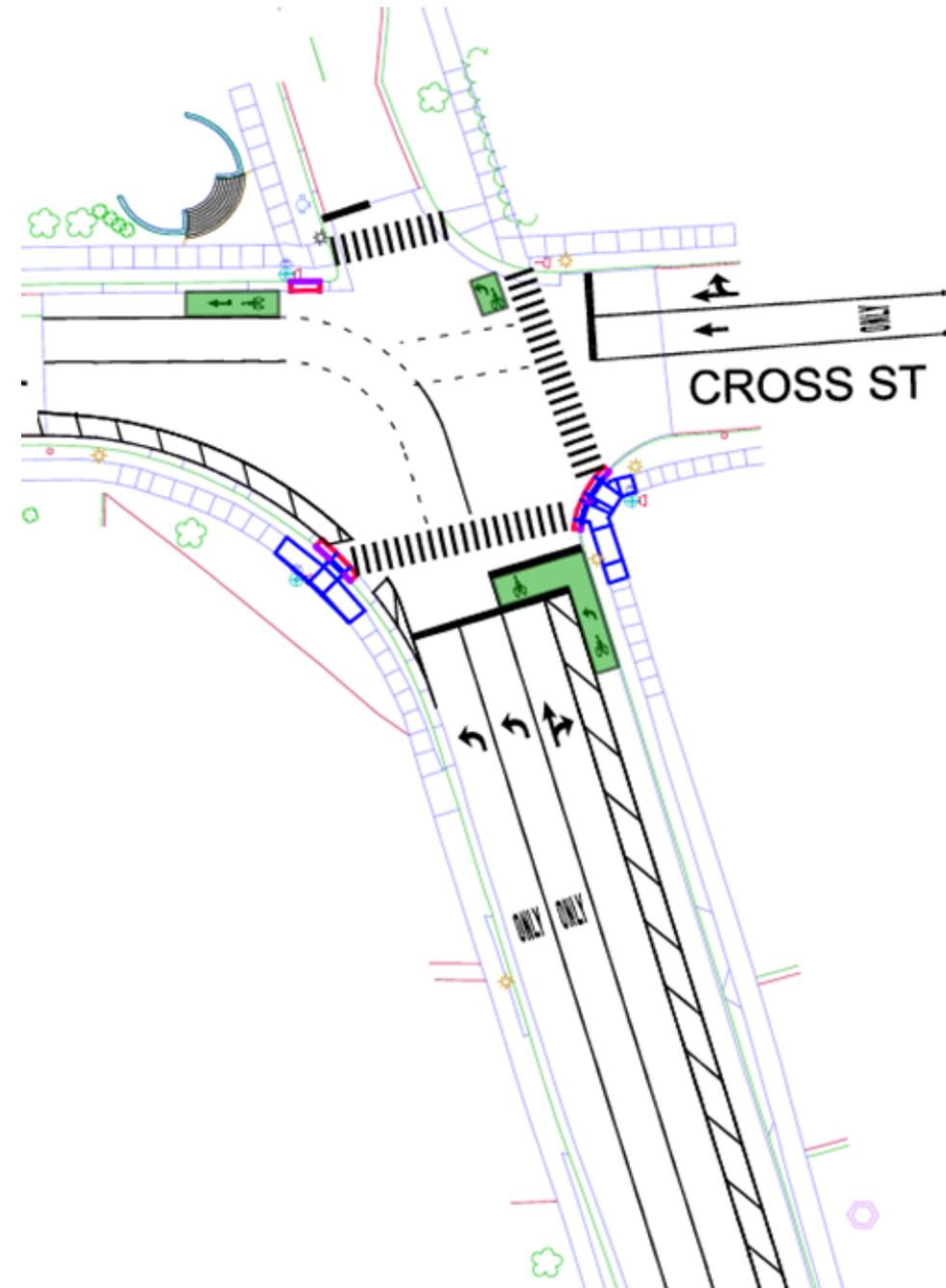


**1** If you don't feel safe merging into traffic, cross through the intersection in the direction you're travelling, then turn at a 90 degree angle and wait for the signal to take you where you want to go.

**2** Merging left across one or several lanes of busy traffic requires savvy maneuvering.

# Huron & Cross Intersection Modification

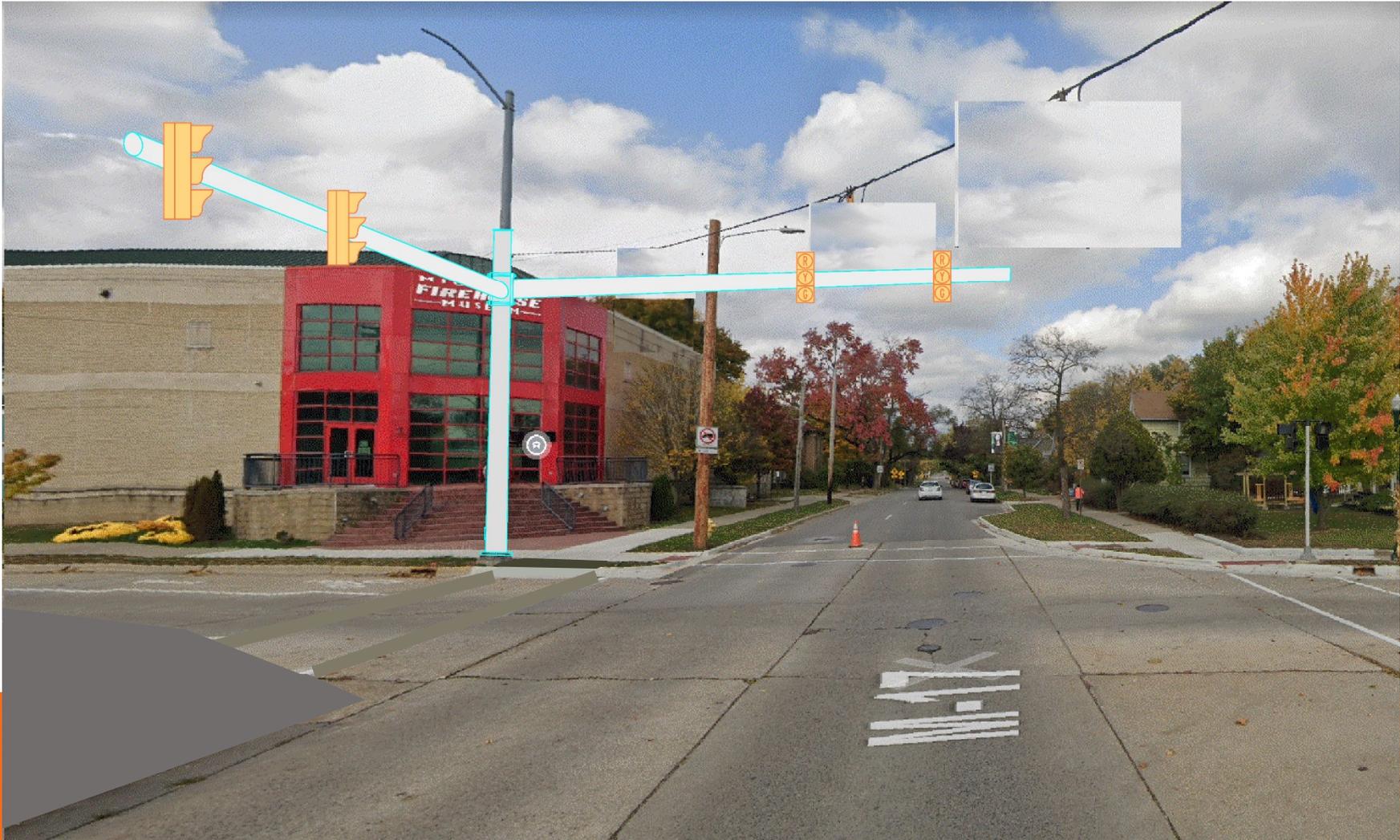
- Modified to operate like a “typical” intersection
- Left-turn “slip-lane” removed and replaced with dual light controlled left turns
- Pedestrian island and westside crosswalk removed
- Westbound dual right and thru lane added to accommodate traffic volumes



## Level of Service

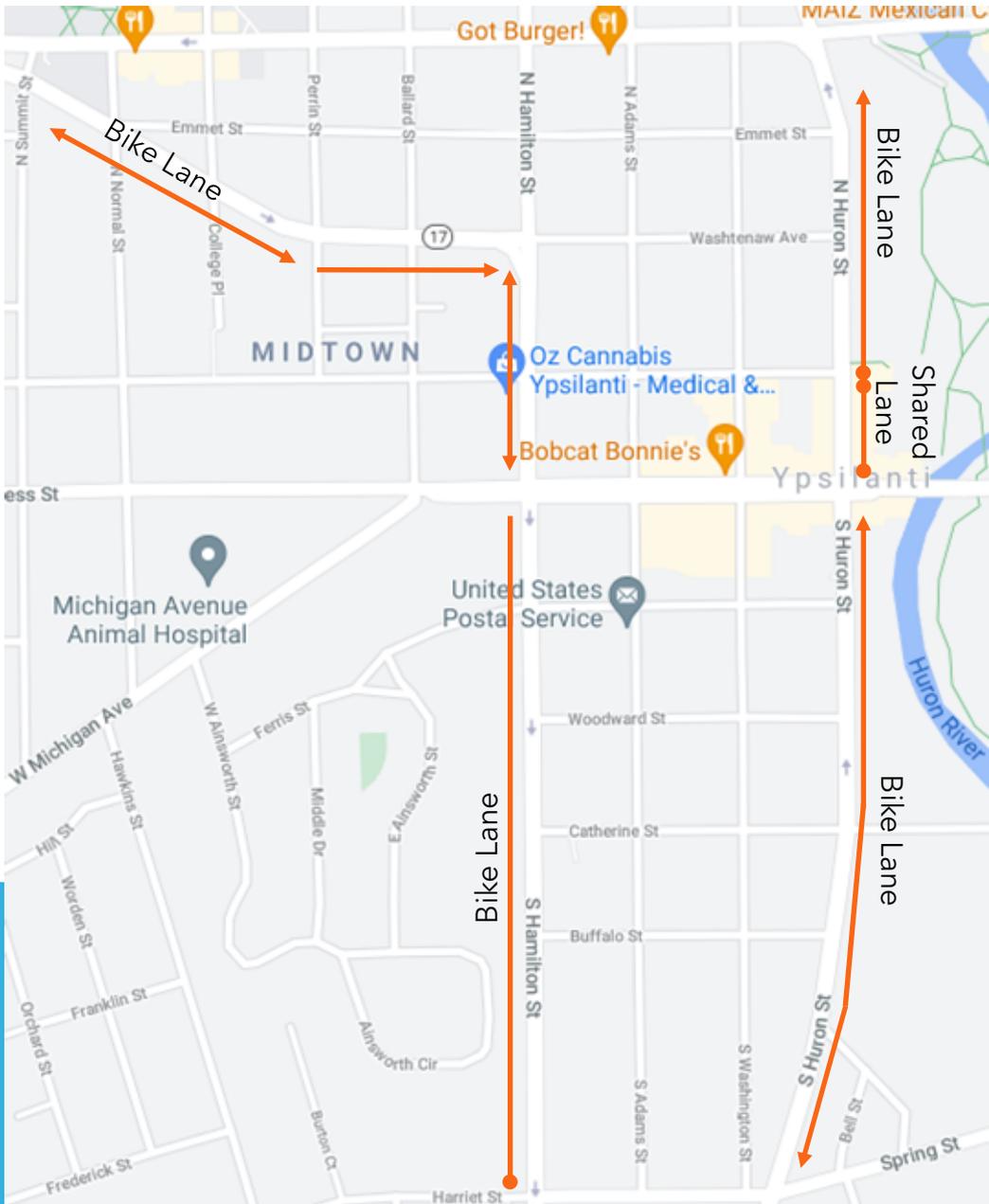
Huron/Cross Intersection			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	B	C	C
PM	B	C	B

# Cross & Huron Intersection Modification



# Overall Changes

- Add over a mile of bike lanes and safe turning at major intersections
- Add ADA ramps and new crosswalks at major pedestrian crossings
- Maintains bus service
- Adds less than half a minute to PM peak travel on Hamilton; less than a minute to AM peak travel on Huron



# Summary & Next Steps

## **The project would:**

- Reduce the predicted number of crashes per mile per year by reducing the number of travel lanes.
- Improve pedestrian safety by reducing the travel lanes needed to cross.
- Improve mobility for non-vehicular transportation modes by adding bike lanes.
- Slow vehicle traffic speeds, reducing the risk of fatal injury in a crash.
- Increase vehicle travel time through downtown by less than several minute at peak times.
- Connect to the Huron St over I-94 pathway

## **Next Steps:**

- Design completion in 2021.
  - Construction to begin in 2022.
  - Construction phasing public meeting
- 

# Questions / Contacts



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[wesslerb@cityofypsilanti.com](mailto:wesslerb@cityofypsilanti.com)

Monica Monsma | Public Involvement & Hearings Officer | MDOT  
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