



Twin Ports Interchange Reconstruction Project Duluth – Superior MIC Policy Board

Project Goals and Location

-  TPI WP1 and WP2: I-35/I-535/Hwy 53 Interchange Reconstruction (2020-2024)
-  TPI WP3: Hwy 53 Reconstruction (2022-2025)
-  TPI WP4: I-535/Garfield Avenue Reconstruction (2022-2024)

TPI: Twin Ports Interchange **WP:** Work Package



- **Enhance safety by eliminating blind merges and left exits**
 - Moving left exits to the right
 - Relocating merges
- **Replace aging infrastructure**
 - Reconstructing weight restricted and non-redundant bridges
 - Reduces maintenance and closures
 - Eliminates some bridge structure
- **Improve freight mobility**
 - Allow oversize/overweight freight on the Interstate
 - First and last mile to port!

Goal: Improve Freight Mobility



10/31/22 – 5:30 AM

Goal: Improve Freight Mobility

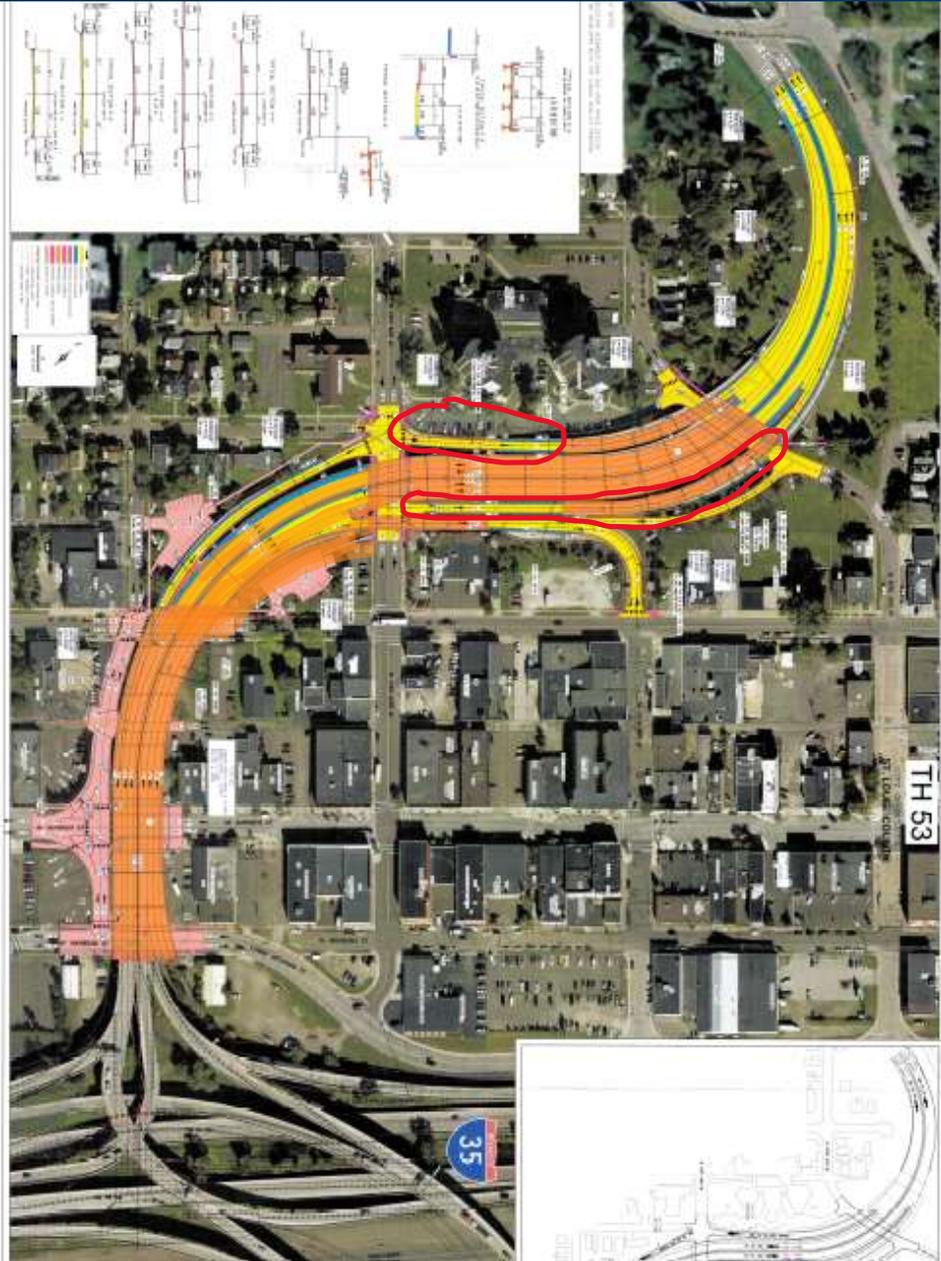


10/31/22 - noon

Twin Ports Interchange

- Work Pack (WP) 3 and 4
- Bids reviewed and accepted from Ames Kraemer Joint Venture (AKJV)
- Contract awarded
- WP 3 and 4 Construction Cost \$159 million
 - Total construction cost: $\$276 + \$159 = \$435$ million

TPI Work Package 3 (TH 53 Bridges)



- Complete reconstruction of the TH 53 bridges
- Limited utility work
- City street reconstruction
- Status
 - Demolition has commenced
 - 21st ramps are now closed
 - Open to traffic fall 2024
 - Final completion fall 2024

TPI Work Package 3 (TH 53 Bridges)



TPI Work Package 3 (TH 53 Bridge Demolition)



12/14/2022

TPI Work Package 4 (I-535/Garfield Interchange)



- Reconstruct bridges 69808, 69808A, 69809
- Significant reconstruction of bridge 69810
- Utilities, storm sewer, pavement reconstruction
- Minor track relocation near 69810
- Status
 - Under construction now
 - SB Garfield bypassed to NB off ramp later in December
 - Open to traffic fall 2023
 - Final completion fall 2024

TPI Work Package 4 (I-535/Garfield Interchange)



TPI Work Package 4 (I-535/Garfield Interchange)



SB Traffic Switch January 6

TPI Work Packages 1 and 2 (I-35 and main interchange)



- Status

- Now working on Lincoln Park side and bayside
- On schedule
- I-35 mainline and connections to 535 will be open fall 2023
- Final completion 2024 (including Lower Michigan)

TPI Work Packages 1 and 2 (I-35 and main interchange)



12/14/2022

I-35: What a difference three months make!



TPI Work Packages 1 and 2 (I-35 and main interchange)



Lincoln Park



Substructure Construction :

- BR 69906 (over I35),
- BR 69139 (over Michigan St., Superior Street, 1st Street, etc.)
- Retaining Walls for merge ramps

Closure of Michigan Street

Lincoln Park



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Closure of Michigan Street

What's Next? – Traffic Changes

- **Demolition and reconstruction continues on Garfield Interchange**
 1. Traffic shift for SB Garfield: January 6th
- **Demolition on TH 53 (Piedmont Ave.)**
 - Complete from Superior Street to 1st Street
 - 1st Street currently closed for clean-up
 - Working up the hill
 - Will have 2 of 3 streets (W. Michigan, W. Superior, W. 1st Street) open
 - Will not simultaneously close both W. 1st St. and 21st Ave W.

Garfield Avenue – We've been conveying this message to the public

- Traffic is HEAVY on Garfield to/from Superior, WI
 - ➡ Trucks are having trouble getting in/out from the businesses
 - **Garfield is Over Capacity**
 - New Traffic signal at Helberg Drive is helping the local businesses safely use Garfield Ave. Patience is still necessary.
 - Please...
 1. Use Bong Bridge route to reduce congestion on Garfield Avenue
 2. Watch Speed
 3. Be Considerate (do not block driveways when stopped at the signals)

Project Outreach and Communication

Project information hotline

- Phone number: 218-343-3748
- Use 511 for updates
- Sign up for updates on the project website:
<https://www.dot.state.mn.us/d1/projects/twin-ports-interchange/>

Time-lapse camera: linked to project webpage

- Near 27th Avenue West bridge, pointing north
- Garfield Avenue overpass, pointing south

Posted videos

- We have been creating original videos with specific information on the project to post on the project webpage.
 - Beam Setting
 - Miller Coffee Creek
 - TPI Progress Update
 - Bridge Demolition, & more

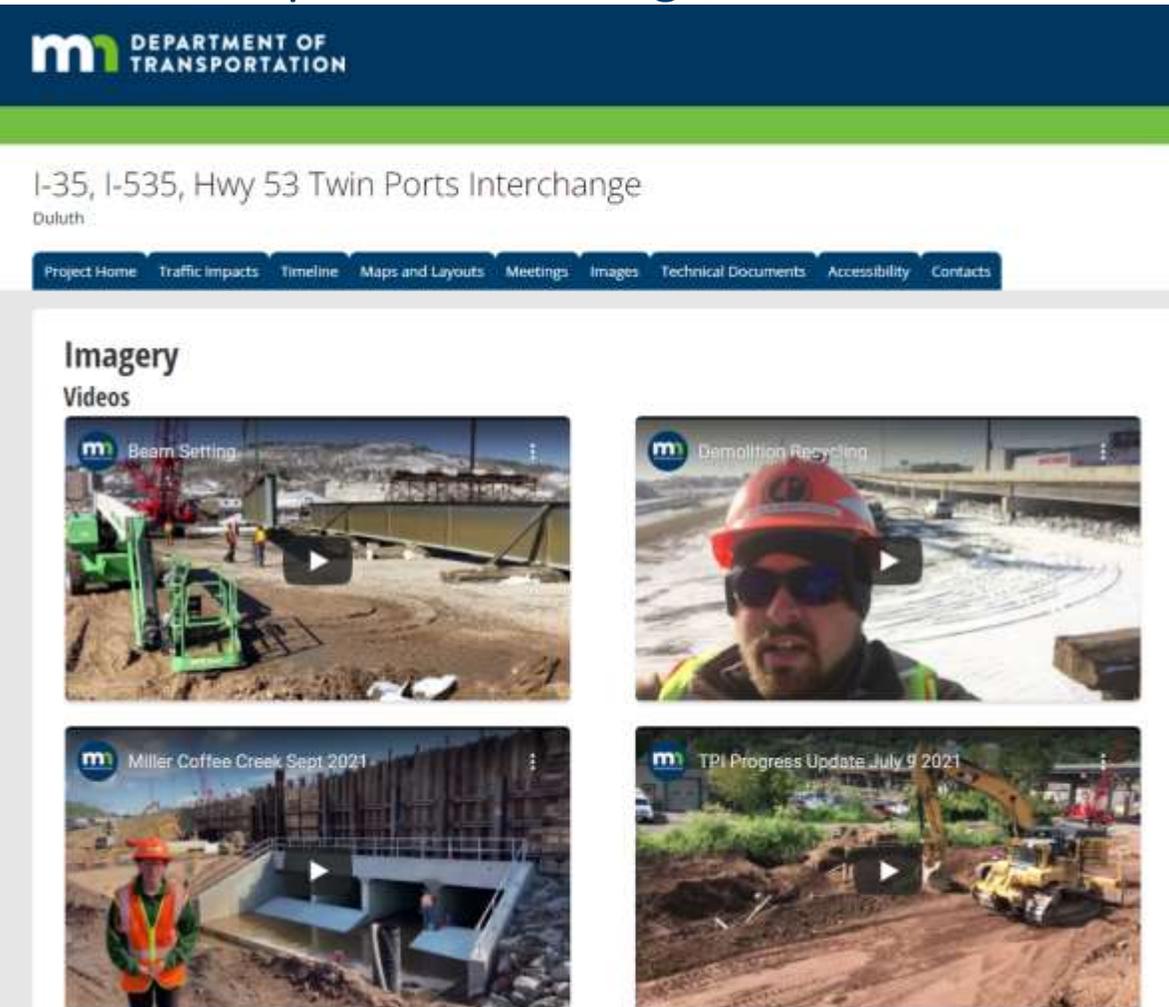
Public meetings

- Regular construction update meetings. Details to attend will be on the project “meetings” page. Recordings of the meetings are posted to be viewed when convenient.

Check out posted photos and videos

- <https://www.dot.state.mn.us/d1/projects/twin-ports-interchange/index.html>

- Time-lapse cameras are now in place and linked to the project webpage



The screenshot shows the Minnesota Department of Transportation (MnDOT) project webpage for the I-35, I-535, Hwy 53 Twin Ports Interchange in Duluth. The page features a navigation menu with links for Project Home, Traffic Impacts, Timeline, Maps and Layouts, Meetings, Images, Technical Documents, Accessibility, and Contacts. Under the 'Imagery' section, there are four video thumbnails:

- Beam Setting:** A construction site showing a green excavator and workers.
- Demolition Recycling:** A close-up of a worker wearing a red hard hat and safety glasses.
- Miller Coffee Creek Sept 2021:** A worker in a safety vest standing next to a concrete structure.
- TPI Progress Update July 9 2021:** A construction site with a yellow excavator and dirt.



Questions/Comments?

Pete Marthaler, P.E. | TPI Construction Manager | Peter.Marthaler@state.mn.us | (218) 393-4074

or

Patrick Huston, P.E. | Major Projects Engineer | patrick.huston@state.mn.us | 218-348-9902

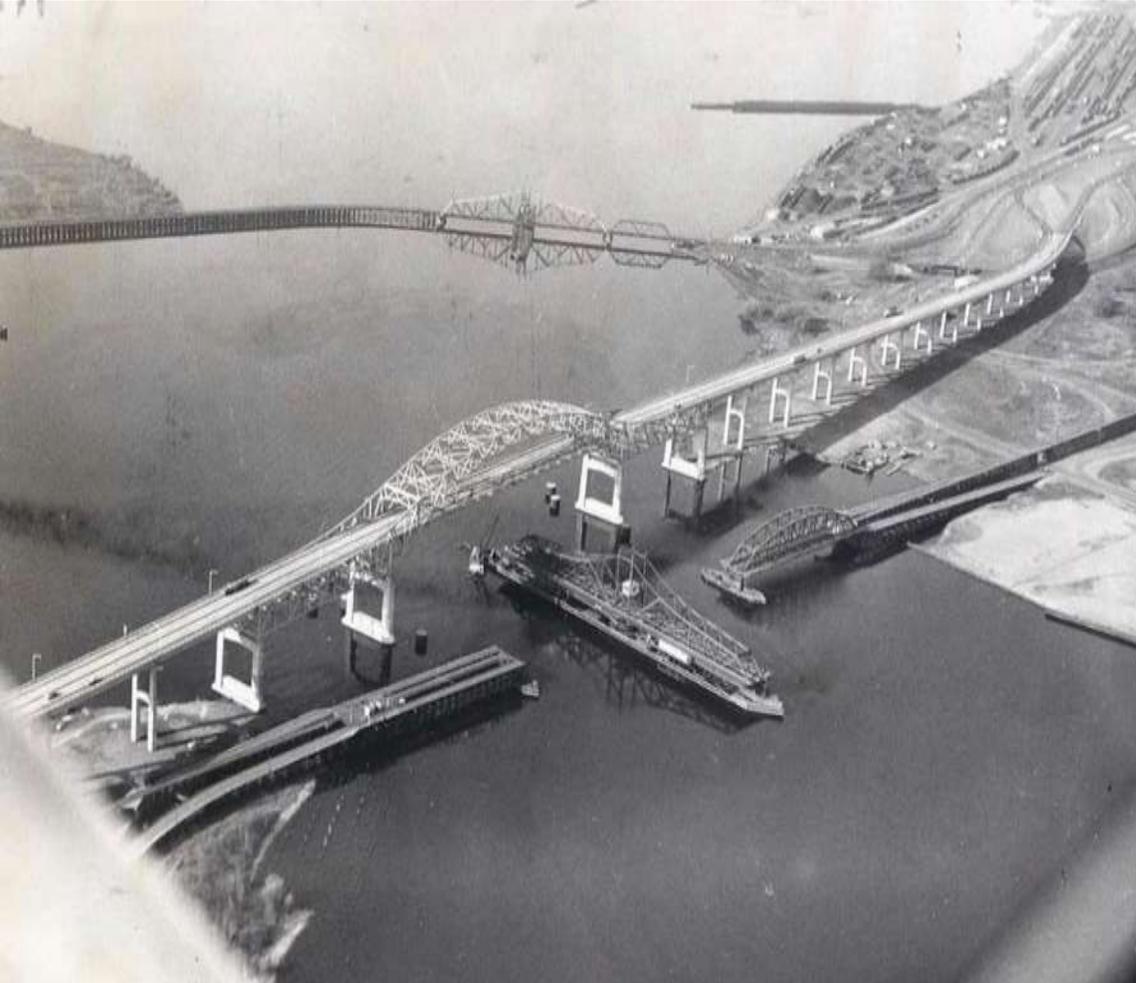
or

Project Information Line 218-343-3748



Blatnik Bridge Update

Blatnik Bridge Overview



- Opened to traffic in **1961**
- Approximately **8,000 feet** long (*1.5 miles*)
- **120-foot** clearance over St. Louis Bay
- Carries **4** traffic lanes (*2 in each direction*)
- Accommodates **33,021** vehicles per day (*2019*)
- Bridge conditions limit vehicle weight to about **60%** of a standard highway bridge

Project Purpose and Need

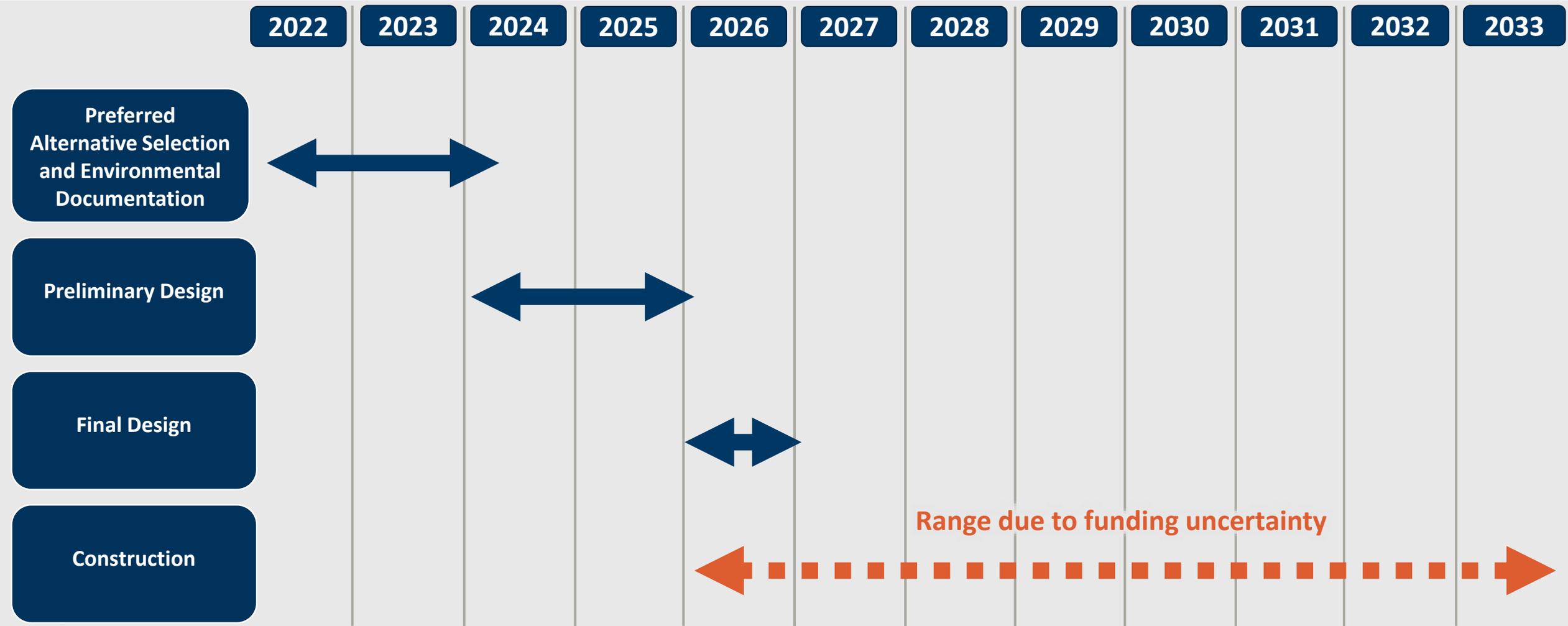
Purpose Statement

“Provide an interstate highway connection across the St. Louis Bay that does not restrict the movement of freight and provides local, regional, and international movement in a reliable and efficient manner.”

Needs

- Poor condition of the bridge
- Bridge conditions hinder vehicle and freight mobility
- Design deficiencies impair traffic operations
- High crash rates on the bridge, approaches and access interchanges
- No bicycle or pedestrian facilities on the existing bridge

Project Schedule



Order of Magnitude Construction Schedule

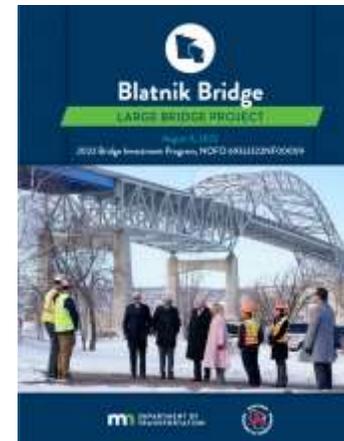
Construction could take between 5 to 7 years depending on the chosen bridge alignment. Bridge closure estimates range from between 3 and 5 years. During this time, traffic would be routed southwest over the US 2 Bong Bridge.

ALIGNMENT	MINIMUM BRIDGE CLOSURE	CONSTRUCTION DURATION
Existing Alignment	4-5 years	5 years
West/Existing Combination Alignment	3-4 years	6-7 years



Project Cost/Funding

- Original design + construction cost = \$21 million
 - \$21 million inflated to 2028 is greater than \$2 billion
- Current high level total project cost estimate for budgeting purposes is \$1.8 billion (inflated to 2028)
- Application submitted for competitive IJA “Bridge Infrastructure Program” (BIP) – large bridge grant
 - Amount requested: \$889,498,500
 - Announcement of winners expected January 2023



Milestones



Opportunities for Public Comment

Project Kick-Off – September 2020

Purpose and Need – January 2021

Alternatives Evaluation

May 2021

January 2022

June 2022

Present Recommended Build Alternatives to Advance for Further Evaluation – **December 2022**

Present Impact Evaluation and Preferred Alternative for Public Comment – **Fall 2023**

WE
ARE
HERE



Step 4 Outreach Meetings

- **Agency Outreach**
 - Tuesday, December 6
- **Project Advisory Committee (PAC):**
 - Wednesday, December 7
- **Public Open House:**
 - Tuesday December 13, 5 p.m. (in-person) at the Superior Public Library
 - Good attendance last night
 - No controversy



Step 4 Alternatives



Step 4: Alternatives Development

- **Goals:**
 - Refine alternatives based on Step 3 findings
 - Conduct detailed traffic studies for interchange configurations
 - Evaluate vertical profile
 - Evaluate detailed social, economic, and environmental impacts
 - **Recommend Build Alternatives to Advance for Further Evaluation**

Step 4: Evaluation Criteria

Primary needs:

- Improve vehicle safety and mobility
- Improve oversized truck mobility

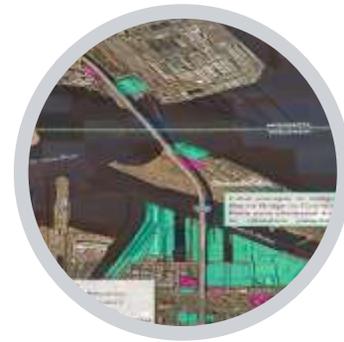
Secondary needs:

- Opportunity to accommodate bike/pedestrian infrastructure



Step 4: Evaluation Criteria

- Construction duration/phasing vs. bridge closure duration
- Avoid impacts to protected species
- Physical and economic diversity
- Right-of-way impacts
- Wetland and waterway impacts
- Ability to avoid or manage soil, sediment, and water contamination



Step 4 Alternatives (What we evaluated)

Alignments

- Existing Alignment
- West/Existing Combination Alignment

Interchanges

- Diamond Interchange
- Offset Diamond Interchange
- Non-Traditional Interchange
- Single Point Urban Interchange



Alignments



Existing Alignment



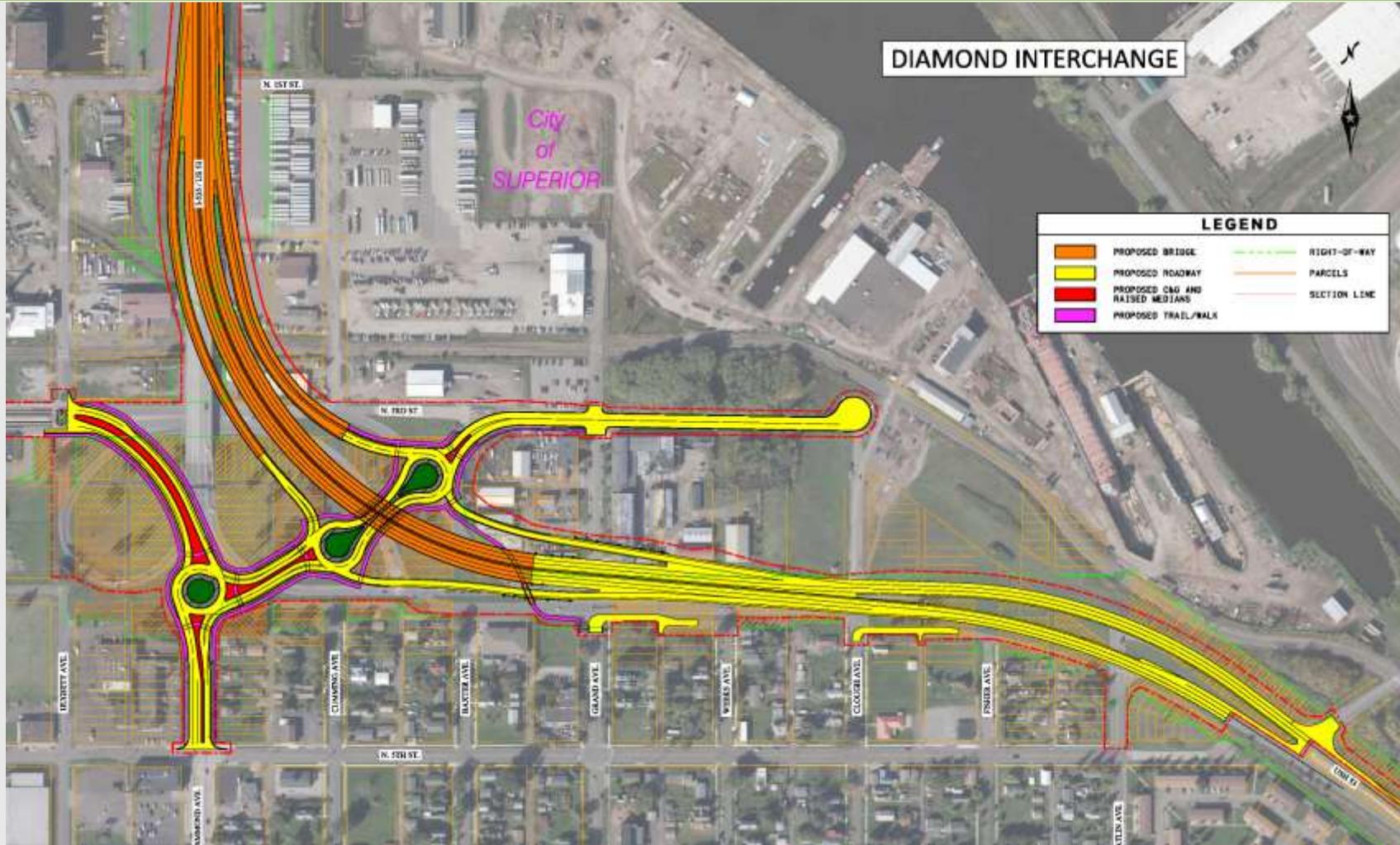
West/Existing Combination Alignment



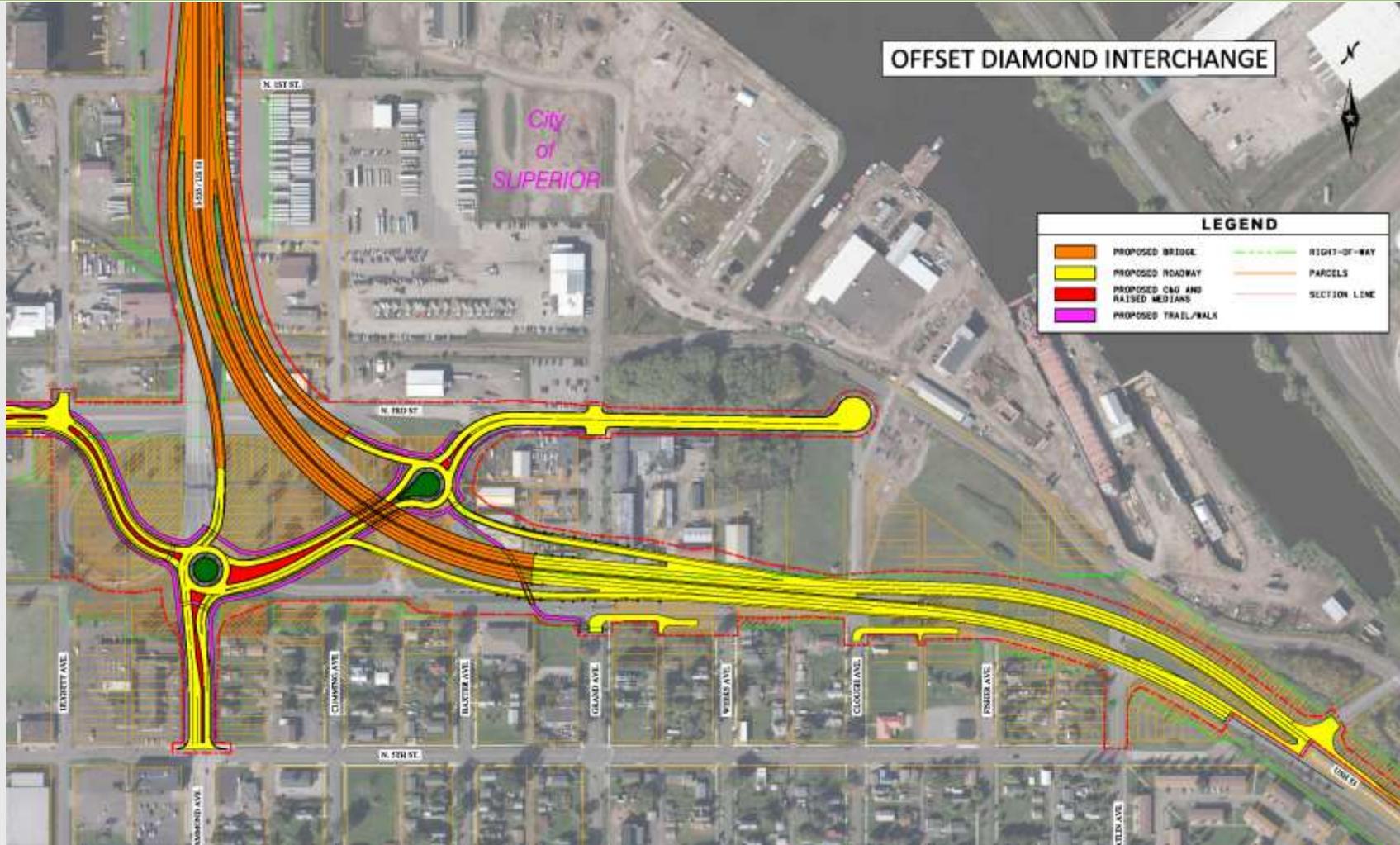
Interchanges



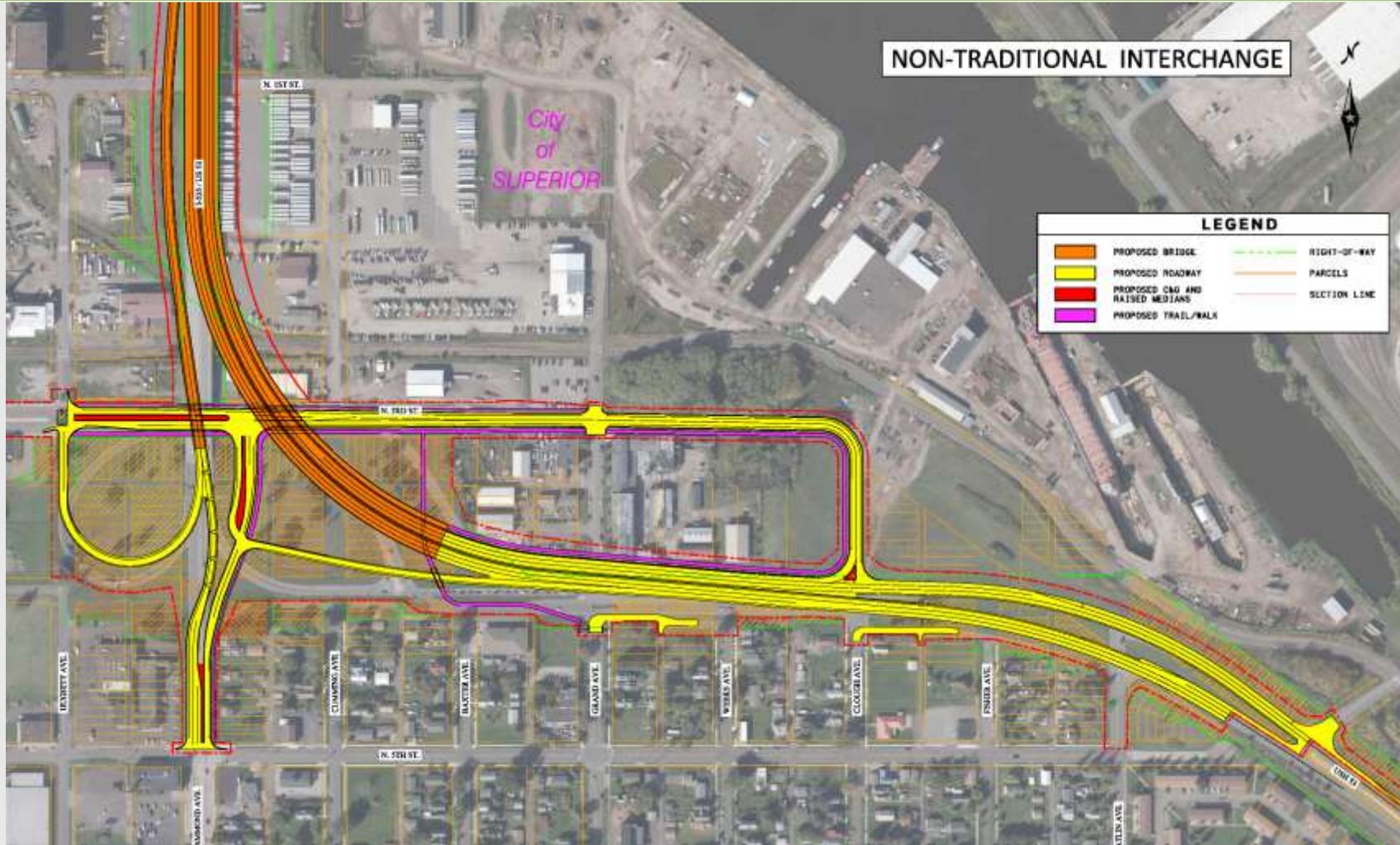
Diamond Interchange



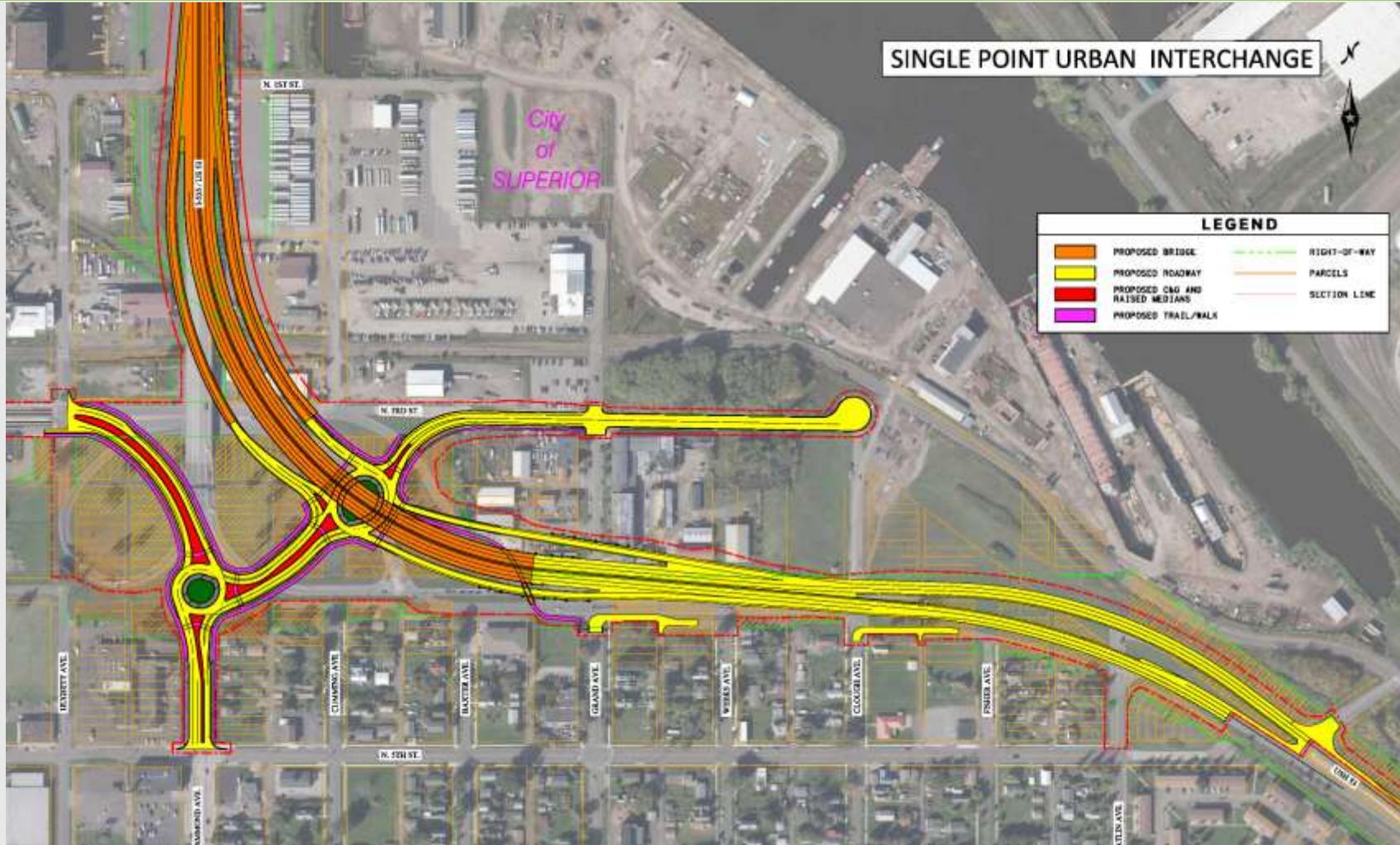
Offset Diamond Interchange



Non-Traditional Interchange



Single Point Urban Interchange



**Recommended to
be further
evaluated in
Environmental
Assessment (EA)**



Alternatives to be Studied in the Environmental Document

1

ALTERNATIVE 1:

Existing
Alignment

+

Offset Diamond
Interchange

+

Shared Use Path

2

ALTERNATIVE 2:

Existing
Alignment

+

Offset Diamond
Interchange

3

ALTERNATIVE 3:

West/Existing
Combination
Alignment

+

Offset Diamond
Interchange

+

Shared Use Path

4

ALTERNATIVE 4:

West/Existing
Combination
Alignment

+

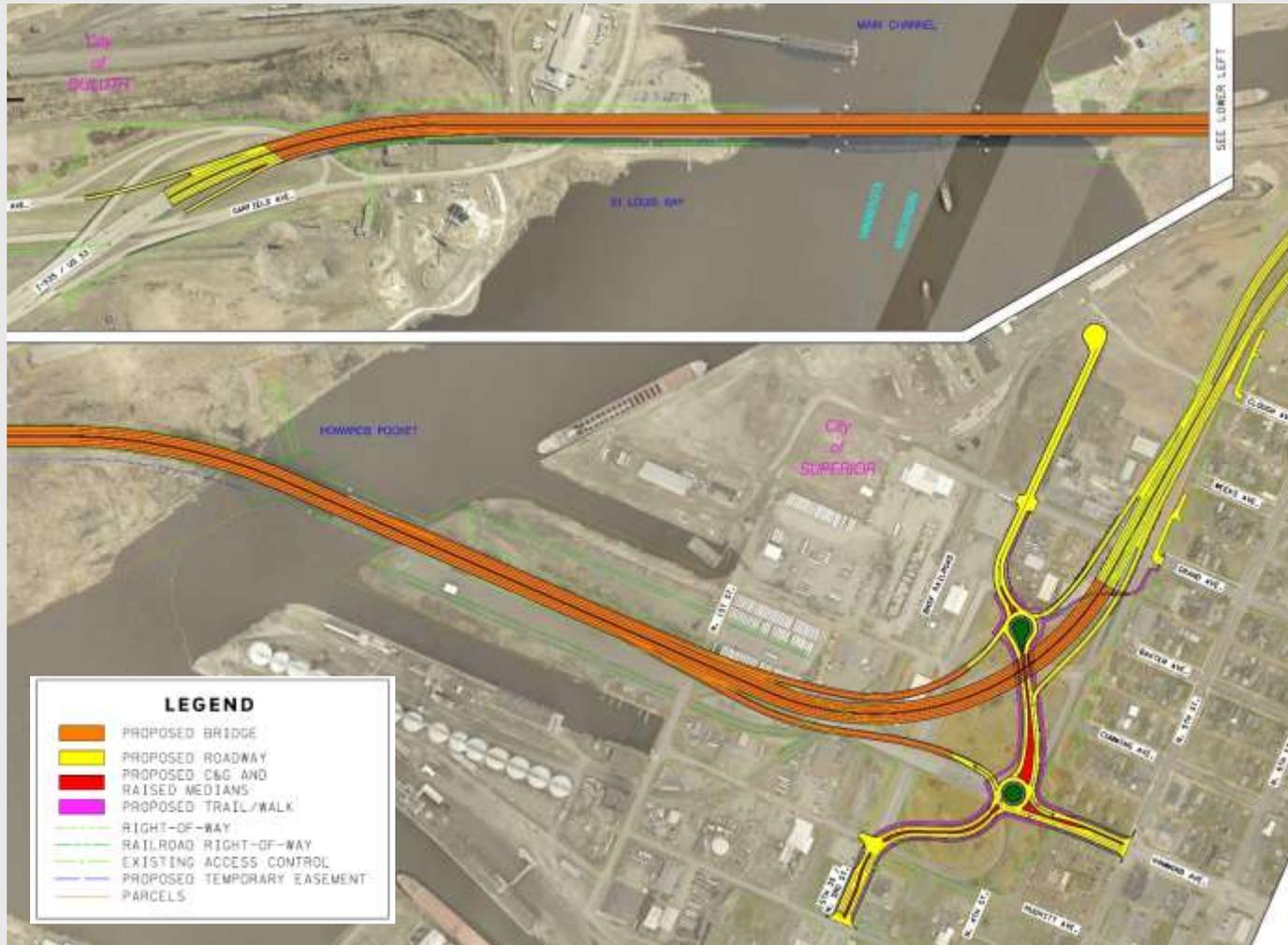
Offset Diamond
Interchange

5

NO-BUILD ALTERNATIVE

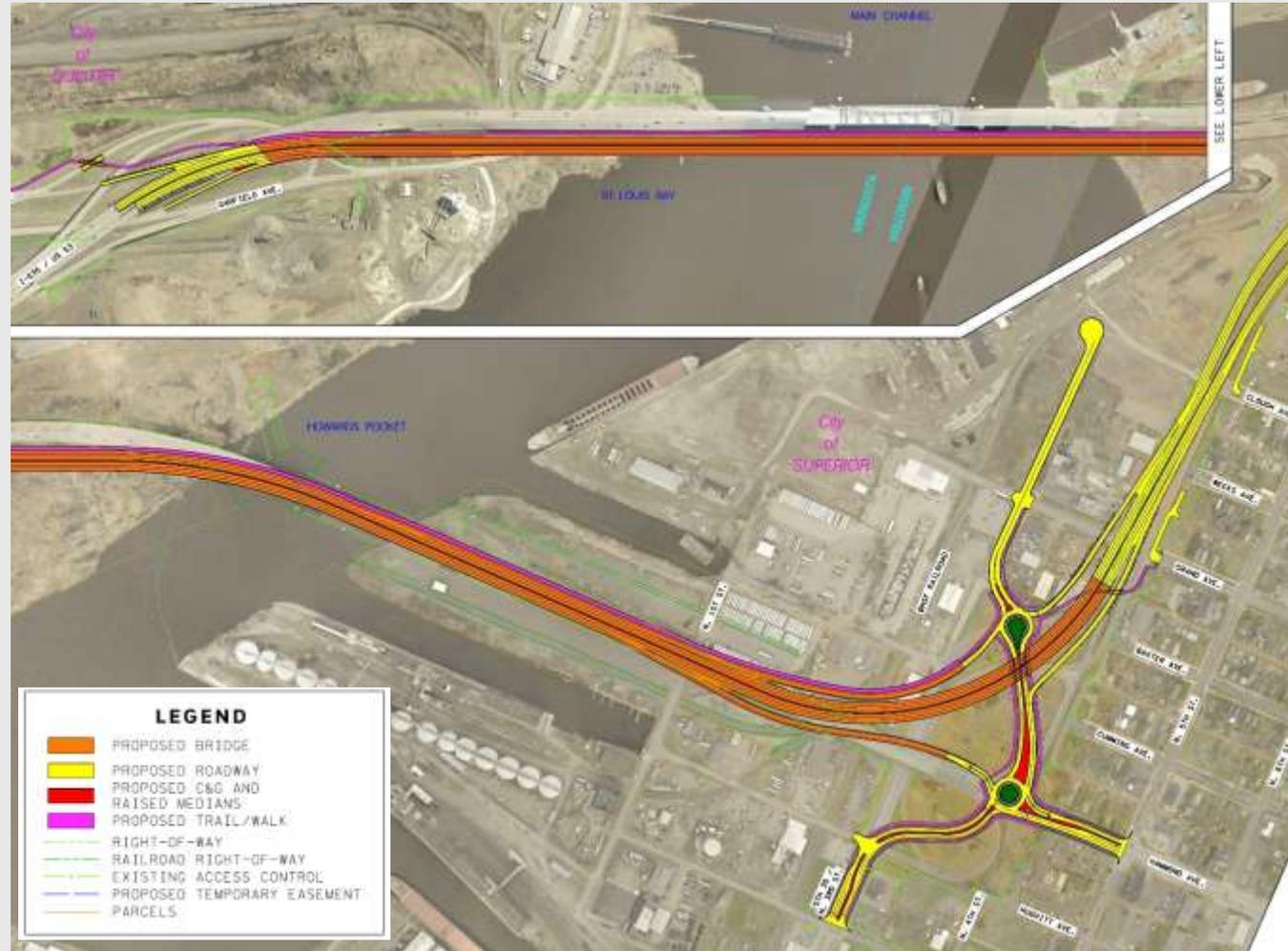
Alternative 2

Existing Alignment + Offset Diamond Interchange



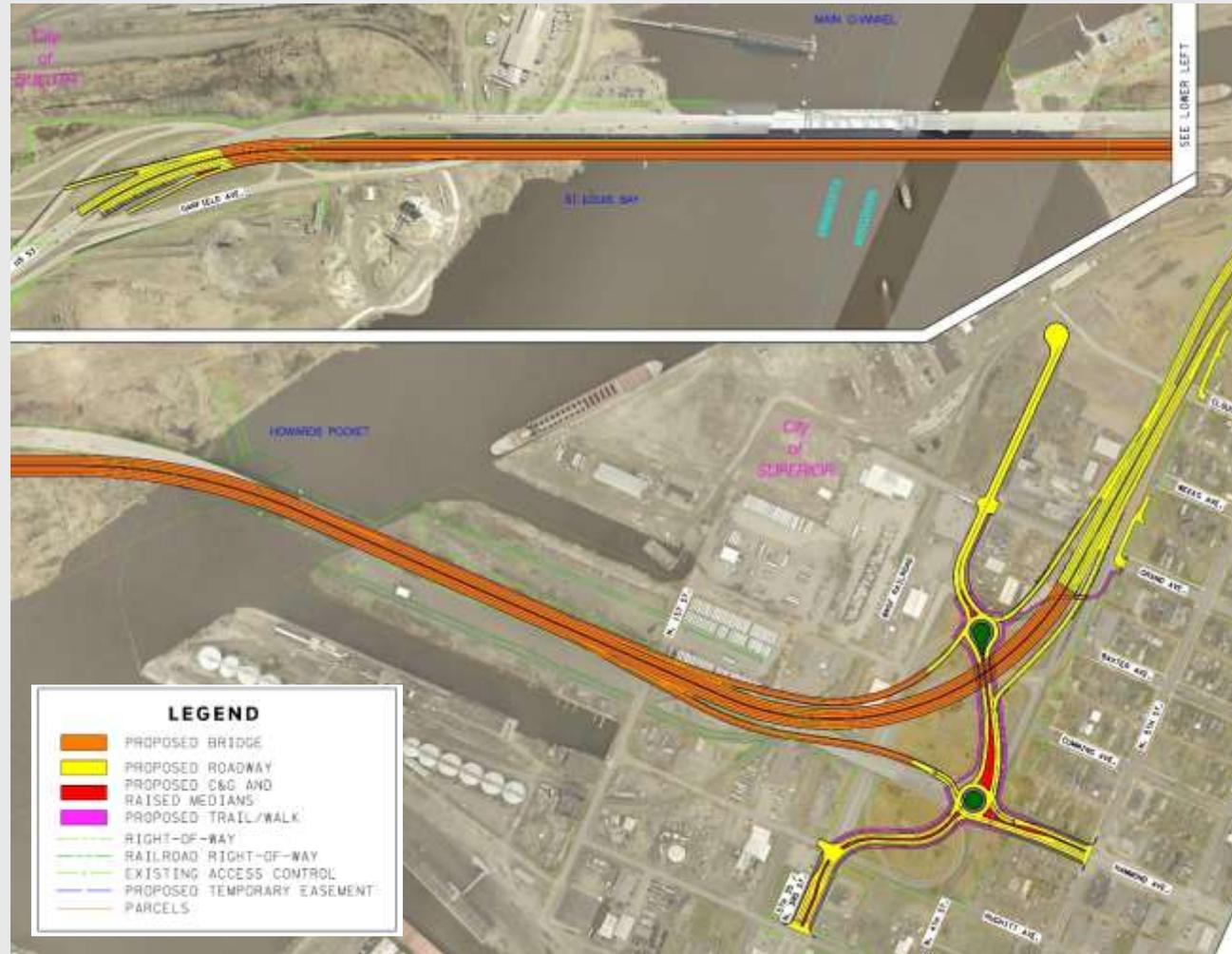
Alternative 3

West/Existing Combination Alignment + Offset Diamond Interchange + Shared Use Path



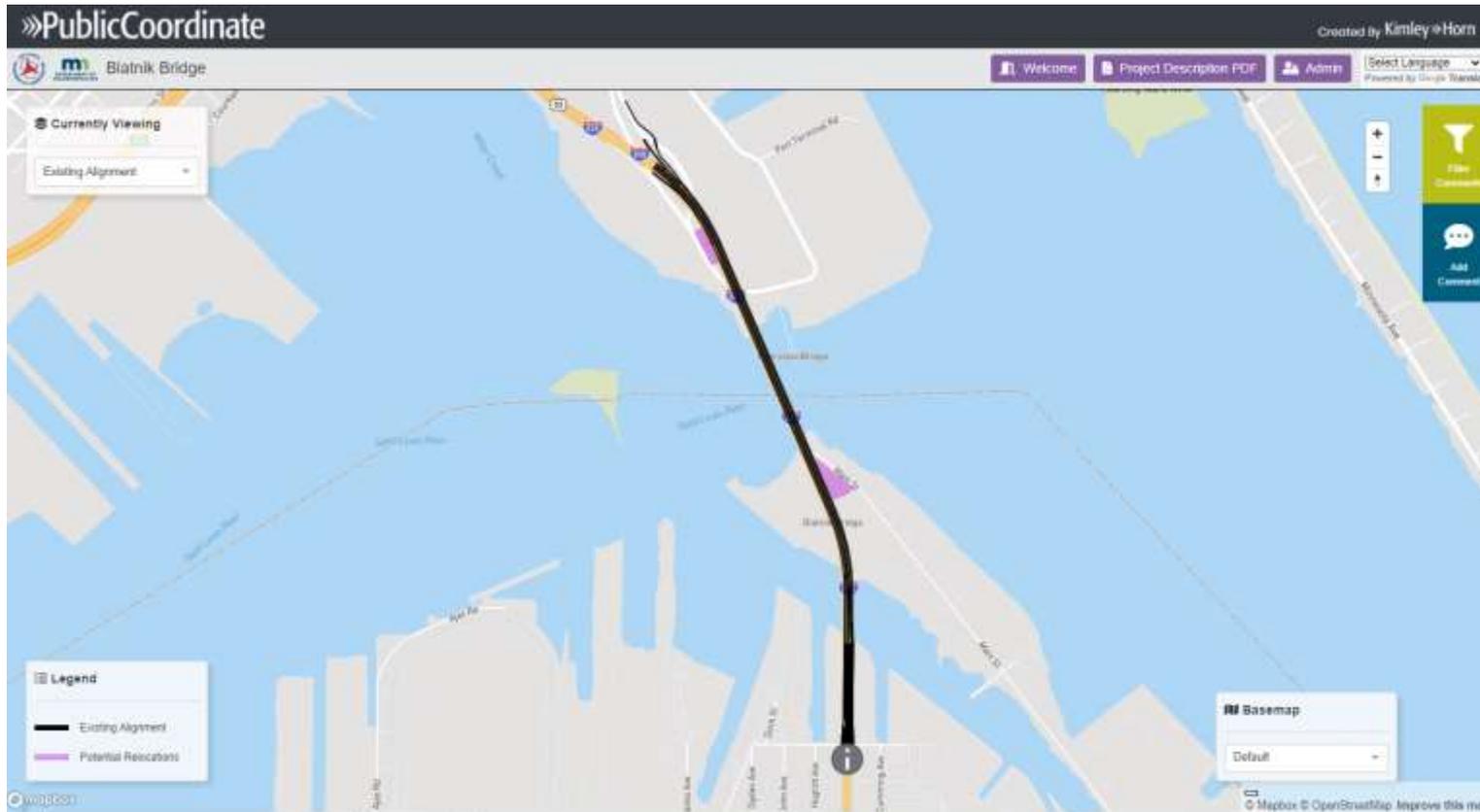
Alternative 4

West/Existing Combination Alignment + Offset Diamond Interchange



Project Interactive Feedback Map

- <https://app.publiccoordinate.com/#/projects/blatnikbridgeNOVEMBER2022/map>



Next Steps

- ✓ Refine remaining alternatives
- ✓ Evaluate intersection control measures
- ✓ Develop comparison cost of alternatives
- ✓ Evaluate detailed social, economic, and environmental impacts in the environmental document
- ✓ Identify a preferred alternative
- ➔ Next public open house for input on the recommended preferred alternative: *Fall 2023*



GOAL: SELECT PREFERRED ALTERNATIVE

Questions/Comments

Public comment period ends: January 6, 2023

- **Project Website:**
MnDOT: mndot.gov/d1/projects/blatnik-bridge/
WisDOT: wisconsindot.gov/Pages/projects/by-region/nw/blatnikbridge
- **Contact:**
Pat Huston, MnDOT District 1 Major Projects Engineer
(218) 348-9902 patrick.huston@state.mn.us

Marc Bowker, WisDOT NW Region Project Manager
(715) 635-4975 marc.bowker@dot.wi.gov
- **Mail:**
MnDOT, 1123 Mesaba Ave., Duluth, MN 55811

