



I-43 North-South Majors Project Contractor Briefing/Workshop

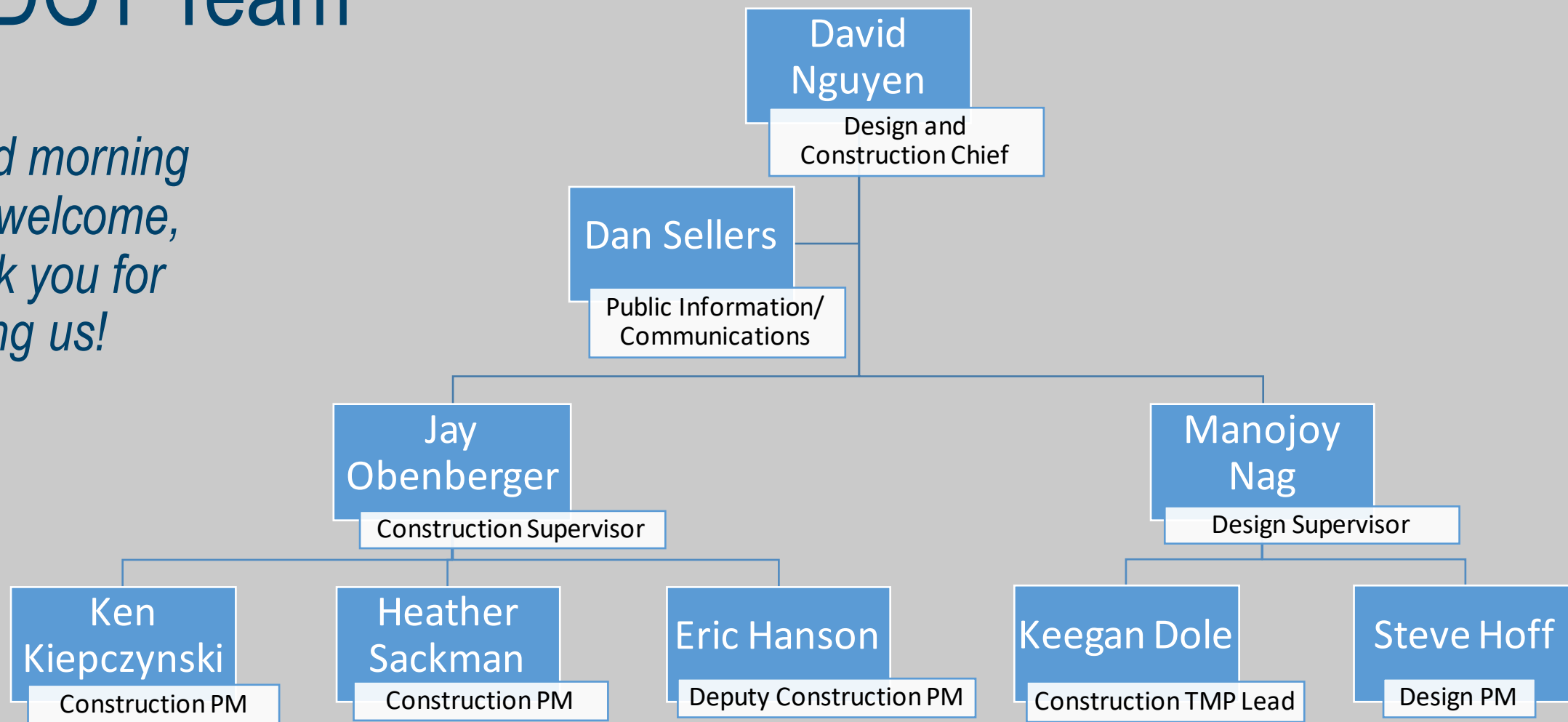
I-43 Design Team
WisDOT SE Region



Virtual via Webex - May 19, 2021

WisDOT Team

*Good morning
and welcome,
thank you for
joining us!*

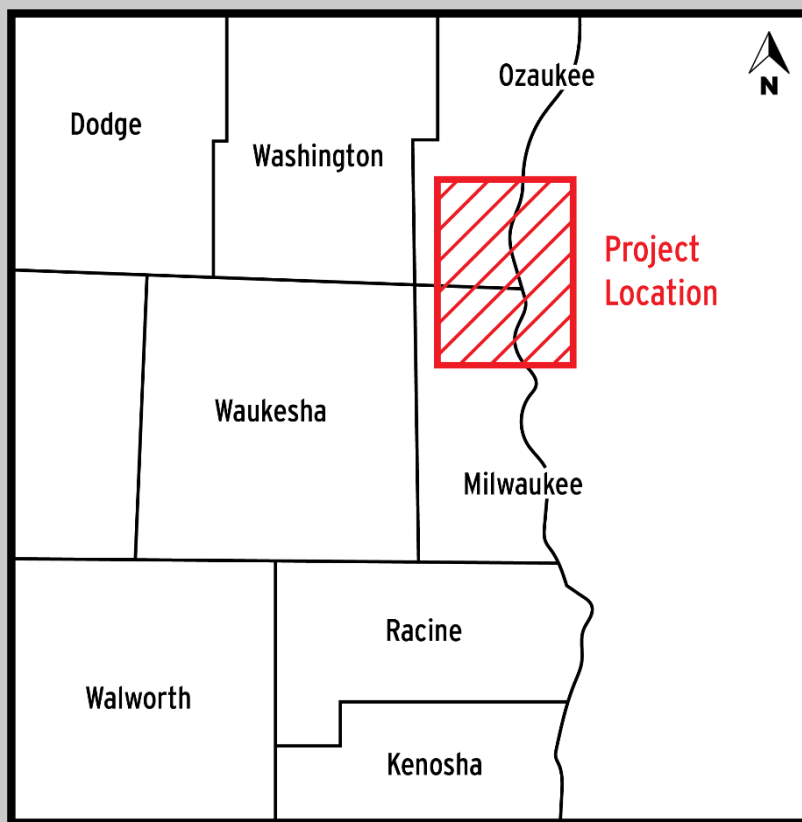


I-43 N-S Majors Project Presentation Overview

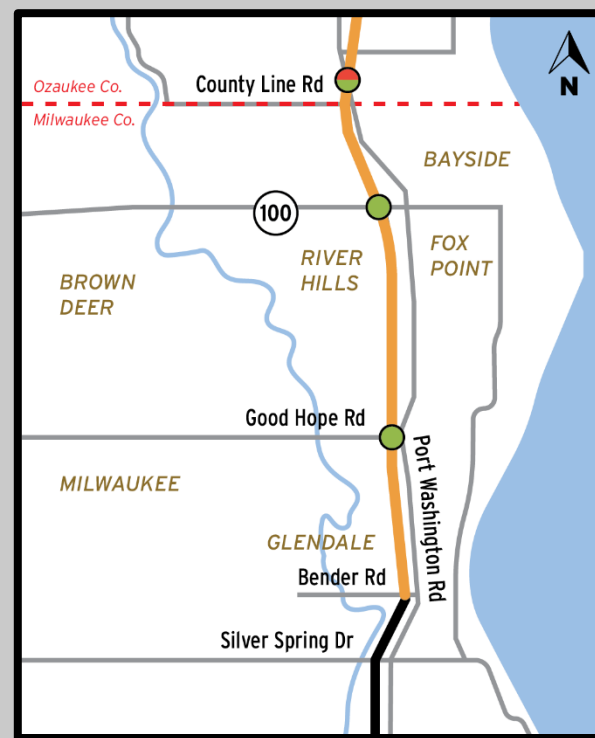
1. Project Overview/Schedule
2. Sequencing and Staging
3. Let Packages Details/Quantities
4. Design/Construction Considerations
5. Q & A



Project Overview



MILWAUKEE COUNTY (SOUTH)



- Existing Interchange
- New Interchange

OZAUKEE COUNTY (NORTH)



Project Overview - Delivery Schedule

	2020				2021				2022				2023				2024				2025			
Design/Engineering																								
Right of Way Acquisition/Utility Relocations																								
Construction																								
Work Zone Prep																								
North End Mainline																								
County Line/ Port Rd Interchange																								
Port Rd*																								
UPRR Bridge*																								
South End Mainline*																								
Mequon Interchange																								
Polymer Bridge Overlays/Wrap Up Work																								
Public Involvement																								

*tied bid package



Project Overview - Adjacent Projects

- Detour route coordination
- Traffic control interface coordination
- Syncing communications
- Example Projects
 - I-43 URT
 - WIS 57 Green Bay Road
 - WIS 181 Resurfacing Ozaukee County

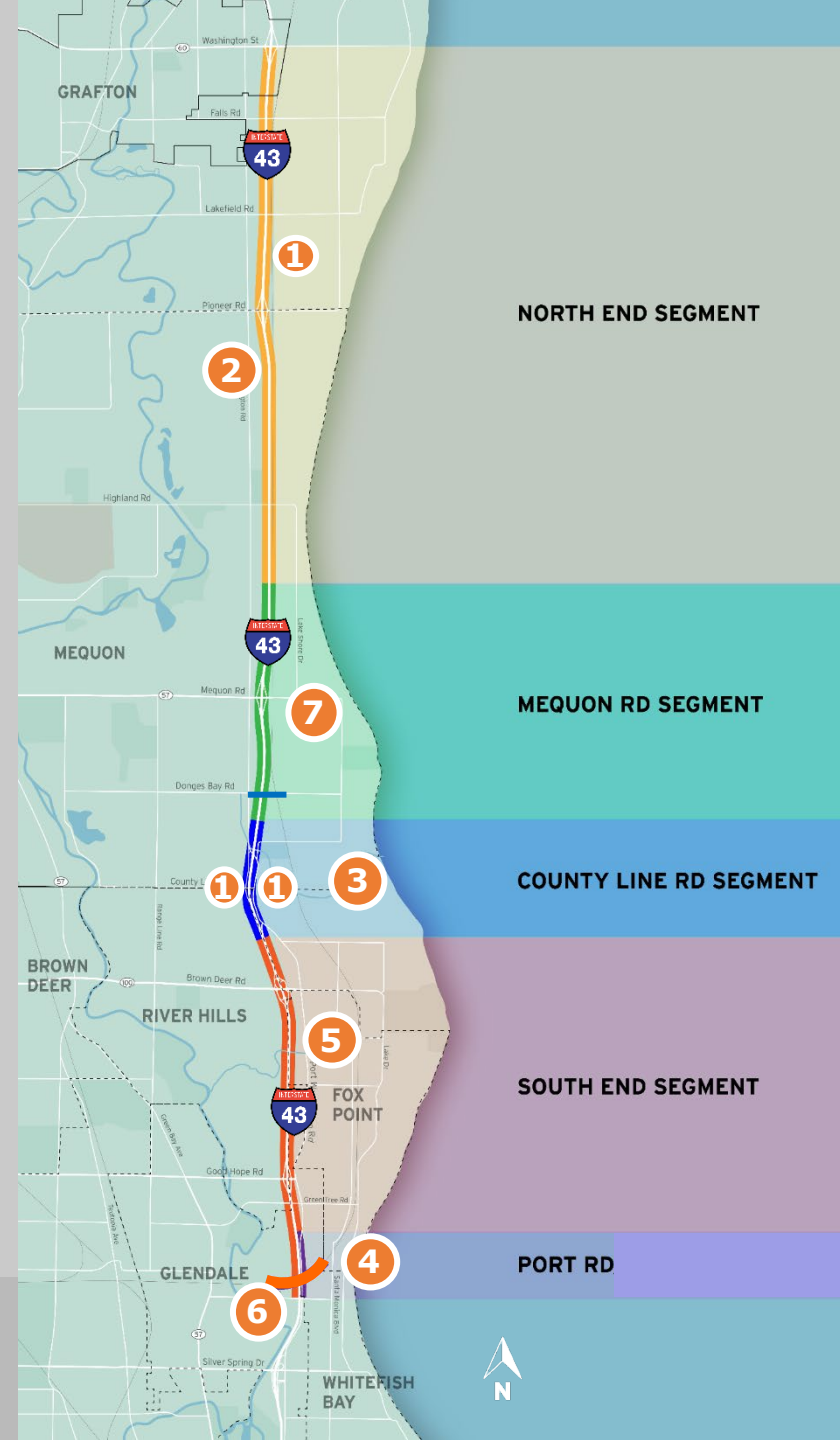
I-43 URT Project



I-43 Construction Projects

#	Segment	ID	Letting Month	Let Cost Estimate	Construction Years
1	Work Zone Prep	1229-04-70	July 2021	\$8,000,000 - \$10,000,000	late 2021
2	North End	1229-04-76	Nov 2021	\$120,000,000- \$135,000,000	2022-2023
3	County Line Rd/Port Rd Interchange	1229-04-74	Dec 2021	\$55,000,000 - \$65,000,000	2022 to mid-2023
4	Port Washington Rd	1229-04-71 (tied w/ 72/73)	Oct 2022	\$10,000,000- \$12,000,000	2023
5	South End	1229-04-73 (tied w/ 71/72)	Oct 2022	\$120,000,000- \$130,000,000	2023-2024
6	UPRR Bridge	1229-04-72 (tied w/ 71/73)	Oct 2022	\$11,000,000- \$14,000,000	2023
7	Mequon Rd Interchange	1229-04-75	July 2023*	\$40,000,000- \$50,000,000	2023-2024

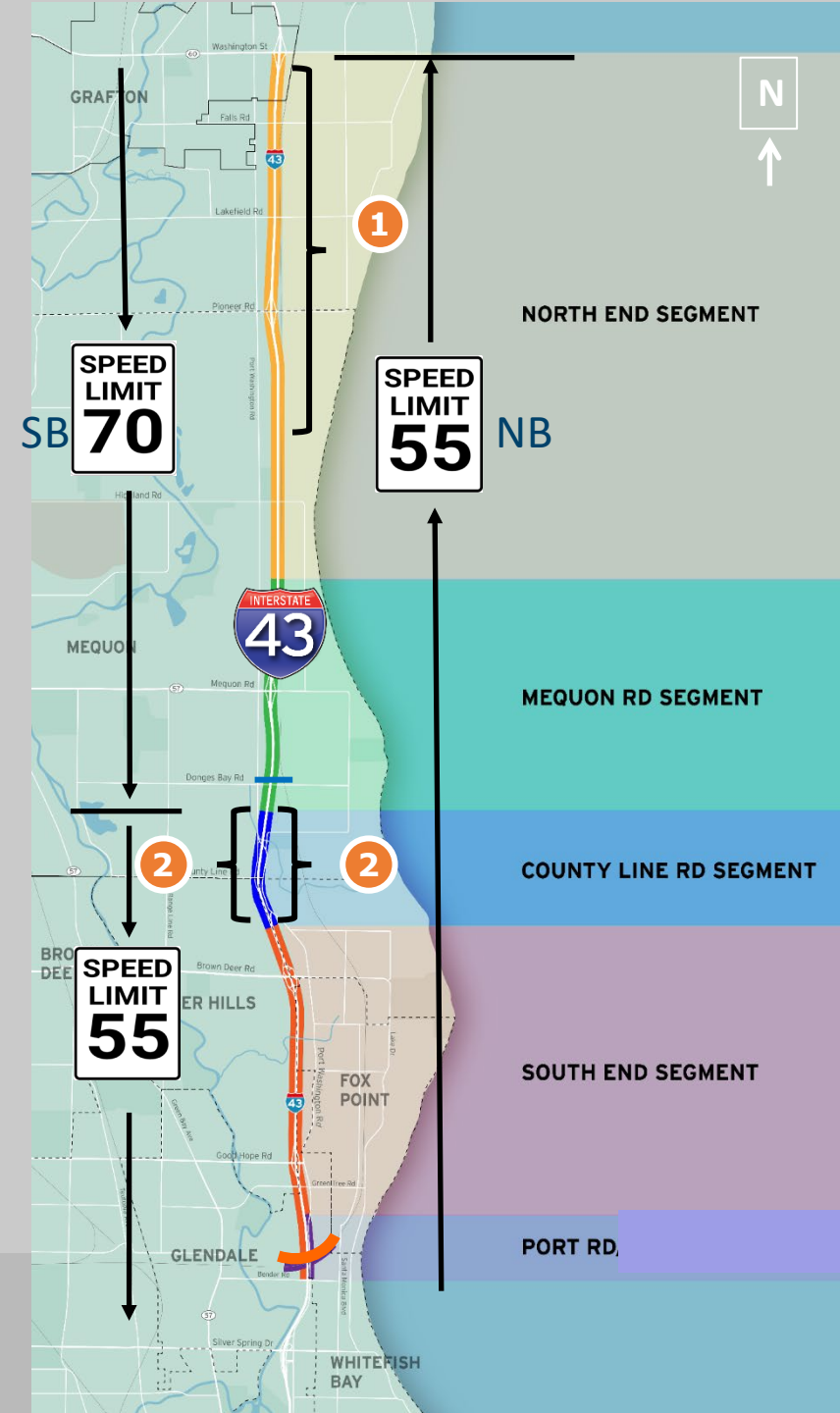
*package advanceable to earlier FY '23 letting if needed



Project Sequencing and Staging - 2021

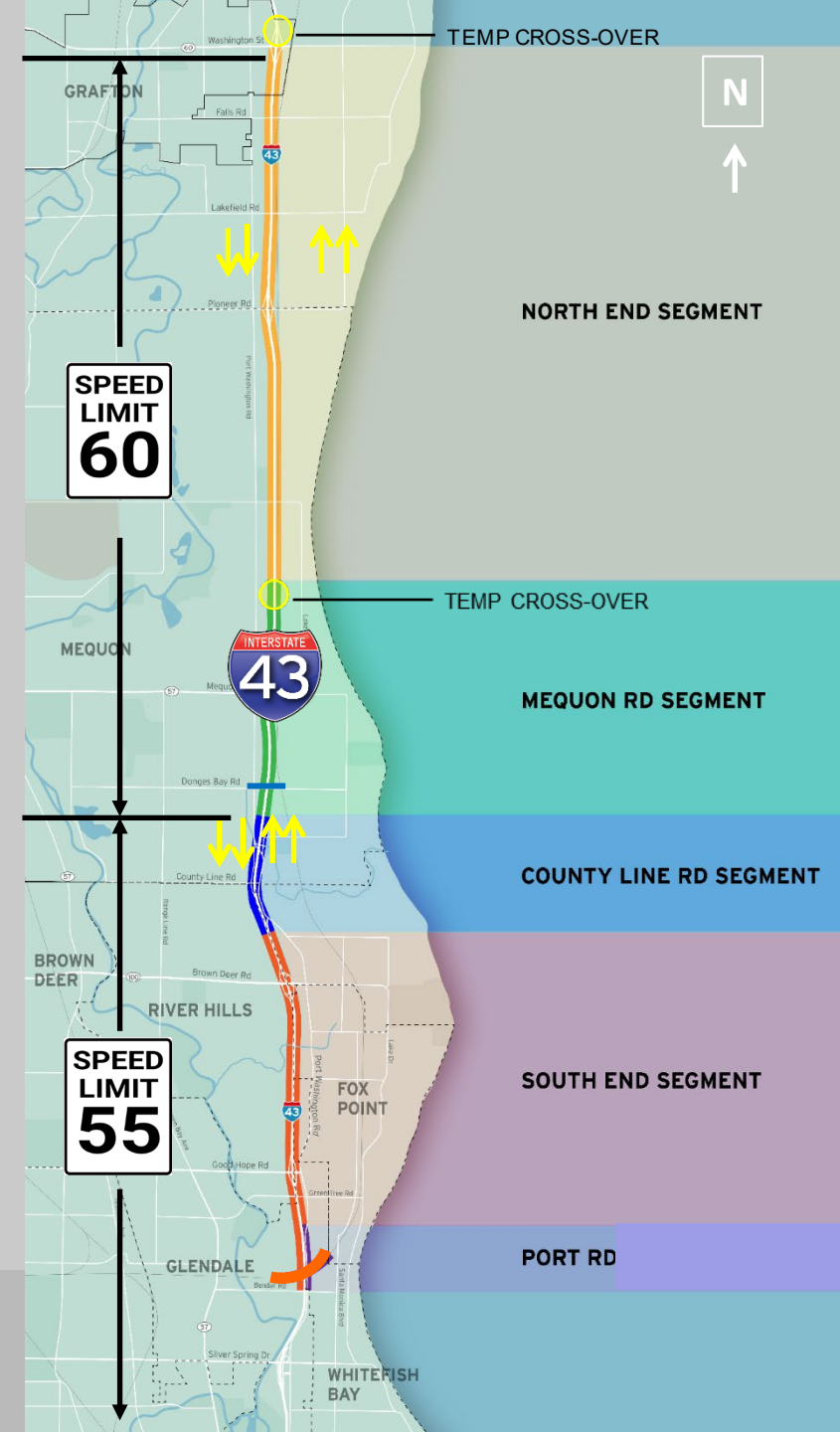
- Work Zone Prep (2021) – various locations

- 1 North End northbound shoulder reconstruction
 - 2 County Line Road segment northbound and southbound shoulder reconstruction and temp widening
- *Requires daytime and nighttime lane closures*
 - *County Line Road ramps to/from south closed*



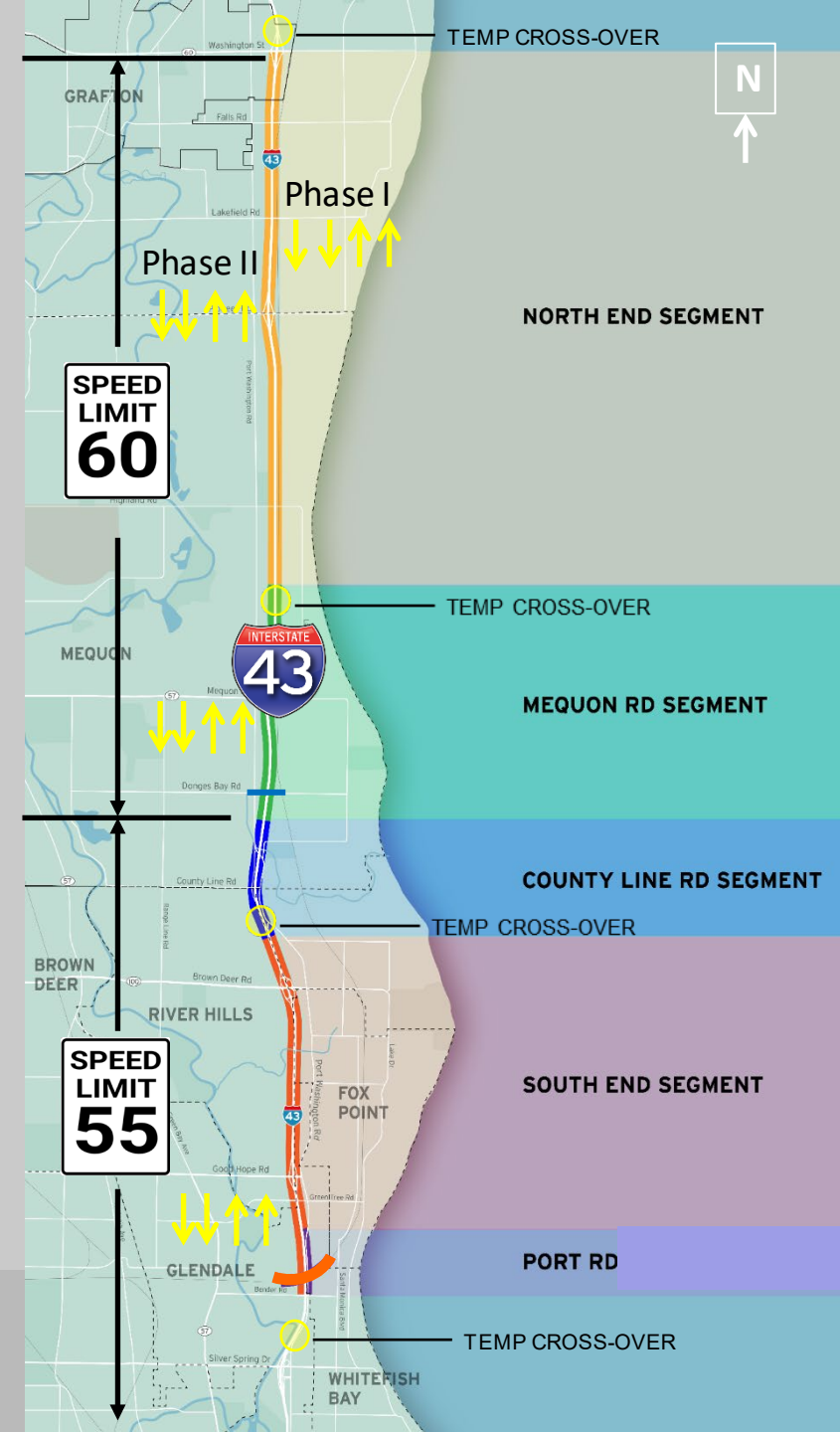
Project Sequencing and Staging – 2022

- North End yr-1
 - Widen northbound mainline, construct new Highland Interchange and inside northbound lanes
 - Highland Road closure approximately from January through August
- County Line Rd Segment yr-1
 - Inside-Out mainline construction
 - Construct Fish Creek Box Culvert across the freeway
 - Close and rebuild Port Washington Rd Bridge over freeway
 - Close and rebuild the Donges Bay Rd Bridge over freeway
- During Construction (all years): two 12' lanes + 2' shoulders minimum will be provided in each direction



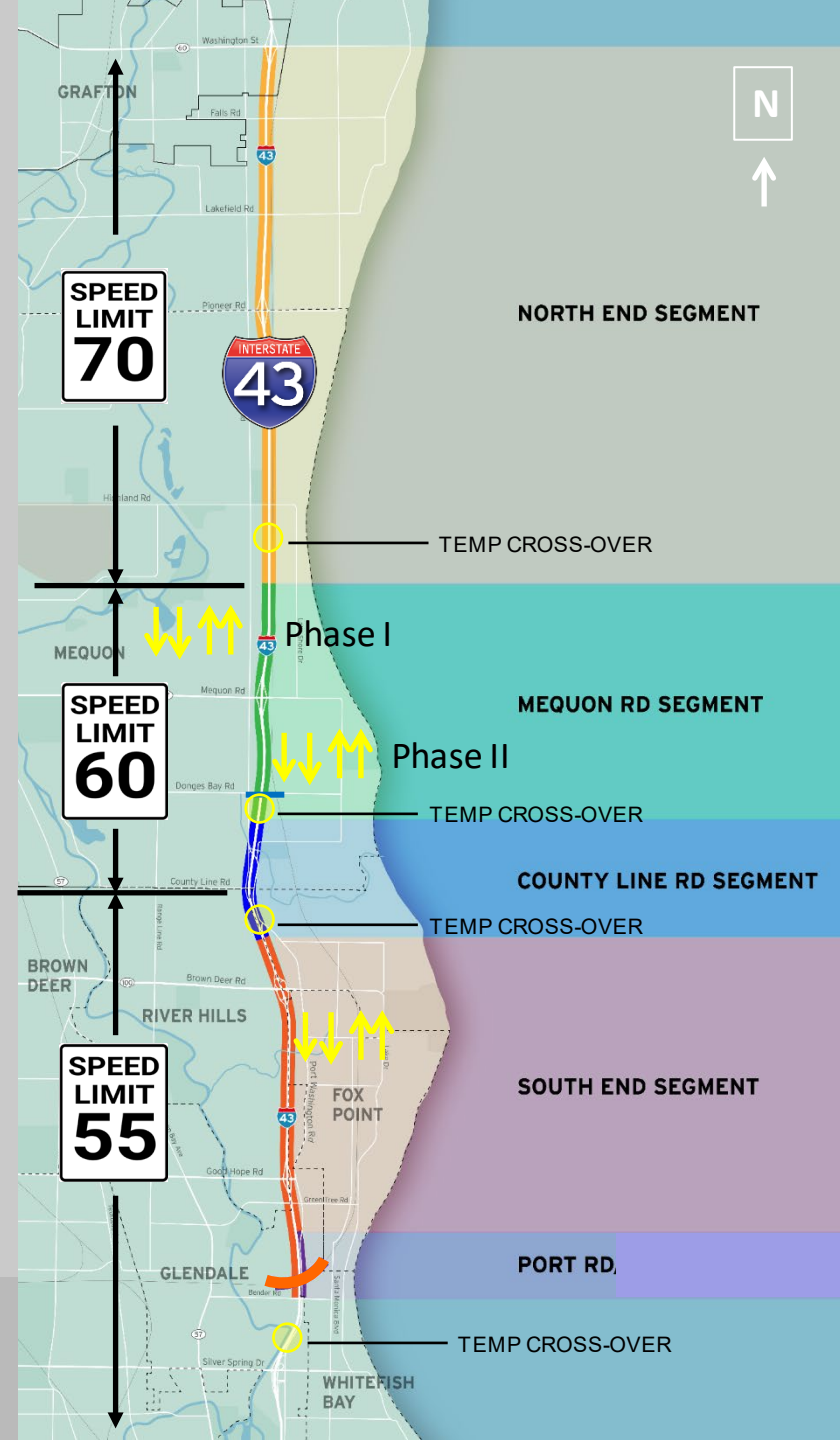
Project Sequencing and Staging – 2023

- North End yr-2
 - Construct CTHC I-change, southbound lanes, outside northbound lanes
 - CTHC Bridge and I-change closed
- County Line Rd Segment yr-2
 - Construct new County Line Rd Bridge (full closure) and mainline segment at County Line Rd
- South End yr-1
 - Construct southbound temp widening and majority of northbound lanes
 - UPRR bridge construction over freeway
 - Reconstruct and expand Port Washington Rd, maintain traffic
- Mequon Segment yr-1
 - Construct southbound temp widening and new southbound bridge



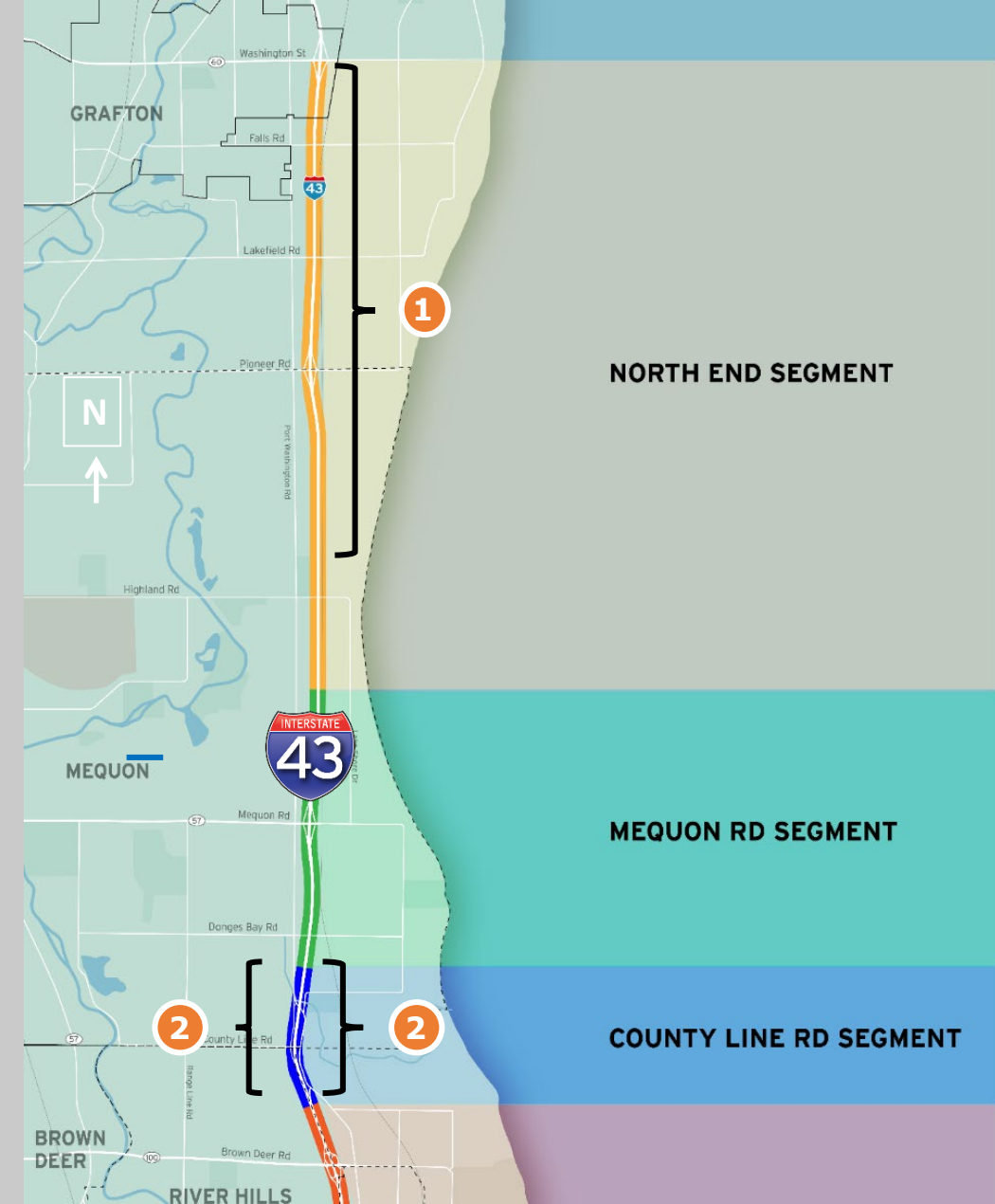
Project Sequencing and Staging – 2024

- South End yr-2
 - Construct median barrier and northbound inside shoulder, construct southbound lanes
 - Reconstruct Jean Nicolet Rd between Bender Rd and Green Tree Rd (staggered full closures)
- Mequon Segment yr-2
 - Construct northbound lanes then southbound lanes
 - Construct northbound bridge over Mequon Rd

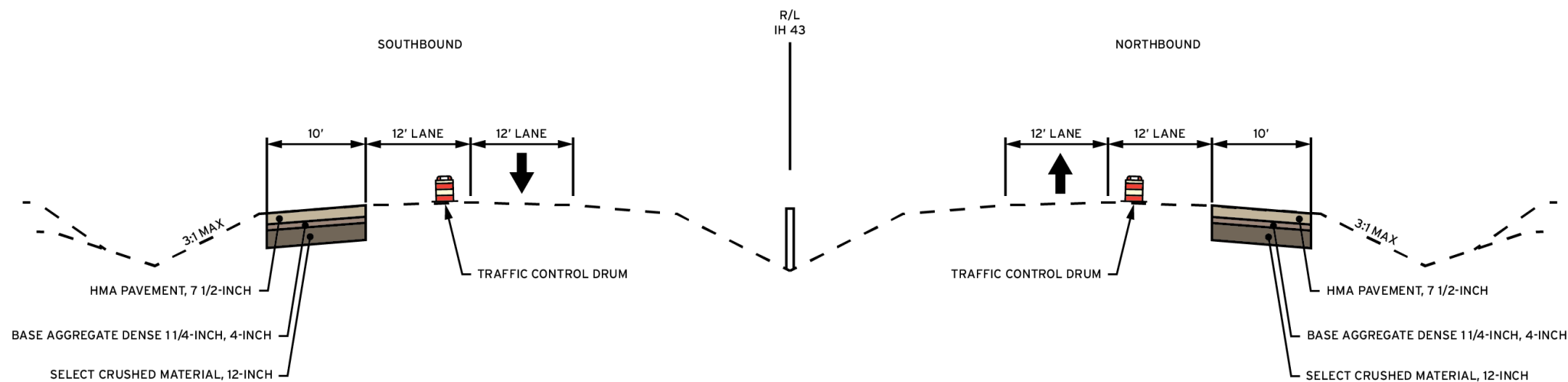


Project Let Packages: Work Zone Prep (1229-04-70)

- Work Zone Prep (July 2021 let) – various locations
 - 1 North End northbound shoulder reconstruction (4 miles)
 - 2 County Line Road segment northbound and southbound shoulder reconstruction and temp widening (1.8 miles)
- Completion date November 15, 2021
- Holiday and special event work restrictions
- Lane closures allowed midday within North End segment
- Nighttime lane closures only at County Line
- Multiple work crews required

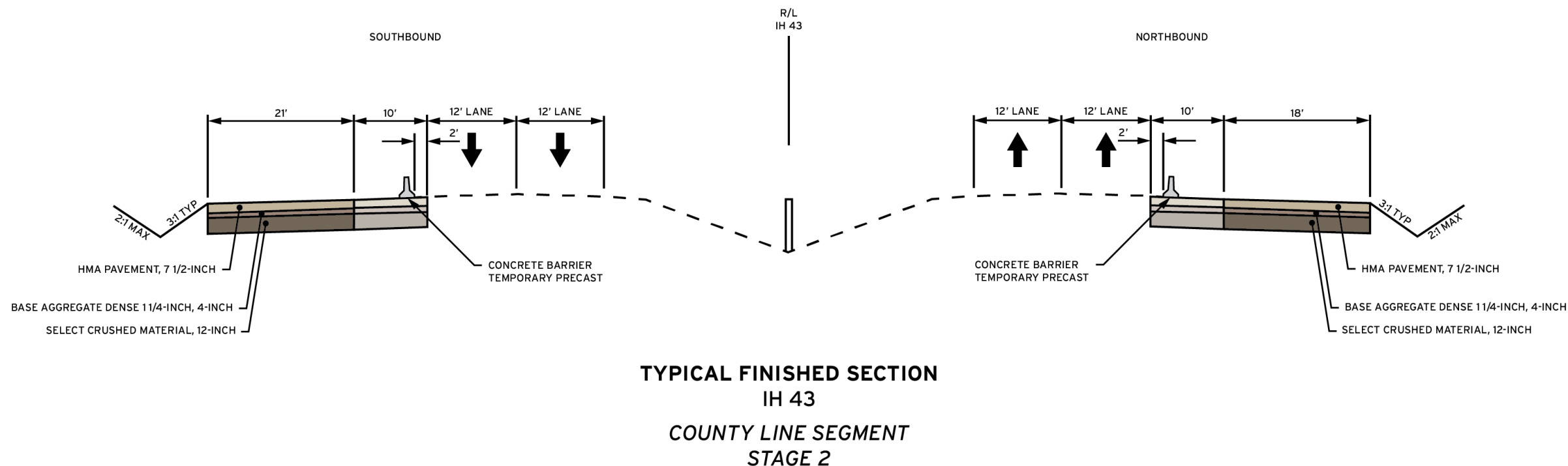


Project Let Packages: Work Zone Prep (1229-04-70)

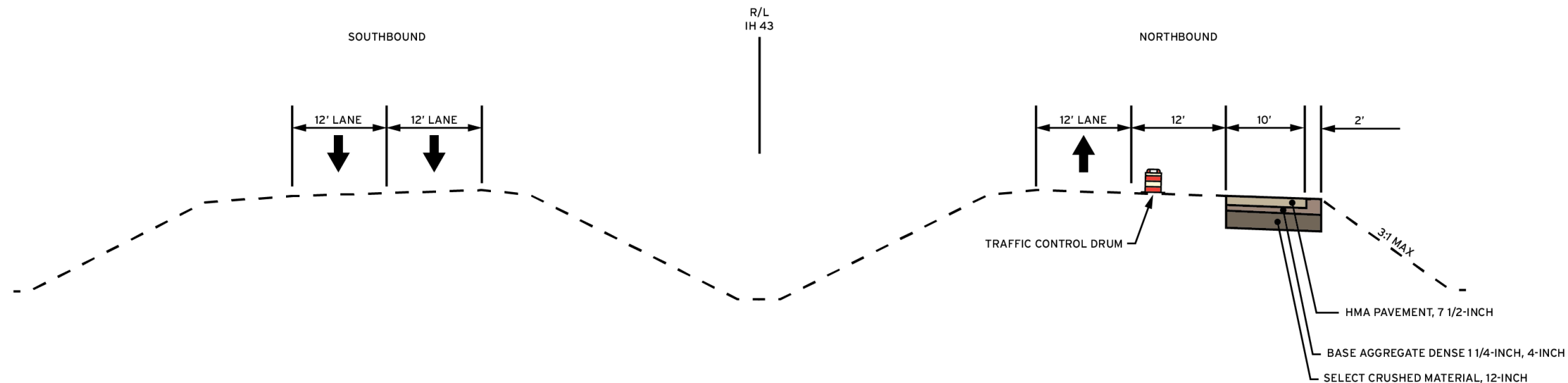


TYPICAL FINISHED SECTION
IH 43
COUNTY LINE SEGMENT
STAGE 1

Project Let Packages: Work Zone Prep (1229-04-70)



Project Let Packages: Work Zone Prep (1229-04-70)



TYPICAL FINISHED SECTION
IH 43
NORTH END SEGMENT

Project Let Packages: Work Zone Prep (1229-04-70)

I-43 WZ Prep

Quantities

Item	Total
Excavation Common (CY)	50,000
Roadway Embankment (CY)	5,000
Select Crushed (Ton)	35,000
Breaker Run (Ton)	45,000
HMA Pavement (Ton)	30,000
Concrete Barrier Temporary (LF)	20,000

Project Let Packages: North End (1229-04-76)





Project Let
Packages: North
End (1229-04-76)



I-43 and Highland Road Diamond Interchange



Project Let Packages: North End (1229-04-76)

I-43 North End Segment

Quantities

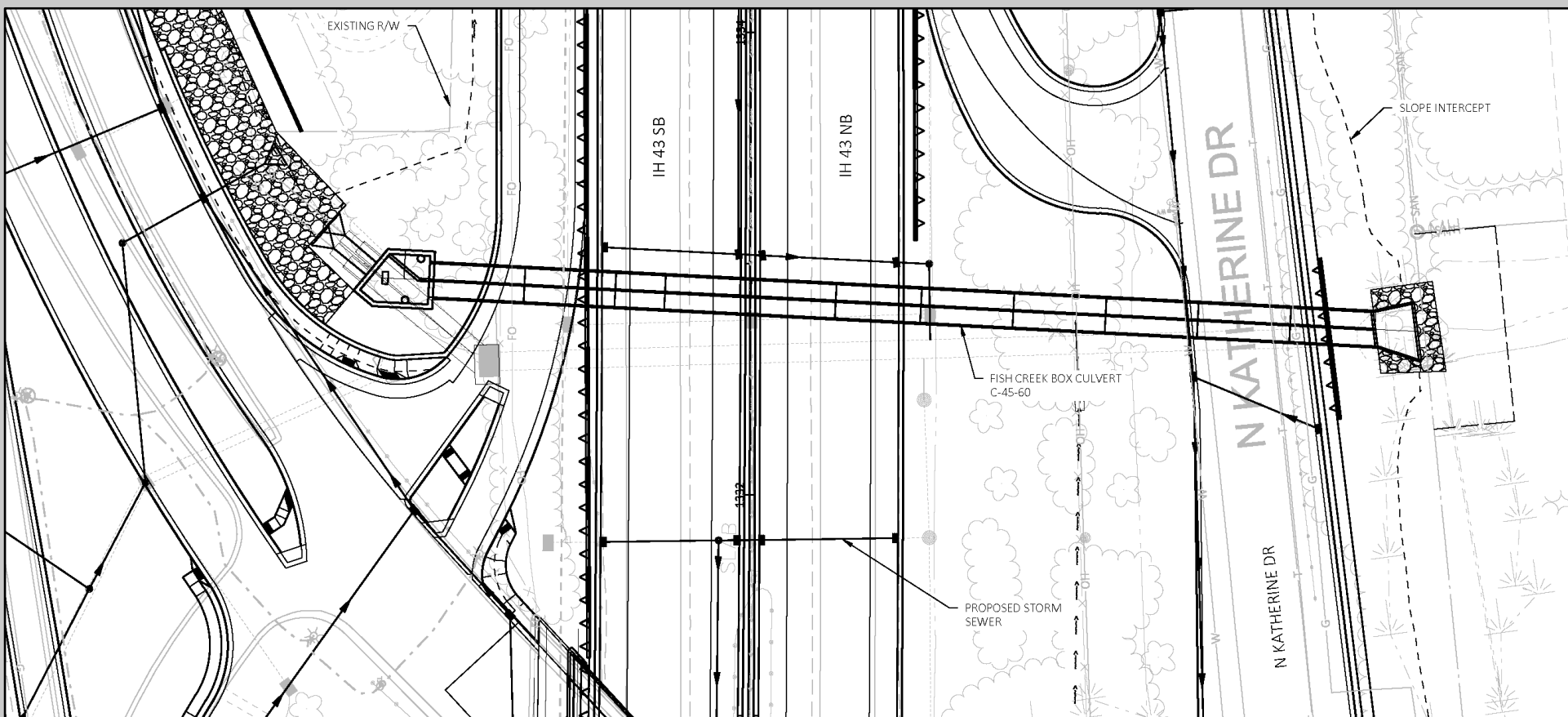
Item	Total
Excavation Common (CY)	340,000
Roadway Embankment (CY)	540,000
Base Aggregate Dense (Ton)	355,000
Breaker Run (Ton)	595,000
Concrete Pavement (SY)	450,000
HMA Pavement (Ton)	40,000
Concrete Barrier (LF)	20,000
Concrete Barrier Temporary (LF)	230,000
Beam Guard (Permanent) (LF)	65,000
Bridge Deck (SF)	70,000
Retaining Walls (SF)	120,000
Noise Walls (SF)	60,000

Project Let Packages: Co Line/Port Road Interchange (1229-04-74)



Project Let Packages: Co Line/Port Road Interchange (1229-04-74)

Fish Creek Box Culvert



Project Let Packages: Co Line/Port Road Interchange (1229-04-74)

I-43 County Line Segment

Quantities

Item	Total
Excavation Common (CY)	160,000
Roadway Embankment (CY)	90,000
Base Aggregate Dense (Ton)	95,000
Breaker Run (Ton)	170,000
Concrete Pavement 8-Inch (SY)	25,000
Concrete Pavement 10 1/2-Inch (SY)	120,000
HMA Pavement (Ton)	25,000
Concrete Barrier (LF)	35,000
Concrete Barrier Temporary (LF)	60,000
Beam Guard (Permanent) (LF)	0
Bridge Deck (SF)	40,000
Retaining Walls (SF)	40,000
Noise Walls (SF)	70,000

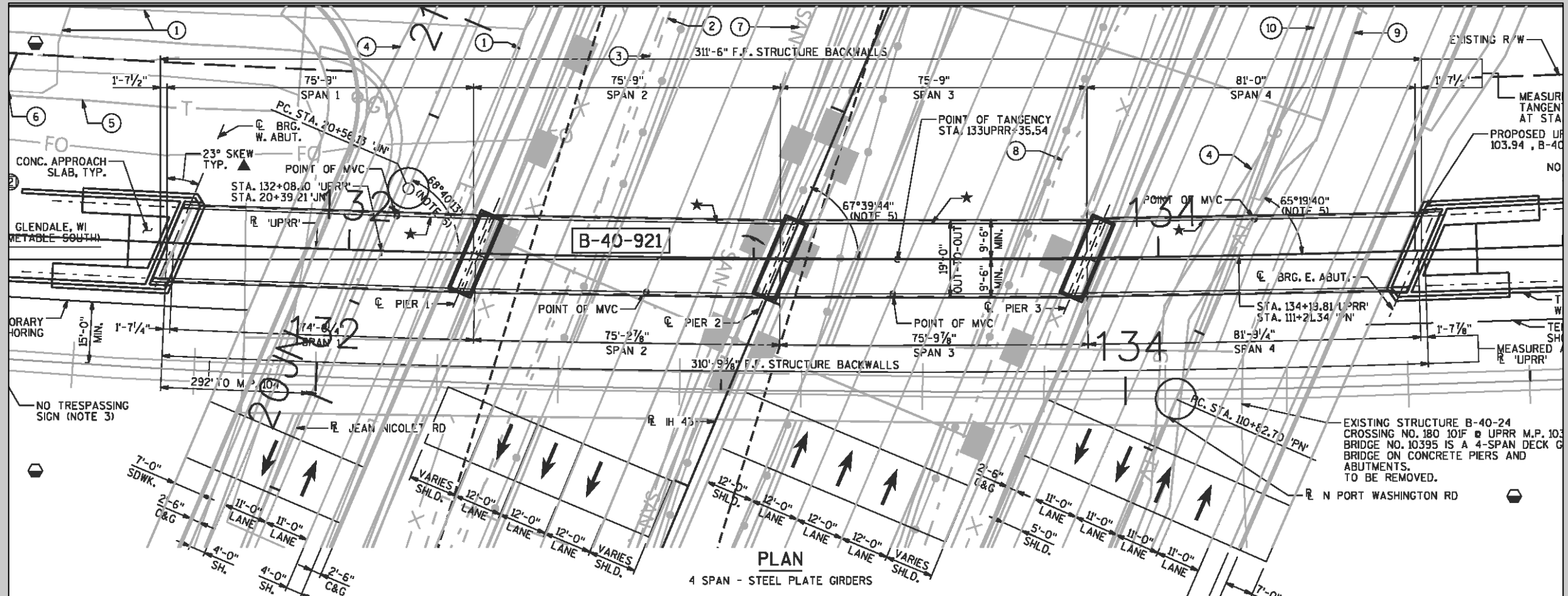
Project Let Packages: South End Mainline (1229-04-71/72/73)



Project Highlights

- Construct I-43 from Bender Road through Brown Deer Road (3.8 miles)
- Construct Port Washington and Jean Nicolet Rd on east and west side of the freeway north of Bender
- Construct the UPRR bridge over the freeway
- Construct the Good Hope Road and Brown Deer Road interchanges, widen existing structures
- 5 Bridges, 15 Retaining Walls, 22 Sign Structures, 4 Noise Walls, 1 Box Culvert (Indian Creek)
- 10/2022 Let, anticipated completion 11/2024
- 11 Residential Relocations
- Pre-Bid between advertisement and letting

New offset UPRR Bridge and Embankment



Project Let Packages: South End Mainline (1229-04-71/72/73)

I-43 South End Segment

Quantities

Item	Total
Excavation Common (CY)	407,700
Roadway Embankment (CY)	314,604
Base Aggregate Dense (Ton)	194,978
Breaker Run (Ton)	365,248
Concrete Pavement (SY)	399,315
HMA Pavement (Ton)	9,545
Concrete Barrier (LF)	132,696
Concrete Barrier Temporary (LF)	300,000
Bridge Deck (SF)	19,357
Retaining Walls (SF)	116,036
Noise Walls (SF)	348,940

Project Let Packages: Mequon Road Interchange (1229-04-75)



Project Highlights

- Construct I-43 from Donges Bay Road through Glen Oaks Lane (2.3 miles)
- Construct the Mequon Road Interchange
- 2 bridges, 1 noise wall, 1 mainline culvert crossing
- 7/2023 let, anticipated completion 11/2024
- Pre-Bid between advertisement and letting

Project Let Packages: Mequon Road Interchange (1229-04-75)

I-43 Mequon Road Segment

Quantities

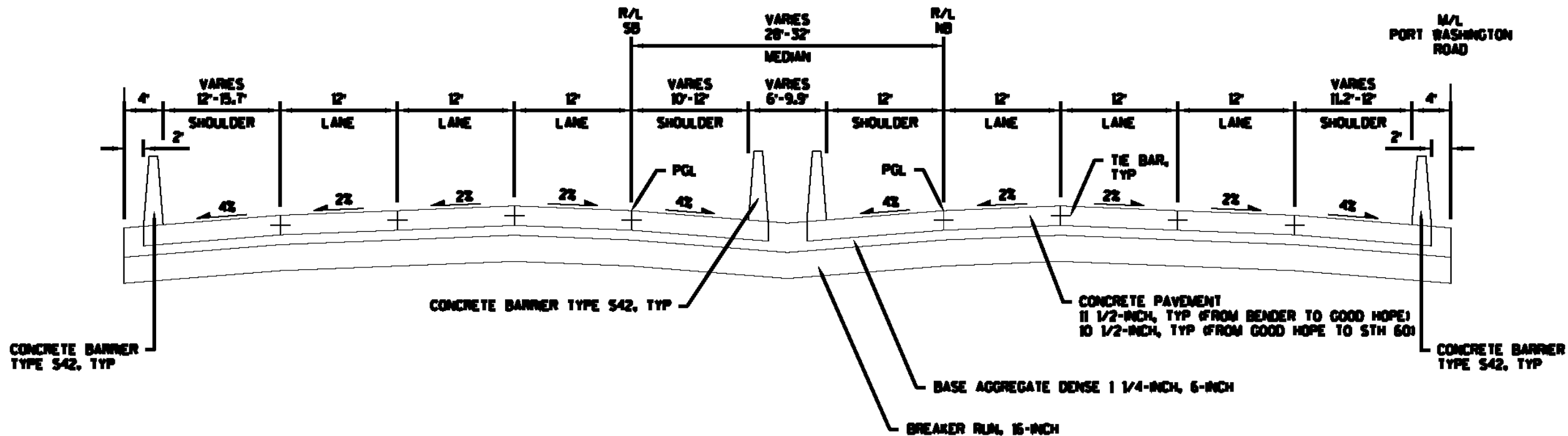
Item	Total
Excavation Common (CY)	105,000
Roadway Embankment (CY)	45,000
Base Aggregate Dense (Ton)	90,000
Breaker Run (Ton)	185,000
Concrete Pavement 8-Inch (SY)	25,000
Concrete Pavement 10 1/2-Inch (SY)	185,000
HMA Pavement (Ton)	5,000
Concrete Barrier (LF)	55,000
Concrete Barrier Temporary (LF)	125,000
Beam Guard (Permanent) (LF)	5,000
Bridge Deck (SF)	25,000
Retaining Walls (SF)	0
Noise Walls (SF)	25,000

Design/Construction Considerations - Specs

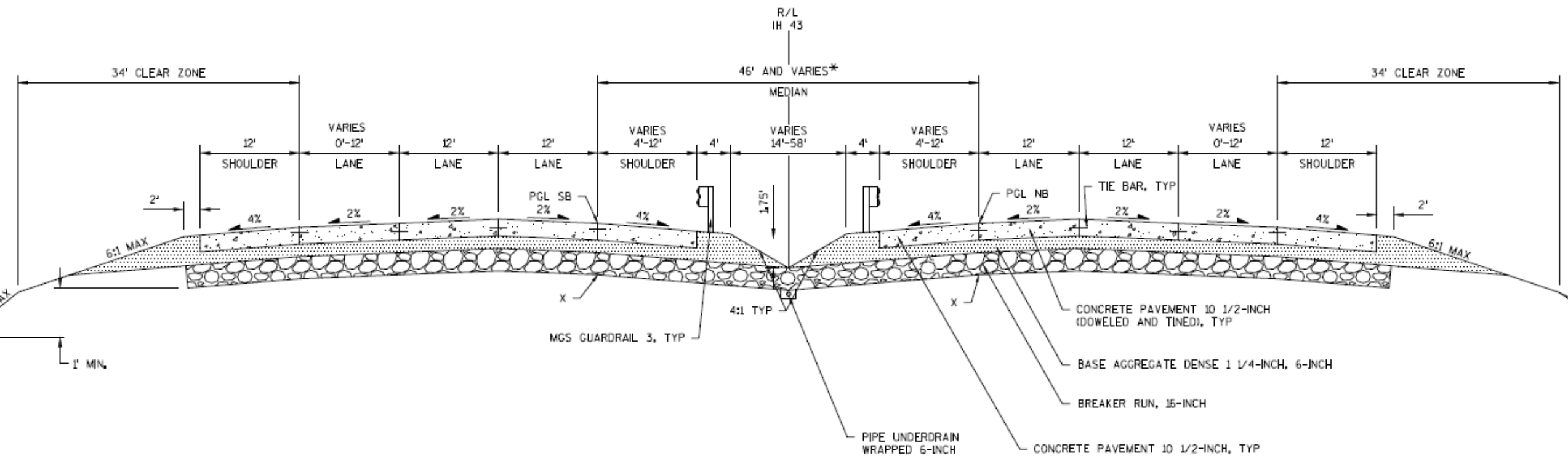
- Eruv
- Special Events
- Weekly traffic and stakeholder meetings
- Partnering
- Severe weather clause not included
- DBE goals
- Safety specs
- Field office



Design/Construction Considerations – Mainline Typical Urban (Mequon Road to the South)

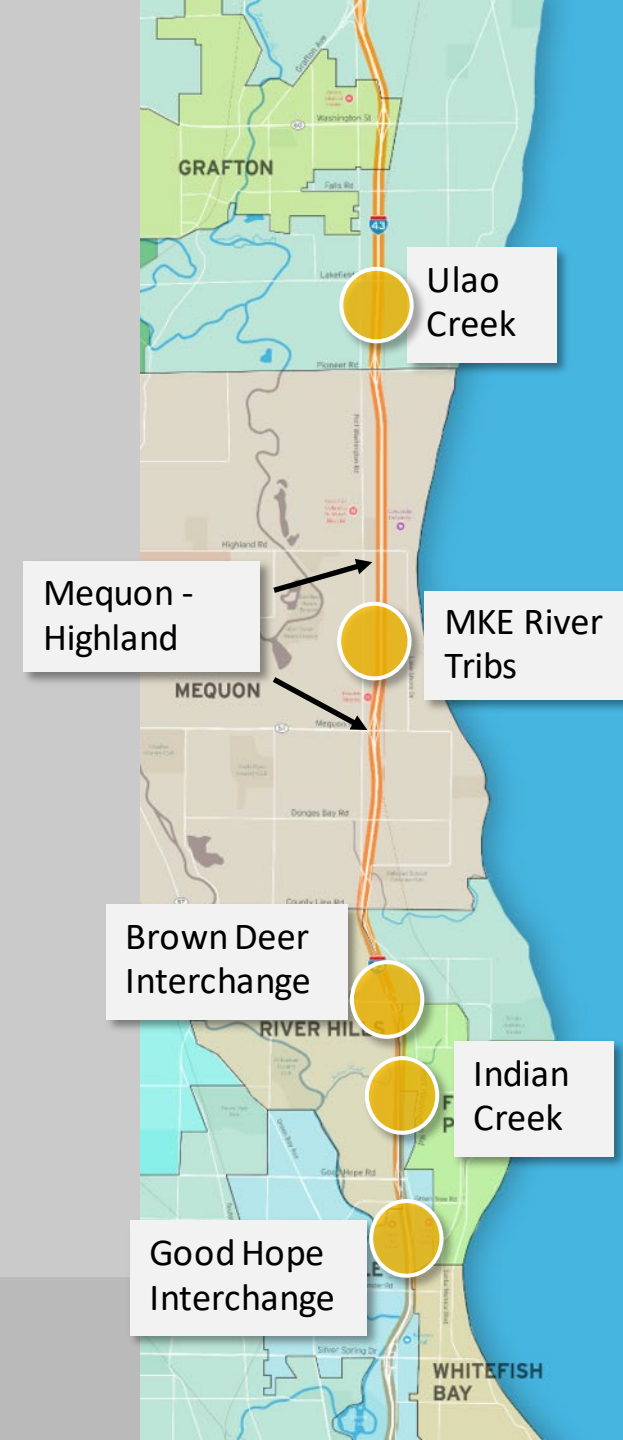


Design/Construction Considerations – Mainline Typical Rural (North of Mequon Road)



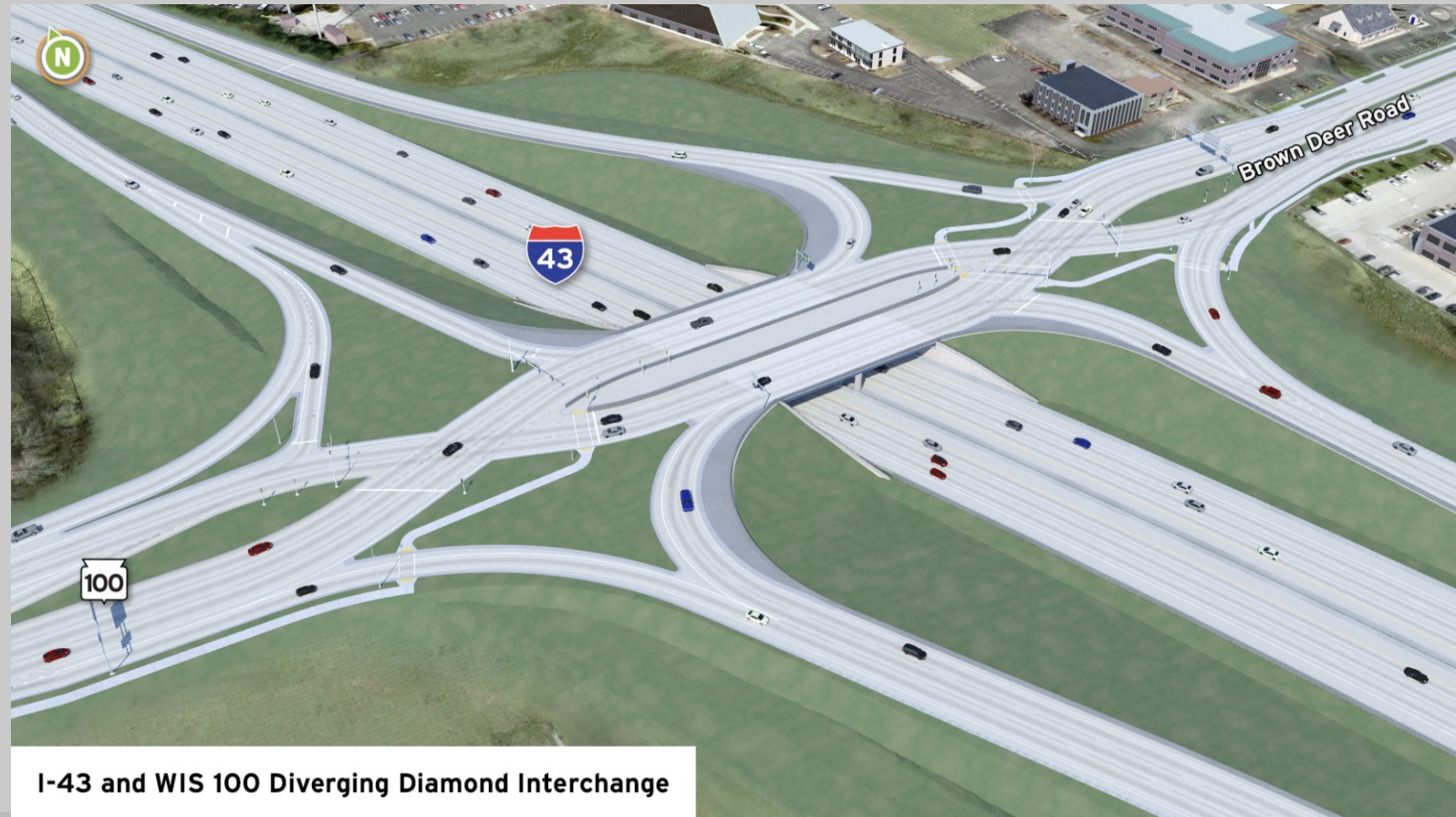
Design/Construction Considerations - Environmental

- In-Stream Restrictions (Longear Sunfish, Redfin Shiner)
 - North End – Ulao Creek
 - South End – Indian Creek
 - Mequon – Milwaukee River tributaries under I-43 and Mequon Road
- Special Seed Mix (Brown Deer and Good Hope Interchanges)
 - Rusty patched bumble bee
- Clearing and grubbing restrictions Mequon to Highland
 - Little Brown Bat
- Southbound entrance from Mequon grading restrictions
 - Seaside crowfoot mitigation



Design/Construction Considerations – Signals/ITS

- 17 traffic signals
- Three DMS structures
- 7 CCTV cameras
- Weather stations
- Speed detectors



Design/Construction Considerations – RR Coordination

- North End
 - CTH C crossing
 - Highland Bridge over UPRR
 - Temp crossing and access roads
 - Flagger coordination
- South End
 - Bridge over I-43, Jean Nicolet, and Port Washington Roads
 - Offset alignment
 - Retaining wall
 - Track throws
 - Flagger coordination



Looking North at proposed UPRR
Bridge – Milwaukee County

Design/Construction Considerations - Utilities

- Private Utilities:
 - Electric: We Energies
 - Gas: We Energies
 - Communications: AT&T Wisconsin, Charter (Spectrum), CenturyLink (Lumen), AT&T Local Network, Everstream, Midwest Fiber Networks, Verizon, Windstream, Wisconsin Independent Network
- Municipal Utilities:
 - Water: Glendale, Fox Point, Mequon, Grafton
 - Sanitary: MMSD, Glendale, Bayside, River Hills, Mequon, Grafton
 - Lighting: Glendale, Mequon
- WisDOT Utilities:
 - Lighting, RWIS, Signals, FTMS

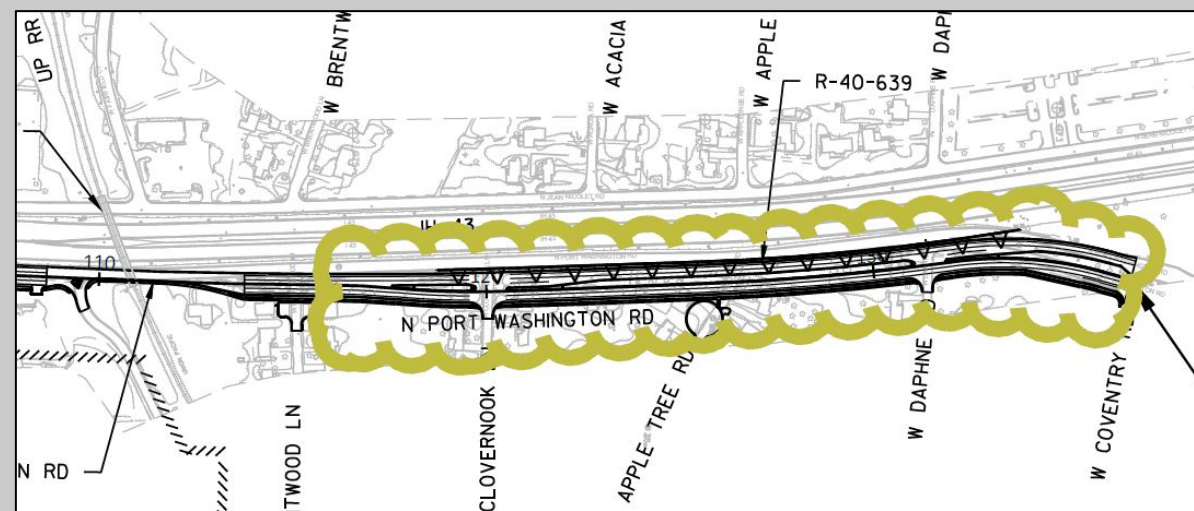
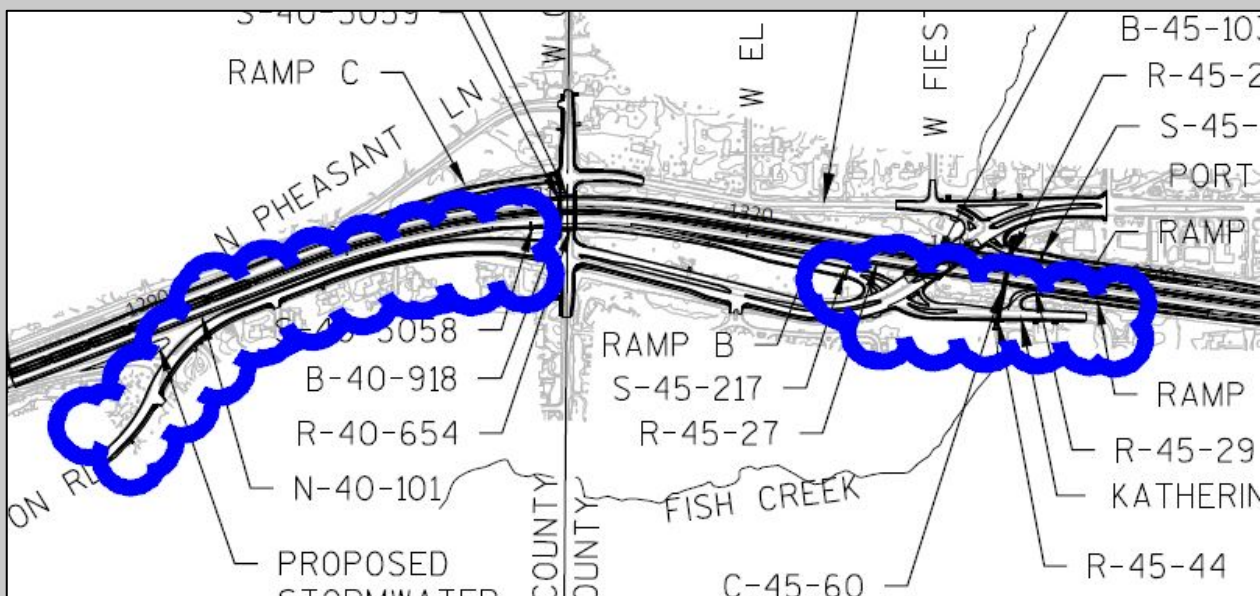
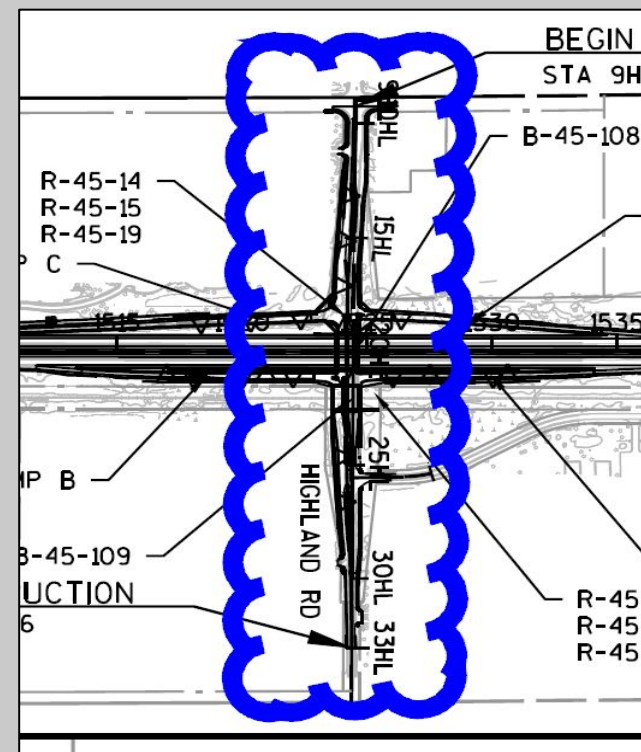


Design/Construction Considerations - Utilities

- Most relocations occur at the interchanges
 - Port Washington Road / UPRR (south end); Good Hope Road interchange; Brown Deer Road interchange; County Line Road interchange; Mequon Road interchange; Highland Road interchange; Pioneer Road interchange
- Most notable relocations
 - Mequon water main (County Line Road; Highland Road)
 - We Gas 20-inch high pressure gas main
 - MMSD manholes
 - CenturyLink fiber optic
- In-contract work
 - Sanitary manholes
 - Hydrant and valve adjustments

Design/Construction Considerations - Utilities

- Most notable relocations
 - We Gas 20-inch high-pressure gas main (Port Washington Road)
 - Mequon water main 16-inch and 12-inch (County Line Road)
 - Mequon water main 12-inch (Highland Road)



Design/Construction Considerations – TMP/Traffic

- Dedicated Law Enforcement
- Freeway Service Teams
- Emergency Vehicle Preemption
- Transit Coordination
- Alt route adaptive and responsive signals
- Temporary traffic signals
- Local road improvements
- Work zone ITS



Design/Construction Considerations - Outreach

- Public very involved and active
- Corridor public information meetings (PIM's) held January 2020 – over 800 attendees
 - Included local elected officials meeting
- Noise wall PIM's held virtually late 2020 and spring 2021
- Additional corridor-wide PIM's planned for 2021
- Ongoing coordination meetings being held virtually with schools, municipalities, and other stakeholders



Q & A and Wrap Up

I-43 Information and Contacts

WisDOT Southeast Region

Please visit our website at: www.wisconsindot.gov/43corridor

Or contact project manager Steve Hoff: steve.hoff@dot.wi.gov

