

MICHIGAN DEPARTMENT OF TRANSPORTATION DESIGN-BUILD

Informational Meeting: I-96 Wacousta to M-43

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May 20, 2009



General Project Description – I-96

- Reconstruction of 5.78 miles of I-96
- Reconstruction of Interchange Ramps at Grand River Ave.
- Reconstruction of Interchange Ramps at M-43 (Saginaw Highway)
- Signing & Pavement Markings
- Carpool Lot Expansion at Grand River Ave.

General Project Description

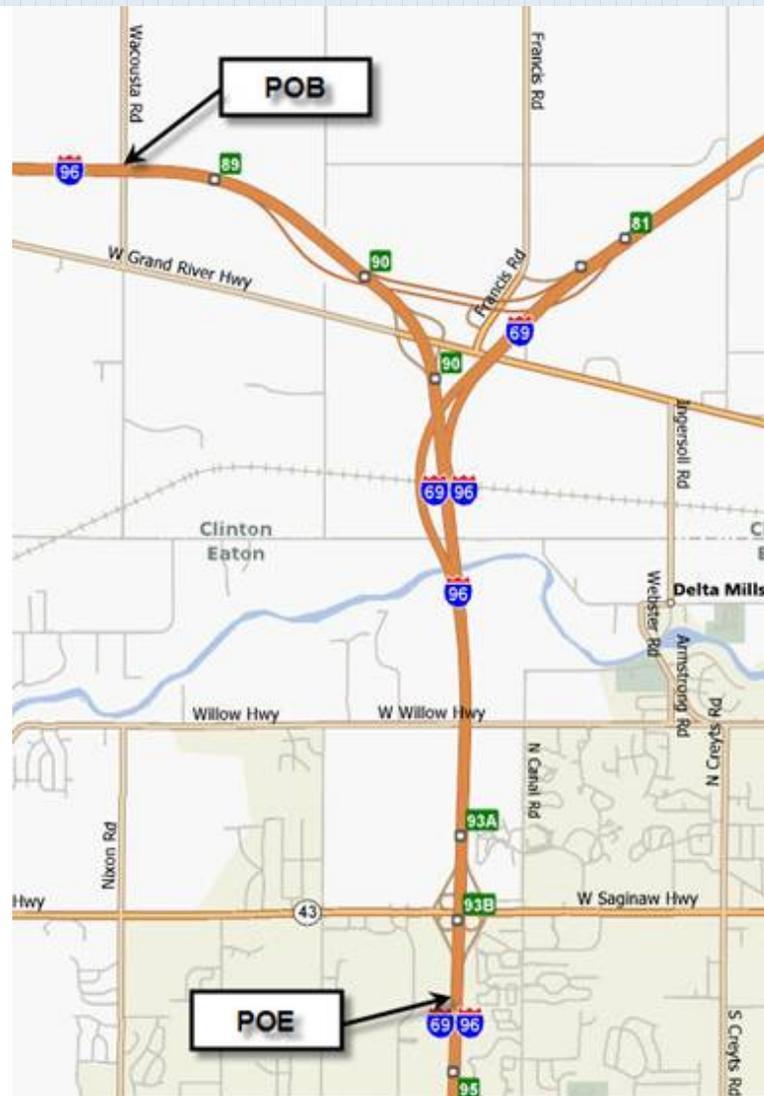
M-43 and Canal Road

- Reconstruction of 0.82 miles of M-43
- Widening of 0.30 miles of Canal Road
- Traffic Signal work along M-43 and Canal Road

Project Description – Bridge Work

- Rehabilitation of 10 bridges along I-96
 - Wacousta Road over I-96
 - deep overlay
 - I-96 EB & WB over Grand River Ave.
 - deep overlay / full painting
 - I-69 EB turning roadways over I-96 & I-69 WB over I-96
 - full painting
 - Eaton Highway over I-96 and over I-69
 - rehab items
 - Willow Highway over I-96
 - barrier wall / rehab items
 - I-96 EB & WB over M-43 (Saginaw Highway)
 - deep overlay / widening

General Project Location



General Project Location



Elements of Design-Build Contract

- Design: Partnership between Designer and Contractor
- Permits and Permitting Requirements
- Utility Coordination
- Maintenance of Traffic
- Construction

MDOT Role

- Partner with Design-Build Team
- Review Design for Acceptance
- Coordinate Public Involvement
- Provide Base Plan Information
- Provide Background Information (geotechnical, road and bridge as-builts, survey data, etc.)
- Typical Construction Oversight

Request for Proposals (RFP) Content

- Instructions to Proposers (ITP)
 - to guide teams in preparing technical proposals and bids
- Book 1 – Design-Build Contract
 - written for design-build projects
- Book 2 – Project Requirements
 - project specific guidance for administration, design, and construction
- Book 3 – Applicable Standards
 - a list of standards that apply to the administration, design, and construction of the project
- Reference Information Documents (RID)
 - additional information for reference only
- Example: Item 601 from August 8, 2008 letting

Instructions To Proposers (ITP)

- Typical Advertisement Sheet
 - Contractor Pre-Qualifications
- Designer Pre-Qualifications
- Alternate Technical Concepts (ATC's)
- Technical Proposal Requirements
- Procurement Schedule
 - Pre-Bid Meeting Dates
 - Letting Dates

Design-Build Tentative Procurement Schedule

PROCUREMENT SCHEDULE	
Issuance of Request for Proposals by MDOT - E-Proposal	June 29, 2009
Pre-Bid meeting	July 23, 2009
ATC Submittal Deadline	August 6, 2009
Clarification Submittal Deadline	August 20, 2009
1300EZ form due (part of normal E-proposal process)	August 24, 2009
Technical Proposal Due Date	August 27, 2009
As Submitted Bid Opening Date	August 27, 2009
Notify Responsive Proposer of approval of Bid	September 3, 2009

Book 1

Design-Build Contract

Book 1

SECTION 4 - Schedule

- Crossovers and Shoulders in Fall 2009
 - plans included in RFP
- I-96 work to be completed in 2010
- M-43 work to be completed in 2011 (Memorial to Labor Day)
- Bridge work on local roads to be completed during 2010 Summer months

SECTION 12 - Shared Risk Items

- Subgrade Undercutting
- Non-Hazardous Contaminated Material Handling and Disposal
- Subbase Removal and Replacement

SECTION 17 – Liquidated Damages

- LD's anticipated to change for Different Areas of the Project

Book 2

Project Requirements

Section 2: Project Management

- **Cost / Progress / Schedule Management**
 - Schedule of values at NTP
 - Two-week Cycle or Monthly Invoices
 - Monthly Progress Reports
 - Monthly CPM Schedule Updates
- **Quality Management**
 - Design / Construction Quality Management
 - MDOT oversight during construction
 - Similar to current DBB practices
- **Human Resource Management**
 - Key Personnel
 - Weekly labor hour reports

Section 3: Public Information

- Traffic
 - Motoring public awareness with message boards
- Public Information Meetings
 - Pre-construction for I-96 (March 2010)
 - Pre-construction for M-43 (March 2011)
- Monthly Progress Meetings
 - Local Businesses and Emergency Responders
 - Traffic Changes and Updates

Section 4: Environmental Compliance

- Permits
 - MDEQ
 - Expect minimal impact to wetlands
 - Notice of coverage from NPDES
 - County Drain Commissions
 - Connections outside road ROW

Section 6: Utilities

- Utility Coordination – Pre-award
 - Existing utilities identified
 - Potential utility conflicts identified
 - Communication with utilities started
- Utility Coordination – Post-award
 - Utility Verification Meeting with MDOT
 - Contractor to track utilities after award
 - Contractor responsible for coordination
 - Contractor agreeing to Utility Relocation Plans

Section 7: Right-of-Way

- ROW Impacts along M-43
- ROW acquisition ongoing
- ROW certification by late summer 2010

Section 8: Geotechnical

- Numerous Shoulder & Pavement Cores
- Misc Borings (i.e. strain poles, permanent signs)
- I-96 over M-43 bridge borings available from previous work
- Additional borings required at M-43 for design of structure widening
- Pavement Types
 - 11.5 inch Concrete Pavement on I-96 and I-69
 - Existing Concrete Pavement Recycled for use as Stabilized Base
 - Subbase salvaged/replaced
 - HMA on M-43 and Canal

Section 9: Land Surveying

- Existing vertical/horizontal survey control
- Survey control verification required

Section 11: Roadways

- Base plans provided in RID
- Horizontal and vertical alignments flexible
- 1:4 slopes or flatter

Section 12: Drainage

- Replacement of most CSP culverts along I-96
 - hydraulic analysis required
- Cleanup and/or reconstruction of ditches along I-96 at identified locations
- Replacement of most storm sewer systems along M-43 and Canal Rd.
- Detention improvements at M-43/I-96 interchange

Section 13: Structures

- Widening of I-96 EB and WB over M-43
 - from 2' outside shoulder to 12' outside shoulder
- Deep Deck Overlay
 - Wacousta Rd.
 - I-96 over Grand River Ave.
 - I-96 over M-43
- Additional Items
 - P&H replacement
 - Substructure, Deck, and Barrier patching
 - Concrete Surface Coating ~ all bridges
 - Steel Beam Painting ~ I-69 over, M-43 under, GR Ave. under

Section 14: Landscaping

- Incidental to Construction
 - Slope Restoration
 - Replanting Trees where removed
 - 2 replacements for 1 removal

Section 16: Signing, Pavement marking, Signalization, and Lighting

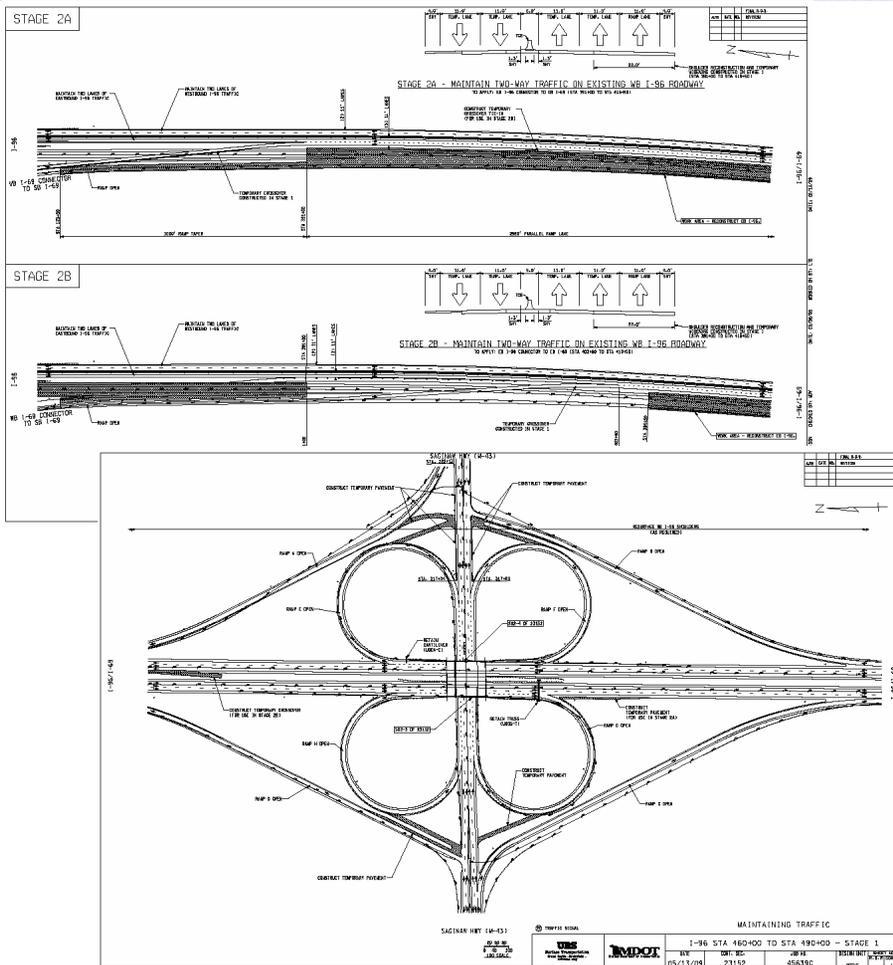
- Signal work at M-43 and Canal Road
- Signal Work at Canal Road Fire Station
- Signal work at I-96 and M-43 Interchanges
- Anticipate Replacement of Some Trusses and Cantilevers along I-96

Section 18: Maintenance of Traffic

- Global Signing
- Limited Ramp Closure Durations at Grand River Ave. and M-43 (Saginaw Highway).
- I-96 Crossover / shoulder upgrades
Design provided for 1st stage (2009)
- MOT detours provided – final approval required
- Traffic Management Plan

Section 18: Maintenance of Traffic

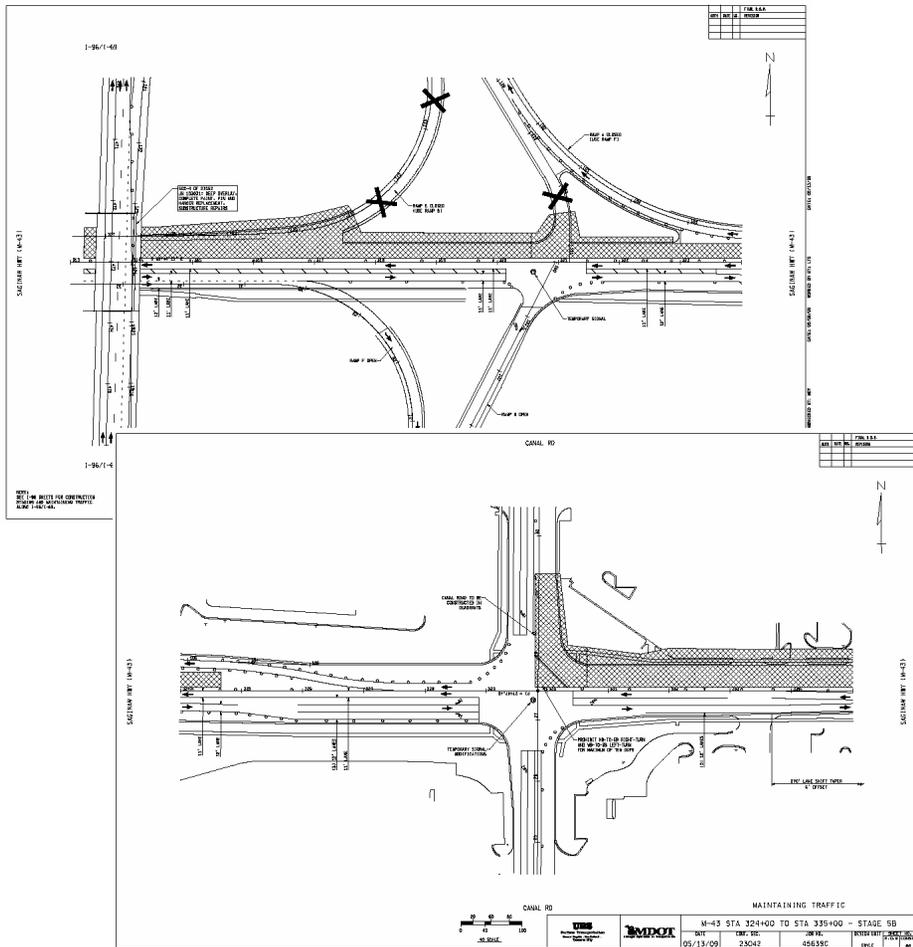
Reference Information Documents – Typical Staging (I-96)



- 2 lanes open in each direction at all times
- 3 lanes open on EB for I-69 EB connector
- EB full width construction
- WB part width construction
- Temporary ramp staging to keep M-43 ramp movements open

Section 18: Maintenance of Traffic

Reference Information Documents – Typical Staging (M-43 and Canal Road)



- 1 lane open in each direction at all times
- 1 left turn lane required at all times
- Part width construction at M-43 and Canal Road intersection
- County Road Commission permits required for Canal Road work

Book 3 Standards

Reference Information Documents

- Additional information available
 - Design files
 - culvert and storm sewer inspection report and videos
 - existing road plans
 - existing bridge plans
- Electronic files of As-Builts/As-Let plans currently available upon request

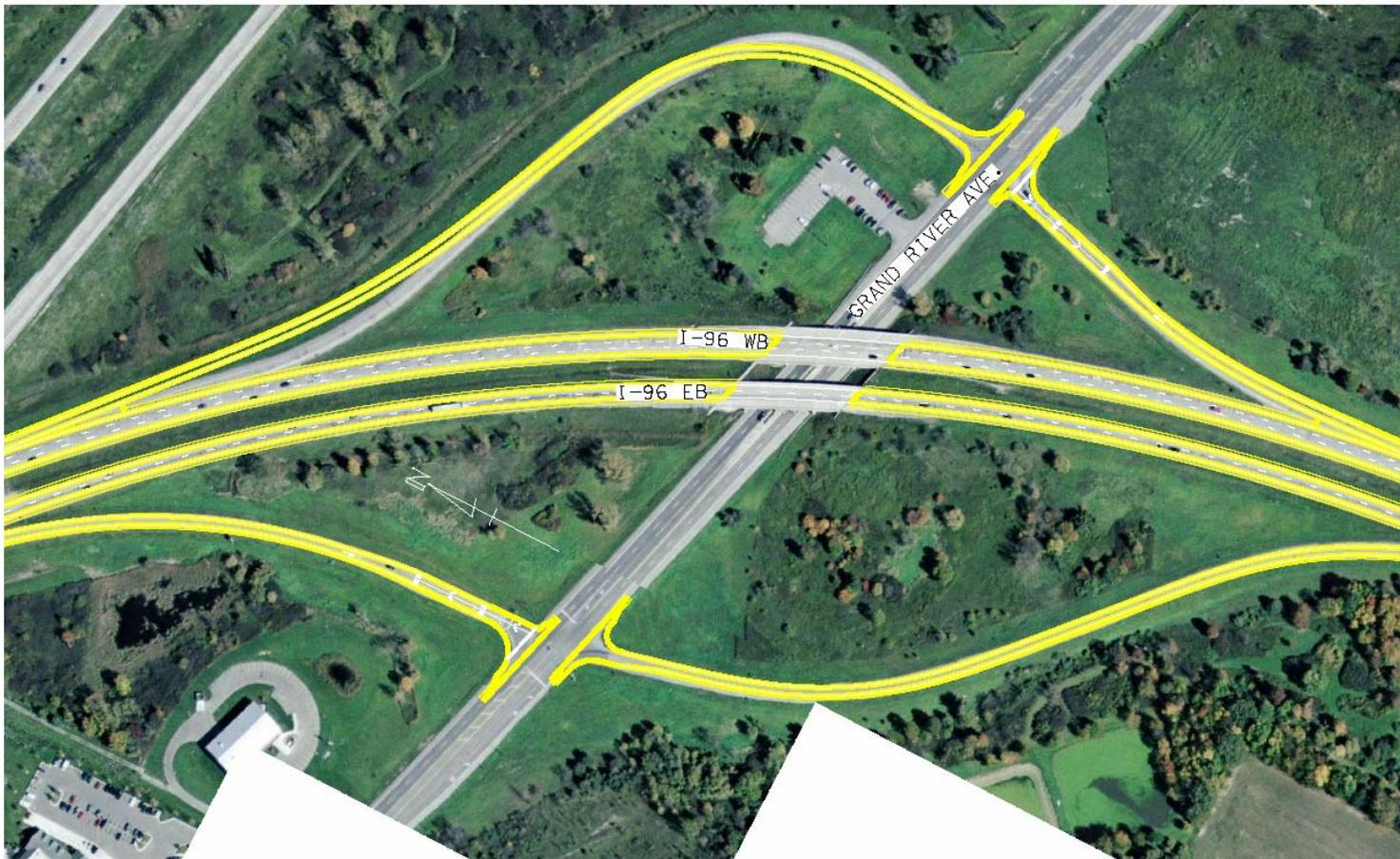
Questions?



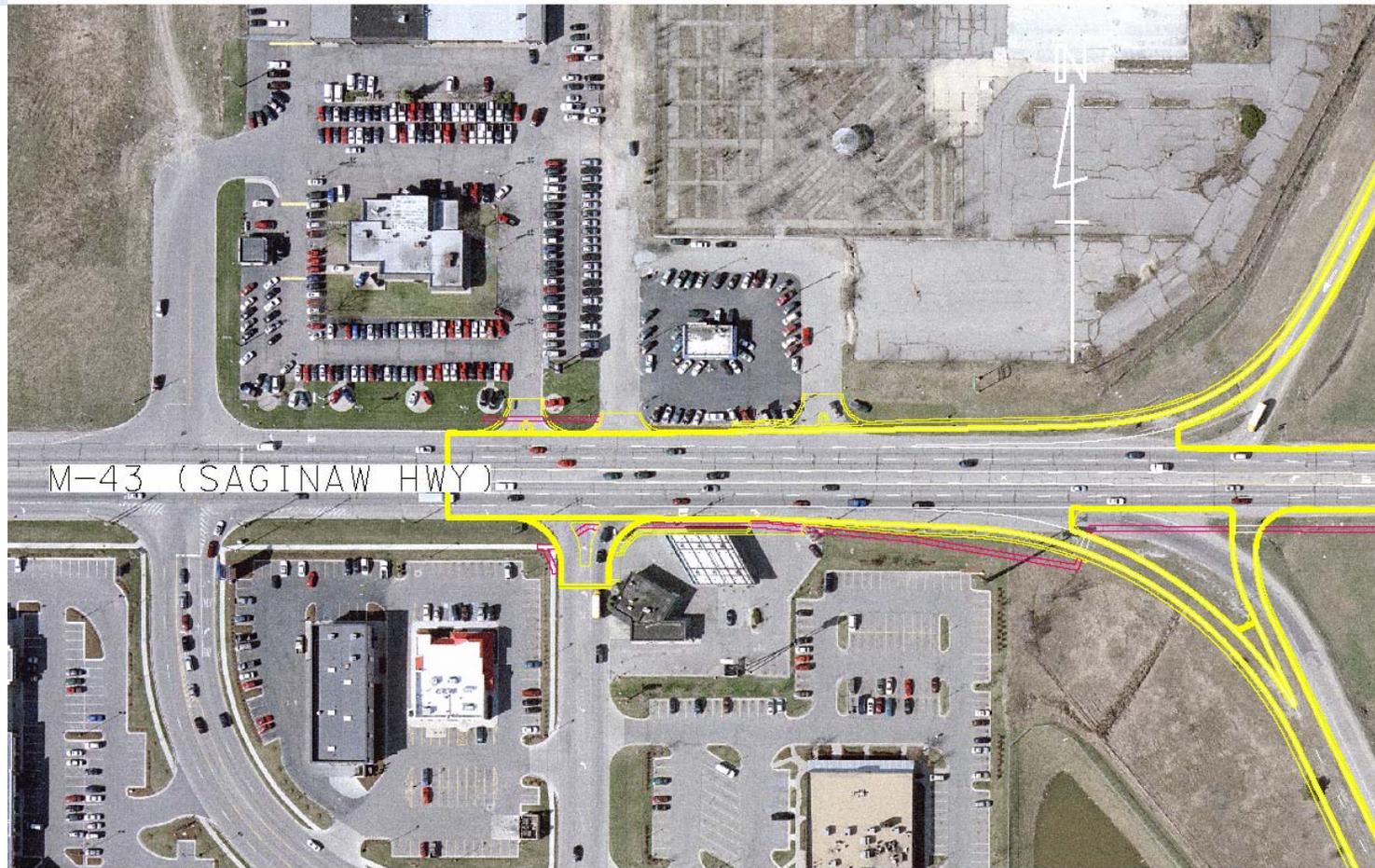
I-96 P.O.B.



Grand River Ave. Interchange

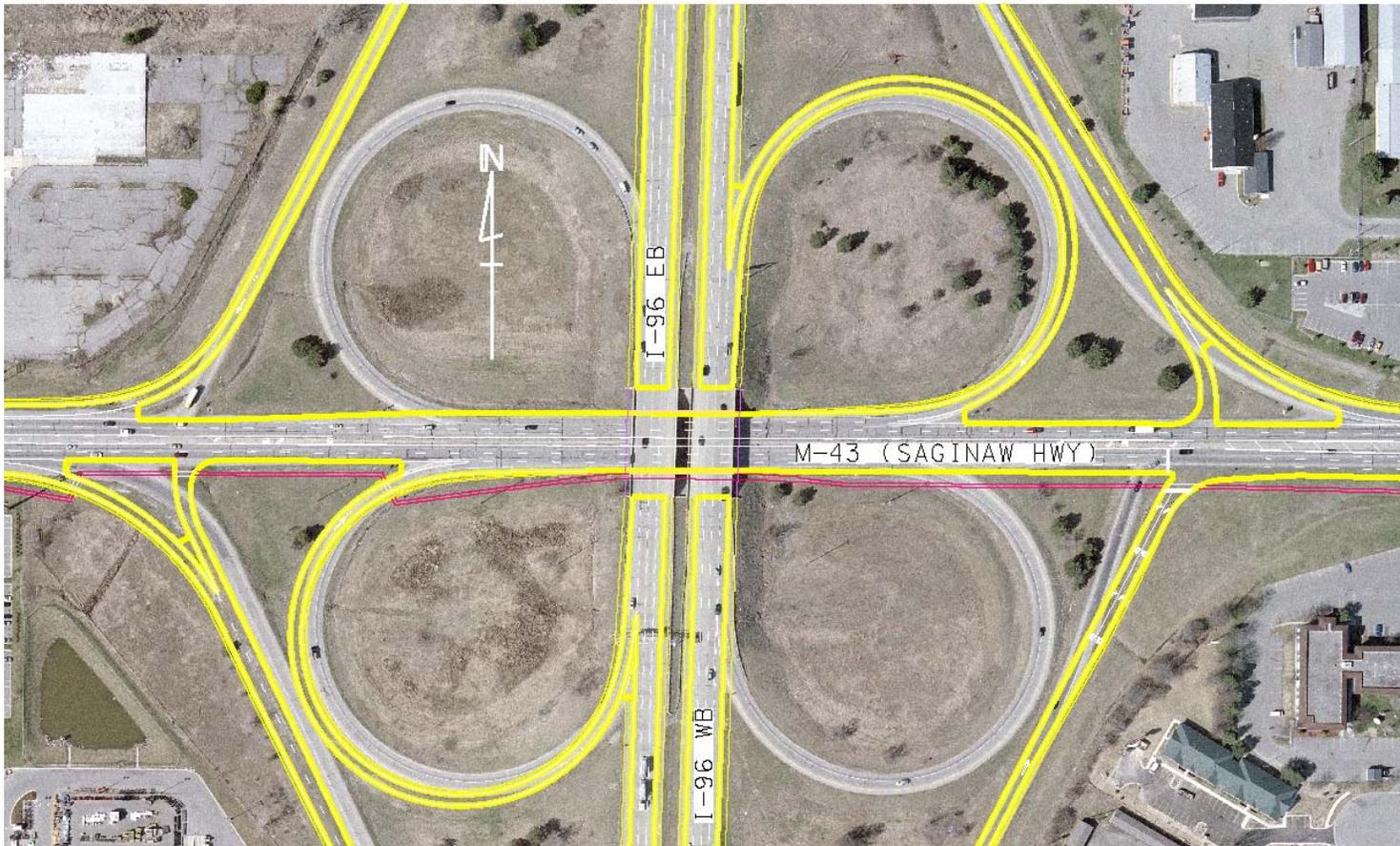


M-43 Begin Work

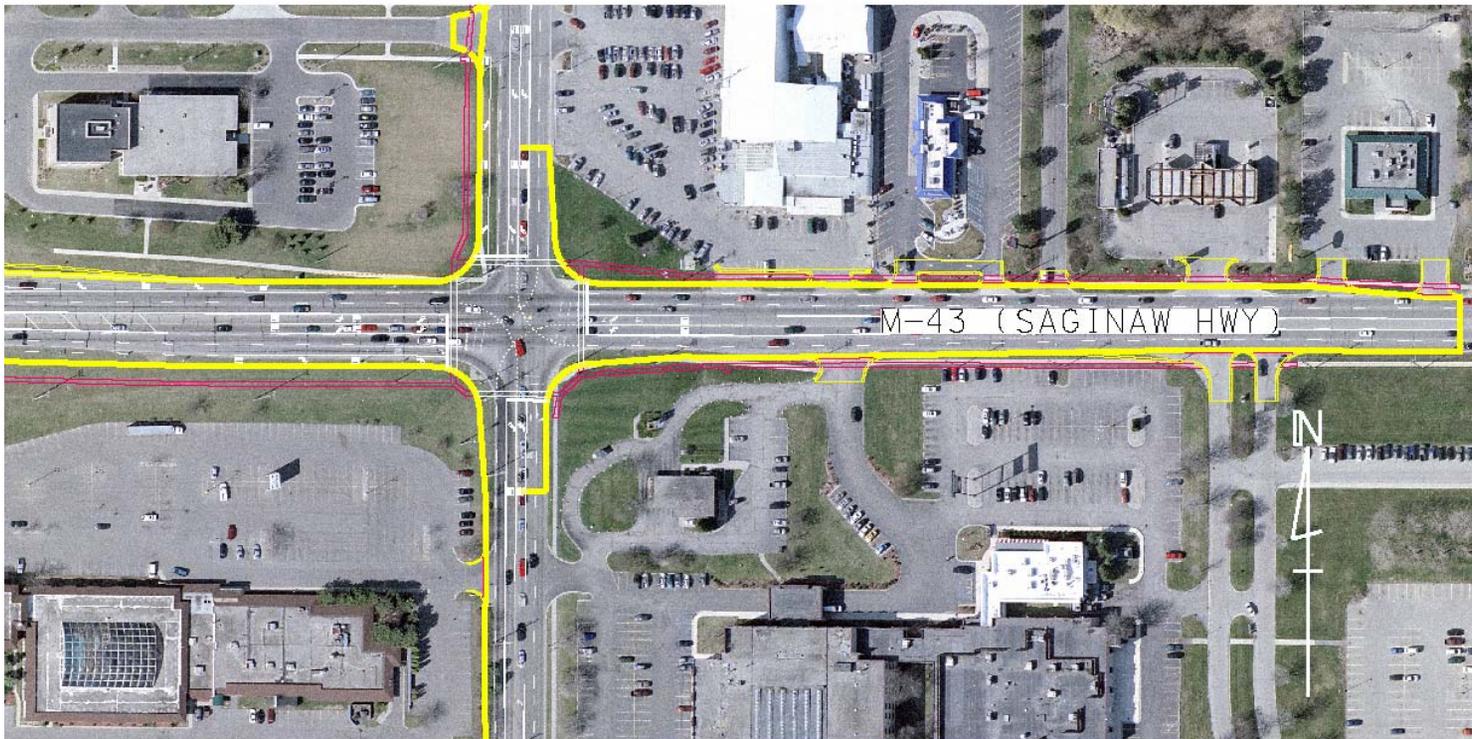


M-43 Interchange

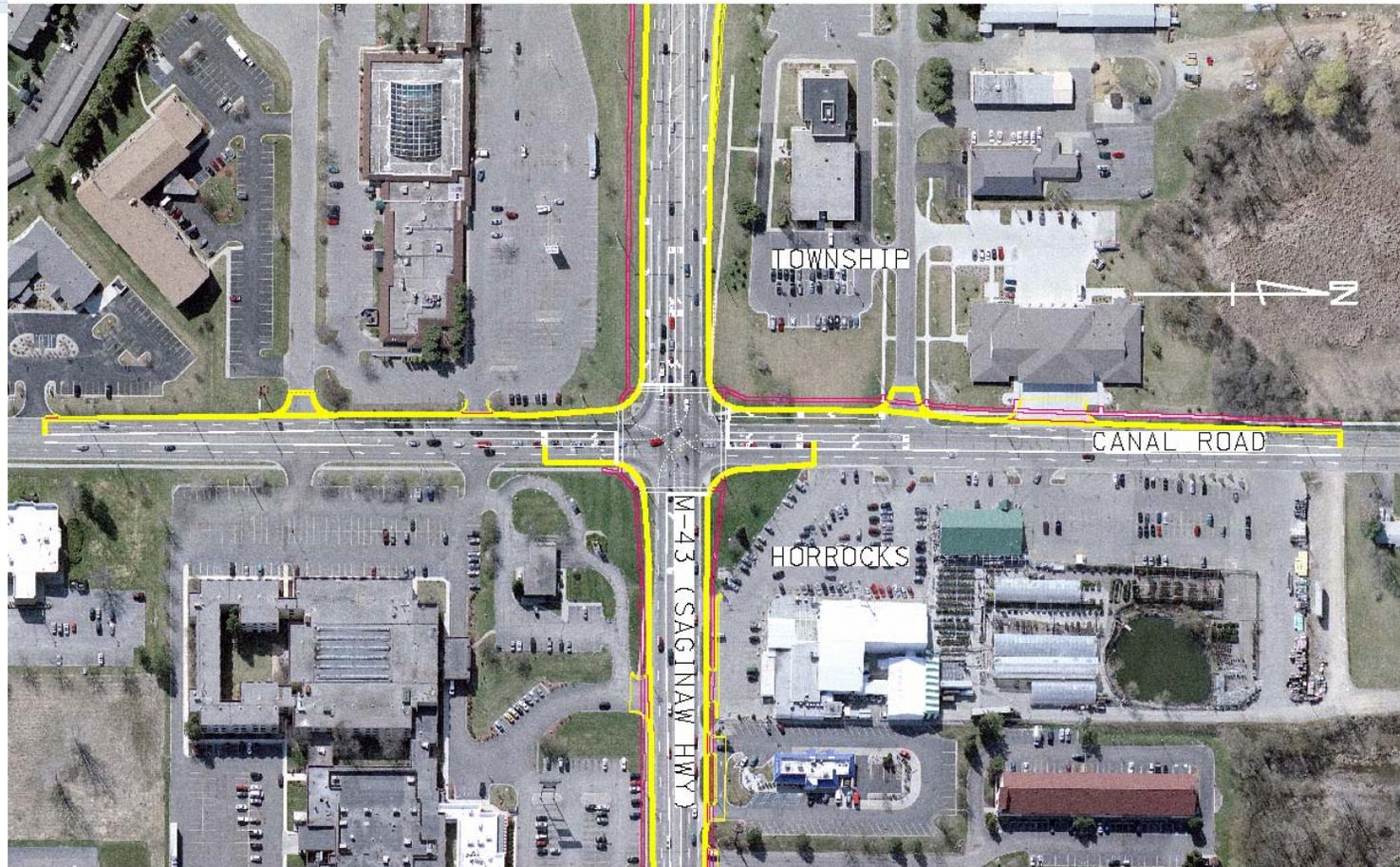
NW & SE Loops Will Be Removed



M-43 End Work



Canal Road



I-96 P.O.E.

