Public Open House

February 25, 2020

Mankato Avenue Reconstruction

Agenda

1. Welcome and Introductions
2. About the Project
3. What we Heard
4. Proposed Concepts
5. A Case Study – Golden, CO
6. How the Concept Addresses Existing Issues
7. Provide Input
8. Next Steps
9. Thank You!

Welcome and Introductions

DEPARTMENT OF TRANSPORTATION

CITY OF WINONA MINNESOTA

Stantec

Welcome and Introductions

Project Team

MnDOT + City of Winona + Stantec

About the Project

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CITY OF WINONA MINNESOTA

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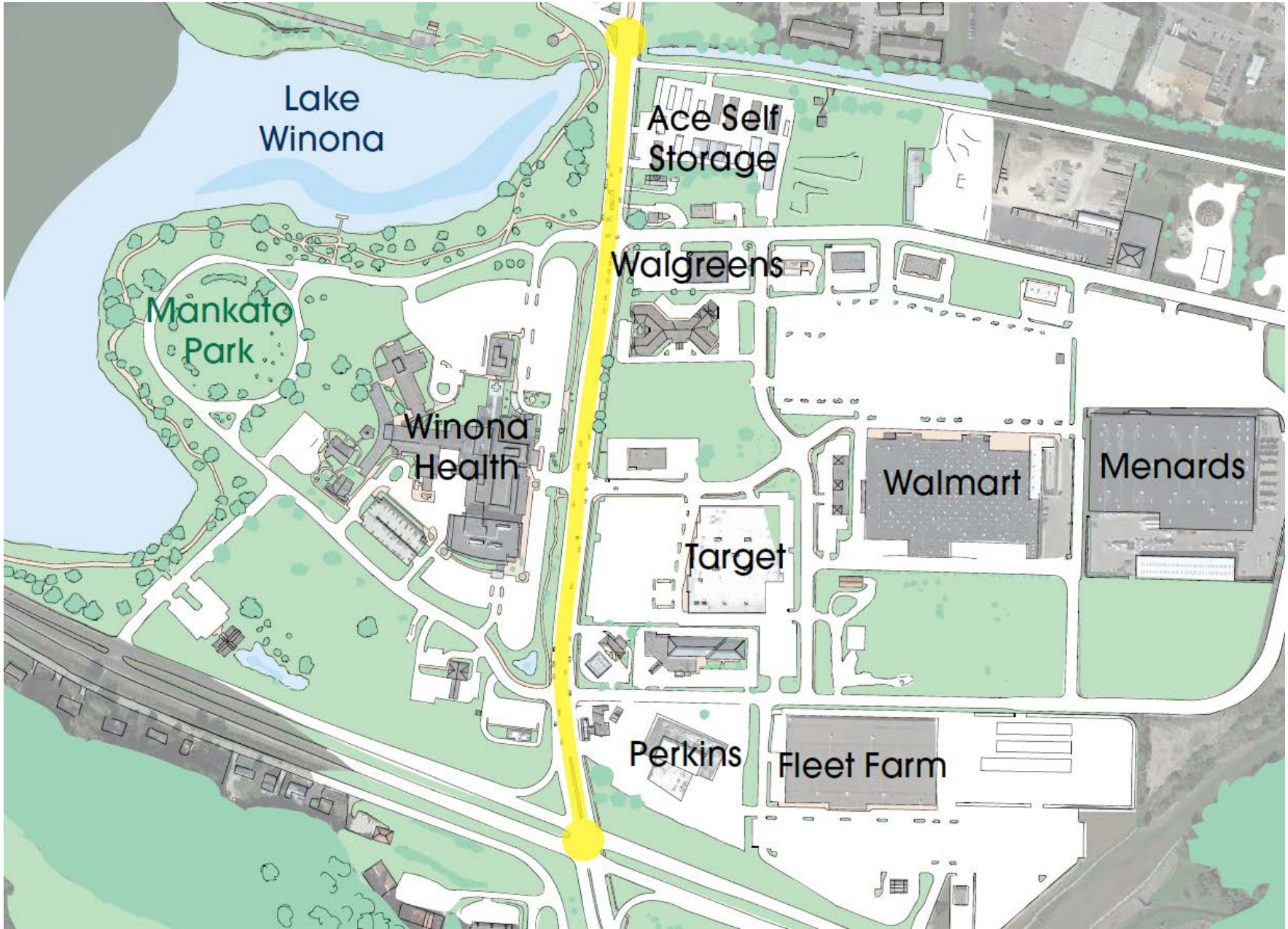
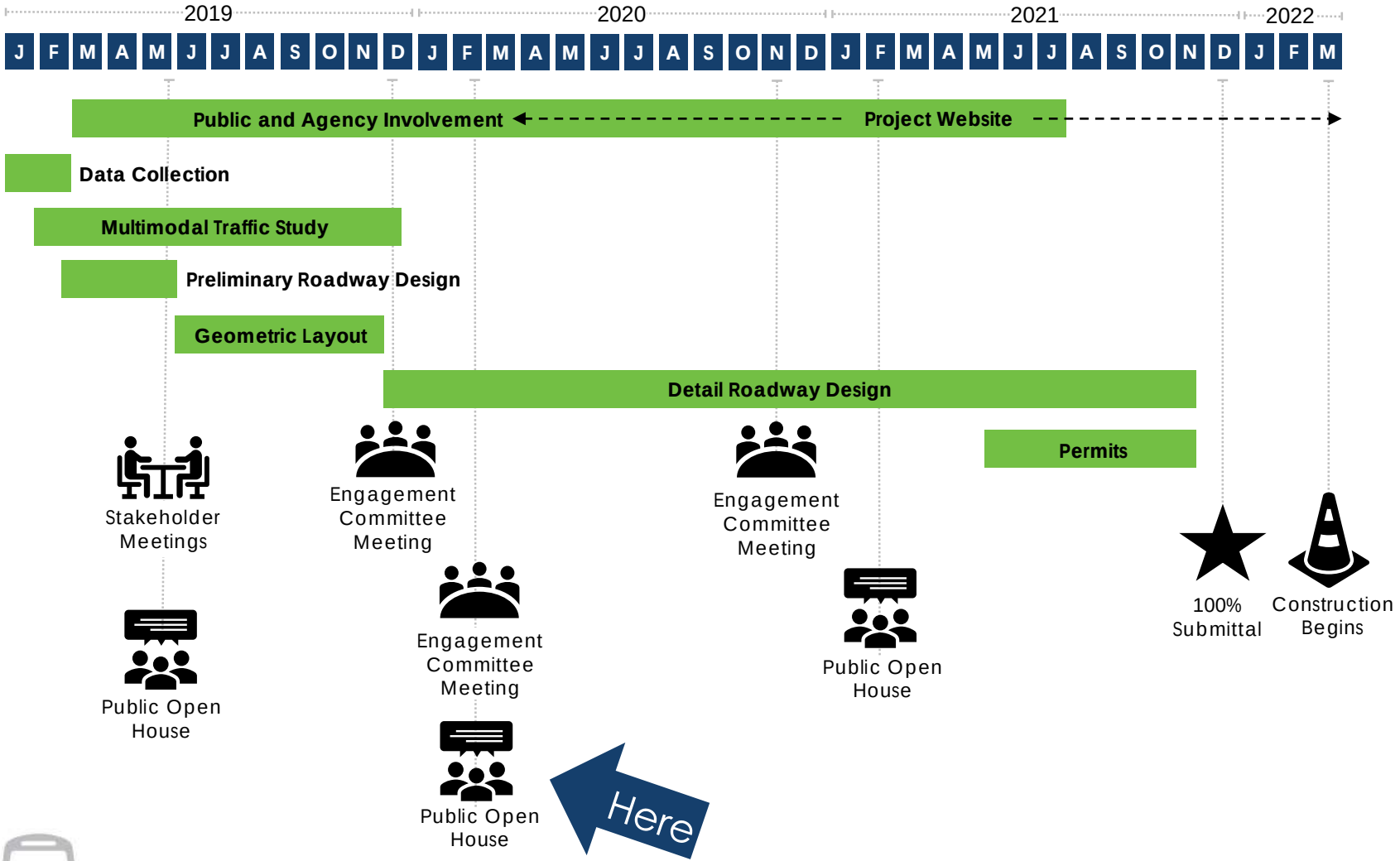
Project Location



Project Purpose

- Important and heavily-utilized corridor.
- Serves as the single artery on the east side of Lake Winona.
- Doubles as Highway 43 (the only route to cross the Mississippi River for nearly 30 miles in either direction).
- The intersection with Highway 61 serves as a critical access point between Winona, I-90 and the greater region.
- Serves as an entryway to Winona from the south.
- Mankato Ave requires a full reconstruction between Highway 61 and the intersection with Sarnia Street.
- The reconstruction is anticipated to take place in 2022.

Project Schedule



What We Heard

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Community Input Completed

Public Open House #1

Online Engagement

Pop-up Sessions

Listening Sessions

Walk Audit

Bike Audit

Engagement Committee

Pop-up Session

Bike Audit

Walk Audit

Public Input Meeting #1

What We Heard

Trail on the West Side is Not Highly Used because it Stops at Bruski Dr.

Riverbend Rd & Mankato Ave
Issues with Existing Signal

Difficulty with variability of speed, heavy traffic volumes, and unpredictable access points

TH 61 & Mankato Ave
Need Safer Crossing for Pedestrians & Bicycles

Need for Separated Pedestrian & Bicycle Facilities on the East Side

Speeding Drivers

Sarnia St. & Mankato Ave
Left Turns Difficult

General Feeling of Not Feeling Safe Walking or Biking Along the Corridor

Crossing Mankato Ave is Difficult Everywhere for all Modes of Transportation

Railroad Switching Delays

Better Lighting Needed

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

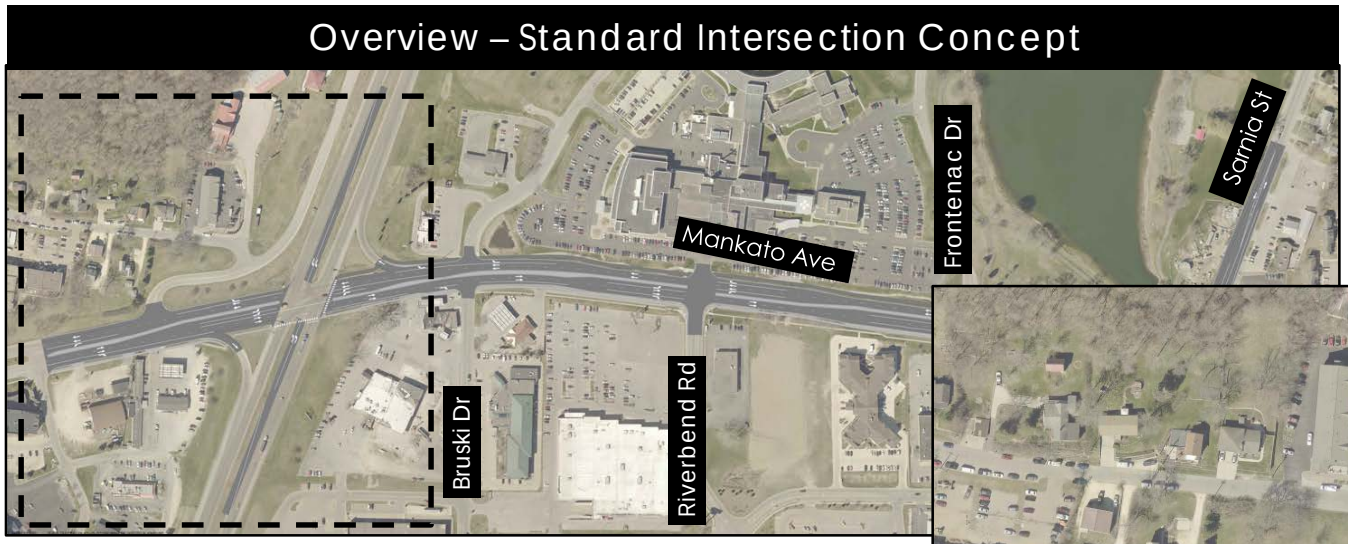
TH 61 & Mankato Ave
Left Turn Lanes onto TH 61 Have Long Queue Lengths

Proposed Concepts

Standard Intersection Concept

Overview – Standard Intersection Concept

Standard Intersection Concept



Design Requirements

- Raised median on TH 43 across East Lake Blvd. Intersection
- Dual left turn lanes on all four legs of the intersection
- Signalized Intersection

Standard Intersection Concept

Overview – Standard Intersection Concept

TH 61 Intersection

Pros

✓ Improves operation and Level of Service (LOS) of intersection

✓ No permanent right of way impacts

Cons

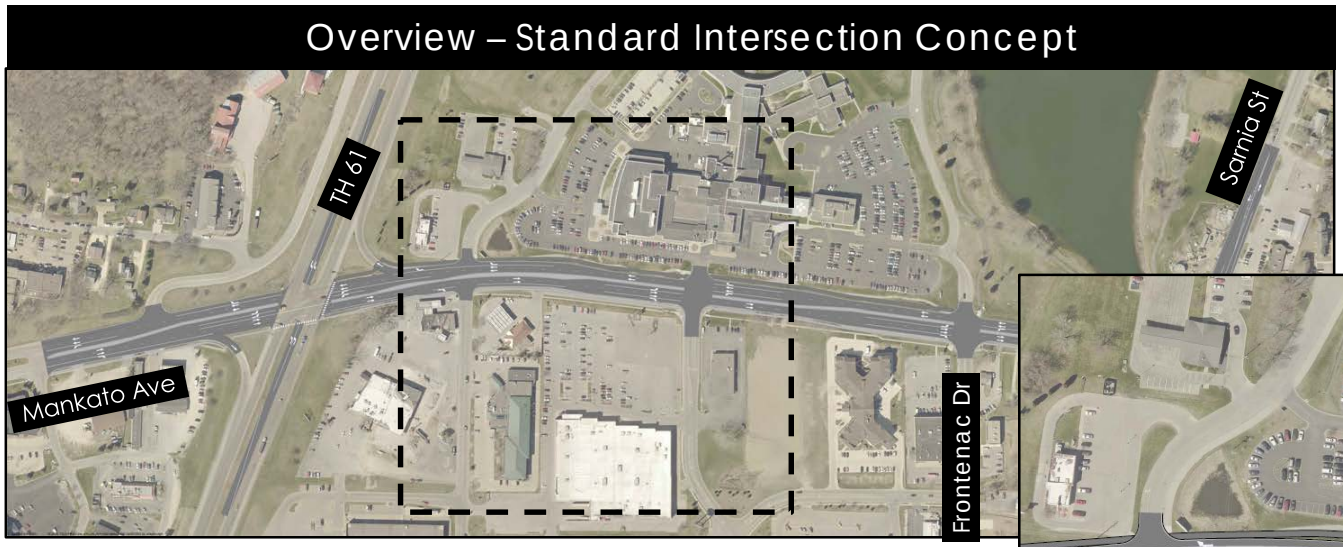
× Remains a high speed intersection

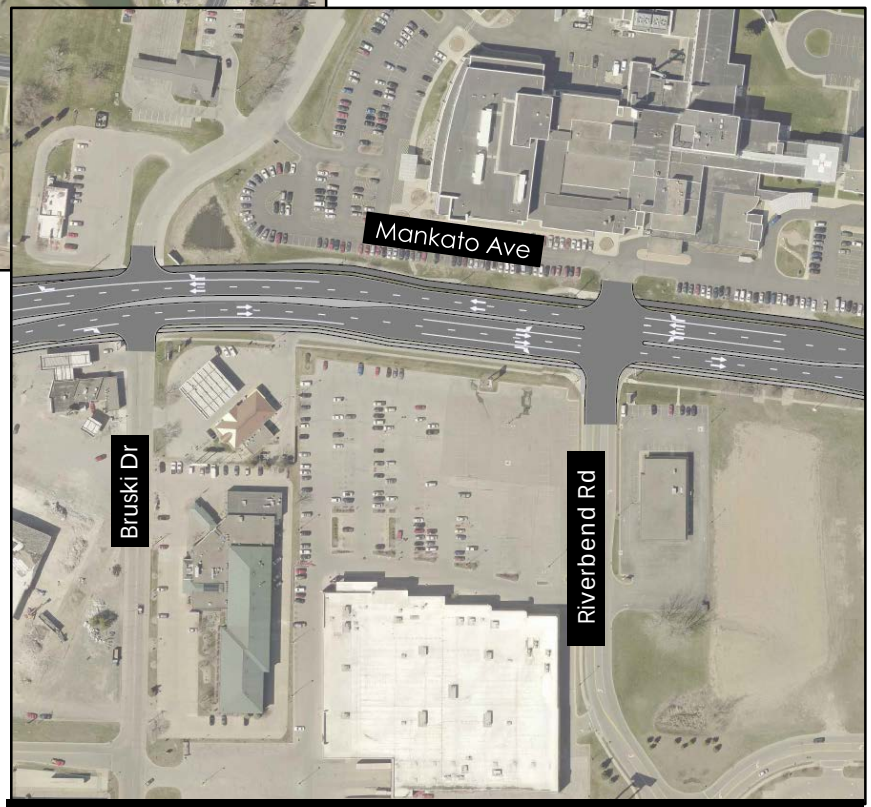
× Longer crosswalk on TH 43

× Potential for more severe crashes

× Requires all access closures to Sinclair gas station

Standard Intersection Concept

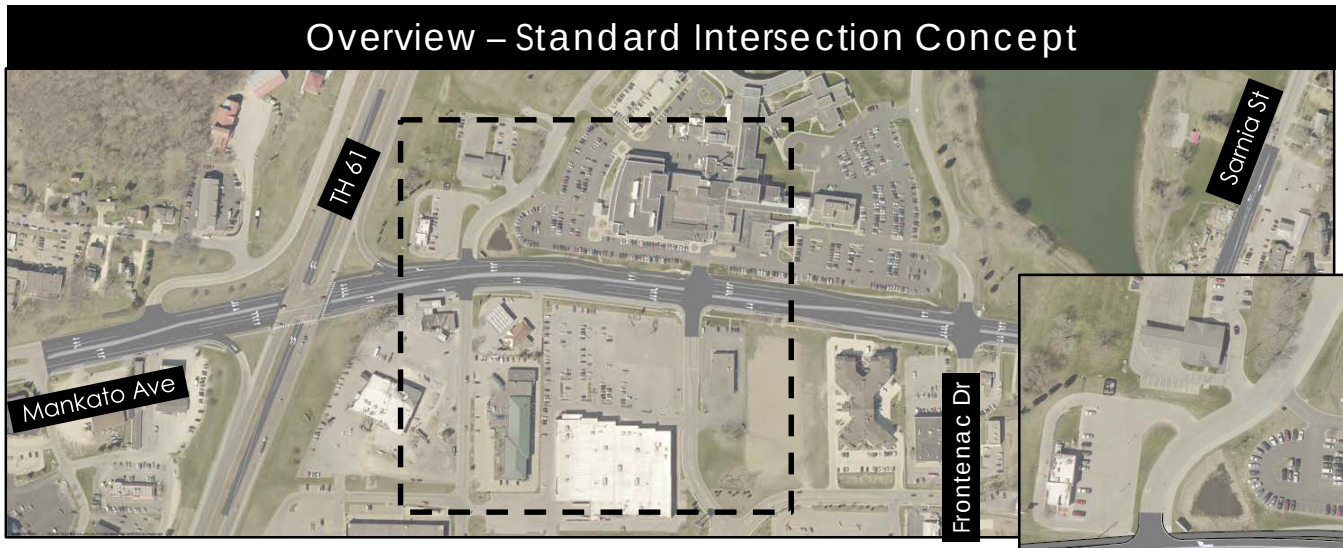




Design Requirements

- Raised median on TH 43 across Bruski Drive Intersection

Standard Intersection Concept



Pros

✓ Eliminates dangerous left turn movement from Bruski Dr.
✓ Provides a right turn lane for SB TH 43 to Parks Ave.
✓ No permanent right of way impacts at Riverbend Rd.
✓ Operates at an acceptable LOS

Cons

× Provides short right turn lane into Bruski Dr.
× Does not allow trucks or cars to turn and head south on TH 43.
× Right of way impacts near Winona Health pond

Standard Intersection Concept

Overview – Standard Intersection Concept

Frontenac Dr. Intersection

Design Requirements

- Remains the same as it is today

Standard Intersection Concept

Overview – Standard Intersection Concept

Frontenac Dr. Intersection

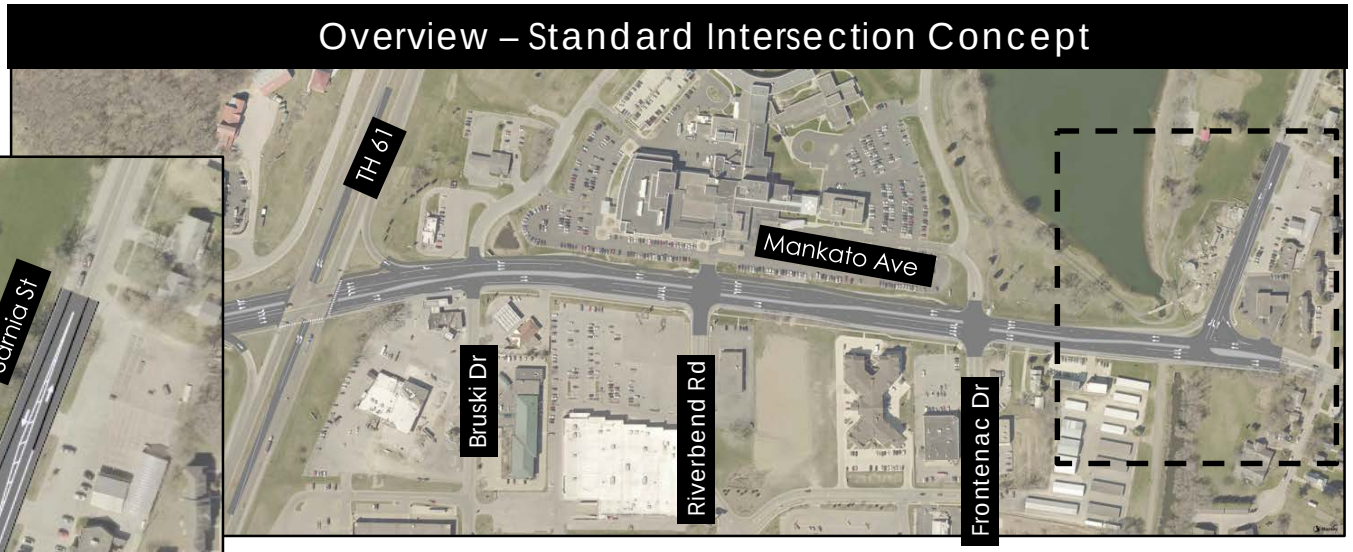
Pros

- ✓ Operates at an acceptable LOS
- ✓ No permanent right of way impacts

Cons

- × May require closure of access to Mugby Junction
- × Requires longer ped crossing time and exposure (compared to roundabout)

Standard Intersection Concept



Design Requirements

- Signalized intersection
- Removal of free right turn lane
- Raised median on the north leg of Mankato Ave.

Standard Intersection Concept

Overview – Standard Intersection Concept

Sarnia St. Intersection

Pros

✓ Signal provides movement for EB Sarnia St. to NB Mankato Ave.

✓ Improves operation and LOS of the intersection

✓ No permanent right of way impacts

Cons

× Restricts left turns into Merchants Bank from Mankato Ave.

Roundabout Concept

Overview – Roundabout Concept

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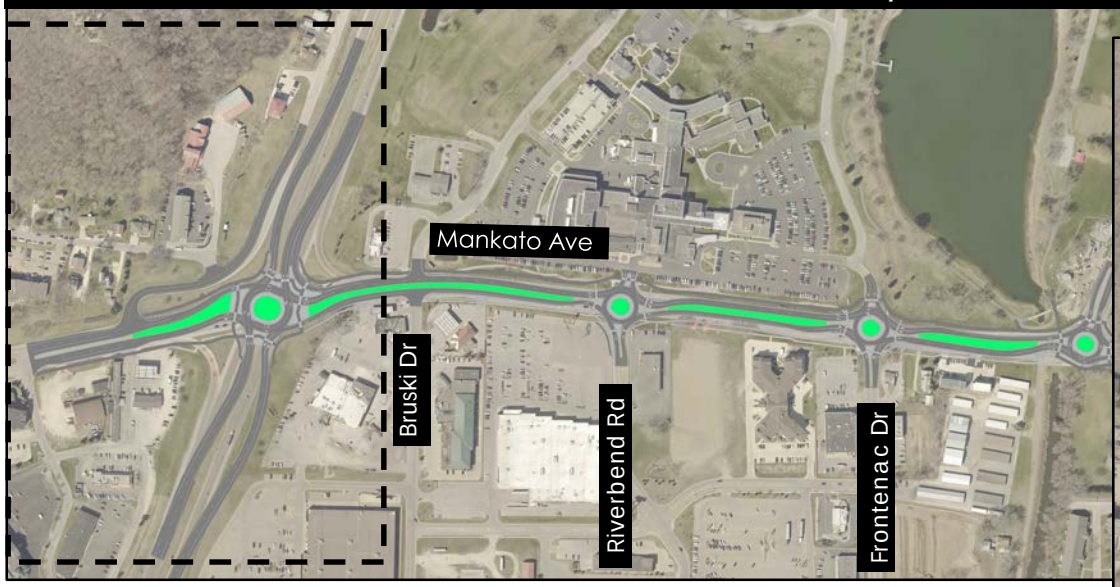
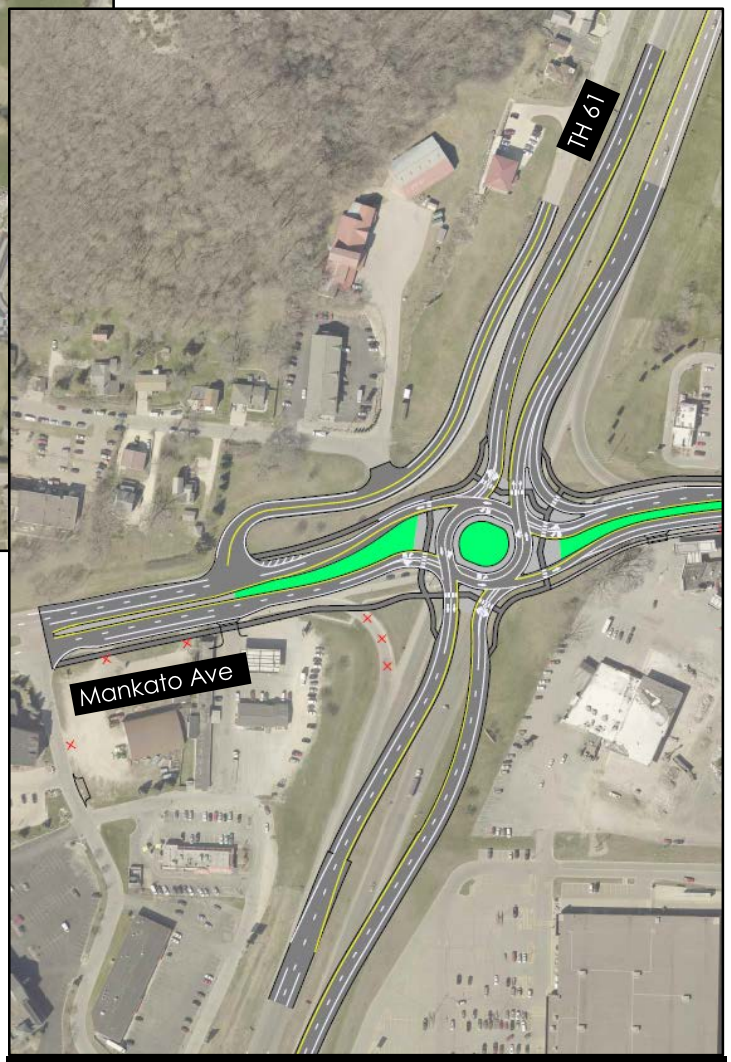
Roundabout Concept

Overview – Roundabout Concept



Design Requirements

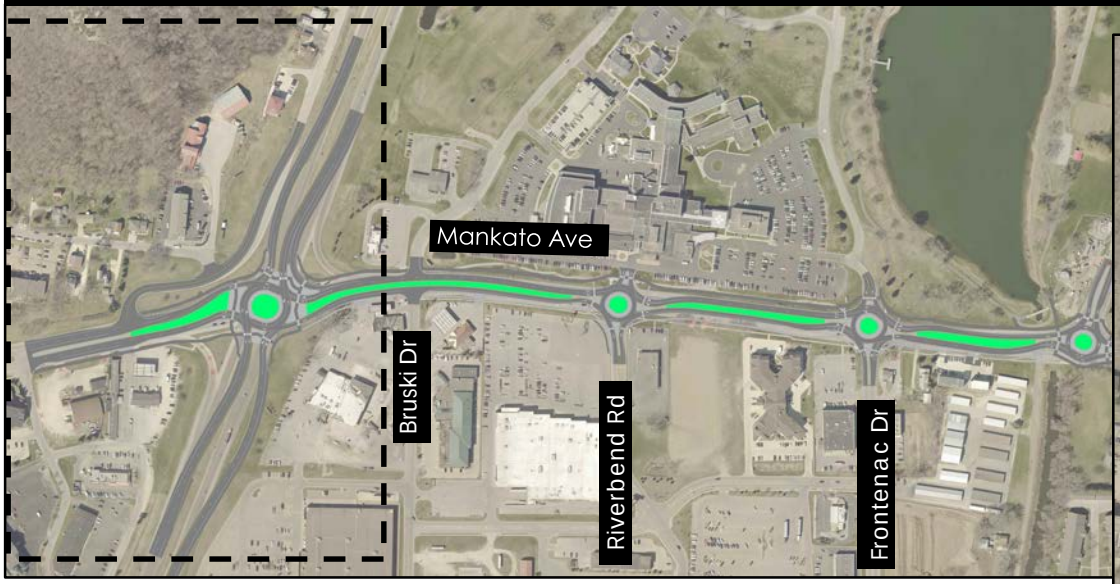
- Raised median on TH 43 across East Lake Blvd. Intersection
- Reconstruction of East Lake Blvd.
- Removal of free right from NB TH 43 to EB TH 61
- Multi-lane roundabout with single lane NB and SB exits

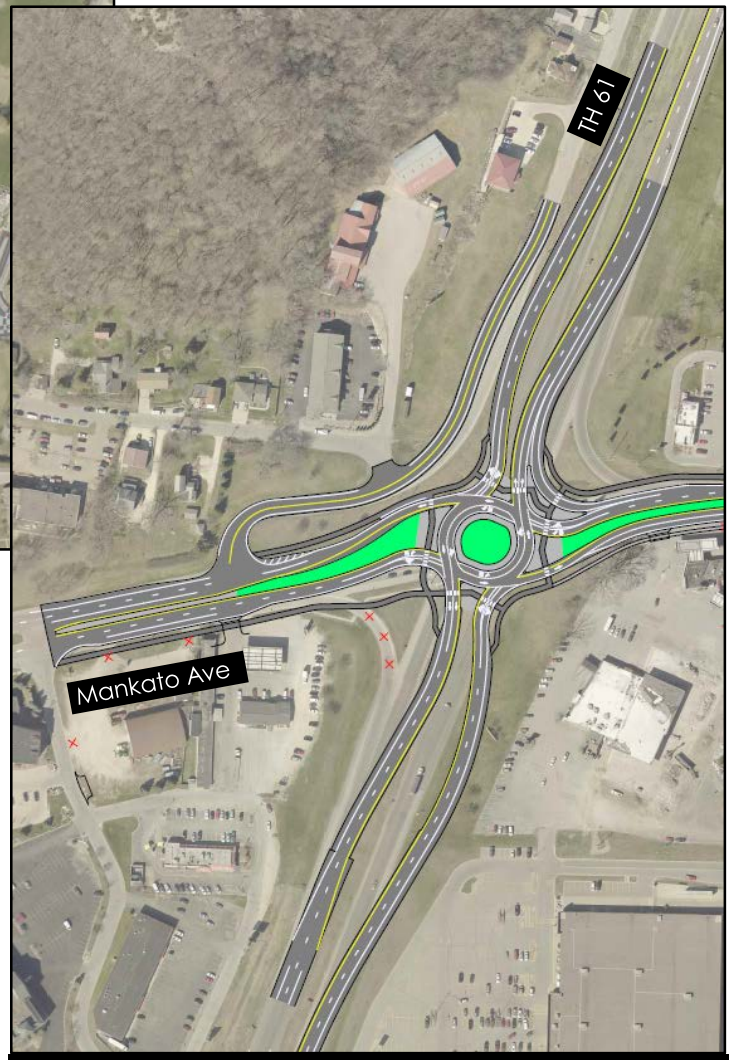


TH 61 Intersection

Roundabout Concept

Overview – Roundabout Concept





TH 61 Intersection

Pros

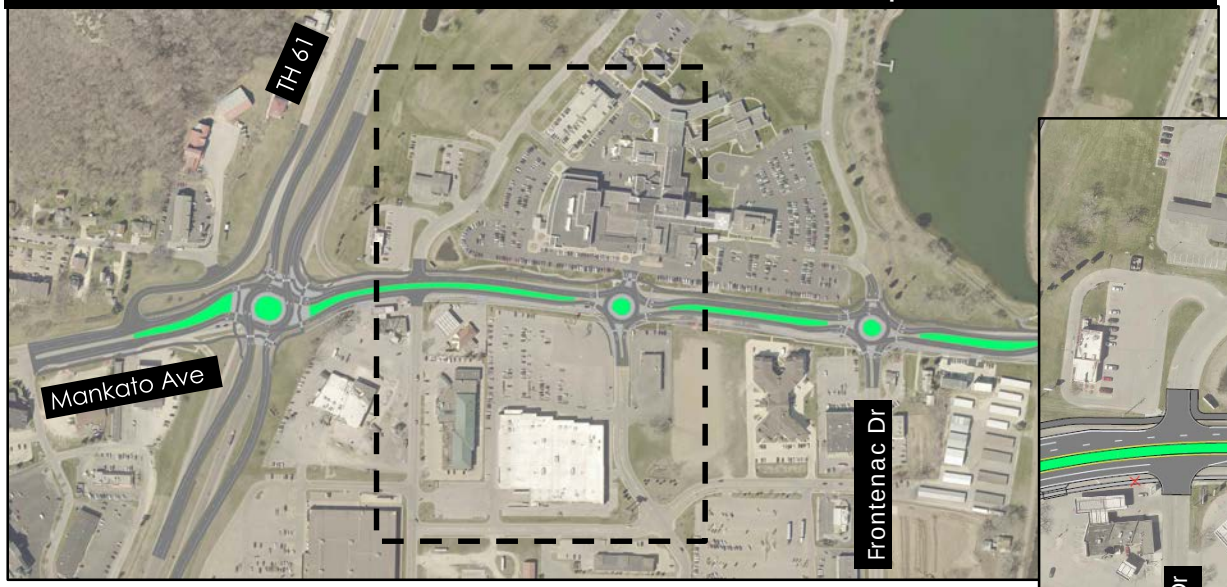
✓ Operates at a better LOS than the signalized intersection
✓ Travel speeds through intersection are low speed
✓ Provides safer low speed crossings for pedestrians and bicyclists
✓ Eliminates most needs for large trucks to have to stop and start again
✓ No permanent right of way impacts
✓ Provides safe U-turn location for traffic leaving Fleet Farm access

Cons

× Requires one access closure to Sinclair Gas Station (one remains open)

Roundabout Concept

Overview – Roundabout Concept



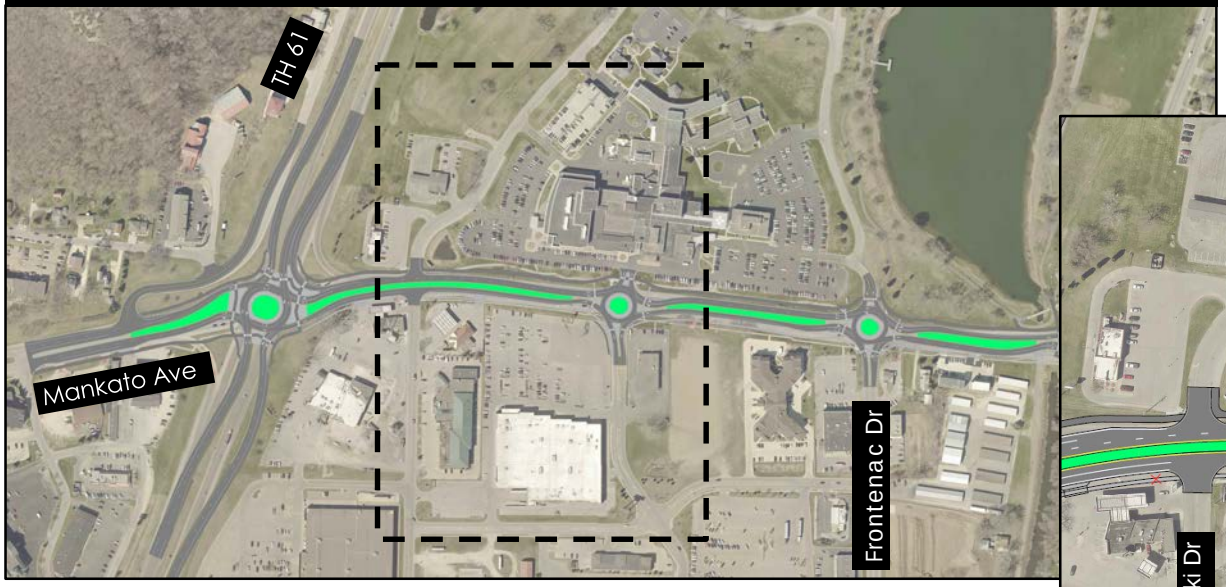
Bruski Dr. and Riverbend Rd Intersections

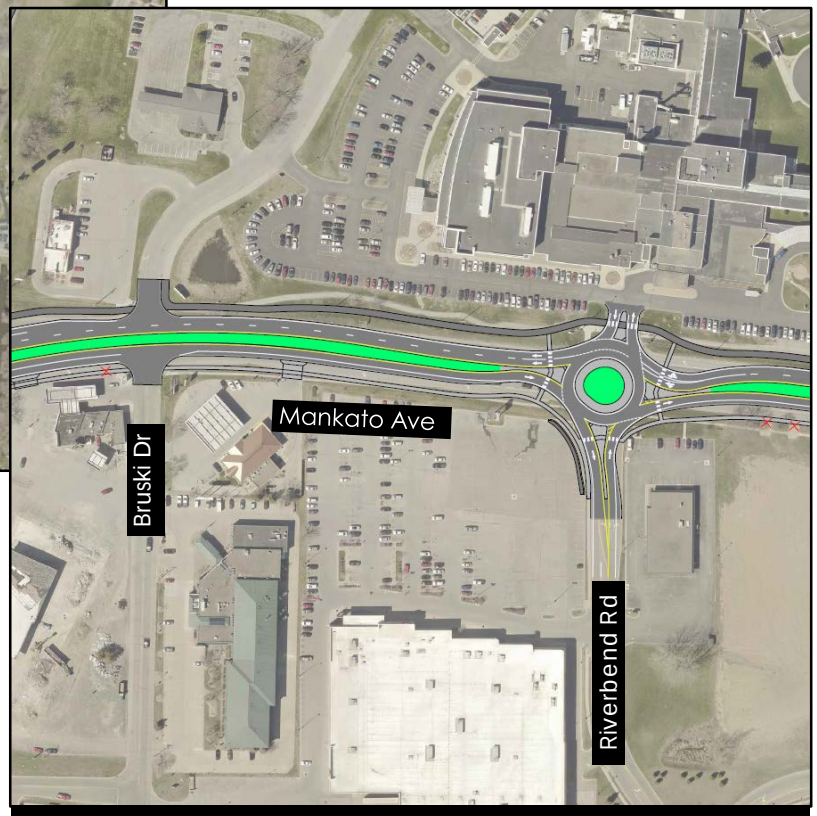
Design Requirements

- Raised median on TH 43 across Bruski Drive Intersection
- Partial multi-lane roundabout at Riverbend Rd.

Roundabout Concept

Overview – Roundabout Concept





Bruski Dr. and Riverbend Rd Intersections

Pros

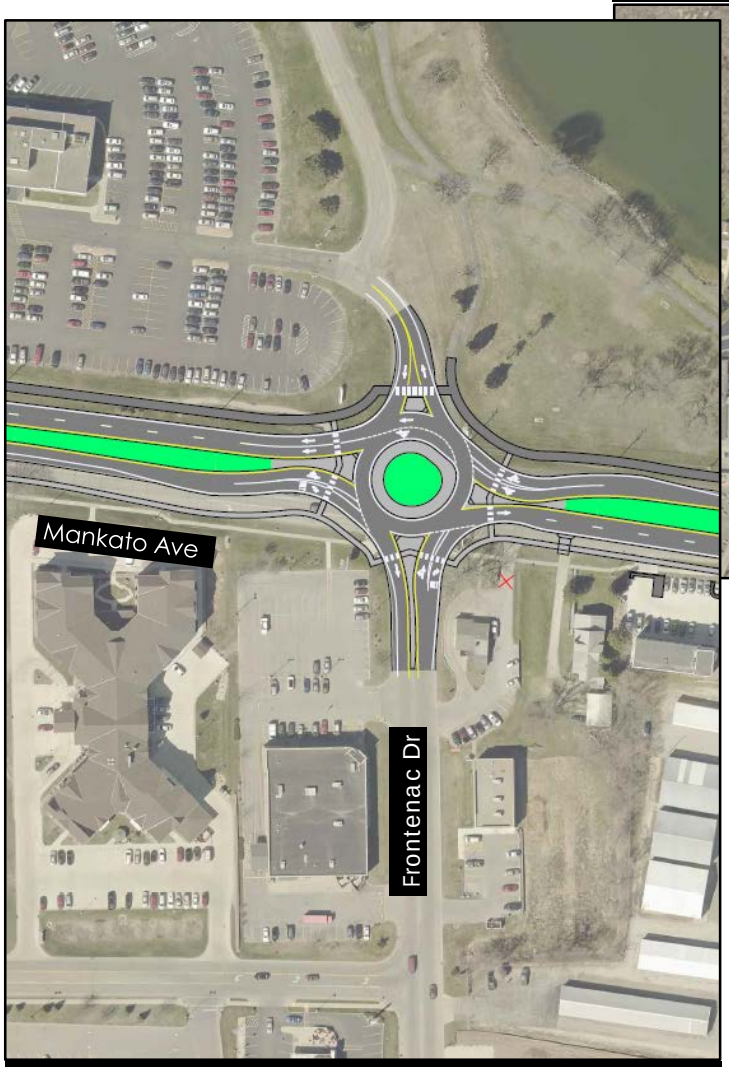
✓ Eliminates dangerous left turn movement from Bruski Dr.
✓ Operates at a better LOS than the signalized intersection
✓ Low speed providing safer pedestrian and bicyclists crossings
✓ No permanent right of way impacts
✓ Fewer lanes for pedestrians to cross
✓ Provides safe U-turn location for Bruski Dr.

Cons

× Does not allow trucks to turn and head south from Bruski Dr. on TH 43
× Some permanent right of way impacts at Riverbend Rd.

Roundabout Concept

Overview – Roundabout Concept



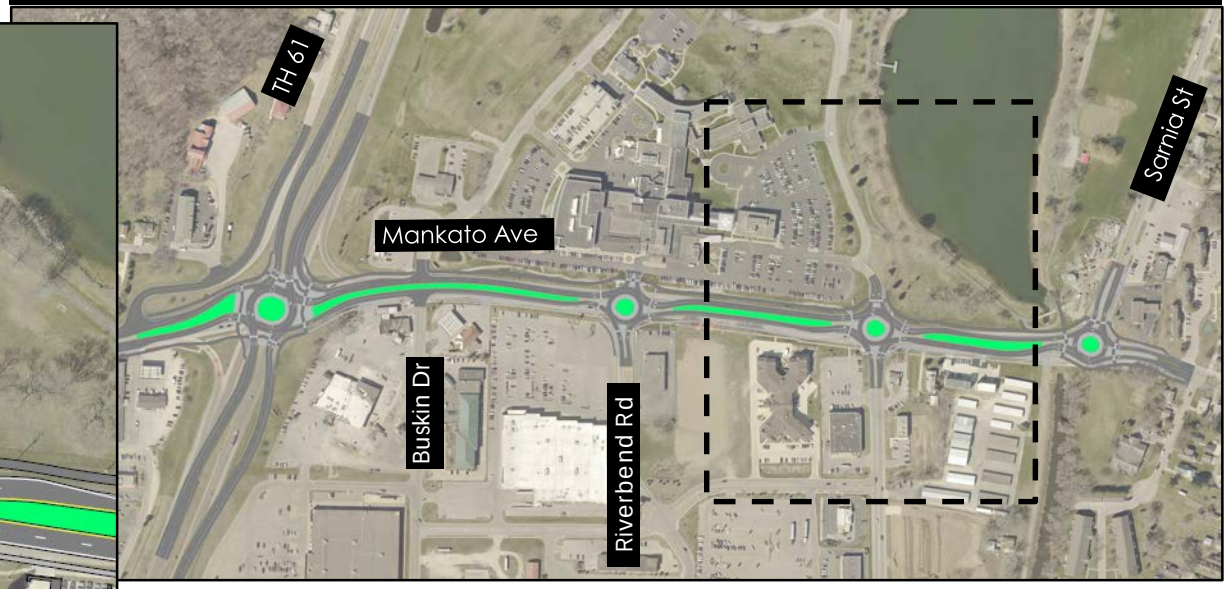
Frontenac Dr. Intersection

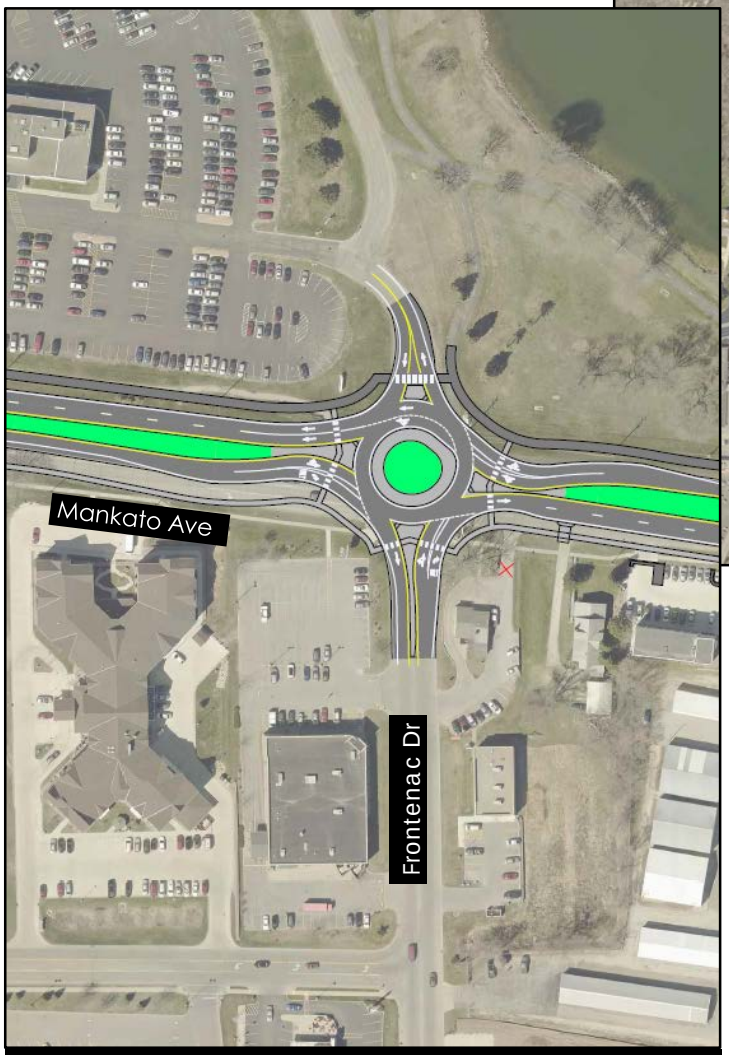
Design Requirements

- Partial multi-lane roundabout

Roundabout Concept

Overview – Roundabout Concept





Frontenac Dr. Intersection

Pros

✓ Operates at a LOS better than the signalized intersection

✓ Low speed providing safer pedestrian and bicyclists crossings

✓ Fewer lanes for pedestrians to cross

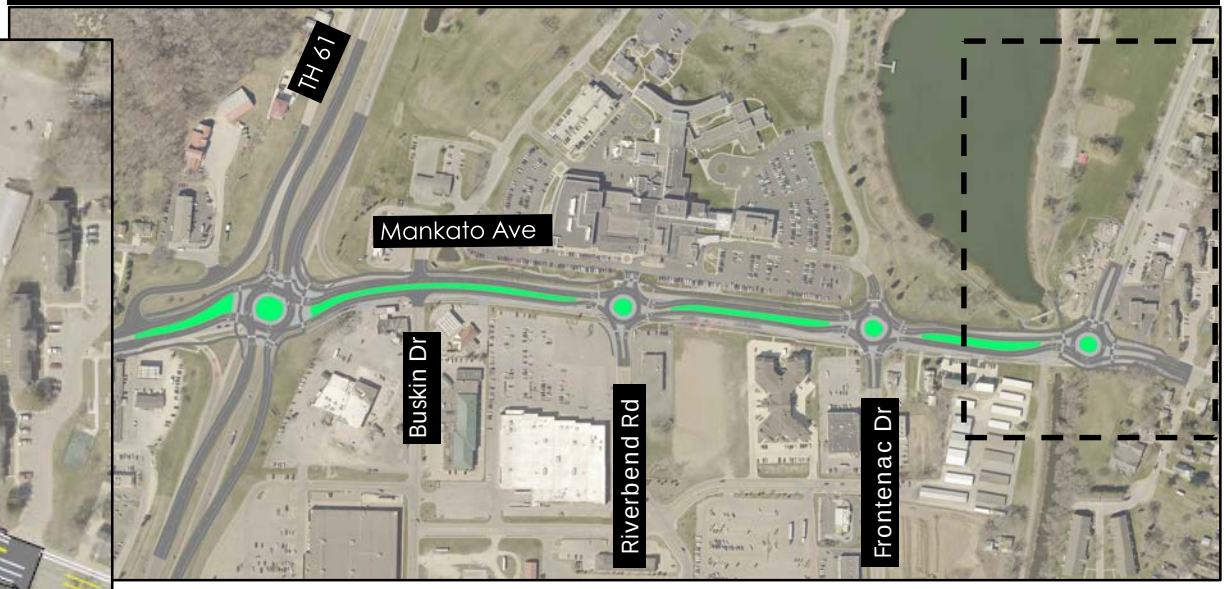
Cons

× Requires the closure of TH 43 access to Mugby Junction

× Requires minor permanent right of way

Roundabout Concept

Overview – Roundabout Concept



Sarnia St. Intersection

Design Requirements

- Removal of free right turn lane
- Raised median on the north leg of Mankato Ave.

Roundabout Concept

Sarnia St. Intersection

Overview – Roundabout Concept

Pros

✓ Operates at a LOS better than the signalized intersection

✓ Eliminates weave from EB Sarnia St. to SB TH 43

✓ Roundabout provides movement for EB Sarnia St. to NB Mankato Ave.

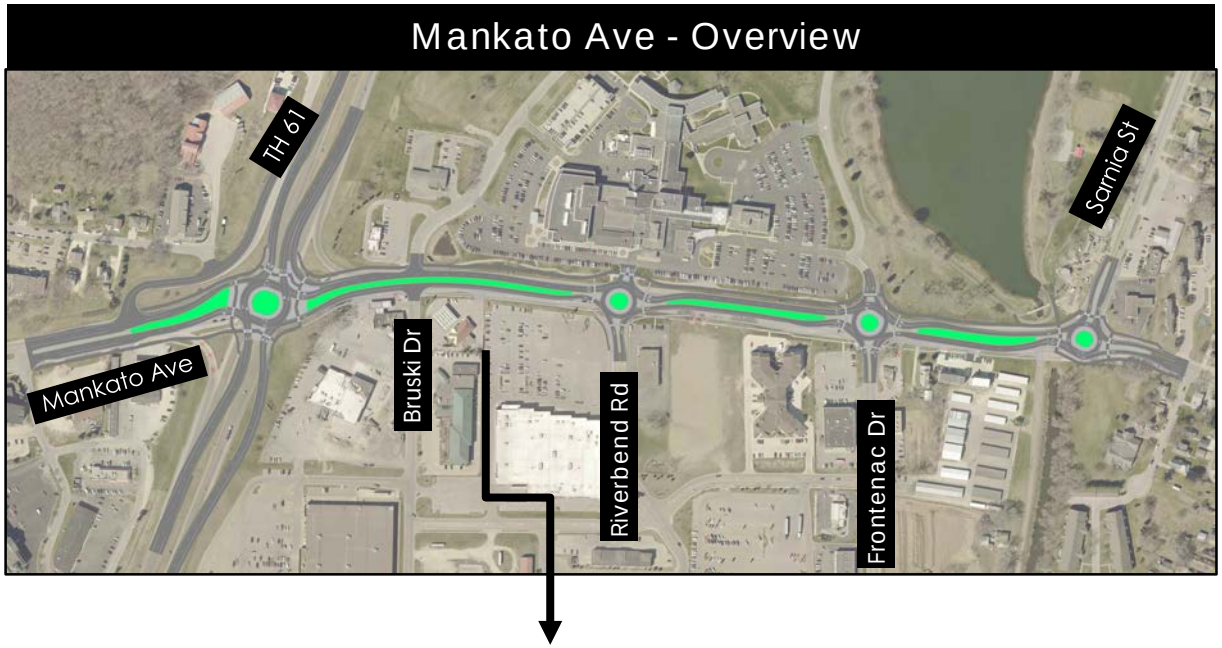
✓ Low speed providing safer pedestrian and bicyclists crossings

✓ Provides outside lane to allow for backups due to train switching operations

Cons

✗ Restricts left turns into Merchants Bank from Mankato Ave.

Roundabout Concept



Possible Typical Sections Renderings

A Case Study – Golden, CO

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A Roundabout Case Study – Golden, CO

Golden, Colorado

- Nestled into the foothills of the Rocky Mountains on the west side of the Denver metro area.
- City Population = 17,000
- Traditional Downtown
- Home to the Colorado School of Mines

Winona, Minnesota

- Nestled into the bluffs of the Mississippi River.
- City Population = 27,000
- Traditional Downtown
- Home to Winona State University

A Roundabout Case Study – Golden, CO

South Golden Road

- Existing Conditions
  - Suburban Highway
  - 5-lanes (4 travel lanes, 1 center turn lane)
  - Numerous Access Points
  - Traffic Signals at Major Intersections
  - Serves residential areas, businesses (including fast-food), and a shopping center
  - Traffic Volumes = 11,000 to 12,000 Vehicles per Day

- Existing Issues
  - Numerous Conflicting Left-Turn Movements
  - Speeding Motorists
  - Difficult to Cross, Especially for Elderly Pedestrians

Mankato Ave (TH 43)

- Existing Conditions
  - Trunk Highway
  - 5-lanes (4 travel lanes, 1 center turn lane)/4-lanes with Dedicated Left Turn Lanes
  - Numerous Access Points
  - Traffic Signals at Major Intersections
  - Serves residential areas, businesses, medical facility, and senior housing
  - Traffic Volumes = 22,400 Vehicles per Day

- Existing Issues
  - Numerous Conflicting Left-Turn Movements
  - Speeding Motorists
  - Difficult to Cross, Especially for Elderly Pedestrians
  - Variability in Speed

A Roundabout Case Study – Golden, CO

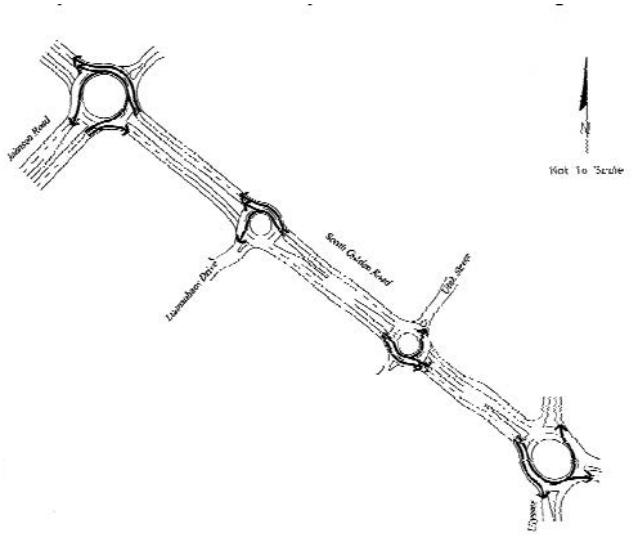
South Golden Rd Before Improvements

Mankato Ave Before Improvements

A Roundabout Case Study – Golden, CO

South Golden Road

- City staff moved forward with presenting a concept with four roundabouts in series due to:
  - Traffic Calming Affects
  - Ease of U-Turns, Improving Access to Businesses
  - Aesthetic Opportunities
  - Increased Safety
  - Reduced Vehicular Conflicts



South Golden Rd Roundabout Plan

Businesses were hesitant, but the numbers spoke for themselves.

A Roundabout Case Study – Golden, CO

Proven Benefits from the Golden Road Case Study

- Cost savings due to no traffic signal reconstruction
- 88% decrease in total accident rates
- 93% decrease in injury accident rates
- Slower traffic speeds
- Lower travel times
- Less delay at business access points
- Enhanced streetscaping
- 60% increase in sales tax revenues
- 75,000 Sq. Ft. of added retail/office space due to stimulated economic activity
- NOTE: Traffic volumes in the study were from 1999. It is still functioning well today after additional traffic growth

South Golden Rd Roundabout

How the Concept Addresses Existing Issues

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What We Heard

How does the proposed concept address what you said?

Trail on the West Side is Not Highly Used because it Stops at Bruski Dr.

Riverbend Rd & Mankato Ave
Issues with Existing Signal

Difficulty with variability of speed, heavy traffic volumes, and unpredictable access points

TH 61 & Mankato Ave
Need Safer Crossing for Pedestrians & Bicycles

Need for Separated Pedestrian & Bicycle Facilities on the East Side

Speeding Drivers

Sarnia St. & Mankato Ave
Left Turns Difficult

General Feeling of Not Feeling Safe Walking or Biking Along the Corridor

Crossing Mankato Ave is Difficult Everywhere for all Modes of Transportation

Railroad Switching Delays

Better Lighting Needed

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

TH 61 & Mankato Ave
Left Turn Lanes onto TH 61 Have Long Queue Lengths

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Need Safer Crossing for Pedestrians & Bicycles

The trail will be realigned and runs from Sarnia St. to East Lake Blvd.

Need for Separated Pedestrian & Bicycle Facilit… on the East Side

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Sarnia St.
Left Tur

The existing signal will be removed.

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Speeding Drivers

Sarnia St. & Av
Left Turns

of Not king or Corridor

Crossing Mankato Everywhere for all Mode

Better Lighting Needed

The four roundabouts in series with keep vehicles free flowing at a more constant speed. Access points will be consolidated where feasible.

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

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TH 61 & Mankato Ave
Need Safer Crossing for Pedestrians & Bicycles

Roundabouts slow down traffic speeds and allow pedestrians to focus on one lane of traffic at a time when crossing. Medians create a pedestrian refuge.

General Feeling of Not
Corridor

Need for Separated Pedestrian & Bicycle Facilities on the East Side

Mankato Ave is Difficult
for all Modes of Transportation

Railroad Switching Delays

Better Lighting Needed

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Need for Separated Pedestrian & Bicycle Facilities on the East Side

A boulevard separated sidewalk will be added on the East side of Mankato Ave.

General Feeling of Not Feeling Safe Walking or Biking Along the Corridor

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Railroad Switching Delays

Better Lighting Needed

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Crossing Ma
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Delays

Better Lighting Needed

Median separated roundabouts coupled with 11-foot driving lanes will create a tighter corridor and help control speed.

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Everywhere for all Modes of

A roundabout at Sarnia St & Mankato Ave will eliminate left turning across traffic.

Better Lighting Needed

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend R
Safe Crossing
Housing Re

1 & Mankato Ave
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61 Have Long Queue Lengths

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The corridor will feel tighter and have slower speeds.

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Riverbend Rd & Mankato Ave
Issues with Existing Signal

Difficulty with variability of speed, heavy traffic volumes, and unpredictable points

TH 61 & Mankato Ave
Need Safer Crossing for Pedestrians & Bicycles

Need for Separated Pedestrian & Bicycle Facilities on the East Side

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Additional NB lane constructed in roundabout for queued traffic; City to install preemptive warning system to alert traffic of train blocking Mankato Ave.

General Feeling of Not Feeling Safe Walking or Biking Along the Corridor

Railroad Switching Delays

Better Lighting Needed

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

TH 61 & Mankato Ave
Left Turn Lanes onto TH 61 Have Long Queue Lengths

DEPARTMENT OF TRANSPORTATION
CITY OF WINONA
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What We Heard

How does the proposed concept address what you said?

Trail on the West Side is Not Highly Used because it Stops at Bruski Dr.

Riverbend Rd & Mankato Ave
Issues with Existing Signal

Difficulty with variability of speed, heavy traffic volumes, and unpredictable access points

TH 61 & Mankato Ave
Need Safer Crossing for Pedestrians & Bicycles

Need for Separated Pedestrian & Bicycle Facilities on the East Side

Speeding Drivers

Sarnia St. & Mankato Ave
Left Turns Difficult

General Feeling of Not Feeling Safe Walking or Biking Along the Corridor

Crossing Mankato Ave is Difficult Everywhere for all Modes of Transportation

Railroad Switching Delays

Better Lighting Needed

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

Lighting will be upgraded along the entire corridor.

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What We Heard

How does the proposed concept address what you said?

Trail on the West Side is Not Highly Used because it Stops at Bruski Dr.

Riverbend Rd & Mankato Ave
Issues with Existing Signal

Slower traffic speeds, pedestrian refuge in the median, and pedestrians being able to focus on one lane of traffic at a time when crossing at a roundabout will help pedestrians and bicyclists of all abilities.

Need for Separated Pedestrian & Bicycle Facilities on the East Side

Speeding Drivers

Sarnia St. & Mankato Ave
Left Turns Difficult

Crossing Mankato Ave is Difficult Everywhere for all Modes of Transportation

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Better Lighting Needed

Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

TH 61 & Mankato Ave
Left Turn Lanes onto TH 61 Have Long Queue Lengths

What We Heard

How does the proposed concept address what you said?

Trail on the West Side is Not Highly Used because it Stops at Bruski Dr.

Riverbend Rd & Mankato Ave
Issues with Existing Signal

Difficulty with variability of speed, heavy traffic volumes, and unpredictable access points

TH 61 & Mankato Ave
Need Safer Crossing for Pedestrians & Bicycles

Need for Separated Pedestrian & Bicycle Facilities on the East Side

Speeding Drivers

Sarnia St. & Mankato Ave
Left Turns Difficult

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TH 61 & Mankato Ave will be a roundabout, eliminating left hand turns across traffic.

Crossing Mankato Ave is Difficult Everywhere for all Modes of Transportation

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Sarnia St. & Mankato Ave
Difficult to Cross Walking & Biking

Riverbend Rd & Mankato Ave
Safe Crossing Needed for Senior Housing Residents & Hospital

TH 61 & Mankato Ave
Left Turn Lanes onto TH 61 Have Long Queue Lengths

Provide Input

DEPARTMENT OF TRANSPORTATION

Stantec

How to Provide Input

Visit our website to learn more and share your ideas!

www.mankatoavereconstruction.com

You can:

- Visit with project staff in attendance tonight
- Submit written comments in person tonight
- Submit written comments online via the project website or by contacting the project manager
- Subscribe to our email list serve

Contact Us

Visit our website to learn more and share your ideas!

www.mankatoavereconstruction.com

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Next Steps

DEPARTMENT OF TRANSPORTATION
CITY OF WINONA MINNESOTA
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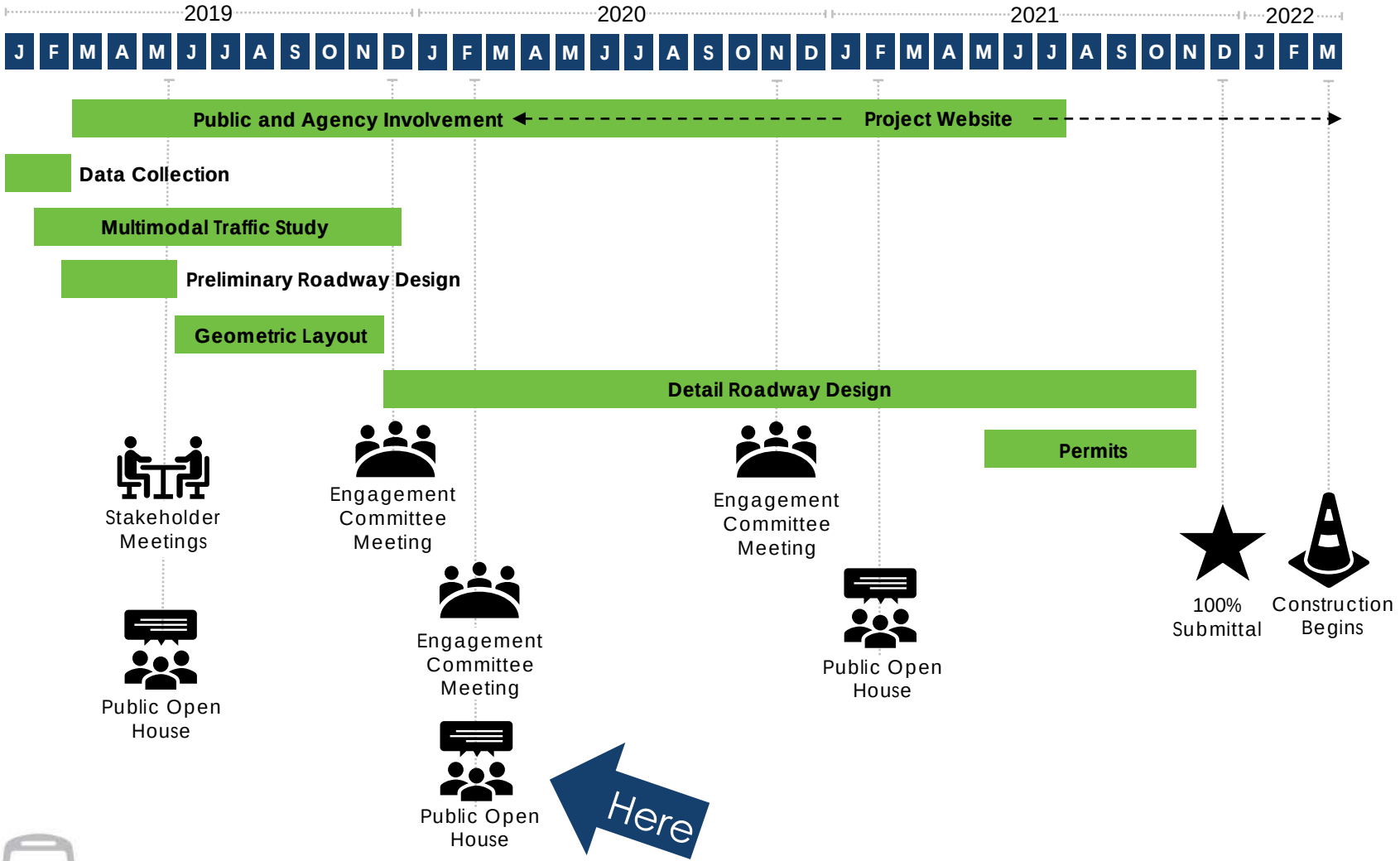
Project Schedule



Thank You!

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CITY OF WINONA
MINNESOTA
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