US-23 Flex Route Extension Operational and Environmental Study

Virtual Public Meeting

January 13, 2021

Title VI of the Civil Rights Act

Title VI of the Civil Rights Act of 1964 requires MDOT to provide the opportunity for everyone to comment on transportation programs and activities that may affect their community.

Please take the three-question survey found in the chat box.

You can help MDOT comply with Title VI and related statutes, which require the collection of statistical data to aid in assessing MDOT's outreach efforts among those who are affected or interested in this project.

Agenda

1. Introduction
2. US-23 Flex Route Phase I
3. Study Overview
4. Preferred Alternative:
   a. I-96/US-23 Interchange Area
   b. Bridge Work
   c. Silver Lake Road Interchange
   d. M-36 Interchange
5. Preliminary Environmental Findings
6. Project Timeline
7. Questions?
8. Contact Us

FlexRoute23

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Rebuilding MI Corridors

US-23 Flex Route is a Rebuilding MI Corridor

- Rebuilding MI Corridors are part of the Rebuilding MI bond program focused on state highways and bridges that are critical to our economy and carry the most traffic.
- Rebuilding MI Corridors will be designed and constructed as a single project.
- MDOT will environmentally review these corridors as single projects to identify any potential cumulative impacts.

For more information, visit www.Michigan.gov/MDOT5YearPlan or contact MDOT Public Involvement Officer Monsma Monica at MonsmaM@Michigan.gov.

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Introduction

US-23 Flex Route

- Phase 1
  - M-14 to south of M-36 (9 Mile Road)
  - Opened to Traffic in 2018
- Phase 2
  - M-36 to I-96/US-23 interchange
  - Rebuilding Michigan Bond Program
- Operational and Environmental Study
  - Traffic and operational analysis
  - Road and bridge scoping
  - Environmental surveys
  - NEPA documentation

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US-23 Flex Route Phase I

- Overall Improvement in Travel Time and Reliability
  - Travel Time
  - Planning Time
  - Speed
  - Crashes
- SB saw the greatest improvement
- NB will benefit from the extension to I-96
- MSU Study
  - Performance
  - Safety Impacts

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Study Overview

Purpose of the study is to focus on:

- Traffic Safety
- Operational Needs
- Directional Weekday (Monday – Friday) Peak Period Congestion
- Infrastructure Condition

Goal is to: Develop Safe, Efficient, Sustainable Transportation Improvements to assure that the corridor will meet current and future highway operations using state-of-the-art traffic control measures along with improved infrastructure.

Study Overview

Need is to focus on:

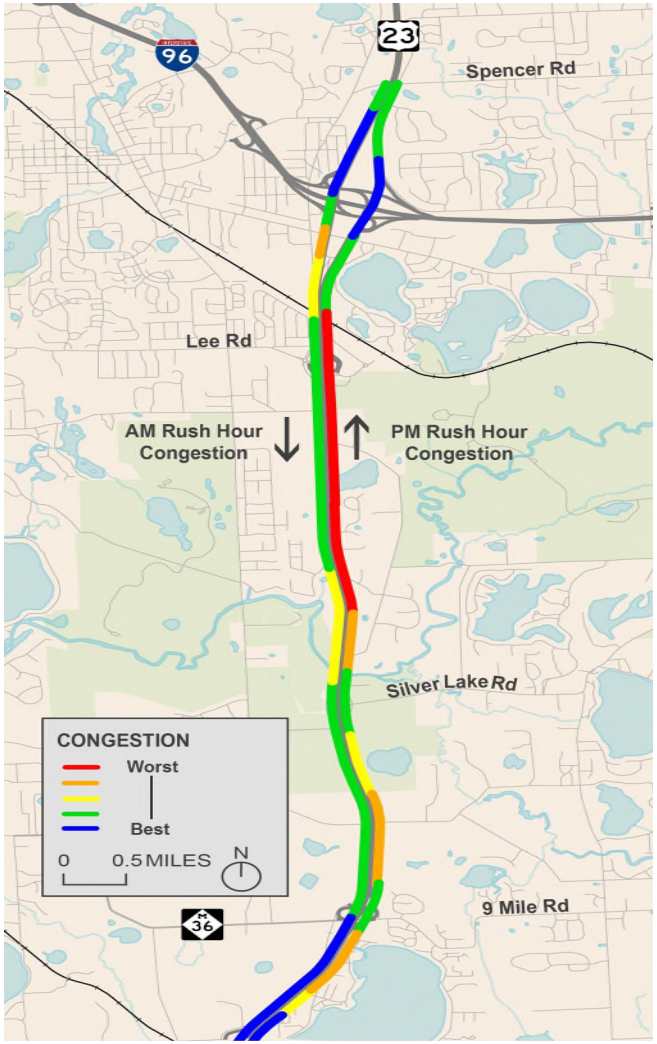
- Economic feasibility regarding restricted funding;
- Pavement condition;
- Directional weekday (Monday – Friday) peak period congestion;
- On-ramps that are short to adequately accelerate and merge into traffic;
- Traffic operations at M-36, Silver Lake and I-96 interchanges;
- High crash segments throughout the corridor;
- Incident management areas to safely clear and investigate accidents; and
- Road and bridge maintenance.

Study Overview

The Study includes:

- Road and bridge scoping to extend the US-23 Flex Route to I-96;
- Recommended alternatives at the M-36 and Silver Lake Road interchanges;
- Environmental Analysis that identifies potential environmental impact locations; and,
- NEPA documentation

Preferred Alternative



Flex Route Extension:

Extend the Flex Lane from south of M-36 (9 Mile Road) to the I-96/US-23 interchange

Interchange Alternatives:

Silver Lake Road and M-36 (9 Mile Road)

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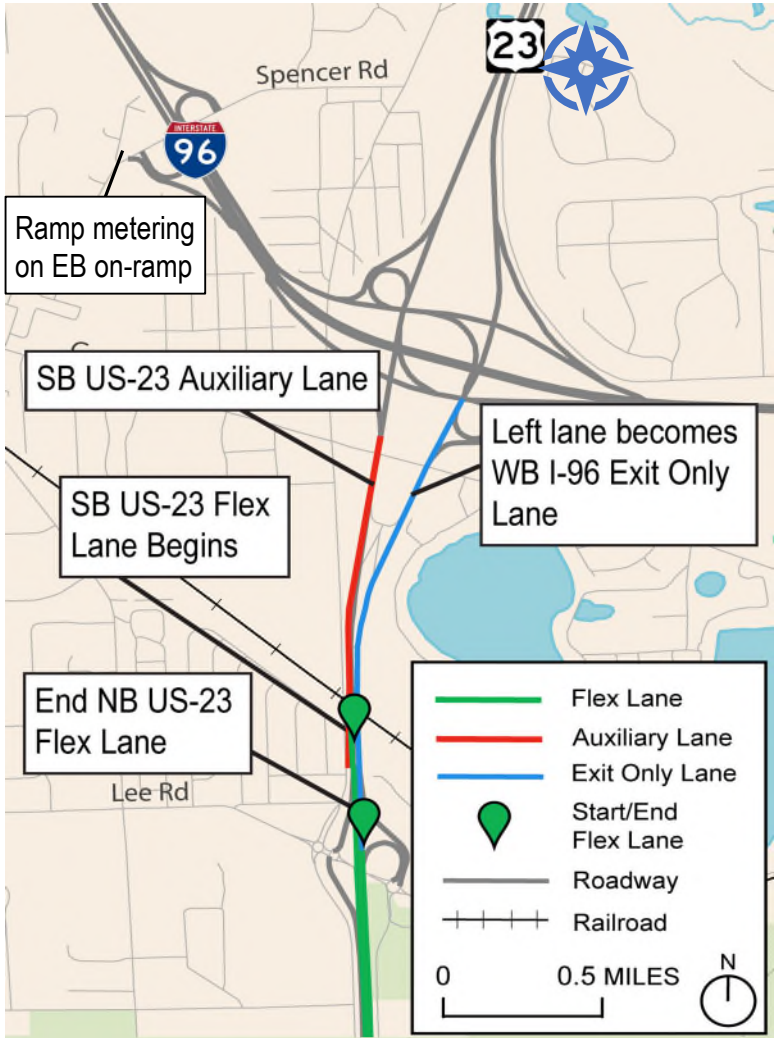
Preferred Alternative *(I-96/US-23 Interchange Area)*



- NB Flex Lane will end between the Lee Road off- and on-ramps
  - Flex Lane will transition into an exit-only lane to westbound I-96
- SB Flex Lane will start between Lee Road off-ramp and CSX railroad bridge
  - An auxiliary lane will be added along SB US-23 between the EB I-96 on-ramp and Lee Road off-ramp
- Add ramp metering to EB Spencer Road on-ramp

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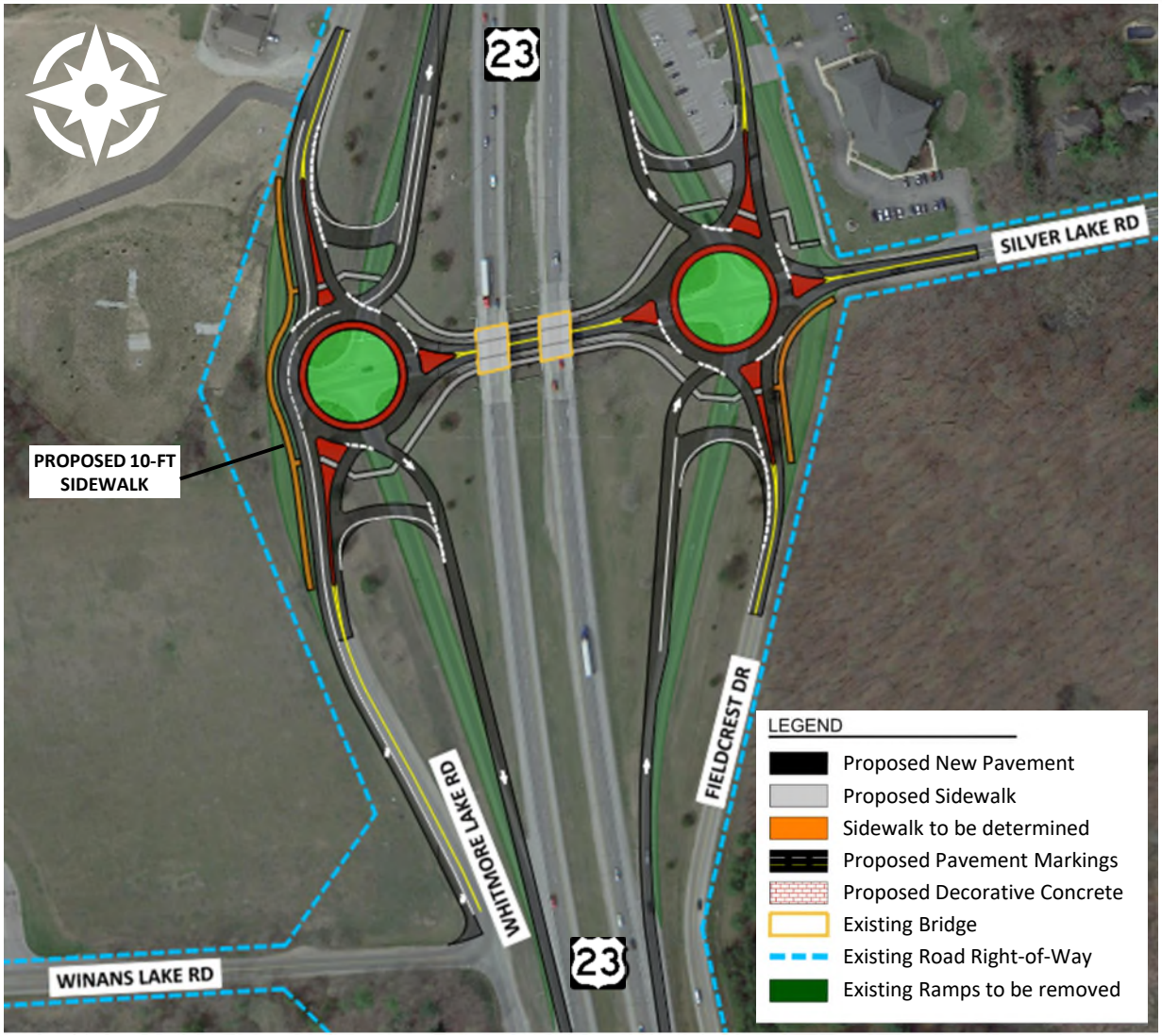
Preferred Alternative *(Bridge Work)*

- The two Grand River Avenue bridges over US-23 will have maintenance work
- The railroad bridge over US-23 will not be replaced
- The Lee Road bridge will have maintenance work
- The two bridges over the Huron River will be modified due to median widening

Preferred Alternative *(Silver Lake Road Interchange)*



Silver Lake Road

- Existing: Tight diamond configuration with closely spaced intersections at Whitmore Lake Road and Fieldcrest Road
- Proposed: Two options – SPUI or roundabouts
- Preferred: Roundabouts at each ramp terminal that include Whitmore Lake Road and Fieldcrest Road

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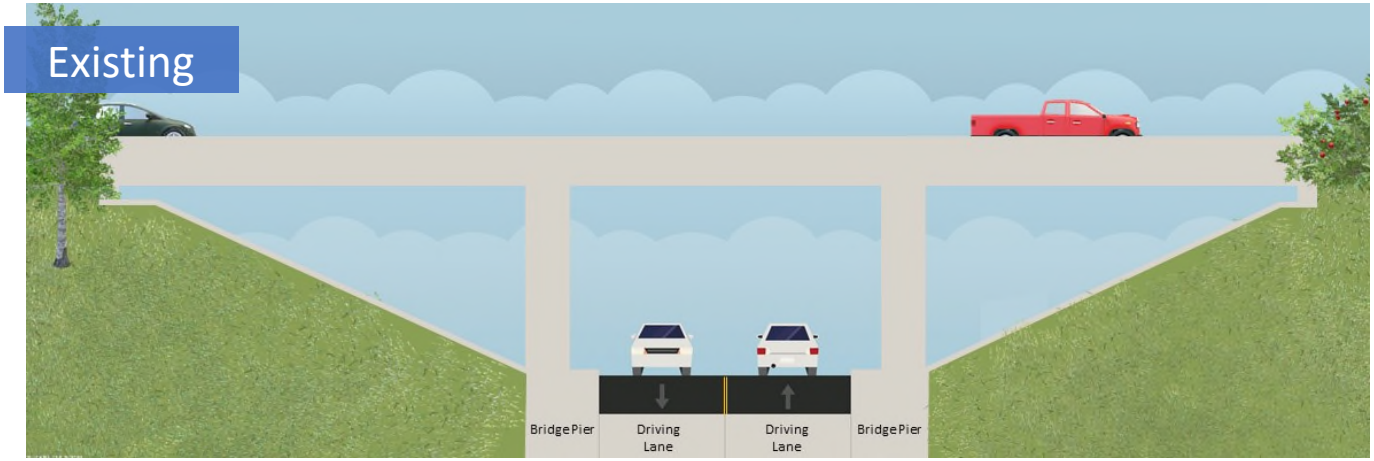
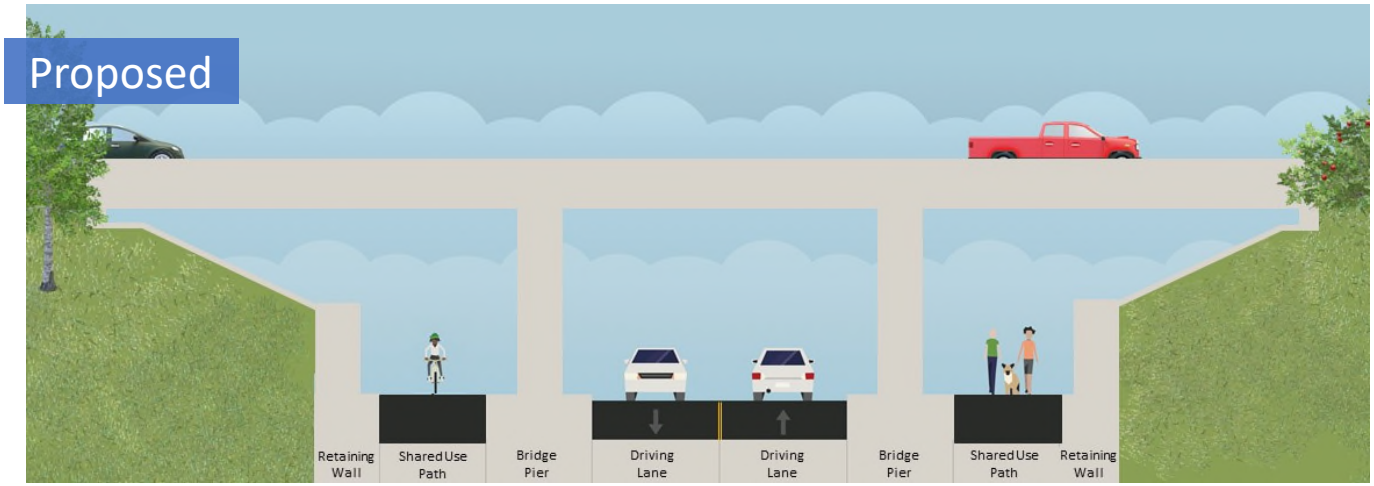
Preferred Alternative *(Sliver Lake Road Non-motorized)*

Existing



Proposed



- Current slope walls extend to bridge piers.
- A 10-foot shared-use path will be constructed on both sides of Silver Lake Road and through the roundabouts.
- Slope walls will be modified to add the path

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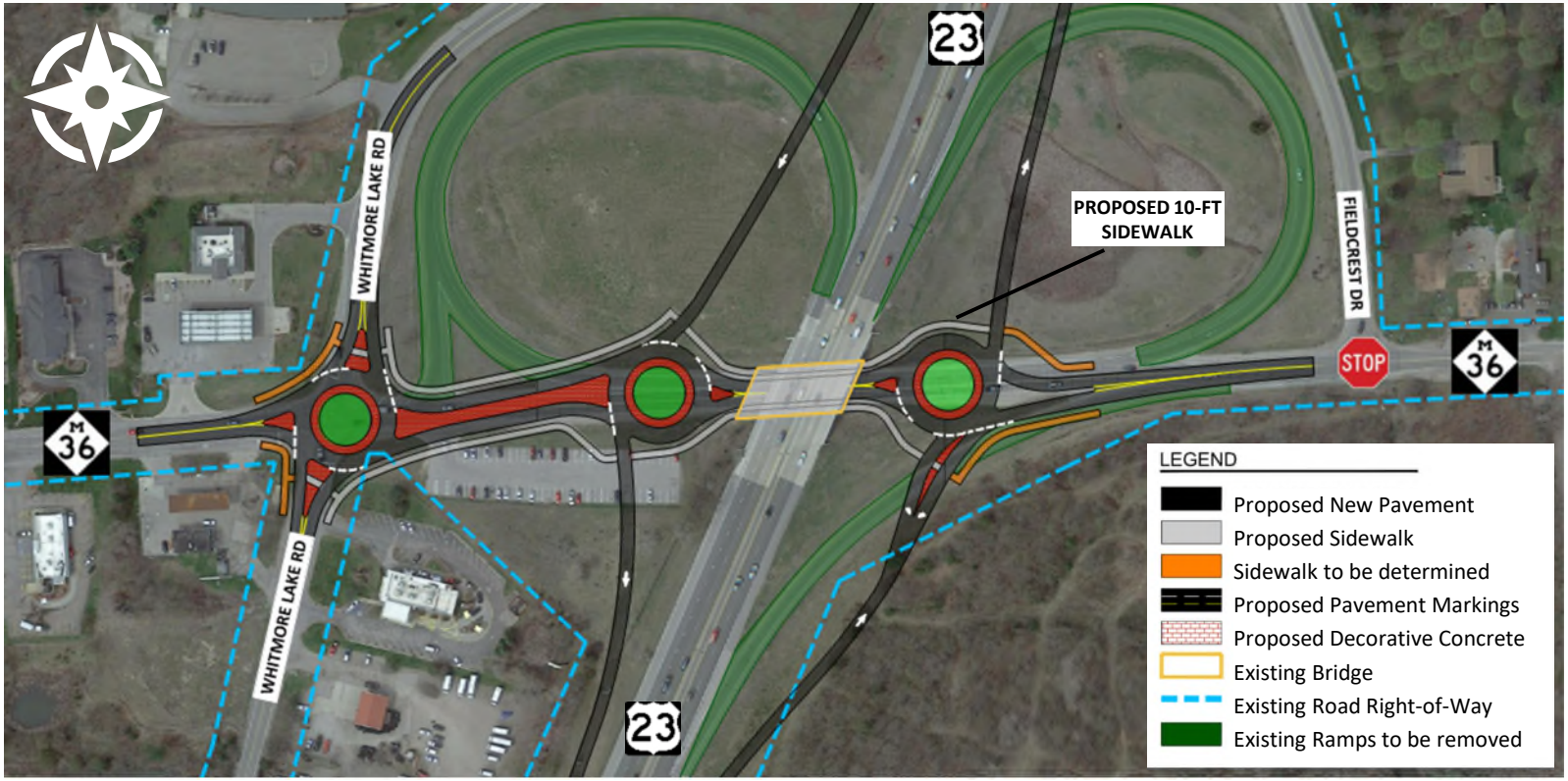
Preferred Alternative *(M-36 Interchange)*

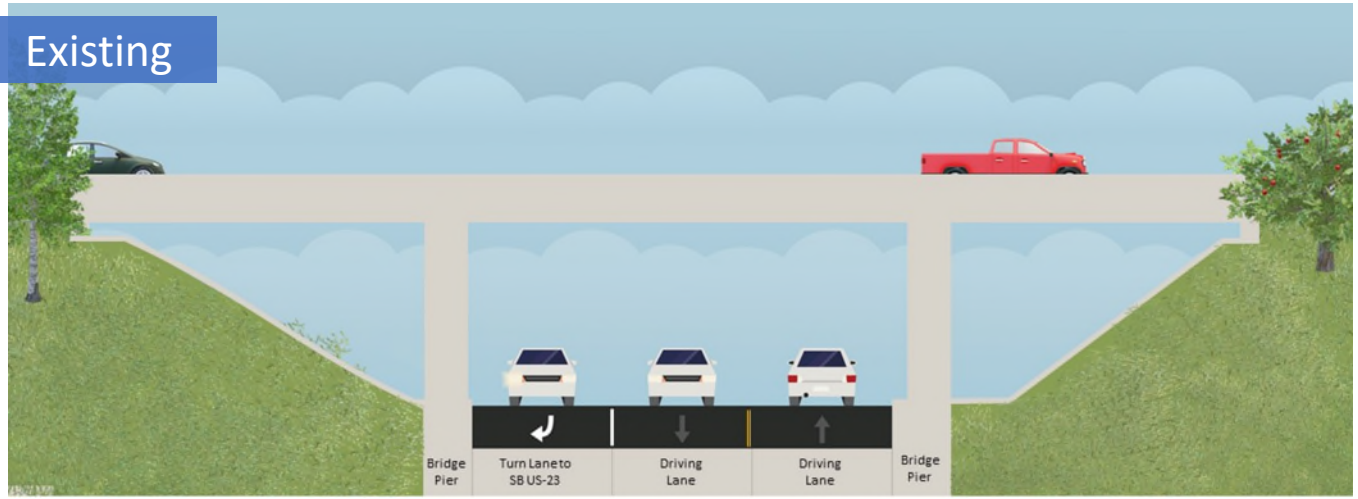


M-36 (9 Mile Road):

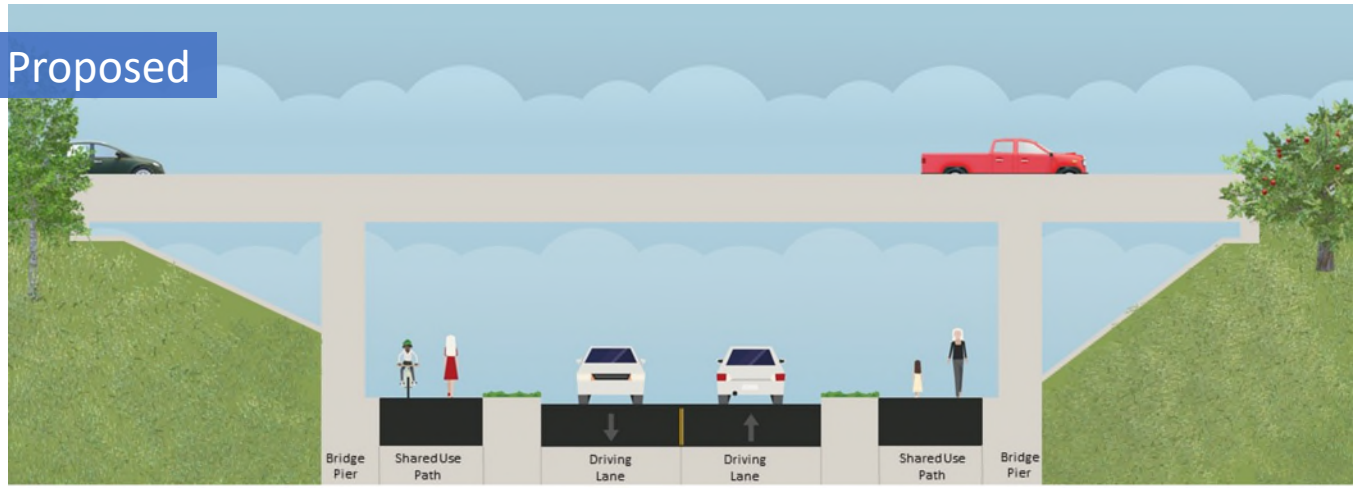
- Existing: Partial cloverleaf configuration with loops and directional ramps
- Preferred: Series of three roundabouts

Preferred Alternative *(M-36 Non-motorized)*

Existing



Proposed



- Bridge will be reconstructed to allow a 10-foot shared-use path on both sides of M-36 (9 Mile Road) and through the roundabouts.

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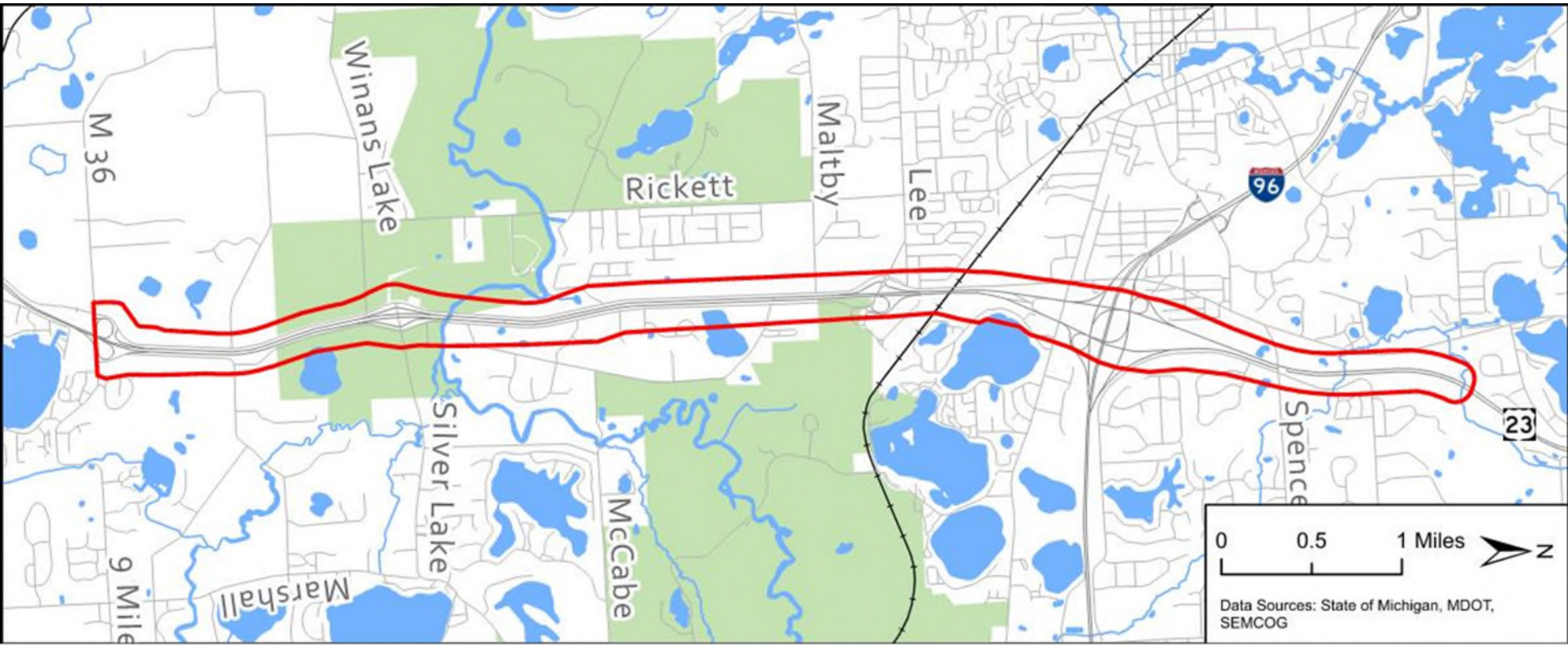
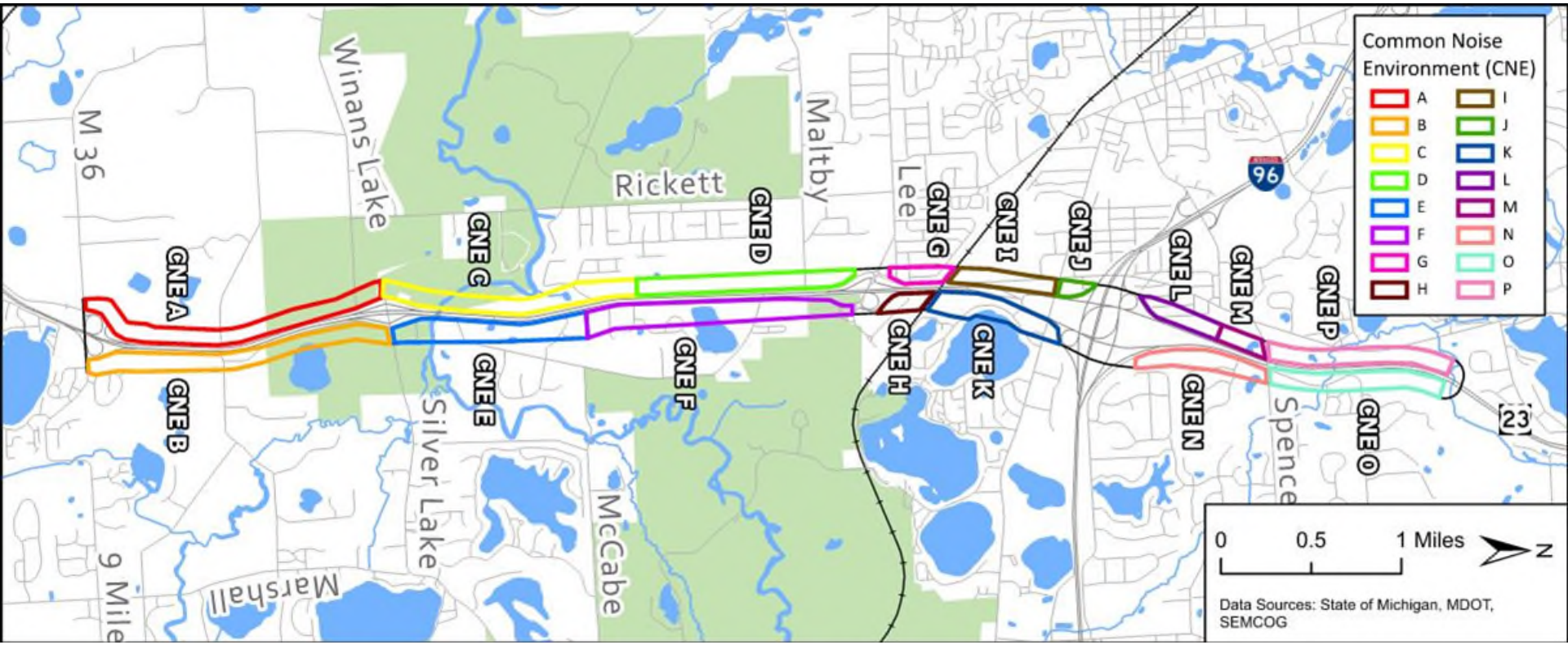
Preliminary Environmental Findings

- Threatened and Endangered Species
  - Survey identified federally protected Snuffbox Mussels in the Huron River
  - MDOT is coordinating with the US Fish and Wildlife Service
- Wetlands and Watershed Areas
  - MDOT will mitigate to address possible impacts
- Right-of-Way
  - Minimal Effect
- Noise
  - The draft noise analysis is complete

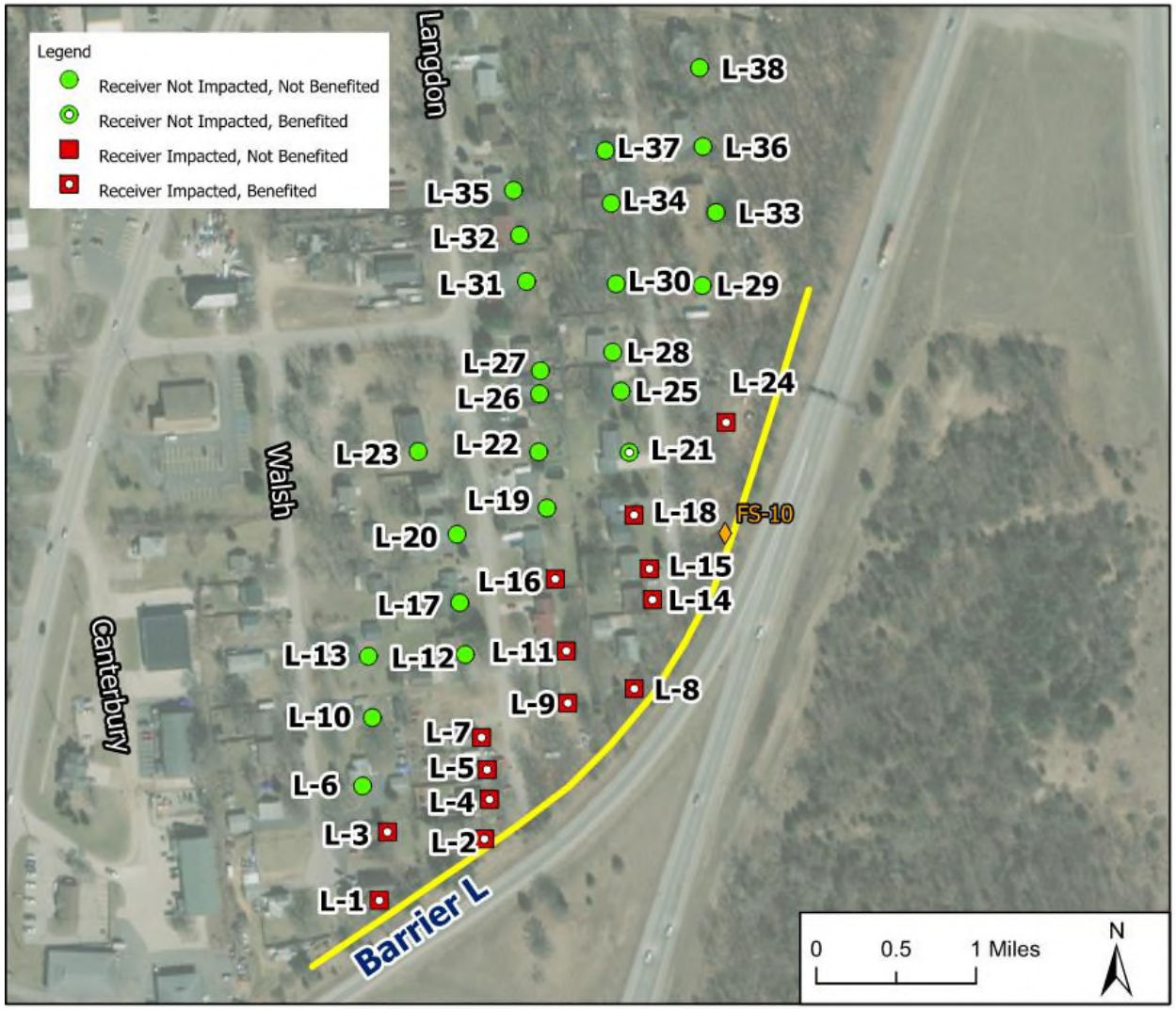
Noise Analysis – Study Area



Noise Analysis – Common Noise Environments



Noise Analysis – Receptor Sample



Noise Analysis – Abatement Criteria

- Noise barriers must meet Feasibility & Reasonableness Criteria:
  - Feasibility:
    - *Noise reduction of 5 dB(A) achieved by at least 75% of impacted receptors*
    - *Noise barrier constructability and driver safety*
  - Reasonableness:
    - *Achieves 7 dB(A) for at least 50% of benefiting receptor and a 10 dB(A) reduction for one benefited receptor.*
    - *Cost effectiveness of less than $49,878 per benefiting receptor.*

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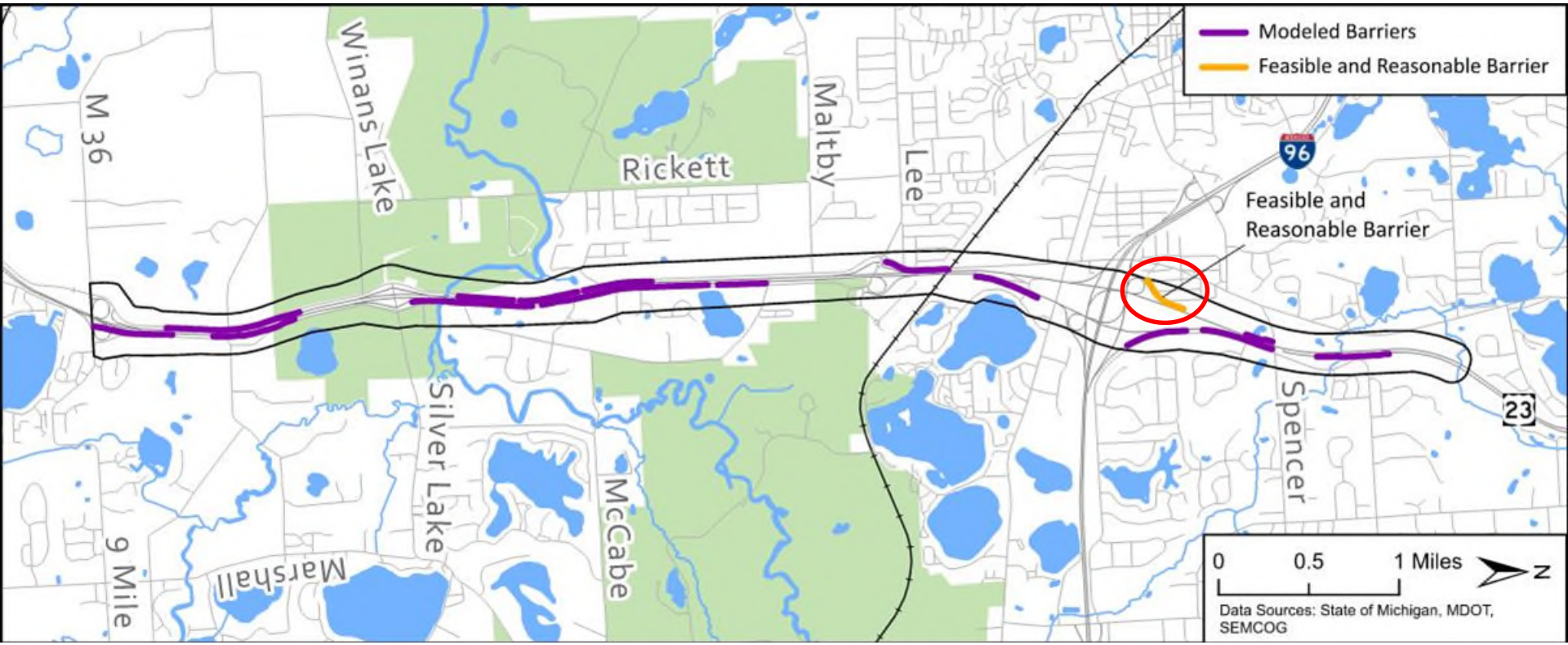
Noise Analysis – Modeled Noise Barriers



Questions?

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Comment Period

Comments received until:

February 4, 2021

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Contact Us

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