APPENDIX G. LEVEL 3 SCREENING REPORT

PROPEL US 31

Smarter Transportation. Stronger Communities.

US 31 North

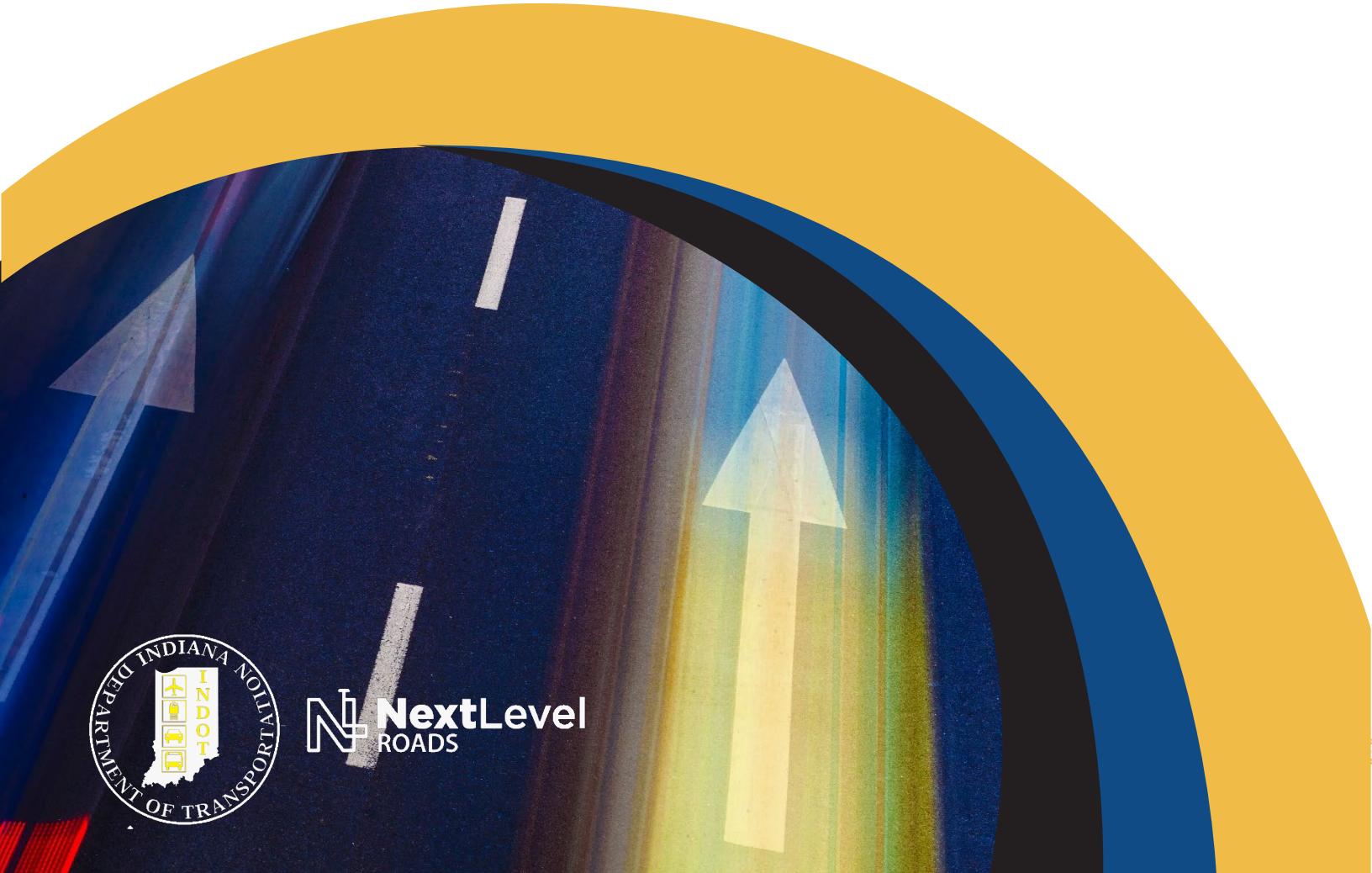
LEVEL 3 SCREENING REPORT

FINAL

June 13, 2025

Prepared By

PARSONS



EXECUTIVE SUMMARY

PROPEL US 31
Smarter Transportation Stronger Communities.

Together, we can ProPEL Indiana forward.

US 31 NORTH LEVEL 3 SCREENING | SPRING 2025

Level 3 Screening Summary

The Level 3 screening is the third of three steps to identify possible solutions to the transportation issues along the US 31 North study corridor.

The study area was divided into six Planning Segments, as shown on the map, in which traffic characteristics and context are similar.

Multiple Improvement Packages for each Planning Segment were developed. All maintain existing free-flow conditions but vary in level of access and facility type. Every Improvement Package considers Primary and Secondary Intersections and the roadway segments between them.

Using factors shown in the table below, the Improvement Packages in each segment were comparatively evaluated against each other and against the No-Build. Based on this evaluation, each package was either Eliminated or Carried Forward.

Each step of the Level 3 screening and recommendations is described in this Executive Summary. More information can be found in the ***Level 3 Screening Report.***

SUMMARY OF LEVEL 3 SCREENING CRITERIA	
SAFETY:	Ability to potentially reduce severe crashes, specifically right-angle crashes
MOBILITY:	Travel time along US 31, average distance between US 31 crossing and access points, and east-west mobility
ENVIRONMENTAL IMPACTS:	Natural resources, cultural and recreational resources, community and socioeconomic resources
COSTS:	Estimated construction costs, right-of-way costs, and total Improvement Package costs
GOALS:	Ability to align with or achieve the seven identified study goals

SUMMARY OF LEVEL 3 EVALUATION METHODOLOGY

STEP 1: Define Planning Segments

The study area was divided into six Planning Segments in which traffic characteristics and context are similar, and where improvements at one intersection could influence those at adjacent intersections.

PLANNING SEGMENT	NORTHERN INTERSECTION	SOUTHERN INTERSECTION	LENGTH (MILES)	PRIMARY INTERSECTION(S)
FULTON NORTH	CR 700 NORTH	CR 375 NORTH	3.9	N/A
ROCHESTER NORTH	OLSON ROAD	CR 50 EAST/ SWEETGUM ROAD	4.1	OLSON ROAD CR 100 NORTH/6TH STREET
ROCHESTER SOUTH	SR 25	CR 350 SOUTH	4.9	SR 25 OLD US 31/SOUTHWAY CR 150 SOUTH/WABASH AVENUE
MACY	CR 400 SOUTH	CR 825 SOUTH	5.2	CR 650 SOUTH/CR 1350 NORTH
DENVER	CR 1050 NORTH	SR 16	5.0	SR 16
MEXICO	CR 600 NORTH	EEL RIVER ROAD (S)	3.8	CR 550 NORTH/MEXICO ROAD

STEP 2: Define Improvement Packages

Four Improvement Packages were developed. All maintain existing free-flow conditions but vary in level of access and facility type, as shown in the table below. Each Improvement Package considered all Primary and Secondary Intersections and the roadway segments between them.

Package 1 would provide safety upgrades while leaving the access control similar to current conditions. Most intersections generally would remain as two-way-stop-controlled (TWSC), while some would be considered for upgrades such as directional or reduced conflict intersections (RCI).

Package 2 generally would provide RCI or other safety improvements at the Primary Intersections and would add a level of access control by implementing directional intersection treatments at many Secondary Intersections.

Package 3 would provide access control by allowing median openings in limited circumstances or removing them, and also limiting cross-street access by implementing RIRO treatments at most Secondary Intersections and grade-separated interchanges at most Primary Intersections.

Package 4 would provide full access control by closing all median openings and providing access only at grade-separated interchanges. Interchanges and overpasses at certain intersections would provide access and crossing locations, but the remaining intersections would be closed.

ACCESS CONTROL AND CONNECTION/FEATURE	NO-BUILD	PACKAGE 1	PACKAGE 2	PACKAGE 3		PACKAGE 4
US 31 FACILITY TYPE & TRAFFIC CONDITION	ARTERIAL FREE-FLOW	ARTERIAL FREE-FLOW	ARTERIAL FREE-FLOW	EXPRESSWAY LITE FREE-FLOW	EXPRESSWAY FREE-FLOW	FREEWAY FREE-FLOW
CHARACTERISTICS	*HIGHER ACCESS TO/FROM US 31 LOWER COST*				*LOWER ACCESS TO/FROM US 31 HIGHER COST*	
ACCESS CONTROL	MINIMAL	PARTIAL	PARTIAL	PARTIAL		FULL
SIGNALIZED INTERSECTIONS	NO	NO	NO	NO		NO
UNSIGNALIZED INTERSECTIONS	YES	YES	YES	YES		NO
MEDIAN OPENINGS (BETWEEN INTERSECTIONS)	ALLOWED	ALLOWED (REDUCED QUANTITY)	ALLOWED (REDUCED QUANTITY)	ALLOWED (LIMITED CIRCUMSTANCES)	NOT ALLOWED	NOT ALLOWED
AVERAGE ACCESS SPACING	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES
COMMERCIAL DRIVEWAY ACCESS	FULL	RIRO OR FULL ACCESS	RIRO ONLY	RIRO ONLY	NONE	NONE
RESIDENTIAL DRIVEWAY ACCESS	FULL	RIRO ONLY	RIRO ONLY	RIRO ONLY	NONE	NONE

Step 3: Evaluate Safety and Mobility

Improvement Packages analyzed safety and mobility for all types of users along the US 31 corridor.

Safety:

- Concerns at Intersections with US 31
- Access Control

Mobility:

- Cross-Highway Connectivity (East-West Mobility)
- Ability to Access US 31
- Regional and Statewide Mobility

Step 4: Refine Conceptual Design and Estimate Costs

Right-of-way requirements for each conceptual design were estimated from anticipated construction limits. Efforts were made to avoid and minimize impacts. Planning-level construction and right-of-way costs were estimated based on current prices, historical data and similar area projects. A range of estimated costs and associated cost-effectiveness was also considered.

Step 5: Environmental Resources

The potential impacts presented in the Level 3 screening are preliminary and reflect the planning level of design:

Natural Resources: Wetlands, rivers and streams, floodplains, and forests

Cultural and Recreational Resources: Above-ground resources, archaeological sites, Section 4(f), and cemeteries

Community and Socioeconomic Resources: Potential relocations, right-of-way acquisition, sensitive communities, farmland, and potential hazardous materials sites.

Step 6: Study Goals

The seven study goals were considered in the Level 3 screening. A qualitative range of "greatly diminishes" to "greatly enhances", or "low" to "high", was used to comparatively evaluate the Improvement Packages.

Step 7: Evaluate Improvement Packages - Recommendations

After completing the Level 3 analysis, including consideration of public input, each improvement package was rated using the following definitions:

Eliminated = Meets the purpose and need established with this study; however, the Improvement Package is considered unreasonable due to limited benefits compared to its impacts and/or costs. It does not warrant consideration as part of any subsequent NEPA and project development studies in this planning segment unless conditions in the study area significantly change in the future (e.g., changes in land use, baseline environmental and/or traffic conditions, etc.).

Carried Forward = Meets the purpose and need established with this study and is considered reasonable at this stage of planning. The Improvement Package warrants consideration as part of any subsequent NEPA and project development studies in this planning segment.

SUMMARY OF LEVEL 3 SCREENING RESULTS

The Level 3 screening identified six Planning Segments each with four Improvement Packages, as well as the No-Build alternative. Detailed results are provided in the ***Level 3 Screening Report.***

PLANNING SEGMENT	NO-BUILD	PACKAGE 1 ARTERIAL FREE-FLOW	PACKAGE 2 ARTERIAL FREE-FLOW	PACKAGE 3 EXPRESSWAY/EXPRESSWAY LITE FREE-FLOW	PACKAGE 4 FREEWAY FREE-FLOW
FULTON NORTH	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
ROCHESTER NORTH	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
ROCHESTER SOUTH	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
MACY	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
DENVER	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
MEXICO	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD

NEXT STEPS

No decisions have been made about the future of US 31 and no projects related to the PEL study have been funded. Cohesive packages based on access management strategies are presented in the PEL study to show potential interoperability between intersections and to be able to assess potential impacts relative to each other.

Based on the work completed in this study, INDOT's long-term vision is for US 31 between Indianapolis and South Bend to be a free-flow facility (i.e., no signals or stop signs for mainline traffic). Within the US 31 North study area, US 31 is already free-flow, but the study identified the need to improve safety and mobility in the corridor and the packages presented would do that to varying levels.

Depending on multiple factors, including statewide priorities and funding availability, intersection treatments considered as part of this PEL study could be combined in different ways and/or implemented incrementally to address the identified transportation needs and support the goals of the study area. PEL study outcomes like the purpose and need and the alternatives screening and its results can help provide a seamless transition between the PEL study and project development and future NEPA studies.

The final step of the ProPEL US 31 North study will be the PEL Study Report, expected in summer 2025.

Study Timeline

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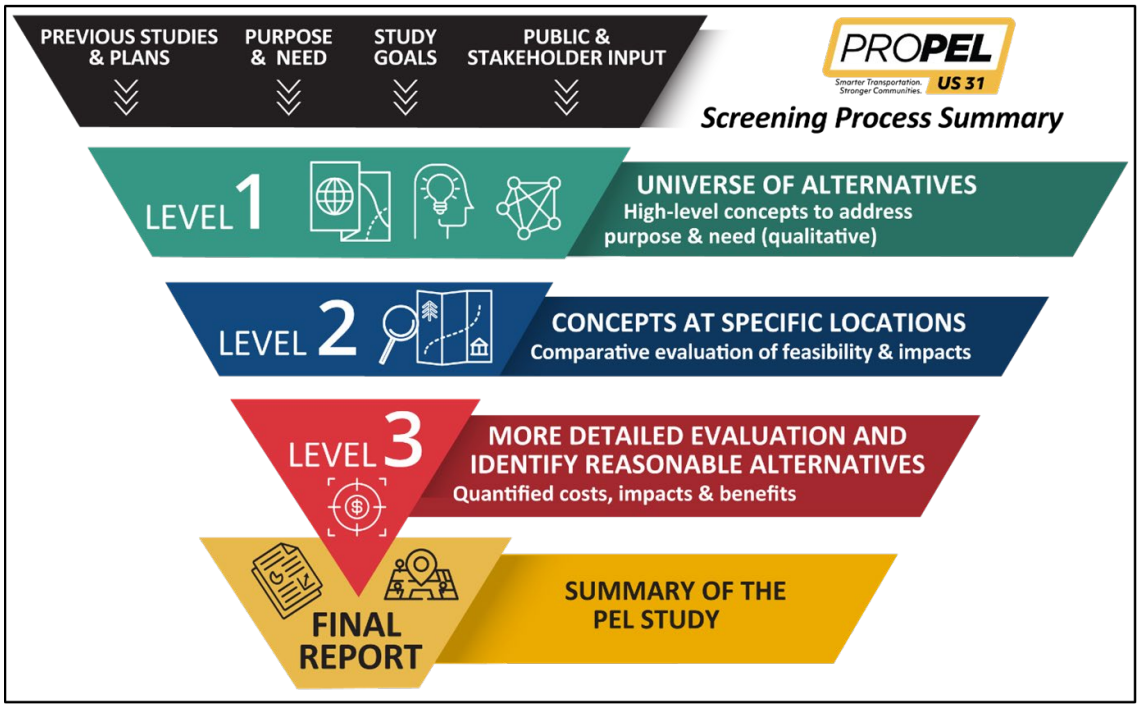
1. INTRODUCTION

1.1. PURPOSE AND INTENT OF THIS REPORT

This report documents the process and results of the Level 3 screening of alternatives that advanced from the Level 2 screening for the ProPEL US 31 North study. The Level 3 screening represents the third step in a three-level alternatives development and screening process, as shown in Figure 1.

Figure 1 – Summary of ProPEL US 31 North Alternatives Development and Screening Process



The purpose of the Level 3 screening – which is the final screening step for this PEL study – is to develop and analyze Improvement Packages for sections of the study area. These sections, called Planning Segments, consider improvements at all study area intersections as well as the roadway sections between them (see Section 3 for full details on methodology). The improvements considered in the Level 3 screening were identified from the Level 2 screening, previous studies, current plans, and public and stakeholder input as well as industry guidelines and solutions for safety and operations for highways like US 31.

The Level 3 screening includes both qualitative and quantitative factors to enable a relative assessment of costs, benefits, and impacts to eliminate unreasonable alternatives. It is INDOT's intent for the Level 3 screening to develop and evaluate varied access management approaches for Planning Segments in the study area to better understand relative costs, benefits, and impacts of different access management strategies along the study corridor for all users. Since it is not the intent to have a single recommended alternative at the conclusion of this PEL study, the Level 3 screening presents a range of Improvement Packages for each Planning Segment, including some with more access control similar to freeway conditions and some with less access control on US 31 that would provide public access points more in line with existing conditions.

Inputs to this report include the following, all of which are available on the study website (https://propelus31.com/31doclibrary/):

- ProPEL US 31 North *Purpose and Need Report*;
- ProPEL US 31 North *Environmental Constraints Report*;
- ProPEL US 31 North *Existing Transportation Conditions Report*;
- ProPEL US 31 North *Universe of Alternatives (Level 1) Screening Report*;
- ProPEL US 31 North *Level 2 Screening Report*; and
- ProPEL US 31 North Resource Agency, Stakeholder, and Public Involvement (RASPI) Summary #1, RASPI Summary #2, and RASPI Summary #3.

Similar to the first two levels of screening, meeting the purpose, needs, and study goals are confirmed in Level 3, and public and stakeholder input is considered and will be sought as part of this screening. A goal of the PEL process is the identification of a range of reasonable alternatives for the study area. Given the transportation needs identified within the study area, a reasonable alternative could consist of improvements at a single intersection; it could also consist of improvements at multiple intersections and/or the roadway sections in between them (i.e., access management). Depending on multiple factors, including statewide priorities and funding availability, improvements carried forward from this PEL study could be combined in different ways to address the identified transportation needs and support the goals of the study area.

The following information is provided in this report:

- A summary of the study area purpose and need statement along with study goals.
- A summary of the Level 1 screening and the concepts advanced.
- A summary of the Level 2 screening and the alternatives advanced.
- A summary of the public involvement and agency coordination activities associated with the publication of the *Draft Level 3 Screening Report*, a summary of the comments received and individual responses to them, as well as a summary of the changes made to this report after considering them.
- The methodology developed and applied in the Level 3 screening process.
- Details of how alternatives were identified, developed, and evaluated during the Level 3 screening.
- An overview of the next steps in this PEL study.

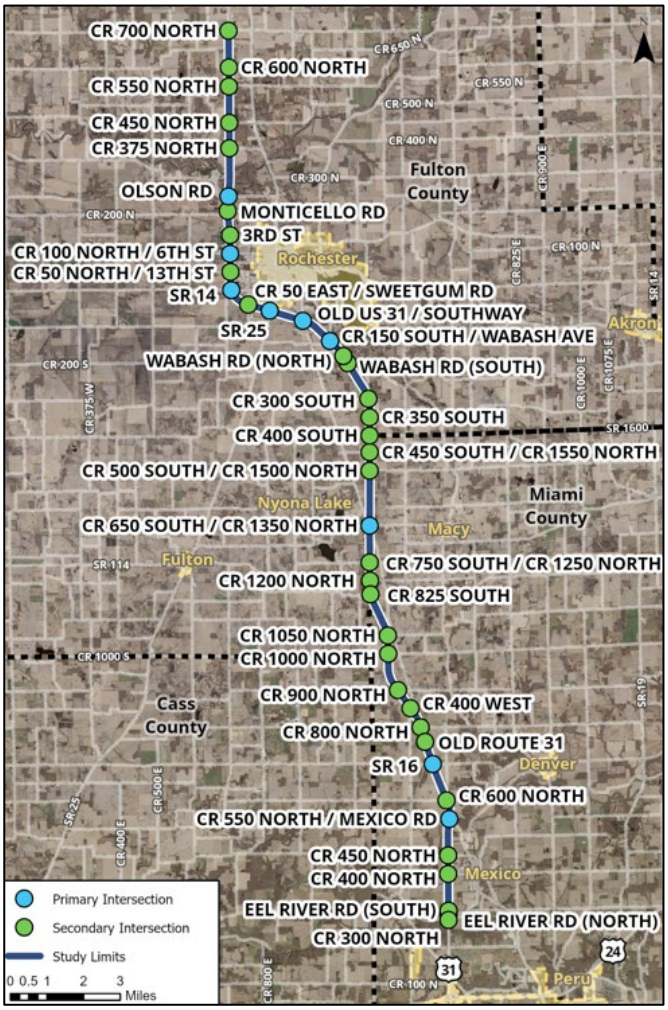
1.2. STUDY LIMITS AND STUDY INTERSECTIONS

The US 31 North study corridor is approximately 27 miles long, extending from County Road (CR) 300 North, just south of the Eel River in Miami County, to CR 700 North, just south of the Fulton/Marshall County line, as shown in Figure 1. US 31 in the study corridor is a four-lane Principal Arterial roadway with two lanes in each direction separated by an approximately 50- to 60-foot grass median.

US 31 within the study corridor is free-flowing: there are no signalized intersections or stop-controlled intersections for US 31 traffic, and the posted speed limit is 60 mph. Land use within the study area is predominantly agricultural with residential and commercial properties, including those supporting agricultural uses, and community facilities interspersed throughout. Rochester is the county seat of Fulton County and is located directly adjacent to US 31 along the ProPEL US 31 North study corridor.

Within the study corridor, there are nine Primary Intersections and 31 Secondary Intersections, as shown in Figure 2.

Figure 2 – US 31 North Study Corridor & Study Intersections



Primary Intersections have a crossroad classified as a Principal Arterial, Minor Arterial, or Major Collector. These are the highest non-interstate classifications of roadways. These intersections are currently two-way stop-controlled (TWSC), except for SR 25, which is a diamond interchange, and SR 14, which is an overpass. These crossroads are some of the major carriers for the east-west traffic flow through the study area and have a larger influence on corridor operations.

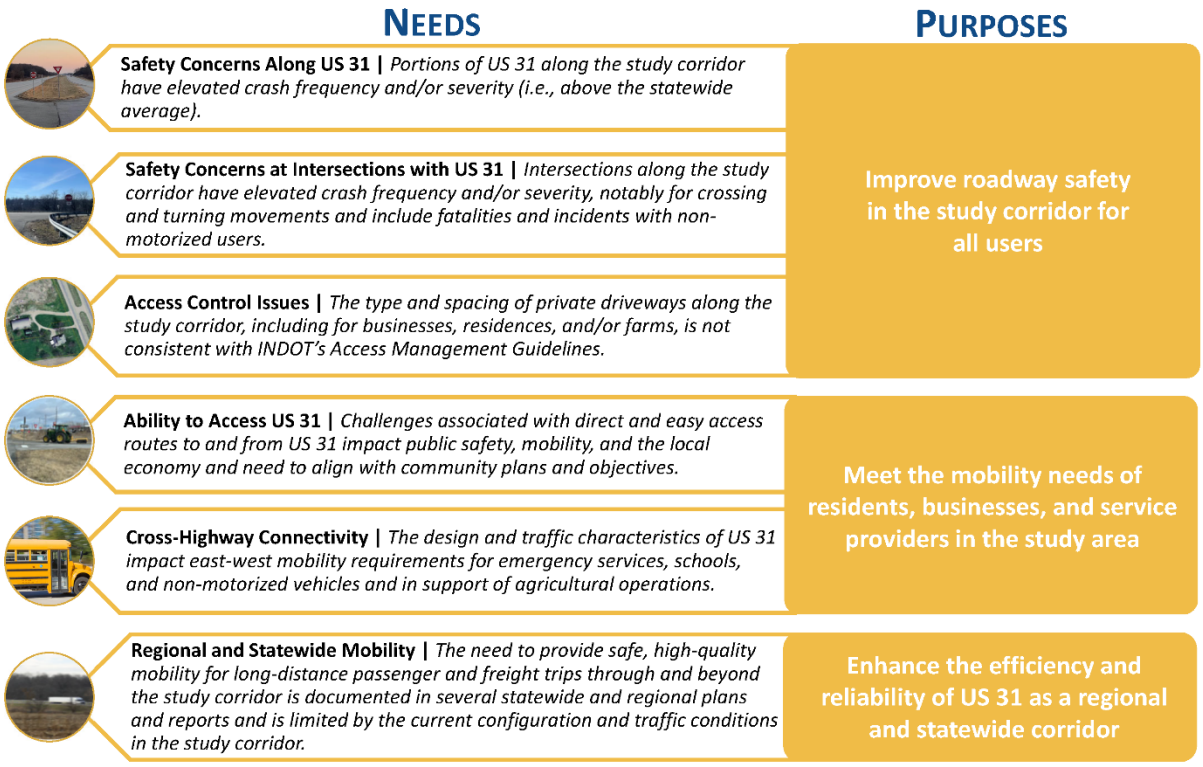
Secondary Intersections have a crossroad classified as Minor Collector or Local Road, which are the lowest classifications of roadways. These intersections are typically two-way stop controlled and have minor influence on the operations of the US 31 corridor.

This Level 3 screening considers a range of alternatives at the Primary Intersections, the Secondary Intersections, as well as the roadway sections between them.

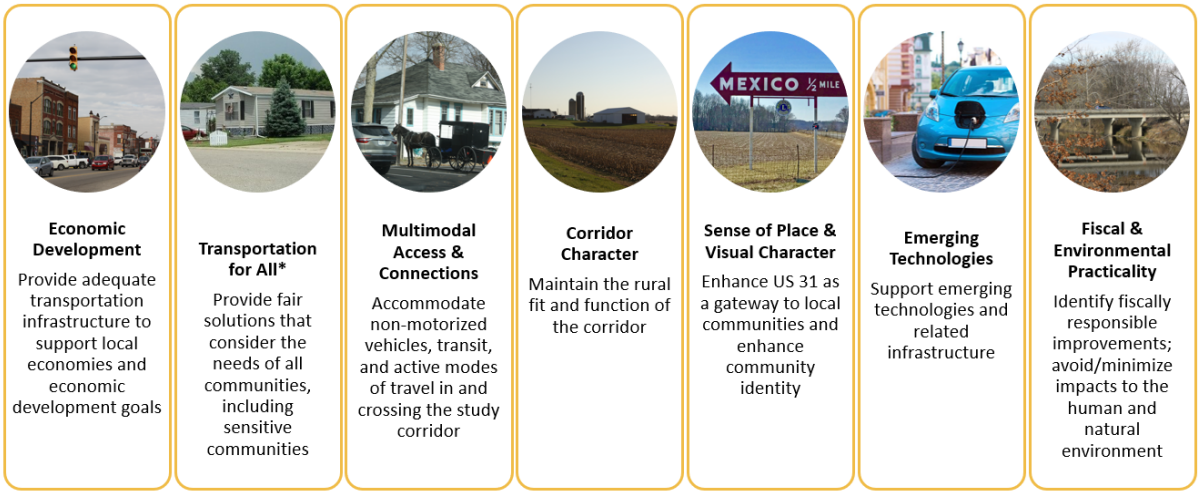
1.3. SUMMARY OF PURPOSE & NEED

The *Purpose and Need Report* for the ProPEL US 31 North study identified six needs and three associated purposes in the study corridor, in addition to seven study goals, as shown in Figure 3. The study purposes identified for the corridor and the associated performance measures (transportation performance, impacts and benefits, and costs) are the basis for the screenings for this study. For more detail, see the ProPEL US 31 North *Purpose and Need Report* available on the study website (https://propelus31.com/us-31-north/).

Figure 3 – Summary of Purpose, Need, and Goals for the ProPEL US 31 North Study



STUDY GOALS



* This goal was refined based on the issuance of Federal Executive Orders 14154, 14148, 14173, and 14281; State Executive Orders 25-49 and 25-37; and USDOT Order 2100.7.

1.4. SUMMARY OF LEVEL 1 AND LEVEL 2 SCREENINGS

1.4.1. UNIVERSE OF ALTERNATIVES (LEVEL 1) SCREENING

The Level 1 screening considered a set of 55 transportation improvement concepts, including the No-Build Alternative, for the US 31 North study corridor. Each concept was qualitatively evaluated against the purpose and need for the study area and for practicality within the study corridor. Public and stakeholder input was considered as part of the Level 1 screening.

The Level 1 screening resulted in the following:

- Four Primary Concepts that met a majority of transportation needs and were carried forward to the Level 2 screening for evaluation as stand-alone alternatives.
- Thirteen Complementary Concepts that met some transportation needs. These concepts were carried forward to the Level 2 screening for location-specific application that would complement a Primary Concept.
- Seven Design Elements that did not meet any transportation needs but were considered practical as they could provide some benefit to the study area. These concepts were carried forward to the Level 2 screening for incorporation, where applicable.
- The No-Build Alternative met two transportation needs, but it would not address the substantive safety issues identified throughout the study area. The No-Build Alternative was advanced to the Level 2 screening to serve as a baseline for comparison to build alternatives.

The *Draft Universe of Alternatives (Level 1) Screening Report* was published for public comment on November 13, 2023, and the public comment period extended through December 22, 2023. Additionally, the report was distributed to federal, state, and local resource agencies as well as the tribal nations for review and comment.

For further information on the Level 1 screening, including details on methodology, screening results, as well as comments and responses received during the public comment period, please see the *Final Universe of Alternatives (Level 1) Screening Report*, which is available on the study website (https://propelus31.com/31doclibrary/).

1.4.2. LEVEL 2 SCREENING

The purpose of the Level 2 screening was to qualitatively evaluate location-specific improvements at specific locations to assess reasonability and potential impacts. In Level 2, the seventeen (17) potential solutions that were identified as Primary and Complementary Concepts were qualitatively evaluated at the Primary Intersections in the study area. These intersections largely control roadway operations in the study area. Therefore, the intersection alternatives considered at them influence what can be constructed upstream or downstream and set the foundation for improvements between them. Thus, the Level 2 screening identified the building blocks for the Level 3 screening.

The Level 2 screening resulted in the following:

- At the eight Primary Intersections, three intersection improvement alternatives were carried forward to the Level 3 screening for further study: Unsignalized Intersection Improvements at seven locations; Cross Road Overpass/Underpass at five locations; and Convert to Interchange at five locations.
- A freeway concept was also carried forward. A freeway is one example of a free-flow facility, which is a road that has no traffic signals, stop signs, or yield signs. There are varying types of free-flow

facilities, ranging from freeways – which have full control of access [1] – to free-flow facilities that have no or partial control of access [2] (e.g., unsignalized arterial, expressway). The Level 2 screening report indicated the potential options for facility types in the US 31 North study area would be evaluated in the Level 3 screening. Note: A freeway may be designated an interstate if certain conditions are met; however, not all freeways are interstates. INDOT is not including or considering applying interstate design standards along the US 31 North study corridor.

- A range of the thirteen Complementary Concepts were carried forward to the Level 3 screening at the eight Primary Intersections, including: Access Management, Median Safety Improvements, Adjacent Intersection Improvements, Add or Lengthen Turn Lanes (Left or Right), Realign Skewed Intersections, Add/Extend Acceleration/Deceleration Lanes, Intersection Sight Distance Improvements, Ramp Terminal Intersection Improvements, Roadway Lighting, Roadway Drainage Improvements, Warning Systems, Bike/Pedestrian Facilities, and Non-Motorized User Accommodations. At any given Primary Intersection, anywhere from five to nine Complementary Concepts were identified to be carried forward.
- The No-Build Alternative was advanced to the Level 3 screening to serve as a baseline for comparison.

The *Draft Level 2 Screening Report* was published for public comment on March 27, 2024, and the public comment period extended through April 30, 2024. Additionally, the report was distributed to federal, state, and local resource agencies as well as tribal nations for review and comment.

For further information on the Level 2 screening, including details on methodology, screening results as well as comments and responses received during the public comment period, please see the *Final Level 2 Screening Report*, which is available on the study website (https://propelus31.com/31doclibrary/).

1.5. COMPLEMENTARY CONCEPTS

The Complementary Concepts evaluated in the Level 3 screening are listed in Table 1 with an explanation how each was considered.

Table 1 – Consideration of Complementary Concepts in Level 3

Complementary Concepts	Explanation
Access Management	Access management strategies were considered to varying degrees for each of the Improvement Packages in Level 3, ranging from less access control (similar to the existing conditions), gradually adding more access control via reducing access points and median openings, to full access control (freeway). See Section 3.2 for additional details.
Median Safety Improvements	Median safety improvements, such as median cable barrier, should be considered between intersections during future design phases of future projects that may result from recommendations of this PEL study.

[1] Full control of access = Connections are provided only with select public roads through interchanges. Driveway connections (residential and commercial) are not permitted.
[2] Partial control of access = Connections are provided with public roads via interchanges and/or at-grade intersections. The number of roadway connections and/or driveway connections (residential and commercial) may be reduced in number and/or limited to right-in/right-out movements. The number of median openings may also be reduced.

Complementary Concepts	Explanation
Adjacent Intersection Improvements	Improvements at intersections on the cross street directly adjacent to the intersection with US 31 were considered in this Level 3 screening for the intersections where safety issues with intersection control were identified during earlier stages of this study. One such location is the intersection of CR 800 North (Miami) and Old US 31 where intersection control is suggested.
Add or Lengthen Turn Lanes (Left or Right)	The Improvement Packages in this Level 3 screening include lengthening of mainline turn lanes or addition of mainline turn lanes in the cases where one is not currently present at all intersections.
Realign Skewed Intersections	Realignment of roadways at intersections where substantial skew is present was considered in the Level 3 screening. One such location is the Old US 31/Southway intersection.
Add or Lengthen Acceleration/ Deceleration Lanes	Adding or lengthening acceleration or deceleration lanes was considered at the exit and entrance ramp merges and diverges at the one existing interchange in the study area at SR 25.
Intersection Sight Distance Improvements	Intersection sight distance was considered in development of alternatives evaluated in this Level 3 screening at the two intersections that were previously identified as having deficiencies: 3rd Street and Old US 31/Southway.
Ramp Terminal Intersection Improvements	This Level 3 screening considered ramp terminal intersection improvements at the intersections of the US 31 ramps at the existing SR 25 interchange.
Roadway Lighting	Roadway lighting was too detailed for this level of planning study, but should be considered during future design phases at all interchanges, RCIs, and other innovative intersections as per INDOT lighting guidelines, or where safety data indicates that lighting could be an effective countermeasure based on the nature of the crashes.
Roadway Drainage Improvements	Roadway drainage improvements were too detailed for this level of planning study, but should be considered during future detailed design phases, as necessary.
Warning Systems	Warning systems should be considered for future implementation at TWSC intersections with elevated crash indices.
Bicycle/Pedestrian Facilities	The need for improved or additional bicycle and pedestrian facilities within the study area has not been identified in this study. The alternatives evaluated in the Level 3 screening do not include bicycle or pedestrian facilities; however, such facilities can be incorporated into future projects that may result from recommendations of this PEL study.
Non-Motorized User Accommodations	The planned overpass at CR 700 North (Fulton) will accommodate non-motorized travel across US 31 in the area where such travel was identified in earlier phases of this study. The need for additional non-motorized routes or facilities in the study area has not been identified in this study. Such facilities can be incorporated into future projects that may result from recommendations of this PEL study.

1.6. DESIGN ELEMENTS

The Design Elements considered during this study are listed in Table 2 with an explanation of how each design element should be considered going forward.[3]

Table 2 – Consideration of Design Elements

Design Element	Explanation
Traffic Control Visibility Upgrades	Limited traffic control elements are found within the US 31 North study area. Upgrades to existing control devices should be addressed in the preliminary design phase of any project that follows this PEL study.
Pavement Marking Improvements	Pavement markings will be addressed in the preliminary design phase of any project that follows this PEL study.
Roadway Signage Improvements	Roadway signage will be addressed in the preliminary design phase of any project that follows this PEL study.
Wildlife Crossings	Wildlife crossing patterns are influenced by development and could substantially change in the time between completion of this PEL study and construction of projects. The need for wildlife crossings should be evaluated in any NEPA studies that follow this PEL study.
Gateway/Corridor Treatments	Gateway and corridor treatments are aesthetic improvements. Possible locations for such improvements have been identified in the Level 3 screening; however, details of the treatment should be addressed in the preliminary design phase of any future projects in the study area.
Speed Management	Changes to intersection type and/or roadway geometry were not identified as potential means to manage speeds along US 31. The alternatives considered in this Level 3 Screening Report seek to remove or reduce conflicts to maintain free flow conditions along US 31.

[3] The design elements were refined based on the issuance of several federal and state Executive Orders (EOs), as well as one USDOT order. See Section 2.3 for additional information.

2. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

2.1. PUBLIC INVOLVEMENT

Throughout the US 31 North PEL study, INDOT has provided opportunities for the public to engage with the study team and provide feedback on study documents and planning decisions. Since publishing the *Final Level 2 Screening Report*, the study team has continued holding Community Office Hours and coordinating with stakeholders, and, with the publication of the *Draft Level 3 Screening Report*, held in-person and virtual public information meetings to gather feedback. The in-person public meeting was held November 18, 2024, at Rochester Community High School. Content from the public meeting, including a video of the meeting presentation was used to create a virtual public meeting on the study website that was available shortly after the public meeting until the comment period ended December 13, 2024. A complete list and description of outreach activities is provided in the *Resource Agency, Stakeholder & Public Involvement Summary #3*, which can be found on the study website.

The Level 3 analysis also considered the public involvement and agency coordination associated with the publication of the *Draft Universe of Alternatives (Level 1) Screening Report* and *Draft Level Screening 2 Report*. Final copies of these reports, including responses to all public, agency, and tribal nation comments received during the formal comment periods are on the study website.

The *Draft Level 3 Screening Report* for the ProPEL US 31 North study area was made available for public review on November 12, 2024, on the study website, with hard copies also provided at seven publicly accessible locations in Rochester, Peru, and Akron. These locations included:

- Akron Carnegie Public Library, Akron, IN
- Fulton County Public Library, Rochester, IN
- Fulton County Chamber of Commerce, Rochester, IN
- Council on Aging and Community Center, Rochester, IN
- Rochester City Hall, Rochester, IN
- Fulton County Commissioner's Office, Rochester, IN
- Peru Public Library, Peru, IN, 46970

As stated in the public notice of its release, INDOT invited public feedback on the *Draft Level 3 Screening Report* document for a comment period through December 13, 2024. Comments could be provided on the study website or in-person at various community events and office hours. During this timeframe, postcards to approximately 10,000 local households were mailed, handouts were distributed at businesses throughout the corridor, and six community office hours were held. The public availability of the screening report and its associated comment period were also posted on social media. Additionally, INDOT held a virtual briefing to the Stakeholder Advisory Committee (SAC) on November 12, 2024, to solicit local feedback and help spread the word of the availability of the document. Similarly, briefings were also given to representatives of Fulton County, Miami County, and Rochester as well as the US 31 Coalition. Concurrently, the *Draft Level 3 Screening Report* was distributed to federal, state, and local resource agencies and tribal nations for review and comment.

There were 86 comments submitted by the public for the ProPEL US 31 North study corridor during the comment period. Most comments were focused on mobility and access and the ability of local residents, farmers, and businesses to continue to efficiently access their destinations in the study corridor. The majority of the comments (58) were directed at one or more specific Planning Segments, with the Denver Planning

Segment receiving the most (57%); the remainder of the comments were directed to the study corridor or study as a whole. The SR 16 intersection with US 31 received the most comments. Concerns were also raised regarding the potential impacts of the Improvement Packages on emergency response times. A full list of comments received, and responses is provided in Appendix C.

2.2. AGENCY COORDINATION

The *Draft Level 3 Screening Report* was distributed to Federal, state, and local agencies on November 12, 2024, for their review. A virtual Resource Agency and Cultural Resources Stakeholder Meeting was held December 4, 2024, and included information regarding the *Draft Level 3 Screening Report* and how to best review the report, an overview of environmental and cultural resources, and next steps for the study. A summary of the meeting is provided in the *Resource Agency, Stakeholder & Public Involvement Summary #3* on the study website.

The U.S. Fish and Wildlife Service (USFWS) responded via letter, providing information regarding listed and proposed endangered, threatened, and rare species that may occur in the study area. This includes several species of bats and mussels, and the monarch butterfly. The letter noted that it appeared that Packages 3 and 4 would have greater impacts to natural resources and agreed with the report's suggestion that Packages 1 and 2 be recommended.

2.3. LEVEL 3 SCREENING REPORT UPDATES

Based on the public comments and agency feedback received, the following changes were made to the *Draft Level 3 Screening Report*:

- Minor editorial changes were made throughout the report to increase clarity.
- The Executive Summary was updated to reflect changes made throughout the report.
- One study area goal (see Section 1.3) was refined and one design element (Alternative Fuel/Electric Vehicle Considerations) was eliminated based on the issuance of several Executive Orders (EOs) and one United States Department of Transportation Executive (USDOT) order, including:
  - Federal EOs: EO 14154, EO 14148, EO 14173, and EO 14281;
  - State EOs: EO 25-49, EO 25-37, and EO 25-14; and
  - USDOT Order 2100.7.
- Section 2 was added to the report to summarize outreach activities, comments received, and changes to the report.
- A summary of the public comments received specific to each Planning Segment was added to the report (Sections 4.1 through 4.6).
- The evaluation of environmental resources (see Section 3.5) and ability to meet study area goals (see Section 3.6) were updated to reflect the issuance of several Executive Orders (EOs) and one USDOT order, including:
  - Federal EOs: EO 14154, EO 14148, EO14173, and EO 14281;
  - State EOs: EO 25-49, EO 25-37, and EO 25-14; and
  - USDOT Order 2100.7.
- In other study areas, INDOT received several questions and comments seeking clarification on the Improvement Package ratings. More specifically, there was confusion between the Recommended and Carried Forward ratings since both would require further consideration after the PEL study. To provide greater clarity, all Improvement Packages evaluated in the *Final Level 3 Screening Report* were rated as Eliminated or Carried Forward. Minor updates to the rating definitions were also made.
- Added text to Section 5 to document INDOT's long-term vision for the US 31 corridor. This information was added to clarify INDOT's vision as well as the approach to studying a wide range of improvements and facility types as part of the ProPEL US 31 North study.
- Appendix C was added to include *Level 3 Screening Report* comment/response matrices.

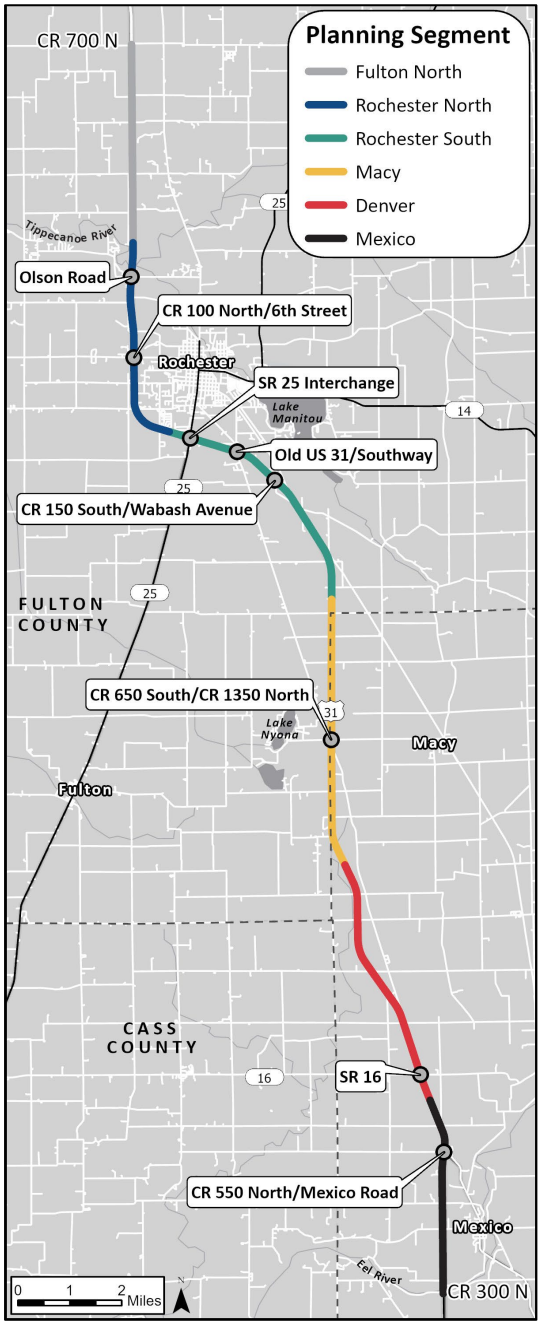
3. LEVEL 3 EVALUATION METHODOLOGY

3.1. STEP 1: DEFINE PLANNING SEGMENTS

While the Level 2 screening focused on Primary Intersections, Level 3 expands to look at sections of the study corridor. The study corridor was divided into sections called Planning Segments. Planning Segments are sections of the study area that function as a "system" to provide access and mobility. Intersections and roadway segments within these sections will be evaluated as a unit to maintain or improve mobility and safety within the Planning Segment. Planning Segments provide a broader context for evaluating and recommending improvements in the Level 3 screening. This approach also helps to avoid potential negative impacts from focusing only on a single intersection without analyzing the impacts it could have upstream and downstream within the segment.

Six Planning Segments were identified within the study area, as shown in Figure 4 and summarized in Table 3. Each ranges from approximately three to five miles in length. Groupings of intersections that provide access within communities were considered – as indicated by the Planning Segment names – as were the Primary Intersection(s) serving those communities. The potential for improved intersections to influence one another – as well as public feedback – was also taken into consideration.

Figure 4 – US 31 North Planning Segments & Primary Intersections



Fulton North represents the northernmost portion of the study area and includes intersections north of Rochester. The Rochester area was divided into two Planning Segments – Rochester North and Rochester South. Public and stakeholder feedback to this point in the study has mentioned considerations for both northern and southern access to Rochester, with Olson Road as a potential northern access point for Rochester. In the Rochester South segment, which extends south to near the Fulton and Miami County line, SR 25, Old US 31/Southway, and Wabash Avenue are the three most common routes between US 31 and the south and east sides of Rochester.

The Planning Segment limits in the southern end of the study corridor were chosen to logically consider intersections serving the Macy, Denver, and Mexico areas together – particularly the Primary Intersection(s) serving them. The Macy segment is centered on the Primary Intersection at CR 650 South/CR 1350 North that serves Macy and Nyona Lake; the Denver segment includes SR 16, a Primary Intersection that serves Denver; and the Mexico segment was

formed starting from the study's southern terminus at CR 300 North and stretching north to CR 600 North to include all the intersections in the Mexico area.

Table 3 – ProPEL US 31 North Planning Segments

Planning Segment	Northern Intersection	Southern Intersection	Length (miles)	Primary Intersection(s)
Fulton North	CR 700 North	CR 375 North	3.9	N/A
Rochester North	Olson Road	CR 50 East/ Sweetgum Road	4.1	Olson Road CR 100 North/6th Street
Rochester South	SR 25	CR 350 South	4.9	SR 25 Old US 31/Southway Wabash Avenue
Macy	CR 400 South	CR 825 South	5.2	CR 650 South/CR 1350 North
Denver	CR 1050 North	SR 16	5.0	SR 16
Mexico	CR 600 North	Eel River Road (S)	3.8	CR 550 North/Mexico Road

Details of each of the Planning Segments are provided in Section 4. It is important to note the above Planning Segments are not intended to be segments of independent utility with logical termini as required by the National Environmental Policy Act (NEPA) process.

3.2. STEP 2: DEFINE IMPROVEMENT PACKAGES

For each Planning Segment, a comprehensive set of intersection improvements were combined as Improvement Packages. Multiple Improvement Packages were developed for each Planning Segment. The Improvement Packages range from less access control (similar to the existing conditions), gradually adding more access control via reducing access points and median openings, to the fourth Improvement Package that has full access control (freeway). This range allows for the consideration of the balance of access control (and safety improvements) versus local mobility for the Improvement Packages.

The following criteria were considered when forming the Improvement Packages:

- **Influence of adjacent intersections:** The influence of a given concept at a specific location on the adjacent intersections was considered. For example, if an interchange alternative was considered at a Primary Intersection, consolidation of access to/from US 31 through closure of adjacent Secondary Intersections was recommended along with it. Similarly, as the scope of the Level 3 analysis expanded from just Primary Intersections to looking at the Planning Segment as a whole including Secondary Intersections, some of the considerations at Primary Intersections changed and alternatives not previously studied in Level 2 were considered in Level 3. For example, an interchange may have been considered at a Primary Intersection in Level 2, but when looking at the Planning Segment as a whole in Level 3 another intersection could be a better candidate for an interchange in the Planning Segment. Discussions of any of these types of changes are provided in the Improvement Package descriptions in Section 4 of this report.
- **Interchange spacing guidelines:** Per INDOT direction, there should be a minimum of 3 miles between adjacent interchanges in rural areas and a minimum of one mile between adjacent interchanges on non-interstate routes in urban areas; however, this was examined for the context of each section and

location. The US 31 North study corridor is considered to be rural per consultation with INDOT and urban area boundary maps.

- **Access management principles:** Driveway treatments and recommendations on the spacing of median openings was considered.
- **Improvements at Secondary Intersections:** There are numerous Secondary Intersections within the study limits where no detailed evaluation was performed in the Level 2 screening. Access management principles were considered in the Level 3 screening to align the treatments at intersections along the study corridor with the appropriate access management strategies. The improvements to Secondary Intersections typically consist of restricting turning movements or closure of the intersection. Certain Secondary Intersections were considered for other intersection improvements when the location called for an access point or crossing location.

County Transportation Plans were also used to inform the intersection treatments in some of the Improvement Packages, especially regarding overpasses or interchanges in the packages with more access control.

A major consideration in the creation of Improvement Packages was the level of access management. According to FHWA, access management provides an important means of maintaining mobility. It calls for effective ingress and egress to a facility, efficient spacing and design to preserve the functional integrity, and overall operational viability of street and road systems. A range of access control was considered for the Level 3 Improvement Packages. Table 4 lists the different levels of access control considered and the effects of each on existing and future connections with US 31. The table is arranged left to right from least access control (existing conditions) to most (full) access control. These facility types, and their associated characteristics, are based on guidance found in the *INDOT Access Management Guide*[4] and the *INDOT Driveway Permit Manual*.[5]

In addition, the "expressway lite" facility type, which is shown in Table 4, was developed in direct response to public comments received throughout the study to improve mobility without sacrificing accessibility to/from US 31. After considering these comments, INDOT developed the expressway lite facility type to combine the driveway access aspects of a free-flow arterial facility with the increased access management of an expressway facility. Expressway lite maintains the existing free-flow condition and includes the following elements: no traffic signals, partial control of access, limited median openings for U-turn movements between intersections, and right-in/right-out for all private driveways. The inclusion of median U-turn openings would be evaluated on a case-by-case basis during the project development process, as discussed further below.

In addition, there are several unmarked locations along the study corridor that appear to be used as field access to and from US 31. Alternative access (not on US 31) appears to be available for all impacted fields, so no right-of-way impact was assumed for the purposes of this study. These locations will be assumed to be closed in all Improvement Packages.

Focusing further on the unsignalized at-grade Secondary Intersections, a stepwise application of five potential treatments were used to implement increasing access control in the Improvement Packages. These five treatments (from less access control to more access control) are shown in Table 5 and in Figure 5 (TWSC), Figure 6 (RCI), Figure 7 (Directional), and Figure 8 (RIRO). These treatments appear throughout the different Improvement Packages, as needed. For example, RCIs are included in Improvement Packages 1, 2, and 3.

[4] https://www.in.gov/indot/files/guide_total.pdf
[5] https://www.in.gov/indot/files/Driveway-Permit-Manual.pdf

Table 4 – Guiding Principles for Access Control in Improvement Packages

Connections/ Features	No-Build	Package 1	Package 2		Package 3		Package 4
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***		***Expressway Lite Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost*** ⟷						***Lower Access to/from US 31 Higher Cost***
Access Control	Minimal	Partial	Partial		Partial		Full
Signalized Intersections	No	No	No		No		No
Unsignalized Intersections	Yes	Yes	Yes		Yes		No
Median Openings* (between intersections)	Allowed	Allowed *(reduced quantity)*	Allowed *(reduced quantity)*		Allowed *(limited circumstances)*	Not Allowed	Not Allowed
Average Access Spacing**	Varies	Varies	Varies	Varies	Varies		Varies
Commercial Driveway Access	Full	RIRO or Full Access	RIRO only		RIRO only	None	None
Residential Driveway Access	Full	RIRO only	RIRO only		RIRO only	None	None

RIRO = right-in-right-out configuration

Limited Circumstances = Median opening(s) between intersections will be limited to select locations and evaluated on a case-by-case basis in a Planning Segment to reduce the travel distance associated with limiting turning movements at certain intersection treatments. Median openings would include a properly designed U-turn opening to facilitate safe and efficient access that may be restricted by the median.

* Refers to public median openings between intersections. For all Improvement Packages, median openings for emergency vehicles may be provided. For alternatives that limit turning movements at intersections, U-turn locations could also be considered.

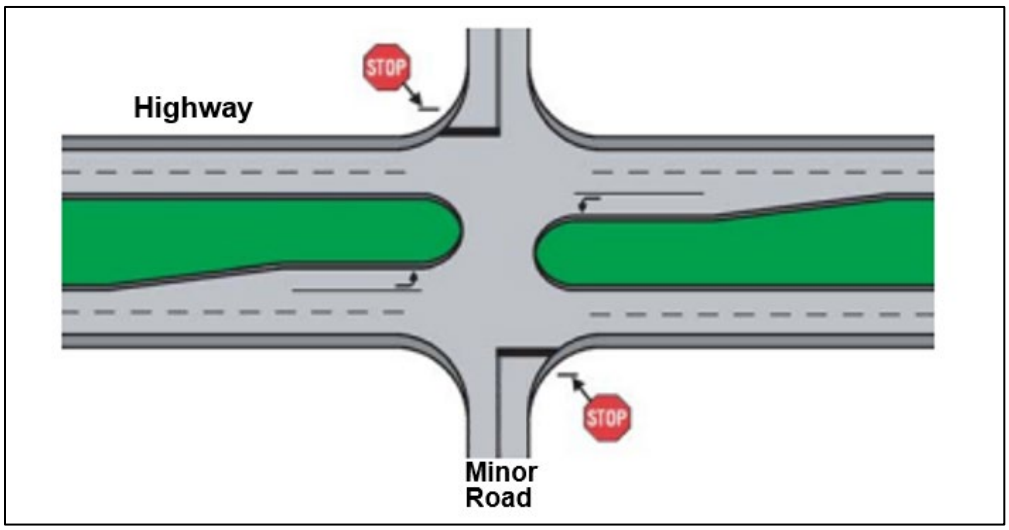
** Refers to average median opening spacing including intersections and mid-block openings/U-turn locations.

Table 5 – Levels of Access Control and Allowable Movements for Unsignalized At-Grade Intersection Treatments

Movement	At-Grade, Unsignalized Intersection Treatments				
	TWSC	RCI	Directional	RIRO	Closure
Characteristics	***Higher Access to/from US 31*** ⟷				***Lower Access to/from US 31***
Mainline Right Turns	Yes	Yes	Yes	Yes	No
Mainline Left Turns	Yes	Yes	Yes	No	No
Cross Street Right Turns	Yes	Yes	Yes	Yes	No
Cross-Street Throughs (Crossing)	Yes	Yes*	No	No	No
Cross-Street Left Turns	Yes	Yes*	No	No	No

* via median U-turn movements

Figure 5 – Two-Way Stop-Controlled Intersection



Source: Virginiadot.org

Figure 6 – Reduced Conflict Intersection (RCI) Schematic Diagram

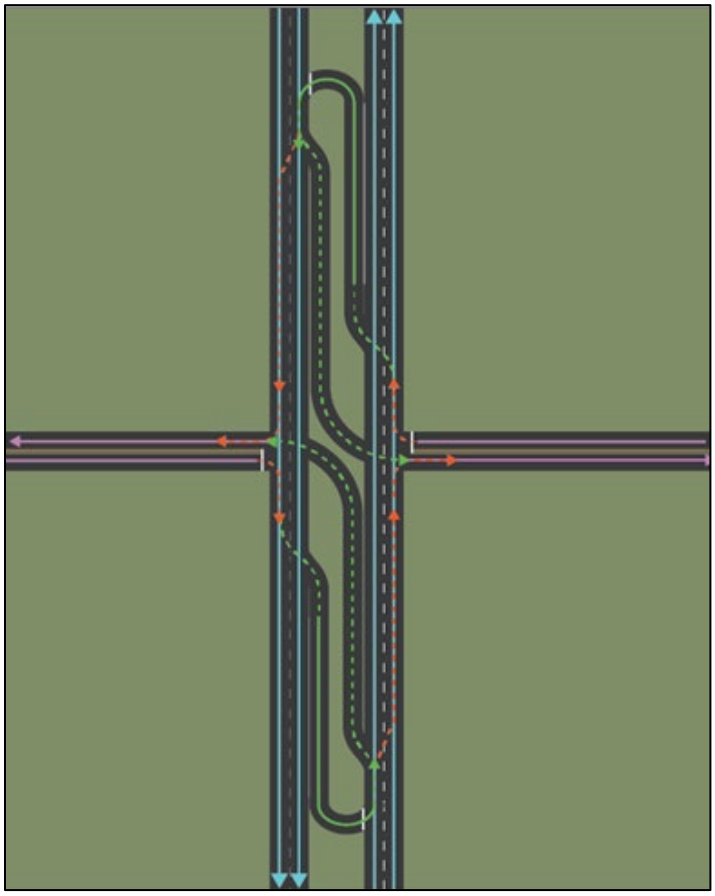


Figure 7 – Access Management: Right-In/Right-Out (RIRO) Schematic Diagram

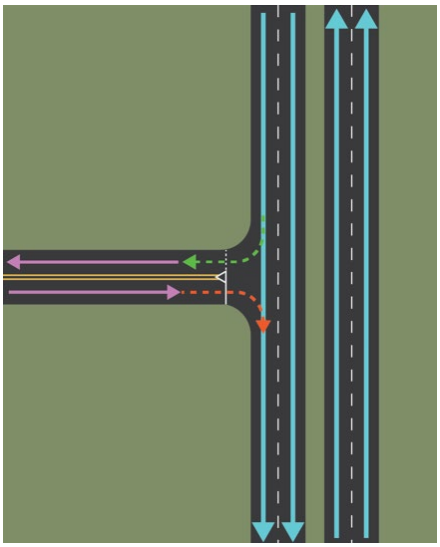
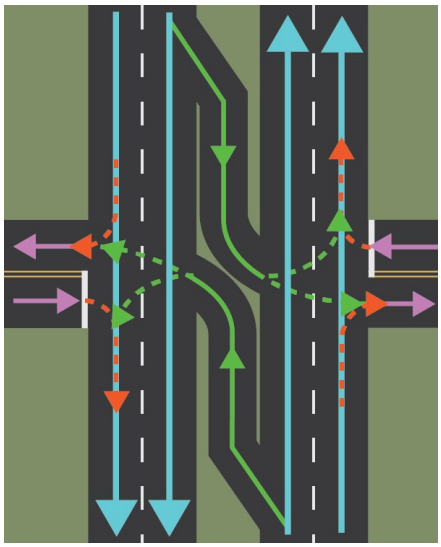


Figure 8 – Access Management: Directional Intersection Schematic Diagram



In summary, the Improvement Packages may be generalized as follows:

- Package 1 would provide safety upgrades while leaving the access control similar to current conditions. Most intersections generally would remain as TWSC, while some would be considered for upgrades such as directional intersections or reduced-conflict intersections (RCI).
- Package 2 generally would provide RCI or other safety improvements at the Primary Intersections and would add a level of access control by implementing directional intersection treatments at many Secondary Intersections.
- Package 3 would provide access control by allowing median openings in limited circumstances or removing them, and also limiting cross-street access by implementing RIRO treatments at most Secondary Intersections and grade-separated interchanges at most Primary Intersections.
- Package 4 would provide full access control by closing all median openings and providing access only at grade-separated interchanges. Interchanges and overpasses at certain intersections would provide access and crossing locations, but the remaining intersections would be closed.

For certain cases in Packages 2 and 3 where a series of directional or RIRO intersection treatments could limit directional travel from the side streets, public median opening(s) between intersections could be evaluated on a case-by-case basis in a Planning Segment to reduce the travel distance associated with limiting turning movements. The median openings would include a properly designed U-turn opening to facilitate safe and efficient access. For all Improvement Packages, including those with higher access control, median openings for emergency vehicles may be provided. For alternatives that limit turning movements at intersections, U-turn locations could also be considered. The determination of the number and location of these median openings is more detailed than the scope of this planning study and would occur during the project development process.

Professional judgment was used to create representative Improvement Packages for each Planning Segment of the study area that constitute a reasonable range of alternatives, including different facility types. Details of the Improvement Packages for each Planning Segment are provided in Section 4. For each intersection improvement within the package, a conceptual design was developed as detailed in Section 3.4 below.

3.3. STEP 3: EVALUATE SAFETY AND MOBILITY

Safety and mobility were identified in the US 31 North *Purpose and Need Report* as priorities and are, therefore, a focus for the evaluation of Improvement Packages. A wide variety of transportation users cross or utilize the US 31 corridor every day. Therefore, the full range of users and vehicle types were taken into consideration during this evaluation to the extent possible and appropriate for this level of planning study.

3.3.1. SAFETY

Purpose and Need: Safety Concerns at Intersections with US 31

One of the needs identified for the study is safety concerns at intersections with elevated crash indices, where crossing and turning movements are of particular concern.

Reduce Conflict Points

The safety performance of each Improvement Package was determined using a multi-step process that started with the identification of conflict points. Conflict points occur where the paths of two different vehicles intersect and the vehicles may potentially occupy the same spot at the same time thus creating a crash. Conflict points occur where cross streets and driveways connect to or cross the mainline lanes of US 31. Reductions in conflict points are associated with improvements in safety, as fewer conflict points result in fewer locations where multi-vehicle crashes may occur. Conflict points are generally grouped into three categories:

- Diverging: Two vehicle paths separate from each other. Example: Right turn movement and through movements from US 31 diverge at an intersection.
- Merging: One vehicle path merges with another. Example: Right turn movement from a side street merges with traffic on the major road.
- Crossing: Paths of opposite or opposing vehicle paths cross. Example: Left turn movement crosses the opposing through movement at a four-legged intersection.

In general, the likelihood of crashes occurring at an intersection can be decreased as conflict points are eliminated; however, the total number of conflict points is a much less significant safety metric than the type/severity of conflict point. Crossing conflict points pose the highest risk for right-angle crashes with high severity, especially on a high-speed facility like US 31. Merging and diverging conflict points are more likely to pose risks for sideswipe and rear-end crashes that are typically less severe. The likelihood of crashes at an intersection can be decreased as conflict points are eliminated. Reducing conflict points improves safety. With US 31 being a high-speed facility with a history of severe, right-angle crashes related to left turns and crossing movements from the cross street, the focus of the Level 3 crash analysis was to understand to what extent different Improvement Packages would reduce or eliminate crossing conflict points.

The total number of crossing conflict points at the Primary and Secondary Intersections was summed for the No-Build scenario and each Improvement Package. The number of crossing conflict points in each Improvement Package was compared to that of the No-Build scenario. The percent reduction in total crossing conflict points at each intersection compared to the No-Build scenario was then applied to the number of crashes that previously occurred over a five-year period at the existing crossing conflict points at each intersection in each Planning Segment. This provided an estimate of the potential reduction of right-angle crashes due to the implementation of each Improvement Package over a period of twenty years. It should be noted that even if all mainline crossing conflict points are eliminated with a certain Improvement Package (e.g., a freeway package), there could still be severe crashes from other crash types. For example, interchanges remove crossing conflict points from the mainline, but still have them at the ramp terminal intersections where the exposure and speed is decreased.

A Cost-Effectiveness Index (CEI) was then used to compare the safety performance of each Improvement Package. The CEI, which here represents the average cost (in millions of dollars) to potentially reduce one crossing-related crash, is calculated by dividing the total estimated cost of the Improvement Package, using the average of the high and low estimate, by the number of potential crossing crashes reduced by the implementation of the Improvement Package. This index provides a means to compare the cost-effectiveness of the safety benefits of each Improvement Package. Lower CEI values indicate the most cost-effective Improvement Packages in terms of safety improvement. A higher CEI means that the incremental cost to reduce one additional crash is higher. An Improvement Package could have the potential to reduce more right-angle crashes, but its higher overall costs would make it less cost-effective for improving safety.

Purpose and Need: Access Control Issues

Access Control – Number of Driveways

Another safety need identified for the study relates to access control. The type and spacing of private driveways along the study corridor is not consistent with INDOT's Access Management Guidelines. Driveways onto US 31 also create conflict points where crashes may occur. Each of the Improvement Packages implements incremental increases in access control. Driveways are converted to RIRO in Packages 1, 2, and 3 and closed altogether in Package 4. Therefore, one of the ways of evaluating the safety of Improvement Packages was to sum the number of driveways for each. Decreases in the number of driveways indicates a safety improvement.

3.3.2. MOBILITY

Three needs related to mobility were identified in the study's purpose and need: cross-highway (east-west) mobility, the ability to access US 31, and regional/statewide mobility.

Purpose and Need: Cross-Highway Connectivity (East-West Mobility)

East-west mobility – which is the ability to safely cross US 31 – was identified as a need and then reiterated as such according to public feedback. This includes east-west travel for personal travel, emergency services, schools, non-motorized vehicles, and the agricultural industry. As more access control is implemented across the Improvement Packages, east-west mobility may decrease, as there are fewer places to cross US 31. The quality of the crossing points, especially in terms of safety, was considered when assessing east-west mobility. Some Improvement Packages may have fewer crossing points, but the quality of those crossing points has been improved in terms of safety (as assessed using the measures mentioned above).

Average Distance Between US 31 Crossing Points

One measure of east-west mobility in the study area is the number of points at which US 31 can be crossed. Fewer crossing points means traveling farther to reach a crossing point. Average distance between US 31 crossing points is one of the ways to assess east-west mobility in the corridor. This measure provides some indication of the distance one may have to travel north or south to be able to cross US 31. A lower number for distance between crossing points generally indicates better east-west mobility. A higher number generally indicates having to travel longer distances to cross US 31. Package 1 and Package 2 would allow median openings, though could reduce the quantity of median openings compared to existing conditions. Package 3 would allow median openings in limited circumstances for expressway lite facility types. Package 3 for expressway facility conditions and Package 4 would eliminate median openings. T-intersections are not considered crossing points. This takes into account mobility for regular vehicular traffic, agricultural traffic, emergency services, and other types of vehicles including buses and non-motorized traffic. This measure is per Planning Segment and does not take into consideration crossing points on adjacent Planning Segments.

For certain cases in Package 2 and Package 3 where a series of directional or RIRO intersections could limit directional travel from the side streets, public median opening(s) between intersections could be considered

on a case-by-case basis in a Planning Segment to reduce the travel distance associated with limiting turning movements. The median openings would include a properly designed U-turn opening to facilitate safe and efficient access. For all Improvement Packages, including those with higher access control, median openings for emergency vehicles may be provided. The determination of the number and location of these median openings is more detailed than the scope of this planning study and would occur during the project development process. This planning-level analysis assumes a worst-case scenario where no U-turn locations are provided.

East-West Mobility Compared to No-Build

As crossing points of US 31 are reduced and the spacing between them increases, the quality of east-west mobility across US 31 decreases. For intersections that are currently crossing points for US 31 but would be reconfigured in Improvement Packages so as to no longer allow crossing movements, vehicles must travel to an adjacent intersection where they can cross US 31. This causes additional travel time to cross US 31.

Multiple Improvement Packages would reduce or eliminate east-west movements at intersections, or eliminate entire intersections, to align with the guiding principles for access management established in Section 3.2. The reduction or elimination of these crossing points would result in additional travel for users seeking to cross US 31 from the east or west. Using the potential spacing of crossing points, median openings, and intersection types, east-west mobility for each Improvement Package was ranked as follows:

- Similar – Mobility for east-west trips would be similar to that of the No-Build alternative. Under this ranking, direct access to crossroads may be reduced, but regularly spaced intersections and median openings would provide mobility similar to the No-Build condition.
- Decreased – Mobility for east-west trips would be decreased with median openings removed. Some cross-street approaches at intersections would prohibit crossing with right-in/right-out alignment. The average distance between crossing points increases but does not vary substantially from the No-Build alternative.
- Greatly Decreased – Mobility for east-west trips would be greatly decreased with all or most median openings removed. The majority of cross-street intersections would be closed or restricted to RIRO access. The average distance between crossing points increases substantially from the No-Build alternative.

Purpose and Need: Ability to Access US 31

The ability to access US 31 was identified in the study's purpose and need. Direct and easy access to/from US 31 is considered important to residents, businesses (including the agricultural industry), and service providers (including schools and emergency services) in the study area.

Average Distance Between US 31 Access Points

One measure of access to/from US 31 is the number of points at which US 31 can be accessed. Fewer access points mean potentially traveling farther to reach an access point. Average distance between access points is one of the ways to assess access to/from US 31. This measure provides an indication of the distance one may have to travel north or south to be able to access US 31. This takes into account mobility for regular vehicular traffic, agricultural traffic, emergency services, and other types of vehicles including buses and non-motorized traffic. This measure is per Planning Segment and does not take into consideration access points on adjacent Planning Segments.

Purpose and Need: Regional and Statewide Mobility – Support Free-Flow

Regional and statewide mobility was identified as one of the needs for the study. The need to provide safe, high-quality mobility for long-distance passenger and freight trips through and beyond the study corridor is

documented in several statewide and regional plans and reports. The US 31 North study corridor is currently a free-flow facility (a road that has no traffic signals, stop signs, or yield signs).

Planning Segment Travel Time

One measure of regional mobility and free-flow conditions is travel time from one end of the Planning Segment to the other. There are no traffic signals along US 31 in the study corridor, and no recurring congestion is observed. Therefore, the travel time through the corridor is already optimal and cannot be improved, only maintained. Introducing signalized intersections in the corridor would decrease regional mobility by introducing delay. All of the Improvement Packages considered in Level 3 maintain the free-flow conditions along the US 31 study corridor. Therefore, all of the Improvement Packages are equal in maintaining free-flow conditions and will have the same estimated travel time through each Planning Segment.

Note that for the purposes of comparison, this assumes that the speed limit would remain the same for all packages. Even if the speed limit were increased by five miles per hour, the travel time would not improve substantially because all other packages have free-flow conditions already.

3.3.3. SUMMARY OF SAFETY AND MOBILITY MEASURES OF EFFECTIVENESS

Table 6 summarizes the safety and mobility measures of effectiveness evaluated for each Improvement Package within each Planning Segment.

Table 6 – Safety and Mobility Measures of Effectiveness

Measure of Effectiveness		Unit	Description
Safety	Total Conflict Points	#	Reducing the number of conflict points will improve safety by reducing the exposure to crashes. See Section 3.3.1
	Crossing Conflict Points	#	Crashes involving vehicles at crossing conflict points (e.g., crossing the mainline) tend to result in right-angle crashes and be more severe. A reduction in the number of crossing conflict points will improve safety by decreasing the potential of severe crashes. See Section 3.3.1
	% Reduction in Crossing Conflict Points	%	Similar to the above, this calculation provides the amount of reduction (and therefore reduction in potential future crashes) for crossing conflict points.
	Estimate of Crossing-Related Crashes Prevented (20 yrs)	#	Historic crash data for the Planning Segments was used to estimate the number of crossing crashes that may be prevented at each intersection by each Improvement Package over the 20-year life of the improvement.
	Cost-Effectiveness Index (CEI)	#	CEI provides a means to consider the cost of safety benefits of each Improvement Package, with the lowest CEI value representing those Improvement Packages that are most cost-effective from a safety standpoint.

Measure of Effectiveness		Unit	Description
Mobility	Average Travel Time along US 31 During AM/PM Peak Hour	Min	A combination of the travel time for motorists through the Planning Segment traveling at the posted speed limit, as well as any delay associated with the Primary Intersections within the segment. See Section 3.3.2
	Average Distance between US 31 Access Points	Miles	The average distance in miles along US 31 between access points in a given Planning Segment. This value serves as a general gauge of the level of access provided to US 31 and is one measure of local mobility.
	Average Distance between US 31 Crossing Points	Miles	The average distance along US 31 between available east-west crossing points within each Planning Segment. This value serves as a general gauge of the amount of access provided across US 31 and is one measure of local mobility.
	East-West Mobility (compared to No-Build)	Relative Change	The alteration or elimination of median openings and crossing points affects the time it takes to cross US 31 from the east or west. Alternatives with fewer crossing points would require some vehicles to travel farther to get to a crossing point. This value assesses the relative change in the estimated time required to cross US 31 for each package in comparison to the No-Build condition.
	Residential Driveways (RIRO vs Full)	#/#	Each package provides a specific treatment for driveways within the Planning Segment. This value shows the quantity of each type (RIRO or Full) of residential driveway in each Improvement Package.
	Commercial Driveways (RIRO vs Full)	#/#	Each package provides a specific treatment for driveways within the Planning Segment. This value shows the quantity of each type (RIRO or Full) of commercial driveway in each Improvement Package.
	Field Access Driveways (RIRO vs Full)	#/#	Each package provides a specific treatment for driveways within the Planning Segment. This value shows the quantity of each type (RIRO or Full) of field entrances in each Improvement Package.
	Farmland Access Impacts	Yes/No	Potential for access impacts including direct impacts to farm entrances along US 31 (Yes/No)

3.4. STEP 4: REFINE CONCEPTUAL DESIGN & ESTIMATE COSTS

The Level 2 screening report provided a high-level estimation of improvement limits (i.e., a footprint) for each Primary Intersection alternative. These conceptual designs were advanced during the Level 3 screening process as the Improvement Packages were developed for each Planning Segment by:

- Revising the conceptual design and associated footprint at the Primary Intersections in more detail and in overall context of each Improvement Package, as needed;
- Adding conceptual designs and associated footprints for all Secondary Intersections to cohesively fill out each Improvement Package;
- Avoiding and minimizing adverse impacts to the human and natural environment to the extent possible for a planning study; and
- Minimizing costs.

For each intersection improvement within each Improvement Package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential right-of-way limits so that potential impacts were not understated. The resulting footprints and associated potential right-of-way limits of the conceptual designs are provided in Appendix A. The construction footprint was developed by providing a buffer beyond the estimated construction limits. This wider area was developed to account for the preliminary nature of the conceptual design and to account for inevitable changes that occur as future projects advance through more detailed design. The construction footprint was used to estimate potential right-of-way needs with the exception of relocations, which were estimated based on the construction limits and loss of access.

Right-of-way requirements for each of these conceptual designs were estimated from the anticipated construction footprints. A conservative approach was used to estimate right-of-way acquisition so that potential impacts were not understated. Parcel boundaries were obtained from the Indiana Geographic Information Office[6] for the entire study area. Engineering judgment was applied to this information to determine the impacts to each parcel. Several Improvement Packages would not allow driveway access to/from US 31. Non-agricultural parcels that currently have driveways to US 31 were assumed to be total acquisitions in these Improvement Packages. Agricultural parcels with driveway access to/from US 31 that appeared to have feasible alternative access were not considered as total acquisition. Potentially landlocked parcels were considered as total acquisition. Future studies may evaluate means to provide alternative access to impacted parcels that eliminates the need for total acquisition. Additionally, there are several areas where the cross-street right-of-way is unclear or unknown. When more detailed design is prepared for the specific intersection treatments in future studies, the potential right-of-way impacts may be reduced.

Planning-level construction and right-of-way acquisition costs were estimated for each of the Improvement Packages. Quantities for major construction items (e.g., pavement, earthwork, retaining walls, bridges) were estimated using the conceptual designs. Current unit prices were applied to these quantities to estimate construction costs. The costs associated with unquantified items (e.g., drainage, traffic items, ancillary construction activities) were estimated based on INDOT historical bid data and applied as a percentage of the construction sub-total. Soft costs (e.g., preliminary engineering, construction engineering, mobilization/demobilization, etc.) were computed as percentages of the construction sub-totals based on past experience for similar project types in Indiana as well as guidance in the *INDOT Design Manual*. A range of estimated construction costs were developed based on the application of an appropriate contingency for the

[6] https://www.indianamap.org/datasets/INMap::parcel-boundaries-of-indiana-current/about

level of design detail developed as part of a transportation planning study. The contingency was verified through an independent assessment of risk.

Right-of-way acquisition costs were estimated for all non-agricultural use parcels based on assessed values obtained from the property assessor's website of each county. These assessed values were inflated by 20% to better represent current market values. Agricultural use parcels were valued on a per acre basis using current sales data for each county. Relocation costs and real estate consultant fees were estimated based on a working knowledge of current INDOT right-of-way acquisition processes. It is expected INDOT will have residuals available for sale after completion of any project that requires substantial right of way acquisition (i.e., freeway and expressway Improvement Packages). The value of these residuals has not been accounted for in the cost estimating of this study. The cost to acquire all necessary acreage to construct the Improvement Packages has been accounted for in this study; however, only the acreage needed for permanent right-of-way is included in the comparison matrices of this report.

All estimated costs listed in this report are provided in 2024 dollars. Inflation of costs to a year of expenditure was not possible as the timeline for any projects resulting from this PEL study is not yet known. The planning-level cost estimates should be revisited in the future as additional detail is developed and as statewide priorities and funding availability become clearer. Planning-level cost estimates are provided in Appendix B.

All cost estimates shown in this report do not include pavement replacement or resurfacing outside of the intersection improvement areas. It can be assumed that replacement of pavement may cost approximately $14,000,000 per mile of existing cross section if needed for any of the Improvement Packages that move forward from the PEL. Asset condition at that time is assumed to dictate what is needed between intersections.

3.5. STEP 5: EVALUATE ENVIRONMENTAL RESOURCES

The identification of potential impacts to environmental resources includes both qualitative and quantitative factors to enable a relative assessment of costs, benefits, and impacts at a planning level. Potential impacts to environmental resources were primarily based on the resources documented in the *US 31 North Environmental Constraints Report*; this document is available on the study website and provides full details on resources, evaluation methodologies, and governing rules and regulations. The conceptual design included a construction footprint that was used to conservatively estimate potential right-of-way for each Improvement Package (see Section 3.4 above). These were used to calculate potential impacts, as described in Table 7 and detailed in the sections below[7].

The potential impacts presented in this Level 3 screening are preliminary and reflect the planning level of design available at this time. Throughout the screening process, a conservative approach was taken, and it is anticipated that impacts could be further minimized and/or avoided in the future at a more detailed level of design after this PEL study. For example, while a residential or commercial relocation may be counted at the planning level due to potential loss of access, these impacts may be avoided during subsequent project development activities by providing alternative access. Impacts estimated for this screening are direct/permanent impacts; there may be additional construction-related impacts that involve temporary or short-term changes that are beyond the scope of this planning-level study. Potential issues related to environmental resources are noted below and will be documented in the final *PEL Study Report* at the end of this study. Additional details and evaluation would typically be developed during the National Environmental Policy Act (NEPA) process, which occurs during INDOT's traditional project development process for projects utilizing federal funds or requiring federal approvals.

Any potential impacts to these resources could likely be further minimized and/or avoided. In the future, direct impacts to environmental resources would have to be coordinated with the appropriate federal and state agencies for required permits and approvals, depending on the type and extent of impacts.

[7] The analysis was updated to consider the issuance of several federal and state EOs, as well as one USDOT order. See Section 2.3 for additional information.

Table 7 – Environmental Resources and Measurement of Impacts

Environmental Resources		Evaluation Parameters Per Improvement Package
Natural Resources	NWI Wetlands[1]	Acres impacted
	Rivers and Streams	Linear feet impacted
	Floodplains	Acres impacted
	Forested Areas	Acres impacted
Cultural & Recreational Resources[2]	Aboveground Resources	Potential for adverse impacts to aboveground cultural resources? (Yes/No) Are these direct or proximity impacts? (Direct/Visual)
	Other Section 4(f) Resources	Are there any other Section 4(f) resources (i.e., parks/recreation areas or wildlife/waterfowl refuges) that may be impacted? (Yes/No)
	Known Archaeological Sites	Are there any known archaeological sites that may be impacted? (Yes/No)
	Cemeteries	Number of cemeteries that may be impacted
Community & Socioeconomic Resources	Residential Relocations	Number of residential relocations
	Business Relocations	Number of business relocations
	Community Facility or Institutional Relocations	Number of community facility or institutional relocations
	Total New Right-of-Way Acquisition	Number of acres of new right-of-way acquisition required for construction, operation and maintenance. Excludes acreage of additional new right-of-way from relocations that could be considered excess property and potentially be sold off at project completion.
	Title VI / Community Impact Analysis	
	Acres Impacted	Acres of new right-of-way impacted within sensitive communities compared to overall acres impacted
	Relocations	Number of relocations within sensitive communities compared to overall relocations
	Risk of Greater Impacts to Sensitive Communities	Potential risk for greater impacts to sensitive communities? (Yes/No)
	Farmland Impacts	Acres of farmland impacted
	Potential Hazardous Materials Sites	Number of sites impacted

[1] Impacts to National Wetlands Inventory (NWI) mapped resources. Formal water resources identification and wetlands delineations must occur during the NEPA process for any project(s) that move forward from the study.

[2] Eligible historic sites as determined in the ProPEL US 31 North's Above-Ground Cultural Resources Identification Memorandum and Archaeological Cultural Resources Identification Memorandum.

[3] Farmland impacts were analyzed through parcel data supplemented by GIS aerial reviews of active farmland.

[4] Historic sites listed or eligible for listing on the National Register of Historic Places have been identified separately (see Cultural & Recreational Resources section above). Additional Section 4(f) resources include public parks, recreation areas, and wildlife/waterfowl refuges.

3.5.1. NATURAL RESOURCES

Natural resources that are considered in this Level 3 screening include those that could require regulatory agency involvement during future project development and the NEPA process: National Wetland Inventory (NWI) wetlands (acres), rivers and streams (linear feet), floodplains (acres), and forested areas (acres). All impacts to natural resources are based on the concept footprint within each of the Improvement Packages; all natural resources located within the construction footprint were assumed to be impacted. Data is sourced from the *US 31 North Environmental Constraints Report* and supplemented by woodland land cover data from IndianaMap, as needed.

3.5.2. CULTURAL & RECREATIONAL RESOURCES

Cultural and recreational resources that are considered in this Level 3 screening include those that could require regulatory agency involvement during future project development and the NEPA process: potential impacts to aboveground resources (yes/no); potential impacts to known archaeological sites (yes/no); potential impacts to other Section 4(f) resources (yes/no); and cemeteries (number impacted). Data on potential aboveground resources (13 total in the study area) and cemeteries (5 total in the study area) is sourced from the *US 31 North Above-ground Cultural Resources Identification Memorandum*. All impacts to cultural resources are based on the potential right-of-way within each of the Improvement Packages. Data on potential Section 4(f) resources is sourced from the *US 31 North Environmental Constraints Report,* which identified 4 public parks and recreational facilities within the study area that primarily serve the local population (i.e., are not regional or state facilities). There are no known archaeological sites in the US 31 North study area.

3.5.3. COMMUNITY & SOCIOECONOMIC RESOURCES

Numerous potential impacts to socioeconomic resources were considered in this Level 3 screening including: potential relocations (number, by type); total new right-of-way acquisition (acres); potential impacts to sensitive communities (acres, number of relocations, and identification of the potential risk of greater impacts); farmland (acres); and potential hazardous materials sites (number). Since there are no community facilities within proximity of the improvements, it was not used as a comparison criterion in the Level 3 screening.

For potential relocations, if the structure was impacted by the construction limits of an intersection treatment, or access could not be maintained without impacting an adjacent property owner, a displacement was assumed for the purposes of this planning-level screening. Total new right-of-way acquisition estimates are based off the acreage required for the construction, operation, and maintenance. It is important to note that for the purposes of this planning study, the estimate excludes acreage associated with relocations that could be considered excess property and potentially sold at project completion.

Data on sensitive communities and hazardous materials sites is sourced from the *US 31 North Environmental Constraints Report,* which identified 3 census tracts with sensitive communities and 8 parcels with a potential for hazardous materials within the study area. Information for farmland is supplemented by the National Land Cover Database from the U.S. Geological Survey and aerial photography to estimate active farms. These impacts are based on the potential right-of-way for each of Improvement Packages.

3.6. STEP 6: EVALUATION OF STUDY GOALS

The seven goals identified for the ProPEL US 31 North study area are summarized in Section 1. Table 8 illustrates how study area goals were considered as part of the Level 3 screening. In most cases, the measures of effectiveness used to comparatively evaluate Improvement Packages were also used to consider study area goals.[8] Using the criteria in the table, qualitative ratings for each study area goal were assigned to each Improvement Package. The following defines the ratings used for each goal:

- Greatly Diminishes – High negative performance in majority of performance measures.
- Diminishes – Negative performance in multiple measures of effectiveness (may include no change or minor positive performance in some measures).
- Neutral – Performance varies; Some positive performance and some negative performance OR factor/condition not present OR further information needed to assess.
- Enhances – Positive performance in multiple measures of effectiveness; May include no change or minor negative performance in some measures.
- Greatly Enhances – High positive performance in majority of performance measures; No negative performance measures.

The goal of Fiscal and Environmental Practicality was evaluated using the following ratings:

- Low – Low-cost effectiveness combined with relatively high impacts to community and environmental resources.
- Moderate – Moderate cost-effectiveness combined with relatively moderate impacts to community and environmental resources.
- High – High cost-effectiveness combined with relatively low impacts to community and environmental resources.

This methodology was consistently applied to each Planning Segment considered in the Level 3 analysis.

[8] The analysis was updated to consider the issuance of several federal and state EOs, as well as one USDOT order. See Section 2.3 for additional information.

Table 8 – Evaluation Methodology for Study Area Goals

Study Area Goal	How Measured?	How Considered as Part of the Level 3 Screening?
Economic Development	Support the existing economy and/or planned economic development through adequate transportation infrastructure that provides improved safety, mobility and/or access.	• % Reduction in Crossing Conflict Points • Estimate of Crossing-Related Crashes Prevented (20 yrs) • Avg. Travel Time Along US 31 During AM/PM Peak Hour (min) • Average Distance between US 31 Access Points (miles) • Average Distance between US 31 Crossing Points (miles) • East-West Mobility (Compared to No Build) (relative change)
Transportation for All	Improve safety, mobility, or access for all communities, including sensitive communities.	• Criteria listed above under Economic Development • Sensitive communities present? • Potential risk of greater impacts to sensitive communities?
Multimodal Access and Connections	Include sidewalk, trails, or other non-motorized methods of travel and transit.	• To assess an Improvement Package's performance related to this goal, three factors were considered: – Are there existing bicycle/pedestrian facilities or known non-motorized vehicle routes? – Do local plans identify any planned facilities or additional needs to accommodate these users? – How are the existing/planned facilities considered as part of the Improvement Package?
Corridor Character	Maintain the rural fit and function of the corridor (i.e., a rural arterial with primarily at-grade intersections).	• Number of overpasses/interchanges (i.e., shift towards interstate-like facility) • Average Distance between US 31 Access Points (miles) • Average Distance between US 31 Crossing Points (miles)
Sense of Place & Visual Character	Enhance US 31 as a gateway to local communities and enhance community identity.	• To assess an Improvement Package's performance related to this goal, two factors were considered: – Presence of community or communities – Type of potential improvement (interchanges have greatest potential for enhancement)
Emerging Technologies	Has the potential to interact with connected vehicles and/or support alternative fuel initiatives.	• In general, none of the Improvement Packages would impact the ability to implement autonomous and connected vehicles. Additionally, none would preclude alternative fuel initiatives.
Fiscal & Environmental Practicality	Expected to not have substantial environmental impacts and are expected to have good returns on the investments.	• Costs and/or Cost-Effectiveness Index • Impacts to Natural Resources • Impacts to Cultural Resources • Residential and Business Relocations • Total New Right-of-Way Acquisition • Potential risk of greater impacts to sensitive communities • Impacts to Farmland and/or Farmland Access

3.7. STEP 7: EVALUATE IMPROVEMENT PACKAGES

All measures for safety and mobility, impacts to environmental resources, costs, and goals are summarized in a table for each Improvement Package within each Planning Segment. This allows for relative comparisons between the Improvement Packages within a Planning Segment. Using this information, each Improvement Package was rated using the following terminology and definitions:

- Eliminated = Meets the purpose and need established with this study; however, the Improvement Package is considered unreasonable due to limited benefits compared to its impacts and/or costs. It does not warrant consideration as part of any subsequent NEPA and project development studies in this planning segment unless conditions in the study area significantly change in the future (e.g., changes in land use, baseline environmental and/or traffic conditions, etc.).
- Carried Forward = Meets the purpose and need established with this study and is considered reasonable at this stage of planning. The Improvement Package warrants consideration as part of any subsequent NEPA and project development studies in this planning segment.

Note that while it would not fully meet the identified needs, the No-Build would be required to be considered in any subsequent environmental reviews conducted in accordance with the NEPA process and will, therefore, be carried forward in all Planning Segments.

To assist in the recommendations for the Improvement Packages, qualitative ratings for each safety, mobility, environmental, cost, and goal measure of effectiveness were assigned. Within each category, a wide range of measures were considered and emphasis was placed on those differentiating between the Improvement Packages. The following defines the ratings used for each measure of effectiveness:

- Safety – Each of the Improvement Packages would improve safety to some degree. Data indicates that the primary cause of severe crashes are crossing conflicts, so the estimated number of crossing-related crashes prevented during a 20-year period (life of the improvement) was a primary criterion in this assessment. Summary ratings included:
  - Minimal Improvement (0 to 20 crashes potentially prevented);
  - Modest Improvement (20 to 50 crashes potentially prevented); and
  - Substantial Improvement (more than 50 crashes potentially prevented).
- Local Mobility – Increasing levels of access control would result in reduced mobility for local trips. The assessment included a comprehensive evaluation of the effect of each intersection improvement type on mobility within a Planning Segment. Ratings included:
  - Minimal/No Change (distance between crossing/access points increases 0 to 10 percent);
  - Minor Reduction (distance between crossing/access points increases 10 to 100 percent);
  - Modest Reduction (distance between crossing/access points increases 100 to 150 percent); and
  - Substantial Reduction (distance between crossing/access points increases more than 150 percent).
- Regional Mobility – The US 31 North study area is free-flow and currently experiences no intersection or congestion-related delays. As a result, none of the Improvement Packages would substantively change regional mobility and each was given a rating of No Change.
- Environmental Resources – Each of the Improvement Packages was evaluated for impacts to a wide range of natural, cultural/recreational, and community/socioeconomic resources. The assessment synthesized these impacts, taking into consideration the magnitude of those impacts as well as the context of those resources within the study area. The factors that had the greatest influence on the

ratings and allowed for differentiation between the Improvement Packages were river/stream impacts, relocation and right-of-way impacts, and impacts to farmland. Ratings included:

  - Minimal Impact (little to no impact to most resource categories); and
  - Modest Impact (greater impacts to a single resource category and/or some impacts to many resource categories).
  - None of the Improvement Packages were determined to reach the level of Substantial Impacts.

- Costs – The cost of the Improvement Packages vary widely, with those that include new overpasses or interchanges typically resulting in the highest costs. Based on the preliminary cost estimates (see Appendix B), the following ratings were used:
  - Packages costing less than $25 million were rated as Low Cost;
  - Packages costing between $25 and $75 million were rated as Moderate Cost; and
  - Packages costing over $75 million were rated as High Cost.
- Goals – The evaluation of each Improvement Package is described in Section 3.6 above. The results of that evaluation – each Improvement Package assessed on its progress toward attainment of each goal – was synthesized into a single cumulative assessment of the performance of the Improvement Package as a whole. Ratings included Enhances, Slightly Enhances, Neutral, Slightly Diminishes, and Diminishes.

4. IMPROVEMENT PACKAGE EVALUATION

4.1. FULTON NORTH

4.1.1. PLANNING SEGMENT DETAILS

The Fulton North Planning Segment is 3.9 miles in length and is composed of five Secondary Intersections and no Primary Intersections. This segment runs north-south through north-central Fulton County and is rural in character. There are no private driveways to US 31 in this Planning Segment. There is a current INDOT project (Des No. 2200484) to provide an overpass at the CR 700 North intersection with construction programmed for 2027. There is also an interchange planned for the SR 110 intersection which is one mile north of CR 700 North (outside of the ProPEL US 31 North study area). Both of these projects are assumed to be part of the No-Build and all Improvement Packages, as discussed further below.

Figure 9 – Fulton North Planning Segment

Public Comments Received on Draft Level 3 Screening Report

The following bullet points summarize the range of comments received on the *Draft Level 3 Screening Report* for this planning segment:

- Concerned about the lack of options to cross US 31; recommend adding an overpass at CR 450 North or Olson Road
- Concerned about closure of CR 375 North and the impact on businesses and the Fulton County Historical Society (Package 4)
- Dislike the RCI included at CR 450 North; there are too many farm implements using that intersection to make an RCI usable (Package 2)
- The highest priority in this planning segment should be the construction of an overpass at CR 700 North

4.1.2. IMPROVEMENT PACKAGES

There are four Improvement Packages within the Fulton North Planning Segment varying from less access control to full access control. For each intersection improvement within the package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential impacts to natural resources and potential right-of-way, which are provided in Appendix A.

Fulton North – Improvement Package 1

Improvement Package 1 would have the same level of access control as the current conditions, with access and crossing movements allowed at all at-grade intersections. As noted previously, an overpass is assumed as

an existing condition at CR 700 North. The Secondary Intersections at CR 600 North, CR 550 North, CR 450 North, and CR 375 North would remain as TWSC. There would be lengthening of mainline turn lanes at CR 600 North, CR 550 North, CR 450 North, and CR 375 North. Warning Systems could be considered as Complementary Concepts at CR 450 North and CR 375 North where slightly elevated crash activity was identified.

Fulton North – Improvement Package 2

Improvement Package 2 would have more access control than Improvement Package 1. Directional intersections would be provided at the Secondary Intersections at CR 600 North, CR 550 North, and CR 375 North to provide access to US 31, but only as right turns. Crossing and left-turn movements from these cross streets would be eliminated to improve safety. Access from US 31 to the cross street would be allowed for both left turns and right turns. An RCI at CR 450 North would address an elevated crash rate and also provide a crossing and turnaround point near the midpoint of the segment. Crossing points in the segment would be provided at CR 700 North (overpass) and CR 450 North (RCI). Alternatively, some or all of the directional intersections could be implemented as RCIs (by adding median U-turn locations) to provide more crossing locations within the Planning Segment and allow for vehicles to turn around and access the opposite direction of travel on US 31 with some additional cost but minimal difference in impacts.

Fulton North – Improvement Package 3

Improvement Package 3 in the Fulton North segment would feature additional access control and no median openings, similar to an expressway facility. Instead of directional intersections, the four Secondary Intersections would all be RIRO, further restricting the allowable movements at these locations to only right-turn movements to and from the cross streets. Crossing and left-turn movements from these cross streets would be eliminated to improve safety. The planned overpass at CR 700 North would be the crossing point provided in the Fulton North segment in this Improvement Package. While an expressway facility was used for the purposes of this Level 3 evaluation, an expressway lite facility could also be considered, which would provide median U-turn openings at strategic locations to allow access to the opposite direction of travel on US 31 in stretches where the only access is via RIRO intersections.

Fulton North – Improvement Package 4

Improvement Package 4 would feature full access control, similar to a freeway facility. This package would not have any median openings or at-grade intersections. All Secondary Intersections would be closed. The planned overpass at CR 700 North would be the crossing point provided in the Fulton North segment in this Improvement Package. This package was formed with the assumption that there would be full access at Olson Road (as shown in all four Improvement Packages in the Rochester North Planning Segment). It is most likely that this package would only be implemented if there are freeway segments north and south of it.

Fulton North – Improvement Package Summary

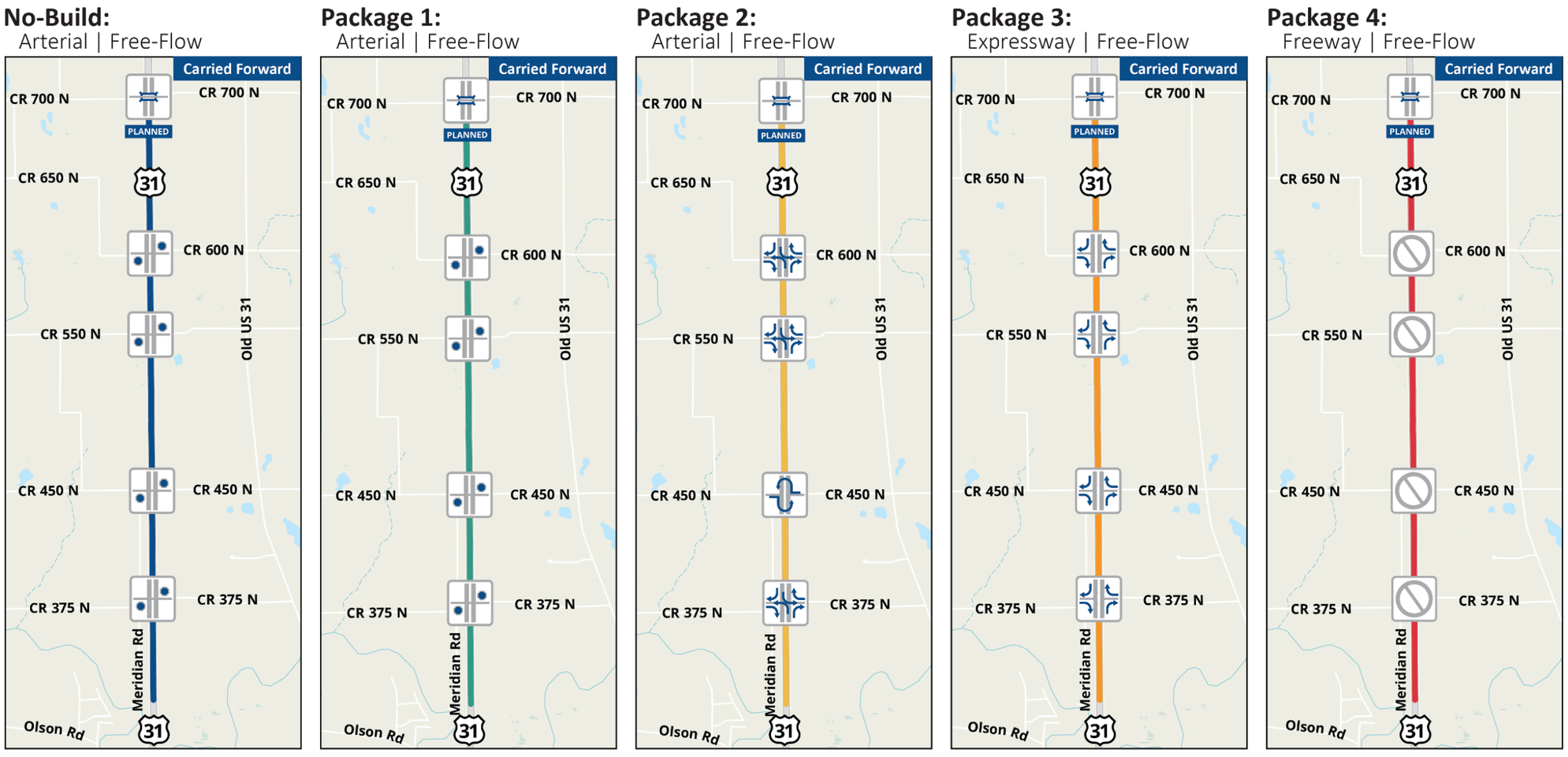
The Improvement Packages for the Fulton North Planning Segment are shown below in Table 9 and Figure 10.

Table 9 – Fulton North – Summary of Improvement Packages

Intersection or *Feature*	Fulton North Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost***		⟷		***Lower Access to/from US 31 Higher Cost***
CR 700 North	Overpass (planned)	Overpass (planned)	Overpass (planned)	Overpass (planned)	Overpass (planned)
CR 600 North	TWSC	TWSC	Directional	RIRO	Closed
CR 550 North	TWSC	TWSC	Directional	RIRO	Closed
CR 450 North	TWSC	TWSC	RCI	RIRO	Closed
CR 375 North	TWSC	TWSC	Directional	RIRO	Closed
Median Openings	*Allowed*	*Allowed (reduced quantity)*	*Allowed (reduced quantity)*	*Not Allowed*	*Not Allowed*

Note there are no private driveways in the Fulton North segment.

Figure 10 – Level 3 Improvement Packages – Fulton North



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

Study Recommendation: Carried Forward | Eliminated

- Two-Way Stop Controlled Intersection
- Reduced Conflict Intersection (Unsignalized)
- Overpass
- Intersection Closed
- Right-In/Right-Out Intersection (RIRO)
- Directional Intersection (RIRO + Left Turns from US 31)
- Interchange

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

ACCESS CONTROL METHODS:

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS**| All driveways are RIRO, no median openings
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

There are no private driveways to US 31 in this Planning Segment.

KEY MAP:

Table 10 – Fulton North – Comparison of Improvement Packages

Measures of Effectiveness			Fulton North Improvement Packages				
			No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
		US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Purpose and Need	**Safety**	Total Conflict Points (number)	168	168	60	16	0
		Crossing Conflict Points (number)	96	96	16	0	0
		Percent Reduction in Crossing Conflict Points	N/A	0%	83%	100%	100%
		Estimate of Potential Crossing-Related Crashes Prevented (20 yrs)	N/A	0	30	36	36
		Cost Effectiveness Index (CEI)	N/A	N/A	0.2	0.1	0.1
	Mobility	Average Travel Time Along US 31 During AM/PM Peak Hour (minutes)	3.9/3.9	3.9/3.9	3.9/3.9	3.9/3.9	3.9/3.9
		Average Distance between US 31 Access Points (miles)	0.8	0.8	0.8	0.8	3.9
		Average Distance between US 31 Crossing Points (miles)	0.6	0.6	1.3	1.9	1.9
		East-West Mobility (Compared to No-Build)	N/A	Similar	Decreased	Greatly Decreased	Greatly Decreased
		Residential Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Commercial Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Field Access Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Farmland Access Impacts (Yes/No)	No	No	No	No	No
Environmental Resources	**Natural**	NWI Wetlands (acres impacted)	0	0	0	0	0
		Rivers and Streams (linear feet impacted)	0	0	0	0	0
		Floodplains (acres impacted)	0	0	0	0	0
		Forested Areas (acres impacted)	0	3	4	4	3
	Cultural & Recreational	Potential Impacts to Above-ground Resources (Yes/No)	No	No	No	No	No
		Potential Impacts to Known Archaeological Sites (Yes/No)	No	No	No	No	No
		Potential Impacts to other Section 4(f) Resources (Yes/No)	No	No	No	No	No
		Cemeteries (number impacted)	0	0	0	0	0
	Community & Socioeconomic	Residential Relocations (number)	0	0	0	0	0
		Business Relocations (number)	0	0	0	0	0
		Community Facility or Institutional Relocations (number)	0	0	0	0	0
		Total New Right-of-Way Acquisition (acres)	0	<1	<1	<1	2
		Potential Impacts to Sensitive Communities (acres)	0	0	0	0	0
		Potential Relocations in Sensitive Communities (number)	0	0	0	0	0
		Risk of Greater Impacts to Sensitive Communities (Yes/No)	No	No	No	No	No
		Farmland (acres impacted)	0	<1	<1	<1	<1
		Potential Hazardous Materials Sites (number impacted)	0	0	0	0	1
Costs		Estimated Construction Cost (2024 Dollars)	$0	$3M to $4M	$3M to $5M	$2M to $3M	$2M to $3M
		Estimated Right-of-Way Cost (2024 Dollars)	$0	$50k to $60k	$90k to $110k	$60k to $80k	$160k to $200k
		Estimated Total Package Cost (2024 Dollars)	$0	$4M to $7M	$6M to $8M	$3M to $5M	$3M to $5M
Goals		Economic Development	N/A	Neutral	Neutral	Neutral	Neutral
		Transportation for All	N/A	Neutral	Neutral	Neutral	Neutral
		Multimodal Access & Connections	N/A	Neutral	Neutral	Neutral	Neutral
		Corridor Character	N/A	Neutral	Neutral	Neutral	Diminishes
		Sense of Place & Visual Character	N/A	Neutral	Neutral	Neutral	Neutral
		Emerging Technologies	N/A	Neutral	Neutral	Neutral	Neutral
		Fiscal & Environmental Practicality	N/A	High	High	High	High

Note: Additional soft costs (e.g., preliminary engineering, construction engineering, etc.) are included in the estimated total package cost.

4.1.3. EVALUATION

The Improvement Packages for the Fulton North Planning Segment were comparatively evaluated for safety and mobility according to the purpose and need as well as potential environmental impacts, costs, and study goals. The evaluation of these factors is summarized in Table 10 and detailed in the sections below.

Purpose and Need: Safety

Reduce Conflict Points

The number of crossing conflict points was determined at each intersection according to its potential intersection treatment for each particular Improvement Package. The total crossing conflict points within the segment were summed for each Improvement Package and compared to the No-Build package. Overall, the number of crossing conflict points would be lowest for Improvement Packages 2, 3, and 4. Even though there are no crossing conflict points eliminated and no reduction in crossing-related crashes predicted in Package 1, there would still be safety benefits with the lengthening of turn lanes at the TWSC intersections. Mainline US 31 turn lanes will be lengthened (or added where there currently are none) where necessary and applicable in each of the Improvement Packages to improve safety. Packages 2, 3, and 4 would have the highest potential for preventing crashes related to crossing conflict points. Package 2 could potentially prevent 30 of the crossing crashes in the segment by constructing an RCI at CR 450 North and directional intersections at the three other intersections. Packages 3 and 4 could each potentially prevent 36 of the crossing crashes in the segment by eliminating all of the crossing conflict points. The cost-effectiveness indices show that Improvement Packages 2, 3, and 4 would have similar cost-effectiveness. The comparison is shown in Table 10.

Purpose and Need: Mobility

E-W Mobility

Average Distance Between US 31 Crossing Points

Package 1 would have the same number of crossing points as the No-Build package (5), but the number of crossing points would decrease to two in Package 2 and one in Packages 3 and 4 as directional intersections, RIROs, and closures are introduced. The RCI at CR 450 North would provide a second crossing point in Package 2. East-west mobility could be improved in Package 2 by installing U-turn median openings at some or all of the directional intersections to form RCIs that provide additional crossing locations. The average distance between crossing points for each package is shown in Table 10. A qualitative estimate of the effect of this measure on east-west mobility compared to the No-Build alternative is noted in the table as well.

Access To/From US 31

Average distance between US 31 access points is one of the ways to assess accessibility to/from the corridor. Packages 1, 2, and 3 would have the same number of access points as the No-Build (4), but the directional intersections and RIROs at Secondary Intersections in Package 2 and Package 3, respectively, would not offer full access. Package 4 would not provide an access point in the Planning Segment. The closest access point would be the planned interchange one mile north at SR 110 or Olson Road to the south. The average distance between access points for each package is shown in Table 10.

Support Free-Flow (Regional Mobility)

None of the Improvement Packages include traffic signals or other impediments to the existing free-flow conditions and optimal travel time along US 31. Therefore, all Improvement Packages would maintain free-flow conditions and regional mobility and this measure does not differentiate the Improvement Packages. All Improvement Packages would have the same estimated travel time of 3.9 minutes.

Environmental

Natural Resources

Overall, no impacts to wetlands, rivers and streams, and floodplains, and minimal impact to forested areas, would be expected for all Improvement Packages in the Fulton North segment.

Cultural & Recreational Resources

No impacts to either of the two potential above-ground cultural resources in the Fulton North segment are anticipated. At CR 375 North, Improvement Packages 2 and 3 would convert the existing intersection to a directional intersection and RIRO, respectively, and Improvement Package 4 would close the intersection, which would limit and/or remove direct access to the Fulton County Historical Society and the NRHP-listed Leedy Barn from US 31, but access would remain via existing local roads.

Similarly, no impacts to the one potential Section 4(f) resource (the Richland Restoration Park) are anticipated. At CR 450 North, Improvement Packages 2 and 3 would convert the existing intersection to an RCI and RIRO, respectively, and Improvement Package 4 would close the intersection, which would limit and/or remove direct access to the local park from US 31, but access would remain via existing local roads.

There are no known archaeological sites or cemeteries within proximity to the concept footprints in this segment.

Community & Socioeconomic Resources

Minimal new right-of-way acquisition would be anticipated for all Improvement Packages (less than 2 acres).

No relocations are anticipated for any Improvement Package within the Fulton North segment.

In addition to the potential direct impacts (relocations and property impacts) shown in Table 10, access to/from and across US 31 for sensitive communities was considered in the Fulton North segment. A census tract with sensitive communities is located approximately ½ mile east of US 31 along the Fulton North segment. As documented above, all of the Improvement Packages in Fulton North are anticipated to have beneficial effects on safety within the study area; those benefits would be for all residents and users of the transportation network, including sensitive communities. For Improvement Packages 1 and 2, overall effects on access are not anticipated. For Improvement Packages 3 and 4, access to/from and across US 31 would be reduced due to the conversion of existing intersections to RIRO intersections (Improvement Package 3) or the closure of intersections (Improvement Package 4), which could require longer distances between access and/or crossing points. However, it is not anticipated that these impacts would affect sensitive communities any differently than the population at large and no risk of greater impacts is anticipated at this time. While longer distances could increase user costs, any such impacts are anticipated to be minimal based on the average distance between US 31 access/crossing points (see Table 10). A more detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed.

Minimal impacts (less than 1 acre) to farmlands are anticipated for any Improvement Package within the Fulton North segment.

Impacts to one of the three identified parcels with potential for hazardous materials along Fulton North segment is anticipated in Improvement Package 4. No impacts to the three identified parcels with potential for hazardous materials along the Fulton North segment are anticipated for Improvement Packages 1, 2, and 3.

Costs

Planning-level costs were developed for the Improvement Packages within the Fulton North Planning Segment. A range of low and high estimates are reported for each Improvement Package in Table 10. Total package costs for all Improvement Packages are estimated between $3-8 million. Package 2 would have the

highest estimated total package cost ($6-8 million). Both Packages 3 and 4 would be the lowest total package cost ($3-5 million), and Package 1 would be in the middle at $4-7 million.

Goals

Table 10 summarizes the qualitative ratings for each study area goal for each Improvement Package in the Fulton North segment.

- **Economic Development** – Improvement Package 1 would make minimal changes at intersections while improving safety and maintaining local and regional mobility comparable to existing conditions for a Neutral rating. Improvement Package 2 would have a minor negative effect on local mobility and access (due to directional intersections eliminating crossing movements) while improving safety, and little to no effect on regional mobility, also for a Neutral rating. Improvement Packages 3 and 4 would provide some added safety benefits but local mobility and access would be impacted by increasing levels of access control. Improvement Package 4 has the highest potential safety benefit and could provide some greater regional benefit; however, the extensive loss of local mobility and access with implementation of full access control could negatively impact local businesses (including agri-business) and locally planned developments. Balancing these factors resulted in a rating of Neutral.
- **Transportation for All** – Sensitive communities are present within this Planning Segment. Safety benefits associated with each Improvement Package would be realized by all users, including sensitive communities. Likewise, impacts associated with the reduction in access and crossing points (greatest with Improvement Packages 3 and 4) would impact all populations to a similar degree. Therefore, all Improvement Packages were rated Neutral for this goal.
- **Multimodal Access and Connections** – There are no existing or planned bicycle/pedestrian facilities in this Planning Segment. The planned overpass at CR 700 North (separate from this study) would improve cross-highway access for non-motorized users, including horse-drawn vehicles, which is a known need in this segment. Therefore, all Improvement Packages were rated Neutral for this goal.
- **Corridor Character** –This Planning Segment is rural in character. The changes included in Improvement Packages 1 and 2 are not anticipated to alter that character; the fit and function of US 31 in the study corridor would remain as a rural arterial with primarily at-grade intersections for a Neutral rating. Improvement Package 3 would modify the intersections to RIROs but would not be anticipated to impact the overall character. Therefore, Improvement Packages 1, 2, and 3 all received a Neutral rating. By converting US 31 into a freeway and closing all the intersections, Improvement Package 4 would have the potential to "Diminish" that character by shifting the fit and function of US 31 in the study corridor towards an interstate-like facility.
- **Sense of Place & Visual Character** – This segment is rural in character and there are no communities adjacent to the corridor, limiting the potential to create a sense of place with any of the Improvement Packages, all of which received a Neutral rating.
- **Emerging Technologies** – None of the Improvement Packages would impact the ability to implement autonomous and connected vehicles, so each received a Neutral rating. Specific locations for EV infrastructure within this Planning Segment have not yet been identified. In general, Improvement Packages with more control of access could impact the implementation of the INDOT EV Infrastructure Plan; however, additional information and coordination is needed to fully assess.
- **Fiscal & Environmental Practicality** – The Improvement Packages within this Planning Segment would all be moderate in cost and have minimal impacts combined with high cost efficiencies, resulting in a high level of practicality.

4.1.4. RECOMMENDATIONS

Based on the above evaluation, the overall degree to which each of the different measures of effectiveness benefited (or didn't benefit) the study corridor was qualitatively summarized to assist in the rating of each of the four Improvement Packages in the Fulton North segment to be eliminated or carried forward. The results are shown in Table 11.

Table 11 – Fulton North – Level 3 Recommendations

Evaluation Criteria	Fulton North Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Safety	No Change	Minimal Improvement	Modest Improvement	Modest Improvement	Modest Improvement
Local Mobility & Access	No Change	Minimal/ No Change	Minor Reduction	Modest Reduction	Substantial Reduction
Regional Mobility	No Change	No Change	No Change	No Change	No Change
Environmental Resources	No Impact	Minimal Impact	Minimal Impact	Minimal Impact	Minimal Impact
Cost	N/A	Low Cost	Low Cost	Low Cost	Low Cost
Goals	No Change	Slightly Enhances	Slightly Enhances	Slightly Enhances	Neutral
Level 3 Result	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**

Color coding: Gray represents no change from existing conditions (i.e., comparable to No-Build); blue shading represents positive overall changes compared to the No-Build; and brown shading represents negative overall changes compared to the No-Build.

As shown in the table above, overall:

- The No-Build would make no improvements beyond those currently programmed but is required to be considered in the NEPA process and will therefore be carried forward in all Planning Segments.
- Improvement Package 1 would make some safety improvements by lengthening turn lanes at intersections where needed. No crossing conflict points would be removed and therefore no reduction in crossing crashes is predicted. Package 1 would have no negative impact to local mobility and access and minimal impacts to environmental resources while also having a low cost. For these reasons, Package 1 is carried forward.
- Improvement Package 2 would bring modest safety improvements with an RCI at CR 450 North and directional intersections at the three other intersections which potentially prevent 30 of the crossing crashes in the segment. It would do so with only minor reductions in local mobility and access, a low cost, and minimal environmental impacts. Package 2 has a good cost efficiency for crash prevention. For these reasons, Package 2 is carried forward.
- Improvement Packages 3 and 4 would marginally improve safety over Package 2 by eliminating all crossing conflict points in the corridor and potentially eliminating all 26 of the crossing crashes. However, this comes with modest and substantial reductions respectively in local mobility and access. Packages 3 and 4 would have low cost as well as good cost-effectiveness indices similar to Package 2. Package 4 has higher impact with marginal benefits compared to other options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type may be considered in the future to achieve broader transportation goals and objectives, and the tradeoffs between these potential benefits, impacts, and costs would require further analysis in the future to determine if Packages 3 and 4 are reasonable solutions to the Planning Segment's transportation needs. For these reasons, Packages 3 and 4 are carried forward. It is also important to note that since Package 4 would close all at-grade intersections within the Fulton North Planning Segment, it should only be considered if the adjacent Planning Segment of Rochester North was also a freeway facility with an interchange at or near Olson Road.

When viewing these recommendations, it is important to remember that cohesive packages based on access management strategies are presented in this Planning Segment to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Specific intersection treatments could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area. See Section 6 of this report for more details on next steps.

4.2. ROCHESTER NORTH

4.2.1. PLANNING SEGMENT DETAILS

The Rochester North Planning Segment is 4.1 miles in length and has two at-grade Primary Intersections (Olson Road and CR 100 North/6th Street) and four Secondary Intersections. This segment runs north-south along the west side of Rochester. There is an existing overpass at SR 14. There are no private driveways to US 31 in this Planning Segment. The northern crossroads in the segment serve as access to/from US 31 to the north for the north side of Rochester.

Figure 11 – Rochester North Planning Segment

Public Comments Received on Draft Level 3 Screening Report

The following bullet points summarize the range of comments received on the *Draft Level 3 Screening Report* for this planning segment:

- Recommend adding an overpass at Olson Road
- Support Package 3 for the Rochester North planning segment
- Concerned about east-west access across US 31 for farm equipment in this planning segment
- Oppose RCI intersections
- Concerned that RCI intersections would be less safe than existing intersections
- Packages 3 and 4 are too expensive
- Concerned that traffic will be funneled into Rochester and cause traffic problems
- Olson Road floods on the east side of US 31, which would create issues in Package 4 where that is one of the only access points
- SR 14 should be converted into an interchange
- Construction of an interchange at Olson Road/Monticello Road should be a priority

4.2.2. IMPROVEMENT PACKAGES

There are four Improvement Packages considered within the Rochester North Planning Segment varying from less access control to full access control. For each intersection improvement within the package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential impacts to natural resources and potential right-of-way, which are provided in Appendix A.

Rochester North – Improvement Package 1

Improvement Package 1 would have a similar level of access control as the current conditions, with access allowed at all at-grade intersections and crossing movements at all but 3rd Street and CR 50 East/Sweetgum

Road. A directional intersection configuration at the CR 50 East/Sweetgum intersection and the 3rd Street intersection would address the elevated crash activity at those two locations. Disallowing westbound left turns at the 3rd Street intersection would also address the sight distance issue identified for that movement. The Primary Intersections at Olson Road and CR 100 North/6th Street and the Secondary Intersections at Monticello Road and CR 50 North/13th Street would remain as TWSC. The mainline turn lanes would be lengthened at Olson Road, Monticello Road, 3rd Street, CR 100 North/6th Street, CR 50 North/13th Street, and CR 50 East/Sweetgum Road. Warning Systems could be considered as Complementary Concepts where slightly elevated crash activity was identified at Olson Road and CR 100 North/6th Street, 3rd Street, and CR 50 East/Sweetgum Road, instead of the directional intersection.

Rochester North – Improvement Package 2

Improvement Package 2 has more access control than Improvement Package 1. Directional intersections would be provided at all four Secondary Intersections to provide access to US 31, but only as right turns. Crossing and left-turn movements from the cross streets would be eliminated to improve safety. Access from US 31 to the cross street would be allowed for both left turns and right turns. The Primary Intersections at Olson Road and CR 100 North/6th Street would have an RCI, the same as Improvement Package 1. Alternatively, some of the directional intersections could be implemented as RCIs (by adding median U-turn locations) to provide more crossing locations within the Planning Segment and allow for vehicles to turn around and access the opposite direction of travel on US 31 with some additional cost but minimal difference in impacts.

Rochester North – Improvement Package 3

Improvement Package 3 in the Rochester North segment would provide additional access control and no median openings, similar to an expressway facility. Instead of directional intersections, the four Secondary Intersections would be RIRO, further restricting the allowable movements at these locations to only right-turn movements to and from the cross streets. Crossing movements and left turns would be eliminated at these two intersections. An interchange at Olson Road would provide a northern access point to US 31 for the north side of Rochester. An overpass at CR 100 North/6th Street would provide an additional east-west crossing point. These latter two improvements match the *Fulton County Transportation Plan*[9]. While an expressway facility was used for the purposes of this Level 3 evaluation, an expressway lite facility could also be considered, which would provide median U-turn openings at strategic locations to allow access to the opposite direction of travel on US 31 in stretches where the only access is via RIRO intersections.

Rochester North – Improvement Package 4

Improvement Package 4 would provide full access control, similar to a freeway facility. This package would not have any median openings or at-grade intersections. Like Improvement Package 3, there would be an interchange at Olson Road and an overpass at CR 100 North/6th Street. The four Secondary Intersections would be closed. Crossing US 31 would take place only at grade-separated crossings at the Olson Road interchange and overpasses at CR 100 North/6th Street and SR 14 (existing).

Rochester North – Improvement Package Summary

The Improvement Packages for the Fulton North Planning Segment are shown below in Table 12 and Figure 12.

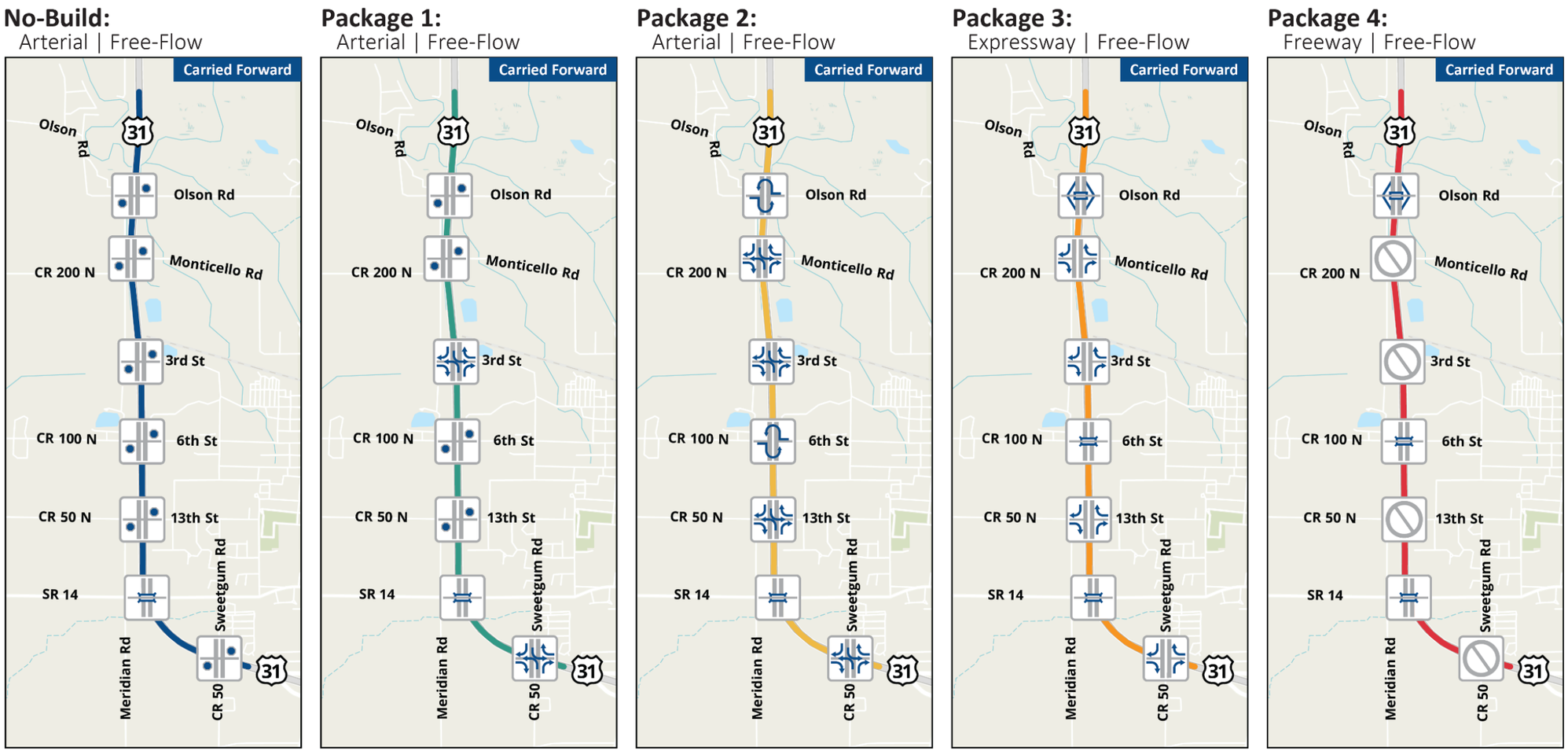
[9] The actual location called for in the transportation plan is just south between Olson Road and Monticello Road, but would require new local roadways.

Table 12 – Rochester North – Summary of Improvement Packages

Intersection or *Feature*	Rochester North Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost***		⟷		***Lower Access to/from US 31 Higher Cost***
Olson Road	TWSC	TWSC	RCI	Interchange (Quadrant)	Interchange (Diamond)
Monticello Road	TWSC	TWSC	Directional	RIRO	Closed
3rd Street	TWSC	Directional	Directional	RIRO	Closed
CR 100 North/6th Street	TWSC	TWSC	RCI	Overpass	Overpass
CR 50 North/13th Street	TWSC	TWSC	Directional	RIRO	Closed
SR 14	Overpass (existing)	Overpass (existing)	Overpass (existing)	Overpass (existing)	Overpass (existing)
CR 50 East/Sweetgum Road	TWSC	Directional	Directional	RIRO	Closed
Median Openings	*Allowed*	*Allowed (reduced quantity)*	*Allowed (reduced quantity)*	*Not Allowed*	*Not Allowed*

Note there are no private driveways in the Rochester North segment.

Figure 12 – Level 3 Improvement Packages – Rochester North



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

Study Recommendation: Carried Forward | Eliminated

- Two-Way Stop Controlled Intersection
- Reduced Conflict Intersection (Unsignalized)
- Overpass
- Intersection Closed
- Right-In/Right-Out Intersection (RIRO)
- Directional Intersection (RIRO + Left Turns from US 31)
- Interchange

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

ACCESS CONTROL METHODS:

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS**| All driveways are RIRO, no median openings
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

There are no private driveways to US 31 in this Planning Segment.

KEY MAP:

Table 13 – Rochester North – Comparison of Improvement Packages

Measures of Effectiveness			Rochester North Improvement Packages				
			No-Build	Package 1	Package 2	Package 3	Package 4
US 31 Facility Type & Traffic Condition			*Arterial Free-Flow*	*Arterial Free-Flow*	*Arterial Free-Flow*	*Expressway Free-Flow*	*Freeway Free-Flow*
Purpose and Need	Safety	Total Conflict Points (number)	252	192	96	37	26
		Crossing Conflict Points (number)	144	104	24	5	6
		Percent Reduction in Crossing Conflict Points	N/A	28%	83%	97%	96%
		Estimate of Potential Crossing-Related Crashes Prevented (20 yrs)	N/A	36	90	102	101
		Cost Effectiveness Index (CEI)	N/A	0.2	0.1	0.7	1.2
	Mobility & Access	Average Travel Time Along US 31 During AM/PM Peak Hour (minutes)	4.1/4.1	4.1/4.1	4.1/4.1	4.1/4.1	4.1/4.1
		Average Distance between US 31 Access Points (miles)	0.6	0.6	0.6	0.7	2.0
		Average Distance between US 31 Crossing Points (miles)	0.5	0.7	1.0	1.0	1.0
		East-West Mobility (Compared to No-Build)	N/A	Similar	Decreased	Greatly Decreased	Greatly Decreased
		Residential Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Commercial Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Field Access Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Farmland Access Impacts (Yes/No)	No	No	No	No	No
Environmental Resources	Natural	NWI Wetlands (acres impacted)	0	0	0	<1	7
		Rivers and Streams (linear feet impacted)	0	1,990	2,560	4,340	8,390
		Floodplains (acres impacted)	0	2	4	7	34
		Forested Areas (acres impacted)	0	2	2	7	39
	Cultural & Recreational	Potential Impacts to Above-ground Resources (Yes/No)	No	No	No	No	No
		Potential Impacts to Known Archaeological Sites (Yes/No)	No	No	No	No	No
		Potential Impacts to other Section 4(f) Resources (Yes/No)	No	No	No	No	No
		Cemeteries (number impacted)	0	0	0	0	0
	Community & Socioeconomic	Residential Relocations (number)	0	0	0	7	12
		Business Relocations (number)	0	0	0	0	0
		Community Facility or Institutional Relocations (number)	0	0	0	0	0
		Total New Right-of-Way Acquisition (acres)	0	<1	<1	15	64
		Potential Impacts to Sensitive Communities (acres)	0	0	0	0	<1
		Potential Relocations in Sensitive Communities (number)	0	0	0	0	0
		Risk of Greater Impacts to Sensitive Communities (Yes/No)	No	No	No	No	No
		Farmland (acres impacted)	0	0	0	1	8
		Potential Hazardous Materials Sites (number impacted)	0	0	0	0	1
Costs		Estimated Construction Cost (2024 Dollars)	$0	$4M to $6M	$6M to $8M	$42M to $52M	$66M to $82M
		Estimated Right-of-Way Cost (2024 Dollars)	$0	$30k to $40k	$30k to $40k	$1M to $2M	$3M
		Estimated Total Package Cost (2024 Dollars)	$0	$7M to $9M	$9M to $13M	$67M to $83M	$106M to $131M
Goals		Economic Development	N/A	Neutral	Neutral	Neutral	Neutral
		Transportation for All	N/A	Neutral	Neutral	Neutral	Neutral
		Multimodal Access & Connections	N/A	Neutral	Neutral	Enhances	Enhances
		Corridor Character	N/A	Neutral	Neutral	Diminishes	Diminishes
		Sense of Place & Visual Character	N/A	Neutral	Neutral	Enhances	Enhances
		Emerging Technologies	N/A	Neutral	Neutral	Neutral	Neutral
		Fiscal & Environmental Practicality	N/A	High	High	Moderate	Low

Note: Additional soft costs (e.g., preliminary engineering, construction engineering, etc.) are included in the estimated total package cost.

4.2.3. EVALUATION

The Improvement Packages for the Rochester North Planning Segment were comparatively evaluated for safety and mobility according to the purpose and need as well as potential environmental impacts, costs, and study goals. The evaluation of these factors has been summarized in Table 13 and the sections below.

Purpose and Need: Safety

Reduce Conflict Points

The number of crossing conflict points was determined at each intersection according to its potential intersection treatment for each particular Improvement Package. The total crossing conflict points within the segment were summed for each Improvement Package and compared to the No-Build. Overall, the number of crossing conflict points would be lowest for Improvement Packages 3 and 4, followed closely by Package 2, and then Package 1. All four packages could potentially prevent at least 36 of the crossing crashes. Mainline US 31 turn lanes will be lengthened (or added where there currently are none) where necessary and applicable in each of the Improvement Packages to improve safety. Package 1 could potentially prevent 36 of the crossing crashes in the segment mainly due to the directional intersections at 3rd Street and CR 50 East/Sweetgum. Package 2 could eliminate an additional 54 crashes by adding RCIs at Olson Road and CR 100 North/6th Street and directional intersections at Monticello Road and CR 50 North/13th Street. Packages 3 and 4 could each potentially prevent over 100 of the crossing crashes in the segment. However, the cost-effectiveness indices show that Improvement Packages 3 and 4 would be much less cost-effective for potential crash reduction than Improvement Packages 1 and 2. The comparison is shown in Table 13.

Purpose and Need: Mobility

E-W Mobility

Average Distance Between US 31 Crossing Points

Package 1 would have two fewer crossing points compared to the current corridor (7). This is due to the directional treatments at 3rd Street and CR 50 East/Sweetgum Road, which would address elevated crash indices due to crossing and left-turn movements at the intersection. The number of crossing points would decrease to three in Packages 2, 3, and 4 as directional intersections, RIROs, and closures are introduced. The three crossing locations would be RCI or interchange at Olson Road, RCI or overpass at CR 100 North/6th Street, and the existing overpass at SR 14. The average distance between crossing points for each package is shown in Table 13. A qualitative estimate of the effect of this measure on east-west mobility compared to the No-Build alternative is noted in the table as well.

Access To/From US 31

Average distance between US 31 access points is one of the ways to assess accessibility to/from the corridor. Packages 1, and 2 would have the same number of access points as the current corridor (6) and Package 3 would have just one fewer, but the directional intersections and RIROs at Secondary Intersections in Package 2 and Package 3, respectively, would not offer full access. Package 4 would provide only one access point in the Planning Segment with the interchange at Olson Road. The average distance between access points for each package is shown in Table 13.

Support Free-Flow (Regional Mobility)

None of the Improvement Packages include traffic signals or other impediments to the existing free-flow conditions and optimal travel time along US 31. Therefore, all Improvement Packages would maintain free-flow conditions and regional mobility and this measure does not differentiate the Improvement Packages. All Improvement Packages would have the same estimated travel time of 4.1 minutes.

Environmental Impacts

Natural Resources

Overall, Improvement Package 4 would have the largest potential impacts to natural resources: 7 acres of wetlands; over 8,300 linear feet of streams and rivers; and over 30 acres of impacts to both floodplains and forested areas. Other Improvement Packages would have no or more minimal impact on these natural resources: minimal impacts to wetlands (less than 1 acre); 1,990 to 4,340 linear feet of rivers and streams; and 2 to 7 acres of forested area.

The impacts associated with the diamond interchange in Improvement Package 4 would include the Tippecanoe River (approximately 700 linear feet). The Tippecanoe River is critical habitat for the round hickorynut mussel and proposed critical habitat for the salamander mussel, as well as other Federally listed species known within the study area close to the US 31 bridge, and would require coordination with the US Fish and Wildlife Service. No other Improvement Packages would directly impact the Tippecanoe River.

Cultural & Recreational Resources

No impacts to the one potential above-ground cultural resource near CR 50 North/13th Street in the Rochester North segment are anticipated. Similarly, no impacts to the one potential Section 4(f) resource (Prairie Edge Nature Park) are anticipated. At 3rd Street in Rochester, Improvement Packages 1, 2, and 3 would convert the existing intersection to a directional intersection or RIRO and Improvement Package 4 would close the intersection, which would limit and/or remove direct access to the local park from US 31, but access would remain via existing local roads. There are no known archaeological sites or cemeteries within proximity to the concept footprints in this segment.

Community & Socioeconomic Resources

The interchanges in Improvement Packages 3 and 4 would result in those packages requiring the most total new right-of-way acquisition for those two packages: 15 and 64 acres, respectively. Overall, Improvement Packages 1 and 2 would require more minimal new right-of-way acquisition (less than 1 acre each).

It is anticipated that Improvement Packages 3 and 4 would potentially require 7 and 12 residential relocations, respectively; none would be located in areas with sensitive communities. No other relocations of any type are anticipated for the other Improvement Packages within the Rochester North segment.

In addition to the potential direct impacts (relocations and property impacts) as shown in Table 13, access to/from and across US 31 for sensitive communities was considered in the Rochester North segment. Census tracts with sensitive communities are located in Rochester and cross US 31 in the Rochester North segment. Additionally, the Country Meadows Manufactured Home Community is located off of Sweetgum Road. As documented above, all of the Improvement Packages in Rochester North are anticipated to have beneficial effects on the safety within the study area; those benefits would be for all residents and users of the transportation network, including sensitive communities. For Improvement Packages 1 and 2, overall effects on access are not anticipated. For Improvement Packages 3 and 4, access to/from and across US 31 would be reduced due to the conversion of existing intersections to RIRO intersections (Improvement Package 3), the closure of intersections (Improvement Package 4), or the conversion of the intersection to an overpass (both Improvement Packages), all of which could require longer distances between access and/or crossing points. However, it is not anticipated that these impacts would affect sensitive communities any differently than the population at large and no risk or greater impacts is anticipated at this time. While longer distances could increase user costs, any such impacts are anticipated to be minimal based on the average distance between US 31 access/crossing points (see Table 13). More detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed.

Overall, no impact to farmland areas is expected for Improvement Packages 1 and 2. Minimal impact is expected for Improvement Package 3 in the Rochester North segment (1 acre); Improvement Package 4 would require the most (8 acres).

Improvement Package 4 may impact the one identified parcel with potential for hazardous materials along the Rochester North segment (the Paradise Truck Plaza on the south side of US 31 at CR 50 East).

Costs

Planning-level costs were developed for the Rochester North Improvement Packages. A range of low and high estimates are reported for each Improvement Package in Table 13. Total package costs for all Improvement Packages vary widely, between $7 million and $131 million. Packages 1 and 2 would have the lowest estimated total package cost ($7-9 million and $9-13 million, respectively) while Package 4 would have the highest estimated total package cost ($106-131 million). Total package costs for Package 3 would be $67-83 million.

Goals

Table 13 summarizes the qualitative ratings for each study area goal for each Improvement Package in the Rochester North segment.

- **Economic Development** – Improvement Package 1 would make minimal changes at intersections while improving safety and maintaining local and regional mobility comparable to existing conditions for a Neutral rating. Improvement Package 2 would have a minor negative effect on local mobility and access (due to directional intersections eliminating crossing movements) while improving safety, and little to no effect on regional mobility, also for a Neutral rating. Improvement Packages 3 and 4 would provide some added safety benefits but local mobility and access would be impacted by increasing levels of access control. Improvement Package 4 has the highest potential safety benefit and could provide some greater regional benefit; however, the extensive loss of local mobility and access with implementation of full access control could negatively impact local businesses (including agri-business) and locally planned developments. Balancing these factors resulted in a rating of Neutral.
- **Transportation for All** – Sensitive communities are present within this Planning Segment. Safety benefits associated with each Improvement Package would be realized by all users, including sensitive communities. Likewise, impacts associated with the reduction in access and crossing points (greatest with Improvement Packages 3 and 4) would impact all populations to a similar degree. Therefore, all Improvement Packages were rated Neutral for this goal.
- **Multimodal Access and Connections** – U.S. Bike Route 35A crosses US 31 at CR 100 North/6th Street in Rochester. Improvement Packages 3 and 4 would provide an overpass at this location, creating an optimal crossing for bicycles and pedestrians and therefore received an Enhanced rating. Improvement Packages 1 and 2 would both include an RCI at this location, providing the potential for more limited improvements similar to existing operations, and therefore received a Neutral rating.
- **Corridor Character** – The northern portion of this Planning Segment is rural in character. The changes included in Improvement Packages 1 and 2 are not anticipated to alter that character; the fit and function of US 31 in the study corridor would remain as a rural arterial with primarily at-grade intersections for a Neutral rating. Improvement Packages 3 and 4 would convert US 31 into an expressway or freeway, respectively, including the addition of an interchange at Olson Road and an overpass at CR 100 North/6th Street. Therefore, Improvement Packages 3 and 4 would have the potential to "Diminish" that character by shifting the fit and function of US 31 in the study corridor towards an interstate-like facility.
- **Sense of Place & Visual Character** – Improvement Packages 3 and 4 include the construction of a new interchange at Olson Road. Since this interchange would provide an opportunity to create a northern gateway to the City of Rochester, these two packages received an Enhance rating. Improvement

Packages 1 and 2 would provide more limited opportunities to enhance the sense of place in this segment comparable to existing conditions and therefore received a Neutral rating.

- **Emerging Technologies** – None of the Improvement Packages would impact the ability to implement autonomous and connected vehicles, so each received a Neutral rating. Specific locations for EV infrastructure within this Planning Segment have not yet been identified. In general, Improvement Packages with more control of access could impact the implementation of the INDOT EV Infrastructure Plan; however, additional information and coordination is needed to fully assess.
- **Fiscal & Environmental Practicality** – Improvement Packages 1 and 2 have the lowest estimated costs combined with higher cost efficiencies and minimal impacts, resulting in a high level of practicality. Improvement Packages 3 and 4 would both have higher costs. However, Improvement Package 3 would have a more moderate cost efficiency with lower overall impacts, resulting in a moderate level of practicality. Improvement Package 4 would have the highest costs, lower cost efficiency, and have higher environmental impacts, including relocations and stream impacts, resulting in a lower rating.

4.2.4. RECOMMENDATIONS

Based on the above evaluation, the overall degree to which each of the different measures of effectiveness benefited (or didn't benefit) the study corridor was qualitatively summarized to assist in the rating of each of the four Improvement Packages in the Rochester North segment to be eliminated or carried forward. The results are shown in Table 14.

Table 14 – Rochester North – Level 3 Recommendations

Evaluation Criteria	Rochester North Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Safety	No Change	Modest Improvement	Substantial Improvement	Substantial Improvement	Substantial Improvement
Local Mobility & Access	No Change	Minor Reduction	Minor Reduction	Modest Reduction	Substantial Reduction
Regional Mobility	No Change	No Change	No Change	No Change	No Change
Environmental Resources	No Impact	Minimal Impact	Minimal Impact	Minimal Impact	Modest Impact
Cost	N/A	Low Cost	Low Cost	Moderate Cost	High Cost
Goals	No Change	Slightly Enhances	Slightly Enhances	Slightly Enhances	Neutral
Level 3 Result	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**

Color coding: Gray represents no change from existing conditions (i.e., comparable to No-Build); blue shading represents positive overall changes compared to the No-Build; and brown shading represents negative overall changes compared to the No-Build.

As shown in the above table, overall:

- The No-Build alternative would make no improvements beyond those currently programmed but is required to be considered in the NEPA process and will therefore be carried forward in all Planning Segments.
- Improvement Package 1 would make safety improvements by potentially reducing 36 of the crossing crashes in the segment, mainly due to directional intersections at 3rd Street and CR 50 East/Sweetgum. At the same time, it would have a minor impact to local mobility and access and minimal impacts to environmental resources while also having a low cost. Based on the cost and the number of crashes potentially prevented, Package 1 offers good cost efficiency from a safety standpoint. For these reasons, Package 1 is carried forward.
- Improvement Package 2 would bring substantial safety improvements by potentially eliminating 90 crossing crashes by adding RCIs at Olson Road and CR 100 North/6th Street and directional intersections at Monticello Road and CR 50 North/13th Street. It would do so with only minor reductions in local mobility and access, a low cost, and minimal environmental impacts. Package 2 has the best cost efficiency for crash prevention of the four packages. For these reasons, Package 2 is carried forward.
- Improvement Packages 3 and 4 would bring substantial safety improvement by reducing another 12 and 11 more crossing crashes respectively compared to Package 2. However, this comes at much higher costs and modest and substantial reductions in local mobility and access, respectively. Packages 3 and 4 have cost-effectiveness indices seven to twelve times worse than Package 2. Packages 3 and 4 have higher costs and impacts with marginal benefits compared to other lower-cost options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between these potential benefits, impacts, and costs would require further analysis in the future to determine if these packages are a reasonable solution to the Planning Segment's transportation needs. For these reasons, Packages 3 and 4 are carried forward.

When viewing these recommendations, it is important to remember that cohesive packages based on access management strategies are presented in this Planning Segment to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Specific intersection treatments could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area. See Section 6 of this report for more details on next steps.

4.3. ROCHESTER SOUTH

4.3.1. PLANNING SEGMENT DETAILS

The Rochester South Planning Segment is 4.9 miles in length and has three Primary Intersections (SR 25, Old US 31/Southway, CR 150 South/Wabash Avenue) and four Secondary Intersections. The northern part of the segment encompasses the south side of Rochester while the southern part is rural in character. There is an existing diamond interchange at SR 25. There is one private driveway on the west side of US 31 across from the Wabash Road (South) intersection; however, the property is already owned by the State of Indiana and the driveway will be closed in all Improvement Packages.

Figure 13 – Rochester South Planning Segment

Public Comments Received on Draft Level 3 Screening Report

The following bullet points summarize the range of comments received on the *Draft Level 3 Screening Report* for this planning segment:

- Oppose limiting access to US 31 at CR 150 South/Wabash Avenue
- Support improvements at Old US 31/Southway; other intersections in this planning segment should remain unchanged because the small benefits do not justify the costs
- Construction of an overpass at Old US 31/Southway should be a priority

4.3.2. IMPROVEMENT PACKAGES

There are four Improvement Packages considered within the Rochester South Planning Segment varying from less access control to full access control. For each intersection improvement within the package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential impacts to natural resources and potential right-of-way, which are provided in Appendix A.

Rochester South – Improvement Package 1

Improvement Package 1 would have the same level of access control as the current conditions, with access and crossing movements allowed at all intersections. The Primary Intersections at Old US 31/Southway and CR 150 South/Wabash Avenue would have RCIs to provide safety improvements at those intersections. A RIRO configuration would be provided at the Wabash Road (North) intersection. The Secondary Intersections at Wabash Road (South), CR 300 South, and CR 350 South would remain as TWSC. Complementary Concept improvements at the ramp terminal intersections at the SR 25 interchange are also recommended as part of every Improvement Package. The improvements to address recurring rear-end crash patterns could either be improvements to the right-turn slip lanes on the ramps or converting the stop-controlled intersections to

roundabouts. There would be lengthening (or addition in the cases where one is not currently present) of mainline turn lanes at Old US 31/Southway, CR 150 South/Wabash Avenue, Wabash Road (N), Wabash Road (S), CR 300 South, and CR 350 South. Fixing the suboptimal skew and the sight distance issue for northbound left turns should also be considered as Complementary Concepts while constructing the RCI at the Old US 31/Southway intersection.

Rochester South – Improvement Package 2

Improvement Package 2 would have more access control than Improvement Package 1. Directional intersections would be provided at the Secondary Intersections to provide access to US 31, but only as right turns. Crossing and left-turn movements from the cross streets would be eliminated to improve safety. Access from US 31 to the cross street would be allowed for both left turns and right turns. There would be an overpass at Old US 31/Southway and Wabash Avenue would remain TWSC. The *Fulton County Transportation Plan* recommends an overpass at Old US 31/Southway. Traffic from Rochester that currently uses Southway to access southbound US 31 via a left-turn movement that includes crossing northbound US 31 would use the potential overpass to safely cross US 31, make a left turn onto eastbound CR 150 South and then make a right turn onto US 31 at Wabash Avenue. The opposite return trip to Rochester from northbound US 31 could be made via Wabash Avenue. Wabash Road (North) would be closed, and nearby access would be provided via Wabash Avenue. Alternatively, some or all of the directional intersections could be implemented as RCIs (by adding median U-turn locations) to provide more crossing locations within the Planning Segment and allow for vehicles to turn around and access the opposite direction of travel on US 31 with some additional cost but minimal difference in impacts.

Rochester South – Improvement Package 3

Improvement Package 3 in the Rochester South segment would provide additional access control and no median openings, similar to an expressway facility. Instead of directional intersections, the two Secondary Intersections at CR 300 South and CR 350 South would be RIRO, further restricting the allowable movements at these locations to only right-turn movements to and from the cross streets. Crossing movements and left turns would be eliminated at these two intersections. There would be an overpass at Old US 31/Southway and also at Wabash Avenue. RIRO configurations at the two Wabash Road T-intersections would facilitate access to US 31 in the area of Wabash Avenue. By providing this access to US 31, both Southway and Wabash Avenue could continue to serve as access routes out of south and east Rochester without having to make at-grade crossing or left-turn movements at US 31. Return trips to Rochester on US 31 from the south would be accomplished via the SR 25 interchange. Utilizing an RCI at the two Wabash Road T-intersections would allow access back to Rochester via Southway and Wabash Avenue. While an expressway facility was used for the purposes of this Level 3 evaluation, an expressway lite facility could also be considered, which would provide median U-turn openings at strategic locations to allow access to the opposite direction of travel on US 31 in stretches where the only access is via RIRO intersections.

Rochester South – Improvement Package 4

Improvement Package 4 would provide full access control, similar to a freeway facility. This package would not have any median openings. An overpass is provided at Old US 31/Southway to allow for safer crossing of US 31 and access to the county roadway network south of Rochester. The Secondary Intersections at Wabash Road (N), Wabash Road (S), CR 300 South, and CR 350 South would be closed. An interchange was considered for Wabash Avenue during the Level 2 screening, but the existing SR 25 interchange is only 1.7 miles away and could be used for access to/from US 31. In order to consolidate access points for a limited access facility, Wabash Road would be closed. Crossing US 31 would take place only at grade-separated crossings at the SR 25 interchange and the Old US 31 Southway overpass.

Rochester South – Summary of Improvement Packages

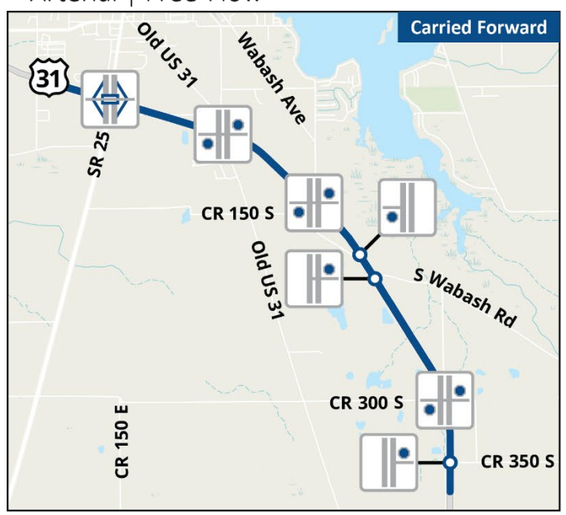
The Improvement Packages for the Rochester South Planning Segment are shown below in Table 15 and also in Figure 14.

Table 15 – Rochester South – Summary of Improvement Packages

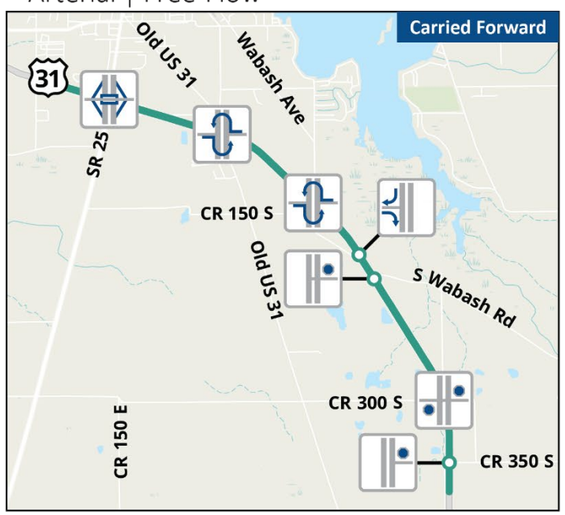
Intersection or *Feature*	**Rochester South Improvement Packages**				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost*** ⟷				***Lower Access to/from US 31 Higher Cost***
SR 25	Interchange (existing)	Interchange (existing)	Interchange (existing)	Interchange (existing)	Interchange (existing)
Old US 31/Southway	TWSC	RCI	Overpass	Overpass	Overpass
CR 150 South/Wabash Avenue	TWSC	RCI	TWSC	Overpass	Closed
Wabash Road (N)	TWSC	RIRO	Closed	RIRO	Closed
Wabash Road (S)	TWSC	TWSC	Directional	RIRO	Closed
CR 300 South	TWSC	TWSC	Directional	RIRO	Closed
CR 350 South	TWSC	TWSC	Directional	RIRO	Closed
Median Openings	*Allowed*	*Allowed (reduced quantity)*	*Allowed (reduced quantity)*	*Not Allowed*	*Not Allowed*

Figure 14 – Level 3 Improvement Packages – Rochester South

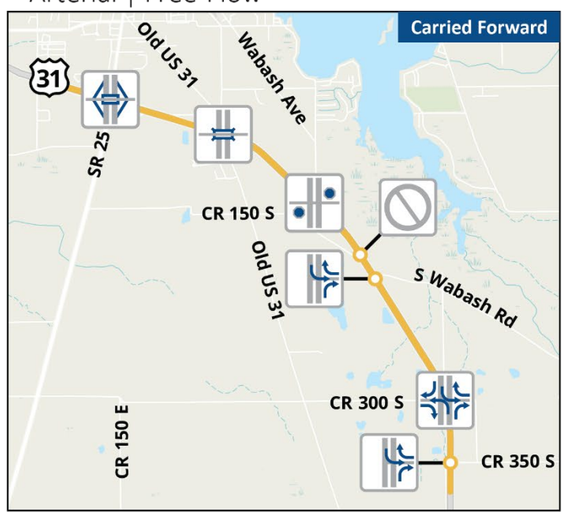
No-Build:
Arterial | Free-Flow



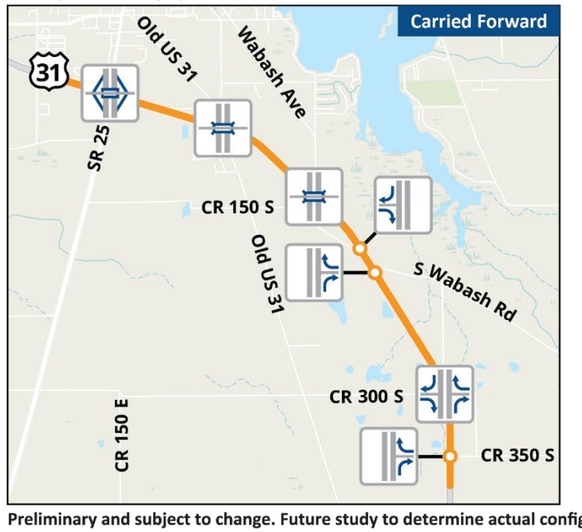
Package 1:
Arterial | Free-Flow



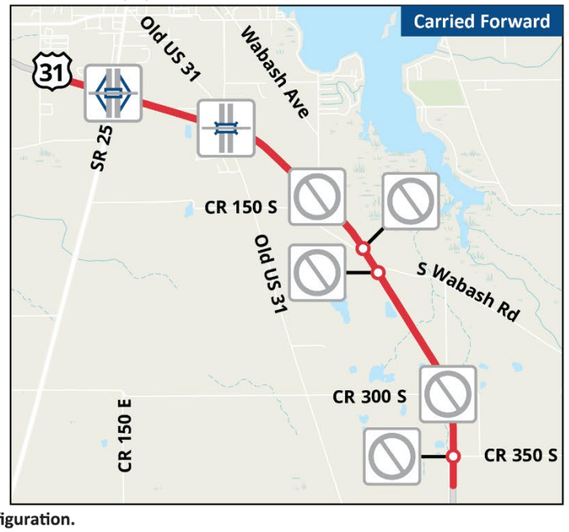
Package 2:
Arterial | Free-Flow



Package 3:
Expressway | Free-Flow



Package 4:
Freeway | Free-Flow



Preliminary and subject to change. Future study to determine actual configuration.

KEY MAP:

INTERSECTION TYPES:

- Two-Way Stop Controlled Intersection
- Right-In/Right-Out Intersection (RIRO)
- Directional Intersection (RIRO + Left Turns from US 31)
- Reduced Conflict Intersection (Unsignalized)
- Overpass
- Interchange
- Intersection Closed

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

ACCESS CONTROL METHODS:

Study Recommendation: Carried Forward | Eliminated

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS**| All driveways are RIRO, no median openings
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

There are no private driveways to US 31 in this Planning Segment.

Table 16 – Rochester South – Comparison of Improvement Packages

Measures of Effectiveness			Rochester South Improvement Packages				
			No-Build	Package 1	Package 2	Package 3	Package 4
US 31 Facility Type & Traffic Condition			*Arterial Free-Flow*	*Arterial Free-Flow*	*Arterial Free-Flow*	*Expressway Free-Flow*	*Freeway Free-Flow*
Purpose and Need	Safety	Total Conflict Points (number)	181	136	88	32	22
		Crossing Conflict Points (number)	93	48	24	5	6
		Percent Reduction in Crossing Conflict Points	N/A	48%	59%	94%	94%
		Estimate of Potential Crossing-Related Crashes Prevented (20 yrs)	N/A	57	70	72	72
		Cost Effectiveness Index (CEI)	N/A	0.4	0.6	1.3	0.6
	Mobility & Access	Average Travel Time Along US 31 During AM/PM Peak Hour (minutes)	4.9/4.9	4.9/4.9	4.9/4.9	4.9/4.9	4.9/4.9
		Average Distance between US 31 Access Points (miles)	0.6	0.6	0.8	0.8	2.5
		Average Distance between US 31 Crossing Points (miles)	1.0	1.0	1.2	1.2	1.6
		East-West Mobility (Compared to No-Build)	N/A	Similar	Decreased	Decreased	Greatly Decreased
		Residential Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Commercial Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Field Access Driveways, RIRO/Full (number)	1/0	0/0	0/0	0/0	0/0
		Farmland Access Impacts (Yes/No)	No	Yes	Yes	Yes	Yes
Environmental Resources	Natural	NWI Wetlands (acres impacted)	0	0	0	0	0
		Rivers and Streams (linear feet impacted)	0	530	540	540	530
		Floodplains (acres impacted)	0	0	0	0	0
		Forested Areas (acres impacted)	0	8	6	8	6
	Cultural & Recreational	Potential Impacts to Above-ground Resources (Yes/No)	No	No	No	No	No
		Potential Impacts to Known Archaeological Sites (Yes/No)	No	No	No	No	No
		Potential Impacts to other Section 4(f) Resources (Yes/No)	No	No	No	No	No
		Cemeteries (number impacted)	0	0	0	0	0
	Community & Socioeconomic	Residential Relocations (number)	0	0	1	1	1
		Business Relocations (number)	0	0	0	0	0
		Community Facility or Institutional Relocations (number)	0	0	0	0	0
		Total New Right-of-Way Acquisition (acres)	0	1	3	5	7
		Potential Impacts to Sensitive Communities (acres)	0	<1	<1	<1	<1
		Potential Relocations in Sensitive Communities (number)	0	0	0	0	0
		Risk of Greater Impacts to Sensitive Communities (yes/no)	No	No	No	No	No
		Farmland (acres impacted)	0	<1	1	2	2
		Potential Hazardous Materials Sites (number impacted)	0	0	0	0	0
Costs		Estimated Construction Cost (2024 Dollars)	$0	$11M to $15M	$24M to 30M	$53M to $66M	$23M to $29M
		Estimated Right-of-Way Cost (2024 Dollars)	$0	$150k to $190k	$240k to $290k	$280k to $350k	$400k to $500k
		Estimated Total Package Cost (2024 Dollars)	$0	$18M to $23M	$38M to $48M	$84M to $104M	$37M to $46M
Goals		Economic Development	N/A	Neutral	Neutral	Neutral	Neutral
		Transportation for All	N/A	Neutral	Neutral	Neutral	Neutral
		Multimodal Access & Connections	N/A	Neutral	Neutral	Neutral	Enhances
		Corridor Character	N/A	Neutral	Neutral	Diminishes	Diminishes
		Sense of Place & Visual Character	N/A	Neutral	Enhances	Enhances	Enhances
		Emerging Technologies	N/A	Neutral	Neutral	Neutral	Neutral
		Fiscal & Environmental Practicality	N/A	High	Moderate	Low	Moderate

Note: Additional soft costs (e.g., preliminary engineering, construction engineering, etc.) are included in the estimated total package cost.

4.3.3. EVALUATION

The Improvement Packages for the Rochester South Planning Segment were comparatively evaluated for safety and mobility according to the purpose and need as well as potential environmental impacts, costs, and study goals. The evaluation of these factors has been summarized in Table 16 and the sections below.

Purpose and Need: Safety

Reduce Conflict Points

The number of crossing conflict points was determined at each intersection according to its potential intersection treatment for each particular Improvement Package. The total crossing conflict points within the segment were summed for each Improvement Package and compared to the No-Build. Overall, the number of crossing conflict points would be lowest for Improvement Packages 3 and 4, followed by Package 2, and then Package 1. Each of the four packages could potentially prevent at least 57 crossing crashes. Mainline US 31 turn lanes will be lengthened (or added where there currently are none) where necessary and applicable in each of the Improvement Packages to improve safety. Package 1 could potentially prevent 57 of the crossing crashes in the segment by adding an RCI at Old US 31/Southway, the corridor's highest crash intersection, as well as an RCI at CR 150 South/Wabash Avenue and a RIRO intersection at the Wabash Road (N) T-intersection. Package 2 could prevent an additional 13 crashes by making Old US 31/Southway an overpass, closing the Wabash Road (N) T-intersection, and making directional intersections at the three intersections to the south. Packages 3 and 4 could each potentially prevent another two crossing crashes in the segment. However, the cost-effectiveness indices show that this small gain in safety under Improvement Package 3 would be less cost-effective for potential crash reduction than Improvement Packages 1, 2, and 4. The comparison is shown in Table 16.

Purpose and Need: Mobility

E-W Mobility

Average Distance Between US 31 Crossing Points

Package 1 would have the same number of crossing points as the current corridor (4), but the number of crossing points would decrease to three in Packages 2 and 3, and 2 crossing points in Package 4 as directional intersections, RIROs, and closures are introduced. The existing interchange at SR 25 is a crossing location that would be present in all packages including the No-Build. Additionally, an overpass at Old US 31/Southway would be present in Packages 2, 3, and 4. In Packages 1, 2, and 3, an RCI, TWSC, or overpass would provide a crossing point at CR 150 South/Wabash Avenue. However, in Package 4, this crossing point would be closed due to its proximity to the proposed overpass at Old US 31/Southway. East-west mobility could be improved in Package 2 by installing U-turn median openings at the directional intersection at CR 300 South to form an RCI that would provide an additional crossing location. The average distance between crossing points for each package is shown in Table 16. A qualitative estimate of the effect of this measure on east-west mobility compared to the No-Build alternative is noted in the table as well.

Access To/From US 31

Average distance between US 31 access points is one of the ways to assess accessibility to/from the corridor. Package 1 would have the same number of access points as the current corridor (7) while Packages 2 and 3 would have two fewer, but the directional intersections and RIROs for Secondary Intersections in Package 2 and Package 3 respectively would not offer full access. The combination of the overpass at Wabash Avenue and the RIRO at the nearby offset intersections at Wabash Road in Package 3 would provide access. Package 4 would provide only one access point in the Planning Segment with the existing interchange at Old US 31/Southway. The average distance between access points for each package is shown in Table 16.

Support Free-Flow (Regional Mobility)

None of the Improvement Packages include traffic signals or other impediments to the existing free-flow conditions and optimal travel time along US 31. Therefore, all Improvement Packages would maintain free-flow conditions and regional mobility and this measure does not differentiate the Improvement Packages. All Improvement Packages would have the same estimated travel time of 4.9 minutes.

Environmental

Natural Resources

Overall, it is anticipated that there are no impacts to wetlands or floodplains for any Improvement Packages in the Rochester South segment. Potential impacts to rivers and streams are anticipated to range from approximately 530 to 540 linear feet. Anticipated impacts to forested areas for all Improvement Packages would be relatively similar (6 to 8 acres). There is no work near, and no impacts to, the Manitou Wetlands Complex, but drainage enters the system from the highway and any work could require coordination with the US Fish and Wildlife Service.

Cultural & Recreational Resources

No impacts to the two potential Section 4(f) resources (the Nickel Plate Trail and the Manitou Wetlands Complex) are anticipated in the Rochester South segment. While the Nickel Plate Trail crosses South Wabash Road (South) within 100 feet of US 31, the potential improvements at this location (TWSC, directional intersection, RIRO, and closure for Improvement Packages 1 through 4, respectively) all would require minor amounts of new right-of-way and it is assumed could avoid directly impacting the trail crossing. There are additional trail crossings along several cross streets east of US 31. The closest access point to US 31 for the Manitou Wetlands Complex is from Westside Road, near Wabash Avenue. While all Improvement Packages would limit or remove direct access from US 31 to the local trail and wetland complex to some degree, access would remain via existing local roads.

There are no known above-ground resources, archaeological sites, or cemeteries within proximity to the concept footprints in this segment.

Community & Socioeconomic Resources

Improvement Package 1 would require the least amount of new right-of-way acquisition (1 acre). It is anticipated that Improvement Packages 2, 3 and 4 would require modest amounts of new right-of-way acquisition: 3, 5, and 7 acres, respectively.

It is anticipated that Improvement Packages 2, 3, and 4 would each require 1 residential relocation. Improvement Package 1 would not have any residential relocations. No business or community/institutional facility relocations are anticipated for any Improvement Packages within the Rochester South segment. No relocations would be located in areas with sensitive communities.

Northwest of SR 25, there may be minimal right-of-way acquired in a census tract for sensitive communities (less than 1 acre). There are no identified census tracts with sensitive communities south of Rochester in this segment. In addition to the potential direct impacts (relocations and property impacts) as shown in Table 16, of which there are none, it is not anticipated that any potential access impacts would affect sensitive communities any differently than the population at large and no risk of greater impacts is anticipated at this time. While longer distances could increase user costs, any such impacts are anticipated to be minimal based on the average distance between US 31 access/crossing points (see Table 16). More detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed.

Impacts to farmland are anticipated to be minimal, with up to 2 acres potentially impacted by the Improvement Packages.

No impacts to the two identified parcels with potential for hazardous materials along the Rochester South segment are anticipated.

Costs

Planning-level costs were developed for the Improvement Packages within the Rochester South Planning Segment. A range of low and high estimates are reported for each Improvement Package in Table 16.

Total package costs for all Improvement Packages vary widely, between $18 million and $104 million. Package 1 would have the lowest estimated total package cost ($18-23 million) while Package 3 would have the highest estimated total package cost ($84-104 million). Packages 2 and 4 would have a total package cost on the lower end of that range, each between $37-48 million.

Goals

Table 16 summarizes the qualitative ratings for each study area goal for each Improvement Package in the Rochester South segment.

- **Economic Development** – Improvement Package 1 would make minimal changes at intersections while improving safety and maintaining local and regional mobility comparable to existing conditions for a Neutral rating. Improvement Package 2 would have a minor negative effect on local mobility and access (due to directional intersections eliminating crossing movements, an overpass limiting access, and one intersection closure) while improving safety, and little to no effect on regional mobility, also for an overall Neutral rating. Improvement Packages 3 and 4 would provide some added safety benefits but local mobility and access would be impacted by increasing levels of access control. Improvement Package 4 has the highest potential safety benefit and could provide some greater regional benefit; however, the extensive loss of local mobility and access with implementation of full access control could negatively impact local businesses (including agri-business) and locally planned developments. Balancing these factors resulted in the rating of Neutral.
- **Transportation for All** – Sensitive communities are present within this Planning Segment near the SR 25 interchange. Safety improvements at the interchange would benefit these populations, as well as the entire population. Likewise, impacts associated with the reduction in access and crossing points (greatest with Improvement Packages 3 and 4) would impact all populations to a similar degree. Therefore, all Improvement Packages were rated Neutral for this goal.
- **Multimodal Access and Connections** –The Nickel Plate Trail parallels US 31 to the east between CR 300 South and CR 150 South/Wabash Avenue. None of the Improvement Packages would directly impact the trail. Improvement Package 4, which would close each of the intersections in this area, could impact the ability of users to reach the trail. In Improvement Package 4, the closure of Wabash Road (S) just to the east of the trail would provide a safety benefit to trail users by removing an at-grade street crossing, and would decrease vehicle traffic of the other at-grade trail crossings, thus resulting in an Enhances rating. All other Improvement Packages received a rating of Neutral since safety and access would be similar to existing conditions.
- **Corridor Character** – The southern portion of this Planning Segment is rural in character. The changes included in Improvement Packages 1 and 2 are not anticipated to alter that character; the fit and function of US 31 in the study corridor would remain as a rural arterial with primarily at-grade intersections for a Neutral rating. Improvement Packages 3 and 4 would convert US 31 into an expressway or freeway, respectively, including the addition of one to two new overpasses, and therefore would potentially "Diminish" that character by shifting the fit and function of US 31 in the study corridor towards an interstate-like facility.
- **Sense of Place & Visual Character** – This segment already includes the interchange at SR 25, which serves as a primary gateway to the City of Rochester. The improvements to that interchange included

in each of the Improvement Packages would provide modest opportunities to improve the visual character of the area. Improvement Packages 2, 3, and 4 would provide an overpass at Old US 31/Southway, which could serve as a visual gateway (without access) to Rochester. Therefore, Improvement Packages 2, 3, and 4 received an overall Enhances rating and Improvement Package 1 a Neutral rating.

- **Emerging Technologies** – None of the Improvement Packages would impact the ability to implement autonomous and connected vehicles, so each received a Neutral rating. Specific locations for EV infrastructure within this Planning Segment have not yet been identified. In general, Improvement Packages with more control of access could impact the implementation of the INDOT EV Infrastructure Plan; however, additional information and coordination is needed to fully assess.
- **Fiscal & Environmental Practicality** – Improvement Package 1 would have the lowest estimated package costs and highest cost effectiveness index, with minimal overall impacts, resulting in a high level of practicality. Improvement Packages 2 and 4 would have more moderate costs and cost effectiveness indices, with comparable levels of overall impacts, resulting in a more moderate rating. Improvement Package 3 would have the highest costs, lowest cost effectiveness index, and comparable overall impacts, resulting in a lower rating.

4.3.4. RECOMMENDATIONS

Based on the above evaluation, the overall degree to which each of the different measures of effectiveness benefited (or didn't benefit) the study corridor was qualitatively summarized to assist in the rating of each of the four Improvement Packages in the Rochester South segment to be eliminated or carried forward. The results are shown in Table 17.

Table 17 – Rochester South – Level 3 Recommendations

Evaluation Criteria	Rochester South Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Safety	No Change	Substantial Improvement	Substantial Improvement	Substantial Improvement	Substantial Improvement
Local Mobility & Access	No Change	Minimal/No Change	Minor Reduction	Minor Reduction	Substantial Reduction
Regional Mobility	No Change	No Change	No Change	No Change	No Change
Impacts	No Impact	Minimal Impact	Minimal Impact	Minimal Impact	Minimal Impact
Cost	N/A	Low Cost	Moderate Cost	High Cost	Moderate Cost
Goals	No Change	Slightly Enhances	Slightly Enhances	Slightly Diminishes	Slightly Enhances
Level 3 Result	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**

Color coding: Gray represents no change from existing conditions (i.e., comparable to No-Build); blue shading represents positive overall changes compared to the No-Build; and brown shading represents negative overall changes compared to the No-Build.

As shown in the above table, overall:

- The No-Build would make no improvements beyond those currently programmed but is required to be considered in the NEPA process and will therefore be carried forward in all Planning Segments.
- Improvement Package 1 would make substantial safety improvements by potentially preventing 57 of the crossing crashes in the segment, by adding an RCI at Old US 31/Southway, the corridor's highest crash intersection, as well as an RCI at CR 150 South/Wabash Avenue and a RIRO intersection at the Wabash Road (N) T-intersection. At the same time, it would cause minimal change to local mobility and access and minimal impacts to environmental resources, while also having a low cost. Based on the cost and the number of crashes potentially prevented, Package 1 offers good cost efficiency from a safety standpoint. For these reasons, Package 1 is carried forward.

- Improvement Package 2 would bring substantial safety improvements by adding an overpass at Old US 31/Southway, a closure at the Wabash Road (N) T-intersection, and directional intersections at the three intersections to the south. Package 2 potentially prevents nearly as many crossing crashes as Packages 3 and 4. However, it would do so with only minor reductions in local mobility and access, a moderate cost, and minimal environmental impacts. Package 2 also has a moderate cost efficiency for crash prevention. For these reasons, Package 2 is carried forward.
- Improvement Packages 3 and 4 would provide substantial safety improvements with a similar number of potential crossing crashes reduced as Package 2. However, Package 3 comes at a much higher cost and minor reductions in local mobility and access. The cost efficiency for Package 3 is poor. Package 4 has a cost similar to Package 2, however it would come with substantial reduction in local mobility and access. Packages 3 and 4 have higher costs (particularly Package 3) and higher impacts (particularly Package 4) with marginal benefits compared to other lower-cost options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between these potential benefits, impacts, and costs would require further analysis in the future to determine if these packages are a reasonable solution to the Planning Segment's transportation needs. For these reasons, Packages 3 and 4 are carried forward.

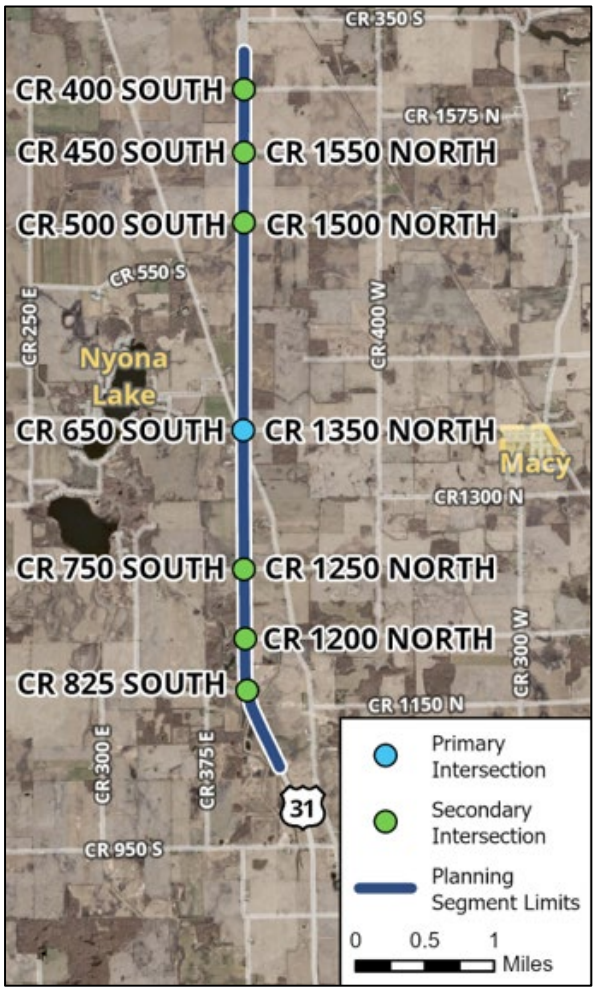
When viewing these recommendations, it is important to remember that cohesive packages based on access management strategies are presented in this Planning Segment to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Specific intersection treatments could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area. See Section 6 of this report for more details on next steps.

4.4. MACY

4.4.1. PLANNING SEGMENT DETAILS

The Macy Planning Segment is 5.2 miles in length and has one Primary Intersection (CR 650 South/CR 1350 North) and six Secondary Intersections. The segment is rural in character but has the town of Macy two miles to the east and the Nyona Lake area one mile to the west. There are no private driveways accessing US 31 in the Macy segment.

Figure 15 – Macy Planning Segment



Public Comments Received on Draft Level 3 Screening Report

The following bullet points summarize the range of comments received on the *Draft Level 3 Screening Report* for this planning segment:

- Either remove access to US 31 or have an overpass over US 31 at CR 1500 North
- Oppose limiting access at intersections
- Support Package 1 for this planning segment
- An overpass should be provided at CR 1200 North to provide access for school buses and farm equipment
- Oppose the overpass at CR 500 South/CR 1500 North due to the increase in traffic that will occur
- Construction of an interchange CR 650 South/CR 1350 North should be a priority

4.4.2. IMPROVEMENT PACKAGES

There are four Improvement Packages within the Macy Planning Segment varying from less access control to full access control. For each intersection improvement within the package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential impacts to natural resources and potential right-of-way, which are provided in Appendix A.

Macy – Improvement Package 1

Improvement Package 1 would have the same level of access control as the current conditions, with access and crossing movements allowed at all intersections. There would be turn lane lengthening (or addition in the cases where one is not currently present) at CR 400 South, CR 450 South/CR 1550 North, CR 500 South/CR 1500 North, CR 650 South/CR 1350 North, CR 750 South/CR 1250 North, CR 1200 North, and CR 825 South. Warning Systems could be considered as a Complementary Concept at the CR 650 South/CR 1350 North and CR 500 South/CR 1500 North intersections where slightly elevated crash activity was identified.

Macy – Improvement Package 2

Improvement Package 2 would have more access control than Improvement Package 1. Directional intersections would be provided at the Secondary Intersections to provide access to US 31, but only as right turns. Crossing and left-turn movements from the cross streets would be eliminated to improve safety. Access from US 31 to the cross street would be allowed for both left turns and right turns. An RCI at CR 650 South/CR 1350 North would provide safety improvements and allow for the crossing of US 31 and to provide a U-turn location for right-turning vehicles from cross streets with directional treatments to be able to turn around and access the opposite direction of travel on US 31. An RCI at CR 500 South/CR 1500 North would provide an additional point of full access and crossing within the segment. CR 400 South was also considered for the second access/crossing point, but CR 500 South/CR 1500 North was chosen because it was identified by this study as an important crossing location, and it is identified as a potential location for an interchange in the *Miami County Transportation Plan*. Alternatively, some or all of the directional intersections could be implemented as RCIs (by adding median U-turn locations) to provide more crossing locations within the Planning Segment and allow for vehicles to turn around and access the opposite direction of travel on US 31 with some additional cost but minimal difference in impacts.

Macy – Improvement Package 3

Improvement Package 3 in the Macy segment would provide additional access control and no median openings, similar to an expressway facility. The Secondary Intersections with directional treatments in Package 2 would become RIRO treatments in Package 3 by closing the medians and disallowing left turns from the mainline. Because there would not be any median openings in this package, the RCI at CR 650 South/CR 1350 North would be an interchange in order to maintain full access and grade-separated crossing. An overpass at CR 500 South/CR 1500 North would provide a second at-grade crossing option within the Planning Segment. While an expressway facility was used for the purposes of this Level 3 evaluation, an expressway lite facility could also be considered, which would provide median U-turn openings at strategic locations to allow access to the opposite direction of travel on US 31 in stretches where the only access is via RIRO intersections.

Macy – Improvement Package 4

Improvement Package 4 would provide full access control, similar to a freeway facility. This package would not have any median openings and the only access to/from US 31 would be via grade-separated interchanges. Crossing US 31 would take place only at grade separations at an overpass or interchange. CR 650 South/CR 1350 North is the only Primary Intersection within the Macy Planning Segment and would be an interchange, as carried forward from the Level 2 Screening. An additional overpass at CR 500 South/CR 1500 North would provide a second grade-separated crossing location within the Planning Segment. The remaining five intersections would be closed under an Improvement Package with full access control.

Macy – Summary of Improvement Packages

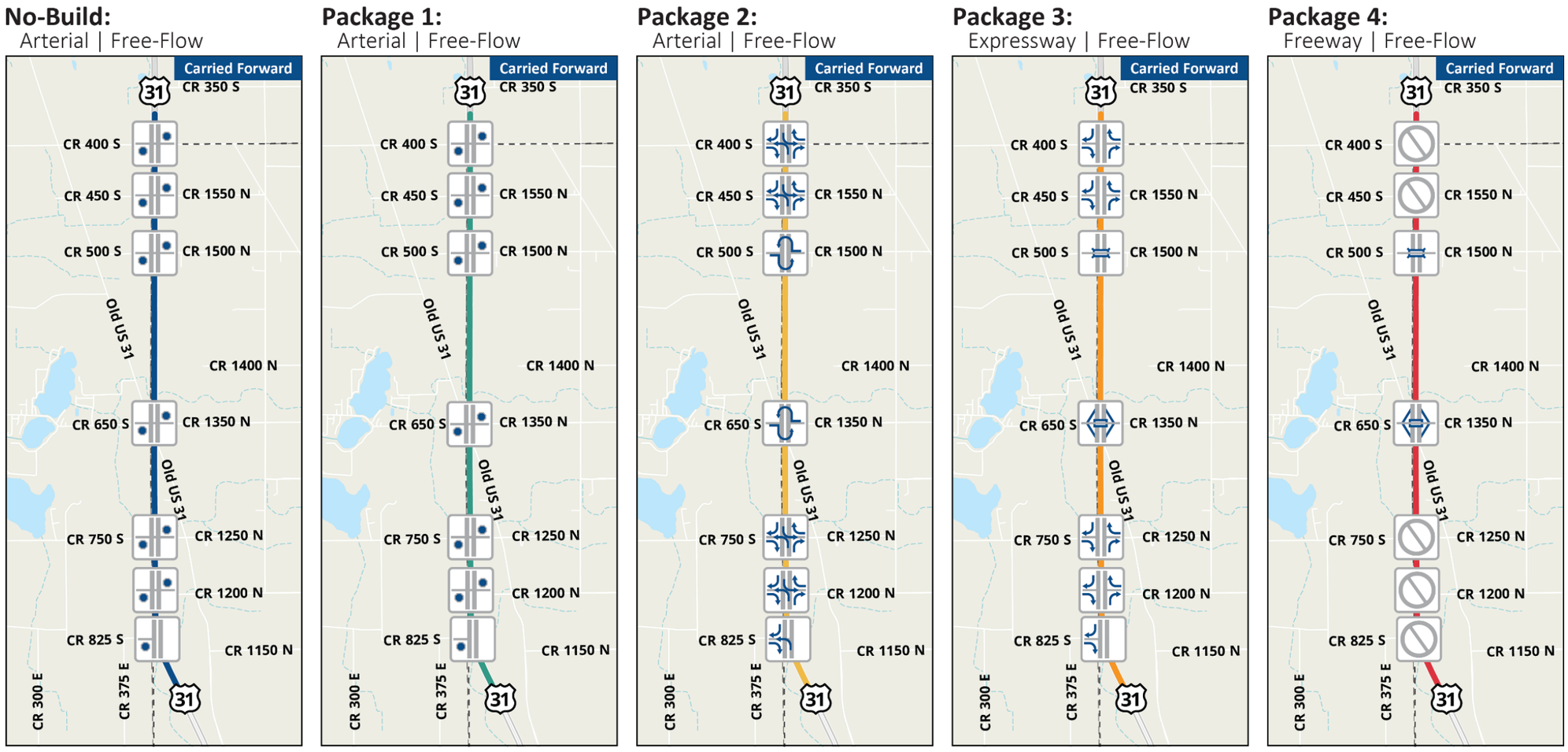
The Improvement Packages for the Macy Planning segment are shown below in Table 18 and Figure 16.

Table 18 – Macy – Summary of Improvement Packages

Intersection or *Feature*	Macy Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost*** ⟷				***Lower Access to/from US 31 Higher Cost***
CR 400 South	TWSC	TWSC	Directional	RIRO	Closed
CR 450 South/CR 1550 North	TWSC	TWSC	Directional	RIRO	Closed
CR 500 South/CR 1500 North	TWSC	TWSC	RCI	Overpass	Overpass
CR 650 South/CR 1350 North	TWSC	TWSC	RCI	Interchange (Quadrant)	Interchange (Quadrant)
CR 750 South/CR 1250 North	TWSC	TWSC	Directional	RIRO	Closed
CR 1200 North	TWSC	TWSC	Directional	RIRO	Closed
CR 825 South	TWSC	TWSC	Directional	RIRO	Closed
Median Openings	*Allowed*	*Allowed (reduced quantity)*	*Allowed (reduced quantity)*	*Not Allowed*	*Not Allowed*

Note there are no private driveways in the Macy segment.

Figure 16 – Level 3 Improvement Packages - Macy



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

Study Recommendation: Carried Forward | Eliminated

- Two-Way Stop Controlled Intersection
- Directional Intersection (RIRO + Left Turns from US 31)
- Right-In/Right-Out Intersection (RIRO)
- Reduced Conflict Intersection (Unsignalized)
- Interchange
- Overpass
- Intersection Closed

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

ACCESS CONTROL METHODS:

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS**| All driveways are RIRO, no median openings
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

There are no private driveways to US 31 in this Planning Segment.

KEY MAP:

Table 19 – Macy – Comparison of Improvement Packages

Measures of Effectiveness			Macy Improvement Packages				
			No-Build	Package 1	Package 2	Package 3	Package 4
US 31 Facility Type & Traffic Condition			*Arterial Free-Flow*	*Arterial Free-Flow*	*Arterial Free-Flow*	*Expressway Free-Flow*	*Freeway Free-Flow*
Purpose and Need	Safety	Total Conflict Points (number)	263	263	102	44	22
		Crossing Conflict Points (number)	149	149	26	6	6
		Percent Reduction in Crossing Conflict Points	N/A	0%	83%	96%	96%
		Estimate of Potential Crossing-Related Crashes Prevented (20 yrs)	N/A	0	26	27	27
		Cost Effectiveness Index (CEI)	N/A	N/A	0.5	3.5	3.6
	Mobility & Access	Average Travel Time Along US 31 During AM/PM Peak Hour (minutes)	5.2/5.2	5.2/5.2	5.2/5.2	5.2/5.2	5.2/5.2
		Average Distance between US 31 Access Points (miles)	0.7	0.7	0.7	0.7	2.6
		Average Distance between US 31 Crossing Points (miles)	0.7	0.7	1.7	1.7	1.7
		East-West Mobility (Compared to No-Build)	N/A	Similar	Decreased	Greatly Decreased	Greatly Decreased
		Residential Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Commercial Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Field Access Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Farmland Access Impacts (Yes/No)	No	No	No	No	No
Environmental Resources	Natural	NWI Wetlands (acres impacted)	0	0	0	1	1
		Rivers and Streams (linear feet impacted)	0	320	290	540	530
		Floodplains (acres impacted)	0	0	0	0	0
		Forested Areas (acres impacted)	0	2	4	7	8
	Cultural & Recreational	Potential Impacts to Above-ground Resources (Yes/No)	No	No	No	No	No
		Potential Impacts to Known Archaeological Sites (Yes/No)	No	No	No	No	No
		Potential Impacts to other Section 4(f) Resources (Yes/No)	No	No	No	No	No
		Cemeteries (number impacted)	0	0	0	0	0
	Community & Socioeconomic	Residential Relocations (number)	0	0	0	0	0
		Business Relocations (number)	0	0	0	1	1
		Community Facility or Institutional Relocations (number)	0	0	0	0	0
		Total New Right-of-Way Acquisition (acres)	0	<1	<1	21	31
		Potential Impacts to Sensitive Communities (acres)	0	<1	<1	12	16
		Potential Relocations in Sensitive Communities (number)	0	0	0	1	1
		Risk of Greater Impacts to Sensitive Communities (Yes/No)	No	No	No	Yes	Yes
		Farmland (acres impacted)	0	<1	0	13	19
		Potential Hazardous Materials Sites (number impacted)	0	0	0	0	0
Costs		Estimated Construction Cost (2024 Dollars)	$0	$5M to $7M	$7M to $9M	$54M to $67M	$54M to $67M
		Estimated Right-of-Way Cost (2024 Dollars)	$0	$130k to $160k	$130k to $160k	$560k to $690k	$770k to $950k
		Estimated Total Package Cost (2024 Dollars)	$0	$8M to $11M	$11M to $14M	$85M to $106M	$86M to $106M
Goals		Economic Development	N/A	Neutral	Neutral	Neutral	Neutral
		Transportation for All	N/A	Neutral	Neutral	Neutral	Neutral
		Multimodal Access & Connections	N/A	Neutral	Neutral	Neutral	Neutral
		Corridor Character	N/A	Neutral	Neutral	Diminishes	Diminishes
		Sense of Place & Visual Character	N/A	Neutral	Neutral	Enhances	Enhances
		Emerging Technologies	N/A	Neutral	Neutral	Neutral	Neutral
		Fiscal & Environmental Practicality	N/A	High	High	Low	Low

Note: Additional soft costs (e.g., preliminary engineering, construction engineering, etc.) are included in the estimated total package cost.

4.4.3. EVALUATION

The Improvement Packages for the Macy Planning Segment were comparatively evaluated for safety and mobility according to the purpose and need as well as potential environmental impacts, costs, and study goals. The evaluation of these factors has been summarized in Table 19 and the sections below.

Purpose and Need: Safety

Reduce Conflict Points

The number of crossing conflict points was determined at each intersection according to its potential intersection treatment for each particular Improvement Package. The total crossing conflict points within the segment were summed for each Improvement Package and compared to the No-Build. Overall, the number of crossing conflict points would be lowest for Improvement Packages 3 and 4. Package 1 has the same number of conflict points as the No-Build alternative. Packages 2, 3, and 4 could potentially prevent at least 26 crossing crashes. Mainline US 31 turn lanes will be lengthened (or added where there currently are none) where necessary and applicable in each of the Improvement Packages to improve safety. Package 1 would maintain the same TWSC configuration at all of the intersections and therefore would not eliminate any crossing conflict points. Adding an RCI at CR 650 South/CR 1350 North, the segment's highest crossing-crash intersection, could eliminate 16 crossing crashes if it were added to Package 1. Package 2 could potentially eliminate 26 crossing crashes by adding an RCI at CR 650 South/CR 1350 North and at CR 500 South/CR 1500 North and making directional intersections at the other five intersections in the segment. Packages 3 and 4 could prevent one additional crossing crash. However, the cost-effectiveness indices show that Improvement Packages 3 and 4 would be much less cost-effective for a minimal increase in potential crash reduction compared to Improvement Package 2. The comparison is shown in Table 19.

Purpose and Need: Mobility

E-W Mobility

Average Distance Between US 31 Crossing Points

Package 1 would have the same number of crossing points as the current corridor (6), but the number of crossing points would decrease to two in Packages 2, 3, and 4 as directional intersections, RIROs, and closures are introduced. The two crossing locations would be RCI or interchange at CR 650 South/CR 1350 North and RCI or overpass at CR 500 South/CR 1500 North. East-west mobility could be improved in Package 2 by installing U-turn median openings at some or all of the directional intersections to form RCIs that provide additional crossing locations and turnaround locations. The average distance between crossing points for each package is shown in Table 19. A qualitative estimate of the effect of this measure on east-west mobility compared to the No-Build alternative is noted in the table as well.

Access To/From US 31

Average distance between US 31 access points is one of the ways to assess accessibility to/from the corridor. Packages 1 and 2 would have the same number of access points as the current corridor (7) and Package 3 would have only one fewer, but the directional intersections and RIROs at Secondary Intersections in Package 2 and Package 3, respectively, would not offer full access. Package 4 would provide only one access point in the Planning Segment with the interchange at CR 650 South/CR 1350 North. The average distance between access points for each package is shown in Table 19.

Support Free-Flow (Regional Mobility)

None of the Improvement Packages include traffic signals or other impediments to the existing free-flow conditions and optimal travel time along US 31. Therefore, all Improvement Packages would maintain free-flow conditions and regional mobility and this measure does not differentiate the Improvement Packages. All Improvement Packages would have the same estimated travel time of 5.2 minutes.

Environmental

Natural Resources

Overall, minimal impacts to wetlands, floodplains, and forested areas would be expected for all Improvement Packages in the Macy segment. Potential impacts to rivers and streams would similarly be in the range of approximately 290 linear feet (Improvement Package 2) to 540 linear feet (Improvement Package 3).

Cultural & Recreational Resources

No impacts to either of the two potential above-ground cultural resources in the Macy segment are anticipated. There are no known archaeological sites, other Section 4(f) resources, or cemeteries within proximity to the concept footprints in this segment.

Community & Socioeconomic Resources

There would be less than 1 acre of new right-of-way needed for Improvement Packages 1 and 2. Improvement Packages 3 and 4 would require approximately 21 and 31 acres of new right-of-way acquisition, respectively.

It is anticipated that Improvement Packages 3 and 4 would each potentially require 1 commercial relocation. These relocations would be located in a census tract with sensitive communities. No residential relocations are anticipated for any Improvement Packages within the Macy segment.

Since a census tract with sensitive communities is located on the western side of US 31 for the majority of the Macy segment, any new right-of-way acquisition on that side of the highway would be located in the identified census tract. As shown in Table 19, this would total approximately 12-16 acres for Improvement Packages 3 and 4, which represents more than half of the estimated total right-of-way acreage. Therefore, this was identified as a risk of a greater impact to sensitive communities. There is also one potential relocation within the identified census tract. More detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed. In addition to these potential direct impacts (relocations and property impacts), access to and across US 31 for sensitive communities was considered in the Macy segment. As documented above, all of the Improvement Packages in Macy are anticipated to have beneficial effects on the safety within the study area; those benefits would be for all residents and users of the transportation network, including sensitive communities. For Improvement Packages 1 and 2, overall effects on access are not anticipated. For Improvement Packages 3 and 4, access to/from and across US 31 would be reduced due to the conversion of existing intersections to RIRO intersections (Improvement Package 3), the closure of intersections (Improvement Package 4), or the conversion of the intersection to an overpass (both Improvement Packages), all of which could require longer distances between access and/or crossing points. However, it is not anticipated that these access impacts would affect sensitive communities any differently than the population at large. Therefore, no risk of greater impacts to sensitive communities was identified. While longer distances could increase user costs, any such impacts are anticipated to be minimal based on the average distance between US 31 access/crossing points (see Table 19). More detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed.

Overall, potential impacts to farmlands would increase with each Improvement Package in the Macy segment, with minimal impacts to farmlands for Improvement Packages 1 and 2 and up to 19 acres for Improvement Package 4.

No impacts to the one identified parcel with potential for hazardous materials along the Macy segment are anticipated.

Costs

Planning-level costs were developed for the Improvement Packages within the Macy Planning Segment. A range of low and high estimates are reported for each Improvement Package in Table 19. Total package costs for all Improvement Packages vary widely, between $8 million and $106 million. Packages 1 and 2 would have

the lowest estimated package costs ($8-11 million and $11-14 million, respectively) while Packages 3 and 4 would have the highest estimated package cost ($85-106 million and $86-$106 million, respectively).

Goals

Table 19 summarizes the qualitative ratings for each study area goal for each Improvement Package in the Macy segment.

- **Economic Development** – Improvement Package 1 would make minimal changes at intersections while improving safety and maintaining local and regional mobility comparable to existing conditions for a Neutral rating. Improvement Package 2 would have a minor negative effect on local mobility and access (due to directional intersections eliminating crossing movements) while improving safety, and little to no effect on regional mobility, also for a Neutral rating. Improvement Packages 3 and 4 would provide some added safety benefits but local mobility and access would be impacted by increasing levels of access control. Improvement Package 4 has the highest potential safety benefit and could provide some greater regional benefit; however, the extensive loss of local mobility and access with implementation of full access control could negatively impact local businesses (including agri-business) and locally planned developments. Balancing these numerous factors resulted in the rating of Neutral.
- **Transportation for All** – Sensitive communities are present within this Planning Segment. Right-of-way and at least one relocation would also be required from this area with Improvement Packages 3 and 4. However, safety benefits associated with each Improvement Package would be realized by all users, including sensitive communities. Likewise, impacts associated with the reduction in access and crossing points (greatest with Improvement Packages 3 and 4) would impact all populations to a similar degree. Therefore, all Improvement Packages were rated Neutral.
- **Multimodal Access and Connections** – There are no existing or planned bicycle/pedestrian facilities, known non-motorized vehicle routes, or known other multimodal needs in this Planning Segment. Therefore, all Improvement Packages were rated Neutral for this goal. Opportunities exist to incorporate bicycle/pedestrian facilities into the preliminary design phase of any future projects in the study area.
- **Corridor Character** – This Planning Segment is rural in character. The changes included in Improvement Packages 1 and 2 are not anticipated to alter that character; the fit and function of US 31 in the study corridor would remain as a rural arterial with primarily at-grade intersections for a Neutral rating. Improvement Packages 3 and 4 would convert US 31 into an expressway or freeway, respectively, including a new overpass and interchange each. Therefore, Improvement Packages 3 and 4 would have the potential to "Diminish" that character by shifting the fit and function of US 31 in the study corridor towards an interstate-like facility.
- **Sense of Place & Visual Character** – Improvement Packages 3 and 4 would include the construction of a new interchange at CR 650 South/CR 1650 North. Since this interchange would provide an opportunity to create a visual gateway to Macy and Nyona Lake, these two packages received an Enhances rating. Improvement Packages 1 and 2 would provide limited opportunities to enhance the sense of place in this segment comparable to existing conditions and therefore received a Neutral rating.
- **Emerging Technologies** – None of the Improvement Packages would impact the ability to implement autonomous and connected vehicles, so each received a Neutral rating. Specific locations for EV infrastructure within this Planning Segment have not yet been identified. In general, Improvement Packages with more control of access could impact the implementation of the INDOT EV Infrastructure Plan; however, additional information and coordination is needed to fully assess.
- **Fiscal & Environmental Practicality** – Improvement Packages 1 and 2 would have modest estimated costs and lower impacts, combined with higher cost efficiency, resulting in a high level of practicality

for each. Improvement Packages 3 and 4 would both have higher costs combined with increased impacts and lower cost efficiency, resulting in a low level of practicality for each.

4.4.4. RECOMMENDATIONS

Based on the above evaluation, the overall degree to which each of the different measures of effectiveness benefited (or didn't benefit) the study corridor was qualitatively summarized to assist in the rating of each of the four Improvement Packages in the Macy segment to be eliminated or carried forward. The results are shown in Table 20.

Table 20 – Macy – Level 3 Recommendations

Evaluation Criteria	Macy Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Free-Flow***	***Freeway Free-Flow***
Safety	No Change	Minimal Improvement	Modest Improvement	Modest Improvement	Modest Improvement
Local Mobility & Access	No Change	Minimal/ No Change	Minor Reduction	Modest Reduction	Substantial Reduction
Regional Mobility	No Change	No Change	No Change	No Change	No Change
Environmental Resources	No Impact	Minimal Impact	Minimal Impact	Minimal Impact	Minimal Impact
Cost	N/A	Low Cost	Low Cost	High Cost	High Cost
Goals	No Change	Slightly Enhances	Slightly Enhances	Slightly Diminishes	Slightly Diminishes
Level 3 Result	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**

Color coding: Gray represents no change from existing conditions (i.e., comparable to No-Build); blue shading represents positive overall changes compared to the No-Build; and brown shading represents negative overall changes compared to the No-Build.

As shown in the above table, overall:

- The No-Build would make no improvements beyond those currently programmed but is required to be considered in the NEPA process and will therefore be carried forward in all Planning Segments.
- Improvement Package 1 would make some safety improvements by adding or extending turn lanes where necessary. At the same time, it would have no impact to local mobility and access and minimal

impacts to environmental resources while also having a low cost. For these reasons, Package 1 is carried forward.

- Improvement Package 2 would bring modest safety improvements by adding RCIs at CR 650 South/CR 1350 North and CR 500 South/CR 1500 North and directional intersections at the other five intersections, which potentially prevent nearly as many crossing crashes as Packages 3 and 4. However, it would do so with only minor reductions in local mobility and access, a low cost, and minimal environmental impacts. Package 2 also has the best cost efficiency for crash prevention among the four packages in the segment. For these reasons, Package 2 is carried forward.
- Improvement Packages 3 and 4 would improve safety with one additional potential crossing crash prevented compared to Package 2. However, this comes at much higher costs and modest and substantial reductions in local mobility and access, respectively. Packages 3 and 4 have cost-effectiveness indices about seven times worse than Package 2. Packages 3 and 4 have higher costs and impacts with marginal benefits compared to other lower-cost options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between these potential benefits, impacts, and costs would require further analysis in the future to determine if these packages are a reasonable solution to the Planning Segment's transportation needs. For these reasons, Packages 3 and 4 are carried forward.

When viewing these recommendations, it is important to remember that cohesive packages based on access management strategies are presented in this Planning Segment to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Specific intersection treatments could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area. See Section 6 of this report for more details on next steps.

4.5. DENVER

4.5.1. PLANNING SEGMENT DETAILS

The Denver Planning Segment is 5.0 miles in length and has one Primary Intersection (SR 16) and six Secondary Intersections. The segment is rural in character with Deedsville (via CR 1000 North) and Denver (via SR 16) both three miles to the east. There are two private residential driveways to US 31 in this segment.

Figure 17 – Denver Planning Segment

Public Comments Received on Draft Level 3 Screening Report

The following bullet points summarize the range of comments received on the *Draft Level 3 Screening Report* for this planning segment:

- Prefer the No-Build for this planning segment
- Prefer Package 1 for this planning segment
- Prefer Package 2 or 3 for this planning segment
- Request frontage road along the east side of US 31 from CR 450 North or Mexico Road to CR 800 North due to the lack of alternate north-south routes
- SR 16 should have cross-highway access, the directional intersection (Package 1) is not a good option
- In Package 3, CR 1000 North should have access to US 31
- Support constructing an interchange at SR 16
- All of these packages will make travel for locals more difficult
- Full access is needed at SR 16 and CR 1000 North
- An RCI at SR 16 would be preferable to a directional intersection in Package 1
- Recommend providing full access at CR 800 North and CR 1000 North
- Recommend providing at least RIRO access at CR 900 North in all packages
- Support connecting CR 800 North to SR 16 using Old US 31; consider extending it to Mexico Road
- The interchange at SR 16 would impact access to a residence and a historic barn; these impacts should be avoided

4.5.2. IMPROVEMENT PACKAGES

There are four Improvement Packages within the Denver Planning Segment varying from less access control to full access control. For each intersection improvement within the package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential impacts to natural resources and potential right-of-way, which are provided in Appendix A.

Denver – Improvement Package 1

With the exception of CR 800 North and SR 16, Improvement Package 1 would have the same level of access control as the current conditions, with access and crossing movements allowed at all other intersections. Directional intersections at CR 800 North and SR 16 would prohibit crossing and left-turn movements from the cross street to address elevated crash indices at the intersections. Many public comments were received that expressed concern with the directional intersection and the prohibition of crossing and left-turn movements at SR 16 because of cross-county travel patterns that utilize SR 16. This concern has been noted and will be evaluated further and addressed as part of any future project development activity at this location. That evaluation will include the possibility of adding U-turn median openings at select locations in the corridor as well as combining elements from multiple packages to create an optimized solution. There would be turn-lane lengthening (or addition in the cases where one is not currently present) at CR 1050 North, CR 1000 North, CR 900 North, CR 400 West, CR 800 North, Old US 31 Connector, and SR 16. One of the private driveways would be converted to RIRO. The other would maintain full access because it shares a median opening with the Old US 31 Connector directly across from it. A warning system could be considered as a Complementary Concept at SR 16 and CR 800 North instead of a directional intersection. Also, it is recommended that stop signs be added to the Old US 31 legs of the adjacent intersection with CR 800 North and Old US 31.

Denver – Improvement Package 2

Improvement Package 2 would have more access control than Improvement Package 1. Directional intersections would be provided at CR 1050 North, CR 900 North, CR 400 West, CR 800 North, and the Old Route US 31 Connector to provide access to US 31, but only as right turns. Crossing and left-turn movements from the cross streets would be eliminated to improve safety. Access from US 31 to the cross street would be allowed for both left turns and right turns. RCIs at SR 16 and CR 1000 North would provide crossing points and also serve as locations to turn around and access the opposite direction of travel on US 31 within the segment. Alternatively, some or all of the directional intersections could be implemented as RCIs (by adding median U-turn locations) to provide more crossing locations within the Planning Segment and allow for vehicles to turn around and access the opposite direction of travel on US 31 with some additional cost but minimal difference in impacts. The private driveways would be converted to RIRO access.

Denver – Improvement Package 3

Improvement Package 3 would provide additional access control and could provide median openings in limited circumstances to reduce the travel distance associated with limiting turning movements at certain intersections to right-in/right-out only. Instead of directional intersections at CR 1050 North, CR 900 North, CR 400 West, CR 800 North, and the Old Route US 31 Connector, these five Secondary Intersections would be RIRO, further restricting the allowable movements at these locations to only right-turn movements to and from the cross streets. Crossing movements and left turns would be eliminated at these five intersections. There would be an interchange at SR 16, which matches the recommendation in the *Miami County Transportation Plan*. An overpass at CR 1000 North would provide a second crossing point within the segment. The private driveways would be converted to RIRO.

Denver – Improvement Package 4

Improvement Package 4 would provide full access control, similar to a freeway facility. This package would not have any median openings or at-grade intersections. Intersections at CR 1050 North, CR 900 North, CR 400 West, CR 800 North, and the Old Route US 31 Connector would be closed. Like Improvement Package 3, there would be an interchange at SR 16 and an overpass at CR 1000 North. Crossing US 31 would take place only at grade-separated crossings at the SR 16 interchange and the overpass at CR 1000 North. The private driveways would also be closed.

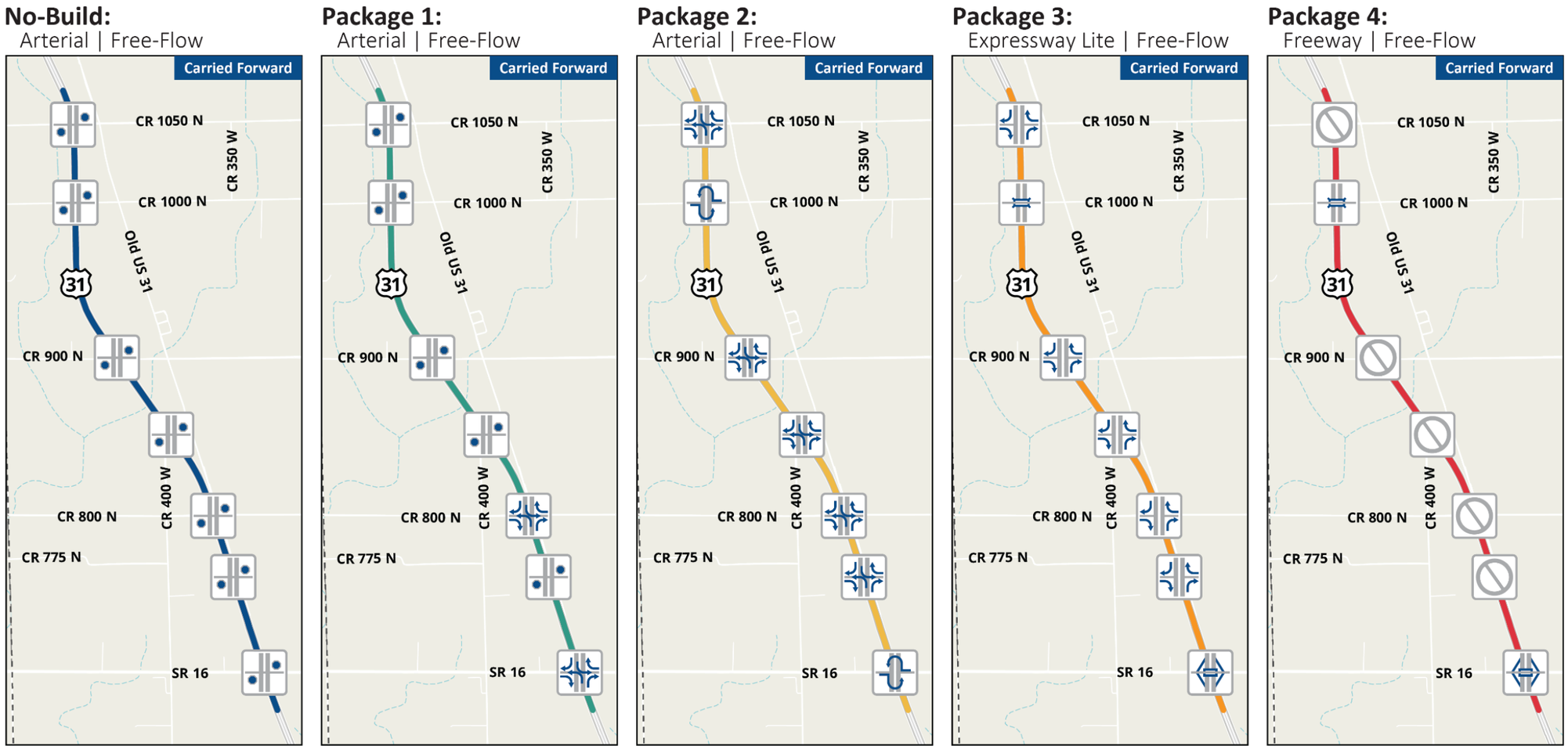
Denver – Summary of Improvement Packages

The Improvement Packages for the Denver Planning Segment are shown below in Table 21 and Figure 18.

Table 21 – Denver – Summary of Improvement Packages

Intersection or *Feature*	Denver Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Lite Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost***		⟷		***Lower Access to/from US 31 Higher Cost***
CR 1050 North	TWSC	TWSC	Directional	RIRO	Closed
CR 1000 North	TWSC	TWSC	RCI	Overpass	Overpass
CR 900 North	TWSC	TWSC	Directional	RIRO	Closed
CR 400 West	TWSC	TWSC	Directional	RIRO	Closed
CR 800 North	TWSC	Directional	Directional	RIRO	Closed
Old Route 31 Connector	TWSC	TWSC	Directional	RIRO	Closed
SR 16	TWSC	Directional	RCI	Interchange (Quadrant)	Interchange (Diamond)
Residential Driveways	*Full Access*	*RIRO only*	*RIRO only*	*RIRO only*	*No Access*
Median Openings	*Allowed*	*Allowed (reduced quantity)*	*Allowed (reduced quantity)*	*Allowed (limited circumstances)*	*Not Allowed*

Figure 18 – Level 3 Improvement Packages – Denver



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

Study Recommendation: Carried Forward | Eliminated

- Two-Way Stop Controlled Intersection
- Intersection (Unsignalized)
- Overpass
- Intersection Closed
- Right-In/Right-Out Intersection (RIRO)
- Directional Intersection (RIRO + Left Turns from US 31)
- Interchange

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

ACCESS CONTROL METHODS:

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, median openings provided (limited circumstances)
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

KEY MAP:

Table 22 – Denver – Comparison of Improvement Packages

Measures of Effectiveness			Denver Improvement Packages				
			No-Build	Package 1	Package 2	Package 3	Package 4
US 31 Facility Type & Traffic Condition			*Arterial Free-Flow*	*Arterial Free-Flow*	*Arterial Free-Flow*	*Expressway Lite Free-Flow*	*Freeway Free-Flow*
Purpose and Need	Safety	Total Conflict Points (number)	263	233	102	39	22
		Crossing Conflict Points (number)	149	129	26	5	6
		Percent Reduction in Crossing Conflict Points	N/A	13%	83%	97%	96%
		Estimate of Potential Crossing-Related Crashes Prevented (20 yrs)	N/A	17	33	36	35
		Cost Effectiveness Index (CEI)	N/A	0.6	0.4	4.4	4.8
	Mobility & Access	Average Travel Time Along US 31 During AM/PM Peak Hour (minutes)	5.0/5.0	5.0/5.0	5.0/5.0	5.0/5.0	5.0/5.0
		Average Distance between US 31 Access Points (miles)	0.6	0.6	0.6	0.7	2.5
		Average Distance between US 31 Crossing Points (miles)	0.7	1.0	1.7	1.7	1.7
		East-West Mobility (Compared to No-Build)	N/A	Similar	Decreased	Greatly Decreased	Greatly Decreased
		Residential Driveways, RIRO/Full (number)	0/2	1/1	2/0	2/0	0/0
		Commercial Driveways, RIRO/Full (number)	0/0	0/0	0/0	0/0	0/0
		Field Access Driveways, RIRO/Full (number)	1/0	0/0	0/0	0/0	0/0
		Farmland Access Impacts (Yes/No)	No	Yes	Yes	Yes	Yes
Environmental Resources	Natural	NWI Wetlands (acres impacted)	0	<1	<1	<1	<1
		Rivers and Streams (linear feet impacted)	0	0	0	400	400
		Floodplains (acres impacted)	0	0	0	0	0
		Forested Areas (acres impacted)	0	2	2	3	3
	Cultural & Recreational	Potential Impacts to Above-ground Resources (Yes/No)	No	Yes	Yes	Yes	Yes
		Potential Impacts to Known Archaeological Sites (Yes/No)	No	No	No	No	No
		Potential Impacts to other Section 4(f) Resources (Yes/No)	No	No	No	No	No
		Cemeteries (number impacted)	0	0	0	0	0
	Community & Socioeconomic	Residential Relocations (number)	0	0	0	1	2
		Business Relocations (number)	0	0	0	0	1
		Community Facility or Institutional Relocations (number)	0	0	0	0	0
		Total New Right-of-Way Acquisition (acres)	0	2	3	31	147
		Potential Impacts to Sensitive Communities (acres)	0	0	0	0	0
		Potential Relocations in Sensitive Communities (number)	0	0	0	0	0
		Risk of Greater Impacts to Sensitive Communities (Yes/No)	No	0	0	0	0
		Farmland (acres impacted)	0	1	1	20	104
		Potential Hazardous Materials Sites (number impacted)	0	0	0	0	0
Costs		Estimated Construction Cost (2024 Dollars)	$0	$5M to $7M	$7M to $9M	$90M to $111M	$93M to $115M
		Estimated Right-of-Way Cost (2024 Dollars)	$0	$260k to $320k	$330k to $410k	$2M	$5M to $6M
		Estimated Total Package Cost (2024 Dollars)	$0	$8M to $11M	$11M to $15M	$142M to $175M	$151M to $185M
Goals		Economic Development	N/A	Neutral	Neutral	Neutral	Neutral
		Transportation for All	N/A	Neutral	Neutral	Neutral	Neutral
		Multimodal Access & Connections	N/A	Neutral	Neutral	Neutral	Neutral
		Corridor Character	N/A	Neutral	Neutral	Diminishes	Diminishes
		Sense of Place & Visual Character	N/A	Neutral	Neutral	Enhances	Enhances
		Emerging Technologies	N/A	Neutral	Neutral	Neutral	Neutral
		Fiscal & Environmental Practicality	N/A	High	High	Low	Low

Note: Additional soft costs (e.g., preliminary engineering, construction engineering, etc.) are included in the estimated total package cost.

4.5.3. EVALUATION

The Improvement Packages for the Denver Planning Segment were comparatively evaluated for safety and mobility according to the purpose and need as well as potential environmental impacts, costs, and study goals. The evaluation of these factors has been summarized in Table 22 and the sections below.

Purpose and Need: Safety

Reduce Conflict Points

The number of crossing conflict points was determined at each intersection according to its potential intersection treatment for each particular Improvement Package. The total crossing conflict points within the segment were summed for each Improvement Package and compared to the No-Build. Overall, the number of crossing conflict points would be lowest for Improvement Packages 3 and 4. Mainline US 31 turn lanes will be lengthened (or added where there currently are none) where necessary and applicable in each of the Improvement Packages to improve safety. Package 1 could potentially prevent 17 of the crossing crashes in the segment due to adding a directional intersection at SR 16, the segment's highest crossing-crash intersection. Package 2 could prevent an additional 16 crossing crashes by adding RCIs at SR 16 and CR 1000 North and directional intersections at the other five intersections. Packages 3 and 4 could prevent three and two additional crossing crashes, respectively. However, the cost-effectiveness indices show that Improvement Packages 3 and 4 would be 10 times less cost-effective for a minimal increase in potential crash prevention compared to Improvement Package 2. The comparison is shown in Table 22.

Purpose and Need: Mobility

E-W Mobility

Average Distance Between US 31 Crossing Points

Package 1 would have two fewer crossing points compared to the current corridor (6). This is because there would be a directional treatment at both SR 16 and CR 800 North to address elevated crash indices due to side-street crossing and left-turn movements at the intersections. The number of crossing points would decrease to two in Packages 2, 3, and 4 as directional intersections, RIROs, and closures are introduced. The two crossing locations would be RCI or overpass at CR 1000 North and RCI or interchange at SR 16. East-west mobility could be improved in Package 2 by installing U-turn median openings at some or all of the directional intersections to form RCIs that provide additional crossing and turnaround locations. The average distance between crossing points for each package is shown in Table 22. A qualitative estimate of the effect of this measure on east-west mobility compared to the No-Build alternative is noted in the table as well.

Access To/From US 31

Average distance between US 31 access points is one of the ways to assess accessibility to/from the corridor. Packages 1 and 2 would have the same number of access points as the current corridor (7) and Package 3 would have only one fewer, but the directional intersections and RIROs at Secondary Intersections in Package 2 and Package 3 respectively would not offer full access. Package 4 would provide only one access point in the Planning Segment with the interchange at SR 16. The average distance between access points for each package is shown in Table 22.

Support Free-Flow (Regional Mobility)

None of the Improvement Packages include traffic signals or other impediments to the existing free-flow conditions and optimal travel time along US 31. Therefore, all Improvement Packages would maintain free-flow conditions and regional mobility and this measure does not differentiate the Improvement Packages. All Improvement Packages would have the same estimated travel time of 5.0 minutes.

Environmental

Natural Resources

Overall, minimal or no impacts to wetlands, floodplains, and forested areas would be expected for all Improvement Packages in the Denver segment. For rivers and streams, no impact would be anticipated for Improvement Packages 1 and 2, and 400 linear feet of impact would be anticipated for Improvement Packages 3 and 4.

Cultural & Recreational Resources

Impacts to one of the two potential above-ground resources in the Denver segment are anticipated. All Improvement Packages would likely require some level of acquisition of the Maus Farm resource (IHSSI Number 103-634-20014, rated Notable) located at the intersection of US 31 and SR 16. The directional and RCI in Packages 1 and 2, respectively, could impact a linear piece of the property directly adjacent to SR 16, and the interchanges in Packages 3 and 4 are anticipated to be more impactful and could require full acquisition, particularly the diamond interchange (Package 4); impacts would be minimized/avoided in future design. The other above-ground resource, the Carvey House, would not be impacted by any of the Improvement Packages. There are no known archaeological sites, other Section 4(f) resources, or cemeteries within proximity to concept footprints in this segment.

Community & Socioeconomic Resources

Less than 3 acres of new right-of-way is needed for Improvement Packages 1 and 2. Improvement Packages 3 and 4 would require approximately 31 and 147 acres of new right-of-way acquisition, respectively.

It is anticipated that Improvement Packages 3 and 4 would potentially require 1 or 2 residential relocations, respectively, and there could be an additional 1 commercial relocation for Improvement Package 4 only. No other relocations of any type are anticipated for the other Improvement Packages within the Denver segment. No relocations would be located in areas with sensitive communities.

There are no identified census tracts with sensitive communities along the Denver segment. In addition to the direct impacts (relocations and property impacts) as shown in Table 22, it is not anticipated that any potential access impacts would affect sensitive communities any differently than the population at large and no risk of greater impacts is anticipated at this time. More detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed.

There would be minimal farmland impacts for Improvement Packages 1 and 2 (less than 2 acres each). Improvement Packages 3 and 4 would impact approximately 20 and 104 acres of farmland, respectively.

No impacts to the one identified parcel with potential for hazardous materials along the Denver segment are anticipated.

Costs

Planning-level costs were developed for the Improvement Packages within the Denver Planning Segment. A range of low and high estimates are reported for each Improvement Package in Table 22. Total package costs for all Improvement Packages vary widely, between $8 million and $185 million. Packages 1 and 2 would have the lowest estimated total costs ($8-11 million and $11-15 million, respectively) while Packages 3 and 4 would have the highest estimated package cost ($142-175 million and $151-185 million, respectively).

Goals

Table 22 summarizes the qualitative ratings for each study area goal for each Improvement Package in the Denver segment.

- **Economic Development** – Improvement Package 1 would make minimal changes at intersections while improving safety and maintaining local and regional mobility comparable to existing conditions

for a Neutral rating. Improvement Package 2 would have a minor negative effect on local mobility and access (due to directional intersections eliminating crossing movements) while improving safety, and little to no effect on regional mobility, also for a Neutral rating. Improvement Packages 3 and 4 would provide some added safety benefits but local mobility and access would be impacted by increasing levels of access control. Improvement Package 4 has the highest potential safety benefit and could provide some greater regional benefit; however, the extensive loss of local mobility and access with implementation of full access control could negatively impact local businesses (including agri-business) and locally planned developments. Balancing these numerous factors resulted in the rating of Neutral.

- **Transportation for All** – There are no sensitive communities identified in this Planning Segment. Therefore, all Improvement Packages received a Neutral rating for this goal.
- **Multimodal Access and Connections** –There are no existing or planned bicycle/pedestrian facilities, known non-motorized vehicle routes, or known other multimodal needs in this Planning Segment. Therefore, all Improvement Packages were rated as Neutral for this goal. Opportunities exist to incorporate bicycle/pedestrian facilities into the preliminary design phase of any future projects in the study area.
- **Corridor Character** –This Planning Segment is rural in character. The changes included in Improvement Packages 1 and 2 are not anticipated to alter that character; the fit and function of US 31 in the study corridor would remain as a rural arterial with primarily at-grade intersections for a Neutral rating. Improvement Packages 3 and 4 would convert US 31 into an expressway or freeway, respectively, including a new overpass and interchange each. Therefore, Improvement Packages 3 and 4 would have the potential to "Diminish" that character by shifting the fit and function of US 31 in the study corridor towards an interstate-like facility.
- **Sense of Place & Visual Character** – Improvement Packages 3 and 4 include the construction of a new interchange at SR 16. Since this interchange would provide an opportunity to create a visual gateway to the Denver area, Improvement Packages 3 and 4 were rated as Enhances. Improvement Packages 1 and 2 would provide limited opportunities to enhance the sense of place in this segment comparable to existing conditions and therefore received a Neutral rating.
- **Emerging Technologies** – None of the Improvement Packages would impact the ability to implement autonomous and connected vehicles, so each received a Neutral rating. Specific locations for EV infrastructure within this Planning Segment have not yet been identified. In general, Improvement Packages with more control of access could impact the implementation of the INDOT EV Infrastructure Plan; however, additional information and coordination is needed to fully assess.
- **Fiscal & Environmental Practicality** – Improvement Packages 1 and 2 would have modest estimated costs and lower impacts, combined with higher cost efficiency, resulting in a high level of practicality for each. Improvement Packages 3 and 4 would both have higher costs combined with increased impacts and lower cost efficiency, resulting in a low level of practicality for each.

4.5.4. RECOMMENDATIONS

Based on the above evaluation, the overall degree to which each of the different measures of effectiveness benefited (or didn't benefit) the study corridor was qualitatively summarized to assist in the rating of each of the four Improvement Packages in the Denver segment to be eliminated or carried forward. The results are shown in Table 23.

Table 23 – Denver – Level 3 Recommendations

Evaluation Criteria	Denver Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Lite Free-Flow***	***Freeway Free-Flow***
Safety	No Change	Minimal Improvement	Modest Improvement	Modest Improvement	Modest Improvement
Local Mobility & Access	No Change	Minor Reduction	Minor Reduction	Modest Reduction	Substantial Reduction
Regional Mobility	No Change	No Change	No Change	No Change	No Change
Environmental Resources	No Impact	Minimal Impact	Minimal Impact	Modest Impact	Modest Impact
Cost	N/A	Low Cost	Low Cost	High Cost	High Cost
Goals	No Change	Slightly Enhances	Slightly Enhances	Slightly Diminishes	Slightly Diminishes
Level 3 Result	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**

Color coding: Gray represents no change from existing conditions (i.e., comparable to No-Build); blue shading represents positive overall changes compared to the No-Build; and brown shading represents negative overall changes compared to the No-Build.

As shown in the above table, overall:

- The No-Build would make no improvements beyond those currently programmed but is required to be considered in the NEPA process and will therefore be carried forward in all Planning Segments.
- Improvement Package 1 would make safety improvements by potentially preventing 17 crossing crashes in the segment, mainly due to the directional intersection at SR 16. At the same time, it would have a minor negative impact to local mobility and access and minimal impacts to environmental resources while also having a low cost. Based on the cost and the number of crashes potentially prevented, Package 1 offers moderate cost efficiency from a safety standpoint. For these reasons, Package 1 is carried forward.
- Improvement Package 2 would bring modest safety improvements with RCIs at SR 16 and CR 1000 North and directional intersections at the other five intersections, which could potentially prevent 33

of the crossing crashes in the segment, nearly as many as Packages 3 and 4. It would do so with only minor reductions in local mobility and access, a low cost, and minimal environmental impacts. Package 2 also has the best cost efficiency for crash prevention. For these reasons, Package 2 is carried forward.

- Improvement Packages 3 and 4 would provide modest improvements in safety with a similar number of potential crossing crashes prevented as Package 2. However, the marginal increase in safety comes at much higher costs and modest and substantial reductions respectively in local mobility and access. Packages 3 and 4 have cost-effectiveness indices over ten times worse than Package 2. Packages 3 and 4 have higher costs and impacts with marginal benefits compared to other lower-cost options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between these potential benefits, impacts, and costs would require further analysis in the future to determine if these packages are a reasonable solution to the Planning Segment's transportation needs. For these reasons, Packages 3 and 4 are carried forward.

When viewing these recommendations, it is important to remember that cohesive packages based on access management strategies are presented in this Planning Segment to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Specific intersection treatments could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area. See Section 6 of this report for more details on next steps.

4.6. MEXICO

4.6.1. PLANNING SEGMENT DETAILS

The Mexico Planning Segment is 3.8 miles in length and has one Primary Intersection (CR 550 North/Mexico Road) and six Secondary Intersections. The north-south segment is rural in character with Mexico one-half mile to the east. There are seven private driveways to US 31 in this segment including one commercial driveway. The property for one of the driveways is already owned by the State of Indiana and the driveway will be closed in all Improvement Packages.

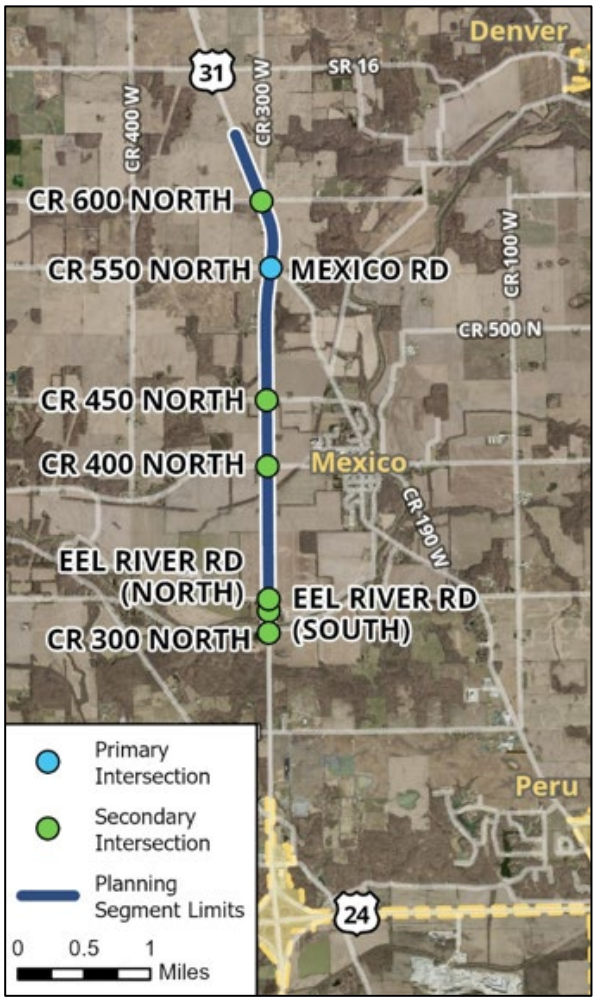
Note that, due to the overlap in study area boundaries, potential treatments at CR 300 North are provided in the *Level 3 Screening Report* for the ProPEL US 31 South study. Those improvements were coordinated and align with this screening report.

Public Comments Received on Draft Level 3 Screening Report

The following bullet points summarize the range of comments received on the *Draft Level 3 Screening Report* for this planning segment:

- Recommend redesigning interchange at CR 400 North to avoid impacts to church
- Support construction of an interchange at CR 400 North
- Recommend providing RIRO access at Eel River Road (N) in all packages
- Oppose removal of access to existing private drives on US 31

Figure 19 – Mexico Planning Segment



4.6.2. IMPROVEMENT PACKAGES

There are four Improvement Packages considered within the Mexico Planning Segment varying from less access control to full access control. For each intersection improvement within the package, a conceptual design was developed. The conceptual design included a construction footprint that was used to estimate potential impacts to natural resources and potential right-of-way, which are provided in Appendix A.

Mexico – Improvement Package 1

Improvement Package 1 would have slightly more access control than the current conditions. The intersections at CR 600 North, CR 550 North/Mexico Road, CR 450 North and CR 400 North would remain TWSC. A directional intersection at Eel River Road (N) would prohibit left-turn movements from the cross street to address an elevated crash index at the intersection. This configuration would still allow trips to utilize the US 31 bridge over the Eel River as an alternative to the Denniston Bridge to the west. Eel River Road (S) would be converted to a RIRO. There would be turn-lane lengthening (or addition in the cases where one is

not currently present) at CR 600 North, CR 550 North/Mexico Road, CR 450 North, CR 400 North, Eel River Road (N), and Eel River Road (S). The private driveways would be converted to RIRO except for the commercial driveway and the driveway directly across from it. A Warning System could also be considered at CR 400N and Eel Road (N) as a Complementary Concept to address the elevated crash rates at these two intersections.

Mexico – Improvement Package 2

Improvement Package 2 would have more access control than Improvement Package 1. An RCI at CR 400 North would provide safety improvements at that intersection as it has elevated crash indices. Directional intersections at CR 600 North, CR 450 North, and Eel River Road (N) would provide access to US 31, but only as right turns. Crossing and left-turn movements from the cross streets would be eliminated to improve safety. Access from US 31 to the cross street would be allowed for both left turns and right turns. Eel River Road (S) would be converted to a RIRO. The CR 550 North/Mexico Road intersection would remain stop control as it has shown no crash activity and in order to provide a second crossing point of US 31 within the segment. Alternatively, the directional intersections at CR 450 North and CR 600 North could be implemented as RCIs (by adding median U-turn locations) to provide more crossing locations within the Planning Segment and allow for vehicles to turn around and access the opposite direction of travel on US 31 with some additional cost but minimal difference in impacts. The private driveways would be converted to RIRO.

Mexico – Improvement Package 3

Improvement Package 3 would provide additional access control but could provide median openings in limited circumstances to reduce the travel distance associated with limiting turning movements at certain intersections to right-in/right-out only. Instead of directional intersections at CR 450 North, Eel River Road (N), and Eel River Road (S), these three Secondary Intersections would be closed. The intersections at CR 600 North and CR 550 North/Mexico Road would be converted to RIRO, further restricting the allowable movements at these locations to only right-turn movements to and from the cross streets. Crossing movements and left turns would be eliminated at these two intersections. There would be an interchange at CR 400 North, which matches the recommendation in the *Miami County Transportation Plan*. An interchange was considered at CR 550 North/Mexico Road in the Level 2 screening when investigated as an isolated intersection. Now when considering the whole segment as a limited access facility, CR 400 North would be a better candidate for an interchange for the area. CR 400 North provides direct access into Mexico from US 31, especially to the grain elevator on the west side of town. This reasoning is also consistent with the *Miami County Transportation Plan* and feedback received from the public on the *Level 2 Screening Report*. CR 400 North also shows elevated crash indices while CR 550 North/Mexico Road does not. All private driveways, including the commercial/residential driveway at McClure's Orchard, would be closed in Improvement Package 3.

Mexico – Improvement Package 4

Improvement Package 4 would provide full access control, similar to a freeway facility. This package would not have any median openings or at-grade intersections. Intersections at CR 600 North, CR 450 North, Eel River Road (N), and Eel River Road (S) would be closed. Like Improvement Package 3, there would be an interchange at CR 400 North and in addition, an overpass would be provided at CR 550 North/Mexico Road. Crossing US 31 would take place only at grade-separated crossings at the CR 400 North interchange and the overpass at CR 550 North/Mexico Road. All driveways would be closed.

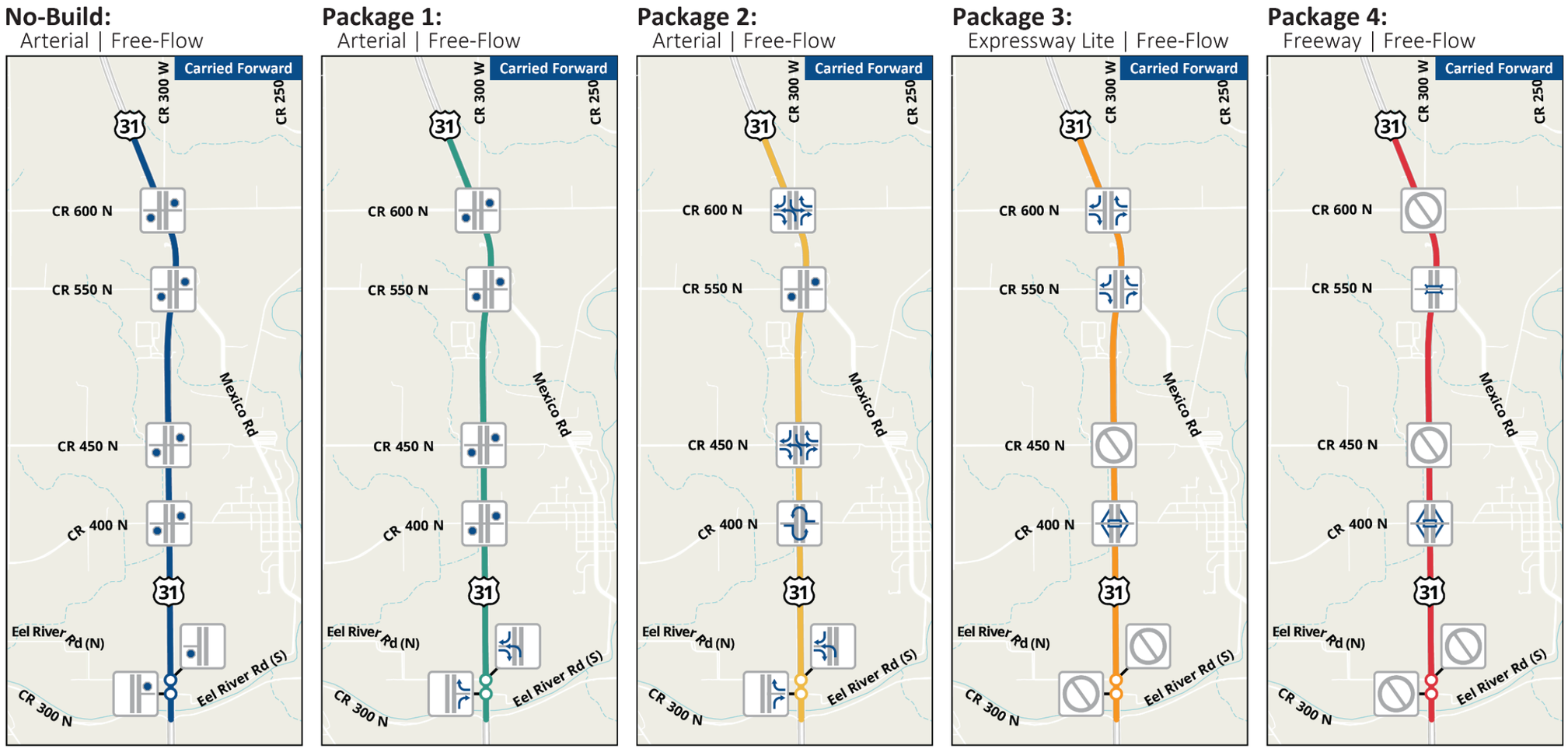
Mexico – Summary of Improvement Packages

The Improvement Packages for the Mexico Planning Segment are shown below in Table 24 and Figure 20.

Table 24 – Mexico – Summary of Improvement Packages

Intersection or *Feature*	Mexico Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Lite Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost***		⟷		***Lower Access to/from US 31 Higher Cost***
CR 600 North	TWSC	TWSC	Directional	RIRO	Closed
CR 550 North/Mexico Road	TWSC	TWSC	TWSC	RIRO	Overpass
CR 450 North	TWSC	TWSC	Directional	Closed	Closed
CR 400 North	TWSC	TWSC	RCI	Interchange	Interchange
Eel River Road (N)	TWSC	Directional	Directional	Closed	Closed
Eel River Road (S)	TWSC	RIRO	RIRO	Closed	Closed
Residential Driveways	*Full Access*	*RIRO only*	*RIRO only*	*RIRO only*	*No Access*
Commercial Driveways	*Full Access*	*RIRO or Full Access*	*RIRO only*	*RIRO only*	*No Access*
Median Openings	*Allowed*	*Allowed (reduced quantity)*	*Allowed (reduced quantity)*	*Allowed (limited circumstances)*	*Not Allowed*

Figure 20 – Level 3 Improvement Packages – Mexico



Preliminary and subject to change. Future study to determine actual configuration.

INTERSECTION TYPES:

Study Recommendation: Carried Forward | Eliminated

- Two-Way Stop Controlled Intersection
- Directional Intersection (RIRO + Left Turns from US 31)
- Right-In/Right-Out Intersection (RIRO)
- Reduced Conflict Intersection (Unsignalized)
- Interchange
- Overpass
- Intersection Closed

ACCESS CONTROL METHODS:

- **MINIMAL ACCESS CONTROL** | Driveways have full access, median openings are provided
- **PARTIAL ACCESS** | All residential driveways are RIRO, commercial driveways may have full access, select median openings provided
- **PARTIAL ACCESS** | All driveways are RIRO, select median openings provided
- **PARTIAL ACCESS**| All driveways are RIRO, median openings provided (limited circumstances)
- **LIMITED ACCESS** | Full control of access (no driveway access, no at-grade intersections, no median openings)

KEY MAP:

All Packages, as applicable, would add or lengthen right and/or left turn lanes from US 31 to improve safety.

Table 25 – Mexico – Comparison of Improvement Packages

Measures of Effectiveness			Mexico Improvement Packages				
			No-Build	Package 1	Package 2	Package 3	Package 4
US 31 Facility Type & Traffic Condition			*Arterial Free-Flow*	*Arterial Free-Flow*	*Arterial Free-Flow*	*Expressway Lite Free-Flow*	*Freeway Free-Flow*
Purpose and Need	Safety	Total Conflict Points (number)	190	185	102	30	22
		Crossing Conflict Points (number)	106	103	40	6	6
		Percent Reduction in Crossing Conflict Points	N/A	3%	62%	94%	94%
		Estimate of Potential Crossing-Related Crashes Prevented (20 yrs)	N/A	0	10	17	17
		Cost Effectiveness Index (CEI)	N/A	N/A	1.1	1.4	3.0
	Mobility & Access	Average Travel Time Along US 31 During AM/PM Peak Hour (minutes)	3.8/3.8	3.8/3.8	3.8/3.8	3.8/3.8	3.8/3.8
		Average Distance between US 31 Access Points (miles)	0.5	0.5	0.5	1.0	1.9
		Average Distance between US 31 Crossing Points (miles)	0.8	0.8	1.3	1.9	1.3
		East-West Mobility (Compared to No-Build)	N/A	Similar	Decreased	Greatly Decreased	Greatly Decreased
		Residential Driveways, RIRO/Full (number)	1/4	4/1	5/0	5/0	0/0
		Commercial Driveways, RIRO/Full (number)	0/1	0/1	1/0	1/0	0/0
		Field Access Driveways, RIRO/Full (number)	4/0	0/0	0/0	0/0	0/0
		Farmland Access Impacts (Yes/No)	No	Yes	Yes	Yes	Yes
Environmental Resources	Natural	NWI Wetlands (acres impacted)	0	0	0	0	0
		Rivers and Streams (linear feet impacted)	0	1,860	2,400	1,680	1,660
		Floodplains (acres impacted)	0	<1	<1	0	0
		Forested Areas (acres impacted)	0	1	1	1	1
	Cultural & Recreational	Potential Impacts to Above-ground Resources (Yes/No)	No	No	No	No	No
		Potential Impacts to Known Archaeological Sites (Yes/No)	No	No	No	No	No
		Potential Impacts to other Section 4(f) Resources (Yes/No)	No	No	No	No	No
		Cemeteries (number impacted)	0	0	0	0	0
	Community & Socioeconomic	Residential Relocations (number)	0	0	0	1	7
		Business Relocations (number)	0	0	0	0	1
		Community Facility or Institutional Relocations (number)	0	0	0	2	2
		Total New Right-of-Way Acquisition (acres)	0	13	15	34	56
		Potential Impacts to Sensitive Communities (acres)	0	0	0	0	0
		Potential Relocations in Sensitive Communities (number)	0	0	0	0	0
		Risk of Greater Impacts to Sensitive Communities (Yes/No)	No	No	No	No	No
		Farmland (acres impacted)	0	8	9	21	24
		Potential Hazardous Materials Sites (number impacted)	0	0	0	0	0
Costs		Estimated Construction Cost (2024 Dollars)	$0	$4M to $6M	$5M to $7M	$12M to $16M	$25M to $32M
		Estimated Right-of-Way Cost (2024 Dollars)	$0	$450k to $560k	$480k to $590k	$2M to $3M	$4M to $6M
		Estimated Total Package Cost (2024 Dollars)	$0	$7M to $10M	$9M to $12M	$21M to $27M	$45M to $56M
Goals		Economic Development	N/A	Neutral	Neutral	Neutral	Neutral
		Transportation for All	N/A	Neutral	Neutral	Neutral	Neutral
		Multimodal Access & Connections	N/A	Neutral	Neutral	Neutral	Neutral
		Corridor Character	N/A	Neutral	Neutral	Diminishes	Diminishes
		Sense of Place & Visual Character	N/A	Neutral	Neutral	Enhances	Enhances
		Emerging Technologies	N/A	Neutral	Neutral	Neutral	Neutral
		Fiscal & Environmental Practicality	N/A	High	High	Moderate	Low

Note: Additional soft costs (e.g., preliminary engineering, construction engineering, etc.) are included in the estimated total package cost.

4.6.3. EVALUATION

The Improvement Packages for the Mexico Planning Segment were comparatively evaluated for safety and mobility according to the purpose and need as well as potential environmental impacts, costs, and study goals. The evaluation of these factors has been summarized in Table 25 and the sections below.

Purpose and Need: Safety

Reduce Conflict Points

The number of crossing conflict points was determined at each intersection according to its potential intersection treatment for each particular Improvement Package. The total crossing conflict points within the segment were summed for each Improvement Package and compared to the No-Build. Overall, the number of crossing conflict points would be lowest for Improvement Packages 3 and 4. Mainline US 31 turn lanes will be lengthened (or added where there currently are none) where necessary and applicable in each of the Improvement Packages to improve safety. Package 1 is not predicted to prevent any crossing crashes, but would improve safety with the turn lane modifications and directional and RIRO configurations at the two Eel River Road intersections. Package 1 could potentially prevent 10 of the crossing crashes in the segment if an RCI were to be added at CR 400 North, the intersection with the segment's highest crash indices. Package 2 does include an RCI at CR 400 North as well as directional intersections at CR 600 North and CR 450 North, potentially eliminating 10 crossing crashes. Packages 3 and 4 could potentially prevent seven additional crossing crashes each. However, the cost-effectiveness indices show that Improvement Packages 3 and 4 would be less cost-effective for potential crash prevention compared to Improvement Package 2. The comparison is shown in Table 25.

Purpose and Need: Mobility

E-W Mobility

Average Distance Between US 31 Crossing Points

Package 1 would have the same number of crossing points as the current corridor (4), but the number of crossing points would decrease further in Packages 2, 3, and 4 as directional intersections, RIROs, and closures are introduced. East-west mobility could be improved in Package 2 by installing U-turn median openings at some or all of the directional intersections to form RCIs that provide additional crossing and turnaround locations. The average distance between crossing points for each package is shown in Table 25. A qualitative estimate of the effect of this measure on east-west mobility compared to the No-Build alternative is noted in the table as well.

Access To/From US 31

Average distance between US 31 access points is one of the ways to assess accessibility to/from the corridor. Packages 1 and 2 would have the same number of access points as the current corridor (6) and Package 3 would have three, but the directional intersections and RIROs at Secondary Intersections in Package 2 and Package 3 respectively would not offer full access. Package 4 would provide only one access point in the Planning Segment with the interchange at CR 400 North. The average distance between access points for each package is shown in Table 25.

Support Free-Flow (Regional Mobility)

None of the Improvement Packages include traffic signals or other impediments to the existing free-flow conditions and optimal travel time along US 31. Therefore, all Improvement Packages would maintain free-flow conditions and regional mobility and this measure does not differentiate the Improvement Packages. All Improvement Packages would have the same estimated travel time of 3.8 minutes.

Environmental

Natural Resources

Overall, minimal impacts to wetlands, floodplains, and forested areas would be expected for all Improvement Packages in the Mexico segment. It is anticipated that there would be between 1,660 and 2,400 linear feet of impacts to rivers and streams for each of the Improvement Packages, primarily near the intersection with CR 400 North. There would be no work near, and no impacts to, the Eel River, which is a known habitat of several Federally listed species.

Cultural & Recreational Resources

No impacts to any of the five potential above-ground cultural resources in the Mexico segment are anticipated. In Improvement Packages 3 and 4, this assumes that access can be maintained to the R. Bond-Hurst Farm via CR 400 North east US 31. There are no known archaeological sites, other Section 4(f) resources, or cemeteries within proximity to the potential footprint in this segment.

Community & Socioeconomic Resources

Improvement Packages 1 and 2 would require the least amount of new right-of-way (13-15 acres each). Improvement Packages 3 and 4 would require approximately 34 and 56 acres of new right-of-way acquisition, respectively.

It is anticipated that Improvement Package 3 would potentially require 1 residential relocation and Package 4 would potentially require 7 residential relocations as well as 1 commercial relocation. Both Package 3 and 4 would also potentially require 2 community/institutional facility relocations (2 churches) each. No other relocations of any type are anticipated for the other Improvement Packages within the Mexico segment. No relocations would be located in areas with sensitive communities.

There are no identified census tracts with sensitive communities along the Mexico segment. In addition to the direct impacts (relocations and property impacts) as shown in Table 25, it is not anticipated that any potential access impacts would affect sensitive communities any differently than the population at large and no risk of greater impacts is anticipated at this time. More detailed evaluation of all populations, including sensitive communities, would be required in the future as project(s) are developed.

Approximately 8 and 9 acres of potential farmland impacts would be anticipated for Improvement Packages 1 and 2, respectively. Improvement Packages 3 and 4 would impact approximately 21 and 24 acres of farmland, respectively.

There are no identified parcels with potential for hazardous materials along the Mexico segment.

Costs

Planning-level costs were developed for the Improvement Packages within the Mexico Planning Segment. A range of low and high estimates are reported for each Improvement Package in Table 25. Total package costs for all Improvement Packages vary widely, between $7 million and $56 million in increasing order from Package 1 to Package 4. Package 1 has the lowest estimated package cost ($7-10 million) while Package 4 has the highest estimated package cost ($45-56 million). Packages 2 and 3 would have estimated package costs in the middle of that range ($9-12 million and $21-27 million, respectively).

Goals

Table 25 summarizes the qualitative ratings for each study area goal for each Improvement Package in the Mexico segment.

- **Economic Development** – Improvement Package 1 would make minimal changes at intersections while improving safety and maintaining local and regional mobility comparable to existing conditions for a Neutral rating. Improvement Package 2 would have a minor negative effect on local mobility and

access (due to a directional intersection eliminating crossing movements) while improving safety, and little to no effect on regional mobility, also for a Neutral rating. Improvement Packages 3 and 4 would provide some added safety benefits but local mobility and access would be impacted by increasing levels of access control. Improvement Package 3 would close 3 of the 6 intersections in the segment, while Improvement Package 4 would close 5 intersections. While these packages could potentially provide some greater regional benefit, the extensive loss of local mobility and access with implementation of full access control could negatively impact local businesses (including agri-business) and locally planned developments. Balancing these numerous factors resulted in the overall rating of Neutral.

- **Transportation for All** – There are no sensitive communities identified in this Planning Segment. Therefore, all Improvement Packages were rated as Neutral.
- **Multimodal Access and Connections** – There are no existing or planned bicycle/pedestrian facilities, known non-motorized routes, or known other multimodal needs in this Planning Segment. Therefore, all Improvement Packages were rated as Neutral. Opportunities exist to incorporate bicycle/pedestrian facilities into the preliminary design phase of any future projects in the study area.
- **Corridor Character** – This Planning Segment is rural in character. The changes included in Improvement Packages 1 and 2 are not anticipated to alter that character; the fit and function of US 31 in the study corridor would remain as a rural arterial with primarily at-grade intersections for a Neutral rating. Improvement Packages 3 and 4 would convert US 31 into an expressway or freeway, respectively, Improvement Packages 3 and 4 would have the potential to "Diminish" that character by shifting the fit and function of US 31 in the study corridor towards an interstate-like facility.
- **Sense of Place & Visual Character** – Improvement Packages 3 and 4 include the construction of a new interchange at CR 400 North. This interchange would provide an opportunity to create a visual gateway to the Mexico area. Improvement Package 4 would also provide an overpass at CR 550 North/Mexico Road, which could serve as a visual gateway (without access). Therefore, Improvement Packages 3 and 4 both received an Enhances rating. Improvement Packages 1 and 2 would provide limited opportunities to enhance the sense of place in this segment comparable to existing conditions and therefore received a Neutral rating.
- **Emerging Technologies** – None of the Improvement Packages would impact the ability to implement autonomous and connected vehicles, so each received a Neutral rating. Specific locations for EV infrastructure within this Planning Segment have not yet been identified. In general, Improvement Packages with more control of access could impact the implementation of the INDOT EV Infrastructure Plan; however, additional information and coordination is needed to fully assess.
- **Fiscal & Environmental Practicality –** Improvement Packages 1 and 2 would have modest estimated costs and cost efficiencies but lower overall impacts, resulting in a higher level of practicality. Improvement Package 3 would have more moderate costs and impacts, resulting in a moderate level of practicality. Improvement Package 4 would have higher costs with higher impacts, including several relocations, and would have lower cost efficiency, resulting in a low level of practicality.

4.6.4. RECOMMENDATIONS

Based on the above evaluation, the overall degree to which each of the different measures of effectiveness benefited (or didn't benefit) the study corridor was qualitatively summarized to assist in the rating of each of the four Improvement Packages in the Mexico segment to be eliminated or carried forward. The results are shown in Table 26.

Table 26 – Mexico – Level 3 Recommendations

Evaluation Criteria	Mexico Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway Lite Free-Flow***	***Freeway Free-Flow***
Safety	No Change	Minimal Improvement	Minimal Improvement	Minimal Improvement	Minimal Improvement
Local Mobility & Access	No Change	Minimal/No Change	Minor Reduction	Substantial Reduction	Substantial Reduction
Regional Mobility	No Change	No Change	No Change	No Change	No Change
Environmental Resources	No Impact	Minimal Impact	Minimal Impact	Minimal Impact	Modest Impact
Cost	N/A	Low Cost	Low Cost	Low Cost	Moderate Cost
Goals	No Change	Slightly Enhances	Slightly Enhances	Neutral	Slightly Diminishes
Level 3 Result	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**	**CARRIED FORWARD**

Color coding: Gray represents no change from existing conditions (i.e., comparable to No-Build); blue shading represents positive overall changes compared to the No-Build; and brown shading represents negative overall changes compared to the No-Build.

As shown in the above table, overall:

- The No-Build would make no improvements beyond those currently programmed but is required to be considered in the NEPA process and will therefore be carried forward in all Planning Segments.
- Improvement Package 1 would make safety improvements by adding or extending turn lanes where necessary and adding directional or RIRO intersection treatments at the Eel River Road intersections. At the same time, it would have minimal negative impact to local mobility and access and minimal impacts to environmental resources while also having a low cost. For these reasons, Package 1 is carried forward.
- Improvement Package 2 would bring minimal safety improvements by potentially preventing 10 (or 50 percent) of the crossing crashes in the segment by adding an RCI at CR 400 North and directional

intersections or a RIRO at four other intersections. It would do so with only minor reductions in local mobility and access, a low cost, and minimal environmental impacts. For these reasons, Package 2 is carried forward.

- Improvement Packages 3 and 4 would provide greater safety improvements than Packages 1 and 2 by potentially preventing 17 of the crossing crashes in the segment. However, this comes with higher costs (particularly Package 4) and substantial reductions in local mobility and access. Package 4 has a high cost-effectiveness index. Overall, Packages 3 and 4 have higher costs and impacts with marginal benefits compared to other lower-cost options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between these potential benefits, impacts, and costs would require further analysis in the future to determine if these packages are a reasonable solution to the Planning Segment's transportation needs. For these reasons, Packages 3 and 4 are carried forward.

When viewing these recommendations, it is important to remember that cohesive packages based on access management strategies are presented in this Planning Segment to show potential interoperability between intersections and to be able to assess potential impacts relative to each other. Specific intersection treatments could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area. See Section 6 of this report for more details on next steps.

5. SUMMARY OF LEVEL 3 RESULTS

The overall results of the Level 3 screening are summarized in Table 27 below.

Table 27 – Level 3 Screening Results

Planning Segment	Improvement Packages				
	No-Build	**Package 1**	**Package 2**	**Package 3**	**Package 4**
US 31 Facility Type & Traffic Condition	***Arterial Free-Flow***	***Arterial Free-Flow***	***Arterial Free-Flow***	***Expressway & Expressway Lite Free-Flow***	***Freeway Free-Flow***
Characteristics	***Higher Access to/from US 31 Lower Cost***		⟷		***Lower Access to/from US 31 Higher Cost***
Fulton North	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
Rochester North	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
Rochester South	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
Macy	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
Denver	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD
Mexico	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD	CARRIED FORWARD

6. NEXT STEPS

Cohesive Improvement Packages based on access management strategies are presented in this document to show potential interoperability between intersections and to be able to assess potential impacts relative to each other.

At this time, no decisions have been made about the future of US 31, and no projects related to the PEL study have been funded by INDOT. A stated goal of the PEL process is the identification of a range of reasonable alternatives. Given the needs identified within the study area, a reasonable alternative could consist of improvements at a single intersection; it could also consist of improvements at multiple intersections and/or the roadway sections in between them (i.e., access management). Additionally, it is important to note that in many cases Improvement Packages 3 and 4 in this Level 3 screening would have high costs and/or impacts with marginal benefits compared to other options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type, such as to a freeway, may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between the potential benefits, impacts and costs would require further analysis in the future to determine if such changes would be a reasonable solution to the study area's transportation needs. Depending on multiple factors, including statewide priorities and funding availability, intersection treatments considered as part of this PEL study could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area.

It is possible that Improvement Packages could be mixed and matched across Planning Segments in the future. This means that access management strategies could vary throughout the study area; however, as part of that decision-making process (which may occur subsequent to this PEL study), an assessment will be completed to consider factors such as driver expectation and continuity across the Planning Segments, as well as the relationship and potential impacts upon other intersections and/or Planning Segments.

Additionally, one of the purposes of completing a PEL study is the early identification of potential issues that would require further consideration. These will be documented in the final PEL Study Report at the end of this study. Additional details and evaluation would typically be developed during the National Environmental Policy Act (NEPA) process, which occurs during INDOT's traditional project development process for projects utilizing federal funds or requiring federal approvals.

6.1. FUTURE VISION

Based on the work completed as part of the ProPEL US 31 North study, INDOT's long-term vision is for US 31 between Indianapolis and South Bend to be a free-flow facility, which is a road without traffic signals, stop signs, or yield signs for the mainline traffic. There are varying types of free-flow facilities, ranging from freeways – which have full control of access – to free-flow facilities that have no or partial control of access. Within the US 31 North study area, US 31 is already free-flow and each of the Improvement Packages would maintain that condition. At the same time, the study identified the need to improve safety and mobility in the study corridor. The alternatives considered in this study would address those needs to varying levels; however, there are tradeoffs to consider and uncertainties that would impact the implementation timeline.

Tradeoffs to consider include:

- Higher costs to implement;
- Higher community and environmental impacts to implement; and

- Potentially severe impacts to local communities and businesses due to the loss of access to/from US 31, as well as reduced mobility across it.

Uncertainties impacting the implementation timeline include:

- Policy decisions of elected officials and agency leaders;
- Statewide transportation priorities; and
- Transportation funding.

Given these tradeoffs and uncertainties, the ProPEL US 31 North study considered a range of improvements that provide INDOT with the flexibility needed to incrementally address the study area's needs through a series of improvements over time. The improvements include more immediate, lower-cost improvements, as well as higher-cost improvements that require funding beyond what is currently available.

Due to the identified uncertainties, the study concludes that implementation of these improvements on US 31 in the study area would likely extend beyond the study's planning horizon of 2045. In the interim, the study provides INDOT with a flexible guide to incrementally upgrade US 31 in the study area to address the identified transportation needs.

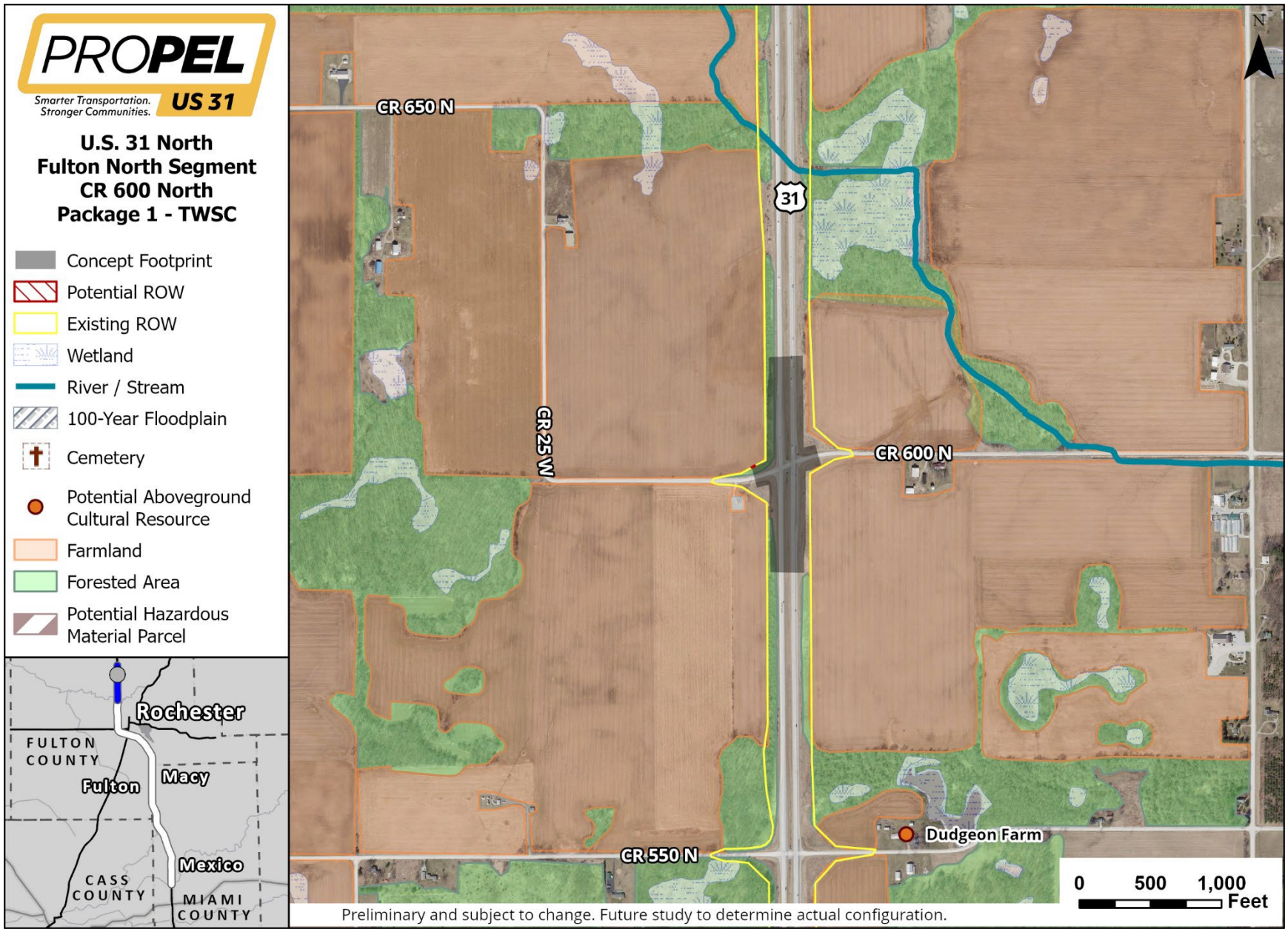
6.2. PEL STUDY REPORT

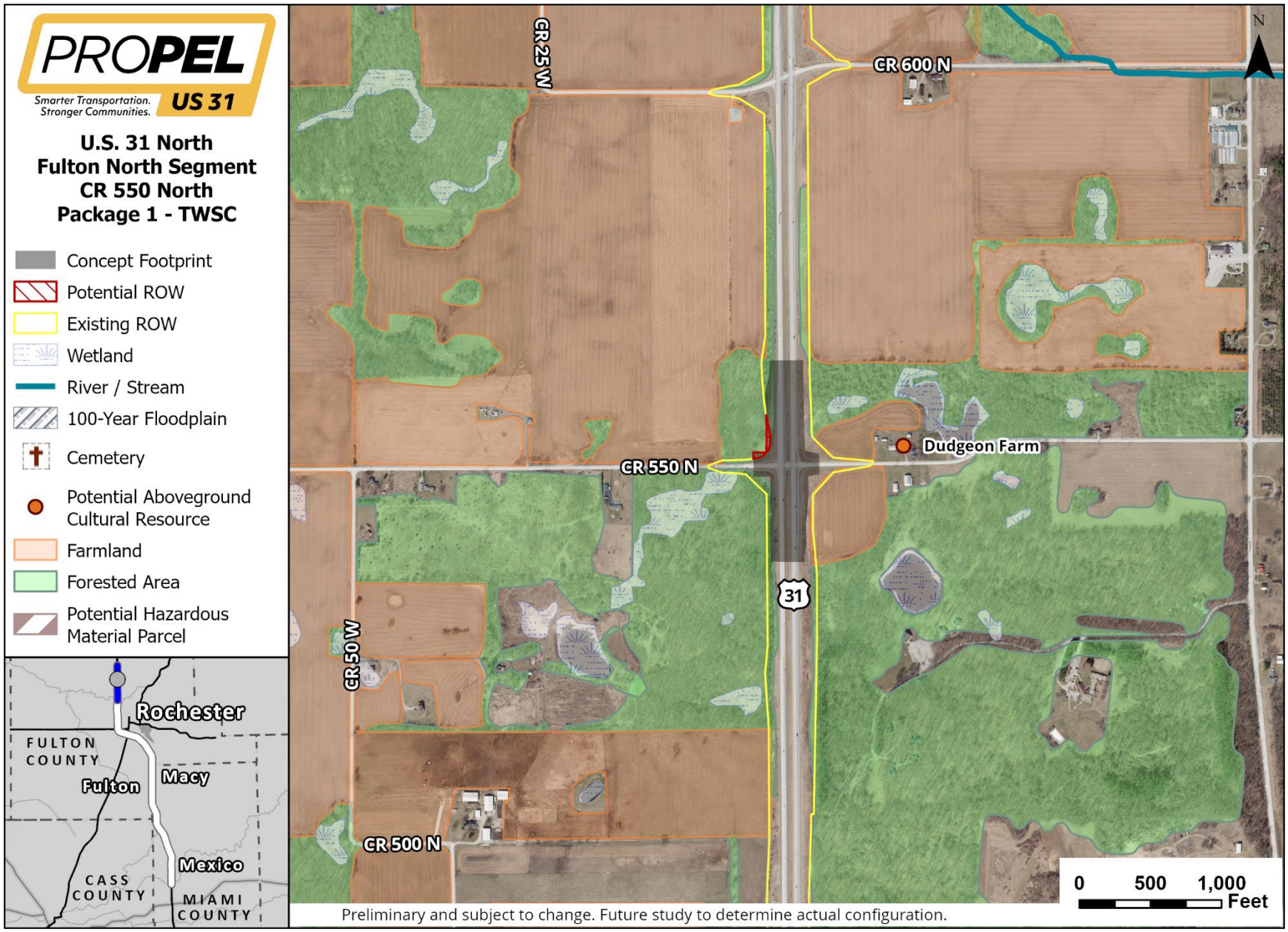
This PEL study is being conducted in accordance with FHWA's PEL program which was established to help transportation planning agencies develop a collaborative, integrated, and seamless decision-making process that minimizes duplication of efforts between early (i.e., pre-NEPA) transportation planning studies and the NEPA process. The overall goal of this PEL study was to complete planning products such as the purpose and need statement and to develop, analyze, and screen a range of reasonable alternatives in a NEPA-compliant manner. As such, when the NEPA process is initiated, these planning products can be incorporated via reference and the information can be used to develop and inform future projects and NEPA studies as is appropriate under planning regulations (23 CFR 450). These planning products can minimize the need for rework and provide a seamless transition between the PEL study and future NEPA studies.

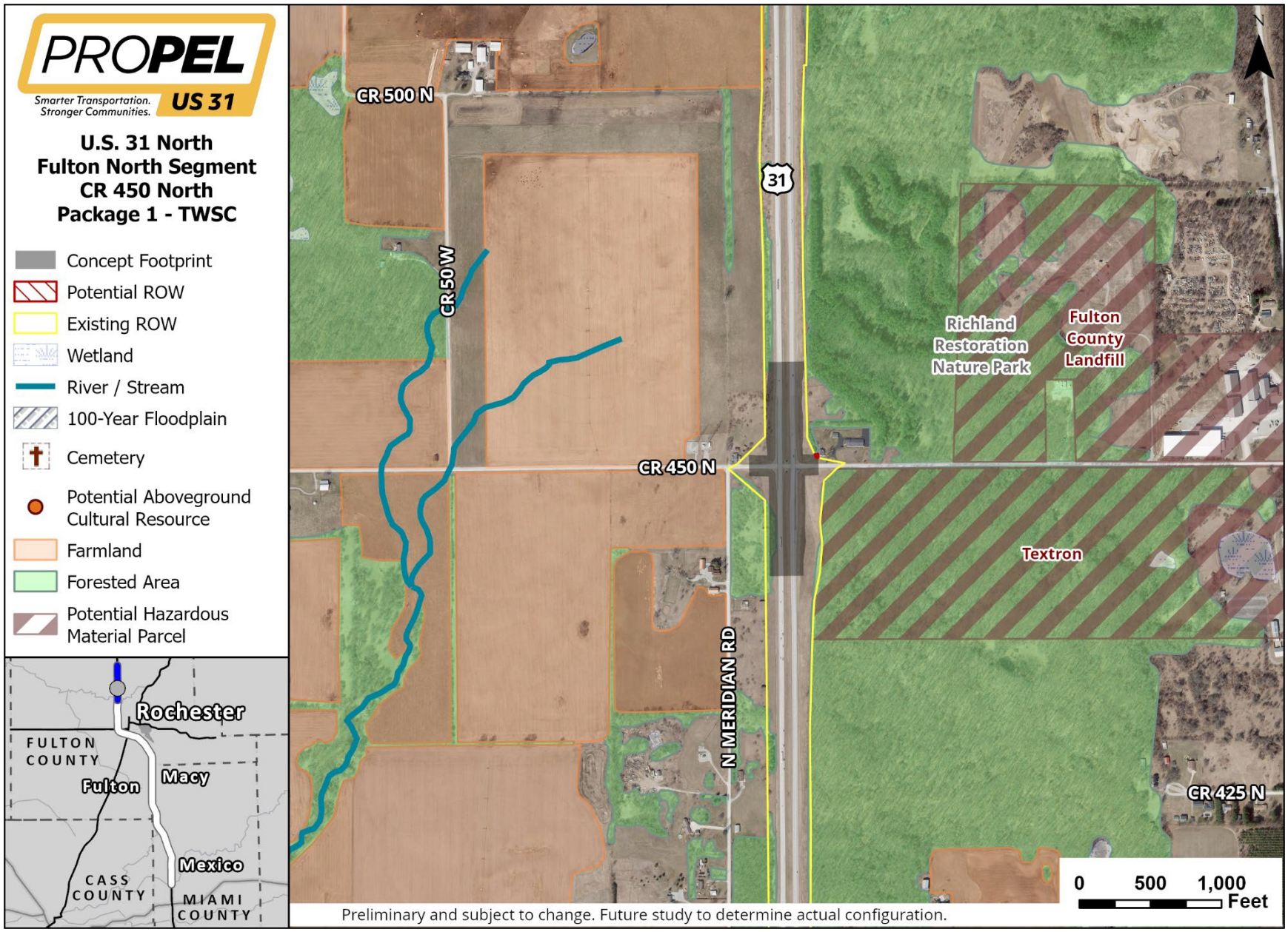
The final step of the ProPEL US 31 North study will be the development and publication of the *PEL Study Report*, which will include completion of the FHWA PEL Questionnaire. Like all other planning products for the study, the *PEL Study Report* will be made available for agency and public review. The *PEL Study Report* is expected to be published in 2025. INDOT will determine the appropriate public involvement methods depending on if/what new information is presented in the *PEL Study Report*. If no new information is presented, INDOT may use other ways to engage stakeholders and the public rather than conducting formal in-person public information meetings.

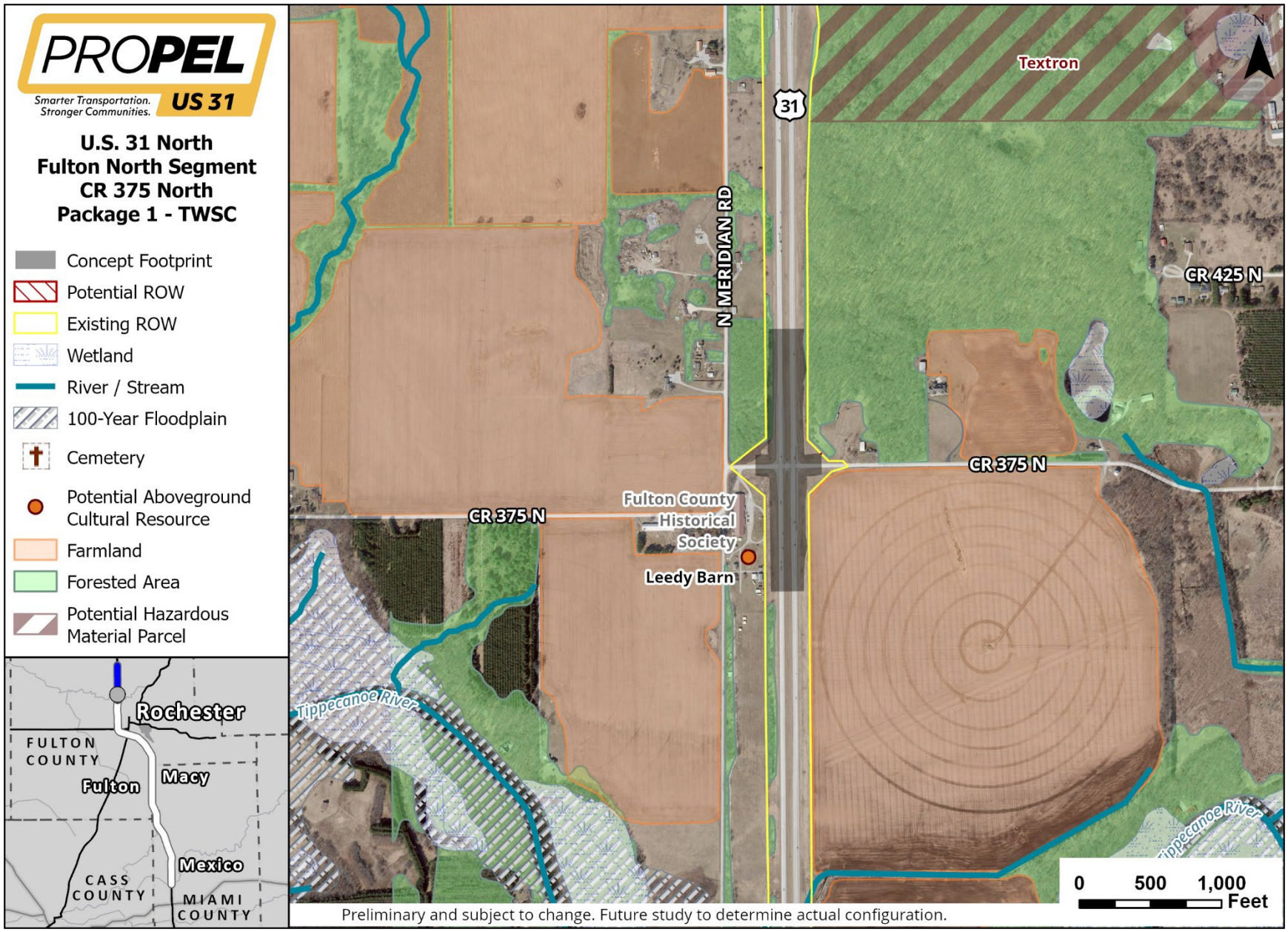
PROPEL US 31 NORTH
LEVEL 3 REPORT

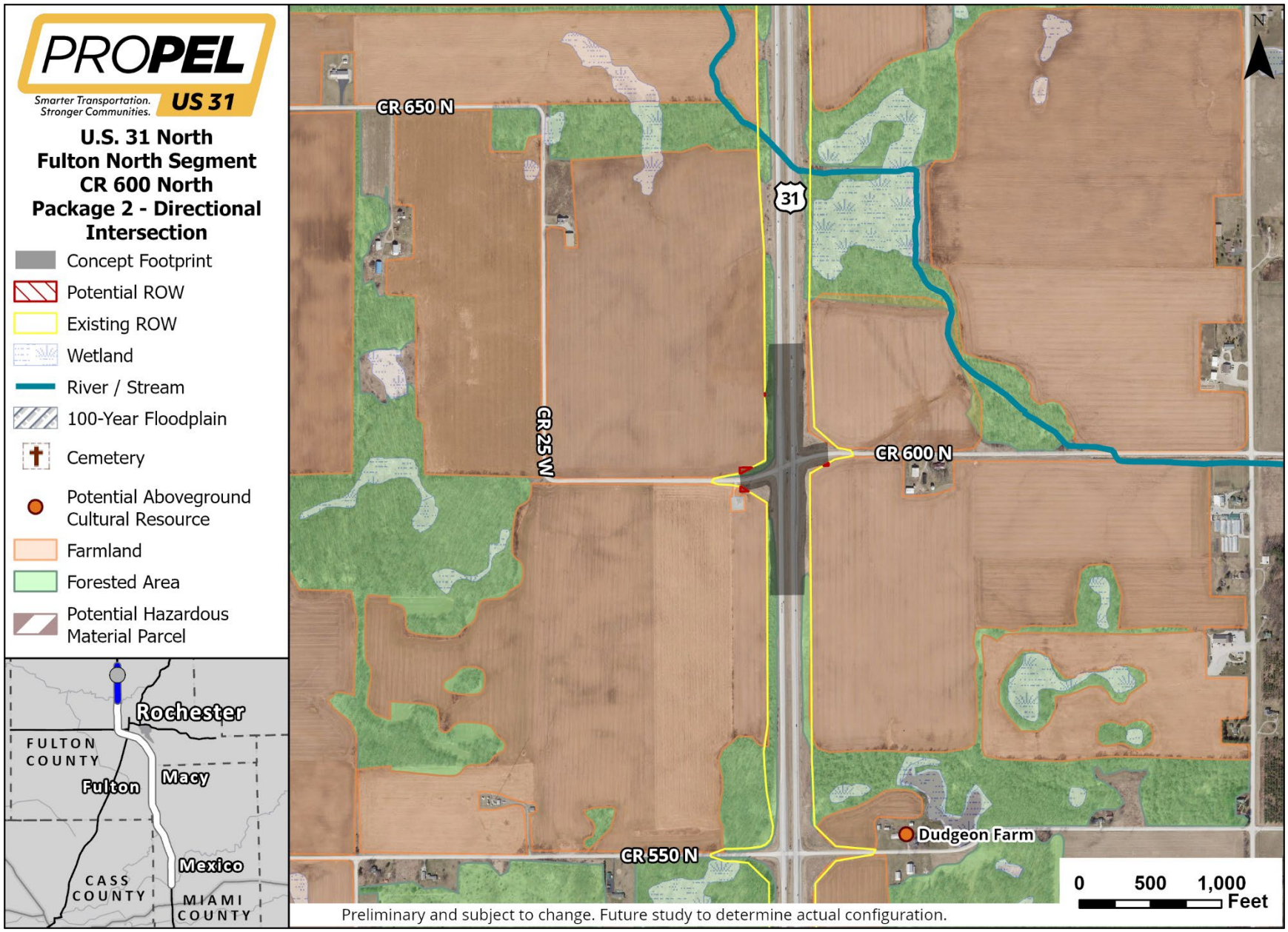
APPENDIX A.
IMPROVEMENT PACKAGE MAPS

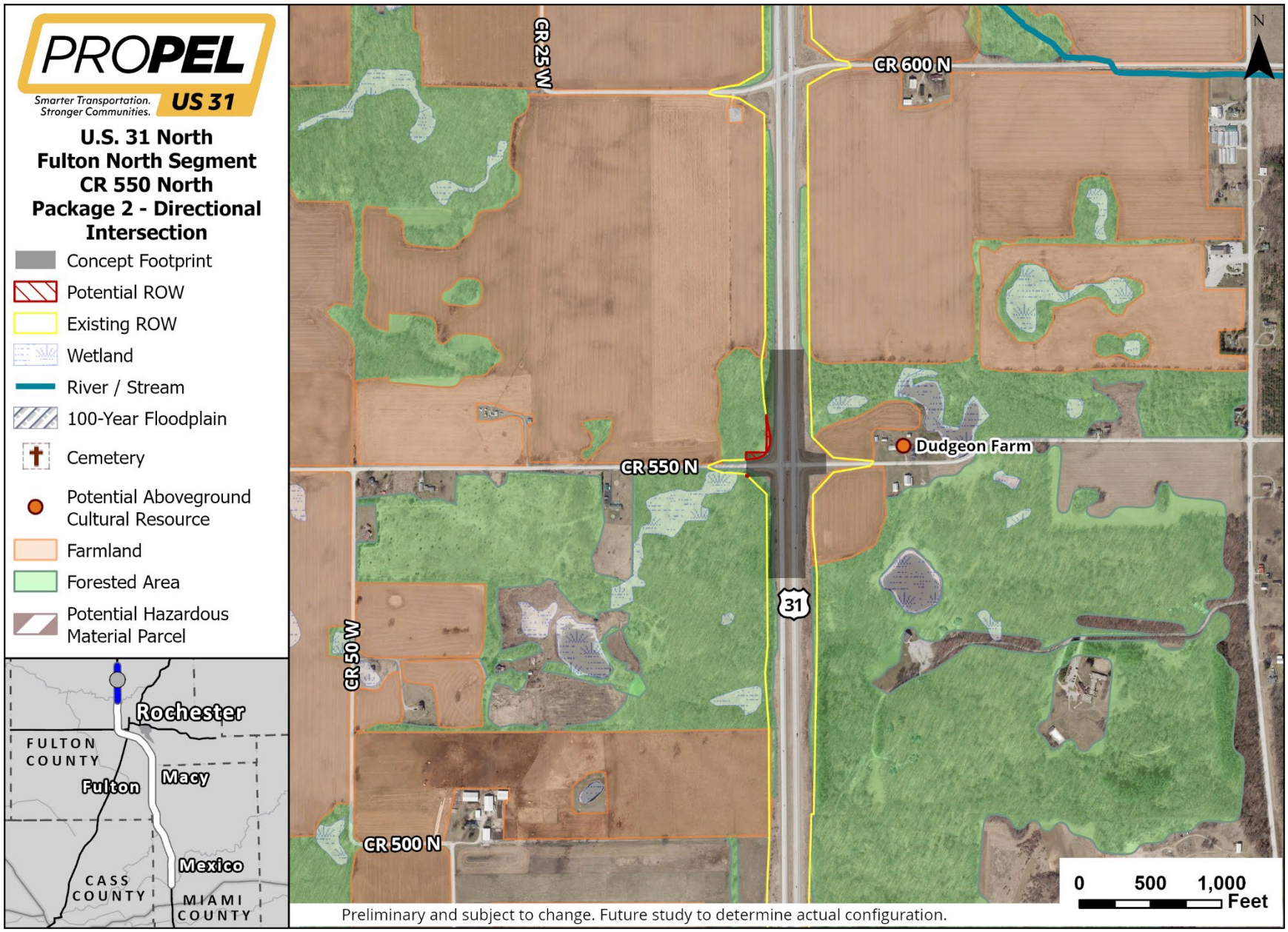

PROPEL US 31
Smarter Transportation. Stronger Communities.
U.S. 31 North
Fulton North Segment
CR 600 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 650 N
31
CR 25W
CR 600 N
Dudgeon Farm
CR 550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

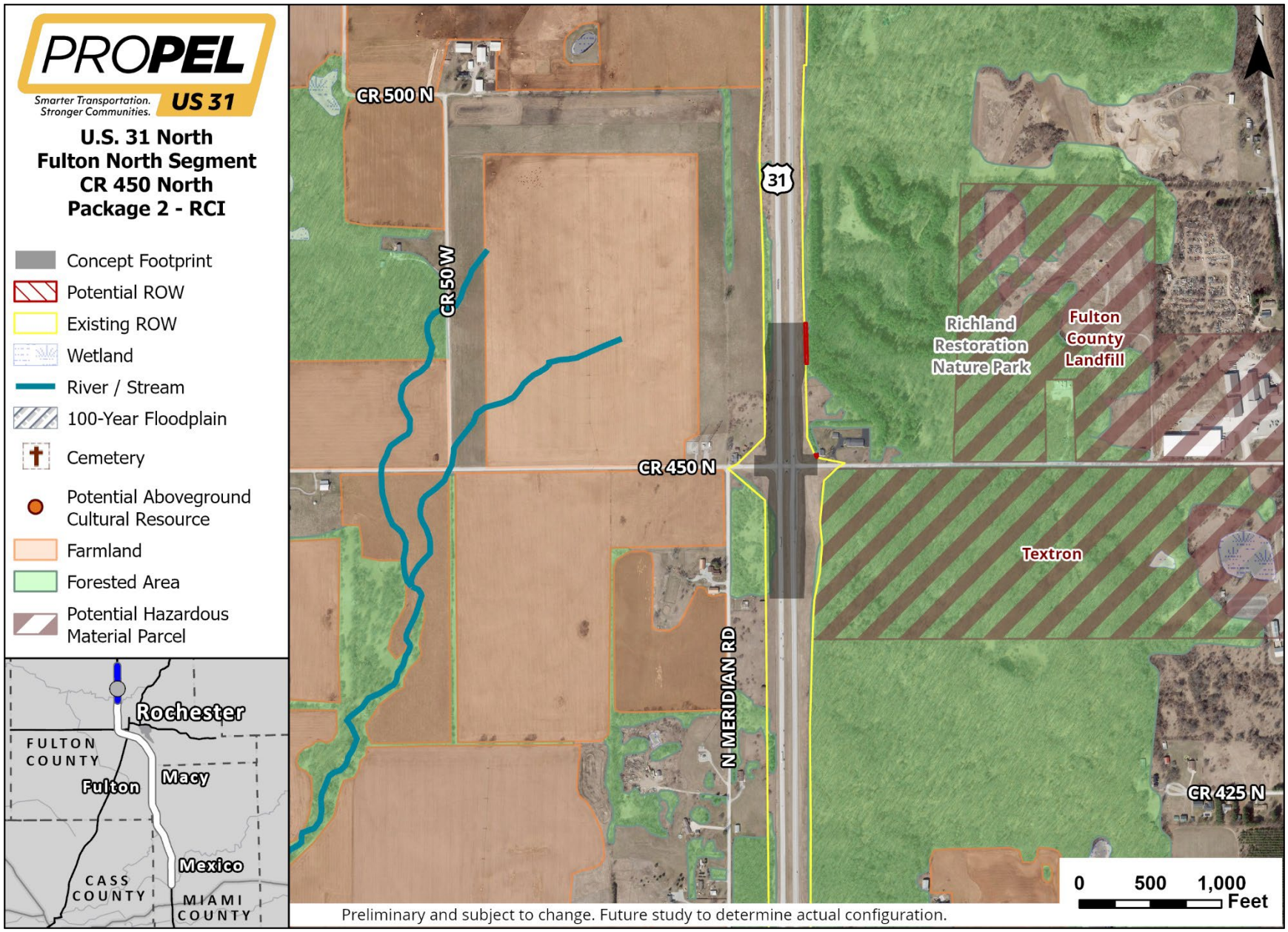

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 550 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 25 W
CR 600 N
CR 550 N
CR 50 W
CR 500 N
Dudgeon Farm
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

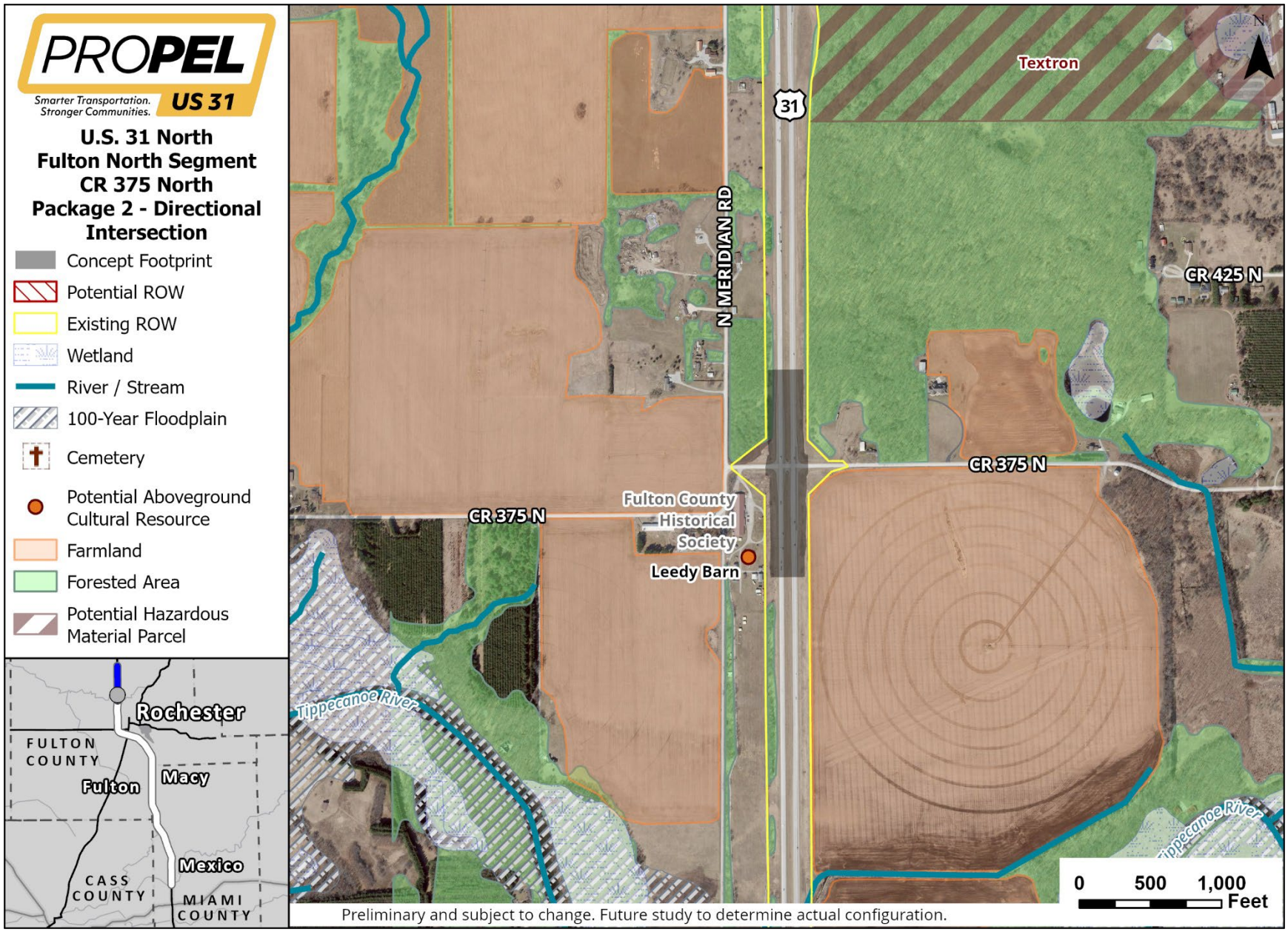

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 450 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 500 N
CR 50 W
31
Richland Restoration Nature Park
Fulton County Landfill
CR 450 N
Textron
N MERIDIAN RD
CR 425 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

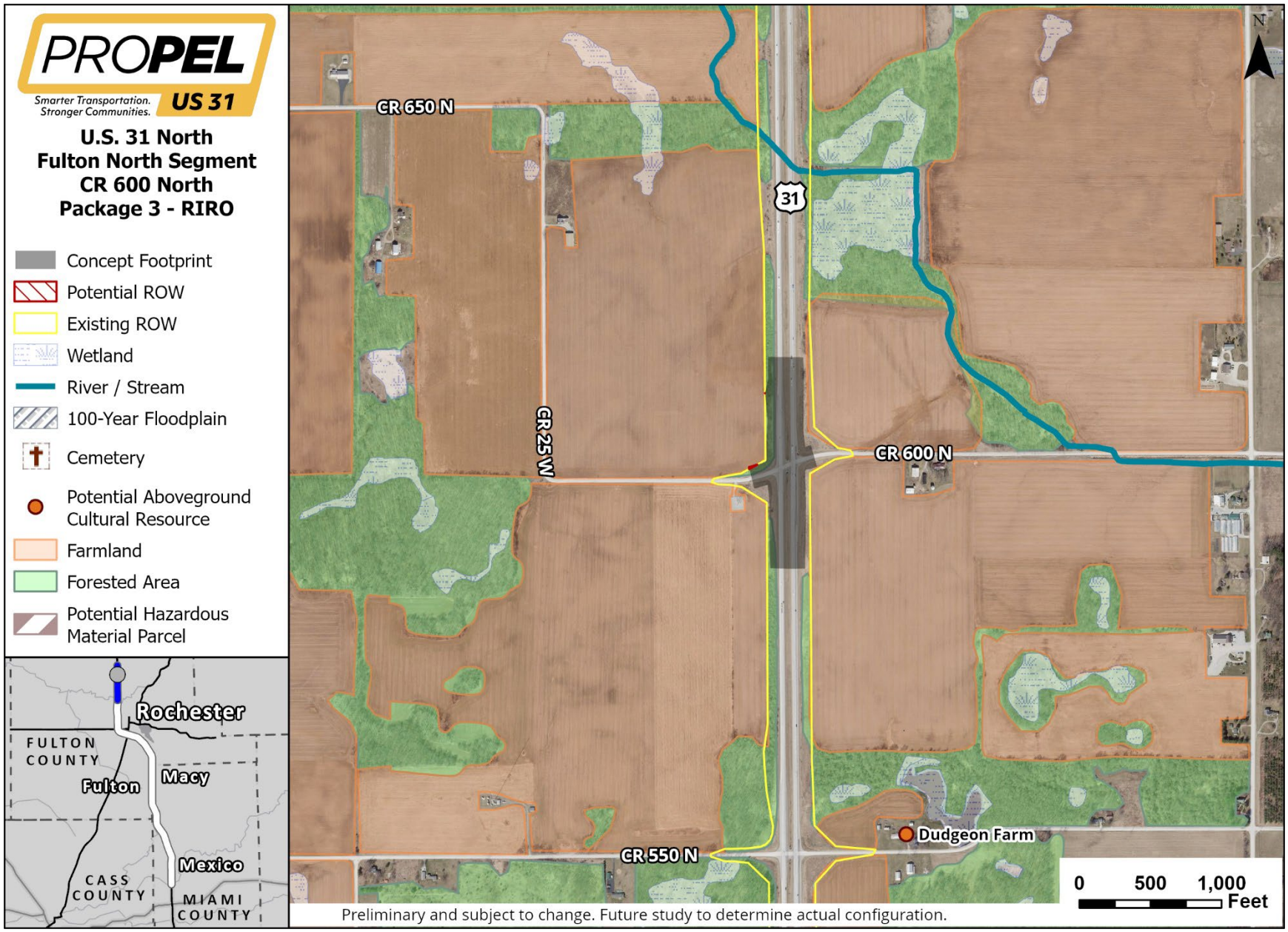

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 375 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Textron
31
N MERIDIAN RD
CR 425 N
CR 375 N
CR 375 N
Fulton County Historical Society
Leedy Barn
Tippecanoe River
Tippecanoe River
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

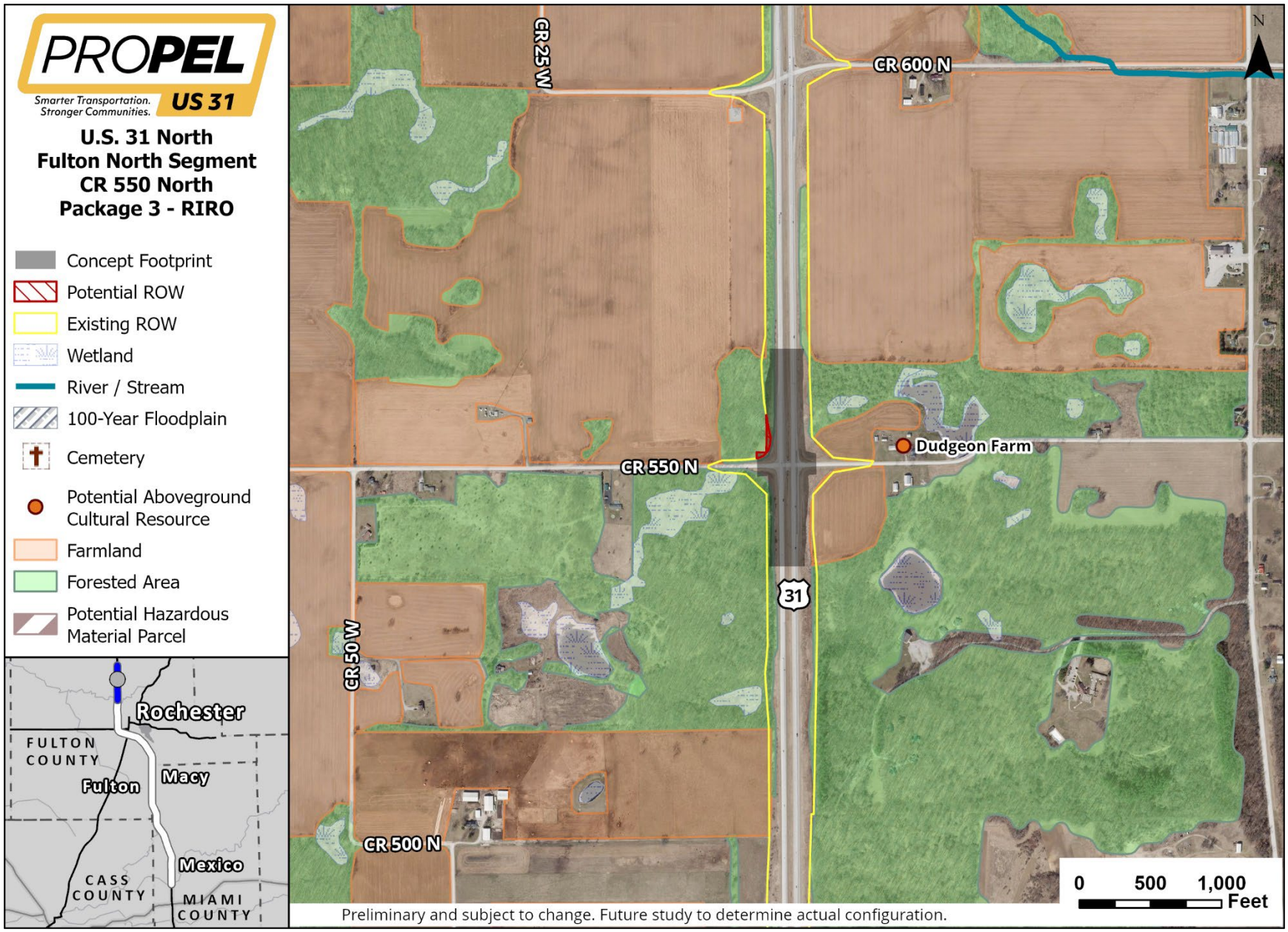

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 600 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 650 N
31
CR 25W
CR 600 N
Dudgeon Farm
CR 550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

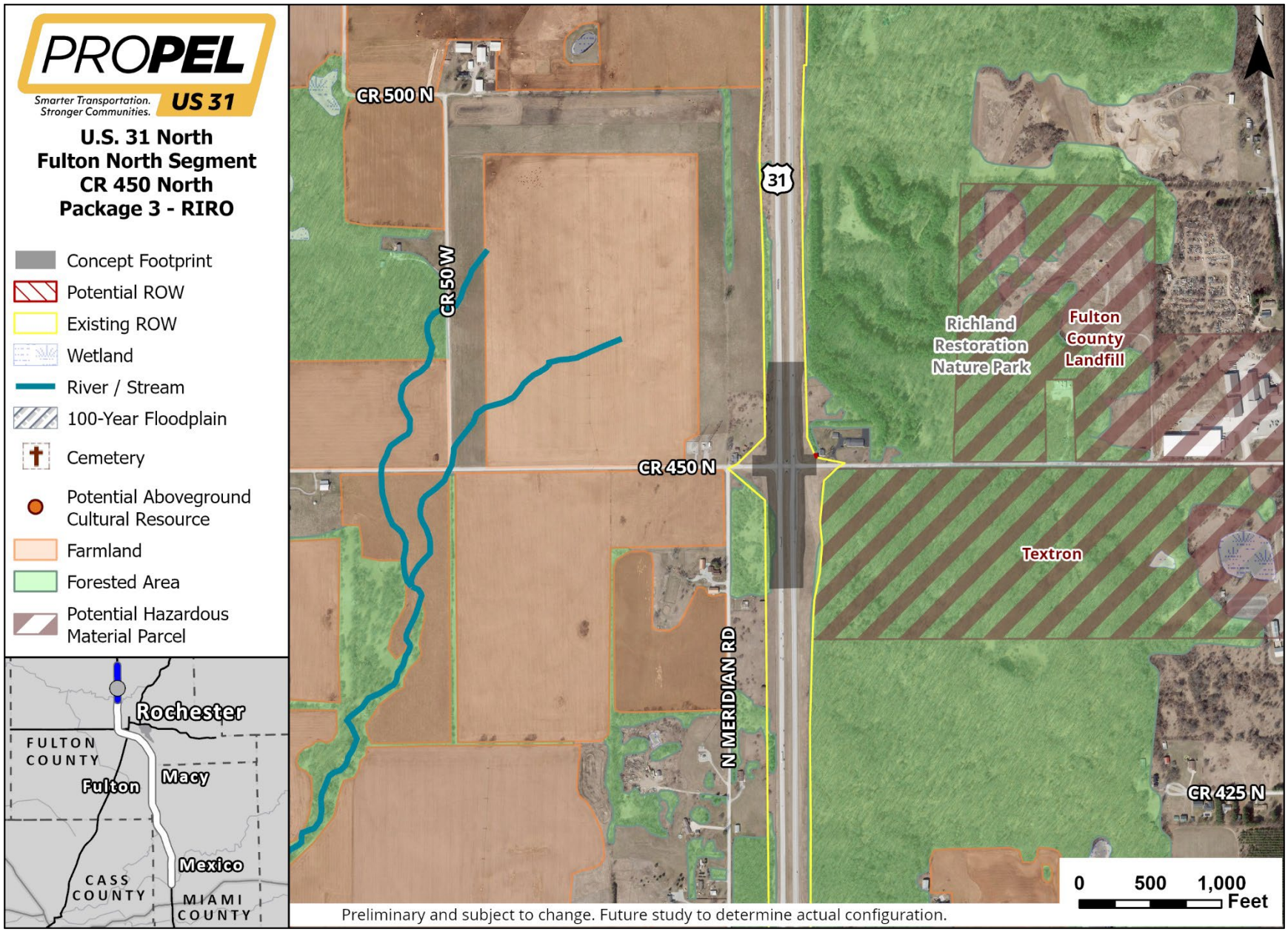

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 550 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 25 W
CR 600 N
CR 550 N
CR 50 W
CR 500 N
Dudgeon Farm
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

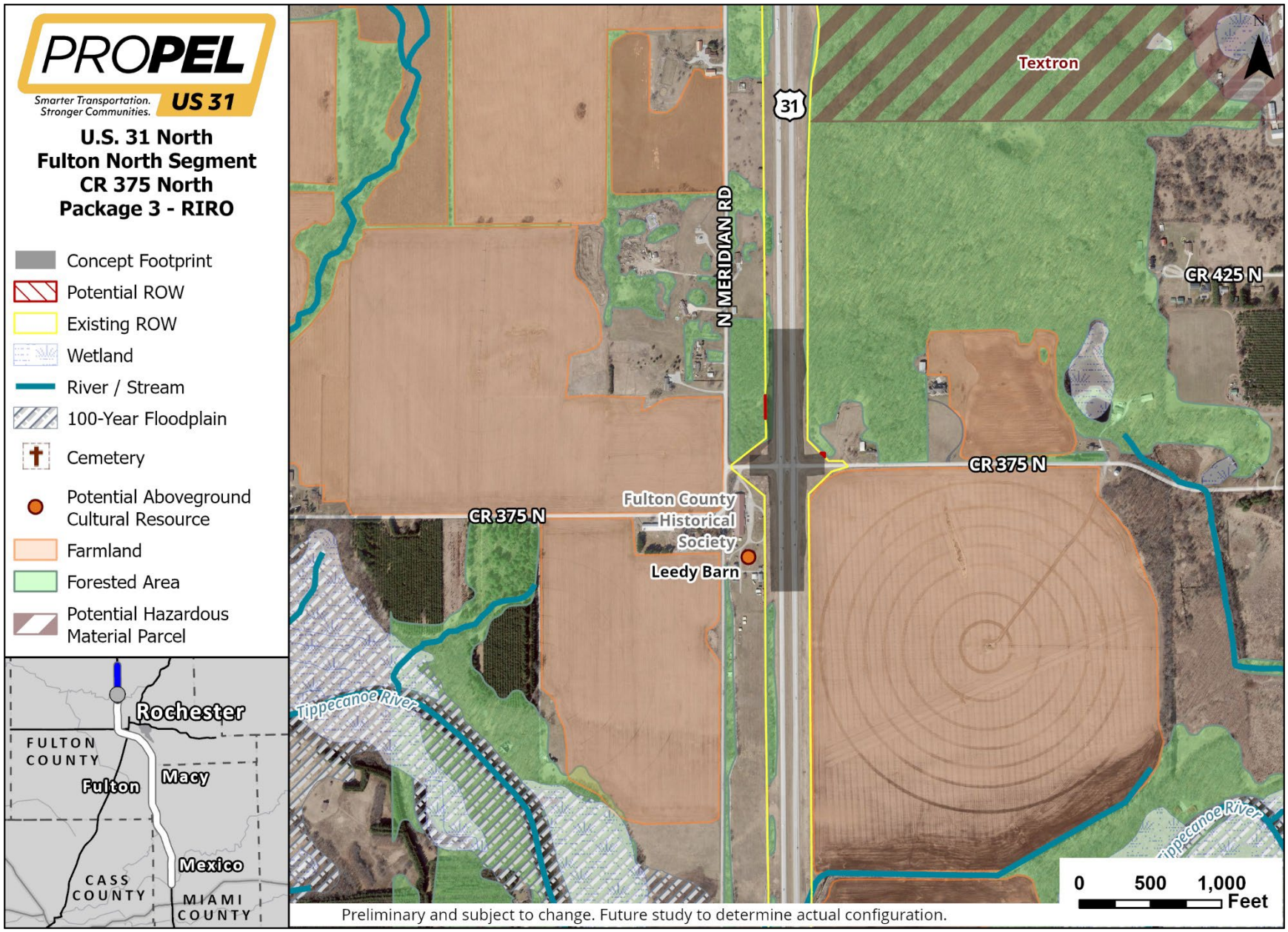

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 450 North
Package 2 - RCI
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 500 N
CR 50 W
31
Richland Restoration Nature Park
Fulton County Landfill
CR 450 N
Textron
N MERIDIAN RD
CR 425 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

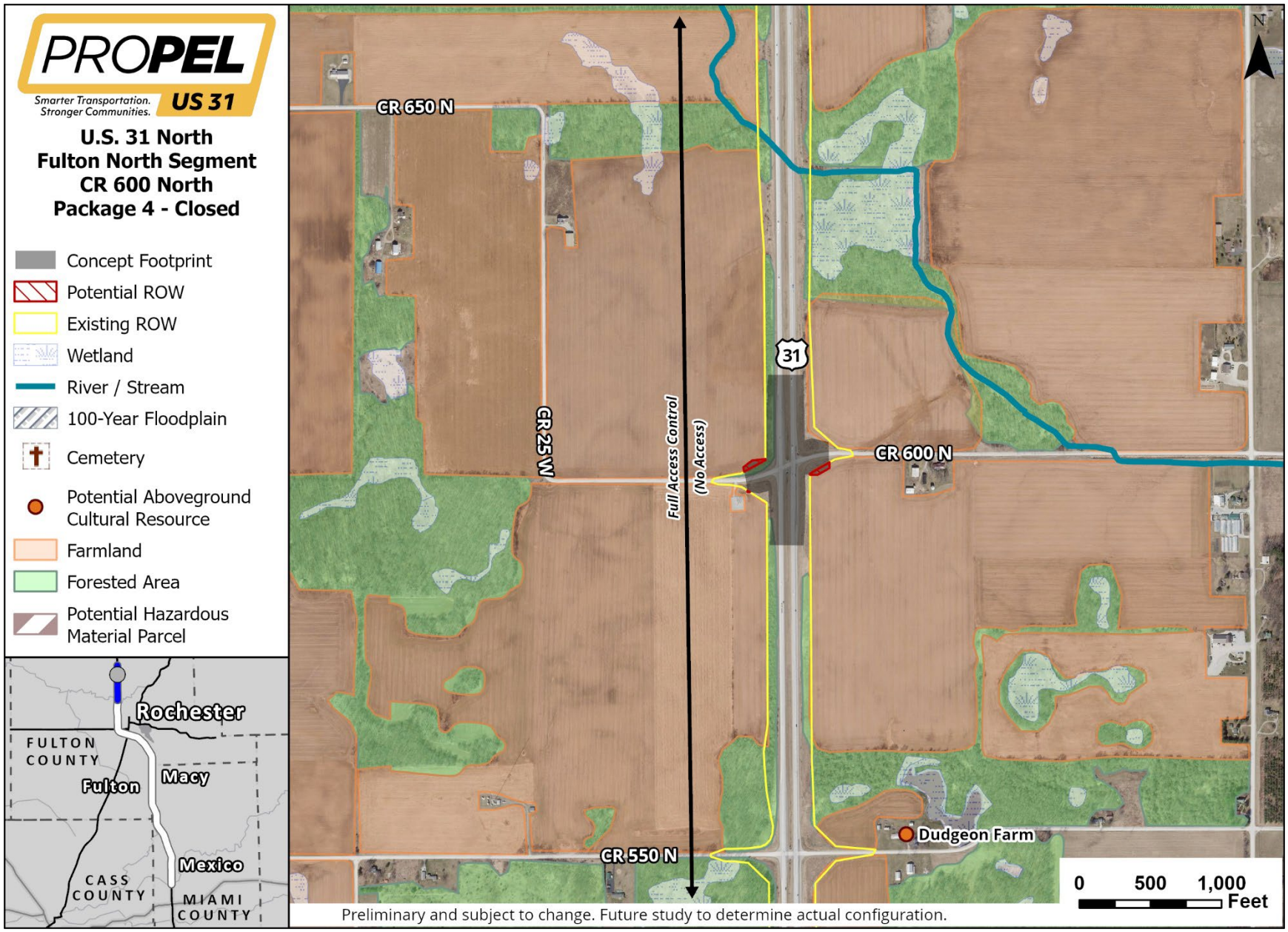

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 375 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Textron
31
N MERIDIAN RD
CR 425 N
CR 375 N
CR 375 N
Fulton County Historical Society
Leedy Barn
Tippecanoe River
Tippecanoe River
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

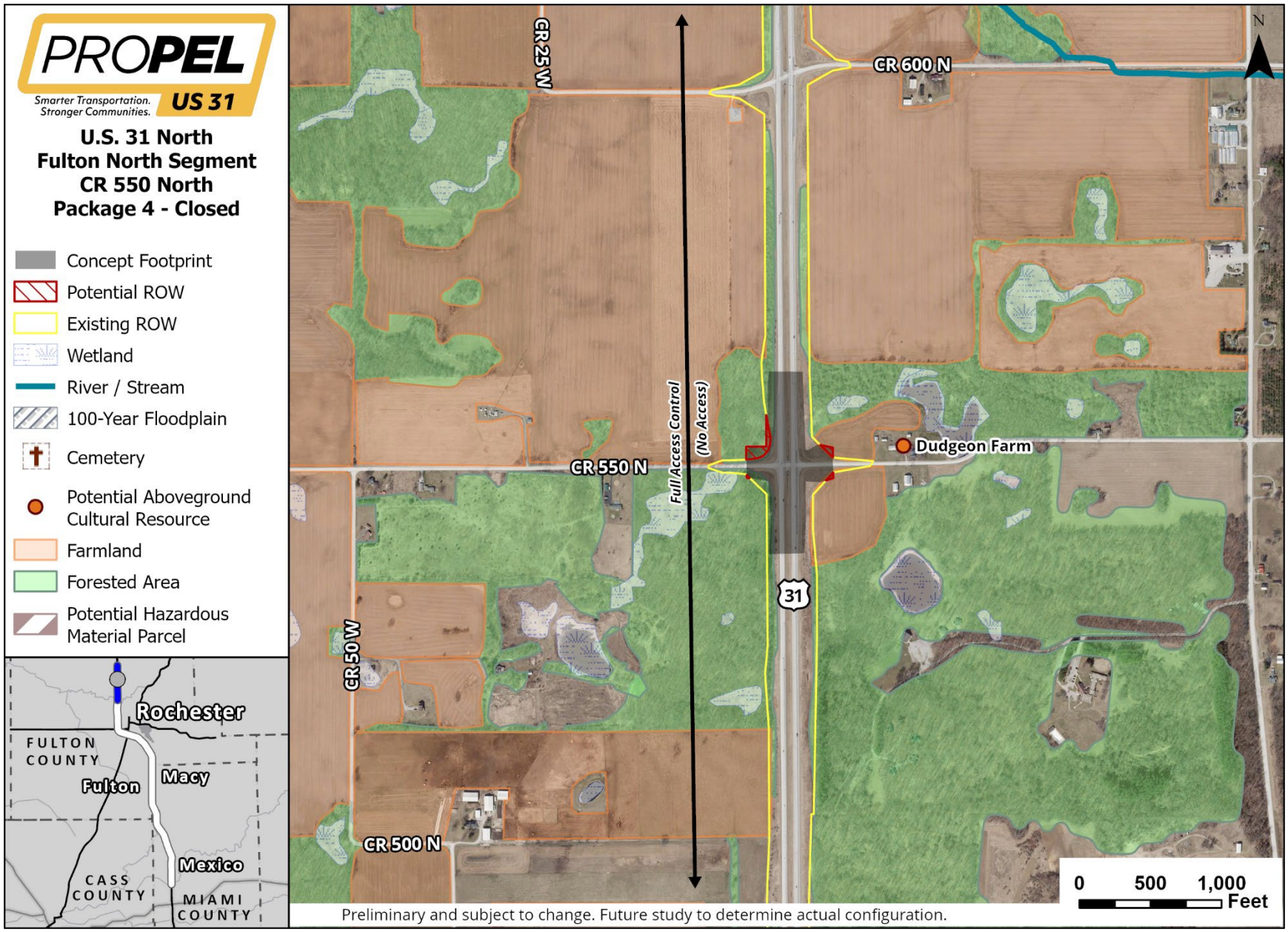

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 600 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 650 N
31
CR 25W
CR 600 N
Dudgeon Farm
CR 550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

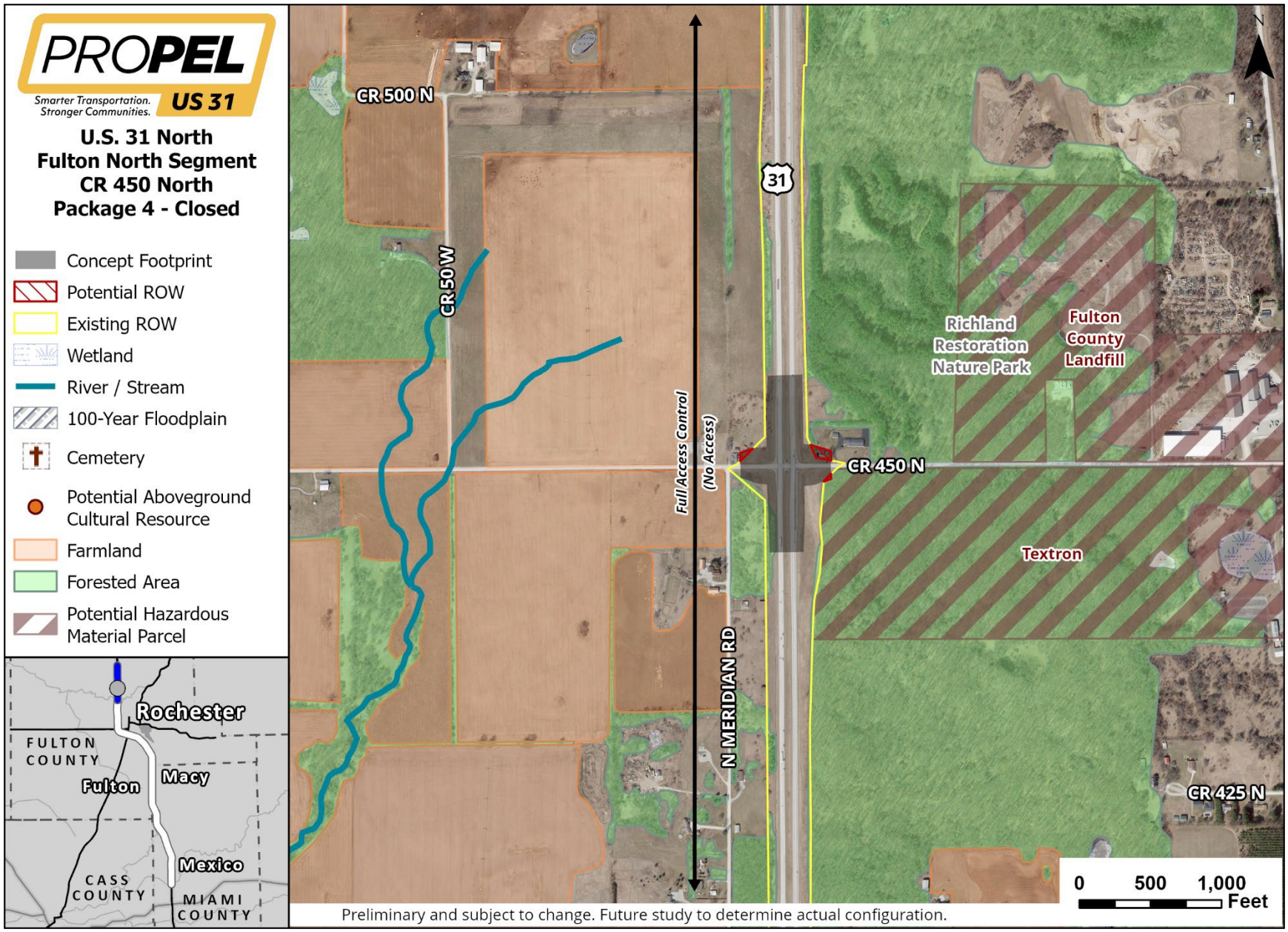

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 550 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 25 W
CR 600 N
CR 550 N
CR 50 W
CR 500 N
Dudgeon Farm
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

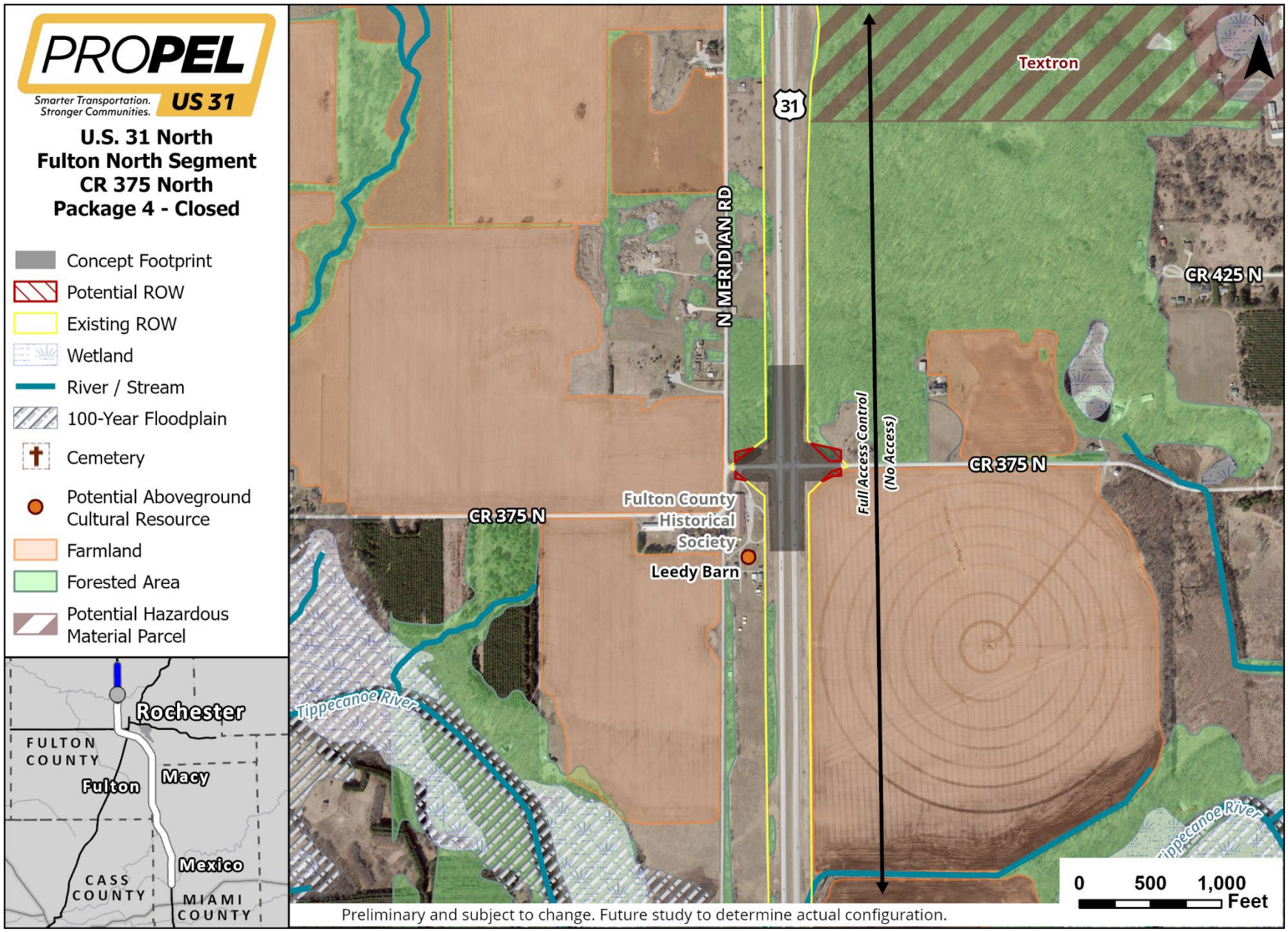

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 450 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 500 N
CR 50 W
31
Richland Restoration Nature Park
Fulton County Landfill
CR 450 N
Textron
N MERIDIAN RD
CR 425 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

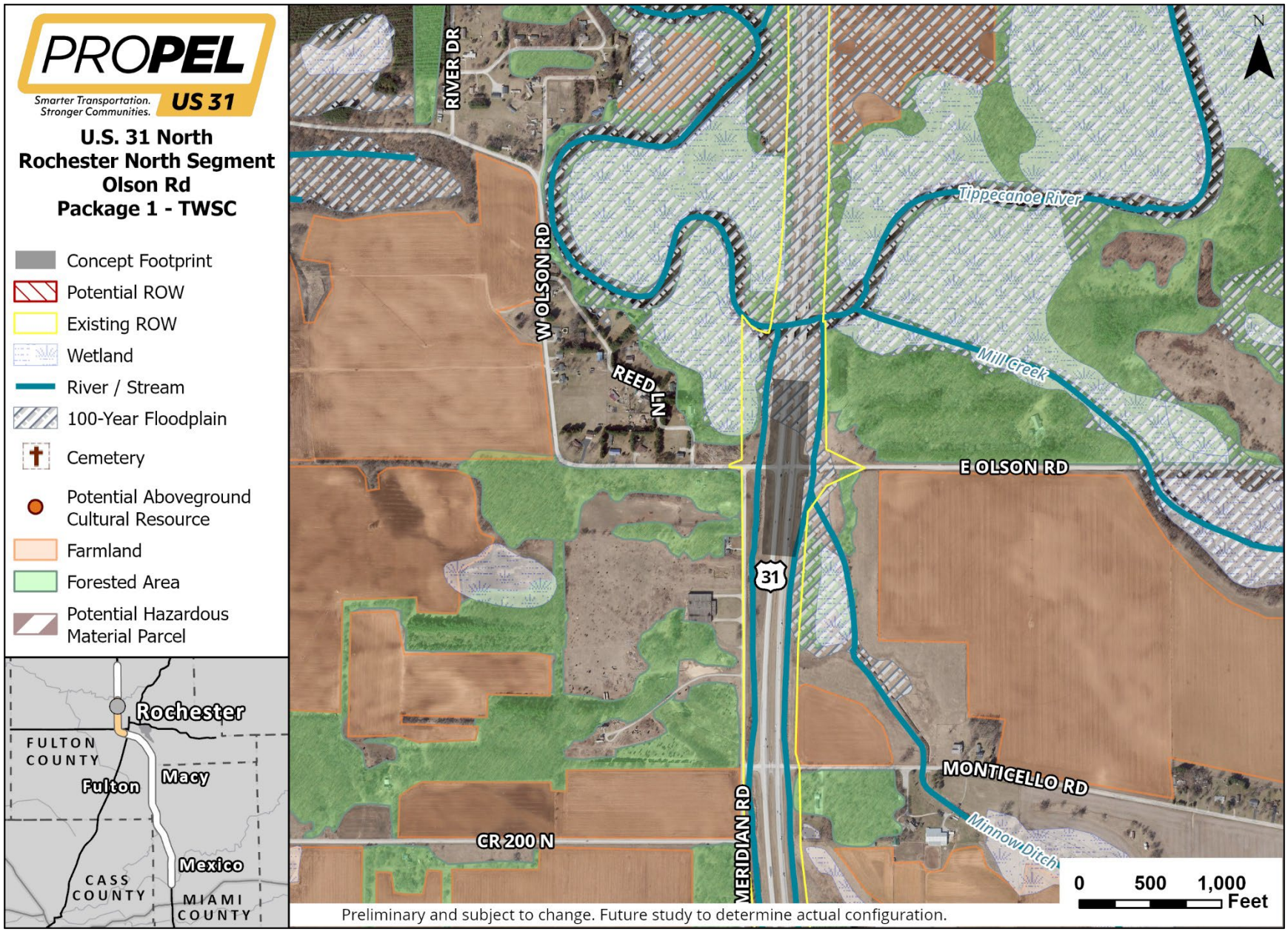

PROPEL US 31
Smarter Transportation. Stronger Communities.
U.S. 31 North
Fulton North Segment
CR 375 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Textron
31
N MERIDIAN RD
CR 425 N
CR 375 N
CR 375 N
Fulton County Historical Society
Leedy Barn
Tippecanoe River
Tippecanoe River
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

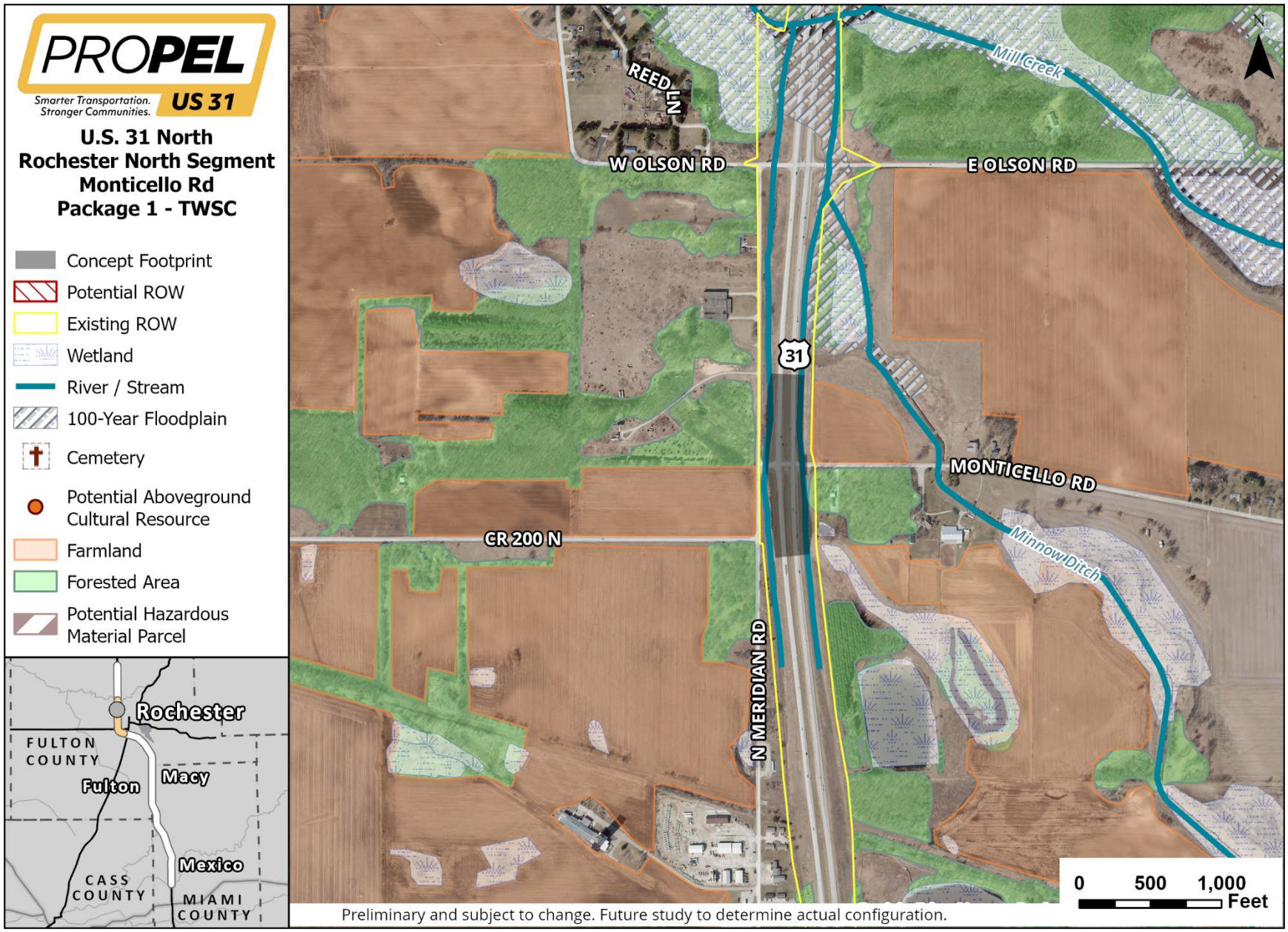

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 600 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 650 N
CR 25 W
Full Access Control
(No Access)
31
CR 600 N
Dudgeon Farm
CR 550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

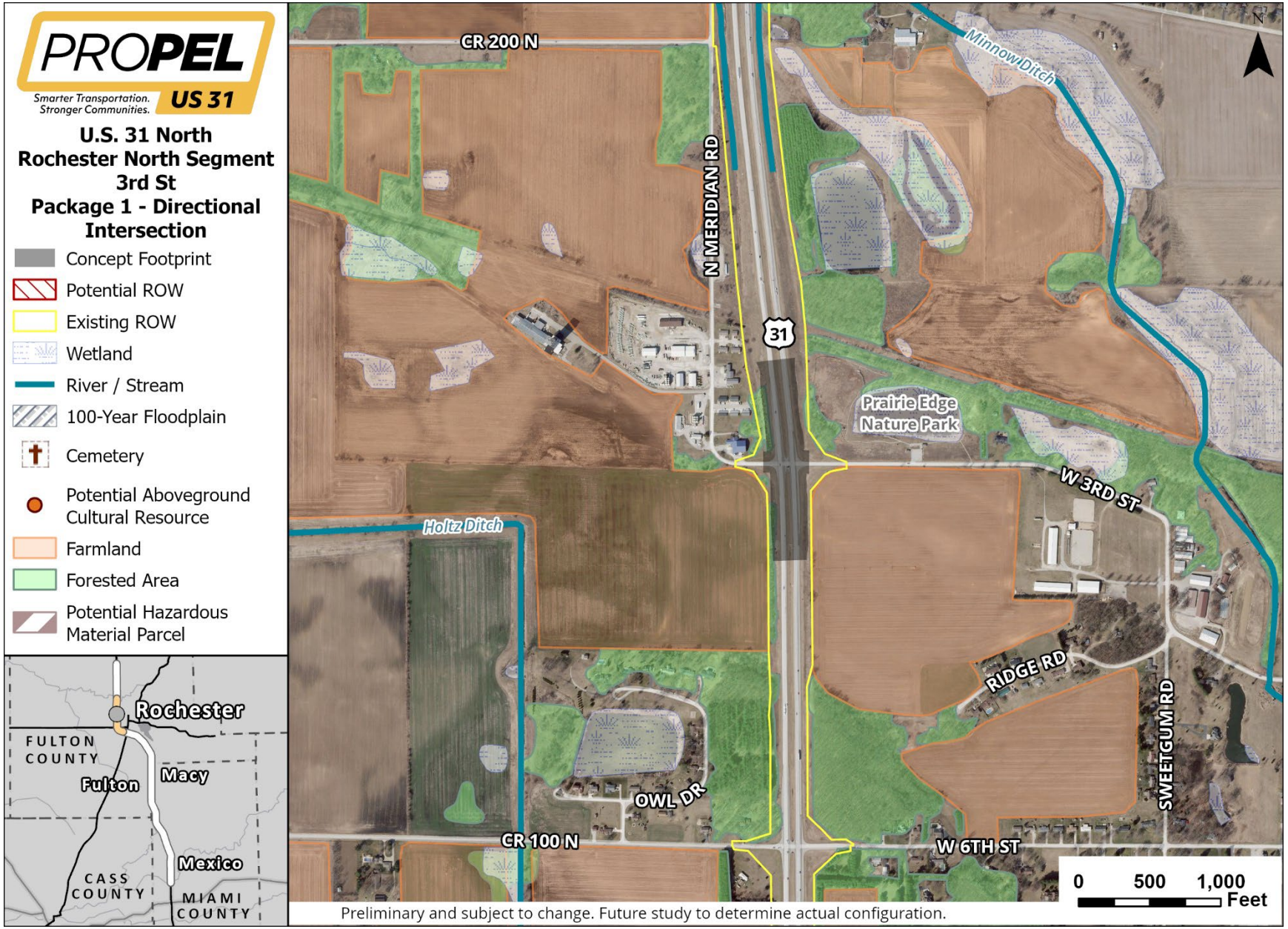

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 550 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 25 W
CR 600 N
Full Access Control
(No Access)
Dudgeon Farm
CR 550 N
31
CR 50 W
CR 500 N
N
0
500
1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 450 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 500 N
CR 50 W
31
Full Access Control
(No Access)
N MERIDIAN RD
CR 450 N
Richland Restoration Nature Park
Fulton County Landfill
Textron
CR 425 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Fulton North Segment
CR 375 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Textron
31
N MERIDIAN RD
CR 425 N
CR 375 N
Full Access Control
(No Access)
Fulton County Historical Society
Leedy Barn
Tippecanoe River
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
Olson Rd
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
RIVER DR
W OLSON RD
REED LN
Tippecanoe River
Mill Creek
E OLSON RD
31
MONTICELLO RD
Minnow Ditch
CR 200 N
MERIDIAN RD
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

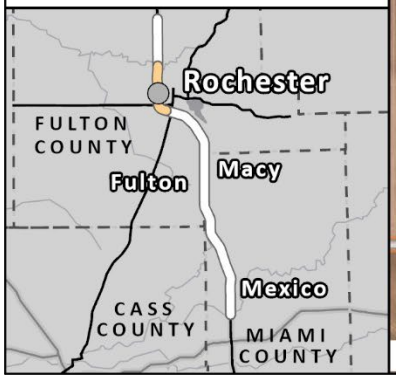

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
Monticello Rd
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
REED LN
W OLSON RD
E OLSON RD
Mill Creek
31
MONTICELLO RD
CR 200 N
Minnow Ditch
N MERIDIAN RD
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

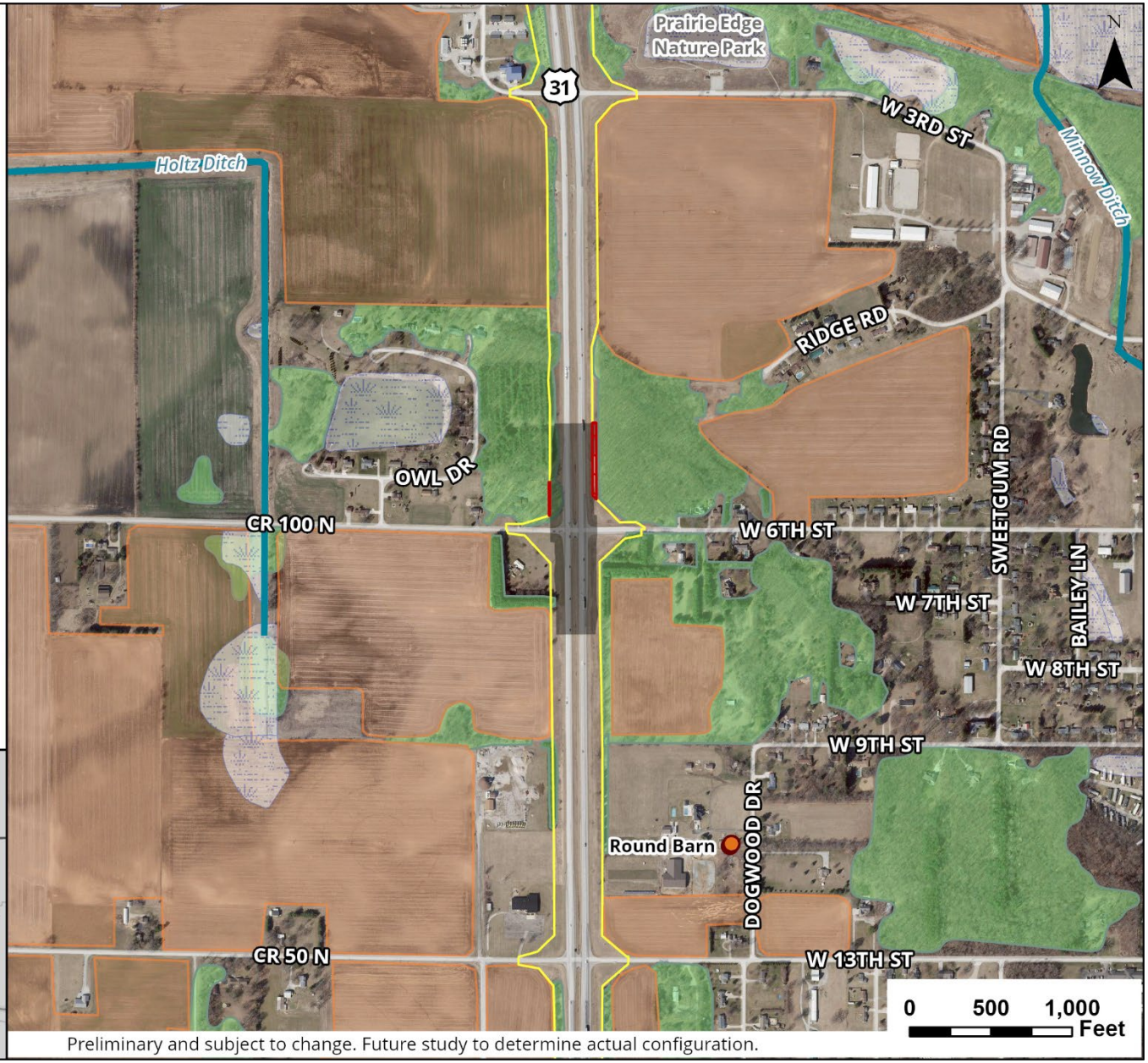

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
3rd St
Package 1 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 200 N
N MERIDIAN RD
31
Minnow Ditch
Prairie Edge Nature Park
W 3RD ST
Holtz Ditch
RIDGE RD
SWEETGUM RD
OWL DR
CR 100 N
W 6TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

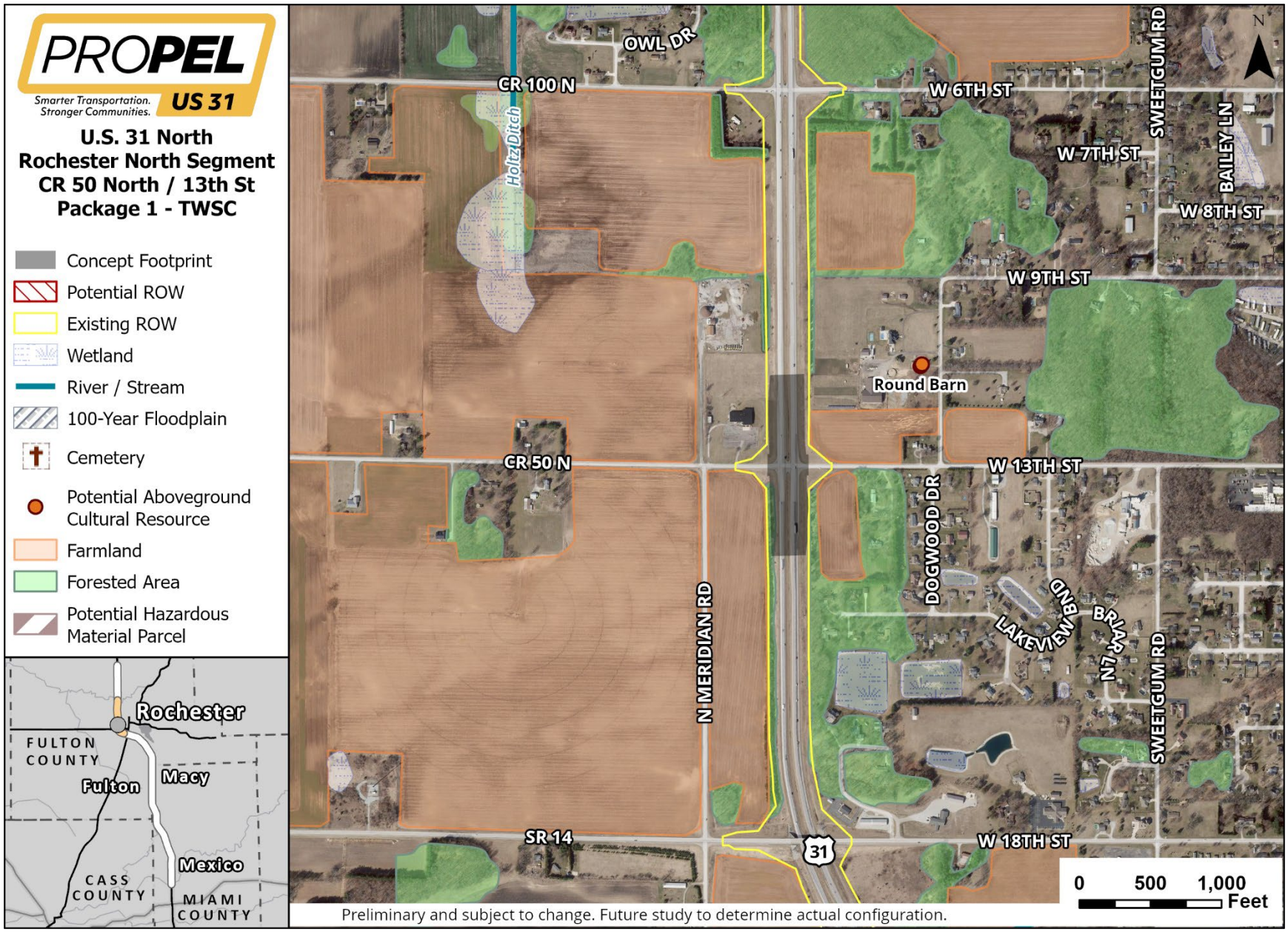
U.S. 31 North
Rochester North Segment
CR 100 North / 6th St
Package 1 - TWSC

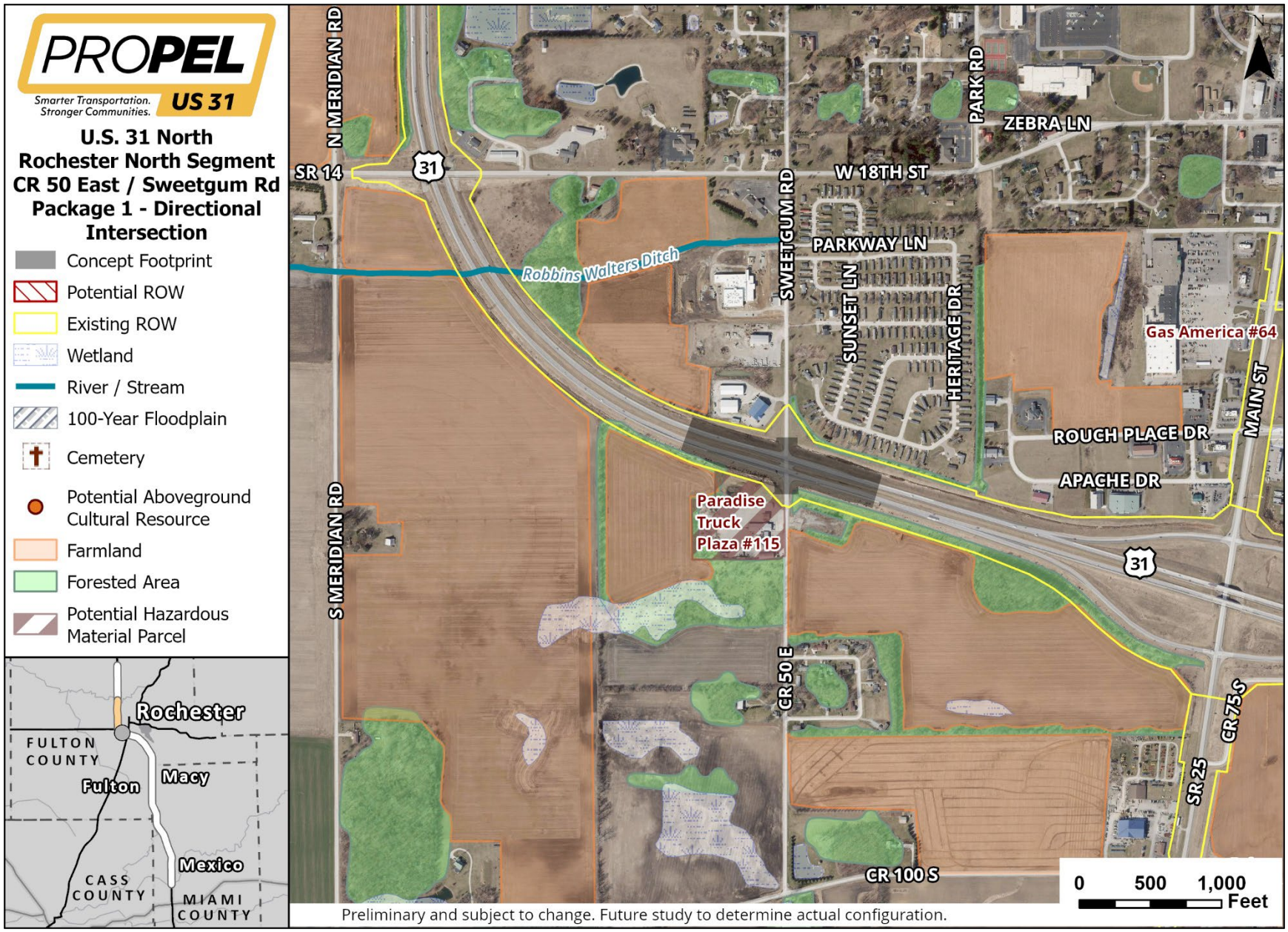
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

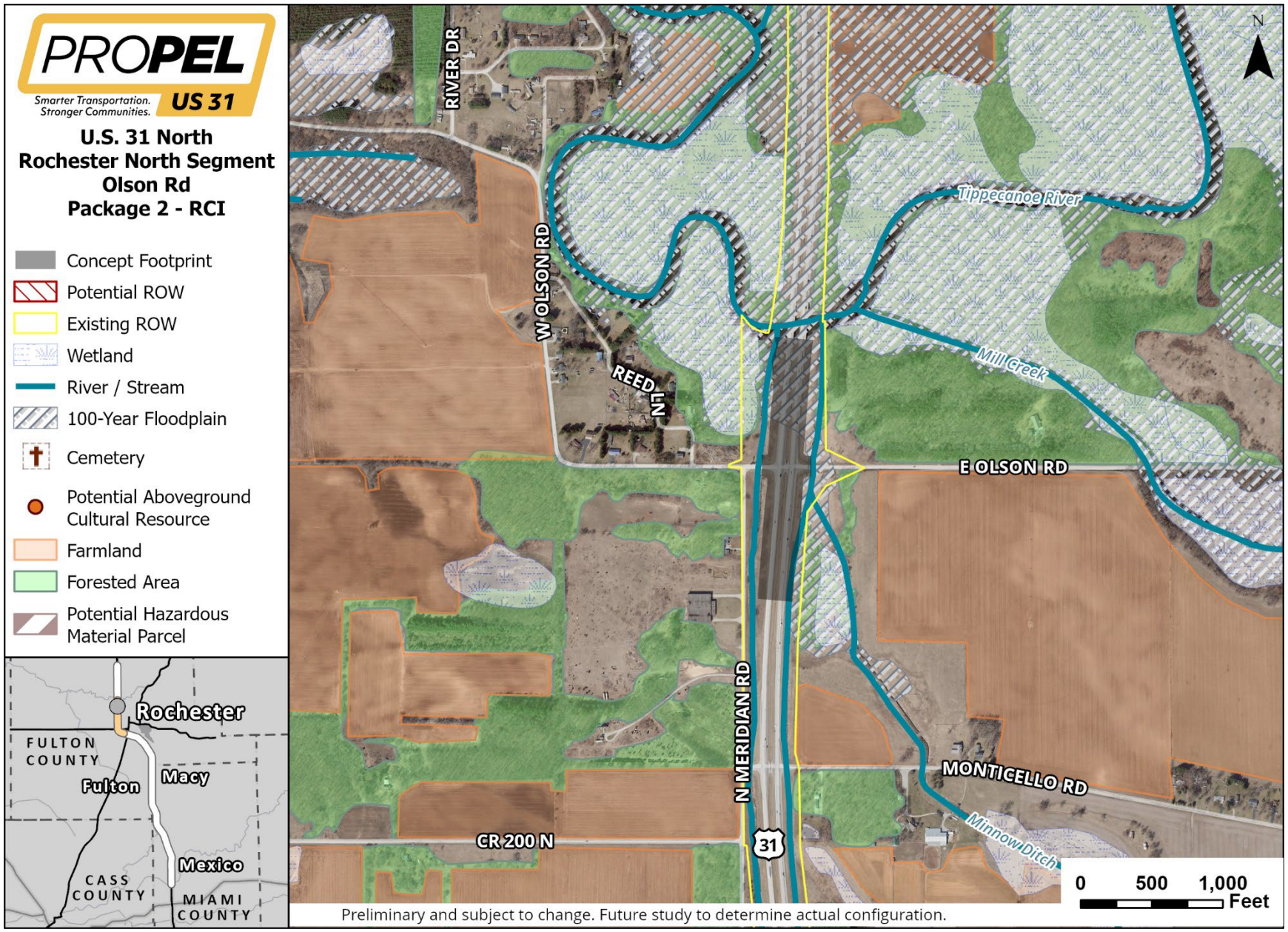




Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 50 North / 13th St
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OWL DR
CR 100 N
Holtz Ditch
W 6TH ST
W 7TH ST
W 8TH ST
W 9TH ST
SWEETGUM RD
BAILEY LN
Round Barn
CR 50 N
W 13TH ST
DOGWOOD DR
LAKEVIEW BND
BRIAR LN
N MERIDIAN RD
SR 14
31
W 18TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

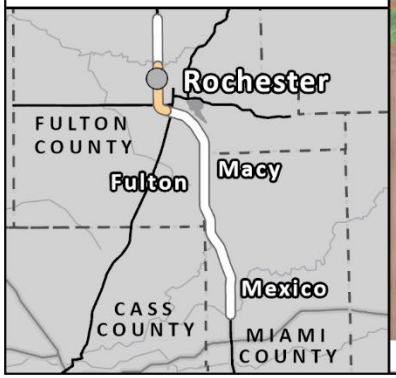

PROPEL
Smarter Transportation. Stronger Communities.
US 31
U.S. 31 North
Rochester North Segment
CR 50 East / Sweetgum Rd
Package 1 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N MERIDIAN RD
SR 14
31
W 18TH ST
PARK RD
ZEBRA LN
SWEETGUM RD
PARKWAY LN
Robbins Walters Ditch
SUNSET LN
HERITAGE DR
Gas America #64
MAIN ST
ROUCH PLACE DR
APACHE DR
S MERIDIAN RD
Paradise Truck Plaza #115
CR 50 E
CR 75 S
SR 25
CR 100 S
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

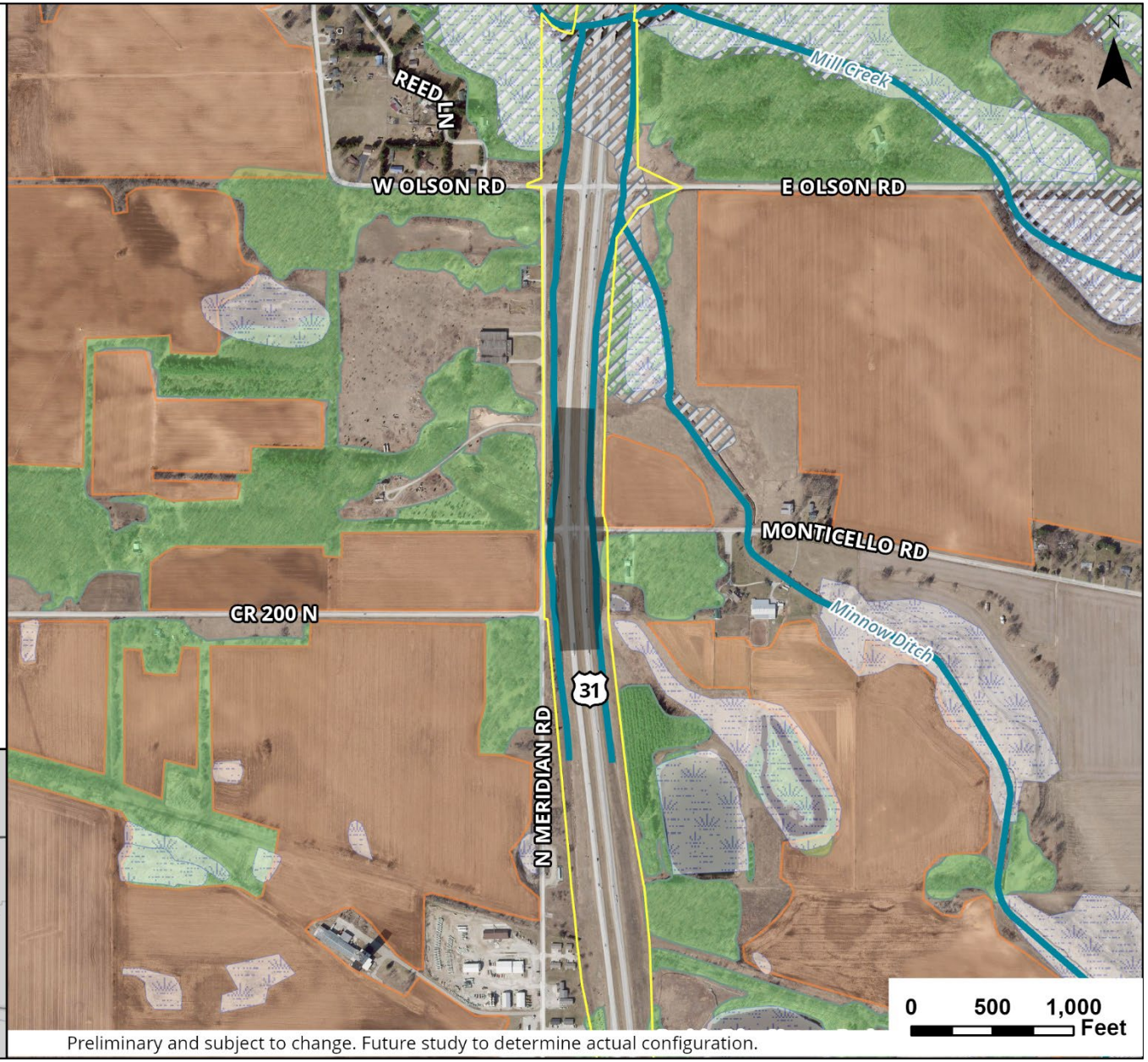

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
Olson Rd
Package 2 - RCI
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
RIVER DR
W OLSON RD
REED LN
Tippecanoe River
Mill Creek
E OLSON RD
N MERIDIAN RD
MONTICELLO RD
Minnow Ditch
CR 200 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities.
US 31

U.S. 31 North
Rochester North Segment
Monticello Rd
Package 2 - Directional Intersection

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



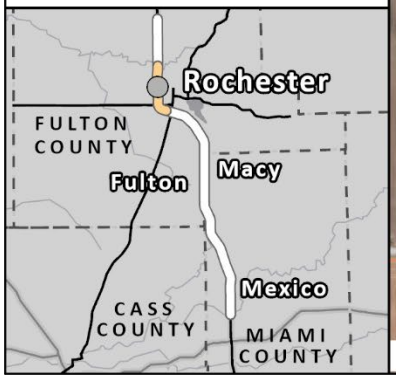


Preliminary and subject to change. Future study to determine actual configuration.

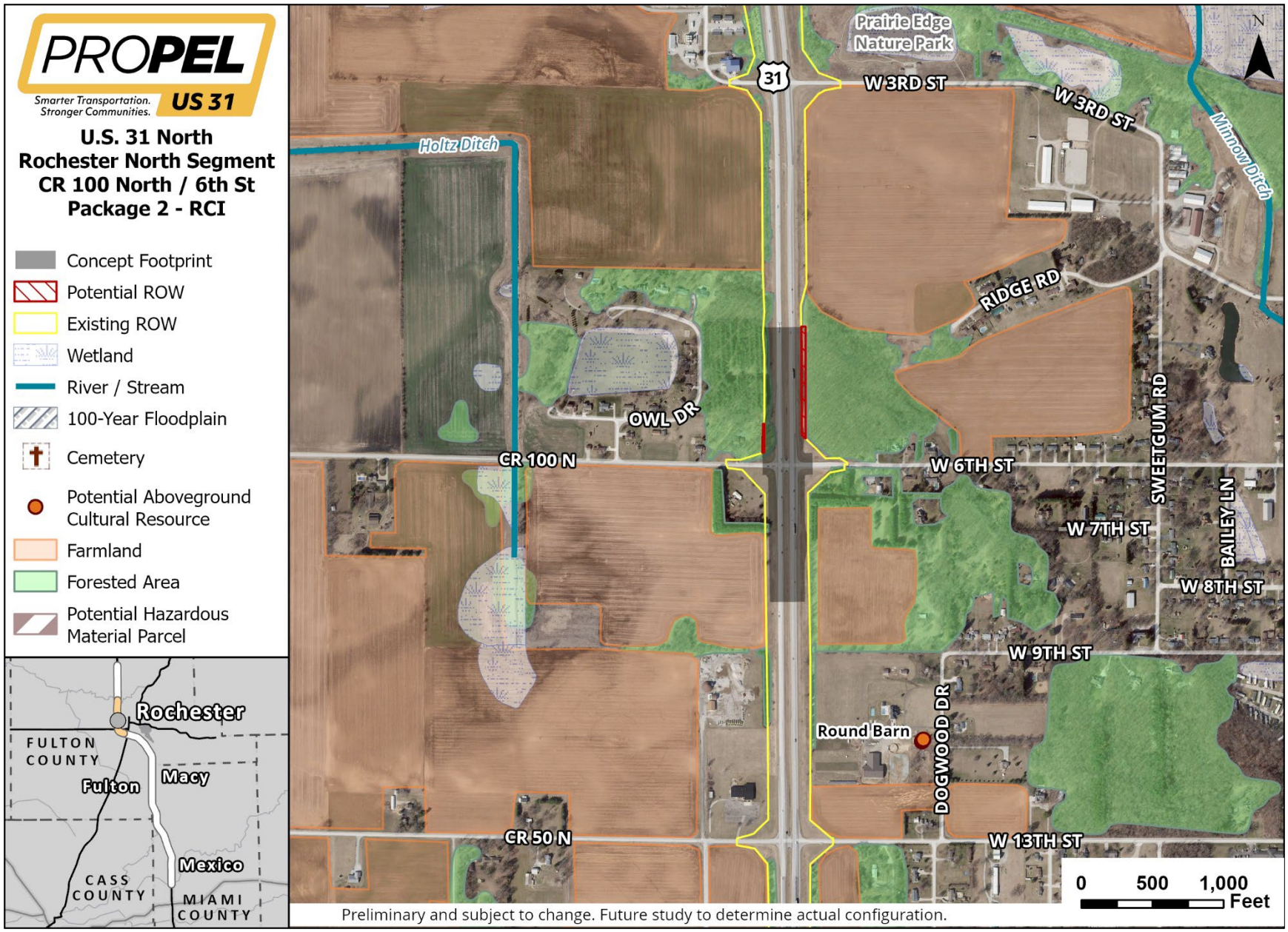
PROPEL
Smarter Transportation. Stronger Communities. US 31

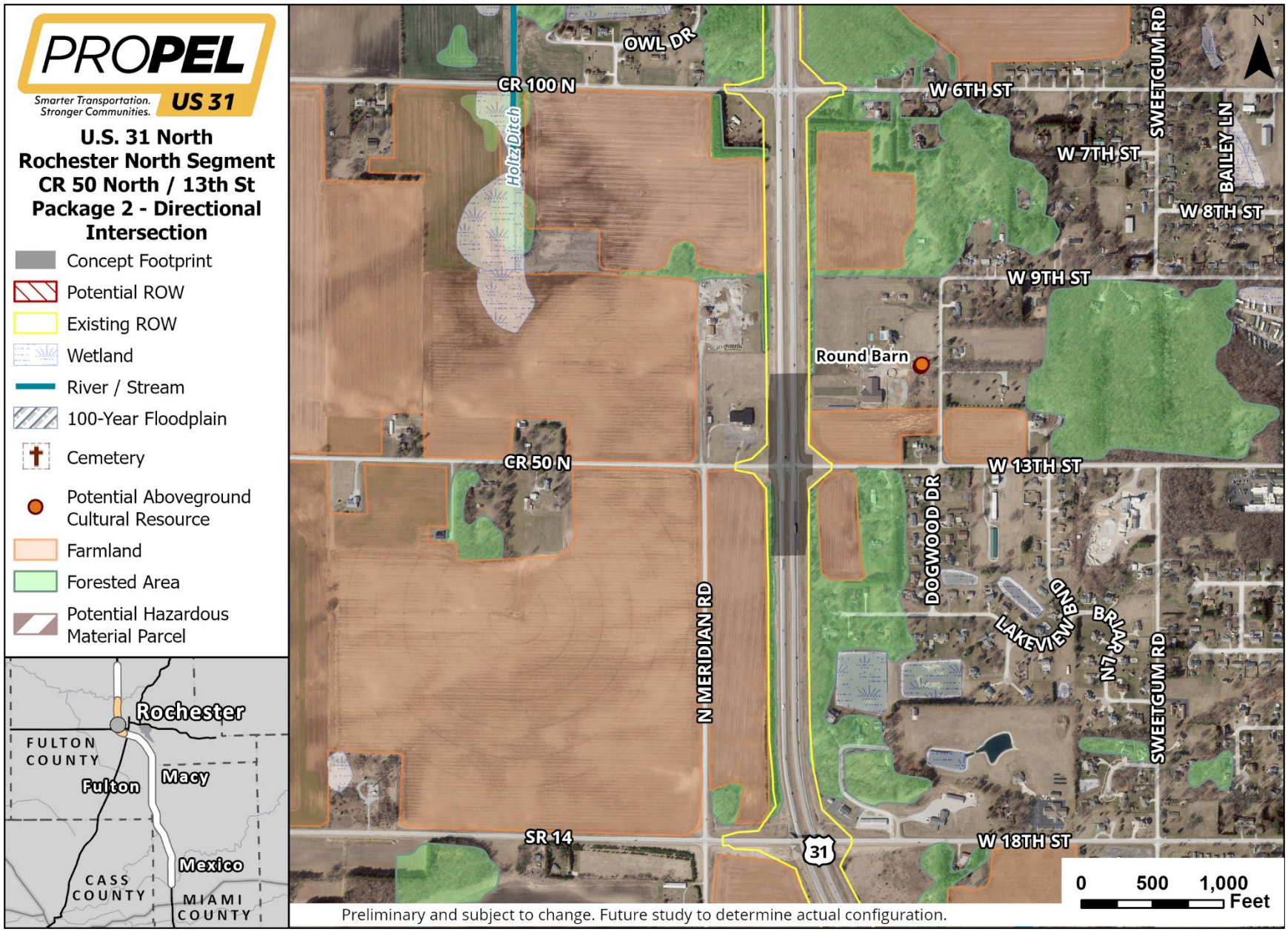
U.S. 31 North
Rochester North Segment
3rd St
Package 2 - Directional Intersection

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



Preliminary and subject to change. Future study to determine actual configuration.

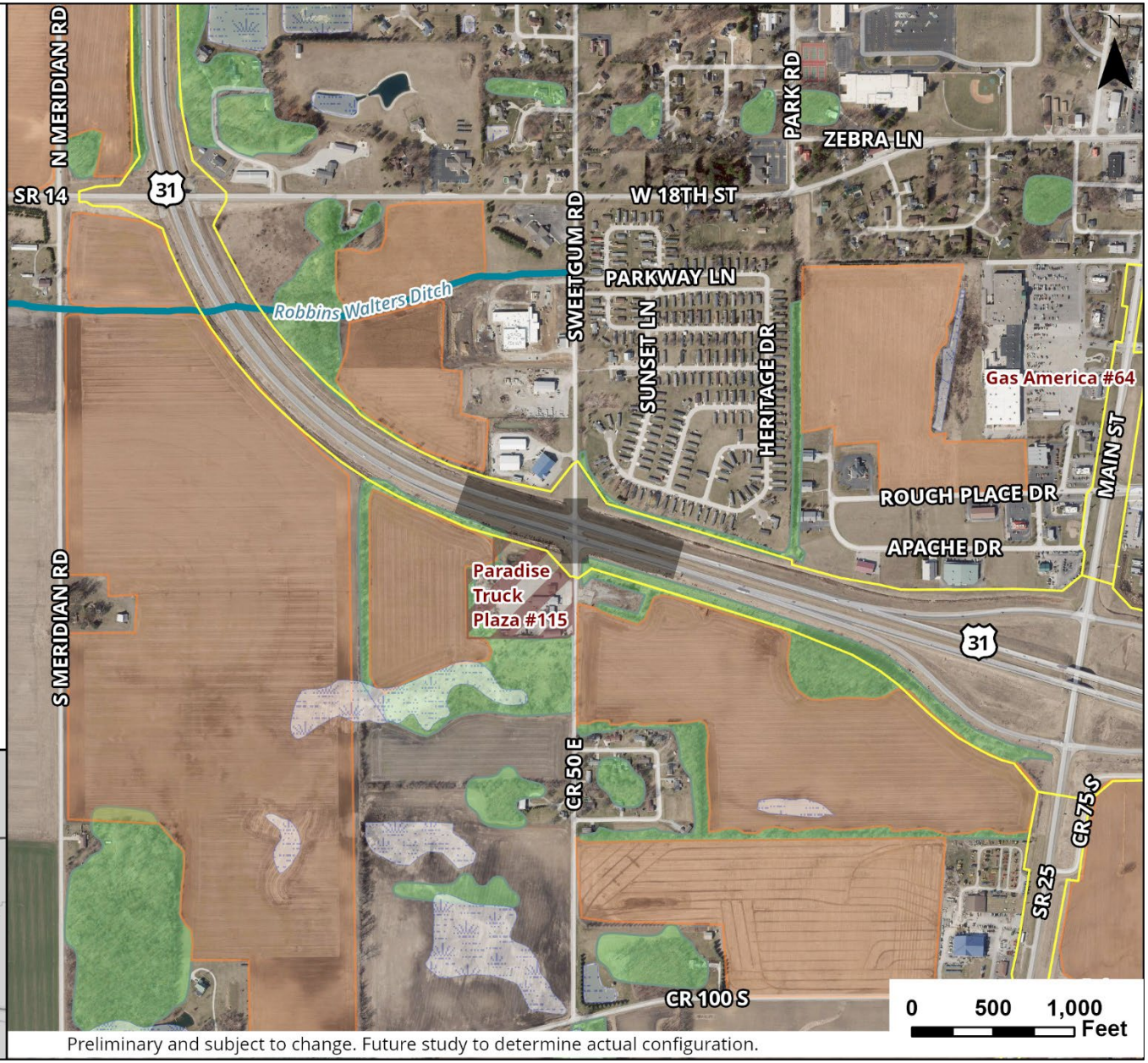

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 100 North / 6th St
Package 2 - RCI
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Prairie Edge Nature Park
31
W 3RD ST
W 3RD ST
Minnow Ditch
Holtz Ditch
RIDGE RD
OWL DR
CR 100 N
W 6TH ST
SWEETGUM RD
BAILEY LN
W 7TH ST
W 8TH ST
W 9TH ST
Round Barn
DOGWOOD DR
CR 50 N
W 13TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 50 North / 13th St
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OWL DR
CR 100 N
Holtz Ditch
W 6TH ST
SWEETGUM RD
W 7TH ST
BAILEY LN
W 8TH ST
W 9TH ST
Round Barn
CR 50 N
W 13TH ST
DOGWOOD DR
LAKEVIEW BND
BRIAR LN
N MERIDIAN RD
SR 14
31
W 18TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

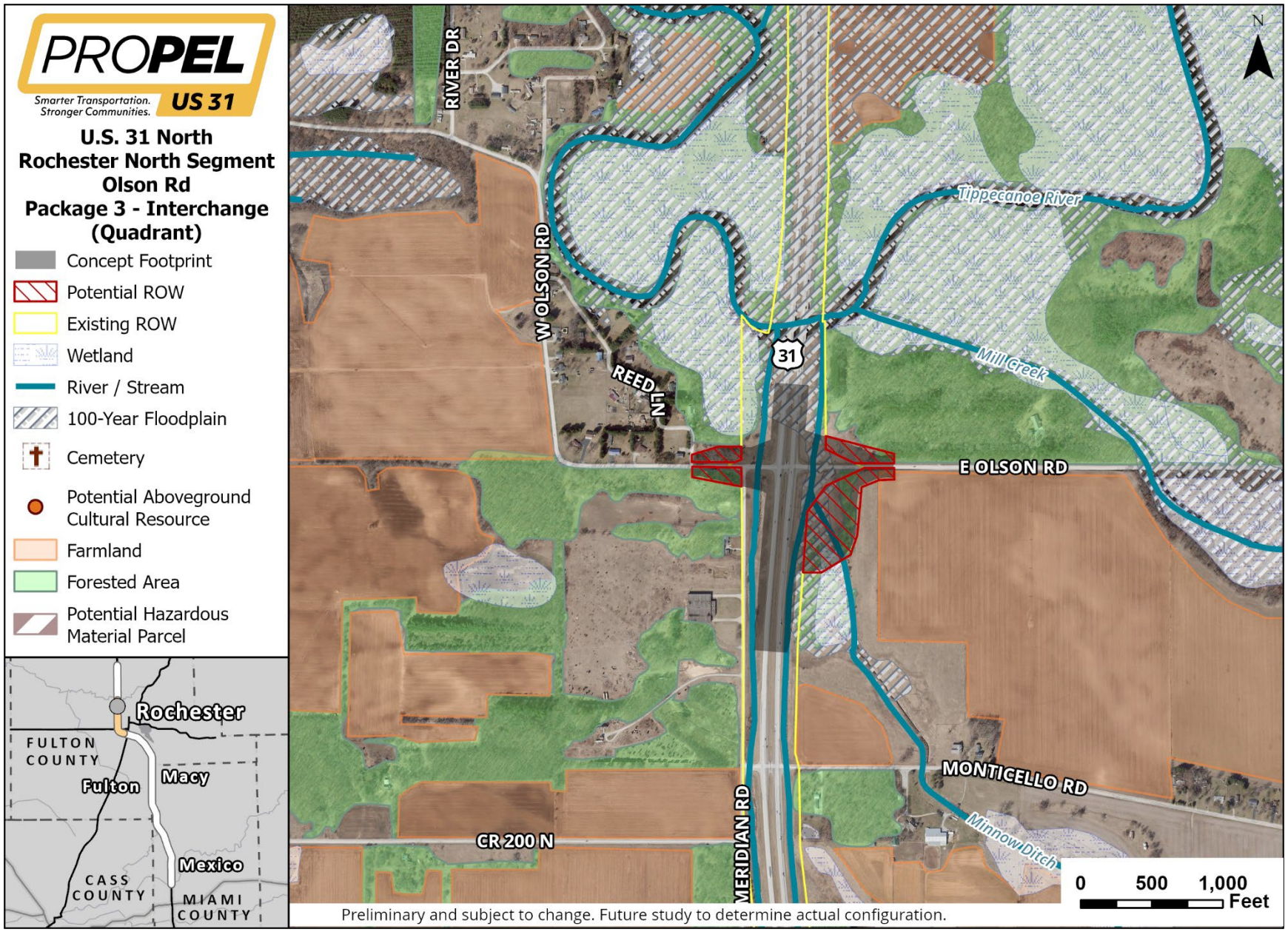
PROPEL
Smarter Transportation. Stronger Communities. US 31

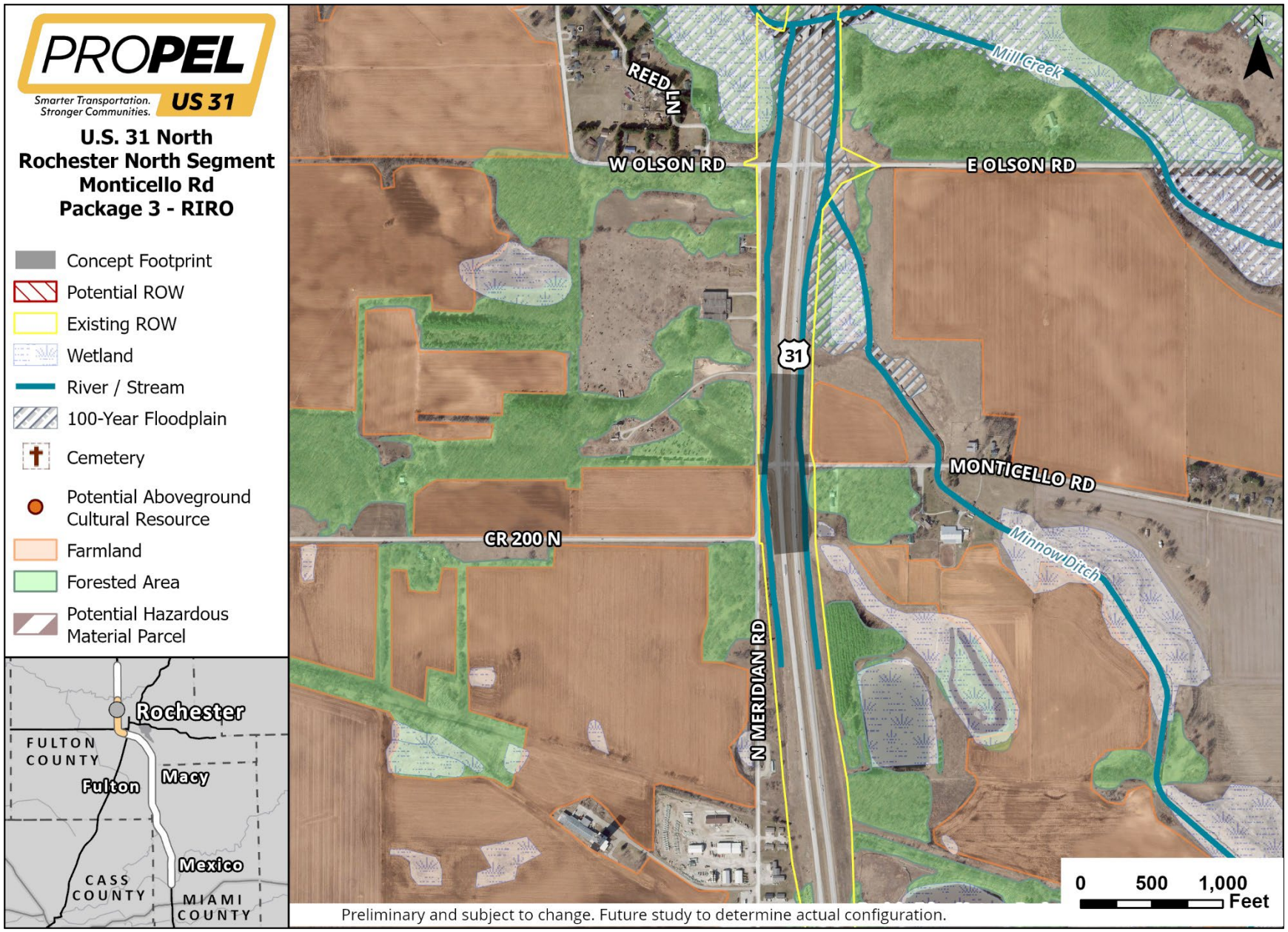
U.S. 31 North
Rochester North Segment
CR 50 East / Sweetgum Rd
Package 2 - Directional Intersection

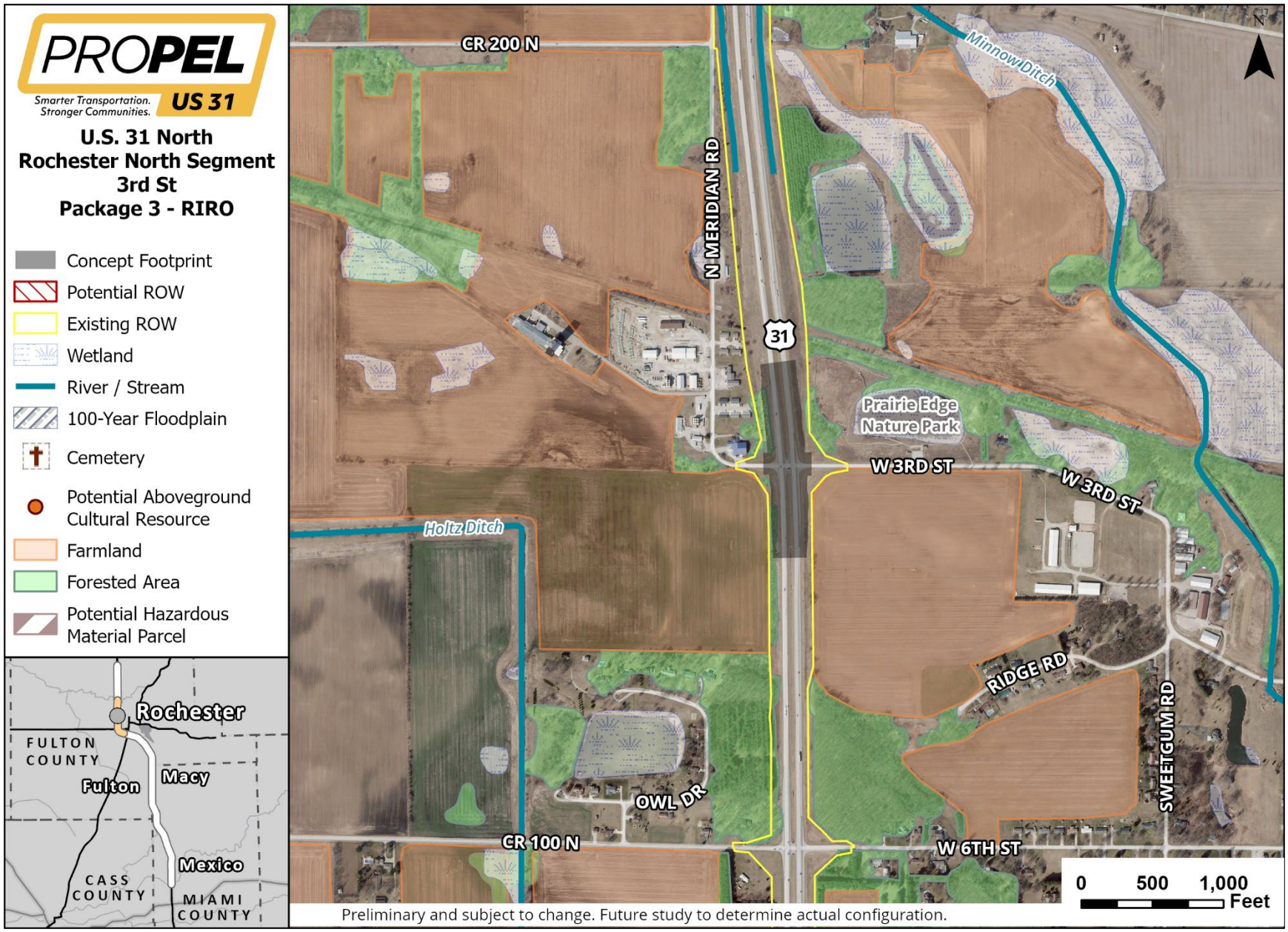
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

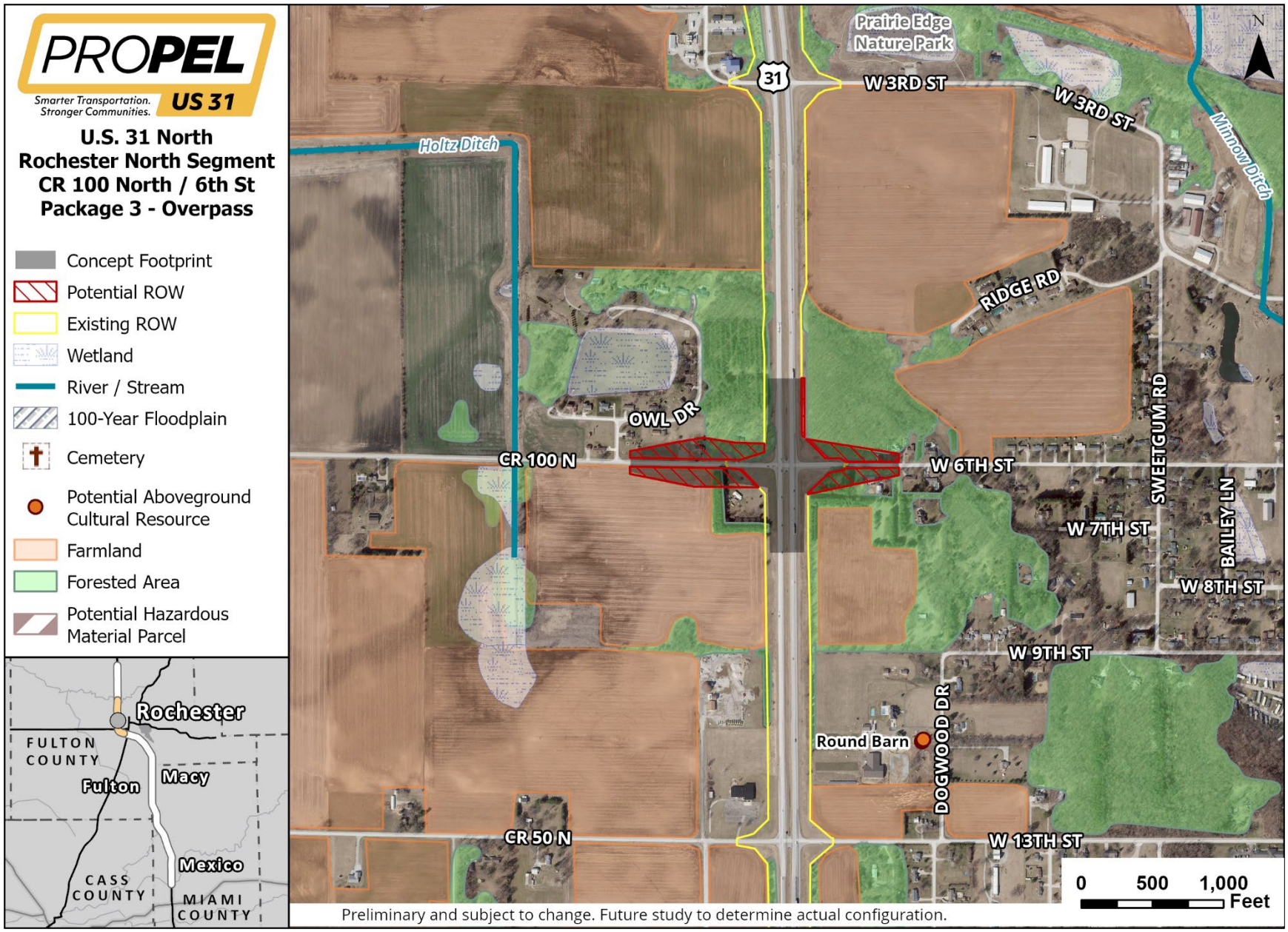


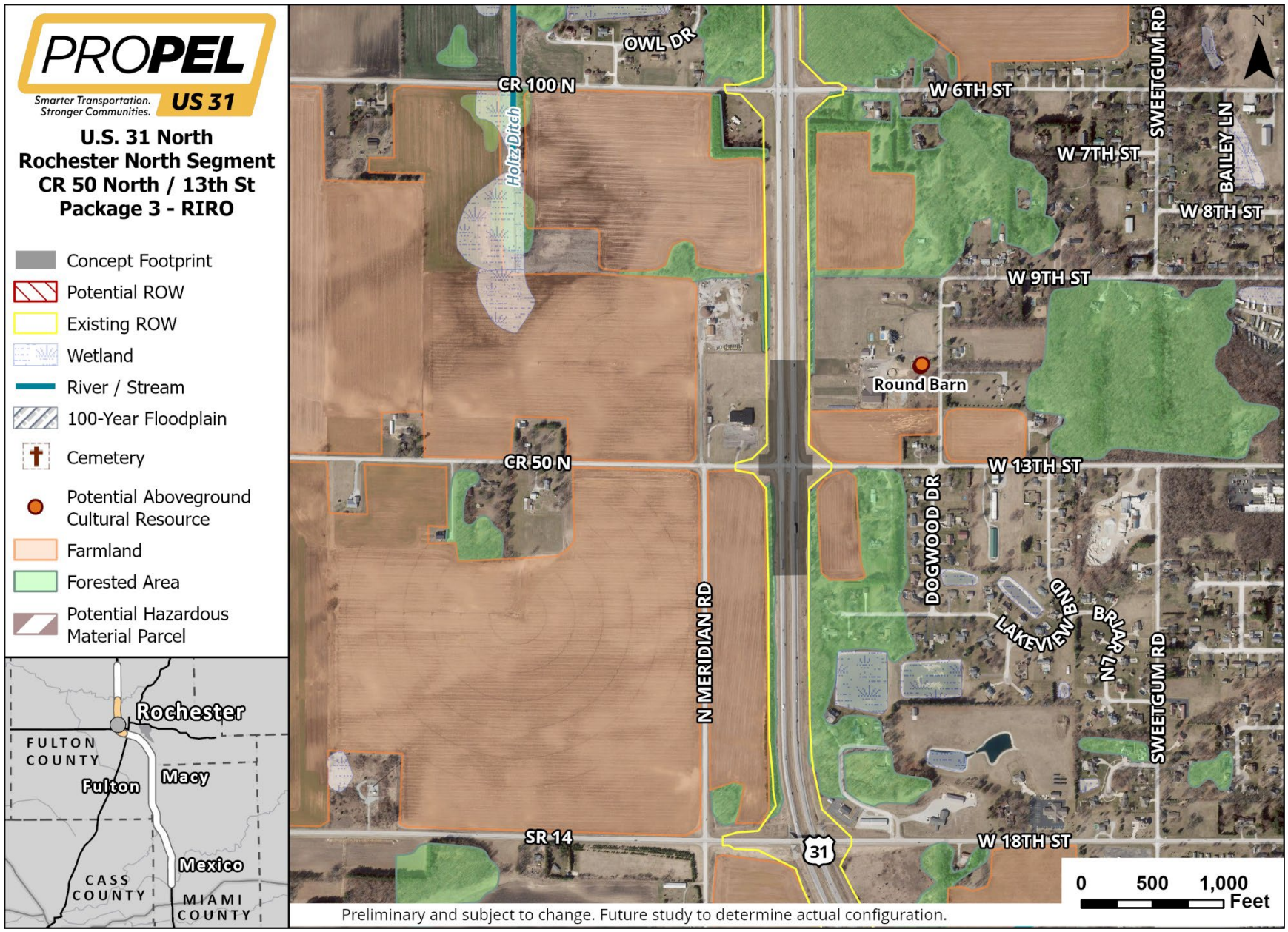
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
Olson Rd
Package 3 - Interchange (Quadrant)
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
RIVER DR
W OLSON RD
REED LN
Tippecanoe River
31
Mill Creek
E OLSON RD
MONTICELLO RD
Minnow Ditch
CR 200 N
MERIDIAN RD
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
Monticello Rd
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
REED LN
W OLSON RD
E OLSON RD
Mill Creek
31
MONTICELLO RD
CR 200 N
Minnow Ditch
N MERIDIAN RD
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
3rd St
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 200 N
N MERIDIAN RD
31
Minnow Ditch
Prairie Edge Nature Park
W 3RD ST
W 3RD ST
Holtz Ditch
RIDGE RD
SWEETGUM RD
OWL DR
CR 100 N
W 6TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

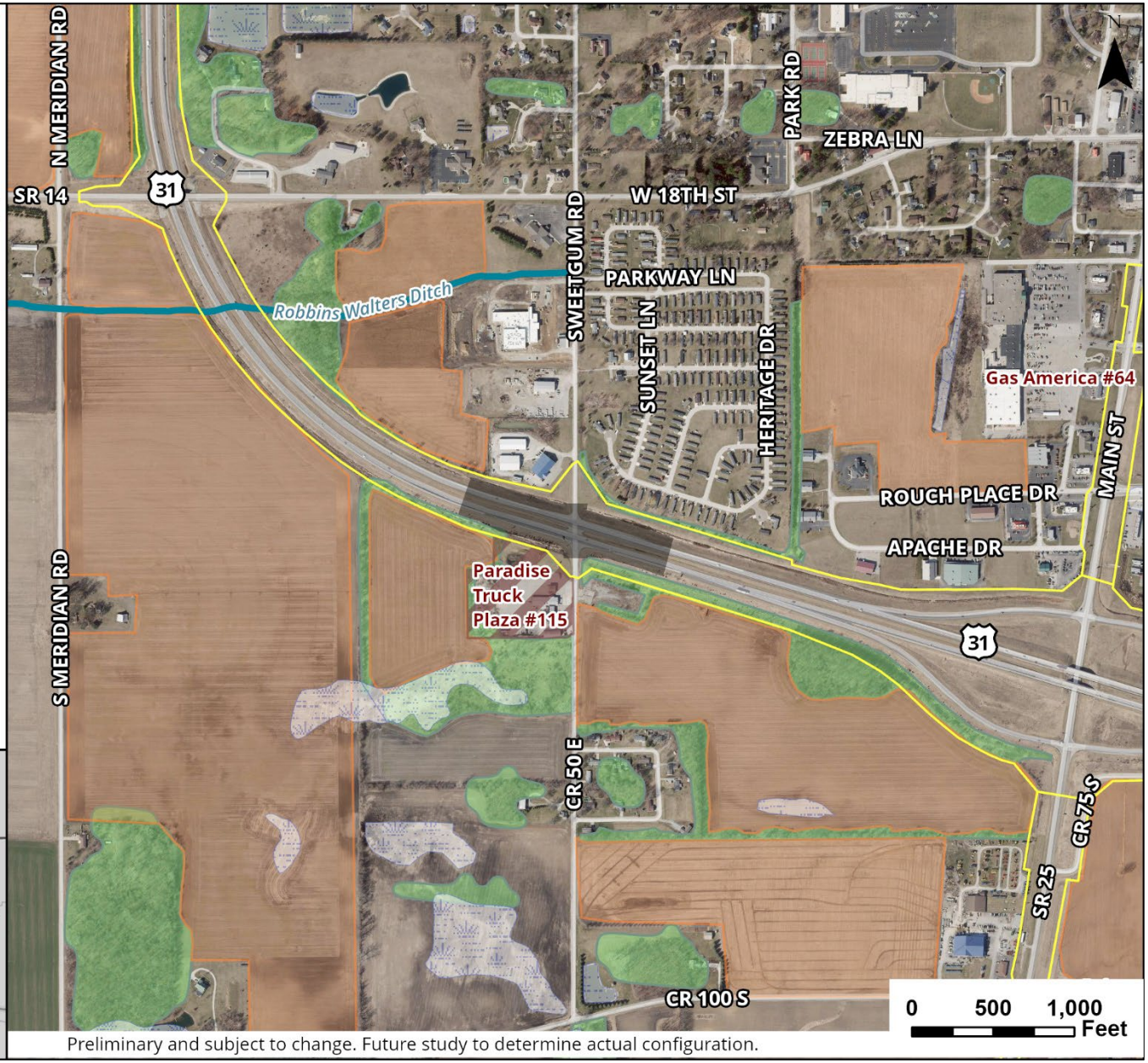

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 100 North / 6th St
Package 3 - Overpass
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Prairie Edge Nature Park
31
W 3RD ST
W 3RD ST
Holtz Ditch
Minnow Ditch
RIDGE RD
OWL DR
CR 100 N
W 6TH ST
SWEETGUM RD
BAILEY LN
W 7TH ST
W 8TH ST
W 9TH ST
DOGWOOD DR
Round Barn
CR 50 N
W 13TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 50 North / 13th St
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OWL DR
CR 100 N
Holtz Ditch
W 6TH ST
W 7TH ST
W 8TH ST
W 9TH ST
SWEETGUM RD
BAILEY LN
Round Barn
CR 50 N
W 13TH ST
DOGWOOD DR
LAKEVIEW BND
BRIAR LN
N MERIDIAN RD
SR 14
31
W 18TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

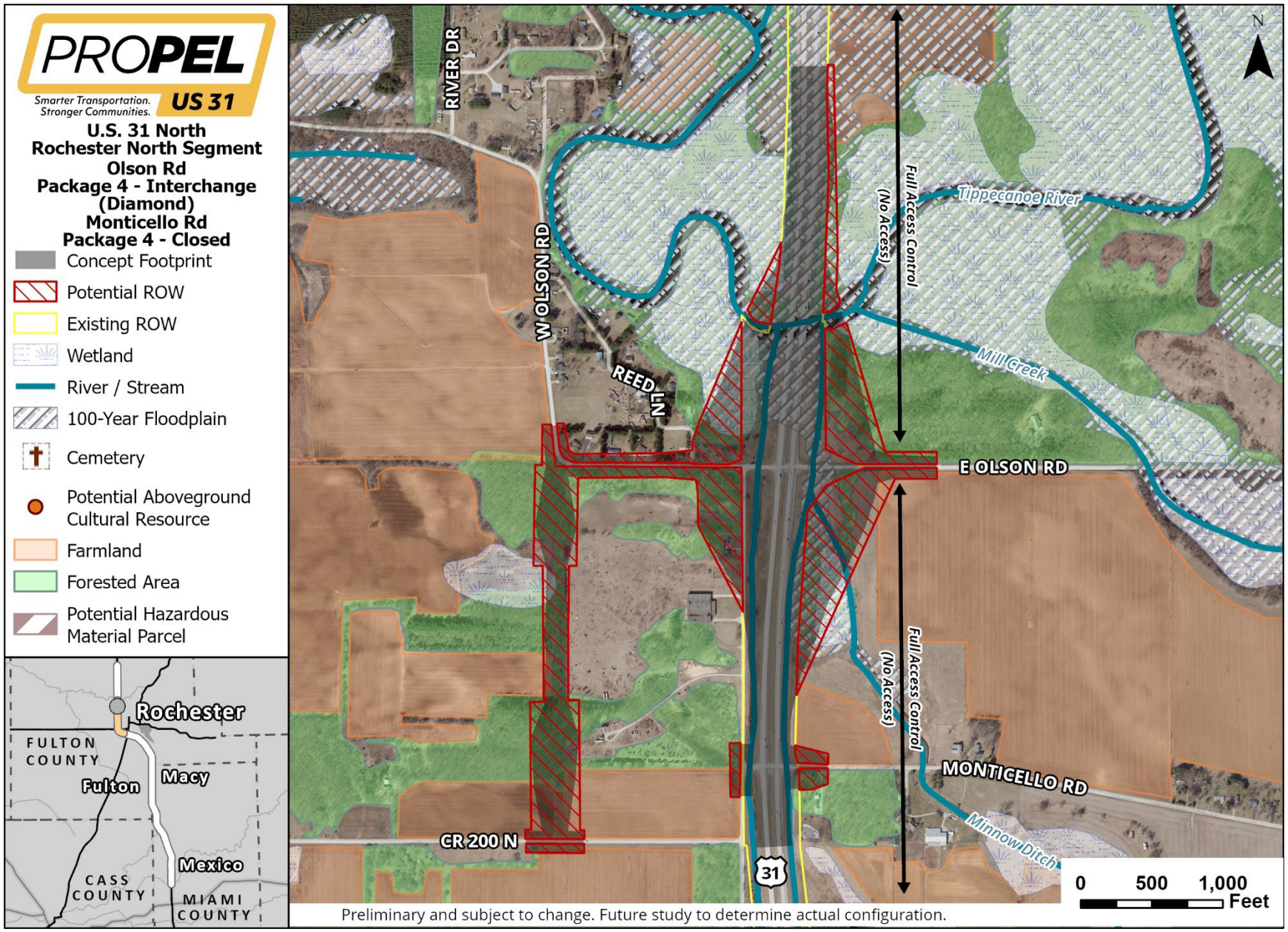
PROPEL
Smarter Transportation. Stronger Communities. US 31

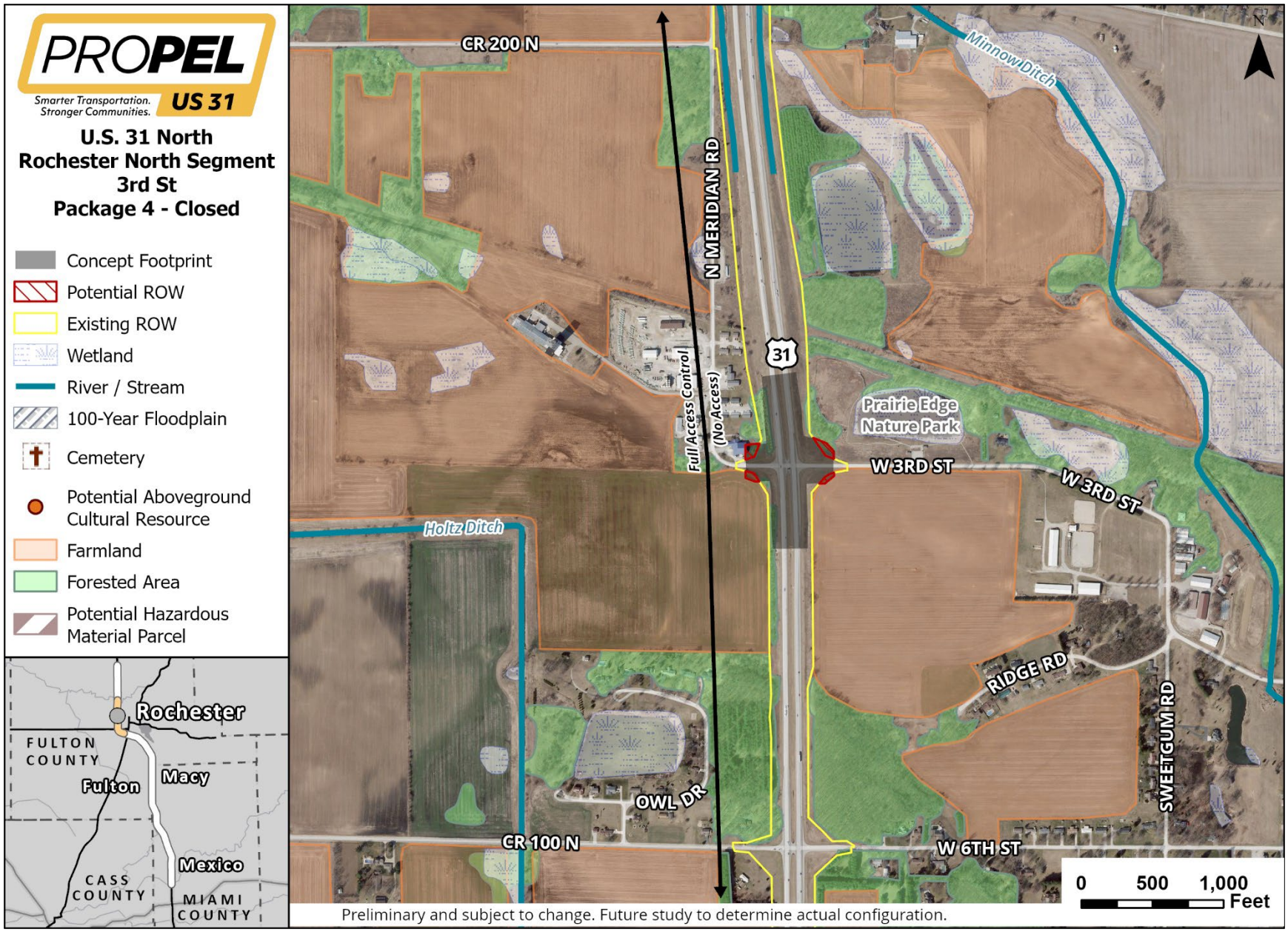
U.S. 31 North
Rochester North Segment
CR 50 East / Sweetgum Rd
Package 3 - RIRO

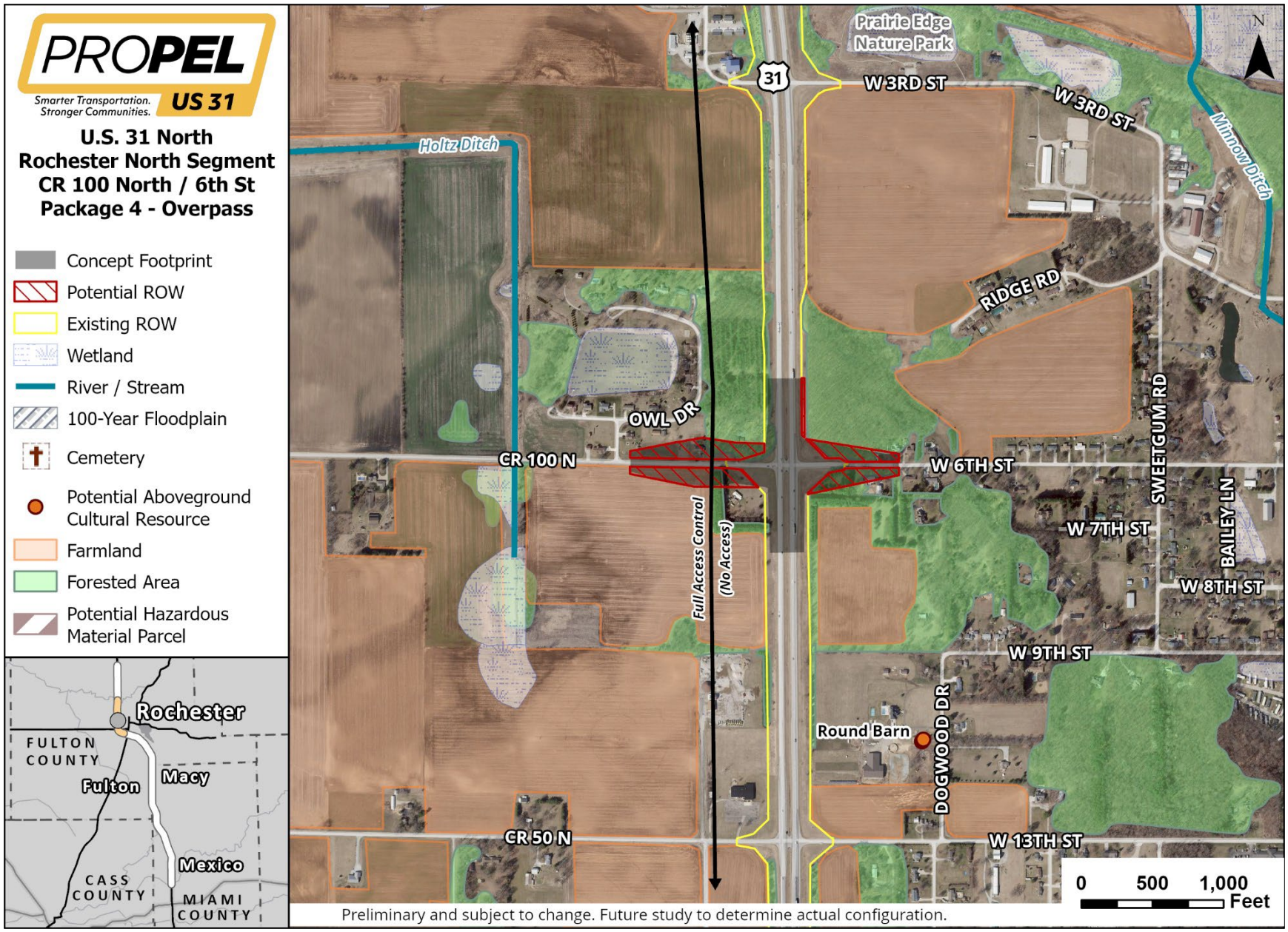
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

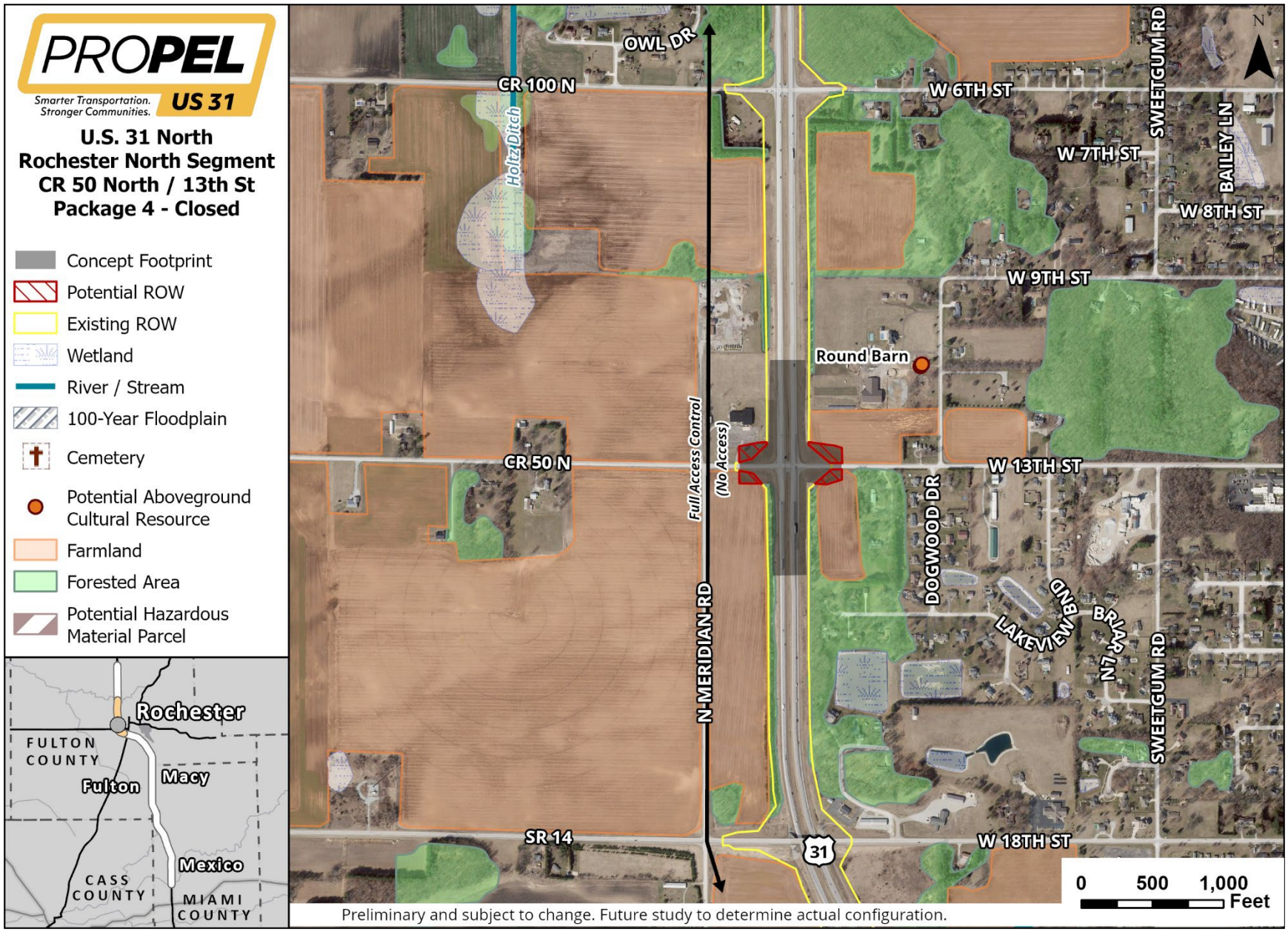


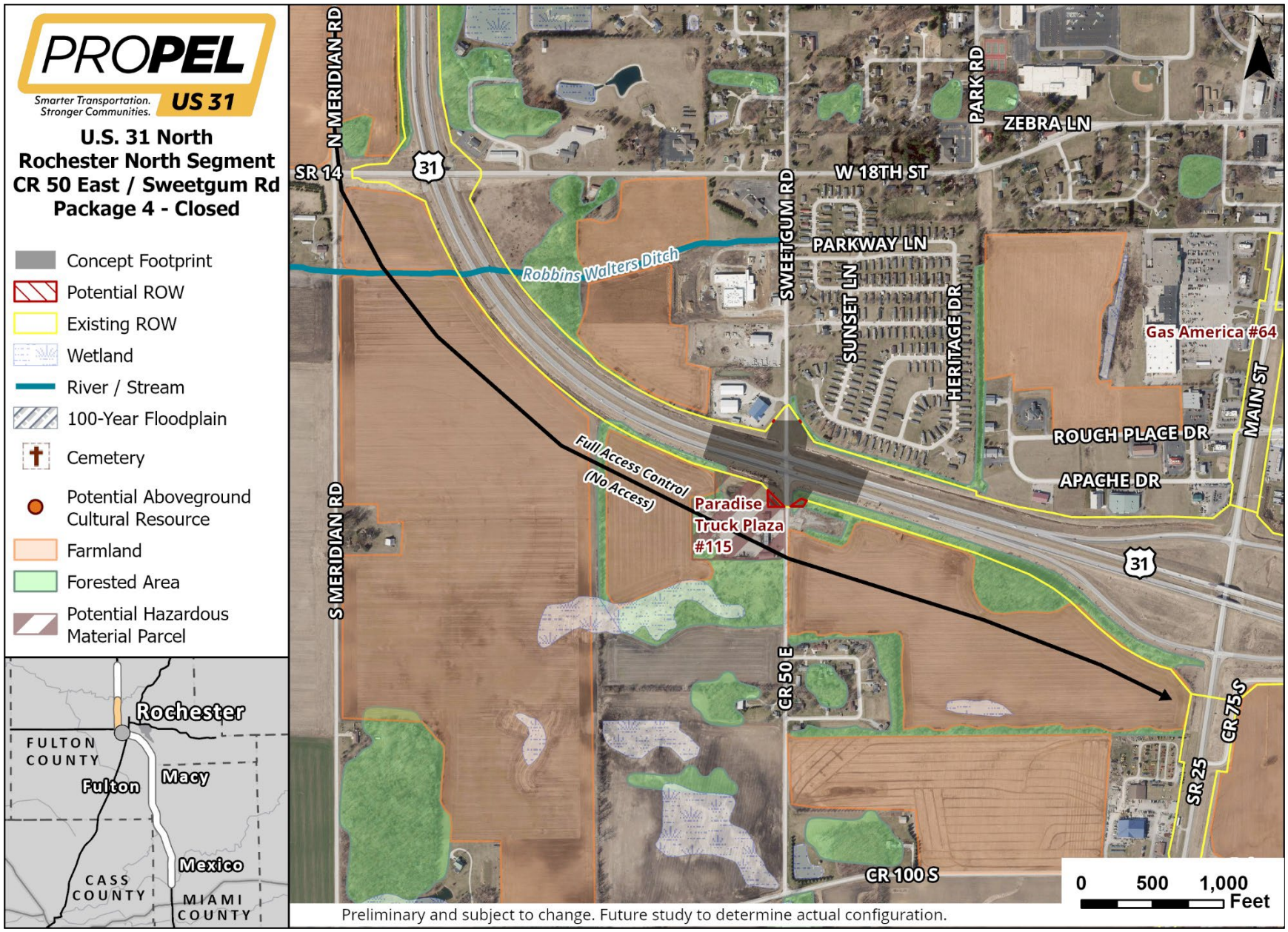
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
Olson Rd
Package 4 - Interchange (Diamond)
Monticello Rd
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
RIVER DR
W OLSON RD
REED LN
Full Access Control (No Access)
Tippecanoe River
Mill Creek
E OLSON RD
Full Access Control (No Access)
MONTICELLO RD
Minnow Ditch
CR 200 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
3rd St
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 200 N
N MERIDIAN RD
Full Access Control (No Access)
31
Minnow Ditch
Prairie Edge Nature Park
W 3RD ST
W 3RD ST
Holtz Ditch
RIDGE RD
SWEETGUM RD
OWL DR
CR 100 N
W 6TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 100 North / 6th St
Package 4 - Overpass
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Prairie Edge Nature Park
31
W 3RD ST
W 3RD ST
Minnow Ditch
Holtz Ditch
RIDGE RD
OWL DR
CR 100 N
W 6TH ST
SWEETGUM RD
BAILEY LN
W 7TH ST
W 8TH ST
Full Access Control
(No Access)
W 9TH ST
DOGWOOD DR
Round Barn
CR 50 N
W 13TH ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

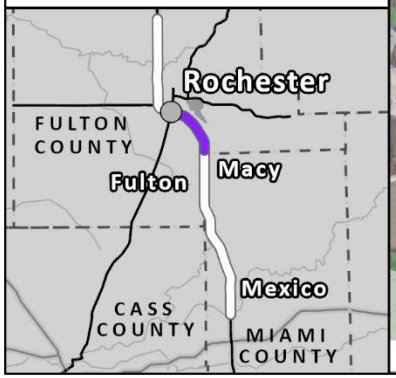

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester North Segment
CR 50 North / 13th St
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OWL DR
CR 100 N
Holtz Ditch
W 6TH ST
W 7TH ST
W 8TH ST
W 9TH ST
W 13TH ST
W 18TH ST
SWEETGUM RD
BAILEY LN
Round Barn
CR 50 N
Full Access Control
(No Access)
N MERIDIAN RD
DOGWOOD DR
LAKEVIEW BND
BRIAR LN
SR 14
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

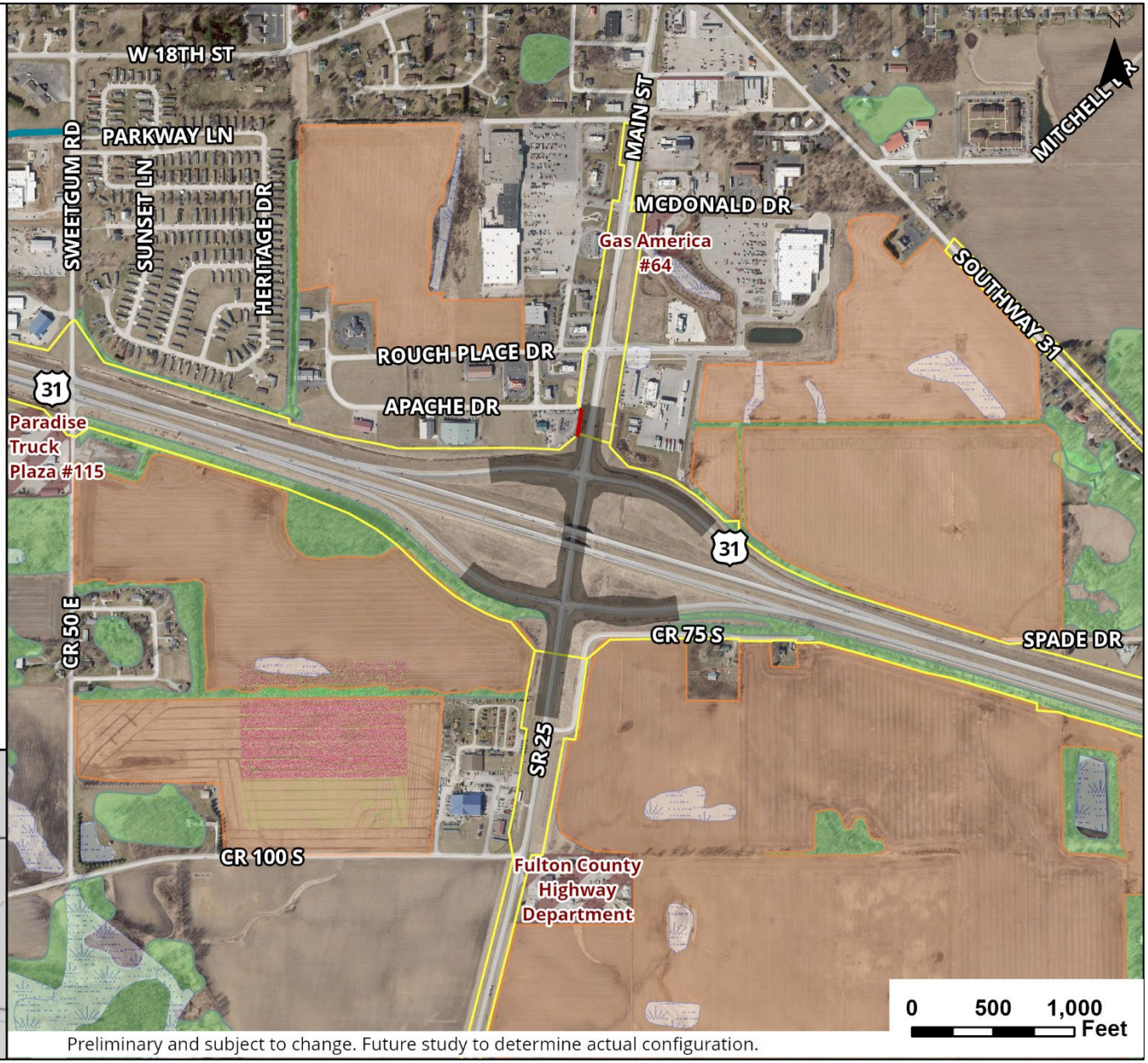

PROPEL
Smarter Transportation. Stronger Communities.
US 31
U.S. 31 North
Rochester North Segment
CR 50 East / Sweetgum Rd
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N MERIDIAN RD
SR 14
31
W 18TH ST
PARK RD
ZEBRA LN
SWEETGUM RD
PARKWAY LN
Robbins Walters Ditch
SUNSET LN
HERITAGE DR
Gas America #64
MAIN ST
ROUCH PLACE DR
APACHE DR
Full Access Control
(No Access)
Paradise
Truck Plaza
#115
S MERIDIAN RD
CR 50 E
CR 75 S
SR 25
CR 100 S
0 500 1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities.
US 31

U.S. 31 North
Rochester South Segment
SR 25
Package 1 - Interchange

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



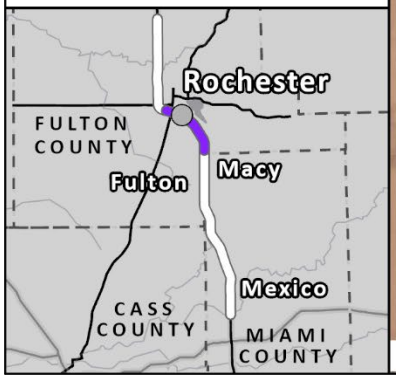


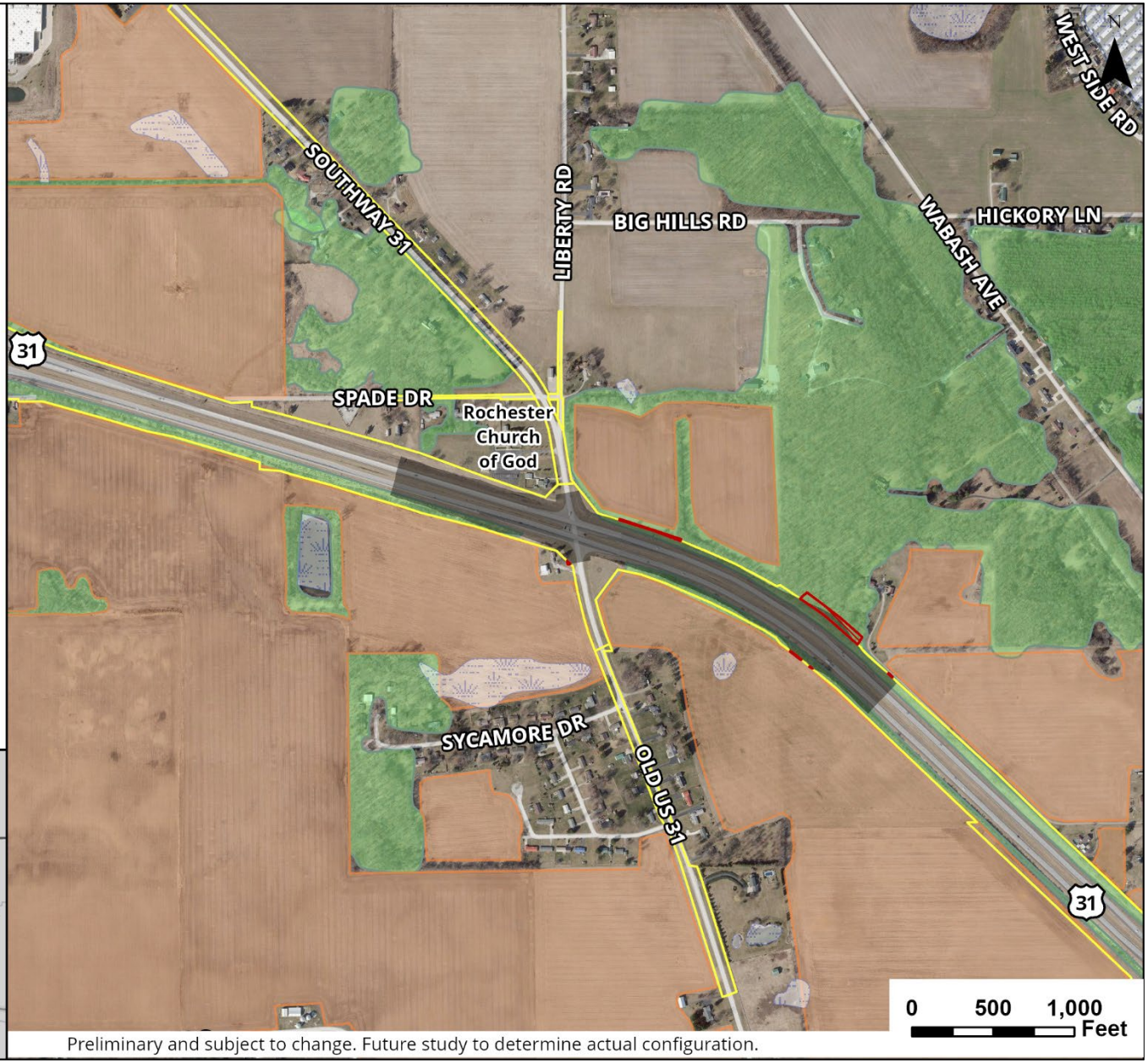
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

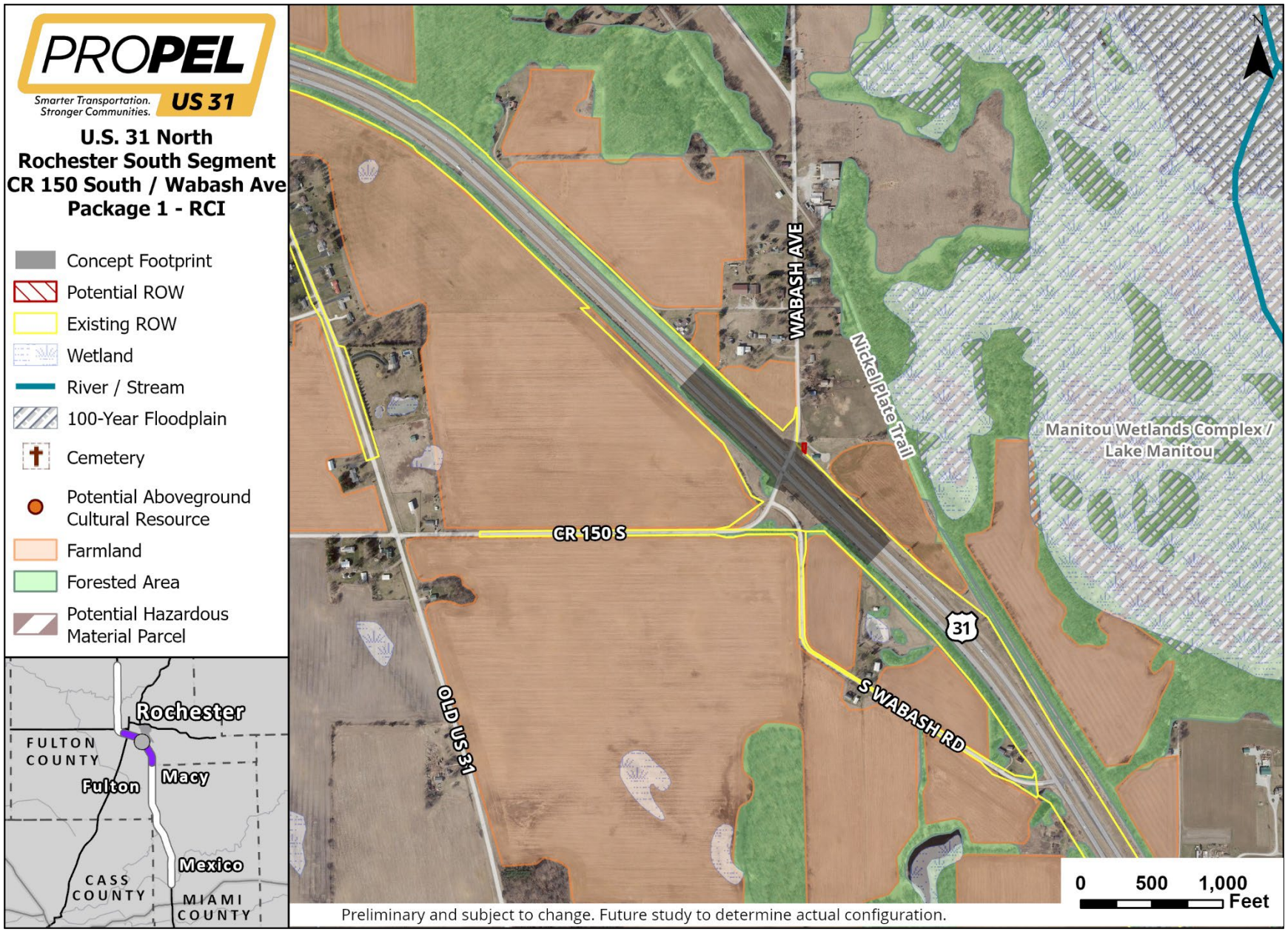
U.S. 31 North
Rochester South Segment
Old US 31 / Southway
Package 1 - RCI

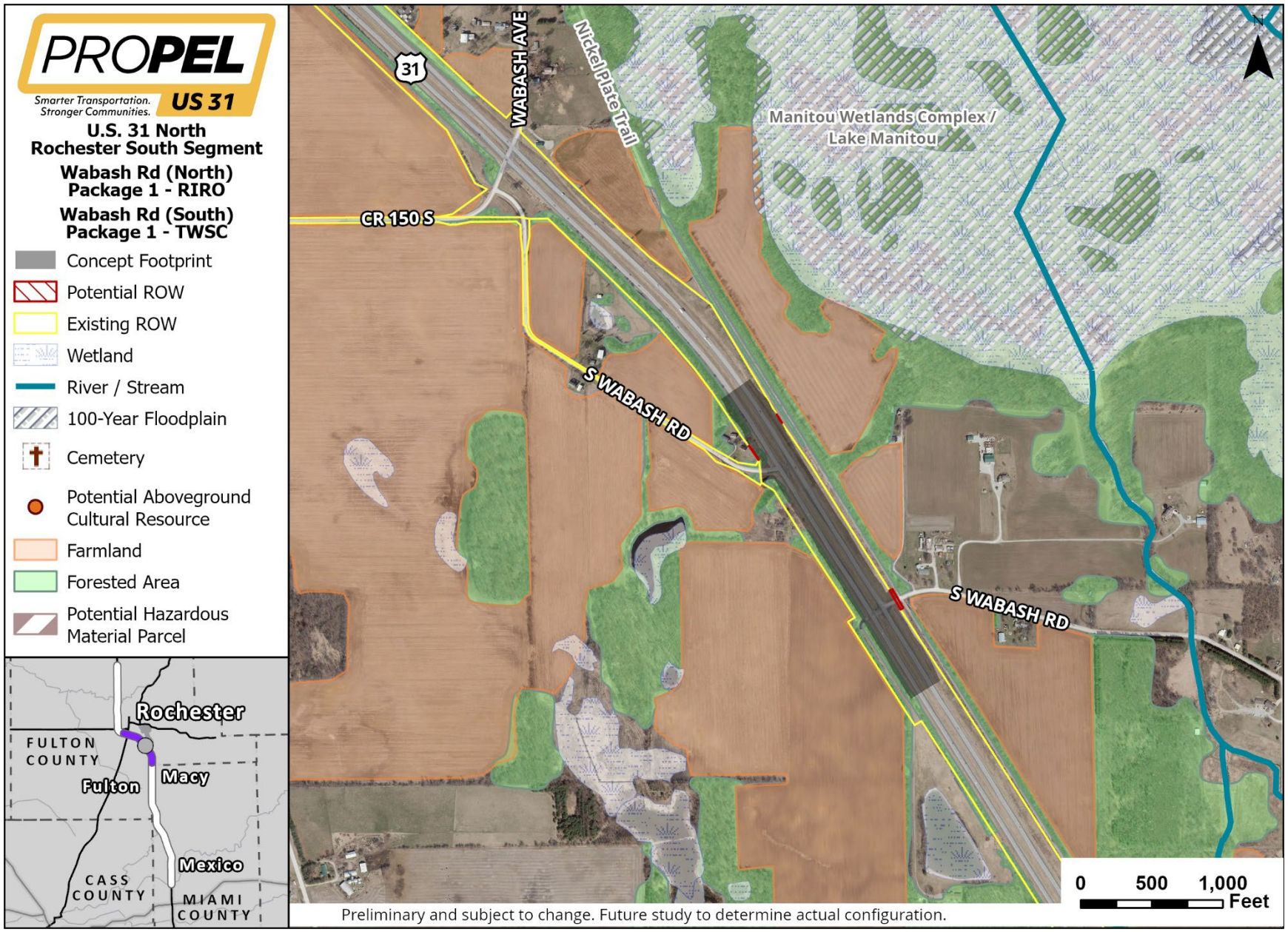
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

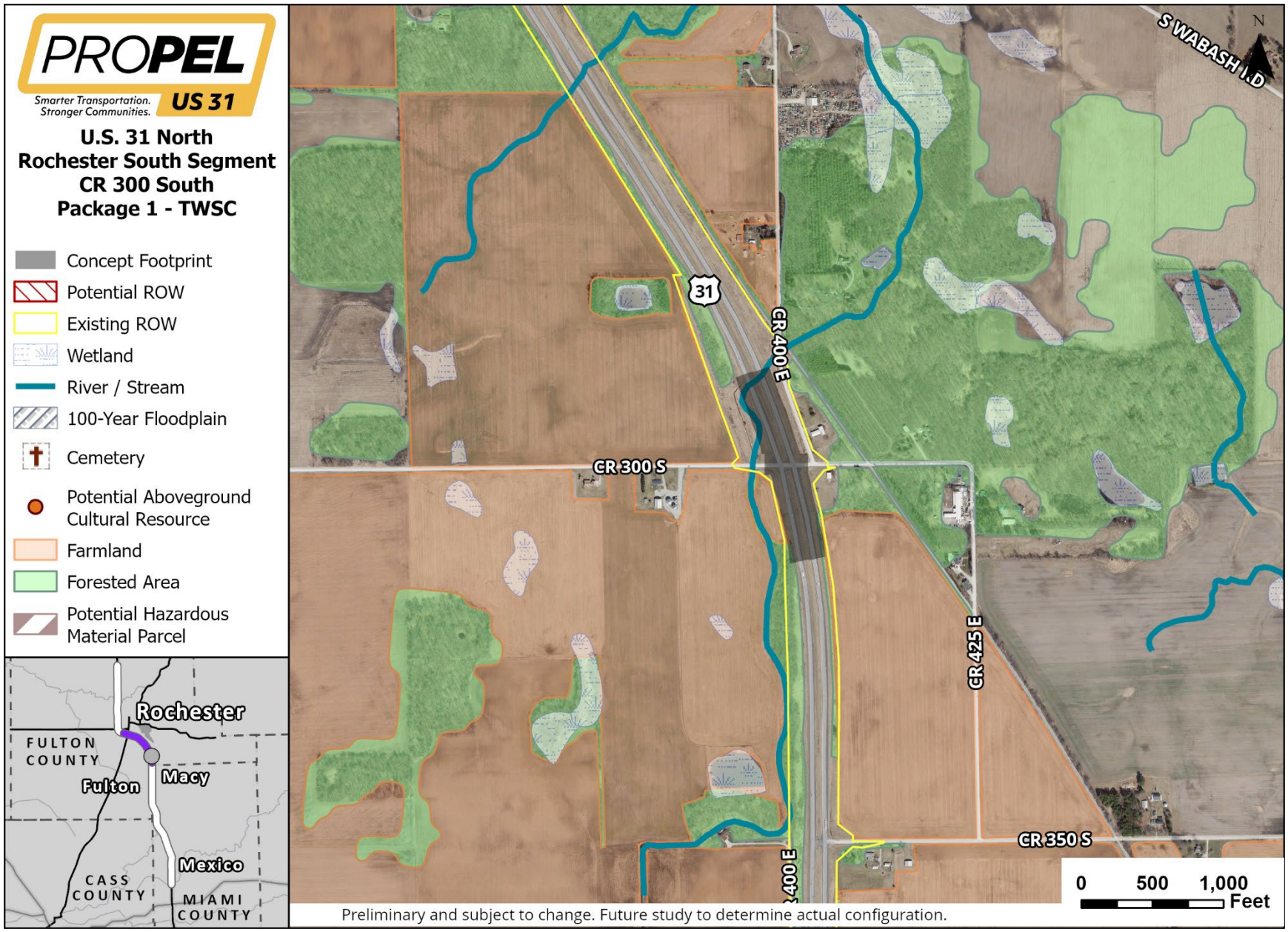




Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
CR 150 South / Wabash Ave
Package 1 - RCI
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
WABASH AVE
Nickel Plate Trail
Manitou Wetlands Complex / Lake Manitou
CR 150 S
31
S WABASH RD
OLD US 31
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

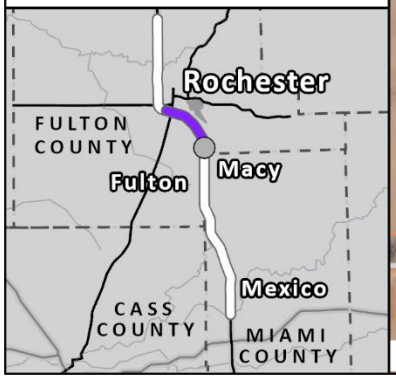

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
Wabash Rd (North)
Package 1 - RIRO
Wabash Rd (South)
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
WABASH AVE
Nickel Plate Trail
Manitou Wetlands Complex / Lake Manitou
CR 150 S
S WABASH RD
S WABASH RD
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

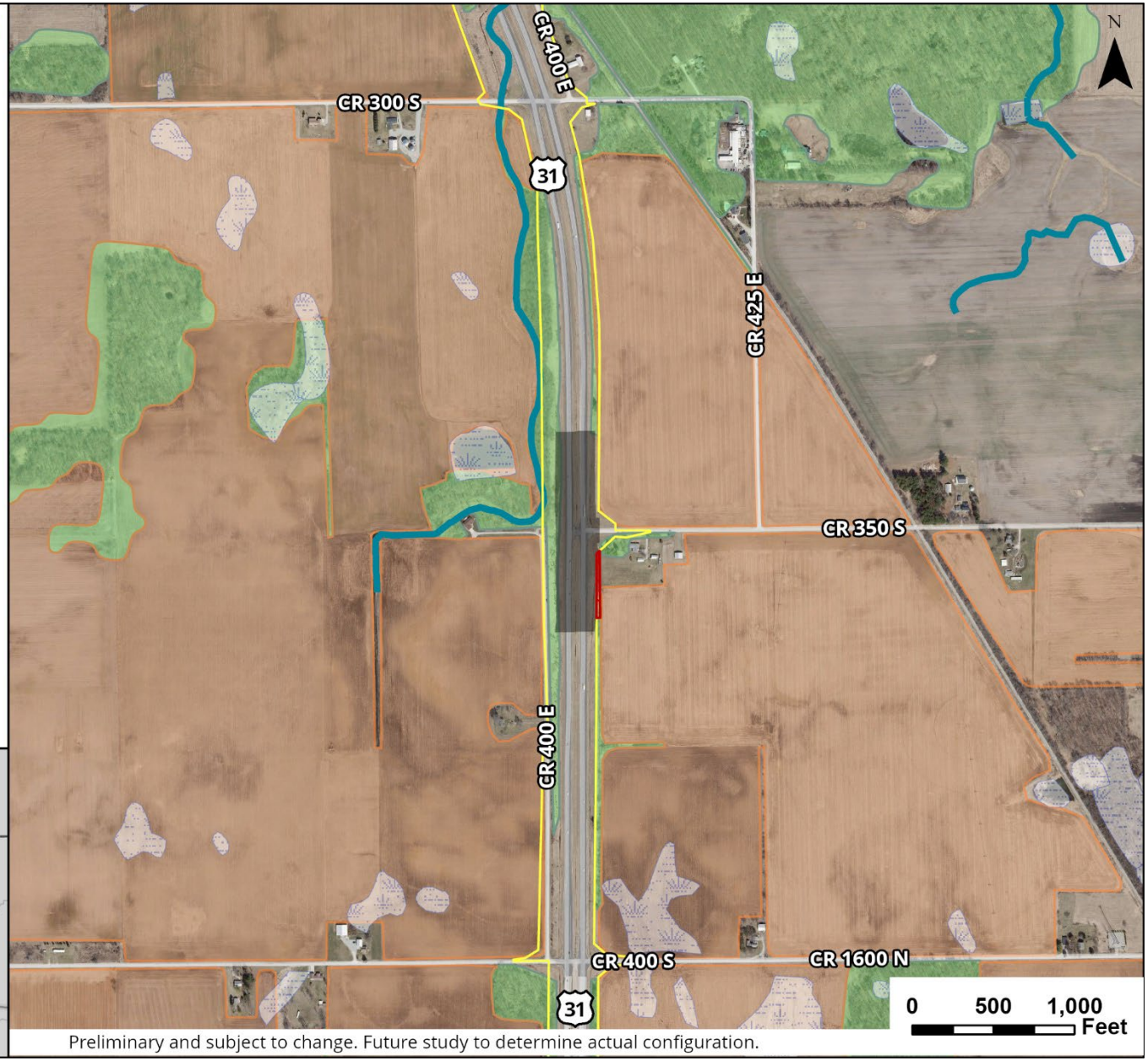

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
CR 300 South
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
S WABASH I.D
N
31
CR 400 E
CR 300 S
CR 425 E
CR 350 S
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Rochester South Segment
CR 350 South
Package 1 - TWSC

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



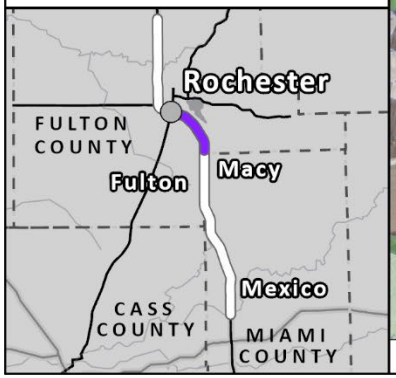


Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Rochester South Segment
SR 25
Package 2 - Interchange

- Proposed Footprint
- Proposed ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Potential Hazardous Material Parcel

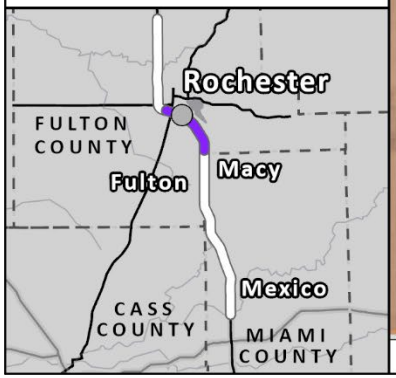


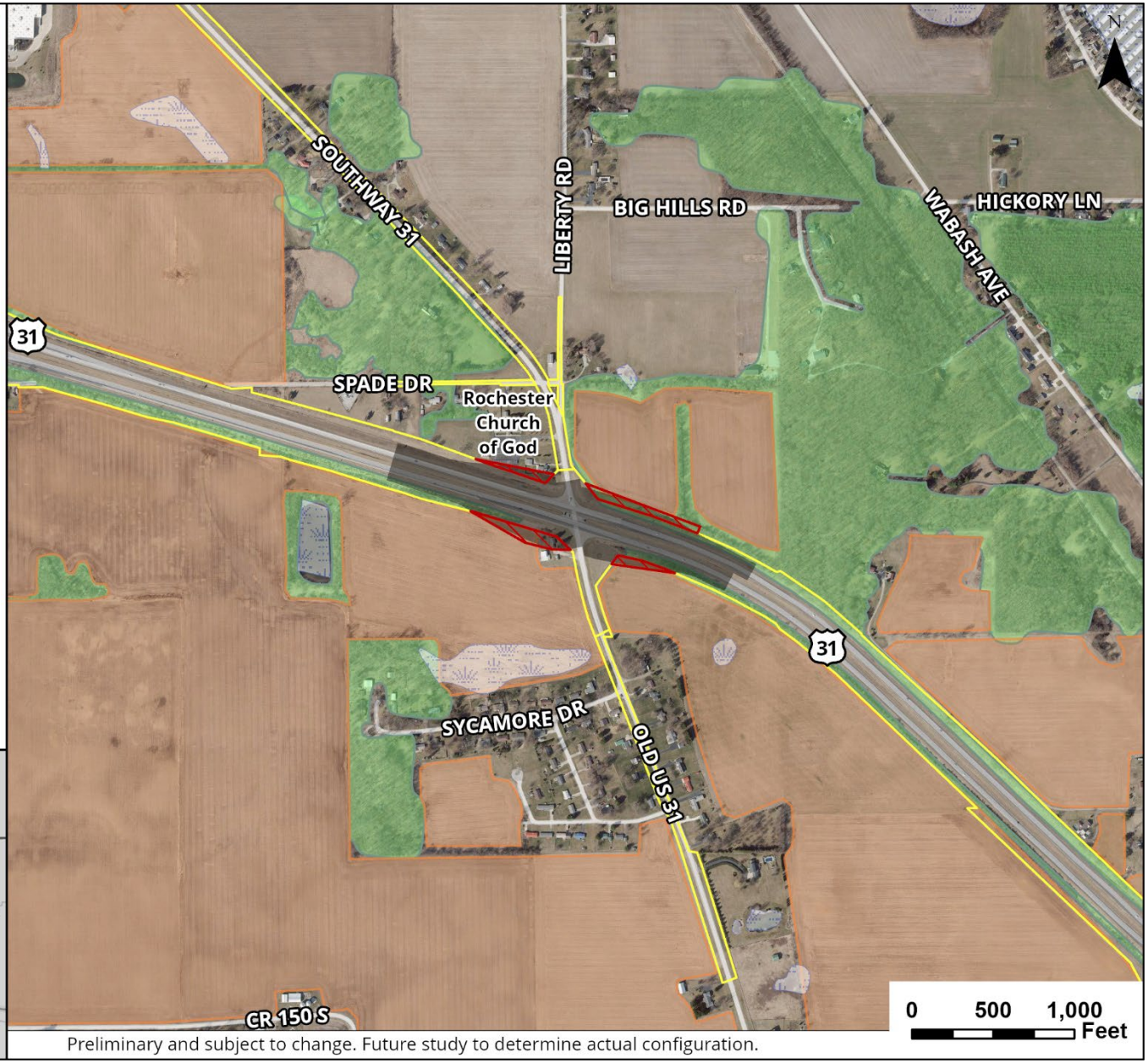
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Rochester South Segment
Old US 31 / Southway
Package 2 - Overpass

- Proposed Footprint
- Proposed ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Potential Hazardous Material Parcel



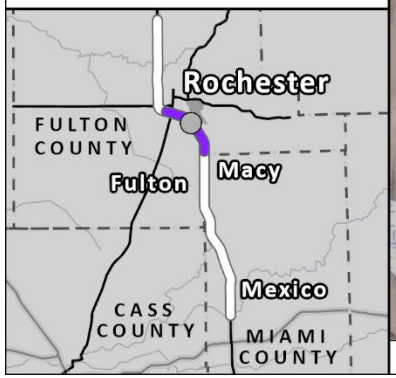


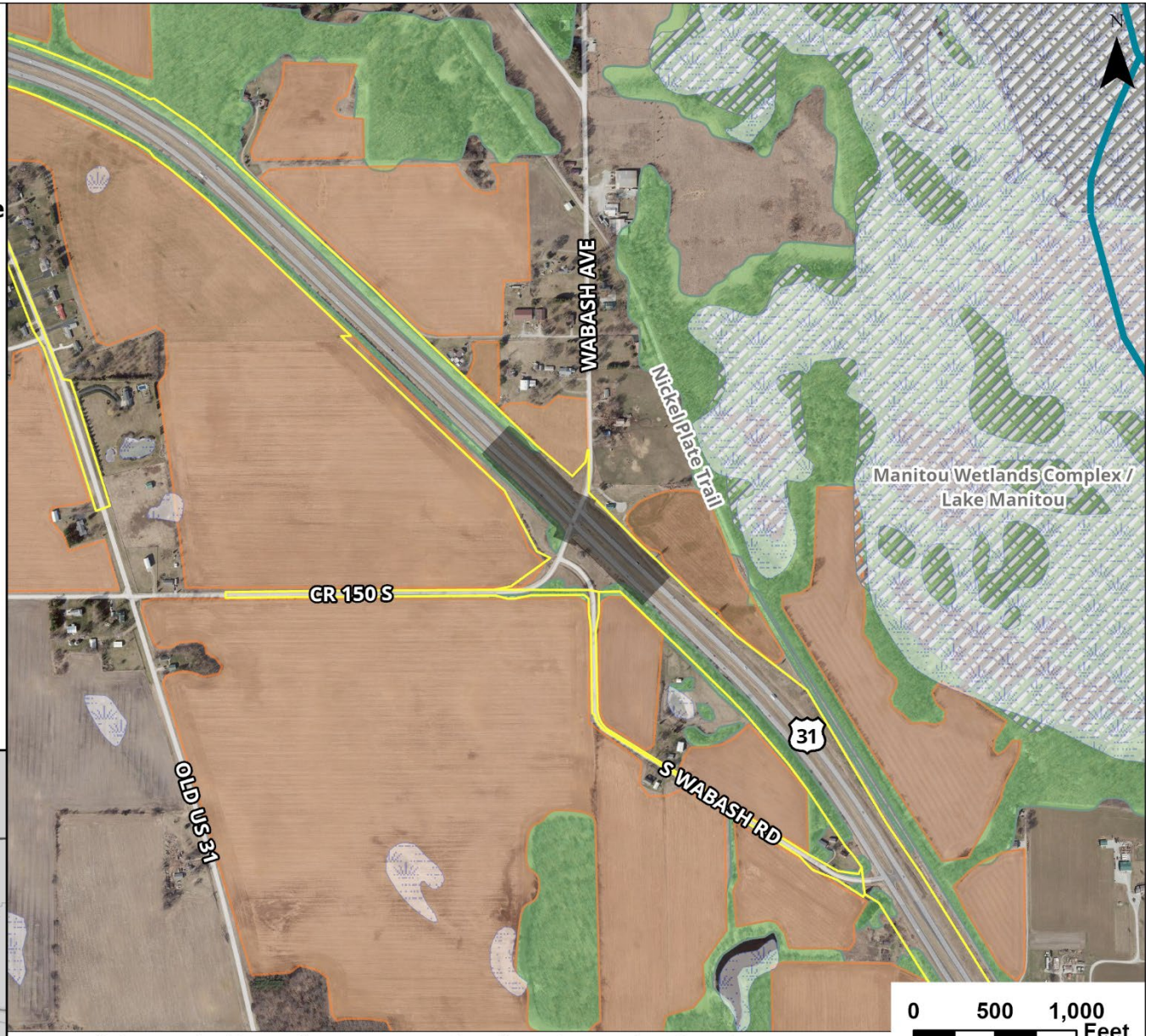
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

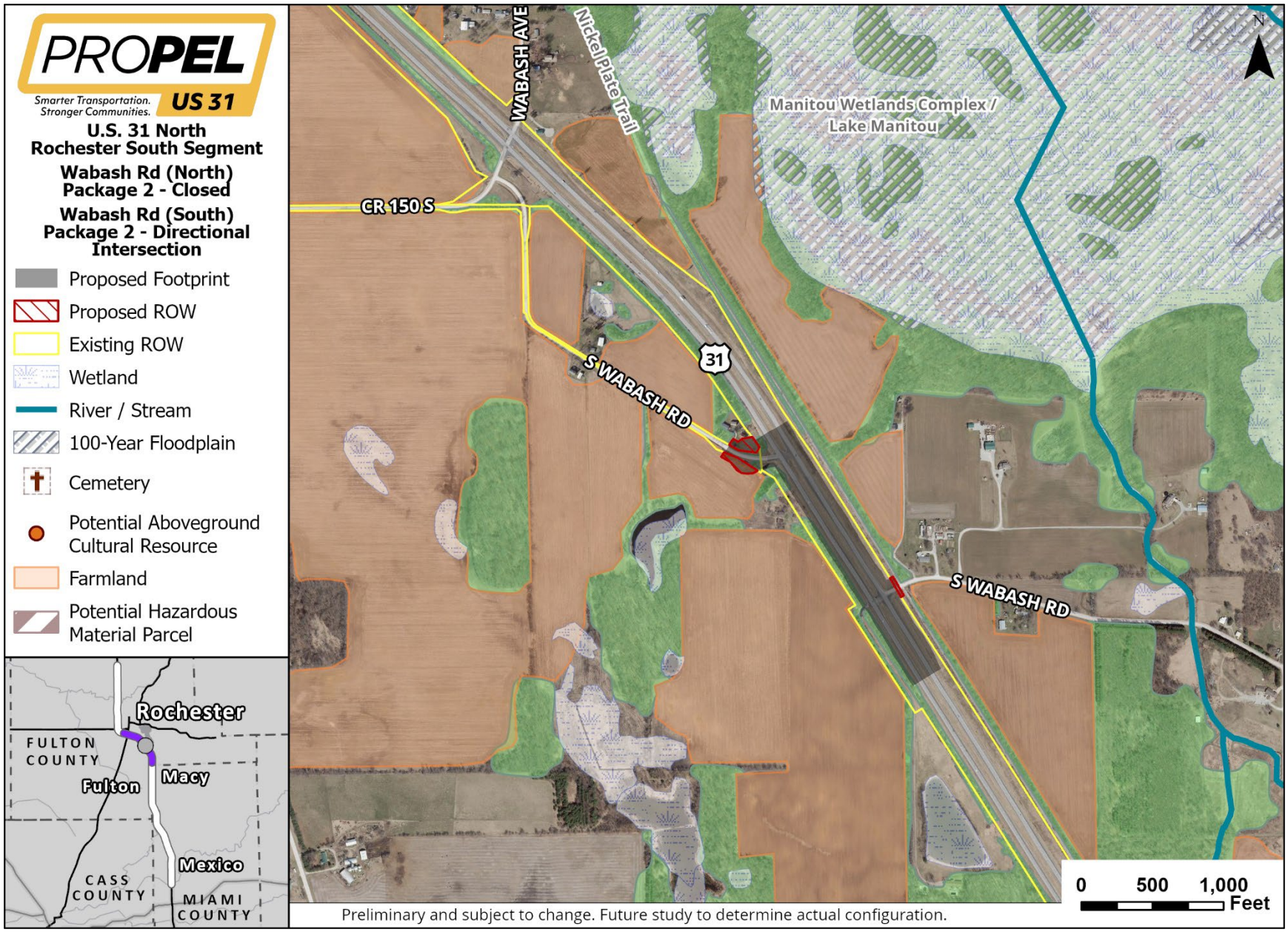
U.S. 31 North
Rochester South Segment
CR 150 South / Wabash Ave
Package 2 - TWSC

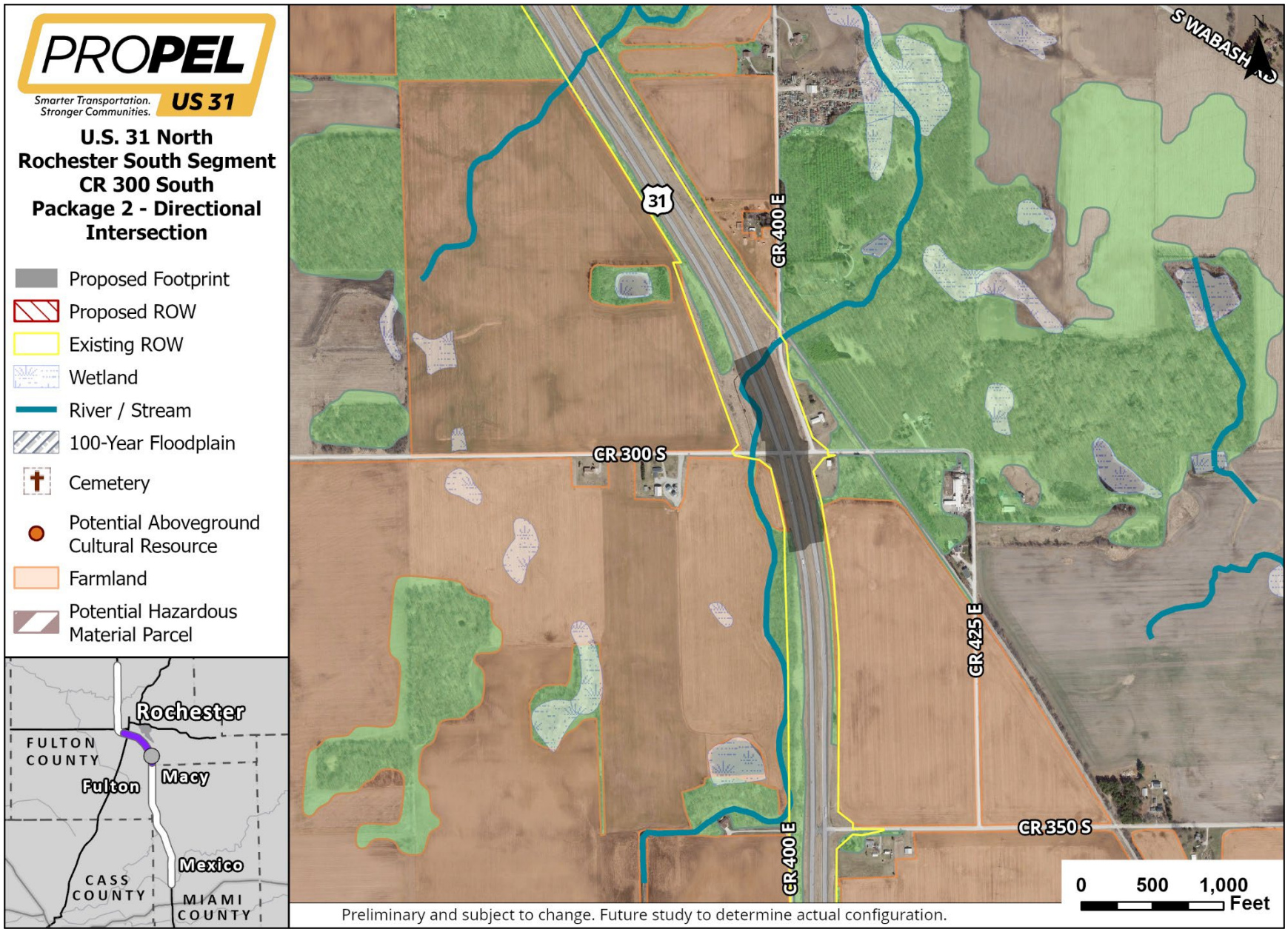
- Proposed Footprint
- Proposed ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Potential Hazardous Material Parcel





Preliminary and subject to change. Future study to determine actual configuration.

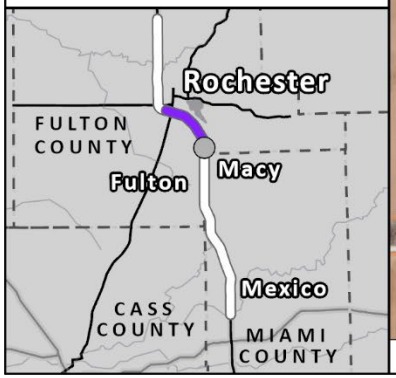

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
Wabash Rd (North)
Package 2 - Closed
Wabash Rd (South)
Package 2 - Directional Intersection
Proposed Footprint
Proposed ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
WABASH AVE
Nickel Plate Trail
Manitou Wetlands Complex / Lake Manitou
CR 150 S
S WABASH RD
31
S WABASH RD
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

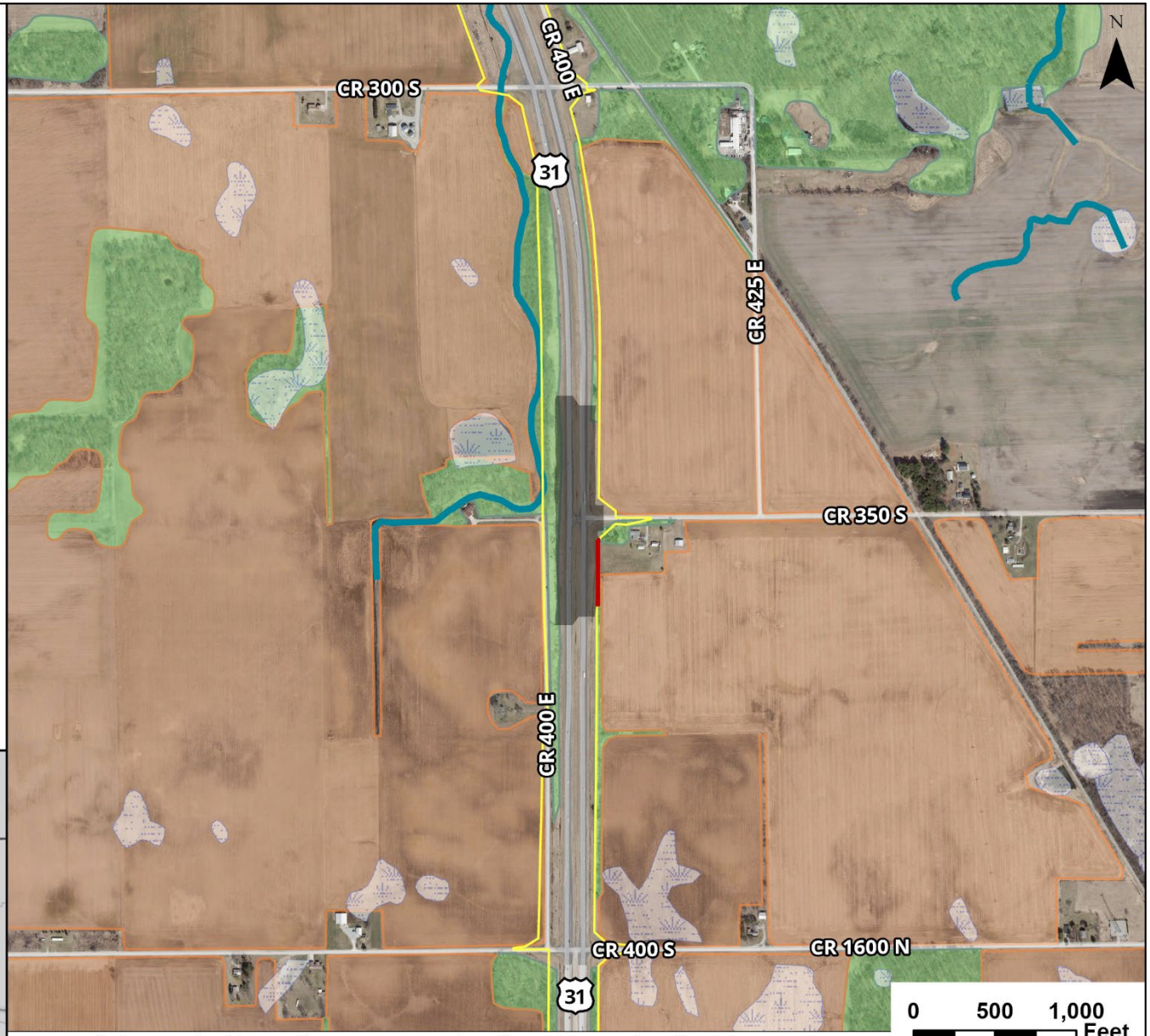

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
CR 300 South
Package 2 - Directional Intersection
Proposed Footprint
Proposed ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
CR 400 E
CR 300 S
CR 425 E
CR 350 S
CR 400 E
S WABASH
N
0
500
1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

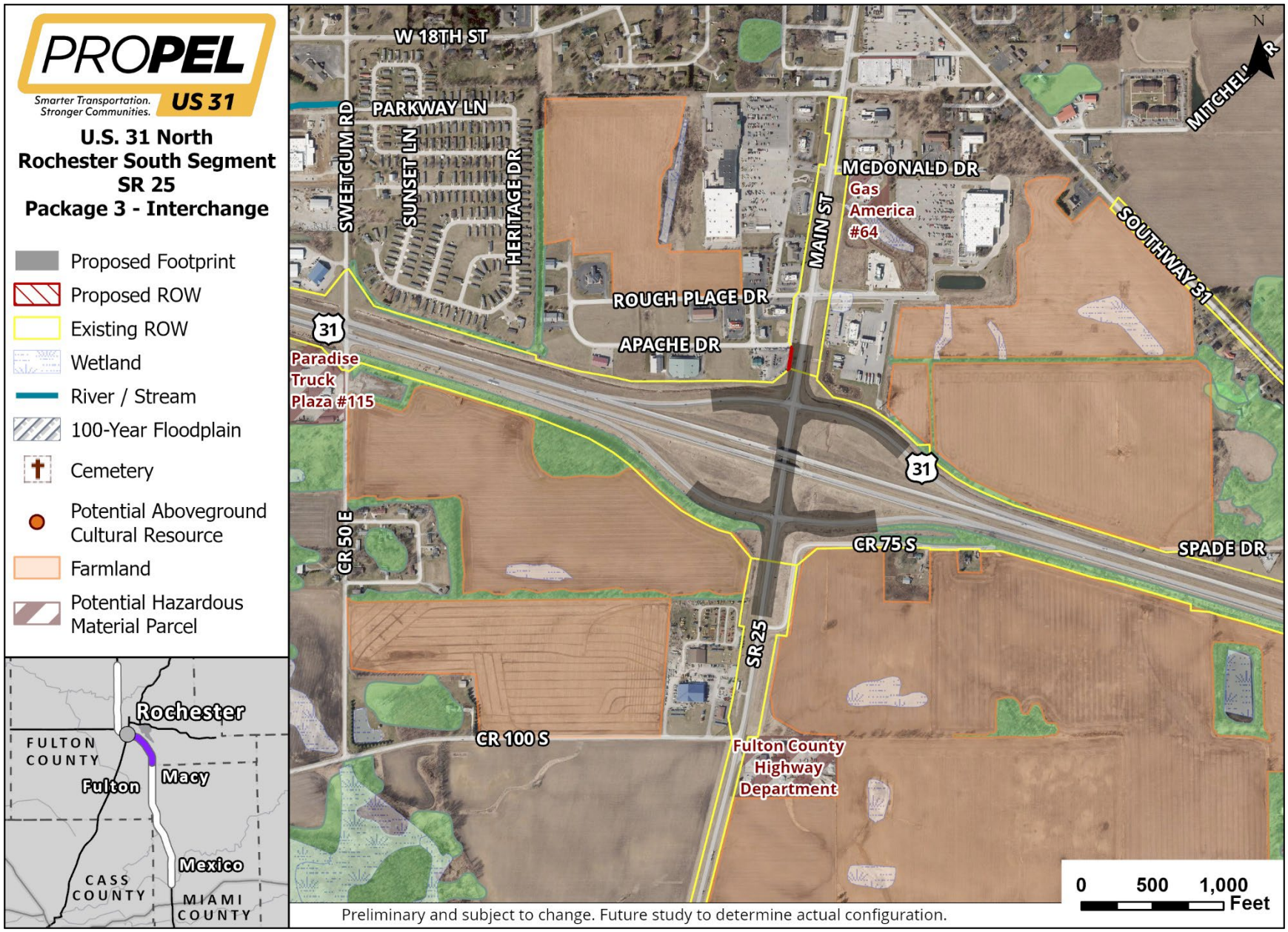
U.S. 31 North
Rochester South Segment
CR 350 South
Package 2 - Directional Intersection

- Proposed Footprint
- Proposed ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Potential Hazardous Material Parcel





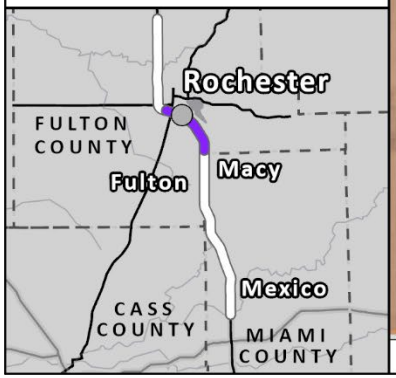
Preliminary and subject to change. Future study to determine actual configuration.

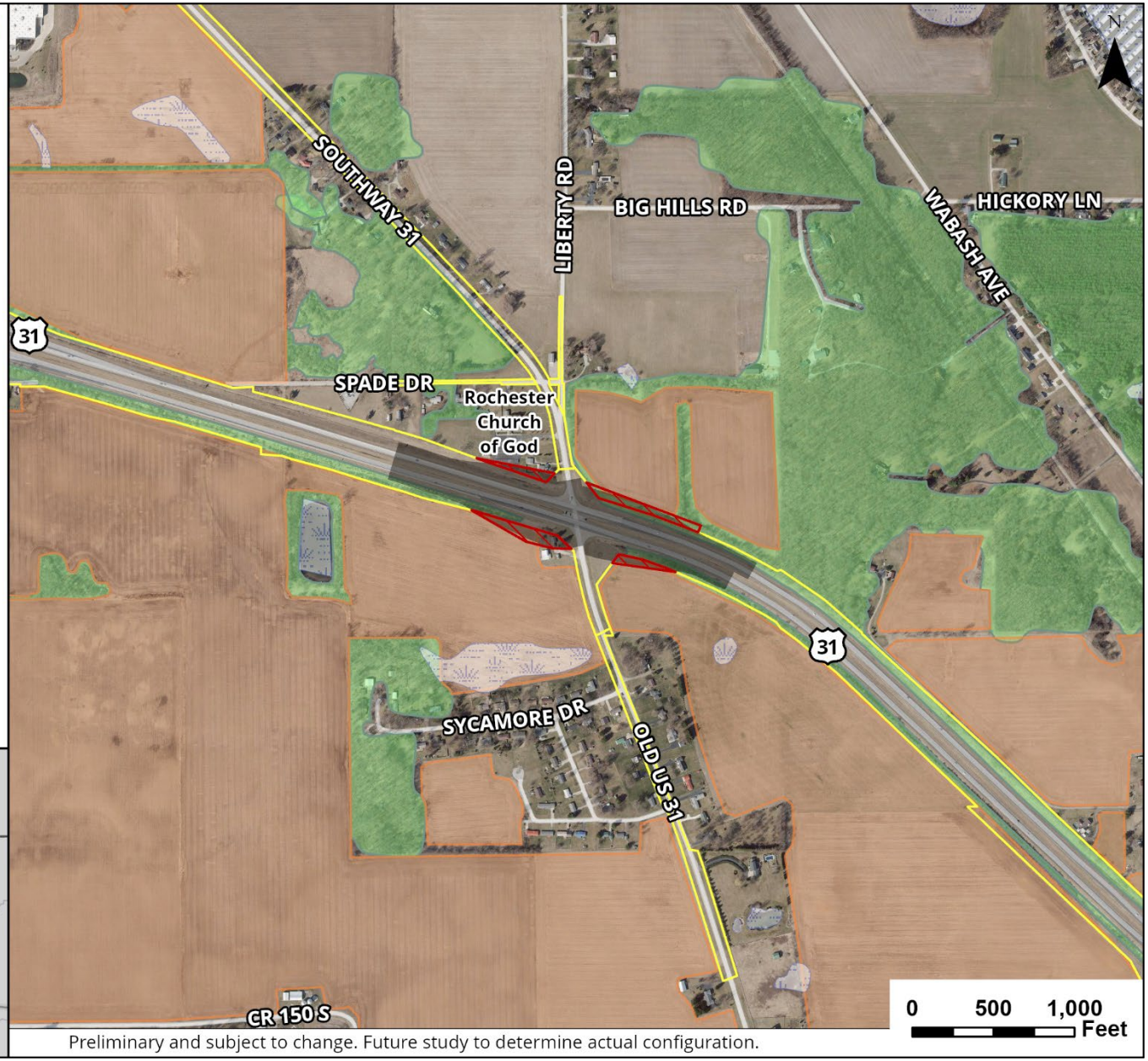

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
SR 25
Package 3 - Interchange
Proposed Footprint
Proposed ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
W 18TH ST
PARKWAY LN
SWEETGUM RD
SUNSET LN
HERITAGE DR
MCDONALD DR
Gas America #64
MAIN ST
SOUTHWAY 31
MITCHELL R
ROUGH PLACE DR
APACHE DR
31
Paradise Truck Plaza #115
CR 50 E
CR 75 S
SPADE DR
SR 25
CR 100 S
Fulton County Highway Department
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

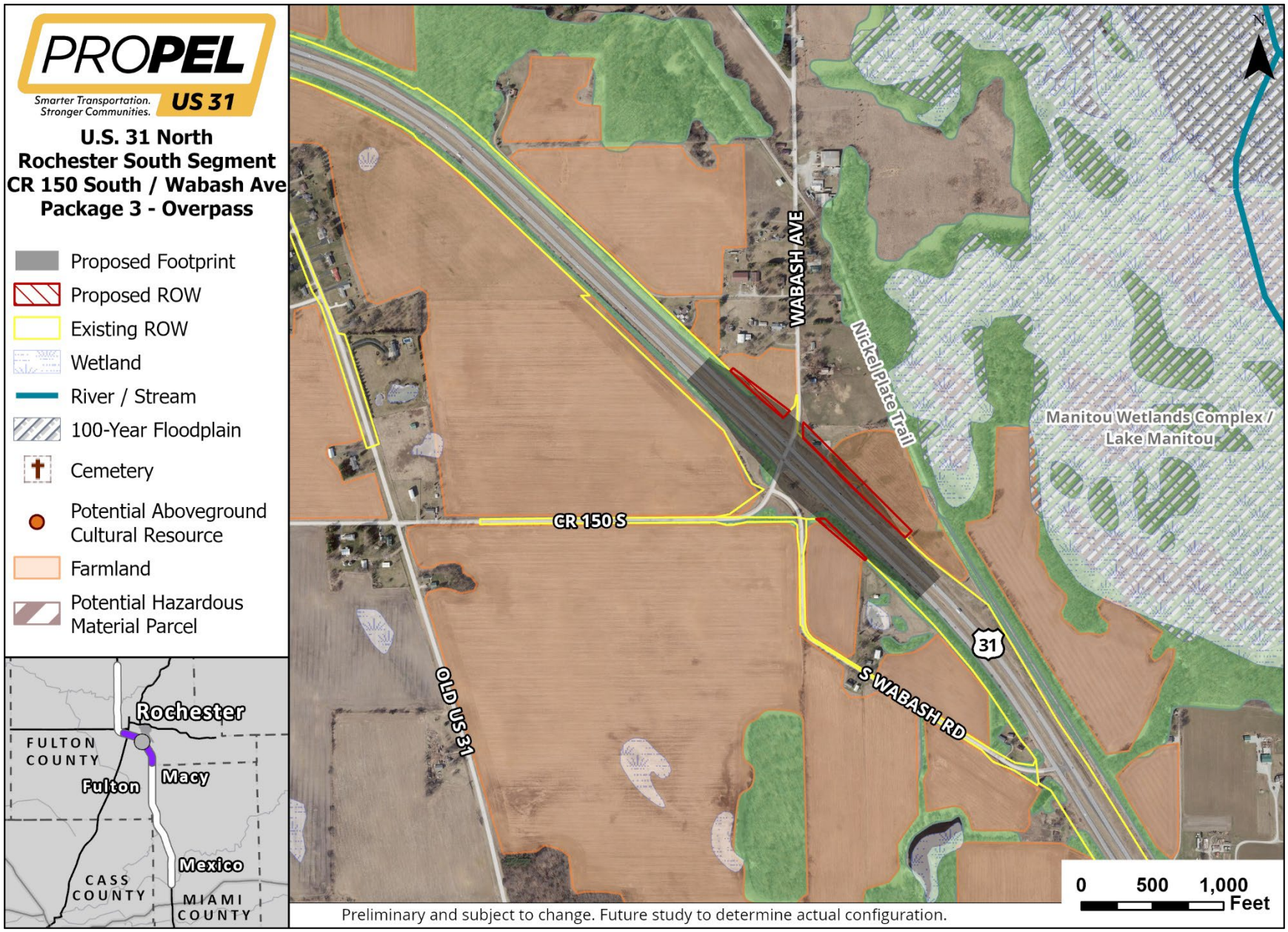
U.S. 31 North
Rochester South Segment
Old US 31 / Southway
Package 3 - Overpass

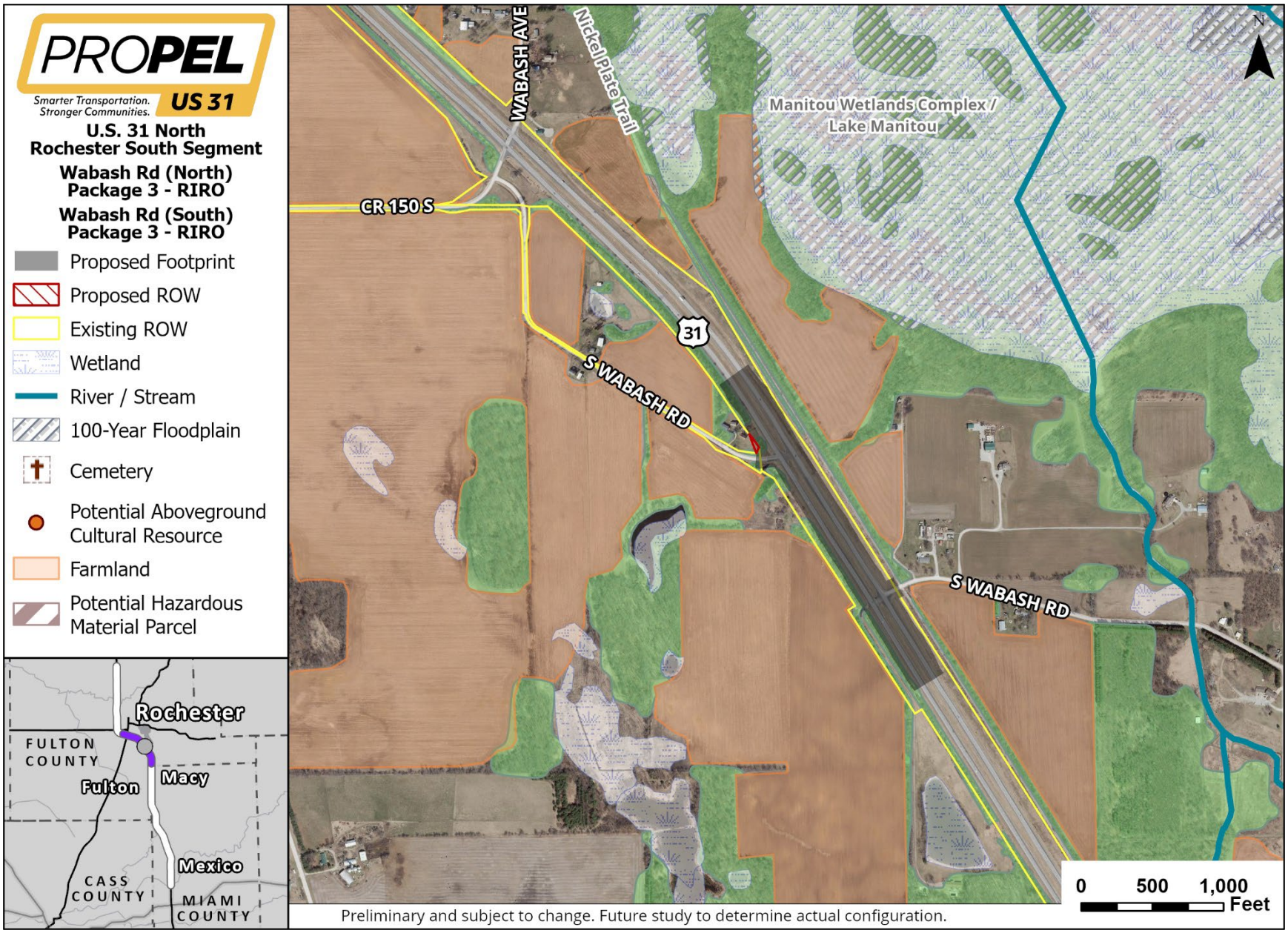
- Proposed Footprint
- Proposed ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Potential Hazardous Material Parcel

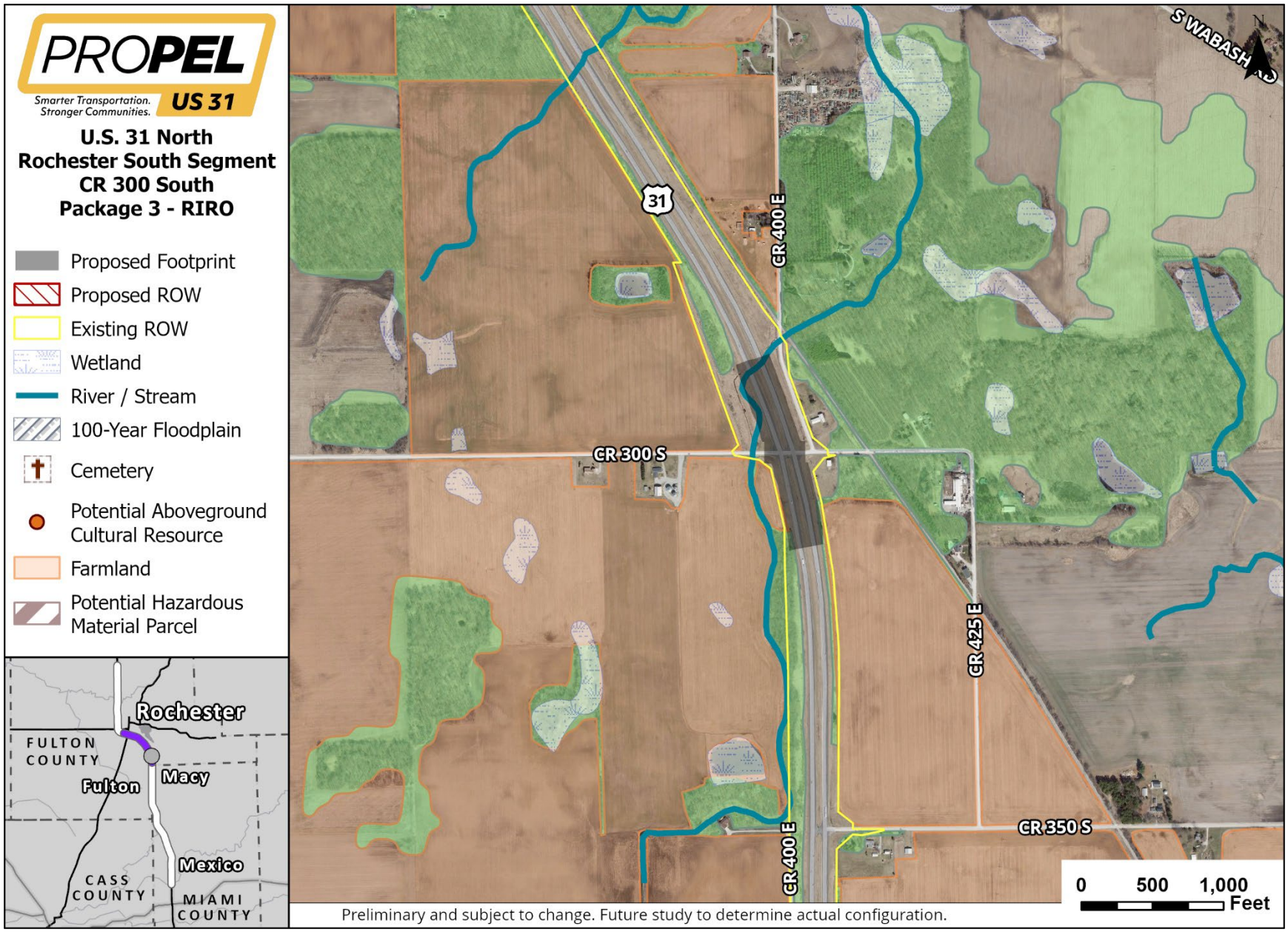




Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
CR 150 South / Wabash Ave
Package 3 - Overpass
Proposed Footprint
Proposed ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
WABASH AVE
Nickel Plate Trail
Manitou Wetlands Complex / Lake Manitou
CR 150 S
OLD US 31
S WABASH RD
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

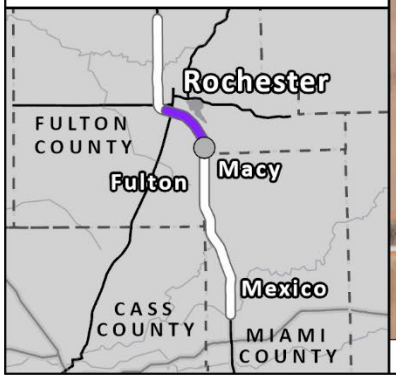

PROPEL US 31
Smarter Transportation. Stronger Communities.
U.S. 31 North
Rochester South Segment
Wabash Rd (North)
Package 3 - RIRO
Wabash Rd (South)
Package 3 - RIRO
Proposed Footprint
Proposed ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
WABASH AVE
Nickel Plate Trail
Manitou Wetlands Complex / Lake Manitou
CR 150 S
31
S WABASH RD
S WABASH RD
N
0
500
1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.

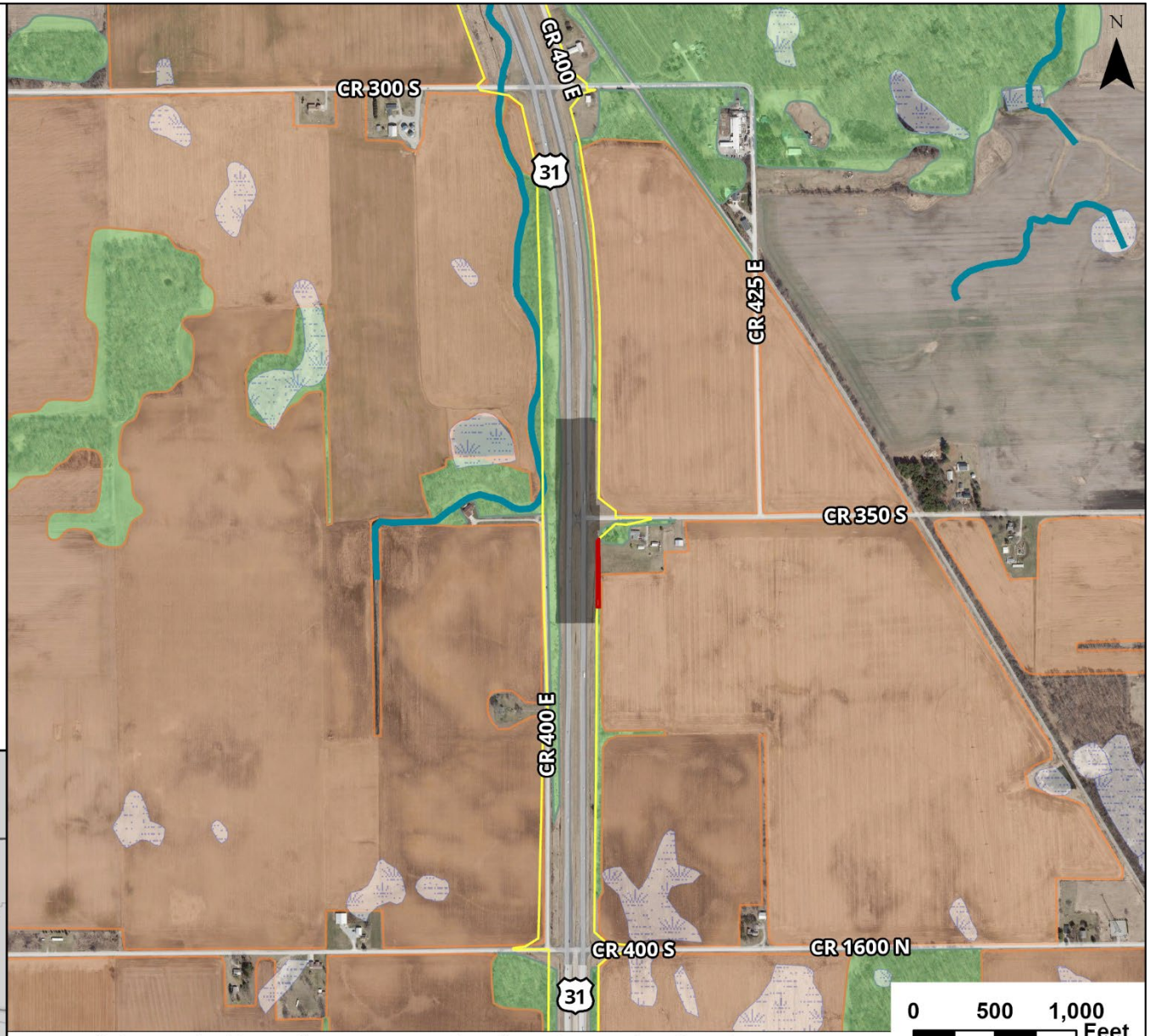

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
CR 300 South
Package 3 - RIRO
Proposed Footprint
Proposed ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
CR 400 E
CR 300 S
CR 425 E
CR 350 S
CR 400 E
S WABASH
N
0
500
1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Rochester South Segment
CR 350 South
Package 3 - RIRO

- Proposed Footprint
- Proposed ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Potential Hazardous Material Parcel



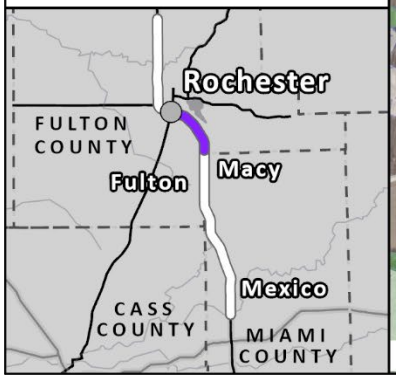


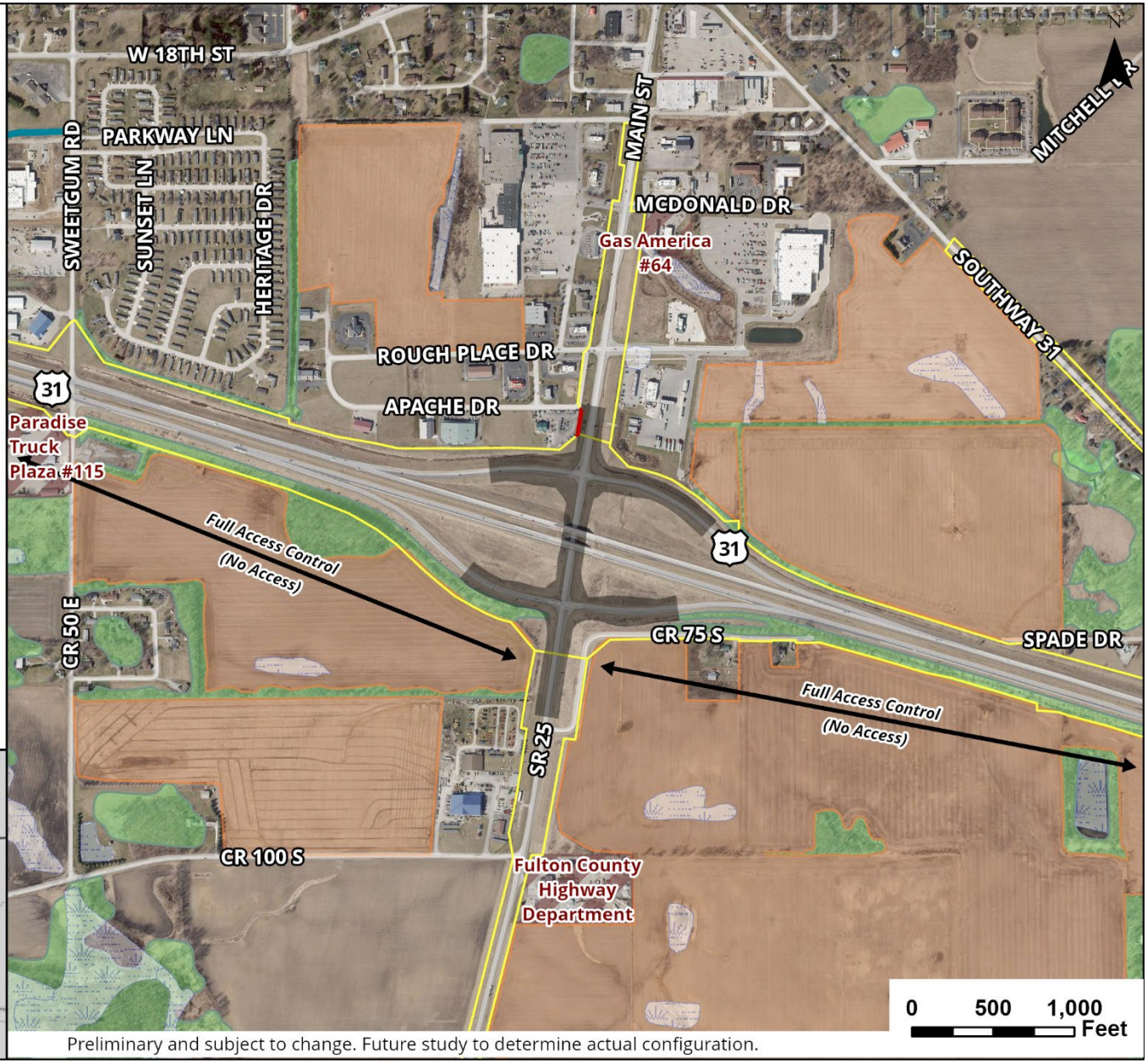
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities.
US 31

U.S. 31 North
Rochester South Segment
SR 25
Package 4 - Interchange

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



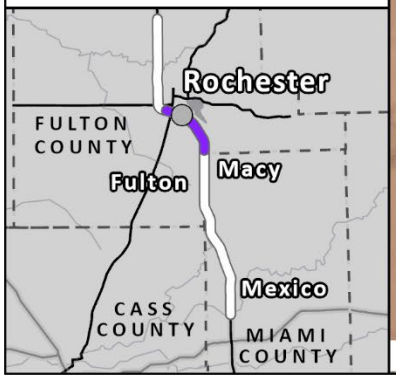


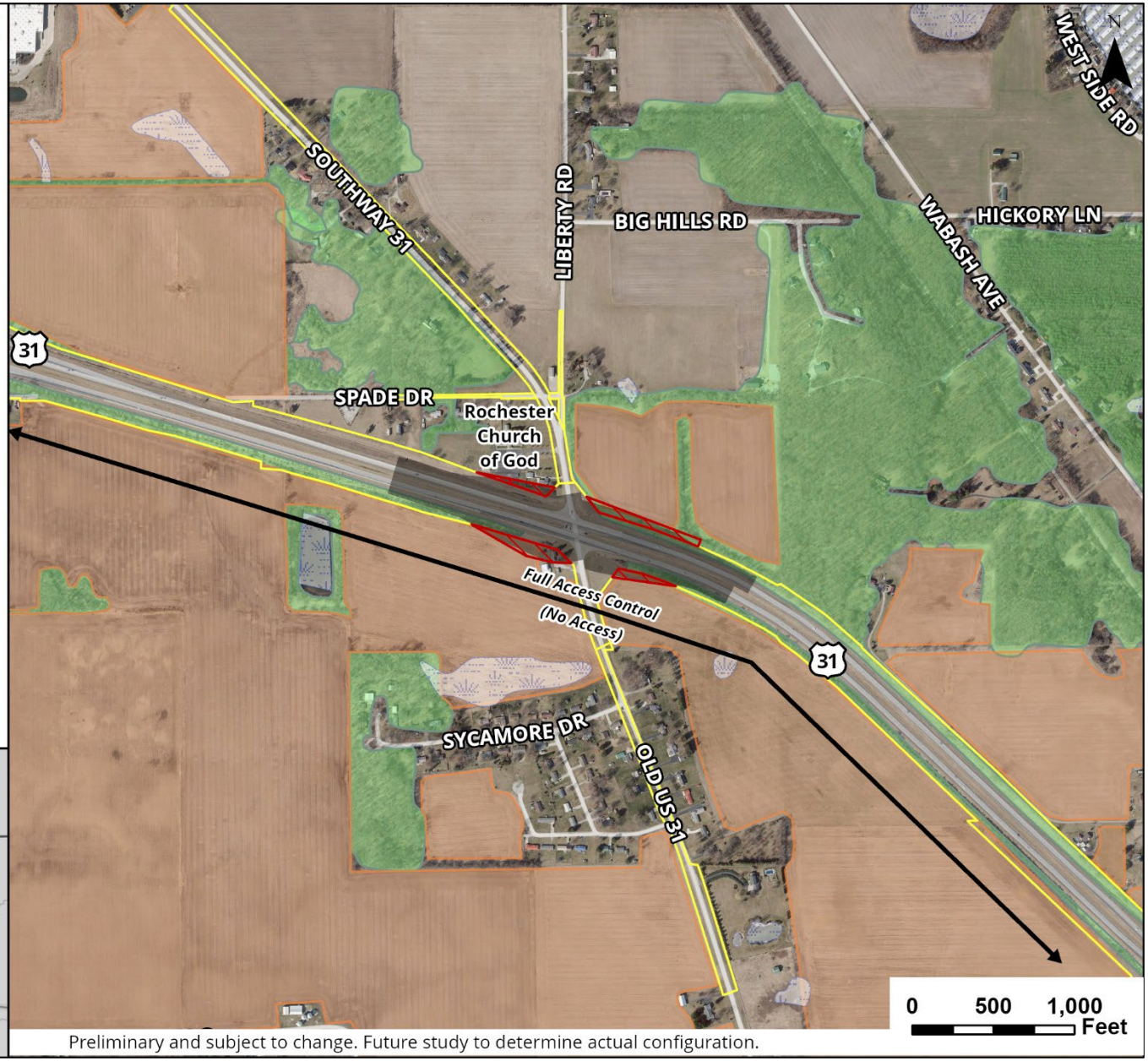
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Rochester South Segment
Old US 31 / Southway
Package 4 - Overpass

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



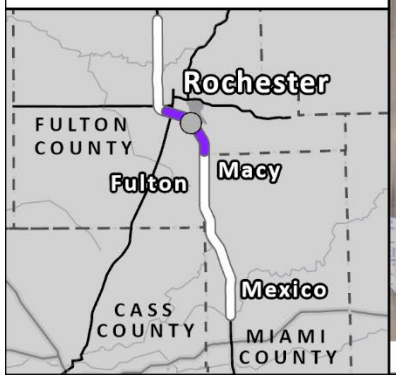


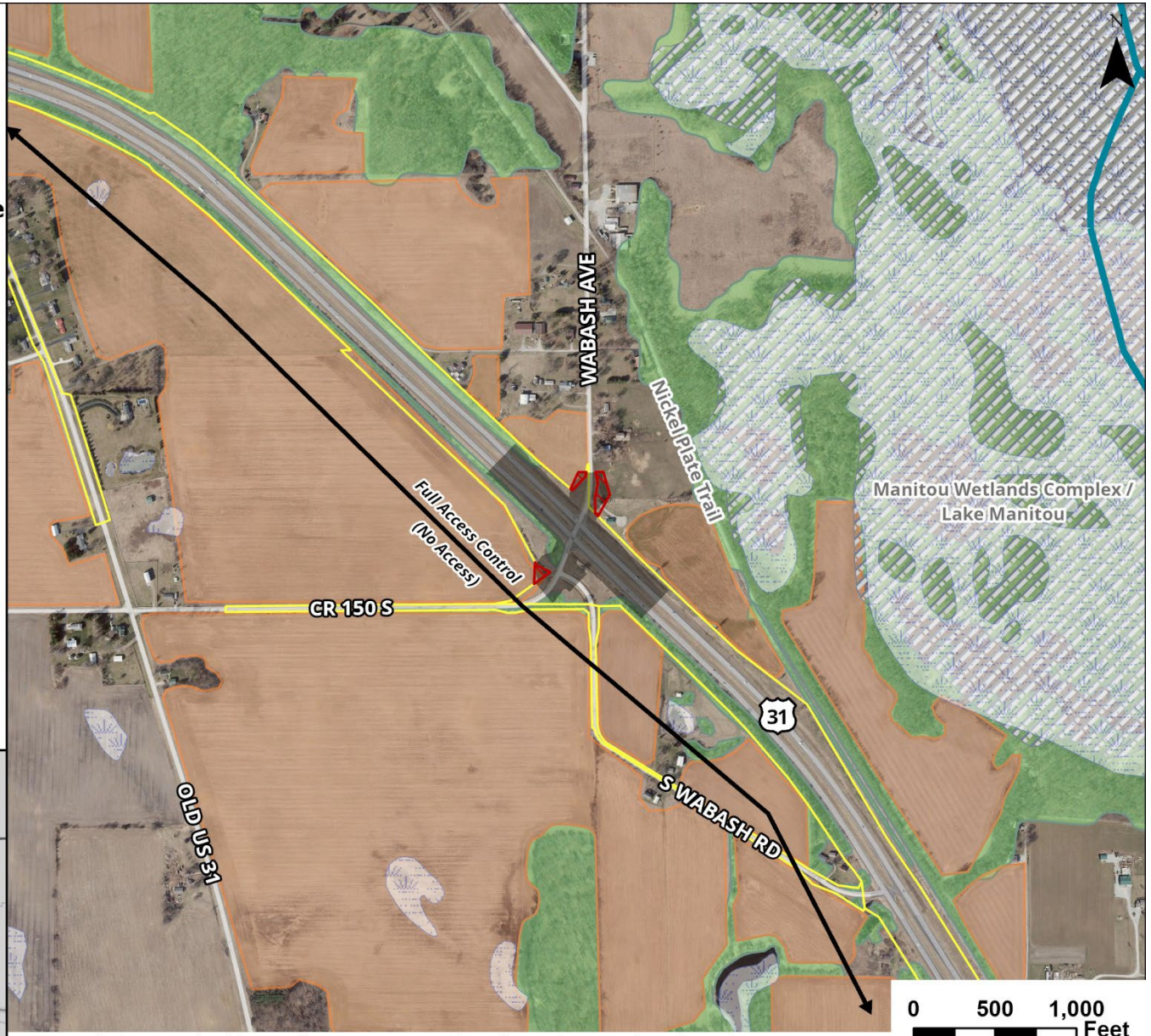
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

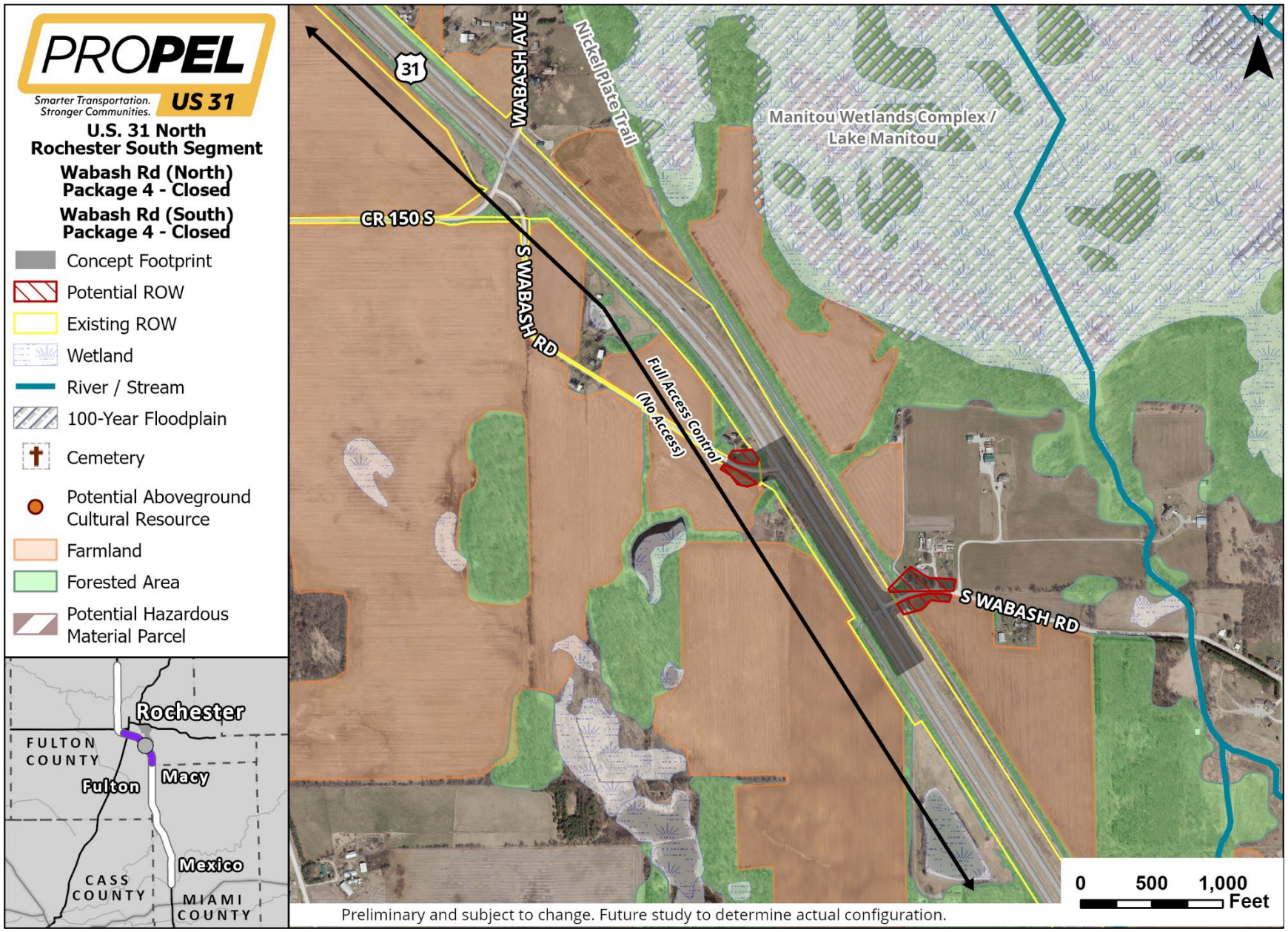
U.S. 31 North
Rochester South Segment
CR 150 South / Wabash Ave
Package 4 - Closed

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





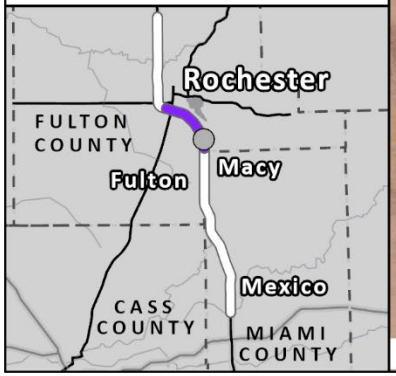
Preliminary and subject to change. Future study to determine actual configuration.

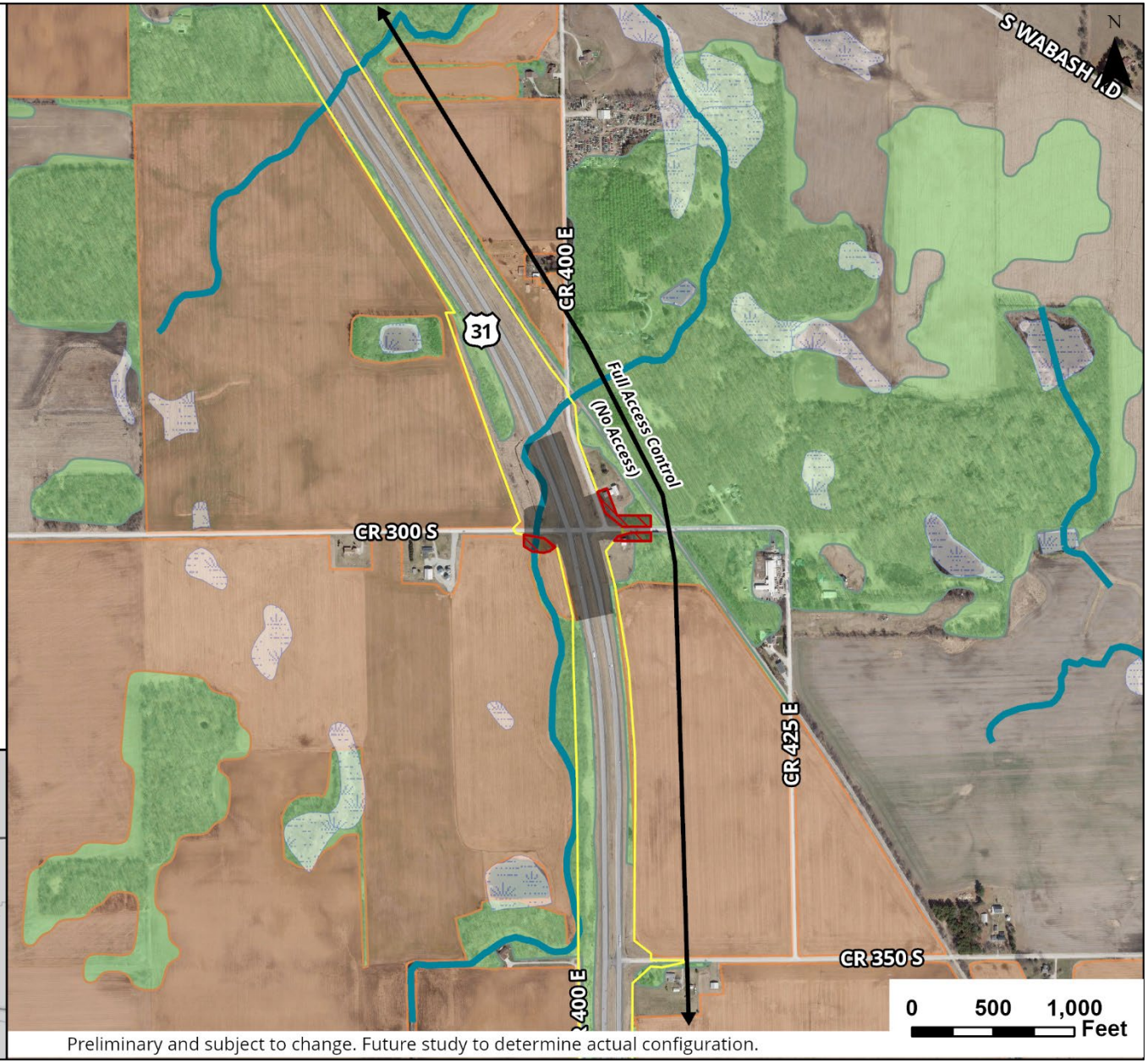

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Rochester South Segment
Wabash Rd (North)
Package 4 - Closed
Wabash Rd (South)
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
WABASH AVE
Nickel Plate Trail
Manitou Wetlands Complex / Lake Manitou
CR 150 S
S WABASH RD
Full Access Control
(No Access)
S WABASH RD
N
0
500
1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Rochester South Segment
CR 300 South
Package 4 - Closed

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



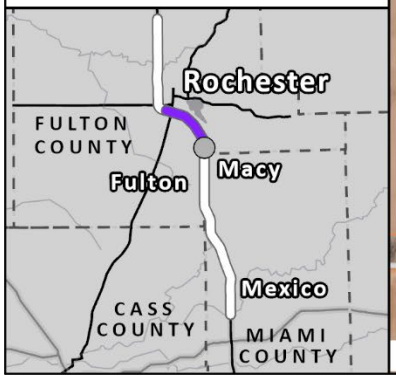


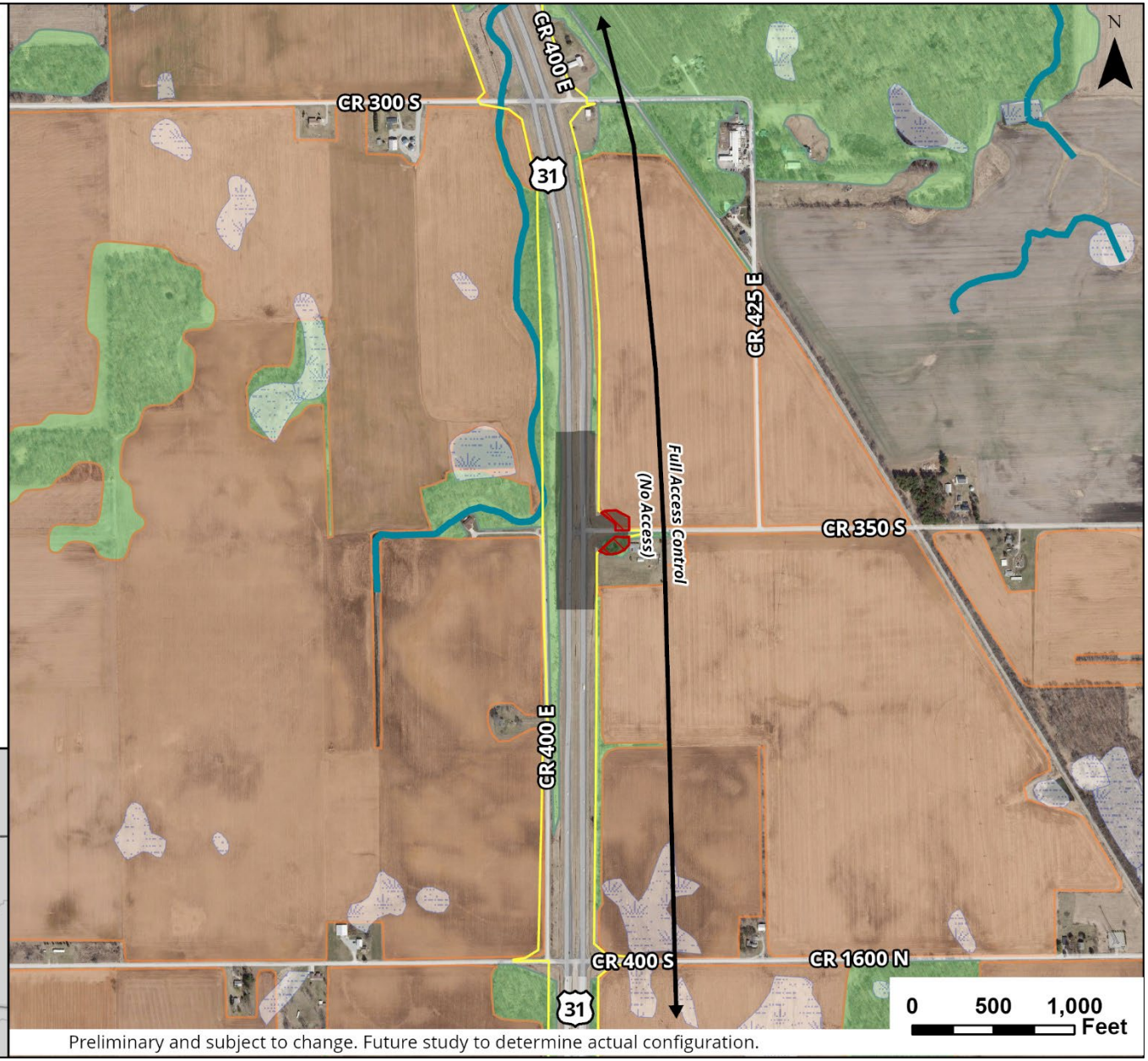
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

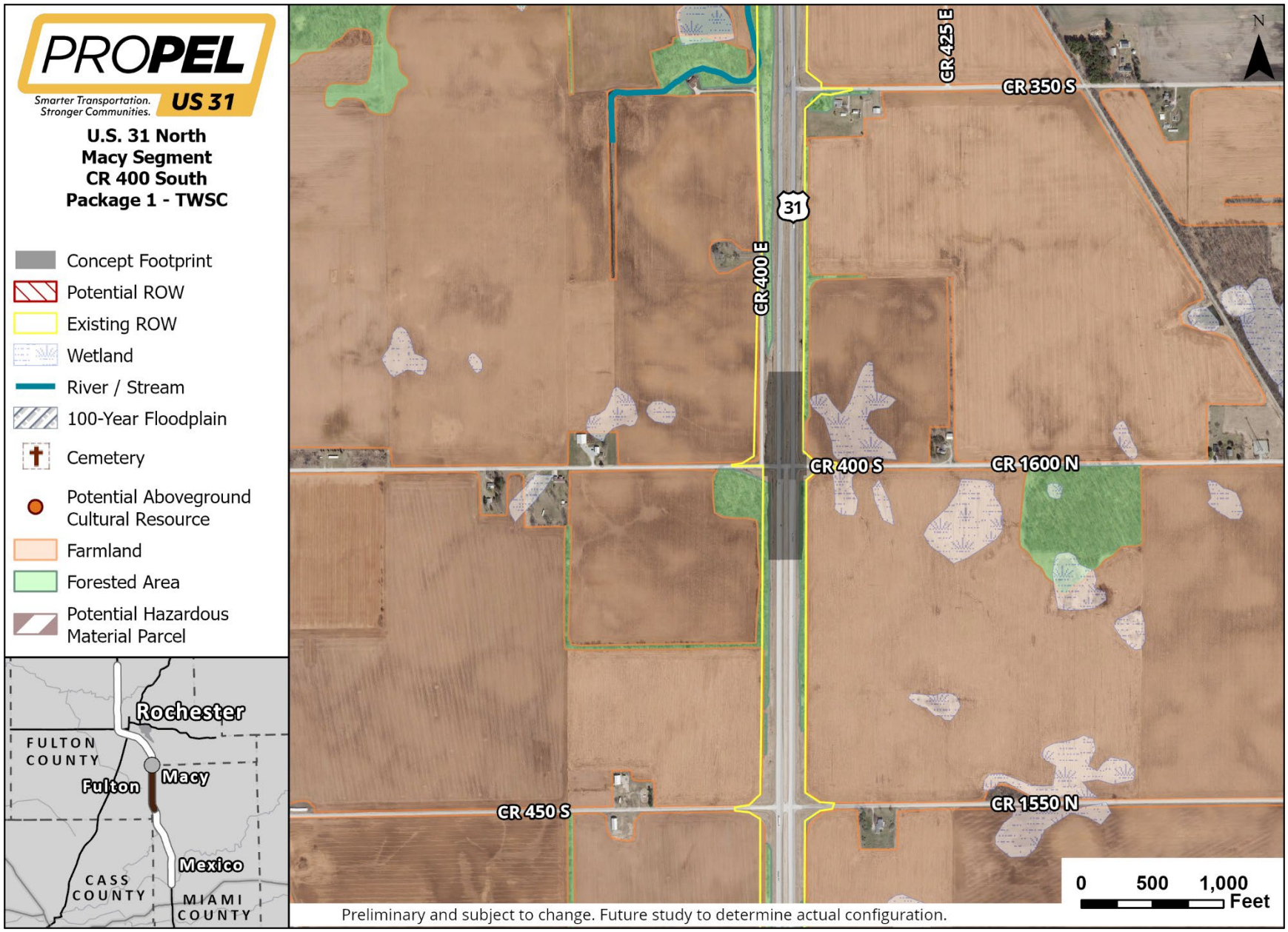
U.S. 31 North
Rochester South Segment
CR 350 South
Package 4 - Closed

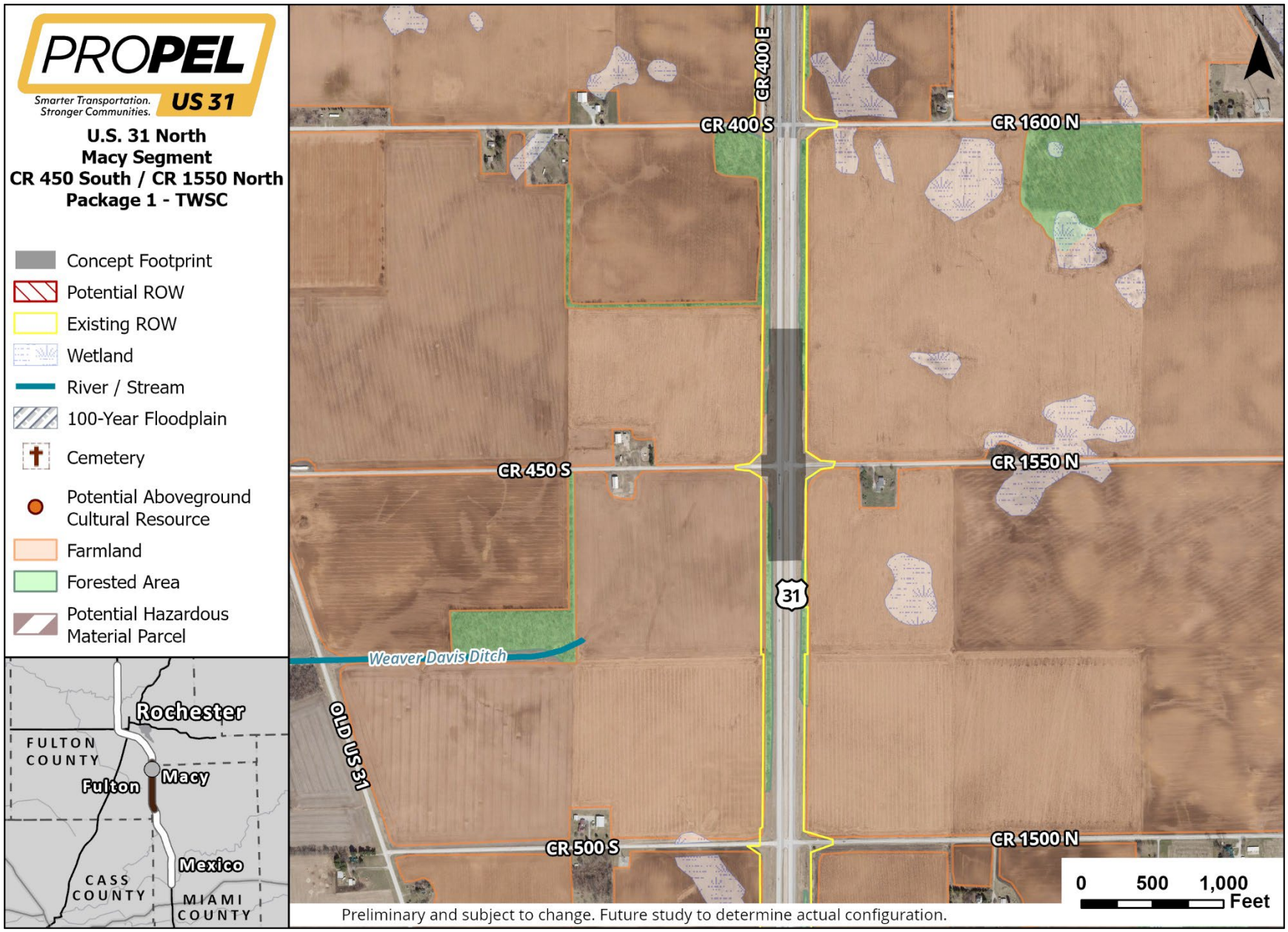
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

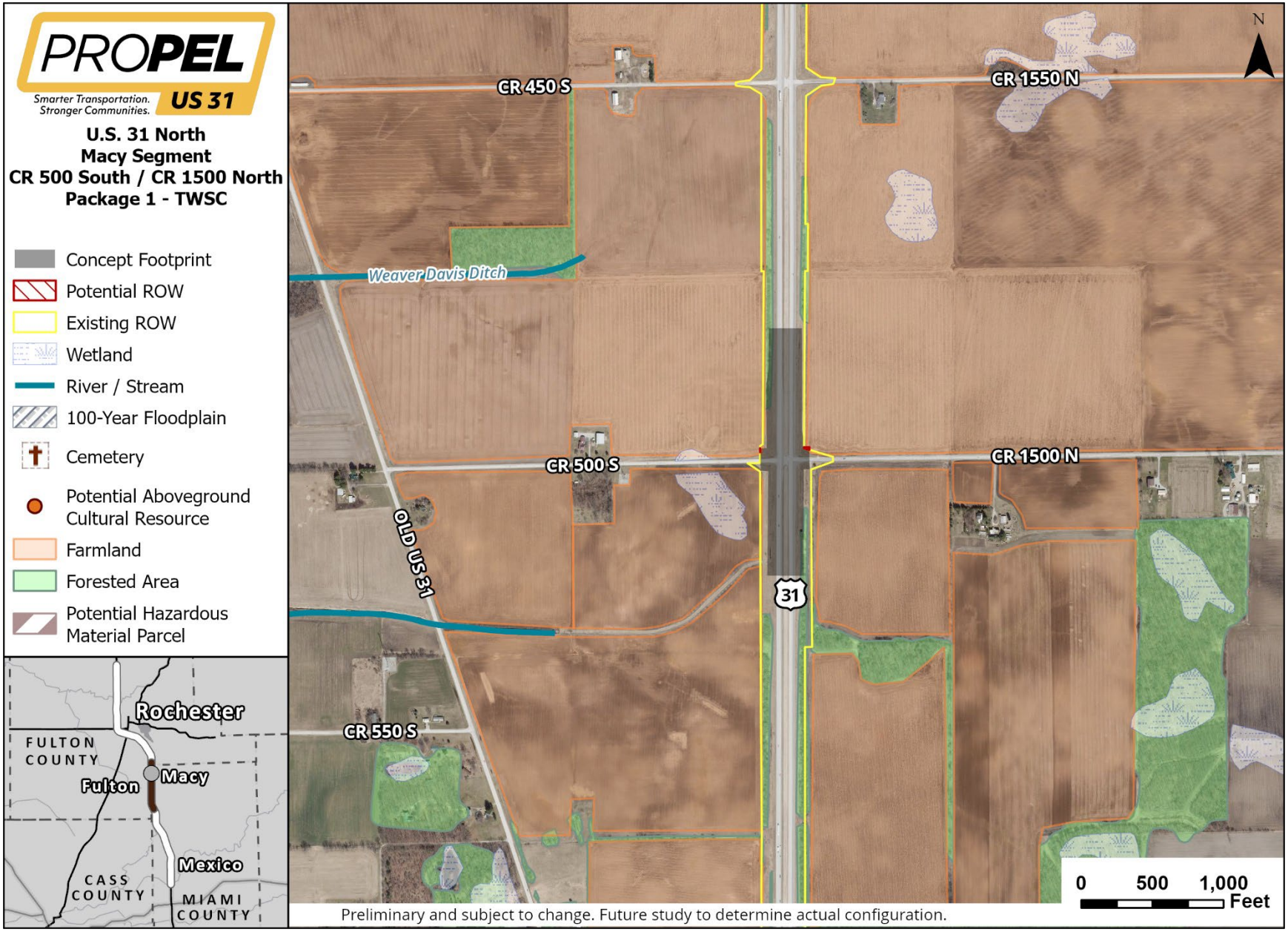


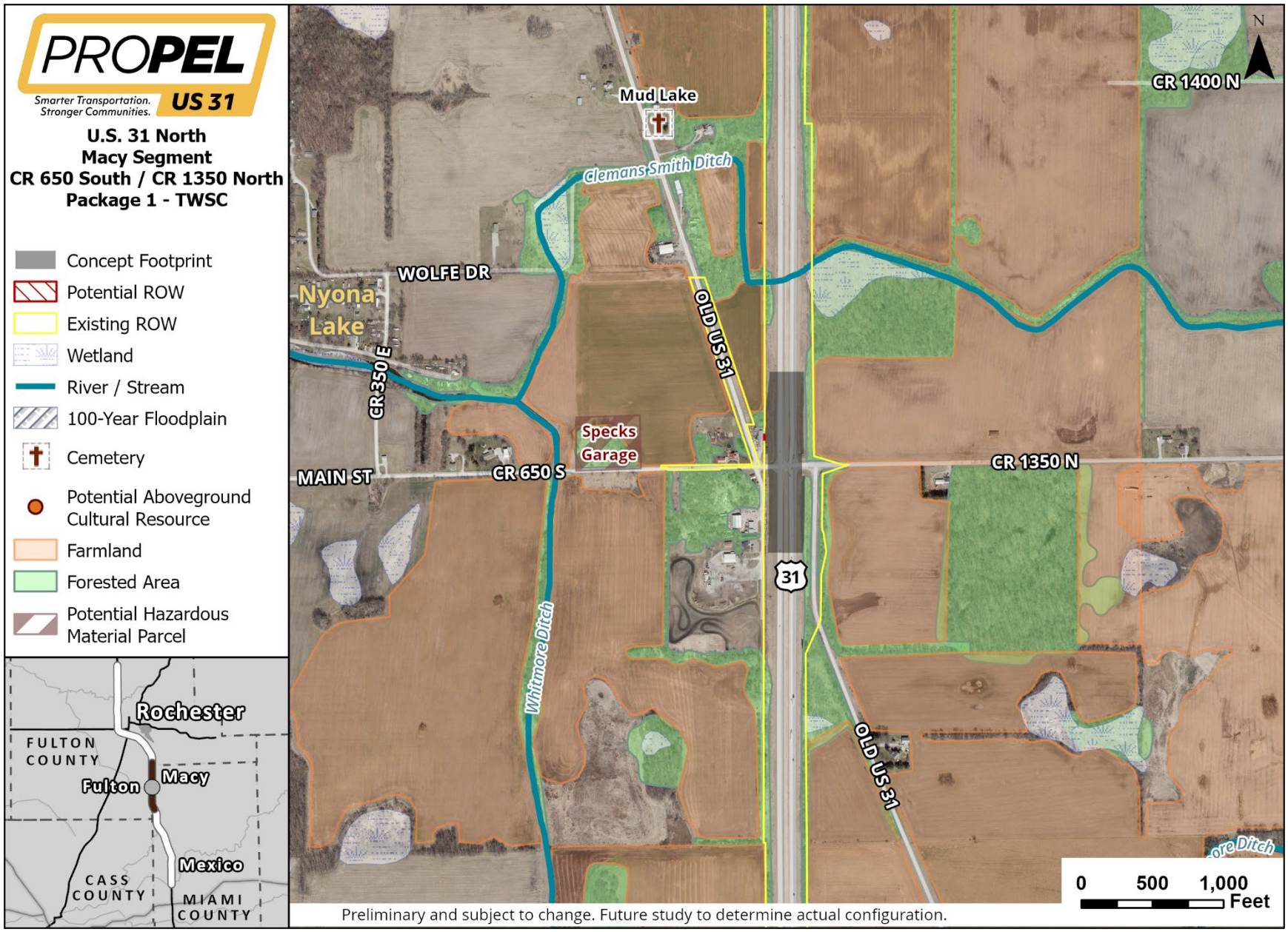


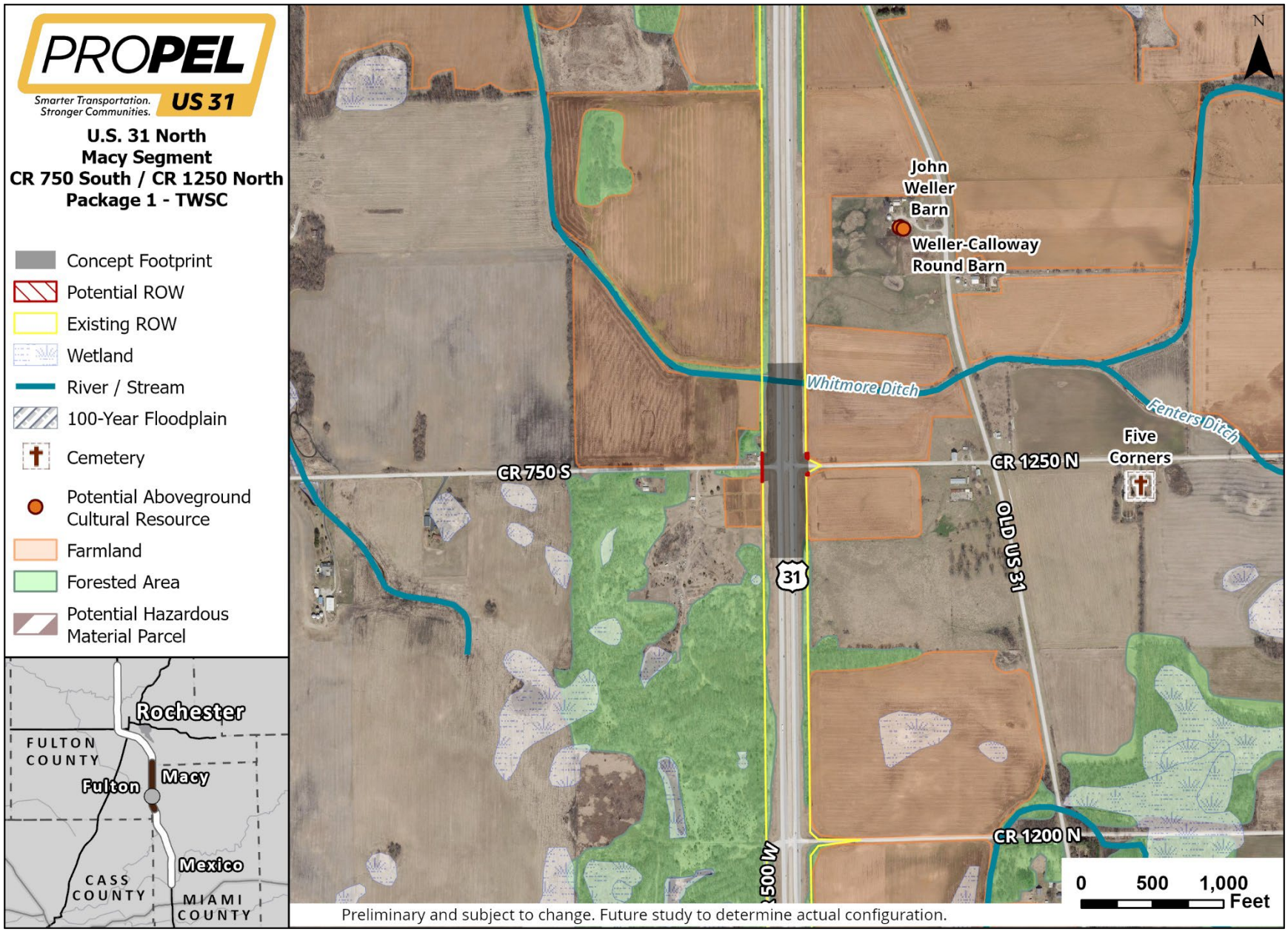
Preliminary and subject to change. Future study to determine actual configuration.

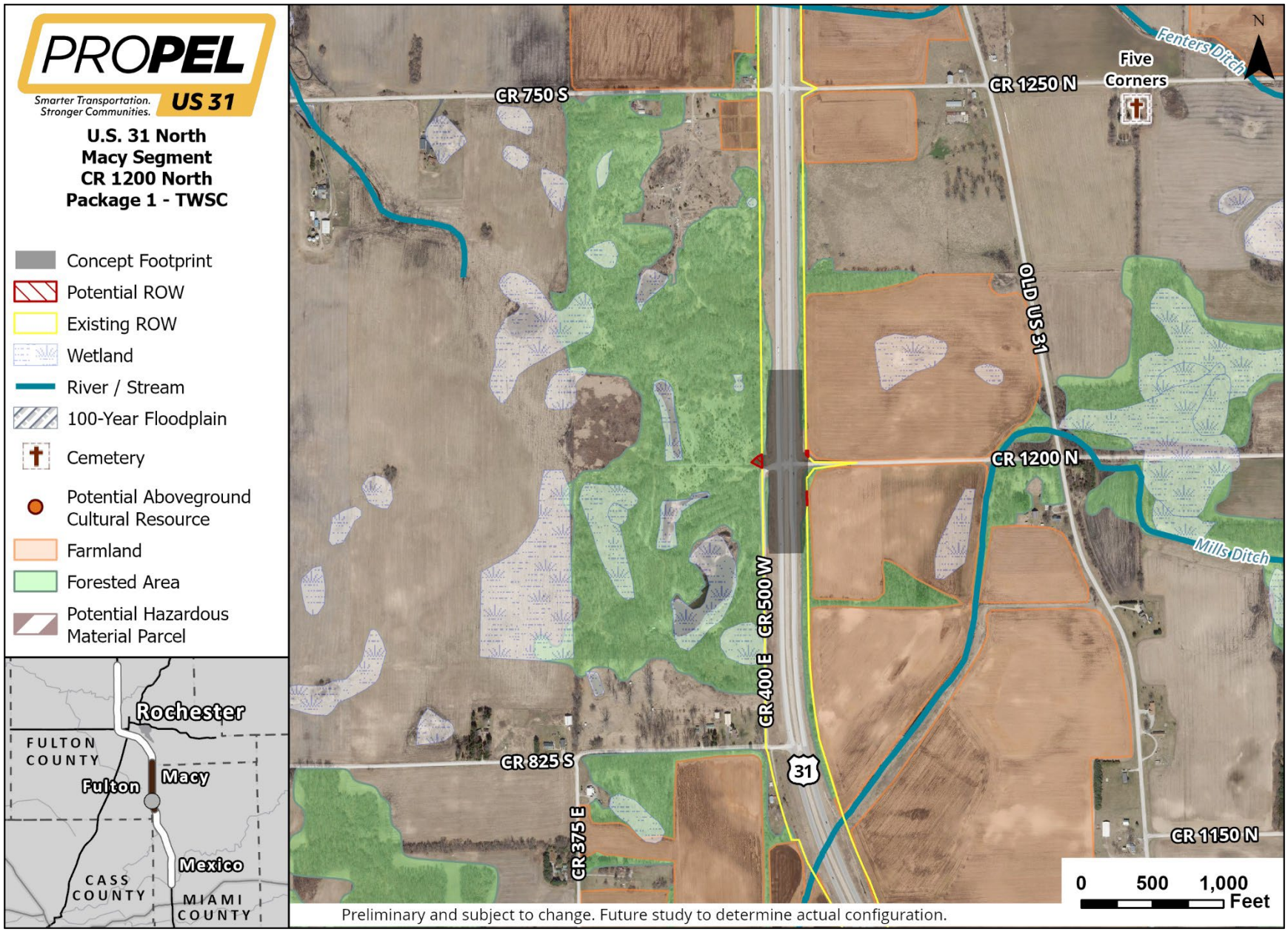

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 400 South
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 425 E
CR 350 S
31
CR 400 E
CR 400 S
CR 1600 N
CR 450 S
CR 1550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

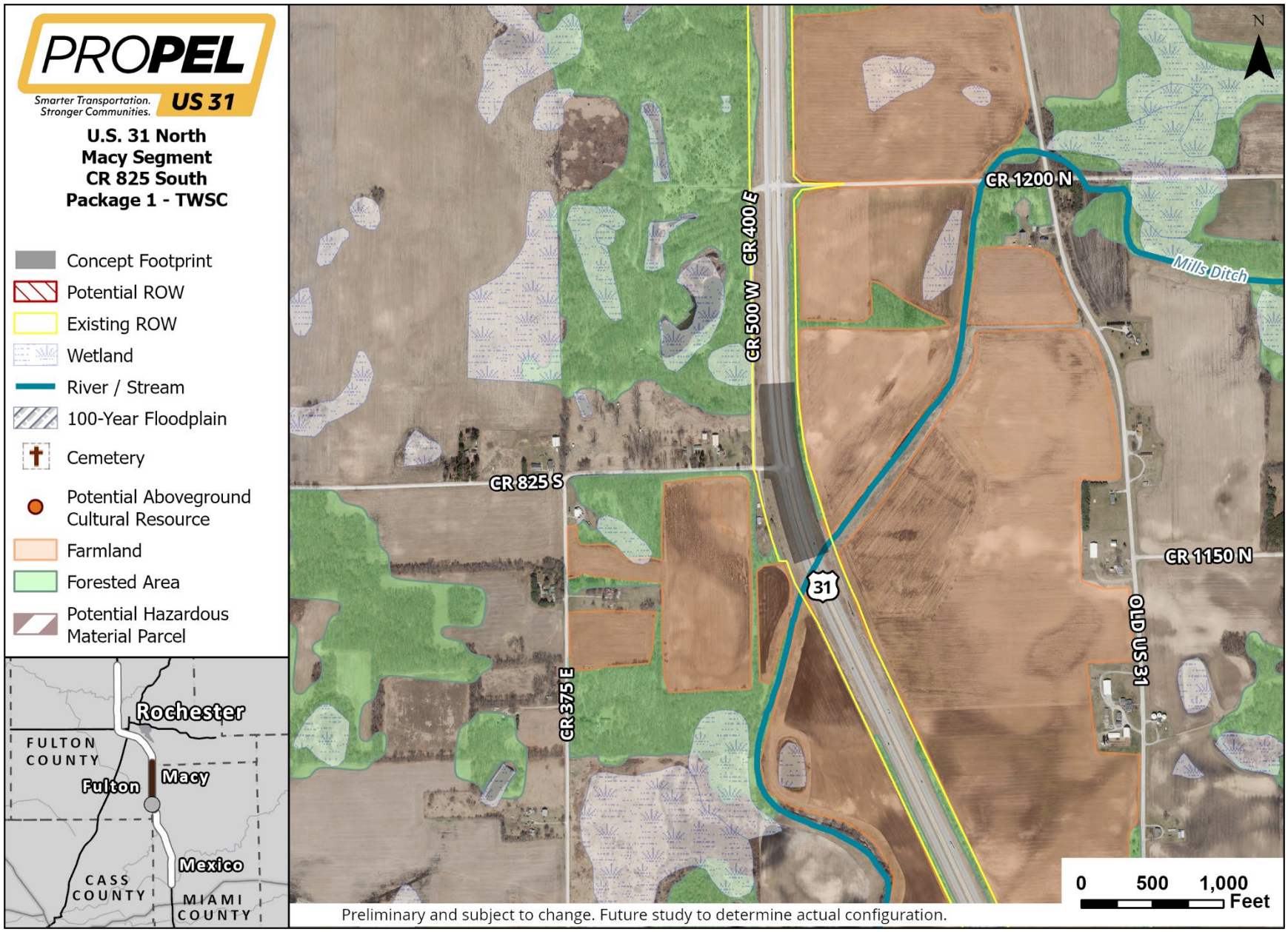

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 450 South / CR 1550 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 400 E
CR 400 S
CR 1600 N
CR 450 S
CR 1550 N
31
Weaver Davis Ditch
OLD US 31
CR 500 S
CR 1500 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

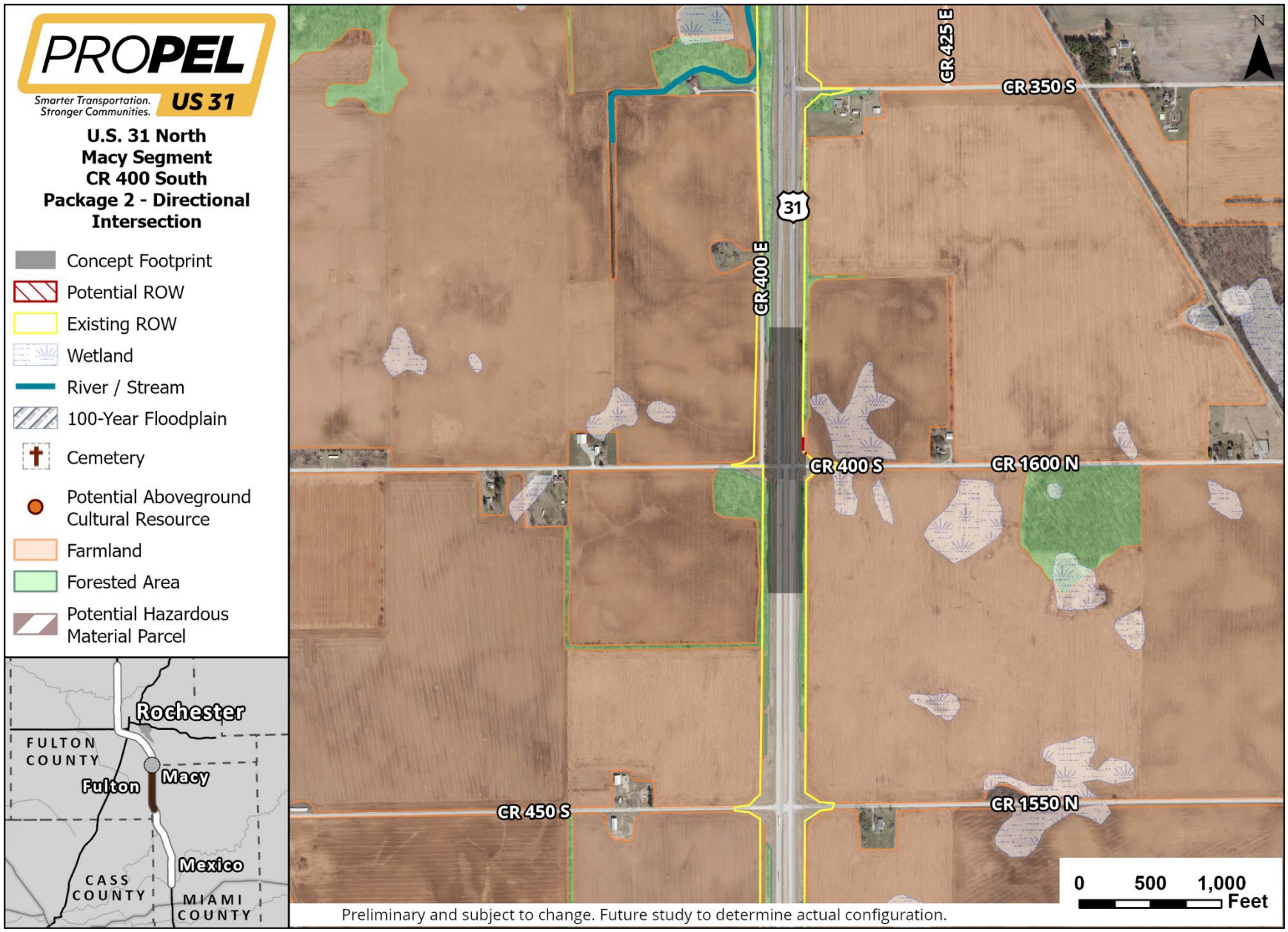

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 500 South / CR 1500 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 450 S
CR 1550 N
Weaver Davis Ditch
CR 500 S
CR 1500 N
OLD US 31
31
CR 550 S
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

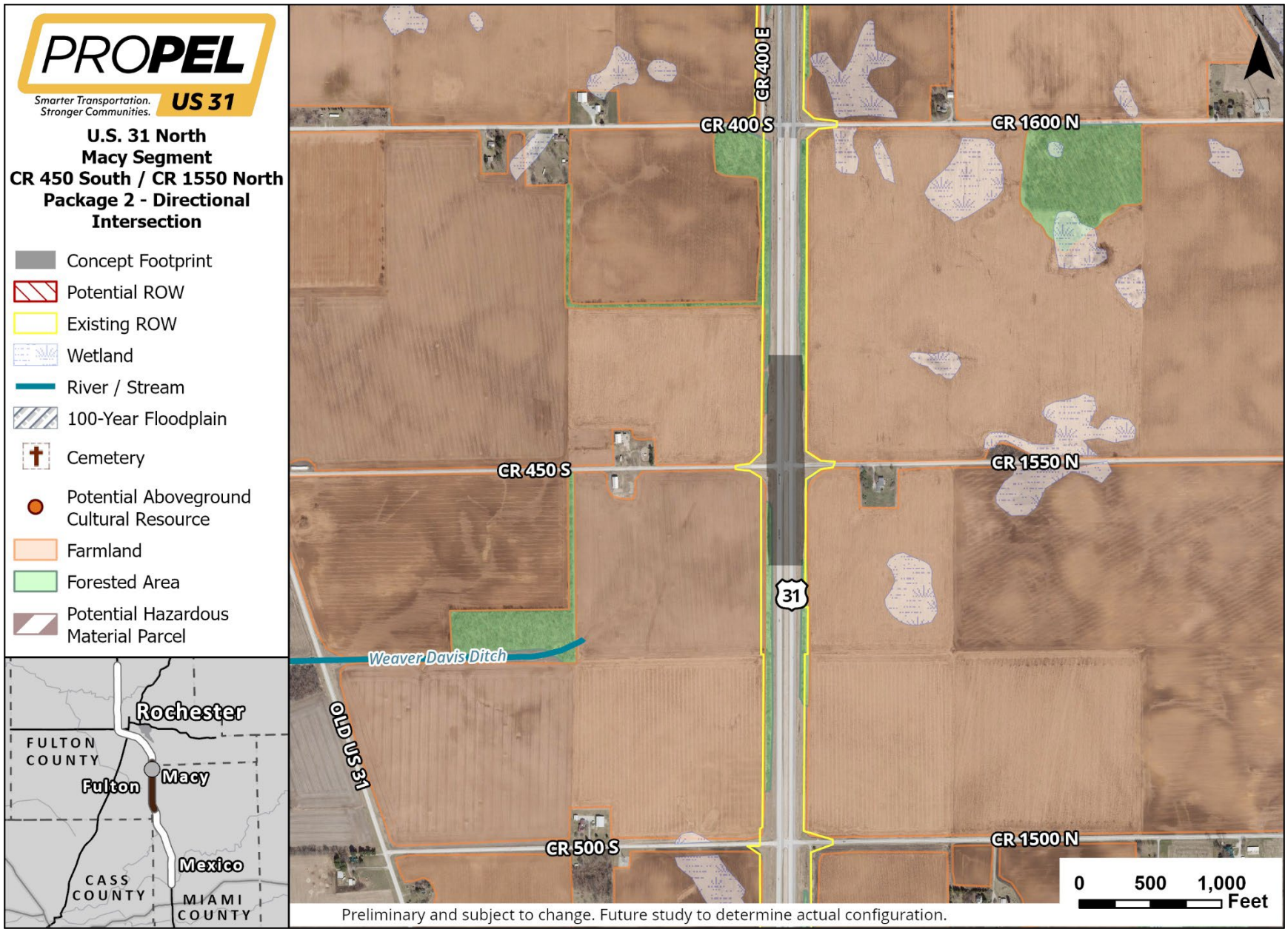

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 650 South / CR 1350 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mud Lake
Clemans-Smith Ditch
WOLFE DR
Nyona Lake
CR 350 E
OLD US 31
Specks Garage
MAIN ST
CR 650 S
CR 1400 N
CR 1350 N
31
Whitmore Ditch
OLD US 31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 750 South / CR 1250 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
John Weller Barn
Weller-Calloway Round Barn
Whitmore Ditch
Fenters Ditch
Five Corners
CR 750 S
CR 1250 N
OLD US 31
31
CR 1200 N
500 W
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 1200 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 750 S
CR 1250 N
Five Corners
Fenters Ditch
OLD US 31
CR 1200 N
Mills Ditch
CR 500 W
CR 400 E
CR 825 S
31
CR 375 E
CR 1150 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 825 South
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
CR 1200 N
CR 400 E
CR 500 W
Mills Ditch
CR 825 S
CR 375 E
31
CR 1150 N
OLD US 31
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

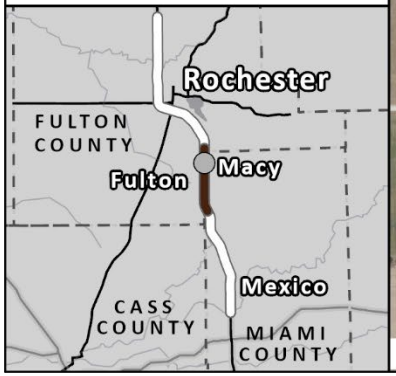

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 400 South
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 425 E
CR 350 S
31
CR 400 E
CR 400 S
CR 1600 N
CR 450 S
CR 1550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

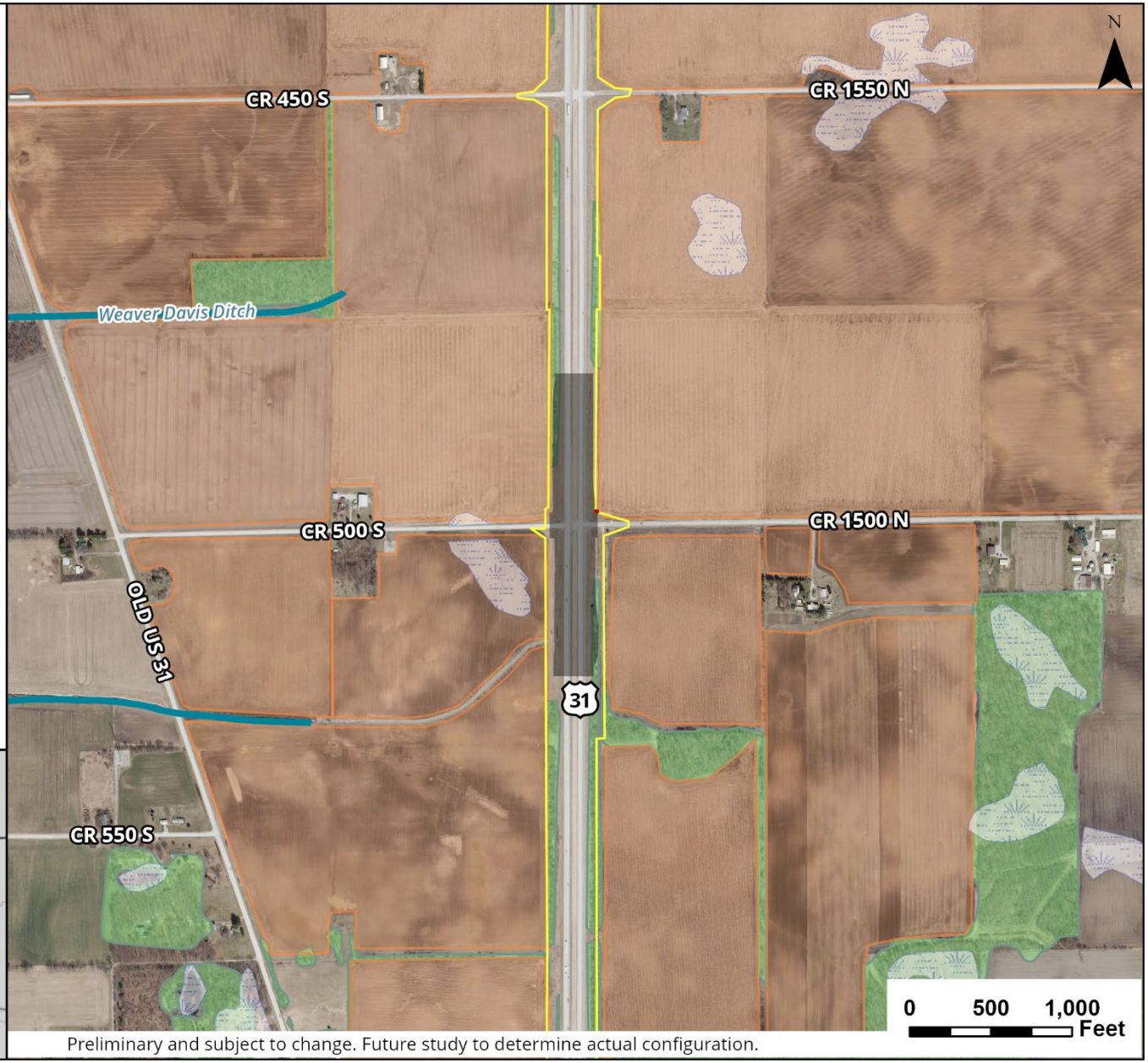

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 450 South / CR 1550 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 400 E
CR 400 S
CR 1600 N
CR 450 S
CR 1550 N
31
Weaver Davis Ditch
OLD US 31
CR 500 S
CR 1500 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL US 31
Smarter Transportation. Stronger Communities.

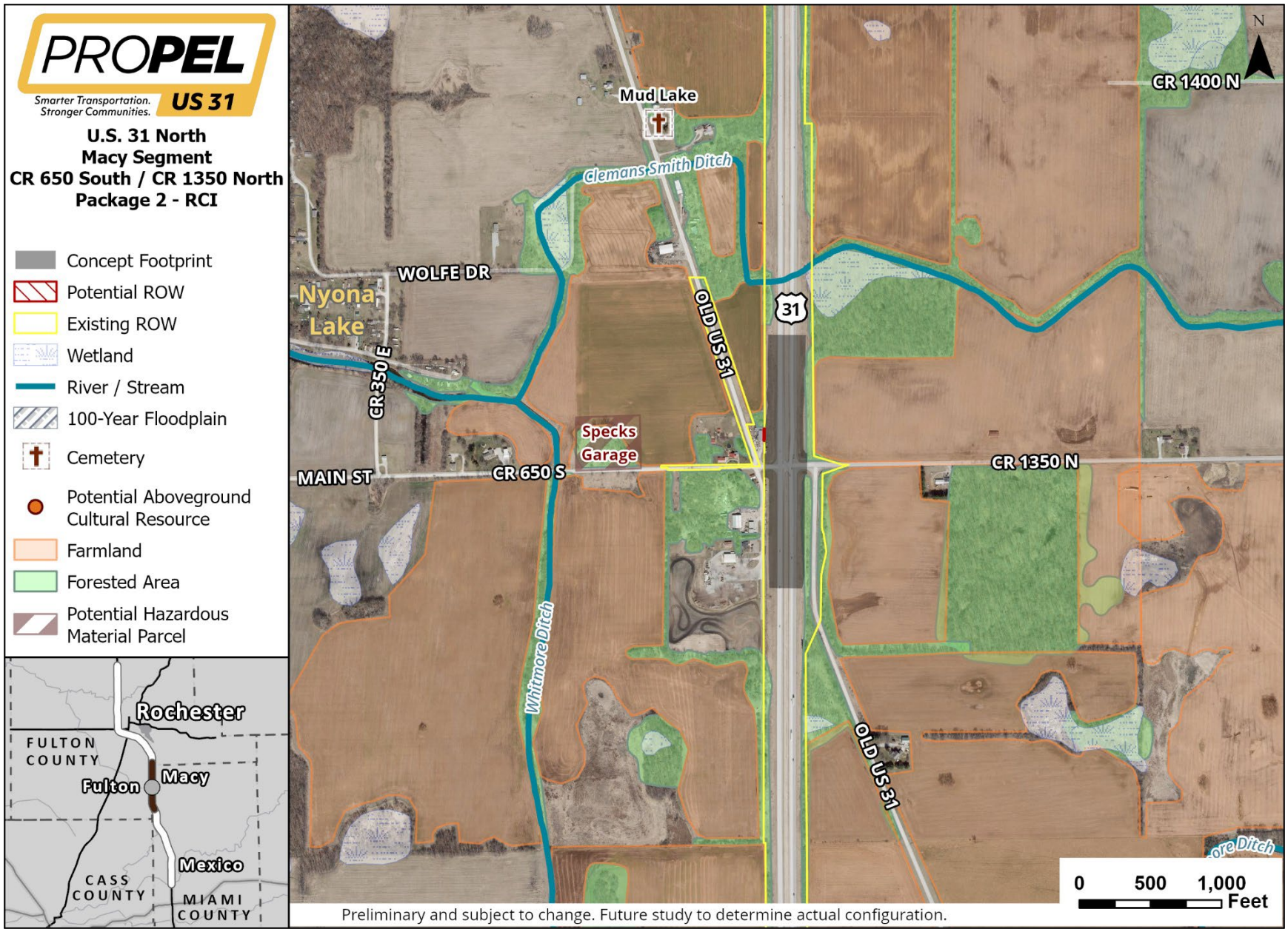
U.S. 31 North
Macy Segment
CR 500 South / CR 1500 North
Package 2 - RCI

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





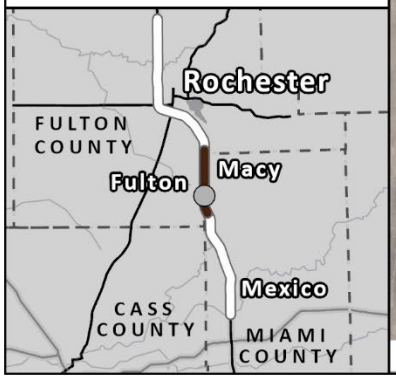
Preliminary and subject to change. Future study to determine actual configuration.

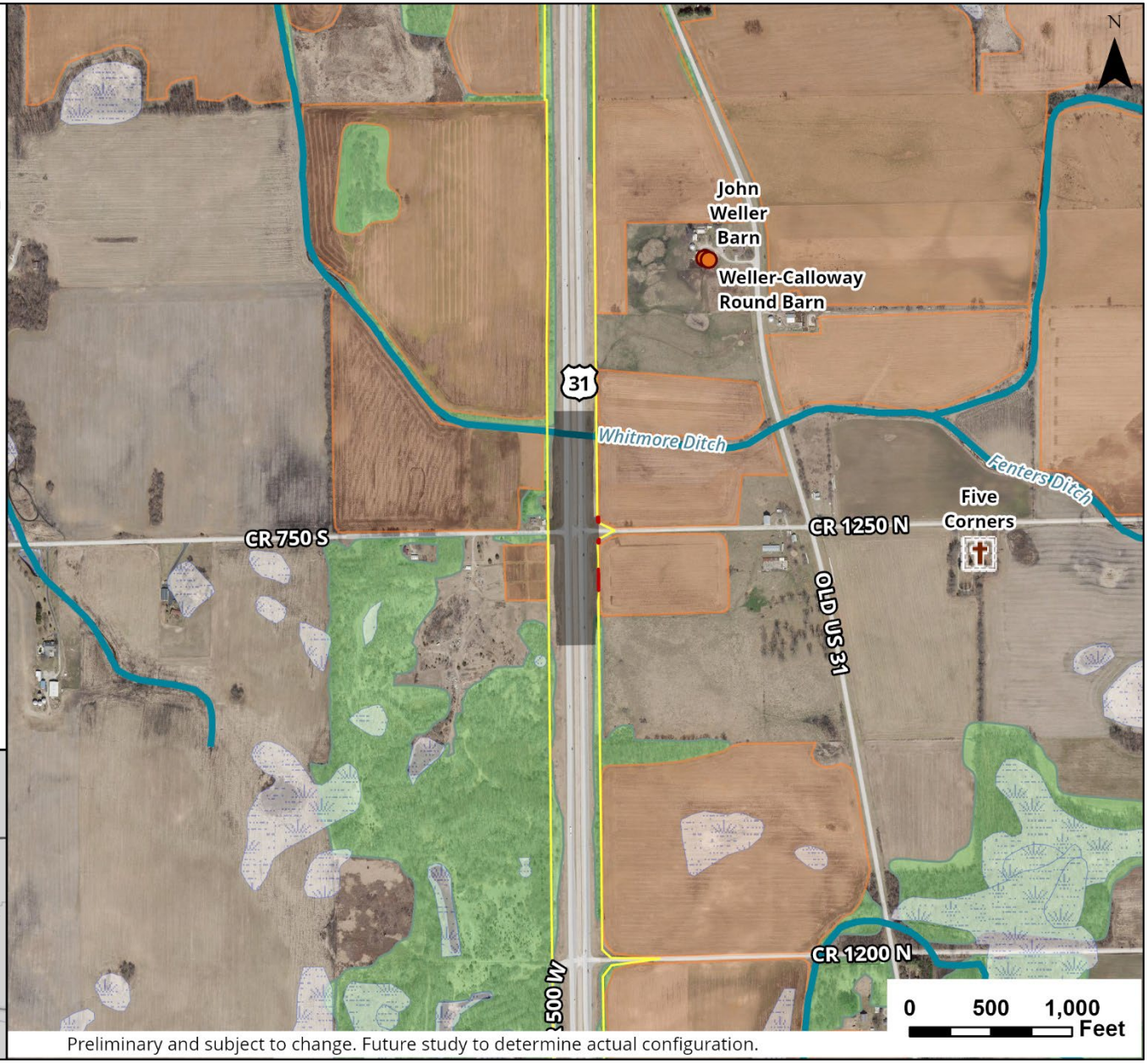

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 650 South / CR 1350 North
Package 2 - RCI
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mud Lake
Clemans-Smith Ditch
WOLFE DR
Nyona Lake
CR 350 E
OLD US 31
31
CR 1400 N
Specks Garage
MAIN ST
CR 650 S
CR 1350 N
Whitmore Ditch
OLD US 31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

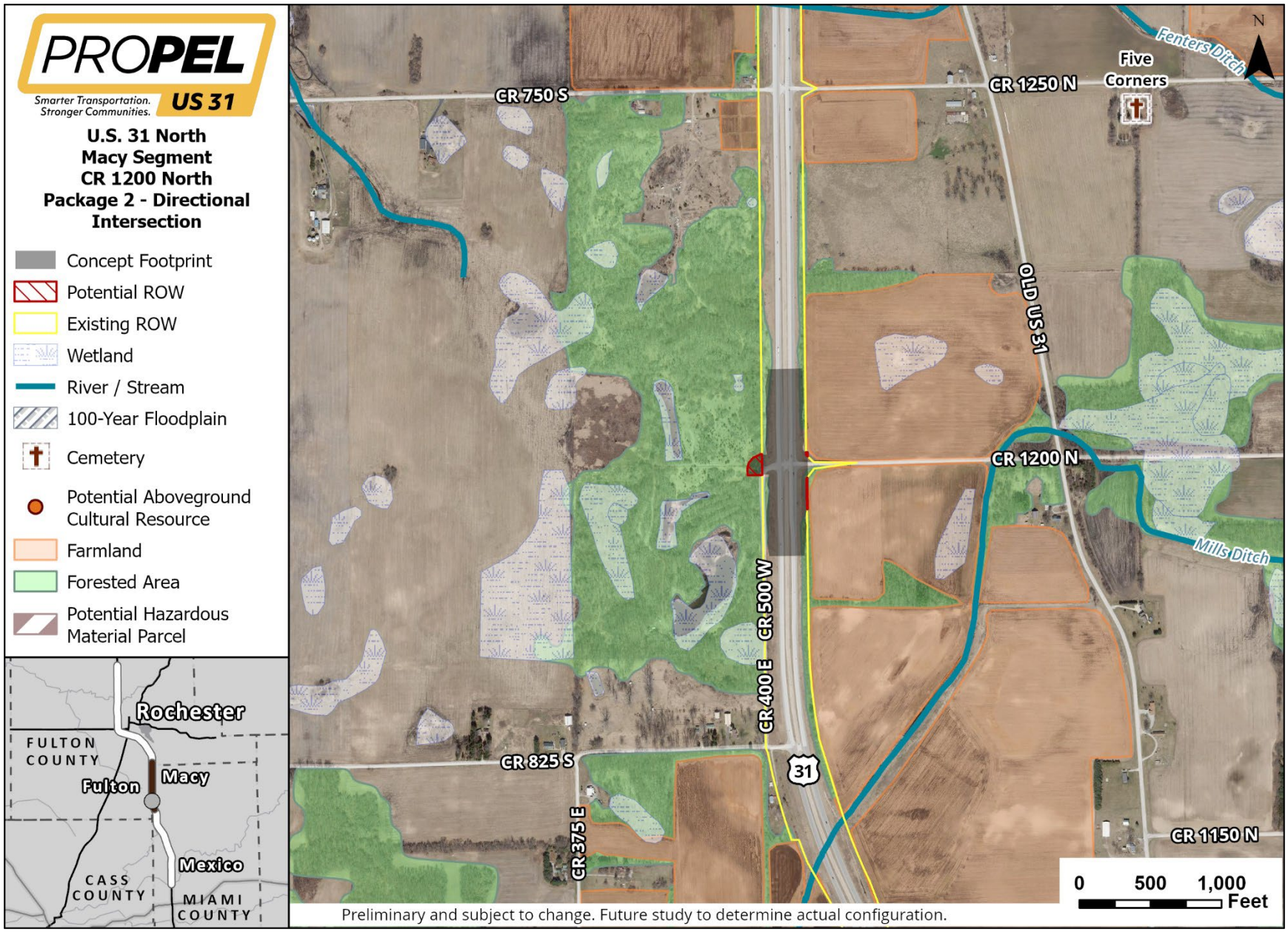
U.S. 31 North
Macy Segment
CR 750 South / CR 1250 North
Package 2 - Directional Intersection

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





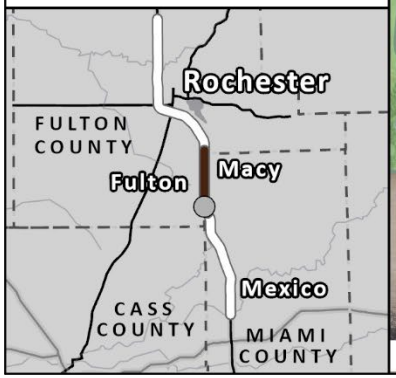
Preliminary and subject to change. Future study to determine actual configuration.

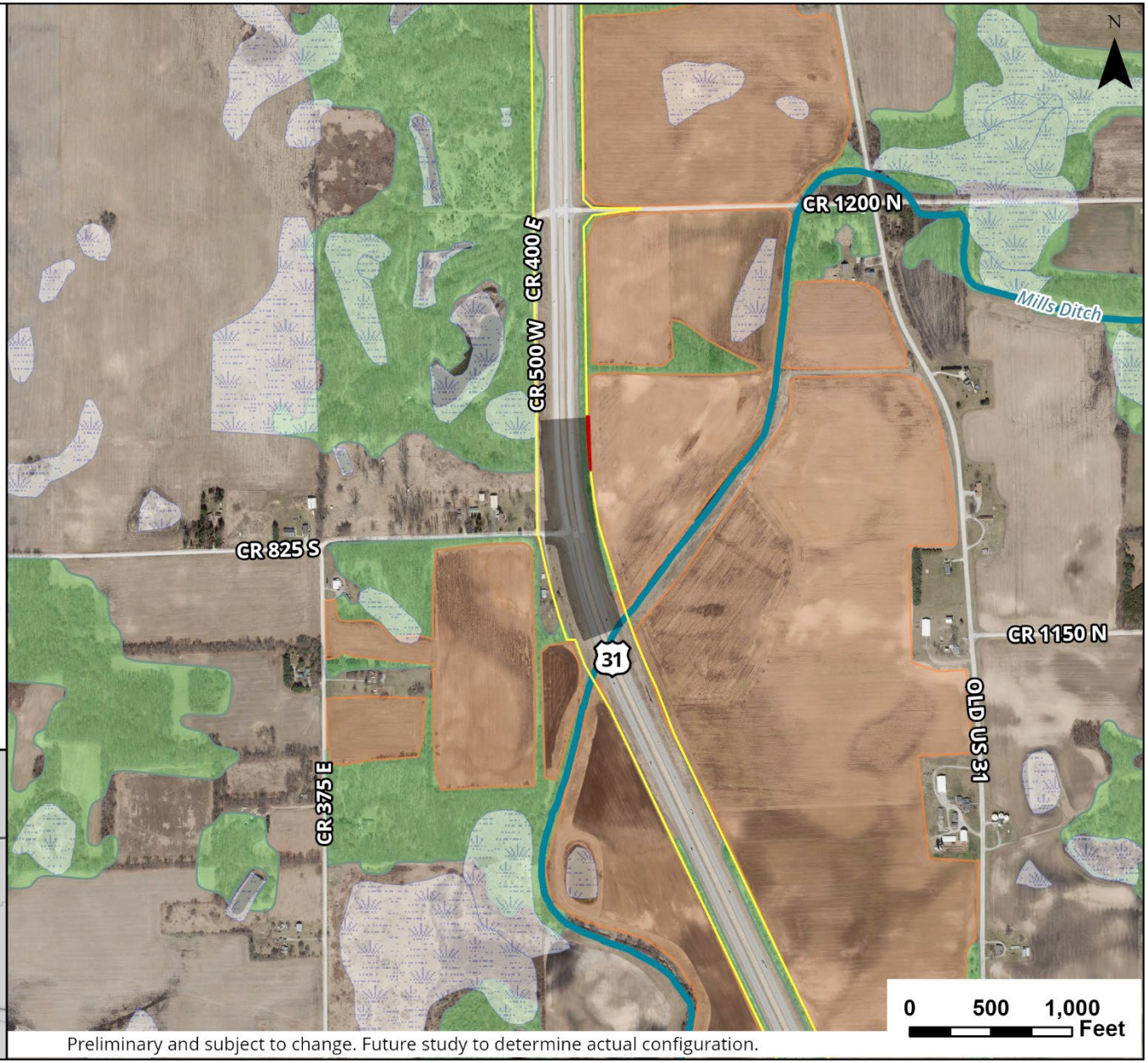

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 1200 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 750 S
CR 1250 N
Five Corners
Fenters Ditch
OLD US 31
CR 1200 N
Mills Ditch
CR 500 W
CR 400 E
CR 825 S
31
CR 375 E
CR 1150 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

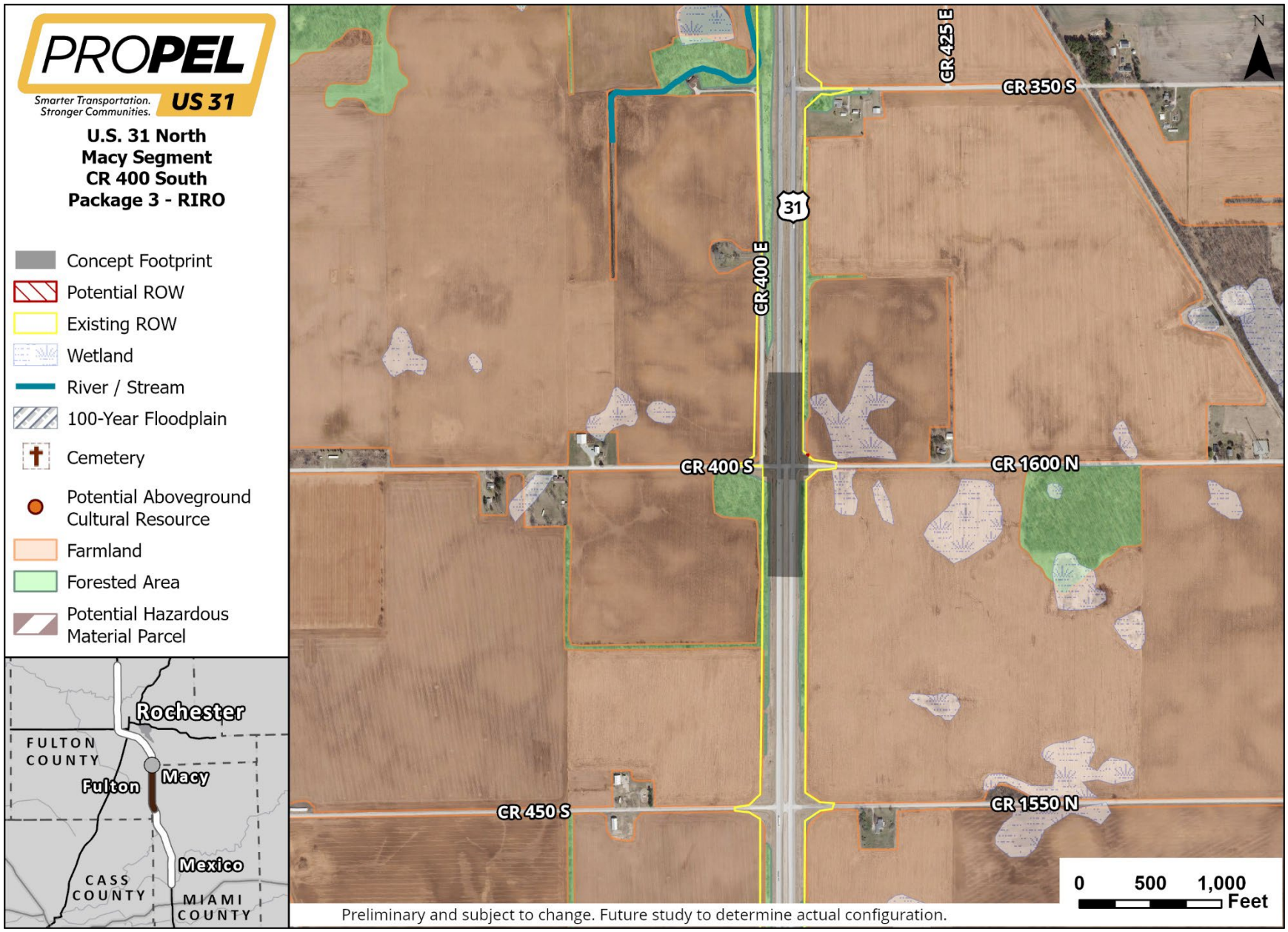
U.S. 31 North
Macy Segment
CR 825 South
Package 2 - Directional Intersection

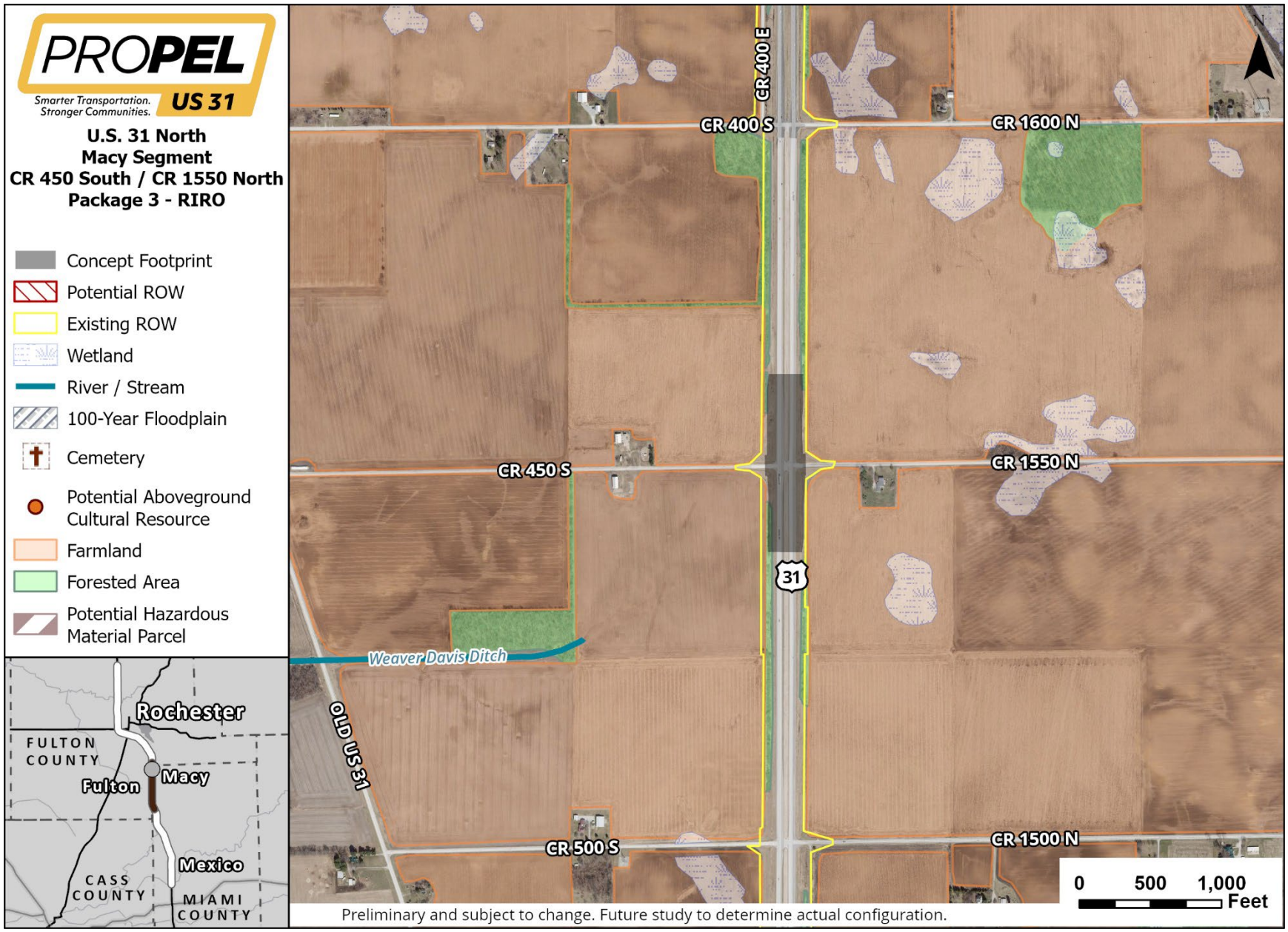
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

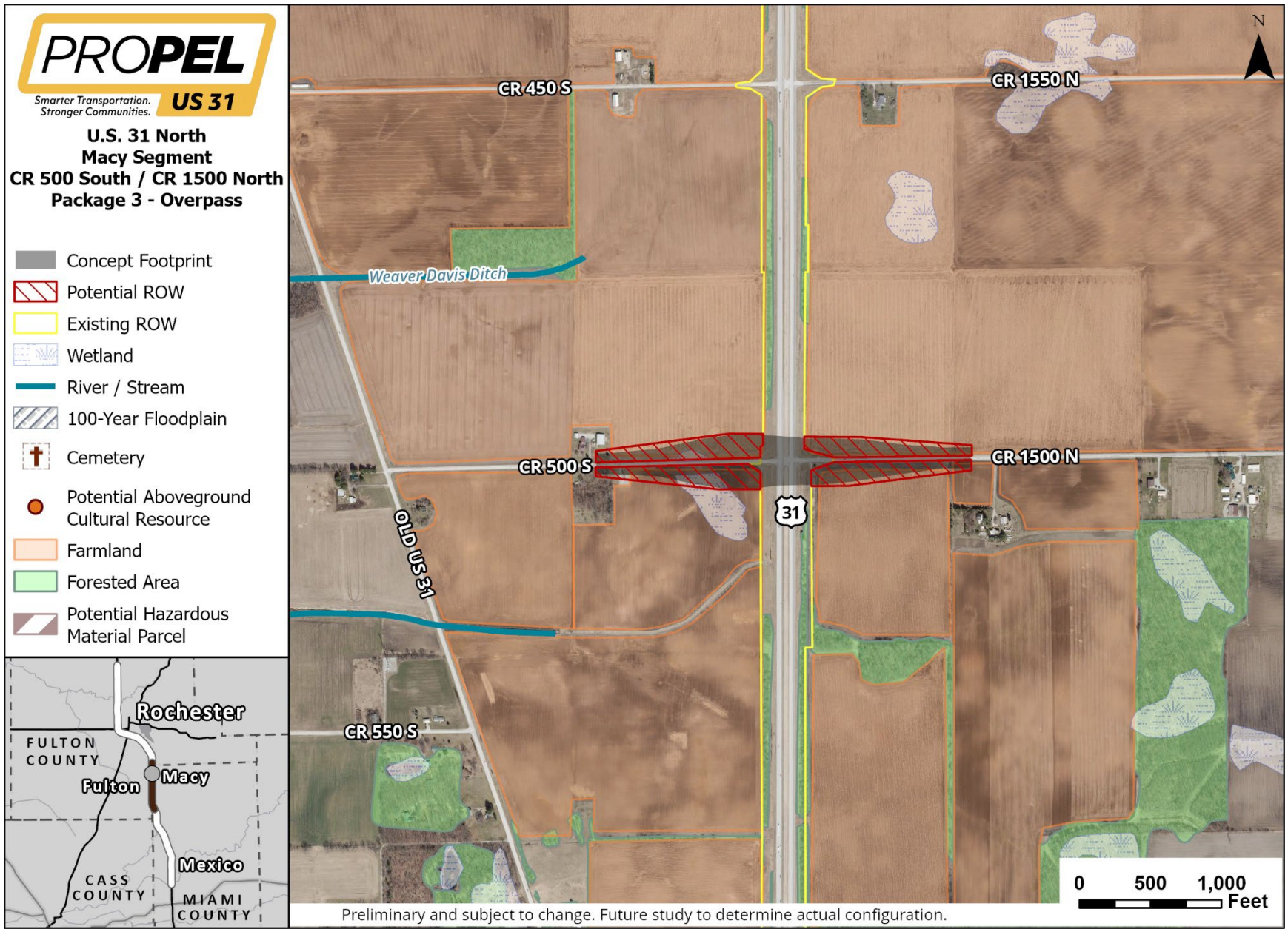


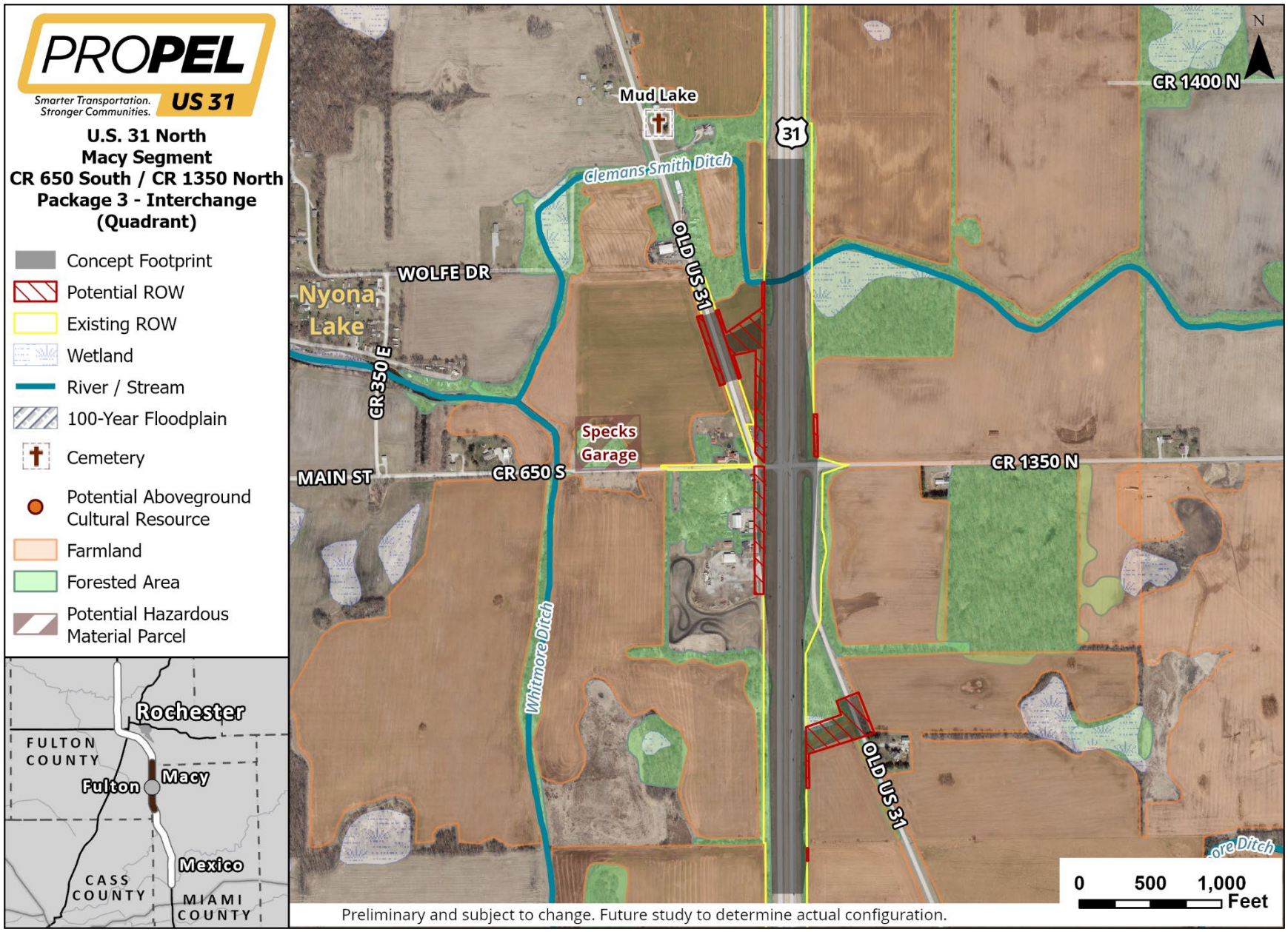


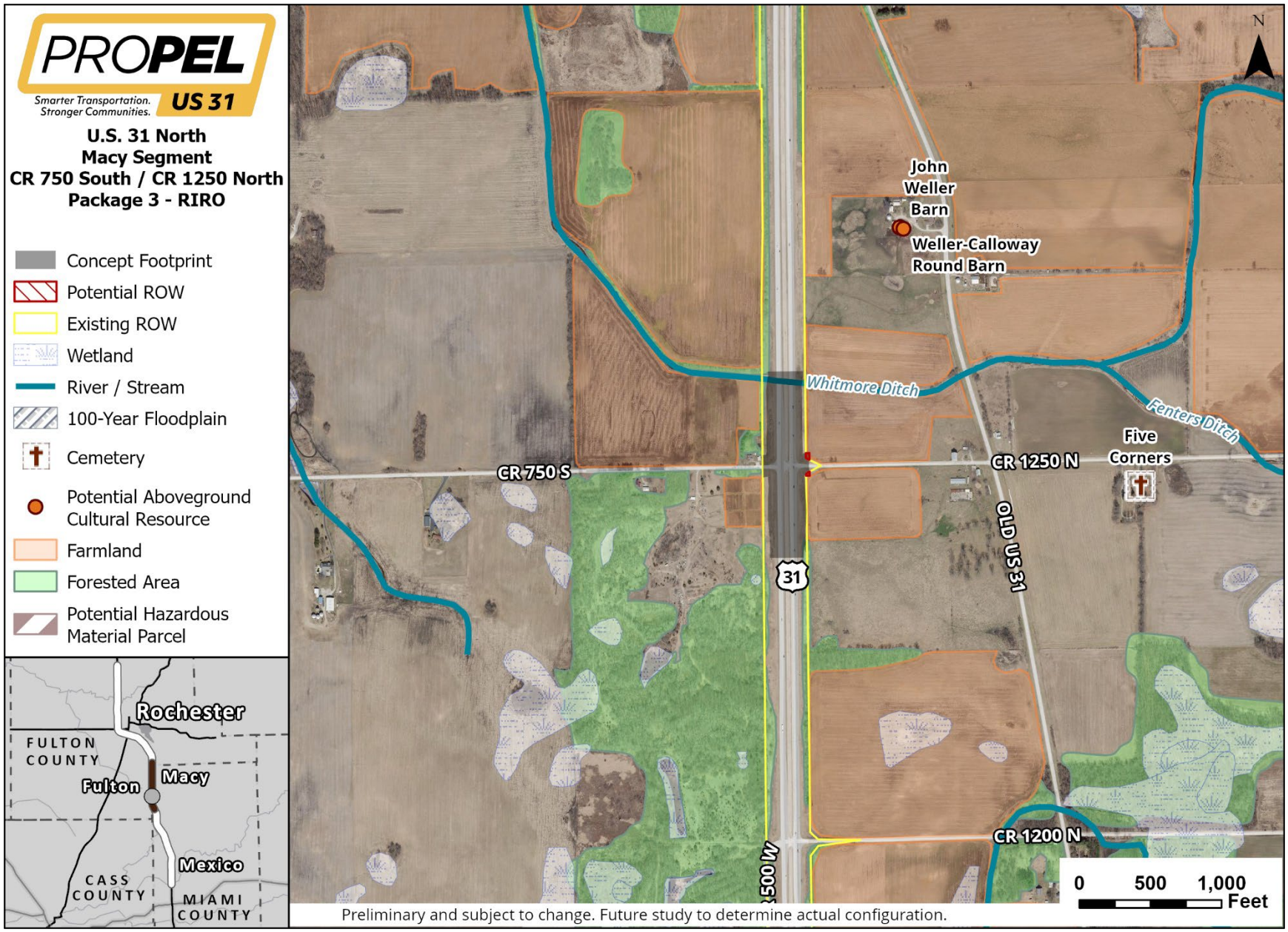
Preliminary and subject to change. Future study to determine actual configuration.

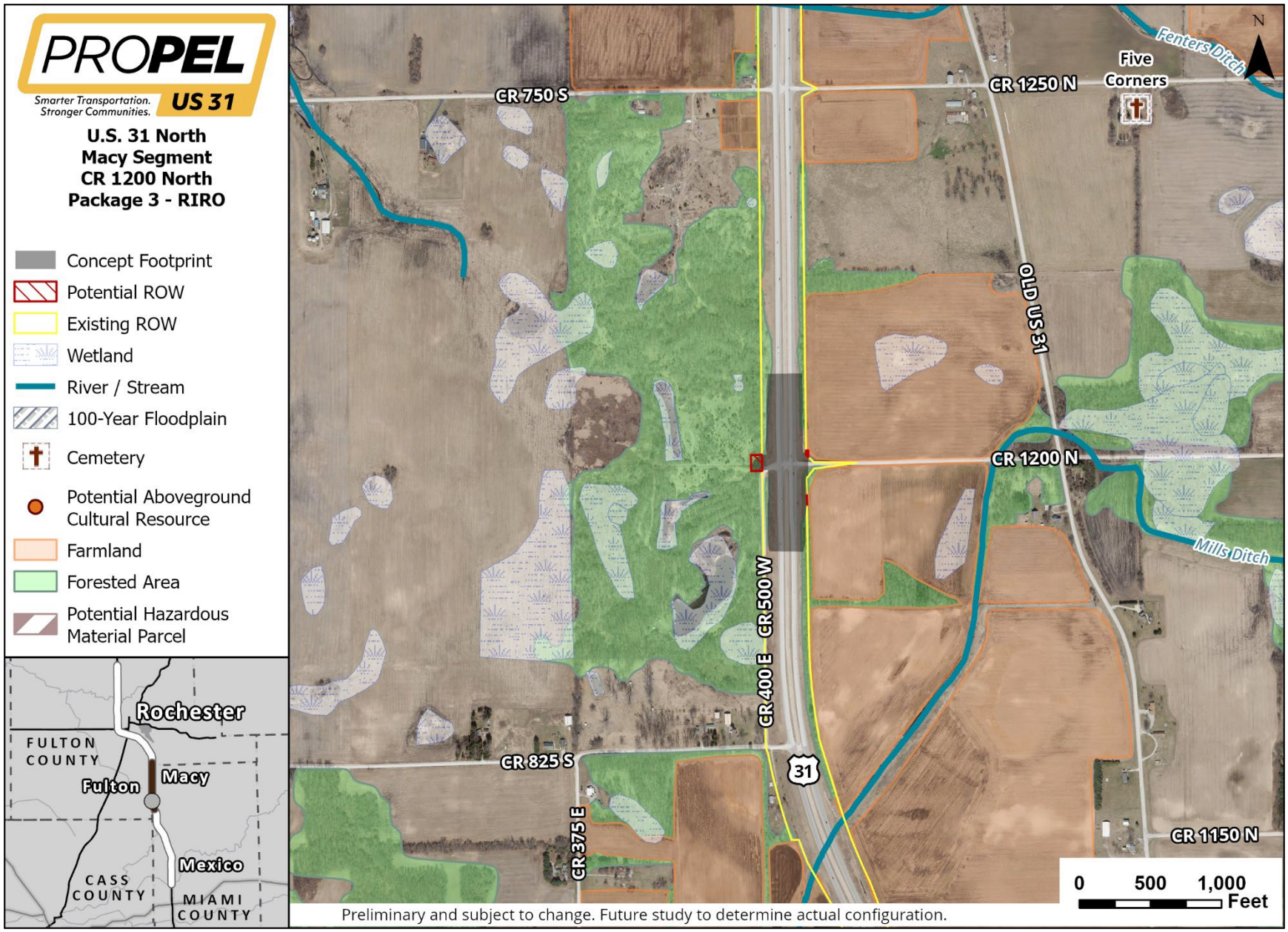

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 400 South
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 425 E
CR 350 S
31
CR 400 E
CR 400 S
CR 1600 N
CR 450 S
CR 1550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

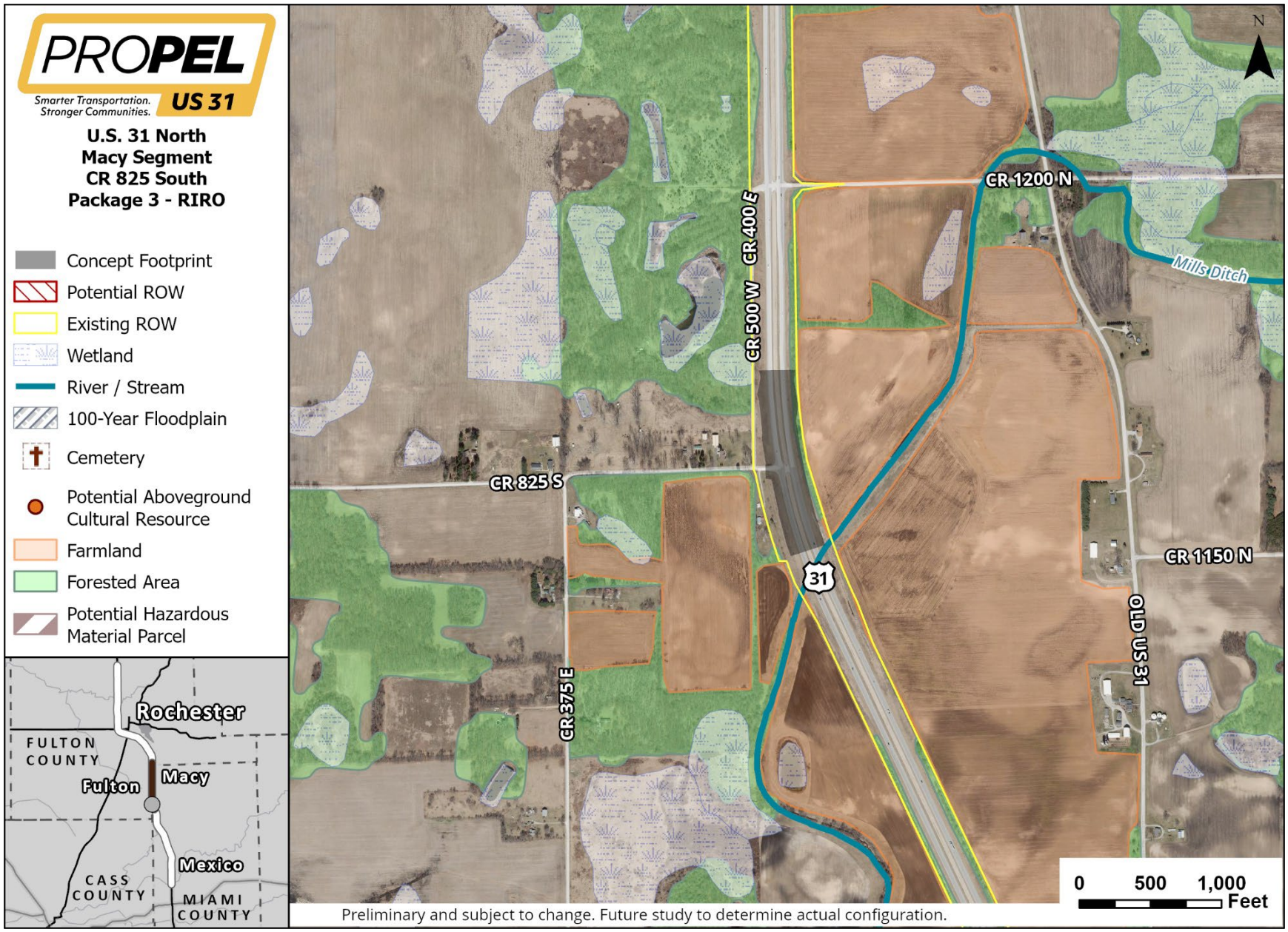

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 450 South / CR 1550 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 400 E
CR 400 S
CR 1600 N
CR 450 S
CR 1550 N
31
Weaver Davis Ditch
OLD US 31
CR 500 S
CR 1500 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

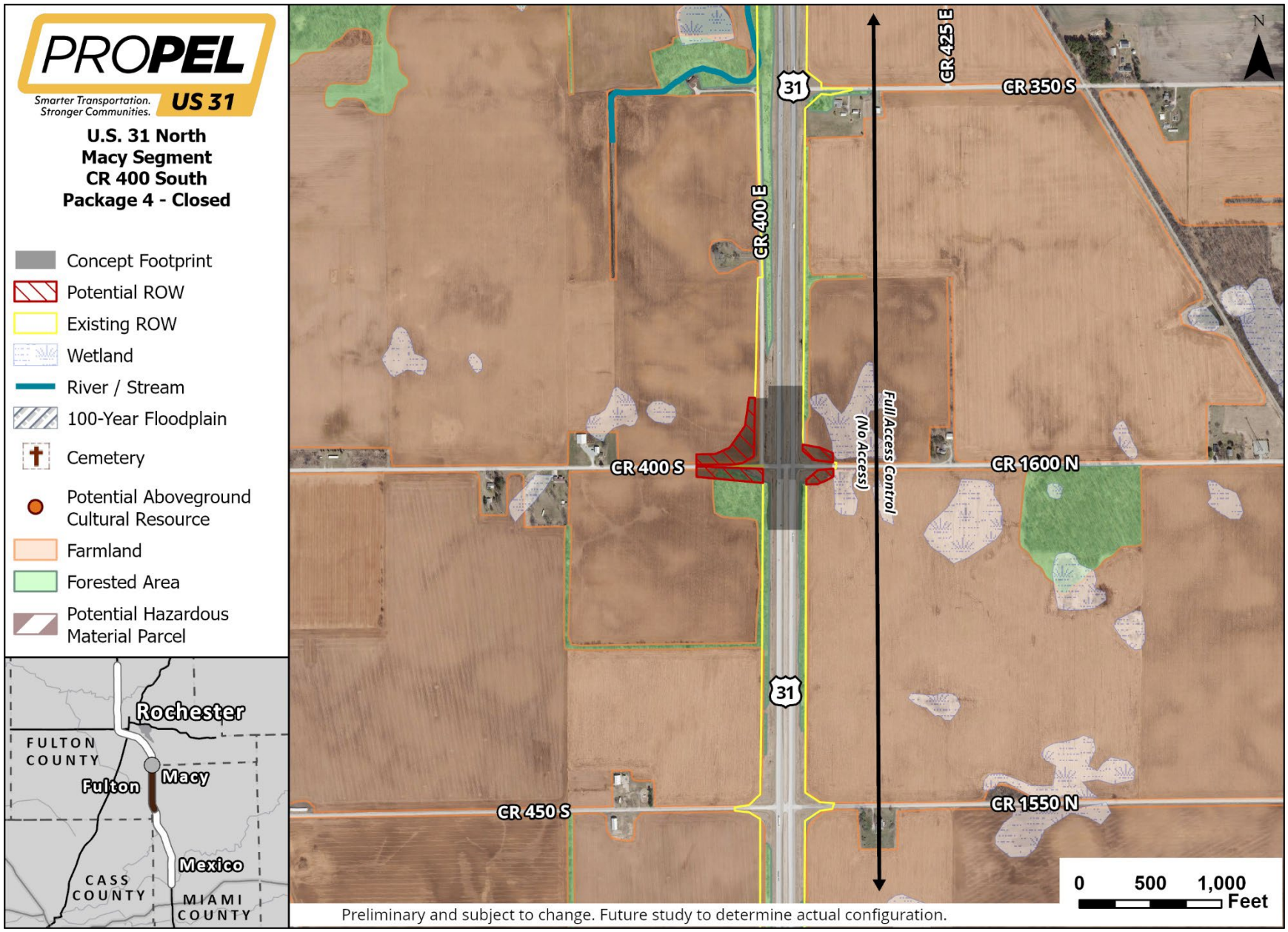

PROPEL US 31
Smarter Transportation. Stronger Communities.
U.S. 31 North
Macy Segment
CR 500 South / CR 1500 North
Package 3 - Overpass
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 450 S
CR 1550 N
Weaver Davis Ditch
CR 500 S
CR 1500 N
31
OLD US 31
CR 550 S
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

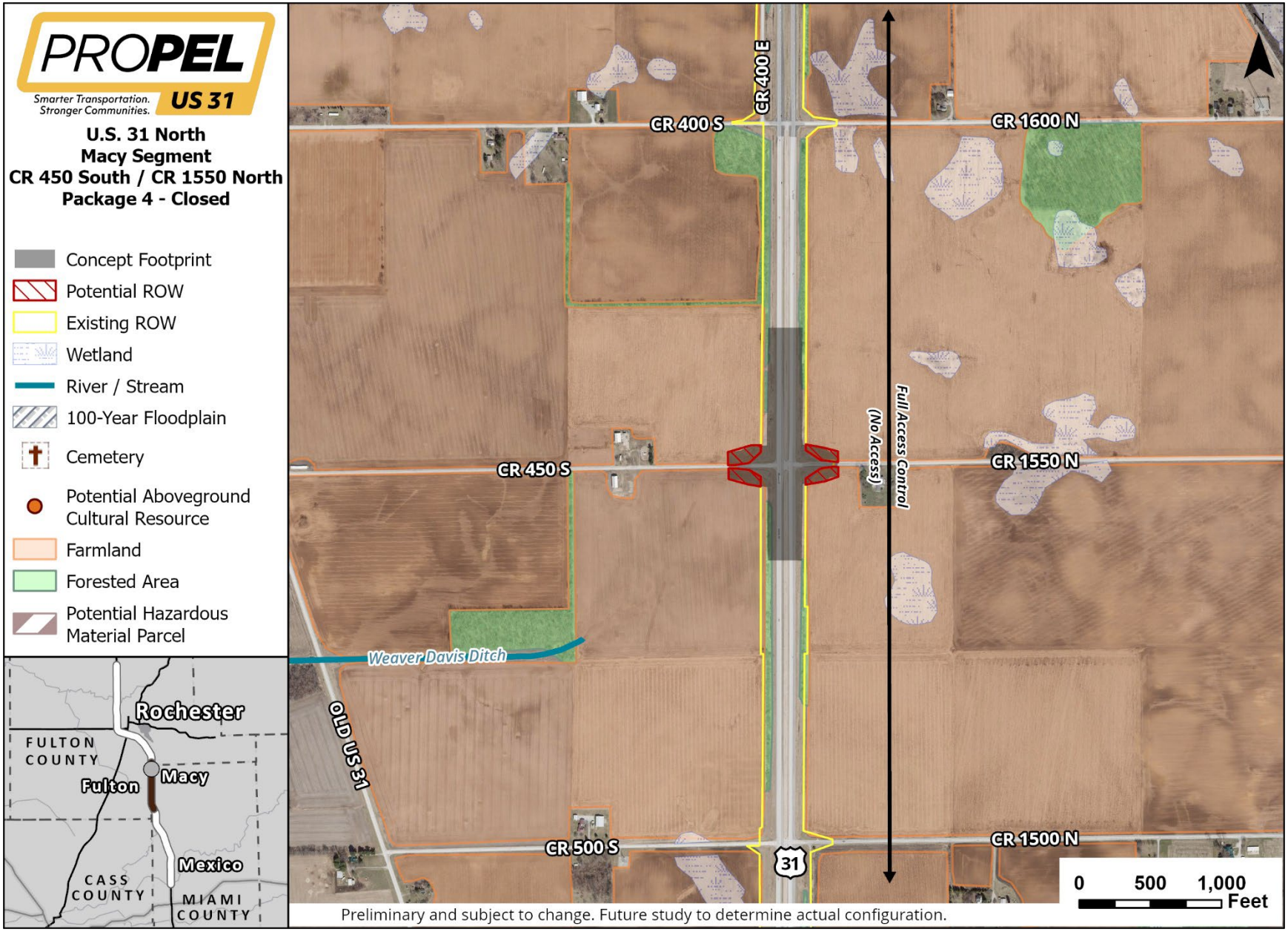

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 650 South / CR 1350 North
Package 3 - Interchange
(Quadrant)
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mud Lake
Clemans-Smith Ditch
OLD US 31
WOLFE DR
Nyona Lake
CR 350 E
Specks Garage
MAIN ST
CR 650 S
CR 1400 N
CR 1350 N
Whitmore Ditch
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

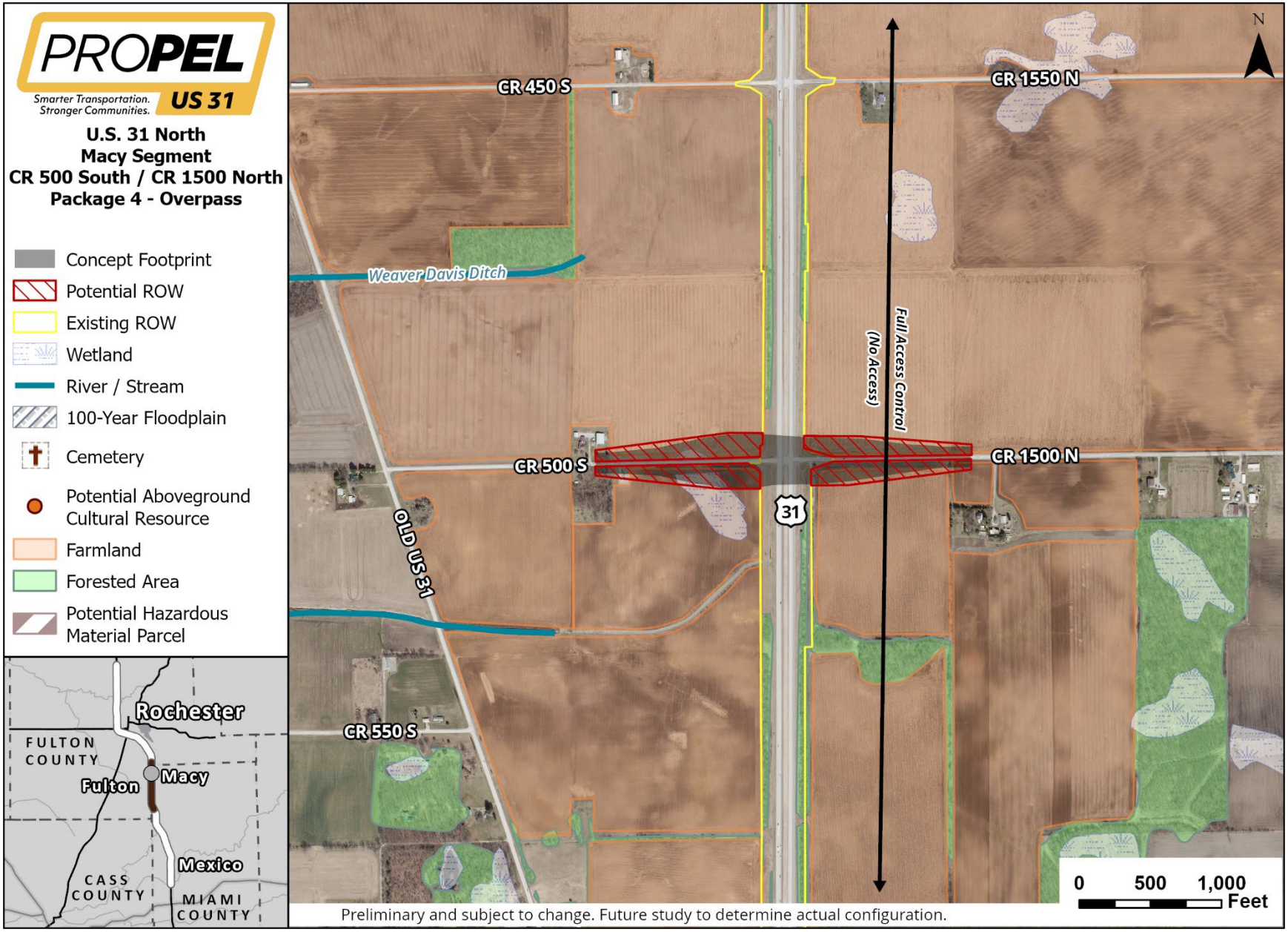

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 750 South / CR 1250 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
John Weller Barn
Weller-Calloway Round Barn
Whitmore Ditch
Fenters Ditch
Five Corners
CR 750 S
CR 1250 N
OLD US 31
31
CR 1200 N
500 W
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 1200 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 750 S
CR 1250 N
Five Corners
Fenters Ditch
OLD US 31
CR 1200 N
Mills Ditch
CR 500 W
CR 400 E
CR 825 S
31
CR 375 E
CR 1150 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 825 South
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
CR 1200 N
CR 400 E
CR 500 W
Mills Ditch
CR 825 S
31
CR 1150 N
OLD US 31
CR 375 E
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 400 South
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
CR 425 E
CR 350 S
CR 400 E
CR 400 S
CR 1600 N
Full Access Control
(No Access)
CR 450 S
CR 1550 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

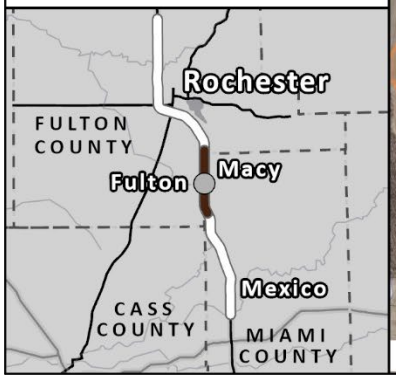

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 450 South / CR 1550 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 400 S
CR 400 E
CR 1600 N
CR 450 S
CR 1550 N
Full Access Control
(No Access)
Weaver Davis Ditch
OLD US 31
CR 500 S
CR 1500 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

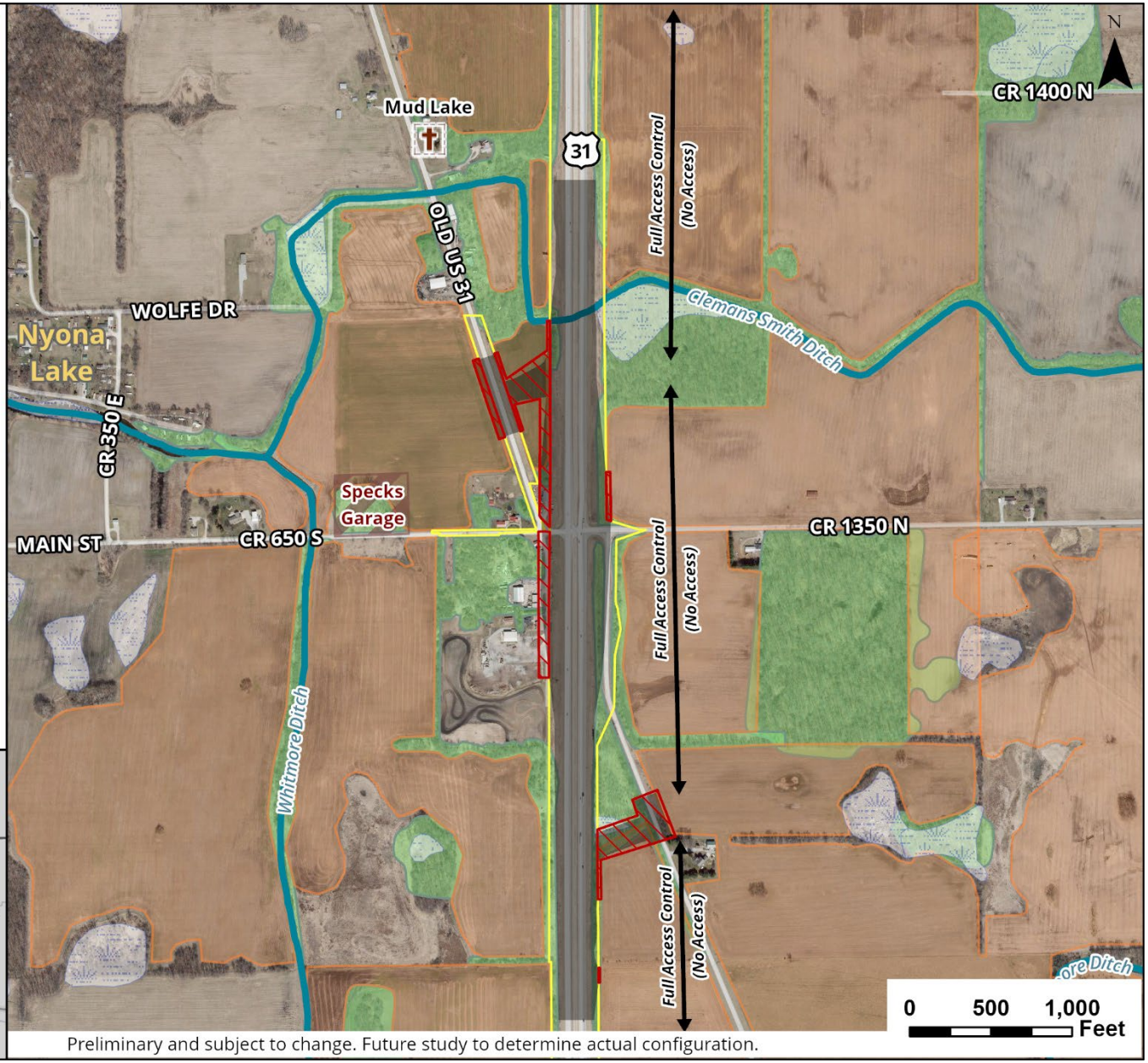

PROPEL US 31
Smarter Transportation. Stronger Communities.
U.S. 31 North
Macy Segment
CR 500 South / CR 1500 North
Package 4 - Overpass
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 450 S
CR 1550 N
Weaver Davis Ditch
Full Access Control
(No Access)
CR 500 S
CR 1500 N
31
OLD US 31
CR 550 S
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

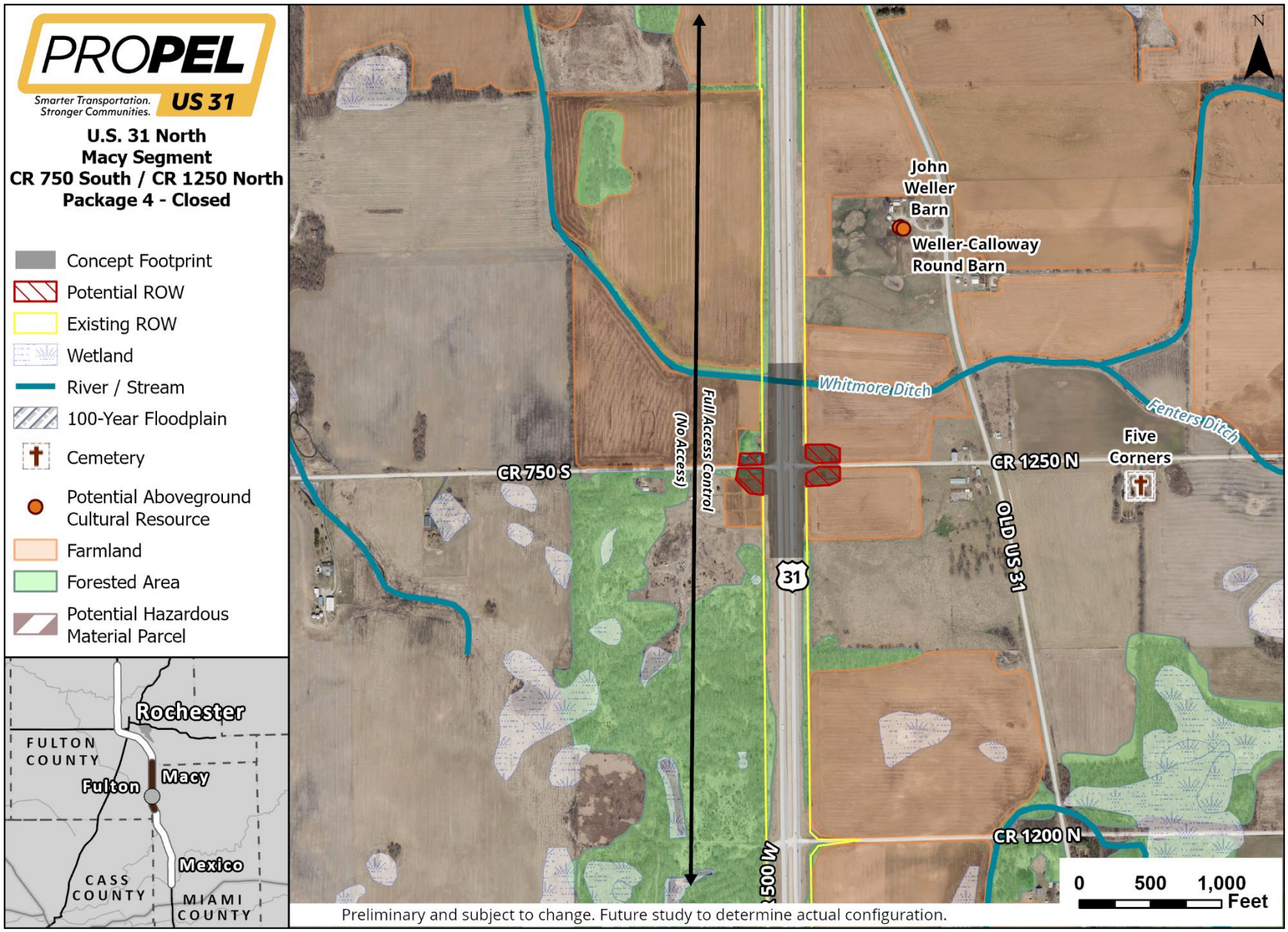
U.S. 31 North
Macy Segment
CR 650 South / CR 1350 North
Package 4 - Interchange (Quadrant)

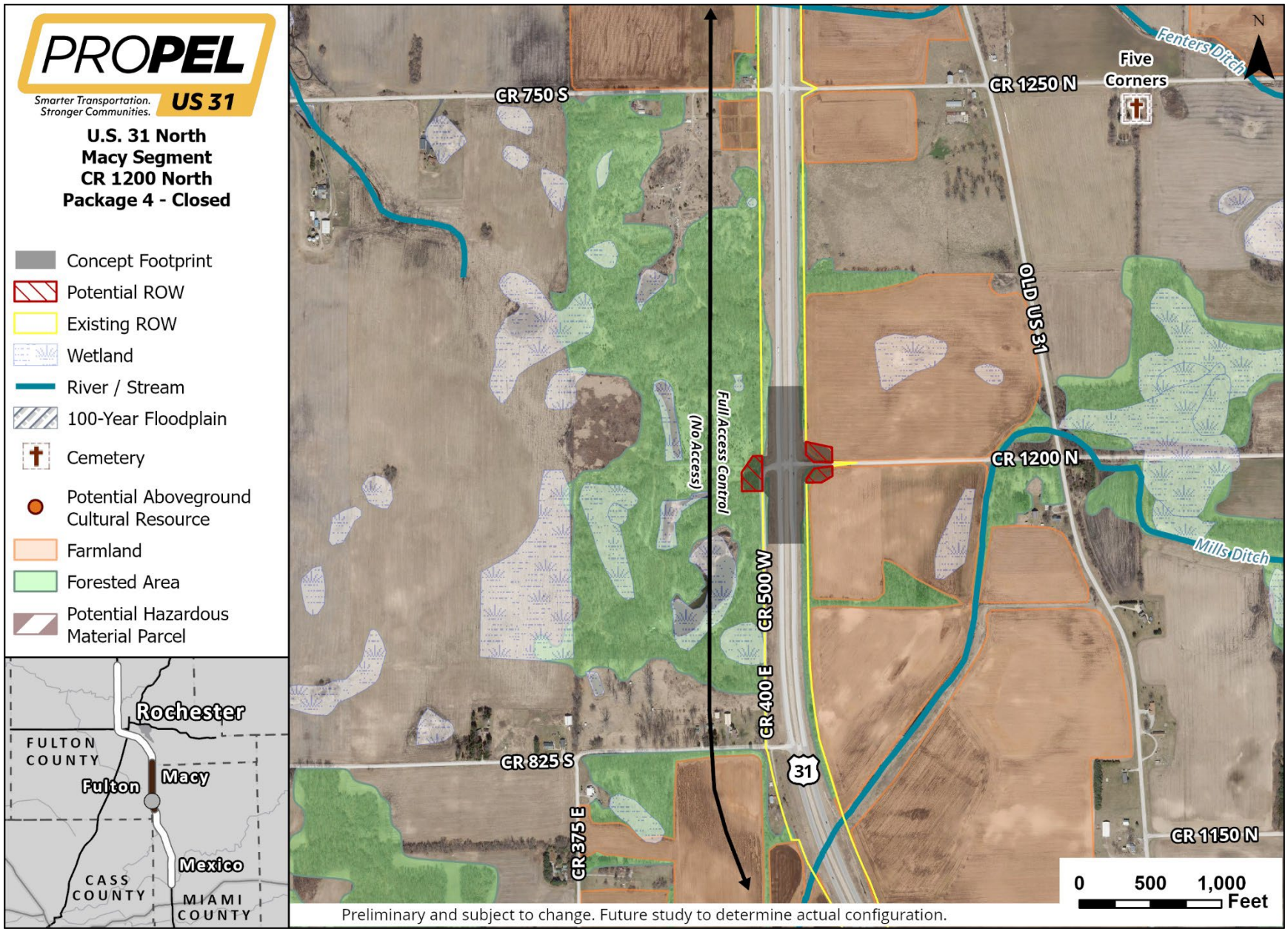
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

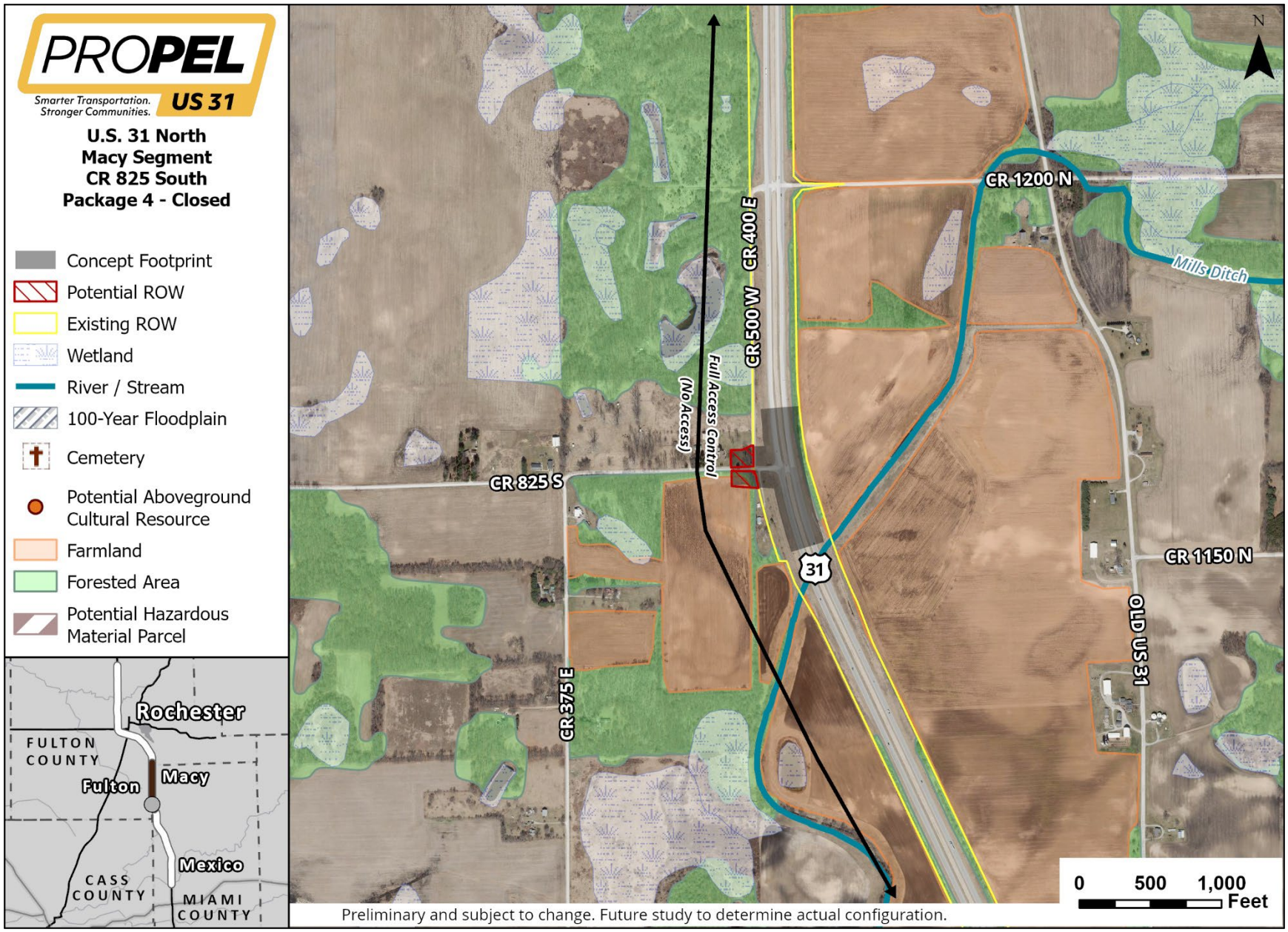


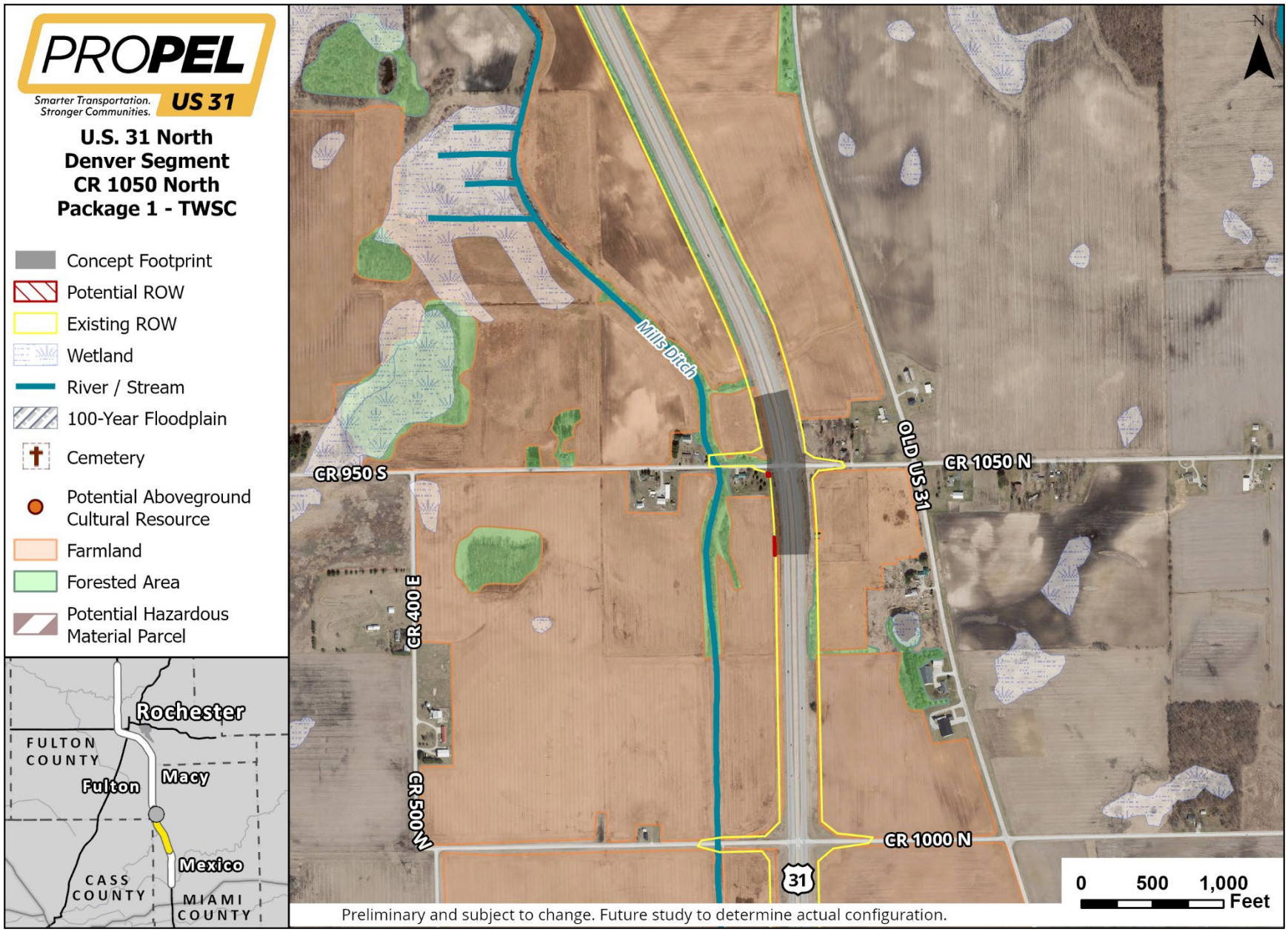


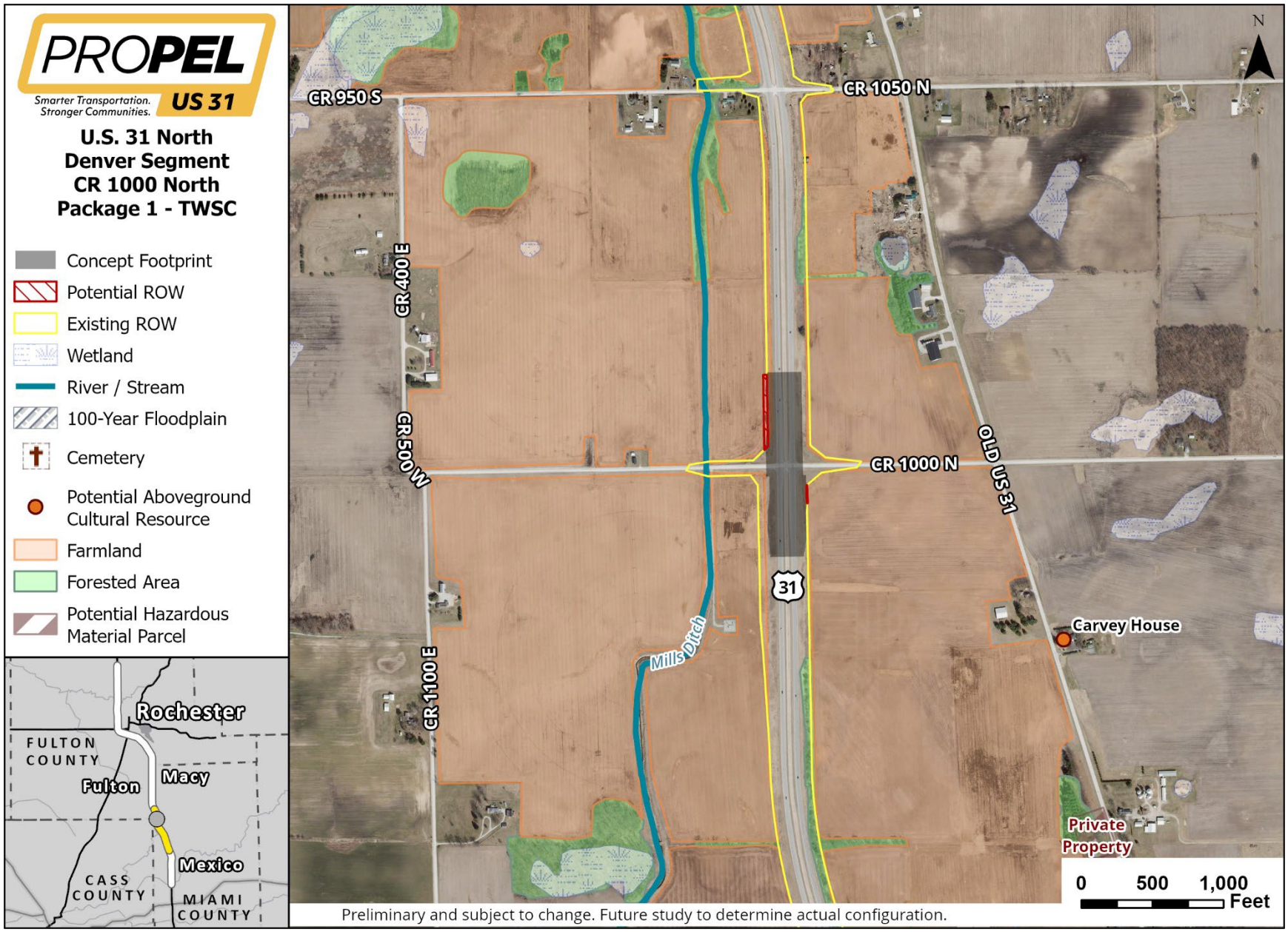
Preliminary and subject to change. Future study to determine actual configuration.

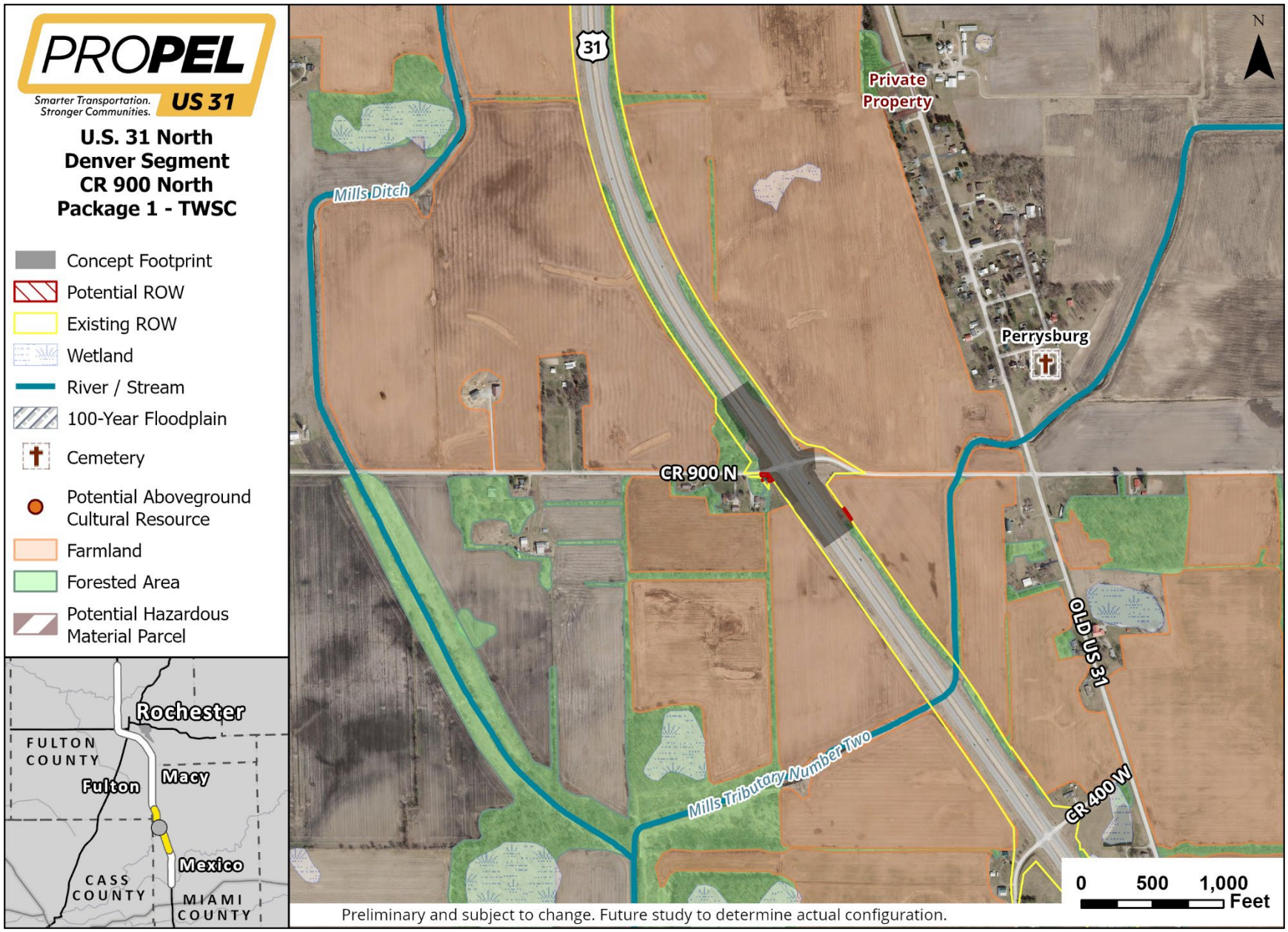

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 750 South / CR 1250 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
John Weller Barn
Weller-Calloway Round Barn
Whitmore Ditch
Fenters Ditch
Five Corners
CR 750 S
CR 1250 N
CR 1200 N
Full Access Control
(No Access)
31
OLD US 31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

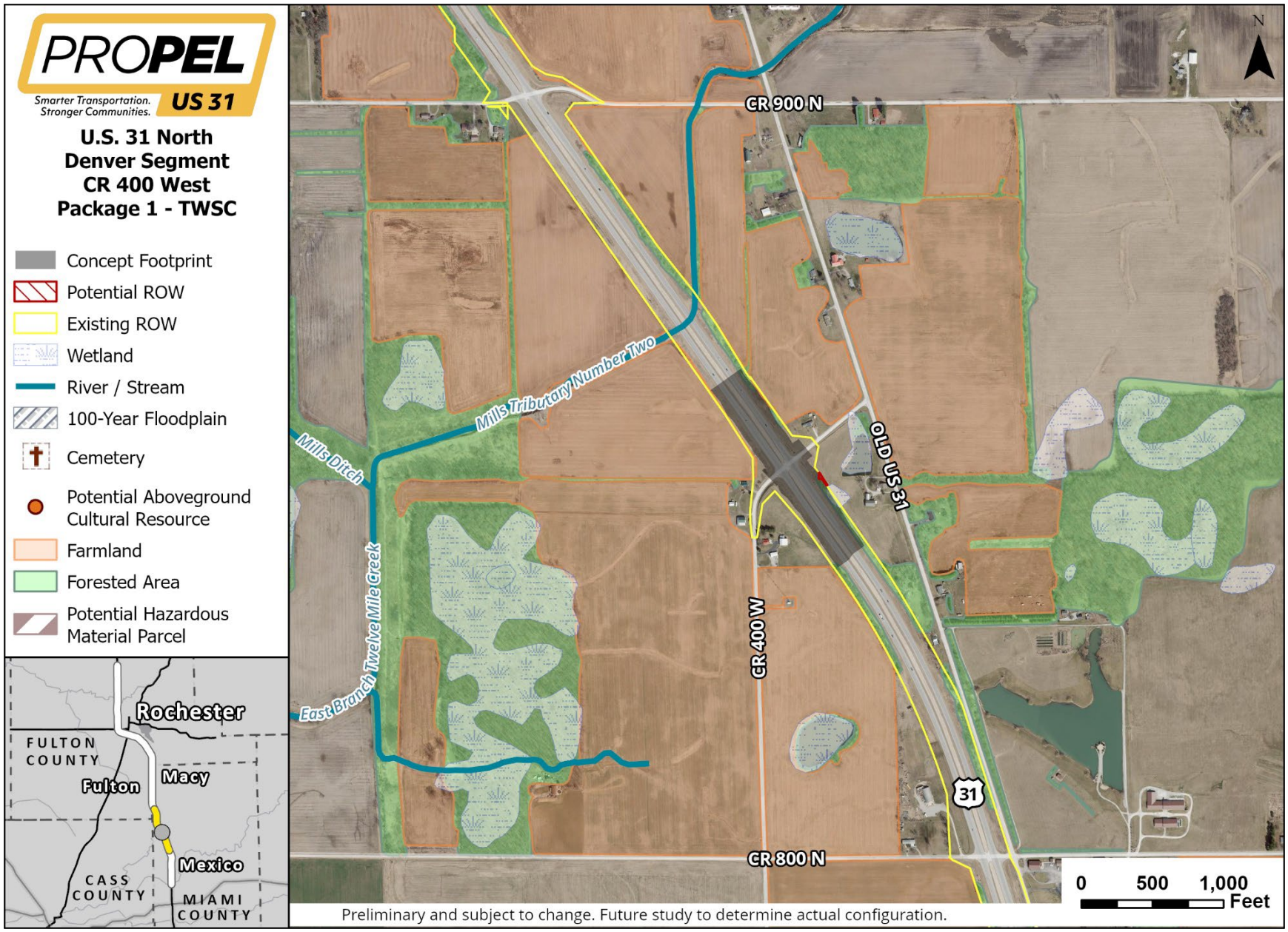

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 1200 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 750 S
CR 1250 N
Five Corners
Fenters Ditch
OLD US 31
Full Access Control
(No Access)
CR 500 W
CR 400 E
CR 375 E
CR 825 S
CR 1200 N
Mills Ditch
31
CR 1150 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

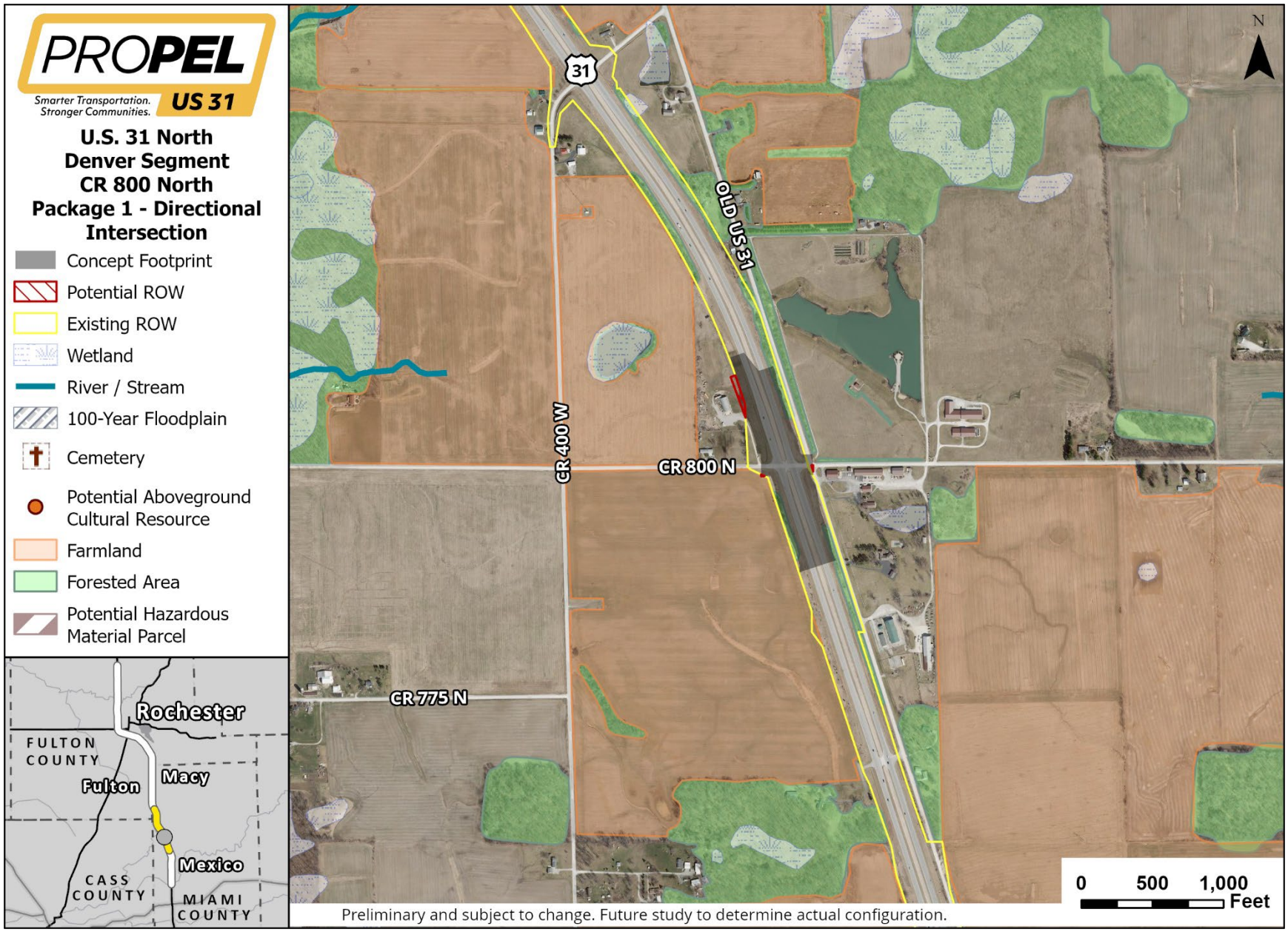

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Macy Segment
CR 825 South
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
CR 1200 N
Mills Ditch
CR 400 E
CR 500 W
Full Access Control
(No Access)
CR 825 S
31
CR 1150 N
OLD US 31
CR 375 E
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 1050 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mills Ditch
CR 950 S
CR 400 E
CR 500 W
OLD US 31
CR 1050 N
CR 1000 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 1000 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 950 S
CR 1050 N
CR 400 E
CR 500 W
CR 1000 N
OLD US 31
31
CR 1100 E
Mills Ditch
Carvey House
Private Property
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 900 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
Mills Ditch
Private Property
Perrysburg
CR 900 N
OLD US 31
Mills Tributary Number Two
CR 400 W
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

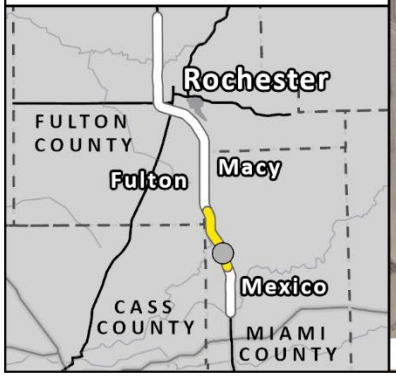

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 400 West
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 900 N
Mills Tributary Number Two
Mills Ditch
East Branch Twelve Mile Creek
OLD US 31
CR 400 W
31
CR 800 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

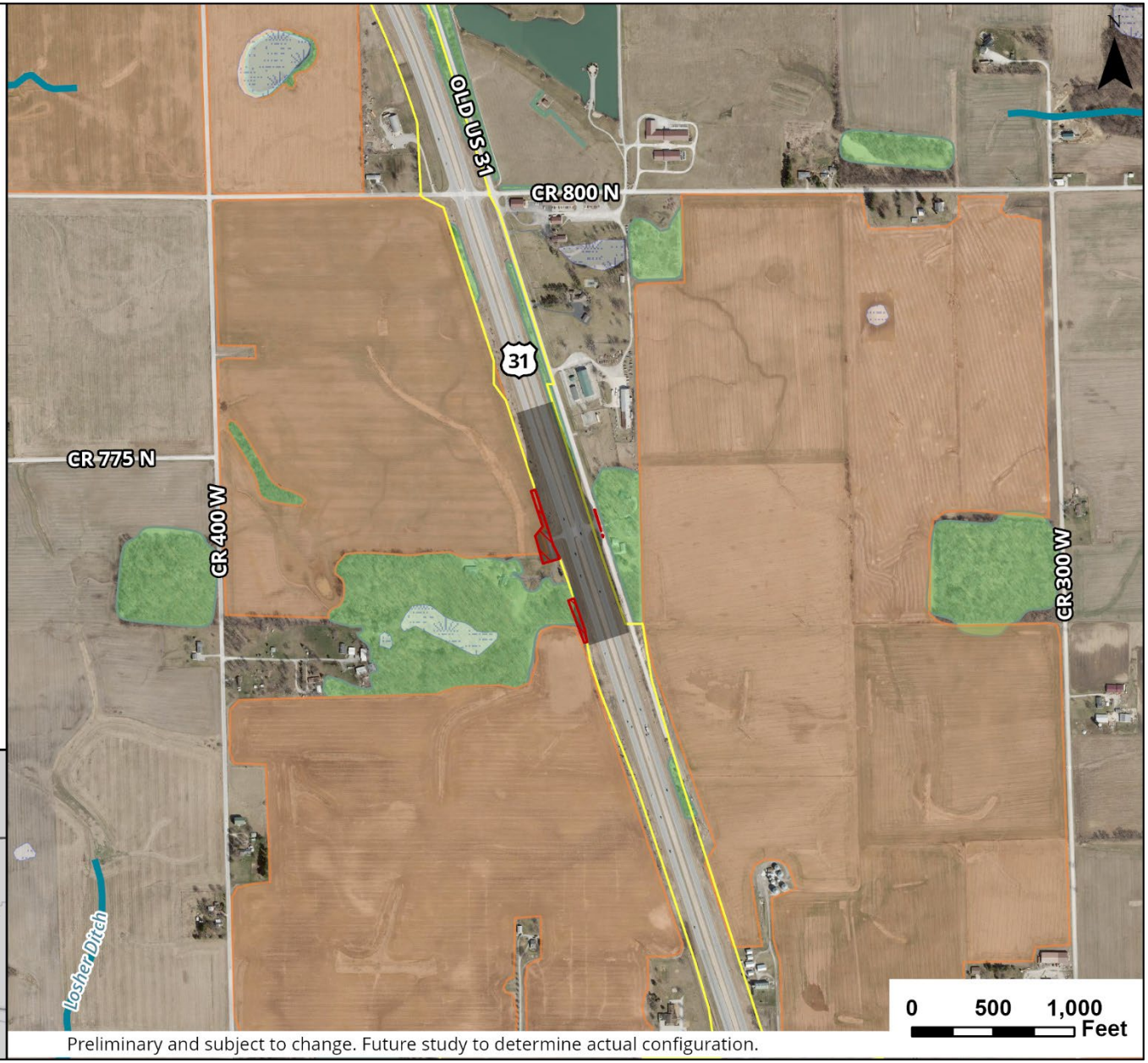

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 800 North
Package 1 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
OLD US 31
CR 400 W
CR 800 N
CR 775 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

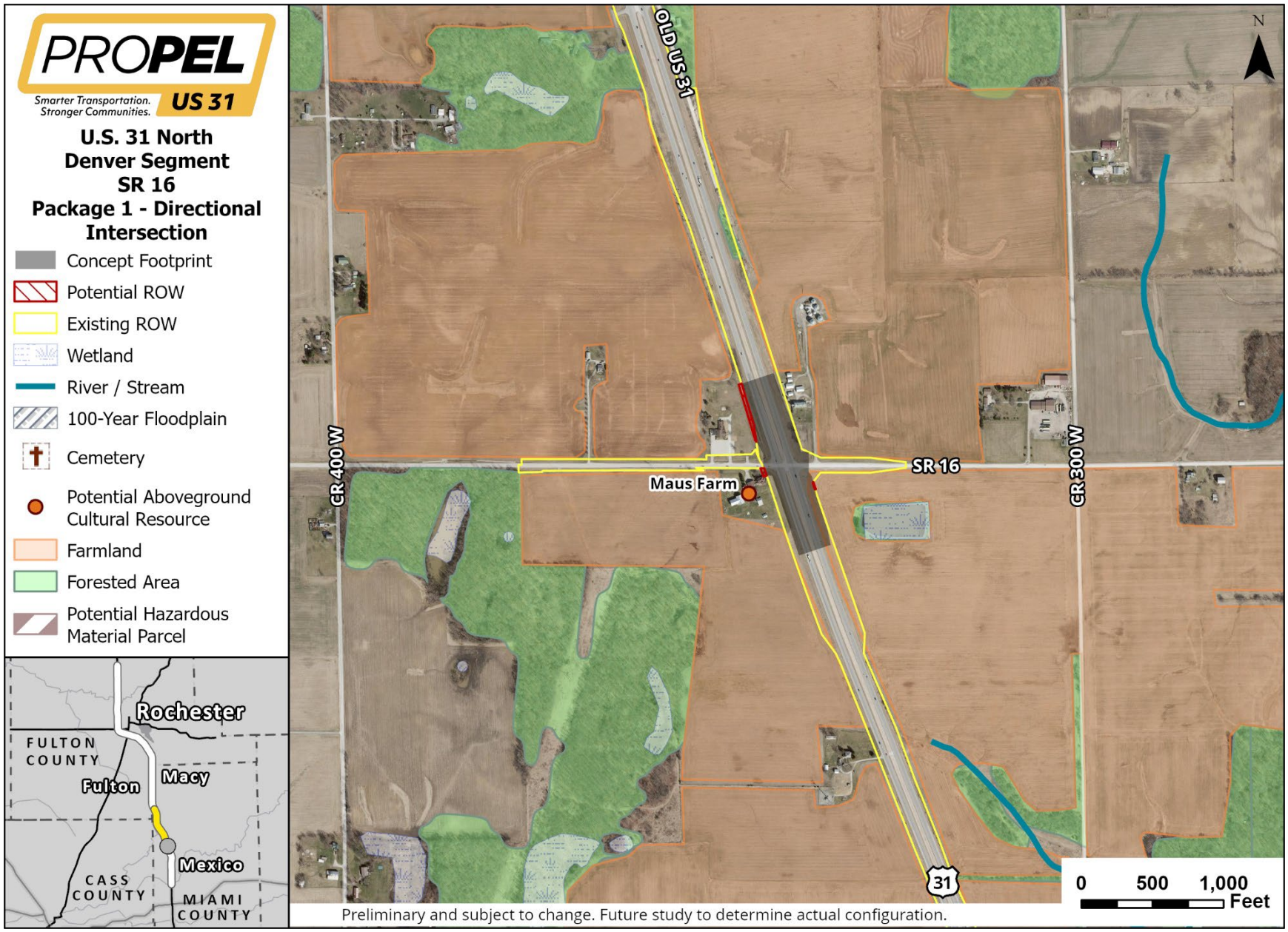
U.S. 31 North
Denver Segment
Old Route 31
Package 1 - TWSC

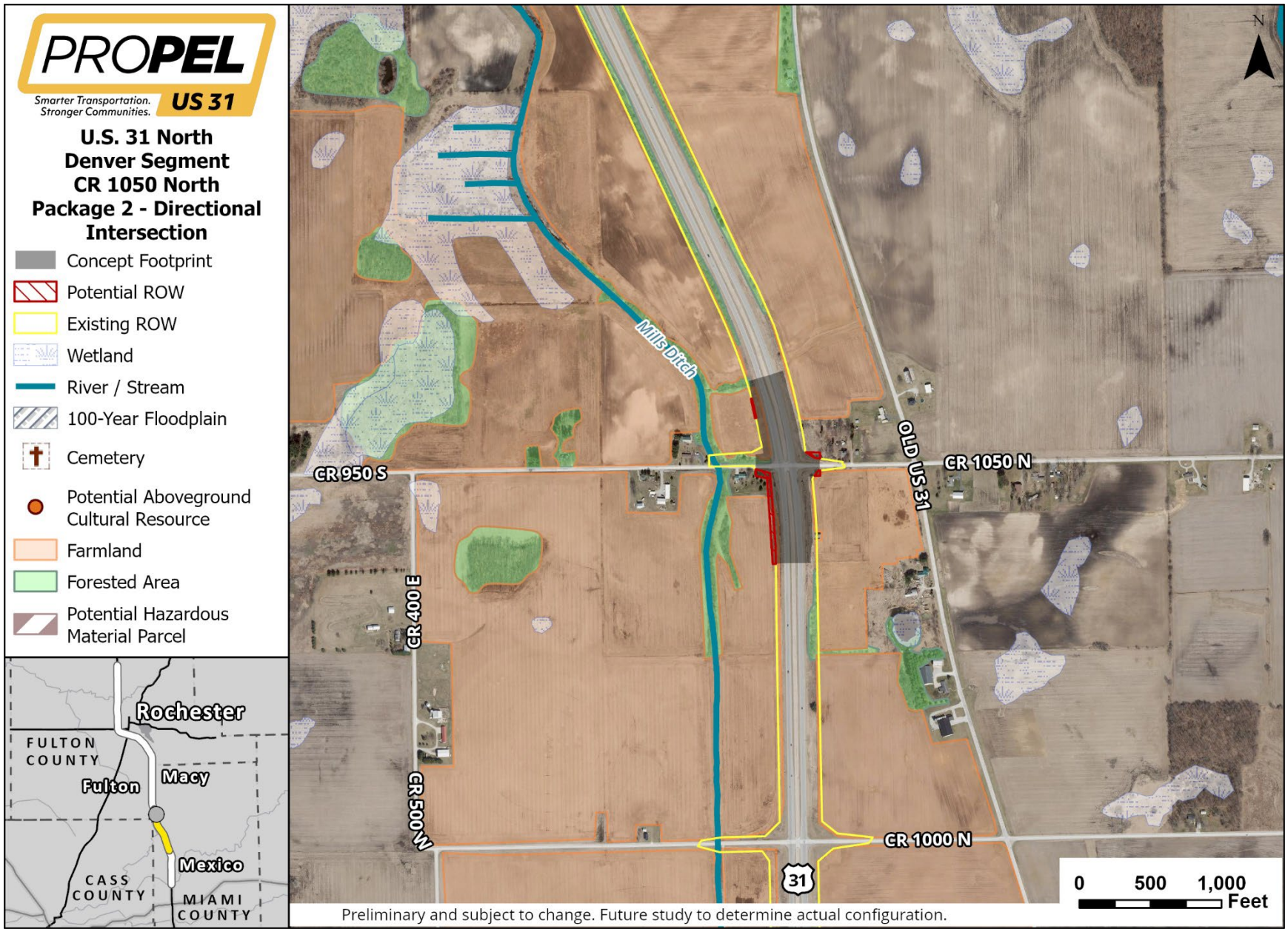
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





Preliminary and subject to change. Future study to determine actual configuration.

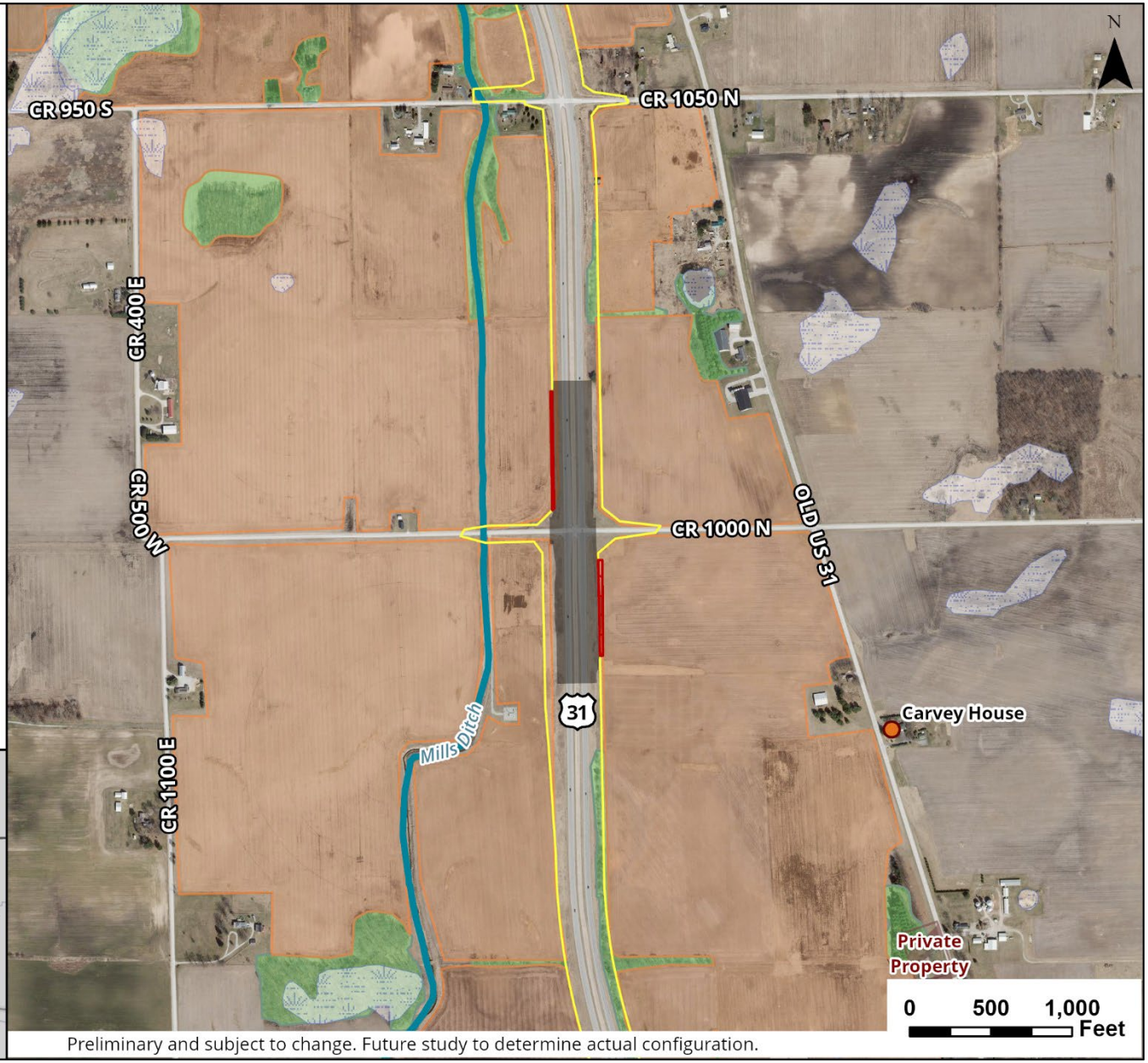

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
SR 16
Package 1 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OLD US 31
CR 400 W
SR 16
Maus Farm
CR 300 W
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 1050 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mills Ditch
CR 950 S
CR 400 E
CR 500 W
OLD US 31
CR 1050 N
CR 1000 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

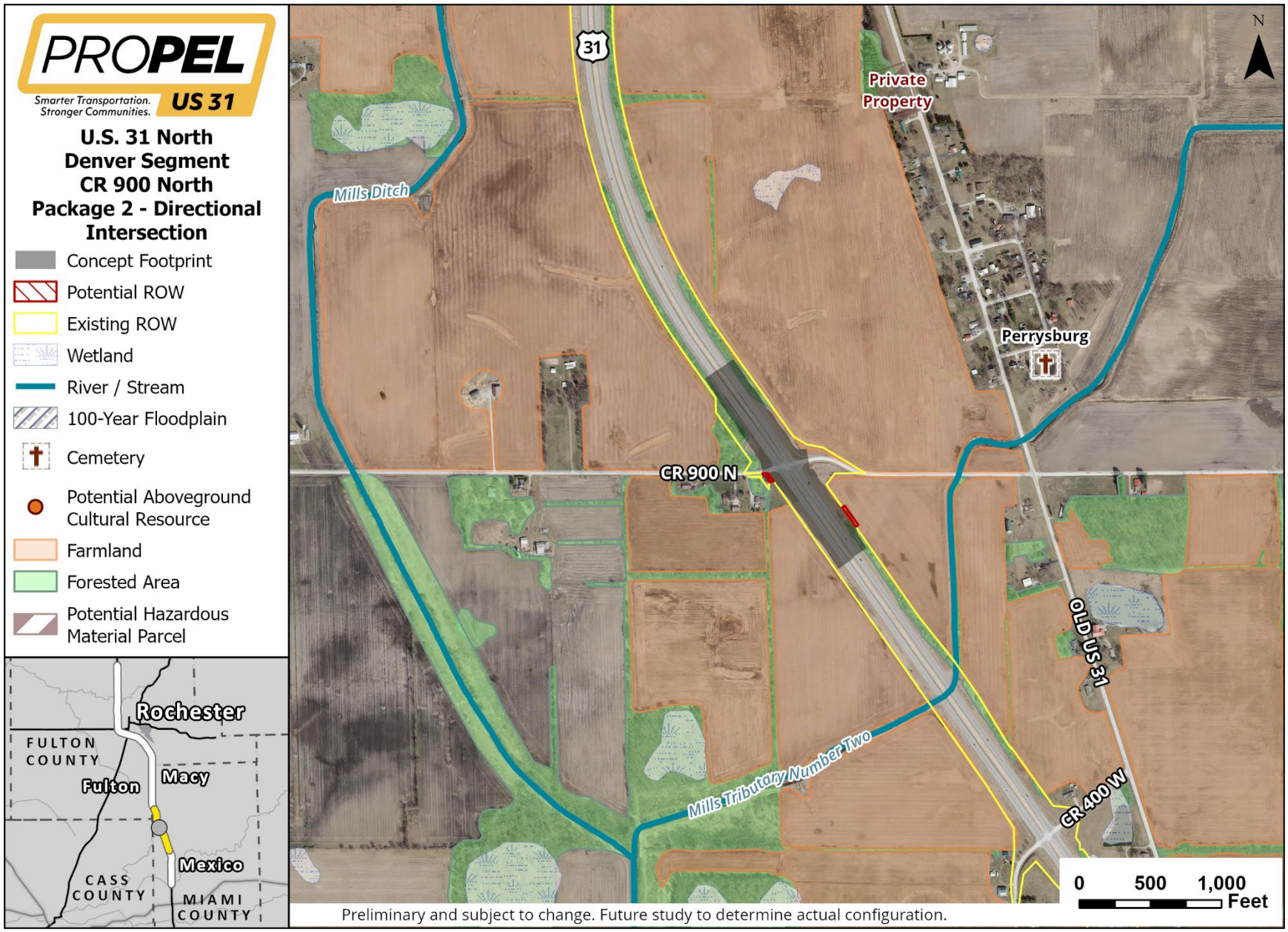
PROPEL
Smarter Transportation. Stronger Communities. US 31

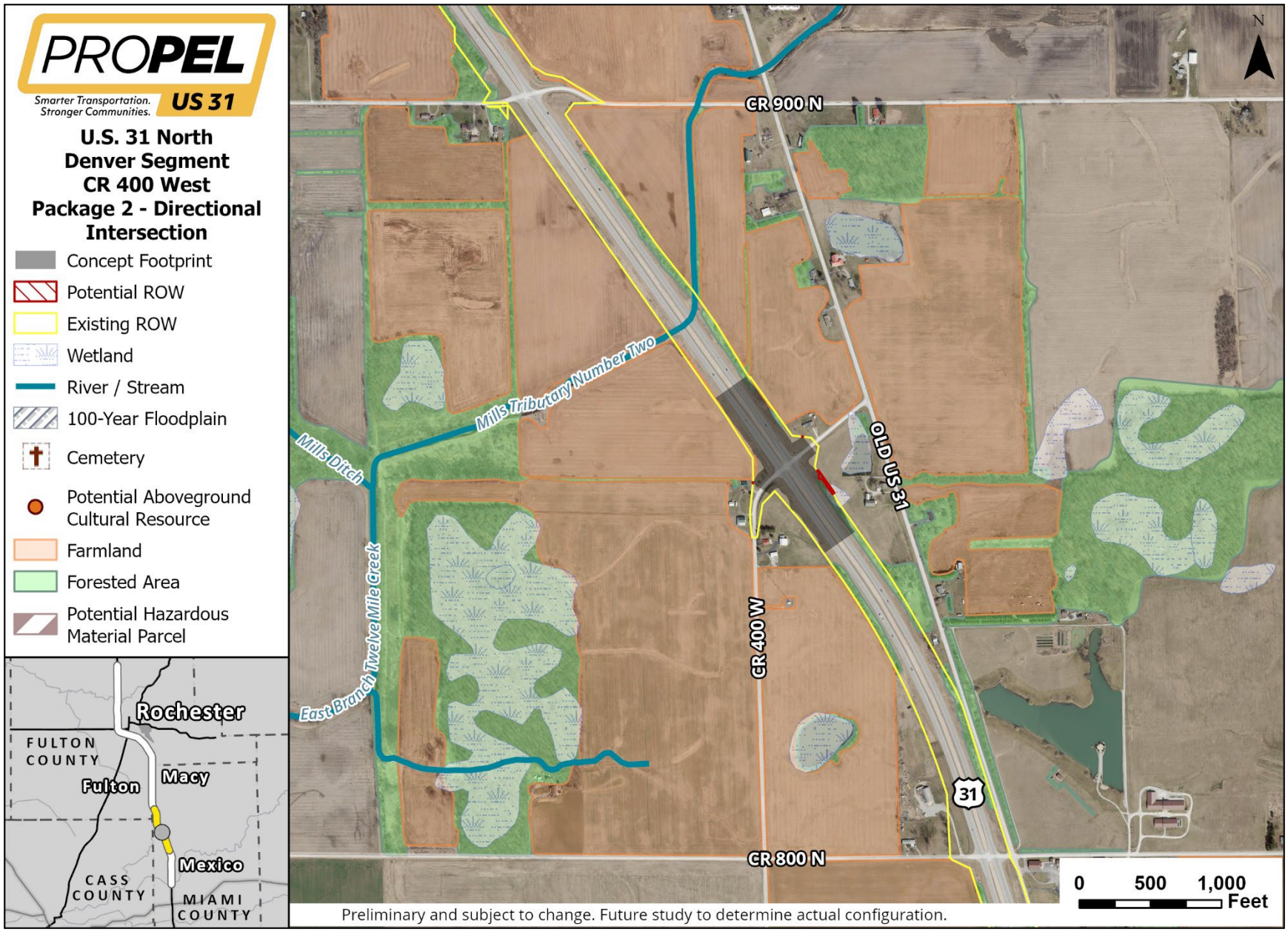
U.S. 31 North
Denver Segment
CR 1000 North
Package 2 - RCI

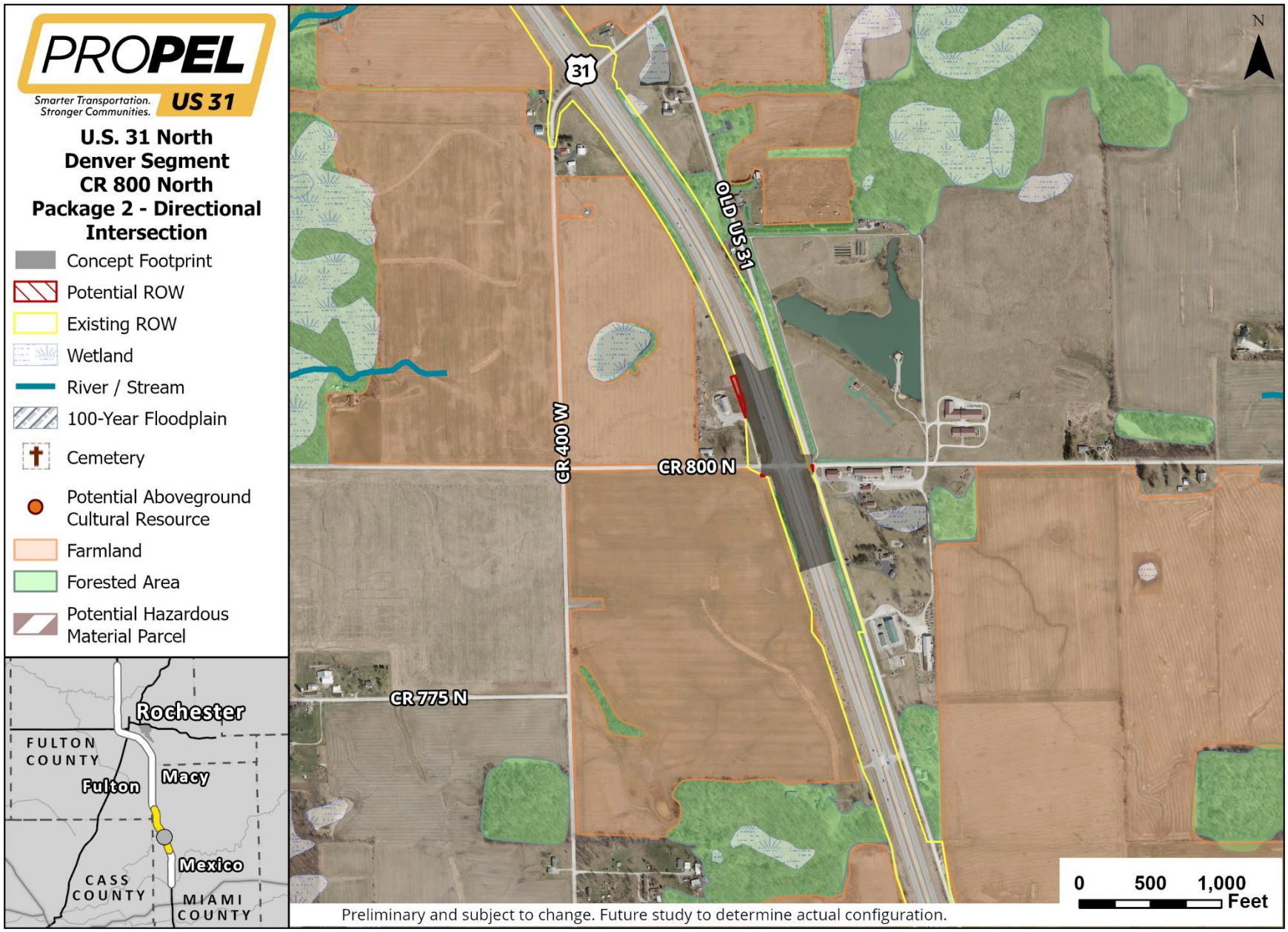
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 900 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
Private Property
Mills Ditch
Perrysburg
CR 900 N
OLD US 31
Mills Tributary Number Two
CR 400 W
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

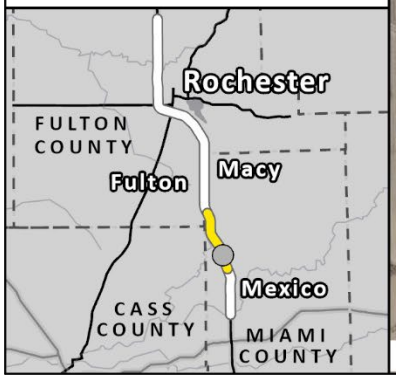

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 400 West
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 900 N
Mills Tributary Number Two
Mills Ditch
East Branch Twelve Mile Creek
OLD US 31
CR 400 W
31
CR 800 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

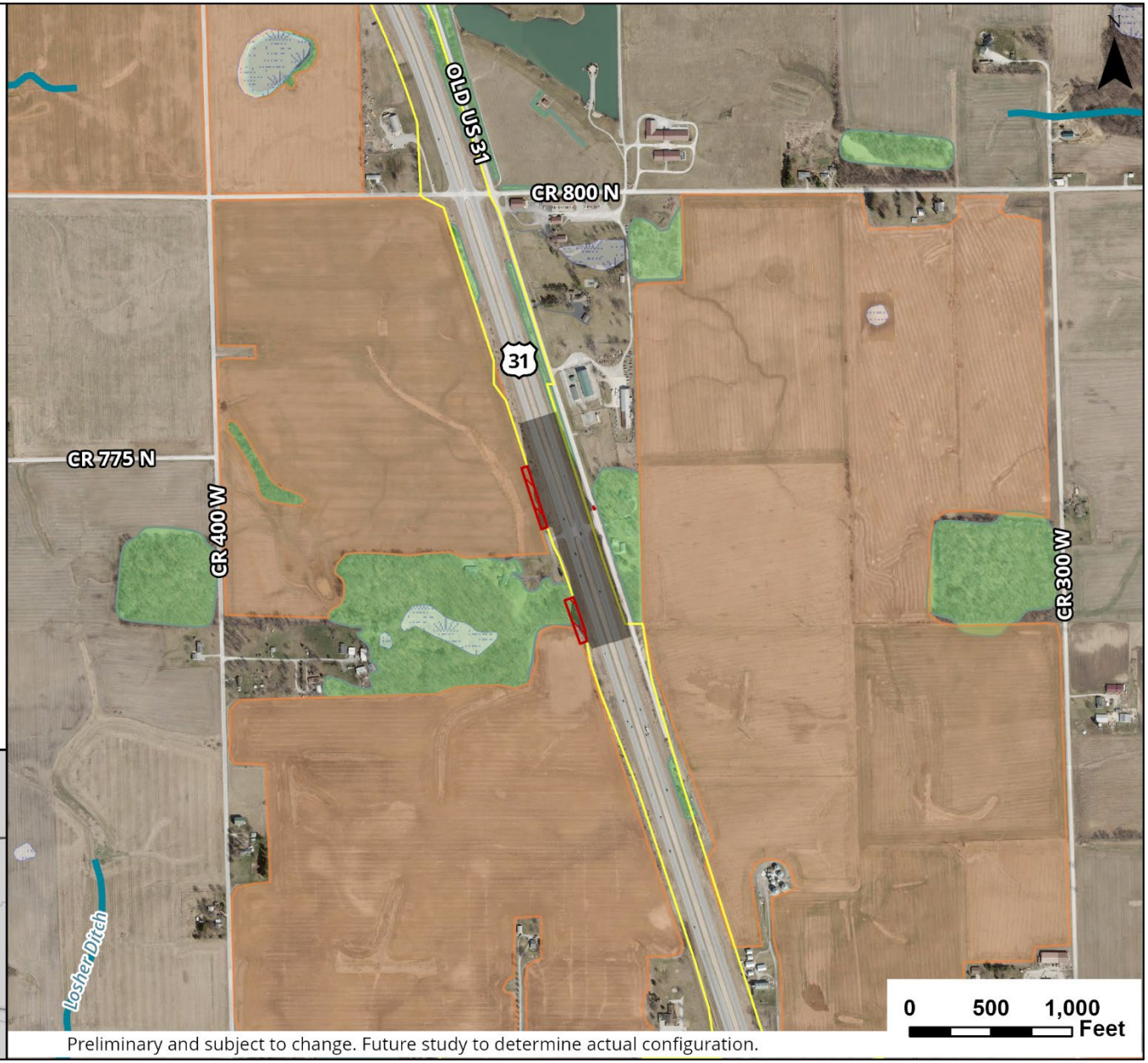

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 800 North
Package 2 - Directional Intersection
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
OLD US 31
CR 400 W
CR 800 N
CR 775 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Denver Segment
Old Route 31
Package 2 - Directional Intersection

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



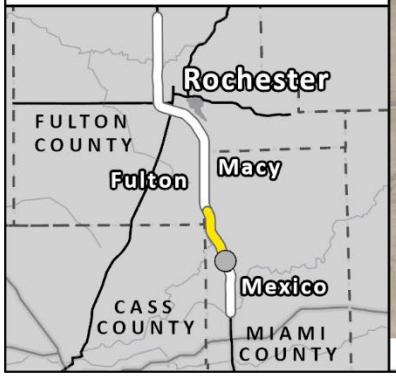


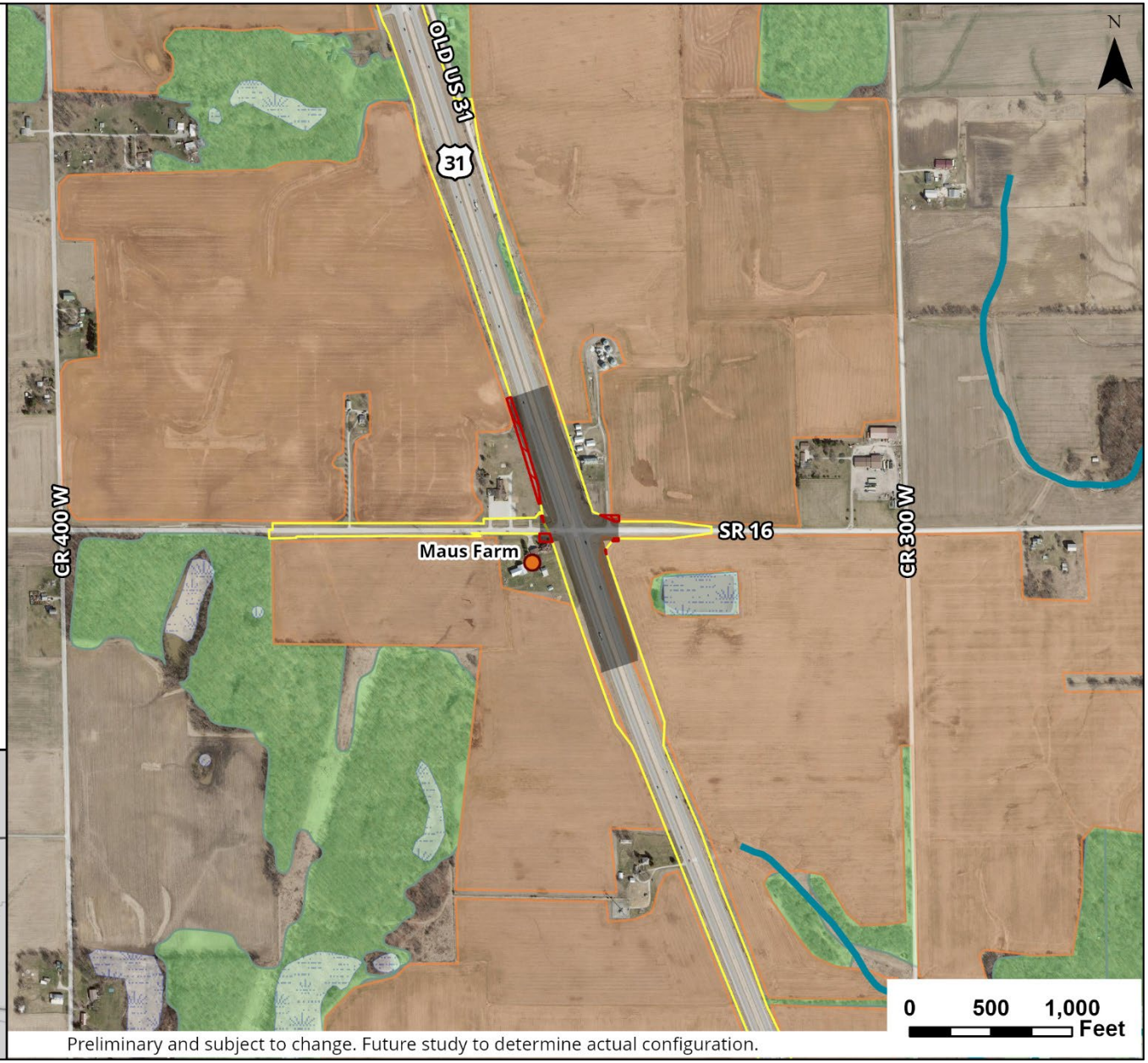
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

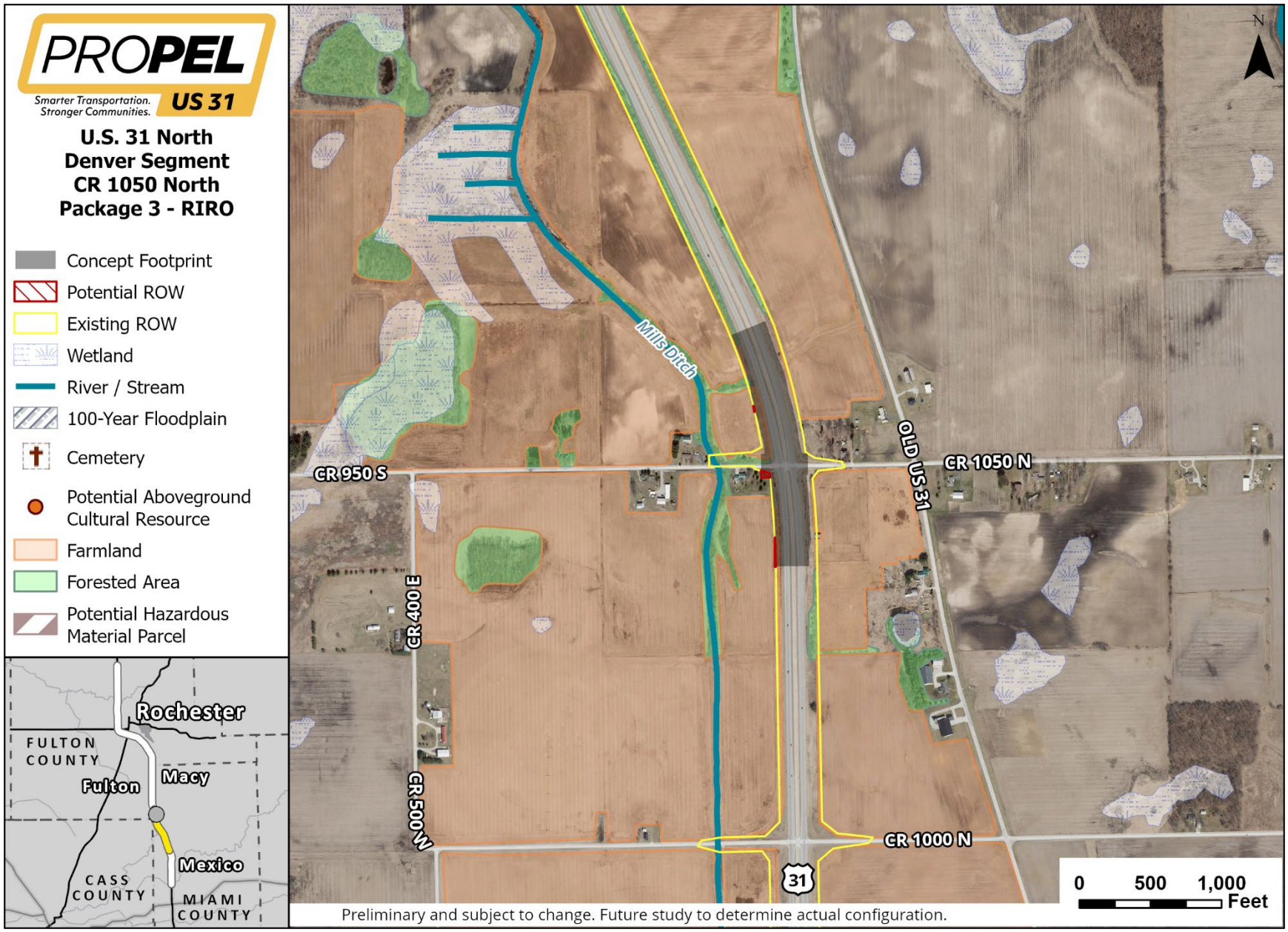
U.S. 31 North
Denver Segment
SR 16
Package 2 - RCI

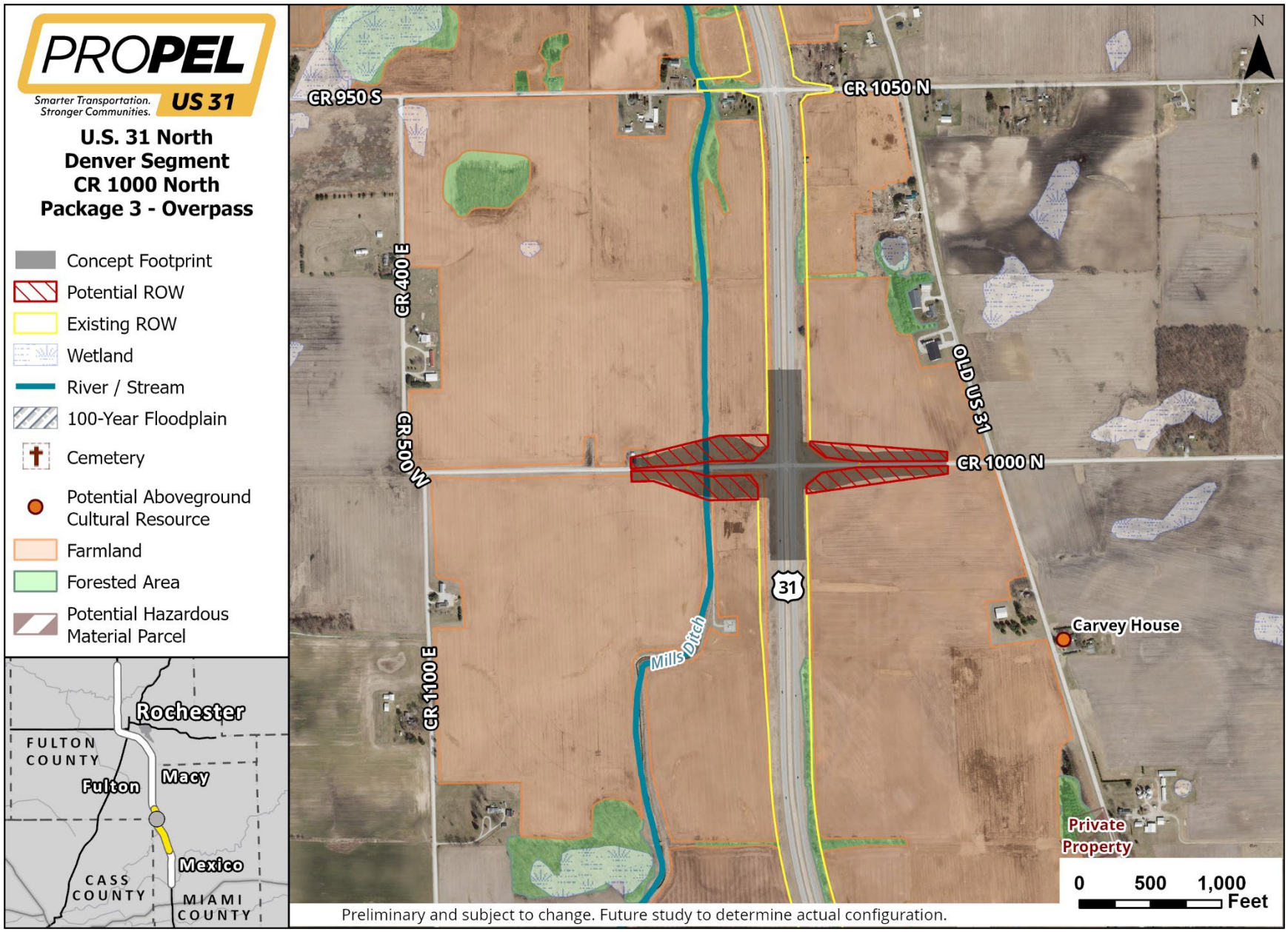
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

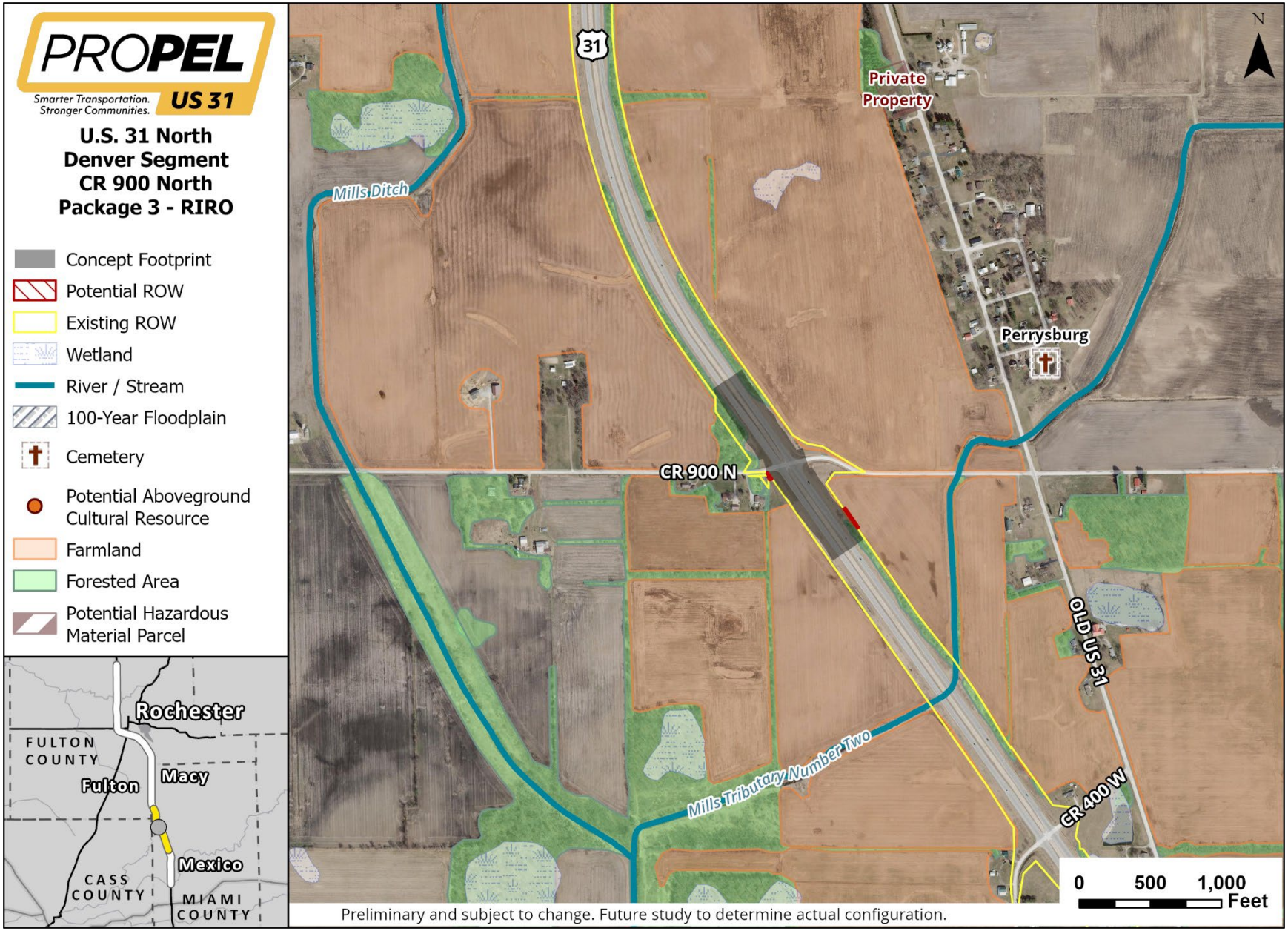


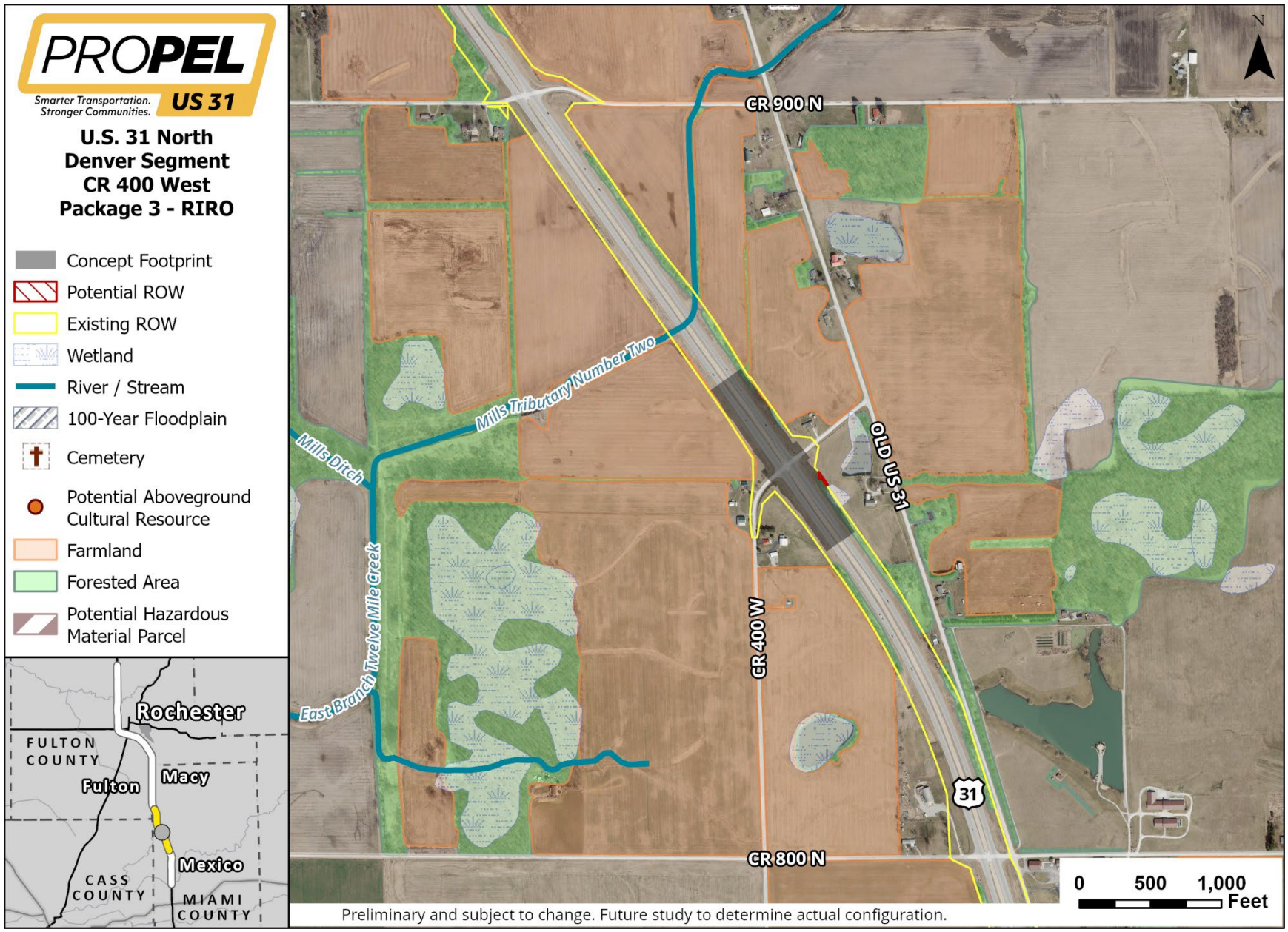


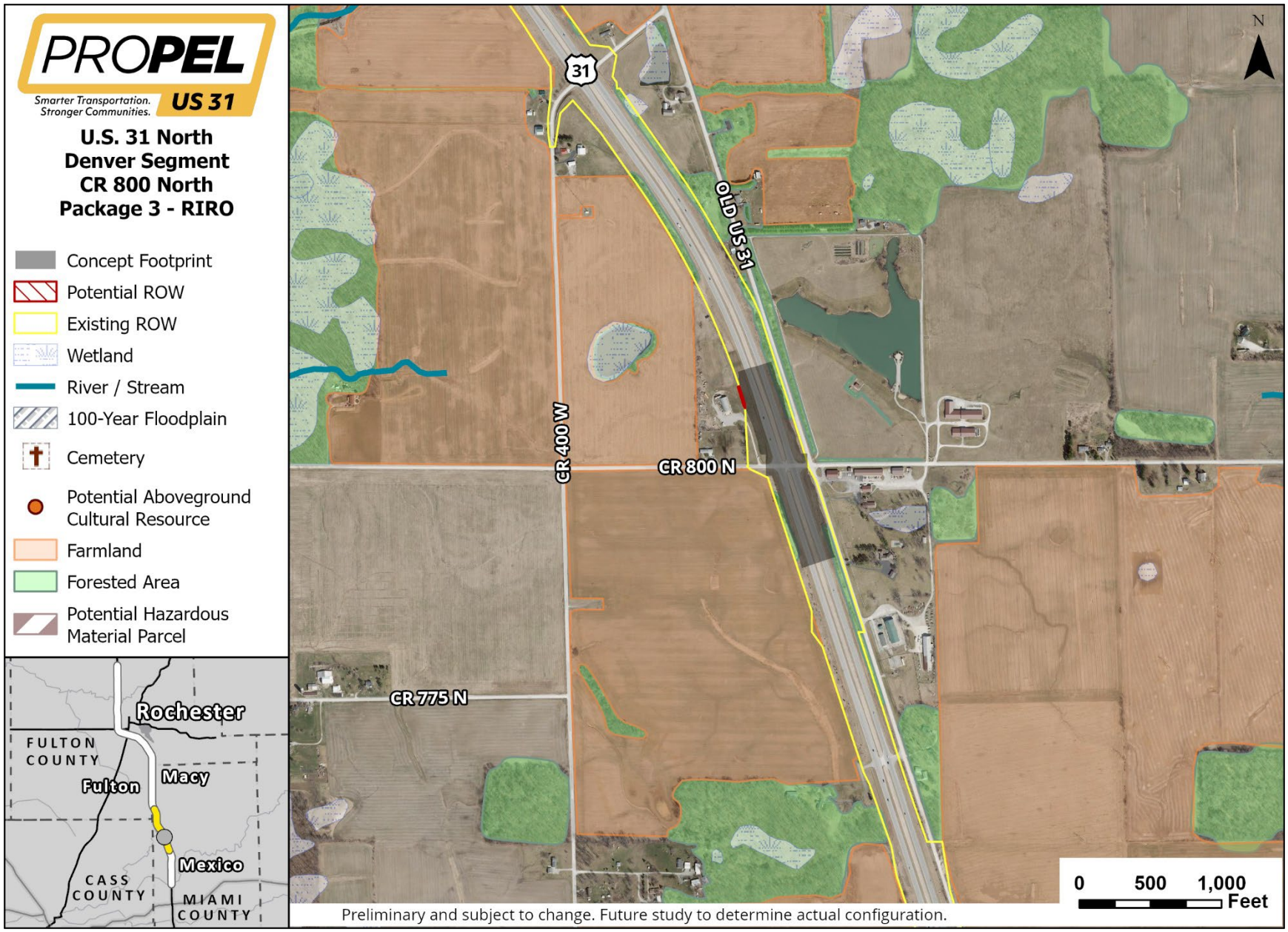
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 1050 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mills Ditch
CR 950 S
CR 400 E
CR 500 W
OLD US 31
CR 1050 N
CR 1000 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 1000 North
Package 3 - Overpass
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
CR 950 S
CR 1050 N
CR 400 E
CR 500 E
OLD US 31
CR 1000 N
31
CR 1100 E
Mills Ditch
Carvey House
Private Property
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 900 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
Private Property
Mills Ditch
Perrysburg
CR 900 N
OLD US 31
Mills Tributary Number Two
CR 400 W
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

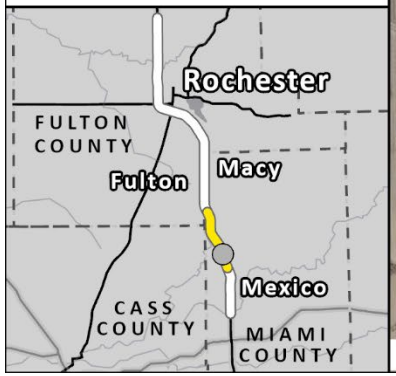

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 400 West
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
N
CR 900 N
Mills Tributary Number Two
Mills Ditch
East Branch Twelve Mile Creek
OLD US 31
CR 400 W
31
CR 800 N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

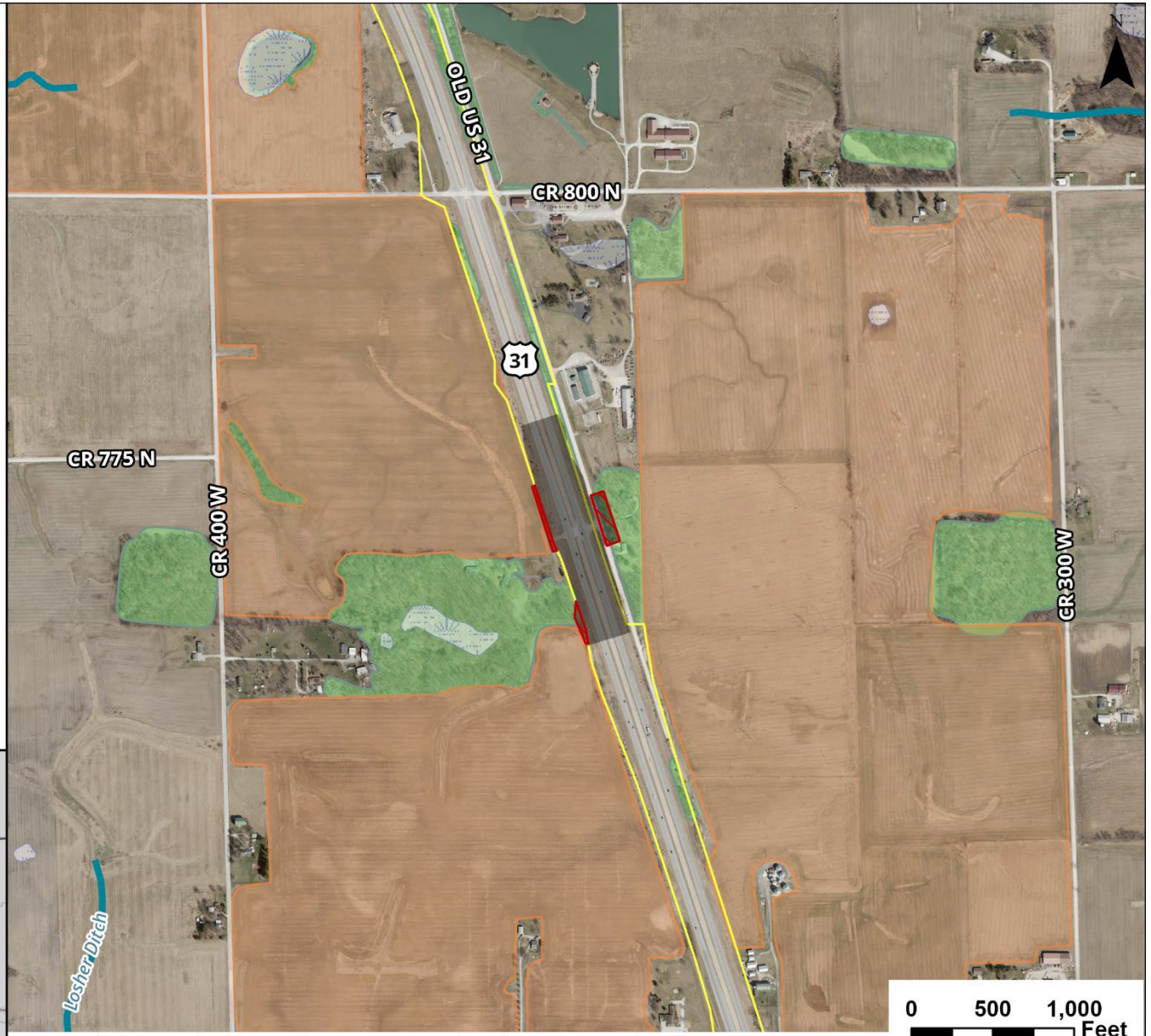

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 800 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
OLD US 31
CR 400 W
CR 800 N
CR 775 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

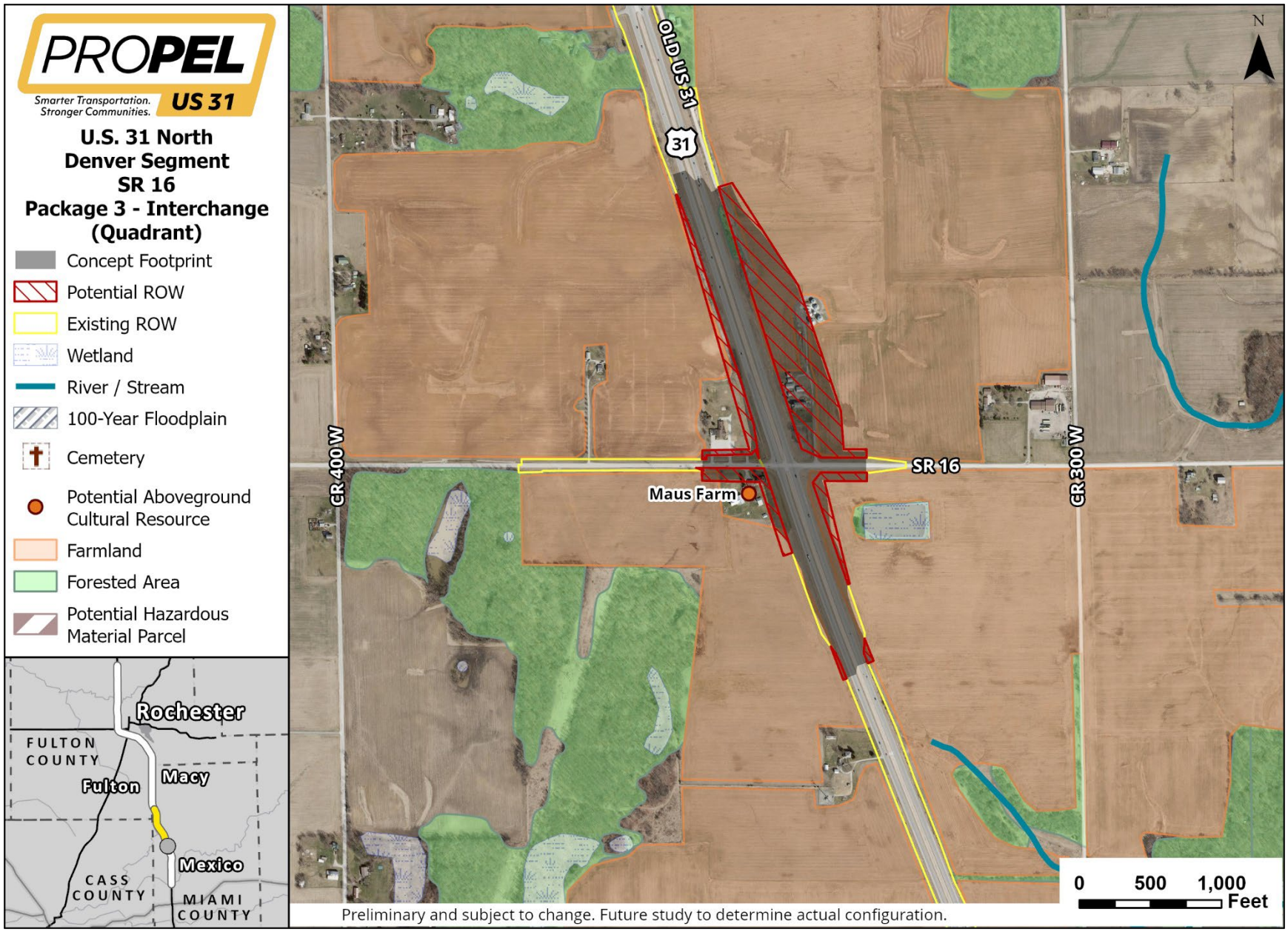
U.S. 31 North
Denver Segment
Old Route 31
Package 3 - RIRO

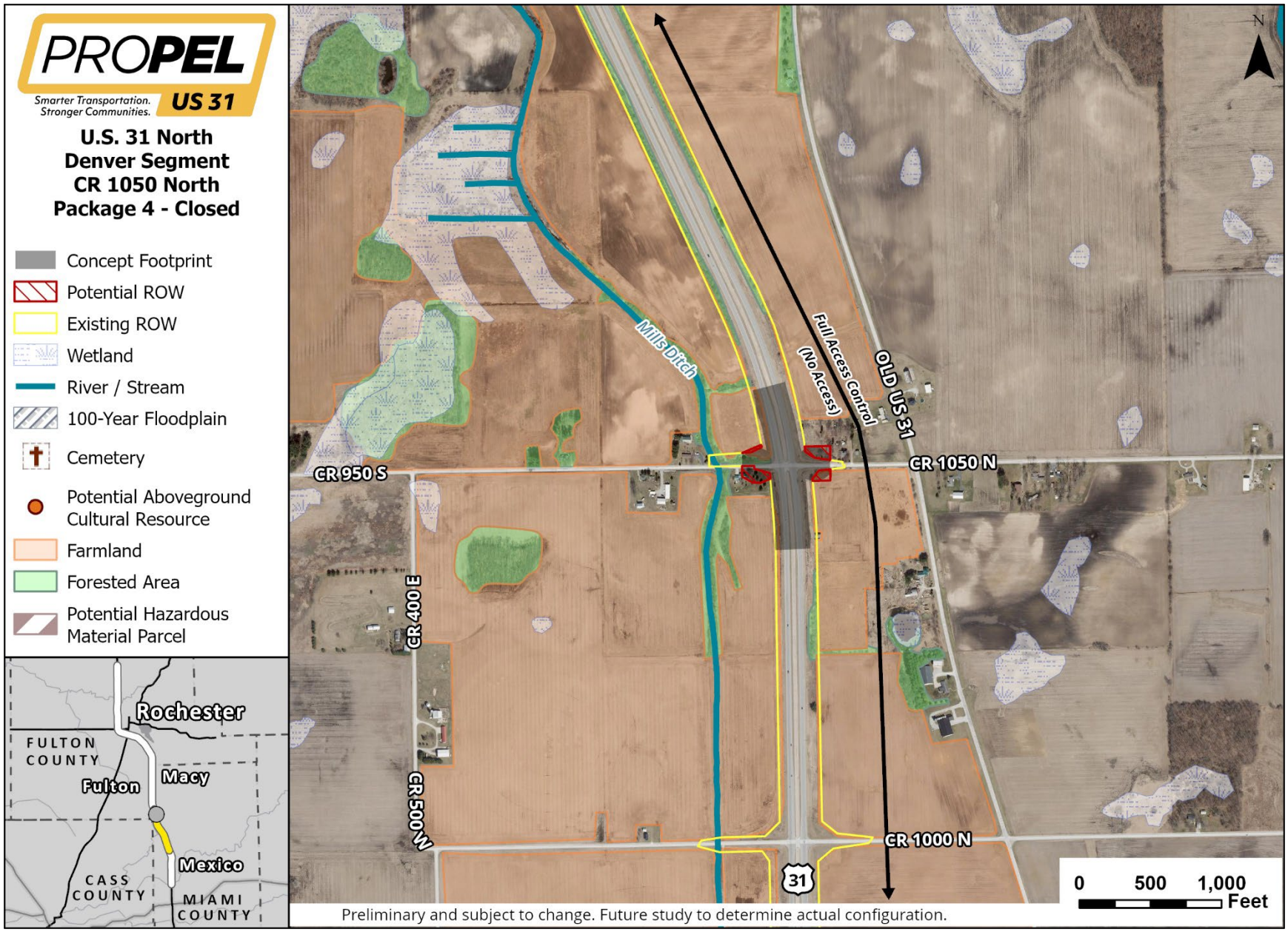
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





Preliminary and subject to change. Future study to determine actual configuration.

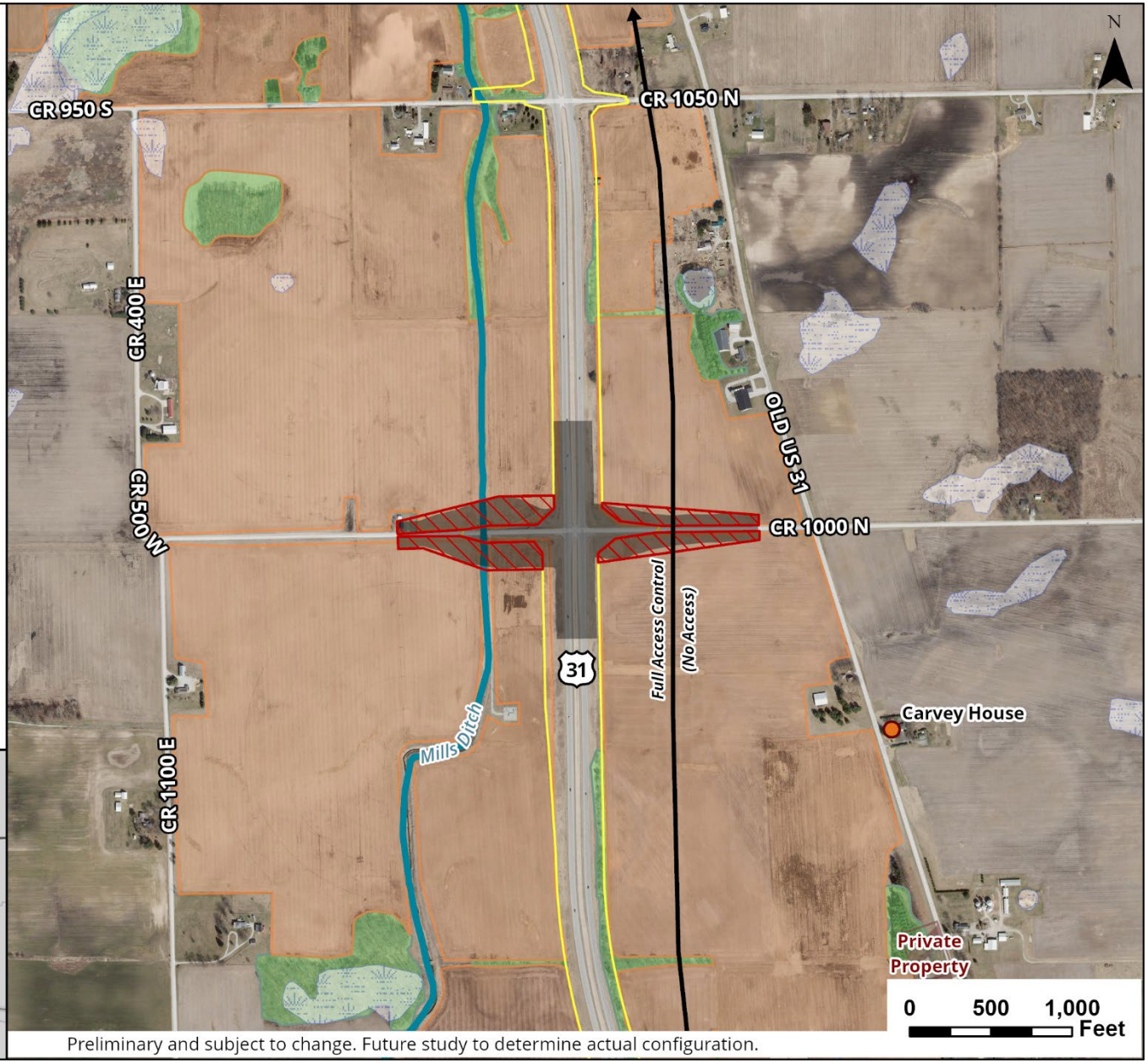

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
SR 16
Package 3 - Interchange (Quadrant)
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OLD US 31
31
CR 400 W
SR 16
Maus Farm
CR 300 W
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 1050 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
Mills Ditch
Full Access Control (No Access)
OLD US 31
CR 950 S
CR 1050 N
CR 400 E
CR 500 W
CR 1000 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

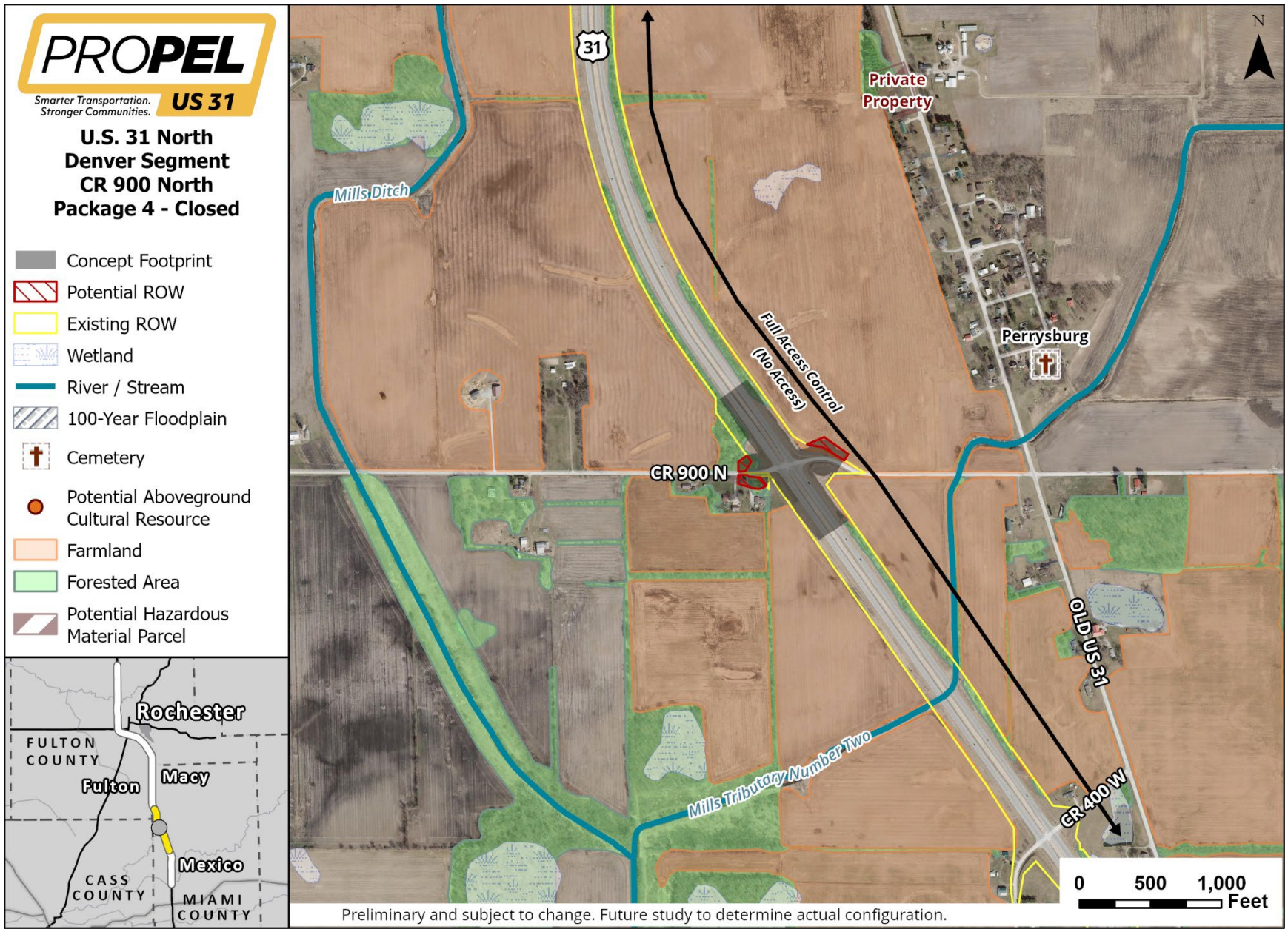
PROPEL
Smarter Transportation. Stronger Communities. US 31

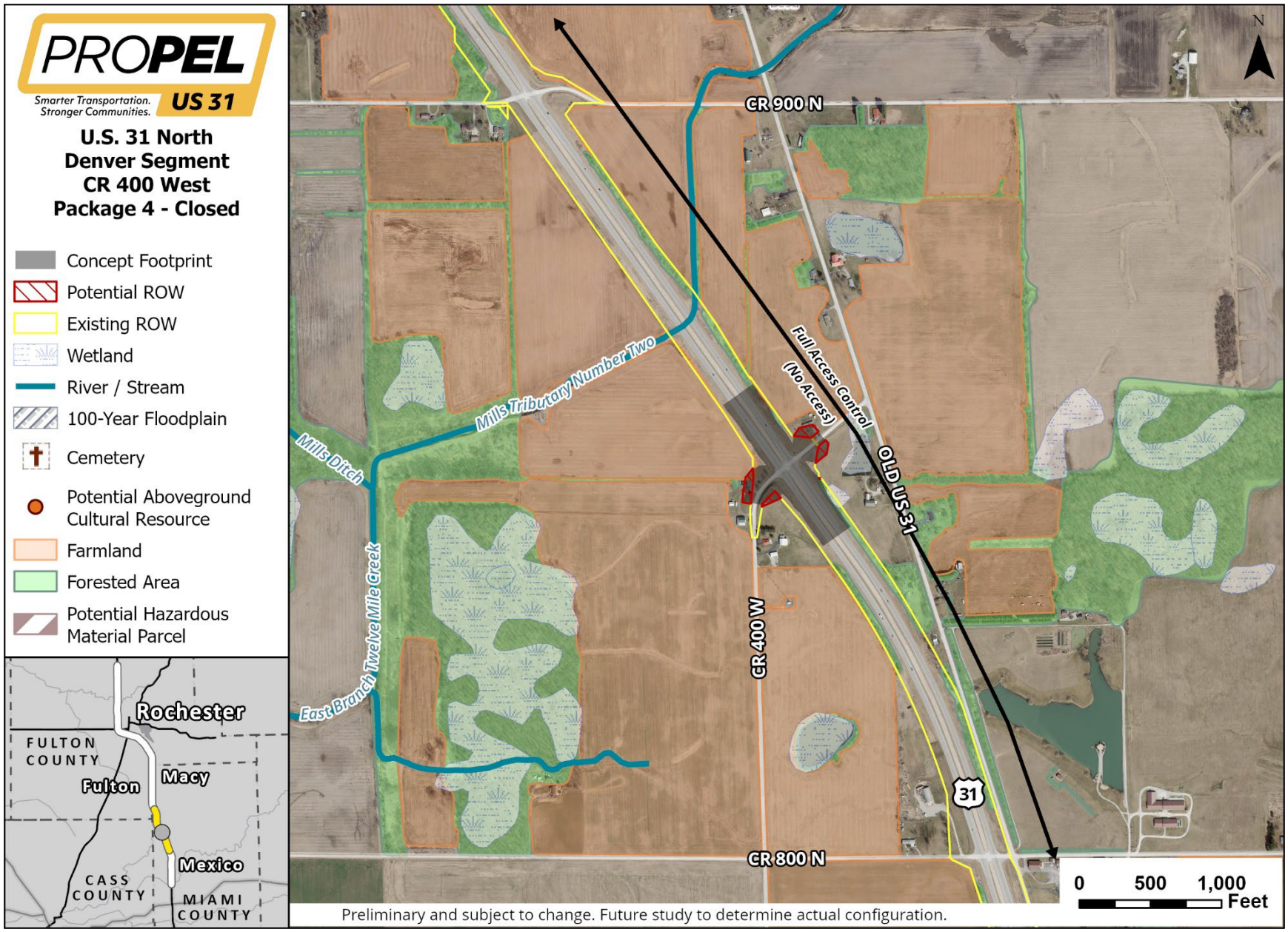
U.S. 31 North
Denver Segment
CR 1000 North
Package 4 - Overpass

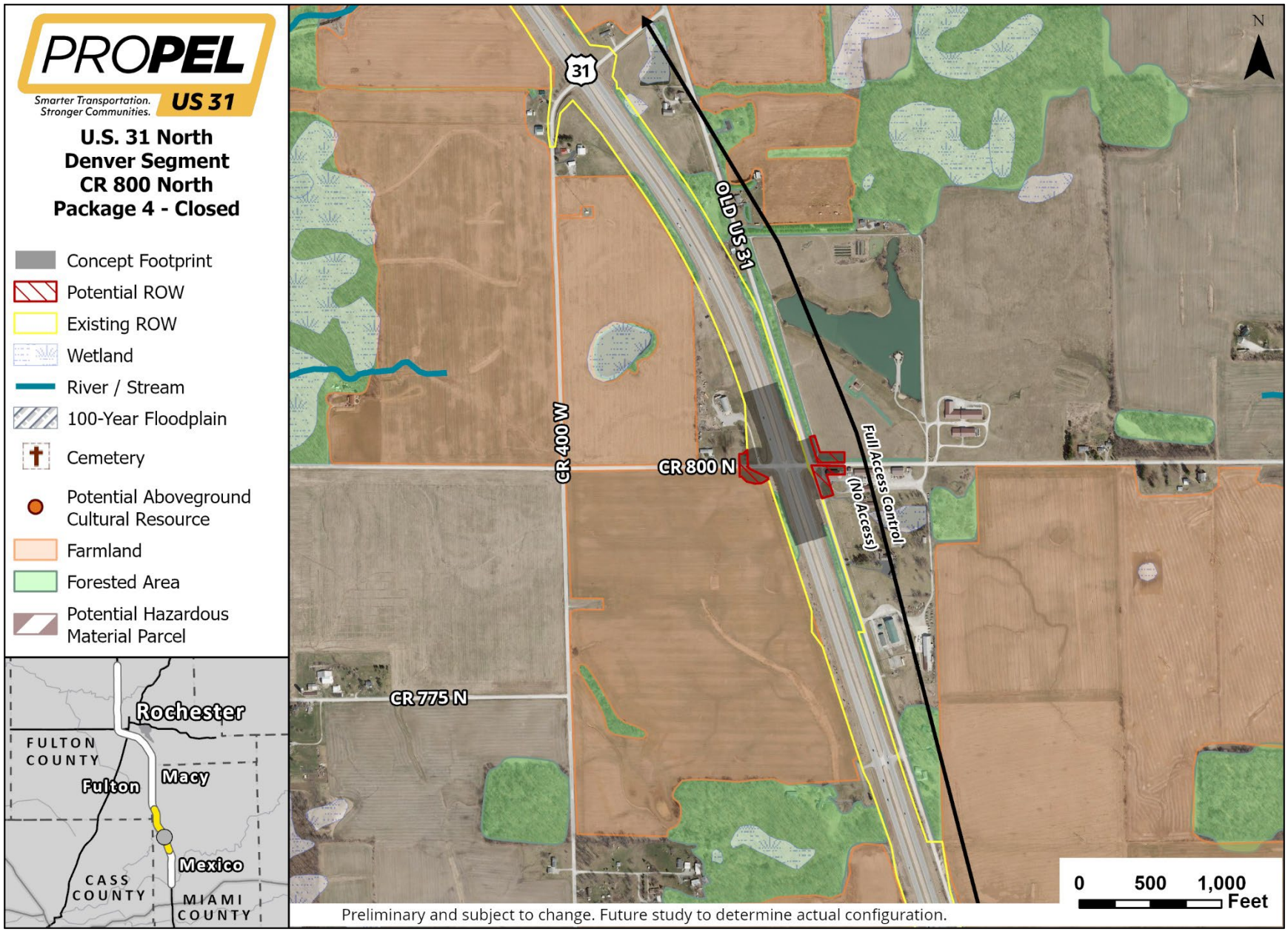
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 900 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
Private Property
Mills Ditch
Full Access Control (No Access)
Perrysburg
CR 900 N
OLD US 31
Mills Tributary Number Two
CR 400 W
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

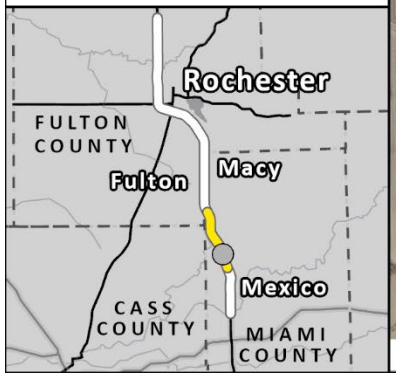

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 400 West
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
CR 900 N
Full Access Control (No Access)
OLD US 31
Mills Tributary Number Two
Mills Ditch
East Branch Twelve Mile Creek
CR 400 W
31
CR 800 N
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

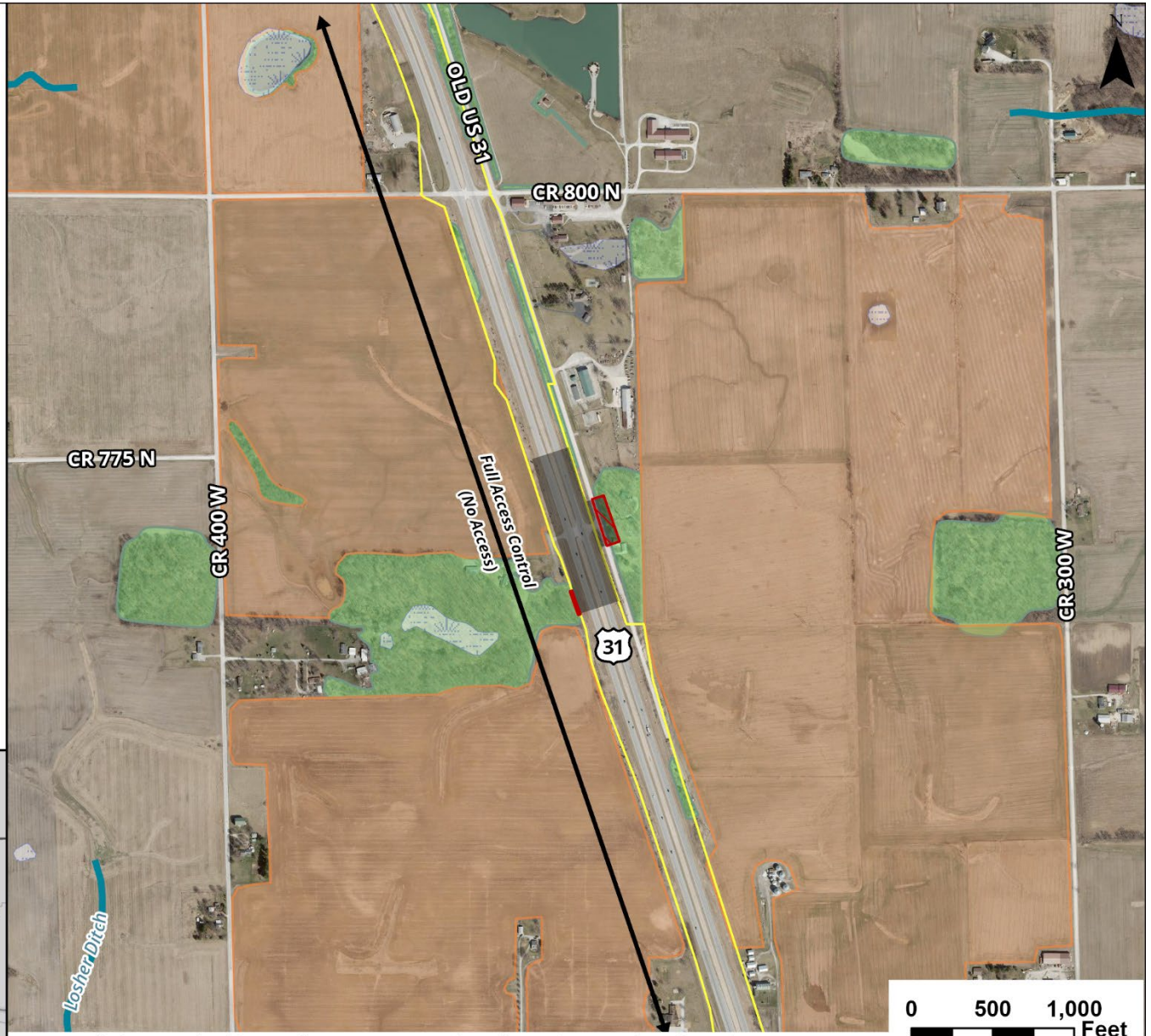

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
CR 800 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
31
OLD US 31
CR 400 W
CR 800 N
CR 775 N
Full Access Control (No Access)
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

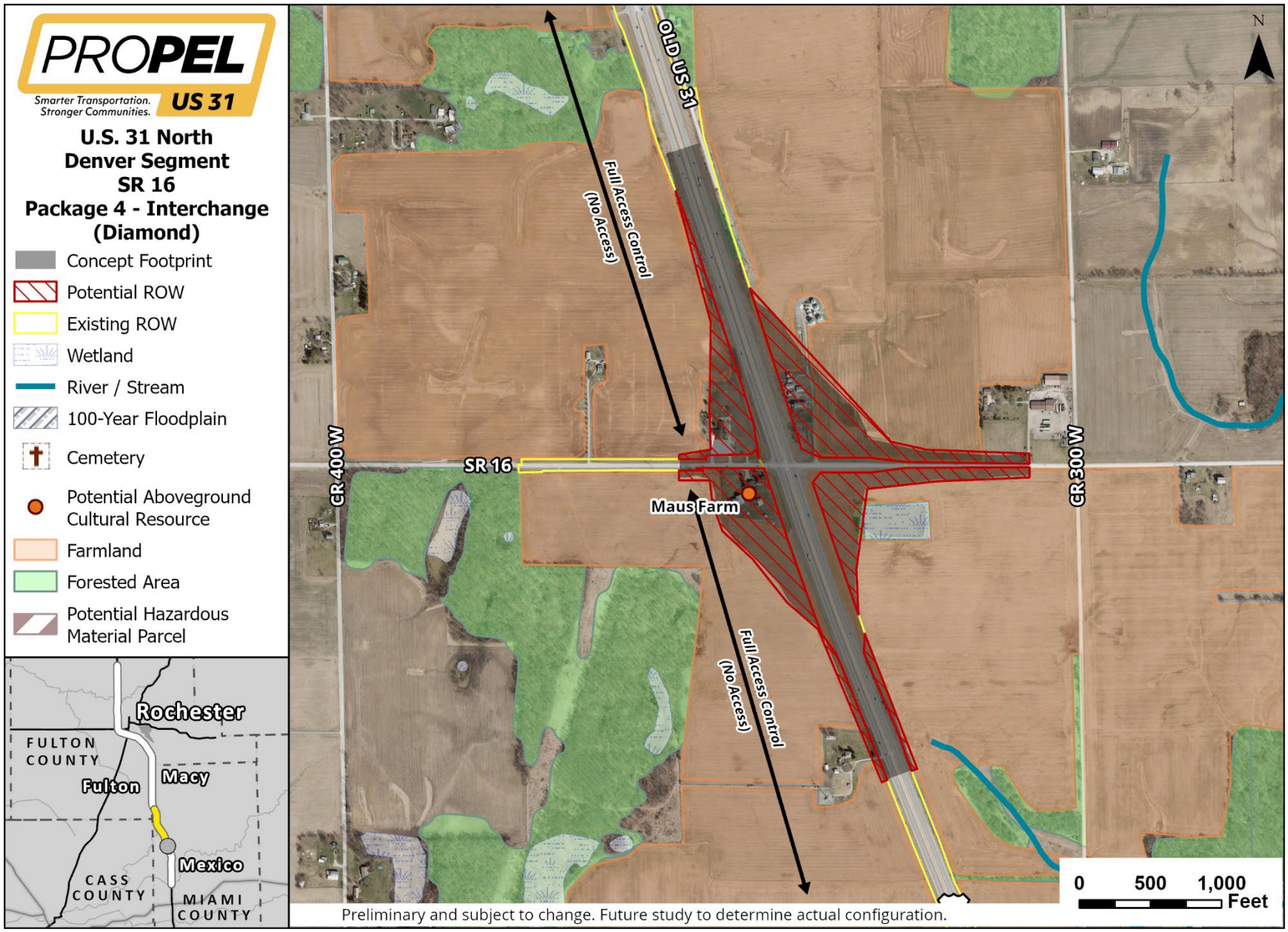
U.S. 31 North
Denver Segment
Old Route 31
Package 4 - Closed

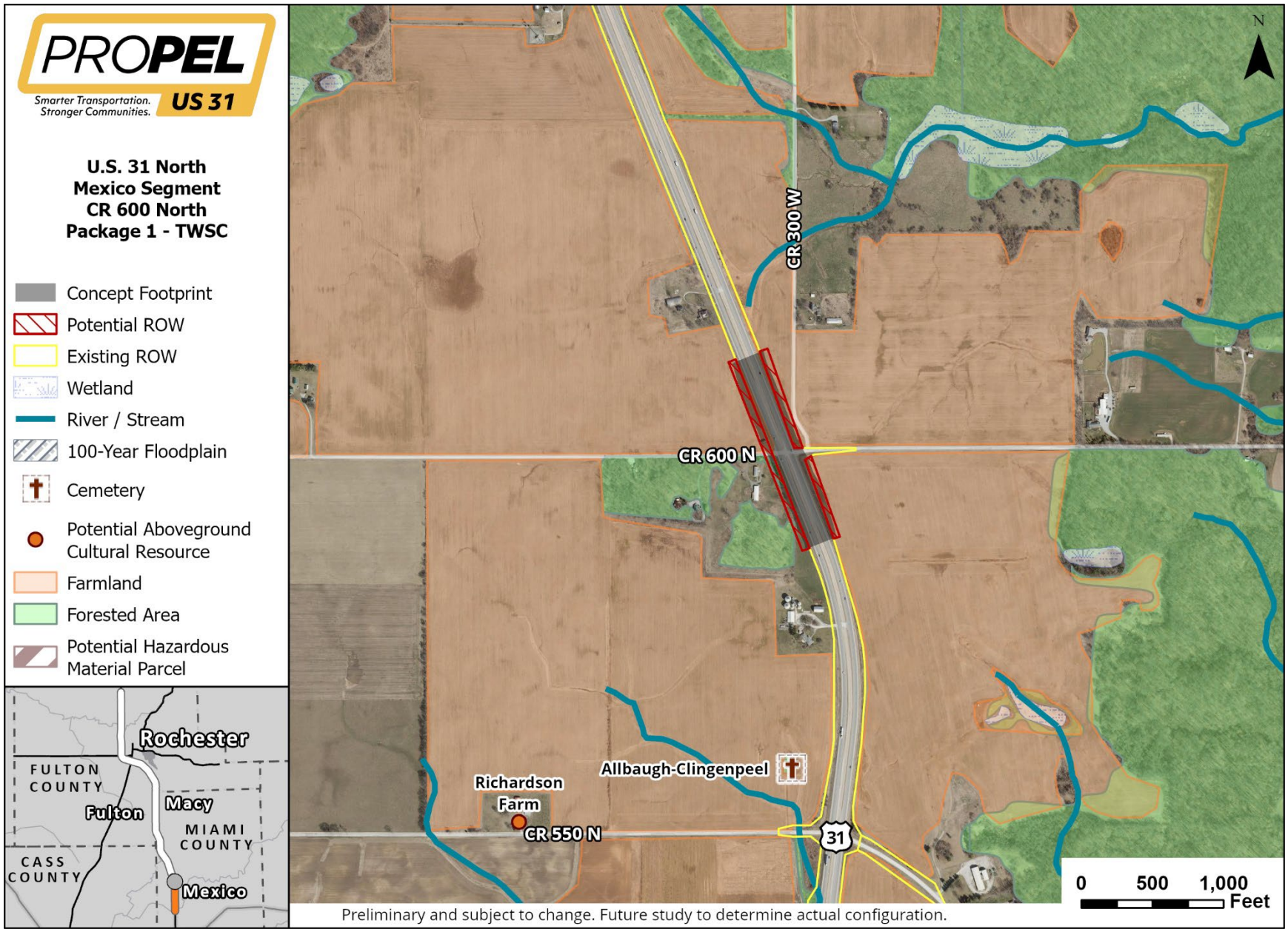
- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





Preliminary and subject to change. Future study to determine actual configuration.

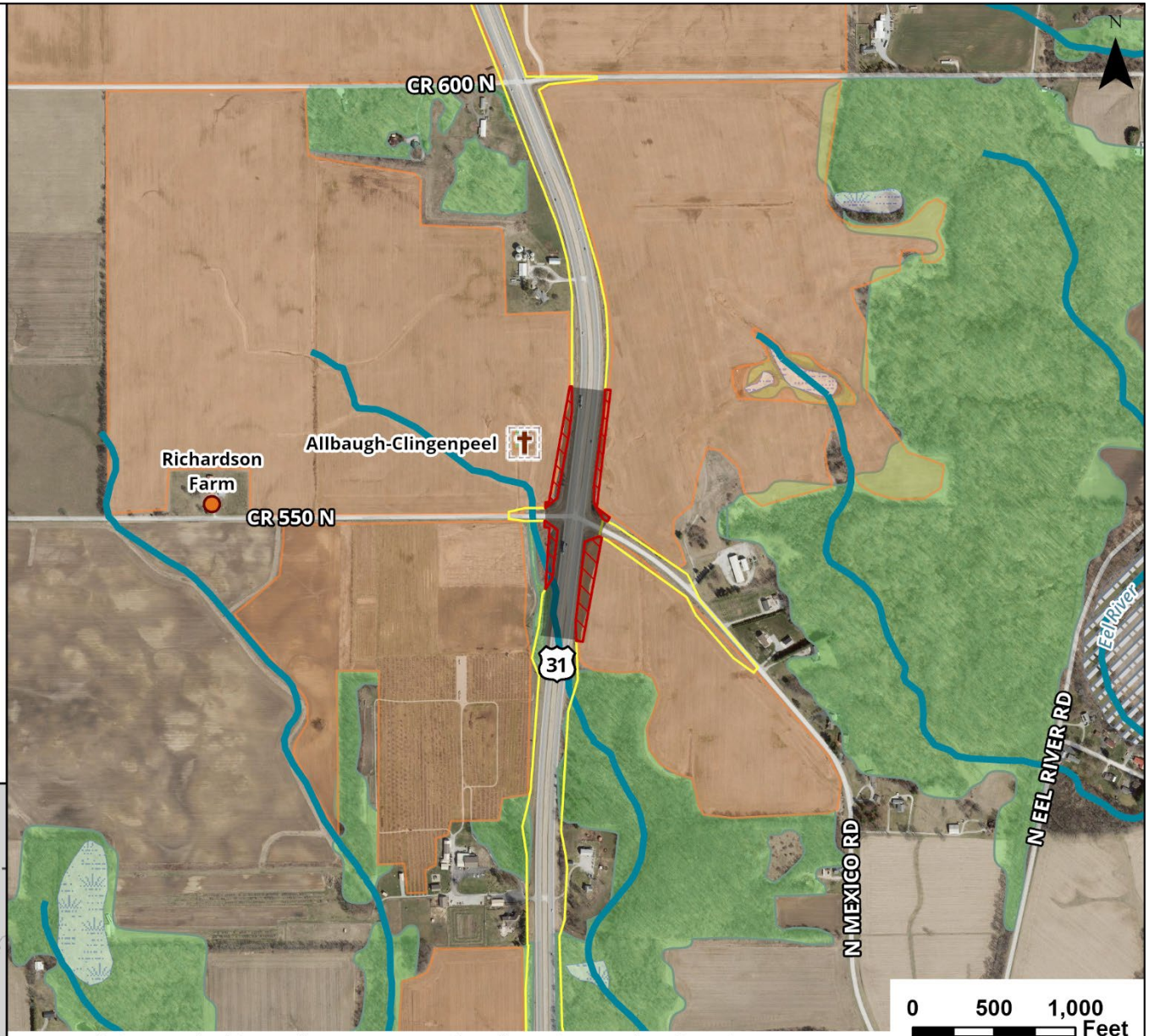

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Denver Segment
SR 16
Package 4 - Interchange (Diamond)
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
Mexico
CASS COUNTY
MIAMI COUNTY
OLD US 31
Full Access Control (No Access)
SR 16
CR 400 W
CR 300 W
Maus Farm
Full Access Control (No Access)
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 600 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 300 W
CR 600 N
Allbaugh-Clingenpeel
Richardson Farm
CR 550 N
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

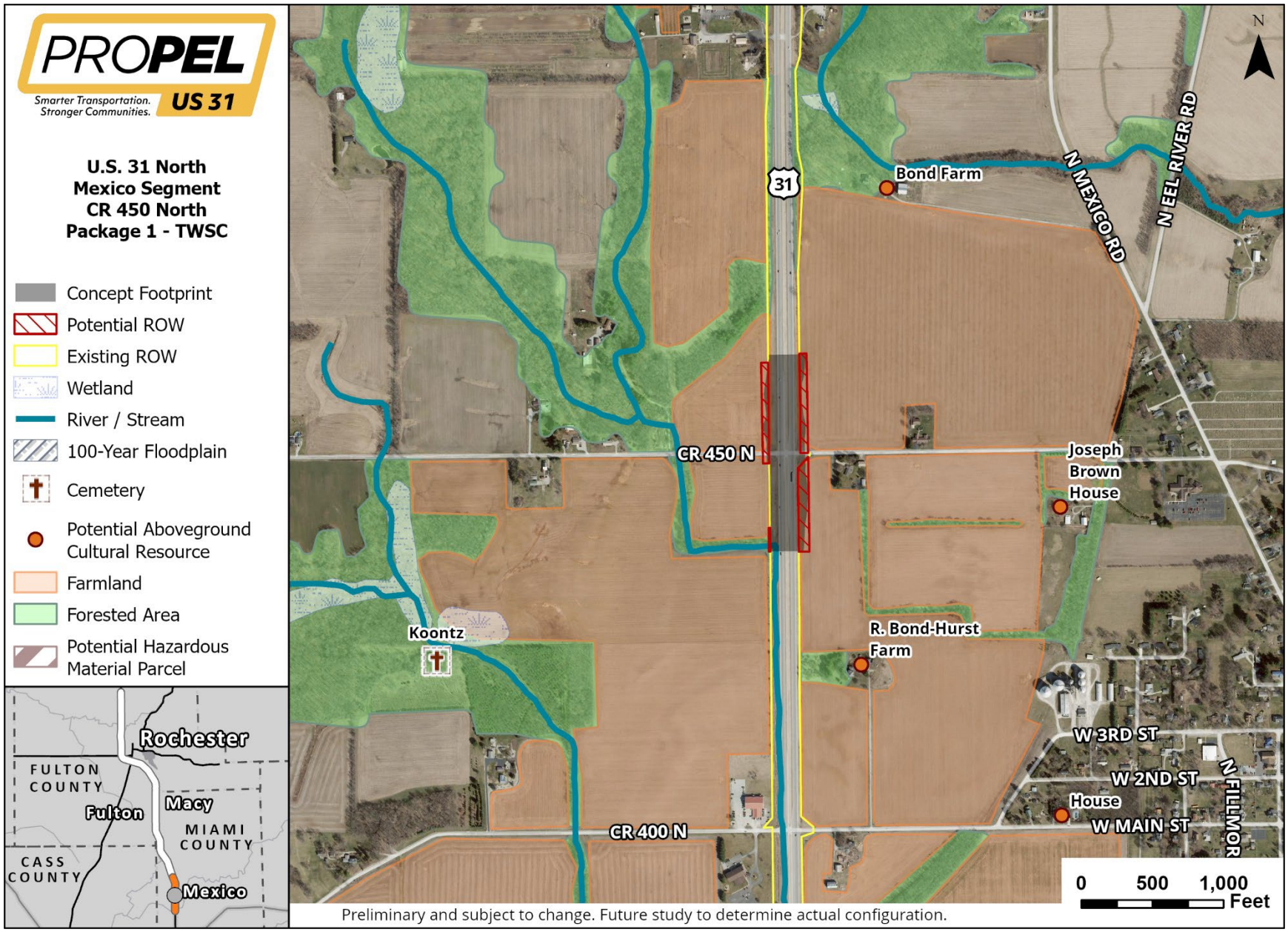
PROPEL
Smarter Transportation. Stronger Communities. US 31

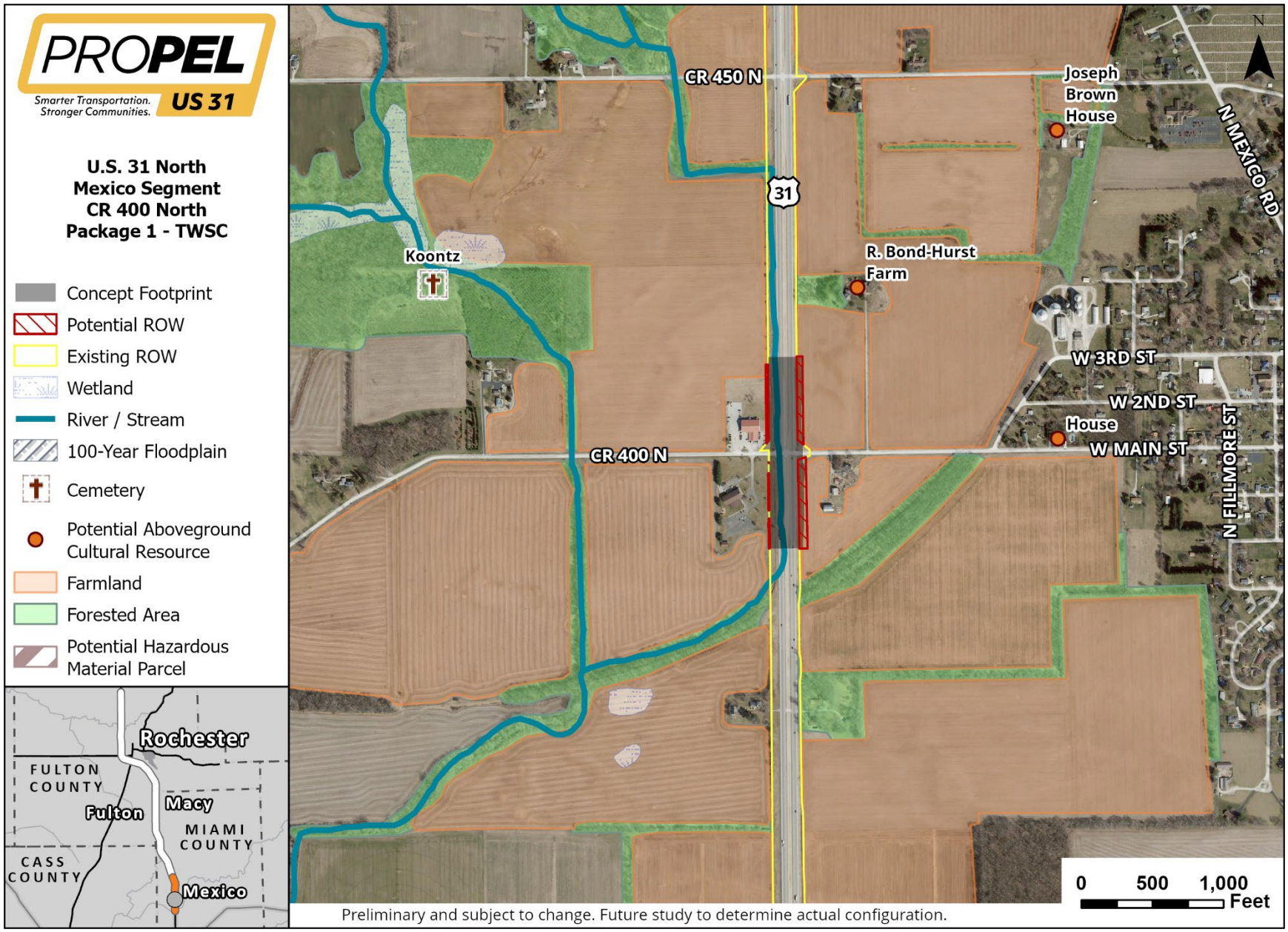
U.S. 31 North
Mexico Segment
CR 550 North / Mexico Rd
Package 1 - TWSC

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



Preliminary and subject to change. Future study to determine actual configuration.


PROPEL US 31
Smarter Transportation. Stronger Communities.
U.S. 31 North
Mexico Segment
CR 450 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
N
31
Bond Farm
N MEXICO RD
N EEL RIVER RD
CR 450 N
Joseph Brown House
Koontz
R. Bond-Hurst Farm
W 3RD ST
W 2ND ST
House
W MAIN ST
N FILLMOR
CR 400 N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 400 North
Package 1 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 450 N
CR 400 N
31
Koontz
Joseph Brown House
R. Bond-Hurst Farm
House
N MEXICO RD
W 3RD ST
W 2ND ST
W MAIN ST
N FILLMORE ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

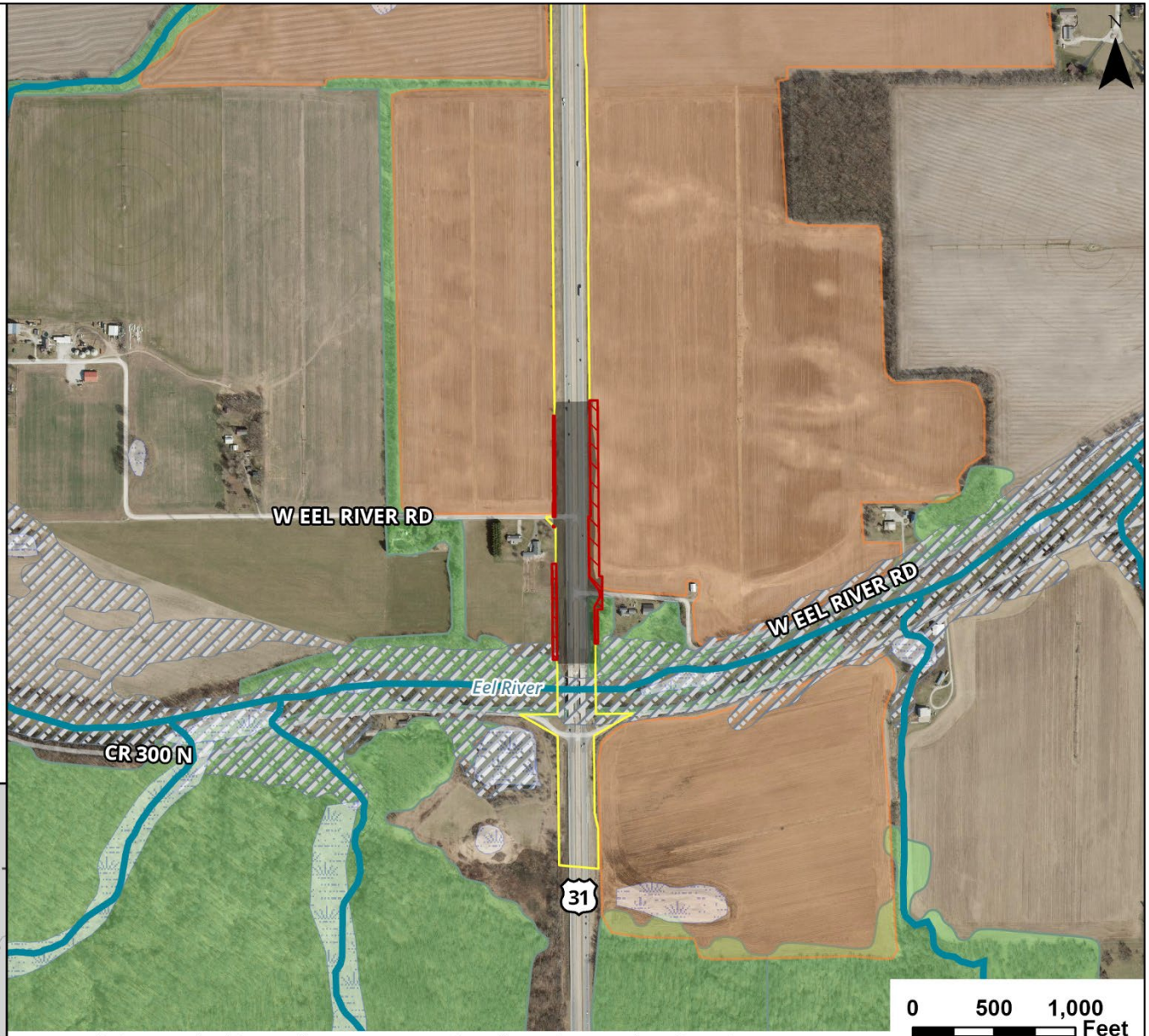
PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment

Eel River Rd (North)
Package 1 - Directional Intersection

Eel River Rd (South)
Package 1 - RIRO

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel

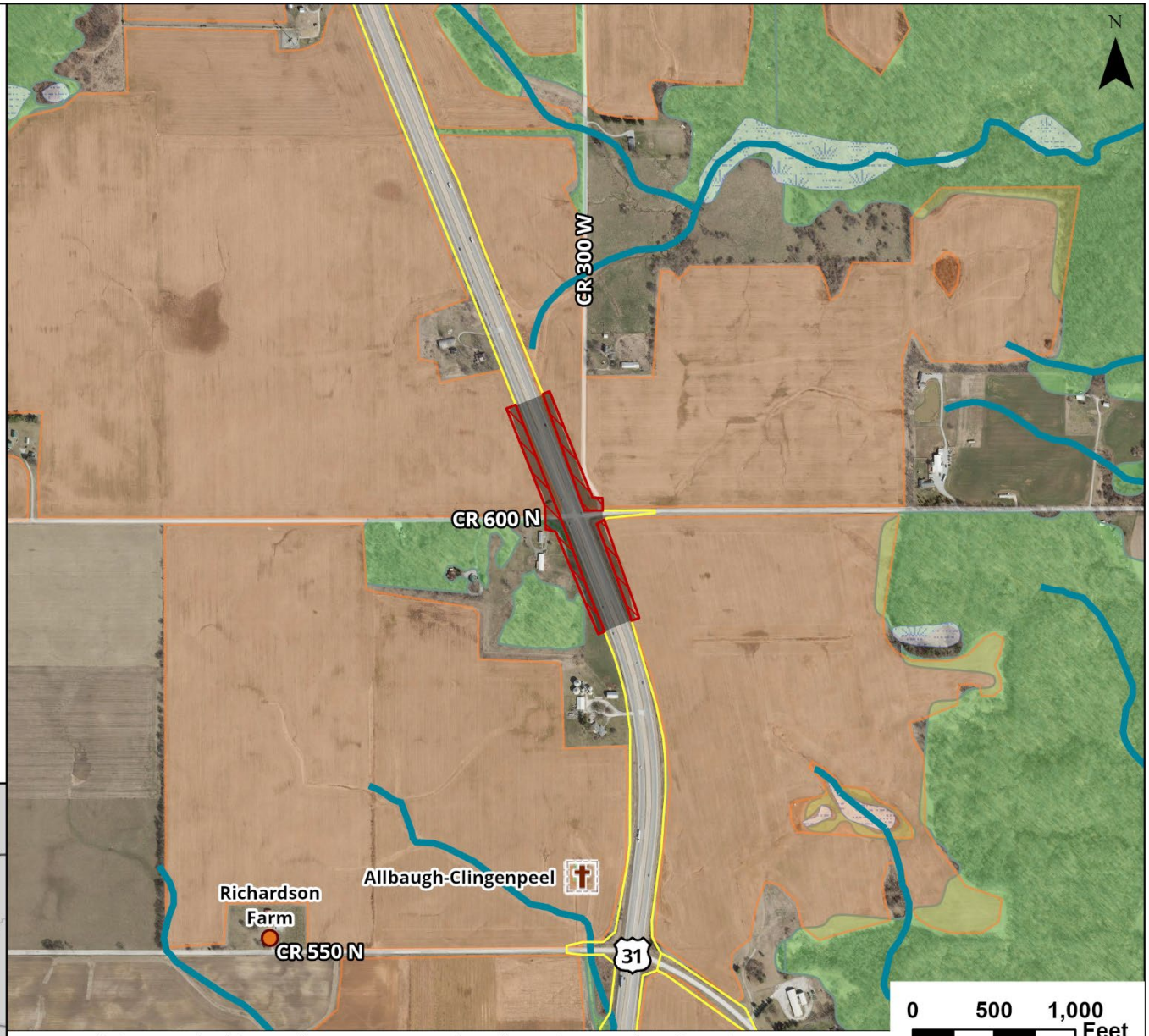


Preliminary and subject to change. Future study to determine actual configuration.

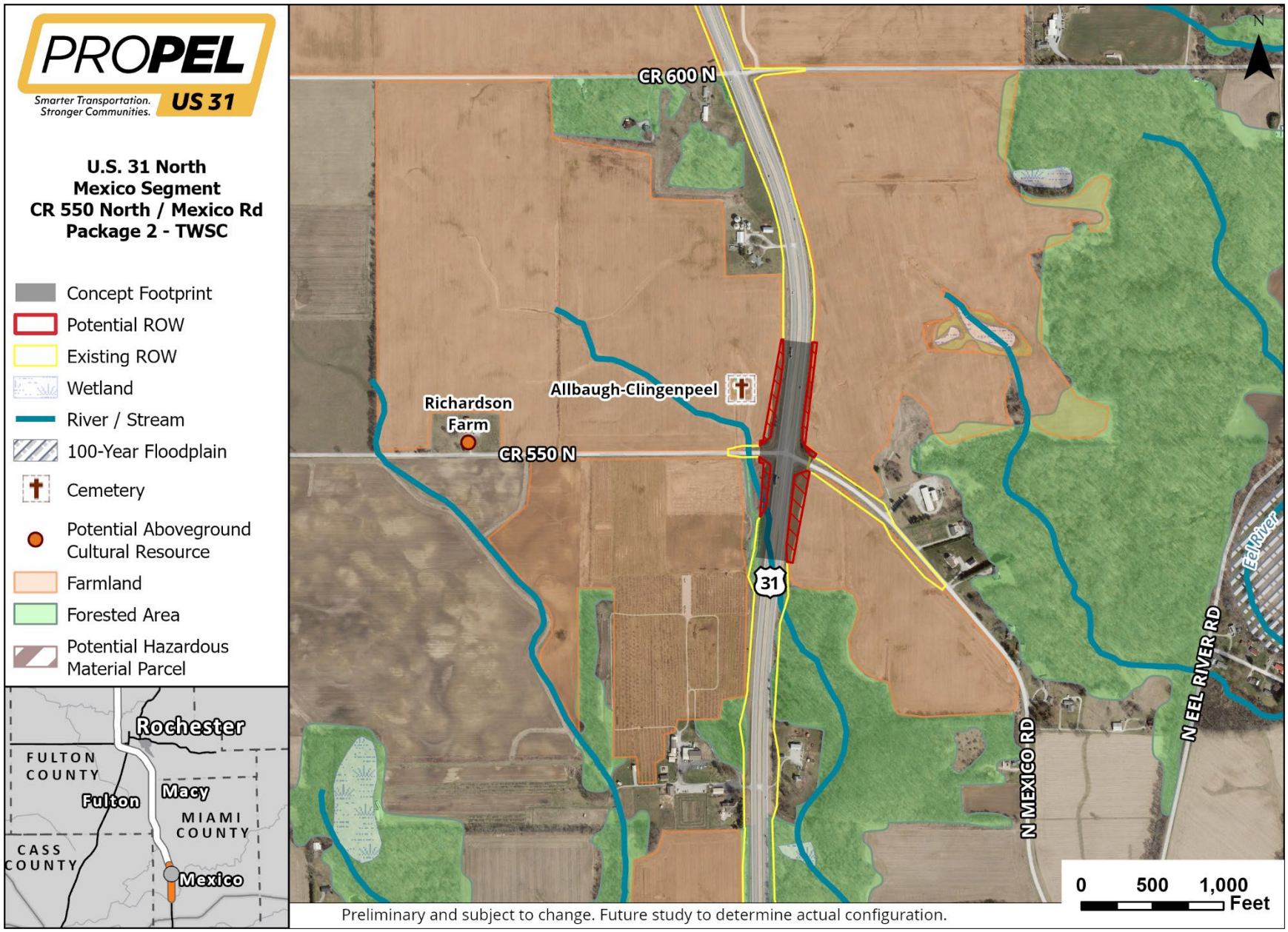
PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment
CR 600 North
Package 2 - Directional Intersection

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



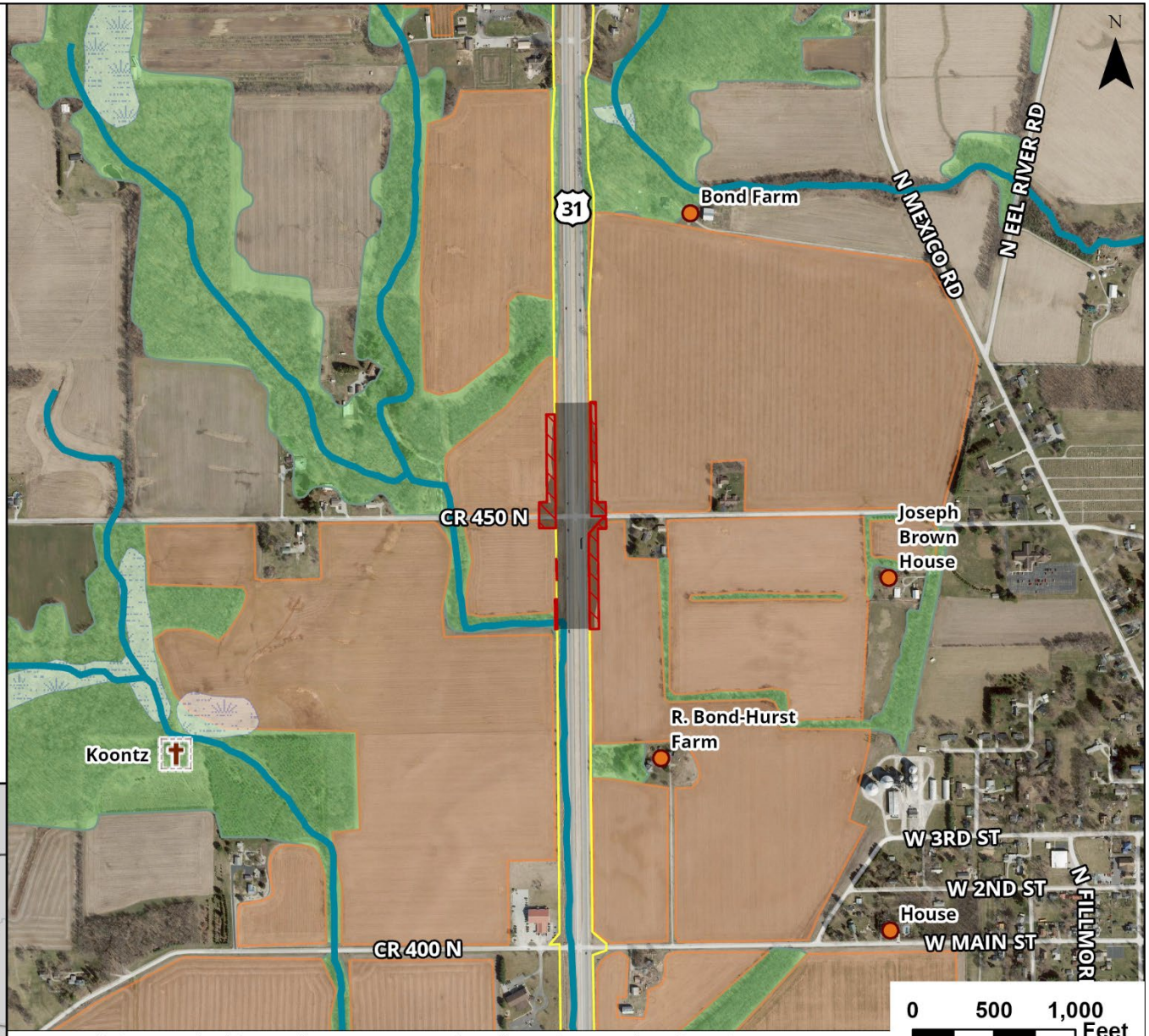
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 550 North / Mexico Rd
Package 2 - TWSC
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 600 N
Allbaugh-Clingenpeel
Richardson Farm
CR 550 N
31
N MEXICO RD
N EEL RIVER RD
Eel River
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

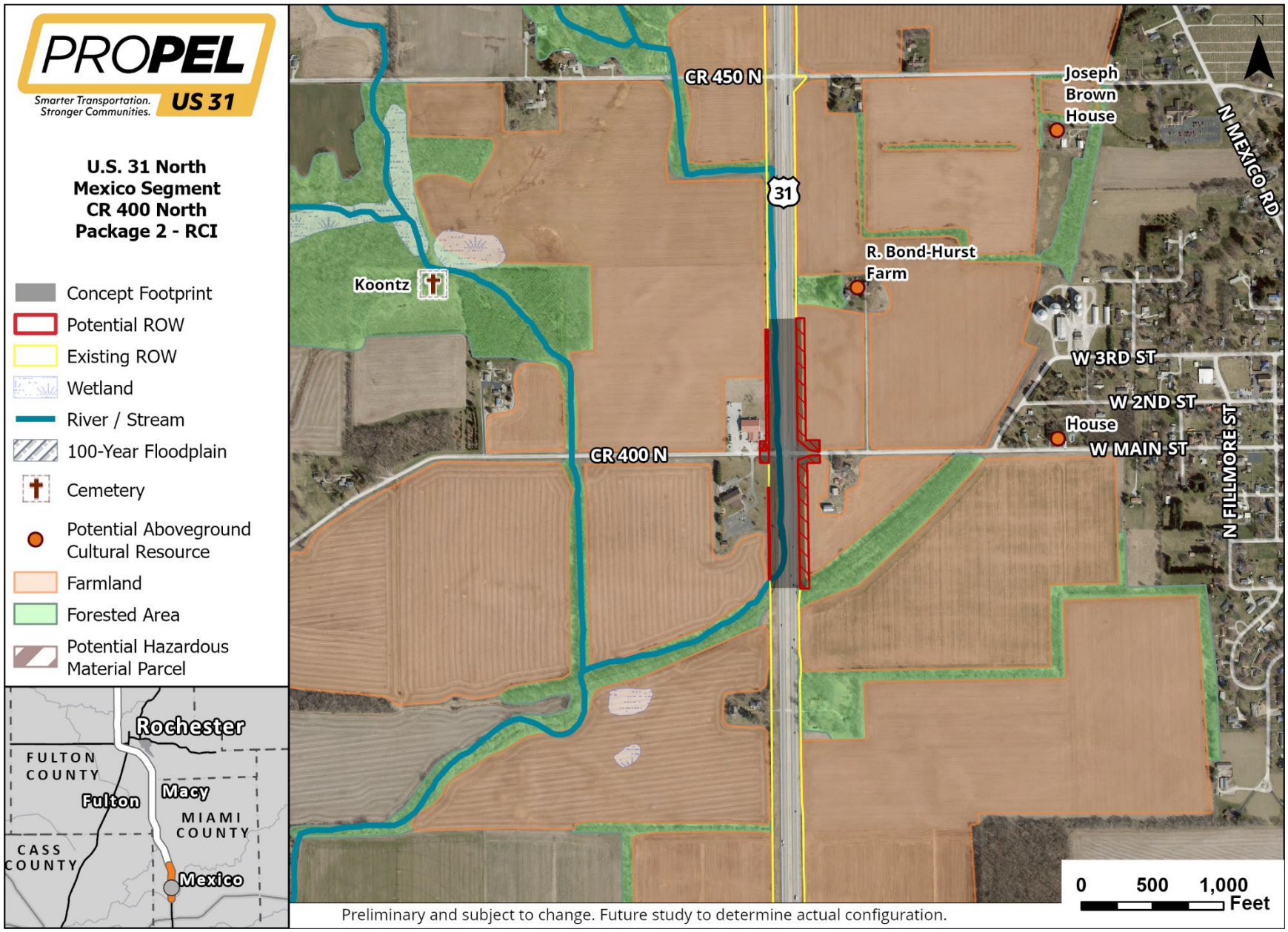
PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment
CR 450 North
Package 2 - Directional Intersection

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 400 North
Package 2 - RCI
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 450 N
CR 400 N
31
Koontz
Joseph Brown House
R. Bond-Hurst Farm
House
N MEXICO RD
W 3RD ST
W 2ND ST
W MAIN ST
N FILLMORE ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

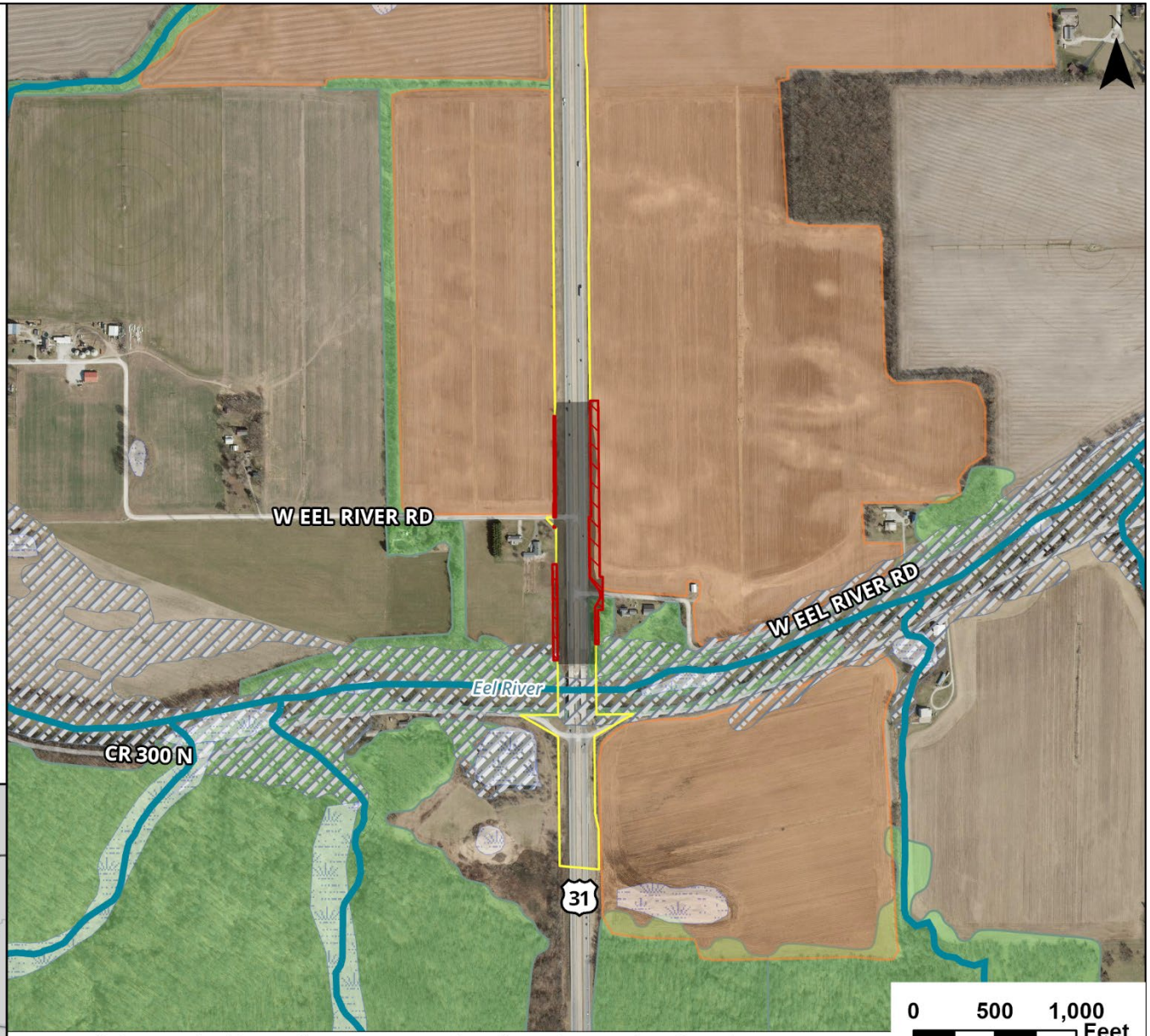
PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment

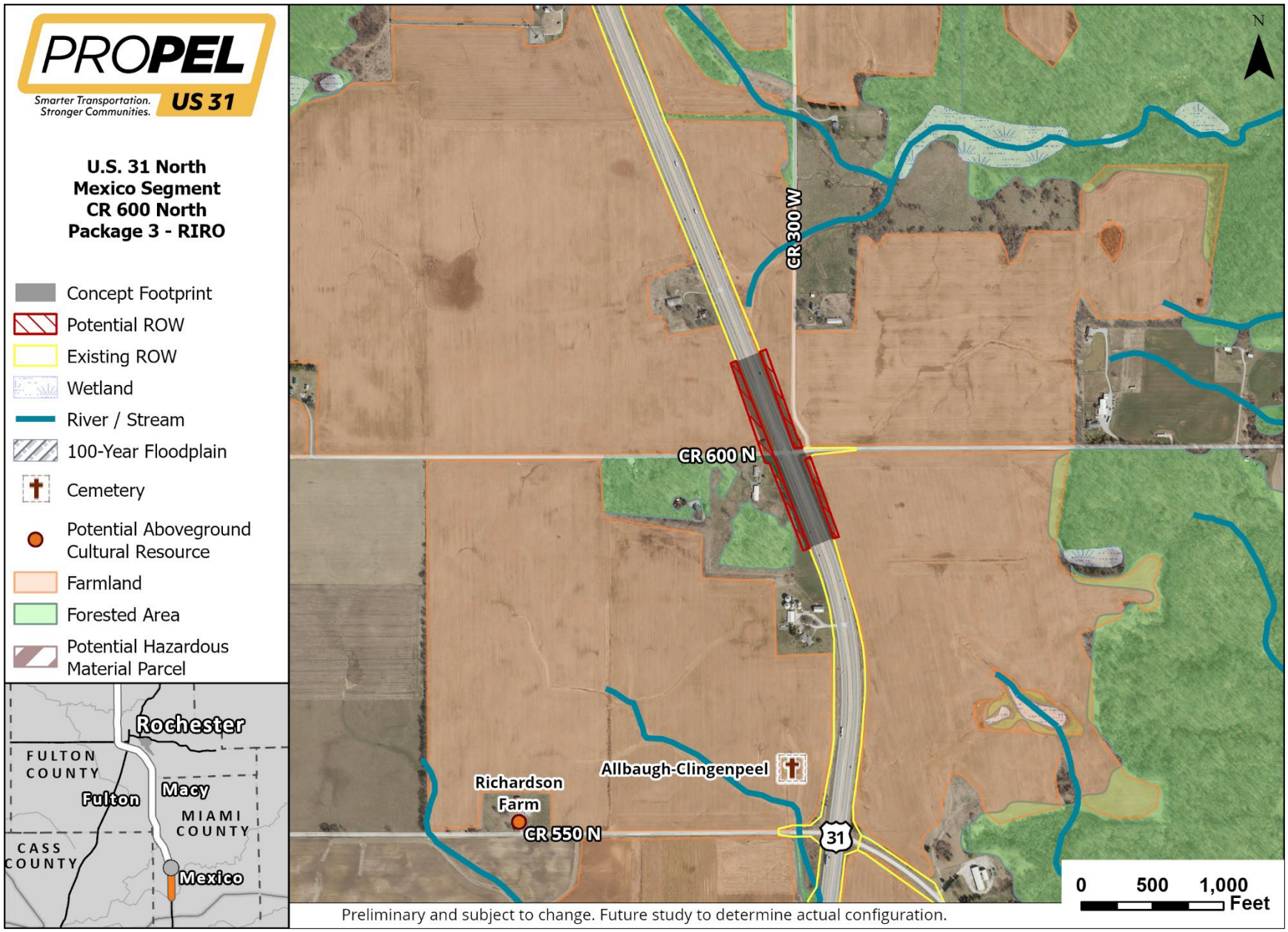
Eel River Rd (North)
Package 2 - Directional Intersection

Eel River Rd (South)
Package 2 - RIRO

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



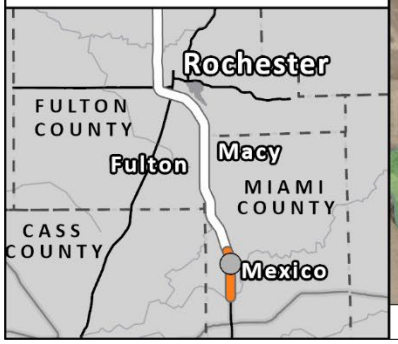
Preliminary and subject to change. Future study to determine actual configuration.

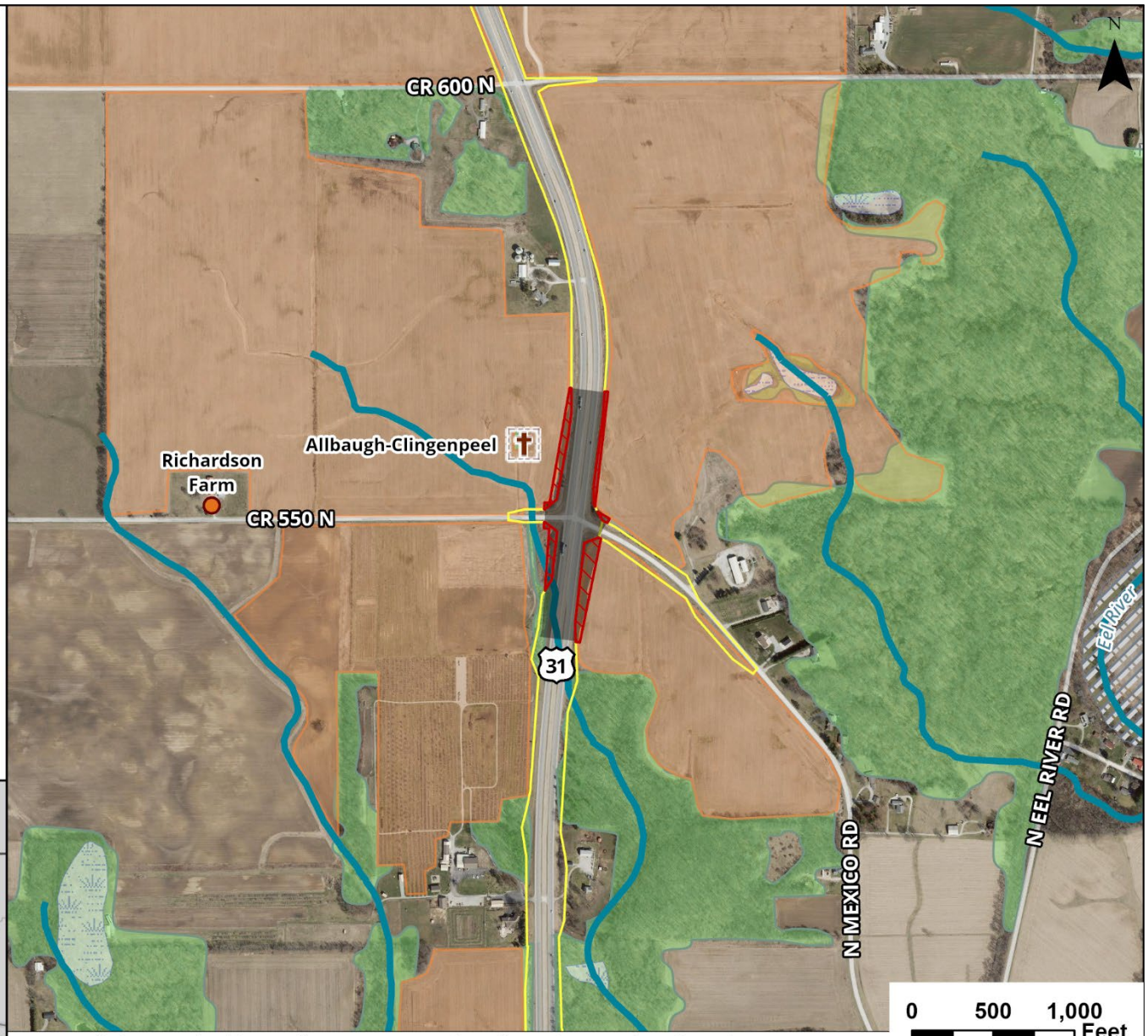

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 600 North
Package 3 - RIRO
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 300 W
CR 600 N
Richardson Farm
CR 550 N
Allbaugh-Clingenpeel
31
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment
CR 550 North / Mexico Rd
Package 3 - RIRO

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



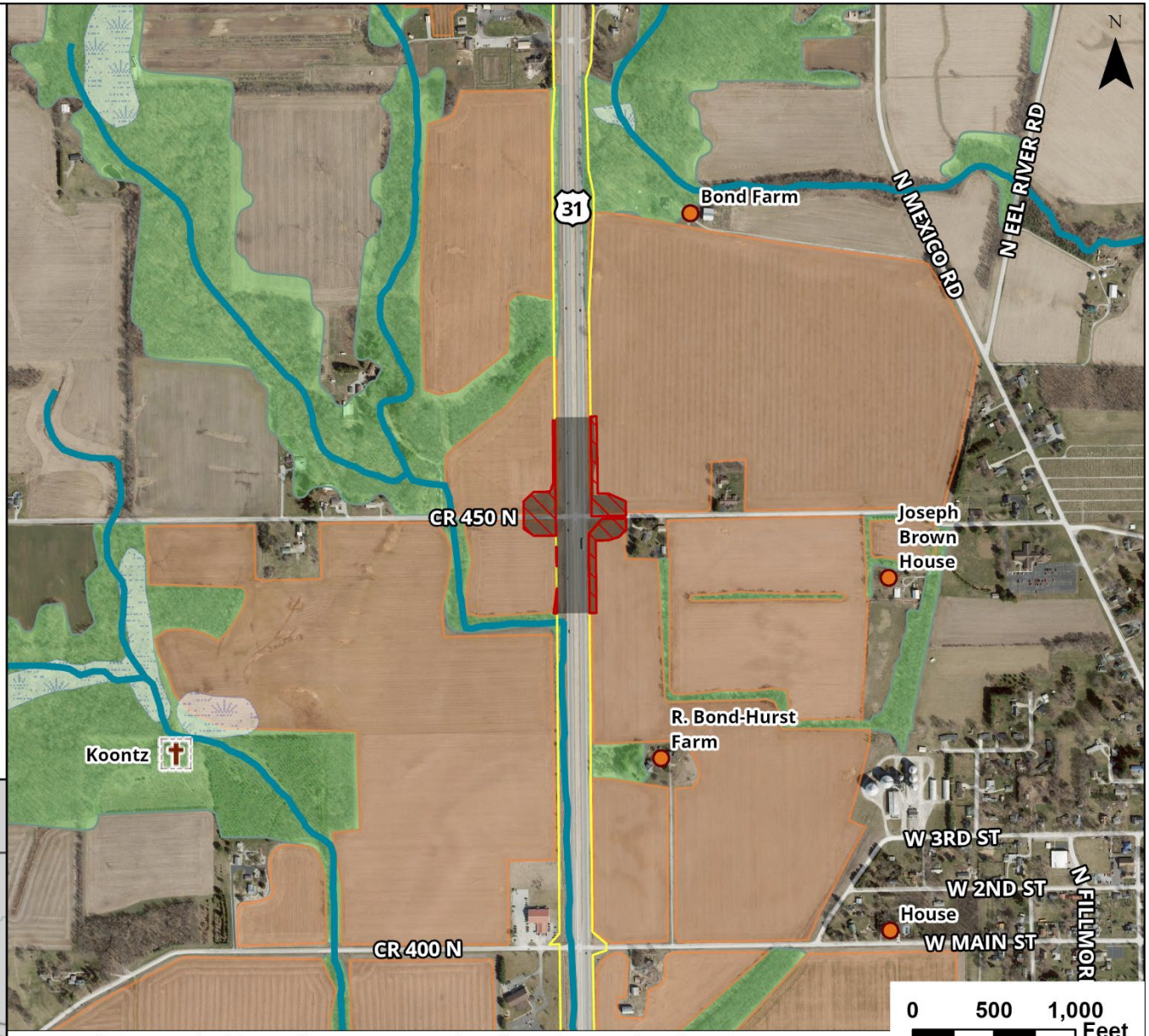


Preliminary and subject to change. Future study to determine actual configuration.

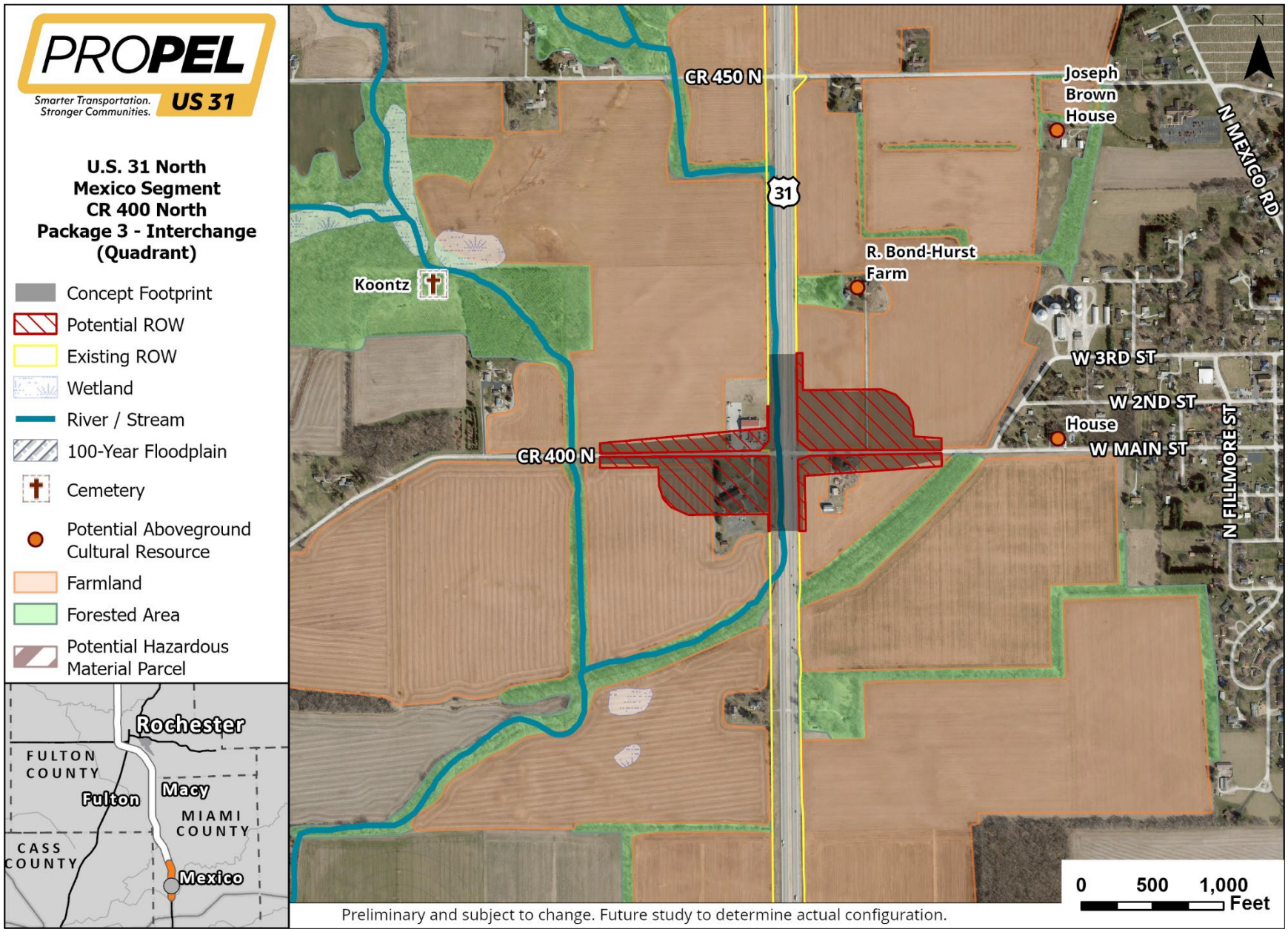
PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment
CR 450 North
Package 3 - Closed

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



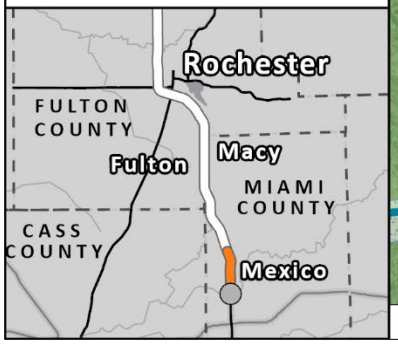
Preliminary and subject to change. Future study to determine actual configuration.

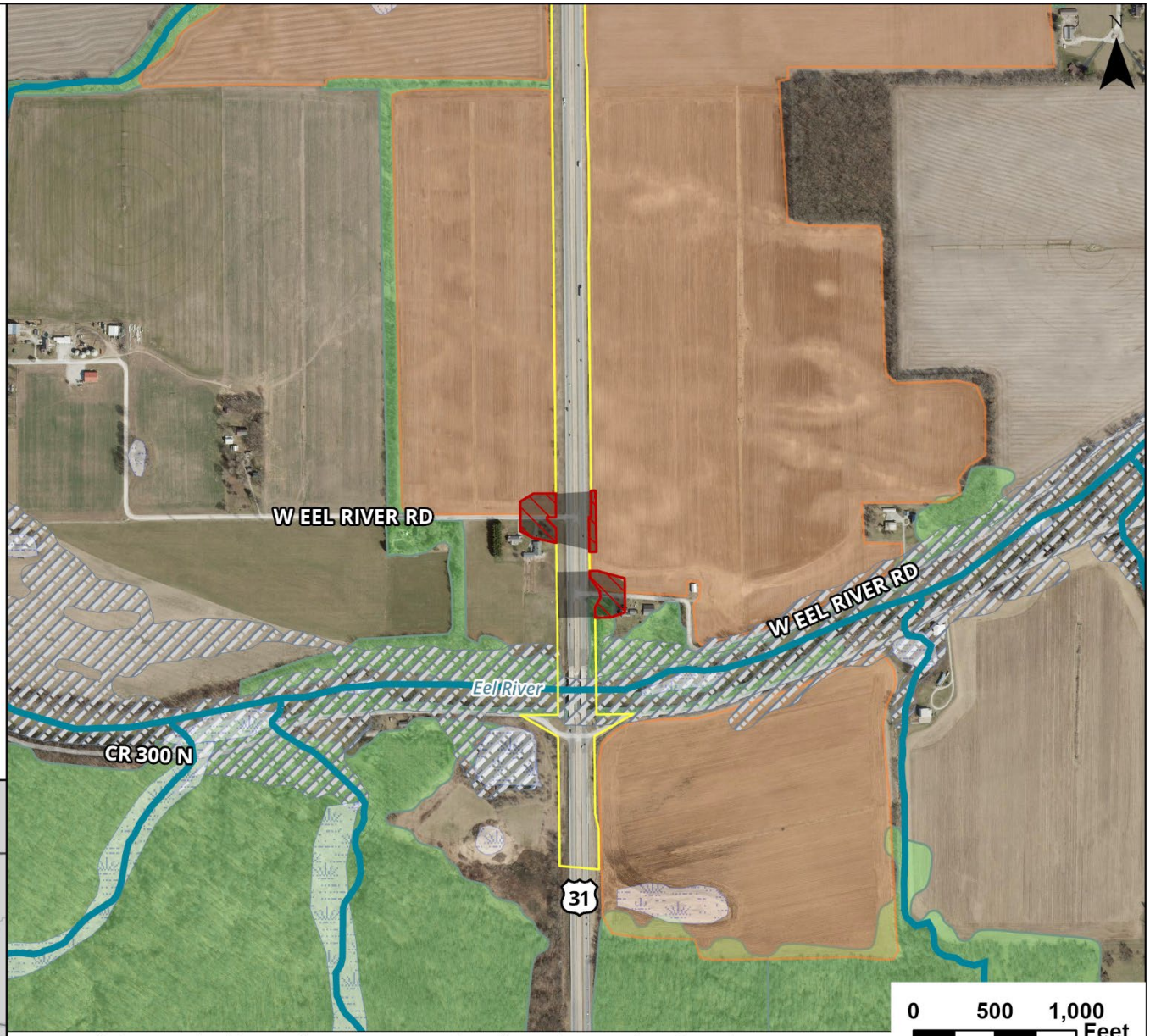

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 400 North
Package 3 - Interchange
(Quadrant)
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 450 N
CR 400 N
31
Koontz
Joseph Brown House
R. Bond-Hurst Farm
House
N MEXICO RD
W 3RD ST
W 2ND ST
W MAIN ST
N FILLMORE ST
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

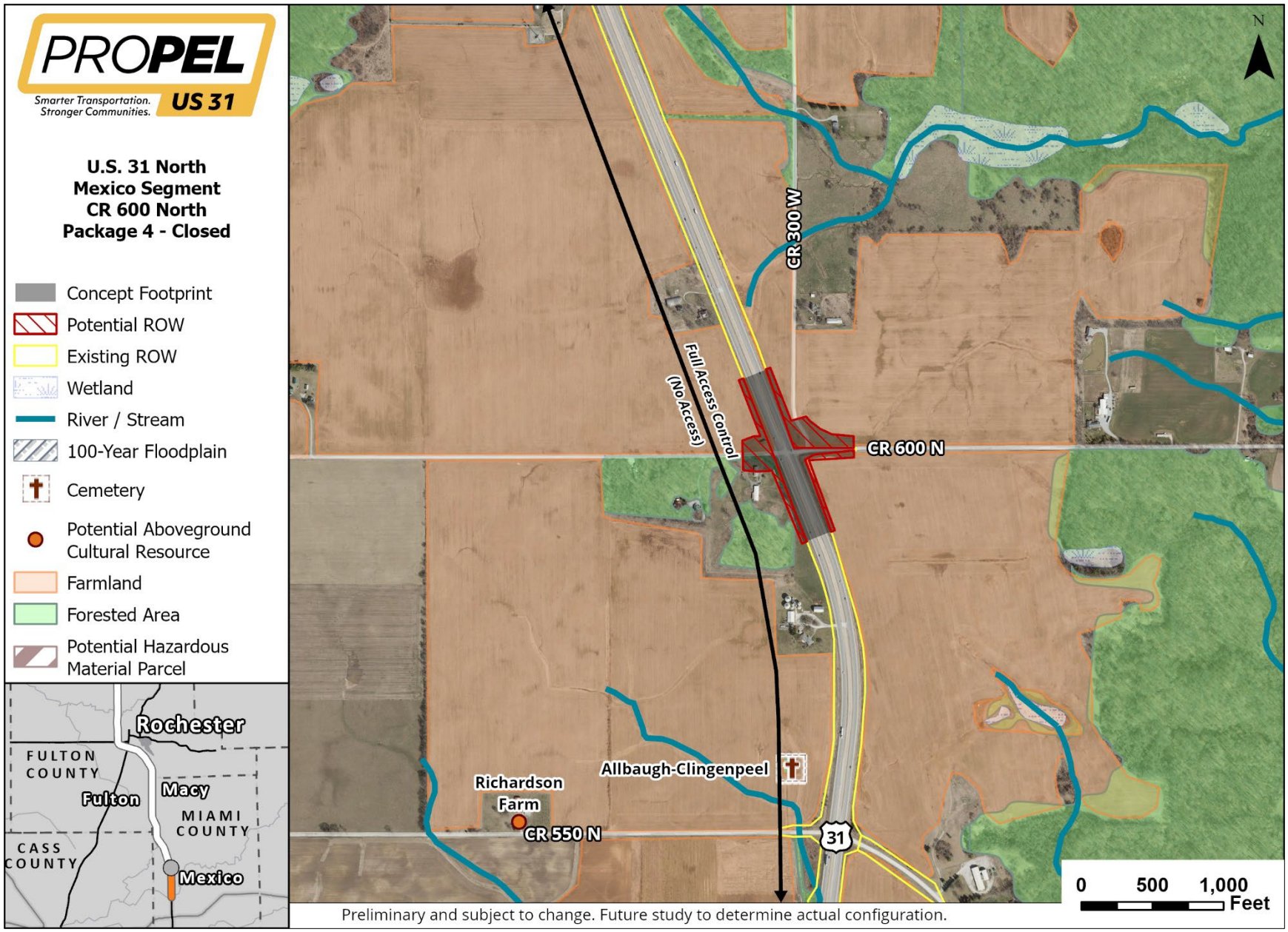
U.S. 31 North
Mexico Segment
Eel River Rd (North)
Package 3 - Closed
Eel River Rd (South)
Package 3 - Closed

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





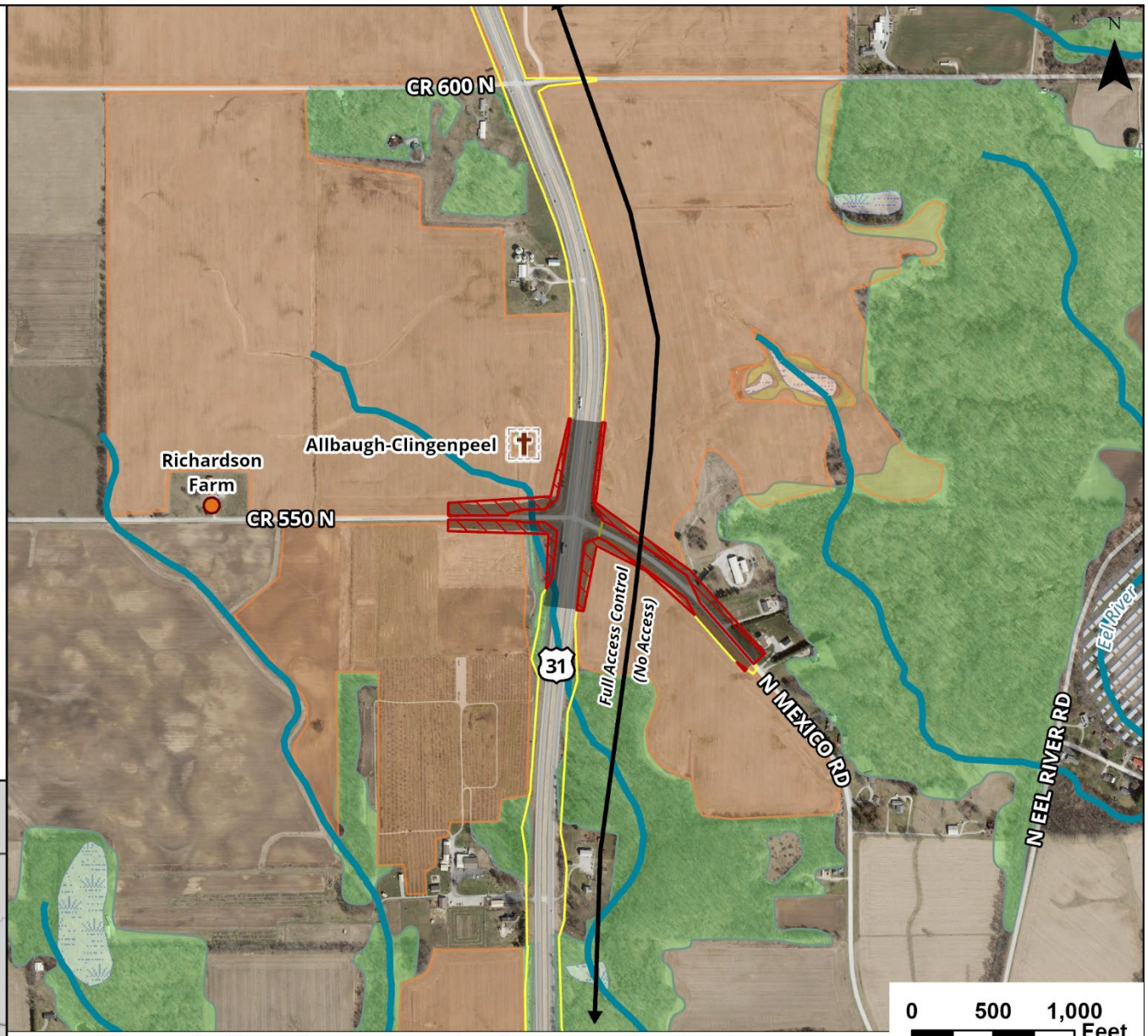
Preliminary and subject to change. Future study to determine actual configuration.


PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 600 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
N
CR 300 W
Full Access Control (No Access)
CR 600 N
Allbaugh-Clingenpeel
Richardson Farm
CR 550 N
31
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

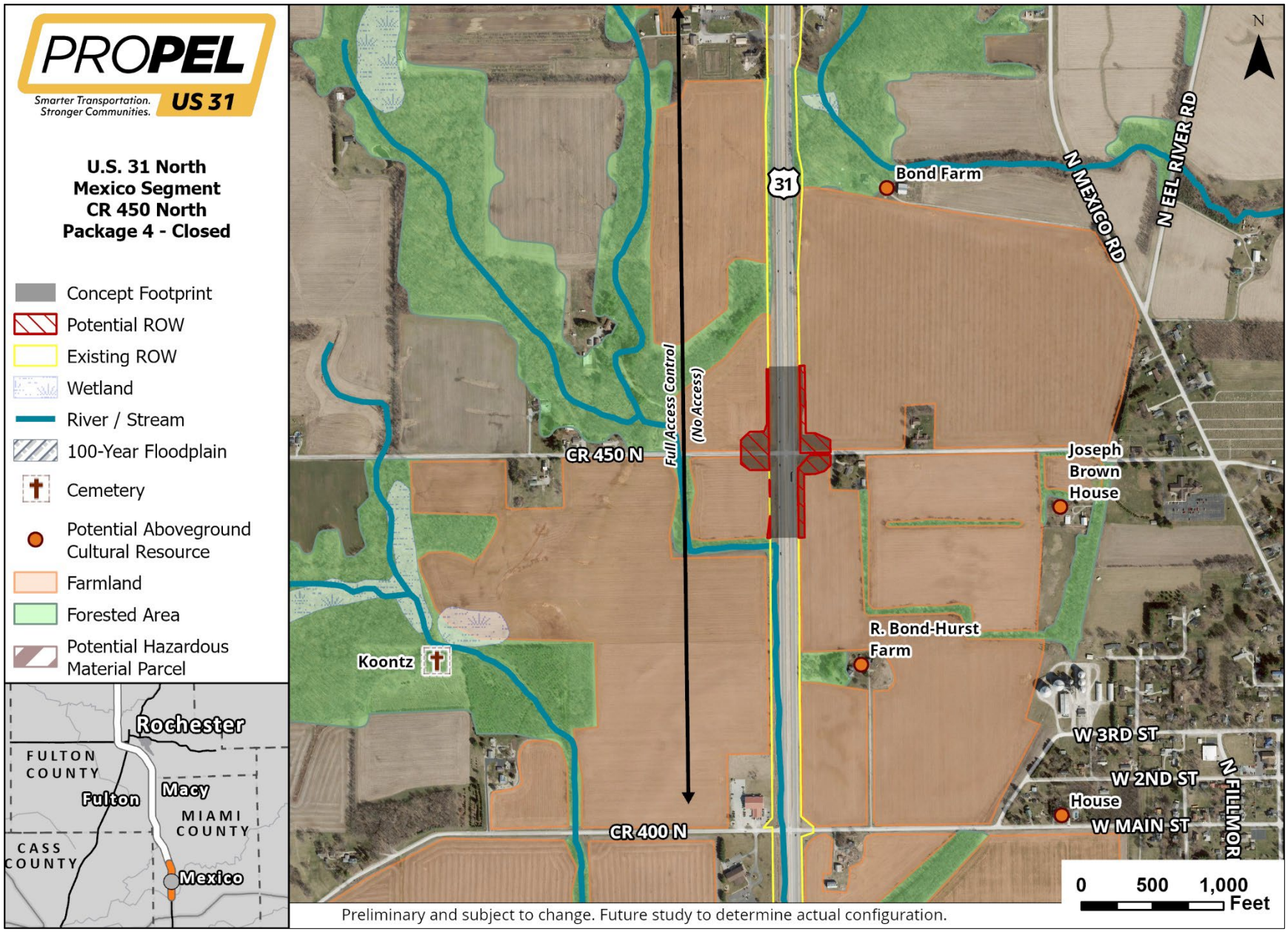
PROPEL
Smarter Transportation. Stronger Communities. US 31

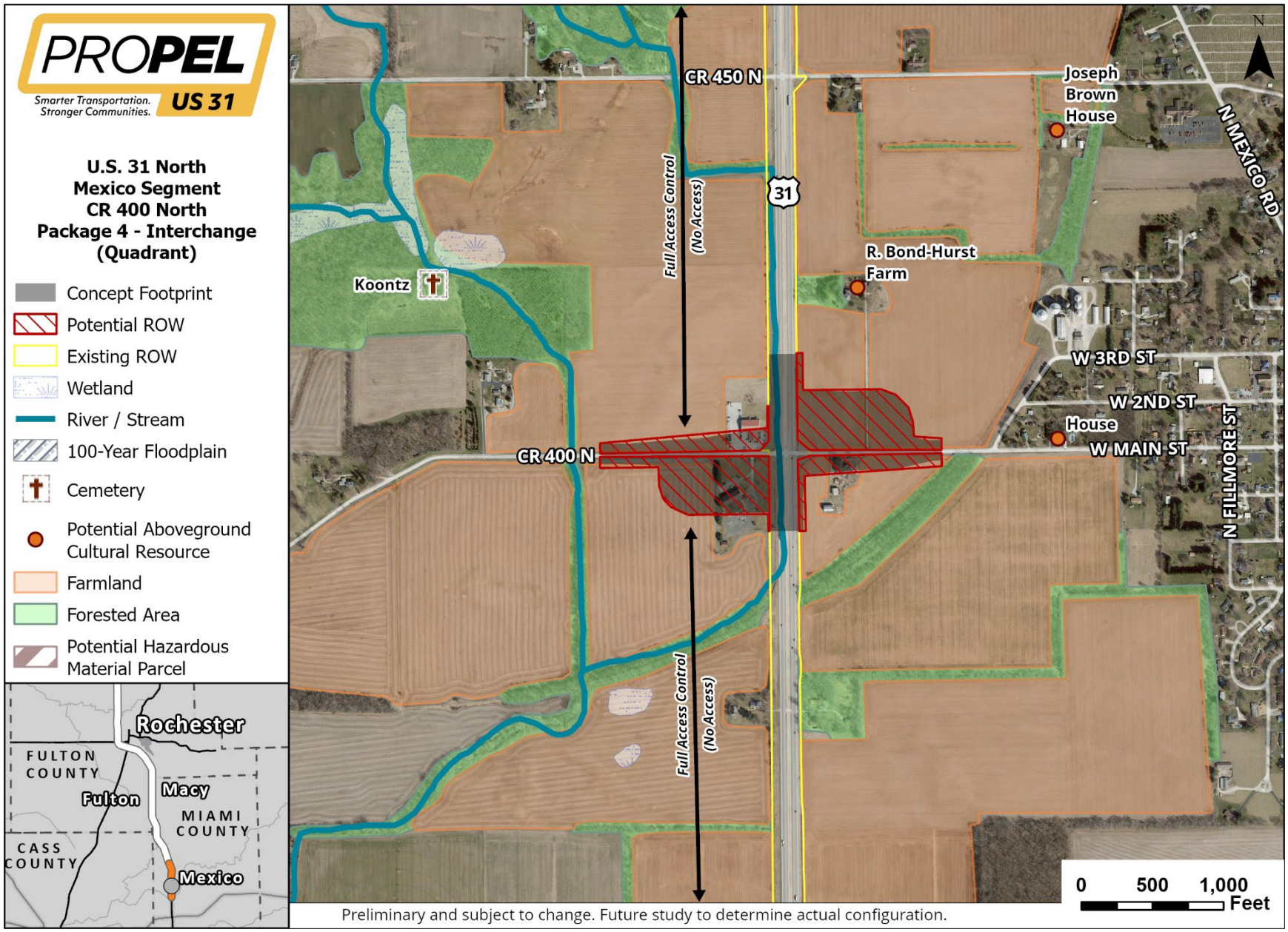
U.S. 31 North
Mexico Segment
CR 550 North / Mexico Rd
Package 4 - Overpass

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel



Preliminary and subject to change. Future study to determine actual configuration.

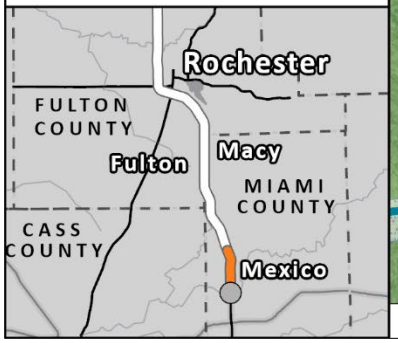

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 450 North
Package 4 - Closed
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
N
31
Bond Farm
N MEXICO RD
N EEL RIVER RD
Full Access Control
(No Access)
CR 450 N
Joseph Brown House
Koontz
R. Bond-Hurst Farm
W 3RD ST
W 2ND ST
House
W MAIN ST
N FILLMOR
CR 400 N
0 500 1,000
Feet
Preliminary and subject to change. Future study to determine actual configuration.

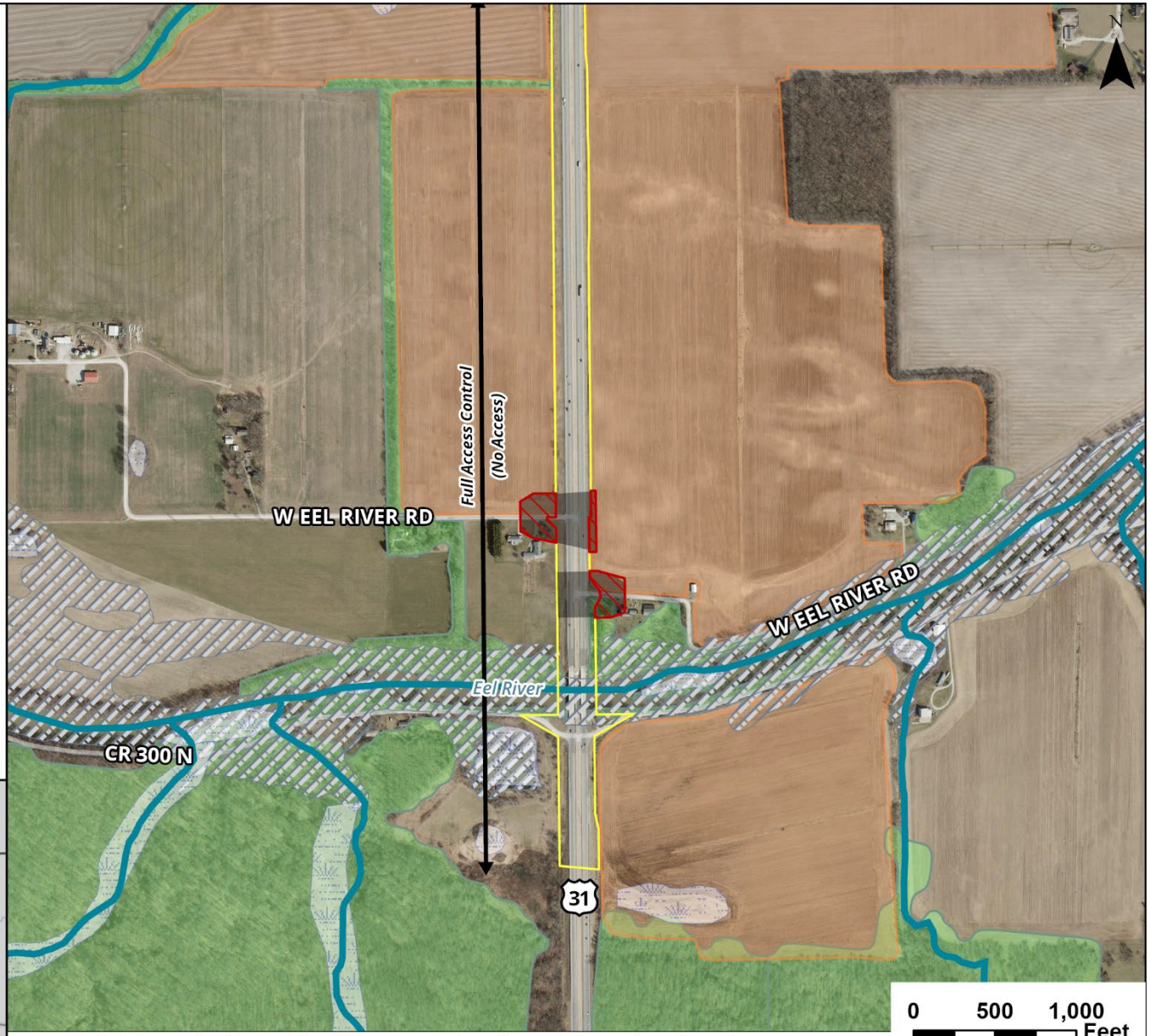

PROPEL
Smarter Transportation. Stronger Communities. US 31
U.S. 31 North
Mexico Segment
CR 400 North
Package 4 - Interchange
(Quadrant)
Concept Footprint
Potential ROW
Existing ROW
Wetland
River / Stream
100-Year Floodplain
Cemetery
Potential Aboveground Cultural Resource
Farmland
Forested Area
Potential Hazardous Material Parcel
Rochester
FULTON COUNTY
Fulton
Macy
MIAMI COUNTY
CASS COUNTY
Mexico
CR 450 N
Full Access Control (No Access)
31
Joseph Brown House
N MEXICO RD
Koontz
R. Bond-Hurst Farm
W 3RD ST
W 2ND ST
House
W MAIN ST
CR 400 N
N FILLMORE ST
Full Access Control (No Access)
N
0 500 1,000 Feet
Preliminary and subject to change. Future study to determine actual configuration.

PROPEL
Smarter Transportation. Stronger Communities. US 31

U.S. 31 North
Mexico Segment
Eel River Rd (North)
Package 4 - Closed
Eel River Rd (South)
Package 4 - Closed

- Concept Footprint
- Potential ROW
- Existing ROW
- Wetland
- River / Stream
- 100-Year Floodplain
- Cemetery
- Potential Aboveground Cultural Resource
- Farmland
- Forested Area
- Potential Hazardous Material Parcel





Preliminary and subject to change. Future study to determine actual configuration.

PROPEL US 31 NORTH
LEVEL 3 REPORT

APPENDIX B.
PLANNING-LEVEL COST ESTIMATES FOR IMPROVEMENT PACKAGES

US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Fulton North**

Improvement Package #: **1**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	4800	LFT	$ 36.00	$ 173,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	712	CYS	$ 70.00	$ 50,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	4268	SYS	$ 35.00	$ 149,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	3168	TON	$ 144.00	$ 456,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	5280	TON	$ 166.00	$ 876,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	1876	TON	$ 113.00	$ 212,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	640	TON	$ 111.00	$ 71,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,033,000
	Sub-Total				**$ 3,020,000**
	Expected Range of Construction Cost Sub-Total			**$ 2,718,000**	**to $ 3,322,000**
	Construction Engineering	2%		$ 54,000	to $ 66,000
	Mob/Demob	5%		$ 136,000	to $ 166,000
	Clearing Right of Way	2%		$ 54,000	to $ 66,000
	MOT	5%		$ 136,000	to $ 166,000
	Opinion of Probable Construction Cost			**$ 3,098,000**	**$ 3,786,000**
	Contingency	35%		$ 1,084,000	to $ 1,325,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 217,000	to $ 265,000
	Preliminary Engineering	15%		$ 465,000	to $ 568,000
	RW Cost			$ 49,000	to $ 59,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 4,913,000**	**to $ 6,003,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Fulton North**

Improvement Package #: **2**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	5200	LFT	$ 36.00	$ 187,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1779	CYS	$ 70.00	$ 125,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	10666	SYS	$ 35.00	$ 373,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	3608	TON	$ 144.00	$ 520,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	6013	TON	$ 166.00	$ 998,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	2111	TON	$ 113.00	$ 239,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	721	TON	$ 111.00	$ 80,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,311,000
	Sub-Total				**$ 3,833,000**
	Expected Range of Construction Cost Sub-Total			**$ 3,450,000**	**to $ 4,216,000**
	Construction Engineering	2%		$ 69,000	to $ 84,000
	Mob/Demob	5%		$ 173,000	to $ 211,000
	Clearing Right of Way	2%		$ 69,000	to $ 84,000
	MOT	5%		$ 173,000	to $ 211,000
	Opinion of Probable Construction Cost			**$ 3,934,000**	**$ 4,806,000**
	Contingency	35%		$ 1,377,000	to $ 1,682,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 275,000	to $ 336,000
	Preliminary Engineering	15%		$ 590,000	to $ 721,000
	RW Cost			$ 88,000	to $ 108,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 6,264,000**	**to $ 7,653,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Fulton North**

Improvement Package #: **3**

Desciption of Improvement Package: Expressway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	4800	LFT	$ 36.00	$ 173,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	356	CYS	$ 70.00	$ 25,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	2132	SYS	$ 35.00	$ 75,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	2640	TON	$ 144.00	$ 380,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	4400	TON	$ 166.00	$ 730,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	940	TON	$ 113.00	$ 106,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	320	TON	$ 111.00	$ 36,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 793,000
	Sub-Total				**$ 2,318,000**
	Expected Range of Construction Cost Sub-Total			**$ 2,086,000**	**to $ 2,550,000**
	Construction Engineering	2%		$ 42,000	to $ 51,000
	Mob/Demob	5%		$ 104,000	to $ 128,000
	Clearing Right of Way	2%		$ 42,000	to $ 51,000
	MOT	5%		$ 104,000	to $ 128,000
	Opinion of Probable Construction Cost			**$ 2,378,000**	**$ 2,908,000**
	Contingency	35%		$ 832,000	to $ 1,018,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 166,000	to $ 204,000
	Preliminary Engineering	15%		$ 357,000	to $ 436,000
	RW Cost			$ 59,000	to $ 73,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 3,792,000**	**to $ 4,639,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Fulton North**

Improvement Package #: **4**

Desciption of Improvement Package: Freeway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	540	LFT	$ 36.00	$ 19,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1408	CYS	$ 70.00	$ 99,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	8448	SYS	$ 35.00	$ 296,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	2104	TON	$ 144.00	$ 303,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	1160	TON	$ 166.00	$ 193,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	3716	TON	$ 113.00	$ 420,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1268	TON	$ 111.00	$ 141,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 765,000
	Sub-Total				**$ 2,236,000**
	Expected Range of Construction Cost Sub-Total			**$ 2,012,000**	**to $ 2,460,000**
	Construction Engineering	2%		$ 40,000	to $ 49,000
	Mob/Demob	5%		$ 101,000	to $ 123,000
	Clearing Right of Way	2%		$ 40,000	to $ 49,000
	MOT	5%		$ 101,000	to $ 123,000
	Opinion of Probable Construction Cost			**$ 2,294,000**	**$ 2,804,000**
	Contingency	35%		$ 803,000	to $ 981,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 161,000	to $ 196,000
	Preliminary Engineering	15%		$ 344,000	to $ 421,000
	RW Cost			$ 158,000	to $ 194,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 3,760,000**	**to $ 4,596,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester North**

Improvement Package #: **1**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	7200	LFT	$ 36.00	$ 259,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1068	CYS	$ 70.00	$ 75,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	8534	SYS	$ 35.00	$ 299,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	4752	TON	$ 144.00	$ 684,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	7920	TON	$ 166.00	$ 1,315,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	2032	TON	$ 113.00	$ 230,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	694	TON	$ 111.00	$ 77,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,528,000
	Sub-Total				**$ 4,467,000**
	Expected Range of Construction Cost Sub-Total			**$ 4,020,000**	**to $ 4,914,000**
	Construction Engineering	2%		$ 80,000	to $ 98,000
	Mob/Demob	5%		$ 201,000	to $ 246,000
	Clearing Right of Way	2%		$ 80,000	to $ 98,000
	MOT	5%		$ 201,000	to $ 246,000
	Opinion of Probable Construction Cost			**$ 4,582,000**	**$ 5,602,000**
	Contingency	35%		$ 1,604,000	to $ 1,961,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 321,000	to $ 392,000
	Preliminary Engineering	15%		$ 687,000	to $ 840,000
	RW Cost			$ 31,000	to $ 37,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 7,225,000**	**to $ 8,832,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester North**

Improvement Package #: **2**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	8000	LFT	$ 36.00	$ 288,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	2846	CYS	$ 70.00	$ 199,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	17066	SYS	$ 35.00	$ 597,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	5632	TON	$ 144.00	$ 811,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	9386	TON	$ 166.00	$ 1,558,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	4066	TON	$ 113.00	$ 459,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1388	TON	$ 111.00	$ 154,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 2,114,000
	Sub-Total				**$ 6,180,000**
	Expected Range of Construction Cost Sub-Total			**$ 5,562,000**	**to $ 6,798,000**
	Construction Engineering	2%		$ 111,000	to $ 136,000
	Mob/Demob	5%		$ 278,000	to $ 340,000
	Clearing Right of Way	2%		$ 111,000	to $ 136,000
	MOT	5%		$ 278,000	to $ 340,000
	Opinion of Probable Construction Cost			**$ 6,340,000**	**$ 7,750,000**
	Contingency	35%		$ 2,219,000	to $ 2,713,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 444,000	to $ 543,000
	Preliminary Engineering	15%		$ 951,000	to $ 1,163,000
	RW Cost			$ 31,000	to $ 37,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 9,985,000**	**to $ 12,206,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester North**

Improvement Package #: **3**

Desciption of Improvement Package: Expressway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	31655	LFT	$ 36.00	$ 1,140,000
203-02070	Borrow	134894	CYS	$ 72.00	$ 9,712,000
303-01180	Compacted Aggregate No. 53	7615	CYS	$ 70.00	$ 533,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	45688	SYS	$ 35.00	$ 1,599,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	7069	TON	$ 144.00	$ 1,018,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	10389	TON	$ 166.00	$ 1,725,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	20105	TON	$ 113.00	$ 2,272,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	6853	TON	$ 111.00	$ 761,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	46784	SF	$ 175.00	$ 8,187,000
	Unquantified Items (as percentage of items above)	52%			$ 14,012,000
	Sub-Total				**$ 40,959,000**
	Expected Range of Construction Cost Sub-Total			**$ 36,863,000**	**to $ 45,055,000**
	Construction Engineering	2%		$ 737,000	to $ 901,000
	Mob/Demob	5%		$ 1,843,000	to $ 2,253,000
	Clearing Right of Way	2%		$ 737,000	to $ 901,000
	MOT	5%		$ 1,843,000	to $ 2,253,000
	Opinion of Probable Construction Cost			**$ 42,023,000**	**$ 51,363,000**
	Contingency	35%		$ 14,708,000	to $ 17,977,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 2,942,000	to $ 3,595,000
	Preliminary Engineering	15%		$ 6,303,000	to $ 7,704,000
	RW Cost			$ 1,436,000	to $ 1,755,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 67,412,000**	**to $ 82,394,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester North**

Improvement Package #: **4**

Desciption of Improvement Package: Freeway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	23910	LFT	$ 36.00	$ 861,000
203-02070	Borrow	213097	CYS	$ 72.00	$ 15,343,000
303-01180	Compacted Aggregate No. 53	19817	CYS	$ 70.00	$ 1,387,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	118903	SYS	$ 35.00	$ 4,162,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	11701	TON	$ 144.00	$ 1,685,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	16348	TON	$ 166.00	$ 2,714,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	52316	TON	$ 113.00	$ 5,912,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	17836	TON	$ 111.00	$ 1,980,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	48358	SF	$ 175.00	$ 8,463,000
	Unquantified Items (as percentage of items above)	52%			$ 22,104,000
	Sub-Total				**$ 64,611,000**
	Expected Range of Construction Cost Sub-Total			**$ 58,150,000**	**to $ 71,072,000**
	Construction Engineering	2%		$ 1,163,000	to $ 1,421,000
	Mob/Demob	5%		$ 2,908,000	to $ 3,554,000
	Clearing Right of Way	2%		$ 1,163,000	to $ 1,421,000
	MOT	5%		$ 2,908,000	to $ 3,554,000
	Opinion of Probable Construction Cost			**$ 66,292,000**	**$ 81,022,000**
	Contingency	35%		$ 23,202,000	to $ 28,358,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 4,640,000	to $ 5,672,000
	Preliminary Engineering	15%		$ 9,944,000	to $ 12,153,000
	RW Cost			$ 2,812,000	to $ 3,436,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 106,890,000**	**to $ 130,641,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester South**

Improvement Package #: **1**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	15130	LFT	$ 36.00	$ 545,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	5481	CYS	$ 70.00	$ 384,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	32884	SYS	$ 35.00	$ 1,151,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	7949	TON	$ 144.00	$ 1,145,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	13248	TON	$ 166.00	$ 2,199,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	14468	TON	$ 113.00	$ 1,635,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	4933	TON	$ 111.00	$ 548,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 3,956,000
	Sub-Total				**$ 11,563,000**
	Expected Range of Construction Cost Sub-Total			**$ 10,407,000**	**to $ 12,719,000**
	Construction Engineering	2%		$ 208,000	to $ 254,000
	Mob/Demob	5%		$ 520,000	to $ 636,000
	Clearing Right of Way	2%		$ 208,000	to $ 254,000
	MOT	5%		$ 520,000	to $ 636,000
	Opinion of Probable Construction Cost			**$ 11,863,000**	**$ 14,499,000**
	Contingency	35%		$ 4,152,000	to $ 5,075,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 830,000	to $ 1,015,000
	Preliminary Engineering	15%		$ 1,779,000	to $ 2,175,000
	RW Cost			$ 149,000	to $ 183,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 18,773,000**	**to $ 22,947,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester South**

Improvement Package #: **2**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	12955	LFT	$ 36.00	$ 466,000
203-02070	Borrow	65308	CYS	$ 72.00	$ 4,702,000
303-01180	Compacted Aggregate No. 53	8043	CYS	$ 70.00	$ 563,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	48251	SYS	$ 35.00	$ 1,689,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	6797	TON	$ 144.00	$ 979,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	10741	TON	$ 166.00	$ 1,783,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	19508	TON	$ 113.00	$ 2,204,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	6651	TON	$ 111.00	$ 738,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	14826	SF	$ 175.00	$ 2,595,000
	Unquantified Items (as percentage of items above)	52%			$ 8,174,000
	Sub-Total				**$ 23,893,000**
	Expected Range of Construction Cost Sub-Total			**$ 21,504,000**	**to $ 26,282,000**
	Construction Engineering	2%		$ 430,000	to $ 526,000
	Mob/Demob	5%		$ 1,075,000	to $ 1,314,000
	Clearing Right of Way	2%		$ 430,000	to $ 526,000
	MOT	5%		$ 1,075,000	to $ 1,314,000
	Opinion of Probable Construction Cost			**$ 24,514,000**	**$ 29,962,000**
	Contingency	35%		$ 8,580,000	to $ 10,487,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 1,716,000	to $ 2,097,000
	Preliminary Engineering	15%		$ 3,677,000	to $ 4,494,000
	RW Cost			$ 238,000	to $ 290,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 38,725,000**	**to $ 47,330,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester South**

Improvement Package #: **3**

Desciption of Improvement Package: Expressway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	15470	LFT	$ 36.00	$ 557,000
203-02070	Borrow	250340	CYS	$ 72.00	$ 18,024,000
303-01180	Compacted Aggregate No. 53	10694	CYS	$ 70.00	$ 749,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	64173	SYS	$ 35.00	$ 2,246,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	7825	TON	$ 144.00	$ 1,127,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	13040	TON	$ 166.00	$ 2,165,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	28234	TON	$ 113.00	$ 3,190,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	9627	TON	$ 111.00	$ 1,069,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	29652	SF	$ 175.00	$ 5,189,000
	Unquantified Items (as percentage of items above)	52%			$ 17,844,000
	Sub-Total				**$ 52,160,000**
	Expected Range of Construction Cost Sub-Total			**$ 46,944,000**	**to $ 57,376,000**
	Construction Engineering	2%		$ 939,000	to $ 1,148,000
	Mob/Demob	5%		$ 2,347,000	to $ 2,869,000
	Clearing Right of Way	2%		$ 939,000	to $ 1,148,000
	MOT	5%		$ 2,347,000	to $ 2,869,000
	Opinion of Probable Construction Cost			**$ 53,516,000**	**$ 65,410,000**
	Contingency	35%		$ 18,731,000	to $ 22,894,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 3,746,000	to $ 4,579,000
	Preliminary Engineering	15%		$ 8,027,000	to $ 9,812,000
	RW Cost			$ 282,000	to $ 344,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 84,302,000**	**to $ 103,039,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Rochester South**

Improvement Package #: **4**

Desciption of Improvement Package: Freeway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	9870	LFT	$ 36.00	$ 355,000
203-02070	Borrow	65308	CYS	$ 72.00	$ 4,702,000
303-01180	Compacted Aggregate No. 53	8209	CYS	$ 70.00	$ 575,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	49253	SYS	$ 35.00	$ 1,724,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	5053	TON	$ 144.00	$ 728,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	6771	TON	$ 166.00	$ 1,124,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	21671	TON	$ 113.00	$ 2,449,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	7388	TON	$ 111.00	$ 820,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	14826	SF	$ 175.00	$ 2,595,000
	Unquantified Items (as percentage of items above)	52%			$ 7,837,000
	Sub-Total				**$ 22,909,000**
	Expected Range of Construction Cost Sub-Total			**$ 20,618,000**	**to $ 25,200,000**
	Construction Engineering	2%		$ 412,000	to $ 504,000
	Mob/Demob	5%		$ 1,031,000	to $ 1,260,000
	Clearing Right of Way	2%		$ 412,000	to $ 504,000
	MOT	5%		$ 1,031,000	to $ 1,260,000
	Opinion of Probable Construction Cost			**$ 23,504,000**	**$ 28,728,000**
	Contingency	35%		$ 8,226,000	to $ 10,055,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 1,645,000	to $ 2,011,000
	Preliminary Engineering	15%		$ 3,526,000	to $ 4,309,000
	RW Cost			$ 403,000	to $ 493,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 37,304,000**	**to $ 45,596,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Macy**

Improvement Package #: **1**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	8400	LFT	$ 36.00	$ 302,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1157	CYS	$ 70.00	$ 81,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	6935	SYS	$ 35.00	$ 243,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	5412	TON	$ 144.00	$ 779,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	9020	TON	$ 166.00	$ 1,497,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	3049	TON	$ 113.00	$ 345,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1040	TON	$ 111.00	$ 115,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,748,000
	Sub-Total				**$ 5,110,000**
	Expected Range of Construction Cost Sub-Total			**$ 4,599,000**	**to $ 5,621,000**
	Construction Engineering	2%		$ 92,000	to $ 112,000
	Mob/Demob	5%		$ 230,000	to $ 281,000
	Clearing Right of Way	2%		$ 92,000	to $ 112,000
	MOT	5%		$ 230,000	to $ 281,000
	Opinion of Probable Construction Cost			**$ 5,243,000**	**$ 6,407,000**
	Contingency	35%		$ 1,835,000	to $ 2,242,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 367,000	to $ 448,000
	Preliminary Engineering	15%		$ 786,000	to $ 961,000
	RW Cost			$ 126,000	to $ 154,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 8,357,000**	**to $ 10,212,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Macy**

Improvement Package #: **2**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	9200	LFT	$ 36.00	$ 331,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	2312	CYS	$ 70.00	$ 162,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	19199	SYS	$ 35.00	$ 672,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	6424	TON	$ 144.00	$ 925,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	10706	TON	$ 166.00	$ 1,777,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	4144	TON	$ 113.00	$ 468,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1415	TON	$ 111.00	$ 157,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 2,336,000
	Sub-Total				**$ 6,828,000**
	Expected Range of Construction Cost Sub-Total			**$ 6,145,000**	**to $ 7,511,000**
	Construction Engineering	2%		$ 123,000	to $ 150,000
	Mob/Demob	5%		$ 307,000	to $ 376,000
	Clearing Right of Way	2%		$ 123,000	to $ 150,000
	MOT	5%		$ 307,000	to $ 376,000
	Opinion of Probable Construction Cost			**$ 7,005,000**	**$ 8,563,000**
	Contingency	35%		$ 2,452,000	to $ 2,997,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 490,000	to $ 599,000
	Preliminary Engineering	15%		$ 1,051,000	to $ 1,284,000
	RW Cost			$ 128,000	to $ 156,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 11,126,000**	**to $ 13,599,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Macy**

Improvement Package #: **3**

Desciption of Improvement Package: Expressway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	16061	LFT	$ 36.00	$ 578,000
203-02070	Borrow	229398	CYS	$ 72.00	$ 16,517,000
303-01180	Compacted Aggregate No. 53	14499	CYS	$ 70.00	$ 1,015,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	86990	SYS	$ 35.00	$ 3,045,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	10257	TON	$ 144.00	$ 1,477,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	17095	TON	$ 166.00	$ 2,838,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	38278	TON	$ 113.00	$ 4,325,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	13049	TON	$ 111.00	$ 1,448,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	20800	SF	$ 175.00	$ 3,640,000
	Unquantified Items (as percentage of items above)	52%			$ 18,139,000
	Sub-Total				**$ 53,022,000**
	Expected Range of Construction Cost Sub-Total			**$ 47,720,000**	**to $ 58,324,000**
	Construction Engineering	2%		$ 954,000	to $ 1,166,000
	Mob/Demob	5%		$ 2,386,000	to $ 2,916,000
	Clearing Right of Way	2%		$ 954,000	to $ 1,166,000
	MOT	5%		$ 2,386,000	to $ 2,916,000
	Opinion of Probable Construction Cost			**$ 54,400,000**	**$ 66,488,000**
	Contingency	35%		$ 19,040,000	to $ 23,271,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 3,808,000	to $ 4,654,000
	Preliminary Engineering	15%		$ 8,160,000	to $ 9,973,000
	RW Cost			$ 560,000	to $ 684,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 85,968,000**	**to $ 105,070,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Macy**

Improvement Package #: **4**

Desciption of Improvement Package: Freeway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	10736	LFT	$ 36.00	$ 386,000
203-02070	Borrow	229398	CYS	$ 72.00	$ 16,517,000
303-01180	Compacted Aggregate No. 53	15814	CYS	$ 70.00	$ 1,107,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	94885	SYS	$ 35.00	$ 3,321,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	9587	TON	$ 144.00	$ 1,381,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	13045	TON	$ 166.00	$ 2,165,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	41748	TON	$ 113.00	$ 4,718,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	14234	TON	$ 111.00	$ 1,580,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	20800	SF	$ 175.00	$ 3,640,000
	Unquantified Items (as percentage of items above)	52%			$ 18,104,000
	Sub-Total				**$ 52,919,000**
	Expected Range of Construction Cost Sub-Total			**$ 47,627,000**	**to $ 58,211,000**
	Construction Engineering	2%		$ 953,000	to $ 1,164,000
	Mob/Demob	5%		$ 2,381,000	to $ 2,911,000
	Clearing Right of Way	2%		$ 953,000	to $ 1,164,000
	MOT	5%		$ 2,381,000	to $ 2,911,000
	Opinion of Probable Construction Cost			**$ 54,295,000**	**$ 66,361,000**
	Contingency	35%		$ 19,003,000	to $ 23,226,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 3,801,000	to $ 4,645,000
	Preliminary Engineering	15%		$ 8,144,000	to $ 9,954,000
	RW Cost			$ 771,000	to $ 943,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 86,014,000**	**to $ 105,129,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Denver**

Improvement Package #: **1**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	8400	LFT	$ 36.00	$ 302,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1246	CYS	$ 70.00	$ 87,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	9601	SYS	$ 35.00	$ 336,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	5544	TON	$ 144.00	$ 798,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	9240	TON	$ 166.00	$ 1,534,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	2501	TON	$ 113.00	$ 283,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	854	TON	$ 111.00	$ 95,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,786,000
	Sub-Total				**$ 5,221,000**
	Expected Range of Construction Cost Sub-Total			**$ 4,699,000**	**to $ 5,743,000**
	Construction Engineering	2%		$ 94,000	to $ 115,000
	Mob/Demob	5%		$ 235,000	to $ 287,000
	Clearing Right of Way	2%		$ 94,000	to $ 115,000
	MOT	5%		$ 235,000	to $ 287,000
	Opinion of Probable Construction Cost			**$ 5,357,000**	**$ 6,547,000**
	Contingency	35%		$ 1,875,000	to $ 2,291,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 375,000	to $ 458,000
	Preliminary Engineering	15%		$ 804,000	to $ 982,000
	RW Cost			$ 256,000	to $ 312,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 8,667,000**	**to $ 10,590,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Denver**

Improvement Package #: **2**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	9200	LFT	$ 36.00	$ 331,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	3202	CYS	$ 70.00	$ 224,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	19199	SYS	$ 35.00	$ 672,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	6424	TON	$ 144.00	$ 925,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	10706	TON	$ 166.00	$ 1,777,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	4144	TON	$ 113.00	$ 468,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1415	TON	$ 111.00	$ 157,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 2,368,000
	Sub-Total				**$ 6,922,000**
	Expected Range of Construction Cost Sub-Total			**$ 6,230,000**	**to $ 7,614,000**
	Construction Engineering	2%		$ 125,000	to $ 152,000
	Mob/Demob	5%		$ 312,000	to $ 381,000
	Clearing Right of Way	2%		$ 125,000	to $ 152,000
	MOT	5%		$ 312,000	to $ 381,000
	Opinion of Probable Construction Cost			**$ 7,104,000**	**$ 8,680,000**
	Contingency	35%		$ 2,486,000	to $ 3,038,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 497,000	to $ 608,000
	Preliminary Engineering	15%		$ 1,066,000	to $ 1,302,000
	RW Cost			$ 329,000	to $ 403,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 11,482,000**	**to $ 14,031,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Denver**

Improvement Package #: **3**

Desciption of Improvement Package: Expressway Lite

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	17297	LFT	$ 36.00	$ 623,000
203-02070	Borrow	240603	CYS	$ 72.00	$ 17,323,000
303-01180	Compacted Aggregate No. 53	12841	CYS	$ 70.00	$ 899,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	77039	SYS	$ 35.00	$ 2,696,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	9435	TON	$ 144.00	$ 1,359,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	15727	TON	$ 166.00	$ 2,611,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	33899	TON	$ 113.00	$ 3,831,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	11556	TON	$ 111.00	$ 1,283,000
618-06192	Wall	34560	LFT	$ 793.00	$ 27,406,000
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 30,176,000
	Sub-Total				**$ 88,207,000**
	Expected Range of Construction Cost Sub-Total			**$ 79,386,000**	**to $ 97,028,000**
	Construction Engineering	2%		$ 1,588,000	to $ 1,941,000
	Mob/Demob	5%		$ 3,969,000	to $ 4,851,000
	Clearing Right of Way	2%		$ 1,588,000	to $ 1,941,000
	MOT	5%		$ 3,969,000	to $ 4,851,000
	Opinion of Probable Construction Cost			**$ 90,500,000**	**$ 110,612,000**
	Contingency	35%		$ 31,675,000	to $ 38,714,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 6,335,000	to $ 7,743,000
	Preliminary Engineering	15%		$ 13,575,000	to $ 16,592,000
	RW Cost			$ -	to $ 1,055,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 142,085,000**	**to $ 174,716,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Denver**

Improvement Package #: **4**

Desciption of Improvement Package: Freeway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	16736	LFT	$ 36.00	$ 602,000
203-02070	Borrow	317568	CYS	$ 72.00	$ 22,865,000
303-01180	Compacted Aggregate No. 53	16795	CYS	$ 70.00	$ 1,176,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	100767	SYS	$ 35.00	$ 3,527,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	10072	TON	$ 144.00	$ 1,450,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	13854	TON	$ 166.00	$ 2,300,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	44336	TON	$ 113.00	$ 5,010,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	15116	TON	$ 111.00	$ 1,678,000
618-06192	Wall	26760	LFT	$ 793.00	$ 21,221,000
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 31,111,000
	Sub-Total				**$ 90,940,000**
	Expected Range of Construction Cost Sub-Total			**$ 81,846,000**	**to $ 100,034,000**
	Construction Engineering	2%		$ 1,637,000	to $ 2,001,000
	Mob/Demob	5%		$ 4,092,000	to $ 5,002,000
	Clearing Right of Way	2%		$ 1,637,000	to $ 2,001,000
	MOT	5%		$ 4,092,000	to $ 5,002,000
	Opinion of Probable Construction Cost			**$ 93,304,000**	**$ 114,040,000**
	Contingency	35%		$ 32,656,000	to $ 39,914,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 6,531,000	to $ 7,983,000
	Preliminary Engineering	15%		$ 13,996,000	to $ 17,106,000
	RW Cost			$ 4,699,000	to $ 5,743,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
Opinion of Probable Cost in 2024 Dollars				**$ 151,186,000**	**to $ 184,786,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Mexico**

Improvement Package #: **1**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	6000	LFT	$ 36.00	$ 216,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1646	CYS	$ 70.00	$ 115,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	10132	SYS	$ 35.00	$ 355,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	3696	TON	$ 144.00	$ 532,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	6160	TON	$ 166.00	$ 1,023,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	4460	TON	$ 113.00	$ 504,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1520	TON	$ 111.00	$ 169,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,515,000
	Sub-Total				**$ 4,429,000**
	Expected Range of Construction Cost Sub-Total			**$ 3,986,000**	**to $ 4,872,000**
	Construction Engineering	2%		$ 80,000	to $ 97,000
	Mob/Demob	5%		$ 199,000	to $ 244,000
	Clearing Right of Way	2%		$ 80,000	to $ 97,000
	MOT	5%		$ 199,000	to $ 244,000
	Opinion of Probable Construction Cost			**$ 4,544,000**	**$ 5,554,000**
	Contingency	35%		$ 1,590,000	to $ 1,944,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 318,000	to $ 389,000
	Preliminary Engineering	15%		$ 682,000	to $ 833,000
	RW Cost			$ 451,000	to $ 551,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 7,585,000**	**to $ 9,271,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Mexico**

Improvement Package #: **2**

Desciption of Improvement Package: Free Flow

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	6400	LFT	$ 36.00	$ 230,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	1912	CYS	$ 70.00	$ 134,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	12266	SYS	$ 35.00	$ 429,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	4532	TON	$ 144.00	$ 653,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	7553	TON	$ 166.00	$ 1,254,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	5398	TON	$ 113.00	$ 610,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	1840	TON	$ 111.00	$ 204,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	0	SF	$ 175.00	$ -
	Unquantified Items (as percentage of items above)	52%			$ 1,827,000
	Sub-Total				**$ 5,341,000**
	Expected Range of Construction Cost Sub-Total			**$ 4,807,000**	**to $ 5,875,000**
	Construction Engineering	2%		$ 96,000	to $ 118,000
	Mob/Demob	5%		$ 240,000	to $ 294,000
	Clearing Right of Way	2%		$ 96,000	to $ 118,000
	MOT	5%		$ 240,000	to $ 294,000
	Opinion of Probable Construction Cost			**$ 5,479,000**	**$ 6,699,000**
	Contingency	35%		$ 1,918,000	to $ 2,345,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 384,000	to $ 469,000
	Preliminary Engineering	15%		$ 822,000	to $ 1,005,000
	RW Cost			$ 478,000	to $ 584,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 9,081,000**	**to $ 11,102,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Mexico**

Improvement Package #: **3**

Desciption of Improvement Package: Expressway Lite

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	10521	LFT	$ 36.00	$ 379,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
303-01180	Compacted Aggregate No. 53	6557	CYS	$ 70.00	$ 459,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	39335	SYS	$ 35.00	$ 1,377,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	4301	TON	$ 144.00	$ 619,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	6288	TON	$ 166.00	$ 1,044,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	16340	TON	$ 113.00	$ 1,846,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	5900	TON	$ 111.00	$ 655,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	10163	SF	$ 175.00	$ 1,779,000
	Unquantified Items (as percentage of items above)	52%			$ 4,242,000
	Sub-Total				**$ 12,400,000**
	Expected Range of Construction Cost Sub-Total			**$ 11,160,000**	**to $ 13,640,000**
	Construction Engineering	2%		$ 223,000	to $ 273,000
	Mob/Demob	5%		$ 558,000	to $ 682,000
	Clearing Right of Way	2%		$ 223,000	to $ 273,000
	MOT	5%		$ 558,000	to $ 682,000
	Opinion of Probable Construction Cost			**$ 12,722,000**	**$ 15,550,000**
	Contingency	35%		$ 4,453,000	to $ 5,443,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 891,000	to $ 1,089,000
	Preliminary Engineering	15%		$ 1,908,000	to $ 2,333,000
	RW Cost			$ 1,985,000	to $ 2,426,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 21,959,000**	**to $ 26,841,000**

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US 31 North PEL Study

Level 3 Screening Cost Estimate

Planning Segment: **Mexico**

Improvement Package #: **4**

Desciption of Improvement Package: Freeway

Item No	Description	Qty	Unit	Unit Cost	Construction Cost
203-02000	Excavation Common	18528	LFT	$ 36.00	$ 667,000
203-02070	Borrow	48197	CYS	$ 72.00	$ 3,470,000
303-01180	Compacted Aggregate No. 53	8233	CYS	$ 70.00	$ 576,000
203-02070	Borrow	0	CYS	$ 72.00	$ -
207-12635	Subgrade Treatment Type IBC	49393	SYS	$ 35.00	$ 1,729,000
401-000009	QC/QA-HMA, 4 58E, Surface, 9.5 mm	5374	TON	$ 144.00	$ 774,000
401-000045	QC/QA-HMA, 4 58E, Intermediate, 19.0 mm	9347	TON	$ 166.00	$ 1,552,000
401-000048	QC/QA-HMA, 4 58S, Base, 25.0 mm	29914	TON	$ 113.00	$ 3,380,000
401-000067	QC/QA-HMA, 4 58E, Intermediate, OG, 19.0 mm	10647	TON	$ 111.00	$ 1,182,000
618-06192	Wall	0	LFT	$ 793.00	$ -
n/a	Bridges	19065	SF	$ 175.00	$ 3,336,000
	Unquantified Items (as percentage of items above)	52%			$ 8,666,000
	Sub-Total				**$ 25,332,000**
	Expected Range of Construction Cost Sub-Total			**$ 22,799,000**	**to $ 27,865,000**
	Construction Engineering	2%		$ 456,000	to $ 557,000
	Mob/Demob	5%		$ 1,140,000	to $ 1,393,000
	Clearing Right of Way	2%		$ 456,000	to $ 557,000
	MOT	5%		$ 1,140,000	to $ 1,393,000
	Opinion of Probable Construction Cost			**$ 25,991,000**	**$ 31,765,000**
	Contingency	35%		$ 9,097,000	to $ 11,118,000
	UT Cost (Reimbursable Utilities Only)	7.0%		$ 1,819,000	to $ 2,224,000
	Preliminary Engineering	15%		$ 3,899,000	to $ 4,765,000
	RW Cost			$ 4,470,000	to $ 5,464,000
	Additional items not accounted for at this stage:	**Qty**	**Unit**	**Unit Cost**	**Construction Cost**
					$ -
					$ -
Opinion of Probable Cost in 2024 Dollars				**$ 45,276,000**	**to $ 55,336,000**

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PROPEL US 31 NORTH
LEVEL 3 REPORT

APPENDIX C.
LEVEL 3 SCREENING COMMENT PERIOD: COMMENTS AND RESPONSES

The tables provided in this appendix list all comments received through the active *Draft Level 3 Screening Report* public comment period through December 13, 2024. *Comments received from the public are provided in Table C-1 and comments/letters received from stakeholders, Tribal Nations, or agencies are provided in Table C-2. Please note that comment text in the table reflects submission content verbatim. Initial responses were provided to the public during the comment period via email, if requested; the responses included herein build upon those initial responses based on ongoing work.*

In response to all comments, it is important to note that all concepts shown in the *Draft Level 3 Screening Report* are preliminary and subject to change. Future studies will determine the actual configuration of any specific intersection improvements.

Table C-1 – Responses to Public Comments Received during the Level 3 Screening Comment Period

#	Topic	Message	Response
1	Mobility, Safety, Draft Level 3 Report	I'm a local resident and the owner of Ramco Metal Roofing and Building on US 31 North in Fulton County. I'm concerned that with a crossing only at 700N and State Road 14, there will be a significant area with limited public safety access on the west side of US 31, north of the river. Adding an overpass at 450N or Olson Road could address this issue. I'm interested in knowing if this option has been considered and what factors might be limiting the addition of an overpass in this area.	These comments are in reference to potential improvements at intersections at CR 700 North (Fulton North planning segment) and State Road 14 (Rochester North segment). Grade-separated crossings have been considered between CR 700 North and SR 14. For the Rochester North planning segment, Package 3 and Package 4 both include an interchange at Olson Road and an overpass at CR 100 North/6th Street that would provide grade-separated crossing points. An RCI that would allow crossings at CR 450 North is also included in Fulton North Package 2.
2	Mobility, Overall US 31 Corridor, Draft Level 3 Report	The package 5 where all roads are closed off except with on/off ramps would be great. This will complete the expressway that was started and will connect SB to Indy with a consistent speed limit.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
3	Mobility, Safety, Draft Level 3 Report	I support package 3 for Rochester North, allowing movement to the most travelled streets/roads, protecting EMS access and reduction of potential crashes. The cost may be more, but, one needs to look at the quality of life for the citizens, not just for the persons travelling on 31. Very candidly, given the goals, the cost should be the least aspect of concern.	At this time, no decisions have been made about the future of US 31, and no projects related to the PEL study have been funded by INDOT. A stated goal of the PEL process is the identification of a range of reasonable alternatives. Given the needs identified within the study area, a reasonable alternative could consist of improvements at a single intersection; it could also consist of improvements at multiple intersections and/or the roadway sections in between them (i.e., access management). Additionally, it is important to note that in many cases Improvement Packages 3 and 4 in this Level 3 screening would have high costs and/or impacts with marginal benefits compared to other options. However, given the role of US 31 in the regional and statewide transportation network, a change in facility type, such as to a freeway in Package 4, may be considered in the future to achieve broader transportation goals and objectives. The tradeoffs between the potential benefits, impacts and costs would require further analysis in the future to determine if such changes would be a reasonable solution to the study area's transportation needs. Depending on multiple factors, including statewide priorities and funding availability, intersection treatments considered as part of this PEL study could be combined in different ways in the future to address the identified transportation needs and support the goals of the study area.
4	Safety, Draft Level 3 Report	I cross US 31 multiple times a day and have seen the traffic increase significantly over the past few years to the point that at grade crossings no longer feel safe. If possible, an overpass at county 450 North would be a good compromise to allow access to the west side of US 31 in the Fulton north section. If the only crossings are at Olson Road and 700 North, the travel time for emergency services double to my residence.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Only Package 4 limits crossing points in Fulton North to just CR 700 North and Olson Road. The other three packages provide (or assume) U-turn median openings between these two intersections that would allow for vehicles to turn around and make a right turn to complete a crossing movement.
5	Mobility, Safety	Regarding the US 31/SR 16 area. Local residents request the project create a frontage road along the east side of US 31 from either 450 N or N. Mexico Road to 800 N. US 31 is the primary north/south transit road for local traffic because there are no contiguous north/south roads, on either side of 31 in this area. On the east side, the first contiguous N/S road is Meridian Rd which is approx 3 miles east of 31. A frontage road on the east side of 31 would also divert the expected additional traffic, which includes trucking and bus traffic, away from the dangerous curves midway between US 31 and the town of Denver.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Potential modifications to the local roadway network could be considered during the development of a future project in this area. Note that Package 3 does include the extension of Old US 31 from CR 800 North to SR 16.
6	Mobility, Safety, Economic Development	Hello, I own a campground in Fulton County called Tippecanoe River Run. We are located west of country road 375 N. The majority of our campers are travel trailers coming on and off highway 31 onto 375 N. I would like to discuss if your developers have considered the campground and the effect closing county road 375 would potentially have on tourism and accident rates. If this road becomes inaccessible it is my fear that the majority of our guests traveling off 31 will need to travel greater distances on county roads while hauling trailers. This seems dangerous given the state of our county roads and the width required for such purposes. Additionally, I am concerned as a Fulton County citizen that decreasing access to the Fulton County historical society would be detrimental to their purpose. The historical society thrives off of travelers coming from highway 31. Without the easy access our	Access to/from US 31 at CR 375 would vary with each of the packages. As access control increases (Packages 2, 3, and 4), it is anticipated that affected traffic would shift to Olson Road, where access will continue to be provided under each package. The comment is correct that this would increase the distance traveled on local roads (from approximately 1.5 miles to 3.5 miles). As any projects are advanced to the project development/NEPA phase, these types of potential impacts would be analyzed and considered as part of those efforts. Stakeholders will be included in that process and have an opportunity to provide input, including potential options for mitigating the impacts of any changes.

#	Topic	Message	Response
		historical society would lose business. I reviewed your plans for this section on Highway 31 and I do agree that lengthening the turn lanes is a viable option, especially knowing that many trailers traveling onto 375 N need a longer deceleration time. If someone would be kind enough to speak to me over the phone I would love to discuss.	
7	Economic Development, Environmental, Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	Please do not do this! This is our community and this is affects all of us! Our commute for work school and outings will be absolutely disastrous! Please we beg you do not do this!	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
8	Environmental, Mobility, Safety	Just stop you are putting lives in danger!!!! Fire and rescue should be able to cross 31 and every county and state road!! I promise you the first time it takes longer to get to a scene and causes someone's life there will be lawsuits like crazy!!! Not to mention we are a farming community and you are stopping the framers routes. It seems to me you are just trying to make Miami county a ghost town. Remember that the next time you go to the store to buy produce and there isn't any because you want to block access to increase speed to get to and from South Bend to Indy!! Also all you are doing is helping drug and sex trafficking. Pissed off citizen!!	Maximizing the safety of our roads is a priority for INDOT. Current and projected (i.e., year 2045) roadway operating conditions were analyzed as part of the study. This information can be found in the *ProPEL US 31 North Existing Transportation Conditions Report*, which is available on the study website (https://propelus31.com/31doclibrary/). Based on the analysis, safety was identified as a concern throughout the study area. As a result, the study team evaluated alternatives to improve safety along US 31 by reducing the number and severity of crashes in the study area. The loss of local access and cross-corridor mobility is an unavoidable impact when considering an upgrade to a higher-level facility. The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Coordination with emergency service providers and local agricultural stakeholders has occurred throughout this study and will be included in any future consideration of improvements.
9	Environmental, Mobility, Safety	Personally feel that package option 1 is ridiculous and not an option for State Road 16. Package 2, still terrible. Package 3 is better but then you screwed up county road 1000 N by making it an overpass but that's how people from the northwestern part of the county or other schools would go to the North Miami Community Schools. Your plans are all wrong and maybe you should have someone that lives in this area ACTUALLY help make the plans. This sounds like a moron made it. Email me for more tips :)	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future to provide INDOT with a range of options. During development of any future project, elements of Improvement Packages may be combined to best address the identified transportation needs. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
10	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report, Economic Development	I have lived in Denver/Miami county since 1979. This is an awful idea!! St Rd 16 is used not only by all the local people from surrounding communities on each side of 31, but also all the farmers and their families that need to get in and out of the fields or to and from their farms. And what about the many companies that use St Rd 16 for their semis/transport vehicles to get between the many small/big towns. And what about buses??? What about fire/rescue????? As a healthcare worker, I can tell you this will take away precious minutes from someone's family getting the help they need in a timely manner.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Coordination with emergency service providers and local schools has occurred throughout this study and will be included in any future consideration of improvements.
11	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report, Economic Development	This is an awful idea. I have lived in Denver/Miami Co. since 1979. St Rd 16 is used not only by all the local people from the surrounding communities on each side of Hwy 31, but all the farmers and their families that use the roadway to get in and out of the fields or to and from their farms. Or the many companies that use St Rd 16 for their semis/transport vehicles to get in and out of the many small/big towns. And what about buses??? What about fire/rescue????? As a healthcare worker I can tell you this idea will take away precious minutes from a patient in need due to not getting help in a timely manner.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Coordination with emergency service providers and local schools has occurred throughout this study and will be included in any future consideration of improvements.
12	Mobility, Draft Level 3 Report	Keep SR 16 open to cross hwy 31. Our residents deserve local throughways.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.

#	Topic	Message	Response
13	Draft Level 3 Report	Why can't it be left as it is? There's no reason to make it more difficult for all the locals and cause more accidents. Leave it alone. It doesn't need changing.	At the outset of this study, the project team gathered and analyzed data on existing traffic conditions in the corridor, including crash history as documented in the *ProPEL US 31 North Existing Conditions Report*. That analysis, combined with input from the community and stakeholders was the basis for the purpose and need statement and goals for the study, which guided the development and evaluation of improvement alternatives. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Generally, Package 1 is the most similar to the existing conditions with addition of lengthening of mainline turn lanes or addition of mainline turn lanes in the cases where one is not currently present at all at-grade intersections on US 31 to improve safety at TWSC intersections.
14	Draft Level 3 Report	Package 1	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
15	Draft Level 3 Report	That proposal [for SR 16] is completely crazy. What exactly will it do to help anyone? We have a business on the corner, farmers, truck drivers and homeowners that use this state road daily. You are only causing more strife in our lives. We then will have to find a way to go the direction that we want to, which will cause more congestion trying to get the right direction that we need to go, especially with semi's. How about putting our tax money towards something that makes sense and leave it alone? Just my two cents since I use it daily.	Improved safety is the primary motivation. Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
16	Draft Level 3 Report	Either remove access to US31 or have an overpass over US 31 at Miami County Road 1500N	An overpass would be provided at this intersection under Packages 3 and 4. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
17	Mobility, Draft Level 3 Report	I think option 3 should be used for the intersections at State Road 16 for Denver and also option 3 for 1350 N at Macy. We need access to 31 as well as the emergency vehicles. The state spent the money for good intersections in Tipton county and southward to Westfield, they should spent it in our area as well!!!!	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
18	Mobility	The Denver 31 plan seems pretty rough. Especially package 1 the 16 and 31 interchange which would shut off truck traffic taking a left turn which would have no option to turn around until 24 -which would be confusing and dangerous to have trucks constantly trying to do a U-turn in, not to mention the increased waste of diesel and mileage that would result. Package 0 2 or 3 would be more ideal	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
19	Mobility, Safety, Draft Level 3 Report	I, along with many others, say leave it the way it is. You people obviously don't drive this area, so it doesn't affect you. I drive a school bus, so it does affect me and my fellow school bus drivers. Our routes are long enough as it is, and taking away our ability to cross the highway, only being able to turn right, or a J turn is not a good answer. We also access the highway when we go on field trips. You people put a J turn on 24 by my house, and I refuse to use it. I refuse to turn right to go left. It's just stupid. It is a lot harder for a bigger vehicle to change lanes to use such a thing. Most people don't want to let a school bus merge into traffic in front of them. They will speed up just so they won't have to be behind a school bus. I can only imagine how the semi drivers feel having to use them. Also, it would be a horrible idea to mess with the intersection of 31 and 16. There is a business there that has been there for many years. I graduated high school with the current owner. It's a funeral home. My family recently had my brother's funeral there. I don't know how my family would have gotten there if that intersection were closed. It would be bad for that business with it being harder to access. I will definitely put do not send me a response because I'd probably put phone, and I don't think you really want to know what I think of you all wasting money. Our roads need fixed, as in repaved, not this nonsense you're proposing.	The alternatives presented in this study attempted to balance safety improvements and maintaining access. The Improvement Packages present a range of this balance. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. "J-turns" are one of several alternatives that fall within the family of Reduced Conflict Intersections (RCIs). Throughout the alternatives development and evaluation phase, the study team worked with the public and study stakeholders to understand the specific concerns associated with RCIs and proactively address them. Specific refinements made to the RCI design concepts considered in this study include the following: • The RCIs will accommodate a WB-65 design vehicle. A WB-65 design vehicle is equivalent to an interstate semitrailer that is over 73 feet in length. This means that RCIs considered as part of this PEL study will accommodate larger vehicles and trucks, including interstate semitrailers as well as most large farm equipment that would need to navigate the intersection. • The RCIs include extra space on the outside for larger vehicles to safely and efficiently make the U-turn movement.

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			• The RCIs, in most cases, include an additional lane on the outside to support traffic making the U-turn to continue on the outside to make a right turn at the cross street or safely merge into through traffic. Should an RCI be advanced by INDOT as a project (or as part of a larger project), further opportunities for public involvement and design concept refinement will occur as part of any subsequent NEPA studies.
20	Mobility, Economic Development	We live west of 31 & travel State road 16 across 31 going east on st rd 16 to our family business & farm daily sometimes several times bc of property on both sides	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
21	Mobility, Overall US 31 Corridor	Apparently the ones offering these solutions DO NOT have kids in the North Miami school district, or commute 16 from Denver to Logansport daily. This is not a good fix for our community. This main road needs left open for numerous reasons.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
22	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	Please make 31 at State Rd 16 an overpass or at the very least a J turn. We drive 16 across 31 every Monday-Friday for work. So to make 16 a RIRO turn onto 31 simply does not work for those of us who drive across 31 at 16 every day.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
23	Draft Level 3 Report	Package 1	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
24	Draft Level 3 Report	I live in Macy and my son goes to Caston school. I would have no access to get him across the highway to school!! I would have to go mikes out of the way to get him there. I also work in Rochester and that would affect my travel to and from! This would kill our small businesses in the small towns!! Emergency vehicles also need access to our small towns! This makes no sense!!	Full access to, from, and across US 31 at CR 650 S/CR 1350 N would be provided under each of the packages. Travel across US 31 would be greatly improved at this intersection under Packages 3 and 4 with the inclusion of an interchange. Similar access would be available at CR 500 S/CR 1500 N, where either full access (Packages 1 and 2) or an overpass (Packages 3 and 4) would be provided.
24	Draft Level 3 Report	Package 1 for Macy and Denver	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
25	Economic Development, Safety, Overall US 31 Corridor	Having grown up and lived in Miami County for more than 50 years, I have frequently driven on State Road 16 to get to counties west and to the state line. It does not seem appropriate to just end St Rd 16 abruptly where it crosses US 31. Closing off state highways from main arteries makes no sense at all. Please reconsider your plans--I have looked at all 4 and do not believe any of them are good plans. Mostly, those plans will just traveling even more difficult for many who use that route routinely. It will also take a huge toll on businesses in that area.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
26	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report, Economic Development	State Road 16, 1000 N, 200 N and 1350 N as well as at least one road coming out of Mexico Indiana are extremely important to be open access as you have to give access for police, fire, and other emergency vehicles to have access to both sides of 31. Our fire, ambulance, rescue, and police service both sides of 31. By limiting access to get onto 31 and also restrict crossing 31 will make it longer for people to get help in an emergency. Also, these are very important intersections for semis to enter and exit 31. There are several trucking companies locally that have home bases here. The drivers won't be able to get back to their homes and home bases. We also have school bus routes that cross 31 that we need access to get to the school without having to add a significant amount of travel time to the bus route which also would increase the cost for transportation on the school and our state.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. At the outset of this study, the project team gathered and analyzed data on existing traffic conditions in the corridor, including crash history as documented in the *ProPEL US 31 North Existing Conditions Report*. Based on public comment and coordination with study stakeholders, such as schools, emergency service providers and the local agricultural industry, the study team identified important crossings in the study corridor. This information can be found in the *ProPEL US 31 North Purpose and Need Report* found on the study website (https://propelus31.com/31doclibrary/). This information was considered by the study team throughout the development and evaluation of alternatives.

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			The loss of local access and cross-corridor mobility is an unavoidable impact when considering an upgrade to a higher-level facility. The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback.
27	Economic Development, Mobility, Overall US 31 Corridor	We have to have an overpass on St Rd 16 and US 31 and one on 1200 N and US 31. North Miami School Corp needs the access for bus traffic. Too many farmers need access for grain and farm machinery. You built so many overpasses from Westfield to Baker's corner, so it's doable.	An overpass would be provided at SR 16 under Packages 3 and 4, in the form of an interchange. None of the packages, as currently defined, would provide an overpass at CR 1200 N. However, under Packages 3 and 4, overpasses would be provided at CR 1000 N and CR 1350 N.
28	Overall US 31 Corridor, Draft Level 3 Report	Need access to East and West SR 16 and Deedsville Road from 31 North and 31 South bounds	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Access to/from US 31 at CR 1000 N (Deedsville Road) would be provided in Packages 1 and 2. In Packages 2 and 3, there would be an overpass at that intersection; accessing US 31 would require using CR 900 N or CR 1050 N. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
29	Overall US 31 Corridor, Economic Development	I own a business in Denver. I rely on the surrounding communities. This will kill my business.	The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
30	Bike and Pedestrian, Economic Development, Mobility, Safety, Overall US 31 Corridor	Need access from state road 16 to us 31 !!!!	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
31	Economic Development, Mobility, Safety, Overall US 31 Corridor	I do not believe shutting state rd 16 off is a good idea. There are two small towns on either side that need this state road access. Twelve Mile thrives on their 4th of July event. There are several people who come from out of town to race and state road 16 is the best option to get there. Denver also has a huge event each year and this would close off access to that. Not to mention the residents that come to Peru and so the business there. Closing that road off would be forcing them to choose other places to go and causing them to be ghost towns and hurting our economy all around.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
32	Overall US 31 Corridor	Please do not dead end SR16 at US31. This is a largely used intersection. Many folks use this intersection to travel to Logansport Memorial Hospital. Blocking the intersection would make the trip much longer than it has to be. It's also worrisome that emergency personnel will have a longer trip and more difficult time getting to some homes in the area of this intersection is dead ended. McClain funeral home is southbound 31 and SR 16, and people from Denver, which is on the other side of the intersection won't be able to travel there as easily. McClain is a staple of our community. Dead ending the road will separate this Denver IN business from the rest of the town. Please build an overpass at SR16 and US31.	The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback. Coordination with emergency service providers has occurred throughout this study and will be included in any future consideration of improvements. Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
33	Mobility, Overall US 31 Corridor, Draft Level 3 Report, Economic Development	Why would you even consider blocking a state road? 16 needs to be a interchange. 1000 N needs to be accessible to the highway. You are blocking the people in Perrysburg from access to 31. And how are the people living on the east side supposed to access 31? If you would put acceleration and deceleration lanes at all intersections and medians, it would	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement.

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		solve a lot of your safety issues and the cost wouldn't be as much. You need to take into consideration the people living in the area.	At CR 1000 N, access to/from US 31 would be provided in Packages 1 and 2. In Package 3, drivers in Perrysburg could access US 31 at CR 900 N or CR 1050 N. In Package 4, access is more restricted and would require travel to either SR 16 or CR 650 S/CR 1350 N. Turn lanes for mainline traffic are provided at all intersections, providing a safe area for turning vehicles as they decelerate approaching the intersection. Acceleration lanes were included at RCI intersections for u-turning vehicles. They were not, however, included for vehicles turning onto US 31 from a stop-controlled intersection (e.g., TWSC, RIRO, etc.). The need for acceleration lanes at these intersections would be considered as part of any project that was developed in the study corridor in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
34	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report, Economic Development	16 is a State Road. Why would you cut it off? Make it an interchange or keep it as it is and just make longer acceleration and deceleration lanes. You are making it impossible for the people living in the area to access 31. Also 1000N needs to be accessible from 31North and 31South lanes. This will allow access to 31 for the people that live in Perrysburg. You shouldn't just be thinking just about the drivers running from Chicago to Indy and vice versa. This highway is used by locals as well. If you would put acceleration and deceleration lanes at every turn, both north and south lanes and for both side of the median, it'd solve some issues and be less costly.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. At CR 1000 N, access to/from US 31 would be provided in Packages 1 and 2. In Package 3, drivers in Perrysburg could access US 31 at CR 900 N or CR 1050 N. In Package 4, access is more restricted and would require travel to either SR 16 or CR 650 S/CR 1350 N. Turn lanes for mainline traffic are provided at all intersections, providing a safe area for turning vehicles as they decelerate approaching the intersection. Acceleration lanes were included at RCI intersections for u-turning vehicles. They were not, however, included for vehicles turning onto US 31 from a stop-controlled intersection (e.g., TWSC, RIRO, etc.). The need for acceleration lanes at these intersections would be considered as part of any project that was developed in the study corridor in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
35	Draft Level 3 Report	Why can't it be left as it is? There's no reason to make it more difficult for all the locals and cause more accidents. Leave it alone. It doesn't need changing.	At the outset of this study, the project team gathered and analyzed data on existing traffic conditions in the corridor, including crash history as documented in the *ProPEL US 31 North Existing Conditions Report*. That analysis, combined with input from the community and stakeholders was the basis for the purpose and need statement, which identified safety, access and mobility needs throughout the corridor. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
36	Overall US 31 Corridor	Why don't you just put in acceleration and deceleration lanes at all intersections and in the medians. Make them longer than what is considered normal. This would be more cost effective than adding interchanges and J turns. More consideration needs to be made to the locals living in the area for easy access to 31.	Turn lanes for mainline traffic are provided at all intersections, providing a safe area for turning vehicles as they decelerate approaching the intersection. Acceleration lanes were included at RCI intersections for u-turning vehicles. They were not, however, included for vehicles turning onto US 31 from a stop-controlled intersection (e.g., TWSC, RIRO, etc.). The need for acceleration lanes at these intersections would be considered as part of any project that was developed in the study corridor in the future. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. All of the Improvement Packages include the lengthening of mainline turn lanes or addition of mainline turn lanes in the cases where one is not currently present at all at-grade intersections.
37	Safety	I keep hearing how concerned the group is about safety, but three times I have asked your group if "stacking" is lawful. If you do not know what I am asking, then you could care less about safety, just getting people from Indy to South Bend faster is really what you are after. I knew I lived in a fly over state, but now I am going to be living in a drive through county. One more time: Is stacking legal?	Multiple vehicles stacking side-by-side in the median causes safety issues that were previously noted in the Existing Transportation Conditions Report. Regardless of the legality of the situation, it is to be avoided for safety reasons (e.g., blocked sight lines, indecisiveness about which vehicle has or will take the right of way). All of the Improvement Packages include lengthening of mainline turn lanes or addition of mainline turn lanes in the cases where one is not currently present at all intersections. By having a mainline left-turn lane allowing vehicles to queue, if needed, in the turn lane instead of in the left mainline lane avoids the situation of left-turning stacking with other vehicles in the median opening to avoid stopping in the mainline lane. The RCI design that has been included at several intersections in the corridor considers and eliminates this potentially dangerous situation through its design. The design of the median openings is narrowed and striped for only one movement and vehicle to occupy the opening at a time.

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38	Economic Development, Safety	Closing 16 to not allow traffic to cross 31 is a big concern. That is the easiest way to get to my mother in laws quickly in an emergency, as she is elderly. We would have to go way out of our way, and take longer to get to her which could compromise her getting the help she needs. The intersection is wide open both directions, no concern for people not to be able to see. People need to be patient and drive with common sense and stop in the middle.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
39	Economic Development, Overall US 31 Corridor, Draft Level 3 Report	I think it is a huge mistake to cut off st rd 16! It is a VERY traveled roadway and it will definitely make response times for medical and law enforcement agencies even longer than they already are possibly making it a life or death issues for someone because they can't get there adequately! It is used by many semi drivers as a through way to deliver goods and the side roads are not adequate for them so it will impact delivery services everywhere! There are school buses that use that intersection and it will add even longer rides for the already hour long rides for most of the children! Strd 16 is a main through way with quite a bit of traffic traveling to and from 31!! There are businesses along 16 that need access to 31 as well and it could possibly damage their businesses! PLEASE reconsider not closing off StRd 16 at 31!	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
40	Mobility, Overall US 31 Corridor, Draft Level 3 Report	The COH visitor is concerned that Miami and Fulton counties are being ignored instead of having US 31 upgraded to freeway standards. Although not one of the recommended alternatives, the freeway concept does not include enough interchanges. He is especially concerned about access for farm implements and emergency vehicles. He believes there needs to be something new at Wabash Road because people from Mishawaka and Elkhart use that a lot to get to Rochester, then US 31. He also has concerns about a proposal to chip and seal SR 14 instead of repaving it like has been done toward Fort Wayne.	Per INDOT direction, there should be a minimum of 3 miles between adjacent interchanges in rural areas and a minimum of one mile between adjacent interchanges on non-interstate routes in urban areas; however, this was examined for the context of each section and location. The US 31 North study corridor is considered to be rural per consultation with INDOT and urban area boundary maps. There will be opportunities for additional public and stakeholder input as part of any NEPA and project development studies subsequent to the ProPEL US 31 North study. The comment regarding SR 14 paving has been shared with INDOT District staff for consideration.
41	Draft Level 3 Report, Safety	Mr. Fugate does not like the RCI proposed at CR 450 N (Fulton Co) in package 2. He is a former truck driver and has a lot of experience with RCIs. He believes the problems with US 31 in northern Fulton Co are due to driver inattention. He believes there are too many farm implements that go through that intersection to make an RCI usable. With the RIRO in the Fulton North package, where would people turn around? And what about farmers? There are several large chicken farmers who need access to US 31. Olson Road is used too much to become an RCI. There is a lot of industry there that relies on quick access to US 31. He has noted a lot of horse and buggies down by CR 450 N. He believe there are more there than CR 700 N.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Throughout the alternatives development and evaluation phase, the study team worked with the public and study stakeholders to understand the specific concerns associated with RCIs and proactively address them. Specific refinements made to the RCI design concepts considered in this study include the following: • The RCIs will accommodate a WB-65 design vehicle. A WB-65 design vehicle is equivalent to an interstate semitrailer that is over 73 feet in length. This means that RCIs considered as part of this PEL study will accommodate larger vehicles and trucks, including interstate semitrailers as well as most large farm equipment that would need to navigate the intersection. • The RCIs include extra space on the outside for larger vehicles to safely and efficiently make the U-turn movement. • The RCIs, in most cases, include an additional lane on the outside to support traffic making the U-turn to continue on the outside to make a right turn at the cross street or safely merge into through traffic. Should an RCI be advanced by INDOT as a project (or as part of a larger project), further opportunities for public involvement and design concept refinement will occur as part of any subsequent NEPA studies. As mentioned in the Level 3 document, it is assumed that limited median U-turn openings would be provided. The location of the median U-turn opening nearest to CR 450 North would be determined as part of a potential future study. The overpass at CR 700 North that is currently being designed as part of a separate project would provide a safer crossing alternative for horse and buggy traffic in the area. The study's outreach efforts have included direct outreach to the Amish and Mennonite communities to gather feedback on the needs and potential improvements in the study corridor. INDOT will continue to engage these communities as part of any projects that move forward in the study corridor.

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42	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	I understand the need to limit access to 31 but I feel the plan is not the best one. It will cause longer times for emergency crews to get where they need to go. Let alone snow removal in the winter time of getting the roads clean for safe travel. Also students will spend longer times on school busses due to routes having to be redirected. Basic travel needs for those who live in this part of the county to get to their own appointments and work will be impacted. I would hope the state will reconsider and install a J-turn at 16 and consider other crossroads too for a j-turn. If we have a choice of blocking all roads or j-turns, I much rather how more access than none. Please reconsider the proposed construction for those who live in northern Miami County.	The loss of local access and cross-corridor mobility is an unavoidable impact when considering an upgrade to a higher-level facility. The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback. Coordination with emergency service providers and local schools has occurred throughout this study and will be included in any future consideration of improvements. It is anticipated that any future project in the corridor will consider combining elements of the packages presented in the report. Thus, at SR 16, where an RCI is included in Package 2, that option will continue to be considered for this location. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
43	Draft Level 3 Report	There is an existing church facility at the southwest quadrant of CR 400 N and US 31. Packages 3 and 4 show complete removal of that church which would be a large community impact. It should be noted that the building immediately to the north of CR 400 is vacant. The alternatives associated with package 3 and 4 should be redesigned to avoid impacting the existing church and instead impact the vacant building on the north side. There are interchange options that would avoid impacting this existing church and minimizing impacts to the community. I would ask that you revise your exhibits in packages 3 and 4 in the final report to reflect this.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. If an interchange were to be considered at CR 400 North in a future project, additional data collection and outreach would be completed to fully understand current uses and develop alternatives that avoid or minimize impacts to the maximum extent possible.
44	Economic Development, Environmental, Safety, Overall US 31 Corridor, Draft Level 3 Report	There's no reason to mess with that intersection. It's going to make it a complete bitch for ALL locals and any emergency situations. Please do not mess with it. Leave it alone! [Note: the specific intersection of interest was not specified in the comment.]	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Coordination with emergency service providers has occurred throughout this study and will be included in any future consideration of improvements.
45	Mobility, Safety, Draft Level 3 Report	I feel very strongly that SR16 should be accessible to US31. Closing this intersection would cause more issues than you may realizes. Fire departments and ambulance's would not be able to reach people in acceptable time. Commuters would have to add considerable miles to their routes. Closing a State road makes no sense. State roads are better maintained and safer. People would have to start using roads not meant for the kind of traffic state roads are built for. Please reconsider any plans to close SR16. Likewise, please consider keeping 400 N, 800 N and 1000 N open at US31 in some manor. People on both sides of 31 use these roads extensively. Especially farm operations. Thank you for listening to my suggestions.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Note that CR 400 N would remain open in all packages. Access control included at CR 800 N and CR 1000 N varies by Package. Note that during development of any future project, elements of Improvement Packages may be combined to best address the project goals.
46	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	CR 900 N should have a riro turn to get to Perrysburg because there are residents in that little town. Also, a vet too. No sense to go a long distance out of your way to turn off.	Some level of access is provided at CR 900 N under Packages 1, 2, and 3. Only in Package 4, the freeway concept, would no access be provided. In a freeway concept, access is only provided via interchanges, so a right-in/right-out would not be appropriate.
47	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	State rd 16 on 700 N on package 4 which is an interchange is a great way to upgrade the state roads that come together. With all the traffic, that could handle the situation.	An interchange would be provided at SR 16 in both Package 3 and Package 4, both of which were carried forward. Note that during development of any future project, elements of Improvement Packages may be combined to best address the project identified transportation needs.
48	Mobility, Safety, Draft Level 3 Report	On 600 N Right turns in and out would be the best instead of closing off all traffic. This would allow Emergency vehicles, law enforcement, school bus, and delivery of mail etc. This is package 3.	Some level of access is provided at CR 600 N under Packages 1, 2, and 3. Only in Package 4, the freeway concept, would no access be provided. In a freeway concept, access is only provided via interchanges, so a right-in/right-out would not be appropriate.

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49	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	Cr 450 N Package 2 of the planned options is right for residents. Directional Intersection RIRO + left turns. Tere is many residents that live on the road. This option is best for Emergency, fire, school bus, police protection etc.	Package 2, along with the other three packages, and the No Build Alternative are being carried forward and will be considered as part of any future project in the corridor.
50	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	CR 400 N Package 3 or 4 with a full intersection would be the best. This intersection connects the Town of Mexico, a lot of residents, grain elevator, fire department and to the east of 31 is a lot of residents and the town of Hoover in Cass County. We have farmers that travel to the grain elevator with grain and back and forth with farm equipment. Some equipment can be long depending on what type of farming they are doing. This cr 400 has no access to the south because of the old narrow wood and iron bridge has low weight limit. No farm equipment or big trucks can go across this. We would need to travel 8 to 10 miles out of way to go south. Therefore, we desperately need access to get across and on us 31 north. We would be hurting to get fire and emergency, school, police if we do not have access to us 31. This full access would also help the semi trucks hauling grain to and from the grain elevator. I see many trucks coming out to the us 31. Full access would mean the semi trucks would be allowed to merge to the us 31 and not have to stop. This would help because there is very heavy traffic during holidays, vacations, ball games. During these times you can hardly get across the us 31 highway with everyone driving 70+ mph.	CR 400 N would remain open in all packages: a TWSC intersection in Package 1; an RCI intersection in Package 2; and an interchange in Packages 3 and 4. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. During development of any future project, elements of Improvement Packages may be combined to best address the identified transportation needs.
51	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	Eel river rd n Package 4 would probably be best because people coming down the hill from the south really fast would not be safe over all with right turns. This area would cause accidents with right turns when people turn out slowly onto us 31. Eel river road on the west side of us31 could be allowed right turns only. That would be good for the residents on the west side. There are fewer residents on the east side and probably be safer with no right turns. So package 4 with a revised option would be the best.	Comment noted. Regarding access at Eel River Road under Package 4, providing right turn access onto US 31 would not be appropriate. In a freeway concept (such as Package 4), access is only provided via interchanges.
52	Mobility, Draft Level 3 Report	State road 16 is the only way I get to and from work and onto US 31 during bad weather. I don't understand how this will help.	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
53	Mobility, Draft Level 3 Report	St rd 16 and 1350n must have full cross over access to us 31. Our home is 2 miles east of us 31 right in the middle of those to points. Us 31 is how we get to peru indiana, old us 31 must be continued from the south deadend to state road 16.	Access to/from US 31 at SR 16 and CR 650 South/CR 1350 North is provided in all four Improvement Packages. Improvement Package 3 in the Denver Planning Segment includes an extension of Old US 31 from CR 800 North to SR 16. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
54	Safety, Overall US 31 Corridor, Draft Level 3 Report	Hello, I would like to discuss the safety plan if our access to highway 31 is compromised. I work in EMS and understand the importance of emergency response. It is my concern that if the access to residents west of US 31 is closed or compromised that our already rural residents will have delayed emergency responses.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Coordination with emergency service providers has occurred throughout this study and will be included in any future consideration of improvements.
55	Economic Development, Safety, Overall US 31 Corridor	As a through user (South Bend to Kokomo) on a weekly basis I appreciate the improvements in safety at a reasonable cost that the recommended plans present.	Comment noted.
56	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report, Environmental	Unimaginable that state road 16 crossing access is to be eliminated! Very few accidents and a main east west corridor for many in the area besides commercial truck traffic as well as a very busy business on this valuable intersection.. Other places south of Kokomo left open have far less traffic than state road 16	Access to/from US 31 at SR 16 is provided in all four Improvement Packages. The movements across US 31 and turning left onto US 31 at SR 16 are only limited in Package 1. This could be rectified by adding U-turn openings directly upstream and downstream of the directional intersection to allow the crossing movement. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.

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57	Overall US 31 Corridor	This is not a damn interstate just leave it alone. This will make it hard for the farmers and schools to do there job. All this is a dumb ass thing that the government want to do	At the outset of this study, the project team gathered and analyzed data on existing traffic conditions in the corridor, including crash history as documented in the *ProPEL US 31 North Existing Conditions Report*. That analysis, combined with input from the community and stakeholders was the basis for the purpose and need statement, which identified safety, access and mobility needs throughout the corridor. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
58	Safety	Finish your construction before winter months. Not safe with snow and icy roads to have construction too with all the semi's travelling on 31.	No projects have been programmed for construction at this point in the process. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
59	Draft Level 3 Report	I have reviewed the findings in the Draft Level 3 Screening Report for INDOT's ProPEL US 31 North Study and I approve and support the recommendations in the document.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
60	Environmental, Mobility, Safety, Overall US 31 Corridor	We just purchased a home on 500 S in Fulton County and do not want to see our quiet road turn into an overpass or access road. With Plan 3 & 4 part or all of our property would be taken for the overpass, according to conversations with planning members at the Nov 18th meeting. Our home is over 125 years old and was originally a log cabin. We want to raise our family here and preserve this home. At the Nov 18th meeting, we were told how to help preserve our home by documenting its age through DNR and the historical society and we will be doing so. Additionally, we are concerned about the traffic that would increase on our road if it was an overpass or access road. We have small children and animals and do not want our quiet road to become a safety issue. We are completely against an overpass plan. We do not want to see our road become heavily trafficked or potentially lose our property for these plans.	The ProPEL US 31 North study is a planning study. No decisions have been made about the future of US 31, and no projects related to the PEL study have been funded by INDOT. At this time, there is no timeline for implementation of improvement projects associated with this study. Additionally, the exact locations and amounts of potential land acquisition (if required) have not been determined. This will require further study and additional detailed engineering work. As part of the study, avoidance and minimization of adverse impacts, such as those to existing homes and businesses, have been considered to the extent feasible in a planning study. These efforts will continue throughout the duration of the study and will also be a focus of any subsequent project development activities, including the NEPA environmental review.
61	Bike and Pedestrian, Economic Development, Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	The first priority for the US 31 North project needs to be the overpass on CR 700 North. This overpass needs to be constructed as soon as possible for the safety of the horse and buggy traffic in the area. I have witnessed several incidents where the lives of those individuals were placed in danger by a horse wanting to continue across the road. A good buggy horse is not afraid of moving traffic. In one instance a buggy was in the center of the intersection at CR 700 North heading east. The driver was trying to keep the horse from pulling out into the northbound traffic. As the driver pulled back on the reins to stop the horse, the horse decided to back the buggy up. The buggy ended up in the passing lane of the southbound traffic. It was a busy day. By the grace of God, both lanes of southbound traffic shifted west onto the side of the road. We were stopped at the stop sign at CR 700 North and witnessed the incident. It was a miracle that no one wrecked or was injured in the incident. CR 700 North overpass needs to be wide enough to accommodate a minimum of 4 lanes of traffic, two lanes for horse and buggy or bicycle traffic and two lanes for motorized vehicles. Also as of today, a large piece of farm equipment would need a minimum width of 24 feet to safely pass across the bridge. By the time that the bridge is constructed, the required width may increase.	An overpass at CR 700 N is currently programmed by INDOT as part of a separate project. Your comments will be shared with the INDOT District office leading that project. As part of that project's development, there will be opportunities to engage and provide feedback directly to the project team.
62	Mobility, Safety, Draft Level 3 Report	After reviewing the Level 3 draft I have some severe concerns about the mobility we will have coming from the west on 200 North in Rochester. With trying to access businesses on the east side of US 31. We are a small family farm and use Meridian to cross 31 with equipment and trucks with gravity wagons hauling grain. The recommendations in this draft will severely limit us and several people like us. If the J turns were to be installed it would force us to take a vehicle traveling at 25 Mph to either play frogger and cut across traffic that travels close to 70 Mph. Or force us to travel several miles out of the way and take 14 into downtown Rochester, down main street to get to Lucas street on the south side of	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. For this preliminary, high-level design for Package 3, Meridian does not tie into Olson Road. "J-turns" are one of several alternatives that fall within the family of Reduced Conflict Intersections (RCIs). Throughout the alternatives development and evaluation phase, the study team worked with the public and study stakeholders to understand the specific concerns associated with RCIs and proactively address them. Specific refinements made to the RCI design concepts considered in this study include the following:

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		town. There needed to be at least one overpass installed that will allow traffic to bypass the town of Rochester and enter from the south side. Recommendation 3 for our area is really the only option. In the video it does not show Meridian getting tied into Olsen but instead dead heading into the overpass fill. This would need to be corrected to allow the frontage road to connect to Olsen so business like Keystone and PBS are able to cross 31 with Equipment. Please take into consideration the local community that does not have access to large equipment like semis for transporting crops and goods across 31. I also want to point out that I am in the construction industry and travel US 31 several times a week. At no other point along US 31 are there J turns. Just because this is some of the final parts of 31 to be converted to limited access. Now is not the time to cheap out. J turns will cause more accidents in this area due to the simple fact that drivers on 31 will not encounter them at any other point in there travels.	• The RCIs will accommodate a WB-65 design vehicle. A WB-65 design vehicle is equivalent to an interstate semitrailer that is over 73 feet in length. This means that RCIs considered as part of this PEL study will accommodate larger vehicles and trucks, including interstate semitrailers as well as most large farm equipment that would need to navigate the intersection. • The RCIs include extra space on the outside for larger vehicles to safely and efficiently make the U-turn movement. • The RCIs, in most cases, include an additional lane on the outside to support traffic making the U-turn to continue on the outside to make a right turn at the cross street or safely merge into through traffic. Should an RCI be advanced by INDOT as a project (or as part of a larger project), further opportunities for public involvement and design concept refinement will occur as part of any subsequent NEPA studies.
63	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	I like the no-build option. Additional choices would be better. Packages 1 through 4 all raise concerns about access for emergency vehicles, farm vehicles, school traffic, and general traffic flow. Some of the packages proposed increase safety at the spots shown, but may decrease safety in other areas where traffic is redirected. If I had to choose one of these bad options other than no-build, I'd prefer package 1 over packages 2-4.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
64	Overall US 31 Corridor	I prefer the no-build option. Hybrid options would be nice. Packages 1 through 4 all raise concerns about access for emergency vehicles, farm vehicles, school traffic, and general traffic flow. Some of the packages proposed increase safety at the spots shown, but may decrease safety in other areas where traffic is redirected.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. It is anticipated that any future project in the corridor will consider combining elements of the packages presented in the report.
65	Economic Development, Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	An overpass at E150S/Wabash Ave severely limits access to US31 North and southbound. I go south to work daily and north on weekends. Our home location was picked based on easy access to US31. If access to US31 needs to go through town the traffic flow would be greatly impacted as currently not designed to handle that volume. Travel times would significantly be increased.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. With the overpass at Wabash Avenue in Package 3, access to southbound US 31 from Wabash Avenue would be obtained by taking the overpass over US 31, traveling south on Wabash Road, and then turning right onto US 31 at the RIRO at Wabash Road. Access to northbound US 31 would be via the interchange at SR 25.
66	Environmental, Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	For the Rochester North area package 1 seems to be the most economical as it will reduce accidents and cost the least amount of money and be the least confusing to people who have not had to deal with J turns or directional intersections. Any time you put in a J turn in you are not helping to prevent accidents. You are making it possible for more accidents with people having to make U turns to go in the direction they need to go. People tend to not move over for traffic wanting to merge into lanes causing those trying to merge to take chances because they are in a hurry to try to get on the road. A J turn will cause more accidents than leaving the crossroads as they are & controlling them with a stop sign. We have too many older people in our community that will get confused & not understand which lane they need to be in. Packages 3 & 4 cost too much and will kill the truck stop at CR 50 & 31. There aren't that many accidents in the Rochester North section of 31 to warrant spending significant money in this section. There are people from other towns who use Olson as access to 31 and to Rochester making it one of the main intersections of this area. Putting in J turns her and at 6th street which is the other main intersection is asking for trouble. I do not believe you will have less accidents at these intersections, you will have more because instead of having 1 access point to 31 you will have 2 access points to 31 at these intersections. 2 access points at the intersection where people are in a hurry to shoot onto 31 & will have more trouble accessing it because of traffic.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. "J-turns" are one of several alternatives that fall within the family of Reduced Conflict Intersections (RCIs). Throughout the alternatives development and evaluation phase, the study team worked with the public and study stakeholders to understand the specific concerns associated with RCIs and proactively address them. Specific refinements made to the RCI design concepts considered in this study include the following: • The RCIs will accommodate a WB-65 design vehicle. A WB-65 design vehicle is equivalent to an interstate semitrailer that is over 73 feet in length. This means that RCIs considered as part of this PEL study will accommodate larger vehicles and trucks, including interstate semitrailers as well as most large farm equipment that would need to navigate the intersection. • The RCIs include extra space on the outside for larger vehicles to safely and efficiently make the U-turn movement. • The RCIs, in most cases, include an additional lane on the outside to support traffic making the U-turn to continue on the outside to make a right turn at the cross street or safely merge into through traffic. Should an RCI be advanced by INDOT as a project (or as part of a larger project), further opportunities for public involvement and design concept refinement will occur as part of any subsequent NEPA studies.

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67	Mobility, Overall US 31 Corridor	Looking at all of the plans presented. it appears that you are continuing to make it harder and harder to get from one side of Fulton county to the other. The plans appear to be funneling all of the traffic into the town of Rochester, which will cause traffic problems. Especially in the spring and fall with all the oversized farm equipment forced to cross 31 by going into Rochester. The use of Olsen road as an option to get onto US 31 from the east needs reevaluated, the road floods during heavy rains. Building a bridge at CR 700 North near the land fill to accommodate a group of people that do could travel 1 mile north to SR110 seems a miss use of funds when a bridge could be placed at 450N and help more people that pay tax's. To the South of Rochester fire services will be none existent due to the time it will take to get around the lake. On and off ramps should be added to SR 14 because CR 50 north and meridian road is used as the on and off for traffic on SR14 coming from the west to get on 31.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
68	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	Proposals that don't permit emergency or safety vehicles to cross US 31 cut off access unnecessarily. There are few roads that cross the county from east to west, and forcing emergency vehicles to detour around closed roads creates additional delays.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
69	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	RIRO intersections are not the best solution for this portion of US 31. It adds confusion and complexity and requires a further J-turn in each direction.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
70	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	The Proposal which extends old US 31 from 800 N to SR 16 looks to be a preferable solution vs. Other proposals other than the "do nothing" option. It would make more sense to extend it all the way south to N Mexico road e.g., old US Hwy 31. It might be a good option to add a roundabout where the extension meets SR 16. There could be a left turn off US 31 to the crossover to the extension to reduce traffic at the US31 SR16 intersection.	Any future consideration of the extension of Old US 31 would include consideration of a range of intersection types and locations, as well as the interaction with US 31 traffic.
71	Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	My comments concern the Rochester South segment, from SR 25 to 350 S, Fulton County. The vast majority of crashes in this segment occur at Old US 31/Southway. I believe that intersection should be improved, and the remaining intersections in this segment should be left AS IS. Other than fixing Old 31, the project cost does not justify the minor amount of crashes prevented. INDOT needs to consider how many Fulton County residents need to go south to Peru, Kokomo, and Indianapolis for work, dr. appts, etc. Package 1 and 2 make this much more difficult for residents, farmers, and truck drivers residing east of 31 and south of Old 31. In Package 2, residents will need to go on country roads approximately 4 miles south into Miami Co. to access 31 or go north on 31, make a loop, and turn around at Old 31 or SR 25, just to then go south. Package 1 - J turns don't work well for semis. There was vast public outcry on these approximately 4-5 years ago, and apparently no one was heard. Emergency services matter--seconds and minutes matter. Packages 1 and 2 impeded east-west travel. Most residents feel INDOT won't do the No-build. Therefore, Package 1 is the next most acceptable. It's STILL 18-24 MILLION dollars. Government needs to be more accountable regarding cost. Package 2, for this segment is 38-48 MILLION. I don't care if some is federal money, it's still taxpayer money! Package 2 will DOUBLE the cost of this segment, compared to Package 1. 13 crashes will be avoided over 20 years. This is only .65 of a crash reduction per year. An additional 24 million on Package 2 would only reduce less than one crash per year! Package 2 would significantly impeded east-west travel for residents. I do sincerely hope this study/INDOT considers the needs of the county's residents and the significant cost of this project--something for which we are all paying. The reduction in crashes from Package 1 to 2, Rochester South segment, are immaterial given the cost, and do not justify the significant burden for those that access and use US 31 daily. Southway 31/Old US 31 is	The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. It is possible that elements of Improvement Packages could be mixed and matched in future studies. Details regarding each of the Improvement Packages in each of the Planning Segments was available at the public meetings. Due to the volume of information provided, it was not practical to present all of it in the oral presentation. Project team members familiar with each segment were at each station to discuss details with attendees interested in each segment. The study team has engaged with stakeholders throughout this process and in a number of venues and formats. The three public meetings were held at major project milestones. Beyond that, the study team has hosted dozens community office hour sessions, more than a dozen meetings with elected officials, and five meetings with our Stakeholder Advisory Committee. All study materials are available on the project website and we have collected feedback and addressed comments throughout the entire study process, including at the public meetings.

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		intersection that has needed fixed for quite some time. I feel the "public meetings" should have allowed public comment. Those presentations did not go over the proposed changes; they merely showed the intersection types and told about the Propel study. Furthermore, we were told the comments had to be made online. There were Amish/Old Order present at our meeting and many older farmers and truck drivers. I feel this wasn't fair to them, and public comments should have been allowed and noted. On Dec. 11 and 12, I saw multiple facebook posts that comments could be made in person. Again, this segment of our population probably isn't on facebook to see those comments.	
72	Economic Development, Mobility, Safety, Overall US 31 Corridor, Draft Level 3 Report	The proposal #4 for US 31 and SR 16 diamond does not show any access to the residence at that intersection. It also shows the SW quadrant Ramp in the place of the historic barn structure at that location. This is unacceptable.	As noted in Table 22 of the report and shown in Appendix A (see page A-119), Package 4 would result in relocations and impacts to the Maus Farm at this intersection. Note that the Indiana Historic Sites and Structures Inventory (IHSSI), which assesses the significance of each property in terms of its historical significance, architectural merit, and integrity, rated this property as “Notable,” indicating that the property is above average in its architectural or historical importance and that further research or investigation may reveal that the property could be eligible for listing on the National Register of Historic Places (NRHP). If a project is proposed at this location in the future, the property would be fully assessed for its NRHP eligibility. As part of the study, avoidance and minimization of adverse impacts, such as those to existing homes and businesses, have been considered to the extent feasible in a planning study. These efforts will continue throughout the duration of the study and will also be a focus of any subsequent project development activities, including the NEPA environmental review.
73	VPIM – Rochester South, Recommended Packages	What I like most are the packages that provide direct access to US31 N & S bound from 150/ Wabash Ave. What I like least is no direct access to US31. Added town traffic/ congestion and travel times would significantly be impacted.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
74	VPIM – Rochester South, Carried Forward Packages	What I like most is -I do not support the carried forward packages as they do not provide access from 150/wabash. This is an important intersection with ample use.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
75	VPIM – Rochester South, General Feedback	Commutes in and around Rochester, to and from US31 would be negatively impacted by increased travel times, areas of congestion and significantly changing the rural community of Rochester. Safety can be addressed without limiting intersections. Thank you.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
76	VPIM, Macy, Recommended Packages	What I like most is package 1. What I like least is any of the other packages	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
77	VPIM, Macy, Carried Forward Packages	What I like most is package 1. What I like least is any other packages	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
78	VPIM – Macy, General Feedback	I prefer package 1 none of the others work for anyone around here gas is to expensive to have to drive 20 miles out of are way to go anywhere please you don’t live here so please stop trying to mess with its I do appreciate this virtual meeting explaining it better I didn’t quite understand it just looking at maps	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future.
79	VPIM – Mexico, Recommended Packages	We are one of the 7 private driveways and we do not want our access taken away from our property. There is literally no reason to take our access away from entering and exiting our property.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
80	VPIM – Mexico, Carried Forward Packages	Same as above. There is absolutely no reason to remove our access from entering or exiting our property.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of

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			improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community.
81	VPIM – Mexico, Recommended Packages	I don't have a comment but a question. If package 4 is selected what happens to the residents if our access is taken away? Will an access road be provided?	If the existing access point to a residence is removed, INDOT makes every effort to provide alternate access. It's important to note that INDOT cannot acquire property from another private owner in order to provide a new access point. Details regarding removal or relocation of access would be studied in detail during the development of any project in the corridor. Outreach to potentially affected property owners would be integral to that process.
82		Thank you for the opportunity to submit comments in response to the Planning and Environmental Linkage Study Level 3 Screening for the US 31 corridor. The members of the US 31 Coalition appreciate the work that you have put into this process. As you are aware, the members and communities comprising the US 31 Coalition have long advocated for a freeway improvement on the corridor. We appreciate the study team "carrying forward" a freeway option in the study. However, the imagined freeway layout that is included in the Level 3 report is insufficient to meet the needs that have been conveyed to the study team. We understand that freeways by definition direct traffic to specific access points in order to improve safety, however, we would request that some additional access or cross-road connection be considered in particular locations. As the individual projects move into environmental analysis and project development, we would want to be included in further conversations to define the actual layout. In addition, as none of the options presented seem to be a perfect solution for the corridor, we ask that the Level 3 screening and the final report not include differentiators such as "recommended" or "carried forward". The study team has done great work to narrow the 55 options down to five, and we do not believe it is prudent to weight those choices to make purely cost-driven decisions until INDOT's future funding is known. We ask that all choices move forward in an equal manner, unless specifically eliminated in the Level 3 analysis. To that end, the members of the Coalition, along with the counties, cities and towns that are represented, have repeatedly made known their opposition to the use of r-cuts on the US 31 corridor. To have this improvement type considered once again is very disappointing. We understand the cost favorability of an r-cut, however, we hope that INDOT will look at all the factors impacting this decision.	As noted in the *Level 2 Screening Report*, interchanges (i.e., freeway access points) were considered as potential solutions at some intersections based on traffic volumes, the proximity of existing and/or planned developments, consideration of overall network connectivity and access, and/or input from both the public and stakeholders. No specific traffic volume criteria or warrants exist for justification of an interchange; however, an interchange was considered as a potential solution as part of a limited-access corridor treatment where logical access points for the area would be established, as documented in the *ProPEL US 31 North Existing Conditions Report*. Per INDOT direction, there should be a minimum of 3 miles between adjacent interchanges in rural areas and a minimum of one mile between adjacent interchanges on non-interstate routes in urban areas; however, this was examined for the context of each section and location. The US 31 North study corridor is considered to be rural per consultation with INDOT and urban area boundary maps. There will be opportunities for additional public and stakeholder input as part of any NEPA and project development studies subsequent to the ProPEL US 31 North study. INDOT received several questions and comments seeking clarification on the Improvement Package ratings. More specifically, there was confusion between the Recommended and Carried Forward ratings since both would require further consideration after the PEL study. To provide greater clarity, all improvement packages evaluated in the *Final Level 3 Screening Report* were rated as Eliminated or Carried Forward. There are no R-CUT intersections included in any of the Improvement Packages considered for the US 31 North study area. An "R-Cut" is one of several alternatives that fall within the family of Reduced Conflict Intersections (RCIs). An R-CUT intersection is similar in nature to an RCI intersection, but it utilizes a signal. Since introducing a signal in this study area would conflict with the study goal to maintain free-flow conditions, R-CUTs were not considered. However, because of the similarities to RCI intersections, the response below is offered regarding RCIs within the study corridor. Throughout the alternatives development and evaluation process, the study team worked with the public and study stakeholders to understand the specific concerns associated with RCIs and proactively address them. Specific refinements made to the RCI design concepts considered in this study include the following: ▪ The RCIs will accommodate a WB-65 design vehicle. A WB-65 design vehicle is equivalent to an interstate semitrailer that is over 73 feet in length. This means that RCIs considered as part of this PEL study will accommodate larger vehicles and trucks, including interstate semitrailers and as well as most large farm equipment that would need to navigate the intersection. ▪ The RCIs include extra space on the outside for larger vehicles to safely and efficiently make the U-turn movement. ▪ The RCIs, in most cases, include an additional lane on the outside to support traffic making the U-turn to continue on the outside to make a right turn at the cross street or safely merge into through traffic. Should an RCI be advanced by INDOT as a project (or as part of a larger project), further opportunities for public involvement and design concept refinement will occur as part of any subsequent NEPA and project development studies. A goal of the US 31 North study was to "Support the existing economy and/or planned economic development through adequate transportation infrastructure that provides improved safety, mobility and/or access." Table 8 in the report identified the criteria used to measure the performance of each package against this goal. In every case, taken as a whole, the packages received a "neutral" rating on this goal. It was the study team's judgment that any potential

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		Related to this concern, we disagree with the ranking of study goals for each section. The study states that a freeway is neutral or even negative for economic development, while an expressway or expressway light enhances economic development. When industries and economic development associations all along the corridor have specifically asked for a freeway for this very reason, we request that the study team reconsider the assumptions made in this section. While we understand that the packages included in the report represent a continuum of cost, mobility and access, there is no consideration of the benefits (economic or otherwise) in this analysis. If this cannot be included in the final report of the PEL, we strongly recommend that it be included in the NEPA analysis for individual segments. Each county in the US 31 corridor has specific locations that need to be addressed for development projects, safety, or other concerns. We have included the intersections below and hope that INDOT will prioritize them as the projects move forward. These are not listed in any particular order, but all represent a need to be addressed sooner rather than later. Each have specific issues and may require a combination of improvements not included in any of the Level 3 options, which we would like to discuss further. <u>Fulton County</u> Olson/Monticello Road interchange Old US 31/Southway 31 overpass Court Road 650 South (Speck's Corner) interchange <u>Marshall County</u> US 31 and Lincoln Highway US 31 and 18th Road (this location is in the SR10-CR700N project underway; however, it is included in these comments for consideration in the PEL). <u>Miami</u> US 31 and CR100N US 31 and Business 31 US 31 and SR 218 North US 31 and SR 18 US 31 and CR800S <u>Tipton County</u> US 31 and CR450N US 31 and Division Road US 31 and CR500S Thank you for the opportunity to comment, and we look forward to continuing the conversation.	economic benefits would be offset by the significant losses in local access and reductions in cross-corridor mobility, as well as the direct impacts to adjacent businesses. Overall, the study team agrees that transportation investments can result in meaningful positive economic impacts. Although there may be potential economic development benefits associated with an upgraded roadway facility, the accurate estimation and analysis of these benefits is difficult and outside the scope of this planning study. The *Level 3 Screening Report* evaluated safety, mobility, and access benefits of the Improvement Packages within each planning segment. This evaluation process was intentionally set-up to consider factors that measure an Improvement Package's ability to address the purpose and need for transportation improvements in the study area. Supporting economic development is a goal for the ProPEL US 31 North study area and was considered qualitatively during the Level 3 screening. See Section 3.7 of the *Level 3 Screening Report* for further information, including what criteria were considered in the analysis of this goal. Further analysis of potential economic benefits could occur during subsequent NEPA and project development studies. Thank you for the information regarding preferred priority locations and it has been documented as part of the official study record. After the PEL study is complete, improvements carried forward from the study will be considered by INDOT as part of their traditional programming and project development processes. INDOT uses an objective, needs-based approach for new programming projects, so areas of highest need are addressed as funding is available. This process, which is known as the call for projects, is typically a five-year timeline.

Table C-2. Responses to Stakeholder, Tribal, and Agency Comments Received during the Level 3 Screening Comment Period

#	Topic	Message	Response
1	Cultural Resources Stakeholder	We live in a County road that comes off New 31 south of Rochester. If 31 becomes a limited access highway, it will be a real handicap for us. It will be more miles and time to get to town (Rochester) and for fire engine and police & other help to get here. It will cost us more gas and more time every day, sometimes several times a day. Please do not make 31 limited access.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. Coordination with emergency service providers has occurred throughout this study and will be included in any future consideration of improvements.
2	Cultural Resources Stakeholder	Making US 31 a limited access highway has several disadvantages. 1. It will cause drivers to need more gasoline. 2. It will take longer for drivers to get where they are going because they have to get on and off at certain places. 3. It will take longer for fire engines and ambulances to get to us who live near the limited assess highway. 4. We live south of Rochester only a quarter mile from US 31 on county road 300 S. It would cause us to have to drive around Lake Manitou to get to Rochester unless they build another road for us or make the Nickel Plate Trail into a road. 5. We hear trucks all night as they go by on the highway. Limited access would probably increase traffic and more noise for us. 6. Accidents bring sirens and police and ambulances, that wake us up at night. I always say a prayer when I hear the sirens and hear about a wreck. I hear the helicopter coming and going in the middle of the night, taking inured people to Kokomo hospital. Please do not make US 31 a limited access highway. Please consider the people who live here next or tor close to the highway.	A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. A reduction in local access and cross-corridor mobility is an unavoidable impact when considering an upgrade to a higher-level facility. The study team attempted to identify a reasonable range of alternatives that balanced the identified safety, mobility and accessibility needs in the study area as well as the public and study stakeholder feedback. With regards to access from CR 300 S to Rochester, the comment is correct with regards to Package 4 (Packages 1, 2, and 3 would continue to allow access to US 31 northbound). As noted above, additional analysis and outreach will be included if and when any of these improvements move forward. Also note that during development of any future project, elements of Improvement Packages may be combined to best address the project goals or modified where needed. Coordination with emergency service providers has occurred throughout this study and will be included in any future consideration of improvements.
3	SAC Member Comment Draft Level 3 Report	When will the Level 3 comments be available to the public? From my perspective, it would be helpful if they were available on the website as submitted and before December 13 for public reference to include horizontal collaboration and response. I believe ProPELUS31 and the work on US31 in the future would benefit from this as well. Will the next level (Fort Wayne DOT as I understand the process) consider comments submitted in Level One and Level two, but not submitted in Level Three? Will relevant comments made in the prior Levels need to be entered into Level 3 to be considered? How has the public been made aware that comments outside of the Comments on the website will not be considered? (That is written in my notes from the last SAC meeting). Between you and I, I did not appreciate the sit down, shut up and listen directions the committee members received which was followed with a very brief question/answer period. This does not fit my definition of collaboration or my practice of organizational collaboration.	Comments received on each screening report have been summarized and addressed in the final version of the relevant report, including those received on this *Final Level 3 Screening Report*.
4	SAC Member Comment Economic Development, Environmental, Mobility, Safety, Draft Level 3 Report	Mexico Planning Segment: Impact to Farms - Farmland is located on both East and West Side of US31 in the Mexico Segment. Exits and crossings currently used by our agricultural business operations are CR 400 through SR 16. No Build Options: The need for change is obvious (US 31 is locally referred to as "the Autobahn"). No Build is not an option with slow moving east/west farm equipment in juxtaposition with fast north/South US 31 traffic. Change is needed for safety and for traffic at cross-purposes. These are not workable options for our farmers. Improvement Package #1: While turn lane lengthening seems like a good idea on paper, in reality it will not help at CR 450N and CR550N. Currently east/west farm transportation depends on traffic intervals provided by the stop light just north of US24 to allow enough time to cross US31 with slow moving equipment often hitched in tandem to the length of a large semi-truck. The reason there are few accidents at CR550N and US 31 is	Thank you for the detailed comments concerning access points and mobility in the corridor. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Also note that it is anticipated that any future project in the corridor will consider combining elements of the packages presented in the report. Coordination with emergency service providers and local agribusinesses has occurred throughout this study and will be included in any future consideration of improvements. During the future development of any project in this corridor, impacts to local access or mobility will be considered in more detail and include additional stakeholder engagement. The construction of local-service roads or improvements to the local roadway network would be considered during that process.

#	Topic	Message	Response
		that farm operators now time their crossings with the stoplight advantage of traffic intervals or they do major equipment moves on weekends. Given the traffic today, that is not easy. Package #1 is predicted to increase the number of accidents at the intersection of US31 and CR550N. For operator safety, to prevent property loss and time lost waiting to cross, these packages are not workable for farmers and agri-business. Improvement Package #2: RCIs at CR400 and DR450 will not make necessary east/west farm operator/equipment crossings safer or easier with north/south high-speed traffic. RIRO would be useful for US31 access for agri-business deliveries, EMT, Fire and School bus services. (See Package #1 for why leaving CR550N stop control would not be workable/safe for farm/operator equipment, school, emergency services or general access to US 31 for north/south agri-business, or resident transportation such as to medical appointments in Indianapolis). Why are there no frontage roads proposed to accommodate fire/EMT/school buses to replace private driveways and closed county road accesses? (See attached on frontage roads). It is my understanding that this option has also been raised by others in public meetings. Improvement Package #3: Not being able to cross at CR550N to the Mexico Road which is in the middle of the REM farmland is totally unacceptable economically and to the 150-year legacy of the farmland (Three Hoosier Heritage Awards, 2024). CR600 as RIRO is not safe as visibility to the fast on-coming south US31 traffic is limited by a hill and a curve. A crossing at CR550N for farm operation, for the neighboring orchard and for access to the drying bins/home just north of CR550N is a business, farm and resident necessity. Closing this intersection to east/west transportation would cause severe business, resident and community (EMT, fire, school busing) hardships. This option will not work for agriculture. Improvement Package #4: An overpass at CR550N would provide the operator/farm equipment safety needed for farm operators, the orchard, and the resident/farm drying bins north of CR550N (west side of US31). Farms would have increased operational expense with access to US31 at CR400N and with the possibility of east/west crossings at SR16 (which the farm operator currently uses). We can accept the closings of CR600N and CR450N with the grade separated interchange at CR400N and with the CR550N overpass (at some inconvenience and additional expense) as the best option for farm operations. SR16: While not included in the Mexico segment, farmers do use SR 16 for east/west US31 crossings for operators/farm equipment. Included in that is access to CRN300W which runs north/south and parallel to the east side of US31. Package #1 appears not to allow SR16 east/west traffic. Traveling to cross US31 on SR16 one would need to turn onto US31 and travel many miles (possibly US24 to the South or SR25 to the North to either get turned back towards SR 16 or at that point, just take an alternate route. Either way, it makes no sense for local traffic or the funeral home that needs to access cemeteries located going both north and south on US31. Farmers need east/west crossings for machinery and the Macy elevator. This option makes SR16 unusable for farming operations. Package #2. A J-Turn/RCI at SR16 would allow east-west traffic access. This intersection is used frequently by area farmers, semis and cars. A J-turn here would be a dangerous mix of fast-moving cars, long semis and slow-moving tandem farm equipment creating backups at this SR16 crossing. That is one of the main uses of this important State Road.(L3, p.14) PropelUS31 study bias/blind spot: North/South transportation needs cannot be prioritized over local East/West transportation/economic needs. This does not meet the Study Goals. This option is not workable for agriculture. Nothing is as disgusting to a rural resident as the assumption by “outsiders” that they can be fooled. Adding a new and untenable alternative to Level 3 (Package 2) for this important main intersection without backing it up with data/rationale leaves the public in the dark. What desk informed research was regarded as important enough to add this to Level 3? Were the current "lived experiences” of traffic backups and the necessary traffic flow for turns to go north and south on US 31 from SR16 considered? This bespeaks a lack of adherence to ProPELUS31's stated	Regarding the noted concerns about RCIs, throughout the alternatives development and evaluation, the study team worked with the public and study stakeholders to understand the specific concerns associated with RCIs and proactively address them. Specific refinements made to the RCI design concepts considered in this study include the following: • The RCIs will accommodate a WB-65 design vehicle. A WB-65 design vehicle is equivalent to an interstate semitrailer that is over 73 feet in length. This means that RCIs considered as part of this PEL study will accommodate larger vehicles and trucks, including interstate semitrailers as well as most large farm equipment that would need to navigate the intersection. • The RCIs include extra space on the outside for larger vehicles to safely and efficiently make the U-turn movement. • The RCIs, in most cases, include an additional lane on the outside to support traffic making the U-turn to continue on the outside to make a right turn at the cross street or safely merge into through traffic. Should an RCI be advanced by INDOT as a project (or as part of a larger project), further opportunities for public involvement and design concept refinement will occur as part of any subsequent NEPA studies. Regarding the balance of north/south transportation needs versus local east/west transportation/economic needs, this study identified both local mobility (access to US 31 and crossing US 31) and regional/statewide mobility as needs for the project. The balance of these two needs has been considered throughout the development and evaluation of Improvement Packages during Level 3. Packages 1 and 2 generally maintain more local mobility (access or crossing) while Packages 3 and 4 generally provide fewer local access and crossing points while providing interchanges and overpasses. The “frontage roads” described in this comment with parallel roadways and a multitude of overpasses and interchanges are usually treatments appropriate in urban areas like the two Minneapolis-area examples pointed out in the comment where the density of development and travel demand supports the provision of such infrastructure. The local-service roads that may be considered during potential future project development would most likely be for the purpose of maintaining access to adjacent properties rather than as a parallel alternative route to US 31.

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		process of collaboration, and their stated goals of safety and mobility (Level 3, pages ES-1& ES-3). It feels like construction costs have been prioritized over safety. Package #3 & #4: Interchanges with overpass and ramps allows for local traffic and farm operators/equipment to cross and to flow in any direction/access to east/west and to US31 north/south. Slow east/west and fast north/south traffic are accommodated. These options are workable for farmers and agri-business. An action to counteract the above noted ProPELUS31 study bias could be if the increased costs for business/county expenses with increased/changed traffic on country roads created by this federal roadway/US31 project could be offset by giving equal weight to slower agriculture/rural east/west transportation needs with faster north/south traffic. It is understood that this federal project assumes no financial responsibility for the indirect expenses of counties and businesses that this project will create. This is IRRESPONSIBLE. If I am gored by my neighbor's bull and it was not due to carelessness on my part, the neighbor should be responsible for my medical costs. Balance of resource distribution to support America's foundational agricultural economy is the responsible thing to do. These "out of the box" considerations may not seem "reasonable"; however, they are justifiable. Farmers, small town residents and agribusiness all pay federal taxes, too. They are stakeholders in this project and expect equitable consideration with the fast north/south US31 traffic goers. ATTACHMENT: Creative Alternatives for US 31North from observed roadways. In Minneapolis, several interstates (US 94, US35W and US35E) run through the city presenting the same problems as in the US 31N corridor with both fast through traffic and slower local traffic needs to be accommodated. (Page 10, Existing Transportation Conditions Report and p. 15 Draft Purpose/Need: 16% of the traffic traverses through the corridor without stopping; 84% is local traffic (37% beginning and ending in the corridor and 48% using the corridor to either enter or exit US31 within this 27-mile rural span). This significant roadway use differential on the US 31 N corridor makes fundamental that local traffic needs are given at least equal weight to through traffic considerations in the planning process. US 31 is vital to people who live in the corridor traveling within, or only entering or exiting the corridor. Minneapolis uses left lanes dedicated to fast/commuter traffic and right lanes for slower local traffic with right turn lanes off the freeway connecting with many overpasses to accommodate both local and through traffic needs. Could this/similar model be used in this rural corridor to accommodate differing traffic needs? It appears the overpass at 700N (near Rochester for agricultural/Amish transportation) has proven a safe intersection (p. 21, Existing Transportation Conditions Report). In a nearby town, Hwy. 36 (with businesses on both north and south sides) connects the Twin Cities with Wisconsin across the St. Croix River Bridge and accommodates commuters and local traffic. Overpasses were placed on both ends of the town corridor. Along most of both sides of this highway (which is not limited access) are two-lane frontage roads. I estimate the volume of traffic on Hwy. 36 to be greater than on US 31 from CR 400N to SR16 and that a frontage road along one side would meet local needs in the US 31 corridor.	
5	SAC Member Comment Economic Development, Environmental, Mobility, Safety, Draft Level 3 Report	HONORING AND INCORPORATING RURAL VALUES: MISSING IN PROPELUS31 STUDIES. US 31N is not "fly over" country. It is foundational to the American economy with a unique culture and needs; it is often unseen as are most foundations, yet essential to the strength and standing of our U.S. way of life. The Stakeholders Advisory Committee is a required component in ProPELUS31 aimed to ensure fairness and avoid researchers' blind spots. This road project requires acceptance of rural values of community connectedness and stewardship of natural resources equally with the need for faster direct north/south transportation. Rural residents will need to accept that the side roads once used almost exclusively for farm machinery/trucks and operators will now be shared with those wishing to go faster and locals who do not have a way to get onto north/south US 31. (5/17/23 SAC minutes, p.6: Data (inverse) shows that 56% of truck traffic in the US corridor is local hauling	Thank you for the detailed comments concerning access points and potential effects on the county road network. A preferred alternative has not been selected. All four packages in each segment, as well as the No-Build, are being carried forward for consideration in the future. Also note that it is anticipated that any future project in the corridor will consider combining elements of the packages presented in the report. Prior to implementation of any package or portion of a package of improvements, additional analysis of traffic and environmental impacts will be undertaken, along with additional outreach to the community. The study team has coordinated throughout the study with emergency service providers and local school stakeholders to understand important access and crossing points and that input has been considered in the development and analysis of improvement packages. All stakeholders, including county officials would be engaged in any future consideration of

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		of grains and animals). Higher taxes on property will be necessary to upgrade narrow country roads (formerly gravel, now topped with tar) without stop signs, shoulders, lane markings, turn lanes, adequate visibility, safe access for residents/farm operators, and trucks/machinery. (See attached for more details). Residents also need to accept the increased pollution leading to more human/animal medical costs, food of lower quality, increased food costs, more accidents, and air pollution - an overall decrease for safe human, animal and natural environments in the area. The country roads will need to be upgraded to accommodate displaced traffic from US 31 and SR 16. (See L3, p.17). These necessary expenses are collateral damage to local governments and residents and are not included in the US31 project funding. A rural sociological asset unseen by desk top research is that rural folks care about what happens to them, their neighbors, domestic and wild animals and the next generations. Stewardship of the soil is forward looking. Soil and air are honored and revered as integral to life. Stewardship is a part of everyday rural considerations and takes priority over man-made roads, speed and money/created wealth. Quality of life whether it be microbes, animals or humans and natural resource stewardship takes precedence in rural thinking. This probably sounds strange and unimportant to the majority of folks not blessed with rural small-town upbringings; interacting daily with natural environments is a formative feature of life on the farm. Without regard for the earth, weather, soil health, earth's creatures, and the efficiency of our farms/workers there is no service and industrial economy, no man-made environment. We can't breakfast on a bowl of money and a side of asphalt and re-bar. That is not the order of the universe, never has been, and never will be. There is no ignoring this simple truth. Man and his plans/self-made materials cannot exist without first the existence of the Givens of Life in all forms and acknowledging their Primacy. Our rural ancestors and the land have taught us balance, how to bring people and ideas together, respectfully listen and compromise, not use people as a means to check a box. Rural peoples see beyond that - the stats and the studies. They value and prioritize their lived experiences with nature and each other, not the contrivances of this culture and the idolatry of wealth - itself a man-made construct. Preserving & enhancing the capability/health of human beings and farmland natural resources in rural America is foundational to and makes possible the monied priority and lifestyle of the dominant culture. ATTACHMENT: WIDER RURAL PICTURE AND FORESEEABLE CONSEQUENCES ProPELUS31 Study Goal: Maintaining rural corridor character and farm/rural businesses. Adversities Created for Agri-business/local businesses with limited access onto US31: County Road upgrades will be needed, such as firmer roadbeds, road widening, berm widening, hill reduction, lane markings, signage (speed, stops, etc.), and safe intersection visibility. Without these, safety for locals/farmers will be reduced. That Federal or state funds are not available in this Project for county road upgrades, was discovered. US31 proposed changes impact beyond the study corridor range (1/2 miles on either side of US 31). It is foreseeable that costs for county road reconstruction fall to Miami County taxpayers, impacting Miami County tax revenues, school funding, and Fire/ EMT services. These public costs are foreseeable. Higher costs/lower incomes: With fewer crossings, agri-business/local businesses expenses will increase for travel time, fuel, labor, insurance rate increases affecting profits and subsequent taxable revenue. The impact of income losses for local business/agri-business is foreseeable. Traffic Displacement: 56% of truck traffic in the US 31 corridor is local hauling of grains and animals (p. 6, 5/17/23 SAC minutes). With limited access to US31, these necessary agri-business transports will be forced to use county roads not engineered for this weight,	projects in the corridor. INDOT would work with stakeholders to identify areas of concern on the county road network and evaluate any needed mitigation measures. Regarding access to/from and across US 31 between CR 300 N and SR 16, Package 1 would provide four full-access and two partial-access points; Package 2 would provide three full-access and three partial-access points; Package 3 would provide two full access and two partial-access points; and Package 4 would provide two full access points.

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		volume of use or mix of traffic. Increased local car traffic displaced from US31 will compete with farm equipment/truck movement. Traffic pattern changes will happen. Limited Access to US 31 and Across US 31: Currently there are 6 road crossings used by farmers on US 31 between CR300N and SH16. Ag needs a minimum of 2 safe crossings on US 31 from CR 300N through SR16 due to locations of grain elevators, packing houses, and the location of Eel River usable/bridges. These crossings are also required for school buses, EMT and fire protection. Rural Health/Quality of Life: It is a given that human and animal health will be negatively impacted by closer proximity of increased noise and air pollution.	
6	US Fish and Wildlife	The U.S. Fish and Wildlife Service (Service) has reviewed the ProPel US 31 North Draft Level 3 Screening Report (Report), dated November 12, 2024, and has the following comments. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (l6 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of l969, the Endangered Species Act of l973, as amended, and the U. S. Fish and Wildlife Service's Mitigation Policy. The Report is the final step to identify a range of possible solutions to transportation issues along the US 31 North study corridor. It identifies six planning segments, multiple improvement packages within each segment, and makes recommendations for the best packages and whether to eliminate or carry forward other packages. Considerations include cost, safety, environmental impacts (including natural, cultural and recreational, and community and socioeconomic resource impacts), and the ability of each package to meet project goals. The ProPel US 31 North study area stretches from County Road 300 North, just south of the Eel River in Miami County to CR 700 North in Fulton County. As mentioned in earlier coordination, the Service is particularly interested in the Eel River and Tippecanoe River crossings and the Manitou Wetlands Complex, southeast of Rochester in Fulton County. Lake Manitou and its wetlands are not directly impacted by US 31, but drainage enters the system from the highway. Information about natural resource impacts in the Report is very general. Below is a list of federally listed and proposed species and critical habitats that may occur within the study area. This information is available from the Service's Information for Planning and Consultation (IPaC) website and is valid for up to 90 days. The Service recommends that the list be verified via IPaC at regular intervals during project planning and implementation for updates to species listings and information. <u>Federally endangered:</u> Indiana bat (Myotis sodalis), northern long-eared bat (Myotis septentrionalis), clubshell mussel (Pleurobema clava), rayed bean mussel (Villosa fabalis), and sheepnose mussel (Plethobasus cyphyus). <u>Federally threatened:</u> Rabbitsfoot mussel (Quadrula cylindrica cylindrica) and round hickorynut mussel (Obovaria subrotunda). <u>Critical Habitat:</u> Round hickorynut mussel critical habitat. <u>Proposed federally endangered and threatened species and critical habitat:</u> Tricolored bat (Perimyotis subflavus), monarch butterfly (Danaus Plexippus), salamander mussel (Simpsonaias ambigua), and salamander mussel critical habitat.	If/when projects in this study corridor move forward, INDOT will continue to consider the project's potential to effect listed and proposed species or critical habitats. INDOT will coordinate with the US Fish and Wildlife Service in any future projects. With regards to USFWS's concurrence with the Draft report's recommendations on packages, note that INDOT received several questions and comments seeking clarification on the Improvement Package ratings. More specifically, there was confusion between the Recommended and Carried Forward ratings since both would require further consideration after the PEL study. To provide greater clarity, all improvement packages evaluated in the *Final Level 3 Screening Report* were rated as Eliminated or Carried Forward.

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		Experimental Population, Non-essential: Whooping crane (Grus americana). Bats All three bat species have ranges that overlap with parts or all the project area. Indiana bats hibernate in caves then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Research has shown that they will also inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainage-ways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects. During the summer, NLEBs typically roost singly or in colonies in cavities, underneath bark, crevices, or hollows of both live and dead trees and/or snags (typically ≥3 inches depth at breast height). Males and non-reproductive females may also roost in cooler places, like caves and mines. NLEBs are opportunistic in selecting roosts, using tree species based on presence of cavities or crevices or presence of peeling bark. They have also been occasionally found roosting in structures like barns and sheds. NLEBs forage for insects in upland and lowland woodlots and tree lined corridors. During the winter they predominately hibernate in caves and abandoned mine portals. The TCB is a small insectivorous bat that typically overwinters in caves, abandoned mines and tunnels, and road-associated culverts (southern portion of the range) and spends the rest of the year in forested habitats, typically roosting among live and dead leaf clusters in tree branches. The tricolored bat (Perimyotis subflavus) was proposed for listing as endangered on September 14, 2022. We do not know when this proposed listing will be finalized, but it could occur soon. No critical habitat has been proposed. Depending on the selected alignments, the project may qualify for the Federal Highway Administration, Federal Rail Administration, and Federal Transit Administration's Rangewide Programmatic Consultation for the Indiana bat and NLEB. Upcoming updates to this process include adding the TCB to the consultation and online determination key and allowing for projects that extend beyond 300 feet from the edge of pavement. Since this project is in a very preliminary stage, we anticipate the updated process to be available when the project gets closer to section 7 consultation. Mussels The round hickorynut mussel (Obovaria subrotunda) was listed as threatened by Federal Register Notice of March 9, 2023, with an effective date of April 10, 2023; at the same time, critical habitat was designated for the species, which includes the entire Tippecanoe River within Fulton County, in addition to sections in adjacent counties. The salamander mussel and critical habitat were proposed for listing in the Federal Register on August 22, 2023. The final rule has not yet been published. There are records for the mussel both upstream and downstream of the US 31 bridge over the Tippecanoe River and critical habitat has been designated within the Tippecanoe River from just south of Oswego Lake in Kosciusko County to upstream of Lake Shafer in White County. In addition, three other Federally listed and proposed mussel species are found within the Tippecanoe River in Fulton County. Sheepnose, clubshell, and rabbitsfoot mussels are known within the project study area (including some records near the US 31 bridge). Sheepnose, clubshell, rabbitsfoot, round hickorynut, and salamander mussels are also known at various locations in the Eel River from North Manchester downstream to the confluence	

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		with the Wabash River at Logansport. Rabbitsfoot has been found in the vicinity of the US 31 bridge at the Eel River. Monarch Butterfly In December 2020, the Service determined that listing the monarch under the ESA was warranted but precluded by higher priority listing actions. Today, December 12, 2024, the Service announced a proposal to list the monarch butterfly as a threatened species with species-specific protections and flexibilities to encourage conservation under Section 4(d) of the ESA. The proposed 4(d) rule incentivizes proactive conservation efforts and allows actions that have beneficial or minimal impacts to monarchs and that do not threaten the species' overall population. If warranted, final rules are typically issued within a year of the proposed rule. The monarch butterfly does not have federal protections currently. The entire proposed rule package can be found on regulations.gov by searching docket number FWS-R3-ES-2024-0137. Whooping Crane The whooping crane occurs only in North America, specifically within Canada and the United States, and is North America's tallest bird. Whooping cranes are a long-lived species, with current estimates suggesting a maximum longevity of at least 30 years for individuals in the wild. Whooping cranes continue to face threats from alteration and destruction of habitat - including migratory habitat and winter habitat. Indiana is within the range of the eastern migratory non-essential population (NEP), an experimental population introduced in the early 2000s. When NEPs are located outside a National Wildlife Refuge or National Park, only two provisions of section 7 of the ESA apply: Section 7(a)(1) and section 7(a)(4). Federal agencies are not required to consult with us under section 7(a)(2). Wetland and stream impacts may require permits from the U.S. Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program, and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with the U.S. Army Corps of Engineers mitigation guidelines. We do not have any other specific comments on the Draft Level 3 Screening Report. Depending on the packages or alternatives selected, the proposed project may have impacts to some or all the above-listed species. Based on the preliminary package descriptions, packages 3 and 4 appear to be higher in natural resource impacts than 1 and 2; therefore, we agree with the Report's suggestion that packages 1 and 2 be recommended. This information is provided for technical assistance purposes and does not constitute consultation under section 7 of the ESA. We appreciate the opportunity to coordinate early in the process to help reduce impacts to natural resources and look forward to reviewing additional project details once those are available. If you have any questions or need more information, please feel free to contact Robin McWilliams Munson of my staff at Robin_McWilliams@fws.gov.	