

WELCOME!



SD HIGHWAY 115 CORRIDOR STUDY



FHWA





STUDY SCHEDULE

Public Meeting #1
Gather feedback on
issues and needs



Public Meeting #2
Preliminary Recommendations
and Concept Refinement



2024

2025

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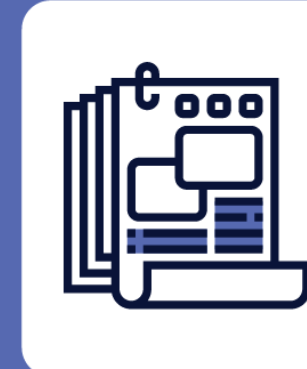
Corridor Vision



Concept Development and Analysis



Concept Refinement and Evaluation

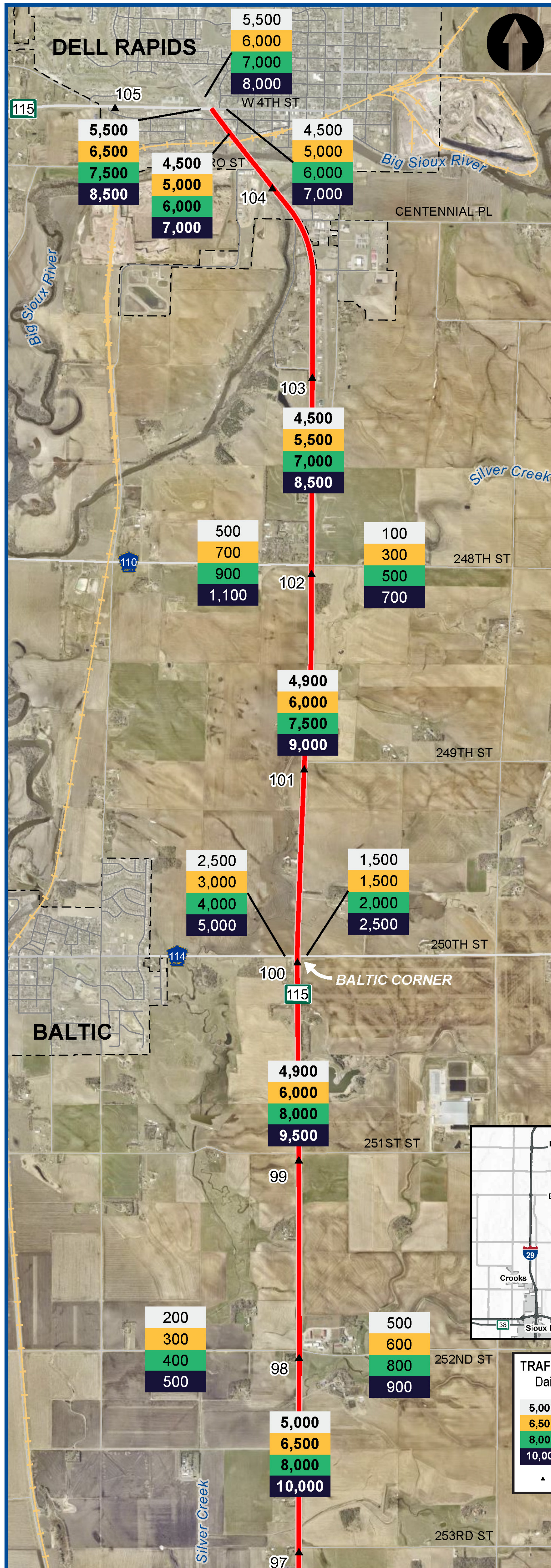


**Recommendations
and Report**

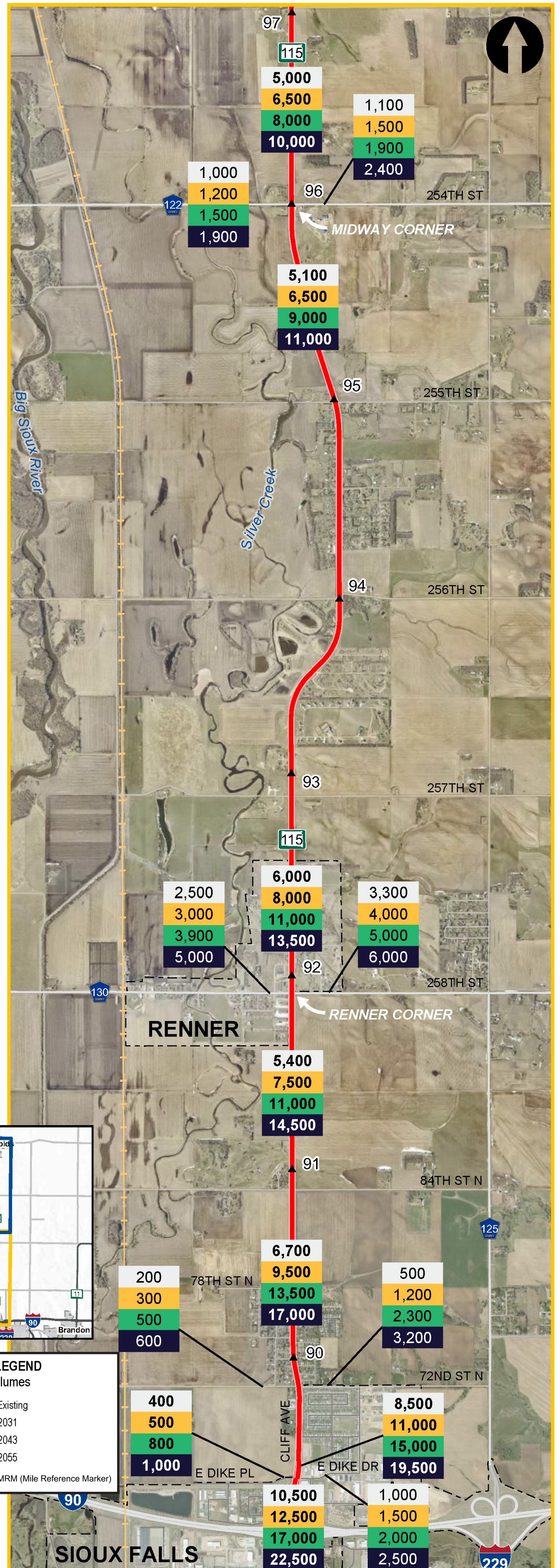
DAILY TRAFFIC VOLUMES

Existing (2024) and Future-Year No Build (2031, 2043, 2055)

NORTHERN SECTION



SOUTHERN SECTION

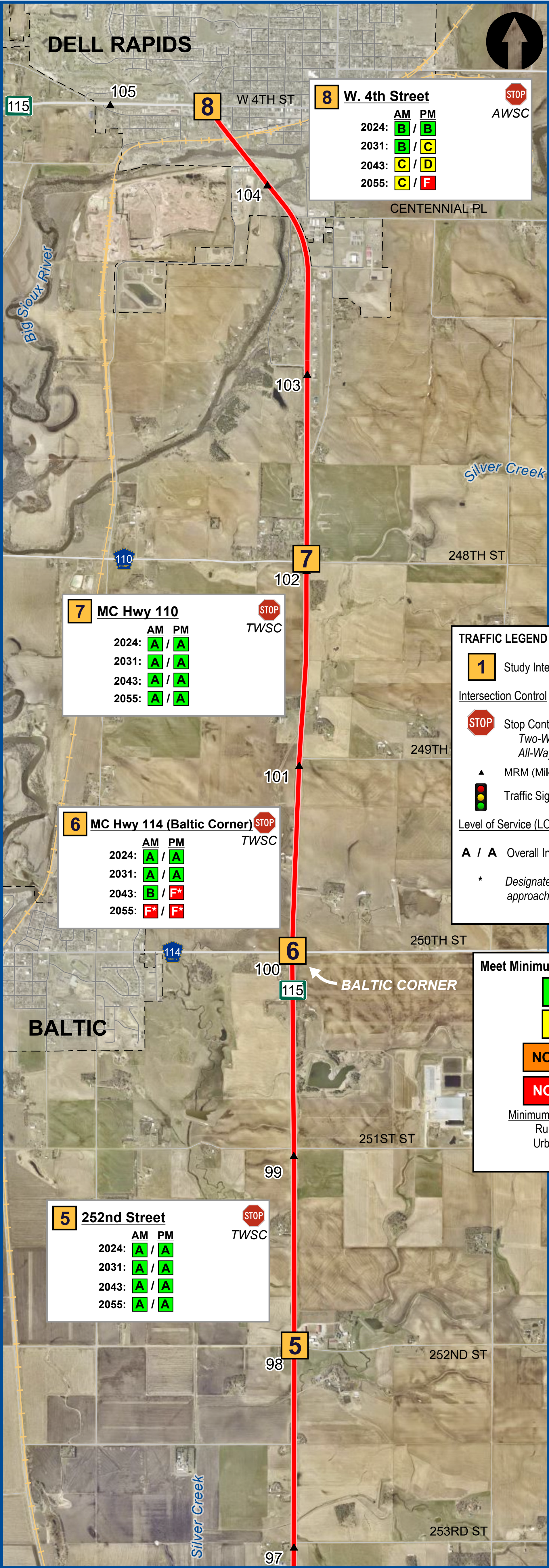


TRAFFIC LEGEND	
Daily Volumes	
5,000	Existing
6,500	2031
8,000	2043
10,000	2055
▲ MRM (Mile Reference Marker)	

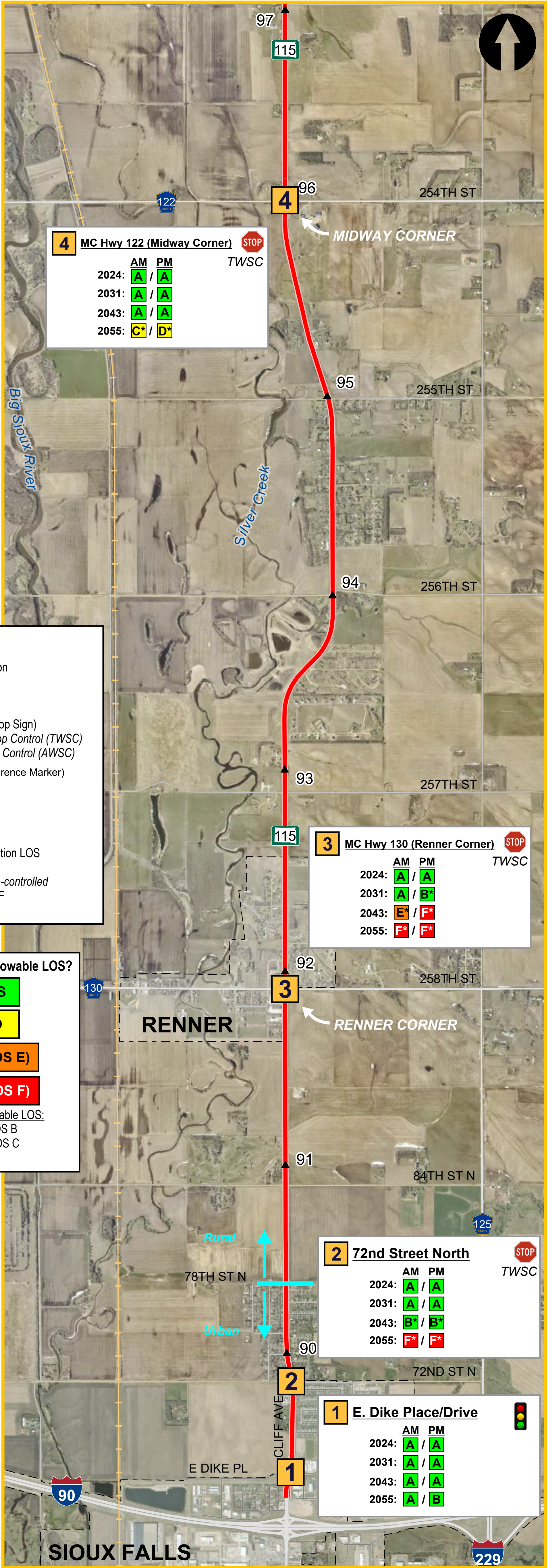
INTERSECTION TRAFFIC OPERATIONS

Existing (2024) and Future-Year No Build (2031, 2043, 2055)

NORTHERN SECTION



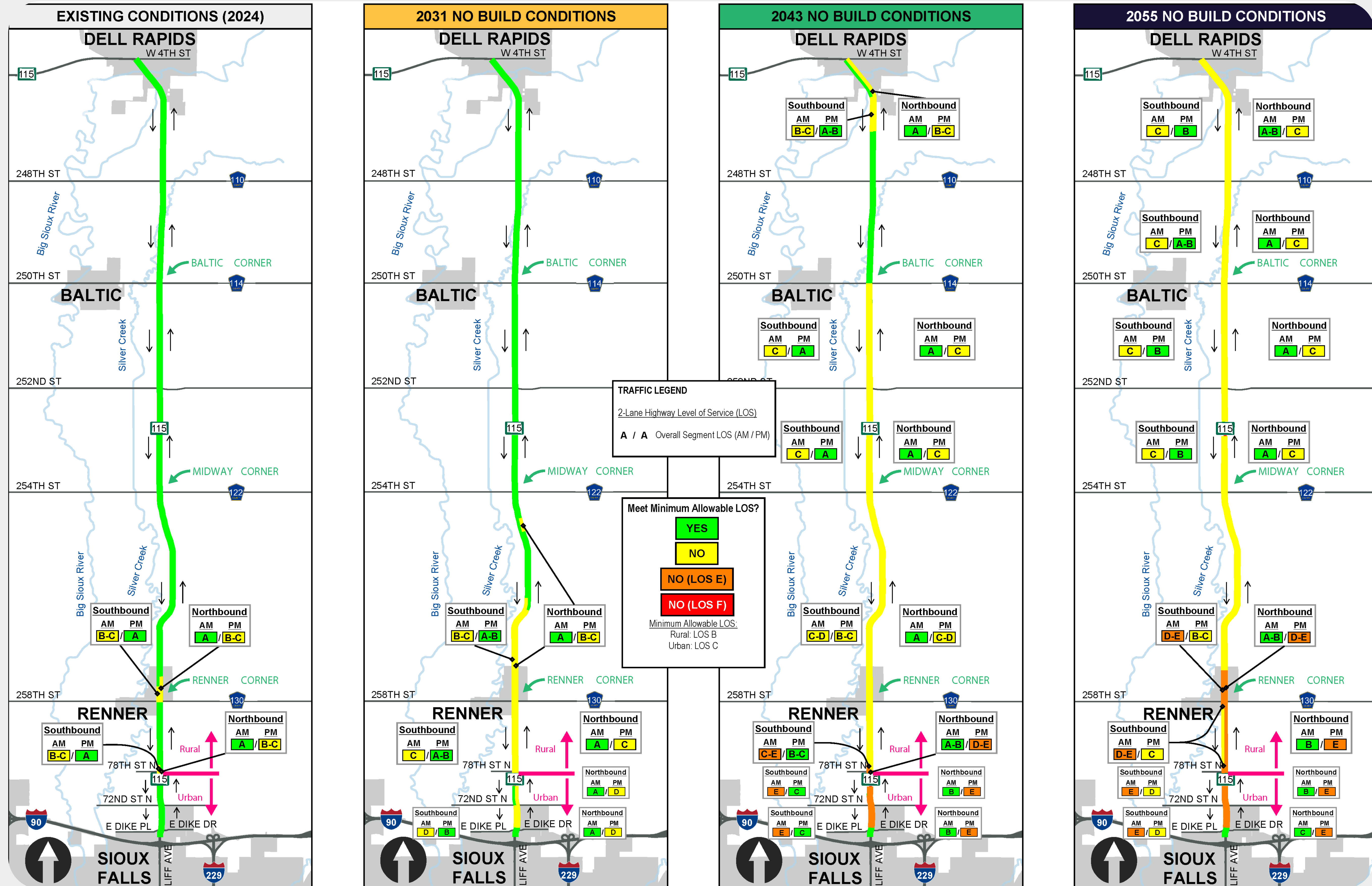
SOUTHERN SECTION

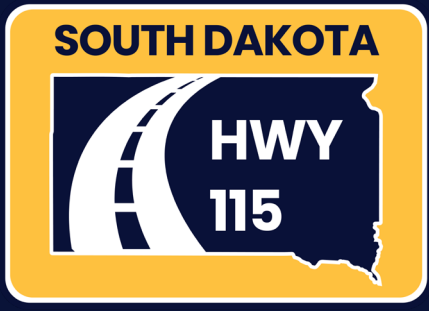




CORRIDOR SEGMENT TRAFFIC OPERATIONS

Existing (2024) And Future-Year No Build (2031, 2043, 2055)

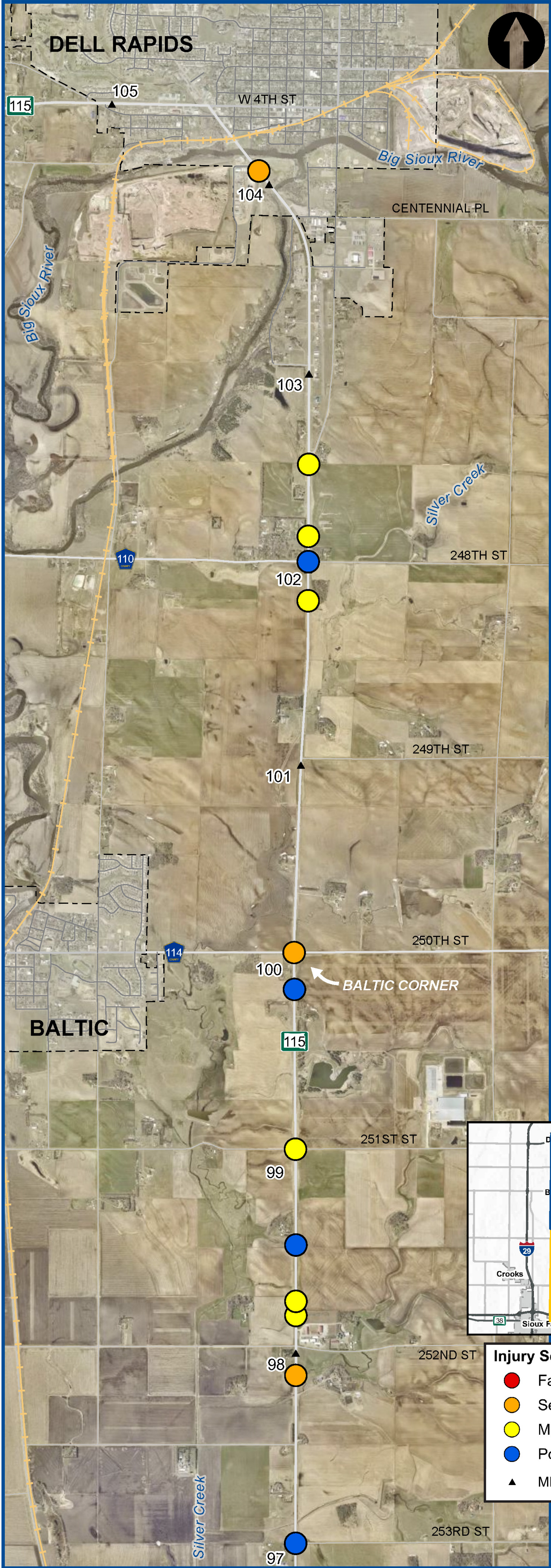




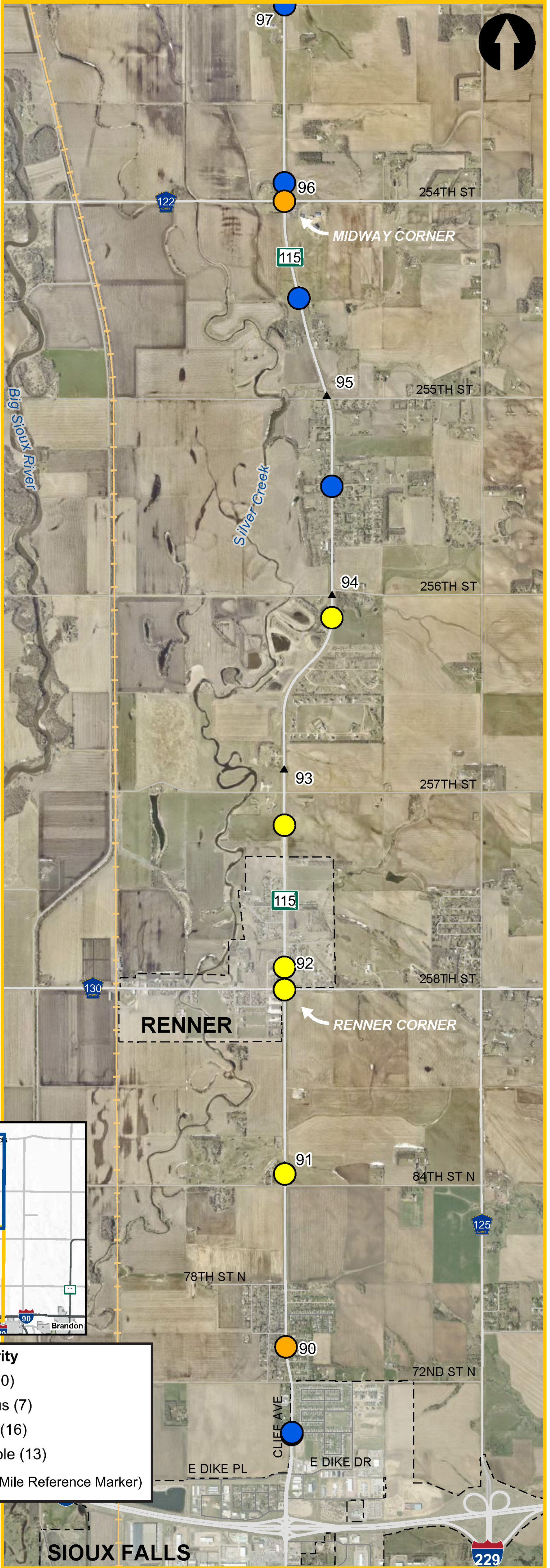
CORRIDOR STUDY

INJURY CRASH HISTORY (2019-2023)

NORTHERN SECTION



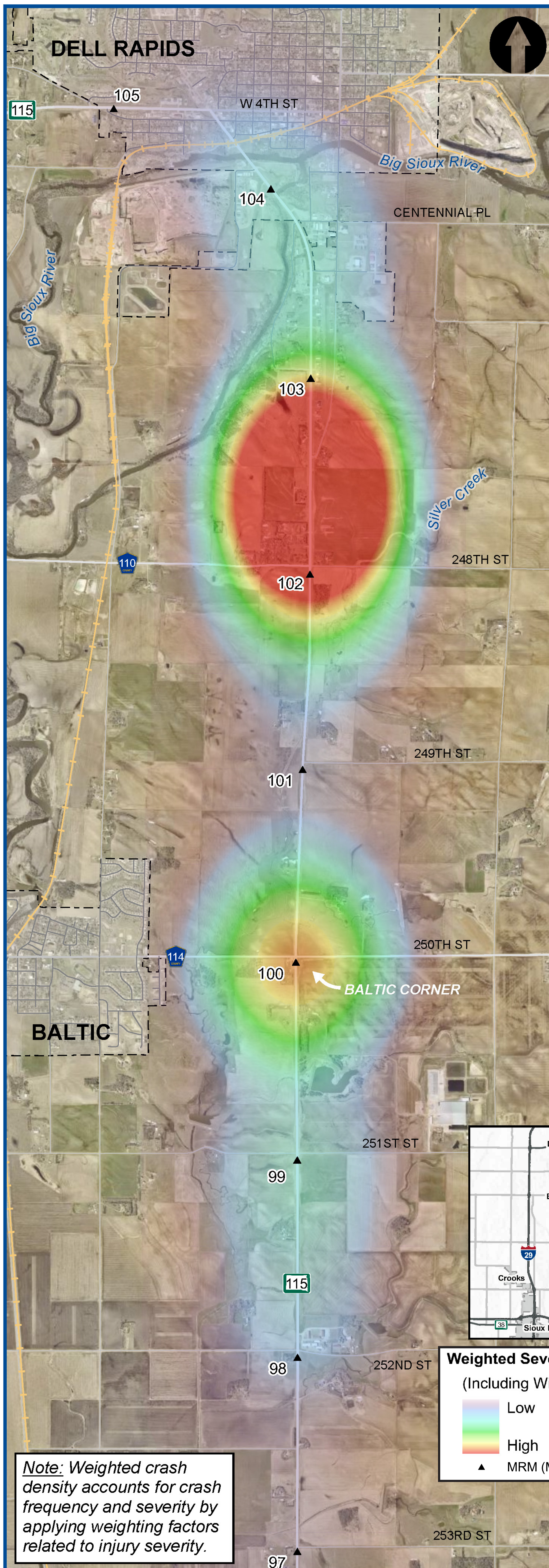
SOUTHERN SECTION



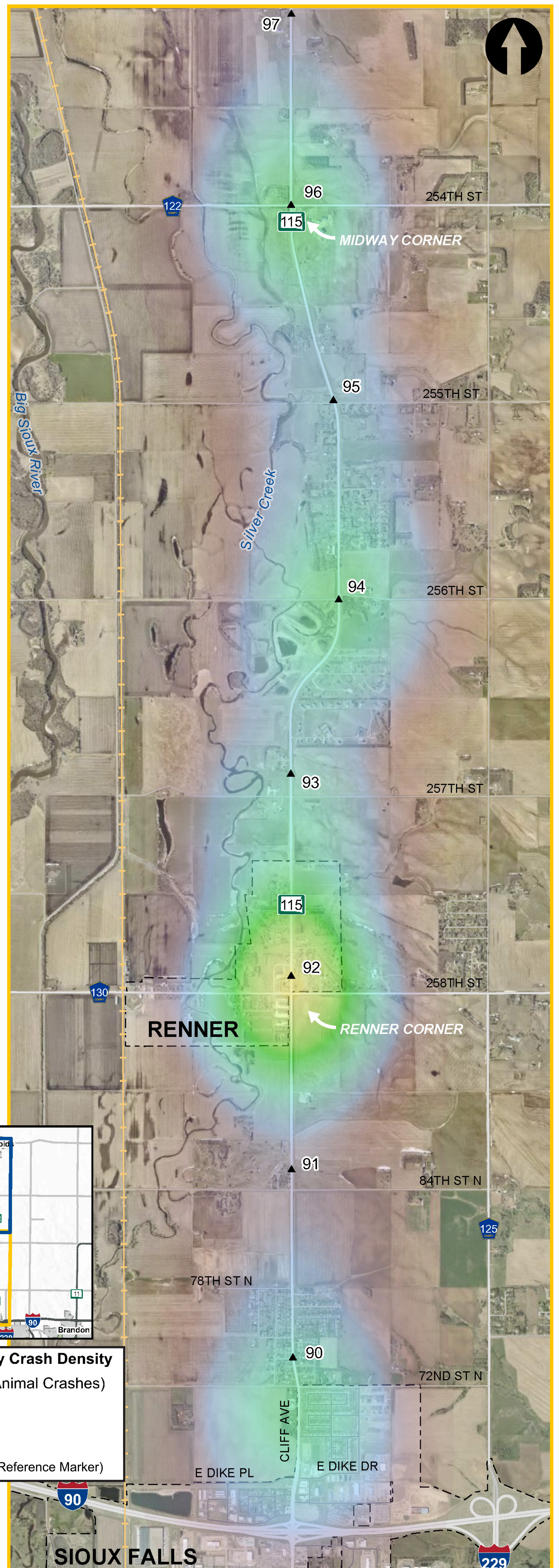
WEIGHTED CRASH DENSITY (2019-2023)

Including Animal Crashes

NORTHERN SECTION



SOUTHERN SECTION



Note: Weighted crash density accounts for crash frequency and severity by applying weighting factors related to injury severity.

Weighted Severity Crash Density
(Including Wild Animal Crashes)

Low

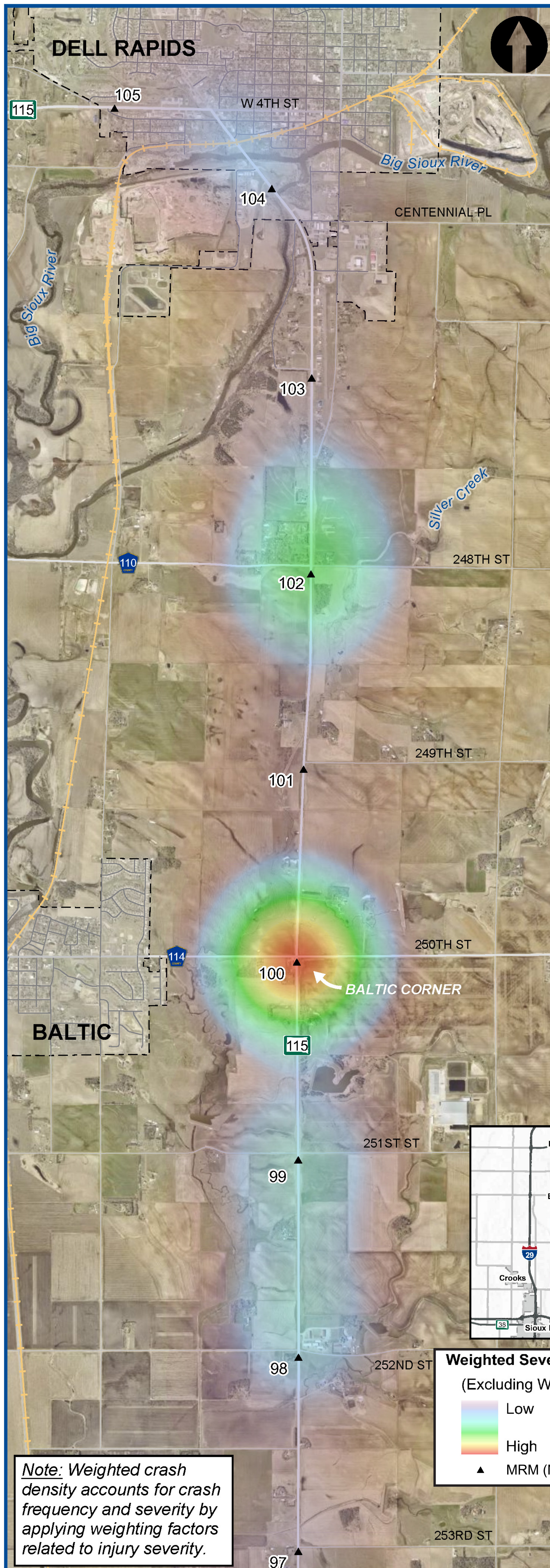
High

▲ MRM (Mile Reference Marker)

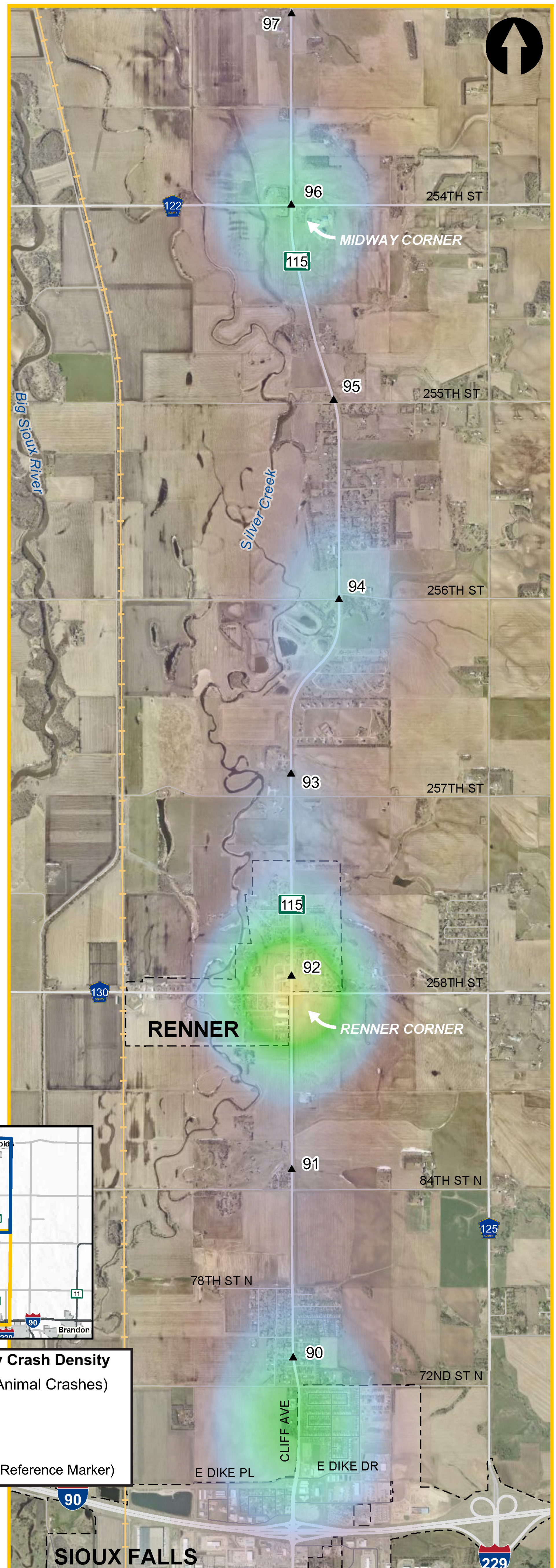
WEIGHTED CRASH DENSITY (2019-2023)

Excluding Animal Crashes

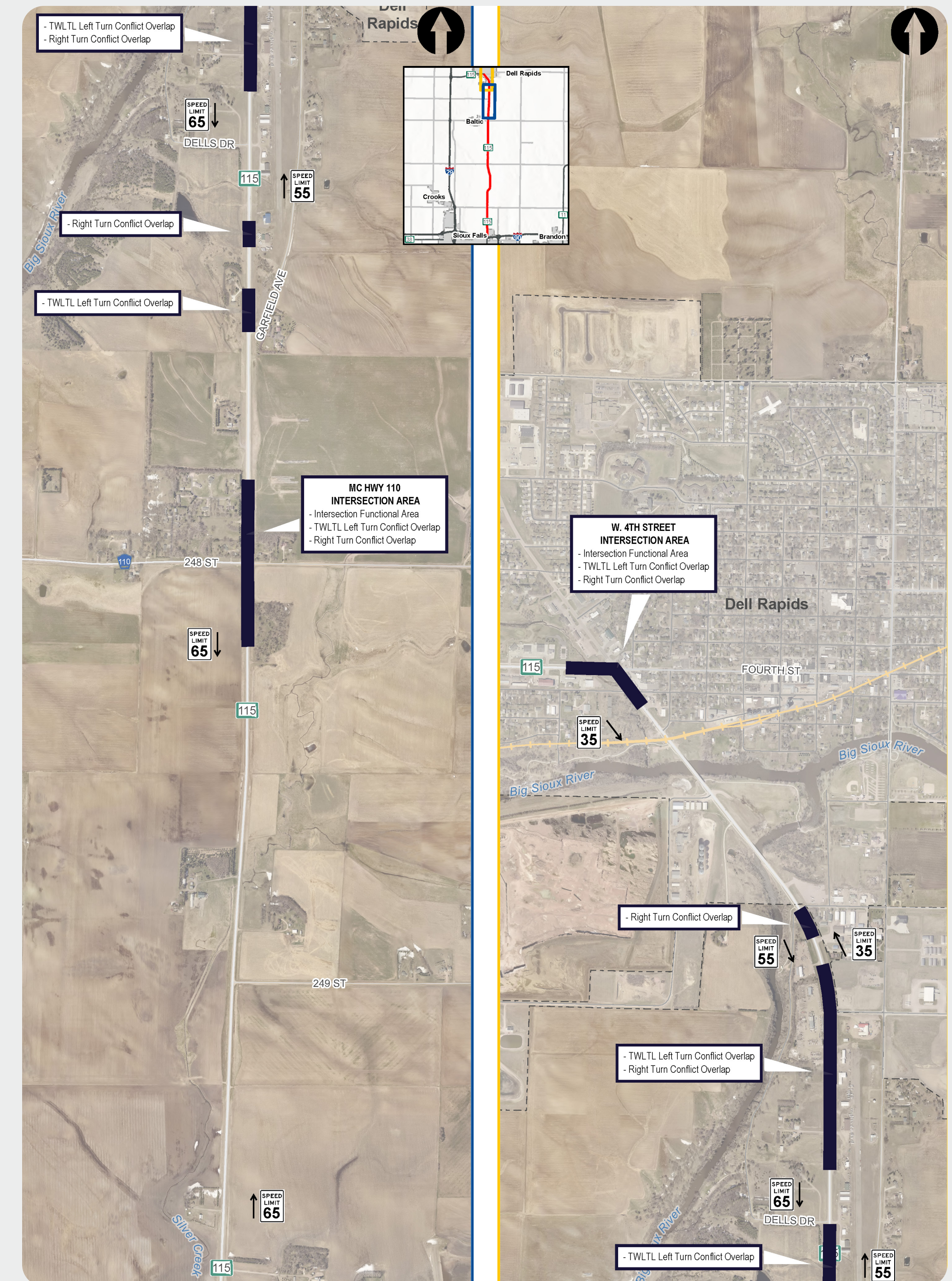
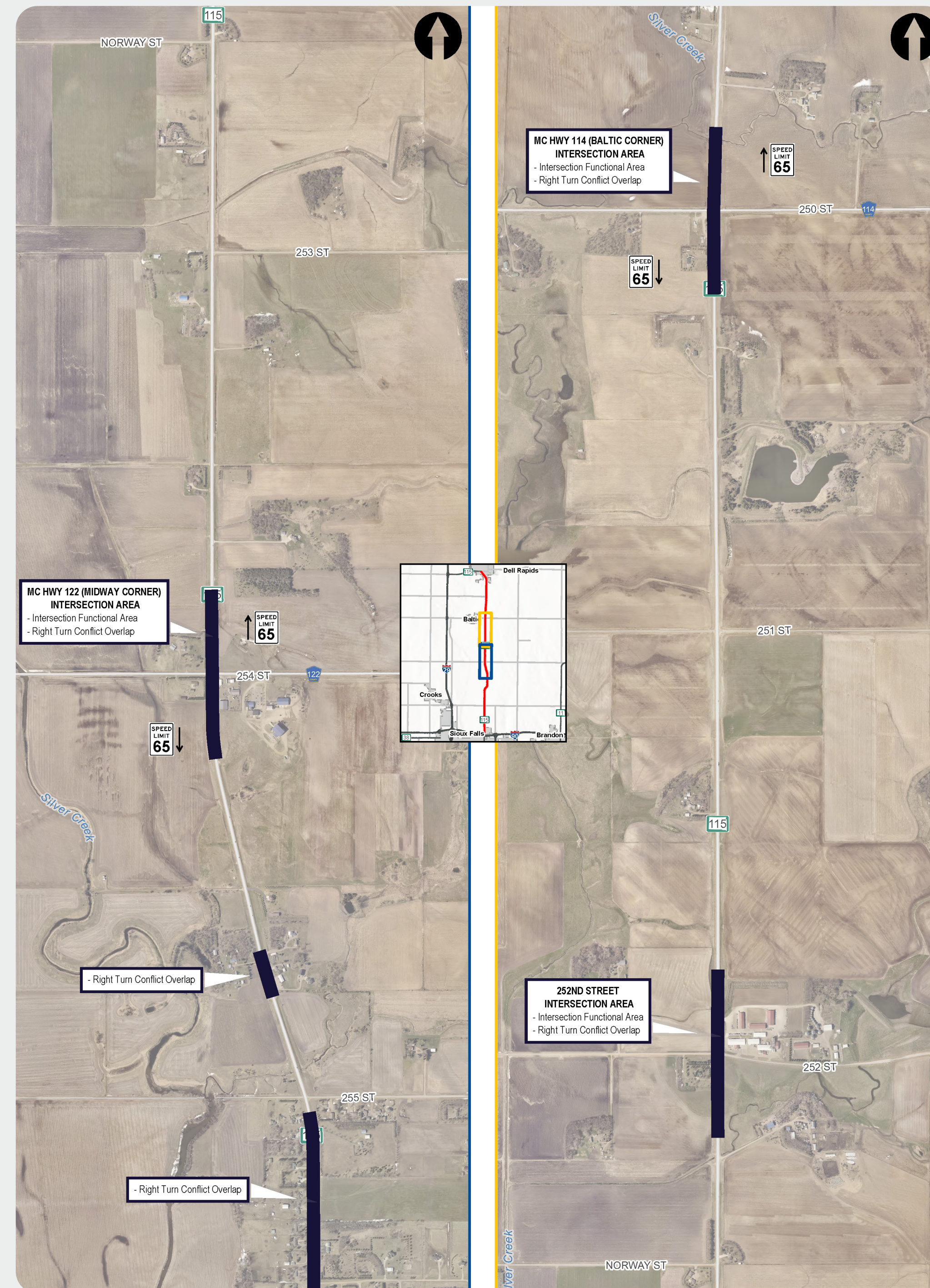
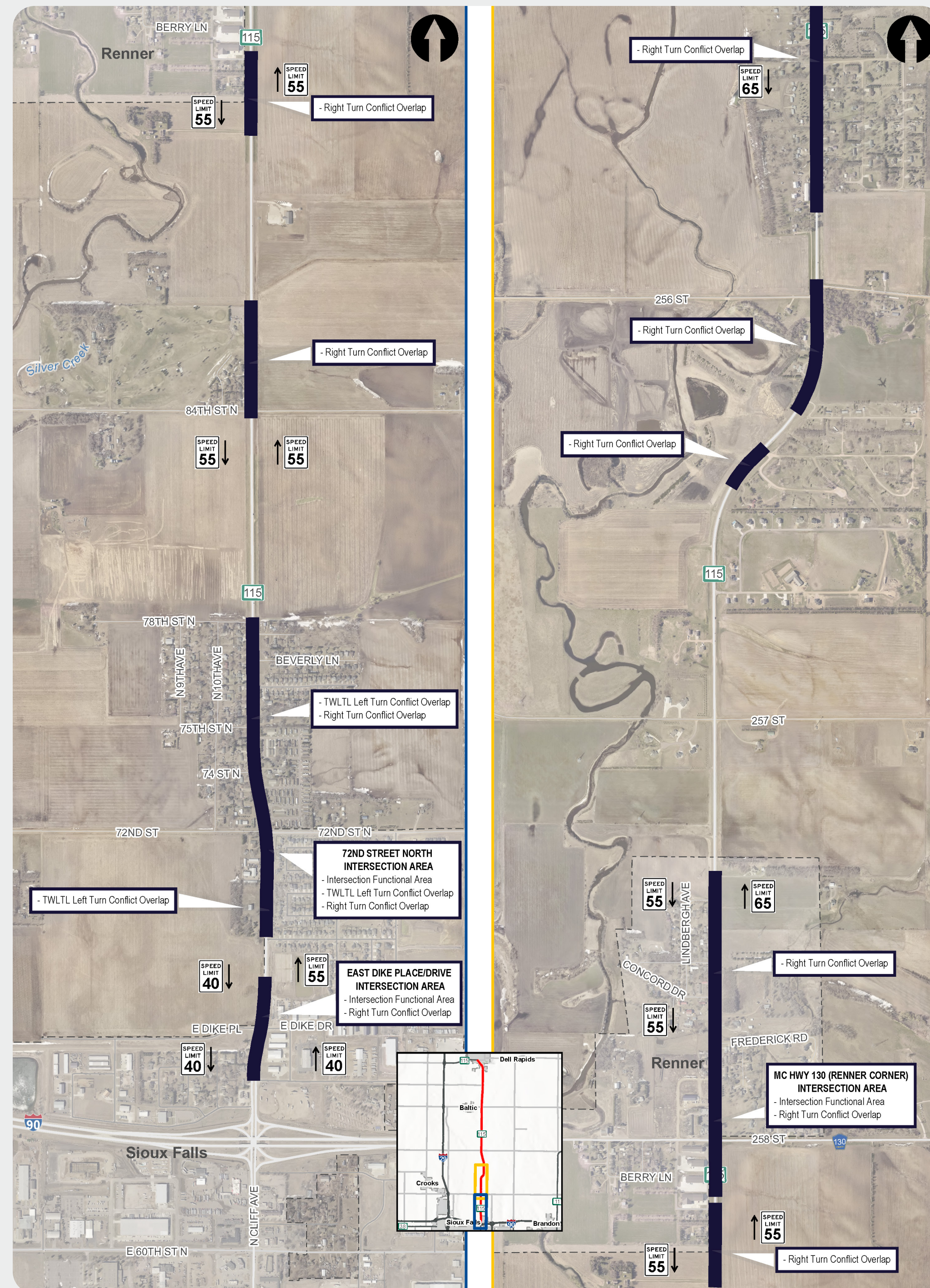
NORTHERN SECTION



SOUTHERN SECTION



CORRIDOR ACCESS MANAGEMENT REVIEW



ACCESS MANAGEMENT CONFLICT TYPES:

Existing access was reviewed for location, spacing, and density-related multi-modal transportation conflicts. Separation of access points is a benefit to operations and safety for all modes of travel through the corridor.

ACCESS MANAGEMENT CONFLICT TYPES:

Intersection Functional Area:
Reflects the area upstream or downstream of an intersection where intersection operations and conflicts influence driver behavior, vehicle operations, or traffic conditions

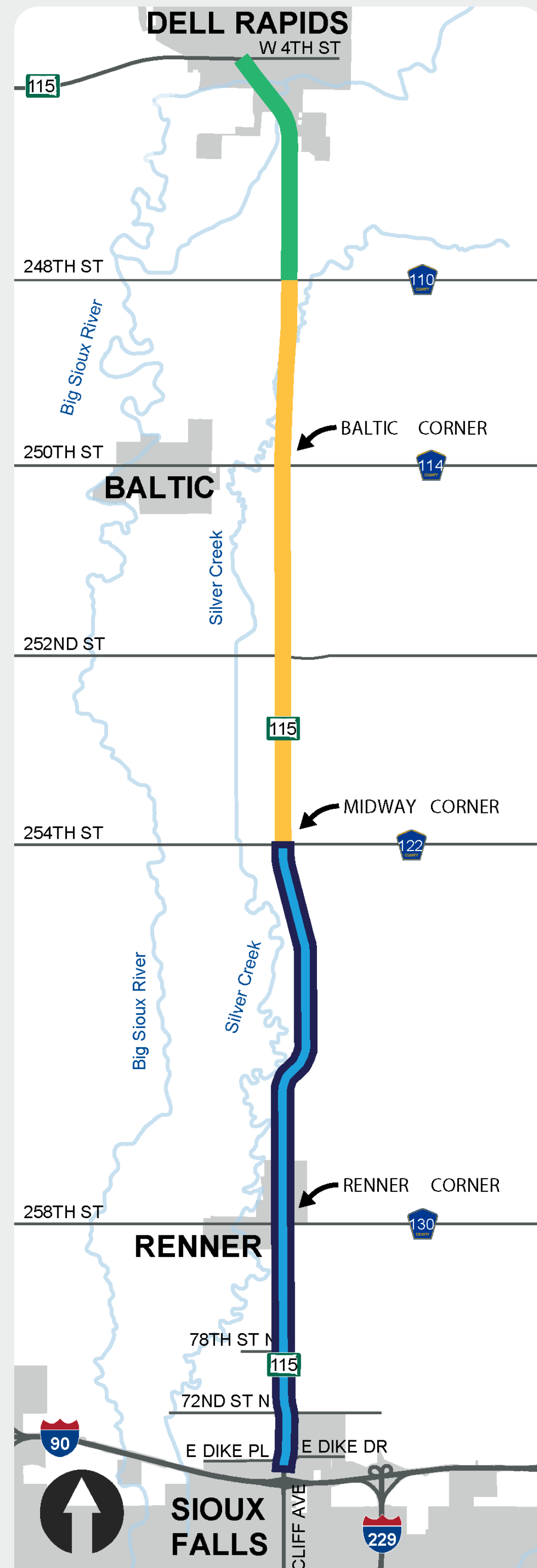
TWLTL Left Turn Conflict Overlay:
Reflects the area along a roadway within a two-way left turn lane (TWLTL) where closely spaced access locations may create head-on conflicts within the TWLTL

Right Turn Conflict Overlay:
Reflects the area where stopping sight distance extends through multiple access locations which causes approaching drivers to monitor more than one access location at a time



S.D. HIGHWAY 115 CORRIDOR TYPICAL SECTIONS

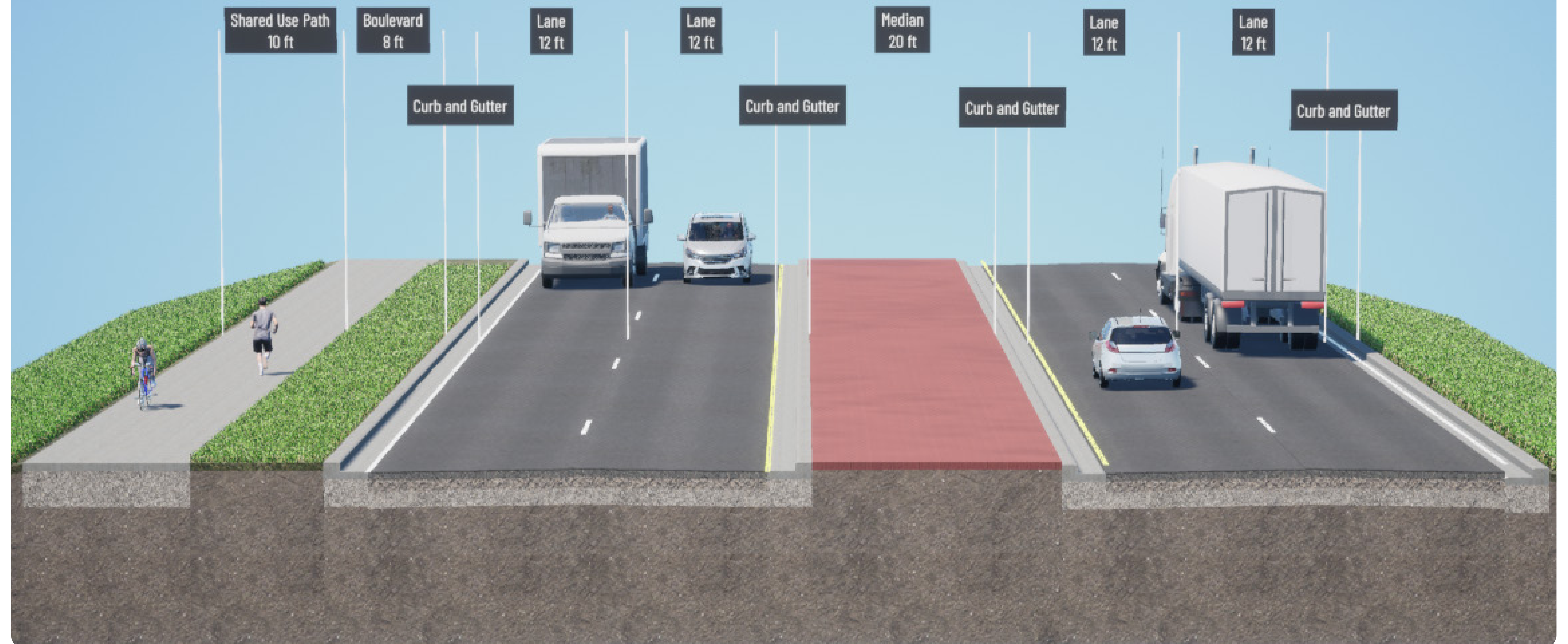
Segment A: S.D. Highway 115 between Sioux Falls and Minnehaha County Highway 122 (Midway Corner)



- Segment A: SD115 between Sioux Falls and MC Highway 122 (Midway Corner)
- Segment B: SD115 between MC Highway 122 (Midway Corner) and MC Highway 110
- Segment C: SD115 between MC Highway 110 and Dell Rapids

A-1: URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) TYPICAL SECTION

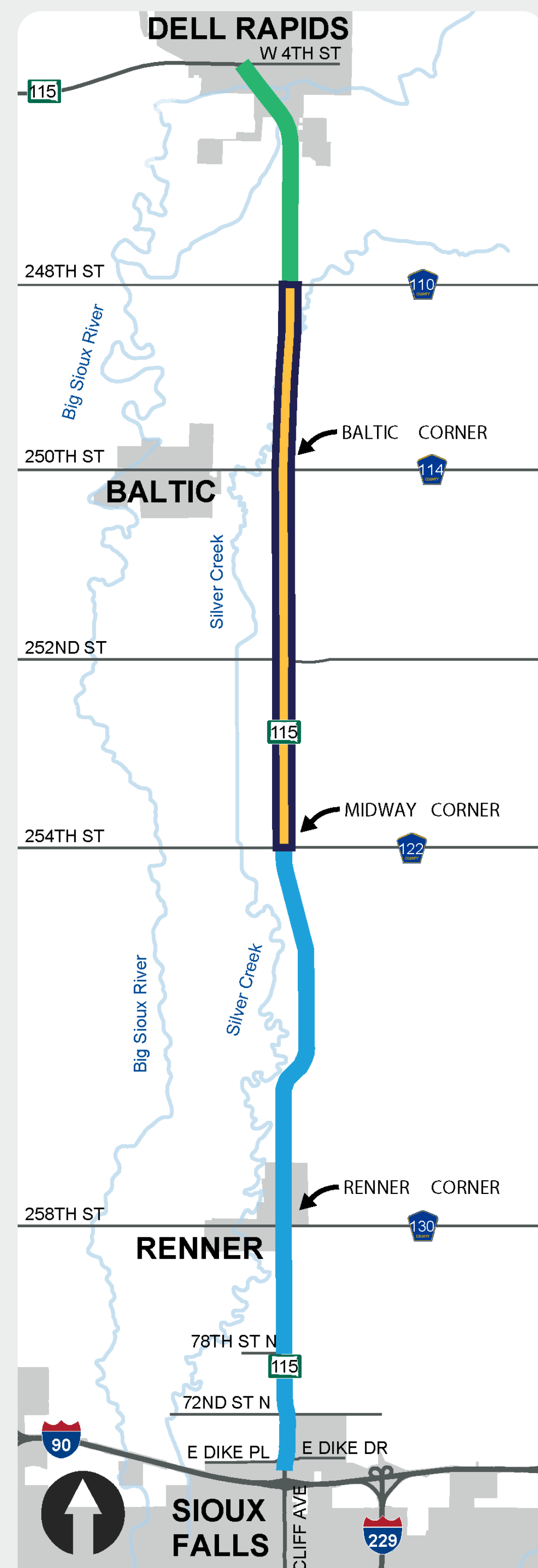
Note: Typical Section A-1 will include a 10 ft. Shared Use Path on both the east and west sides of the S.D. Highway 115 corridor in the Sioux Falls area (East Dike Place/Drive to 78th St. North)





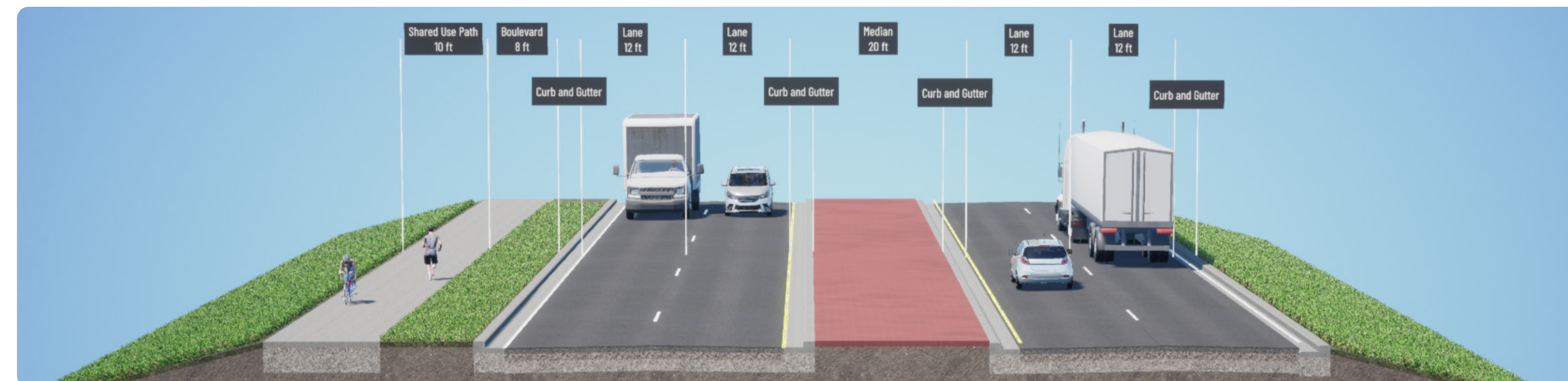
S.D. HIGHWAY 115 CORRIDOR TYPICAL SECTIONS

Segment B: S.D. Highway 115 between Minnehaha County Highway 122 (Midway Corner) and Minnehaha County Highway 110

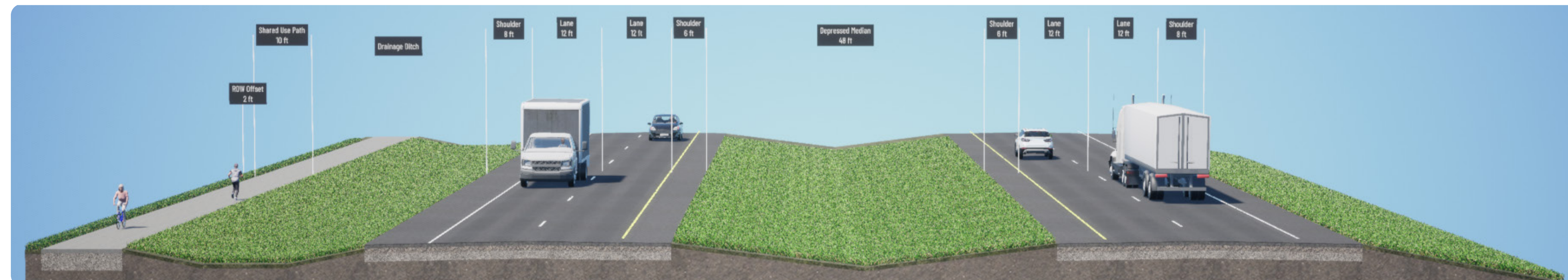


- Segment A: SD115 between Sioux Falls and MC Highway 122 (Midway Corner)
- Segment B: SD115 between MC Highway 122 (Midway Corner) and MC Highway 110
- Segment C: SD115 between MC Highway 110 and Dell Rapids

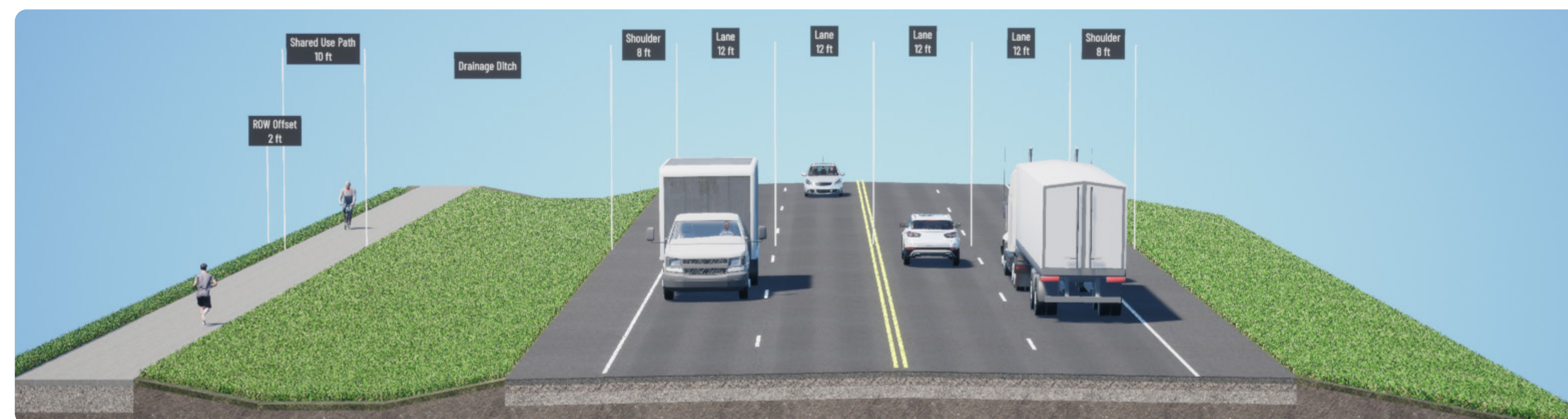
B-1: URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) TYPICAL SECTION



B-2: RURAL FOUR-LANE DIVIDED (DEPRESSED MEDIAN) TYPICAL SECTION



B-3: RURAL SIDE-BY-SIDE PASSING LANES TYPICAL SECTION



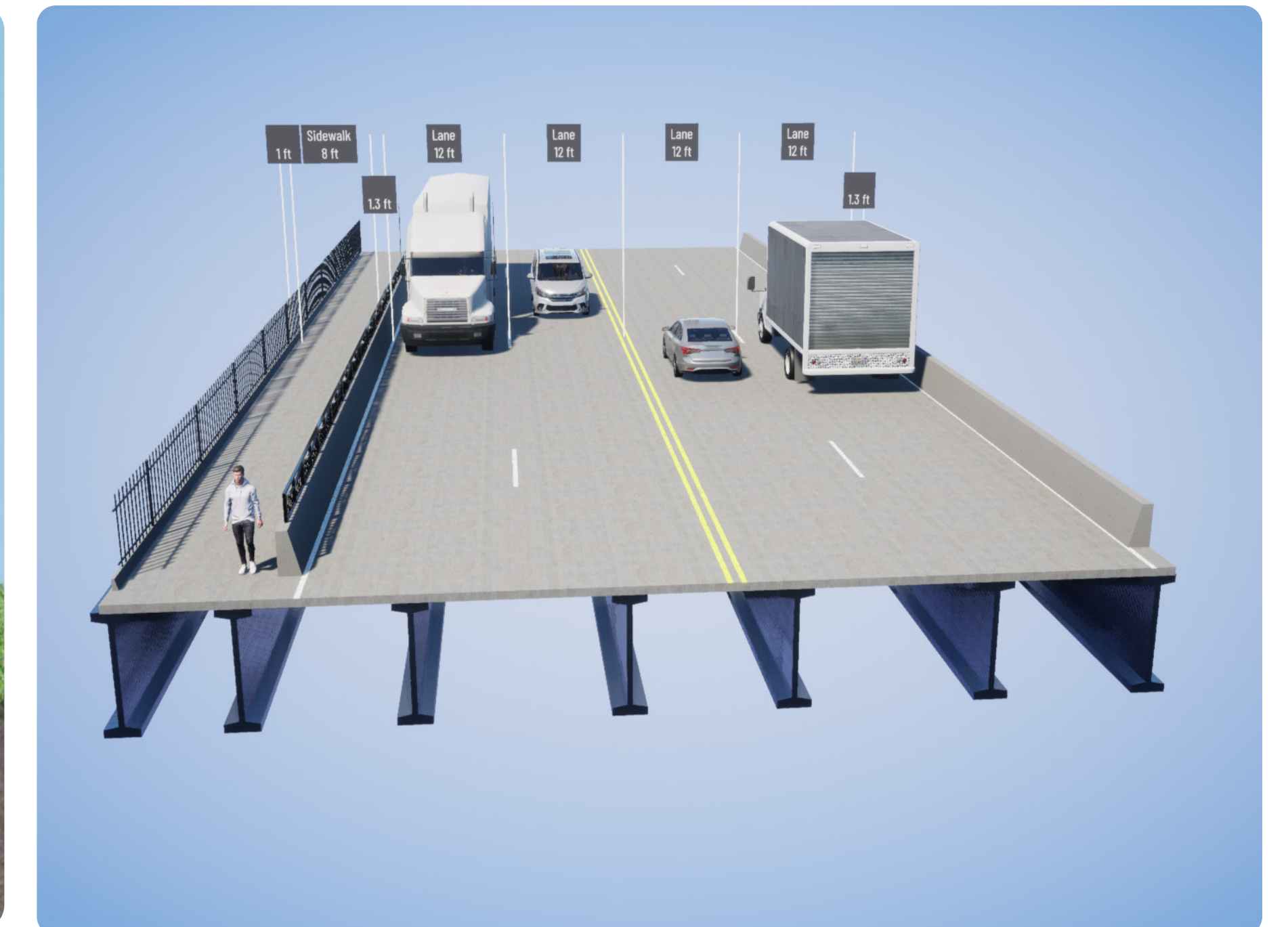
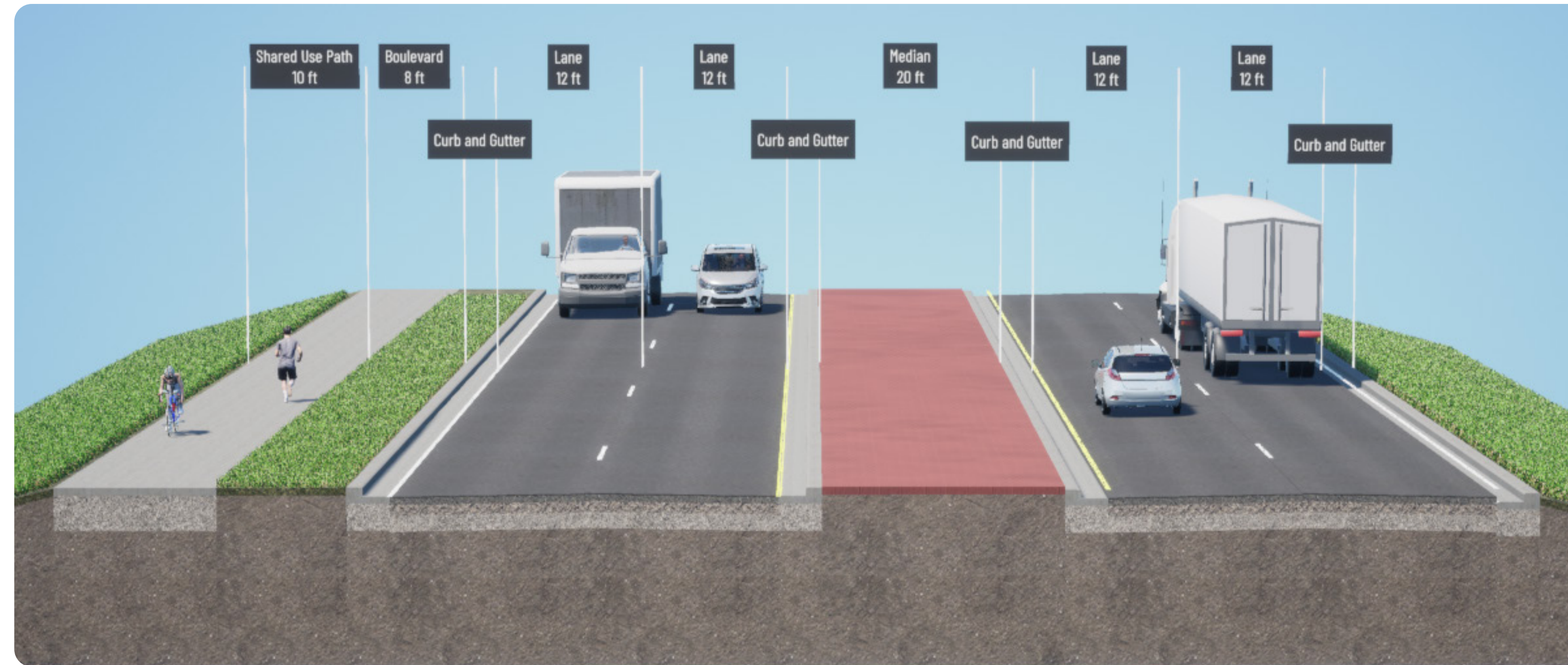


S.D. HIGHWAY 115 CORRIDOR TYPICAL SECTIONS

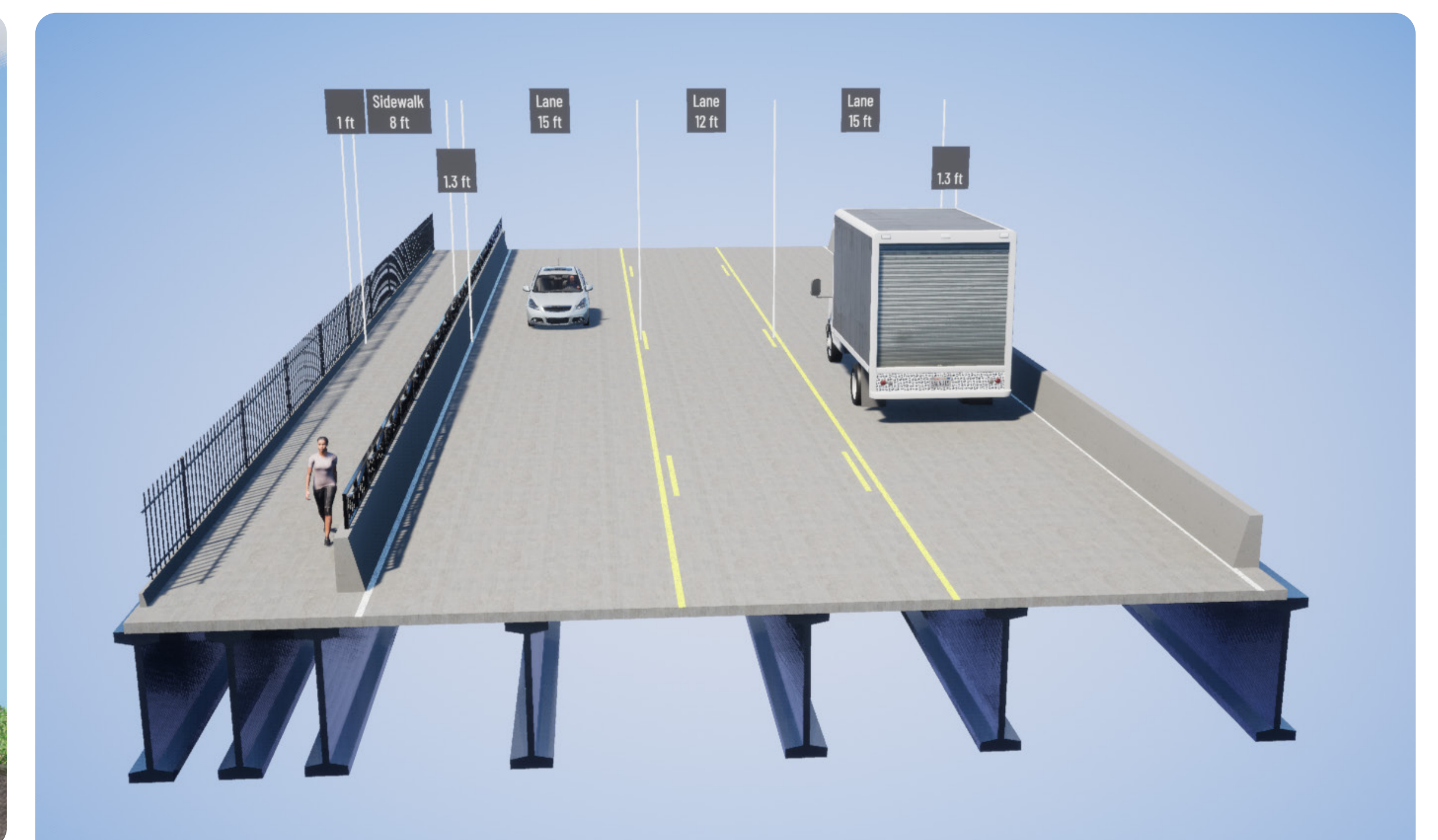
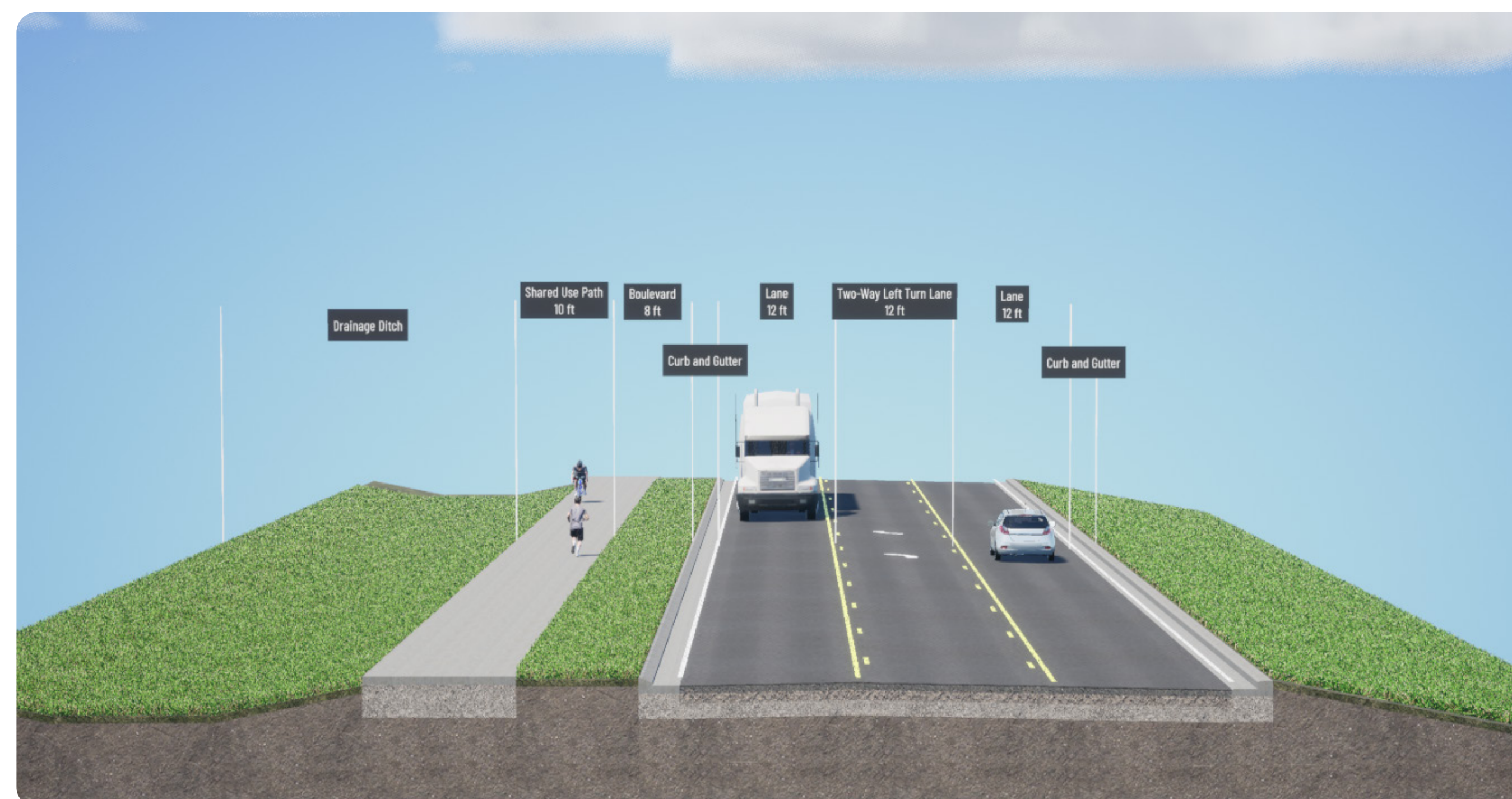
Segment C: S.D. Highway 115 between Minnehaha County Highway 110 and Dell Rapids



C-1: URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) CORRIDOR & BRIDGE TYPICAL SECTIONS



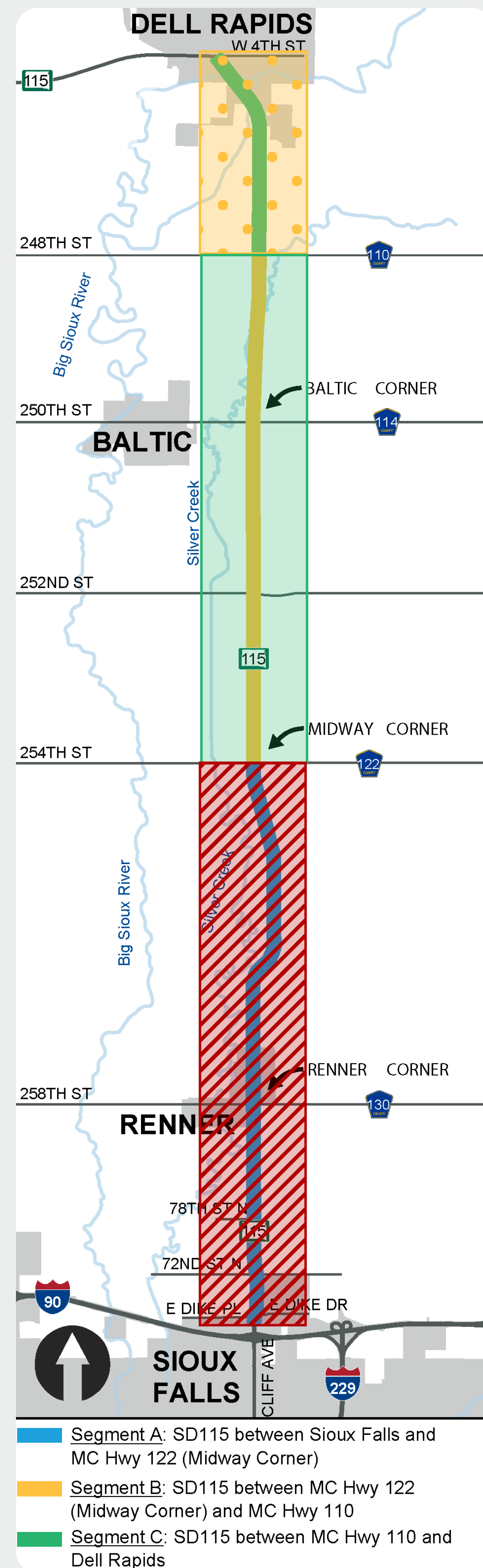
C-2: SUBURBAN THREE-LANE CORRIDOR & BRIDGE TYPICAL SECTIONS



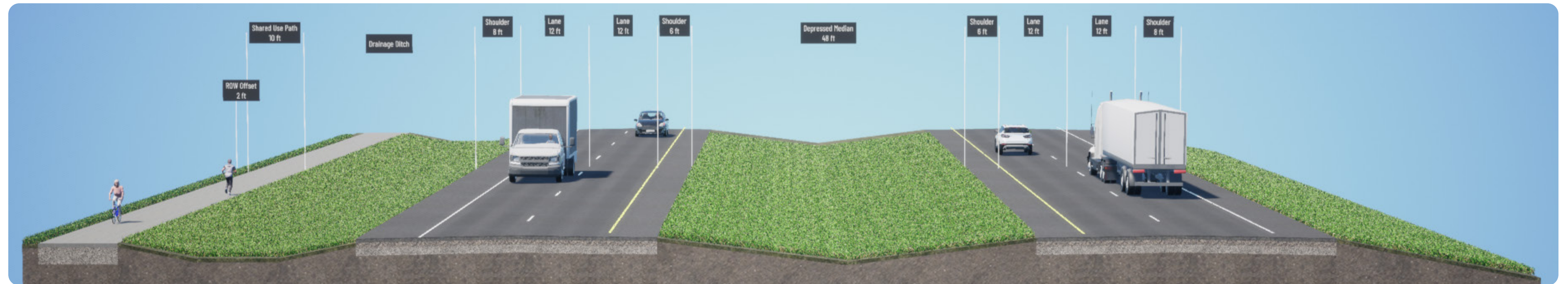


S.D. HIGHWAY 115 CORRIDOR TYPICAL SECTIONS

Segment B: S.D. Highway 115 between Minnehaha County Highway 122 (Midway Corner) and Minnehaha County Highway 110



RURAL FOUR-LANE DIVIDED (DEPRESSED MEDIAN) TYPICAL SECTION



RURAL FOUR-LANE DIVIDED (DEPRESSED MEDIAN) TYPICAL SECTION FEASIBILITY CONSIDERATIONS:

The feasibility of a rural four-lane divided (depressed median) corridor (as depicted above), was reviewed for the entire SD115 study corridor from Sioux Falls to Dell Rapids. While a strong traffic capacity need for multiple lanes exists along portions of the corridor, there are several constraints to implementing a wider rural four-lane divided (depressed median) typical section (as noted below).

SD115 between MC Highway 122 (Midway Corner) and MC Highway 110 (Segment B), was considered feasible for this typical section due to more consistent and available right-of-way (ROW) and corridor segment consistency with rural features.

FEASIBILITY LEGEND

Rural Four-lane Divided (Depressed Median) Typical Section

- Feasible
- Not Feasible
- No Identified 2055 Traffic Operations Need

FEASIBILITY LIMITATIONS OF THE RURAL FOUR-LANE DIVIDED (DEPRESSED MEDIAN) TYPICAL SECTION INCLUDE:

- Narrow, constrained existing ROW
- Potential private property impacts due to additional ROW needs
- Lack of available drainage ditch storage within existing ROW
- High access density in suburban neighborhoods where more narrow typical sections with raised medians would provide greater traffic operational and safety benefits
- Surrounding land use is anticipated to be more urban/suburban and/or falls into a municipality future growth area
- Lack of corridor consistency with adjacent segment (e.g., near Sioux Falls)

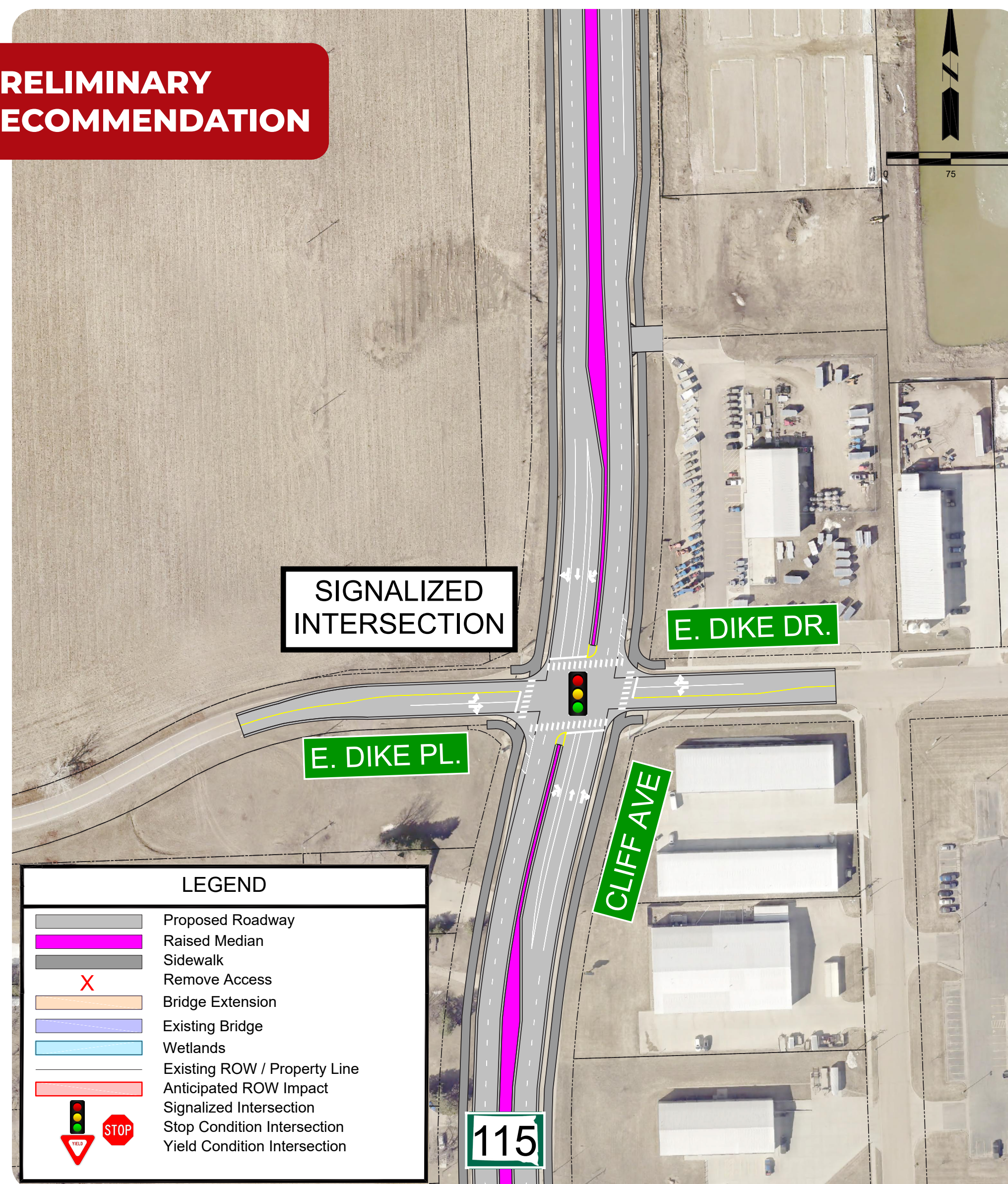


EAST DIKE PLACE/DRIVE & 72ND ST. NORTH

Sioux Falls Area Study Intersection Concepts

SD115 / CLIFF AVENUE & EAST DIKE PLACE/DRIVE

**PRELIMINARY
RECOMMENDATION**



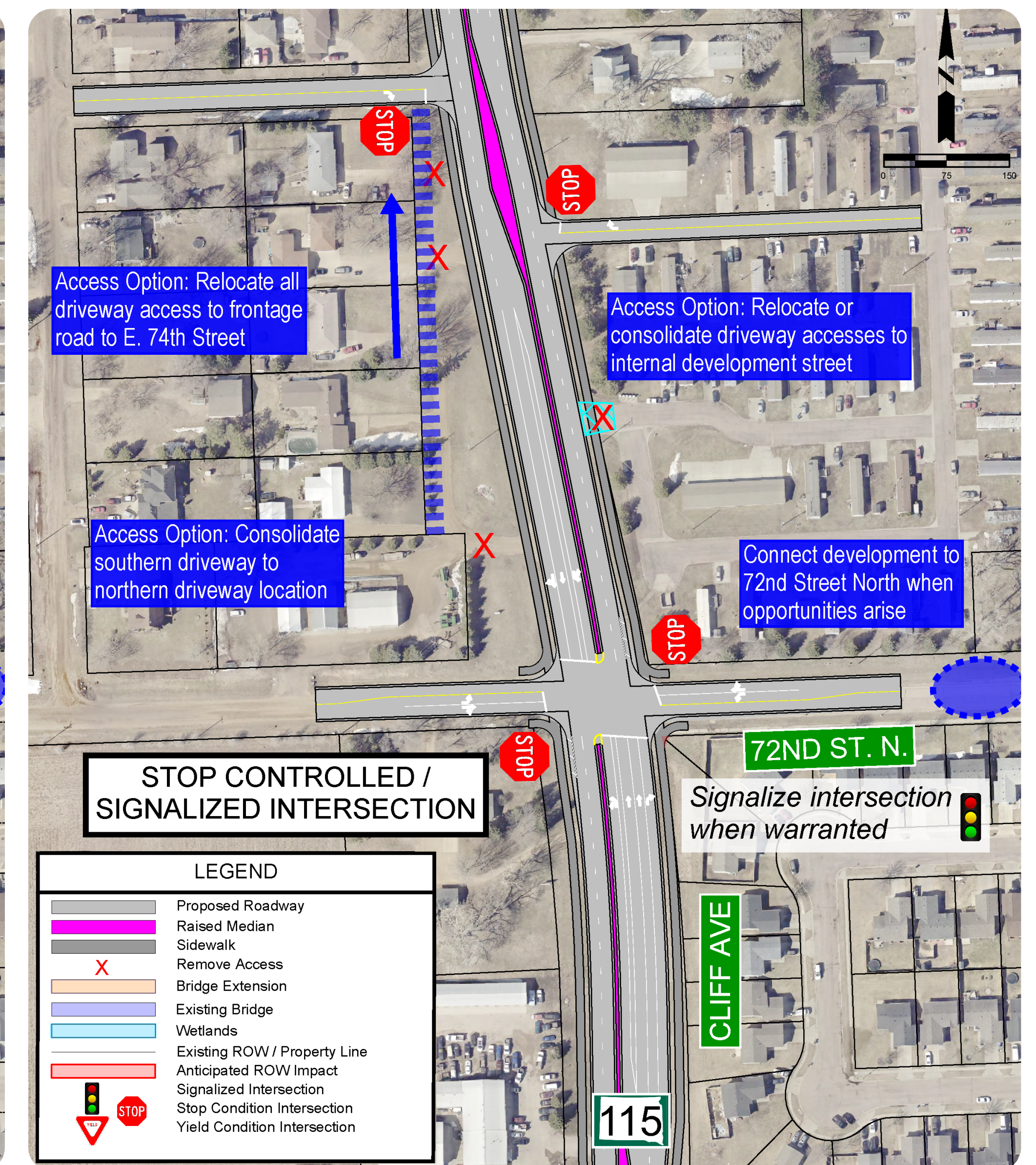
**URBAN FOUR-LANE DIVIDED (RAISED
MEDIAN) CORRIDOR CONCEPTS**

SD115 / CLIFF AVENUE & 72ND ST. NORTH

**PRELIMINARY
RECOMMENDATION**



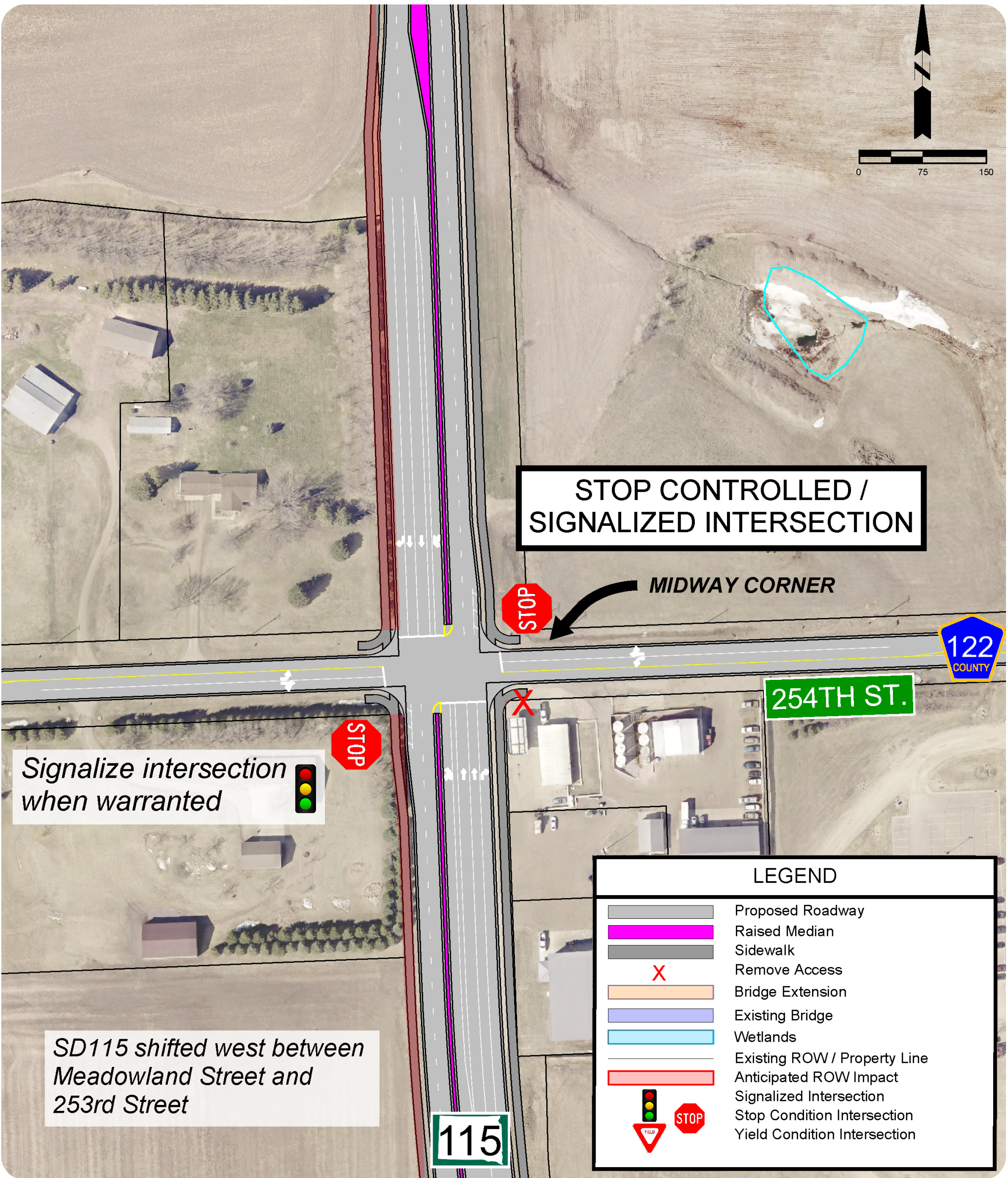
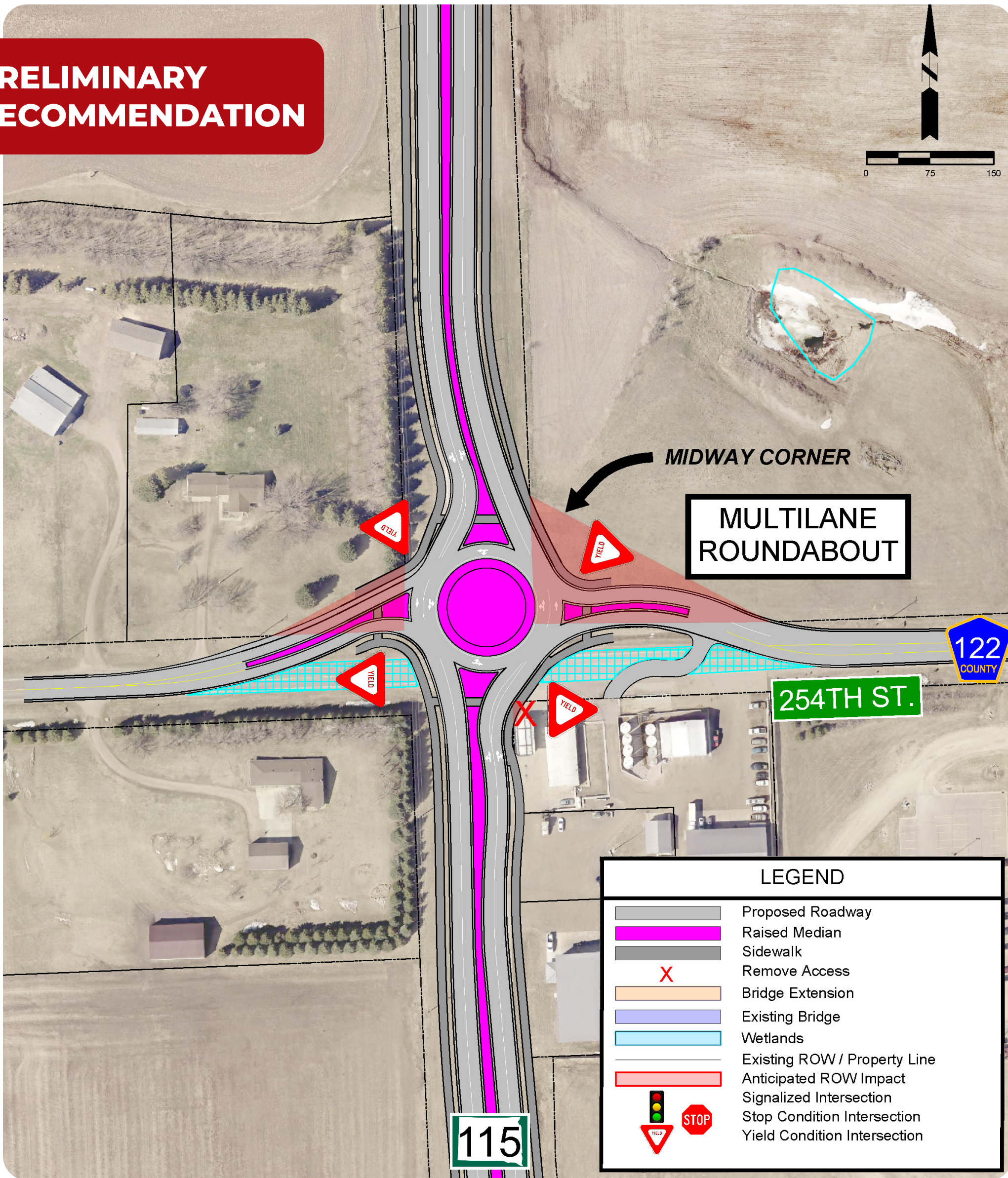
URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) CORRIDOR CONCEPTS



MC HIGHWAY 130 (RENNER CORNER) & MINNEHAHA COUNTY HIGHWAY 122 (MIDWAY CORNER) INTERSECTION CONCEPTS

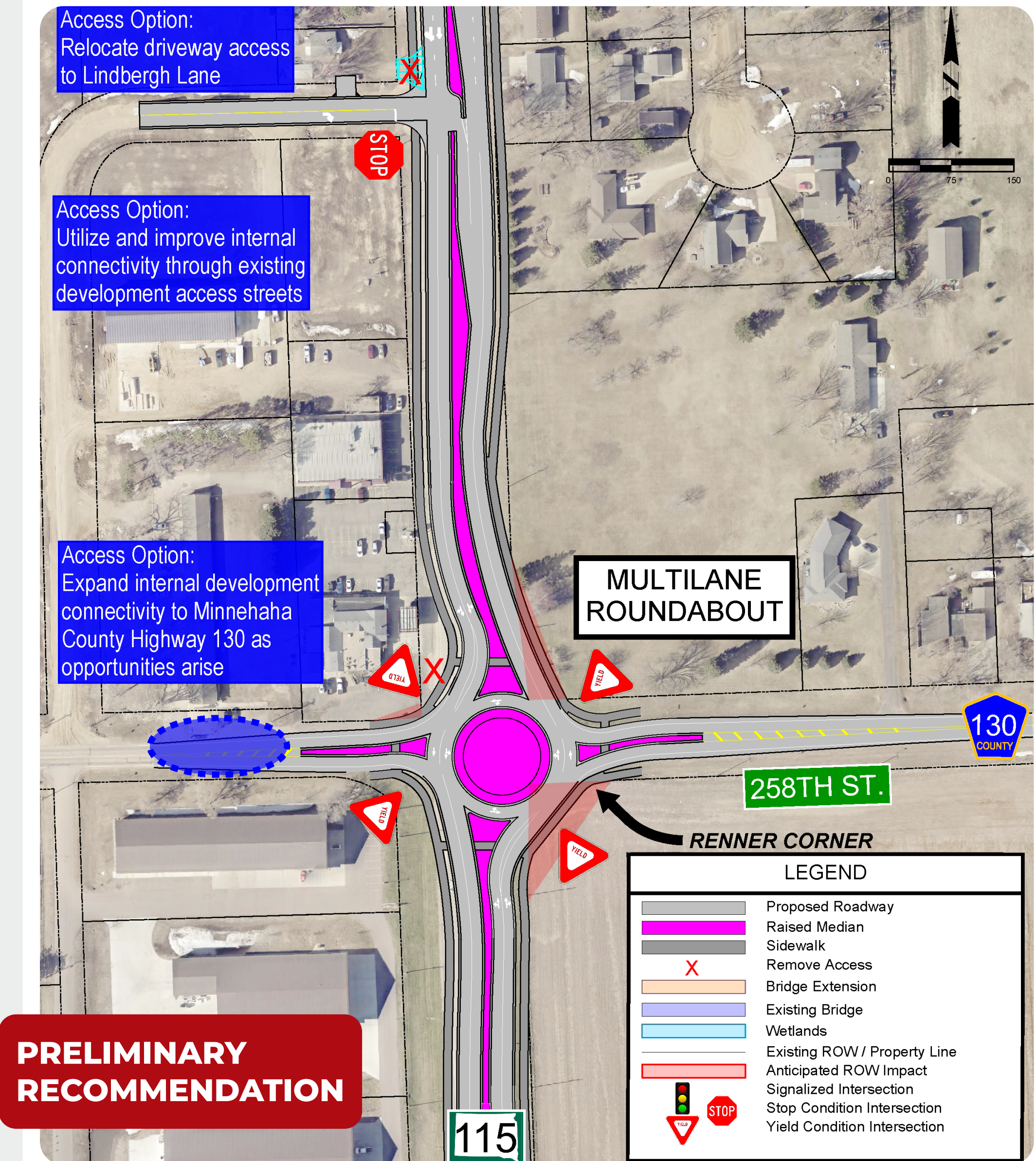
S.D. HIGHWAY 115 & MC HIGHWAY 122 (MIDWAY CORNER)

**PRELIMINARY
RECOMMENDATION**

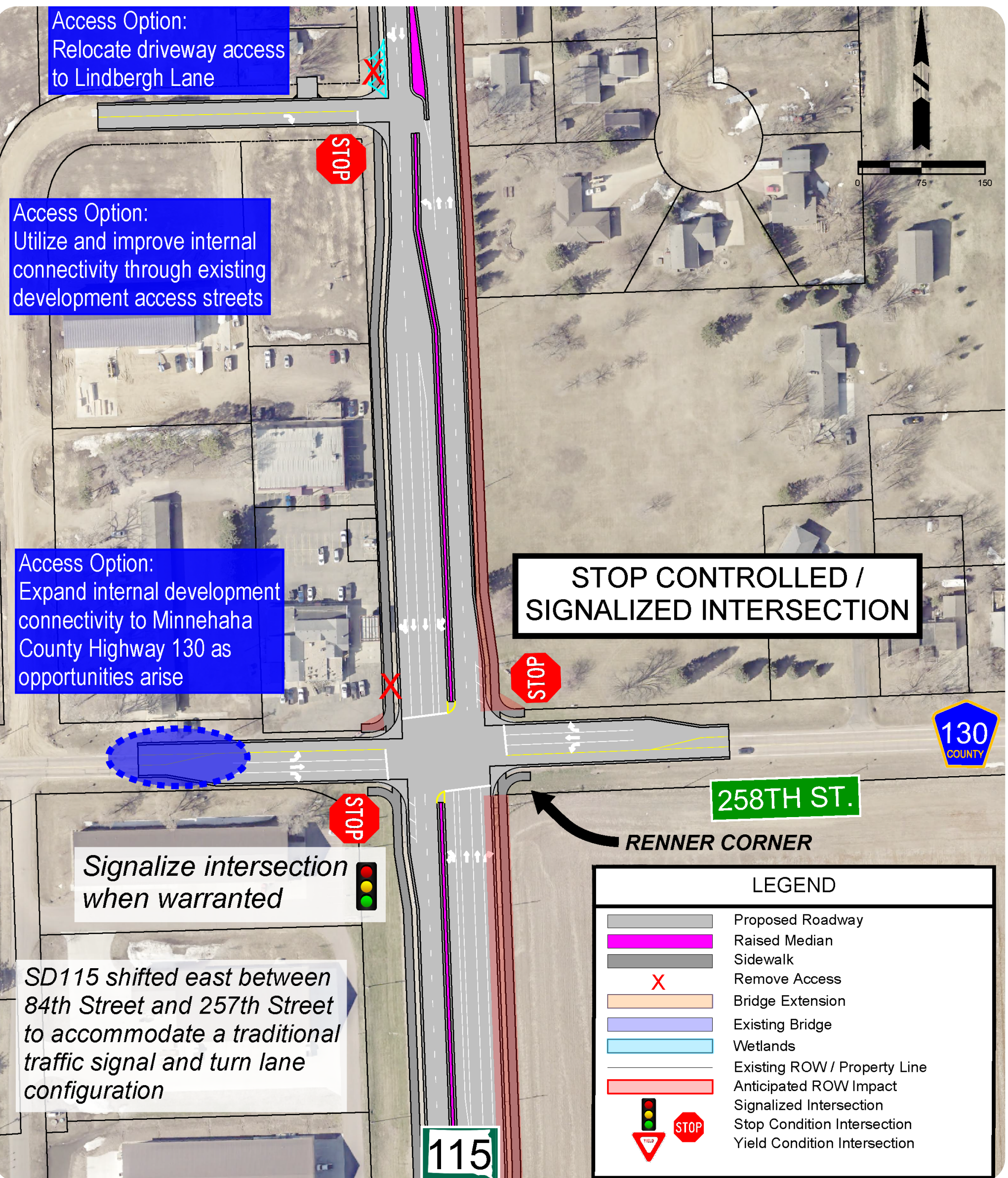


URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) CORRIDOR CONCEPTS

S.D. HIGHWAY 115 & MC HIGHWAY 130 (RENNER CORNER)



**PRELIMINARY
RECOMMENDATION**

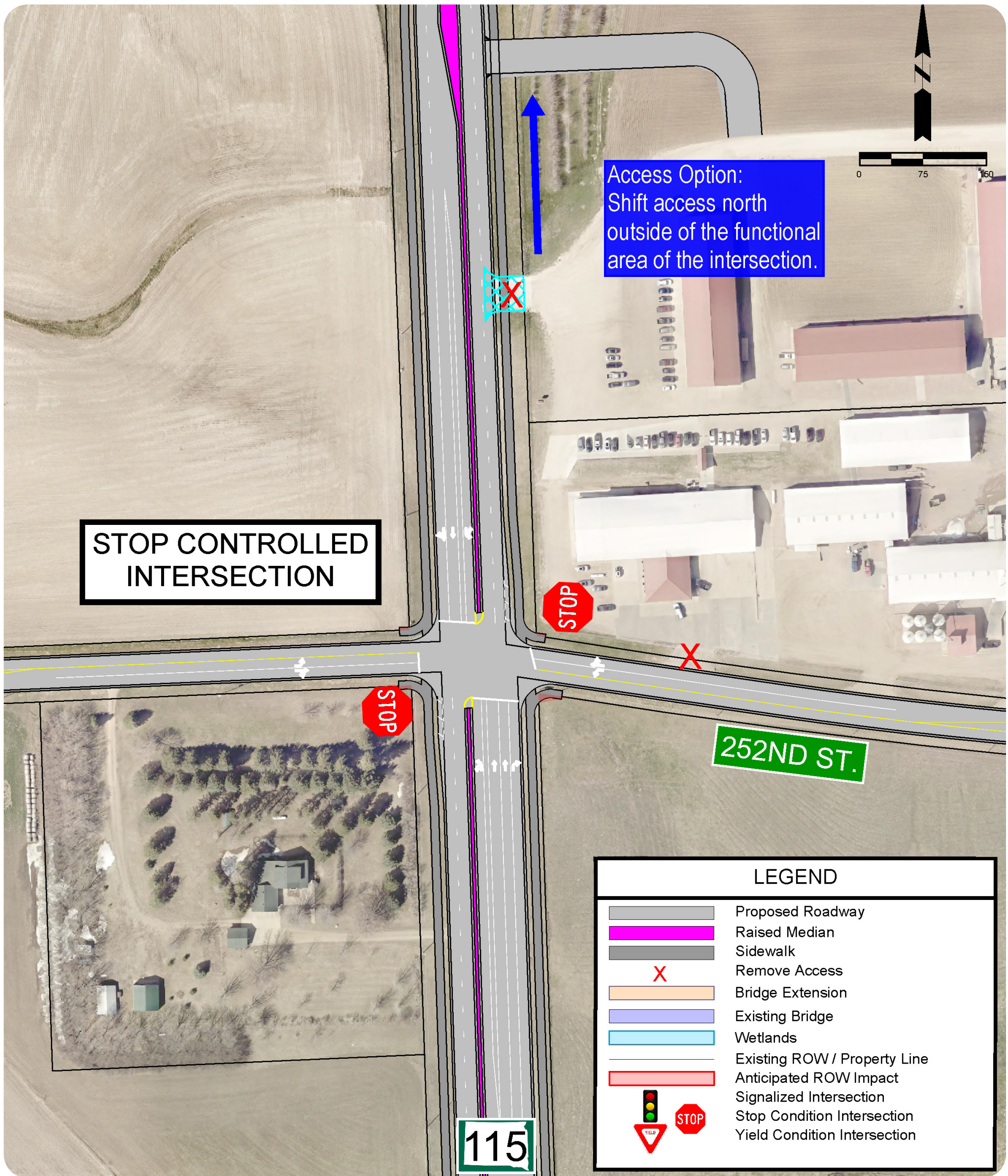
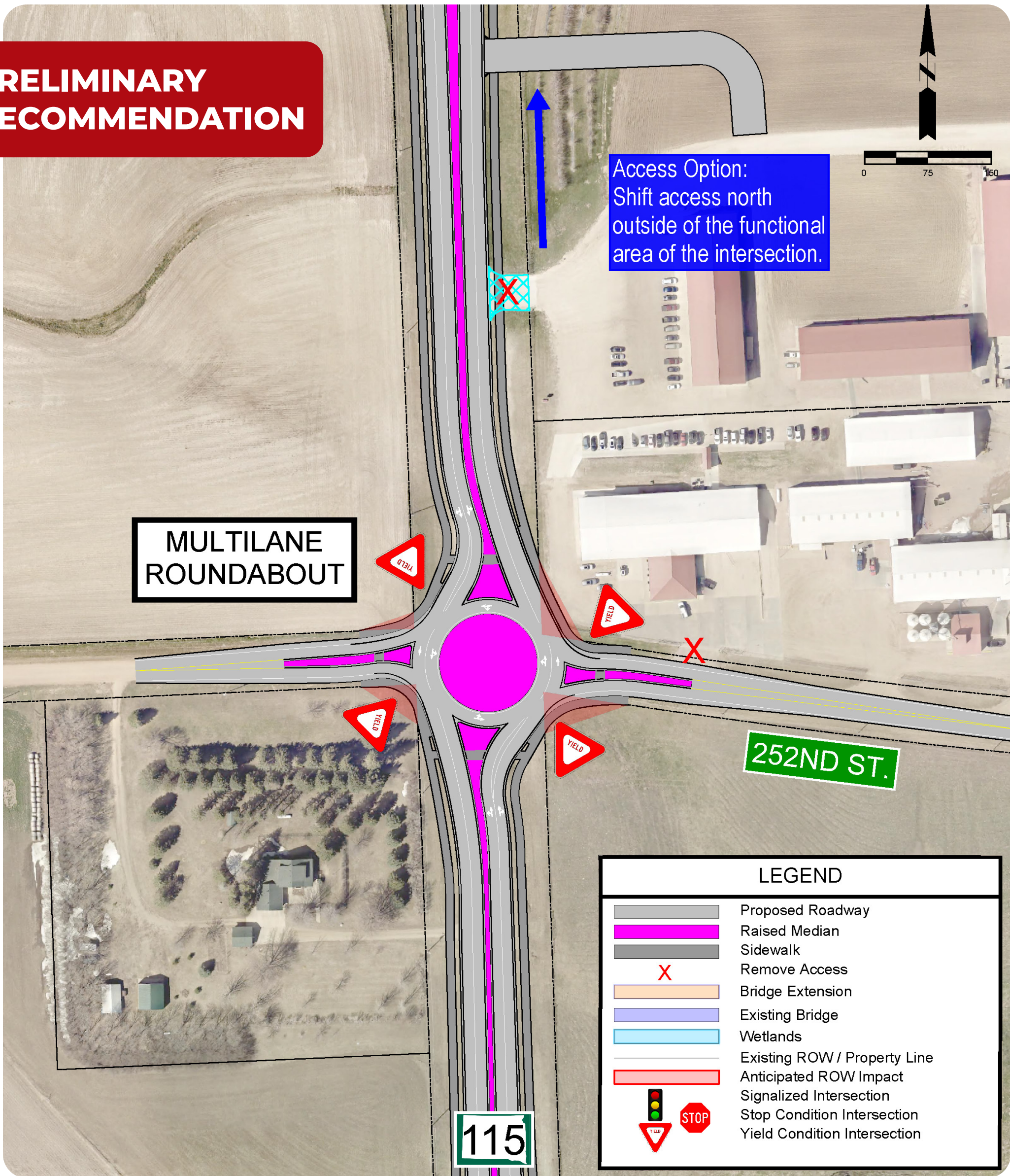


URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) CORRIDOR CONCEPTS



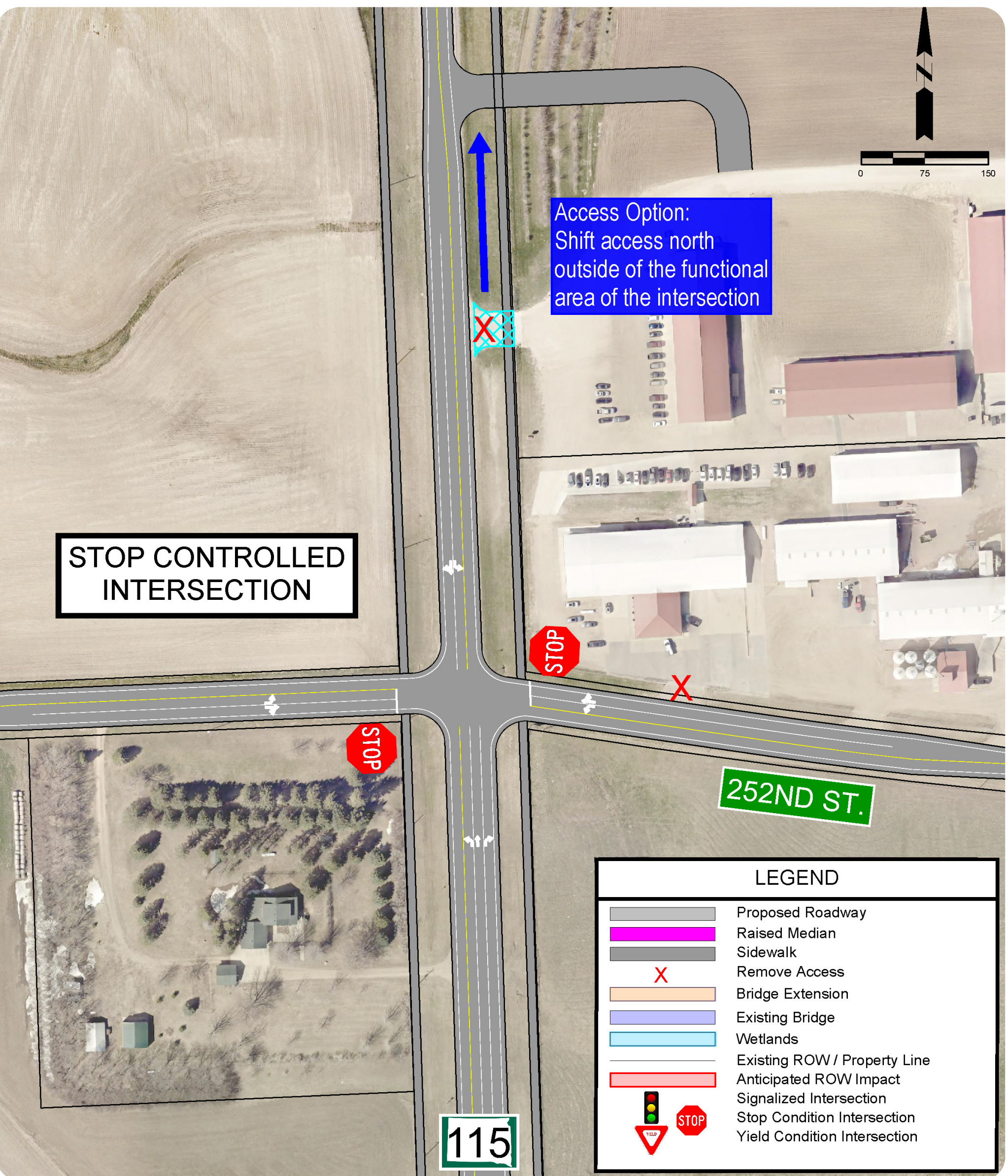
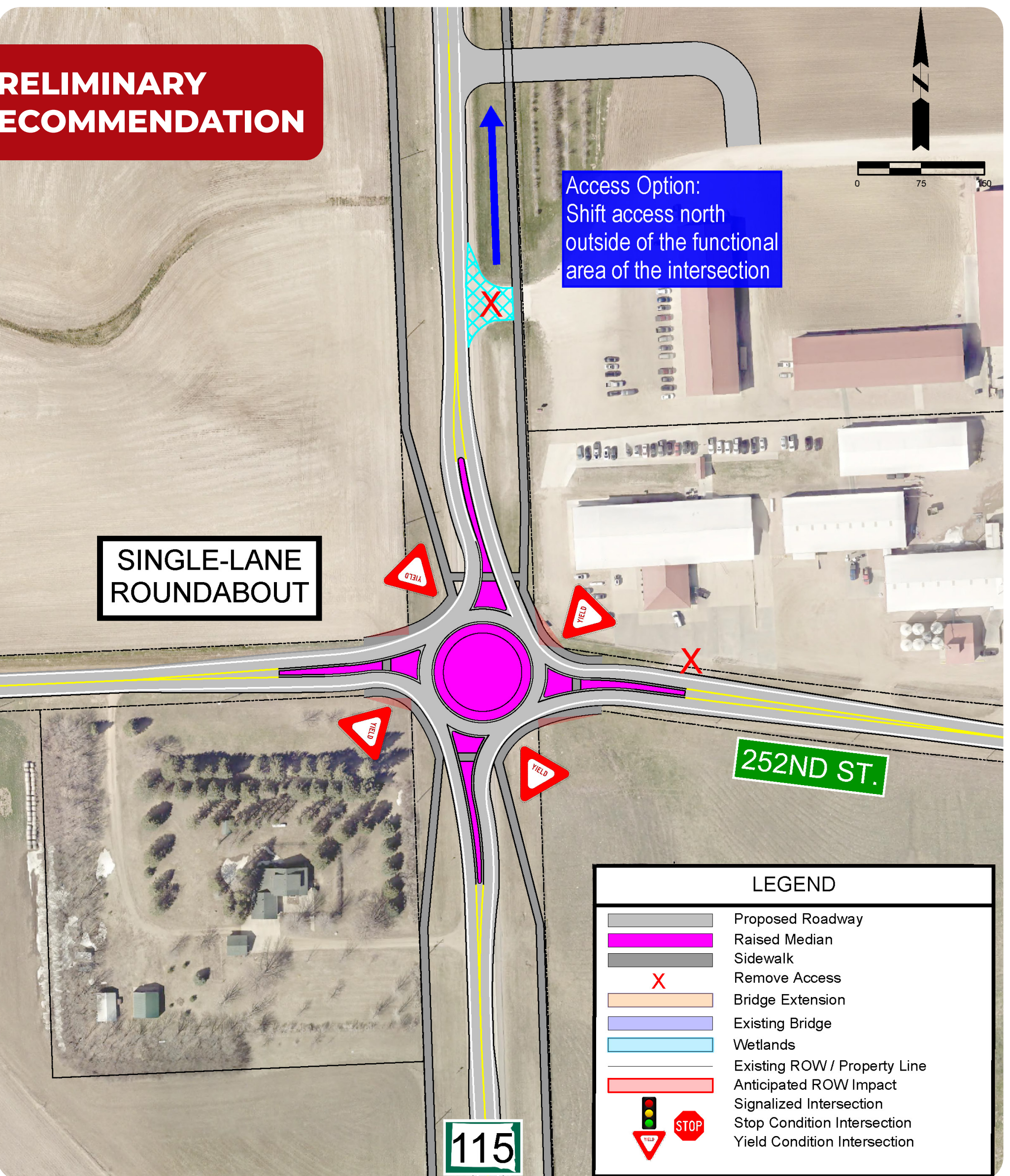
S.D. HIGHWAY 115 & 252ND STREET INTERSECTION CONCEPTS

PRELIMINARY
RECOMMENDATION



URBAN & RURAL FOUR-LANE DIVIDED CORRIDOR CONCEPTS

PRELIMINARY
RECOMMENDATION

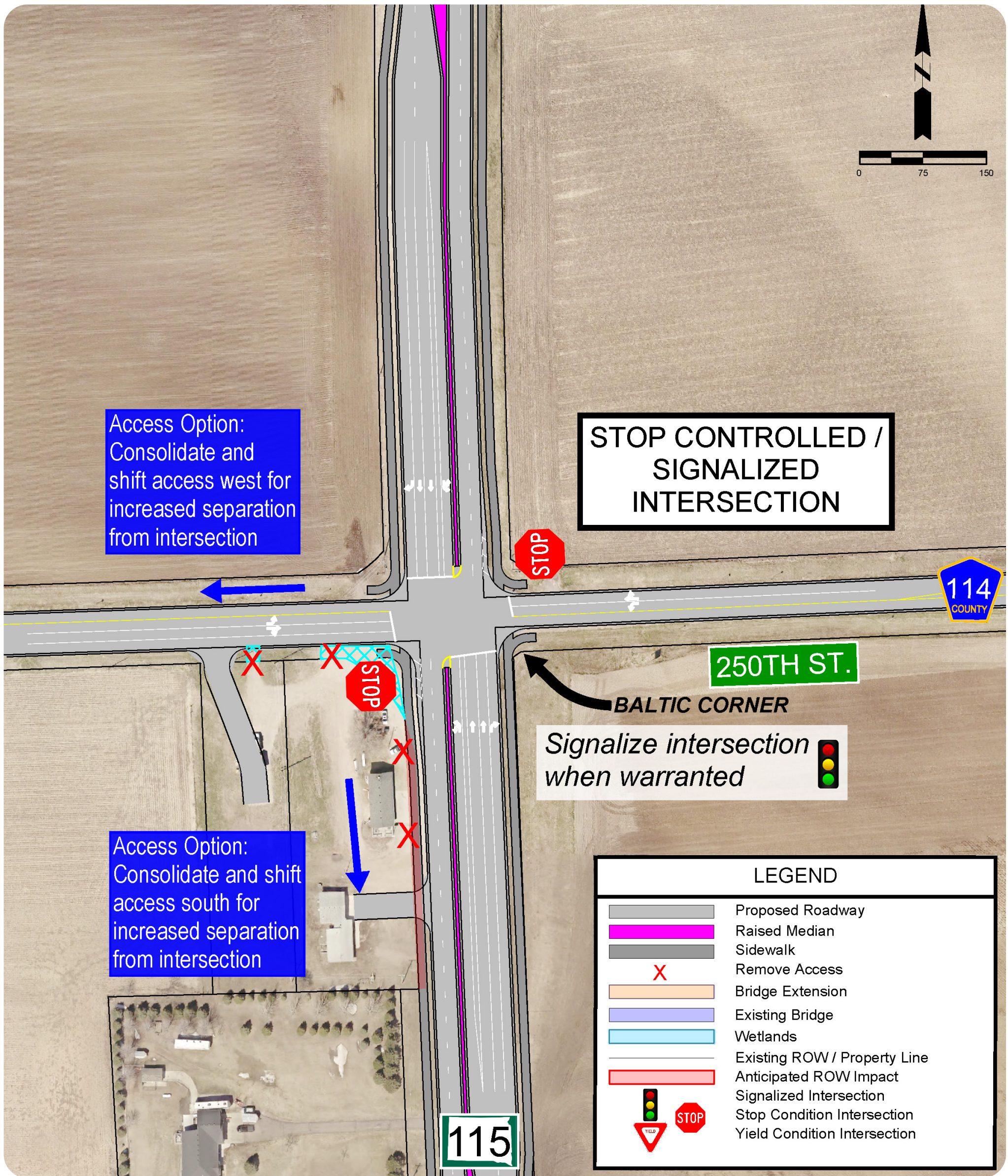


RURAL SIDE-BY-SIDE PASSING LANES CORRIDOR CONCEPTS



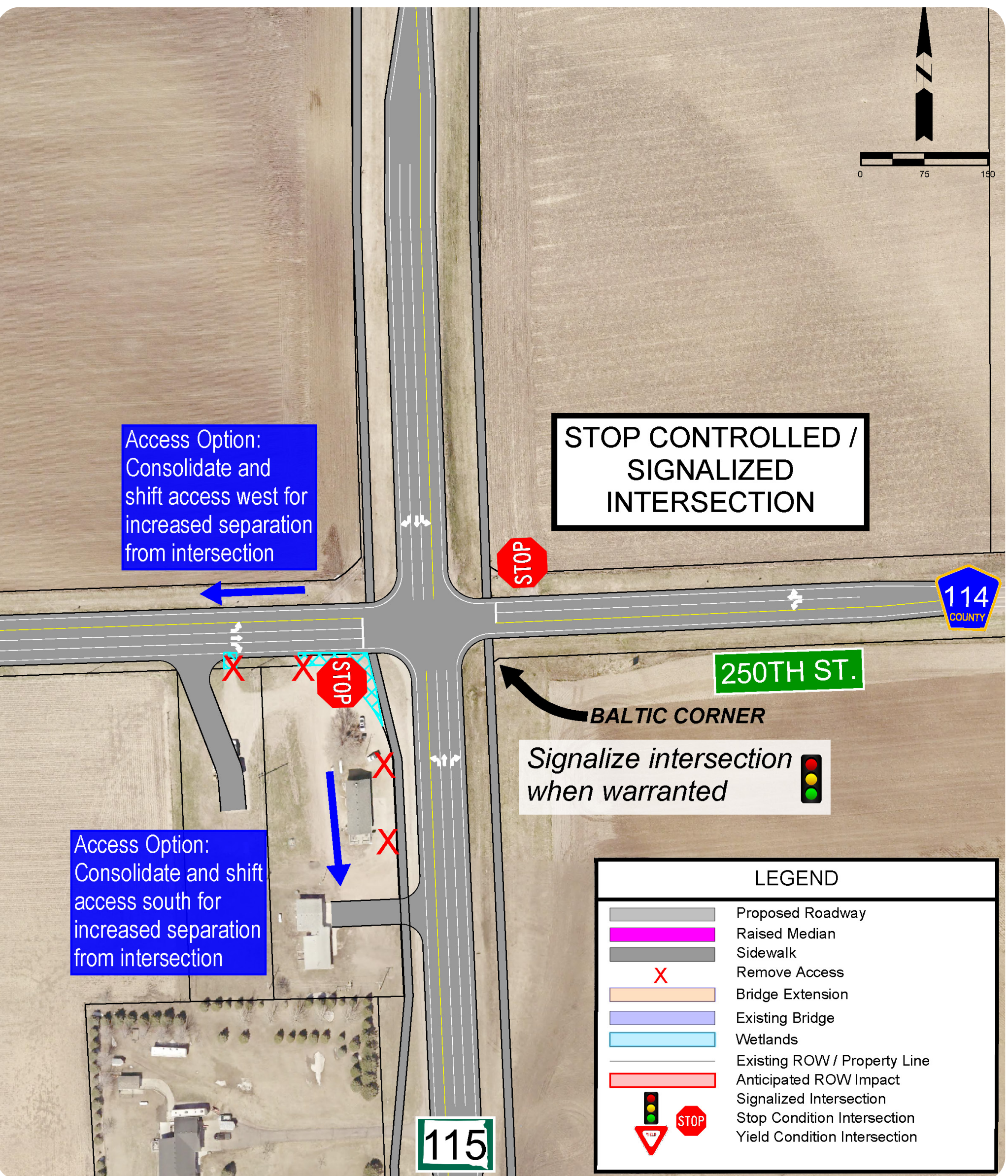
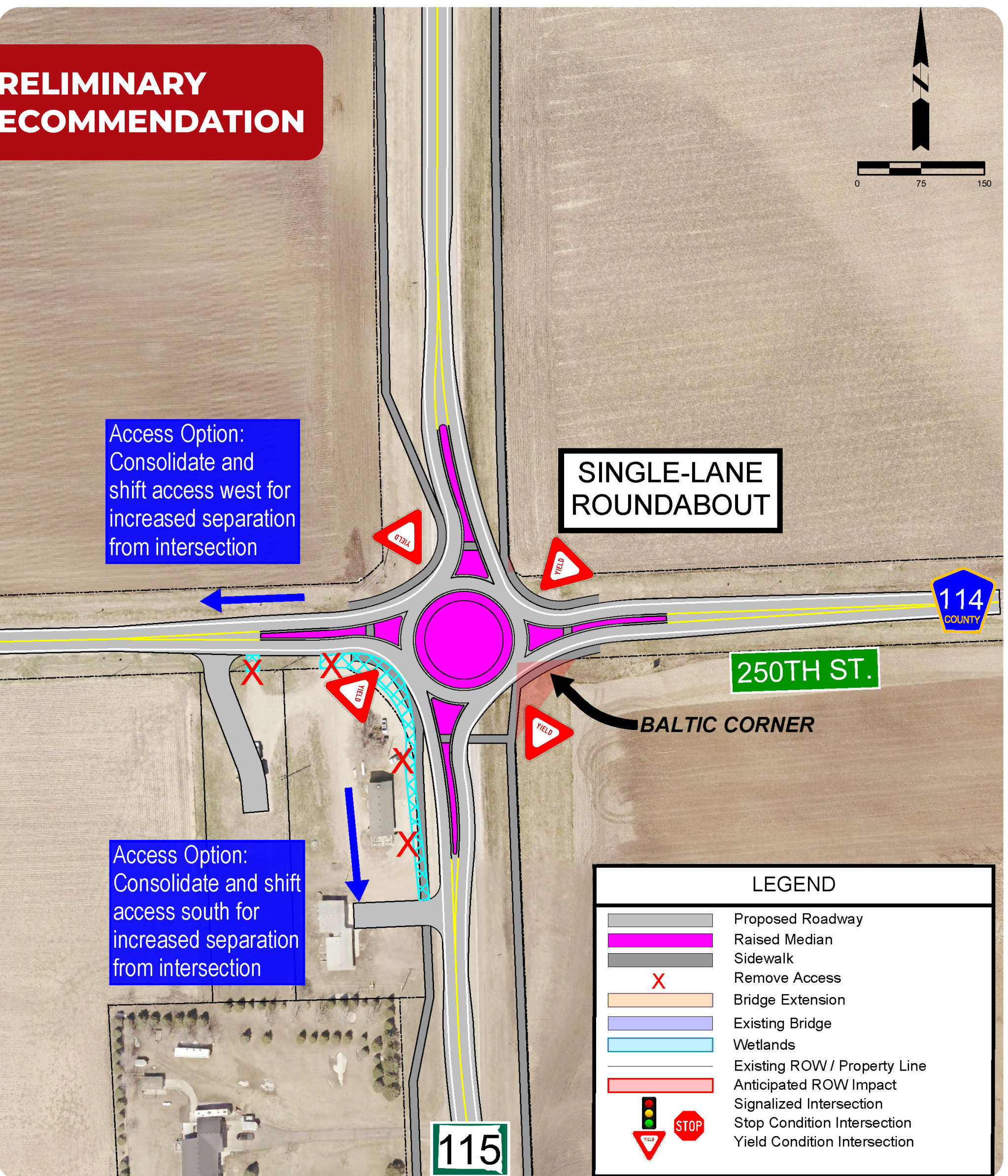
S.D. HIGHWAY 115 & MINNEHAHA COUNTY HIGHWAY 114 (BALTIC CORNER) INTERSECTION CONCEPTS

**PRELIMINARY
RECOMMENDATION**



URBAN & RURAL FOUR-LANE DIVIDED CORRIDOR CONCEPTS

**PRELIMINARY
RECOMMENDATION**

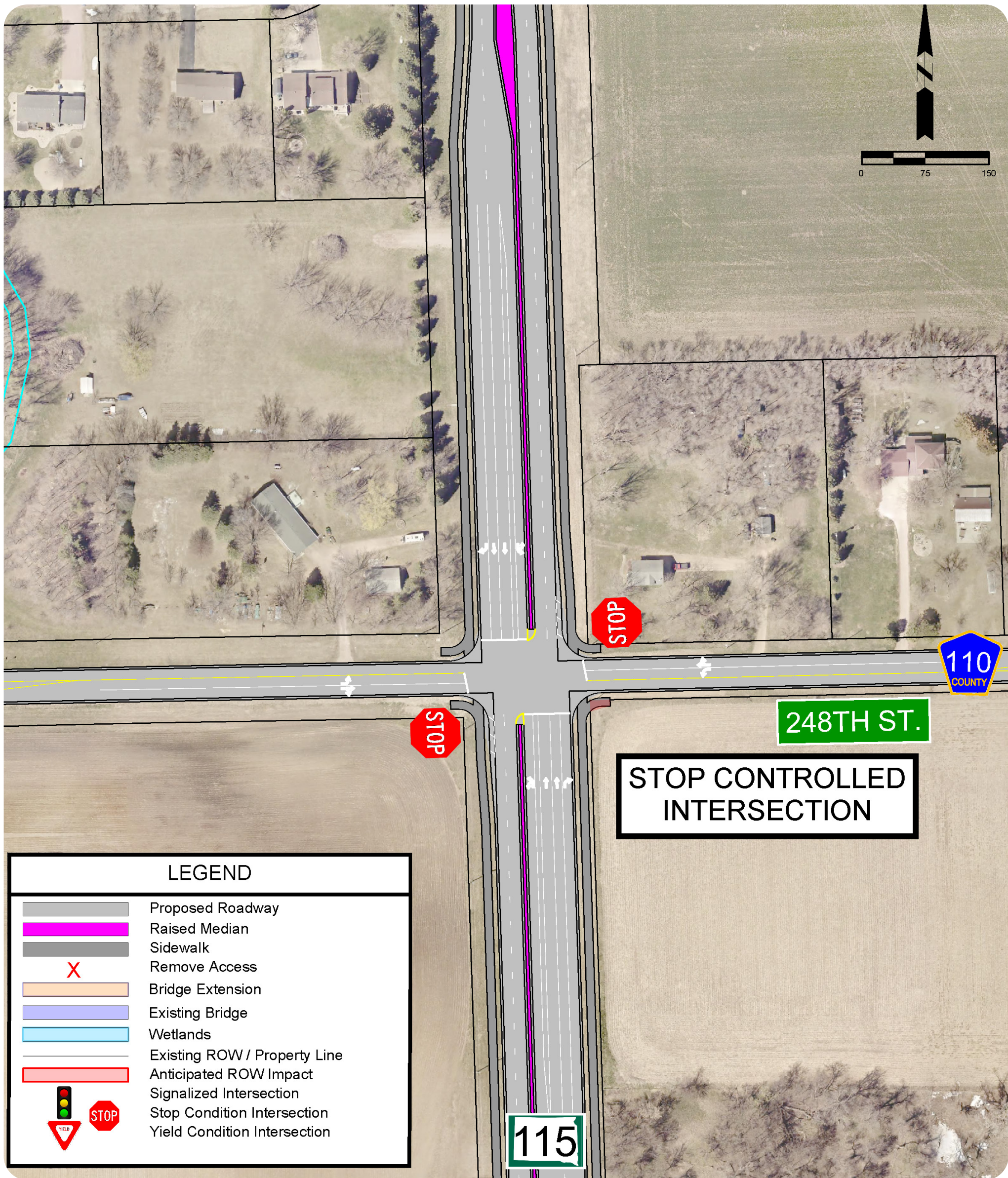
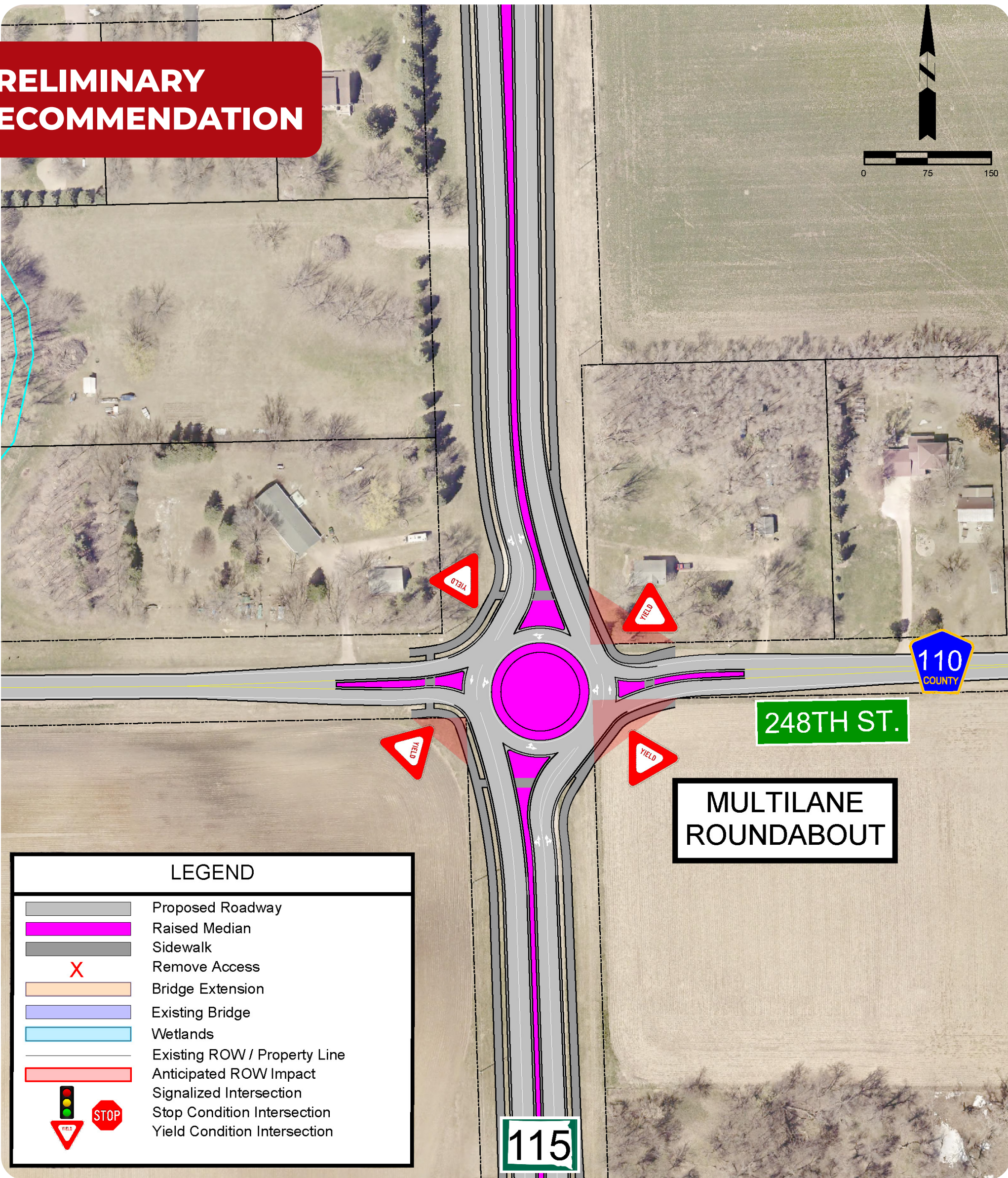


RURAL SIDE-BY-SIDE PASSING LANES CORRIDOR CONCEPTS



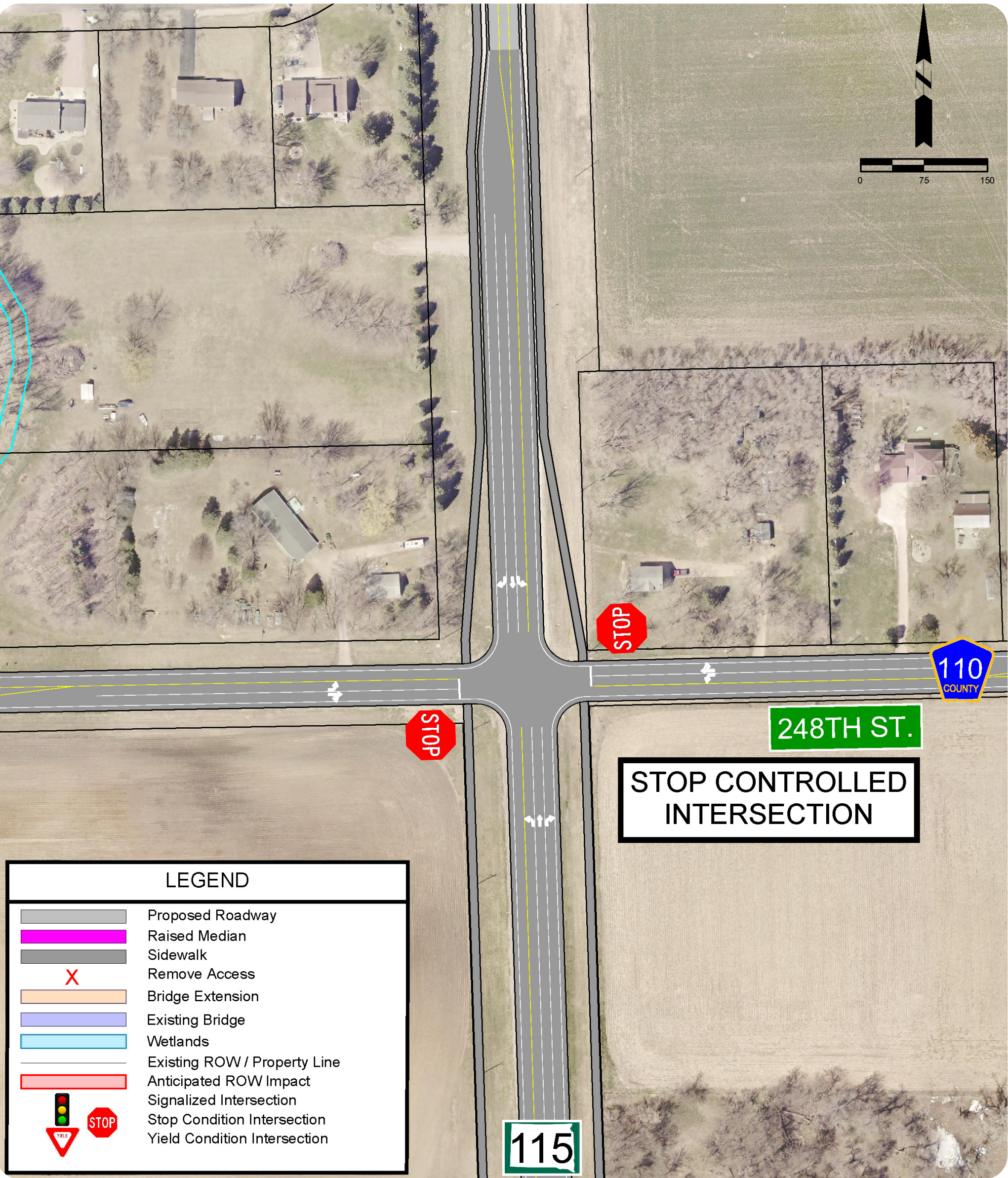
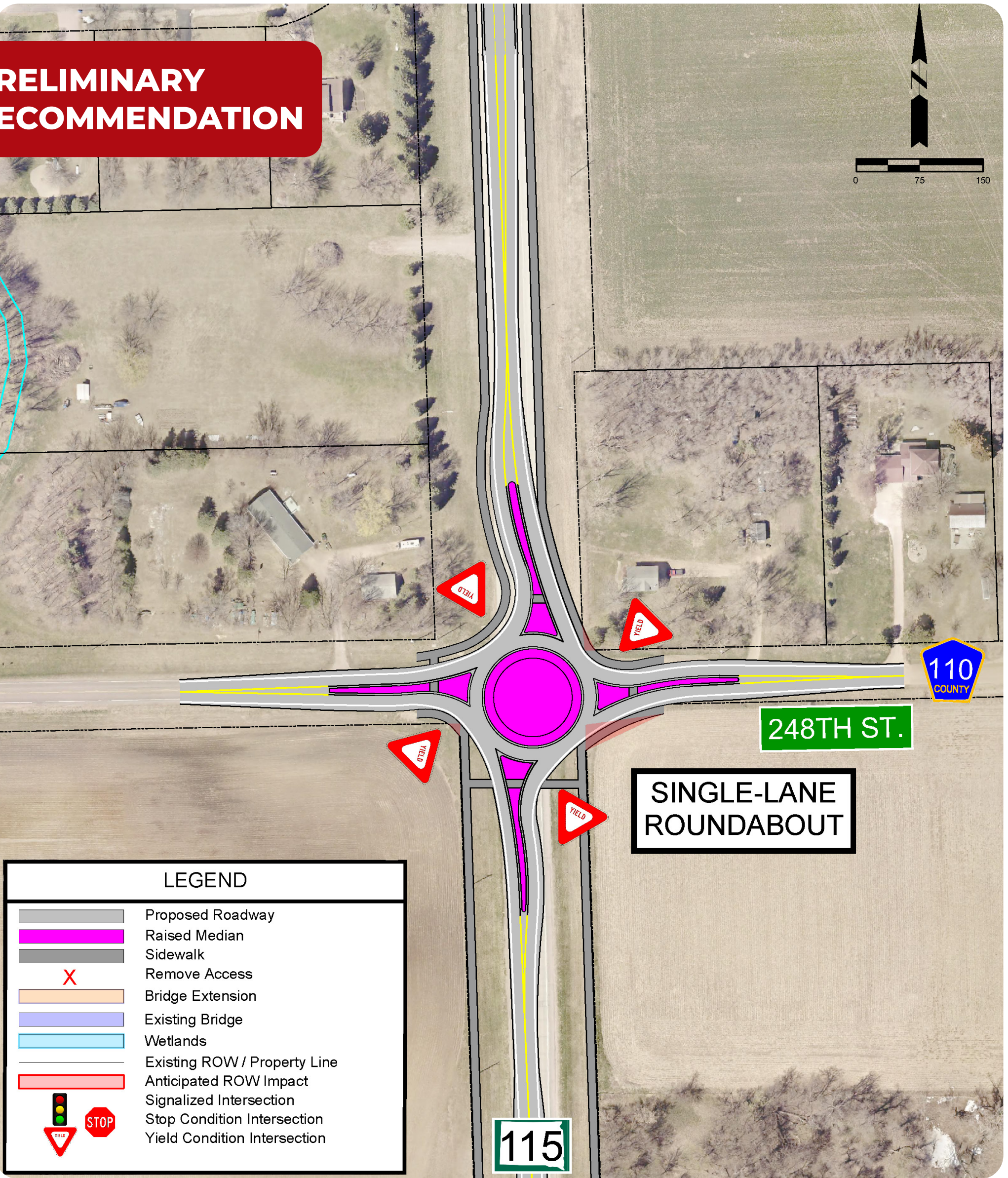
S.D. HIGHWAY 115 & MINNEHAHA COUNTY HIGHWAY 110 INTERSECTION CONCEPTS

PRELIMINARY
RECOMMENDATION



URBAN & RURAL FOUR-LANE DIVIDED CORRIDOR CONCEPTS

PRELIMINARY
RECOMMENDATION



RURAL SIDE-BY-SIDE PASSING LANES CORRIDOR CONCEPTS

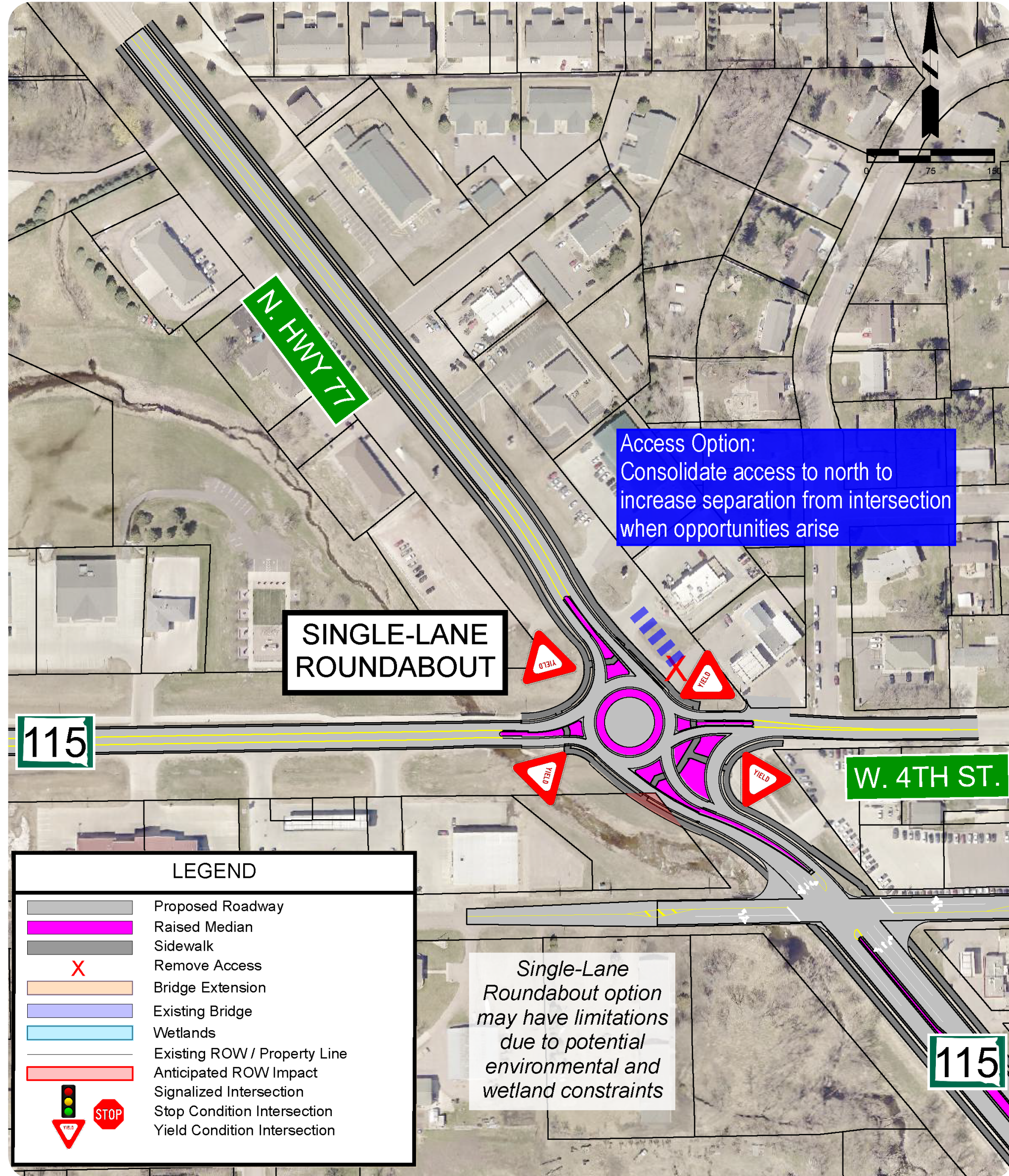
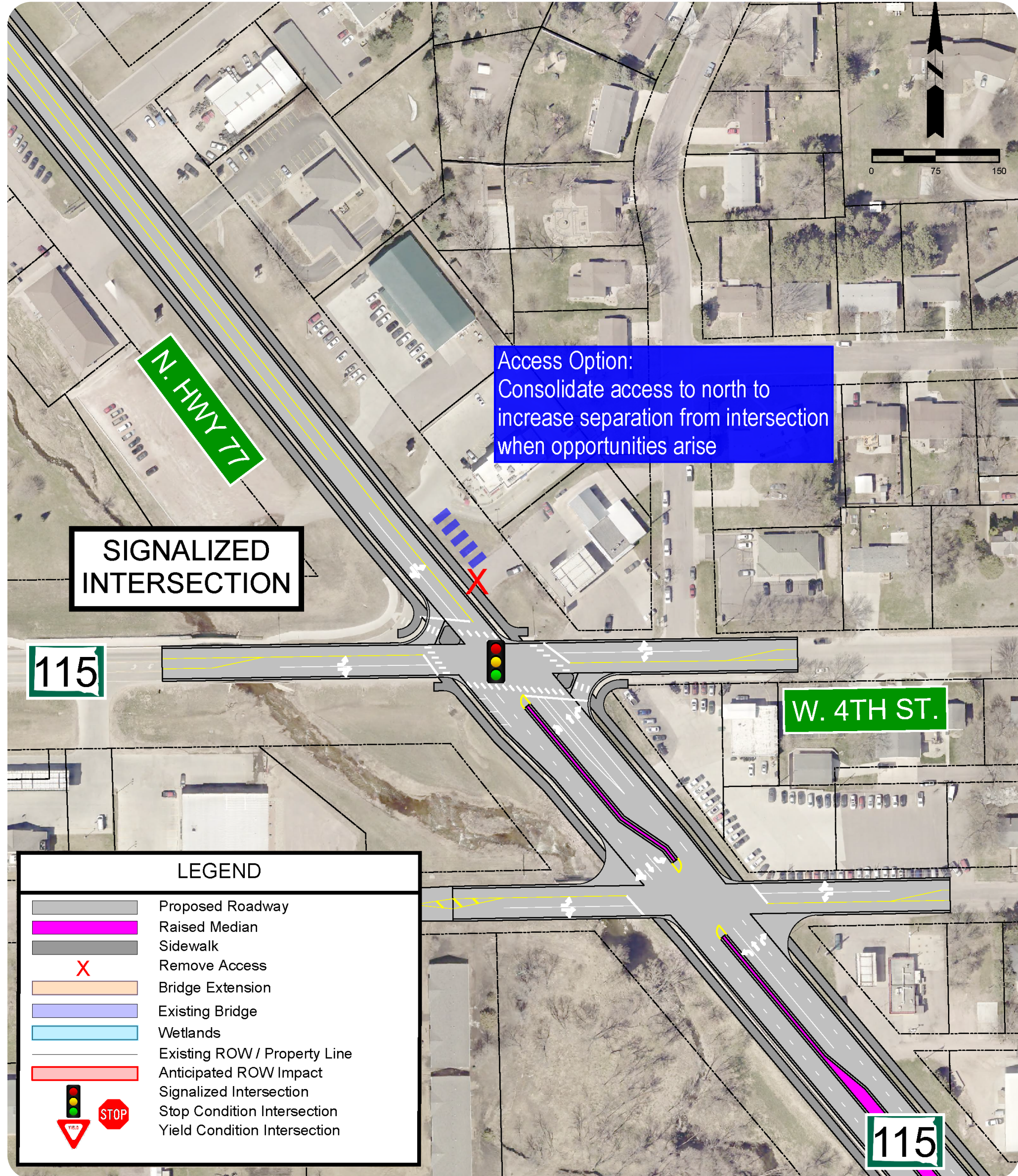


S.D. HIGHWAY 115 & W. 4TH ST. INTERSECTION CONCEPTS

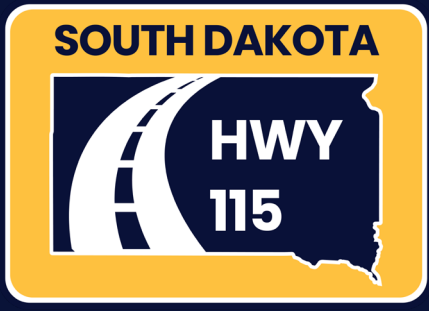
**PRELIMINARY
RECOMMENDATION**



SUBURBAN THREE-LANE CORRIDOR CONCEPTS



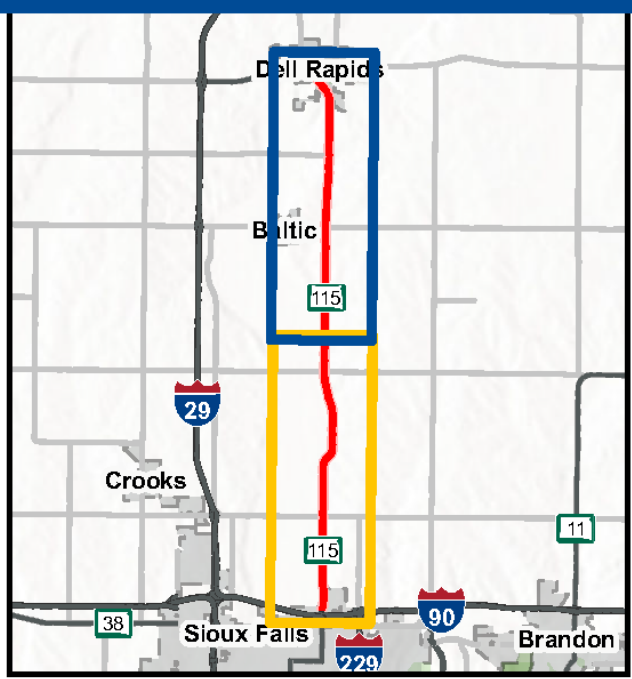
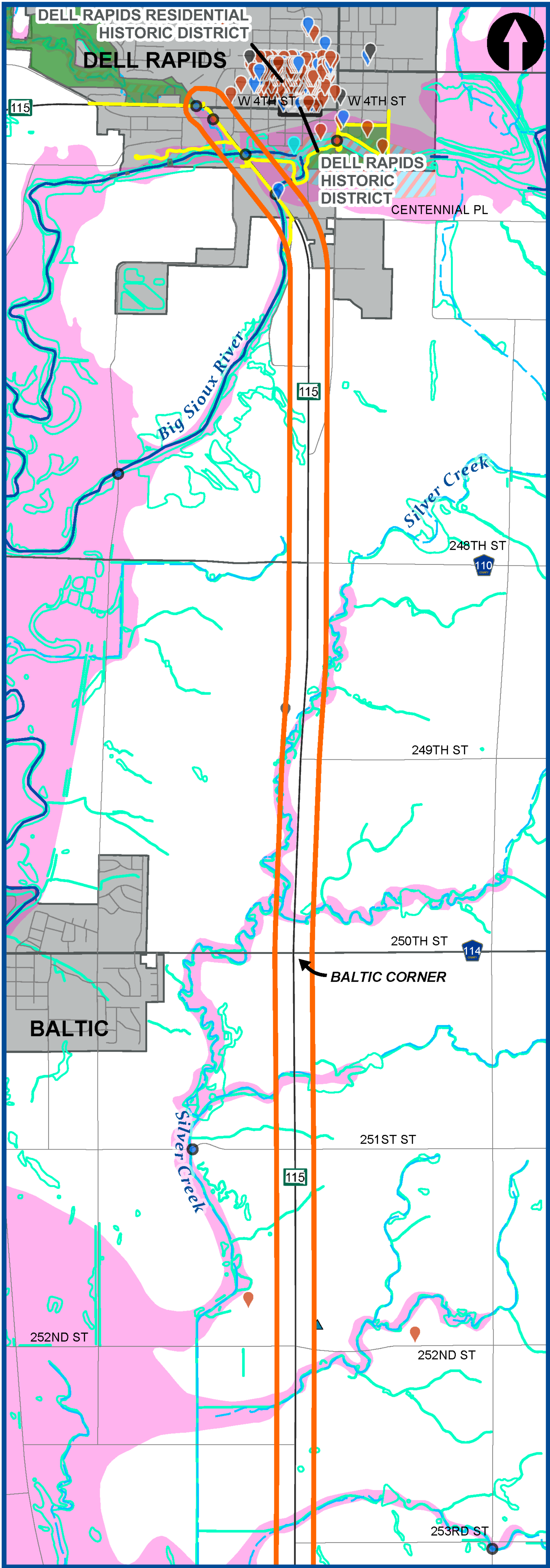
URBAN FOUR-LANE DIVIDED (RAISED MEDIAN) CORRIDOR CONCEPTS



CORRIDOR STUDY

ENVIRONMENTAL CONSIDERATIONS

NORTHERN SECTION

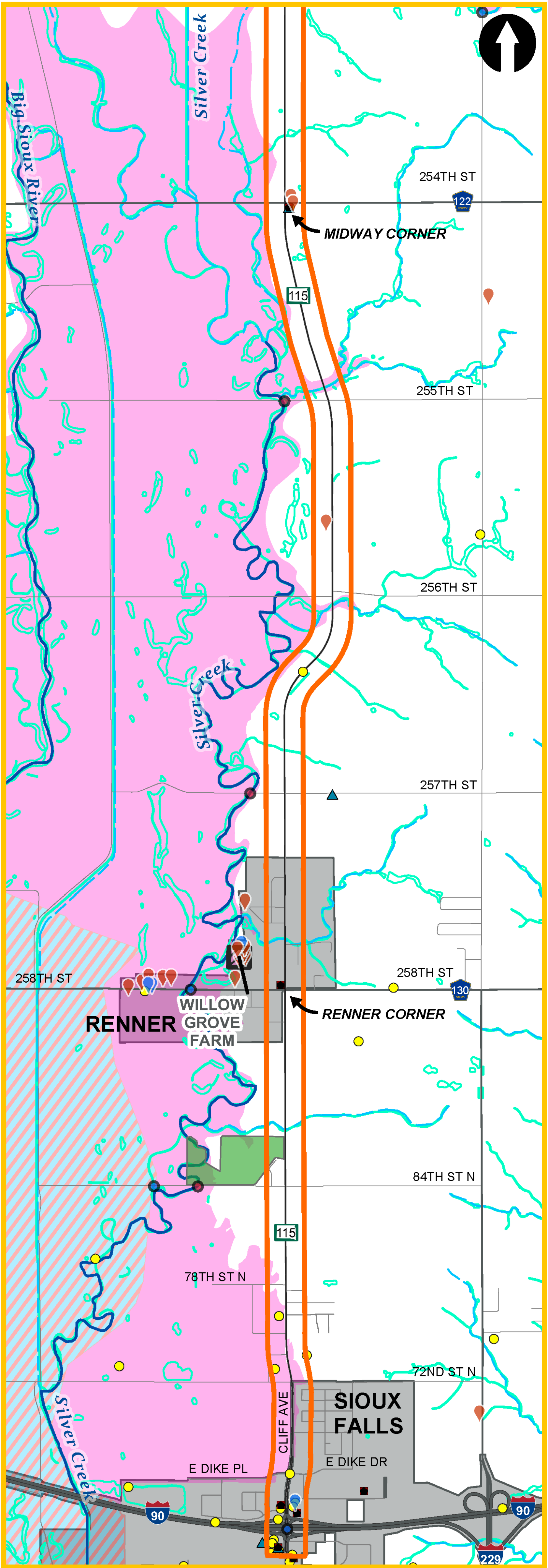


- Study Area
- City Limits
- Trailway
- Parks and Recreation
- National Wetland Inventory (NWI)
- Intermittent
- Perennial
- Regulatory Floodway
- 1% Annual Chance Flood Hazard (100 Year)

0 1 Miles

- Regulated Materials
 - Tanks
 - TRI Facility
 - Tier II Facility
 - Spill Reports
- SARC Records
 - National Register - Eligible Structure
 - Not Eligible Structure
 - Unevaluated Structure
 - National Register - Eligible Bridge
 - Not Eligible Bridge
 - Historic Districts
 - MRM (Mile Reference Marker)

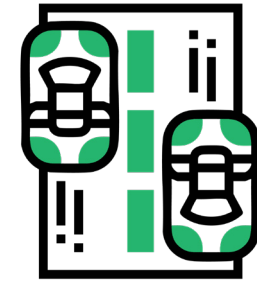
SOUTHERN SECTION





ENVIRONMENTAL & DRAINAGE CONSIDERATIONS

The area in proximity to the S.D. Highway 115 corridor features wetlands, regulatory floodways, and 100-year floodplain, primarily located near the Big Sioux River and Silver Creek. These environmental resources will inform design and drainage decisions during future design projects. Future considerations regarding environmental and drainage-related constraints include:



Corridor Capacity Improvements (Number of Lanes)

Traffic analysis supports the need for additional through lanes, especially between Sioux Falls and MC Highway 122 (Midway Corner), to meet projected peak-hour demand through 2055. In this area, an Urban Four-Lane Divided section with a raised median is recommended to improve traffic flow, manage access, and support safety for all users, including bicyclists and pedestrians. While most of the required space is already within the current right-of-way, drainage facilities (such as storm drainage) may be necessary where space for drainage ditch storage is limited.



Future Development Considerations

Wetlands, floodways, and floodplain areas—primarily west of the corridor—will constrain future development.



Next Steps for Future Design

Future design projects that will follow after the completion of the study will develop specific drainage designs and recommendations related to the proposed recommended corridor typical sections based on the traffic, safety, and access needs.



DRAFT PURPOSE AND NEED

The project team drafted the following preliminary purpose statement that can be further developed as the study progresses. The intent of this statement is to:



- 1** Solicit your input to help the project team better understand corridor and intersection issues
- 2** Use the input to refine the final purpose and need statements to comply with the National Environmental Policy Act (NEPA)

PROJECT PURPOSE

To improve multi-modal traffic operations and safety and enhance corridor functionality through access management for the S.D. Highway 115 corridor between its intersection with East Dike Place/Drive and W. 4th St.

PROJECT GOALS

Desired project outcomes beyond the transportation issues identified in the Purpose and Need and balance environmental and transportation values.

- 1** Improve safety through corridor and intersection projects that reduce crashes resulting in injuries at intersections or roadway segments, reduce wild animal-related crashes, and reduce potential conflicts through access management treatments.
- 2** Accommodate the 2015 Sioux Falls MPO Bicycle Plan and incorporate a multi-modal facility for bicycles and pedestrians.

PROJECT NEEDS

The primary “drivers” of the project reflecting the fundamental reasons why the project is being pursued.

TRAFFIC OPERATIONS

Forecasted traffic volumes indicate capacity needs along the S.D. Highway 115 corridor through the 2055 Planning Horizon. The identified need from the planning process is a capacity deficiency requiring that S.D. 115 corridor segments and intersections operate at least LOS “B” in rural areas and LOS “C” in urban areas. The expected 2055 traffic volumes will cause intersection and corridor operations to exceed these values.

ACCESS MANAGEMENT

Existing access locations and driveways along S.D. Highway 115 do not meet current SDDOT and City of Sioux Falls access spacing standards. This impacts overall traffic operations and safety of the corridor due to existing access conflicts with intersection functional area.

PAVEMENT CONDITION

SDDOT’s pavement management system indicates a future need for pavement replacement or reconstruction along the S.D. Highway 115 corridor to address the conditions of the existing pavement infrastructure. The need for pavement replacement or reconstruction will be a notable driver for the timing of the project. Future roadway reconstruction should reflect a typical section consistent with future traffic operational needs to maximize the lifecycle of new.



CORRIDOR STUDY

S.D. HIGHWAY 115 CORRIDOR SIOUX FALLS TO RENNER



CORRIDOR STUDY

S.D. HIGHWAY 115 CORRIDOR RENNER TO MIDWAY



CORRIDOR STUDY

S.D. HIGHWAY 115 CORRIDOR MIDWAY TO BALTIMIC



CORRIDOR STUDY

S.D. HIGHWAY 115 CORRIDOR BALITIC TO DELL RAPIDS



S.D. HIGHWAY 115 CORRIDOR ALTERNATIVES EVALUATION MATRIX

CORRIDOR ALTERNATIVES			Compliance with Design Guidelines	Long-Range Traffic Operations	Safety	Access	Bicycle & Pedestrian	Environmental Impacts	ROW Impacts
Corridor	Intersection	Alt. ID							
SD115 Segment A: East Dike Place/Drive (Sioux Falls) to Minnehaha County Highway 130 (Renner Corner)									
Urban Four-lane Divided (Raised Median) Corridor <i>Multi-lane SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	A-1a	5	4	4	4	5	3	3
	Multi-lane (Hybrid) Roundabouts	A-1b	5	5	5	5	5	3	5
SD115 Segment B: Minnehaha County Highway 130 (Renner Corner) to Minnehaha County Highway 110									
Urban 4-Lane Divided (Raised Median) Corridor <i>Multilane SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	B-1a	5	4	4	4	5	3	3
	Multi-lane (Hybrid) Roundabouts	B-1b	5	5	5	5	5	3	5
Rural 4-Lane Divided (Depressed Median) Corridor <i>Multilane SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	B-2a	5	4	4	3	5	3	3
	Multi-lane (Hybrid) Roundabouts	B-2b	5	5	5	4	5	3	4
Rural Side-By-Side Passing Lanes Corridor <i>Two-Lane with Passing Lanes SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	B-3a	5	3	3	3	5	4	4
	Single Lane Roundabouts	B-3b	5	4	4	4	5	4	5
SD115 Segment C: Minnehaha County Highway 110 to W. 4th Street (Dell Rapids)									
Urban Four-lane Divided (Raised Median) Corridor <i>Multi-lane SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	C-1a	5	4	4	4	5	3	3
	Multi-lane (Hybrid) Roundabouts	C-1b	5	5	5	5	5	3	3
Suburban Three-Lane Corridor <i>Three-Lane SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	C-2a	5	4	3	3	5	5	5
	Single Lane Roundabouts	C-2b	5	5	4	4	5	4	4
No Build <i>Two-Lane / Three-Lane SD115 Corridor</i>	Standard Intersections (Stop signs or traffic signals)	Entire Corridor	3	2	2	2	2	5	5

Rating of 3 or above indicates the respective measures meets study goals, is a benefit to the corridor, and/or exhibits minimal impacts.
ROW: Right-of-way



ROUNDABOUT BENEFITS

ROUNDABOUT INTERSECTION CONCEPTS

Long-term traffic operations analysis through the 2055 Planning Horizon indicated a need for a roundabout or traffic signal at several study intersections. Roundabouts are a recommended strategy at intersections in the *2024 South Dakota Strategic Highway Safety Plan*.

SINGLE-LANE & MULTI-LANE ROUNDABOUTS

The addition of single-lane or multi-lane roundabouts will help to:

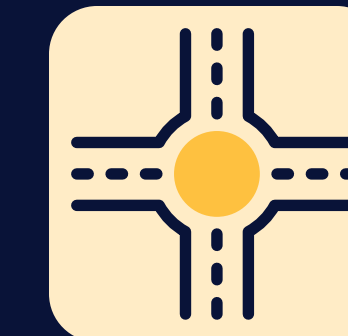
Ease traffic congestion, particularly during the morning and evening commute hours.

Improve traffic operational performance through the 2055 Planning Horizon compared to a traditional traffic signal

Increase multi-modal user comfortability by calming traffic which provides more opportunities for pedestrians and bicyclists and vehicles approaching from the side-street to navigate the intersection safely

Enhance safety. Roundabouts have been identified as a proven safety countermeasure by the Federal Highway Administration (FHWA) because of their ability to substantially reduce the types of crashes that result in injury or loss of life.

Minimize additional right-of-way (ROW) impacts near intersections due to the lack of additional turn lanes needed with traditional traffic signal intersections



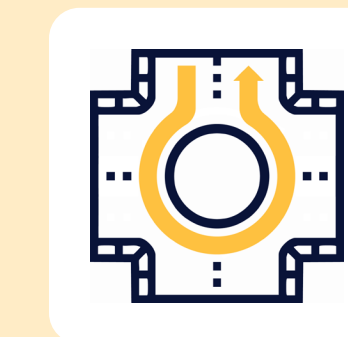
BENEFITS OF ROUNDABOUTS



Significantly reduces the risk of serious and fatal injury crashes



Allows drivers to travel more safely through the intersection



Provides greater traffic movement coordination for U-turns and direct access locations



**ROUNDABOUT
SAFETY**



**ROUNDABOUT
NAVIGATION**



**ROUNDABOUTS &
OVERSIZED VEHICLE
CONSIDERATIONS**

Scan these QR Codes for additional information regarding safety background, general navigation, and oversized vehicle considerations for Single-Lane and Multi-Lane Roundabouts.



ACCESS CONCEPTS

Access concepts identified on the corridor concept roll plots are a benefit to long-term traffic operations and safety along the S.D. Highway 115 corridor. These concepts reduce potential access-related conflicts such as:

Intersection Functional Area Conflicts, the area upstream or downstream of an intersection, where drivers are reacting to vehicles in front of them, changing lanes, slowing down, or queuing

Two-way Left Turn Lane (TWLTL) Conflict Overlaps where closely spaced access locations can create head-on conflicts within the TWLTL

Right Turn Conflict Overlaps where stopping sight distance extends through multiple access locations which causes drivers to monitor more than one access location at a time

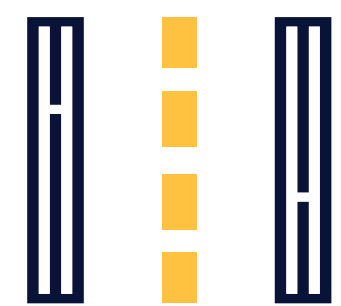
Access strategies incorporated into the S.D. Highway 115 concepts include:

- 1/4 mile (Urban) or 1/2 mile (Rural) full access intersections with available U-turn movements
- Consolidated access locations
- Relocated access locations outside of the major intersection functional area
- Raised medians with right-in right-out (RIRO) direct access movements

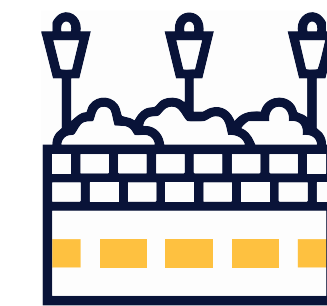


CORRIDOR CONCEPTS & FEEDBACK

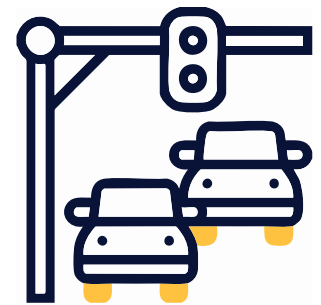
Preliminary recommendations, presented in display boards and conceptual layouts, reflect potential long-range modifications to the following elements along the SD115 corridor:



Corridor number of lanes



Roadway typical section elements
(e.g., lane and shoulder widths, raised or depressed medians, etc.)



Intersection configurations
(e.g. turn lanes, traffic control, etc.)



Driveway access



Multi-modal features (bicycle and pedestrian)
(e.g. crossing locations, preferred shared use path location on either the east or west side of the SD115 corridor)



Please provide your feedback on the preliminary recommendations and concepts developed for the SD115 corridor via physical comment forms or through the study website.

<https://sdhighway115.com/>



PLANNING LEVEL COST ESTIMATES

CORRIDOR SEGMENT RECOMMENDATIONS

ALTERNATIVES	CONSTRUCTION COST (2025 \$MIL)
S.D. Highway 115 Corridor Reconstruction (Segment A) <i>East Dike Place/Drive (Sioux Falls) to MC Highway 122 (Midway Corner) (~6.5 miles)</i>	
I-229 Exit 7 (Rice St.) Interchange Reconstruction I-229 interchange to Bahnson Avenue	\$40 - \$55
S.D. Highway 115 Corridor Reconstruction (Segment B) <i>MC Highway 122 (Midway Corner) to MC Highway 110 (~6.0 miles)</i>	
Rice St. Reconstruction: Four-lane Divided East of Bahnson Avenue to Veterans Parkway (~2.5 miles)	\$35 - \$40
Rice St. Reconstruction: Four-lane Divided Veterans Parkway to Six Mile Road (~1 mile)	\$15
Holly Boulevard Reconstruction: Four-lane Divided East of Six Mile Road to West of Sioux Boulevard (~2 miles)	\$25 - \$30
S.D. Highway 115 Corridor Reconstruction (Segment C) <i>MC Highway 110 to W. 4th St. (Dell Rapids) (~2.5 miles)</i>	
Suburban Three-lane Corridor*	\$15 - \$20
Urban Four-lane Divided (Raised Median) Corridor	\$30 - \$35

Costs do not include preliminary engineering, construction engineering, or right-of-way/easement acquisitions
*Excludes existing segment of SD115 already constructed as a Suburban Three-lane Corridor

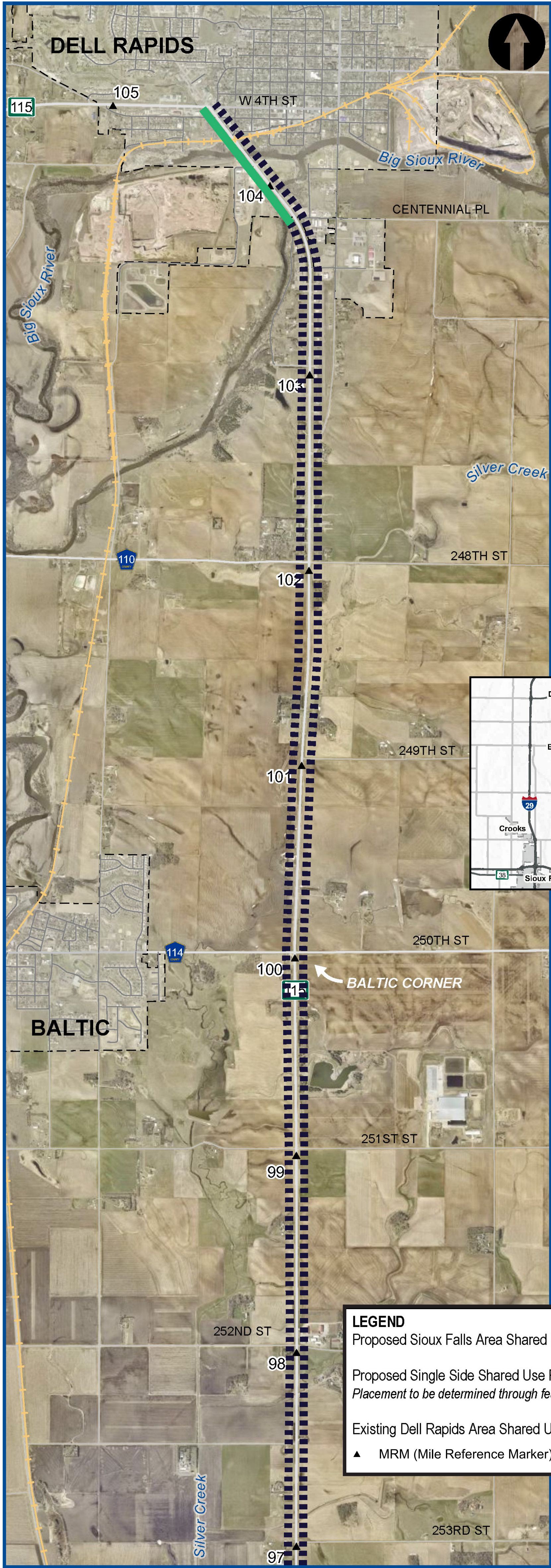
INTERSECTION & OTHER RECOMMENDATIONS

ALTERNATIVES	CONSTRUCTION COST (2025 \$MIL)
Major Intersection Options Single Lane Roundabout Single Lane Stop-Control / Signalized Intersection Multi-lane Corridor Roundabout Multi-lane Corridor Stop-Control / Signalized Intersection	\$4 - \$4.5 \$3.5 - \$4.5 \$5.5 - \$6 \$6 - \$7
Big Sioux River Bridge Expansions (2 Bridges) With Urban Four-lane (Raised Median) Corridor	\$9 - \$10

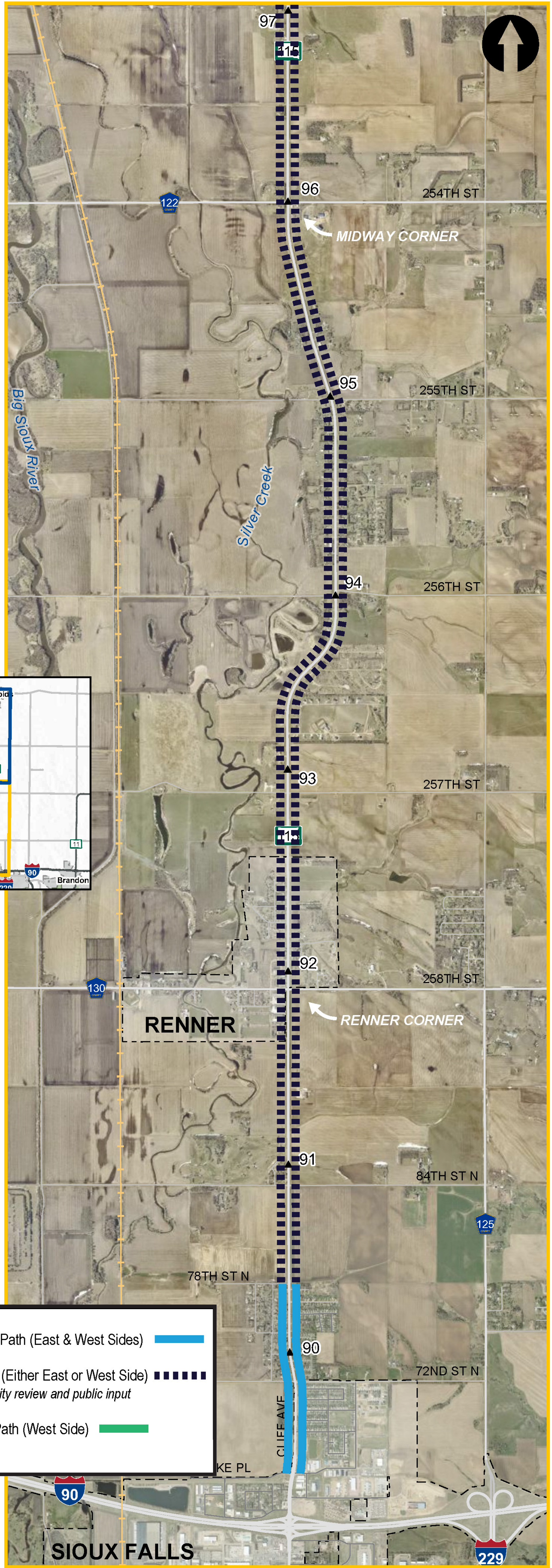
Costs do not include preliminary engineering, construction engineering, or right-of-way/easement acquisitions

BICYCLE & PEDESTRIAN CONCEPTS

NORTHERN SECTION



SOUTHERN SECTION



BICYCLE & PEDESTRIANS CONCEPTS

Bicycle and pedestrian concepts identified on the corridor concept roll plots include a 10 ft. shared use path on one side (north of 78th St. North to Dell Rapids) or both sides (within Sioux Falls from East Dike Place/Drive to 78th St. North). The study team is seeking your feedback on which side of the S.D. Highway 115 corridor the shared use path facility should be placed between 78th St. North and Dell Rapids (east or west).