

Presentation to Moorhead City Council

May 11, 2020

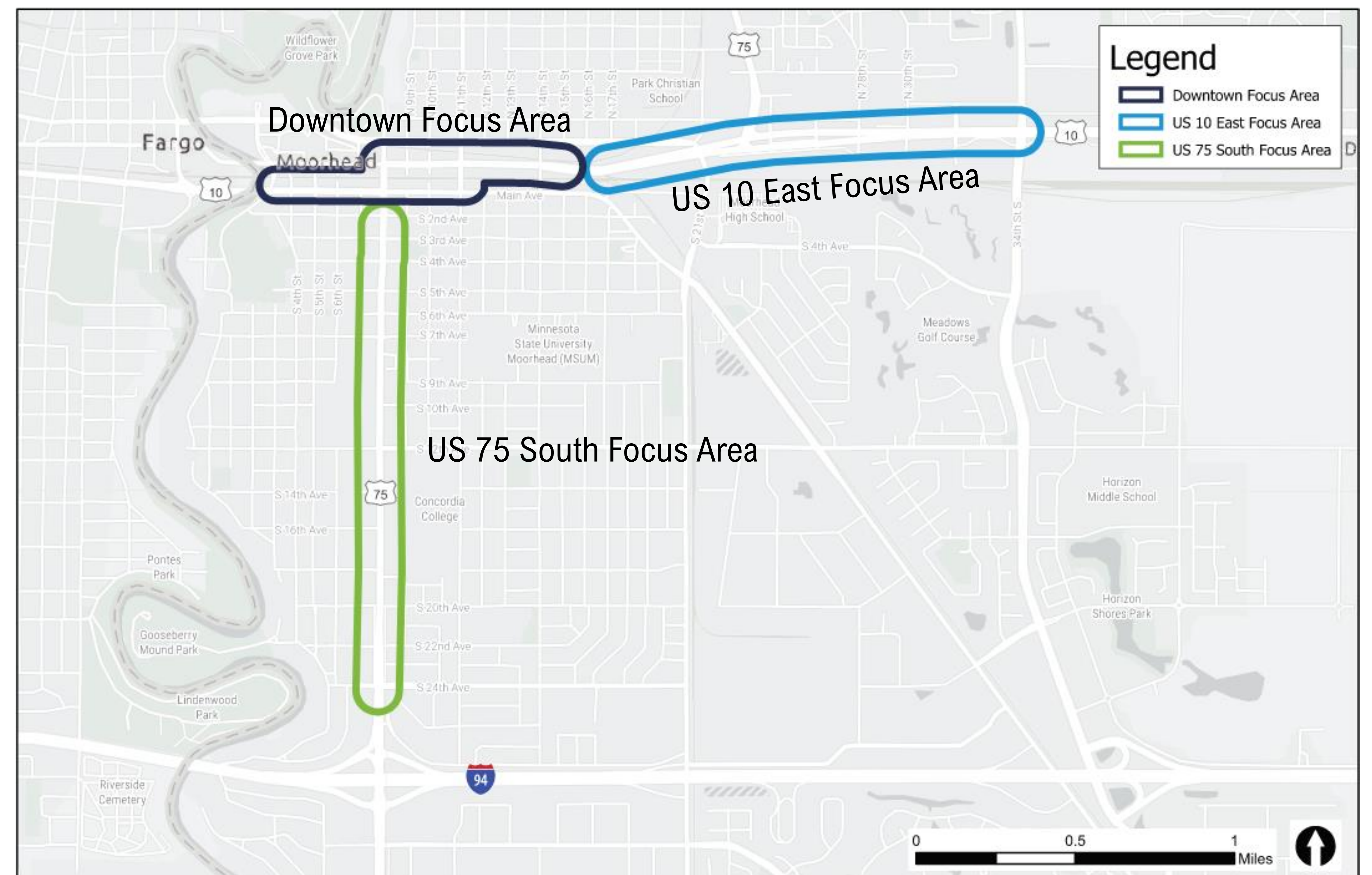
About the Study



Project Overview

About the study:

- Builds on work completed as part of the 2013 study
- Incorporates recommendations from the 12th Avenue corridor study
- Incorporates recommendations from the 11th Street underpass study
- Develops a vision and recommendations for three focus areas:
 1. Downtown Moorhead
 2. US 75 South
 3. US 10 East
- Recommendations will set framework for the Minnesota Department of Transportation (MnDOT) District 4 reconstruction projects in 2025 and 2026



Study partners:

- MnDOT District 4
- City of Moorhead
- Fargo-Moorhead Metro COG
- Downtown Moorhead, Inc.
- MATBUS
- Minnesota State University Moorhead






Study Vision & Goals

Vision:

This study looked at balancing the needs of motorized and non-motorized traffic with business access, while considering the effects of changes on Main Avenue in downtown Fargo and what it means for traffic traveling across the Red River through downtown Moorhead. Community and stakeholder input were key in informing the future visions for the corridors.

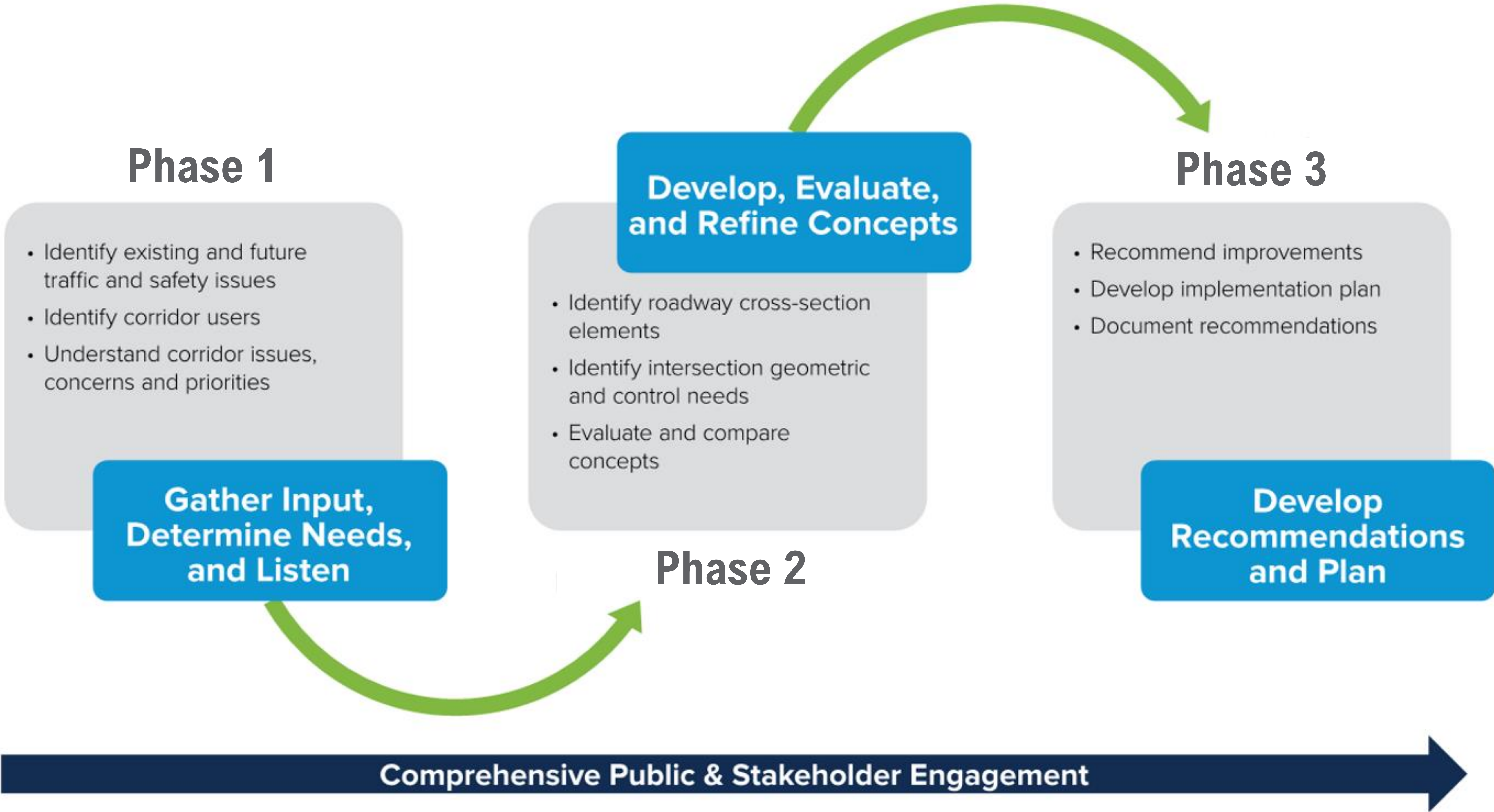
Goals:

The study was guided by the following overarching goals in which the recommended visions need to:

-  Provide roadways that to fit land use (i.e., appropriate access and design).
-  Accommodate appropriate users (i.e., complete streets) .
-  Create an environment to stimulate growth.
-  Provide flexibility for near and long-term transportation needs .
-  Improve “Gateway” feel for US 10 and US 75 corridors.

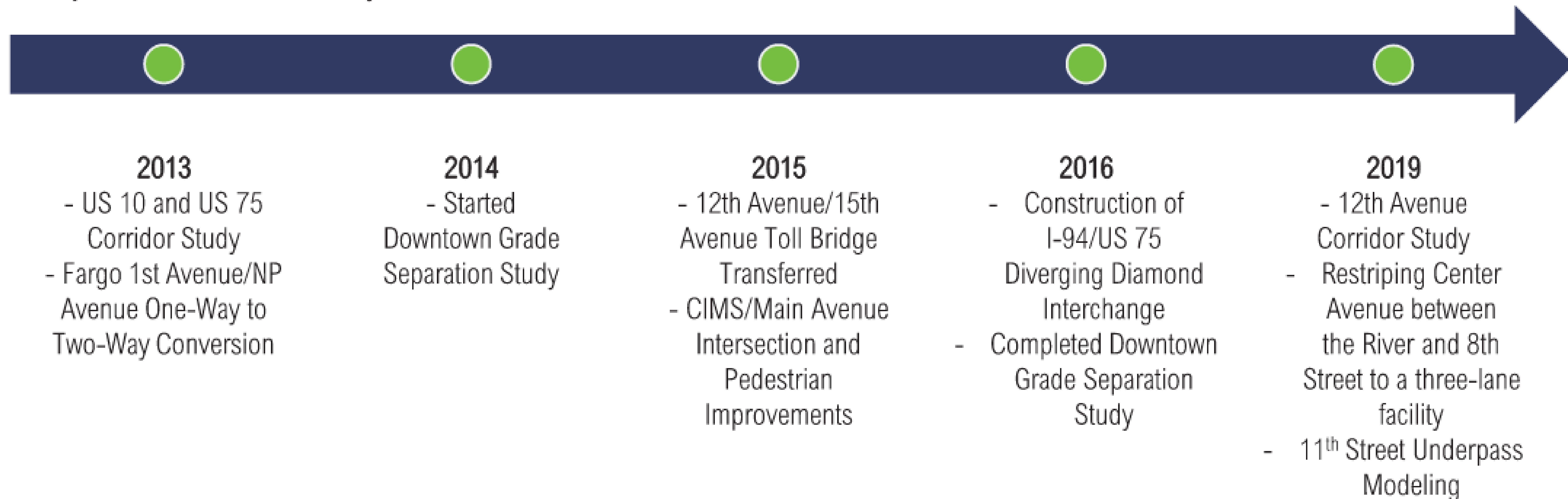
Ultimately, the study will develop and execute a project that meets the needs for 30+ years.

Study Process



Timeline for Projects Impacting Downtown Moorhead

Completed Studies and Projects:



Ongoing and Future Work:

- US 10 and US 75 Corridor Study
- SE Main Avenue/20th/21st Railroad Grade Separation → 2020
- Main Avenue Reconstruction in Fargo (Reduces Main Avenue from a 5-Lane Roadway to a 3-Lane Roadway)
- Project Development for US 10 and US 75 Reconstruction → 2020-2024
- Reconstruction of US 10 and US 75 → 2025-2026

Engaging the Community



Public & Stakeholder Engagement Summary

1250+

people engaged

Broad public engagement and specific outreach for each Focus Area

10+ ENGAGEMENT STRATEGIES



pop-up meeting



public meeting



focus groups



web survey



paper survey



email



social media



newsletter



story map

WHAT WE HEARD



The corridors should be planned to accommodate all users.



Streetscape improvements, including wider sidewalks, artistic elements, and designs for safer crossings, should be considered.



Bicycle and pedestrian infrastructure improvements are needed.



The US 10 corridor could be improved by making design changes to reduce vehicular speeds.

ROUND 1

126

surveys completed

43

people attended in-person engagement events

ROUND 2

261

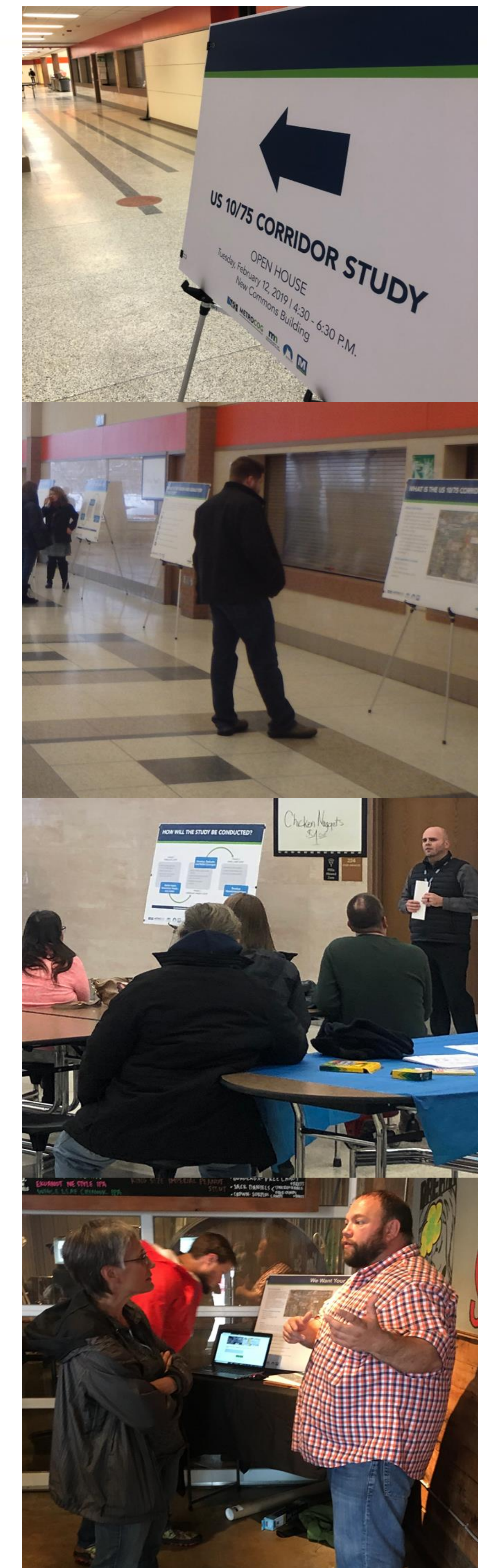
surveys completed

100

people attended in-person engagement events

730

written comments received



Downtown Focus Area



Downtown Focus Area

Overview:

- The Downtown focus area serves many differing land uses including a combination of low-density office, service, commercial and residential land uses.
- Additional high-density residential developments are currently under construction.
- The City of Moorhead's goal is to make downtown a better place to socialize, work, shop and live.



Downtown Focus Area

Community Input:

The following highlights key input obtained:

- Widen the sidewalk along 8th Street between 1st and Center Avenues.
- Utilize dead-end spaces for public uses like park space, benches, or parking.
- Add signage that notifies motorists to find an alternate route when trains are approaching downtown.
- Make street design improvements (i.e., streetscaping and reduced roadway width) to reduce traffic speeds along Center Avenue between 14th Street and 21st Street/1st Avenue.
- Improve the pedestrian crossing at the Main Avenue (US 10)/7th Street intersection.
- Redesign Center Avenue to work for walkers, bikers and drivers.
- Potentially redesign Main Avenue following Main Avenue project in Fargo.

Downtown Focus Area

Vision for Focus Area:

The vision largely prioritizes roadway design elements that focus on improving the environment for pedestrians and bicyclists by taking advantage of opportunities presented by reductions in vehicular traffic volumes along key downtown roadways.

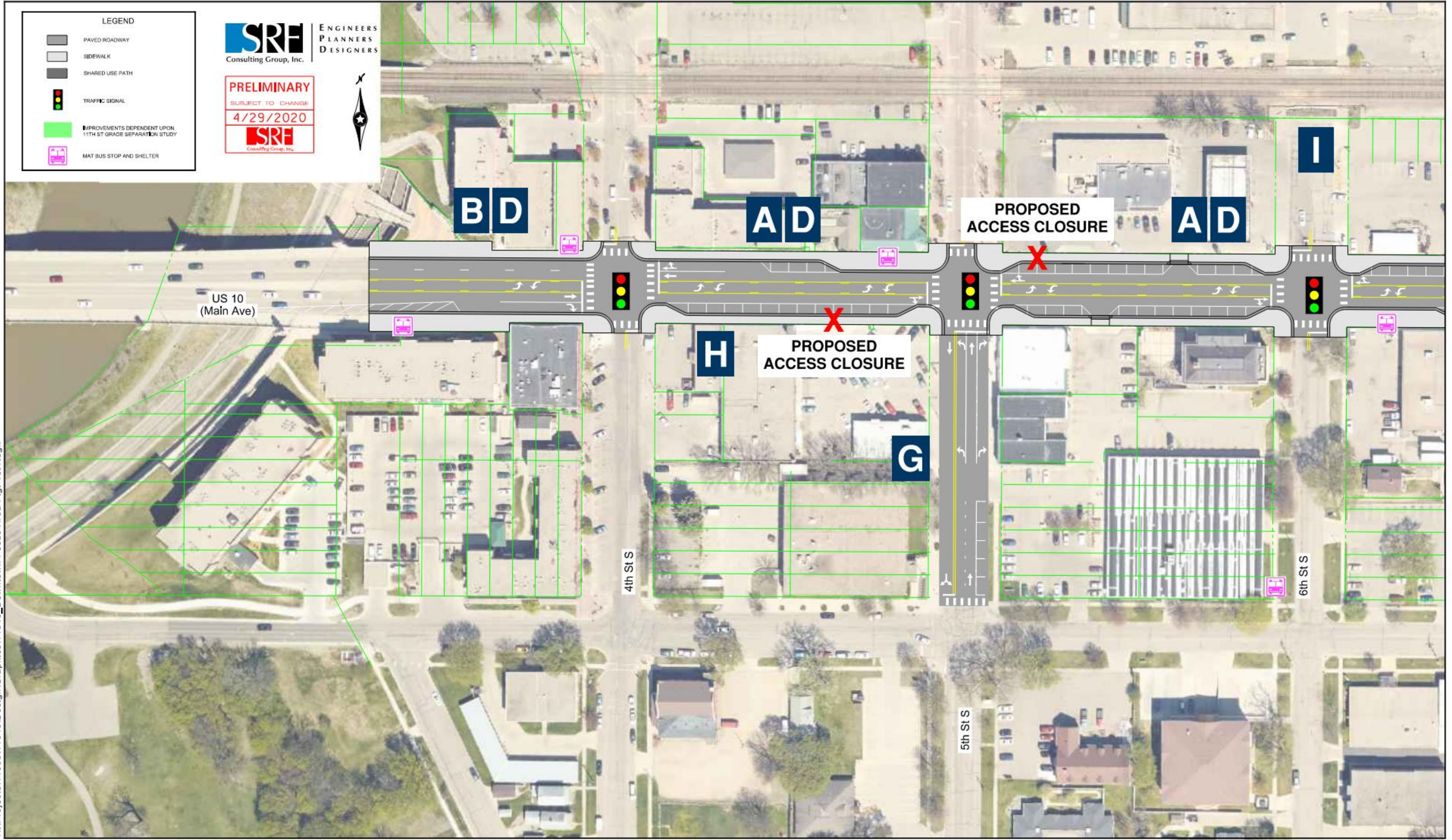
Overarching Goals	Elements of Vision for Focus Area
Provide roadways that fit land use (i.e., appropriate access and design)	<ul style="list-style-type: none"> ▪ Downtown is a dense commercial area with many business accesses ▪ Future redevelopment will increase residential living opportunities
Accommodate appropriate users (i.e., complete streets)	<ul style="list-style-type: none"> ▪ Downtown has high pedestrian activity ▪ With future redevelopment opportunities, pedestrian activity will increase ▪ Numerous transit routes serve the corridors ▪ Need to prioritize walking and biking
Create an environment to stimulate growth	<ul style="list-style-type: none"> ▪ Prioritizing a pedestrian friendly environment stimulates growth ▪ Roadway design needs to consider changing environment in downtown
Provide flexibility for near and long-term transportation needs	<ul style="list-style-type: none"> ▪ Red River crossing at Main Avenue is important as a mobility corridor but also needs to balance the needs of a downtown that desires to become a more pedestrian friendly environment ▪ Future route jurisdiction change of US 10 /75 and railroad grade-separation will alter traffic patterns providing opportunities to “right-size” roadways ▪ Reconstruction of Main Avenue in Fargo will also alter traffic patterns providing opportunities to “right-size” roadways
Improve “Gateway” feel for US 10 and US 75 corridors	<ul style="list-style-type: none"> ▪ “Right-size” roadways to provide more space for streetscaping aesthetics

Downtown Focus Area

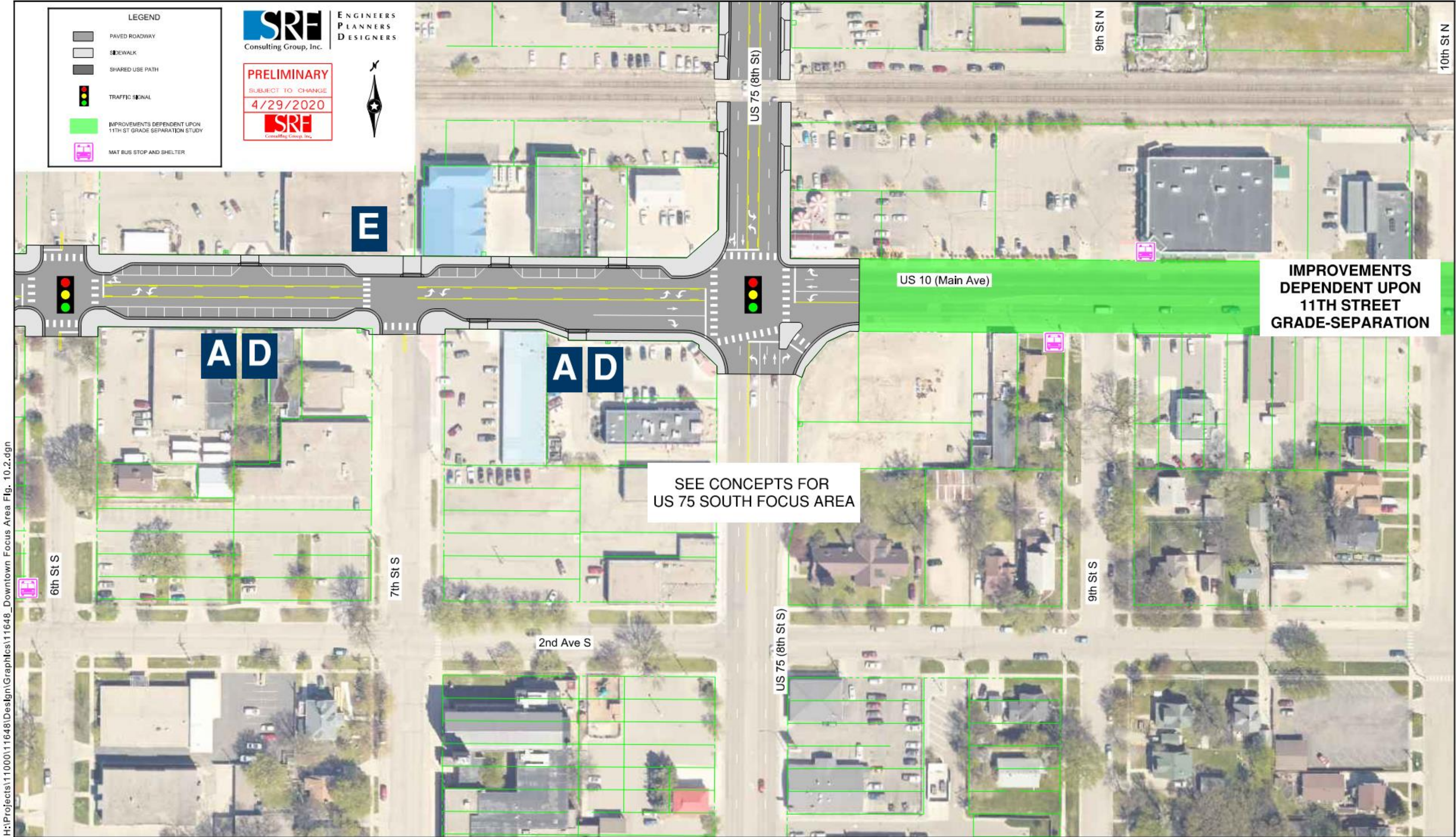
Concepts for Downtown Focus Area		How do concepts address the goals?	Do concepts address corridor needs?		
			Pavement Conditions	Safety and Mobility	Walkability and Bikeability
A	Reconstruct Main Avenue (US 10) as a Three-lane undivided roadway from the river to 8th Street (US 75)	<ul style="list-style-type: none"> Reconstructs poor pavement conditions Promotes a more pedestrian-friendly environment On-street parking can stimulate economic growth and improve safety for pedestrians by creating a barrier 	✓	✓	✓
B	Reconstruct Main Avenue (US 10) as a Five-lane undivided roadway from the river through 8th Street (US 75)	<ul style="list-style-type: none"> Reconstructs poor pavement conditions Maintains existing safety and mobility conditions 	✓	✓	
C	Reconstruct Center Avenue as a Three-lane undivided roadway from 8th Street to 11th Street	<ul style="list-style-type: none"> Reconstructs poor pavement conditions Promotes a more pedestrian-friendly environment On-street parking can stimulate economic growth and improve safety for pedestrians by creating a barrier 	✓	✓	✓
D	Minimize lane widths along all roadways	<ul style="list-style-type: none"> Reduced lane widths help promote slower driving speeds and slower speeds reduce the severity of crashes Narrower streets shorten the distance pedestrians need to cross major roadways (US 10) Reduced lane widths provide more space to be used as green space or for wider sidewalks/trails 	✓	✓	✓
E	Install curb bump-outs with marked pedestrian crossing at 7th Street for pedestrians crossing Main Avenue (US 10)	<ul style="list-style-type: none"> Curb bump-outs shorten the crossing distance which limits exposure to pedestrians from vehicular traffic Marked crossing provides designated crossing location while alerting drivers to where pedestrians are crossing 		✓	✓
F	* Install marked pedestrian safety island at 7th Street for pedestrians crossing Main Avenue (US 10)	<ul style="list-style-type: none"> Pedestrian safety island limits exposure to pedestrians from vehicular traffic by providing a refuge Marked crossing provides designated crossing location while alerting drivers to where pedestrians are crossing 		✓	✓
G	Convert 5th Street to two-way street between Main Avenue (US 10) and 2nd Avenue	<ul style="list-style-type: none"> Two-way streets are good for business and stimulate economic growth 			
H	Install dynamic signs that alert drivers of when trains are approaching (locations to be determined during project development)	<ul style="list-style-type: none"> Improves mobility by alerting drivers to alternate routes during train events, which cause major delays today 		✓	
I	Utilize dead-end spaces for public uses like park space, benches, or parking	<ul style="list-style-type: none"> Improve "Gateway" feel 			

Note: * Optional crossing pending further study regarding demand for crossing following future downtown redevelopment.





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SRE Locally Preferred Concepts for Downtown Focus Area

US 10 / US 75 Corridor Study
Moorhead, Minnesota

Job # 11648
4/29/2020

SRE ENGINEERS
PLANNERS
DESIGNERS
Consulting Group, Inc.

PRELIMINARY
SUBJECT TO CHANGE
4/29/2020

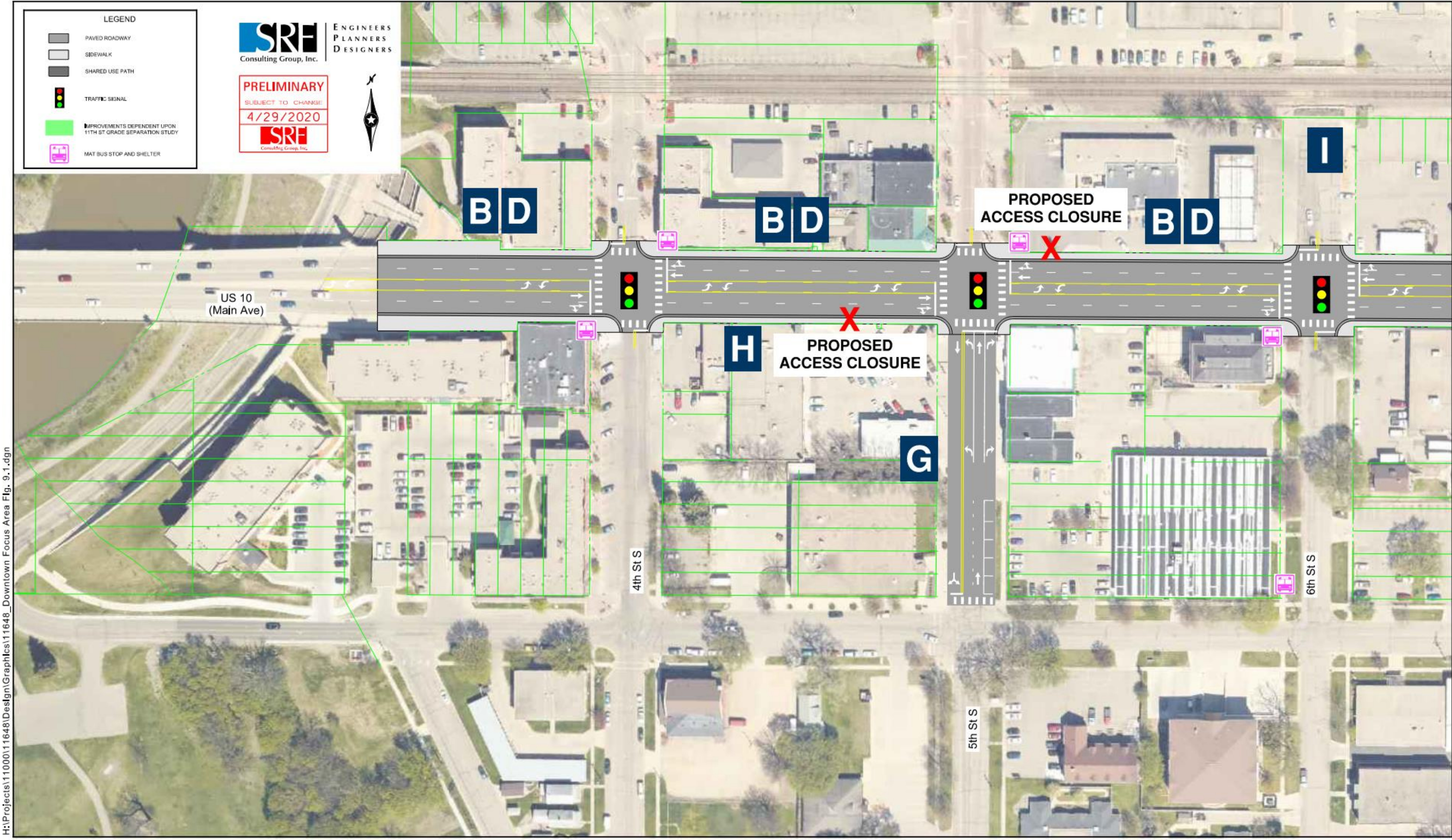
SRE
Consulting Group, Inc.

- LEGEND**
- PAVED ROADWAY
 - SIDEWALK
 - SHARED USE PATH
 - TRAFFIC SIGNAL
 - IMPROVEMENTS DEPENDENT UPON 11TH ST GRADE SEPARATION STUDY
 - MAT BUS STOP AND SHELTER

**IMPROVEMENTS
DEPENDENT UPON
11TH STREET
GRADE-SEPARATION**

SEE CONCEPTS FOR
US 75 SOUTH FOCUS AREA

Figure 27



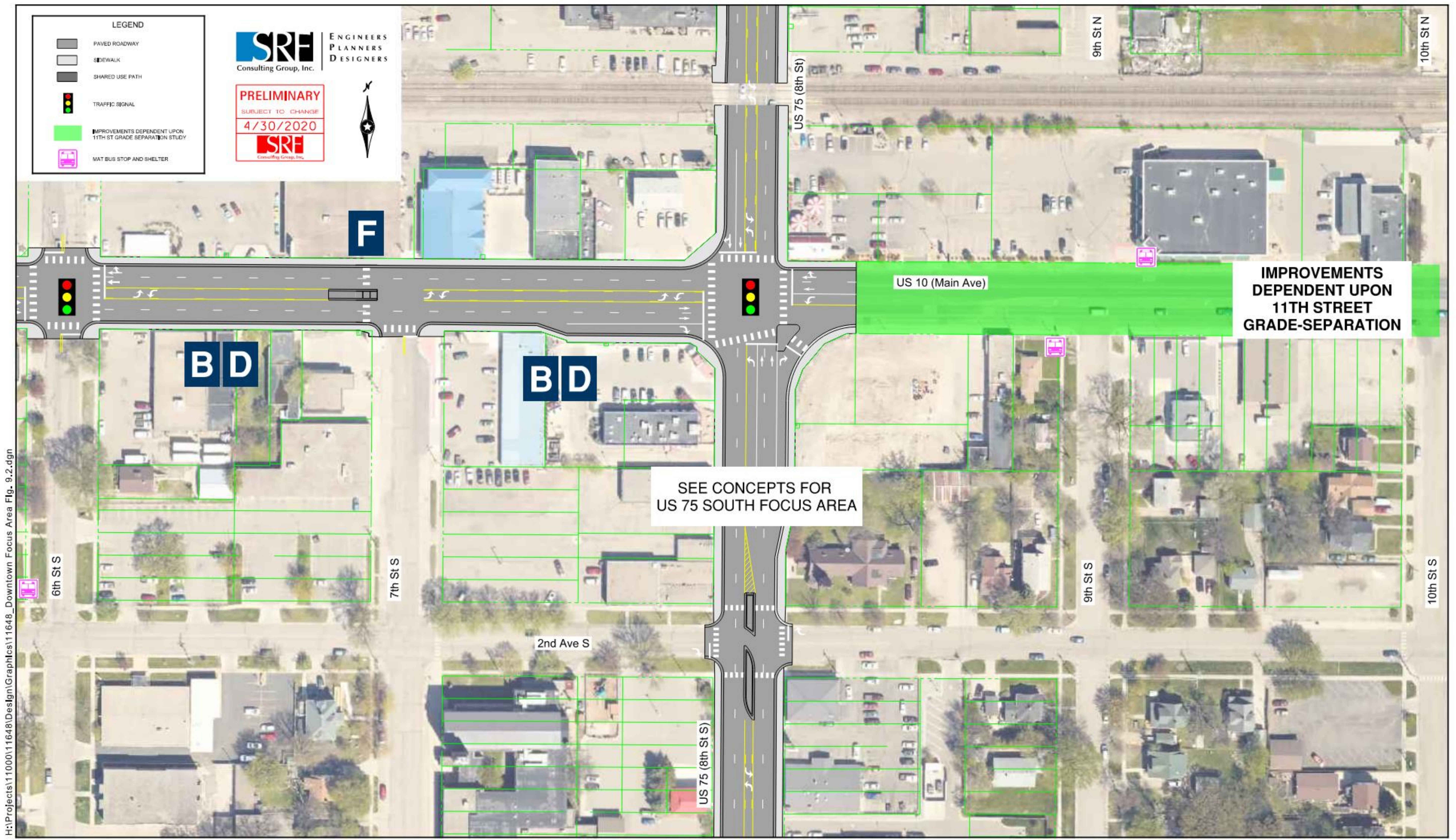
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SRE Alternate Concepts for Downtown Focus Area

US 10 / US 75 Corridor Study
Moorhead, Minnesota

Job # 11648
4/29/2020

Figure 28

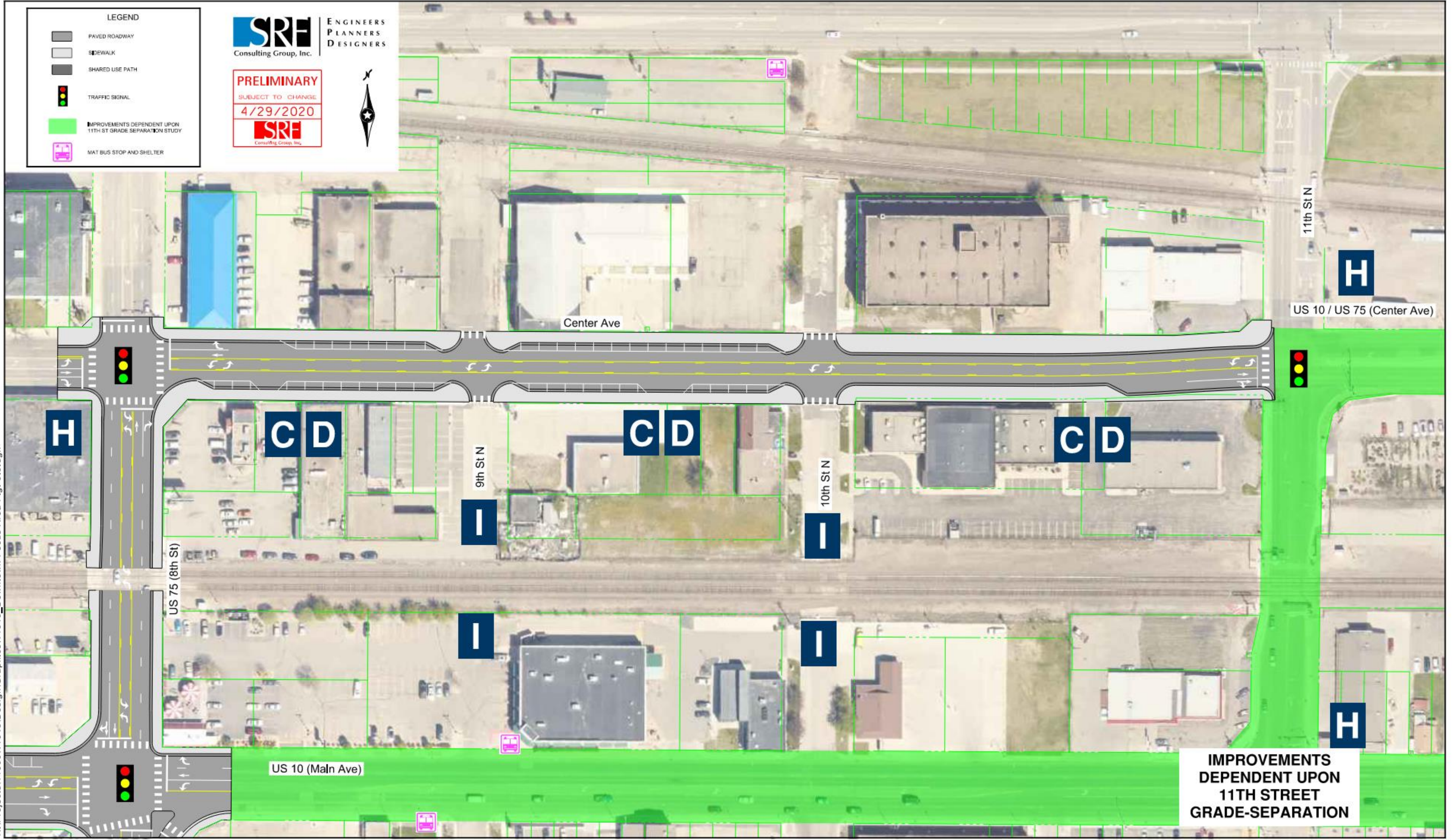


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SRE **Alternate Concepts for Downtown Focus Area**
 US 10 / US 75 Corridor Study
 Moorhead, Minnesota

Figure 29

Job # 11648
 4/30/2020



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US 75 South Focus Area



US 75 South Focus Area

Overview:

- Area roughly encompasses the neighborhoods surrounding the three main higher education institutions in the City (Concordia College, Minnesota State University Moorhead, and Minnesota State Community and Technical College).
- Commercial uses on the northern end transition to low/medium density housing to institutional use (Concordia College) as you head south.



US 75 South Focus Area

Community Input:

The following highlights key input obtained:

- US 75 corridor "feels like a highway".
- Need to consider multi-use path along 8th Street (US 75).
- Need to address safety concerns along 8th Street (US 75) between Main and 4th Avenues.
- Consider removing the existing "jog" in 8th Street (US 75).
- There is high pedestrian activity crossing at 2nd Avenue.

US 75 South Focus Area

Vision for Focus Area:

The vision largely prioritizes maintaining the existing historical character with the large street trees having more of a neighborhood feel mixed with a collegiate environment with many pedestrians. Many of the homes in this area derive access directly from 8th Street (US 75). Roadway design elements focus on improving the environment for pedestrians and bicyclists while maintaining the historic feel of the corridor.

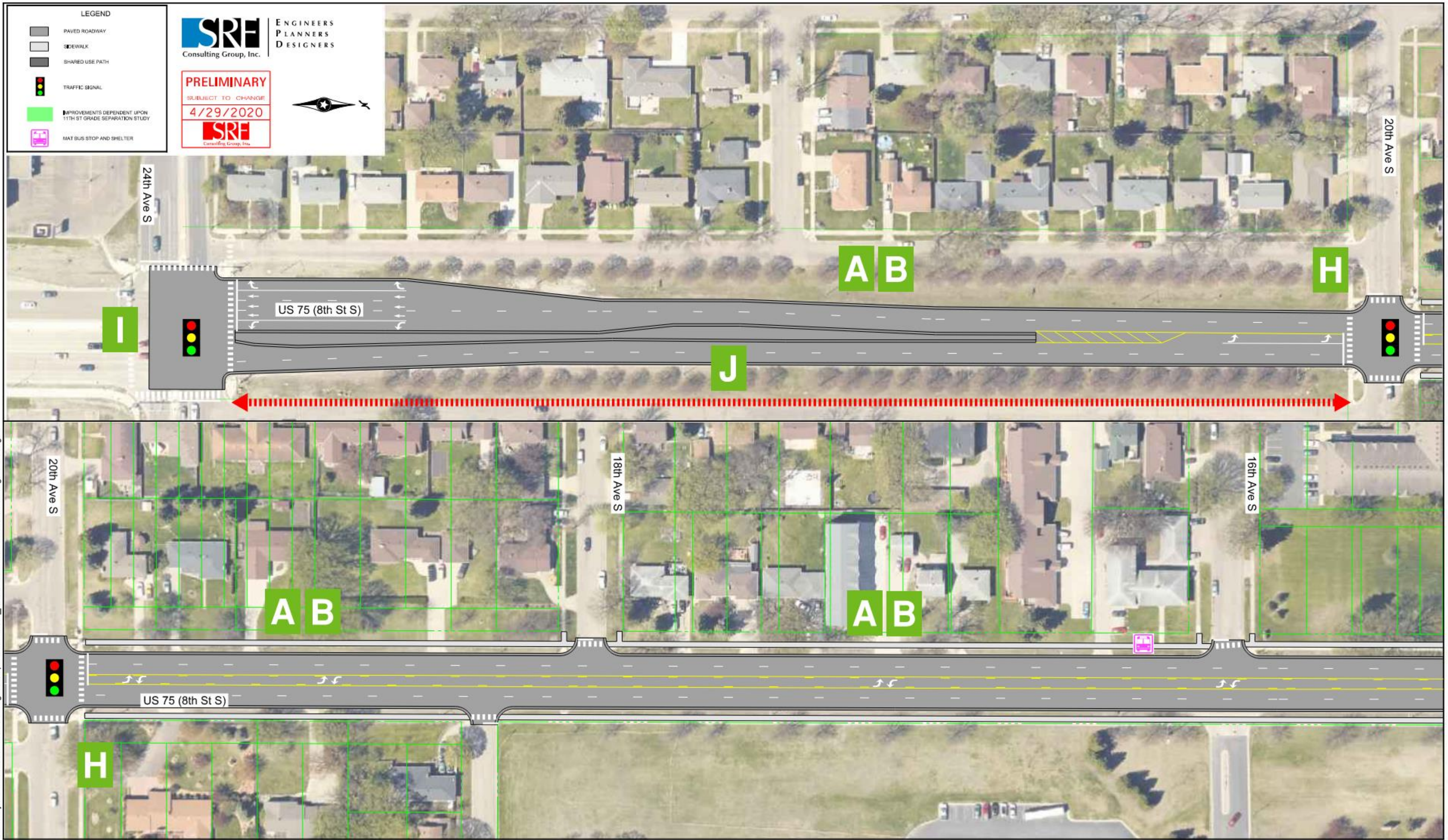
Overarching Goals	Elements of Vision for Focus Area
Provide roadways that fit land use (i.e., appropriate access and design)	<ul style="list-style-type: none"> ▪ Maintain access to residential land uses that still require direct access to 8th Street (US 75) ▪ Minimize impacts to business accesses between 5th and Main Avenues ▪ Maintain mobility for commuter users as 8th Street (US 75) is the main connection between I-94 and downtown Moorhead
Accommodate appropriate users (i.e., complete streets)	<ul style="list-style-type: none"> ▪ Improve crossings for the high pedestrian activity that cross 8th Street (US 75) ▪ Improve north-south trail connections
Create an environment to stimulate growth	<ul style="list-style-type: none"> ▪ Focus area is well developed so this is a low priority goal for US 75 South
Provide flexibility for near and long-term transportation needs	<ul style="list-style-type: none"> ▪ Address traffic safety and operational deficiencies at key intersections ▪ Address “jog” in corridor alignment
Improve “Gateway” feel for US 10 and US 75 corridors	<ul style="list-style-type: none"> ▪ Maintain historic feel of corridor by limiting impacts to existing street trees

US 75 South Focus Area

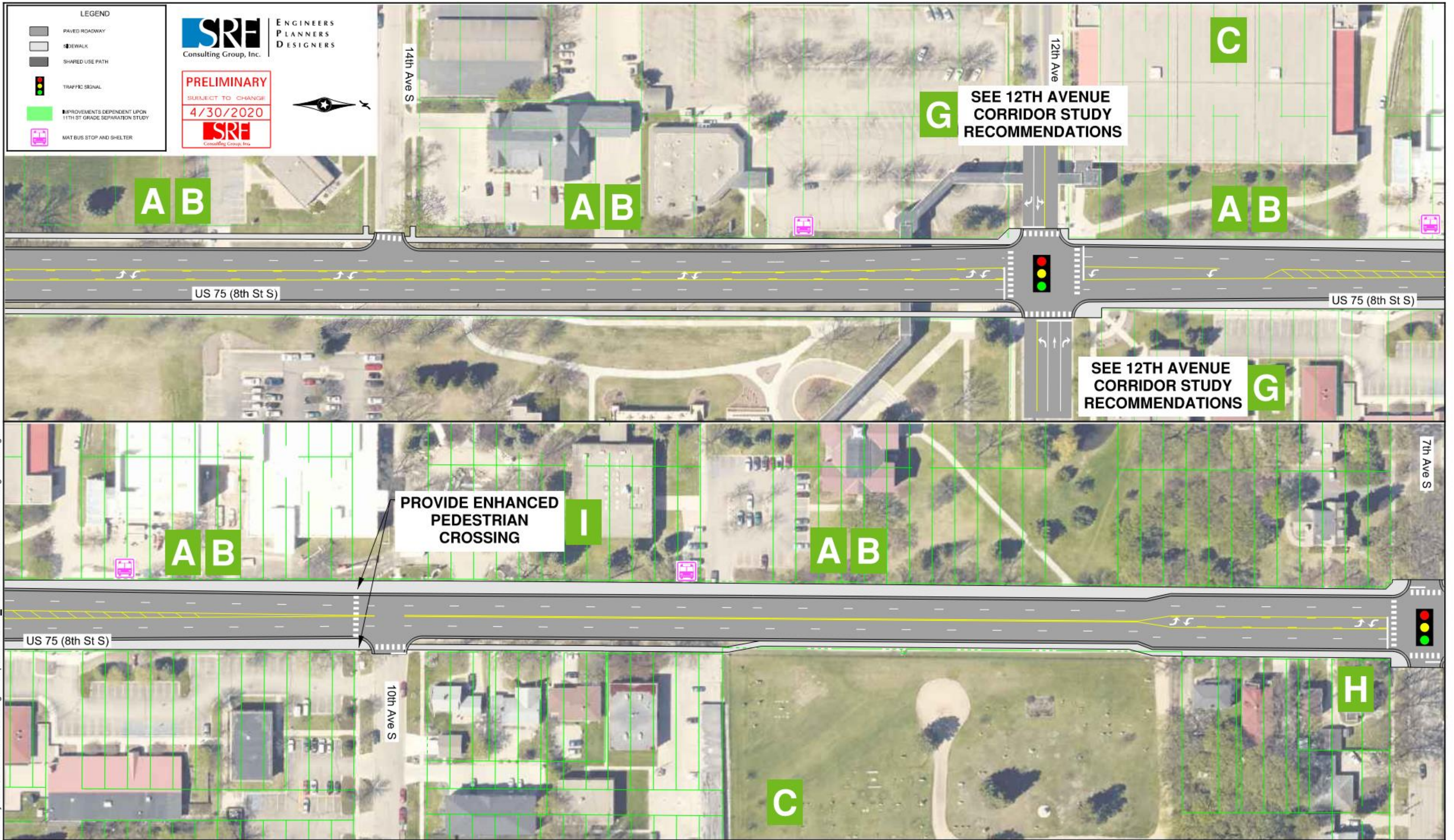
Concepts for US 75 South		How do concepts address the goals?	Do concepts address corridor needs?		
			Pavement Conditions	Safety and Mobility	Walkability and Bikeability
A	Reconstruct entire corridor	<ul style="list-style-type: none"> Reconstructs poor pavement conditions 	✓	✓	✓
B	Minimize lane widths along entire corridor	<ul style="list-style-type: none"> Reduced lane widths help promote slower driving speeds and slower speeds reduce the severity of crashes Narrower streets shorten the distance pedestrians need to cross major roadways (US 75) Reduced lane widths provide more space to be used as green space or for wider sidewalks/trails 	✓	✓	✓
C	Use 4th Street and 5th Street or 11th Street for parallel bike route	<ul style="list-style-type: none"> Moving bike route to adjacent corridors maintains "Gateway" feel for corridor since trees will not need to be demolished Parallel routes promote bikeability by connecting other routes 			✓
D	Restrict access at 2nd Avenue and install marked pedestrian safety island for pedestrians crossing 8th Street (US 75)	<ul style="list-style-type: none"> Access restriction addresses near and long-term needs by addressing an existing safety issue Pedestrian safety island limits exposure to pedestrians from vehicular traffic by providing a refuge Marked crossing provides designated crossing location while alerting drivers to where pedestrians are crossing 		✓	✓
E	Install traffic signal control at 4th Avenue when warranted by traffic levels	<ul style="list-style-type: none"> Addresses long-term needs by providing accommodating additional traffic that will shift to 4th Avenue from 2nd Avenue caused by the access restriction at 2nd Avenue Traffic signals are effective at stopping traffic to allow pedestrians to cross a major roadway (US 75) 		✓	✓
F	Minimize "jog" in corridor between 4th Avenue and 6th Avenue	<ul style="list-style-type: none"> Provides flexibility for near and long-term needs by addressing an existing lane continuity issue 		✓	
G	Revise intersection geometry and lane usage, and make signal timing improvements, including installing a leading pedestrian interval and install dynamic no right-turn on red, at 12th Avenue	<ul style="list-style-type: none"> Addresses near and long-term needs by reducing overall vehicle delays Improves walkability by enhancing visibility of pedestrians in the intersection to reinforce their priority over turning vehicles 		✓	✓

US 75 South Focus Area

Concepts for US 75 South		How do concepts address the goals?	Do concepts address corridor needs?		
			Pavement Conditions	Safety and Mobility	Walkability and Bikeability
H	Reinstall traffic signal control at 7th Avenue and 20th Avenue	<ul style="list-style-type: none"> Addresses long-term needs by providing accommodating additional traffic that will shift to 4th Avenue from 2nd Avenue caused by the access restriction at 2nd Avenue Traffic signals are effective at stopping traffic to allow pedestrians to cross a major roadway such as 8th Street (US 75) 		✓	✓
I	Reinstall enhanced pedestrian crossing treatment at 10th Avenue (type to be determined during preliminary engineering)	<ul style="list-style-type: none"> Enhanced pedestrian crossings are effective at stopping traffic to allow pedestrians to cross a major roadway such as 8th Street (US 75) 10th Avenue is a key crossing location to connect to the pedestrian and bicycle system 			✓
J	Construct separated bike facility along east frontage road between 20th and 24th Avenues	<ul style="list-style-type: none"> Fills gap between 20th and 24th Avenues Provides connection between 12th Avenue and across I-94 			✓
K	Tie into recent reconstruction at 24th Avenue	<ul style="list-style-type: none"> Completes overall corridor reconstruction 	✓		



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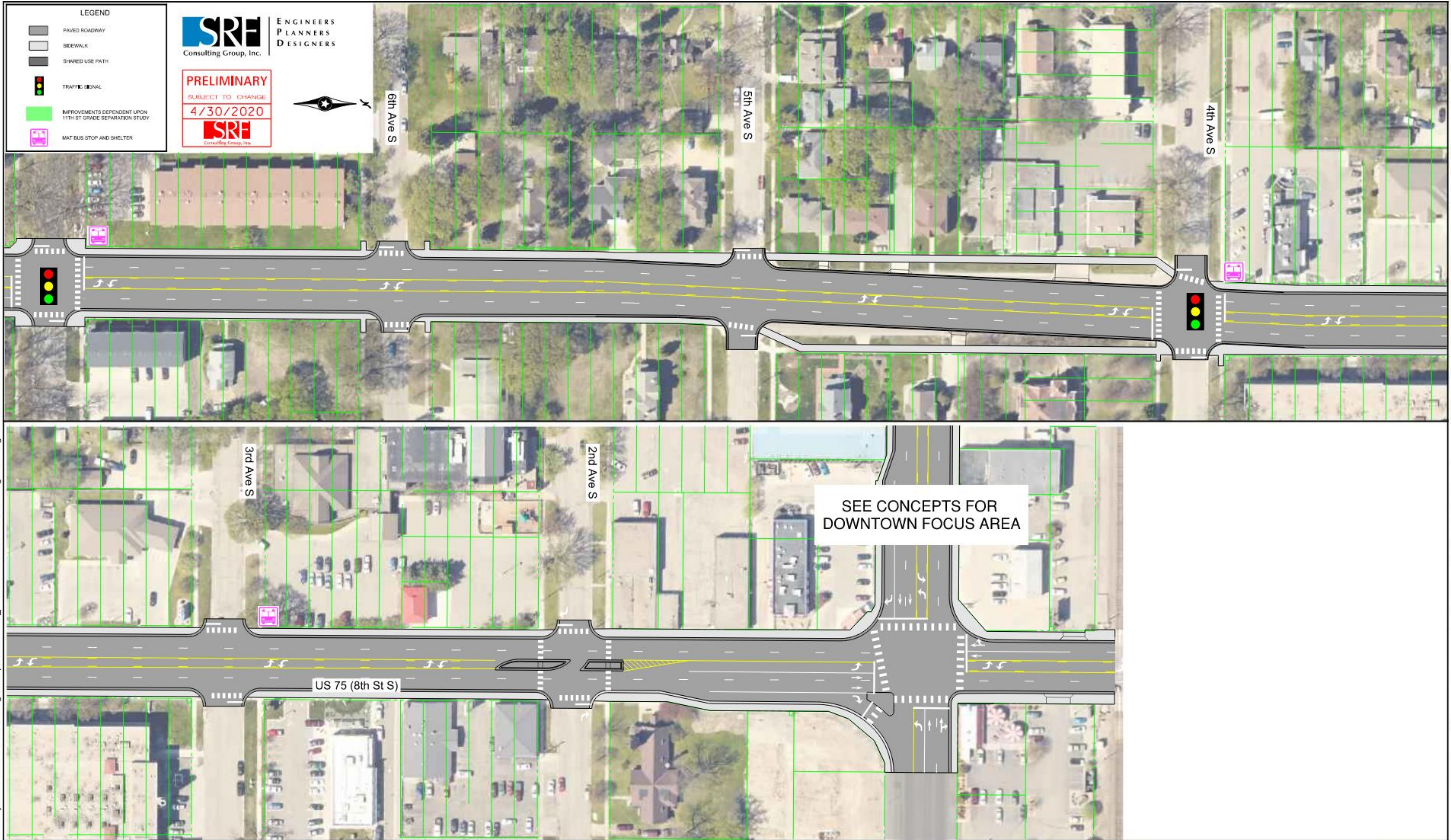
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SRE Locally Preferred Concepts for US 75 South Focus Area

US 10 / US 75 Corridor Study
Moorhead, Minnesota

Job # 11648
4/30/2020

Figure 32



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SRE Locally Preferred Concepts for US 75 South Focus Area

US 10 / US 75 Corridor Study
Moorhead, Minnesota

Job # 11648
4/30/2020

Figure 33

US 10 East Focus Area



US 10 East Focus Area

Overview:

- Area primarily consists of land uses that are industrial and commercial type uses but the focus area has been identified as an area with opportunities for redevelopment. Further, in this focus area US 10 transitions from urban to rural with limited access except at key intersections.
- Trails are not provided on both sides of US 10 nor are there any pedestrian or bicycle connections to downtown.
- There is a need to address intersection and corridor safety issues identified along with a few traffic operations issues.



US 10 East Focus Area

Community Input:

The following highlights key input obtained:

- Need to convert to "urban" corridor by removing the ditch median to be consistent with the roadway both east and west of the focus area.
- Consider limiting movements that can be made at certain intersections to help improve safety.
- Construct trails along both the north and south sides of corridor.
- Consider pedestrian and bicycle underpasses at US 10/US 75 and 21st Street/1st Avenue intersection.
- MnDOT's preference is to maintain opportunity for commercial vehicle inspection site.



US 10 East Focus Area

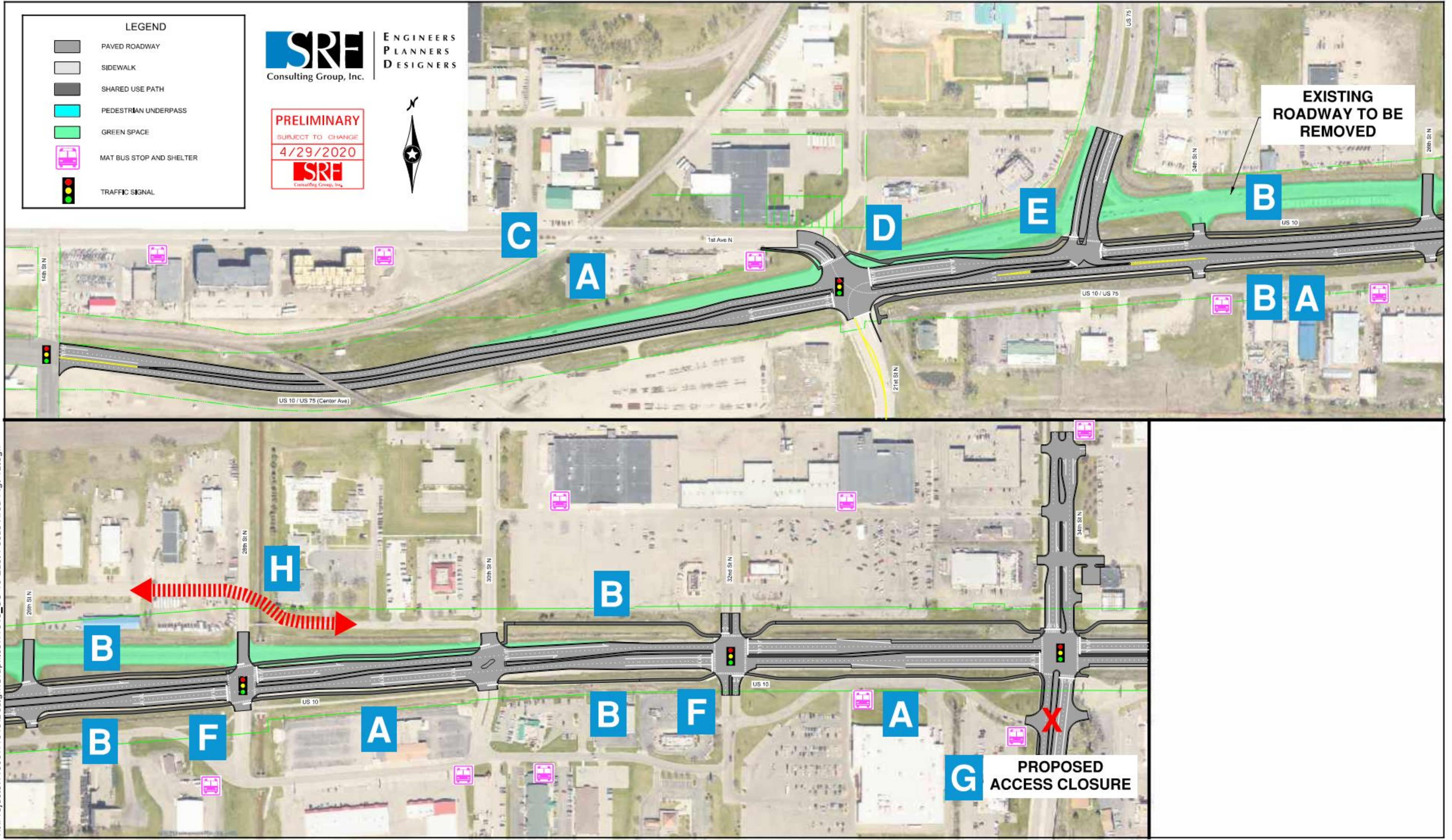
Vision for Focus Area:

The vision largely prioritizes connecting the urban character of downtown with US 10 east of the focus area in Dilworth while addressing safety and mobility issues and improving connections for pedestrians and bicycles. Roadway design elements focus on improving the character of the corridor.

Overarching Goals	Elements of Vision for Focus Area
Provide roadways that fit land use (i.e., appropriate access and design)	<ul style="list-style-type: none"> Connect urban character between downtown Moorhead and Dilworth
Accommodate appropriate users (i.e., complete streets)	<ul style="list-style-type: none"> Maintain mobility for commuters Improve US 10 crossings for pedestrians and bicycles Improve east-west trail connections and provide connection to downtown Moorhead
Create an environment to stimulate growth	<ul style="list-style-type: none"> Redevelopment opportunities exist so access needs to be safety managed and planned
Provide flexibility for near and long-term transportation needs	<ul style="list-style-type: none"> Address traffic safety and operational deficiencies at key intersections
Improve “Gateway” feel for US 10 and US 75 corridors	<ul style="list-style-type: none"> Connect urban character between downtown Moorhead and Dilworth

US 10 East Focus Area

Concepts for US 10 East		How do concepts address the goals?	Do concepts address corridor needs?		
			Pavement Conditions	Safety and Mobility	Walkability and Bikeability
A	Reconstruct entire corridor while narrowing the median to remove the wide median	<ul style="list-style-type: none"> Reconstructs poor pavement conditions Narrowing the median promotes the urban character for the corridor connecting US 10 with downtown 	✓	✓	✓
B	Construct a shared-use path along both the north and the south sides US 10 between 21st Street/1st Avenue and 28th Street	<ul style="list-style-type: none"> Provides connection for pedestrians and bicycles between the downtown connections and trails that already exist on the east end of the corridor 			✓
C	Construct a shared-use path along 1st Avenue between 21st Street/1st Avenue and 11th Street	<ul style="list-style-type: none"> Provides connection for pedestrians and bicycles between downtown and US 10 east of downtown Existing railroad bridge makes it difficult to construct trail along US 10 from 11th Street to 1st Avenue/21st Street 			✓
D	Revise intersection geometry, remove split-phased signal timing, and construct a pedestrian and bicycle underpass near the intersection	<ul style="list-style-type: none"> Mobility is improved by removing the split-phasing at the traffic signal Pedestrian/bicycle tunnel provides key connection for users south of US 10 to cross to the north side 		✓	✓
E	Construct continuous green-T intersection at US 10/US 75 intersection	<ul style="list-style-type: none"> Green-T accommodates traffic levels while ensuring queues between the 1st Avenue/21st Avenue intersection and the US 10/US 75 intersection can be accommodated Provides signalization for the westbound thru and southbound left-turn conflict Overall mobility is improved 		✓	✓
F	Provide signalized full-access intersections at 28th Street and 32nd Street east of US 75 (and restrict access at the other intersections)	<ul style="list-style-type: none"> Proper access management minimizes conflicts and improves the safety and mobility of the intersections 		✓	
G	Restrict access at south frontage road at 34th Street to a right-in/right-out access	<ul style="list-style-type: none"> Access is too close to US 10 causing safety issues 		✓	
H	Connect frontage road between 26th and 30th Streets	<ul style="list-style-type: none"> Promotes connectivity with access restrictions 		✓	



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Next Steps



Implementation

MnDOT has a fiscally constrained 4-year program of projects and a 10-year plan of projects.

These only include projects that MnDOT can reasonably be expected to construct each year based on the projected revenues it predicts to receive. Base on MnDOT's near- and long-term needs, the reconstruction of US 10 and US 75 will need to be implemented in phases:

Phase 1 (Construction Year 2025): MnDOT Programmed Funds = \$14.6M

- US 75 (8th Street): 24th Avenue to US 10 (Main Avenue)
- US 10 (Main Avenue): River to US 75 (8th Street)

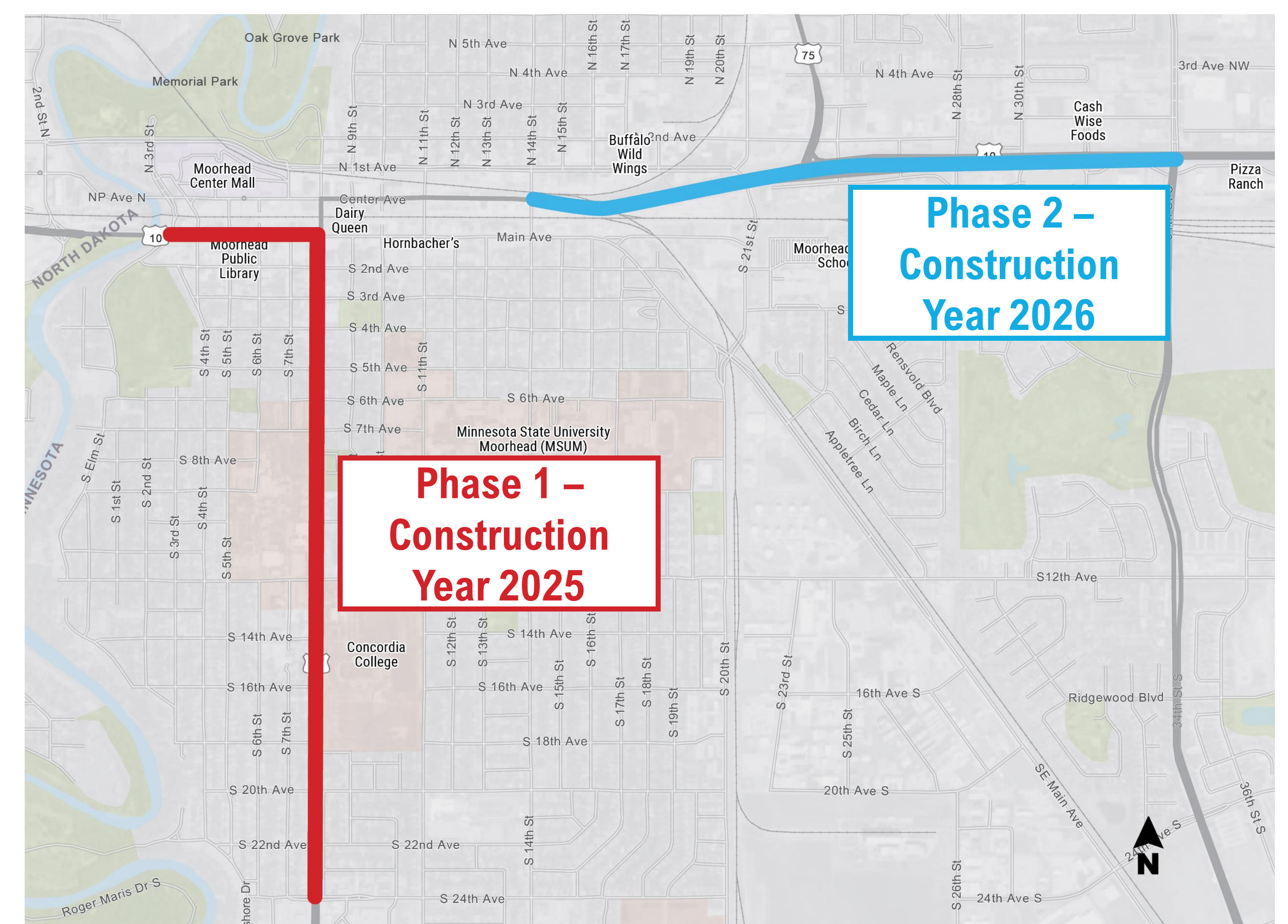
Phase 2 (Construction Year 2026): MnDOT Programmed Funds = \$10.8M

- US 10 (Center Ave): 14th Street to 34th Street

Implementation

Phase 1 (Construction Year 2025)

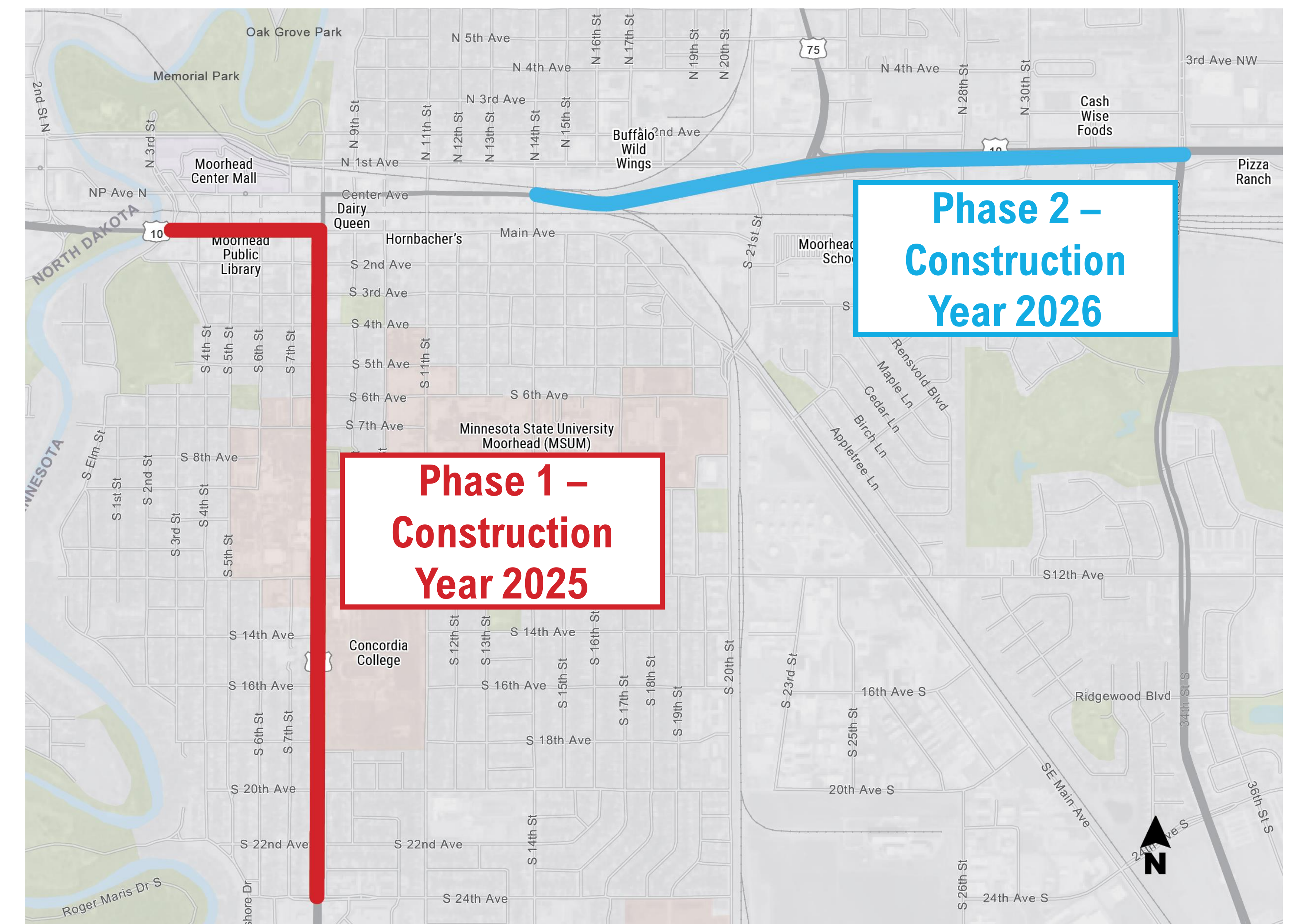
- Prioritizes the need to address deteriorating pavement conditions while minimizing potential construction staging and coordination issues with a future grade-separation project in downtown.
- The proposed location of grade-separation is anticipated to be at 11th Street. MnDOT and the City of Moorhead are currently working through the environmental documentation process and developing preliminary design plans; however, funding is not currently identified for any changes.



Implementation

Phase 2 (Construction Year 2026)

- Reconstructs the US 10 East focus area. Lower priority for pavement rehabilitation needs compared to Phase 1 project corridors.
- Construction staging and coordination is not expected to be an issue in the area because of the amount of existing right of way.
- Reconstruction of (Main Avenue east of 8th Street will be planned and coordinated with any future downtown grade-separation project.



Community and stakeholder engagement will be ongoing through the next steps of the project!

Thank You!

For more information contact:

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Visit the study website to view a copy of the report:

<http://www.fmmetrocog.org/projects-rfps/us-1075-corridor-study>



February 2019 Public Meeting at Moorhead High School