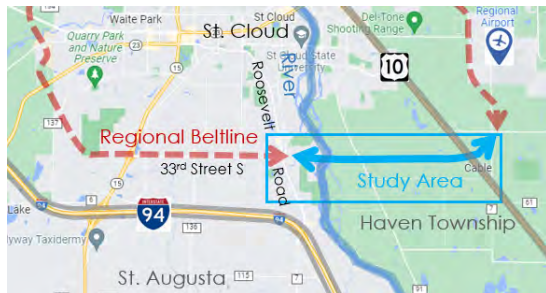


# Mississippi River Bridge Planning Study Recommended Approach July 2023



Mississippi  
River Bridge  
Planning  
Study



APO



## INTRODUCTION

This report presents the recommendations of the Mississippi River Bridge Planning Study. The analysis and conclusions are based on the previously adopted vision and goals; design criteria; input received on the preliminary alternatives from the study Steering Committee, stakeholders, and the community; and refinement by Stantec, consultants for the study.

The objectives of the study are to:

- Develop a recommended corridor, bridge location, and interchange concept for a new roadway in St. Cloud and Haven Township in Sherburne County;
- Provide guidance for incorporating the recommended corridor into comprehensive plans for the affected jurisdictions;
- Provide guidance for reviewing development applications prior to actual construction; and
- Outline the environmental review process and applicable permits required to move the project forward.

The Steering Committee for the St. Cloud APO Mississippi River Bridge Planning Study includes representatives from the City of St. Cloud, Stearns County, Sherburne County, Haven Township, MnDNR, MnDOT, and St. Cloud business community.

The Background Report for this study was prepared in March 2021 with information and analysis on the corridor. A Preliminary Alternatives report was prepared in November 2022 and presented to the project Steering Committee, major landowners, and at community meetings held on January 25 and January 30, 2023. Similar materials on the Preliminary Alternatives were posted online on the St. Cloud APO website, City of St. Cloud website, and Haven Township website, with an online survey to provide opportunity for comments. The Preliminary Alternatives included two alignments on the West Side in St. Cloud and three potential alignments in Haven Township, plus options within these alternatives.

The alignments considered are near 33<sup>rd</sup> Street South in St. Cloud and between 37<sup>th</sup> Street SE and County Road 65 (42<sup>nd</sup> Street SE) in Haven Township, connecting Roosevelt Road in St. Cloud to U.S. Highway 10 (US 10). For simplicity, the new roadway will be referred to as 33<sup>rd</sup> Street in this report.

Comments on the preliminary alternatives and the study from the in-person meetings, online input, and Minnesota DNR are summarized below and included in full at the end of this report.



## EXECUTIVE SUMMARY

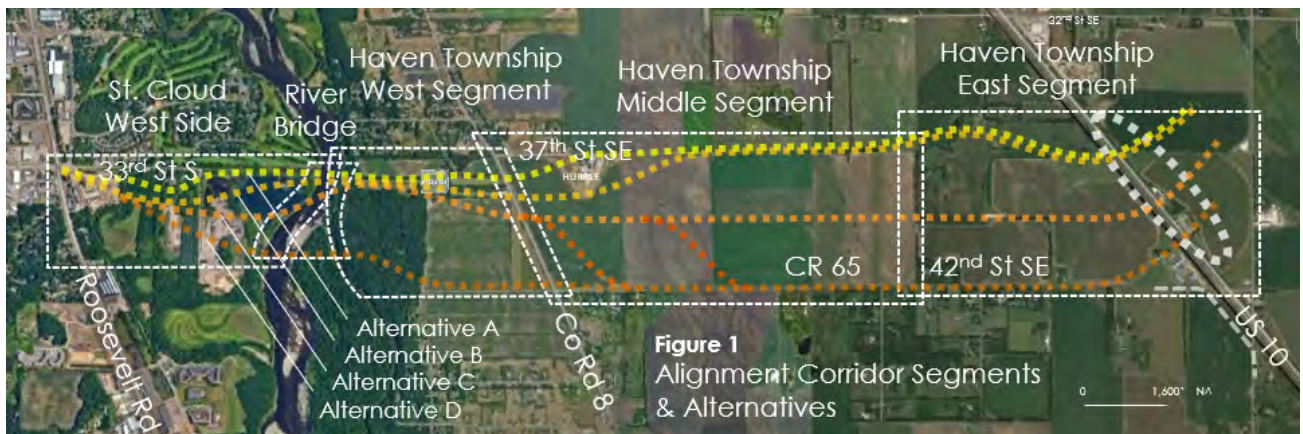
The purpose and need for the 33<sup>rd</sup> Street bridge and roadway project are to address the demands of the growing St. Cloud region and its roadway system by providing a new bridge crossing of the Mississippi River in the southeast part of the region, as well as a link in the Regional Beltline. The needs for this link include the social and economic demands of the region; mobility, system linkage, and local access for individuals, transit, and freight within the regional transportation system; fire and emergency access to the southeast part of the region; and relieving congestion on existing bridges. These needs can only be met with a new Mississippi River crossing and roadway, recommended to be located in the vicinity of 33<sup>rd</sup> Street South connecting Roosevelt Road in St. Cloud to U.S. Highway 10 in Haven Township in Sherburne County.

Goals for the project include minimizing impacts to the Mississippi River corridor, providing essential connectivity in the southeast part of the St. Cloud region, potentially completing the southern leg of the Regional Beltline, providing continuity and relieving congestion in the regional transportation system, improving freight transport, improving access to jobs, relieving congestion on existing bridges, improving fire and emergency response times, improving access to the St. Cloud airport, and providing pedestrian and bicycle access across the river.

A set of twelve design criteria was adopted by the study Steering Committee and weighted as to their relative importance. These criteria were used to evaluate the alternative corridor alignments and arrive at a recommended alignment.

Various alignments within the Study Area were considered and condensed into four corridor alignment alternatives – A, B, C, and D – shown in Figure 1 below. The alternatives are described, analyzed, and ranked against the adopted design criteria in this report. The analysis concluded that parts of Alternatives A and B were the most positive overall and are recommended as the generalized alignment for the new roadway and bridge crossing. Maps of the alternatives and recommended alignment, crossing location, and interchange location are included in this report.

Guidance is provided for including the recommendations of this study in local comprehensive plans for the City of St. Cloud, Haven Township, and Sherburne County, as well as guidance for these jurisdictions in reviewing development applications for properties that may be affected, prior to actual construction of the roadway. Also included is an outline of the future environmental review study through the NEPA process and applicable permits.





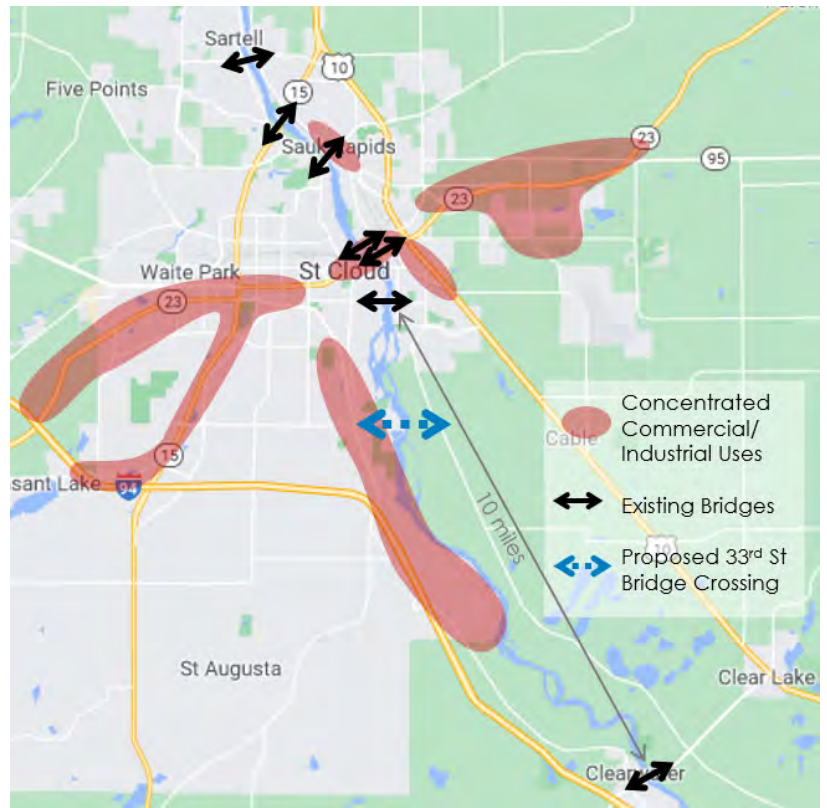
## DRAFT PURPOSE AND NEED

This is a planning study and not an environmental analysis under the National Environmental Protection Act (NEPA) process. The statement of Purpose and Need will be refined within the NEPA process, to be undertaken at a later date.

The Purpose and Need for the proposed roadway and bridge as drafted in this report are documented in previous work on this study and are summarized in the statements below.

- 1) Social demands and economic development needs require this link in the transportation system. The St. Cloud metropolitan area has had significant growth in population and employment on the west side of the Mississippi River. Haven Township, on the east side of the Mississippi River, is anticipated to grow significantly in the future. This growth trend, south of St. Cloud's metropolitan core, is expected to continue.

The comprehensive plans for St. Cloud, Waite Park, and other communities envision meeting the demands of metropolitan area growth by accommodating new residential, commercial and industrial land uses in the south parts of the region. This growth needs an integrated regional roadway system with a new bridge crossing to function safely and effectively.

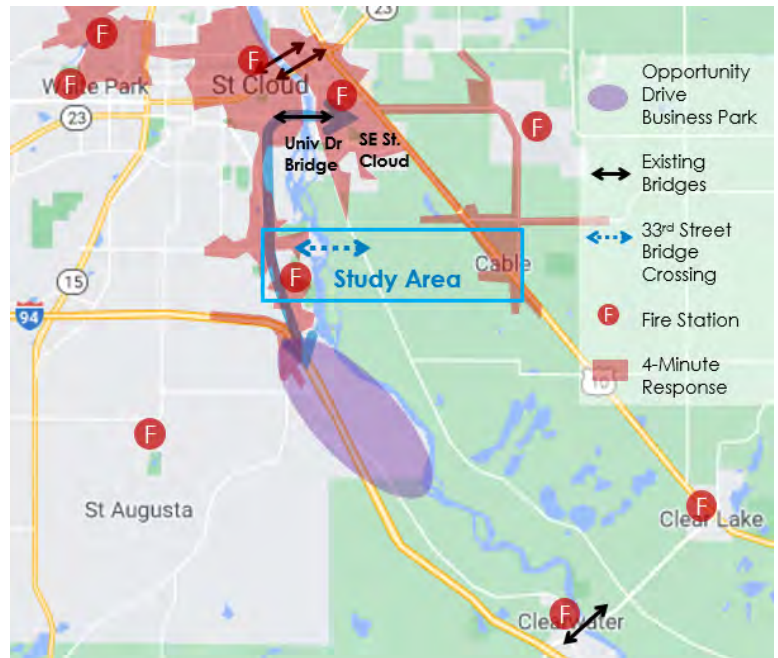


- 2) Mobility, system linkage and local access require this link in the transportation system. South of University Drive the current transportation system in St. Cloud lacks east-west arterial connectivity. Access for individuals, transit, and freight transport on the southeast side of St. Cloud must utilize University Drive to cross the Mississippi River and travel south on Roosevelt Road to access I-94 and surrounding neighborhoods and businesses.

There are currently six bridges crossing the Mississippi River in the St. Cloud metropolitan area – two in downtown, three in the northern suburbs of Sauk Rapids and Sartell, and one south of downtown at University Drive, all within a space of just over 5 miles. The next bridge crossing south of University Drive is Minnesota Highway 24, 10 miles downriver in Clearwater. The proposed 33<sup>rd</sup> Street bridge crossing would close that gap considerably and provide a vital link in the southern part of the region.



3) Recognized standards for fire and emergency operations (NFPA 1710) support providing this link in the transportation system. These regulations set guidelines and industry best standards regarding response time. A significant benchmark is a four-minute response time for the initial arriving apparatus. Currently, areas east of the Mississippi River and south of 36<sup>th</sup> Street SE are outside of the 4-minute initial response time.



4) Capacity and transportation demand in the St. Cloud metropolitan area support providing this link in the transportation system. Due to growth in the southern St. Cloud metropolitan area, traffic volumes are increasing and are projected to continue increasing, especially on the existing bridges. Currently, the University Drive bridge is the primary river crossing in southern St. Cloud. The University Drive Bridge now operates at an LOS (level of service) F and serves primarily residential neighborhoods on either side. It cannot be widened without significant modifications, adding even more traffic to these residential areas while not serving the real transportation needs of destinations further south in St. Cloud.

5) Traffic modeling by the St. Cloud APO shows that five of the six most congested segments of roadway in the region are Mississippi River bridges. The modeling also shows that providing a new bridge crossing at 33<sup>rd</sup> Street would significantly reduce that congestion and improve traffic in other parts of the system as well.

6) A new bridge crossing would improve the modal Interrelationships in the larger transportation system, including trucks, transit, and bicycle and pedestrian facilities. The St. Cloud airport is an important economic and transportation hub for the area. The current roadway network lacks east-west mobility across the Mississippi River for transit, businesses, and individuals in the southwest portion of the St. Cloud region who rely on air transportation. There are currently no bicycle and pedestrian facilities to cross the Mississippi River south of University Drive in the St. Cloud area.

7) The Mississippi River is designated “Scenic” under Minnesota’s Wild and Scenic Rivers Program in this stretch from St. Cloud to Clearwater. Any crossing would have impacts on the river environment. Physical constraints, including existing development and environmental areas, exist at all potential Mississippi River crossing locations. The recommended crossing at 33<sup>rd</sup> Street has benefits in terms of system connectivity and fewer environmental impacts than other potential crossing locations.



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## GOALS

The proposed Mississippi River crossing and roadway seeks to meet the following Goals, adopted by the Mississippi River Bridge Planning Study Steering Committee:

- Goal 1. Identify an alignment for the bridge and roadway to minimize environmental and visual impacts to the Mississippi River corridor, balancing those impacts with the identified benefits of the project.
- Goal 2. Provide essential connectivity for the south and east sides of the St. Cloud region to serve the economic and social needs of the Greater St. Cloud Area.
- Goal 3. Complete the southern leg of the circumferential Beltline that has been planned to complete an efficient and integrated roadway system throughout the St. Cloud region.
- Goals 4. Provide connectivity and continuity with the regional arterial and collector roadway system, relieving congestion and improving the efficiency of movement of people and materials to support the prosperity of the broader St. Cloud community.
- Goal 5. Improve the efficiency of freight transport throughout the region in order to support the economic health of the region.
- Goals 6. Improve the efficient movement of people to jobs in the southern part of the region in order to support the economic health of the region.
- Goal 7. Relieve traffic congestion on bridges in the region, especially the University Drive bridge, which connects mostly residential areas, by creating a bridge and roadway across the southern St. Cloud region.
- Goal 8. Save lives and improve emergency vehicle response times for the areas east of the Mississippi River with the goal of achieving a 4-minute response time for emergency services.
- Goal 9. Greatly improve access to the St. Cloud Regional Airport for businesses and individuals in the southwest part of the region.
- Goal 10. Provide integrated pedestrian and bicycle mobility across the Mississippi River for the area south of University Drive.



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## VALUES

Values guiding the project were adopted by the Steering Committee, addressing the triple bottom line of environmental, social, and economic issues:

### ENVIRONMENTAL

- Improved air quality due to reduced congestion and more efficient traffic movement
- Improved access to the river and regional park, increasing awareness and appreciation of the river corridor



### SOCIAL

- Improved life and health due to reduced emergency response time
- Serving population growth in the south and southeast parts of the region
- Access for underserved populations
- Integrated, connected community identity



### ECONOMIC

- Jobs – easier access for employees, reduced commute time
- Development opportunity for properties along the corridor
- Improved transport of goods and services, including commercial freight
- Improved access to the St. Cloud airport
- Regional system improvements – reduced travel time, reduced congestion





## DESIGN CRITERIA

Design criteria were developed and adopted by the Steering Committee for analyzing alignments and features of the bridge and corridor. They involve elements that can be identified on the ground in these locations, as opposed to the regional criteria noted in the Draft Purpose and Need and the Goals.

### ENVIRONMENTAL

- **Life** – vegetation, wildlife
- **Water** – river, streams, wetlands, floodplain, stormwater
- **Land** – geology, soils, landform, aggregate resources, archaeology, culture, 4(f)/6(f) land
- **Air** – noise, air quality

### SOCIAL

- **Aesthetics** – visual impact, character
- **Recreation** – park access, future programming, access to river/stream
- **Connection** – multimodal access for cars, trucks, transit, bike, pedestrians
- **Property** – impacts to home, neighborhood, community

### ECONOMIC

- **Engineering** – design standards, geometrics, intersection spacing, impact to existing roadways, signalization, safety, level of service
- **Utilities** – impacts, ease of connection and construction
- **Cost** – roadway and related improvements
- **Development** – direct property impact, access, economic potential

## Ranking

The Study Steering Committee ranked the Design Criteria in the following order of importance. All criteria are important and necessary in designing the roadway and bridge, but some are more sensitive, will influence the route more than others, or have more impact and therefore are weighted more heavily in ranking the alternatives.

- 1) Water
- 2) Connection
- 3) Life
- 4) Cost
- 5) Engineering
- 6) Property
- 7) Aesthetics
- 8) Development
- 9) Recreation
- 10) Air
- 11) Land
- 12) Utilities

These criteria in the above order were used in the analysis of the corridor alignment alternatives and are described more fully below.



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### **Water**

Water was ranked highest in the criteria, mainly involving the crossing of the Mississippi River, but also wetlands, Plum Creek, smaller back channels of the Mississippi River, and the manmade quarry pond on the West Side in St. Cloud. Alignments crossing the river at the narrow point were considered much more favorably than other longer crossing points. Alternates that go north onto the isthmus on the West Side would have less impact to the quarry pond than those going across the pond, which is a floodplain and designated wetland. That impact would need to be balanced with potential property impacts to the Country Club, Hess property, and City lift station compared to alignments further south.

### **Connection**

All alignments would provide similar connection for all modes of travel and generally provide the ability to connect to existing and future roadways and trails. Alternatives further north in Haven Township provide a somewhat shorter and more direct connection across the corridor than alignments further south. A roadway between Roosevelt Road in St. Cloud to US 10 in Haven Township is a key connection, with or without the development of the regional Beltline.

### **Life**

Impacts to vegetation and wildlife would likely be most noticeable in the extent to which the alignments have a longer bridge crossing of the bridge channel or longer crossing through the Haven Forest on the west side of Haven Township near the river. Alignments further north avoid this impact to a much greater extent than a river crossing further south.

### **Cost**

Cost estimates have not been prepared for the roadway and bridge crossing other than the rough cost comparison of crossing the quarry pond in the West Side analysis. A relatively small cost savings of half a million dollars could be achieved by routing the roadway on piers on the isthmus on the north edge of the quarry pond rather than across the pond, which needs to be weighed against potential impacts to the Country Club. This cost is likely small in the context of the overall project. In Haven Township the northern alignments would likely be less costly since they are shorter and more direct than the southern alignments. Alignments A, B, and C avoid the widest part of the Haven Forest, involving less tree clearing and therefore less cost than Alternative D.

### **Engineering**

In this general analysis all alignments may have similar engineering considerations, except for crossing over, near or around the quarry pond on the West Side, and the length or complexity of the river bridge. Future studies for all alignments on or near the quarry pond would need to verify the depth of water and depth to bedrock in order to design the roadway, piers and bridges, which has not been done for this study. Alignments that come near existing property access, such as along 37<sup>th</sup> Street SE and County Road 65 in Haven Township may need to provide frontage roads in addition to the new 33<sup>rd</sup> Street roadway itself, which would involve more engineering.

### **Property**

Impacts to property on West Side would directly affect the Landwehr parcel which would either have the roadway encroach on its northern edge or be divided in two by the new roadway. This is discussed below under the Development criterion. Alignments A and B come close to the St. Cloud Country Club with visual and potential noise impacts. The Hess property and the City lift station may also be impacted more or less by the alternatives, but the intent is to avoid significant impacts to either of these properties. On the Haven Township side, Alternatives A, B, and C come closer to the existing residential neighborhood on 12<sup>th</sup> and 13<sup>th</sup> Avenues SE than Alternative D.





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Alternative D would stay much farther away from this residential area, which would need to be weighed against its greater impacts to the Haven Forest. Also in Haven Township, the Asquith property could be impacted by Alternatives A, B or C.

### **Aesthetics**

The design and appearance of the bridge and roadway have not been developed for this study. Detailed aesthetic consideration in comparing the alignments is premature but a longer river bridge would have greater aesthetic impact on the river corridor than a shorter bridge. A new four-lane roadway near existing residential development and other existing land uses, such as the St. Cloud Country Club, would have greater aesthetic impact than if it were located farther away.

### **Development**

On the West Side all alignment options maintain access to the Landwehr property and the Fisher/Fed Ex property. The Landwehr parcel would be the most affected but would be left with either one or two developable parcels. Both Landwehr and Fisher would have access to the new roadway via a new cul-de-sac connecting road.

In Haven Township the properties affected would likely be developed some day. The options for development are fairly wide open, since they are generally larger parcels. The alignments and alternatives that leave larger parcels intact would be generally better for future development than alignments that leave smaller or shallower remnant parcels. The school district parcel is the one parcel we know of with specific development plans - all alignments avoid bisecting that parcel.

### **Recreation**

The new roadway would have bike and pedestrian trails on one or both sides. The Beaver Island Trail on the West Side would be connected to the new roadway at Roosevelt Road and may be only minimally impacted. Future access to the regional park and to the river itself would be more or less the same for all alignments, details of which would be worked out in future design studies. There may be impacts to the Mississippi Water Trail and MnDNR campsites in this part of the river.

### **Air**

Air quality and noise issues would likely be similar for all alignment alternatives. The various Haven Township alignments would impact existing properties differently in terms of traffic noise, but no detailed studies or modeling have been done at this point.

### **Land**

Impacts to the land would be similar for all alignments – all would need to traverse Plum Creek and the slope on the West Side and go around or through the quarry pond. In Haven Township all alignments would need to negotiate the bluff and slope near the river. Aggregate Industries and Cemstone have property that is or will be used for gravel extraction and have indicated they could work around a future roadway.

### **Utilities**

The impact on utilities would likely be similar for all alignments. No detailed study of utilities has been done or is expected within this current study, but most utilities would come from the north in St. Cloud serving future development, so the northern alignments generally make utility connections easier and shorter than the alignments further south.



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## COMMENTS

Summaries of comments on the study and preliminary recommendations are attached to this report. They include the following:

- Online survey responses April-May 2021
- Facebook comments January 2023
- Community meetings map comments January 2023
- Community meetings survey January 2023
- Letter from Minnesota DNR July 2023

The public comments and responses reflect a variety of opinions on the bridge project. The responses to two questions in the 2021 survey however, with over four hundred responses, illustrate the basic issues and feelings about the bridge project. When asked if the bridge would create problems for the area 38% said No, 43% said Yes – close to evenly divided – with 19% neutral. But when asked if the new bridge would be a benefit to the area, 72% said Yes, only 20% said No – an overwhelming positive response – with 8% neutral or no opinion. This indicates an understanding of the complexity of the project and overcoming the challenges it presents, but also the need and desire for it.

The public comments can be divided generally into the following issues:

- Negative impacts to the Mississippi River corridor and sensitive natural areas
- Negative impacts to existing residential areas and other uses
- Positive impacts on ease of connecting parts of the region and relieving traffic congestion
- Positive impacts on property development and the economy

The draft Purpose and Need statement above and the descriptions and analysis of the alternatives in this report attempt to address these issues.

The DNR letter summarizes the steps this project needs to follow in order for a new Mississippi River crossing to be ultimately approved. They note the significant hurdles faced in obtaining a DNR Public Waters Permit within this section of the Mississippi River. That process and those requirements will be fully addressed in the environmental review process that will follow this study.



## ALTERNATIVES

Four alternatives for the bridge and roadway were considered in this analysis, designated A, B, C, and D, with two sub-alternatives, D1 and D2. The alternatives are a combination and refinement of features of various alternatives considered in previous planning studies, environmental studies, and in the preliminary alignments for this study. There are numerous small differences within various alternatives which have been consolidated into the four alternatives discussed below.

### Previous Alternatives

A ring road around the St. Cloud region was proposed in the 1993 St. Cloud Comprehensive Plan Update. It showed the river crossing at 33<sup>rd</sup> street in a very conceptual way, extending straight east-west across the river, outlined in the blue box on Figure 2 to the right. The concept was designated a Parkway Thoroughfare and not developed to any level of detail but was offered in simple sketch form as a planning feature for the region.

In 2003 St. Cloud updated the Comprehensive Plan again, including two concepts for future development in Haven Township showing the bridge and roadway in a conceptual way, illustrated on Figures 3 and 4 on the next page. Concept 1 extended the bridge straight across the river at 33<sup>rd</sup> Street continuing on 37<sup>th</sup> Street SE in Haven Township before curving north to join US 10. Concept 2 crossed the river at 33<sup>rd</sup> Street, then curved south, crossing County Road 8 at County Road 65/42<sup>nd</sup> Street SE and continuing east across Haven Township.

In the 2005 *St. Cloud Metropolitan Area Mississippi River Crossing Environmental Impact Statement Scoping Decision Document* six corridors for a new bridge crossing were analyzed. The 33<sup>rd</sup> Street corridor was selected as the preferred crossing. The *EIS Scoping Document* also analyzed four alternative alignments for the bridge and roadway in more detail, Figures 5-8 on the next pages. Alternatives #1 and #4 were similar to the two 2003 St. Cloud Comprehensive Plan concepts, while Alternatives #2 and #3 curved around the south side of the quarry pond on the west side of the river in St. Cloud before continuing on either 37<sup>th</sup> Street SE or County Road 65/42<sup>nd</sup> Street SE as in the earlier concepts.

The preliminary alternatives prepared earlier for this study are included on the following pages in Figure 9. These alternatives included A and B alignments on the West Side and Northern, Middle, and Southern alignments in Haven Township. The report on the preliminary alignments discussed routes around the south side of the quarry pond that would then cross the Mississippi River opposite the DNR Island and Haven Forest but were not included as preliminary alternatives because of the significantly greater impacts to the river corridor, the longer bridge spans required, and impacts to the Haven Forest. These alignments are now included in this current report as Alternatives C and D, to allow for analysis of their impacts relative to the other alternatives.

Figure 2 – 1993 Ring Road Concept

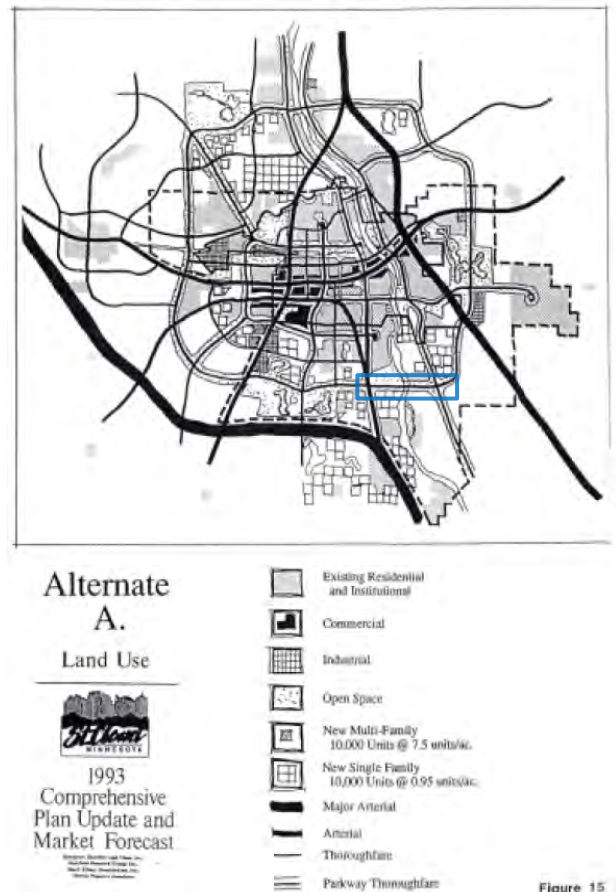


Figure 15



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Figure 3 – 2003 St. Cloud Comprehensive Plan, Haven Township Concept 1



Figure 4 – 2003 St. Cloud Comprehensive Plan, Haven Township Concept 2





Figure 5 – 2005 EIS Scoping Document Alternative #1

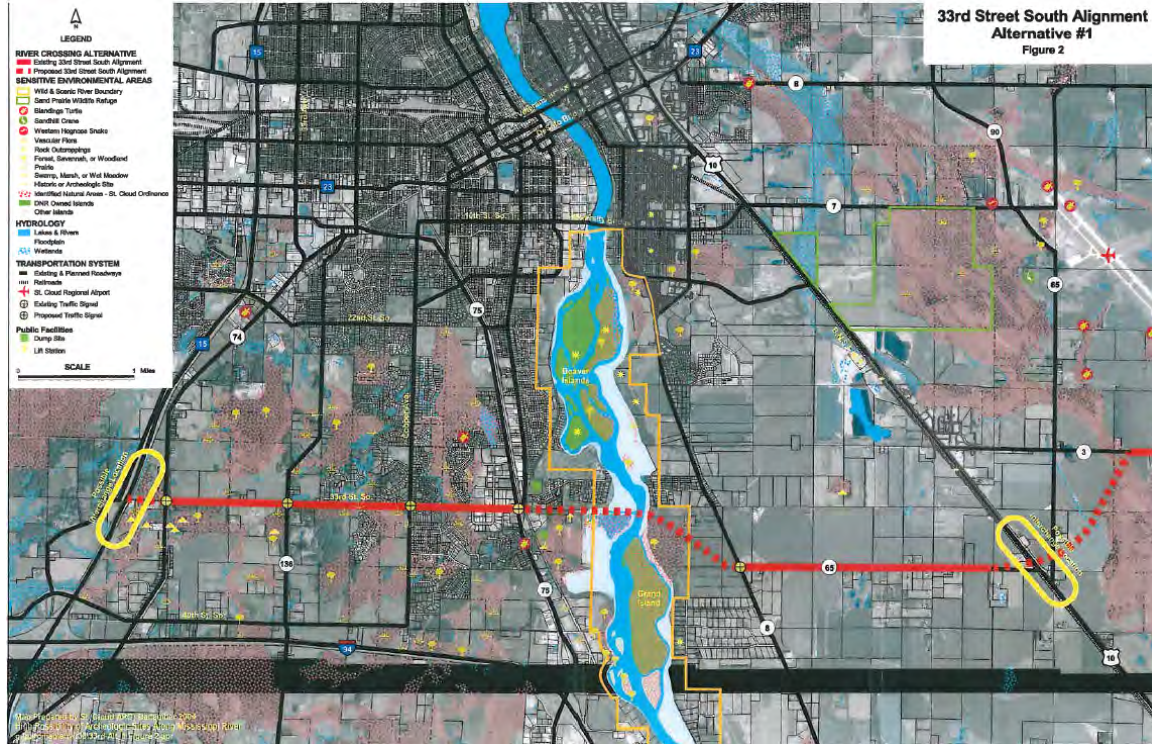
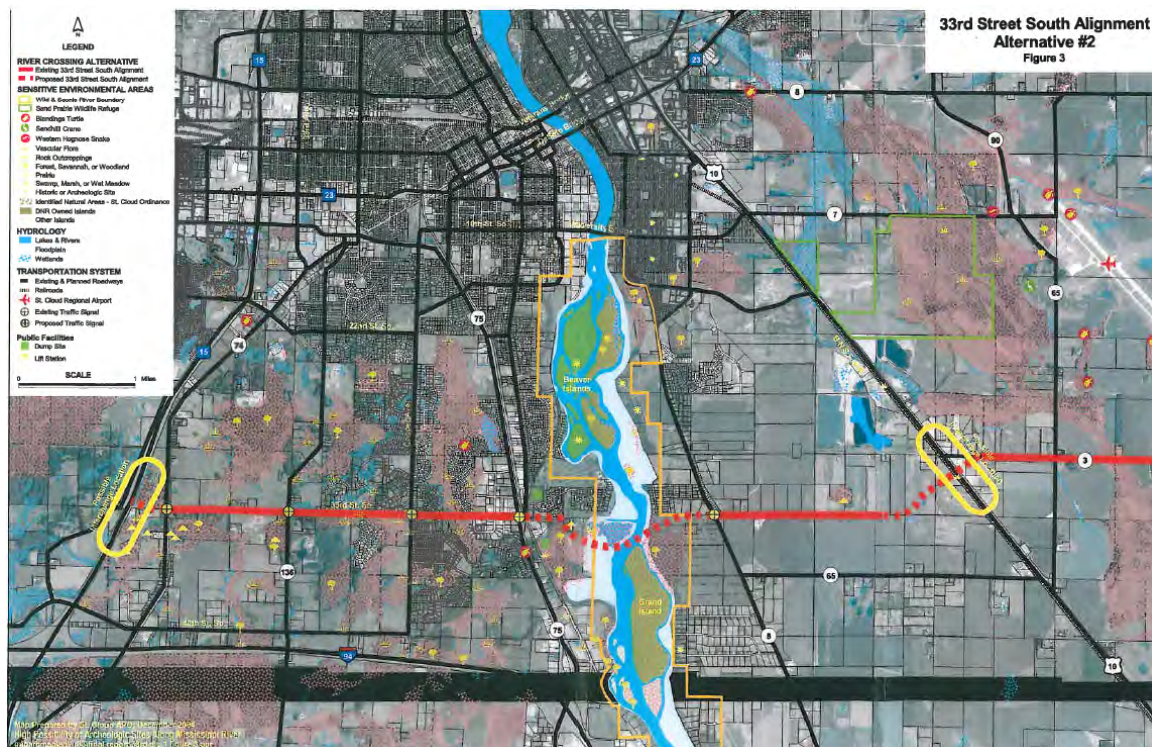


Figure 6 – 2005 EIS Scoping Document Alternative #2



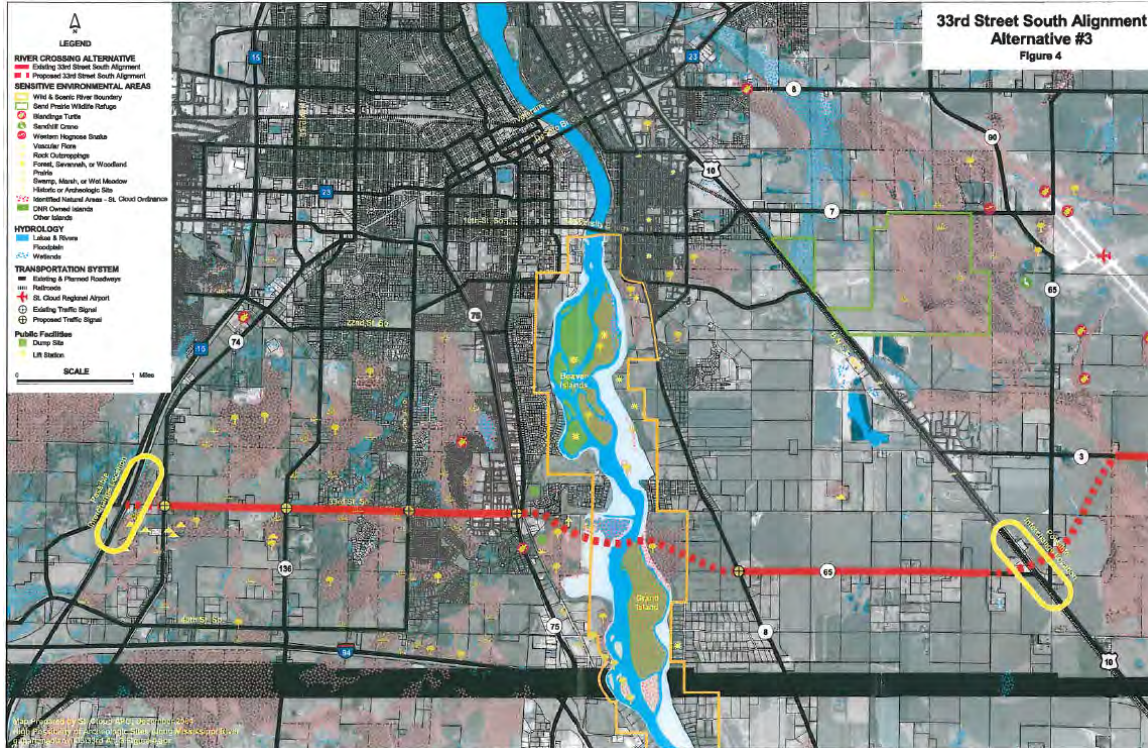


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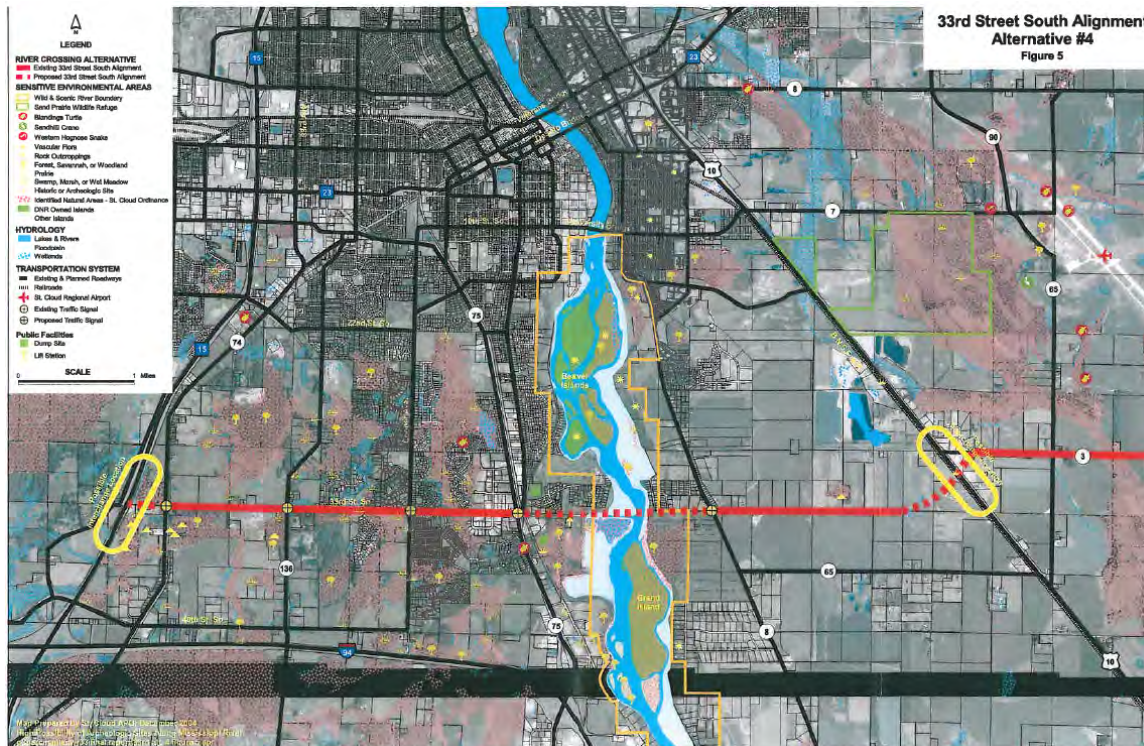
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### Figure 7 – 2005 EIS Scoping Document Alternative #3



### Figure 8 – 2005 EIS Scoping Document Alternative #4

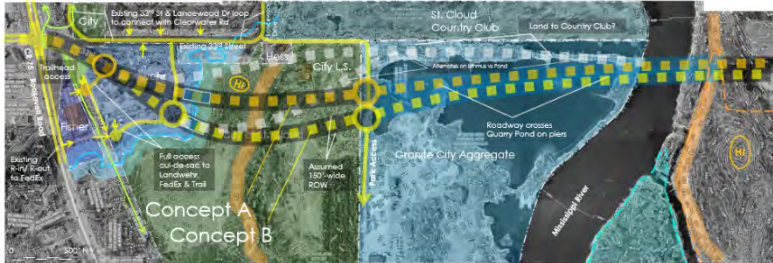


Design with community in mind



Figure 9 – Mississippi River Bridge Planning Study Preliminary Alignments, 2022

West Side Alignments



Haven Township Alignments





## Current Alternatives

The alternatives analyzed in the current report are illustrated in a series of attached maps, Figures 10-14. The first shows the entire corridor, the others in more detail, dividing the corridor into five segments: West Side, River Bridge, in Haven Township – West Segment, Middle Segment, and East Segment. The more detailed maps for the segments note various features in numbered notes on the maps.

## Alternative A



Alternative A follows a northern route in the West Side segment from 33<sup>rd</sup> Street and Roosevelt Road on the north side of the Landwehr property, then on piers on the isthmus at the north edge of the quarry pond to its bridge crossing of the Mississippi River. This route stays close to existing 33<sup>rd</sup> Street S but does not encroach on it, allowing existing 33<sup>rd</sup> to function largely as it does now, serving several existing residential developments and Lancewood Drive. All alternatives assume existing 33<sup>rd</sup> Street on the west side of the river would remain in place to serve existing development. The spacing of existing driveways and streets in the area would not be compatible with the new 33<sup>rd</sup> Street roadway. By following a northern route, Alternative A passes across the north side of the Landwehr parcel but does not divide it into two separate parcels as the other alternatives do.

A key consideration for all alternatives is the location of the first intersection east of Roosevelt Road with the new roadway. Assuming a new roundabout intersection, the closest this could be is about 500 feet east of Roosevelt Road. The furthest it could be is about 1,050 feet east, close to Plum Creek. These are illustrated as Concepts A1 and A2 on Figures 15 and 16. The concepts are for illustration only and are not intended to represent refined, engineered designs.

This option crosses the northernmost section of River Bluffs Regional Park, a 6(f) property and 4(f) resource. Crossing at this location would likely provide less disruption to existing or planned park amenities and resources compared to options that travel further south within the park.

At the quarry pond, Alternative A would be built on the isthmus, a 50-60-foot wide stretch of land between the pond to the south and Plum Creek to the north. The isthmus is not wide enough to hold the full width of the approximately 90-foot-wide roadway, so the road would need to be supported on piers. This would be less costly and less invasive than crossing directly over the water or filling the pond or creek to make an embankment wide enough for the entire road. See discussion of quarry pond crossing options and costs below.





The length of the river bridge crossing for Alternative A is about 400 feet of river channel, the shortest crossing possible in this stretch of the river for several miles in either direction. Extending east into Haven Township, Alternative A would stay several hundred feet south of the existing residential neighborhood on 13<sup>th</sup> and 14<sup>th</sup> Avenues SE, and also avoids going through the widest part of the Haven Forest. Only a narrow part of the forest near the river would be impacted by the new roadway. The route would then cross County Road 8 at least 500 feet south of 37<sup>th</sup> Street SE, this dimension allowing reasonable traffic movements at both 37<sup>th</sup> Street and the intersection of County Road 8 with new 33<sup>rd</sup> Street. East of County Road 8, Alternative A would curve north of the Hurre property to join 37<sup>th</sup> Street, then extend more or less on the alignment of 37<sup>th</sup> Street to US 10. On the north side of the Hurre property there could be potential conflicts with existing property access, which would need to be taken into account in the final design. At US 10, Alternative A would have an interchange on the east side of the highway in order to keep all traffic movements on one side of the highway and the railroad tracks that parallel it. The 33<sup>rd</sup> Street roadway would then curve north to join 45<sup>th</sup> Avenue SE, as would all the alternatives.

### Alternative B



Alternative B also follows a northern route on the west side of the river, but not as far north as Alternative A. From Roosevelt Road it would cross through the middle of the Landwehr property, dividing it into two developable parcels, then continue across the quarry pond on piers before crossing the river. This alternative also crosses the northern section of River Bluffs Regional Park, reducing segmentation of the park property. The river bridge crossing for Alternative B is also 400 feet of channel, the shortest possible in this part of the river.

Extending east into Haven Township, Alternative B would stay several hundred feet south of the existing residential neighborhood on 13<sup>th</sup> and 14<sup>th</sup> Avenues SE and would avoid going through the widest part of the Haven Forest. Approaching County Road 8 it veers slightly south to go around the south side of the Hurre property east of County Road 8. Once east of the Hurre property it curves north to join the alignment of 37<sup>th</sup> Street SE, like Alternative A, and continues east on the same alignment as Alternative A to an interchange with US 10.



## Alternative C



Alternative C follows more or less the same route as Alternative B on the west side of the quarry pond, dividing the Landwehr property into two developable parcels, and crossing River Bluffs Regional Park, but continues southeast to go around the largest part of the quarry pond to the river. This route allows the road to stay on solid ground most of the way instead of going across water over the pond or be supported on piers on the isthmus on the north side of the pond. The bridge for Alternative C would angle north to touch down on the east side of the river at the north edge of the Haven Forest, avoiding going through the widest part of that forest. The tradeoff, however, is that Alternative C would cross the river at a point about 1,000 feet across, more than double the 400 feet for Alternatives A or B. This would involve much higher cost as well as a longer segment of disruption to the river environment. This route goes near the DNR Island Forest but would likely not actually touch it or the second smaller river channel on the east side of the island.

Extending east into Haven Township, Alternative C would also be close to existing residential neighborhoods to the north. It would cross through the middle of the large Imholte Brothers agricultural parcel, which many have suggested should be avoided if possible. This alternative continues east more or less midway between 37<sup>th</sup> Street SE and County Road 65. It would continue east to an interchange with US 10 similar to the earlier alternatives.

The West Side and River Bridge segments of either Alternative A or B could be connected to Alternative C in Haven Township and continue from County Road 8 east to US 10 on the C alignment.



## Alternative D



Alternative D follows more or less the same route as Alternatives B and C on the west side of the river, dividing the Landwehr property into two developable parcels, but crosses River Bluffs Regional Park further south, dividing the northern section of the park. This alignment continues southeast to go around the south side of the smaller quarry pond and the larger quarry pond before crossing the river. This route allows the road to stay on more solid ground than Alternative C instead of going across part of the quarry pond or being supported on piers on the isthmus on the north side of the pond. The tradeoff is similar to the previous alternative – Alternative D would cross the river at a point about 600 feet wide, much wider than the 400 feet for Alternatives A or B, but less than the 1,000 feet for Alternative C. This would involve higher cost as well as a longer segment of disruption to the river environment. Alternative D would touch down on the east side of the river on the DNR Island Forest, cross a second smaller river channel on the east side of the island, then cross through about 1,600 feet of the Haven Forest before continuing east. All of these features involve significantly more environmental impacts than the other alternatives.

Extending east into Haven Township, Alternative D aligns with County Road 65/42<sup>nd</sup> Street SE. This alignment avoids cutting through the middle of the large farm parcels but would create conflicts and complications with numerous existing residential driveways on County Road 65, which may require a frontage road or other more complex design considerations. Alternative D continues east on the alignment of County Road 65 to an interchange with US 10 then curves north to join 45<sup>th</sup> Avenue SE as in the other alternatives.

### Alternatives D1 & D2

Alternatives D1 and D2 are sub-options that start at County Road 8 in Haven Township at the intersection suggested for Alternative C but then curve south to County Road 65 to join Alternative D in two possible options. There may be other options to consider if this route is chosen.

Alternatives D1 and D2 avoid some of the residential driveway conflicts on the west segment of County Road 65 but would encounter the same conflicts as Alternative D along the eastern segment of County Road 65. Alternatives D1 and D2 are illustrated as extensions of Alternative C which poses the problems of the longer river crossing, but these two sub-options could also be connected to the bridge crossing alignment of the more northerly routes, Alternatives A and B, if there are good reasons to consider it.



## Quarry Pond Crossing Options



The four alternatives go around or through the quarry pond in different ways. Rough cost estimates were prepared for each option, shown above, summarized below and illustrated on Figure 17. The first three options would be for Alternative A, the others, in order, are for Alternatives B, C, and D.

**A1.** Road on Isthmus + Embankment in Plum Creek. One option is to fill in a portion of Plum Creek north of the isthmus to create an embankment wide enough for the road, shown in Section 1 on Figure 17. For the 2,200 feet of roadway on the isthmus, we estimate the cost to be roughly \$6.5 million. This option is not recommended as part of the Alternative A alignment considered in this report due to its impacts on the creek.

**A2.** Road on Isthmus + Embankment in Quarry Pond. A similar option would be to fill in a portion of the quarry pond south of the isthmus to create an embankment wide enough for the road, illustrated on Figure 17. For the 2,200 feet of roadway on the isthmus, we estimate the cost to be roughly \$7 million, higher than the first option above because the quarry pond is much deeper than Plum Creek and a larger, wider embankment would be needed. This option is not recommended as part of the Alternative A alignment considered in this report due to its cost and impacts on the quarry pond.

**A3.** Road on Isthmus on Piers. A third option would be to build the road on top of the isthmus, as suggested in Alternative A, built up on piers, since the isthmus is not wide enough for the proposed four-lane road. For the 2,200 feet of roadway on the isthmus, we estimate the cost to be roughly \$6 million. This would be the preferred approach for Alignment A.

**B.** Road over Quarry Pond on Piers. A fourth option would be to build the road over the water across the quarry pond, as in Alternative B, on piers. For the 2,200 feet of roadway across the pond, we estimate the cost to be roughly \$6.5 million, the same or lower than either of the embankment options above, but only about half a million dollars more than the road on piers on the isthmus for Alternative A.



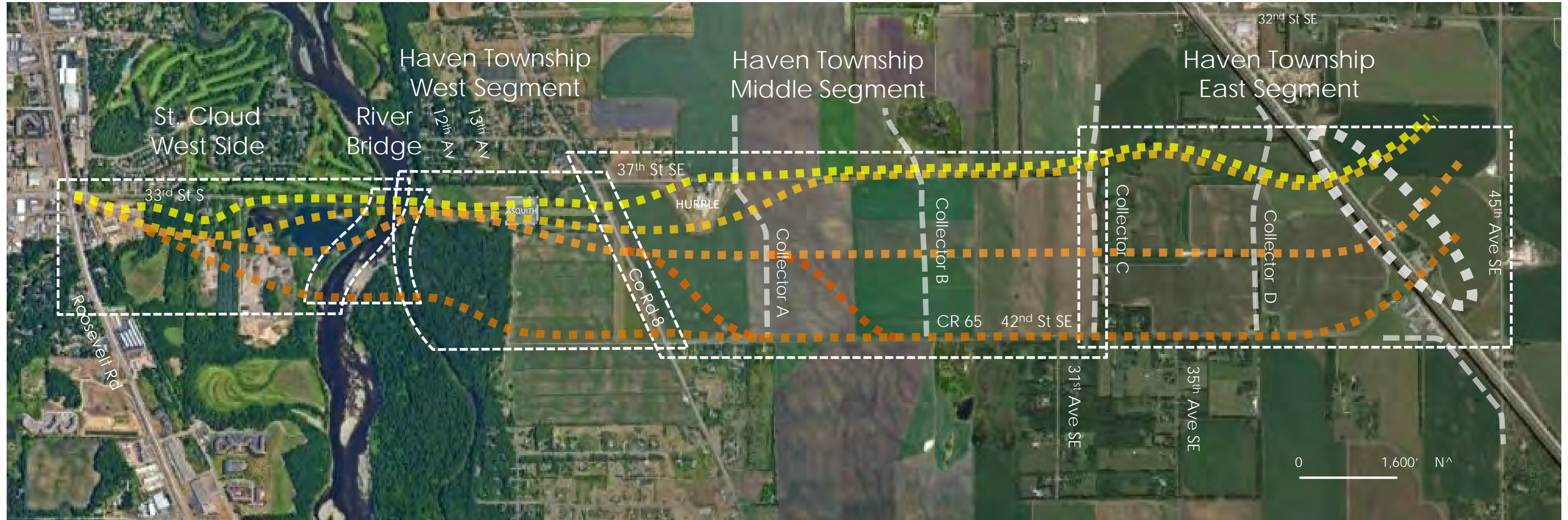
July 2023

**C. Road Around Most of the Quarry Pond.** A fifth option would be to build the road mostly on presumably solid ground around the south side of the large part of the large quarry pond as in Alternative C, but crossing north of the smaller quarry pond. For the 1,000 feet of roadway on solid ground plus the 700 feet of pond crossing before the river crossing, we estimate the cost to be roughly \$2.5 million. While this cost is much lower than the above options, it lines up the road to cross at the widest point of the alternatives, and near to the DNR Forest Island. The added cost of the bridge itself would likely be many times more than the cost savings achieved by avoiding going through the quarry pond.

**D. Road Around South Side of Quarry Pond.** A sixth option would be to build the road on presumably solid ground around the south side of both the larger and smaller quarry ponds, as in Alternative D. For the 1,500 feet of roadway around the pond to the river, we estimate the cost to be roughly \$1 million. While this cost is much lower than the above earlier options it lines up the road to cross at a wider part of the river, a second smaller river channel, part of the DNR Forest Island, and through a large swath of the Haven Forest on the east side of the river, all with significant environmental impacts. The added cost of the bridge itself would likely be many times more than the cost savings achieved by avoiding going through the quarry pond.

These cost considerations show that building the road on the isthmus or across the quarry pond would cost about \$5-6 million more than going around the south side of the pond as in Alternative D, and \$3-4 million more than going across only part of the pond as in Alternative C. But the added cost of the bridge crossings for Alternatives C and D would be many times that cost. Plus, the environmental impacts to the river corridor from a longer bridge and to the DNR Island Forest and the Haven Forest would be considerable. For these reasons we believe Alternatives A or B are better choices overall than Alternatives C or D.

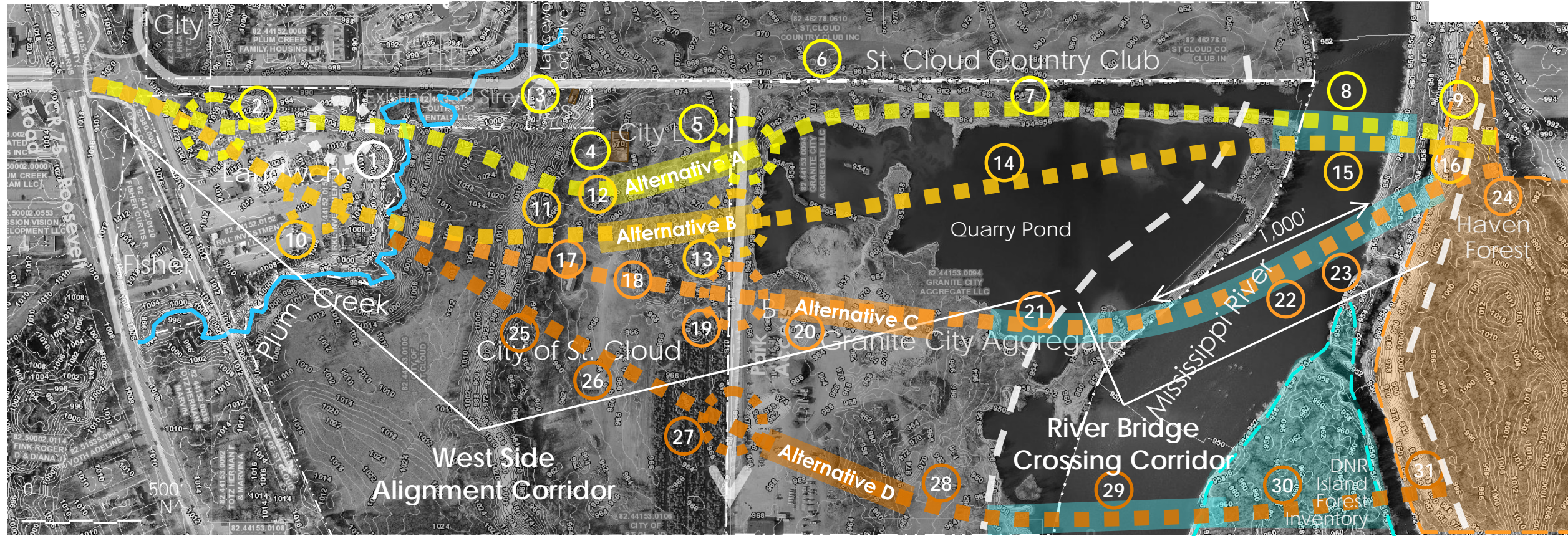
**Figure 10**  
**Alignment Corridor Segments & Alternatives**





- Alternative A
- Alternative B
- Alternative C
- Alternative D
- D1
- D2
- Interchange with US 10

Mississippi  
 River Bridge  
 Planning  
 Study

**Figure 11**  
**St. Cloud West Side & River Bridge Alternatives**  
 Roosevelt Rd to Mississippi River, Mississippi River Bridge Crossing



- All Alternatives:**
- Start at Roosevelt Rd
  - Cross Landwehr parcel with intersection access to Landwehr, Fisher, and trailhead at E edge of Landwehr parcel
  - Cross Plum Creek at E edge of Landwehr parcel
  - Provide intersection access to Park, Granite City Aggregate parcel
-  Intersection (generalized)  
 River bridge

**Alternative A**

- 1) Alternate intersection on Landwehr – all alternatives
- 2) Intersection on Landwehr before creek
- 3) Avoids Hess property
- 4) Close to City lift station
- 5) Access intersection to Park & Granite City close to existing 33<sup>rd</sup> St, difficult access
- 6) Close to Country Club
- 7) Crosses quarry pond on isthmus on piers
- 8) Crosses river at narrow point, 400 ft
- 9) Crosses narrow part of Haven Forest

**Alternative B**

- 10) Intersection on Landwehr before creek
- 11) Avoids Hess property
- 12) Avoids City lift station
- 13) Access intersection to park & Granite City stays >500 ft away from existing 33<sup>rd</sup> St
- 14) Crosses quarry pond on piers, over water
- 15) Crosses river at narrow point, 400 ft
- 16) Crosses narrow part of Haven Forest

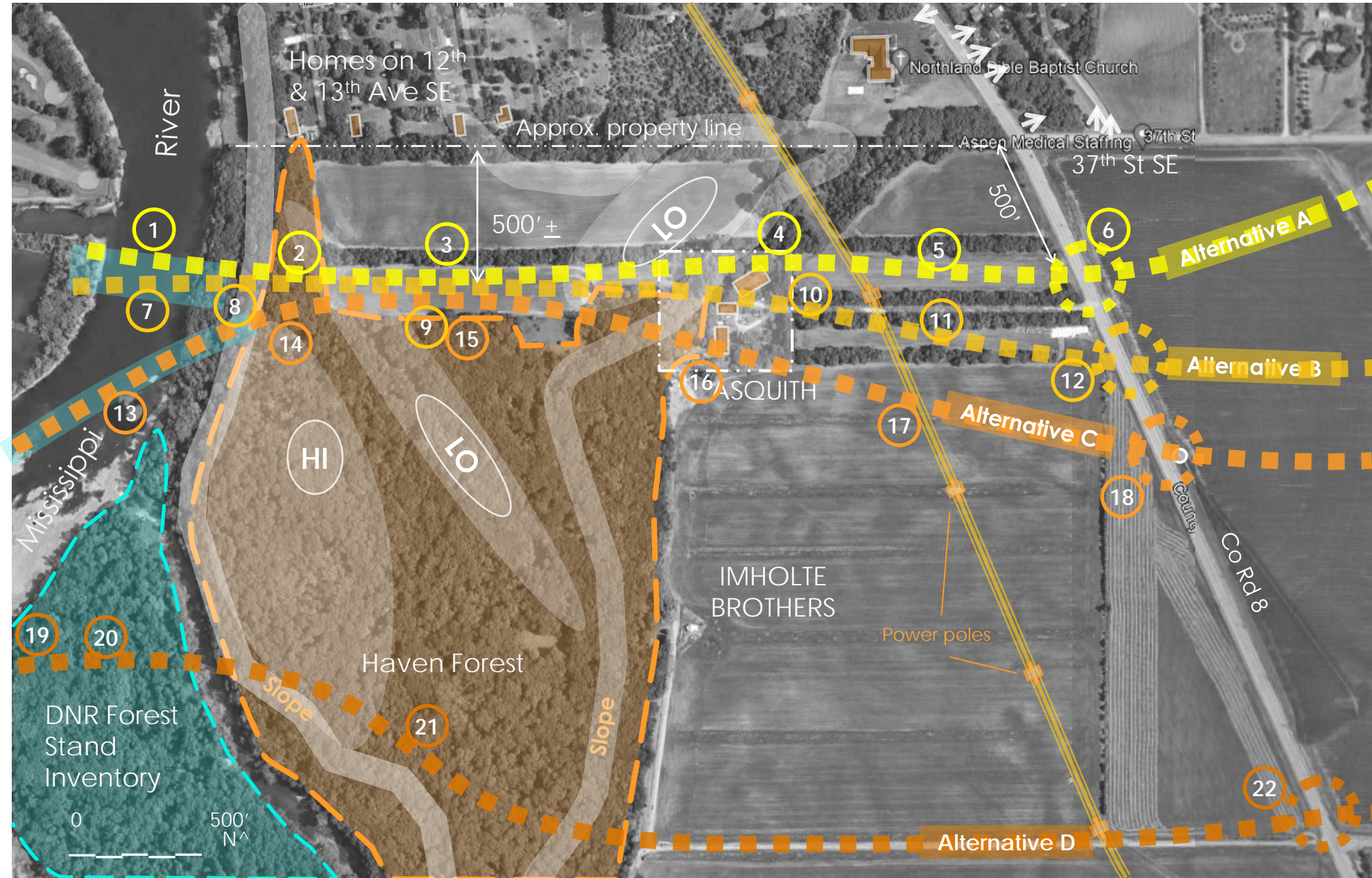
**Alternative C**

- 17) Avoids Hess property
- 18) Avoids City lift station
- 19) Access OK to park & Granite City
- 20) Stays mostly on solid ground – avoids quarry pond by going around S side
- 21) Crosses small part of S side of pond
- 22) Crosses river at wide point, 1,000 ft
- 23) Avoids DNR Island
- 24) Crosses narrow part of Haven Forest

**Alternative D**

- 25) Avoids Hess property
- 26) Avoids City lift station
- 27) Access OK to park & Granite City
- 28) Stays on solid ground, avoids quarry pond by going around S side
- 29) Crosses river at wider point, 600 ft
- 30) Crosses DNR Island & 2<sup>nd</sup> channel
- 31) Crosses wide part of Haven Forest

**Figure 12**  
**Haven Township West Alternatives**  
 Mississippi River to Co Rd 8



**Alternative A**

- 1) Crosses river at narrow point, 400 ft
- 2) Crosses narrow part of Haven Forest
- 3) Close to homes to N
- 4) May impact Asquith property
- 5) Avoids cutting through larger parcels
- 6) Intersection with Co Rd 8 >500 ft S of 37<sup>th</sup> St

**Alternative B**

- 7) Crosses river at narrow point, 400 ft
- 8) Crosses narrow part of Haven Forest
- 9) Close to homes to N
- 10) May impact Asquith property
- 11) Avoids cutting through larger parcels
- 12) Intersection with Co Rd 8 >500 ft S of 37<sup>th</sup> St

**Alternative C**

- 13) Crosses river at wide point, 1,000 ft
- 14) Crosses narrow part of Haven Forest
- 15) Close to homes to N
- 16) May impact Asquith property
- 17) Cuts through middle of larger parcels
- 18) Intersection OK with Co Rd 8 1/4 mi S of 37<sup>th</sup> St

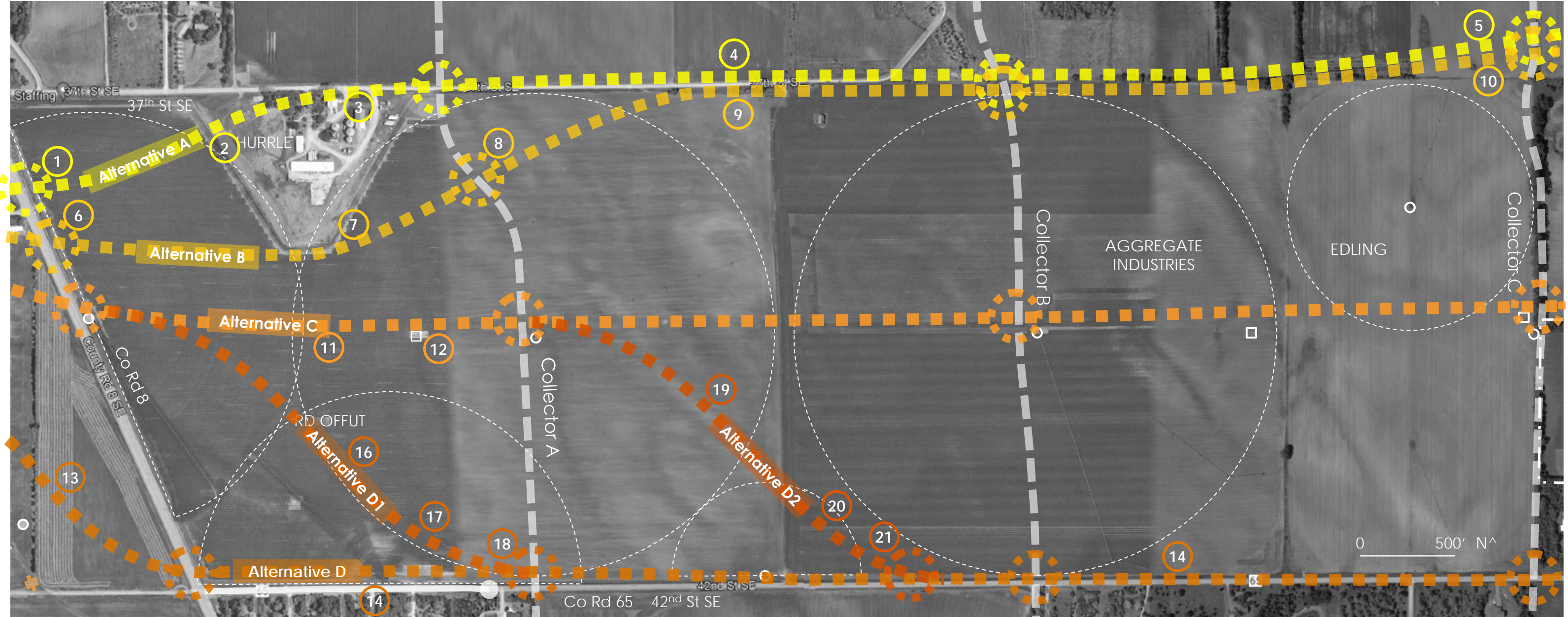
**Alternative D**

- 19) Crosses river at wider point, 600 ft
- 20) Crosses DNR Island
- 21) Crosses wide part of Haven Forest
- 22) Intersection with Co Rd 8 & Co Rd 65





**Figure 13**  
**Haven Township Middle Segment Alternatives**  
**Co Rd 8 to Collector C**



**Alternative A**

- 1) Intersection with Co Rd 8 >500 ft S of 37th St
- 2) Curves N to 37th St, avoids cutting larger parcels
- 3) Conflicts with access driveways on 37th St
- 4) Follows 37th St E to US 10
- 5) Curve around wetland

**Alternative B**

- 6) Intersection with Co Rd 8 >500 ft S of 37th St
- 7) Avoids Hurre property
- 8) Collector A intersection >500 ft S of 37th St or close to 37th
- 9) Follows 37th St, avoids cutting larger parcels
- 10) Curve around wetland

**Alternative C**

- 11) Cuts through middle of larger parcels
- 12) Avoids driveways on both 37th St & Co Rd 65

**Alternative D**

- 13) Cuts through larger parcel
- 14) Conflicts with access driveways on Co Rd 65
- 15) Can follow Co Rd 65 but new roadway would need to be rebuilt

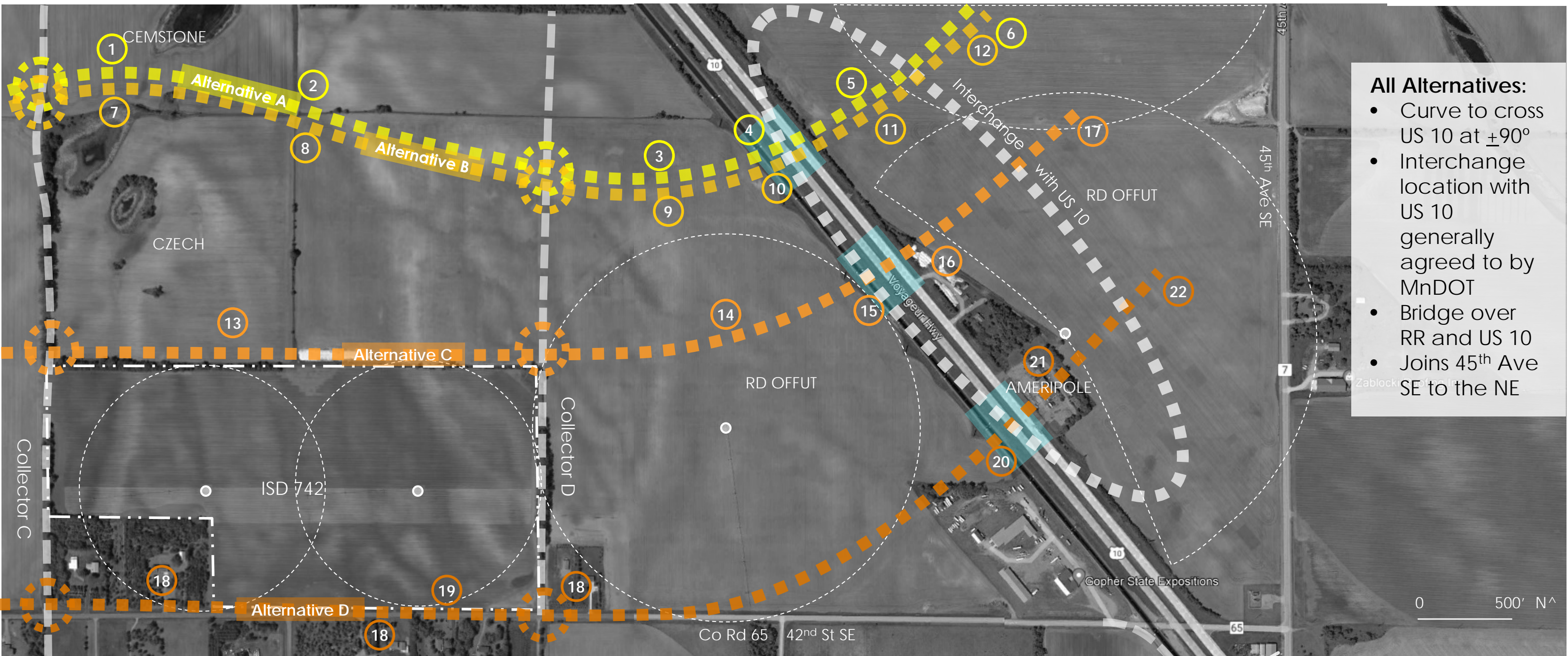
**Alternative D1**

- 16) Cuts through larger parcels
- 17) Avoids driveway conflicts on W end of Co Rd 42
- 18) Joins Alternative D Alignment

**Alternative D2**

- 19) Cuts through larger parcels
- 20) Avoids conflicts with Co Rd 42 access driveways on W end
- 21) Joins Alternative D Alignment

**Figure 14**  
**Haven Township East Segment Alternatives**  
**Collector C to US 10**



**All Alternatives:**

- Curve to cross US 10 at  $\pm 90^\circ$
- Interchange location with US 10 generally agreed to by MnDOT
- Bridge over RR and US 10
- Joins 45<sup>th</sup> Ave SE to the NE

**Alternative A**

- 1) Curve to avoid wetlands
- 2) Generally follows 37<sup>th</sup> St, avoids cutting through larger parcels
- 3) Curve to cross US 10 at 90°
- 4) Bridge over RR & US 10
- 5) Crosses larger parcels but no direct impact to structures
- 6) Connects with 45<sup>th</sup> Ave SE to NE

**Alternative B**

- 7) Curve to avoid wetlands
- 8) Generally follows 37<sup>th</sup> St, avoids cutting through larger parcels
- 9) Curve to cross US 10 at 90°
- 10) Bridge over RR & US 10
- 11) Crosses larger parcels but no direct impact to structures
- 12) Connects with 45<sup>th</sup> Ave SE to NE (Follows Alternative A Alignment)

**Alternative C**

- 13) Cuts through middle of larger parcels
- 14) Curves to cross US 10 at 90°
- 15) Bridge over RR & US 10
- 16) May impact RD Offut parcel
- 17) Connects with 45<sup>th</sup> Ave SE to NE

**Alternative D**

- 18) Conflicts with driveway accesses on Co Rd 65
- 19) Can follow Co Rd 65 but new roadway would need to be rebuilt
- 20) Bridge over RR & US 10
- 21) May impact Ameripole parcel
- 22) Connects with 45<sup>th</sup> Ave SE to NE

Figure 15  
 Concept A1  
 Concept for Discussion June 2023

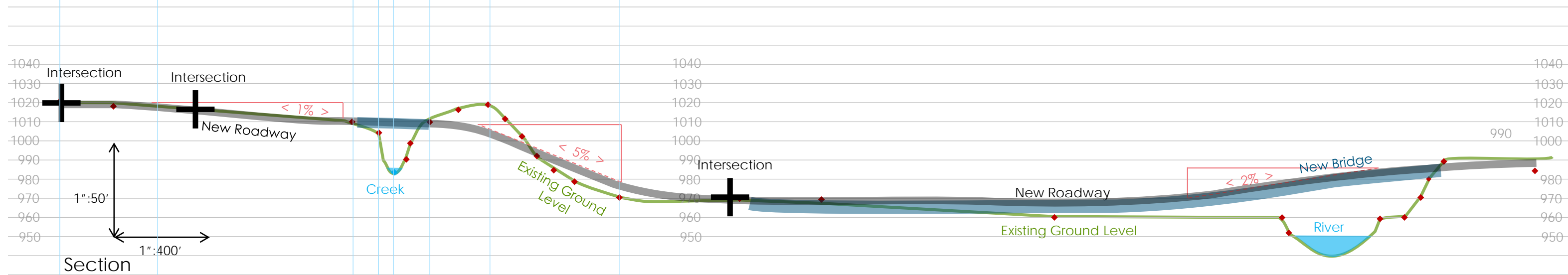
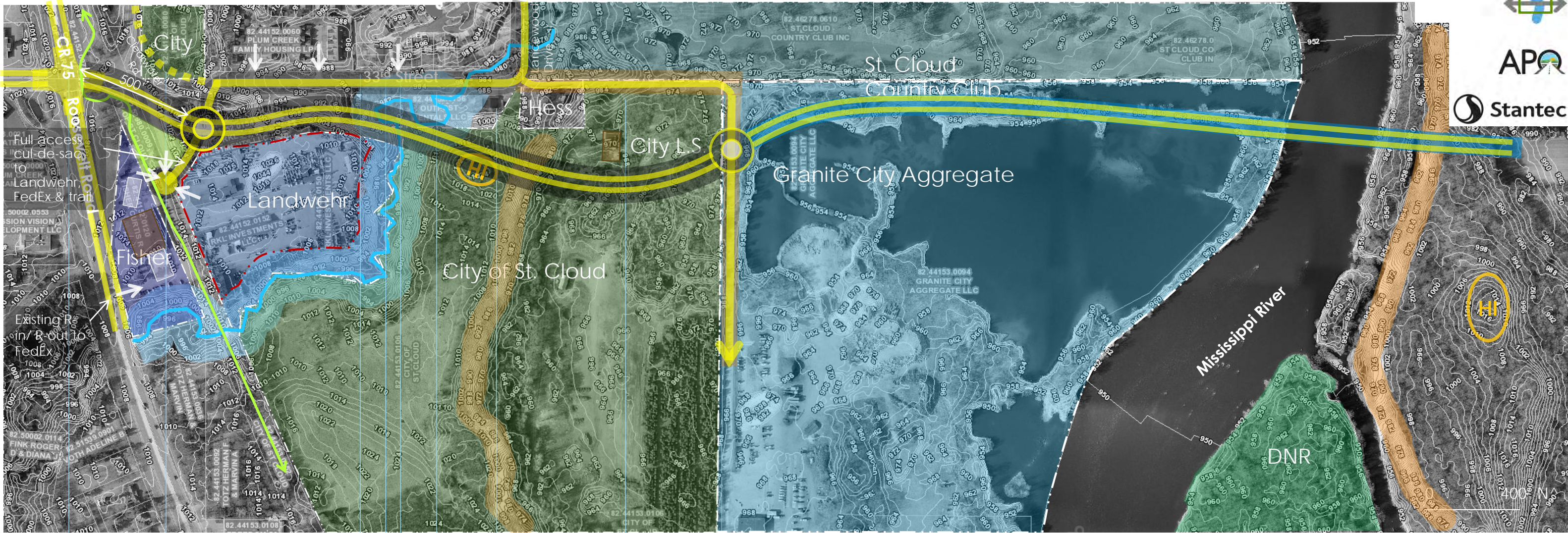


Figure 16  
 Concept A2  
 Concept for Discussion June 2023

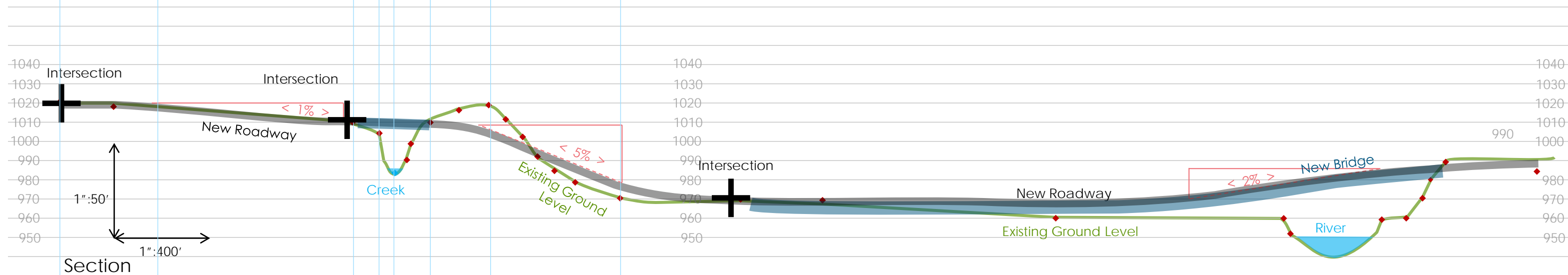
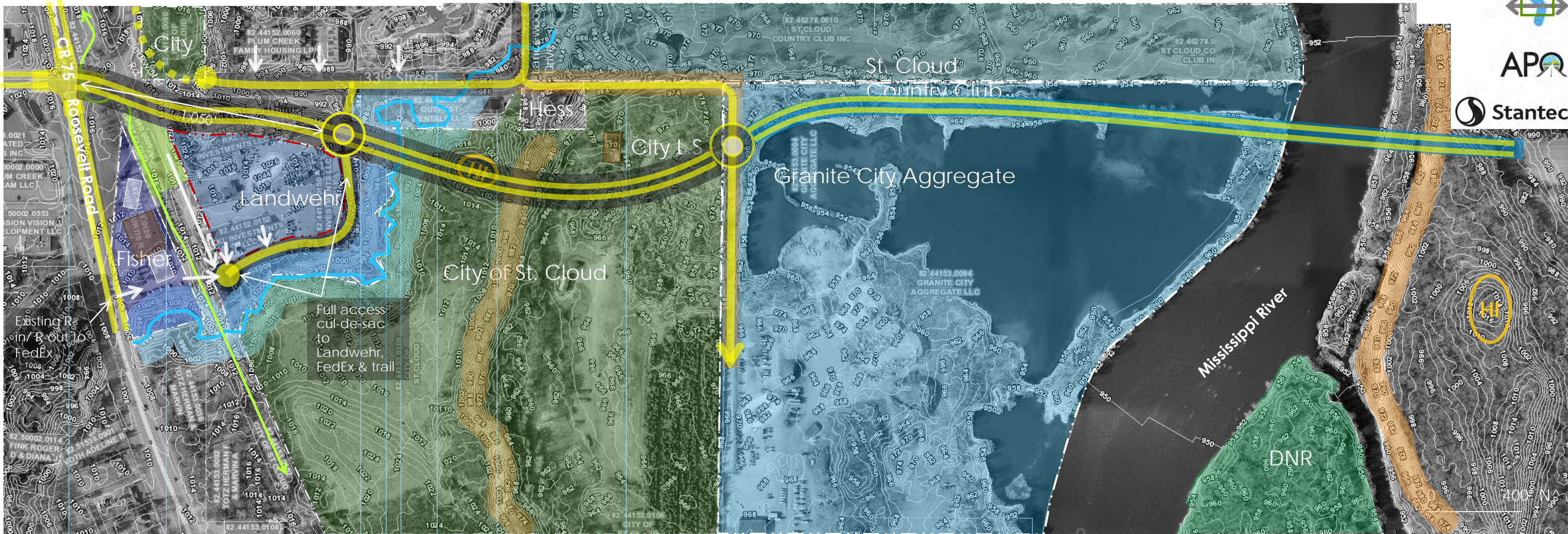
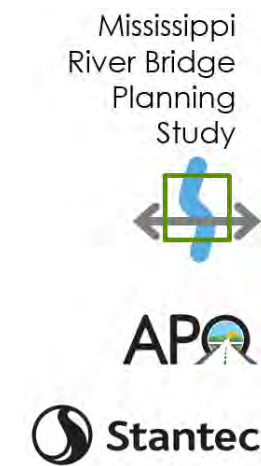
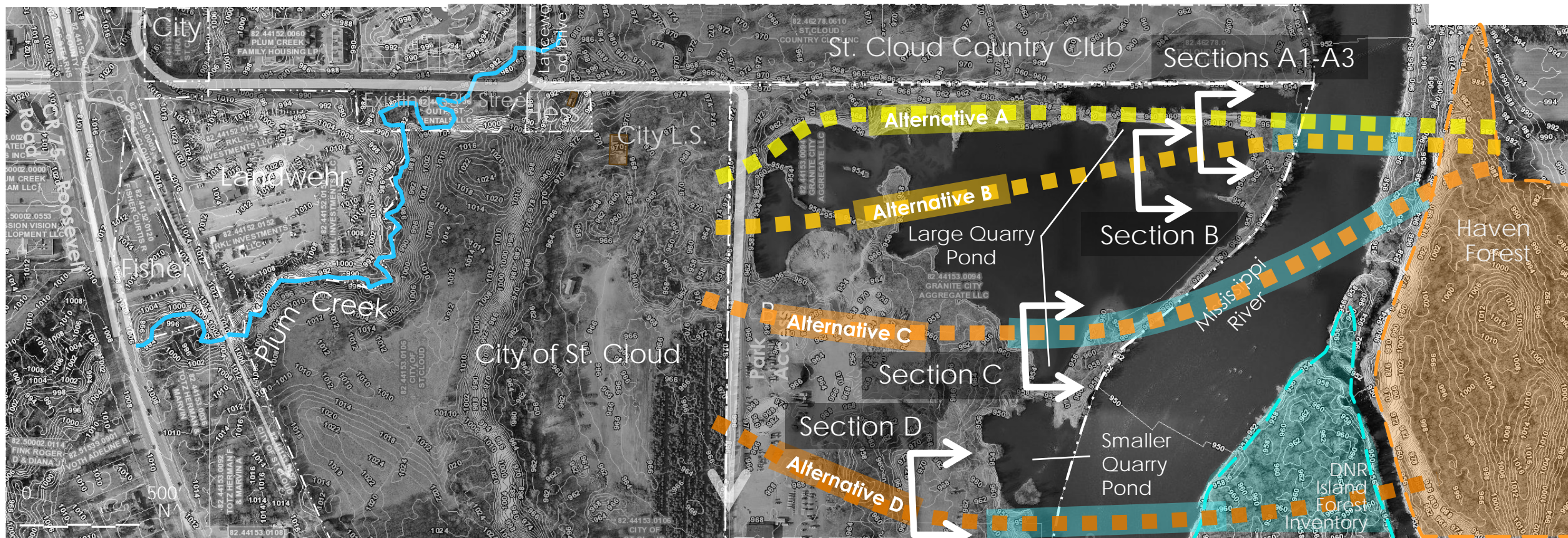


Figure 17  
Quarry Pond Crossing Options



Road on Isthmus + Embankment in Plum Creek



Section A1 (not preferred)

Road on Isthmus + Embankment in Quarry Pond



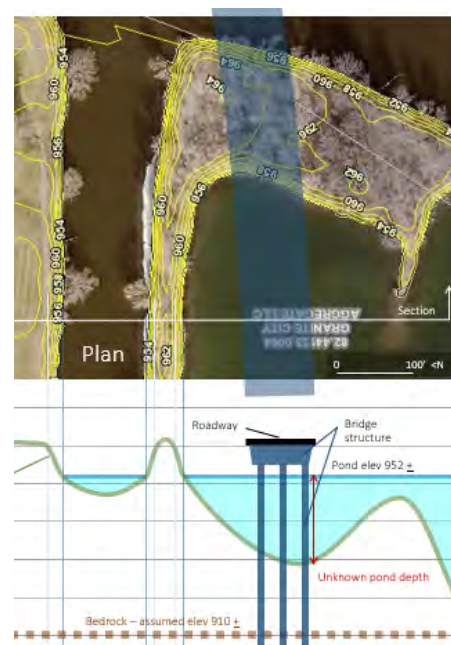
Section A2 (not preferred)

Road on Isthmus on Piers



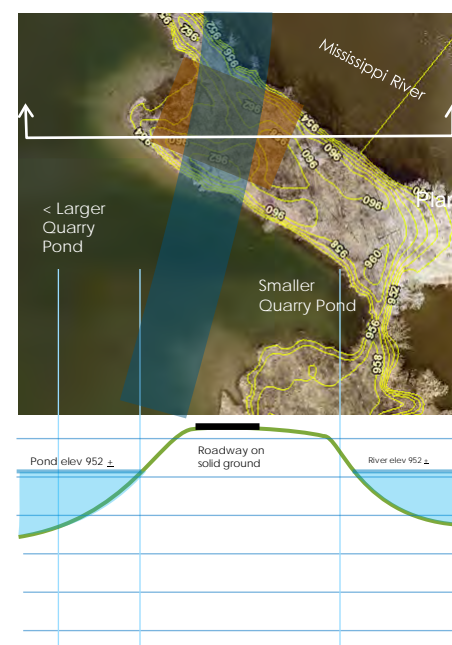
Section A3 (preferred)

Road Over Quarry Pond on Piers



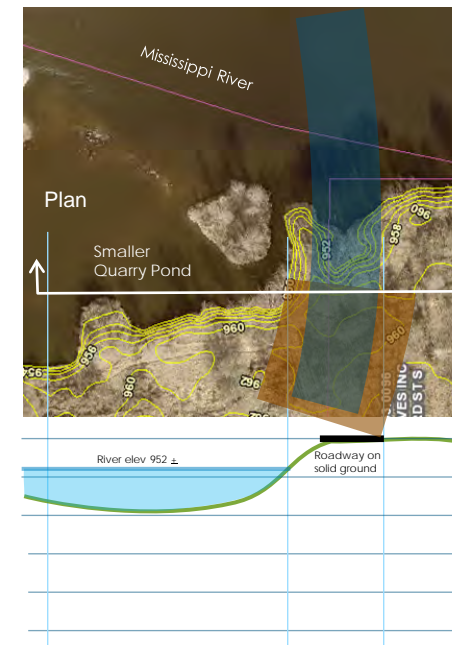
Section B

Road Around Most of the Quarry Pond



Section C

Road Around South Side of Quarry Pond



Section D



## DEVELOPMENT PLANS

### Landwehr Property

One of the properties most affected by the new roadway is the Landwehr property on the West Side in St. Cloud, located south of 33<sup>rd</sup> Street just east of Roosevelt Road. New 33<sup>rd</sup> Street would necessarily encroach on this property in order to continue east toward the river. There are several properties and two city streets that take access off the segment of existing 33<sup>rd</sup> Street on the north edge of the Landwehr property. Intersection spacing for the new roadway would not allow those existing accesses to remain onto new 33<sup>rd</sup> Street, especially Clearwater Road, so new 33<sup>rd</sup> Street needs to curve south from Roosevelt Road to keep existing 33<sup>rd</sup> Street in place. This would run through the Landwehr property, taking its direct access and also the direct access to 33<sup>rd</sup> Street and Clearwater Road for the Fisher parcel. Potential development plans for the Landwehr parcel under various alternatives are shown on the next pages – both keeping most of the property intact in one parcel on the south side of the new roadway under Alternative A, illustrated on Figures 18 and 19 as Concepts A1 and A2, or dividing the property into two more or less equal parcels under Alternatives B, C, and D, illustrated on Figures 20 and 21. All development concepts provide access at a full movement intersection east of Roosevelt Road between the new 33<sup>rd</sup> Street roadway and the Landwehr parcel and the Fisher parcel, now occupied by the FedEx business.

### River Bluffs Regional Park

The River Bluffs Regional Park is on the west side of the Mississippi River in the Study Area and would be affected by any alignment of a new 33<sup>rd</sup> Street roadway. The City of St. Cloud prepared a master plan for the park in 2005, when it was then called Plum Creek Regional Park. The master plan anticipates the 33<sup>rd</sup> Street roadway and shows three potential alignments for it on the master plan map, attached as Figure 22. The master plan is conceptual and any future development of park facilities – picnic areas, ballfields, hiking and biking trails, natural areas, etc. – would need to be coordinated with the alignment and design of the roadway. The master plan includes the Hardrives property which has been assumed to be a future acquisition added to the regional park, but which is not yet owned by the City.



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Figure 18 – Fisher & Landwehr Parcels Concept A1



Fisher & Landwehr Parcels

Concept A1 Site Plan & Access

Preliminary Draft for Discussion Only 4-28-23

Mississippi River Bridge Planning Study



APR

Stantec

Figure 19 – Fisher & Landwehr Parcel Concept A2



Fisher & Landwehr Parcels

Concept A2 Site Plan & Access

Preliminary Draft for Discussion Only 4-28-23

Mississippi River Bridge Planning Study



APR

Stantec



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Figure 20 – Fisher & Landwehr Parcels Concept – Intersection close to Roosevelt Road



Fisher & Landwehr Parcels

Concept Site Plans & Access Options

Alternatives B, C, and D (Intersection close to Roosevelt Road)

Draft for Discussion June 2023

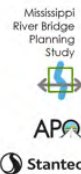


Figure 21 – Fisher & Landwehr Parcels Concept – Intersection near Plum Creek

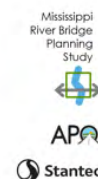


Fisher & Landwehr Parcels

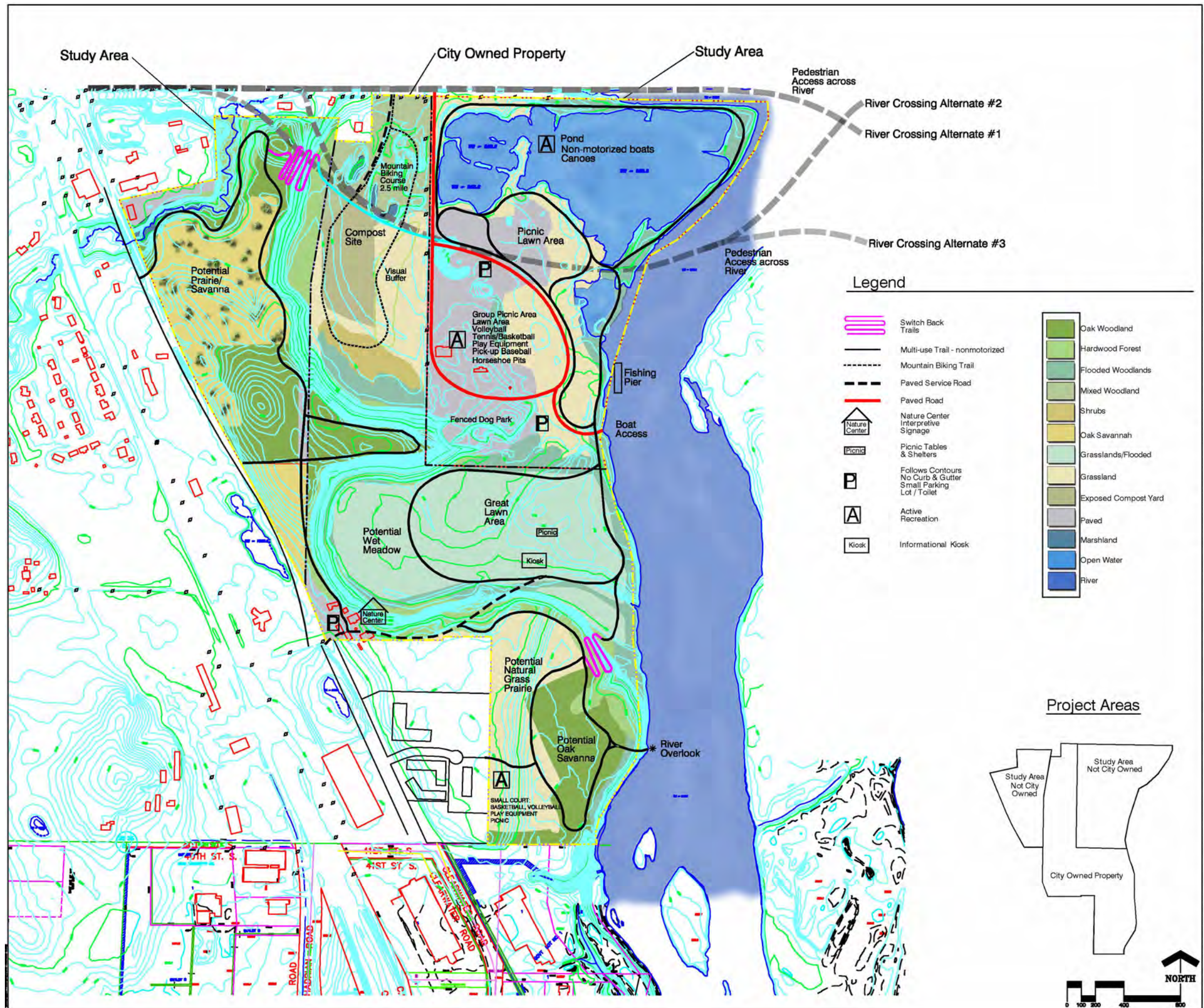
Concept Site Plans & Access Options

Alternatives B, C, and D (Intersection near Plum Creek)

Preliminary Draft for Discussion June 2023







**Figure 22**  
Plum Creek Regional Park  
Master Plan  
(now River Bluffs Regional Park)



## DESIGN CRITERIA MATRIX & RANKING

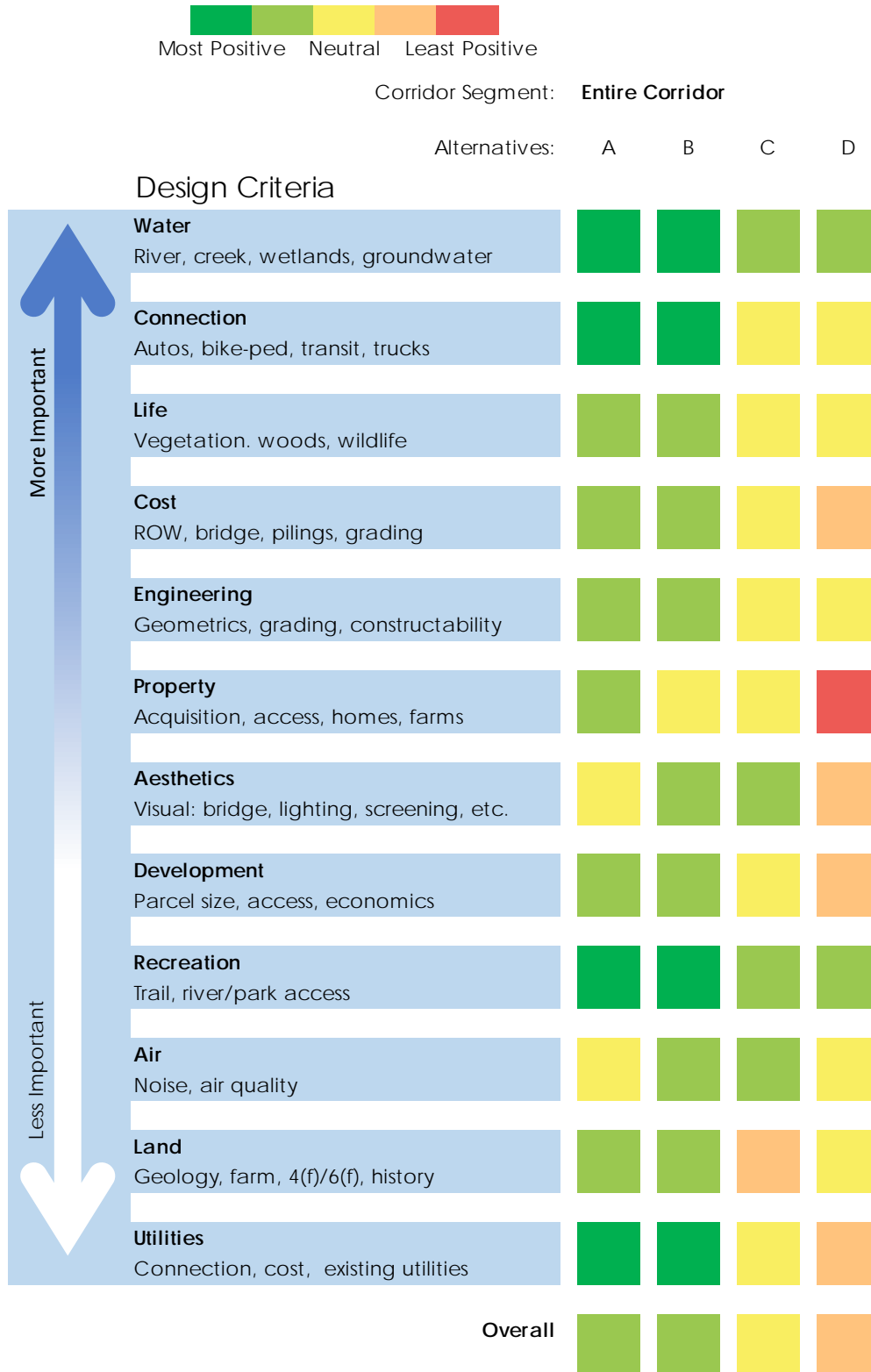
The twelve design criteria discussed above were used to rank the alternatives using a matrix of the criteria and a ranking from most positive to least positive using five colors on each of the five segments of the corridor. The ranking of each alternative as a whole is included in the graph on the next page, Figure 23, Corridor Alternatives & Design Criteria Matrix summary. The full matrix is attached to this report as Figure 28 and a map ranking the segments of the corridor Alternatives according to the matrix is attached as Figure 29.

Alternatives A and B ranked as the most positive overall, owing largely to less impact on the Mississippi River corridor due to taking the shortest bridge crossing distance, fewer impacts to the DNR Island and Haven Forest, and less impact to property access in Haven Township on along County Road 65 in Haven Township. Alternatives C and D would have significantly more impacts to the Mississippi River corridor due to the longer bridge span needed, larger impacts to River Bluffs Regional Park, and direct impacts to the DNR Island Forest and Haven Woods in Haven Township. For these reasons, the Recommended Alignment Corridor stays on a mostly northern alignment on the West Side in St. Cloud and in Haven Township. The recommended alignment is shown as a corridor generally 200 to 500 feet wide alignment and not a detailed alignment – detailed placement of the bridge and roadway would come with future engineering analysis and design.



July 2023

Figure 23 Corridor Alternatives & Design Criteria Matrix Summary





## COMPREHENSIVE PLAN GUIDANCE

Suggested guidance for comprehensive plans in the jurisdictions affected by the Mississippi River Bridge Planning Study:

### City of St. Cloud

The *Comprehensive Plan City of St. Cloud* (March 2016) might update discussion of the 33<sup>rd</sup> Street bridge crossing and roadway in the following places:

- Chapter 7 Transportation & Mobility
  - Update discussion of the *33<sup>rd</sup> Street S Bridge* section to include the recommendations of this study
  - Update the *Transportation & Mobility* map to include the recommended alignment of the 33<sup>rd</sup> Street bridge crossing and roadway

### Sherburne County & Haven Township

The *Sherburne County Comprehensive Plan 2010-2030* (September 2011) might include mention or illustration of the potential 33<sup>rd</sup> Street bridge crossing and roadway in the following places in the Plan:

- Chapter 5, Transportation – Roadway System Plan
  - Note location and status of bridge crossing and 33<sup>rd</sup> Street roadway
- Chapter 7, Parks & Recreation – Regional Trail System
  - Note location and status of bridge crossing and 33<sup>rd</sup> Street roadway, which will include a trail
- Chapter 9, Township Land Use Plans, Haven Township
  - Update the section on future land use and transportation plans to include the status of the 33<sup>rd</sup> Street bridge and roadway

The *Sherburne County Transportation Plan* (November 2019) might include mention or illustration of the potential 33<sup>rd</sup> Street bridge crossing and roadway in the following places in the Plan:

- Figure 5 Issues Map (NW Area)
  - Note potential future bridge crossing and roadway
- Page 16, Deficiencies in Mississippi River Crossings
  - Note potential future bridge crossing and roadway
- Figure 27 County Parks & Trails
  - Note potential future bridge crossing and roadway
- Page 65, Section 2.11, Ongoing Studies
- Figure 33 Potential Bridge and Freight Projects
- Figure 36 Future Functional Class
- Figure 40 Potential Regional trail corridors



## GUIDANCE FOR REVIEWING DEVELOPMENT APPLICATIONS

This report offers recommendations at a planning level for a bridge and roadway project that is many years off, if it is built at all. Nevertheless, it is prudent to try to avoid development that would complicate or thwart the project. We offer the following guidance to the City of St. Cloud, Haven Township, and Sherburne County in reviewing development applications within the Study Area:

- 1) Include this study, when finished, on the City, Township, and County websites, or make it available in other ways, so that users are aware of the study and its recommendations.
- 2) Include a map of the recommended alignment on pertinent land use plans and transportation plans so that property owners and potential developers are aware of the project.
- 3) In reviewing plats within the vicinity of the recommended alignment of the bridge and roadway, City and County staff should encourage platting and development that will avoid direct conflict with the proposed roadway corridor, including appropriate spacing for property access and new roadways.
- 4) City and County planning and engineering staff should be familiar with the study and the recommended alignment and keep updated on the status of the project, in order to inform property owners, developers and other applicants of potential impacts.
- 5) Building projects on properties on or near the recommended corridor should be encouraged to locate new structures out of the way of the proposed roadway.
- 6) Aggregate mining permits in Haven Township along or near the recommended corridor should be reviewed carefully to avoid potential conflicts with the new roadway. Sherburne County and Haven Township should work closely with aggregate mining operators to coordinate the timing and extent of mining in the area.
- 7) Roadway projects and individual driveways access to properties on or near the recommended corridor should be encouraged to take into account the future roadway.



## NEPA PROCESS & APPLICABLE PERMITS

### Background

The National Environmental Protection Act (NEPA) and associated regulations outline a process to evaluate potential environmental impacts of projects involving federal funding. The regulations require documentation of decisions resulting from the process. The key elements of the process include determining the project's purpose and need and the range of alternatives to be considered; determining potential environmental impacts; coordinating with relevant agencies; involving the public; determining mitigation for unavoidable impacts; and documentation of the analysis and decisions through an environmental impact statement, an environmental assessment, or a categorical exclusion supported by the administrative record. Review under the NEPA process will follow this planning study at a later date. The Minnesota Environmental Protection Act (MEPA) regulations also apply.

The environmental review process will follow Federal Highway Administration (FHWA) and Minnesota Department of Transportation (MnDOT) guidance within a combined State and Federal process for environmental assessments, environmental assessment worksheets, and environmental impact statements (EA, EAW and EIS). According to MnDOT guidance “[e]nvironmental decisions in the EIS process are documented at the Federal level in a Record of Decision, and at the state level in an Adequacy Determination. These documents conclude the formal environmental review process under NEPA and MEPA.”

### NEPA/Next Steps

Building on the Background Report and the responses from the agency and stakeholder letters, a Purpose and Need should be developed to explain to project stakeholders why the APO is proposing to construct the river crossing and extend 33<sup>rd</sup> Street and what the project objectives are. The Purpose and Need should reflect the setting and background of the communities within the study area and to help them realize their transportation goals by considering land use, transportation, environmental and infrastructure needs in a unified way. The Purpose and Need should represent the balanced consideration of roadway users and environmental protection and provide a foundation for developing the range of project alternatives. This will allow the APO to evaluate alternative courses of action and make decisions in the best overall public interest.

The Purpose and Need should include the following discussion:

- a. Description of project location, length, logical termini & independent utility (23 CFR 771.111(f)), and a definition of the project study area.
- b. Description of existing transportation facilities and services, including highway, transit, bus service, bicycles and pedestrian, ADA compliance, etc.
- c. Identification of specific transportation problems and deficiencies (improvements, highway, truck, RV, pedestrian, bicycle, travel times, and transit).
- d. System linkage information.
- e. Existing and future capacity traffic projections.
- f. Social, economic, and environmental justice issues related to purpose and need.
- g. Safety problems



h. Summarize previous and current transportation studies and regional, community, and local land use development and growth plans relevant to the project. Discuss projects consistency with these studies and plans.

A summary of the Purpose and Need should be distributed for review by Agencies and Local Government – with the goal of gaining consensus/agreement. The study document will express a common vision between APO, local government, and stakeholders for the future operational functionality and access management of the study area.

Having a solid Purpose and Need will support the project within NEPA and into the permitting phase. This project will involve permits and approvals that require the approving agency analyze the alternatives under consideration to determine the Least Environmentally Damaging Practicable Alternative (LEDPA) as part of the permitting process (i.e. – the USACE as required by the 404(b)(1) guidelines). To be selected as the LEDPA, a project alternative must result in the least impact to resources while being practicable after taking into consideration cost, existing technology, and logistics while also considering the overall project purpose. This is also considered as part of the Section 4(f) and Section 6(f) processes for impacts to publicly owned parklands.

As the NEPA phase begins, the class of action (COA) will need to be determined. The COA for a project defines the level of environmental review that will be required to make an environmental determination based on the project location, extent, and potential for impact on the human environment. As the Mississippi River crossing moves from planning into project development, the proposed project will be reviewed to determine which of the three basic “classes of action” is most appropriate for documentation of the project. The levels of documentation required for locally led, federally funded projects through the Federal Highway Administration (FHWA) include:

- Class I: Environmental Impact Statements (EISs)
- Class II: Categorical Exclusions (CEs)
- Class III: Environmental Assessments (EAs)

Class I actions include those known to have a significant effect on the environment. Examples for transportation projects are given under 23 CFR 771.115(a), including: 1) a new controlled access freeway, and 2) a highway project of four or more lanes on a new location.

Class II actions project types normally do not have a significant effect on the human environment. The remaining actions are categorized as Class III and require the preparation of an EA. EAs are prepared for projects in that are not categorized as Class I or II and which the significance of the environmental impact is not clearly established. An EA is designed to summarize the basic facts of a proposed project for public notification, permit applications, and provides a determination about whether the project requires an Environmental Impact Statement (EIS).

Based on the funding source and anticipated permitting requirements, the Mississippi River crossing and 33<sup>rd</sup> Street improvements will involve a federal permit/approval and will therefore be considered a federal action, most likely through the FHWA. However, if more than one federal agency is involved, the APO will need to work with the involved agencies to designate a lead federal agency responsible for carrying out the federal action and ensuring the project complies with the requirements of NEPA. Determination of the lead federal agency will be based on funding sources and permitting requirements.

In addition to the federal requirements under NEPA, the project review will need to meet the State requirements under MEPA. Similar to a federal EA for NEPA, Minnesota utilizes an Environmental



Assessment Worksheet (EAW) to process a Class III environmental review under MEPA. MnDOT and local government units undertaking a FHWA funded project typically use a combined EA/EAW format for federal actions that meets both the state and federal requirements in one document. Minnesota rules under the Environmental Quality Board (EQB) 4410.4400 provide thresholds for project to help determine the appropriate environmental document to satisfy State requirements. Thresholds can be met based on the proposed project elements, as in transportation:

EAW: Subp. 22. Highway projects. Relative to this project, items A and C designate the RGU for the type of project listed:

A. For construction of a road on a new location over one mile in length that will function as a collector roadway, the DOT or local governmental unit is the RGU.

C. For the addition of one or more new interchanges to a completed limited access highway, the DOT or local governmental unit is the RGU.

EIS: Subp. 16. Highway projects. For construction of a road on a new location which is four or more lanes in width and two or more miles in length, the DOT or local governmental unit is the RGU.

It is important to note that even if the project type itself does not trigger a certain COA, there are also impact thresholds for resources within the project area such as public waters, wetlands, and land conversion. If thresholds are met or exceeded for resources identified in state or federal rules, this can result in a different/elevated COA. Discussion with the lead federal agency is recommended at the start of the NEPA phase to determine the most appropriate COA.

The length of the project corridor (about four miles) exceeds the 1-mile designation under Subpart 22, so the project will at a minimum require a Class III environmental review (EAW) under MEPA. Depending on the proposed roadway section (i.e. – 2 lanes vs. 4 lanes), a Class I (EIS) could be required under 23 CFR 771.115(a).

Due to the location of the project within the Mississippi River corridor, the designation of this segment of the river as scenic, and the presence of related sensitive environmental properties, several constraints exist within and adjacent to the roadway study corridor. These constraints would likely categorize the project as a Class III Action even if the roadway thresholds were not met. A combined federal EA and State EAW will provide evidence and analysis to a level that is sufficient to determine whether to prepare an Environmental Impact Statement (EIS) or whether a Finding of No Significant Impact (FONSI) is applicable. If no significant impacts are identified, the process will end with a recommendation for a FONSI. Regardless of the NEPA class selected, the environmental review will still need to demonstrate compliance with all other environmental laws and regulations including National Environmental Policy Act (NEPA) compliance, and meeting Section 106 of the National Historic Preservation Act (NHPA), Section 7 of the Endangered Species Act, Section 4(f) of the Department of Transportation Act, Section 6(f) of the Land and Water Conservation Fund Act, and related requirements pertaining to transportation projects.

Ongoing consultation with local, state, and federal resource agencies will be a key part of the NEPA process. Several agencies have been contacted as part of the environmental screen that was completed for this study, however official study notifications should be sent at the start of the NEPA process to appropriate regulatory agency contacts and stakeholders to request input based upon their jurisdiction. The following table highlights key agencies and activities based on the Mississippi River crossing and 33rd Street improvements.





Key Management Agencies	Management Activities
Federal	
Federal Highway Administration (FHWA) (If Lead Federal Agency)	Environmental Assessment
	EIS Need Decision
	Section 4(f) determination
	Interchange Modification Justification Report (IMJR)
Minnesota State Historic Preservation Office (SHPO)	Historic and Archaeological - Section 106
United States Fish and Wildlife Service (USFWS)	Endangered Species Act – Section 7
United States Army Corps of Engineers (USACE)	Clean Water Act/Section 404 Permit/Channel Alterations
United States Environmental Protection Agency (EPA)	Water Quality
National Park Service (NPS) (In conjunction with MnDNR)	Section 6(f) Evaluation for impacts to River Bluffs Regional Park
Federal Emergency Management Agency (FEMA)	Floodplains
Federal Aviation Administration (FAA)	FAA’s online portal and FAA Form 7460-1 to determine any restrictions or requirements for design and construction.
State	
Minnesota Department of Natural Resources (MnDNR)	Dewatering permit
	Section 4(f) and Section 6(f) Evaluation for impacts to River Bluffs Regional Park and the Mississippi River State Water Trail
	Public Waters Work Permit
	Prohibited Invasive Species Permit (if needed)
	State Wild and Scenic River
	Navigational Clearances
Minnesota Pollution Control Agency (MPCA)	Clean Water Act/Section 401 Permit
Minnesota Environmental Quality Board (EOB)	Water Quality
Board of Soil and Water Resources (BWSR)	Wetlands
Local	
Sherburne County	Wild and Scenic, Floodplain Administration, Overlay District
Stearns County	Wild and Scenic, Floodplain Administration, Overlay District, 4(f) and 6(f) for River Bluffs Regional Park
Mississippi River - St. Cloud Watershed	Water Quality
Stearns County Soil and Water Conservation District	Water Quality
Sherburne County Soil and Water Conservation District	Water Quality



## RECOMMENDATIONS

The recommendations in this report represent a planning level of analysis and are not meant to be final or definitive. In addition to the environmental review that will be necessary, the alignment and design of the new bridge and roadway will balance engineering and cost considerations, and other factors which may influence the location and character of the roadway, and which may also shift its location.

The alignments show intersections with assumed future north-south collector streets in Haven Township between County Road 8 and US 10 at roughly half-mile intervals. These are for illustration only and future planning would determine the location of these and other intersections with the new 33<sup>rd</sup> Street.

The analysis in this report of the four Alignment Corridor Alternatives shows that Alternatives A and B would likely have less impacts overall than Alternatives C and D even though A and B have somewhat greater impacts and costs on the West Side as they cross the quarry pond. This would be offset by significantly less cost and less impact to the Mississippi River corridor itself due to the shorter bridge crossing.

The recommended alignment follows Alternative A on the West Side for the first third of a mile east of Roosevelt Road, leaving the Landwehr property with one larger development parcel rather than dividing it into two smaller ones. The route then follows Alternative B, crossing the quarry pond to the river. This route is preferred over Alignment A because it stays farther away from the St. Cloud Country Club – Alternative A crosses the quarry pond on the isthmus close to the Country Club. East of the river in Haven Township, the recommended alignment follows Alternative B curving south of the Hurrel property, resulting in fewer problems with property access on 37<sup>th</sup> Street SE than Alternative A. The recommended alignment continues east from the middle of Haven Township on Alternative B to an interchange with US 10, the same as Alternative A in this segment.





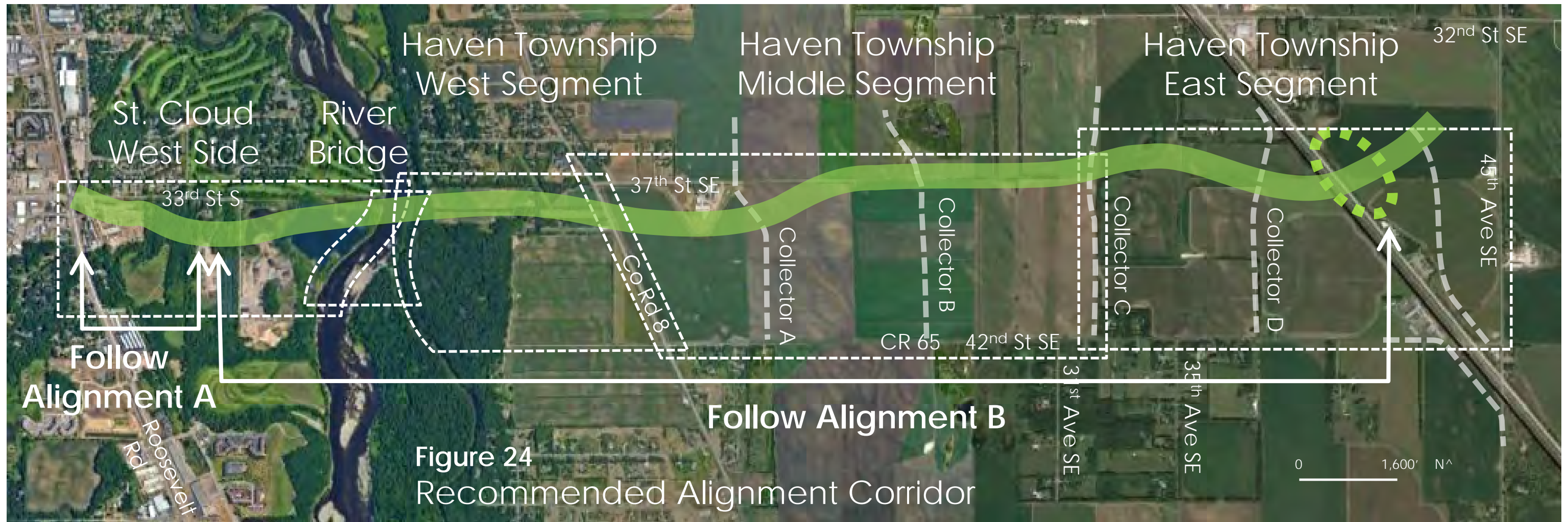
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## St. Cloud APO Mississippi River Bridge Planning Study – Recommended Approach

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Alternatives A, B, and C would have less impact to the Haven Forest than Alternative D. Alternatives C and D would stay farther way from existing residential uses and the St. Cloud Country Club on the West Side but would require longer bridge crossings and greater impact to the Mississippi River environment. Alternative D would stay farther away from existing residential uses in Haven Township but would directly impact the DNR Island Forest and large areas of the Haven Forest. For these reasons Alternatives C and D are not recommended. Balancing these impacts and others will be the goal of the environmental review process and more detailed design consideration.

This recommended corridor is illustrated on Figures 24 to 28 attached as a swath generally 250 to 500 feet wide. The intent is to show the general location that appears to have the least impact. This recommendation is not precise and It is expected that the alignment may be modified in the process of preliminary and final design.





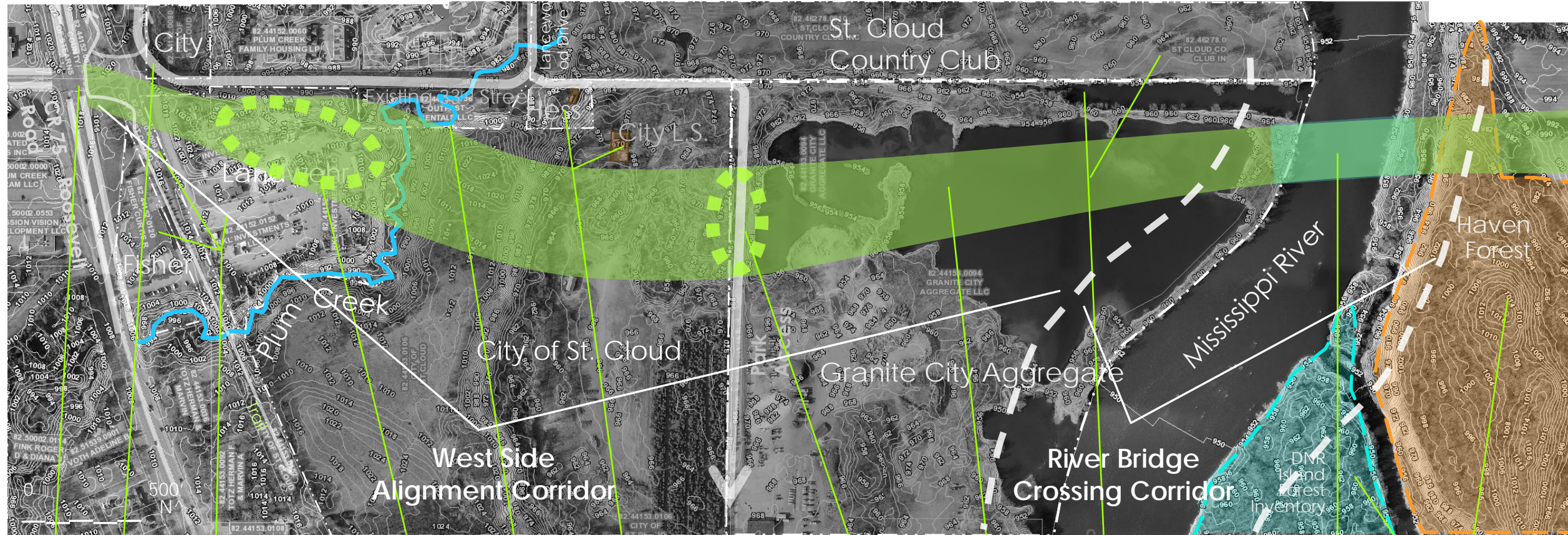
-  Recommended road & bridge corridor
-  Interchange with US 10



Figure 25

# St. Cloud West Side & River Bridge Recommended Alignment Corridor Roosevelt Rd to Mississippi River, Mississippi River Bridge Crossing



- Recommended road & bridge corridor
- Intersection (generalized)
- River bridge

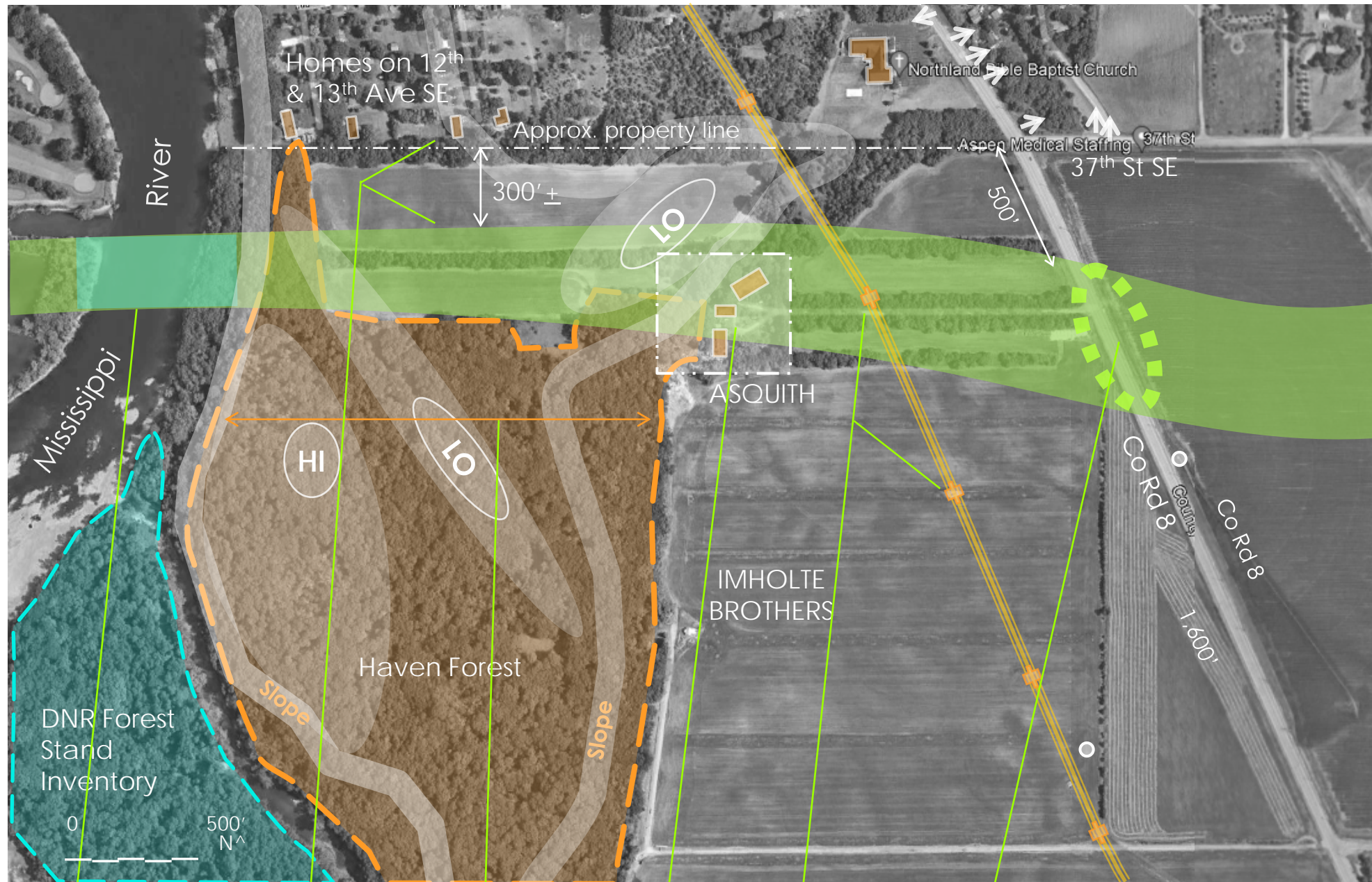
- Intersection provides access to Landwehr, Fisher, & Trailhead
- Avoid Hess property & City lift station
- Avoid encroaching into Plum Creek or onto Country Club
- Avoid DNR Island Forest, Haven Forest
- Avoid existing 33<sup>rd</sup> St (loop or cul-de-sacs)
- Avoid N end of Plum Creek
- Cross pond on piers
- Cross river at narrow point
- New roadway connects with Roosevelt Rd & 33<sup>rd</sup> St
- Intersection min. 500' from Roosevelt Rd, max. at creek
- Intersection access N to existing 33<sup>rd</sup> St, S to Park

Mississippi River Bridge Planning Study



Figure 26

# Haven Township West Segment Recommended Alignment Corridor Mississippi River to Co Rd 8



- Recommended road & bridge corridor
- Intersection
- River bridge
- Overhead power line & towers

Keep as far as possible from homes, buffer

Avoid impacts to Asquith parcel if possible

Intersection with Co Rd 8 min. 500' S of 37th St SE

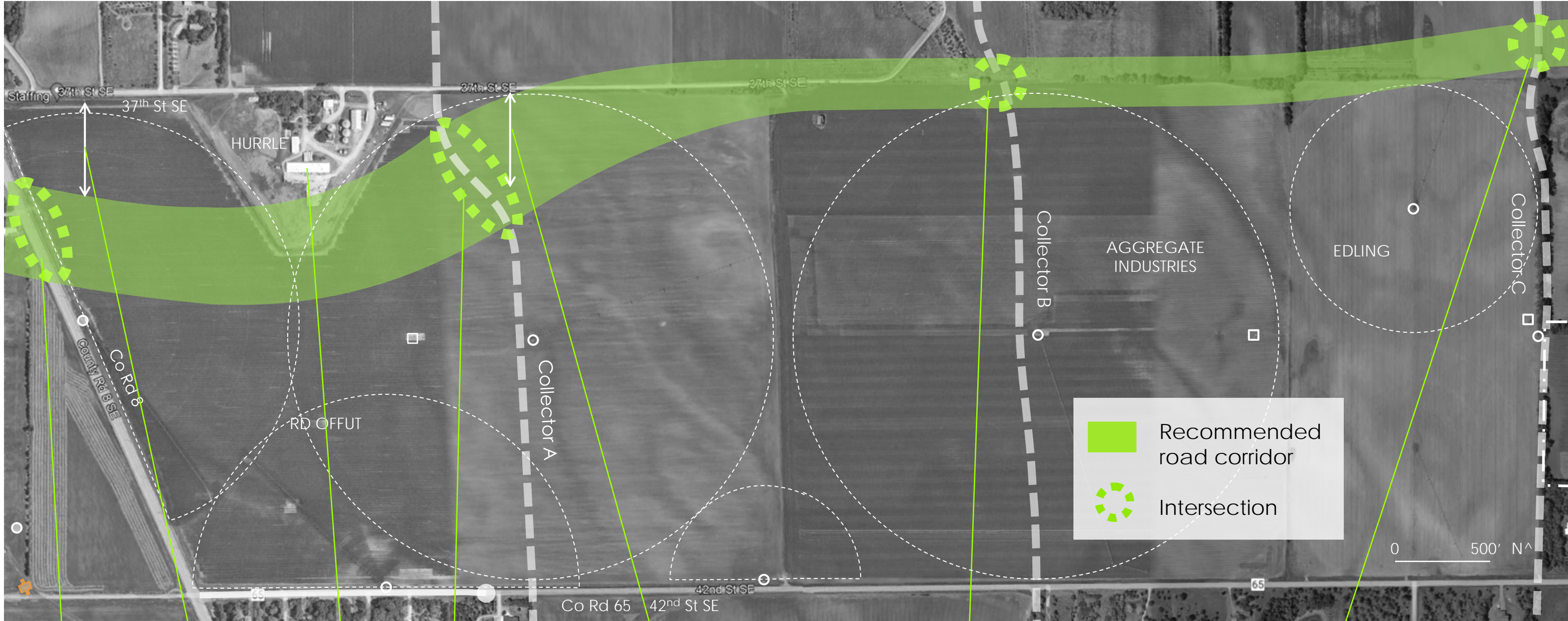
Cross river at narrow point

Avoid wide part of Haven Forest

Avoid power line towers

Figure 27

# Haven Township Middle Segment Recommended Alignment Corridor Co Rd 8 to Collector C



Keep reasonable min. lot depth for development

Intersection with future collector street

Keep reasonable min. lot depth for development, or keep close to 37<sup>th</sup> St SE

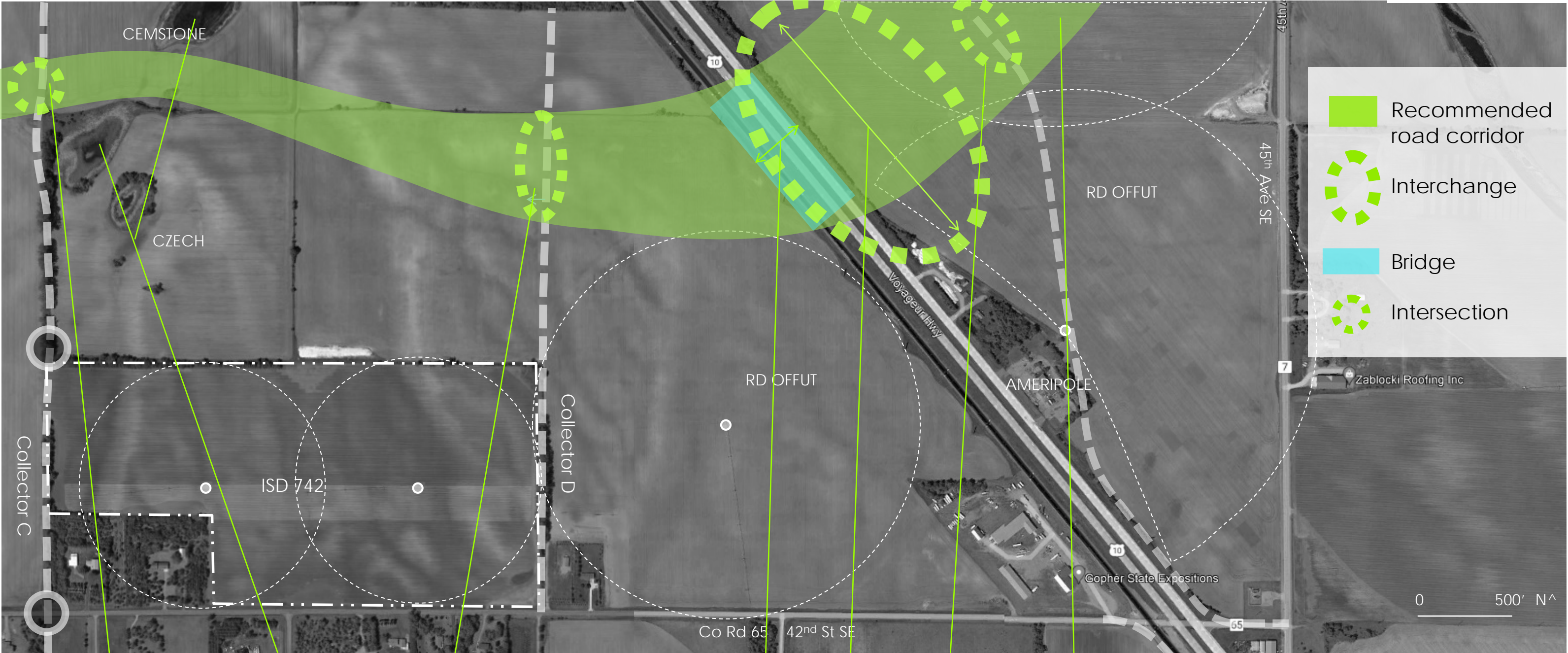
Intersection with future collector street

Intersection with future collector street

Intersection with Co Rd 8 min. 500' S of 37<sup>th</sup> St SE

Avoid impacts to Hurrle parcel if possible

**Figure 28**  
**Haven Township East Segment Recommended Alignment Corridor**  
**Collector C to US 10**



Intersection with future collector street

Intersection with future collector street

Bridge over US 10 & RR

Intersection with realigned frontage road

Connect with 45<sup>th</sup> Ave SE to NE

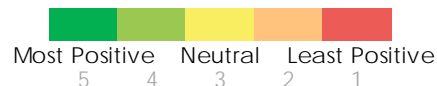
Avoid wetlands

US 10 interchange



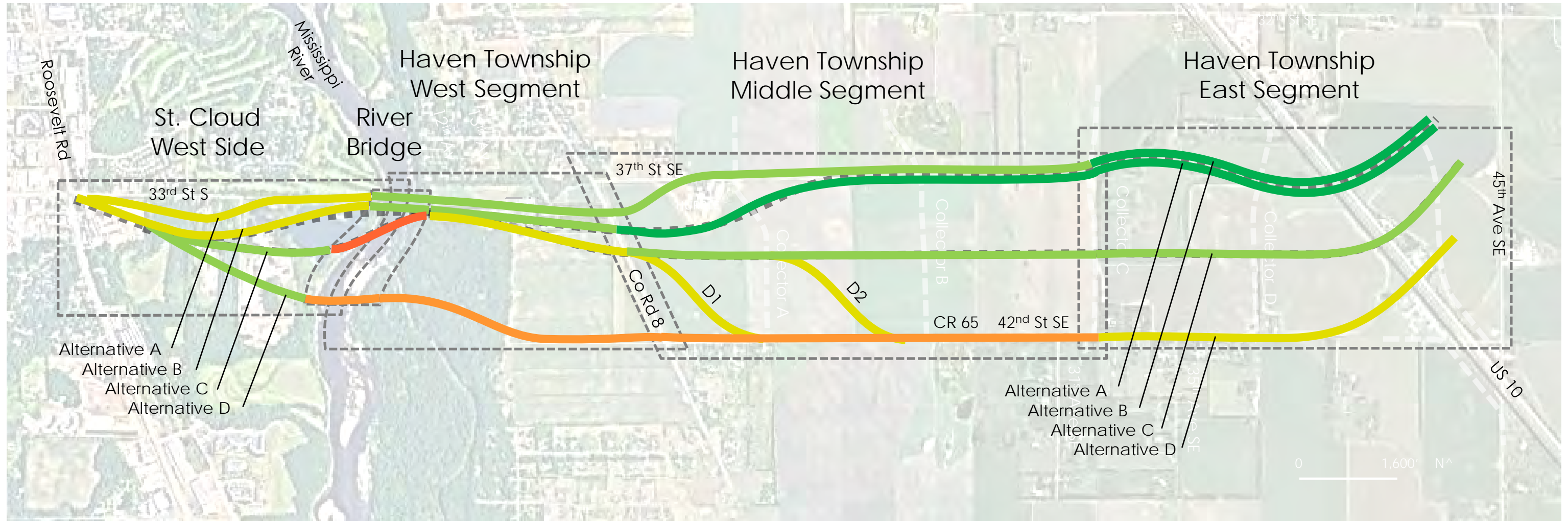
# Figure 29 Design Criteria Matrix

St. Cloud APO Mississippi River Bridge Planning Study  
Corridor Alignment Alternatives & Design Criteria Matrix



Design Criteria	Corridor Segment: St. Cloud West Side Roosevelt Rd to Miss R				Mississippi River Bridge River Crossing				Haven Township West Segment Mississippi River to Co Rd 8				Haven Township Middle Segment Co Rd 8 to Collector C				Haven Township East Segment Collector C to US 10				Overall					
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D		
<b>Water</b> River, creek, wetlands, groundwater	4	3	4	4	5	5	1	1	5	5	4	1	5	5	5	5	5	5	5	5	5	5	5	5		
<b>Connection</b> Autos, bike-ped, transit, trucks	5	5	4	4	5	5	3	3	5	5	4	2	5	5	2	3	2	2	5	5	2	3	5	5	3	3
<b>Life</b> Vegetation, woods, wildlife	4	4	4	4	4	4	2	1	4	4	4	1	5	5	5	5	5	5	5	5	5	5	5	5		
<b>Cost</b> ROW, bridge, pilings, grading	2	1	5	5	5	5	1	2	4	4	4	1	4	5	5	1	2	2	5	5	3	2	4	4	3	2
<b>Engineering</b> Geometrics, grading, constructability	2	1	4	4	4	3	1	2	3	3	3	2	5	5	5	2	3	3	4	4	5	3	4	4	3	3
<b>Property</b> Acquisition, access, homes, farms	4	3	3	3	4	4	1	2	3	2	2	4	3	4	3	1	2	2	4	4	3	1	4	3	3	1
<b>Aesthetics</b> Visual: bridge, lighting, screening, etc.	1	4	5	5	3	3	1	1	2	3	3	4	3	5	5	1	2	2	5	5	5	2	3	4	4	2
<b>Development</b> Parcel size, access, economics	5	4	3	3	5	5	2	2	3	3	3	3	4	5	2	2	2	2	4	4	3	2	4	4	3	2
<b>Recreation</b> Trail, river/park access	5	5	4	4	3	3	4	4	4	4	4	4	5	5	4	2	3	3	5	5	3	4	5	5	4	4
<b>Air</b> Noise, air quality	2	3	5	5	2	2	2	2	2	3	3	4	4	5	5	1	2	2	5	5	5	1	3	4	4	3
<b>Land</b> Geology, farm, 4(f)/6(f), history	2	2	3	3	4	4	3	3	4	4	4	2	4	4	2	4	3	3	4	4	2	4	4	4	2	3
<b>Utilities</b> Connection, cost, existing utilities	5	5	4	4	5	5	2	2	5	5	4	2	5	5	3	1	2	2	5	5	3	2	5	5	3	2
<b>Overall</b>	3	3	4	4	4	4	1	2	4	4	3	2	4	5	4	3	3	3	5	5	4	3	4	4	3	2

**Figure 30**  
**Alignment Corridor Alternatives – Design Criteria Ranking**



Design Criteria Ranking

- █ Most Positive
- █ Neutral
- █ Neutral
- █ Least Positive
- █ Least Positive

