URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET

DATE: 11/15/2021

PRIORITY# 2  Regional: Y/N  Urban Roads: Y/N

City: Minot    Street: US Highway 2/52 and US Highway 83 Interchange

County: Ward    Length: 2100 feet

Proposed Improvement: Improvements include bridge widening, shared use path installation, new signals, new concrete pavement, and conversion to a continuous T interchange.

<table>
<thead>
<tr>
<th>Cost Estimates Breakdown (in $1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>1,000</td>
</tr>
</tbody>
</table>

Present Road: Surface Width? 94'    Surface Type? Concrete and Asphalt

On Street Parking Allowed? No  Present: (No) One Side Both Sides Angle Parallel
    Proposed: (No) One Side Both Sides Angle Parallel

### Proposed Improvements

ADT Present: 23,700    Yr: 2020    Travel Way Width: 82'

ADT Design: Design year: No. of Lanes: 4 to 6

Design Speed: Roadway Width: 82'

Maximum Curve: Min. R/W Width: Varies

### Right of Way

Will Additional ROW or easement be acquired? No  ROW acquisition by: City DOT

Has any ROW easements been acquired since 7-1-72: Unknown  ROW Condemnation by: City DOT

Est. No. of occupied family dwelling to be displaced? 0

Est. No. business to be displaced? 0
### Impacts

- Will there be any additional Impacts (Cultural and Environmental Resources): USACE 404 Permit, City Floodplain Permit
- Will there be any impacts to 4(f) or 6(f) properties: No
- Airports: No  Public Hearings: No
- Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex
- Transportation Enhancements: ITS infrastructure
- Intermodal: City Bus route over bridge
- Pedestrian Needs: Bridge widening needed for shared use path installation

### Railroads Crossings

<table>
<thead>
<tr>
<th>RR Name</th>
<th>No. Xings</th>
<th>No. Tracks and Type of Crossing</th>
<th>Daily Train Movements</th>
<th>Train Speed</th>
<th>Present Protection</th>
<th>Proposed Protection</th>
</tr>
</thead>
</table>

### Purpose and Need Statement:

Based on the Broadway Corridor Study, one of the options was to construct a continuous T interchange with a bridge expansion to carry a shared use path. This alternative was used as the basis of estimate. The project is needed to address capacity issues, alignment concerns, and pedestrian access restrictions.

**Existing Conditions:**

1. When was the current street section built? Has there been any additional maintenance to the street section?
   
   Current interchange was constructed in the mid to late 1970s. NDDOT constructed a bridge deck overlay in 2016.

2. How many driving lanes and turning lanes does the street section currently have and what are the widths of the driving and turning lanes?
   
   Four driving lanes, and a right turn lane for each of the on-ramps.

3. What is the condition of the pavement section?

   A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting?

   B. If the pavement section is concrete, are there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.
Asphalt pavements are showing rutting and cracking issues. NDDOT maintenance staff have been adding spray patch on the larger cracks. The concrete bridge section is in good condition. Interchange ramps have failing concrete sections that will be replaced by the NDDOT in 2022 or 2023.

4. Any existing geometric concerns?  
   There is a city street that continues west from the US 2 off-ramp.

5. Are there any access points to adjoining properties that present a special concern?  
   The above city street does serve some commercial properties. This access will have to be addressed in the design.

6. Are there any existing sidewalks or shared use path in place?  
   None at this time. However, a major project element will be to extend a shared use path across the interchange.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?  
   The system will need to be analyzed and likely replaced. The structural steel plate pipe that carries Puppy Dog Coulee must be replaced.

8. What is the condition of the city’s water and sewer line? Will any work have to be done to the city’s water and sewer lines along with this project?  
   No work should be needed.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?  
   High mast lighting was recently installed through the interchange area. Some luminaries on Broadway will need replacement based on project limits.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?  
    Both ramps have traffic signals that need replacement. Not aware of any high crash locations in the interchange area, only near the project termini at 28th Ave and 20th Ave. Turn lane configurations will change based on final design.

Remarks:  
The City wishes to partner with the NDDOT to design and construct improvements to the US 2/52 and US 83 interchange. The improvement will provide a continuous pedestrian/shared use connection through the area when coupled with the Broadway Reconstruction project. A Continuous T or other configuration will alleviate future congestion issues.
City Engineer: ______________________________  Date: ___________________

District Engineer: ___________________________   Date: ___________________

Note: Please attach a map showing location and extent of the project, detailed cost estimate, and any additional supporting documents.
# US 2 and US 83 Continuous T Interchange Estimate

**Project Length:** 2100

**Section:** modified 6 lanes

**Intersection Control:** Signalized

**Frontage Roads:** None

**Bridge Area:** 5485

**Bridge Length:** 290

<table>
<thead>
<tr>
<th>Item</th>
<th>LF/EA/SF</th>
<th>Price/Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainline 4 lane</td>
<td>850</td>
<td>$2,200.00</td>
<td>$1,870,000.00</td>
</tr>
<tr>
<td>Mainline 6 lane</td>
<td>960</td>
<td>$2,200.00</td>
<td>$2,112,000.00</td>
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<tr>
<td>Signals</td>
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<tr>
<td>Right of Way</td>
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<td>22nd Removal</td>
<td>22000</td>
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<tr>
<td>Bridge Widening</td>
<td>LSUM</td>
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</tr>
</tbody>
</table>

**Sub Total** $5,965,000.00

**Contingency (20%)** 20% $1,193,000.00

**Total (2020)** $8,589,000.00

**Project Total Cost (2026)** $10,256,431.61
Figure 130: I-2 Continuous T Interchange