PRIORITY# 1
Regional: Y/N  Urban Roads: Y/N
City: Minot  Street: Broadway from 19th Ave SW to South City
Limits including adjacent frontage roads but not including US2/83 Interchange; 20th Ave SW
from 4th St to 480’ east of Broadway; 31st Ave SW 320’ west of Broadway to 220’ east of
Broadway; 37th Ave SW from 750’ west of Broadway to 300’ east of Broadway

County: Ward  Length: 15,815 centerline feet total of all roads

Proposed Improvement: Scoping and cost is based upon the Broadway Corridor Study alternative
S.4 with a 4-lane concrete section reconstruction from 19th Ave SW to south city limits. Project
includes reconstruction of adjacent minor arterials to connect to new improvements and to
correct geometry. Improvements include removals, new concrete pavement, signals, asphalt
frontage roads, storm sewers, sidewalks, shared use paths, LED lighting, signage, and other
incidental.

<table>
<thead>
<tr>
<th>PE</th>
<th>CE</th>
<th>R/W</th>
<th>Utility</th>
<th>Constr.</th>
<th>Bridges</th>
<th>Non-Participating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,354</td>
<td>2,354</td>
<td>334</td>
<td>Incl in constr.</td>
<td>23,543</td>
<td>1,000</td>
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</tbody>
</table>

Present Road: Surface Width? Varies by corridor  Surface Type? Asphalt
On Street Parking Allowed?  

<table>
<thead>
<tr>
<th>Proposed Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT Present: 26,645 Broadway  Yr: 2020  Travel Way Width: Varies</td>
</tr>
<tr>
<td>ADT Design: __________ Design year __________  No. of Lanes: 2 to 6</td>
</tr>
<tr>
<td>Design Speed: __________  Roadway Width: 40 to 90 feet</td>
</tr>
</tbody>
</table>
Maximum Curve: ____________________________  Min. R/W Width: 66 feet
Maximum Grade: ____________________________

**Right of Way**
Will Additional ROW or easement be acquired? _Yes__  ROW acquisition by:   City DOT
Has any ROW easements been acquired since 7-1-72: _Yes__  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): Floodplain impacts
Will there be any impacts to 4(f) or 6(f) properties: Unknown, but unlikely
Airports: N/A  Public Hearings: At a minimum a public open house
Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex, possible EA
Transportation Enhancements: Sidewalks, Shared-Use Paths, Trees/Landscaping, ITS
Intermodal: This is a city bus route and needs to be accommodated
Pedestrian Needs: Almost all of corridor lacks pedestrian facilities

<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>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Railroads Crossings**

**Purpose and Need Statement:**
Broadway and the connecting arterials (20th Ave, 31st Ave, 37th Ave) are currently asphalt road sections which have failing pavements. The sections can no longer handle the ESALs from truck loading as these sections have developed over the decades.

There are several geometry issues that cause traffic and safety issues such as negative lane offsets and misaligned intersections. Also, there are inadequate turn lane lengths, access spacing issues, and issues associated with the corridors being above the critical crash rate. The corridors need infrastructure replacement such as upsized storm sewers and the replacement of the failing structural plate pipe that carries Puppy Dog Coulee. Some water and sewer work may be needed as areas are reconstructed. The corridor needs replacement of the existing street lighting system with new LED fixtures. The corridors lack pedestrian facilities except on 31st and 37th Avenues. There are no pedestrian facilities on Broadway from 19th Ave SW to the south city limit line.

Existing Conditions:

1. When was the current street section built? Has there been any additional
maintenance to the street section?
The original Broadway section was built in 1961. The other roadways were built starting in the 1970s through 1980s. The last maintenance on Broadway occurred in 2021 with a chip seal and fog seal from city limits to 31st Ave SW. The NDDOT performed an overlay on the remaining Broadway section in 2016.

2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes?
- Broadway: 4 driving lanes with left and right turn lanes at various locations.
- 20th Ave: 4 driving lanes with left turn lanes at Broadway and 4th St
- 31st Ave: 2 driving lanes with left turn lanes at Broadway
- 37th Ave: 2 driving lanes with left turn lanes at Broadway and transitions to 4 driving lanes west of the Broadway intersection

All driving lanes appear to be 12’ in width and turn lanes are a minimum of 12’ with some at 13’.

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.

All pavement sections are asphalt except a small portion of at the intersection of Broadway/20th Ave and Broadway/37th Ave east.

The pavement is generally in fair to poor condition. The City recently chip sealed Broadway and paver leveled some severe rutting. After one month, the section started to rut again. There are severe base problems under the asphalt pavement.

The concrete pavements are generally in fair condition with some spalling and both transverse and longitudinal cracking. The City has performed some panel replacements in the last two years.

4. Any existing geometric concerns?
   - There are geometric concerns at 4th St/20th Ave, 28th Ave/Broadway, 31st Ave/Broadway (negative lane offsets), 37th Ave/Broadway (negative lane offsets), 40th Ave intersection visibility issues.

5. Are there any access points to adjoining properties that present a special concern?
   - Yes, several that are too close to intersections or are within the functional area of the intersections.

6. Are there any existing sidewalks or shared use path in place?
31st Ave and 37th Ave have shared used paths in place. All other corridors do not have any pedestrian or bicycle facilities.

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 condition of the storm sewers vary along the project. The SPP that carries Puppy Dog Coulee is in need of replacement. All pipes need to be modeled to ensure sizing is adequate.

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? Some watermain upsizing may be needed. Most water and sanitary sewer mains are PVC and should be in good to fair condition. Some relocations of hydrants or other items will be required.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used? The lighting system is old and is in need of replacement. All lighting is HPS and needs to be upgraded to LED.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed? 20th Ave/4th St, 20th Ave/Broadway, 31st Ave/Broadway, 37th Ave/Broadway The entire Broadway corridor is above the critical crash rate. The intersections of 20th Ave and 31st Ave have more crashes than the others. 20th Ave used to be on the high crash list, but hasn’t been in recent years.

Remarks: The City recognizes this is a high cost/high impact project and the NDDOT will likely need to program the improvements over several years. The City want to work with the NDDOT to develop phasing for this important project to address the project needs.

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.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Cost/ft, EA</th>
<th>Length</th>
<th>Total</th>
<th>Federal/State</th>
<th>Local</th>
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<tbody>
<tr>
<td>South Broadway 19th Ave to 20th Ave</td>
<td>$1,791.08</td>
<td>1100</td>
<td>$1,970,186.29</td>
<td>$1,773,167.66</td>
<td>$197,018.63</td>
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<td>South Broadway 28th Ave to 41st Ave</td>
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<td>$1,295,546.74</td>
<td>$323,886.69</td>
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<td>Two-way Frontage Road</td>
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<td>1420</td>
<td>$678,221.70</td>
<td>$542,577.36</td>
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<td>20th Avenue 4th St to 480 E. Broadway</td>
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<td>$2,650,796.10</td>
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<td>31St Avenue - 320 W. Broadway and 220 E. Broadway</td>
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<td>37th Avenue - 750 W. Broadway and 300 E. Broadway</td>
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<td>$1,880,632.37</td>
<td>$1,504,505.89</td>
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<td>Signals - 20th Ave, 31st Ave, 37th Ave, 4th St</td>
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<td>$1,432,862.76</td>
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<td>$3,763,775.83</td>
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<td>Water/Sewer Estimate Placeholder</td>
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All costs are 2020 costs inflated to construction year 2026 at 3% per year