

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 2/26/2024

PRIORITY# 1

Regional: N Urban Roads: Y

City: Minot

Street: 16th St SW - Burdick Expressway to 300' south of
14th Ave, Burdick Expressway – 300' east and west of 16th
St

County: Ward Length: 3200 feet

Proposed Improvement: Complete reconstruction with new concrete pavement, new storm sewer,
detention pond, watermain relocation, shared use path, sidewalks, traffic signal, street lighting,
signing and striping.

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non- Participating	Total
500	1353	450	0	12,207		143	14,653

Present Road: Surface Width? 45' Average

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: 12,905 Yr: 2023

Travel Way Width : 57'

ADT Design: 16,060 Design year 2045

No. of Lanes: 5

Design Speed: _____

Roadway Width: 61'

Maximum Curve: Unknown

Min. R/W Width: 80'

Maximum Grade: 5%

Right of Way

Will Additional ROW or easement be acquired? Yes ROW acquisition by: **City**

Has any ROW easements been acquired since 7-1-72: Yes ROW Condemnation by: **City**

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):

No

Will there be any impacts to 4(f) or 6(f) properties: No

Airports: No Public Hearings: Yes

Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex

Transportation Enhancements: ADA Upgrades, Sidewalk and Shared Use Path replacements, Replace pedestrian push buttons at crossings

Intermodal: No

Pedestrian Needs: ADA Upgrades, Sidewalk and Shared Use Path replacement, replacement of pedestrian push buttons at crossing.

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF	1	2 Underpass				

Purpose and Need Statement:

Purpose of Project

The purpose of this project is to:

- Restore the structural and functional condition of the existing asphalt pavement segments, by reconstructing 16th Street SW to concrete pavement from:
 - 14th Avenue SW to Burdick Expressway
 - Burdick Expressway intersection (including 300 feet each direction on Burdick Expressway)
- Replace deficient and obsolete portions of the City watermain and sanitary sewer system.
- Provide acceptable traffic operations within the corridor.
- Provide storm sewer upgrades and allow for future storm sewer system expansion.
- Improve pedestrian and bicycle facilities along the corridor, and ensure that they meet ADA requirements.

Need for Project

16th Street SW is typically a 4-lane roadway section within the project corridor, with two travel lanes in each direction and occasional dedicated turn lanes at intersections.

- The existing asphalt pavement (located from 14th Avenue SW to Burdick Expressway and from 7th Avenue SW to 5th Avenue SW) has exceeded its useful life and needs to be replaced.
- No dedicated left turn lanes exist at the 11½ Avenue SW or 14th Avenue SW intersections.
- Portions of the City utility infrastructure within the project corridor are constructed with older materials, such as cast iron or vitrified clay, and need to be replaced.

- The storm sewer system south of 11th Avenue SW needs to be extended and a regional detention pond is needed to handle future storm sewer system expansions to the south.
- Existing sidewalks and curbs do not meet ADA requirements.
- The existing traffic signal system at 11th Avenue is deteriorating and in need of replacement.
- The existing lighting system throughout the corridor is deteriorating and in need of replacement.

Existing Conditions:

1. When was the current street section built? Has there been any additional maintenance to the street section?
This area was originally platted in the late 1950's and early 1960's. The first record of asphalt paving of the area states 1964. With multiple reconstructions throughout localized areas of the section. There was also a mill and overly of 16th St SW from W Burdick Expressway to 11th Ave SW in 2018.
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?
Four 11 foot wide drive lanes with left turn lanes at Burdick and 11th Avenue.
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 section has rutting, longitudinal cracking, and transverse cracking. The section also has localized alligator cracking and raveling. The section has been patch on numerous occasions.
The Burdick intersection is faulting, spalling, cracking, and has many broken slabs. Some of the existing concrete will require minor repairs for spalling and cracking.
4. Any existing geometric concerns?
Lack of dedicated left turn lanes or two way left turn lanes.
5. Are there any access points to adjoining properties that present a special concern?
None
6. Are there any existing sidewalks or shared use path in place?
Yes, sidewalks need to have some curb ramps constructed for compliance and the shared-use path from W Burdick Expressway to 14th Ave SW will need to be replaced to comply with ADA guidelines.
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Existing storm sewer is in fair condition, but is undersized. It is anticipated that

storm sewer at intersection of W Burdick Expressway and 16th St SW will be replaced. A new storm sewer system will be installed on 16th St south of 11th Ave to facilitate future drainage improvements. A large detention pond is needed to reduce flooding potential at the underpass. There is a spring located in this area that constantly destroys the asphalt pavement. This must be mitigated as part of the project.

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?
Utilities in this section are in good condition. A section of 16" watermain will have to be relocated for pond construction.
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
The existing lighting is HPS fixtures on 40' poles with 6' davit arms, the proposed project will replace the whole system and change the lighting to LED.
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
There are currently traffic signals along 16th St SW at W Burdick Expressway and 11th Ave SW. Per the NDDOT High Crash Location List, none of these intersections are high accident rate locations. No additional lanes are anticipated to be added/needed.

Remarks:

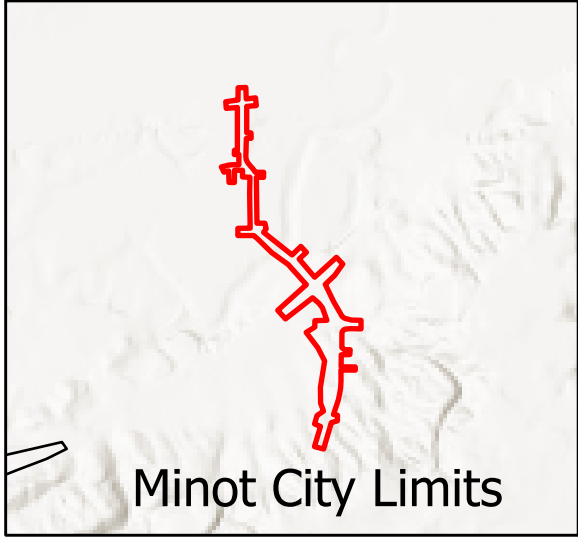
City Engineer: 

Date: 2/28/2024

District Engineer: _____

Date: _____

Note: *Please attach a map showing location and extent of the project, detailed cost estimate, and any additional supporting documents.*



Project Location Map

Project No: SU-4-989(134) PCN: 23860
City of Minot Project 4780
16th Street SW Reconstruction
14th Ave SW to 2nd Ave SW

16th Street SW
RECONSTRUCTION PROJECT

Project Costs

2025 – 16th St Reconstruction: Burdick Expressway to 14th Avenue SW (Phase 1)

Cost Breakdown:

Federal Participating Road Costs:	\$ 7,859,000
Federal Participating Drainage Costs:	\$ 4,348,000
City Costs (Engineering, Right of Way, Water/Sewer)	<u>\$ 2,445,500</u>
Total Cost	\$14,652,500

Revenue Share:

Federal Capped Construction Funds	\$ 7,790,256
City Funds	<u>\$ 6,862,244</u>
Total	\$14,652,500