URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET

DATE:11/08/2023

PRIORITY#1-2025 Regional: (Y)/N Urban Roads: Y/(N)

City: Grand Forks Street:SH297/Demers Ave for 2025

County: Grand Forks Length: The ~0.7 miles

Proposed Improvement: Concrete Panel Repair, Grind, and Selective Dowel Bar Retrofitting of Demers Ave/SH 297. Milling of existing asphalt surfaces and a new 2" asphalt overlay (Central Fire Station to N 6th St excluding overpass, including overpass ramps)

Cost Estimates Breakdown (in $1,000)							
PE	CE	R/W MISC	Utility	Constr.	Bridges	Non-Participating	Total

Present Road: Surface Width? 4 lane divided Surface Type? Concrete

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

Proposed Improvements

ADT Present: ~14,485-17,290 Yr: 2021
ADT Design: ~22,774-33,642 Design year 2045
Design Speed: 35 MPH
Maximum Curve: _____
Maximum Grade: _____

Travel Way Width :65' ~20-25'(ramps)
No. of Lanes: 5
Roadway Width: 65'
Min. R/W Width:90'

Right of Way

Will Additional ROW or easement be acquired? UNK ROW acquisition by: City (DOT)
Has any ROW easements been acquired since 7-1-72: UNK ROW Condemnation by: City (DOT)
Est. No. of occupied family dwelling to be displaced? None Anticipated
Est. No. business to be displaced? None Anticipated

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): None Anticipated
Will there be any impacts to 4(f) or 6(f) properties: None Anticipated
Airports: None Public Hearings: Not Anticipated
Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex
Transportation Enhancements: _____
Intermodal: _____
Pedestrian Needs: Nothing Identified

Railroads Crossings						
RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
None						

Purpose and Need Statement:
This roadway has reached a point in which a rehabilitation project should be considered to extend the life of the pavement and maintain a state of good repair. The most recent rehabilitation project on this portion of SH297 was in 2010.

Existing Conditions:

1. When was the current street section built? Has there been any additional maintenance to the street section?
   This roadway was originally constructed in 1971. A rehabilitation project including diamond grinding was completed in 2010. The ramps were originally constructed in 1976 as a concrete surface, with a supplemental 4" asphalt overlay in 1993, with an additional mill and overlay project in 2011. The 4th Ave S to westbound Demers Ave onramp was modified from a slip lane to a tee-intersection in 2013.

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?
   There are four through lanes approximately 12' wide with left turn lanes and right turn lanes at various intersections. Each ramp (4) is a single driving lane which merges with connecting streets. The withs of the ramps vary from ~20-25' in width.

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.

   The pavement is showing signs of distress comparable with its age and a scheduled rehabilitation project will likely improve the pavement condition and extend the life of the pavement delaying the need for a reconstruction project. This project is proposed to primarily include concrete panel repair and grinding for the roadway. A pavement condition index and International Roughness Index analysis was completed in 2021. The weighted PCI value was 84 and the weighted IRI value was 116 in/mi. The asphalt pavement is showing signs of distress comparable with its age and a mill & overlay will likely improve the condition of the current roadway. The project is proposed to mill the existing asphalt surface and construct a 2" overlay of hot bituminous pavement. The ramps have an average PCI value of 42 and the average IRI value was 158 in/mi.

4. Any existing geometric concerns?
   The existing geometrics appear to be satisfactory at this time.

5. Are there any access points to adjoining properties that present a special concern?
   The access at 1st Ave N is unusually large, measuring approximately 175' at its widest point. Three stop signs are installed on the southbound approach, two of which are located in the roadway pavement. Consideration should be made at narrowing the throat of the north leg of the intersection. There is likely access points of special concern for the overpass ramps.

6. Are there any existing sidewalks or shared use path in place?
   On the portion of the project west of the overpass, there is a shared use path on the south side of Demers Ave and a sidewalk on the north side. On the eastern side of the project, there is a sidewalk on the south side from approximately 1st Ave N to the eastern project limits, and on the north side there is sidewalk from N 8th St to the eastern project limits. Additionally for the overpass ramps, there is a shared use path on the North side of the WB Demers Ave on-ramp and EB off-ramp 4th Ave S on the northern edge of project limits. There is also an existing sidewalk that runs along the EB on-ramp 4th Ave S on the southern edge of project limits.

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 original storm sewer varies significantly in material, age, and size. The condition of the storm sewer is unknown.

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?
There are existing city water lines underneath the northern edge of the western segment of pavement. There is existing water and sanitary sewer under the northern edge of the eastern segment. Additionally for the overpass ramps, there are existing water lines underneath the eastern edge of the project limits near where the ramps diverge/converge on 4th Ave S. Condition of sanitary sewer and sanitary force main are unknown.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
There are 250W HPS and 400W HPS fixtures on 40' tall poles offset on both sides of the road. Consideration should be made regarding replacing wiring and fixtures from HPS to LED fixtures. Additionally for the overpass ramps, there are 250W HPS and 150W HPS fixtures on 40' tall poles located on one-side of road inside of the project extents.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
There is a set of existing emergency signals located near the Fire Station. There have been two fatal crashes which involved collision into the southern emergency traffic signal pole. One fatality was on August 22, 2018, and another on October 16, 2007. Consideration should be made to relocate the signal pole outside of the clear zone. This pole is proposed to be sandblasted and painted with the regional traffic signal rehabilitation project currently programmed for 2025. Additionally for the overpass ramps, there was one non-incapacitating injury on the Demers skyway EB on-ramp on November 14, 2022. Additional turn lanes are not needed for the ramps at this time.

Remarks:

City Engineer: Allen N [signature] Date: 11/15/23

District Engineer: Edward Pavlish Date: 11/16/23

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

CPR & Grind Demers Ave (Central Fire Station to Skyway & Skyway to N 6th St) - 2025

Legend

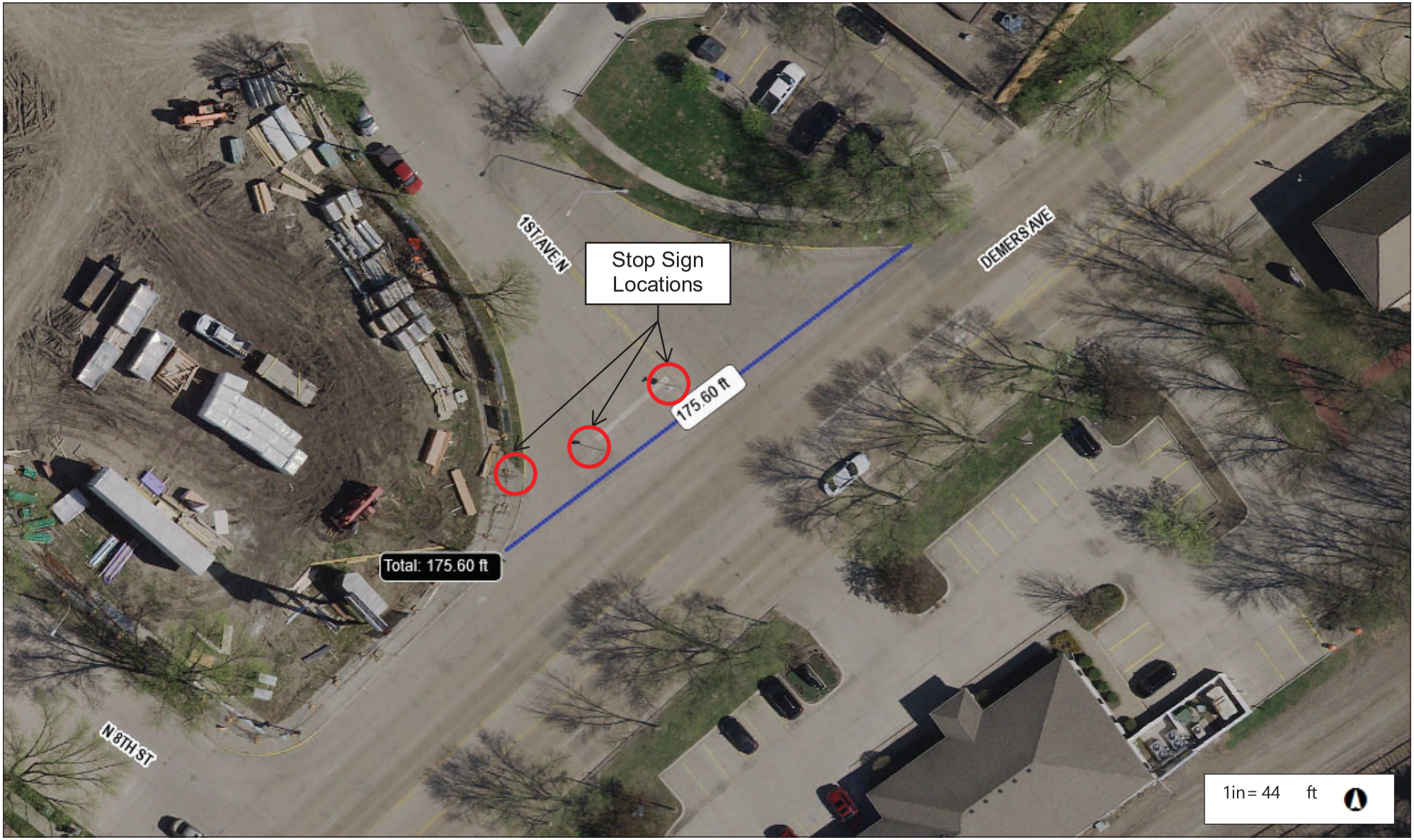
- Active Parcels
- Boundary City Limit
- Boundary Gray Area
- Address Labels
- Road Labels
- RoadCenterlines_9K
  - <all other values>
  - I
  - S
  - U
- Waterbodies
- FacilitySites_Parks_9K
- Railroad
- MunicipalBoundaries

Notes

1,229.2 0 614.58 1,229.2 Feet

NAD_1983_StatePlane_North_Dakota_North_FIPS_3301_Feet
City of Grand Forks GIS

Street Geometry - 1st Ave N & Demers Ave



0.0 0 0.01 0.0 Miles

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City of Grand Forks GIS

2. Existing Bicycle and Pedestrian Facilities Map