



August 24, 2022

Honorable Mayor and Council Members
City of Princeton, MN
705 N 2nd Street
Princeton, MN 55371

Re: Reconstruction of 7th Avenue N/ CSAH 4
WSB Project No. 021244

Dear Mayor and Council Members:

WSB is pleased to provide you with the following proposal for engineering services to complete preliminary design and feasibility study for the reconstruction of 7th Avenue N (CSAH 4) in Princeton from 12th Street to Rum River Drive. The scope of services for this project is based on discussions with City staff.

PROJECT UNDERSTANDING

The reconstruction of 7th Avenue N/County Road 4 in Princeton has been identified as a priority project for both the City and Mille Lacs County. The project limits extend from Rum River Drive north to 12th Street. The roadway has been on Mille Lacs County's capital plan to receive a bituminous overlay for the past several years.

Existing utilities along 7th Avenue include sanitary sewer and watermain. All utilities are nearing the end of their life cycles and are in need of replacement. The sanitary sewer is currently undersized to service full development to the north. Since the utilities need to be replaced, the City has been delaying the County from completing any improvements to 7th Avenue with the intent that the pavement would be replaced when the utilities were reconstructed. As part of this study, 7th Avenue will be evaluated for the option to reconstruct as an urban roadway with curb and gutter and storm sewer.

As part of the project to reconstruct 7th Avenue, the intersections at 12th Street and Rum River Drive will both be evaluated for operations to identify if improvements are needed.

7th Avenue North is an important connector roadway within the City of Princeton. Reconstructing the roadway and existing utilities will have an impact on the daily function of residents, commuters and school bussing. The preliminary design will include an analysis of the impacts and evaluation the constructability of the project.

PROPOSED SERVICES

Survey and Base Mapping (\$8,864)

- Complete topographic survey for the project corridor.
- Survey shall include all surface features within the right of way, elevations at high and low points, and other areas sufficient to generate cross sections and profiles
- Survey all sanitary sewer, hydrants, gate valves, and curb boxes

- Contact the private utility companies and request mapping information and marking of all utilities
- Create base map with completed with line work for all streets and utilities

Geotechnical Soil Borings (\$8,000)

- Obtain soil borings for the area along the alignment, 5 borings at/to 25-foot depths
- Obtain geotechnical report with pavement evaluation and recommendations
- Scope Assumptions:
 - Traffic control not included in estimate, if needed City will assist.
 - Gopher State One site meet.
- Standard Penetration Test borings and sampling
- Routine lab tests (moisture content and P200 wash)
- Classify soils with USCS and prepare boring logs
- Preparation of a Geotechnical Report with recommendations for utilities, subgrade improvements and pavement design

Stormwater (\$6,500)

WSB will review the existing drainage conditions on 7th Avenue. Existing roadway condition is rural (no curb and gutter) and it is anticipated that an urban section (curb and gutter) may be constructed. A review of both conditions will be completed to determine the drainage impacts of going from rural to urban conditions. Proposed collection and conveyance needs for both conditions will be determined. Potential locations for stormwater management and rate control will also be identified as part of the feasibility report. Types of BMPs and design considerations will be included. Costs for the urban and rural system as well as stormwater management will be included.

Sanitary Sewer and Watermain (\$10,400)

Watermain

Evaluate existing watermains, determine sizing of new watermains using the WaterCAD model currently being updated as part of the Comprehensive Water System Plan for Princeton Public Utilities, and prepare cost estimates.

Sanitary Sewer

Evaluate existing sanitary sewers, determine sizing of new sanitary sewers and North Lift Station improvements for up to three scenarios (two intermediate based on existing system capacity and one ultimate build out) using the SewerCAD model that was updated as part of the Comprehensive Sanitary Sewer Plan, and prepare cost estimates. This includes feasibility-level sizing of lift station improvements, but it does not include a lift station site visit or condition assessment.

Intersection and Street Improvements (\$15,000)

Up to three layouts will be developed that will show typical sections, intersection alternatives and preliminary construction limits. The layouts will include existing right of way and identify if any additional right of way that is required. Sidewalk and an urban section will be considered as an option. The intersections of 7th and Rum River Drive and 7th and 12th Avenue will be reviewed, including a cursory review of the existing safety and traffic operational issues. Realignment and/or roundabouts will be considered, and a sketch of the solutions will be drafted. The preliminary limits will be based upon lidar survey and topographic survey as available. Cross sections and profiles will be developed and shown in cross section plan sheets.

As an optional task, WSB will develop a public engagement plan and host a live and virtual open house. WSB will create the materials, mailings, website and attend the open house.

The anticipated cost of the above would be approximately \$6,500.

Feasibility Report (\$17,500)

- Full report with summary of the constructability and recommendations
- Coordination Mille Lacs County
- Constructability of the design
- Preliminary concept drawings and typical sections
- Identification of funding sources
- Project schedule

ENGINEERING SERVICES FEE

We are proposing to complete the work on a cost-reimbursable basis in accordance with our current fee schedule of \$66,264.

If this proposal is acceptable, please execute the signature block below and return as our authorization to proceed.

Please give me a call at 612-219-3500 if you have any questions. Thank you.

Sincerely,



Jennifer Edson
City Engineer
WSB