



**BOLTON  
& MENK**

Real People. Real Solutions.

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September 17, 2019

Mr. Sean Simonson  
Engineering Manager  
801 Washington St.  
Northfield, MN 55057

RE: Engineering for 2020 Mill & Overlay Project  
Additional Project Scope

Dear Mr. Simonson:

The Northfield City Council approved additional project scope to the 2020 Mill & Overlay Project at the August 20, 2019 City Council meeting. The additional scope of work items will result in additional design and construction fees to complete. Below is a list of the proposed changes to the project since the original contract was submitted, as described in your updated scope of services request letter dated August 27, 2019:

- College Street Protected Bike Lane (from First Street to Third Street) replacing the parking on the west side of College Street.
- Storm Drain placement and improvements analysis for the entire project area.
- Bumpout analysis of the entire project area.

## **DESIGN PHASE**

The additional protected bike lane on College Street will require a feasibility study to be conducted followed by the creation of three preliminary options. Graphics will be generated for each approved option for display at the first Neighborhood Meeting. The City will select one option to move forward with and provide any comments for a refined design. Topographic survey of the entire corridor will be required for final design. Final design will incorporate corridor design in Civil 3D to generate plan and profile sheets. Cross sections will be created to verify the grades in the area and to ensure ADA requirements can be met. They will also be analyzed and retaining walls will be included, if required. Storm sewer may need to be relocated/re-designed to accommodate new curb lines, depending on the final design.

The storm drain placement and improvements will involve spread calculations to determine any significant deficiencies in storm drainage and catch basin placement. Results will be discussed with the City and catch basins will be added at intersections to accommodate new intersection grades and improve existing drainage, where possible. This work will not include topographic survey of storm structures or storm structure inventories. Any significant storm sewer re-design, such as added mid-block catch basins, resulting from this analysis is not included in this proposal.

The bumpout analysis of the project area will involve the review of pedestrian flow to determine intersections that may be candidates for bumpouts. The pedestrian flows will be reviewed by onsite observation of up to one day. Intersections will be strategically observed along the entire corridor for concentration of pedestrian crossings relative to one another. Pedestrian counts will not be recorded as part of this process. Results of the analysis will be discussed with the City to determine final proposed bumpout locations, if any are selected. Topographic survey of the entire intersections will be required to allow for final design of the bumpouts. These intersections would require detailed design intersection sheets and analysis of storm sewer structure locations. For purposes of developing our fee, we are assuming four intersections will be topographically surveyed and the design will include bumpouts at all of the crossings in these four intersections.

**TOTAL DESIGN FEE = \$48,527**

### **CONSTRUCTION PHASE**

The added scope changes to the original project will require construction services in addition to that described in our original proposal. The following is a summary of the requested services and their associated fees.

#### **CONSTRUCTION SERVICES**

This task will involve the completion of all necessary construction administration, construction observation, and construction staking by a Bolton & Menk survey crew as required during the project construction due to the added project elements. The added project elements are expected to add additional weeks of construction to complete which will require additional assumed construction hours for construction administration and construction observation. Additional construction staking will be required to stake the additional College Street bikeway and potential additional bumpouts. The original proposal required minimal construction staking other than the Fourth Street bikeway and Third Street sidewalk since the majority of the project is a mill and overlay and does not require significant staking.

**CONSTRUCTION SERVICES FEE**

**\$26,941**

#### **MATERIALS TESTING**

Bolton & Menk has a contract with a geotechnical sub-consultant to provide additional materials testing for the added project elements. This task will primarily be associated with the testing of the additional separated bikeway or trail on College Street and the testing of the potential added bumpouts.

**MATERIALS TESTING FEE**

**\$6,000**

**TOTAL CONSTRUCTION FEE = \$32,941**

**TOTAL ADDITIONAL PROJECT FEE = \$81,468**

We are requesting an additional \$81,468 to complete the additional design, analysis, and construction services as described above. Please see the attached spreadsheet with our breakdown of estimated hours that will be required to complete the additional work for these scope changes.

These added project elements will provide defining characteristics for the neighborhood, including safety improvements that will enhance an already exciting project. Please let me know if there are any services that you would like to discuss, add or eliminate and we can adjust the proposal accordingly. We look forward to continuing to work with you and making this a successful project!

Sincerely,

BOLTON & MENK, INC.



Brian Hilgardner, P.E.  
Principal

This document shall serve as an updated scope of services to the Consultant Service Contract between the parties, dated August 20, 2019 (the "Contract"), pursuant to Section I.B. thereof. All other provisions of the Contract shall remain in full force and effect except as herein modified.

Accepted: \_\_\_\_\_

City of Northfield

## Detailed Cost Estimate

Client: City of Northfield		Bolton & Menk, Inc.												
Project: 2020 Street Improvements - Amendment 1														
Task No.	Work Task Description	Principal-in-Charge	Project Manager	Project Engineer	Engineering Technician	Water Resources Engineer	Project Surveyor	Survey Technician	Survey Crew	Landscape Architect	Resident Project Representative	Clerical	Total Hours	Total Cost
1.0	Feasibility Study	2	4	20	5	0	0	0	0	0	0	0	31	\$4,183
2.0	Topographic Survey	0	0	0	0	0	7	9	30	0	0	2	48	\$6,784
3.0	Design	4	16	100	32	40	0	0	0	96	0	2	290	\$37,560
4.0	Construction Services	2	8	10	0	0	7	8	75	0	100	0	210	\$26,941
5.0	Geotechnical Services	<i>Geotechnical Sub Consultant</i>											579	\$6,000
<b>Total Hours</b>		8	28	130	37	40	14	17	105	96	100	4	579	
<b>Average Hourly Rate</b>		\$171.00	\$139.00	\$128.00	\$145.00	\$138.00	\$156.00	\$130.00	\$145.00	\$120.00	\$112.00	\$86.00		
<b>Subtotal</b>		\$1,368	\$3,892	\$16,640	\$5,365	\$5,520	\$2,184	\$2,210	\$15,225	\$11,520	\$11,200	\$344		
<b>SUBTOTALS</b>														
<b>Design Services</b> (Tasks 1-3)													\$48,527	
<b>Construction Services</b> (Task 4)														
*Includes additional construction staking														
*Includes 10 hours per week of construction administration for an additional 2 weeks														
*Includes 50 hours per week of Resident Project Representative for an additional 2 weeks													\$26,941	
<b>Geotechnical Services</b> (Task 5)														
*Includes additional construction materials testing in accordance with MnDOT Schedule of Materials Control													\$6,000	
<b>Total Fee</b>													<b>\$81,468</b>	