

Real People. Real Solutions.

Ph: (952) 890-0509 Fax: (952) 890-8065 Bolton-Menk.com

June 18, 2019

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

RE: Engineering for 2019 Street Improvement Project Additional Project Scope

Dear Mr. Simonson:

## **DESIGN PHASE**

As you are aware, the 2019 Street Improvement Project has had several additions to the project scope which have resulted in additional design phase fees being accrued. We have been tracking these fees and updating the City so the project team can continue to evaluate overall project costs. Below is a list of several of the changes to the project since the original contract was submitted:

- Additional Sidewalk/ADA Ped Ramps on:
  - South side of Armstrong Rd from 5<sup>th</sup> St to Lincoln St
  - o South side of Forest Ave from Odd Fellows Ln to Existing Walk (W of Orchard)
  - $\circ$  East side of Orchard St from Existing Walk (N of 5<sup>th</sup>) to 4<sup>th</sup> St
  - West side of Plum St from Existing Walk (N of 5<sup>th</sup>) to 4<sup>th</sup> St
  - South side of 4<sup>th</sup> St from Odd Fellows Ln to Poplar St
- Linden Street/Lockwood Bike Route signing & striping plans from Meldahl to Lincoln & continuing on Lockwood from Meldahl to Gill
- Drain tile sump lines to service homes on Blue Stem Court
- 3<sup>rd</sup> St Arts Corridor
  - LA preliminary designs/sketches
  - Meetings/Open House materials preparation and participation
  - LA final plans, specific details, and specifications for landscaping, colored concrete, Arts Guild Plaza, Sculpture Plazas, etc.
  - o Lighting final plans, details, and specifications, including coordination with Xcel
  - Civil final design redoing 3<sup>rd</sup> Street to incorporate bumpouts, circular ADA ped ramps, railroad medians, Arts Guild Plaza, Sculpture Plazas, road alignment to meet State Aid requirements including striping, concrete stamps, etc.
  - Coordination with UP railroad and permitting requirements
  - Storm sewer relocation to accommodate ADA bumpouts
- Watermain redesign to match record drawings provided after final design was completed
- Rebidding Services and Plan/Specification Changes Associated to Revised Bid Package

The additional sidewalk work resulted in the design team having to create corridors in Civil 3D rather than a simple CAD plan view. Cross sections were created because of the grades in the area and the necessity to ensure ADA can be met. This takes considerably more time to design in Civil 3D rather than simply shading a plan in CAD. In addition, several of the boulevard areas were too steep to be graded and required retaining wall design.

The majority of the areas listed above required additional topography survey and structure inventories, much of which had to be completed during the winter with snow and ice removal necessary to complete the work. Due to the progression of work, this also required multiple separate trips to complete. We attempted to track this time while completing the work so we have a very good handle on the additional hours spent for each area.

The arts corridor involved creating several preliminary concept plans along 3<sup>rd</sup> Street to be presented to a stakeholders group, the City Council, and the public. Bolton & Menk helped prepare materials for these meetings and were in attendance to answer questions and explain different options that could be considered. We also created final plans for both construction as well as the landscape/arts and lighting improvements that were decided and approved by the City Council. The civil construction plans for this corridor were redone to accommodate the new LA elements and required significant time to redesign all of the grades to meet ADA in the bumpouts and generate new intersection details. All final plans and specifications for this work had to be completed in an accelerated timeline with many staff working on it at once due to the late approval of the work's inclusion in the project coupled with the deadline set by the City to submit to State Aid for review.

All of these project additions have resulted in an increase to the overall project cost. The construction cost estimate was approximately \$3.0M without contingency, or \$3.4M with a 15% contingency. Final bids after rebidding the project came in at \$3,572,847.70. We are requesting an amendment for \$142,100. Please see the attached spreadsheet with our breakdown of estimated hours that have been accrued to accommodate the described scope changes. Our total proposed design fee with this amendment would be \$248,456 or about 6.95% of the estimate construction cost. This is well within the industry standard for completion of topography survey, preliminary and final design services and in line with our original fees proposed and initial construction estimate.

## TOTAL DESIGN FEE = \$142,100

## **CONSTRUCTION PHASE**

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

#### **CONSTRUCTION STAKING**

This task will involve the completion of all necessary construction staking by a Bolton & Menk survey crew as required during the project construction. This task will primarily be associated with the staking of the additional sidewalk areas, retaining walls, and the additional arts corridor components. The original proposal required very minimal construction staking other than the watermain replacement since the majority of the project was reclamation and does not require staking.

#### **CONSTRUCTION STAKING FEE**

#### **CONSTRUCTION MANAGEMENT (LANDSCAPE ARCHITECT)**

Bolton & Menk is prepared to provide additional construction administration from that listed in the original proposal. This will be to provide support and shop drawing review for the landscape architect elements and lighting associated with the 3<sup>rd</sup> Street corridor. We are assuming 100 hours throughout construction for the work associated with this task.

#### **CONSTRUCTION MANAGEMENT (LA) FEE**

\$14,400

TOTAL CONSTRUCTION FEE = \$37,400

## TOTAL PROJECT AMENDMENT FEE = \$179,500

We can't thank you enough for assisting us in working through all of the challenges that come with this project. It has been great partnering with you on what has become a very innovative project in defining an important downtown corridor of the City with unique, artistic features that will serve the public with safety and aesthetic improvements now and into the future.

Sincerely,

BOLTON & MENK, INC.

Brian Hilgardner, P.E. Principal

Accepted:

City of Northfield

N:\Proposals\Northfield\2019 Street Improvement Project 100518\Amendment\Northfield Amendment\_20190619.docx

Bolton & Menk is an equal opportunity employer.

#### \$23,000

# **Detailed Cost Estimate**

Client: City of Northfield Project: 2019 Street Improvements - Amendment		Bolton & Menk, Inc.								
Task No.	Work Task Description	Principal-in- Charge/Project Manager	Project Engineer	Engineering Technician	Landscape Architect	Registered Land Surveyor	Survey Crew	Total Hours	Total Cost	
1.0	Additional Walk/ADA Ped Ramps	16	40	144	0	16	40	256	\$34,544	
2.0	Linden/Lockwood Bike Route	2	8	28	0	0	0	38	\$5,058	
3.0	3rd Street Arts Corridor	28	135	312	218	18	52	763	\$96,405	
4.0	Watermain Redesign	4	12	30	0	0	0	46	\$6,120	
	Total Hours	50	195	514	218	34	92	1103		
	Average Hourly Rate	\$165.00	\$115.00	\$136.00	\$111.00	\$145.00	\$135.00			
	Subtotal	\$8,250	\$22,425	\$69 <i>,</i> 904	\$24,198	\$4,930	\$12,420			
	SUBTOTALS									
	Design Services (Tasks 1-4)								\$142,127	
	Total Fee								\$142,127	