

**ACTION TRANSMITTAL No. 2018-12**

**DATE:** January 12, 2018  
**TO:** TAC Funding and Programming Committee  
**PREPARED BY:** Joe Barbeau, Senior Planner (651-602-1705)  
**SUBJECT:** Scope Change Request for Minneapolis's University of Minnesota Protected Bikeways Project  
**REQUESTED ACTION:** The City of Minneapolis requests a scope change to its University of Minnesota Protected Bikeways Project (SP # 141-030-041) to remove a segment of the project and add an additional segment.  
**POSSIBLE ACTIONS:** The Committee can recommend approval or denial of the request and recommend a federal award amount.

**BACKGROUND AND PURPOSE OF ACTION:** The City of Minneapolis was awarded \$1,030,294 in STP (Transportation Alternatives) funding in the 2014 Regional Solicitation to construct the University of Minnesota Protected bikeways project, which was to run two segments:

Seward to Dinkytown:

1. 20th Avenue S from Minnehaha Avenue S to 4th Street S
2. 4th Street S from 19th Avenue S to 20th Avenue S
3. 19th Avenue S/10th Avenue SE from 4th Street S to 5th Street SE

University Avenue to East Hennepin Avenue:

4. 15th Avenue SE from University Avenue SE to Rollins Avenue SE
5. Rollins Avenue SE from 15th Avenue SE to 18th Avenue SE
6. 18th Avenue SE from Rollins Avenue SE to East Hennepin Avenue

The project is scheduled for fiscal year 2019.

Since the project was awarded, the City received State bond funds for the rehabilitation of the 10<sup>th</sup> Avenue Bridge over the Mississippi River, a half-mile length included within number 3, above. The newly-funded project will include a protected bikeway. Therefore, the City wishes to remove this stretch from its TAB-funded project to avoid redundancy. This would split number 3, above into the following two bullets:

- 19th Avenue S from 4th Street S to 2nd Street S
- 10th Avenue SE from University Avenue SE to 5th Street SE

Further, in lieu of the portion of the project being removed, the City wishes to extend the "Seward to Dinkytown" stretch cited in the bottom bullet from 5th Street SE roughly a quarter-mile to 8th Street SE, citing 8th Street SE as a logical bikeway connection.

**RELATIONSHIP TO REGIONAL POLICY:** Projects that receive funding through the Regional Solicitation process are subject to the regional scope change policy. The purpose of this policy is to ensure that the project is designed and constructed according to the plans and intent described in the

original application. Additionally, federal rules require that any federally-funded project scope change must go through a formal review and TIP amendment process if the project description or total project cost changes substantially. The scope change policy and process allow project sponsors to adjust their projects as needed while still providing substantially the same benefits described in their original project applications.

A TIP amendment request accompanies this request.

**STAFF ANALYSIS:** The project was funded in the Multiuse Trails and Bicycle Facilities category in the 2016 Regional Solicitation. It scored 885 points, out of 1,000. The highest-scoring unfunded project, Bloomington’s France Avenue Trail, scored 778. Staff shared the scope change request with those scorers whose scores could conceivably change due to the proposal. The project would still score 790 points. Most scorers were hesitant to remove significant points since the entire purpose of the original project will be completed.

The City did not state a requested federal proportion. Assuming the scope change request is approved, options for federal funding allocations include the following as described below and shown in Table 1.

1. **Option 1-Full 80%:** Providing the full original award (**\$1,030,294**). This is slightly less than 80% of the full project cost, inflated to 2019.
2. **Option 2-Proportionate Value of Removed Elements:** Providing an amount based on the proportionate value of the segment being removed. The segment composes roughly 3.3% (\$37,238) of the total cost (\$1,122,494, based on original elements in 2015 dollars). Reducing the federal proportion by that amount would bring the total federal award to **\$996,115**.
3. **Option 3-Proportionate Value of Removed Elements Plus Credit for New Elements:** If the Committee believes it is appropriate to shift funding to the new segment, option 2 can be adjusted to include that segment. This would recover nearly 80% (\$29,314) of amount removed in step 2. This would bring the federal award to **\$1,023,022**.

Table 1: Funding Options

<b>Options</b>	<b>Original STBG Award</b>	<b>Decrease in Funding</b>	<b>New STBG Award</b>
Option 1-Full 80%	\$1,030,294	\$0	\$1,030,294
Option 2-Value of Removed Elements	\$1,049,400	\$53,285	\$996,115
Option 3-Value of Removed + Credit	\$1,049,400	\$26,378	<b>\$1,023,022</b>

**ROUTING**

<b>TO</b>	<b>ACTION REQUESTED</b>	<b>COMPLETION DATE</b>
TAC Funding & Programming Committee	Review & Recommend	
Technical Advisory Committee	Review & Recommend	
Transportation Advisory Board	Review & Approve	

January 9, 2018

Mr. Timothy Mayasich  
Funding and Programming Chair  
Metropolitan Council  
390 Robert Street North  
St. Paul, MN 55101-1805

SUBJECT: U of M Protected Bikeways  
Scope Change Request  
S.P. 141-030-041

The City of Minneapolis was successful in the 2015 federal funding solicitation for Transportation Enhancements (TE) for the construction of protected bikeways connecting the University of Minnesota (U of M) campus to surrounding neighborhoods. The project, known as the U of M Protected Bikeways project, is programmed for construction in 2019. The 2018-2021 State Transportation Improvement Program (STIP) includes \$1,030,294 in federal funding (total project construction cost of \$1,287,868) for a protected bikeway on the following routes:

- 20<sup>th</sup> Avenue S from Minnehaha Avenue S to 4<sup>th</sup> Street S
- 4<sup>th</sup> Street S from 19<sup>th</sup> Avenue S to 20<sup>th</sup> Avenue S
- 19<sup>th</sup> Avenue S/10<sup>th</sup> Avenue SE from 4<sup>th</sup> Street S to 5<sup>th</sup> Street SE
- 15<sup>th</sup> Avenue SE from University Avenue SE to Rollins Avenue SE
- Rollins Avenue SE from 15<sup>th</sup> Avenue SE to 18<sup>th</sup> Avenue SE
- 18<sup>th</sup> Avenue SE from Rollins Avenue SE to East Hennepin Avenue

The purpose of this letter is to request a scope change for consideration. Since the application was submitted and funds were allocated, the City of Minneapolis has received State bonding funding for the rehabilitation of the 10<sup>th</sup> Avenue Bridge over the Mississippi River. The 10<sup>th</sup> Avenue Bridge project, scheduled for 2019 construction, overlaps with a 0.5-mile segment of the U of M Protected Bikeways project and will include a protected bikeway design as part of the bridge design. The requested scope change aims to eliminate redundancies in project scopes and schedules, while further enhancing the bikeway network around the U of M.

Please consider this formal request from the City of Minneapolis for the change in scope of the U of M Protected Bikeways project for fiscal year 2019.

## Original Project Description

In the 2015 TE funding submittal, the U of M Protected Bikeways project proposed to convert 2.6 miles of existing on-street bike lanes to protected bikeways. A map of the original project limits included in the 2015 TE funding submittal can be found in **Attachment A – Figure 1**.

The overall project objective is to improve the safety of people bicycling around the U of M, which is a high demand location for bicycling. Protected bikeways have the potential to improve safety over a conventional bike lane by physically separating bicycle and motor vehicle traffic.

The protected bikeway design is proposed to consist primarily of signing, striping, and flexible delineators. The project will also include signal improvements for bicyclists and curb elements to separate bicycle traffic from buses at select high-volume transit stops.

## Requested Change of Scope

In 2017, the City of Minneapolis was awarded \$31.875 million in State bonding funds for the rehabilitation of the 10<sup>th</sup> Avenue Bridge between 2<sup>nd</sup> Street S and University Avenue SE. A map of the 10<sup>th</sup> Avenue Bridge project limits can be found in **Attachment A – Figure 2**.

The scope of the bridge work includes reconstructing the existing 0.5-mile long bridge deck and approaches in order to extend the lifecycle of the structure. The project incorporates multi-modal improvements including sidewalks on both sides of the bridge and a two-way concrete barrier-protected bikeway. Construction is proposed to begin in 2019.

The 10<sup>th</sup> Avenue Bridge project limits and proposed construction schedule overlap with the U of M Protected Bikeways project limits and construction schedule. At the time of the 2015 TE funding submittal, the City had not yet secured State funding for the 10<sup>th</sup> Avenue Bridge project, and was not aware that the two projects would overlap in scope or schedule.

To eliminate redundancies between the two projects, the requested scope change for the U of M Protected Bikeways project proposes to remove the 10<sup>th</sup> Avenue Bridge segment between 2<sup>nd</sup> Street S and University Avenue SE. The City of Minneapolis believes it is more prudent for the 10<sup>th</sup> Avenue Bridge project to implement the protected bikeway design because the scope of the bridge project allows for the construction of a concrete barrier-protected bikeway. The concrete barrier design has a much longer lifecycle than flexible delineators and is more effective at separating bicycle and motor vehicle traffic.

In addition to removing the 10<sup>th</sup> Avenue Bridge project segment, the requested change in scope proposes to extend the project limits from 5<sup>th</sup> Street SE to 8<sup>th</sup> Street SE. This change would allow the U of M Protected Bikeways project to better connect with the current bikeway network around the U of M. At the time of the 2015 TE funding submittal, the northern most east-west bikeway in this travel shed was 5<sup>th</sup> Street SE. As such, the northern terminus of the U of M Protected Bikeways project was originally proposed at 5<sup>th</sup> Street SE.

Since the TE funding submittal and allocation of funds, the City of Minneapolis installed bike lanes on 8<sup>th</sup> Street SE in coordination with a local 2017 resurfacing project. Eighth Street SE is approximately 0.25-miles north of 5<sup>th</sup> Street SE and provides access to a high density of student housing around the U of M. Modifying the U of M Protected Bikeways project to connect to the new bike lanes on 8<sup>th</sup> Street SE will improve bicycle access and safety for people traveling to and from the U of M.

The proposed scope change reduces the total project length from 2.6 miles to 2.4 miles. A map of the proposed segments to be removed and added can be found in **Attachment A – Figure 3**.

As requested, the project limits are below (project limits that have changed are in **bold**):

- 20<sup>th</sup> Avenue S from Minnehaha Avenue S to 4<sup>th</sup> Street S
- 4<sup>th</sup> Street S from 19<sup>th</sup> Avenue S to 20<sup>th</sup> Avenue S
- **19<sup>th</sup> Avenue S from 4<sup>th</sup> Street S to 2<sup>nd</sup> Street S**
- **10<sup>th</sup> Avenue SE from University Avenue SE to 8<sup>th</sup> Street SE**
- 15<sup>th</sup> Avenue SE from University Avenue SE to Rollins Avenue SE
- Rollins Avenue SE from 15<sup>th</sup> Avenue SE to 18<sup>th</sup> Avenue SE
- 18<sup>th</sup> Avenue SE from Rollins Avenue SE to East Hennepin Avenue

A map of the project limits included in the requested change of scope can be found in **Attachment A – Figure 4**.

#### Cost Estimate

The requested change in scope is estimated to have a relatively neutral impact to the total project budget. While the project length is shorter than the original project limits, the neutral cost change is a factor of the different types of protected bikeway designs along the project corridor:

- The proposed segment to be removed includes 0.5-miles of a *two-way* protected bike lane design. The two-way bikeway design requires one buffer and row of flexible delineators, totaling 0.5 miles. The 30% design construction cost estimate for this segment is \$37,237.65.
- The proposed segment to be added includes 0.25-miles of a *pair of one-way* protected bike lanes. The one-way bikeway design requires two buffers and two rows of flexible delineators – one on each side of the 0.25-mile long corridor, totaling 0.5 miles. The 30% design construction cost estimate for this segment is \$29,314.47.

Based upon the requested change in scope, the City is requesting that the total funding remain as originally allocated. A 30% Design Construction Cost Estimate can be found in **Attachment B**.

The modified scope for the U of M Protected Bikeways project continues to respond to the transportation needs identified, while modifying project elements where the benefits remain consistent with its original intent.

We look forward to discussing the revised project with you in more detail. If you have any questions, I can be reached at 612-673-5012 or by e-mail at [simon.blenski@minneapolismn.gov](mailto:simon.blenski@minneapolismn.gov).

Sincerely,

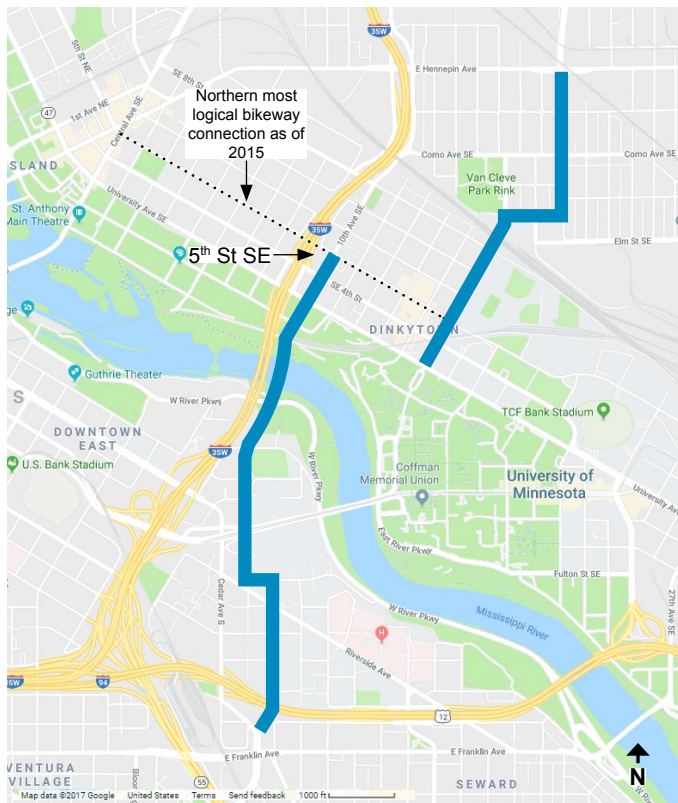
City of Minneapolis

Simon Blenski  
Project Planner

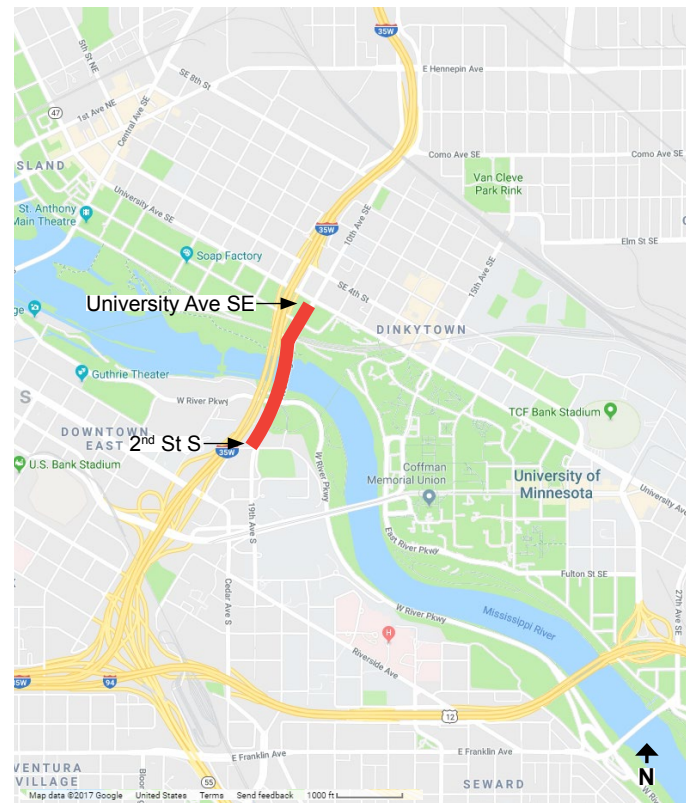
Attachments: Attachment A – Project Location Maps  
Attachment B – Project Cost Estimate

cc: Adam Hayow, City of Minneapolis

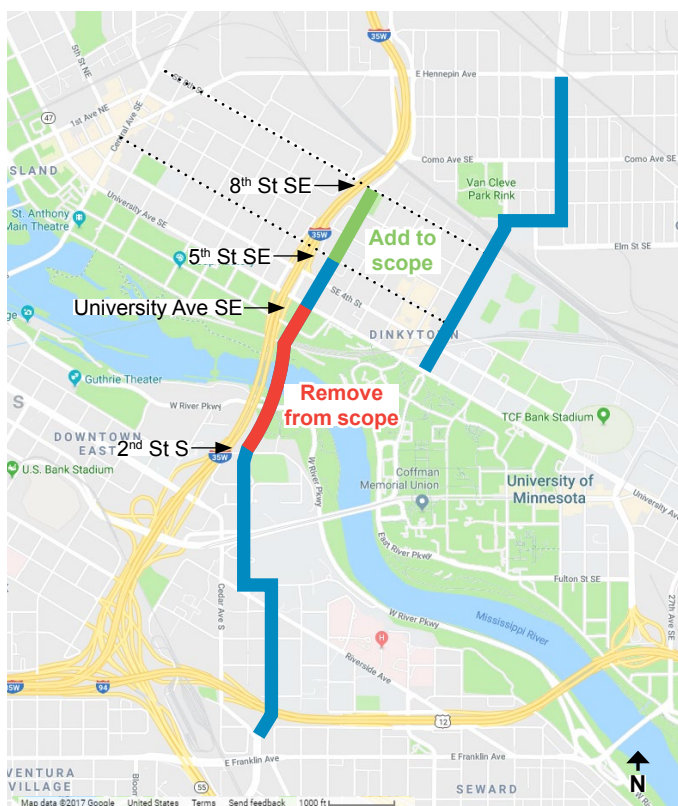
# Attachment A: Project Location Maps



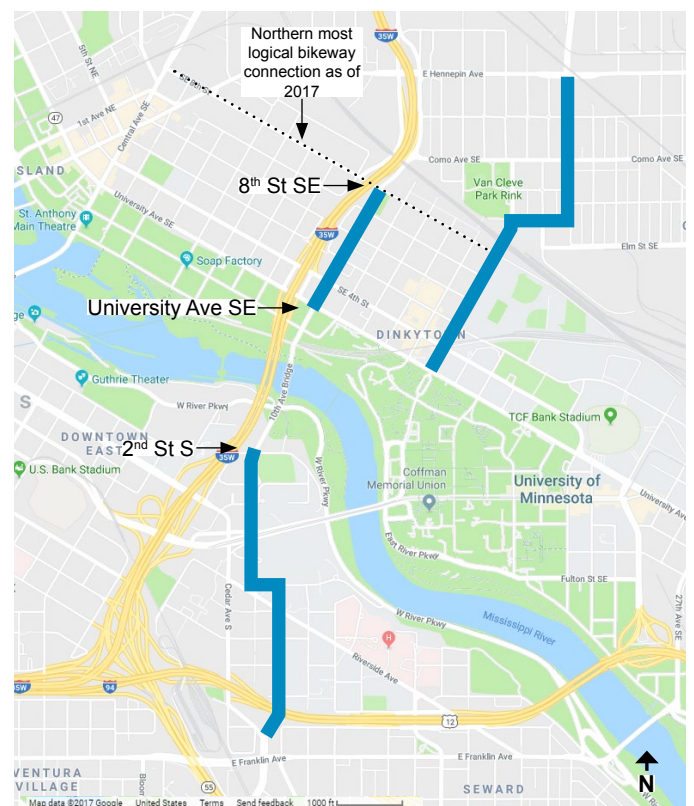
**Figure 1:** Original project limits of the U of M Protected Bikeways project included in the 2015 TE funding submittal (S.P. 141-030-041)



**Figure 2:** 10<sup>th</sup> Avenue Bridge project limits between 2<sup>nd</sup> Street S and University Avenue SE



**Figure 3:** Proposed changes to the original project limits of the U of M Protected Bikeways project (S.P. 141-030-041)



**Figure 4:** Proposed amended project limits included in the requested change of scope to the U of M Protected Bikeways project (S.P. 141-030-041) 2018-12; Page 6

## Attachment B: Project Cost Estimate

U of M Protected Bikeway Project - 30% Design Construction Cost Estimate				
SEGMENT	TOTAL	NOT INCL'D	Date:	12/8/2017
18th Ave SE, from Hennepin Ave through Como Ave.	\$ 52,181.12		By:	CJB
18th Ave SE, from Como Ave to 17th Ave SE	\$ 6,014.03		Checked	KA/CS
Rollins Ave SE, from 17th Ave SE through 15th Ave SE	\$ 32,325.73			
15th Ave SE, from Rollins Ave SE to University Ave SE	\$ 188,246.72			
10th Ave SE, from 8th Street through 5th Street	\$ 29,314.47	Proposed segment to add		
10th Ave SE, from 5th Street through University Ave.	\$ 237,005.95			
10th Ave SE, from University Ave SE to S 2nd St		\$ 37,237.65	Proposed segment to remove	
19th Ave S, from S 2nd St through Riverside Ave	\$ 461,796.00			
S 4th St, from 19th Ave S to 20th Ave S AND 20th Ave S, from S 4th St to Minnehaha Ave	\$ 107,686.51			
<b>Subtotal, in 2015 dollars</b>	<b>\$1,114,570.54</b>	<b>\$37,237.65</b>		
<b>Total Cost, inflated to 2019 dollars at 5% per annum</b>	<b>\$1,354,767.45</b>	<b>\$45,262.59</b>		
<p>Note: This is a 30% design cost estimate, based off of the layout dated 12/8/17. At this early stage of project development, limited survey data is available and project details and background information are subject to change. It is assumed that all work will be conducted within existing right of way and there will be no right of way costs. Traffic control, mobilization and erosion control costs were assumed as a percentage of segment construction costs as noted in the estimate. Remaining unit costs were obtained from 2015 MnDOT average statewide bid costs. A 25% construction cost contingency has been applied to each segment subtotal, which includes an allowance for any additional signing needs that may arise for the project. Total project costs are inflated at 5% per annum to 2019 dollars. Bituminous quantities were assumed at 113 lbs/sy*in and application rate for asphalt emulsion was assumed at 0.1 gal/sy. Final construction costs will vary based on changes in project scope and economic conditions at time of construction.</p>				



**Process to evaluate scope change requests for regionally-selected projects.**

**Adopted by the Transportation Advisory Board on March 16, 2011**

**ACTION TRANSMITTAL 2011-35**

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Projects submitted for consideration through the regional solicitation are often just concepts or unrefined ideas. Project sponsors work on the preliminary and final design, environmental studies etc... after the TAB awards funds to the project. Sometimes during project development the project sponsor has to make significant design changes or finds that the construction cost was underestimated. When that happens, project sponsors may be required to request a scope change and TIP/STIP amendment because the scope and cost in the TIP/STIP has to be consistent with final project documentation that is sent to the FHWA.

Projects sponsors, Met Council and TAB staff, the TAC Funding & Programming Committee (F&PC) and the region would benefit from an adopted methodology to evaluate requested project scope changes. MN/DOT Metro State Aid has been very good at sorting out the significant scope changes that require action from the TAB. The FHWA has provided guidance on when a cost increase triggers a TIP/STIP amendment, and when a change in a project's design requires a scope change and TIP/STIP amendment (attached). The TAC and TAB want to be comfortable that the revised project scope of a regionally-selected project still provides about the same benefits as the original project scope and would have scored high enough to have been selected like the original project scope – to be fair to the other projects not selected. Below is a proposed outline of a process and guidelines for scope change requests.

- 1) Any construction elements added to the project scope must be eligible according to the solicitation criteria used to evaluate the original project submittal, unless the additional elements are already programmed in the STIP.
- 2) Additional federal funds will not be provided and federal funds cannot be swapped between projects of the same or different sponsor.
- 3) Met Council and TAB staff will provide data on the original project to the TAC F&PC, including cover page, project description, location map, layouts, sketches or schematics, and the original project cost estimate.
- 4) The project sponsor must provide data on the revised project scope to the TAC F&PC, including a complete project description, location map, project layout or sketches or schematics, checklist of work that still needs to be done and a revised project cost estimate.
- 5) The project sponsor must also recalculate the responses to certain key criteria based on the revised project scope and provide them to the TAC F&PC. Met Council and TAB staff may consult with the scoring group chair and individual project scorers if necessary to evaluate the recalculated responses and estimate the change in the original project score.
- 6) The TAC F&PC will base their recommendation on whether the estimated score of the revised project scope would have been high enough to have been awarded funds through the regional solicitation. A recommendation to approve the scope change and adopt a TIP amendment will go before the TAC, TAB Programming Committee and full TAB for adoption, then to the Metropolitan Council for concurrence. A recommendation to reject the scope change and TIP amendment will go before the TAC, TAB Programming Committee and full TAB for approval.