

ACTION TRANSMITTAL No. 2019-31

DATE: June 12, 2019

TO: TAC Funding & Programming Committee

PREPARED BY: Joe Barbeau, Senior Planner (651-602-1705)

SUBJECT: Scope Change Request for Hennepin County's CSAH 81 Bridge Replacement Project

REQUESTED ACTION: Hennepin County requests a scope change for its CSAH 81 bridge replacement project (SP # 027-681-038) to replace a third bridge and move the bicycle and pedestrian access.

RECOMMENDED ACTION: That the TAC Funding & Programming Committee recommend to TAC approval of Hennepin County's request to change the scope of its CSAH 81 bridge replacement project (SP # 027-681-038) to replace a third bridge and move the bicycle and pedestrian access.

BACKGROUND AND PURPOSE OF ACTION: Hennepin County was awarded \$7,000,000 in Surface Transportation Block Grant funds for the 2021 fiscal year in the Bridges category as part of the 2016 Regional Solicitation. The project's primary purpose is to replace the northbound and southbound bridges of County State-Aid Highway (CSAH) 81 (W. Broadway Avenue) over Victory Memorial Parkway / Theodore Wirth Parkway / Oakdale Avenue / Lowry Avenue on the border of Minneapolis and Robbinsdale. The project also includes non-motorized paths.

The County is requesting a scope change that would reflect the following changes:

- Reconfiguration of the Victory Memorial Parkway / Theodore Wirth Parkway / Oakdale Avenue / Lowry Avenue intersection. The proposed reconfiguration, shown in Exhibit 3, was the impetus for the request and reduces crossing distances. This requires movement of the placement of the bridges.
- Replacement of a third bridge structure, the on ramp from Lowry Avenue to northbound CSAH 81.
- Relocation of trail connections. The original scope included trail access along the bridges. The proposed change eliminates that access and focuses on improved throughput at the below intersection. Note that the original scope included widening of the original bridges from 35.5 feet to 48.3 feet to accommodate the trails. While those trails are no longer planned, the bridges will still be constructed to the wider width.

The original cost estimate, including local match, was \$15,650,000. It is currently in the draft 2020-2023 TIP at this same figure. The proposed update would bring the cost to \$17,900,000.

RELATIONSHIP TO REGIONAL POLICY: Projects that receive funding through the Regional Solicitation process are subject to the 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. The scope change policy allows project sponsors to adjust their projects as needed while still providing substantially the same benefits described in their original project applications.

A TIP amendment accommodates this request. The amendment reflects the additional bridge replacement, additional cost, and advance construction in 2020.

STAFF ANALYSIS:

Approval/Denial of the Scope Change: The recently updated Scope Change Policy does not call for staff to try to re-create a precise score, but to provide general analysis of the impact to scoring measures (except for cost-effectiveness).

Two projects were funded in the Bridge category. This project was the highest-scoring project in the category by 189 points and outscored the highest unfunded category by 276 points. Therefore, it is safe to say that the project would have been funded if originally proposed this way. Table 1 shows the likely impact on each scoring measure.

Table 1: Scoring Analysis

#	Measure	Original Score	Update Project*	Notes
1A	Average distance to nearest parallel roadways	115	0	
1B	Connection to total jobs and manufacture jobs	8	0	
1C	Current daily heavy commercial traffic	18	0	
1D	Freight elements	15	0	
2A	Current Daily person throughput	92	0	
2B	Forecast 2040 ADT	30	0	
3A	Socio/Economic	27	0	
3B	Housing Performance Score	63	0	
4A	Bridge sufficiency rating	300	0	
4B	Load-Posting	100	0	
5	Multimodal	85	+	More direct/comfortable access
6	Risk Assessment	73	0	
SUBTOTAL		926	0	
7	Cost Effectiveness	17	N/A	
TOTAL		943	0/+	
* 0 = no change + = small improvement, ++ = moderate improvement, +++ = large improvement - = small diminishment, -- = moderate diminishment, --- = large diminishment				

Funding: The updated scope change policy provides the following guidance related to funding:

...While adding eligible project elements is permitted, federal funds cannot be shifted away from any removed elements to new project elements unless the removed elements are being done as part of some other programmed project. Federal funds cannot be added to a project beyond the original award...

The full policy is included in this action item. \$1.35 million is being removed for the trails on the northbound and southbound bridge structures. Council staff’s interpretation is that the bicycle/pedestrian paths are being re-oriented to serve the same area and therefore recommends no reduction.

ROUTING

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

HENNEPIN COUNTY

MINNESOTA

May 15, 2019

Mr. Paul Oehme
Chair, TAC Funding and Programming Committee
Metropolitan Council
230 East 5th Street
St. Paul, MN 55101

Re: Scope Change Request
S.P. 027-681-038
CSAH 81 Bridge Replacement Project
Cities of Minneapolis and Robbinsdale, Hennepin County Minnesota

Dear Mr. Oehme:

Hennepin County respectfully requests that the Metropolitan Council TAC Funding and Programming Committee consider the attached Scope Change Request for the above referenced project at its June 20 meeting. This request includes project scope modifications to include replacement of an adjacent bridge, reconstruction of the intersection below the bridges, and modified trail connections. Additionally, in response to accelerated deterioration, we plan to advance bridge reconstruction to begin in the year 2020.

Hennepin County applied for federal funding through the 2016 Regional Solicitation and was selected to receive \$7 Million in federal funds to replace two bridges (27007 and 27008) that carry CSAH 81 (West Broadway Avenue) over the intersection of Victory Memorial Parkway/Theodore Wirth Parkway, CSAH 153 (Lowry Avenue), Oakdale Avenue and the historic Grand Rounds trail system. The existing bridge foundations are closely tied to the intersection below the bridge. Various bridge replacement options were considered including replacing the structures in-kind, limiting impacts to the intersection below or reconfiguring the layout of both the bridges and intersection below.

Hennepin County has been working with partnering agencies and the surrounding community to develop a preferred option. Through this collaborative effort it was determined that the preferred option is to reconfigure the layout of the West Broadway Avenue bridges (27007 and 27008) and the Theodore Wirth Parkway/Lowry Avenue intersection. An adjacent bridge (27006) which carries traffic from westbound Lowry Avenue to northbound West Broadway Avenue is also in need of replacement at the same time. We request this bridge be included in the project with the other West Broadway Avenue bridges. These changes provide the opportunity to enhance the existing trail and sidewalk connections.

Hennepin County Transportation Project Delivery
Public Works Facility, 1600 Prairie Drive, Medina, MN 55340
612-596-0356 | hennepin.us



Project partners including FHWA, MnDOT, City of Minneapolis, City of Robbinsdale and the Minneapolis Park Board have been involved in developing the revised project scope. The enclosed information provides details on our request. If you have any questions or require any additional information, please contact me at 612-596-0356 or carla.stueve@hennepin.us.

Sincerely,



Carla Stueve, P.E., P.T.O.E
Hennepin County
County Highway Engineer

SCOPE CHANGE REQUEST
CSAH 81 over CSAH 153/Theodore Wirth Parkway/Victory Memorial Drive/Oakdale Ave
Bridge Replacement and Intersection Improvements Project
S.P. 027-681-038
City of Minneapolis and City of Robbinsdale, Hennepin County, Minnesota

Location Map

The project is located on the border of the cities of Robbinsdale and Minneapolis in Hennepin County. Maps showing the general project area and location of the three CSAH 81 (West Broadway Avenue) bridges is provided in Exhibits 1A and 1B.

Project Scope

The original project scope in the approved 2020-2023 STIP includes replacing two bridges (27007 and 27008) which serve northbound and southbound West Broadway Avenue. The scope change request includes the addition of a third bridge (27006), intersection reconfiguration below the structures and new trail connections. No additional federal funds are being requested. The expanded project scope will be funded using county funds.

Revised Project Description

During the project development for the replacement of the West Broadway Avenue bridges it was determined that project partners and the surrounding community preferred reconfiguration of the intersection below the structures as part of the bridge project. Since the existing bridge foundations are tied to the intersection below, a new intersection and bridge design were developed together. Reconfiguration of both the bridges and intersection presented an opportunity to also provide additional trail and sidewalk improvements.

Proposed scope change project description:

The proposed project includes the following components: three new bridges that will replace structures: 27006, 27007 and 27008, including the necessary approach work of approximately 0.5 lane miles of roadway; the Victory Memorial Parkway/Theodore Wirth Parkway/Oakdale Avenue/Lowry Avenue intersection; and improved trail crossings on the bridge replacing structure 27006 and for the intersection below the bridges.

Key project elements include:

Replacement of bridges 27007 and 27008

Bridges 27007 and 27008 carry northbound and southbound West Broadway Avenue traffic. Both bridges carry approximately 10,000 vehicles per day and serve regional traffic. Bridge 27007 is restricted from heavy vehicles and both bridges are structurally deficient.

The expanded scope includes the following new elements:

Victory Memorial Parkway/Theodore Wirth Parkway/Oakdale Avenue/Lowry Avenue intersection

The intersection is located on the border of Robbinsdale and Minneapolis and is adjacent to the historic Grand Rounds trail system. The intersection is also a key connection for North Memorial Hospital that is located immediately west of the intersection. Improvements include reconfiguring lanes to accommodate traffic while reducing crossing distances to improve safety for bicycle and pedestrian traffic.

Bridge 27006 replacement

Bridge 27006 provides an on ramp from Lowry Avenue to northbound West Broadway Avenue which is a key interchange movement. The structurally deficient bridge is weight restricted. Bridges 27006 and 27008 share a foundation and need to be replaced at the same time.

Relocation of trail connections

Two new trail connections are proposed on West Broadway Avenue. With the intersection reconfiguration and inclusion of bridge 27006, Hennepin County along with partnering agencies and the community evaluated the need for new trail connections through this area. A protected on-road bike trail is proposed for the connection between Lowry Avenue and West Broadway Avenue that will connect to the Crystal Lake trail system. Intersection improvements will also provide shortened crossing distances and upgraded trail accommodations.

Work to be Completed

Preliminary plans for the revised project are underway and layouts have been submitted to MnDOT. Additionally, preliminary construction limits and cost estimates have been developed for the revised scope. With approval of the scope change request, Hennepin County will complete the project in the schedule outlined in **Table 1**.

Table 1. Project Schedule

Milestones	Completion Date
Roadway layout development	Apr-2019
Preliminary bridge development	Apr-2019
30% road and bridge submittal	May-2019
60% Road and Bridge submittal	Aug-2019
95% Road and Bridge submittal	Jan-2020
Plans finalized	Mar-2020
Permits acquired	Oct-2020
Bidding	Apr-2020
Begin construction	Jul-2020
Complete construction	Jul-2022

Revised Cost Estimate

Project funding and preliminary construction costs (revised scope) are provided in **Table 2**.

Table 2. Updated Project Construction Cost Estimate and Funding Revisions Request

	Total	FHWA	Local
Original Scope	\$ 15,650,000	\$ 7,000,000	\$ 8,650,000
Expanded Scope	\$ 2,250,000	\$ -	\$ 2,250,000
Total Project	\$ 17,900,000	\$ 7,000,000	\$ 10,900,000

Funding for Scope Change Request

Funding for the scope change request is provided in Tables 3-5 which includes the elements of the project that will be removed and new elements.

Table 3. Original Application

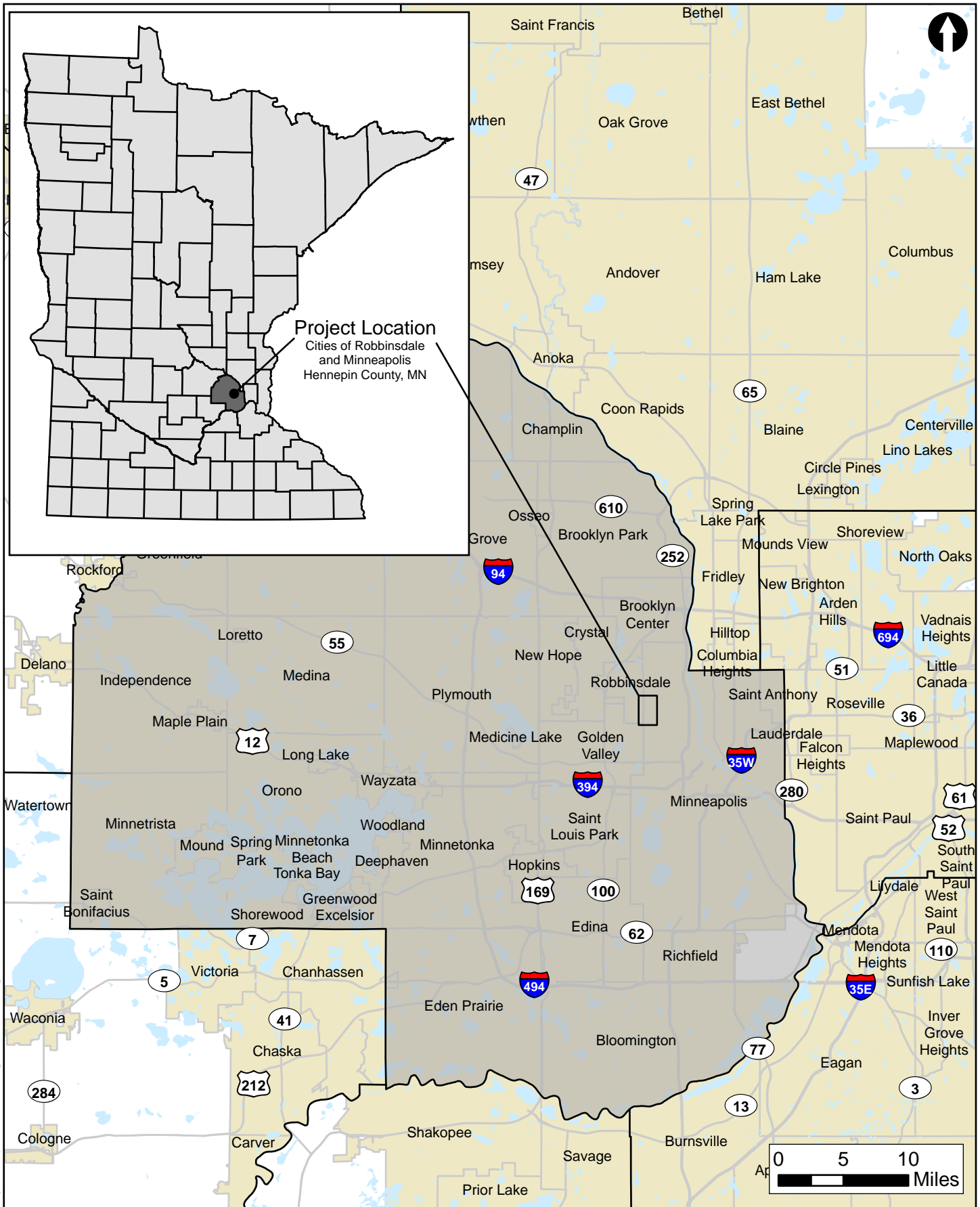
Regional Solicitation Year	2016
Application Funding Category	Bridge rehabilitation/ replacement
HSIP Solicitation?	No
Application Total Project Cost	\$15,650,000
Federal Award	\$7,000,000
Application Federal Percentage of Total Project Cost	45%

Table 4. Project Elements Being Removed

	Original Application Cost
Trail on bridge replacing 27007	\$675,000
Trail on bridge replacing 27008	\$675,000

Table 5. New Project Elements

	Cost (Based on Year in Original Application)
Bridge replacing structure 27006	\$1,750,000
Theodore Wirth Parkway/Victory Memorial Parkway/Oakdale Avenue/Lowry Avenue intersection	\$500,000
Trail on bridge replacing 27006	\$675,000
Trail improvements below structures	\$675,000



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Project Location

West Broadway Avenue Bridges Reconstruction
 Hennepin County, MN
 SPO27681-088

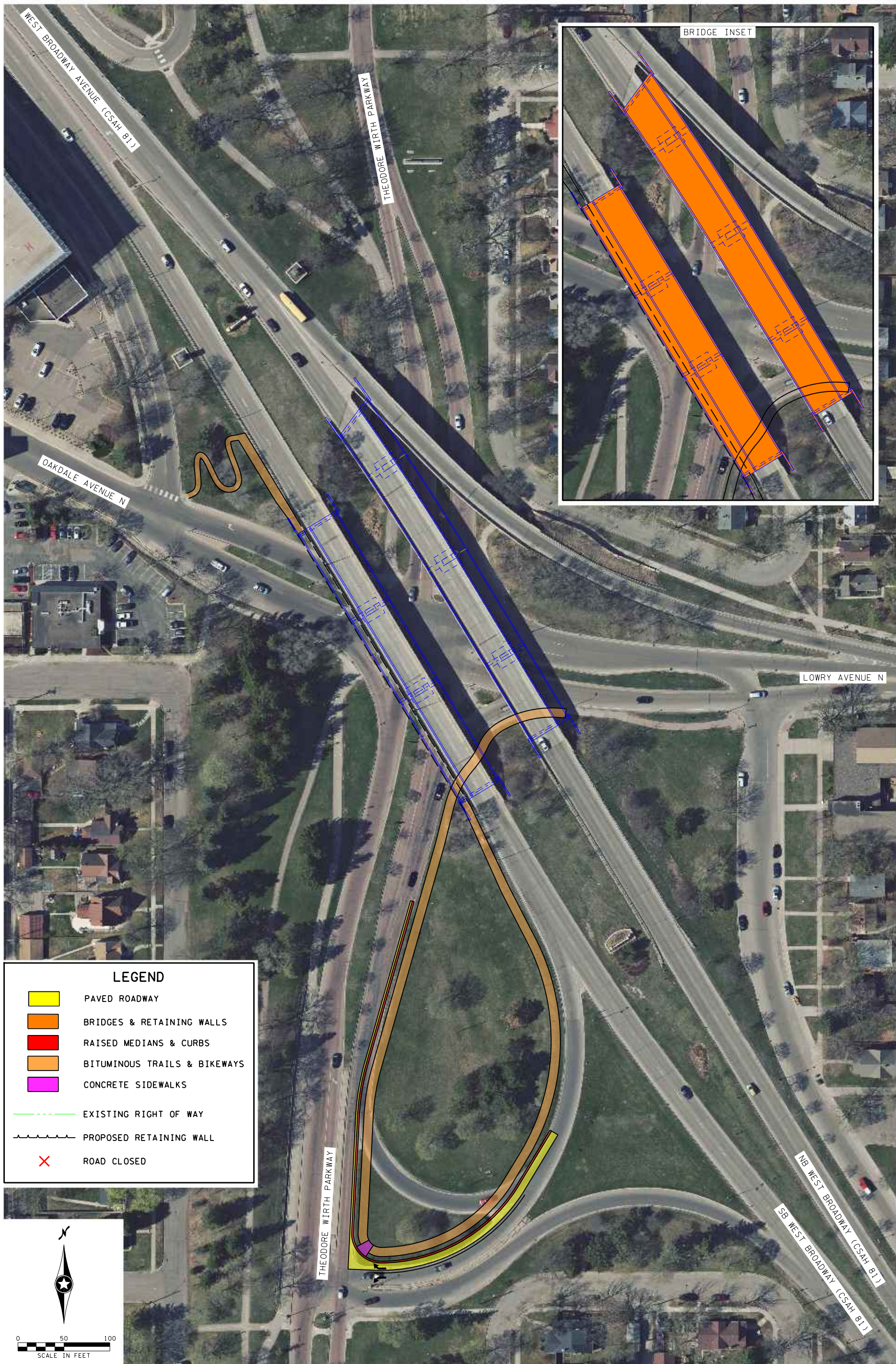
Exhibit 1A



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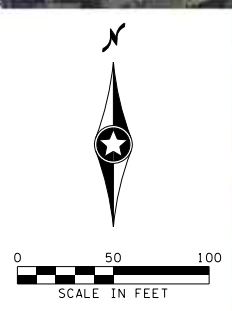
Project Location

West Broadway Avenue Bridges Reconstruction
 Hennepin County, MN
 SP 027-681-038



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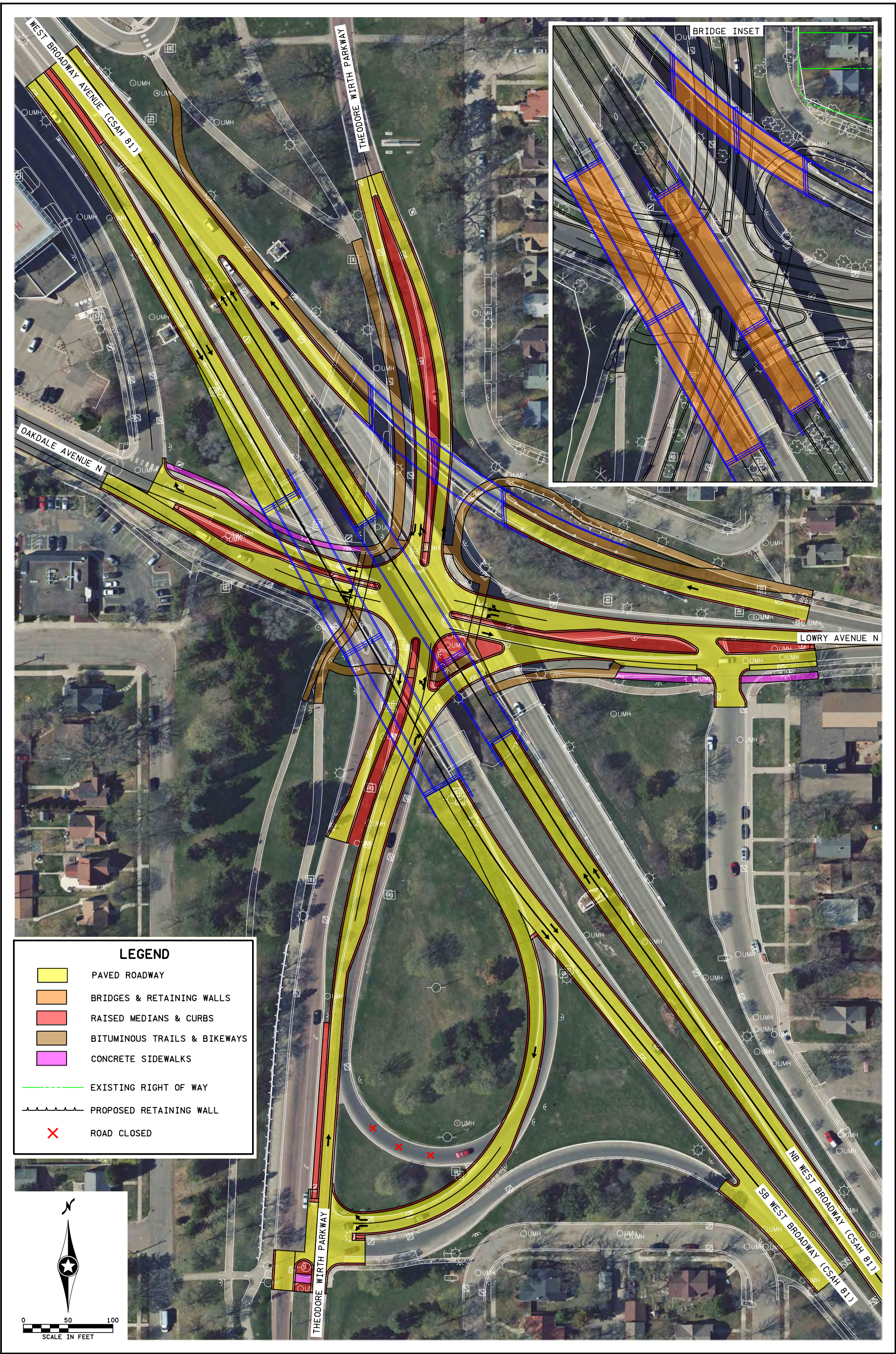
LEGEND	
	PAVED ROADWAY
	BRIDGES & RETAINING WALLS
	RAISED MEDIANS & CURBS
	BITUMINOUS TRAILS & BIKEWAYS
	CONCRETE SIDEWALKS
	EXISTING RIGHT OF WAY
	PROPOSED RETAINING WALL
	ROAD CLOSED



ORIGINAL APPLICATION
 West Broadway Ave. Bridges Reconstruction
 Hennepin County

Exhibit 2

Job #
5/23/2019

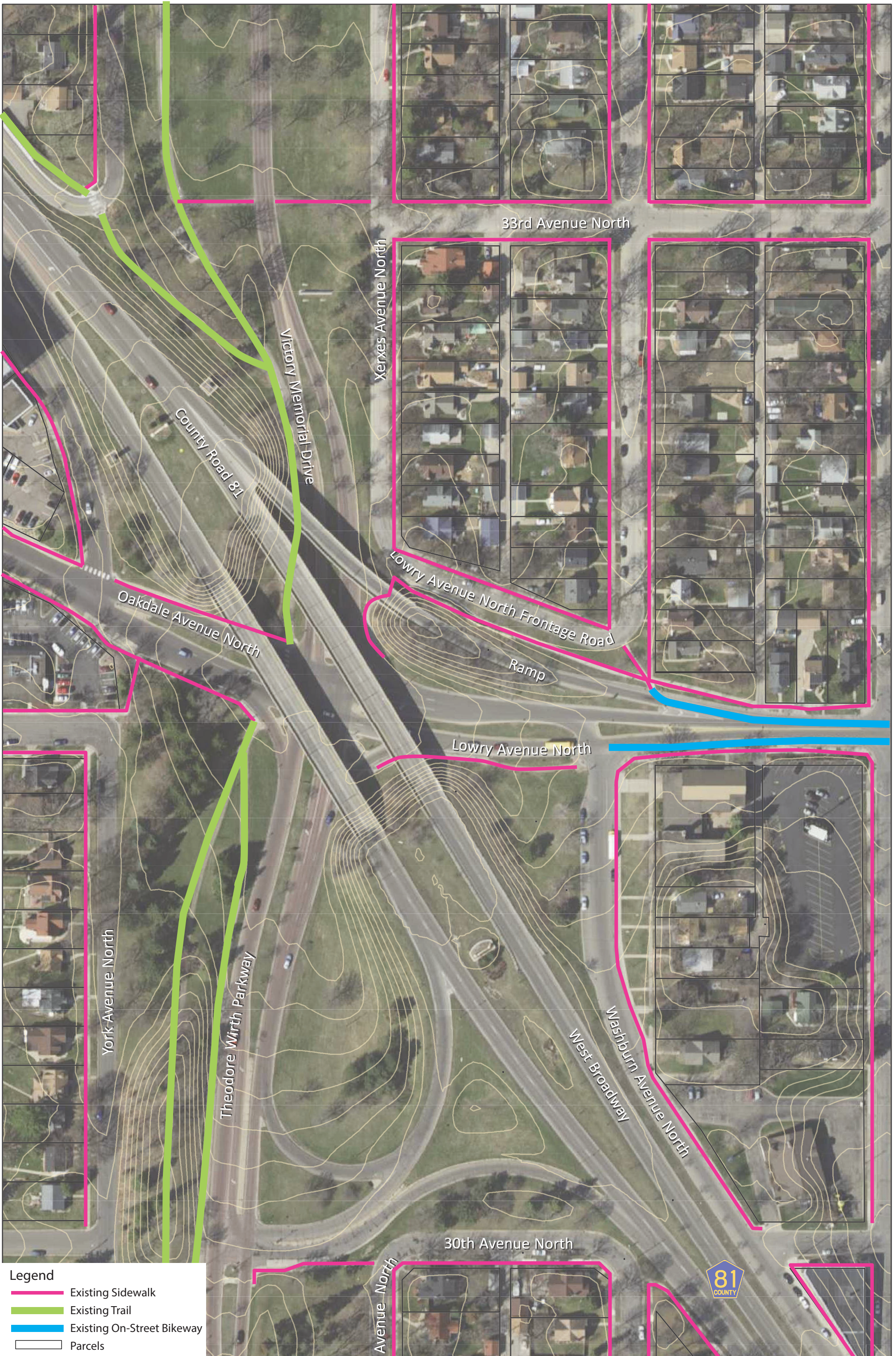


SDGNS



FULL RECONSTRUCT
 West Broadway Ave. Bridges Reconstruction
 Hennepin County

Job #
 4/25/2019



- Legend**
- Existing Sidewalk
 - Existing Trail
 - Existing On-Street Bikeway
 - Parcels

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Scope Change Policy

Projects awarded federal funds by the Transportation Advisory Board (TAB) as part of the Regional Solicitation or Highway Safety Improvement Program (HSIP) are often concepts that are further developed in the period from project application to implementation. Project sponsors work on activities after funds are awarded such as preliminary and final design, environmental studies, and public involvement. Sometimes during this project development process, the project sponsor wants to make changes to the scope of the project. Changes to a project's scope could affect its benefits to the region. It is important to the TAB that any change in a project's scope does not substantially reduce these benefits.

Scope Changes

A scope change is any revision that changes the physical characteristics of the project and has the potential to add to or detract from the project's benefits to the region. The project description in the original funding application serves as the project's scope for the purpose of determining whether a scope change is needed.

Three Levels of Scope Changes

There are three types of scope changes described below. The TAB Coordinator, the MnDOT Metro District Federal Aid Program Coordinator (for Federal Highway Administration-administered projects), and the Transit Federal Grants Manager (for Federal Transit Administration-administered projects) will determine the type of scope change.

Administrative scope changes:

Minor changes that typically occur when projects move into detailed design or minor additions such as project amenities or aesthetic items do not need TAB Coordinator/Metropolitan Council staff review. The MnDOT Metro District Federal Aid Program Coordinator or Metropolitan Council Transit Federal Grants Manager can review and approve minor changes including, but not limited to:

- Removing or adding of minor items, such as benches, waste receptacles, signage, etc.
- Changing the design of aesthetic items, such as lighting, railings, benches, etc.
- Adding items due to normal detailed design of a project such as noise walls, retaining walls, storm sewers, bike racks, wi-fi, etc.
- Adding new project elements/improvements funded through another source (e.g., a change to a more fuel-efficient bus) or combining a TAB-funded project with one or more separate non-TAB funded projects to improve efficiency and reduce construction impacts (e.g., combining a roadway project with an adjacent mill and overlay project). These changes should not detract from the original scope.
- Changing the width of a bike path (must still meet standards).

Informal scope changes:

Scope changes that exceed the standards of administrative scope changes are brought for a consultation between the TAB Coordinator; the MnDOT Metro District Federal Aid Program Coordinator or Metropolitan Council Transit Federal Grants Manager; and Council staff. The consultation will determine if the scope change can be approved through an informal process or if a formal scope change request is needed due to the potential negative impacts of the changes. An informal scope change may include, but is not limited to:

- Slightly changing a bike or pedestrian trail route alignment while still making the major connections.

- Combining two separate TAB-funded projects, provided this does not threaten to negatively impact either project.
- Changing the termini of a project, provided this does not threaten to negatively impact the project.
- Changing a pedestrian overpass to an underpass; or an underpass to an overpass.
- Changing an intersection treatment (e.g., a traffic signal to a roundabout) or an interchange design.
- Changing bus length, fuel source, type, or number, provided there is no resulting decrease in transit service.
- Reversion to the original scope (or a previously approved scope change). Note that any federal funds taken away in a previous scope change cannot be returned; the entire scope would need to be completed with the reduced federal contribution.

Formal scope changes:

Any change that may significantly alter the estimated benefits to the region (particularly if altered to the degree where the revised scope may not have justified its original selection) must go through the formal committee process and be approved by TAB. A formal scope change request process is likely to be needed in instances including, but not limited to:

- Removing significant elements such as a trail, sidewalk, pedestrian bridge, traffic signal, transit stop, transit vehicle, etc.
- Adding elements that detract from the value or intent of the original application.
- Removing proposed access closures, if the closures are described in the project description and used to score points in the application.
- Reducing the frequency or hours of transit service.
- Reducing the number of parking spaces in a park-and-ride facility.
- Changing the number of travel lanes.
- Shifting from a bridge replacement project to a bridge rehabilitation project.
- Changing designs from an off-road trail to on-road bicycle route.

Ineligible Requests

The TAB Coordinator may inform the project sponsor that the proposed revisions exceed the limits of a scope change and that the proposed change constitutes a new project. Such requests will not be processed through the TAC and TAB and that the original project should either be completed or withdrawn. If the project is to be withdrawn, the project sponsor should submit a formal letter to the TAB Coordinator stating that the project is being withdrawn and federal funds are being returned to the region for reallocation. A proposed change will be considered a new project and therefore not eligible for a scope change if it is:

- Relocating the project away from the defined problem, need, or location, such as switching transit start-up service from one market area to another
- Moving funding from one project to another, such as moving funds awarded to a project on County Road A to the same, similar, or different work on County Road Z.
- Eliminating the primary improvement proposed in the project description (e.g., a bridge will not be improved for a project submitted in the bridge application category or a trail will not be improved in the multiuse trails application category).

Steps and Requirements to Determine Scope Change Type and Request a Formal Scope Change

The following steps must be followed to determine a scope change type and whether the proposed change needs to go through the formal scope change request process. It should be noted that once a MnDOT Metro District State Aid project has been authorized, the project scope cannot change.

1. The project sponsor informs the TAB Coordinator and the MnDOT Metro District Federal Aid Program Coordinator or the Metropolitan Council Transit Grants Manager that it wants to change a project. At this time, the MnDOT Metro District Federal Aid Program Coordinator or the Metropolitan Council Transit Federal Grants Manager may determine that the change is minor in scope and no further action is needed. If the requested change is more substantial, the project sponsor will be asked to provide a written description of the proposed scope change and a map or schematics showing how the proposed scope change affects the project.
2. Upon this submittal, the TAB Coordinator will consult with the MnDOT Metro District Federal Aid Program Coordinator or the Metropolitan Council Grants Manager to discuss the extent of the changes and whether the scope change will require a formal scope change request. The TAB Coordinator will contact the project sponsor and inform them whether the proposed modification can be accomplished administratively or whether it will trigger a formal scope change request and/or TIP amendment¹ request.
3. For a formal scope change request, the project sponsor must provide data on the revised project scope to the TAB Coordinator, including a complete project description; location map; project layout, sketches, or schematics; and a discussion of project benefits being retained, gained, or lost. Applicants must provide a cost breakdown of the TAB-eligible items proposed for removal and addition (in the year of costs used in the original application) using the attached project cost worksheet. Failure to do so can result in the request not being included on the TAC Funding & Programming Committee's agenda.
4. Council staff and will conduct an analysis of the requested change, including the background information provided by the project sponsor for consideration by the TAC Funding & Programming Committee. The Committee will discuss the staff analysis and recommend one the following to TAC and TAB (see detailed sections below and on the following page about determining scope change and federal funding amount recommendations):
 - Approval of the scope change as requested;
 - Approval of the scope change request with modifications to the scope and/or a recommended reduction of federal funds; or
 - Denial of the requested change

Determining the Scope Change Approval Recommendation

To determine whether the scope change request should be approved, the TAC Funding & Programming Committee will discuss the merits of the proposed changes and weigh the overall

¹ A TIP amendment request is only required to accompany a scope change request if the project is in the current fiscal year and either the project description changes in the TIP, the project termini change by 0.3-mile or greater, or the funding amount changes enough to meet federal TIP amendment thresholds.

benefits or reduction of benefits to the region. Council staff will provide a written analysis regarding the potential impacts of the proposed changes. The affected scoring measures, except for cost-effectiveness (any cost increases are paid for by the local agency and not federal funds), will be analyzed by Council staff to determine if each sub-score would have likely increased, decreased, or stayed the same with the scope change (a precise rescoring of the application is not possible since applications were scored against each other at a specific moment in time). Council staff will then evaluate whether the total score would have likely increased, decreased, or stayed roughly the same based on the summation of the sub-score changes. This relative change in the total score will be compared to the scoring gap between the project's original score and the highest unfunded project in the same application category. The TAC Funding & Programming Committee may consider recommending denial of the scope change request if it is clear that the project would have scored fewer points than the highest-scoring unfunded project (i.e., the project would have been undoubtedly below the funding line). Council staff may confirm their findings with the original scorer of the measure and/or request additional information of the applicant, if necessary. Project sponsor must attend TAC Funding & Programming, TAC, and TAB meetings, where the item is on the agenda.

Determining the Federal Funding Amount Recommendation

To determine whether federal funds should be recommended to be removed from a project, Council staff will assess the project elements being reduced or removed and provide this information to the TAC Funding & Programming Committee. While adding eligible project elements is permitted, federal funds cannot be shifted away from any removed elements to new project elements unless the removed elements are being done as part of some other programmed project. Federal funds cannot be added to a project beyond the original award.

Applicants must provide a revised cost estimate including a cost breakdown of the items proposed for removal using the attached project cost worksheet. Any removed or added items should use the costs in the year requested in the original application instead of the year of construction costs. Regional Solicitation projects must continue to maintain at least a 20% non-federal match, while HSIP projects must continue to maintain at least a 10% non-federal match.

Staff may recommend funding reduction options, if applicable, based on the federal share of the cost of the project elements being removed or the proportionate reduction of project benefits in cases in which that is discernable (e.g., number of parking spaces or length of sidewalk) and/or another method developed by staff or the TAC Funding & Programming Committee. A recommendation will move from TAC Funding & Programming Committee to the TAC and TAB for approval. If applicable, a TIP amendment request will also be moved for approval through the Metropolitan Council.

ATTACHMENT 1: FUNDING DATA FOR SCOPE CHANGE REQUEST

Original Application:

Regional Solicitation Year	
Application Funding Category	
HSIP Solicitation?	Yes No
Application Total Project Cost	
Federal Award	
Application Federal Percentage of Total Project Cost	

Project Elements Being Removed:

	Original Application Cost

New Project Elements:

	Cost (Based on Year of Costs in Original Application)