#### **ACTION TRANSMITTAL No. 2016-31**

DATE: April 21, 2016

TO: **Technical Advisory Committee** 

FROM: TAC Funding and Programming Committee PREPARED BY: Joe Barbeau, Senior Planner (651-602-1705)

SUBJECT: Scope Change Request for Hennepin County CSAH 46 Bridge

Replacement

REQUESTED Hennepin County requests a scope change to the replacement of its ACTION:

CSAH 46 Bridge over Godfrey Parkway to narrow the bridge and

adjust lane and trail widths.

**POSSIBILE** That the Technical Advisory Committee recommend to the **ACTIONS:** Transportation Advisory Board approval of the scope change

request as requested.

BACKGROUND AND PURPOSE OF ACTION: Hennepin County received \$1,792,000 (inflation-adjusted from \$1,600,000) in STP funds through the Bridge Improvement and Replacement (BIR) category of the 2011 Regional Solicitation. The bridge is currently 64'-4" wide with a six-foot sidewalk, 13-foot driving lane, and 12 foot driving lane in each direction. The original application included at 74'-4" bridge width, eight-foot sidewalk. six-foot shoulder, and two 11-foot driving lanes in each direction.

The City is requesting a change that includes a 9'-5" trail, 13-foot outside driving lane, and 11-foot inside driving lane in each direction. The bridge length would increase, as well, to avoid placing the structures in bedrock. The three layouts are summarized in Table 1 below.

TABLE 1: Comparison

	Current	Original App	Scope Change
Bridge Width	64'-4"	74'-4"	71'-10"
Sidewalk	8'-0"	8'-0"	0' 5 (Dilra/nod combined)
Bike/shoulder	N/A	6'-0"	9'-5 (Bike/ped combined)
Barrier between road/sidewalk	N/A	N/A	1'-6"
Outside driving lane	13'-0"	11'-0"	13'-0"
Inside driving lane	11'-0"	11'-0"	11'-0"
Bridge Length	76'-10"	76'-10"	103'-8"

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 make adjustments to their projects as needed while still providing substantially the same benefits described in their original project applications.

This project is not due to receive any federal funding, as TAB provided all of its federal funds to the County's CSAH 53 Reconstruction (SP 027-653-021) at its January, 2016 meeting. This action included a resolution from the County Board agreeing to complete the project as applied for an on time, subjecting it to TAB's Scope Change and Program Year Policies.

A TIP amendment does not accompany this request, because the project is no long in the TIP, as it is without federal funding.

**STAFF ANALYSIS:** Staff reviewed the submitted scope change request. The project originally scored 655 points and was ranked third out of 10 projects that applied in the BIR category. Staff review, which included sharing the proposed update with scorers from the 2011 Solicitation, examined whether the proposed updated project would have scored well enough to be funded. Most scoring categories are based on bridge condition, rendering the score change minimal. The overall score would have changed slightly, as the narrower bridge would have led to a 13-point reduction. That would bring the score to 642, well above the 578 scored by the highest unfunded BIR project.

Other factors to consider include:

- The request would cause bicyclists and pedestrians to share a path. Pedestrian separation exists both currently and in the original application. Bicycle separation exists on the current application, albeit via a shoulder.
- The original application essentially matches the current cross-section of the Ford Parkway Bridge (as touted in the original application). The updated project would cause a temporary shift, particularly for bicyclists. The application does not say how bicyclists will cross the barrier between the road and the trail, nor does it address the potential for a bicycle barrier to be created by snow.
- The application does not discuss the rationale for selection of the combined trail versus other options such as 6-foot bike shoulders and 7-foot sidewalks.
- The City of Minneapolis includes the bridge as part of its Bicycle Master Plan, calling for a bike lane.

When projects reduce benefits or size, federal funding is sometimes reduced. Options for federal funding include:

- 1. The cost adjustment cited on Exhibit A: Reduction based on 80% (federal portion) of deck/sidewalk reductions; \$51,971 federal, for federal total of \$1,740,029.
- 2. Providing the full amount of federal funds (\$1,792,000)

Because TAB voted to transfer this project's federal funding to the CSAH 53 reconstruction project (027-653-021), any federal funding reduction would be reflected in that project. Given the minor funding change, a TIP amendment would not be needed for that project.

**COMMITTEE COMMENTS AND ACTION:** At its April 21, 2016, meeting, the Funding & Programming Committee unanimously recommended approval of the scope change

request with no federal funding reduction, citing that the projects benefits have been maintained.

# ROUTING

ТО	ACTION REQUESTED	DATE COMPLETED
TAC Funding & Programming Committee	Review & Recommend	4-21-2016
Technical Advisory Committee	Review & Recommend	
Transportation Advisory Board	Review & Approve	



# **Hennepin County**

Public Works

Transportation Department James N. Grube P.E., Director 1600 Prairie Drive Medina, Minnesota 55340

612-596-0300, Phone 612-321-3410, Fax

www.hennepin.us/transportation

March 18, 2016

Mr. Timothy Mayasich TAC Funding & Programming Committee Metropolitan Council 390 Robert Street North St. Paul, MN 55101

Re: SAP 027-646-007, CSAH 46 over the Godfrey Parkway Bridge Replacement – Scope Change Request

#### INTRODUCTION

Hennepin County was successful in the 2011 Regional Solicitation for Federal Bridge Improvement and Replacement (BIR) funding to replace the CSAH 46 bridge over the Godfrey Parkway in Minneapolis. The 2016-2019 State Transportation Improvement Program (STIP) identifies \$1,792,000 in federal funding with a total project cost of \$5,140,000 scheduled for improvements in state fiscal year 2016. On February 12, 2016, a STIP amendment was approved to move the federal funds from this project to SP 027-653-021. This was done as part of a defederalization pilot project. Although federal funds are no longer on this project, the defederalized project must follow Met Council Scope Change Policy. The original project description has changed modestly since its submittal, however the objective and benefits remain unchanged and consistent with its original intent. Please consider this formal scope change request in order to move forward with the project's revised scope.

#### **ORIGINAL PROJECT DESCRIPTION AND BENEFITS**

Built in 1925, the bridge (often referred to as the Godfrey Bridge) has four travel lanes and two 6-footwide sidewalks for pedestrians, and carries CSAH 46 (46th Street) over Godfrey Parkway in Minneapolis. The bridge leads to the Ford Bridge over the Mississippi River.

The project for which federal funds were awarded proposed to replace the existing bridge over Godfrey Parkway with a new structure that would have four 11-foot-wide travel lanes, two six-foot-wide urban shoulders for biking, and two eight-foot-wide sidewalks. The section width of the travel lanes and urban shoulders of the Godfrey Bridge would match the section width of the nearby Ford Bridge which has four 11-foot-wide travel lanes and two six-foot-wide urban shoulders.

The overall original project objectives and benefits as defined in the attached BIR application remain unchanged and will be achieved with the proposed change in scope.

#### **REQUESTED CHANGE OF SCOPE**

Since the 2011 BIR application, Hennepin County's project manager has been working closely with the City of Minneapolis and the Minneapolis Park and Recreation Board (MPRB). The original BIR application identified a proposed typical section that encroaches roughly 2'-4" into the MPRB National Historic Registered Minnehaha Park. We were notified recently that if we continue with the encroachment into Minnehaha Park we must mitigate the taking of what was determined to be Land

March 18, 2016 SAP 027-646-007, CSAH 46 over the Godfrey Parkway Bridge Replacement – Scope Change Request

and Water Conservation (LAWCON) funded property, as Minnehaha Park was purchased using LAWCON funds in 1968. The process of conveying the necessary park property for the bridge project could take 18 months or more. This discovery occurred within the last 3 months of the project's anticipated delivery date. In light of this and in the best interest of the project, Hennepin County proposes to maintain the project's permanent limits within the county's right-of-way in order to avoid the LAWCON impacts. This decision necessitates a scope change request.

The necessary changes to the typical section involved reducing the shoulder width from 6-foot wide to 2 feet. This width (8 feet total) will be combined with the 6-foot wide sidewalks to provide a shared-use facility. In order to protect users of the shared facility from vehicular traffic, a 1'-6" wide barrier will separate pedestrians and bicyclists from vehicular traffic. This results in the Modified Proposed Section as depicted in the attached "Originally Proposed and Modified Proposed Typical Sections". The scope change involves removing separate bicycle accommodations and combining them with the sidewalk.

#### MODIFIED PROJECT DESCRIPTION AND COST ESTIMATE

The overall original project description, objectives, and benefits will remain unchanged and will be achieved with this project. The change in scope related to the typical section and user accommodations will also maintain the original project objectives and benefits as defined under *Project Description* and *Intermodal or Other Special Considerations* of the BIR application.

It is believed formal Transportation Improvement Program amendment will not be required for this project.

Sincerely,

James N. Grube, PE Highway Engineer Project Delivery

Hennepin County Transportation Department

amis M. Sreyle

CC: Nicholas Peterson, Hennepin County Jake Bronder, Hennepin County Colleen Brown, MnDOT Dan Mattison, MnDOT

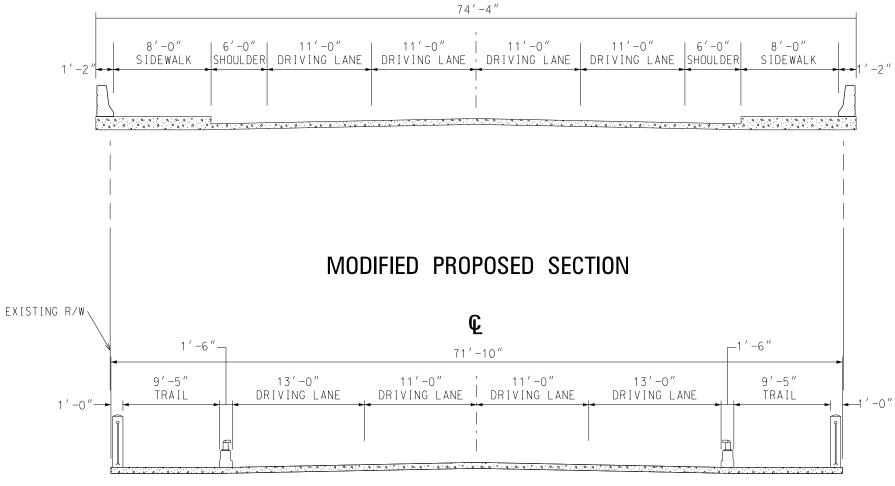
Attachments:

**Proposed and Modified Typical Sections** 

2011 BIR Application

# ORIGNALLY PROPOSED SECTION







MARCH 2016

HENNEPIN COUNTY

# PROPOSED AND MODIFIED TYPICAL SECTIONS

CSAH NO 46 over Godfrey Pkwy #90585

### **Federal BIR Funding Application**

INSTRUCTIONS: Complete and return completed application to Kevin Roggenbuck, Transportation Coordinator, Transportation Advisory Board, 390 North Robert St., St. Paul, Minnesota 55101. (651) 602-1728. Please go to Metropolitan Council's website for instructions. Applications must be received by 5:00 PM at the Metropolitan Council FTP site or postmarked on July 18, 2011.

Office Use Only

received by 5:00 PM at the Metropolitan	Council FTP site or postn	narked on July 18, 20	011.	
	I. GENERAL INFOR	MATION		
1. APPLICANT Hennepin County To	ransportation Departr	nent		
2. JURISDICTIONAL AGENCY Hennep	in County			
3. MAILING ADDRESS 1600 Prairie I	<b>Drive</b>			
CITY <b>Medina</b>	STATE MN	ZIP CODE <b>55340</b>	COUNTY	Hennepin
CONTACT PERSON: James N. Grube	TITLE: Director of Trans and County Engine	•	PHONE NO <b>612-596-</b> 0	
CONTACT E-MAIL ADDRESS: james.gru	be@co.hennepin.mn.u	IS		
II. SUMMARY PROJECT INFORMATION	/ */ Proposers need to atta	ch most recent MN/I	DOT Structure	Inventory Report

- 4. PROJECT NAME, EXISTING BRIDGE #
  Replacement of CSAH 46 (46<sup>th</sup> Street East) over Godfrey Parkway in Minneapolis, Bridge No. 90585
- 6. PROJECT DESCRIPTION (For example, please provide Route, Termini, Length, Additional Thru Lane Capacity): Built in 1925, the bridge (often referred to as the Godfrey Bridge) carries CSAH 46 (46<sup>th</sup> Street) over Godfrey Parkway in Minneapolis. The bridge leads to the Ford Bridge over the Mississippi River. The original bridge carried two street car tracks, two lanes of traffic, and two nine-foot sidewalks. It had granite and brick pavers along with decorative lights and railings. The original pavement was 40 feet from curb to curb. In 1972 the bridge was renovated. The main structure remained, but the pavers, railings, and sidewalks were removed. A new overlay deck, sidewalks, and railings were constructed. The renovated bridge was 50 feet from curb to curb with six-foot sidewalks. In 2002, the bridge was given a new concrete overlay. The project proposes to replace the existing bridge over Godfrey Parkway. The new structure will have four 11-foot-wide travel lanes, two six-foot-wide urban shoulders for biking, and two eight-foot-wide sidewalks. The section width of the travel lanes and urban shoulders of the Godfrey Bridge will match the section width of the nearby Ford Bridge which has four 11-foot-wide travel lanes and two six-foot-wide urban shoulders.
- 7. INTERMODAL OR OTHER SPECIAL CONSIDERATIONS (pedestrian/bicycle, staging, coordination, historic considerations, etc.): The bridge currently has four travel lanes and two 6-foot-wide sidewalks for pedestrians. The project proposes to construct a new bridge with four travel lanes, urban shoulders, and 8-foot-wide sidewalks along each side of the bridge. Metro Transit has four bus routes that travel along over this bridge; they are routes 23, 46, 74, and 84. While the Godfrey Bridge itself is not designated as historic, the project team will incorporate historic considerations, as possible during the design phase of this project because the bridge is located in the Minnehaha Historic District and the Minnehaha Byway District of the Grand Rounds National Scenic Byway.

III. PROJECT FUNDING			
8. FEDERAL BIR <b>\$1,600,000</b>	13. SOURCE OF MATCH County State Aid and Property Tax		
9. STATE BRIDGE BONDS <b>\$0</b>	14. REQUESTED PROGRAM YEAR: 2015 2016		
10. MATCH <b>\$400,000</b>	15. SIGNATURE		
11.TOTAL \$2,000,000 16. TITLE – Assistant County Administrator, Public Works			
12. ESTIMATED COST PER SQUARE FOOT BRIDGE COST – \$268/Sq Ft Bridge Deck			

<sup>\*</sup> Proposers also need to respond in greater detail to Qualifying and Priority criteria found on the following pages.

#### **BIR PROJECTS – QUALIFYING CRIRERIA**

The applicant must respond to each of the qualifying criteria. If there is no response recorded in the application, it will be assumed the project is inconsistent with the qualifying criteria.

1. For federal BIR funds the bridge must be 20 feet or longer.

#### **RESPONSE:**

The bridge is 76.8 feet in length.

2. The bridge is structurally deficient or functionally obsolete and the most recent sufficiency rating must be less than 50 for replacement projects. The bridge is structurally deficient or functionally obsolete and the most recent sufficiency rating must be 80 or less for rehabilitation projects.

#### **RESPONSE:**

The 2010 sufficiency rating is 42.9.

3. The project must be deliverable by the end of FY 2016.

#### **RESPONSE:**

The project is deliverable by the end of FY 2016.

4. The bridge must carry highway traffic. Bridges carrying only rail traffic or only bicycle and pedestrian traffic are not eligible.

#### **RESPONSE:**

The bridge carries highway traffic.

5. The bridge may not be on a roadway functionally classified as a local road/street or minor collector in the functional classification system adopted by the TAB as of May 18, 2011. The bridge may not be on the Interstate System.

#### **RESPONSE:**

The bridge is on County State Aid Highway (CSAH) 46. CSAH 46 is classified as an A-Minor Arterial Augmentor on the functional classification map adopted by the Metropolitan Council in May 2011.

6. Costs required to complete studies, preliminary engineering, design, construction engineering etc., are not eligible for BIR funding. The costs of right-of-way or demolition of the existing bridge are not eligible for funding.

#### **RESPONSE:**

Hennepin County understands these requirements and the BIR funding will only be used for construction of the bridge.

7. No more than \$8,000,000 in federal bridge replacement funds will be originally programmed for a specific project. The local match in funding for any project must be at least 20% of the total (State Bridge Bonding funds are considered local match). The applicant must state that it is responsible for the local (nonfederal) share. No additional points will be awarded for providing a match in excess of 20%.

#### **RESPONSE:**

The amount of requested federal funding for the project does not exceed \$8,000,000. Hennepin County understands that it will be responsible for the local (nonfederal) share of the project's costs.

8. BIR project proposals for bridges selected in previous open BIR solicitations, (1994, 1995, 1997, 1999, 2001, 2003, 2005, 2007 and 2009) are not eligible unless the selected project has been withdrawn or sunset prior to the deadline for proposals in this solicitation. BIR project proposals for trunk highway bridges which are included in the current TIP or Draft TIP with an identified federal funding source are not eligible unless the project was selected in a previous open BIR solicitation and has been withdrawn prior to the deadline for proposals in this solicitation.

#### **RESPONSE:**

This bridge project proposal has not been selected in previous BIR solicitations and this bridge is not a trunk highway bridge.

#### **BIR PROJECTS - PRIORITIZING CRITERIA**

Recorded below are data that will be used to assign points to the bridge proposal. In most cases, the MN/DOT Structure Inventory Report includes the data needed but this may not be as current or comprehensive as the data available to the proposer. Please respond to each criterion by either recording the data from the inventory, or more recent or comprehensive data. (The attached sheet provides the range of points that will be allocated for each criterion and for the specific aspects of the projects)

1. The proposer must identify the functional classification of the roadway the bridge is located on as adopted by the TAB as of May 18, 2011.

#### **RESPONSE:**

CSAH 46 is classified as an A-Minor Arterial Augmentor on the functional classification map adopted by the Metropolitan Council in May 2011.

2. The proposer must identify the most recent average annual daily traffic (AADT) and heavy commercial average annual daily traffic (HCAADT) on the existing bridge to score points for current traffic volume heavy commercial vehicle traffic volume. The proposer may conduct appropriate counts which must be adjusted to average annual values to provide AADT and HCAADT. If the bridge is posted, provide the HCAADT prior to posting if it is available. MnDOT provides web access to all current AADT and HCAADT. <a href="http://www.dot.state.mn/traffic/data/html./volume-program.html">http://www.dot.state.mn/traffic/data/html./volume-program.html</a> The proposer may also contact the following resource people at Mn/DOT to obtain these volumes:

Gene Hicks, Section Director (651) 366-3896; AADT... Megan Forbes (651-366-3883; HCAADT...Tom Nelson (651) 366-3868.

#### **RESPONSE:**

The most current AADT count data (2010) from the Hennepin County Traffic Flow Map is 13,100 vehicles per day. There are no recent HCAADT traffic counts; however a typical HCAADT value for this type of Hennepin County road is two percent of the AADT. The approximate HCAADT based on two percent heavy vehicles is 260.

3. The proposer must identify the most recent structural condition ratings and sufficiency rating of the bridge including any current and historical load postings. The proposer must provide a map showing the bridge location and the official detour for posted bridges and the functional classification of the affected roads.

#### **RESPONSE:**

According to its most recent Mn/DOT Structure Inventory Report, this bridge has an Inventory Rating of HS 13.90 and an Operating Rating of HS 31.29. The Mn/DOT Scour Code for this bridge is A-Non Waterway. We have included the Mn/DOT Structure Inventory Report and Mn/DOT Bridge Inspection Report in the appendix of this application.

4. The proposer must identify in what ways the current bridge is inadequate (if any) with respect to serving bicycles, pedestrians, and fixed route transit and the provisions (if any) to serve those modes with the proposed project.

#### **RESPONSE:**

The current bridge does not have shoulders, but has two 6-foot-wide sidewalks for pedestrians. The proposed bridge will have two 6-foot-wide urban shoulders for biking and two 8-foot-wide sidewalks for pedestrians.

5. The proposer must provide copies of appropriate adopted Bike and Ped plans that include the bridge.

#### **RESPONSE:**

This bridge is included in the City of Minneapolis Bike Master Plan. A map from the Bike Master Plan showing the bridge as part of the future bike system is included in the appendix.

6. The proposer must complete the attached project development checklist.

#### **RESPONSE:**

A completed Project Development Checklist is included in the appendix of this application.

7. The proposer must provide the in-place bridge typical section, proposed bridge typical section and show vertical clearances of the existing and proposed bridge, 20 year projected ADT and design speed to determine if the existing and proposed bridge meets State Aid Standards.

#### **RESPONSE:**

Included in the appendix are the in-place bridge typical section and the proposed bridge typical section. The 20-year projected ADT for this bridge is 14,410 vehicles per day; this 20-year ADT was determined by applying the County's State Aid 20-year traffic growth factor of 1.1 to the 13,100 AADT from the 2010 Hennepin County Traffic Flow Map. The posted speed on CSAH 46 in the area of the Bridge is 30 mph and a design speed of 30 mph would be used for this replacement project.

# **APPENDIX**

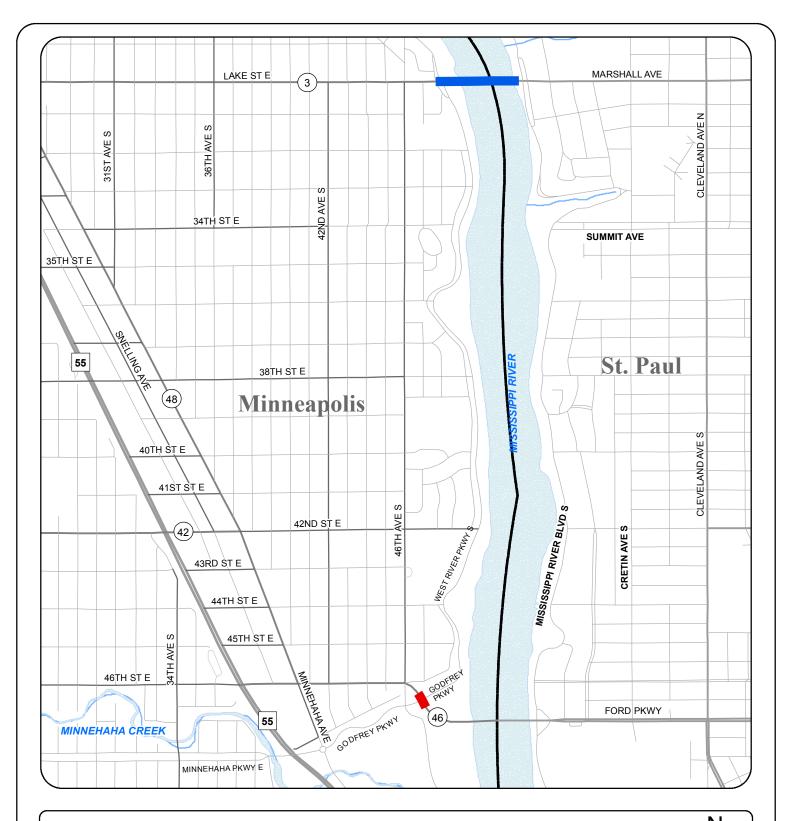
# CSAH 46 (46<sup>th</sup> Street E) Bridge over Godfrey Parkway in Minneapolis

Project Implementation Schedule	(1 page)
Project Location Map	(1 page)
Project Limits Map	(1 page)
Existing and Proposed Typical Sections	(1 page)
Roadway View on Bridge Number 90585 (looking west)	(1 page)
Mn/DOT Structure Inventory Report	(2 pages)
Mn/DOT Bridge Inspection Report	(3 pages)
Letter of Support From City of Minneapolis	(1 page)
City of Minneapolis Bike Master Plan Map	(1 page)

# **Project Implementation Schedule**

For Hennepin CSAH 46 Bridge Number 90585

1)	Project Scope
	Stake Holders have been identified  Meetings or contacts with Stake Holders have occurred
2)	Layout or Preliminary Plan  ☐ Identified Alternates ☐ Selected Alternates ☐ Layout or Preliminary Plan started ☐ Layout or Preliminary Plan completed Anticipated date or date of completion: June 2014
3)	Environmental Documentation  EIS EA PM  Document Status  Document in progress; environmental impacts identified  Document submitted to State Aid for review (date submitted:)  Document approved (need copy of signed cover sheet)  Anticipated date or date of completion/approval: October 2015
4)	R/W  No R/W required  R/W required, parcels not identified  R/W required, parcels identified  R/W has been acquired  Anticipated date or date of acquisition
5)	Railroad Involvement  No railroad involvement on project  Railroad R/W Agreement required; negotiations not begun  Railroad R/W Agreement required; negotiations have begun  Railroad R/W Agreement is complete
6)	Construction Documents/Plan  ☐ Construction plans have not been started ☐ Construction plans in progress Anticipated date or date of completion: October 2015 ☐ Construction plans completed/approved
7)	Letting Anticipated Letting Date: January 2016



# Project Location CSAH 46 Bridge #90585

Project Location

Nearest Local
Parallel Crossing

Located in the City of Minneapolis Hennepin County, Minnesota



Printing Date: 6/30/2011
File: 046\_Br\_90585\_Location\_Map.mxd
Produced by Hennepin County Transportation ning



# Project Limits CSAH 46 Bridge #90585

Project Location
---- CSAH Routes

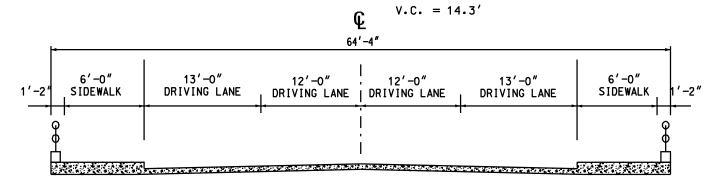
Regional Park

Located in the City of Minneapolis Hennepin County, Minnesota



Printing Date: 6/30/2011
File: 046\_Br\_90585\_Limits\_Map.mxd
Produced by Hennepin County Transportation ning

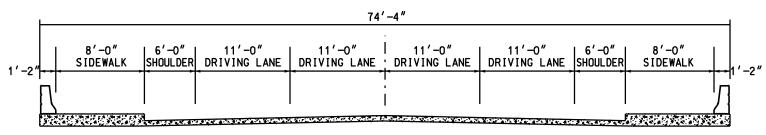
# **EXISTING SECTION**



# PROPOSED SECTION

V.C. = 14.5'

Q





JUNE 2011

HENNEPIN COUNTY

# EXISTING AND PROPOSED TYPICAL SECTIONS

CSAH NO 46 over Godfrey Pkwy #90585

FIGURE



## **Mn/DOT Structure Inventory Report**

Bridge ID: 90585

CSAH 46(E 46TH ST) over STR 1203(GODFREY RD)

	, ,	Date: 00/29/201			
+ GENERAL +	+ ROADWAY +	+ INSPECTION +			
Agency Br. No. 738	Bridge Match ID (TIS) 1	Deficient Status F.O.			
District METRO Maint. Area	Roadway O/U Key 1-ON	Sufficiency Rating 42.9			
County 27 - HENNEPIN	Route Sys/Nbr CSAH 46	Last Inspection Date 05-27-2010			
City MINNEAPOLIS	Roadway Name or Description	Inspection Frequency 12			
Township	CSAH 46(E 46TH ST)	Inspector Name HENNEPIN			
Desc. Loc. 0.3 MI W OF COUNTY LINE	Roadway Function MAINLINE	Structure A-OPEN			
Sect., Twp., Range 17 - 028N - 23W	Roadway Type 2 WAY TRAF	+ NBI CONDITION RATINGS +			
<b>Latitude</b> 44d 55m 06.62s	Control Section (TH Only)	Deck 5			
<b>Longitude</b> 93d 12m 27.64s	Ref. Point (TH Only)	Superstructure 5			
Custodian COUNTY	Date Opened to Traffic 11-01-1972	Substructure 5			
Owner COUNTY	Detour Length 6 mi.	Channel N			
Inspection By HENNEPIN COUNTY	Lanes 4 Lanes ON Bridge	Culvert			
BMU Agreement	ADT (YEAR) 15,600 (2005)	+ NBI APPRAISAL RATINGS +			
Year Built 1925	HCADT	Structure Evaluation 5			
		Deck Geometry 3			
Year Femadalad 1072		Underclearances 4			
Year Remodeled 1972	+ RDWY DIMENSIONS +	Waterway Adequacy N			
Temp	If Divided NB-EB SB-WB Roadway Width 50.0 ft	Approach Alignment 6			
Plan Avail. COUNTY	<b>⊣</b>	- Processing			
+ STRUCTURE +	Vertical Clearance	+ SAFETY FEATURES +			
Service On HWY;PED	Max. Vert. Clear.	Bridge Railing 0-SUBSTANDARD			
Service Under HIGHWAY	Horizontal Clear. 50.0 ft	GR Transition N-NOT REQUIRED			
Main Span Type CONC DECK GIRD	Lateral Clr Lt/Rt	Appr. Guardrail N-NOT REQUIRED			
Main Span Detail	Appr. Surface Width 50.0 ft	GR Termini N-NOT REQUIRED			
Appr. Span Type	Roadway Width 50.0 ft	+ IN DEPTH INSP. +			
Appr. Span Detail	Median Width	Frac. Critical			
Skew	+ MISC. BRIDGE DATA +	Underwater			
Culvert Type	Structure Flared NO	Pinned Asbly.			
Barrel Length	Parallel Structure NONE	Spec. Feat.			
Number of Spans	Field Conn. ID	+ WATERWAY +			
MAIN: 3 APPR: 0 TOTAL: 3	Cantilever ID	Drainage Area			
Main Span Length 42.0 ft	Foundations	Waterway Opening			
Structure Length 76.8 ft	Abut. CONC - SPRD SOIL	Navigation Control NOT APPL			
Deck Width 64.3 ft	Pier CONC - SPRD SOIL	Pier Protection NOT APPL			
Deck Material C-I-P CONCRETE	Historic Status NOT ELIGIBLE	Nav. Vert./Horz. Clr.			
Wear Surf Type LOW SLUMP CONC	On - Off System ON	Nav. Vert. Lift Bridge Clear.			
Wear Surf Install Year 2000	+ PAINT +	MN Scour Code A-NON WATERWAY			
Wear Course/Fill Depth 0.16 ft	Year Painted Pct. Unsound	Scour Evaluation Year 1991			
Deck Membrane NONE	Painted Area	+ CAPACITY RATINGS +			
Deck Protect. NONE	Primer Type	Design Load HS20			
Deck Install Year	Finish Type	Operating Rating HS 31.29			
Structure Area 4,938 sq ft	+ BRIDGE SIGNS +	Inventory Rating HS 13.90			
Roadway Area 3,843 sq ft	Posted Load NOT REQUIRED	Posting Posting			
Sidewalk Width - L/R 6.0 ft 6.0 ft	Traffic NOT REQUIRED	Rating Date 05-01-1990			
Curb Height - L/R 0.92 ft 0.92 ft	Horizontal NOT REQUIRED	Mn/DOT Permit Codes			
Rail Codes - L/R 17 17	Vertical NOT APPLICABLE	A: N B: N C: N			
INGII GOUGS - LIIV II	VEILICAL HOT ALL LIOADEL	A. N B. N C. N			

V2006

Date: 06/29/2011

## **Mn/DOT Structure Inventory Report**

**Bridge ID: 90585** 

CSAH 46(E 46TH ST) over STR 1203(GODFREY RD)

. CENERAL .	+ ROADWAY +	+ INSPECTION +			
+ GENERAL +					
Agency Br. No. 738					
District METRO Maint. Area	Trouble of the state of the sta	Sufficiency Rating 42.9			
County 27 - HENNEPIN	Route Sys/Nbr MUN 1203	Last Inspection Date 05-27-2010			
City MINNEAPOLIS	Roadway Name or Description	Inspection Frequency 12			
Township	STR 1203(GODFREY ROAD)	Inspector Name HENNEPIN			
Desc. Loc. 0.3 MI W OF COUNTY LINE	Roadway Function MAINLINE	Structure A-OPEN			
<b>Sect., Twp., Range</b> 17 - 028N - 23W	Roadway Type 2 WAY TRAF	+ NBI CONDITION RATINGS +			
Latitude 44d 55m 06.62s	Control Section (TH Only)	Deck 5			
Longitude 93d 12m 27.64s	Ref. Point (TH Only)	Superstructure 5			
Custodian COUNTY	Date Opened to Traffic 11-01-1972	Substructure 5			
Owner COUNTY	Detour Length 6 mi.	Channel N			
Inspection By HENNEPIN COUNTY	Lanes 2 Lanes UNDER Bridge	Culvert N			
BMU Agreement	<b>ADT (YEAR)</b> 4,000 (1994)	+ NBI APPRAISAL RATINGS +			
Year Built 1925	HCADT	Structure Evaluation 5			
Year Fed Rehab	Functional Class. URB COLL	Deck Geometry 3			
Year Remodeled 1972	+ RDWY DIMENSIONS +	Underclearances 4			
Temp	If Divided NB-EB SB-WB	Waterway Adequacy N			
Plan Avail. COUNTY	Roadway Width 36.0 ft	Approach Alignment 6			
+ STRUCTURE +	Vertical Clearance 14.3 ft	+ SAFETY FEATURES +			
Service On HWY;PED	Max. Vert. Clear. 14.3 ft	Bridge Railing 0-SUBSTANDARD			
Service Under HIGHWAY	Horizontal Clear. 36.0 ft	GR Transition N-NOT REQUIRED			
Main Span Type CONC DECK GIRD	Lateral Cir Lt/Rt 6.9 ft	Appr. Guardrail N-NOT REQUIRED			
Main Span Detail	Appr. Surface Width 36.0 ft	GR Termini N-NOT REQUIRED			
Appr. Span Type	Roadway Width 36.0 ft	+ IN DEPTH INSP. +			
Appr. Span Detail	Median Width	Frac. Critical			
Skew	+ MISC. BRIDGE DATA +	Underwater			
Culvert Type	Structure Flared NO	Pinned Asbly.			
Barrel Length	Parallel Structure NONE	Spec. Feat.			
Number of Spans	Field Conn. ID	+ WATERWAY +			
MAIN: 3 APPR: 0 TOTAL: 3	Cantilever ID	Drainage Area			
Main Span Length 42.0 ft	Foundations	Waterway Opening			
Structure Length 76.8 ft	Abut. CONC - SPRD SOIL	Navigation Control NOT APPL			
Deck Width 64.3 ft	Pier CONC - SPRD SOIL				
		Nav. Vert./Horz. Clr.			
Wear Surf Type LOW SLUMP CONC	On - Off System ON	Nav. Vert. Lift Bridge Clear.			
Wear Surf Install Year 2000	+ PAINT +	MN Scour Code A-NON WATERWAY			
Wear Course/Fill Depth 0.16 ft	Year Painted Pct. Unsound	Scour Evaluation Year 1991			
Deck Membrane NONE	Painted Area	+ CAPACITY RATINGS +			
Deck Protect. NONE	Primer Type	Design Load HS20			
Deck Install Year	Finish Type	Operating Rating HS 31.29			
Structure Area 4,938 sq ft	+ BRIDGE SIGNS +	Inventory Rating HS 13.90			
Roadway Area 3,843 sq ft	Posted Load NOT REQUIRED	Posting			
Sidewalk Width - L/R 6.0 ft 6.0 ft	Traffic NOT REQUIRED	<b>Rating Date</b> 05-01-1990			
Curb Height - L/R 0.92 ft 0.92 ft	Horizontal NOT REQUIRED	Mn/DOT Permit Codes			
Rail Codes - L/R 17 17	Vertical NOT APPLICABLE	A: N B: N C: N			

Date: 06/29/2011

#### Mn/DOT BRIDGE INSPECTION REPORT

Inspected by: HENNEPIN COUNTY

<b>BRIDGE 90585</b>	CSAH 46(E 46TH ST)	OVER STR 1203(GODFREY RD	INSP. DATE: 05-27-2010

County: HENNEPIN Length: 76.8 ft 0.3 MI W OF COUNTY LINE Location: City: MINNEAPOLIS CSAH 46 Ref. Pt.: 003+00.996 Deck Width: 64.3 ft Route: Township: Control Section: Maint. Area: Rdwy. Area / Pct. Unsnd: 3,843 sq ft Section: 17 Township: 028N Range: 23W 738 Paint Area/ Pct. Unsnd: Local Agency Bridge Nbr: Span Type: CONC DECK GIRD N/A Culvert NBI Deck: 5 Super: 5 Sub: 5 Chan: N Culv: N **OPEN** Open, Posted, Closed: Def. Stat: F.O. A-NON WATERWAY Suff. Rate: 42.9 Appraisal Ratings - Approach: 6 Waterway: N MN Scour Code: Required Bridge Signs - Load Posting: NOT REQUIRED Traffic: NOT REQUIRED Horizontal: NOT REQUIRED Vertical: NOT APPLICABLE STRUCTURE UNIT: 0 FIFM OTY OTY OTY OTY OTY **ELEMENT NAME** ENV INSP. DATE QUANTITY CS<sub>1</sub> CS<sub>2</sub> CS<sub>3</sub> CS 4 NBR CS 5 0 LS O/L (CONC DECK) 05-27-2010 0 0 0 22 4,941 SF 4,941 06-08-2009 4,941 SF 4,941 0 0 0 0 22. Deck repaired & new conc O/L in 2001. Excessive long, diag & map cracks. 300 STRIP SEAL JOINT 05-27-2010 125 LF 0 125 0 N/A N/A 06-08-2009 125 LF 0 125 0 N/A N/A 300. New strip seal & walk protection plate in 2001. Between bridge & approach panel. Joints filled w/ sand. Notes: 0 302 COMPRESSION JOINT 05-27-2010 128 LF 64 64 N/A N/A 64 64 0 06-08-2009 128 LF N/A N/A 302. End of approaches. N & S joints partially deteriorated. **CONC APPROACH SLAB** 05-27-2010 2 EA 1 1 0 0 N/A 321 06-08-2009 2 EA 1 1 0 N/A 321. Trans cracks routered & sealed on S approach in 1999. New O/L in 2001. Spalls in SW & SE corner. Trans & long cracks in N panel. '10-Diag cracks in S panel. Patch in NE corner of N. 333 **RAILING - OTHER** 05-27-2010 305 LF 0 305 n N/A N/A 06-08-2009 305 LF n 305 N/A N/A 0 333. Galvanized railing. Vert cracks in railbase w/ efflor. Railbase pitted @ NE corner. Conc spalled @ name plate @ SE corner. NW railbase spalled. Top rail hit & deformed in NE corner by light base. 110 CONCRETE GIRDER 05-27-2010 614 I F 315 201 98 0 N/A 06-08-2009 614 LF 315 201 98 0 N/A 110. Bridge has been hit @ scraped over each lane. Conc cracked @ several bearing areas. NW fascia bearing area spalled & delam'd w/ rebar exposed @ abut. NE bearing area cracked & delam'd @ abut. Conc spalled w/ rebar exposed @ 3rd bearing from E @ abut. '10-Hairline vert & sheer cracks in S 1/2 of 5 of 6 interior girders. CENTER SPAN: Conc cracked & delam'd @ bottom of 1st, 3rd, 4th, 5th & 6th girders from E. 4th & 5th girders from E have large spalls w/ rebar exposed. E fascia hit & spalled w/ rebar exposed.-(0.5 x 2 ft). SOUTH SPAN: Rebar exposed & rusted @ 3rd from W. '10-Hairline vert & sheer cracks in N 1/2 of all girders near haunch. 0 380 SECONDARY ELEMENTS 05-27-2010 1 FA 0 1 0 N/A 3 06-08-2009 1 EA 0 N/A 1 380. Repaired shotcreted diaphragms 2, 3, 5, 6 & 7 @ N span and 3 & 5 @ center span. Diaphragm 7 spalled & rebars exp in N span. End diaphragms @ corners are spalled w/ rebar exp, except NW. **EXPANSION BEARING** 0 311 05-27-2010 16 EA 0 16 N/A N/A 06-08-2009 16 EA 0 16 0 N/A N/A Notes: 311. Badly rusted. **CONCRETE COLUMN** 0 205 05-27-2010 10 FA 0 10 0 N/A

205. Horiz cracks & spalls in N & S columns. Spall on E face of E column of N & S span. Spalls in 2nd column from W, S

10 FA

n

10

0

N/A

n

06-08-2009

span. Vert crack in W face of E column, S span

## Mn/DOT BRIDGE INSPECTION REPORT

Inspected by: HENNEPIN COUNTY

**BRIDGE 90585** CSAH 46(E 46TH ST) OVER STR 1203(GODFREY RD) INSP. DATE: 05-27-2010 **STRUCTURE UNIT: 0 ELEM** QTY QTY QTY QTY QTY **ELEMENT NAME** ENV INSP. DATE **QUANTITY** CS<sub>1</sub> CS<sub>2</sub> NBR CS<sub>3</sub> CS<sub>4</sub> CS 5 215 **CONCRETE ABUTMENT** 05-27-2010 128 LF 0 0 128 0 N/A 128 LF 0 06-08-2009 128 0 N/A 215. Special surface finish flaking off both abuts. Rust stains from seat - some leakage. Spalls w/ rebar exp & efflor, both abuts. Spalls & rebar exp, both parapets. Conc deteriorated & spalled w/ rebar exp @ NW & NE seat corners. SW seat corner repaired. Seat spalled @ 1st & 3rd stringer from E, N abut. Vert cracks w/ efflor @ NW corner. 2nd & 4th bearing seat from W spalled @ S abut -part of 2nd repaired. Horiz cracks @ 3rd bearing seat from W, S abut. "Soft" conc in bearing & parapet areas, especially in 4 corners. 234 CONCRETE CAP 05-27-2010 131 LF 131 0 0 0 N/A 06-08-2009 131 LF 131 0 0 0 N/A Notes: 234. **CONCRETE WINGWALL** 05-27-2010 4 EA 1 3 0 0 N/A 387 06-08-2009 4 EA 1 3 0 0 N/A 387. Delams @ lower SW wall. Small spall in NE. Vert crack in NE @ base of abut joint. Vert & horiz crack in NW. Spalls @ NW abut joint. Spalls w/ rebar exp in SW. 358 CONC DECK CRACKING 05-27-2010 1 EA 0 0 0 1 N/A 06-08-2009 1 EA 0 1 0 0 N/A Notes: 358 0 1 EA 0 1 0 0 359 CONC DECK UNDERSIDE 05-27-2010 06-08-2009 1 EA 0 1 0 0 359. Delams, scaling & long cracks w/ efflor in 3rd & 5th bays from W. Few spalls & delams w/ rebar exp in center span @ 3rd bay from W. Diag cracks in 1st bay from W & E in all spans. Trans cracks in cantilever. Spalls in all bays of N span. 964 CRITICAL FINDING 05-27-2010 1 EA 0 N/A N/A N/A 06-08-2009 1 EA 1 0 N/A N/A N/A 964. Notes: SIGNING 2 05-27-2010 1 EA 1 0 0 0 0 981 1 EA 0 06-08-2009 1 0 0 0 981. No parking @ all corners. Notes: **DRAINAGE** 0 984 2 05-27-2010 1 EA 1 0 N/A N/A 06-08-2009 1 EA 1 0 0 N/A N/A 984. Notes: 985 **SLOPES** 05-27-2010 1 EA 0 1 0 N/A N/A 1 EA n 06-08-2009 1 0 N/A N/A 985. Some erosion on SE & NW corners. SE has been stabilized w/ bit. NW has erosion under walk approach panel. 0 0 986 **CURB & SIDEWALK** 2 05-27-2010 1 EA 1 N/A N/A 06-08-2009 1 EA 0 N/A N/A 986. SE & SW approach walks are cracked @ manholes. Trans cracks in walk. Curb settled @ NE, NW & SW corners.

Few spalls in E walk. Curb spalled @ NE approach. Patches in E walk near N end. Spall in E approach curb @ strip seal.

#### Mn/DOT BRIDGE INSPECTION REPORT

Inspected by: HENNEPIN COUNTY

BRIDGE 90585 CSAH 46(E 46TH ST) OVER STR 1203(GODFREY RD) INSP. DATE: 05-27-2010

				1101 : 57(12: 00 21 2010				
STRUC	CTURE UNIT: 0							
ELEM NBR	ELEMENT NAME	ENV INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
988	MISCELLANEOUS	2 05-27-2010 06-08-2009	1 EA 1 EA	1 1	0 0	0 0	N/A N/A	N/A N/A
Notes	Notes: 988. Light standards on railbas rusted in base of NE light std.	988. Light standards on railbase @ NE & SW corners. 3 in diam RMC in both walks. Stairs w/ railing in SW. '10-Holes rusted in base of NE light std.						

General Notes:

\*Bridge 90585 (738) CSAH 46 (E 46th St) / Godfrey Rd 5/27/10 BJJ, WJM & PTH.

#### Recommended Repairs:

- 22. Excessive cracks in O/L. Consider surface sealing entire bridge deck.
- 110. Monitor conc beams & conc bearing areas. Repair center span beam diaphragm and slab spalls and other substructure spalls. Also delams in many areas.
- 300. Clean strip seal joints & check seals for damage.
- 321. Repair spall @ SE & SW corner of approach panel.
- 985. Repair erosion under NW walk approach panel.
- 988. Notify Minneapolis street lighting regarding rusted light base in NE corner.

NOTES: See C.P. 9922 S.P. 27-030-03 for repaired deck area & conc O/L plan in '01. Poured deck joint removed during '01 O/L.

Inspector's Signature Reviewer's Signature / Date



#### Department of Public Works

Steven A Kotke, P.E.
City Engineer
Director

350 South 5th Street - Room 203 Minneapolis MN 55415

> Office 612 673-3000 Fax 612 673-3565 TTY 612 673-2157

August 3, 2011

Jim N. Grube Director of Transportation and County Engineer Hennepin County 1600 Prairie Drive Medina, MN 55340

Dear Mr. Grube:

I am writing in support of your Bridge Improvement or Replacement Funding Application to the Metropolitan Council for the replacement of the Godfrey Bridge carrying CSAH 46 (46<sup>th</sup> Street East) over Godfrey Parkway in Minneapolis.

Maintaining the infrastructure in Minneapolis is a cooperative effort between the city, Hennepin County, and the State of Minnesota. While each entity has specific responsibilities for construction and repair, residents and visitors experience the infrastructure without prejudice based on governmental jurisdiction. A bridge that needs repair is simply a bridge that needs repair. The lack of jurisdictional prejudice also extends to funding of projects.

Resources in general are diminishing and significant projects such as bridge repair and replacement are especially difficult to fund. I applaud and thoroughly endorse Hennepin County's application for Bridge Improvement or Replacement Funding to remove and replace a structurally deficient bridge in Minneapolis.

It is also worth noting that the replacement bridge and the inclusion of bike lanes will support the city strategic directions of:

- Infrastructure streets, bridges, sidewalks, sewers, bike lanes & paths well-managed and maintained
- Active lifestyles: walkable, bikeable, swimmable

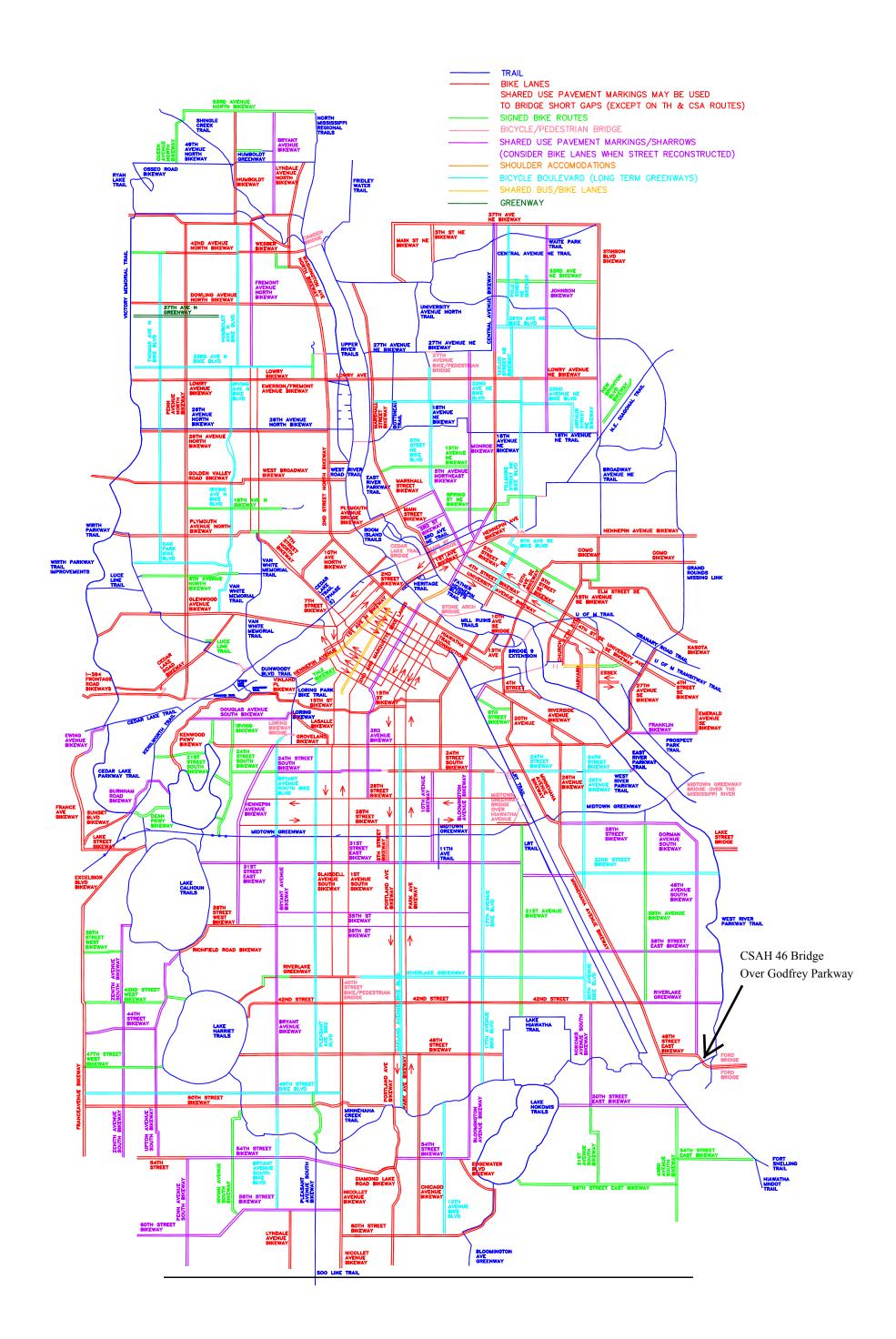
Thank you for the opportunity to support your application and I look forward to this needed improvement in the city.

Sincerely,

Steven A. Kotke, P.E.

City Engineer, Director of Public Works





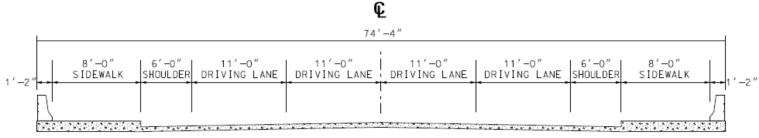
#### **CSAH 46 BRIDGE REPLACEMENT PROJECT**

#### Proposed scope change cost differential (S.A.P. 027-646-007)

April 6, 2016

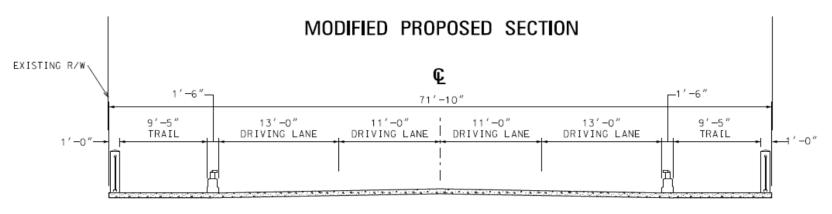
Bridge construction cost comparison between original solicitation and proposed scope change

### ORIGINALLY PROPOSED SECTION



Original estimate \$ 3,036,903

<sup>\*</sup>Required railing width = 1'-8", difference not included in calculations



#### Bridge element changes

Reduced deck width (2'-6") \$ (45,943)

Removed raised concrete sidewalk (18'-4") \$ (19,021)

Increased ornamental railing quantity (50%) \$ 72,900

Total \$ 7,936

Differential includes concrete and reinforcement for deck and substructures

Differntial includes additional parapet tube railing

Modified Estimate \$ 3,044,839

<sup>\*</sup>Required ornamental metal railing not shown on detail above