

Application								
17075 2022 Pridges								
17075 - 2022 Bridges								
17650 - Nicollet Avenue South over Minnehaha Creek								
Regional Solicitation - Roadways Including Multimodal Elements								
Status:	Submitted							
Submitted Date:	04/14/2022 12:2	29 PM						
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What Grant Programs are you most interested in?	Regional Solicit	ation - Bicycle a	and Pedest	rian Facilities				

# **Organization Information**

Name: MINNEAPOLIS,CITY OF

Jurisdictional Agency (if different):

Organization Type: City

Organization Website: http://www.ci.minneapolis.mn.us/

Address: DEPT OF PUBLIC WORKS

309 2ND AVE S #300

MINNEAPOLIS Minnesota 55401

City State/Province Postal Code/Zip

County: Hennepin

Phone:\* 612-673-3884

Ext.

Fax:

PeopleSoft Vendor Number 0000020971A2

# **Project Information**

Project Name

Nicollet Avenue South over Minnehaha Creek - Bridge Rehab

Primary County where the Project is Located Hennepin

Cities or Townships where the Project is Located: Minneapolis

Jurisdictional Agency (If Different than the Applicant):

This project will rehabilitate Bridge No. 90591. The 16-span bridge carries Nicollet Avenue South over Minnehaha Creek and Minnehaha Parkway in the City of Minneapolis. The roadway is classified as an A minor reliever roadway. Project limits are: East Minnehaha Parkway to West 52nd Street (total project length of 1,020 ft.; bridge length of 818 ft.).

The bridge was built in 1923 and repaired in 1973. It is 63 ft. wide, has a total roadway width of 36 ft., and carries two 11 ft. lanes of traffic, two 7 ft. bike lanes, and two 12 ft. sidewalks.

MnDOT traffic data indicates that the AADT in 2015 was 8,900. This segment of Nicollet Avenue currently includes Metro Transit local bus Route 18 which runs from Downtown Minneapolis to South Bloomington. The Kmart at Nicollet Avenue and Lake Street is scheduled for removal in March 2024. This will eliminate a bottleneck and further enhance the Nicollet Avenue corridor through south Minneapolis for potential BRT or streetcar use. An on-street bikeway was added to Nicollet Avenue from 40th Street to 61st Street in 2016. This segment includes Bridge 90591.

Brief Project Description (Include location, road name/functional class, type of improvement, etc.)

The bridge was last inspected by the City of Minneapolis on July 7, 2021. Cracks, concrete spalls, deteriorated concrete, and exposed/rusted reinforcement were found on the underside of the deck, spandrel columns, cap beams, and pier walls. The concrete deck is in poor condition which is reflected in its NBI rating of 4. The 2021 report states, "SB lane has a spall that is 2'x5'x2" deep". The deck joint system has failed allowing salt water to penetrate through the joints and into the cap beams and spandrel columns. The 2019 report states, "Most of the underside of the deck has advanced spalls, rebar is exposed and there is section loss through the 2nd reinforcement mat".

The funds from the Met Council regional solicitation will go toward repairs and rehabilitation of Bridge 90591. The bridge is eligible for listing on the National Register of Historic Places and rehabilitation is the City's preferred solution. Rehabilitation will allow this bridge to continue as an important transportation artery for over 30 more years. In general, the funds will support deck removal and replacement, spandrel column and beam removal and replacement, concrete surface repairs at the arch ribs and piers, sidewalk replacement, a new concrete railing, protected bike lanes, a new drainage system, and a new lighting system.

(Limit 2,800 characters; approximately 400 words)

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
DESCRIPTION - will be used in TIP if the project is selected for funding. See MnDOT's TIP description guidance.

Nicollet Avenue South (MSAS 430) over Minnehaha Creek and Minnehaha Parkway, Bridge Rehab, Br. #90951

Include both the CSAH/MSAS/TH references and their corresponding street names in the TIP Description (see Resources link on Regional Solicitation webpage for examples).

**Project Length (Miles)** 

0.1

to the nearest one-tenth of a mile

#### **Project Funding**

Are you applying for competitive funds from another source(s) to implement this project?

Yes

If yes, please identify the source(s)

State Transportation Fund? Bridge Bonds

Federal Amount

\$7,000,000.00

Match Amount

\$14,500,000.00

Minimum of 20% of project total

Project Total

\$21,500,000.00

For transit projects, the total cost for the application is total cost minus fare revenues.

Match Percentage

67.44%

Minimum of 20%

Compute the match percentage by dividing the match amount by the project total

Source of Match Funds

State Bridge Bond Funds (\$10,000,000); Local Funds (\$4,500,000)

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

**Preferred Program Year** 

Select one: 2026, 2027

Select 2024 or 2025 for TDM and Unique projects only. For all other applications, select 2026 or 2027.

Additional Program Years: 2023, 2024, 2025

Select all years that are feasible if funding in an earlier year becomes available.

### **Project Information-Roadways**

County, City, or Lead Agency City of Minneapolis

Functional Class of Road A Minor Arterial

Road System MSAS

TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET

Road/Route No. 430

i.e., 53 for CSAH 53

Name of Road Nicollet Avenue South

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55419

(Approximate) Begin Construction Date 02/01/2024

(Approximate) End Construction Date 06/01/2025

TERMINI:(Termini listed must be within 0.3 miles of any work)

From:

(Intersection or Address) East Minnehaha Parkway

To:

(Intersection or Address) West 52nd Street

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Miles of Sidewalk (nearest 0.1 miles) 0.4

Miles of Trail (nearest 0.1 miles) 0.4

Miles of Trail on the Regional Bicycle Transportation Network

(nearest 0.1 miles)

0.4

Primary Types of Work Bridge

Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER,STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS,

BRIDGE, PARK AND RIDE, ETC.

**BRIDGE/CULVERT PROJECTS (IF APPLICABLE)** 

Old Bridge/Culvert No.: Bridge No. 90591

New Bridge/Culvert No.: Bridge No. 90591

Structure is Over/Under
(Bridge or culvert name):

over Minnehaha Creek and Minnehaha Parkway

# **Requirements - All Projects**

#### **All Projects**

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2018), the 2040 Regional Parks Policy Plan (2018), and the 2040 Water Resources Policy Plan (2015).

#### Check the box to indicate that the project meets this requirement. Yes

2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.

Goal: Transportation System Stewardship (Page 42)

Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.

#### Objectives:

A. Efficiently preserve and maintain the regional transportation system in a state of good repair.

B. Operate the regional transportation system to efficiently and cost-effectively connect people and freight to destinations.

Briefly list the goals, objectives, strategies, and associated

pages:

Strategies: A significant portion of funding is spent every year for maintenance, operation, repair, and replacement of the existing system. This includes major infrastructure such as pavement, bridges, the bus and rail fleet, park-and-ride facilities, transit stations, stops, and shelters. Climate-related severe weather events such as flooding and colder winters will continue to have impacts on regional transportation infrastructure. Continued and enhanced system maintenance, repair and preservation increase the resiliency of the regional transportation infrastructure. Preservation includes the repair or replacement of pavement, bridges, and infrastructure to support their safe and efficient use.

Goal: Healthy and Equitable Communities (Page 50)

The regional transportation system advances equity and contributes to communities? livability and sustainability while protecting natural, cultural, and developed environments.

Objectives:

- A. Reduce transportation-related air emissions.
- B. Reduce impacts of transportation construction, operations, and use on the natural, cultural, and developed environments.
- C. Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities through the use of active transportation options.
- D. Provide a transportation system that promotes community cohesion and connectivity for people of all ages and abilities, particularly for historically under-represented populations.

Strategies: Investments in the transportation system will protect and enhance the natural, cultural, and developed environments, and will be identified through effective engagement with affected communities.

Examples of environment include the air we breathe, the water we drink and play in, the weather we experience, the characteristics of the neighborhood we live in, and the built infrastructure of roads, bridges, and buildings. A healthy environment is one where impacts of transportation are considered and mitigated in as many ways as we can afford.

Transit Investment Summary (Pages 69-70)

Increased Revenue Scenario? Transitway System

The Increased Revenue Scenario could also reasonably include the following arterial bus rapid transit investments1, beyond the funded and partially funded projects in the Current Revenue Scenario:

- Nicollet Avenue

3. The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.

#### Bridge Rehab

2021 City of Minneapolis Capital Long-Range Improvement Committee Report (pages 23, 26, 35, 42, 47, 54)

Minneapolis 2040 ? The City?s Comprehensive Plan (Pages 94, 128, 245, 260, 272, 274)

Transit & Ped/Bike

List the applicable documents and pages: Unique projects are exempt from this qualifying requirement because of their innovative nature.

Metro Transit Network Next - Identifying the Next Arterial Bus Rapid Transit Lines, February 2021 (Pages 6, 9, 10, 13, 16, 21, 22, 23, 25, 27, 52, 53)

Minneapolis Plan for Sustainable Growth (pages 2-2 through 2-8)

Minneapolis Bicycle Master Plan (pages 52, 122,131-134, 146, 151, 153 172, 199)

Hennepin County 2040 Comprehensive Plan (page 2-34)

Limit 2,800 characters, approximately 400 words

4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible. Unique project costs are limited to those that are federally eligible.

#### Check the box to indicate that the project meets this requirement. Yes

5.Applicant is a public agency (e.g., county, city, tribal government, transit provider, etc.) or non-profit organization (TDM and Unique Projects applicants only). Applicants that are not State Aid cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes

6.Applicants must not submit an application for the same project elements in more than one funding application category.

Check the box to indicate that the project meets this requirement. Yes

7.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below in Table 1. For unique projects, the minimum award is \$500,000 and the maximum award is the total amount available each funding cycle (approximately \$4,000,000 for the 2022 funding cycle).

Strategic Capacity (Roadway Expansion): \$1,000,000 to \$10,000,000 Roadway Reconstruction/Modernization: \$1,000,000 to \$7,000,000

Traffic Management Technologies (Roadway System Management): \$500,000 to \$3,500,000

**Spot Mobility and Safety:** \$1,000,000 to \$3,500,000

Bridges Rehabilitation/Replacement: \$1,000,000 to \$7,000,000

Check the box to indicate that the project meets this requirement. Yes

8. The project must comply with the Americans with Disabilities Act (ADA).

Check the box to indicate that the project meets this requirement. Yes

9.In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA. The plan must be completed by the local agency before the Regional Solicitation application deadline. For the 2022 Regional Solicitation funding cycle, this requirement may include that the plan is updated within the past five years.

The applicant is a public agency that employs 50 or more people and has a completed ADA transition plan that covers the public right of way/transportation.

Yes

(TDM and Unique Project Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA.

Yes

Date plan completed:

03/17/2022

Link to plan:

rtments/public-works/ada-transition/

https://www2.minneapolismn.gov/government/depa

The applicant is a public agency that employs fewer than 50 people and has a completed ADA self-evaluation that covers the public right of way/transportation.

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

10. The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes

11.The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017. Unique projects are exempt from this qualifying requirement.

Check the box to indicate that the project meets this requirement. Yes

12. The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes

13. The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes

14. The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

#### **Roadways Including Multimodal Elements**

1.All roadway and bridge projects must be identified as a principal arterial (non-freeway facilities only) or A-minor arterial as shown on the latest TAB approved roadway functional classification map.

Check the box to indicate that the project meets this requirement. Yes

Roadway Strategic Capacity and Reconstruction/Modernization and Spot Mobility projects only:

2. The project must be designed to meet 10-ton load limit standards.

Check the box to indicate that the project meets this requirement. Yes

#### Bridge Rehabilitation/Replacement and Strategic Capacity projects only:

3.Projects requiring a grade-separated crossing of a principal arterial freeway must be limited to the federal share of those project costs identified as local (non-MnDOT) cost responsibility using MnDOTs Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

Check the box to indicate that the project meets this requirement. Yes

4.The bridge must carry vehicular traffic. Bridges can carry traffic from multiple modes. However, bridges that are exclusively for bicycle or pedestrian traffic must apply under one of the Bicycle and Pedestrian Facilities application categories. Rail-only bridges are ineligible for funding.

Check the box to indicate that the project meets this requirement. Yes

Bridge Rehabilitation/Replacement projects only:

5. The length of the bridge clear span must exceed 20 feet.

Check the box to indicate that the project meets this requirement. Yes

6. The bridge must have a National Bridge Inventory Rating of 6 or less for rehabilitation projects and 4 or less for replacement projects.

Check the box to indicate that the project meets this requirement. Yes

#### Roadway Expansion, Reconstruction/Modernization, and Bridge Rehabilitation/Replacement projects only:

7. All roadway projects that involve the construction of a new/expanded interchange or new interchange ramps must have approval by the Metropolitan Council/MnDOT Interchange Planning Review Committee prior to application submittal. Please contact Michael Corbett at MnDOT (Michael.J.Corbett@state.mn.us or 651-234-7793) to determine whether your project needs to go through this process as described in Appendix F of the 2040 Transportation Policy Plan.

Check the box to indicate that the project meets this requirement. Yes

#### Requirements - Roadways Including Multimodal Elements

# **Specific Roadway Elements**

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$2,205,000.00
Removals (approx. 5% of total cost)	\$25,000.00
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$200,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$90,000.00
Traffic Control	\$75,000.00
Striping	\$10,000.00
Signing	\$10,000.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$35,000.00
Bridge	\$18,690,000.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$16,000.00
Other Roadway Elements	\$0.00
Totals	\$21,356,000.00

# **Specific Bicycle and Pedestrian Elements**

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost		
Path/Trail Construction	\$0.00		
Sidewalk Construction	\$4,000.00		
On-Street Bicycle Facility Construction	\$10,000.00		
Right-of-Way	\$0.00		
Pedestrian Curb Ramps (ADA)	\$20,000.00		

Totals	\$144,000.00
Other Bicycle and Pedestrian Elements	\$10,000.00
Bicycle and Pedestrian Contingencies	\$25,000.00
Wayfinding	\$0.00
Streetscaping	\$0.00
Pedestrian-scale Lighting	\$75,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00

# **Specific Transit and TDM Elements**

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	\$0.00
Stations, Stops, and Terminals	\$0.00
Support Facilities	\$0.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	\$0.00
Vehicles	\$0.00
Contingencies	\$0.00
Right-of-Way	\$0.00
Other Transit and TDM Elements	\$0.00
Totals	\$0.00

# **Transit Operating Costs**

Number of Platform hours 0

Cost Per Platform hour (full loaded Cost) \$0.00

Subtotal \$0.00

Other Costs - Administration, Overhead,etc. \$0.00

#### **Totals**

 Total Cost
 \$21,500,000.00

 Construction Cost Total
 \$21,500,000.00

Transit Operating Cost Total \$0.00

# Measure A: Distance to the nearest parallel bridge

#### RESPONSE:

Location of nearest parallel bridge crossing:

**Explanation:** 

(Limit 2,800 characters; approximately 400 words)

Distance from one end of proposed project to nearest parallel crossing (that is an A-minor arterial or principal arterial) and then back to the other side of the proposed project using non-local functionally-classified roadways (calculated by Council Staff):

Lyndale Avenue South (Hennepin County CSAH 22)

The nearest detour route is CSAH 22. The detour route would be Nicollet Avenue South to 50th Street south to Lyndale Avenue south (CSAH 22) to 54th Street South to Nicollet Avenue South. Regional or longer distance trips that use Nicollet Avenue South will also be able to use I-35W, access is at Diamond Lake Road which is 0.4 miles away from the project site.

It is anticipated that the bridge will be closed for removal and reconstruction of the concrete deck, spandrel columns and floor beams. Construction is anticipated to last 1 calendar year. Its effect on connections to employment will be minimal as the detour route is only approximately 1.7 miles. Transit bus users going to places of employment or postsecondary locations will only experience slight delays. The project is not located on Tier 1, Tier 2, or Tier 3 corridors so a closure will have minimal effect on truck traffic. Also, due to I-35W being adjacent to Nicollet Avenue, trucks will be able to access the 46th Street exit to the north and the Diamond Lake exit to the south to avoid traveling along Nicollet Avenue. It will however place more traffic (8900 ADT) on nearby neighborhoods as Lyndale Avenue South (CSAH 22) will become more congested as will Portland Avenue to the east. It may also affect routes to two nearby schools along 50th Street (Washburn High School and Justice Page Middle School).

Measure B: Project Location Relative to Jobs, Manufacturing, and Education

Existing Manufacturing/Distribution-Related Employment within 1

Mile:

531

Existing Post-Secondary Students within 1 Mile: 0

Upload Map

1648557648430\_NicolletAveBridge RegionalEconomy\_Map\_032822.pdf

Please upload attachment in PDF form.

# **Measure C: Regional Truck Corridor Tiers**

Along Tier 1:

(65 Points)

Miles (to the nearest 0.1 miles):

If box above is checked, fill in length.

Along Tier 2:

(60 Points)

Miles (to the nearest 0.1 miles):

If box above is checked, fill in length.

Along Tier 3:

(55 Points)

Miles (to the nearest 0.1 miles):

If box above is checked, fill in length.

The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:

(10 Points)

The project is not located on a Tier 1, Tier 2, or Tier 3 corridor: Yes

(0 Points)

## **Measure A: Current Daily Person Throughput**

Location 1.7 MI N OF JCT CSAH 53

Current AADT Volume 8900.0

Existing Transit Routes on the Project: 18

Select all transit routes that apply.

Upload "Transit Connections" map

TransitConnections\_Map\_032822.pdf

Please upload attachment in PDF form.

## **Response: Current Daily Person Throughput**

#### Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume

If checked, METC Staff will provide Forecast (2040) ADT volume

**OR** 

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume

Forecast (2040) ADT volume

#### Measure A: Engagement

i.Describe any Black, Indigenous, and People of Color populations, low-income populations, disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.

ii. Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing were engaged, whether through community planning efforts, project needs identification, or during the project development process.

iii. Describe the progression of engagement activities in this project. A full response should answer these questions:

The Nicollet Bridge over Minnehaha Creek provides critical access to nearby residents and also people connecting in the area. It is the route of the high-frequency route 18 bus.

Residents who live within 1/2 mile of the bridge are slightly less diverse than the region as a whole. 23.4% of nearby residents are Black, Indigenous, or People of Color (compared to 32% for the Twin Cities). 13.4% of residents are Black (compared to 9.6% for the Twin Cities), 2.2% are Asian (compared to 7.5%), and 4.2% are Latino (compared to 6.4%). 4% of nearby residents live below the poverty line compared to 9% in the region. 4.4% of nearby residents have a disabilities compared to 9.8% regionwide. Percentage of residents who are youth or seniors are very close to regional averages.

Response:

This project is primarily about addressing a critical maintenance need. While there has been projectfocused communications, there has not been a lot of engagement. The project does respond to feedback during the development of the City's Transportation Action Plan. Engagement for that plan included separate dialogues in-language with members from 7 communities: African American, East African, Latino, Native American, Minneapolis Youth Congress, people with disabilities, and Southeast Asian. It also included 30 direct engagement activities done in partnership with contracted community-based organizations that focused on reaching residents in public housing, East African community members, Latino community members, college students, high school students, and residents of traditionally under representative neighborhoods.

Through that engagement we heard a desire to make travel safe, easy, and reliable for all modes.

This project responds to that by maintenance this key connection for all modes.

(Limit 2,800 characters; approximately 400 words):

#### **Measure B: Equity Population Benefits and Impacts**

Describe the projects benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:

This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.

Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.

Below is a list of potential negative impacts. This is not an exhaustive list.

The project will primarily benefit residents by maintaining access to this important transportation connection. This includes benefits for nearby residents and other travelers who are Black, Indigenous, People of Color, low-income, have a disability, youth, or seniors. It will also help ensure access for the 18 bus is retained.

The project also includes traffic safety benefits, including improved protected bikeway and better protected sidewalk. These will also help to support improved access and healthy transportation options.

Potential negative impacts relate to construction. The city will observe and abide by the applicable Minneapolis ordinances pertaining to permitted noise levels and hours of operation for construction equipment, and will be diligent about implementing dust mitigation. The city will coordinate with the relevant entities to develop and implement a pedestrian detour plan to maintain reliable travel during the construction period. Access to housing and community destinations will be maintained during construction.

Response:

#### **Measure C: Affordable Housing Access**

Describe any affordable housing developments existing, under construction, or planned within ½ mile of the proposed project. The applicant should note the number of existing subsidized units, which will be provided on the Socio-Economic Conditions map. Applicants can also describe other types of affordable housing (e.g., naturally-occurring affordable housing, manufactured housing) and under construction or planned affordable housing that is within a half mile of the project. If applicable, the applicant can provide self-generated PDF maps to support these additions. Applicants are encouraged to provide a self-generated PDF map describing how a project connects affordable housing residents to destinations (e.g., childcare, grocery stores, schools, places of worship).

Describe the projects benefits to current and future affordable housing residents within ½ mile of the project. Benefits must relate to affordable housing residents. Examples may include:

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.

Response:

There are 60 affordable housing with ½ mile of the Nicollet Bridge, including 22 deeply affordable units for people who make less than 30% of area median income. See ?Affordable Housing Developments Nicollet Ave Bridge? file in attachments for a full list.

Affordable housing residents will benefit from being able to make the connection this bridge provides to all modes.

(Limit 2,800 characters; approximately 400 words):

#### Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:

Projects census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area):

Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):

Upload the Socio-Economic Conditions map used for this measure.

1649957018304\_Socio-Economic Map Nicollet Ave Bridge.pdf

#### **Measure A: Bridge Condition**

5.0

5.0

0

**Lowest National Bridge Inventory Condition Rating:** 

4.0

**Upload Structure Inventory Report** 

1648558673199\_NicolletAveBridge\_Inv Report.pdf

Please upload attachment in PDF form.

# **Measure A: Infrastructure Age**

Load Posted (Check box if the bridge is load-posted):

# **Measure A: Multimodal Elements and Existing Connections**

The rehabilitation of the Nicollet Avenue South Bridge (Bridge 90591) over Minnehaha Parkway

and Creek will benefit people walking, biking, and taking transit. As one of only a few bridges over Minnehaha Creek in this part of South Minneapolis, the bridge provides a critical connection across a barrier.

The rehabilitation will replace the bridge deck and will enhance existing bicycle facilities by adding a protected bikeway in each direction, connecting to the Nicollet Avenue on-street bicycle lanes constructed in 2016. The protected bikeway would also connect to proposed protected bikeways on Nicollet Avenue south of the bridge. The addition of protected bikeways through these projects will contribute to a connected All Ages and Abilities bicycle network in Minneapolis and improve safety and comfort for people biking. The bridge rehabilitation will replace existing sidewalks on both sides of the bridge, creating a lasting and safe travel surface for pedestrians. New bridge railings and pedestrian scale lighting will further enhance traveling experience for people walking and biking.

Bridge 90591 crosses over the Minnehaha Parkway Trail that is part of the historic Grand

Rounds pathway system and is listed as a Tier 1 Alignment on the RBTN. The proposed

rehabilitation will improve the safety for both bicyclists and pedestrians, as the rehabilitation will eliminate the risk of falling debris from an obsolete and deteriorating bridge onto the pathways below. City of Minneapolis Bicycle counts indicate that over 1000 cyclists and over 600 pedestrians travel beneath the bridge each day. Repairing the bridge

Response:

will improve its aesthetics, enhancing the livability and quality of life for Minneapolis residents and trail visitors.

Bridge 90591 carries local Metro Transit Route 18, which carries passengers from Bloomington to downtown Minneapolis predominately along Nicollet Avenue and is one of the most used routes in the Metro Transit system. Route 18 is a high frequency network and a Night Owl route. The THRIVE MSP 2040's Transportation Policy Plan stipulates that the Nicollet Avenue South bridge could potentially carry a Streetcar or BRT line in the future. Metro Transit?s Network Next is a 20-year plan for expanding and improving the bus network. Transit improvements under consideration include improved local and express routes, integrated shared mobility options, and new arterial bus rapid transit (BRT) lines. The Nicollet Avenue corridor has been identified for BRT as mid-term level implementation for construction in years 2030-2035, pending full funding.

(Limit 2,800 characters; approximately 400 words)

#### **Transit Projects Not Requiring Construction**

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

#### **Measure A: Risk Assessment - Construction Projects**

#### 1. Public Involvement (20 Percent of Points)

Projects that have been through a public process with residents and other interested public entities are more likely than others to be successful. The project applicant must indicate that events and/or targeted outreach (e.g., surveys and other web-based input) were held to help identify the transportation problem, how the potential solution was selected instead of other options, and the public involvement completed to date on the project. The focus of this section is on the opportunity for public input as opposed to the quality of input. NOTE: A written response is required and failure to respond will result in zero points.

Multiple types of targeted outreach efforts (such as meetings or online/mail outreach) specific to this project with the general public and partner agencies have been used to help identify the project need.

100%

At least one meeting specific to this project with the general public has been used to help identify the project need.

50%

At least online/mail outreach effort specific to this project with the general public has been used to help identify the project need.

50%

No meeting or outreach specific to this project was conducted, but the project was identified through meetings and/or outreach Yes related to a larger planning effort.

25%

No outreach has led to the selection of this project.

0%

Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.

Response:

The Minneapolis Transportation Action Plan update involved three years of public engagement and built upon relationships and engagement conducted as part of Minneapolis 2040, the City's comprehensive plan. Minneapolis staff conducted outreach throughout the City including in Ward 11 where this project takes place. Key goals of public engagement for the Minneapolis Transportation Plan included engaging a broad spectrum of people and stakeholders, prioritizing engagement with traditionally underrepresented groups, and providing many ways for people to provide input. A variety of types of engagement were utilized as part of this project including online materials (websites, surveys, and social media), in-person events (community dialogues, street festivals, and neighborhood meetings), large events (open houses and conferences), and Creative Tools (infographics and digital media communications). Project materials were translated into many languages and translators were made available at large events and by demand at smaller gatherings. With portions of this project within areas with significant low-income and minority populations, access to translated materials was at the forefront of engagement efforts.

Project specific engagement has started for this project with a series of neighborhood meetings this spring. The engagement meetings will be to educate the participants/stakeholders of the project and will be held virtually.

(Limit 2,800 characters; approximately 400 words)

#### 2.Layout (25 Percent of Points)

Layout includes proposed geometrics and existing and proposed right-of-way boundaries. A basic layout should include a base map (north arrow; scale; legend;\* city and/or county limits; existing ROW, labeled; existing signals;\* and bridge numbers\*) and design data (proposed alignments; bike and/or roadway lane widths; shoulder width;\* proposed signals;\* and proposed ROW). An aerial photograph with a line showing the projects termini does not suffice and will be awarded zero points. \*If applicable

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties/MnDOT. If a MnDOT trunk highway is impacted, approval by MnDOT must have occurred to receive full points. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

A layout does not apply (signal replacement/signal timing, standalone streetscaping, minor intersection improvements). Applicants that are not certain whether a layout is required should contact Colleen Brown at MnDOT Metro State Aid colleen.brown@state.mn.us.

100%

For projects where MnDOT trunk highways are impacted and a MnDOT Staff Approved layout is required. Layout approved by the applicant and all impacted local jurisdictions (i.e., cities/counties), and layout review and approval by MnDOT is pending. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

75%

Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points.

Yes

50%

Layout has been started but is not complete. A PDF of the layout must be attached to receive points.

25%

Layout has not been started

0%

**Attach Layout** 

1648572643309\_NicolletAveBridge\_Layout.pdf

Please upload attachment in PDF form.

#### **Additional Attachments**

Please upload attachment in PDF form.

#### 3. Review of Section 106 Historic Resources (15 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge

100%

There are historical/archeological properties present but determination of no historic properties affected is anticipated.

100%

Historic/archeological property impacted; determination of no adverse effect anticipated

Yes

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

Unsure if there are any historic/archaeological properties in the project area.

0%

Project is located on an identified historic bridge

Yes

#### 4.Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements, and MnDOT agreement/limited-use permit either not required or all have been acquired

100%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels identified

25%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels not all identified

Yes

0%

#### 5.Railroad Involvement (15 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable)

Yes

100%

#### **Signature Page**

Please upload attachment in PDF form.

Railroad Right-of-Way Agreement required; negotiations have begun

50%

Railroad Right-of-Way Agreement required; negotiations have not begun.

0%

#### **Measure A: Cost Effectiveness**

Total Project Cost (entered in Project Cost Form): \$21,500,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$21,500,000.00

Enter amount of any outside, competitive funding: \$0.00

Attach documentation of award:

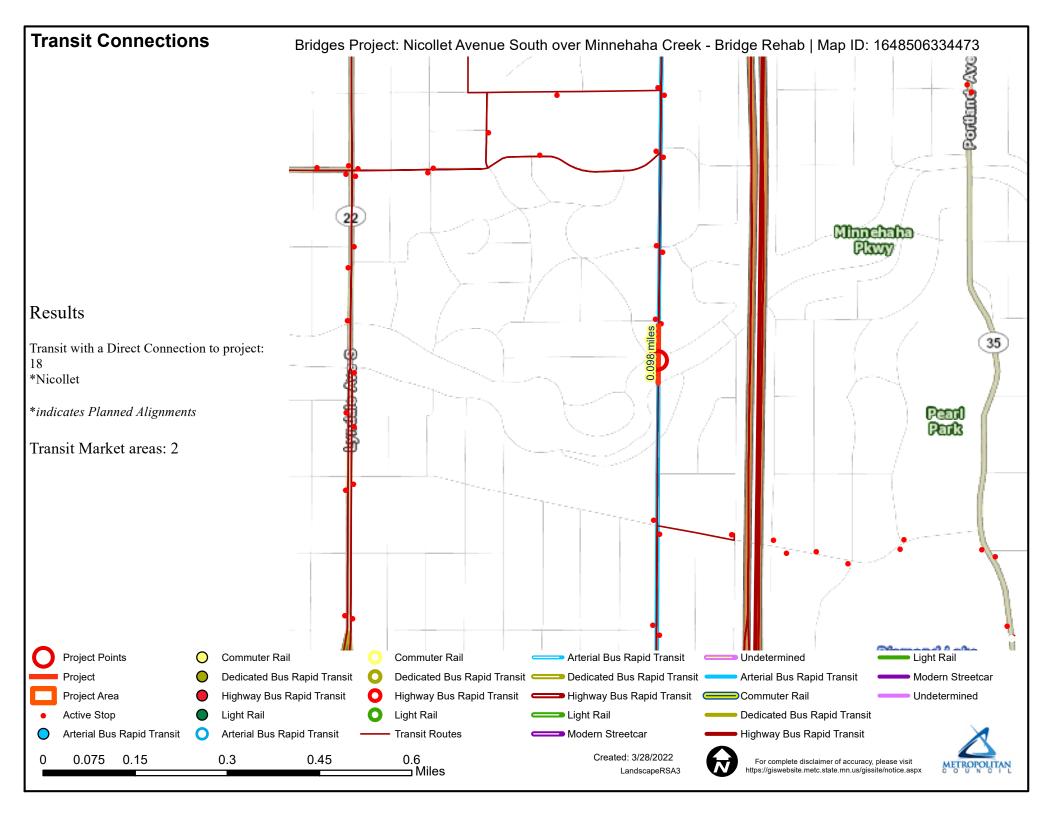
**Points Awarded in Previous Criteria** 

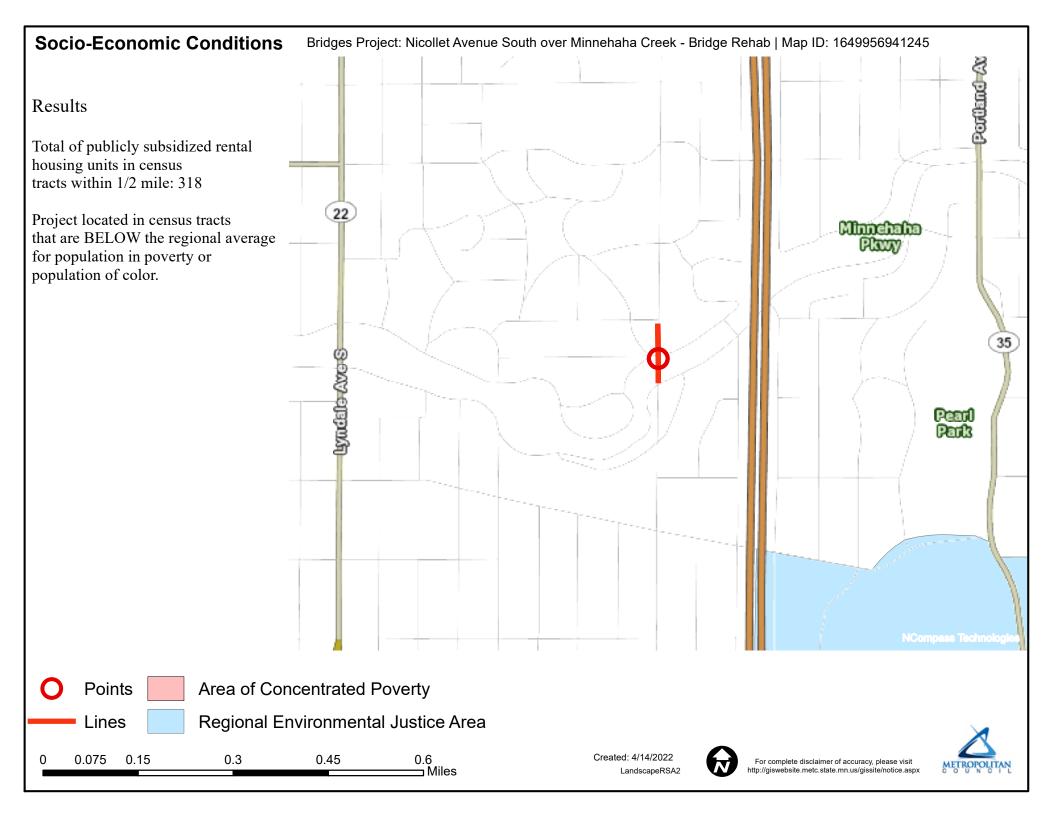
Cost Effectiveness \$0.00

### **Other Attachments**

File Name	Description	File Size
Affordable Housing Developments Nicollet Ave Bridge.pdf	List of affordable housing units near Nicollet Bridge	489 KB
Affordable Housing Map Nicollet Ave Bridge.pdf	Map of affordable housing units near Nicollet Bridge	336 KB
NicolletAveBridge_Exist Conditions Photo.pdf	Bridge Existing Condition Photos	115 KB
NicolletAveBridge_Inv and Insp Report.pdf	Bridge Inventory and Inspection Report	114 KB
NicolletAveBridge_Nicollet Ave S Bikeway.pdf	Nicollet Avenue South Bikeway	236 KB
NicolletAveBridge_Nicollet_Avenue_BRT .pdf	Proposed Nicollet Avenue BRT	1.6 MB
NicolletAveBridge_Project Description.pdf	Project Description	835 KB
NicolletAveBridge_Proposed Rehab & Imprvment Areas.pdf	Bridge Proposed Improvements	2.8 MB
NicolletAveBridge_RBTN Map_032922.pdf	Regional Bicycle Transportation Network Map	762 KB
NicolletAveBridge_Repair Photos.pdf	Bridge Repair Photos	2.0 MB

# **Regional Economy** Bridges Project: Nicollet Avenue South over Minnehaha Creek - Bridge Rehab | Map ID: 1648506334473 Pentlend-Ave Results 22 Minnehalia WITHIN ONE MI of project: Postsecondary Students: 0 Totals by City: Minneapolis Population: 39138 Employment: 7017 Mfg and Dist Employment: 531 Lyadale-Ave Pearl Park **Project Points** Manfacturing/Distribution Centers **Job Concentration Centers Project** Created: 3/28/2022 0.075 0.15 0.3 0.45 0.6 For complete disclaimer of accuracy, please visit ⊐ Miles http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx LandscapeRSA5



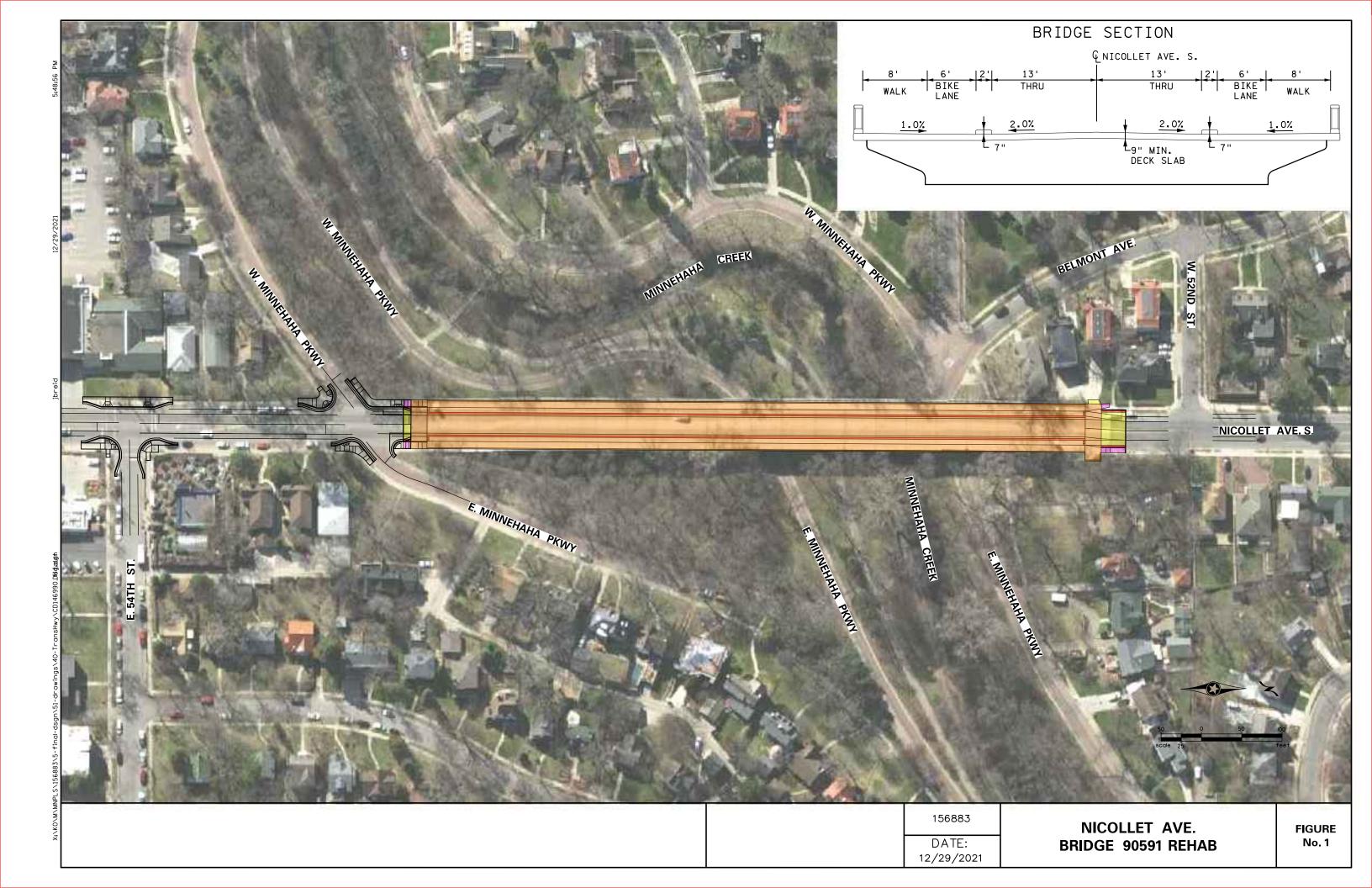


Page No: 1

# MINNESOTA STRUCTURE INVENTORY REPORT

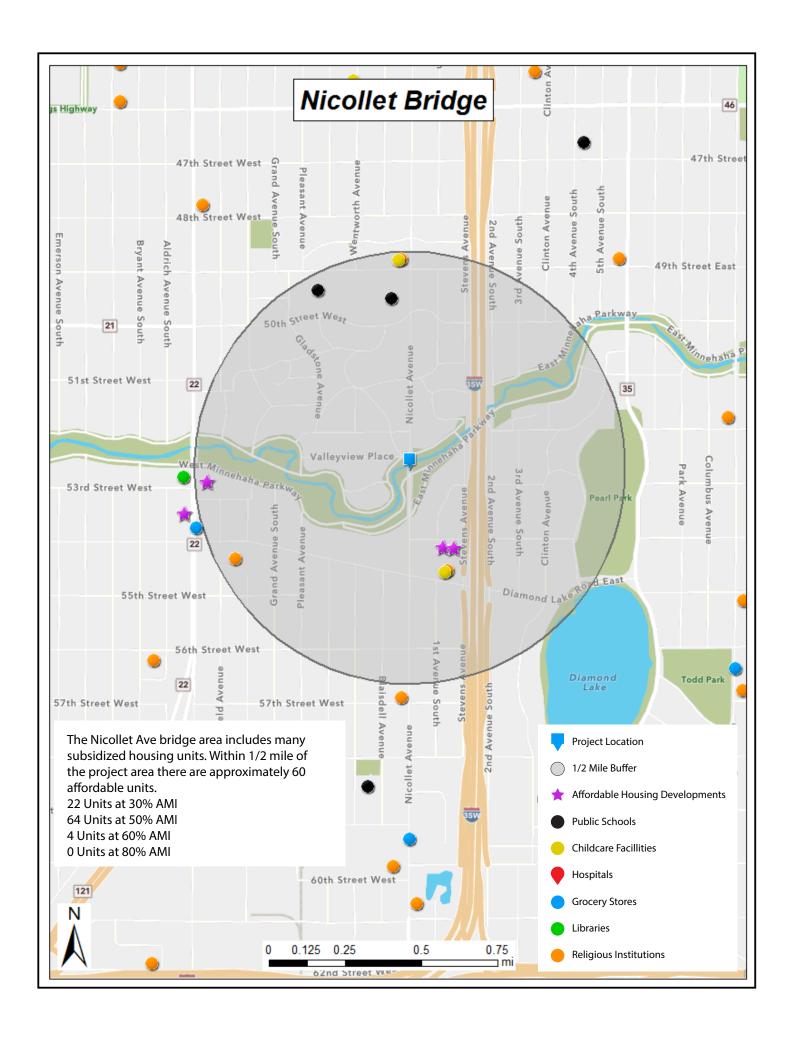
**Bridge ID: 90591** NICOLLET AVE S over MINNEHAHA PKWY; CREEK Date: 03/18/2022

+ GENERAL +	+ ROADWAY ON BRIDGE +	+ INSPECTION +		
Agency Br. No. 4511 Crew	Facility MSAS 430	Deficient Status S.D.		
District METRO Maint. Area	Functional Class URB/MINOR ART	Local Planning Index 47		
County 27 - HENNEPIN	ADT (YEAR) 8,948 (2015)	Last Routine Insp Date 07-21-2021		
City MINNEAPOLIS	HCADT	Routine Insp Frequency 12		
	National Highway System N	Inspector Name CITY MINNEAPOLIS		
Township  Desc. Loc. 1.7 MI N OF JCT CSAH 53	Route Sys/Nbr (TIS) MSAS 430	Status A-OPEN		
	Ref. Point (TIS) 001+00.040	+ NBI CONDITION RATINGS +		
Sect., Twp., Range 15 - 028N - 24W	Detour Length 1 mi.	Deck 4		
Latitude 44d 54m 27.36s		_		
Longitude 93d 16m 41.10s  Custodian CITY	Lanes 2 Lanes ON Bridge			
2.7	Control Section (TH Only)			
- · · · · · · · · · · · · · · · · · · ·	Function MAINLINE			
Insp Responsibility CITY OF MINNEAPOLIS	• •	Culvert		
Year Built 1923	Bridge Match ID 1	+ NBI APPRAISAL RATINGS +		
Date Opened to Traffic 01-01-1974	Roadway Key 1-ON	Structure Evaluation 4		
MN Year Remodeled 2002		Deck Geometry 4		
FHWA Year Reconstructed	+ RDWY DIMENSIONS ON BRIDGE +	Underclearances 6		
Bridge Plan Location MUNICIPAL	If Divided NB-EB SB-WB	Waterway Adequacy 8		
Potential ABC N.A.	Roadway Width 36.0 ft	Approach Alignment 6		
+ STRUCTURE +	Vertical Clearance	+ SAFETY FEATURES +		
Service On HWY;PED	Max. Vert. Clear.	Bridge Railing 0-SUBSTANDARD		
Service Under HWY;STREAM	Horizontal Clear. 36.0 ft	GR Transition 0-SUBSTANDARD		
Main Span Type CONC ARCH	Appr. Surface Width 52.0 ft	Appr. Guardrail 0-SUBSTANDARD		
Main Span Detail OPEN SPANDREL AR	Bridge Roadway Width 36.0 ft	GR Termini 0-SUBSTANDARD		
Appr. Span Type CONC SLAB SPAN	Median Width on Bridge NA	+ SPECIAL INSPECTIONS +		
Appr. Span Detail		Frac. Critical N		
Skew	+ MISC. BRIDGE DATA +	Underwater N		
Culvert Type	Structure Flared NO	Pinned Asbly. N		
Barrel Length	Parallel Structure NONE			
Number of Spans	Field Conn. ID	+ WATERWAY +		
MAIN: 9 APPR: 7 TOTAL: 16	Cantilever ID	Drainage Area		
Main Span Length 93.6 ft	Foundations	Waterway Opening 99999 sq ft		
Structure Length 818.0 ft	Abut. CONC - SPRD SOIL	Navigation Control NO PRMT REQD		
Deck Width 62.3 ft	Pier CONC - FTG PILE	Pier Protection		
Deck Material C-I-P CONCRETE	Historic Status ELIGIBLE	Nav. Vert./Horz. Clr.		
Wear Surf Type MONOLITHIC CONC	On - Off System ON	Nav. Vert. Lift Bridge Clear.		
Wear Surf Install Year	+ PAINT +	MN Scour Code I-LOW RISK		
Wear Course/Fill Depth	Year Painted	Scour Evaluation Year 1991		
Deck Membrane NONE	Painted Area	+ CAPACITY RATINGS +		
Deck Rebars NONE	Primer Type	Design Load HS 20		
Deck Rebars Install Year	Finish Type	Operating Rating HS 29.80		
Structure Area 50,961 sq ft	+ BRIDGE SIGNS +	Inventory Rating HS 17.90		
Roadway Area 29,448 sq ft	Posted Load NOT REQUIRED	Posting		
Sidewalk Width - L/R 12.0 ft 12.0 ft	Traffic NOT REQUIRED	Rating Date 04-01-2013		
Curb Height - L/R 0.75 ft 0.75 ft	Horizontal NOT REQUIRED	Overweight Permit Codes		
Rail Codes - L/R 17 17	Vertical NOT APPLICABLE	A: 1 B: 1 C: 1		
	TOTAL TOTAL			



# Affordable Housing Map Key Information \* Red text denotes addresses outside the 1/2 mile project buffer

Address	<b>Development Stage</b>	# affordable units	0BR	1BR	2BR	31	BR	4BR	Total units	#Units 30% AMI # U	Units 50% AMI	# Units 60% AMI	#Units 80% AMI	% affordable Funding Category
														Tax Credit
103 E 54th St														Subsidized-Other
115 E 54th St	Complete	30			4	14	9	9	30	6	54			100% Tax Credit (LIHTC 9%)
516 W 53rd St	Complete	16	j	1	2	4			16	16				20% Project-Based Subsidy
														Tax Credit
														Subsidized-Other
5320 Lyndale Ave S	Complete	10			2	5	3		24		10			42% Tax Credit (LIHTC 9%)
angletown	Complete	4							4			4		100% Subsidized-Other
	Total	60		0 1	8	23	12	3	3 74	22	64	. 4	0	



# Nicollet Avenue South over Minnehaha Creek – Bridge Rehab Applicant: City of Minneapolis



Page No: 1

# MINNESOTA STRUCTURE INVENTORY REPORT

**Bridge ID: 90591** NICOLLET AVE S over MINNEHAHA PKWY; CREEK Date: 03/18/2022

+ GENERAL +	+ ROADWAY ON BRIDGE +	+ INSPECTION +		
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Sect., Twp., Range 15 - 028N - 24W	Ref. Point (TIS) 001+00.040	+ NBI CONDITION RATINGS +		
<b>Latitude</b> 44d 54m 27.36s	Detour Length 1 mi.	Deck 4		
Longitude 93d 16m 41.10s	Lanes 2 Lanes ON Bridge	Superstructure 5		
Custodian CITY	Control Section (TH Only)	Substructure 4		
Owner CITY	Function MAINLINE	Channel 5		
Insp Responsibility CITY OF MINNEAPOLIS	' ' ' ' ' '   <u> </u>	Culvert N		
Year Built 1923	Bridge Match ID 1	+ NBI APPRAISAL RATINGS +		
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Appr. Span Detail		Frac. Critical N		
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Wear Surf Type MONOLITHIC CONC	On - Off System ON	Nav. Vert. Lift Bridge Clear.		
Wear Surf Install Year	+ PAINT +	MN Scour Code I-LOW RISK		
Wear Course/Fill Depth	Year Painted	Scour Evaluation Year 1991		
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Page No:

03/18/2022

Crew:	03/18/2022 Crew: MINNESOTA BRIDGE INSPECTION REPORT Insp Responsibility: CITY OF MINNEAPOLIS								
	GE 905			INNEHAHA	PKWY; CREEK	INSF	P. DATE: 0	7-21-202 <sup>2</sup>	1
City: Note: Towns!	n: 15 Tov		Route (TIS) Control Sec	1.7 MI N OF J ): MSAS 430 ction: cy Bridge Nbr:	Ref Pt (TIS):001+00.04 Maint. Area:		rea	18 sq ft	
NBI D	eck: 4	Super: 5 Sub: 4 Chan: 5	Culv: N	Open, Pos	sted, Closed: OPEN				
		gs - Approach: 6 Waterway e Signs - Load Posting: NOT Horizontal: NOT RE	REQUIRED	Traffic: NO	Code: I-LOW RISK OT REQUIRED APPLICABLE	Def	f. Stat: S.D.	Suff. Ra	te: 56.6
ELE NBF		ELEMENT NAME		INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800		CAL DEFS OR SAFETY HAZ	ARDS	07-21-2021	1 EA	1	0	0	0
	Notes:	[2021] NO CRITICAL FINDI	NGS.	07-30-2020	1 EA	1	0	0	0
12	REINF	ORCED CONCRETE DECK		07-21-2021 07-30-2020	50,961 SF 50,961 SF	20,000	23,865 43,865	5,096 5,096	2,000 2,000
	Notes:	[2016] MANY DELAMINATION							
		LAYER OF REINFORCEME THE JOINTS TO N. ABUTM SHOTCRETE REPAIR OVE UNDERSIDE HAVE ADVAN OVER THE WATER. CITY (	IENT. STAIN R ROADWA CED SPALL	IING AND EFF AY. REBAR SE .S, REBAR EX	CLORESCENCE. OLD FO CCTION LOSS ON S. SID POSED AND SECTION I	ORM WORK E ABOVE T LOSS THR	K EXPOSED THE CREEK OUGH 2ND	AT S. CAP. . [2019] MOS MATT SPEC	ST OF CIALLY
		DETERIORATION. [2021] N					_	_	
510	WEARII	NG SURFACE		07-21-2021 07-30-2020	29,448 SF 29,448 SF	7,001	15,085 22,086	7,362 7,362	0 0
	Notes:	Top of Concrete Deck with SIZE UNSEALED TRANSV CRACKS AND JOINTS HA PATCHES. [2017] MANY C SPALLS, LARGE CRACKS NO SIGNIFICANT CHANG	'ERSE AND VE NOT BEI ONCRETE I , DETERIOF	ebar Notes: [20 LONGITUDIN, EN SEALED. N PATCHES, FE	016] THERE ARE RANDO AL CRACKS ON ENTIRE MANY OF THE PATCHES W SMALL SPALLS AND I	DECK. TH ARE SCA MANY LAR	S AND FINE HE CENTER LING AT THI GE CRACKS	, MEDIUM T STRIPPED A E EDGES. A S. [2019] MA	TO LARGE AREA SPHALT NY LARGE
301	POUR	ED SEAL JOINT		07-21-2021 07-30-2020	2,164 LF 2,164 LF	0	1,164 1,164	1,000 1,000	0
	Notes:	[2016] LONGITUDINAL AND SEALANT IS DETERIORAT					ADHESION	. [2017] MAT	TERIAL
302	COMP	RESSION DECK JOINT		07-21-2021 07-30-2020	1,197 LF 1,197 LF	0 0	341 341	856 856	0 0
	Notes:	FULL OF SAND AND LOOS DELAMINATION. STEEL EX SATURATION BELOW. FO AREAS OF THE JOINTS, S MATERIAL SEALANT IS DE	KTRUSION E AM OF TWO PALLS AND	MANY PLACE BROKEN AND JOINTS FRO SCALE AT OU	ES OF THE JOINT ARE O PUSHED IN AND MOST M NORTH HAS NO PAR JTSIDE EDGES [2016] P	DPEN, SEP SHOWING A PLASTIC ARA PLAS	PARATION, S RUST, CO CVEGETATION TIC IS DETE	PALLS, SCARROSION A DN GROWIN RIORATING	ALE AND IND NG MANY G. [2017]
330	METAI	BRIDGE RAILING		07-21-2021	1,637 LF	964	673	0	0
	Notes:	[2016] GALVANIZED STEEI CHANGE.	COATING	07-30-2020 IS FADING, M	1,637 LF ANY SCRATCHES AND	964 MINOR RU	673 ST. [2021] N	0 O SIGNIFIC	0 CANT
515	STEEL	PROTECTIVE COATING		07-21-2021	4,229 SF	2,842	1,387	0	0
	Notes:	[2016] GALVANIZED STEE CHANGE.	L COATING	07-30-2020 IS FADING, M	4,229 SF IANY SCRATCHES AND	2,842 MINOR RU	1,387 JST. [2021] I	0 NO SIGNIFIO	0 CANT
331	REINF	ORCED CONC BRIDGE RA	ILING	07-21-2021 07-30-2020	1,637 LF 1,637 LF	1,000 1,000	600 600	37 37	0
					44 D 0 D 4 0 1/0 D 1/0 = 0 =				

Notes: THE CONCRETE PARAPET HAS MANY FINE SIZE MAP CRACKS, RUST STAINS, DELAMINATION, SMALL SPALLS WITH REBAR EXPOSED AT THE FASCIAS. [2016] LARGE SPALLS WITH REBAR EXPOSED BOTH SIDES. [2017] MORE SPALL WITH REBAR EXPOSED. [2021] NO SIGNIFICANT CHANGE.

Notes:								Page No:	5
APPROACH IS MILLED, APPROACH HAVE SPALLS, (2021) NO SIGNIFICANT CHANGE.  22 BITUMINOUS APPROACH ROADWAY D'730-2020 1 1EA 0 1 0 0 0 Notes: [2019] ASPHALT SETTLED DOWN AT N. APPROACH LARGE CRACKS, SEPARATION AND SETTLEMENT AT S APPROACH. 12' OF THE STEEL AT THE JOINT IS EXPOSED. JOINT FILLED WITH ASPHALT. [2019] LARGE CRACKS. [2021] NO SIGNIFICANT CHANGE.  144 REINFORCED CONGRETE ARCH  167-21-2021 1,371 LF 0 750 021 0 NOISE: [11-ERE ARE LONGITUDINAL CRACKS, DELAMINATION, SPALLS WITH REBAR EXPOSED, MANY OF THE CRACKS HAVE AND A CHANGE	321	CONC	RETE APPROACH SLAB		•			-	
Notes:		Notes:					E ROADW	'AY NEXT TO	THE
APPRICACH, 3" OF THE STELLAT THE JOINT IS EXPOSED. JOINT FILLED WITH ASPHALT. [2019] LARGE CRACKS.	822	BITUM	MINOUS APPROACH ROADWAY						
Notes:   THERE ARE LONGITUDINAL CRACKS, DELAMINATION, SPALLS WITH REBAR EXPOSED, MANY OF THE TERACKS HAVE RUST STAINS, ALSO LONGITUDINAL CRACKS, ON THE SIDES OF THE ARCHES, SPALLS WITH REBAR EXPOSED.		Notes:	APPROACH. 3" OF THE STEEL A	T THE JOINT IS EXPO					CKS.
RUST STAINS. ALSO LONGITUDINAL CRACKS ON THE SIDES OF THE ARCHES, SPALLS WITH REBAR EXPOSED, LONGITUDINAL CRACKS ON THE TOP AND BOTTOM OF THE ARCHES, 2013[SHOTCRETE REIRS. SCRAPE MARKS AT N. ARCH OVER THE PARKWY (2016) LARGE DELAMINATION OF THE ARCH S. E OF THE CREEK. SEVER SCALING Arch Spandter Column Notes. MANY CRACKED AND HAVE AREAS OF DELAMINATION AND EFFICIRESCENCE, MANY SPALLS WITH REBARS EXPOSED. (PRIMARILY UNDER DECK. JOINTS). (2016) ARCHES OVER THE TRAIL HAVE LARGE DELAMINATION, [2019] ALL ARCHES HAVE LARGE CRACKS, LARGE DELAMINATION, SPALLS AND REBAR EXPOSED. (2021) NO SIGNIFICANT CHANGE.  205 REINFORCED CONCRETE COLUMN) 07-21-2021 20 EA 0 183 2 0 0  Notes: COLUMNS HAVE FINE TO MEDIUM SIZE VERTICAL CRACKS WITH DELAMINATIONS, SPALLS, REBAR EXPOSED AND SCALING. (2021) NO SIGNIFICANT CHANGE.  210 REINFORCED CONCRETE FIER WALL 07-21-2021 20 OL F 0 100 100 100 0  NOTES: COLUMNS HAVE FINE TO MEDIUM SIZE VERTICAL CRACKS WITH DELAMINATIONS, SPALLS, REBAR EXPOSED AND SCALING. (2021) NO SIGNIFICANT CHANGE.  211 REINFORCED CONCRETE PIER WALL 07-21-2021 200 LF 0 100 100 100 0  NOTES: (2019) MOST OF PIER WALLS HAVE EXTENSIVE SCALING. (2021) NO SIGNIFICANT CHANGE.  212 REINFORCED CONCRETE PIER WALL SHAVE EXTENSIVE SCALING. LARGE SPALLS, REBAR EXPOSED. AND DELAMINATION. ARCHES AND SPALLS AND SPALLS AND DELAMINATED ARCAS. SEVERE SCALE AND SPALL AT SCUPPER LOCATIONS ON PIER WALL EXTENSIVE DETERIORATION AND UNDERMINING AREAS AT STREAM FLOW. (2021) NO SIGNIFICANT CHANGE.  215 REINFORCED CONCRETE ABUTHMENT 07-21-2021 165 LF 0 40 120 5  NOTES: (2016) THERE ARE SIGNS OF SEEPAGE, SCALING, DELAMINATION, LARGE SPALLS, AND DELAMINATION. (2021) NO SIGNIFICANT CHANGE.  224 REINFORCED CONCRETE ABUTHMENT 07-21-2021 165 LF 0 40 120 5  NOTES: (2016) THERE ARE SIGNS OF SEEPAGE, SCALING, DELAMINATION, LARGE SPALLS AND FOUR FULL HEIGHT CRACK ON THE NORTH, SPALLS WITH REBAR EXPOSED AT NW. THERE ARE SIGNS OF SEEPAGE AND AREAS SEVERE AND ARCHES AND ADDIT FULL HEIGHT CRACK ON THE NORTH. SPALLS WITH REBAR EXPOSED AS SEVERE THE MOST SEVERE	144	REINF	FORCED CONCRETE ARCH		•	-			
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SEVERE SCALE AT THE SCUPPER LOCATIONS, [2019] XND COLLIMN FROM N.E. AND 3RD FORM S.W HAVE LARGE	205	REINF	FORCED CONCRETE COLUMN			-			
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AREAS, SEVERE SCALE AND SPALL AT SCUPPER LOCATIONS ON PIER WALL EXTENSIVE DETERIORATION AND UNDERMINING AREAS AT STREAM FLOW. [2021] NO SIGNIFICANT CHANGE.  215 REINFORCED CONCRETE ABUTMENT 07-21-2021 165 LF 0 40 120 5  Notes: [2016] THERE ARE SIGNS OF SEEPAGE, SCALING, DELAMINATION, LARGE SPALLS AND FOUR FULL HEIGHT CRACK. ON THE NORTH, SPALLS WITH REBAR EXPOSED AT N.W. THERE ARE SIGNS OF SEEPAGE AND AREAS OF SCALING. SPALLS WITH REBAR EXPOSED ON THE SOUTH. Wingwall notes: THERE ARE AREAS OF MEDIUM SIZE MAP CRACKS AND DELAMINATIONS. LEAVY VEGETATION, 2019] TOP PART OF N.W ABUTMENT IS BREAKING OFF. LARGE SPALLS AND DELAMINATIONS. LEAVY VEGETATION, 2019] TOP PART OF N.W ABUTMENT IS BREAKING OFF. LARGE SPALLS AND DELAMINATIONS. LEAVY VEGETATION. 2019] TOP PART OF N.W ABUTMENT IS BREAKING OFF. LARGE SPALLS AND DELAMINATIONS. LEAVY VEGETATION. 2019] TOP PART OF N.W ABUTMENT IS BREAKING OFF. LARGE SPALLS AND DELAMINATIONS. LARGE SPALLS AND MANY FINE & MEDIUM SIZE CRACKS AT THE CONCRETE PIER CAP 07-21-2021 3,346 LF 0 2,018 1,328 0  Notes: THERE ARE SPALLS WITH RUST STAINS, INCRUSTATION, PATCHES AND MANY FINE & MEDIUM SIZE CRACKS AT THE CONCRETE EXTENSIONS. SPALLS ON THE ENDS OF THE CAPS ARE THE MOST SEVERE. THERE IS SEEPAGE, EFFLORESCENCE, HEAVY DELAMINATIONS, LARGE SPALLS WITH REBARS EXPOSED AND RUST STAINS UNDER THE EXPANSION JOINTS. ONE STEEL SUPPORT WAS INSTAILED ON ONE KNEE BRACE BOTH SIDES), WHICH IS DETERIORATING AND SHOWING PACK RUST. ONE CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE EXTENSIONS DETERIORATION AND MEDEL STRUCTURAL REVIEW. 2019] LARGE SPALLS AT FIRST KNEE BRACING FROM S.E. ONE PIER CAP OVER 2ND PIER COLUMN FROM SOUTH AND ONE CAP OVER WATER HAVE ADVANCED DETERIORATION, REBAR EXPOSED, SECTION LOSS TO 2ND MATT. [2020] SHOTTCRETE REPAIRS. [2021] NO SIGNIFICANT CHANGE.  885 SCOUR 07-30-2020 1EA 1 0 0 0 0 0 0 NOT-30-2020 1EA 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	210	REINF		07-30-2020	200 LF	0	100	100	0
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CONCRETE EXTENSIONS. SPALLS ON THE ENDS OF THE CAPS ARE THE MOST SEVERE. THERE IS SEEPAGE, EFFLORESCENCE, HEAVY DELAMINATIONS, LARGE SPALLS WITH REBARS EXPOSED AND RUST STAINS UNDER THE EXPANSION JOINTS. ONE STEEL SUPPORT WAS INSTALLED ON ONE KNEE BRACE (BOTH SIDES), WHICH IS DETERIORATING AND SHOWING PACK RUST. ONE CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE WEST AND ONE IN SPAN 2 ON THE EAST. (SEE FILE FOR CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE EXET AND ONE IN SPAN 2 ON THE EAST. (SEE FILE FOR CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE WEST AND ONE IN SPAN 2 ON THE EAST. (SEE FILE FOR CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE WEST AND ONE IN SPAN 2 ON THE EAST. (SEE FILE FOR CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE WEST AND ONE IN SPAN 2 ON THE EAST. (SEE FILE FOR CRACK MONITORS WERE INSTALLED. ONE IN SPAN 3 ON THE WEST AND ONE IN SPAN 3 ON THE WEST AND ONE IN SPAN 2 ON THE EAST. (SEE FILE FOR CRACK MONITORS SHEETS). [2016] LARGE PART OF ONE OF THE EAST. (SEE FILE FOR CRACK MONITORS SHEETS). [2019] LARGE SPALLS AT FIRST KNEE BRACING FROM S.E. ONE PIER CAP OVER 2ND PIER COLUMN FROM SOUTH AND ONE CAP OVER WATER HAVE ADVANCED DETERIORATION, REBAR EXPOSED, SECTION LOSS TO 2ND MATT. [2020] SHOTCRETE REPAIRS.[2021] NO SIGNIFICANT CHANGE IN CRACK MONITORS. SPAN 2 (-4X, +1Y) SPAN 3 (-1X, 0Y).  883	234	REINF	FORCED CONCRETE PIER CAP		•		•		
883 CONCRETE SHEAR CRACKING 07-21-2021 1EA 1 0 0 0 0 0 07-30-2020 1EA 1 0 0 0 0 0 0 07-30-2020 1EA 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Notes:	CONCRETE EXTENSIONS. SPALEFFLORESCENCE, HEAVY DELAEXPANSION JOINTS. ONE STEEL DETERIORATING AND SHOWING WEST AND ONE IN SPAN 2 ON THE E. CAPS ABOVE THE CREEKEXTENSIVE DETERIORATION AND FROM S.E. ONE PIER CAP OVER DETERIORATION, REBAR EXPOSE	LS ON THE ENDS OF MINATIONS, LARGE L SUPPORT WAS INS PACK RUST. ONE COME EAST. (SEE FILE IN THE EAST. (SEE FILE IN THE EAST.) (SEE FILE IN THE EAST.) (SEE FILE IN THE EAST.) (SEED, SECTION LOSSEL)	THE CAPS ARE THE SPALLS WITH REBATALLED ON ONE KNOWN THE PROPERSION OF CHAPTER OF CHAPTE	E MOST SEVARS EXPOSE NEE BRACE (IVERE INSTAL OR SHEETS) OLUMN C 2NI LARGE SPALL ONE CAP OV 0] SHOTCRE	ERE. THEID AND RUIDED AND RUIDED. ONE INTERPORT TO THE PROPERTY OF THE PROPERT	RE IS SEEPAG ST STAINS UN ES), WHICH IS IN SPAN 3 OI RGE PART OI ROM SOUTH I ST KNEE BRAG R HAVE ADVA	GE, NDER THES NOTE OF ONE OHAVE CING NAMED
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Notes:         THERE IS MINOR SCOUR ON THE S.W. & N.E. AND SEDIMENT ON S. SIDE. [2021] NO SIGNIFICANT CHANGE.           892         SLOPES & SLOPE PROTECTION         07-21-2021         1 EA         0         1         0         0           Notes:         [2016] DIRT SLOPE ERODED BOTH SIDES. [2021] NO SIGNIFICANT CHANGE.         894         DECK & APPROACH DRAINAGE         07-21-2021         1 EA         0         1         0         0		Notes:	[2021] NO SHEAR CRACKING ON		1 EA	1	0	0	0
Notes:         THERE IS MINOR SCOUR ON THE S.W. & N.E. AND SEDIMENT ON S. SIDE. [2021] NO SIGNIFICANT CHANGE.           892         SLOPES & SLOPE PROTECTION         07-21-2021         1 EA         0         1         0         0           Notes:         [2016] DIRT SLOPE ERODED BOTH SIDES. [2021] NO SIGNIFICANT CHANGE.         894         DECK & APPROACH DRAINAGE         07-21-2021         1 EA         0         1         0         0	885	scou	IR						
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894 DECK & APPROACH DRAINAGE 07-21-2021 1 EA 0 1 0 0				07-30-2020	1 EA	0			
				07-21-2021	1 EA	0			

Page No:

Notes: [20	021] ALL CATCH BASINS ARE WORKING AS INTENDED.
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395	SIDEWALK, CURB, & MEDIAN		07-21-2021	1 EA	0	1	0	0
			07-30-2020	1 EA	0	1	0	0
Ν	Notes:	CURB; LARGE CRACK. THE SIDE	WALK SUBSURFACE H	AS DELAMINATIO	N AND SPALL	S WITH RE	BARS EXP	OSED A
		SPANDREL COLUMN CAPS. THE	APPROACH SIDEWALK	ON THE N.E. HAS	S LARGE SPA	LLS WITH F	REBAR EXF	OSED.
		STEEL PLATES SHOWING HEAV	Y RUST. THE SIDEWAL	<b>COUNTS ON THE</b>	NE & NW HAS	S FOAM WI	TH NO SEA	L. PAR
		PLASTIC STICKING UP FROM SII	DEWALK JOINTS CAUS	NG TRIP HAZARD	S. THE N.W.	SIDEWALK	TOWER IS	SPALL
		WITH SCRAPE MARKS, OTHERS	SHOWING VERTICAL O	CRACKS, THE ORN	NAMENTAL ST	<b>FEEL AT TO</b>	P HAS SUR	RFACE
		RUST. VEGETATION IN OPEN JO	INTS. [2016] CURB IS R	EPAIRED WITH SI	HOT CRETE. L	ARGE SPA	LL W. SIDE	WALK
		LARGE SPALL WITH REBAR EXP	OSED N.E APPROACH	SIDEWALK. [2021]	NO SIGNIFIC	ANT CHAN	GE.	
399	MISCE	ELLANEOUS ITEMS	07-21-2021	1 EA	1	0	0	0
			07-30-2020	1 EA	1	0	0	0
Ν	Notes:	LIGHTING: [2020] NEW LIGHTS. [	2021] NO SIGNIFICANT	CHANGE.				
900	PROT	ECTED SPECIES	07-21-2021	1 EA	0	1	0	0
			07-30-2020	1 EA	0	1	0	0
		[2021] NO PROTECTED SPECIES						

General ROADWAY UNDER, THERE ARE A FEW CRACKS IN THE ASPHALT SURFACE. CURB UNDER, STANDARD PARK BOARD Notes: CURB AND GUTTER. THE SIDEWALK RUN UNDER THE FOURTH SPAN FROM THE NORTH. FULL OF DIRT FROM THE EROSION OF THE SLOPE TO THE NORTH. WOODEN STAIRWAY ON THE N. IS WEATHERED AND CHECKED. NOTE: ONE ENGINEERING CONCRETE LOSS DISCUSSION POSITIVE MOMENT DOES NOT BECOME AN ISSUE UNTIL AVERAGE LOOSE IS GREATER THAN 4". NEGATIVE MOMENT BECOMES AN ISSUE WHEN AVERAGE LOSS IS APPROXIMATELY 1.5". LOOK IN FILE FOR POSITIVE AND NEGATIVE MOMENTS LOCATIONS. [2021] FIELD INSPECTION BY: KENT MADSEN & ABDULLAHI ABUKAR

#### **RECOMMENDED REPAIRS:**

- -FIX THE SPALLS ON THE DECK
- -REPLACE OPEN JOINTS BOTH SIDES
- -REPLACE N. POURED JOINTS AT N. APPROACH.
- -ADD RIPRAP AT N.W AND S.W OF THE CHANNEL
- -MILL AND OVERLAY ALL OVER COMPRESSED JOINTS.

Deck: [4] [2016] MANY DELAMINATIONS, LARGE SPALLS, LARGE AREAS WITH REBARS EXPOSED, UNDERMINED INTO SECON LAYER OF REINFORCEMENT AND LONGITUDINAL CRACKS WITH AREAS OF INCRUSTATION, LOCATED AROUND ALL TH JOINTS TO N. ABUTMENT. STAINING AND EFFLORESCENCE. OLD FORM WORK EXPOSED AT S. CAP. SHOTCRETE REPAIR OVER ROADWAY. REBAR SECTION LOSS ON S. SIDE ABOVE THE CREEK.[2017] MORE DETERIORATION AND MORE SPALL. wearing surface:2016] THERE ARE RANDOM CRACKS AND FINE, MEDIUM TO LARGE SIZE UNSEALED TRANSVERSE AND LONGITUDINAL CRACKS ON ENTIRE DECK. THE CENTER STRIPPED AREA CRACKS AND JOINTS HAVE NOT BEEN SEALED. MANY OF THE PATCHES ARE SCALING AT THE EDGES. ASPHALT PATCHES. [2017] MANY NEV CONCRETE PATCHES, FEW SMALL SPALLS AND MANY LARGE CRACKS. {2020} CHANGE NBI FOR 5 TO 4 DUE TO DETERIORATION OF UNDER SIDE OF DECK AND SPALLS ON THE DECK.

Superstructure: [5] THERE ARE LONGITUDINAL CRACKS, DELAMINATION, SPALLS WITH REBAR EXPOSED, MANY OF THE CRACKS HAVI RUST STAINS. ALSO LONGITUDINAL CRACKS ON THE SIDES OF THE ARCHES, SPALLS WITH REBAR EXPOSED. LONGITUDINAL CRACKS ON THE TOP AND BOTTOM OF THE ARCHES. [2013]SHOTCRETE REPAIRS. SCRAPE MARKS AT N. ARCH OVER THE PARKWAY. [2016] LARGE DELAMINATION OF THE ARCH S.E OF THE CREEK. SEVER SCALING

Substructure: [4] 2020 change rating 5 to 4. SUBSTRUCTURE HAS ADVANCED DETERIORATION. CAPS ADVANCED SCALING, CRACKING EXTENSIVE DELAMINATION AND SPALLING.

Channel: [5] Channel has moderate lateral movement. The dirt bank eroding on both sides. The bank protection is not in place and bank is deteriorating.

Appr Roadway [6]. There is a slight hill to the north is steep an creates a sight line issues.

Alignment:

## **Nicollet Ave S Bikeway**

## 40th St E to 61st St E

## **Project Background**

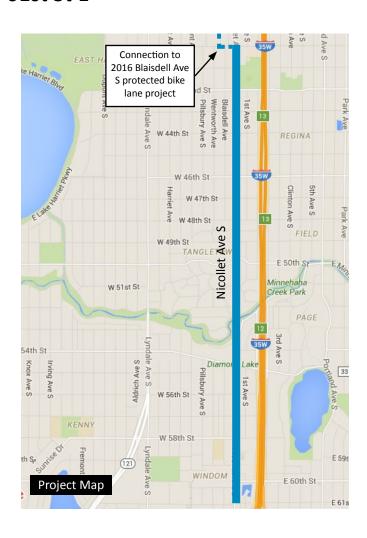
In the summer of 2016, Minneapolis Public Works will be sealcoating Nicollet Avenue South from East Minnehaha Parkway to 61st Street. There is also an opportunity to continue the project north of East Minnehaha Parkway to 40th Street without significant modifications. Both segments of Nicollet Avenue South are identified in the Minneapolis Bicycle Master Plan. The sealcoat project provides an opportunity to implement the planned bikeway consistent with adopted policy.

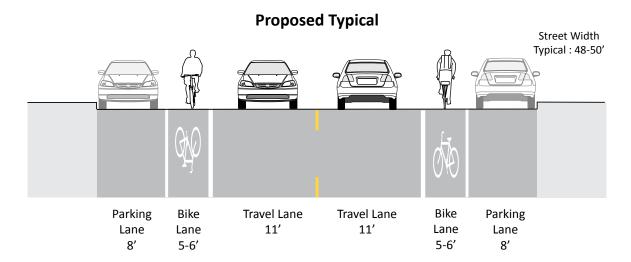
## **Proposed Concept**

There is currently parking on both sides of Nicollet Avenue South along the entire project corridor. In order to install dedicated bike lanes, initial review has found that impacts to existing parking would be minimal. Pending preliminary support from the applicable City Council Offices and impacted stakeholders, Public Works staff would develop the design and provide updates regarding any changes.

### **Contact Information**

Becca Hughes, Minneapolis Public Works rebecca.hughes@minneapolismn.gov or 612-673-3594 Website: www.minneapolismn.gov/bicycles/projects







# Identifying the Next Arterial Bus Rapid Transit Lines

# **NetworkNEXT**

February 2021





## **NICOLLET**

From north to south, the corridor begins in downtown Minneapolis near Washington Avenue and 3rd Avenue South and ends in Bloomington near American Boulevard. The arterial BRT concept would connect to METRO Blue, Green, Orange, B, C, and D lines. South of downtown, most Nicollet BRT stations would be parallel to those of the METRO D Line. Today, the corridor is primarily served by Route 18.

### Within the Corridor

- **77,300** people 84,500 by 2040
- **27,900** people of color
- 23,200 low-income people
- **39,300** renters
- 148,300 jobs, including 47,400 low-wage jobs
- **50%** of Route 18 riders are people of color or live in low-income households

## **Concept Service Plan**

The Nicollet arterial BRT concept would operate every 10 minutes for most of the day, seven days per week. The BRT concept incorporates multiple existing Route 18 branches. Existing Route 18 service headways diminish as the alignment travels south. In general, average weekday service headways are 8 minutes north of 46th Street, 15 minutes between 46th Street and American Boulevard, and 30 minutes between American Boulevard and south Bloomington.

Route 18 would be eliminated and replaced by the arterial BRT service between downtown Minneapolis and American Boulevard. A new Route 518 would be introduced to cover areas south of American Boulevard currently served by Route 18. Route 518 would begin at the planned METRO Orange Line station at Knox Avenue & 76th Boulevard, connect with Nicollet arterial BRT at 77th Avenue & Nicollet Avenue, then continue south on Nicollet Avenue to terminate at 104th St & W Bloomington Freeway Road. The route would operate approximately every 30 minutes throughout most of the day, seven days per week.

## **Proposed Service Headways in Corridor**

Route	Early	AM Peak	Midday	PM Peak	Evening	Night
BRT	20	10	10	10	20	30
518	-	30	30	30	30	-

## **BRT Concept by the Numbers**

- 9.2 miles long,
- 24 station intersections
- 0.38 miles on average between stations
- 78% of existing Route 18 riders in the corridor would be directly served by a station in this concept

## **Ridership Potential**

Existing Weekday Corridor Ridership (Fall 2019)	9,900
Corridor Ridership Propensity (out of 5.0)*	4.1
Corridor Weekday Forecast Ridership (2040)	9,100

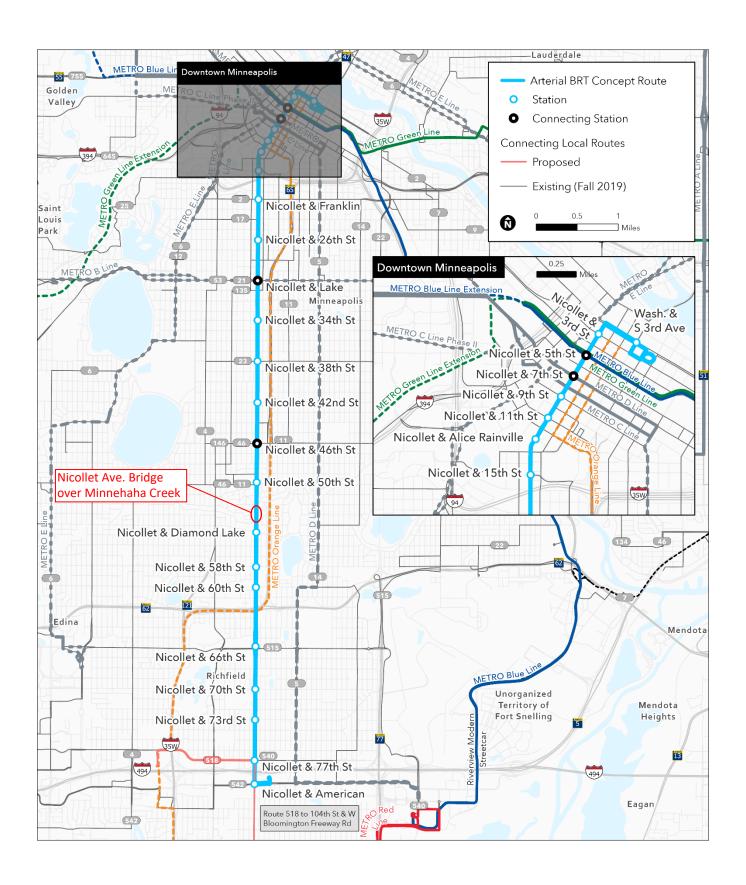
\*Calculated using a statistical demand model based on demographic and land use predictors of Metro Transit's existing bus ridership. For additional details, see the Arterial BRT Corridor Evaluation and Prioritization memorandum at metrotransit.org/network-next.

### **Cost Estimates**

Capital Costs (\$ Millions, Year 2024)	
Stations and construction	\$39.7
Fleet	\$15.9
Other (e.g., right of way, professional svcs., etc.)	\$13.0
Total capital costs	\$66.8

Annual Operations Cost (\$ Millions, Year 2025)	
Cost to operate BRT service	\$14.7
Savings from local service changes	-\$15.1
Net service costs	-\$0.4
BRT improvement costs (e.g., maint., TSP, etc.)	\$5.6
Net total annual operations costs*	\$5.2

<sup>\*</sup>Expenses alone; excludes passenger revenue



# Nicollet Avenue South over Minnehaha Creek - Bridge Rehabilitation Applicant: City of Minneapolis



TANGLETOWN
W 50th St

LYNNHURST

WS4th St

WS4th St

WS5th St

WNDOM

WNDOM

WS5th St

WNDOM

WNDOM

WS5th St

WNDOM

WNDO

Minnehaha Parkway under Nicollet Ave. Bridge

**Project Location** 

Requested Award Amount = \$7,000,000 Project Cost = \$21,500,000

Route: MSAS 430

Location: Minneapolis, MN

### **Project Description**

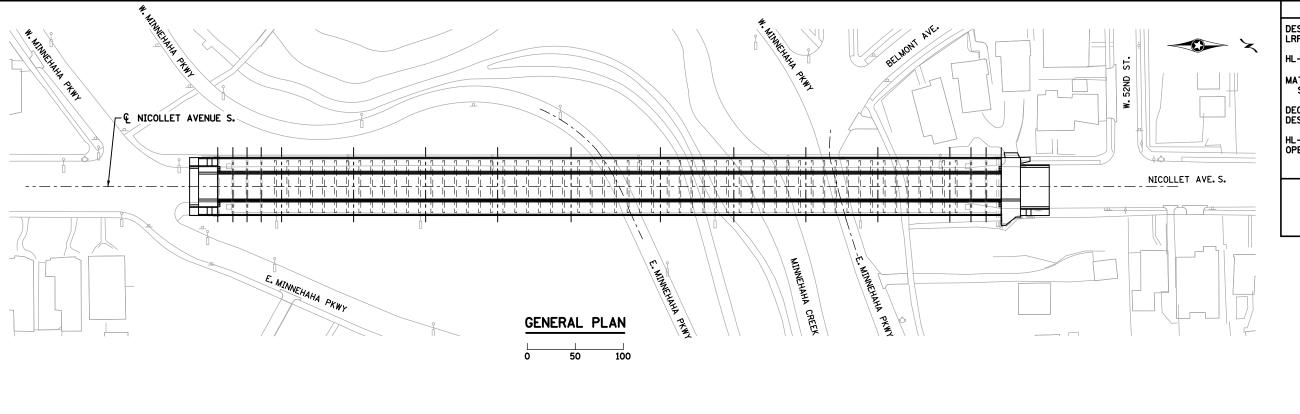
This project is for the rehabilitation of Bridge No. 90591. The 16-span bridge carries Nicollet Avenue South over Minnehaha Creek and Minnehaha Parkway in the City of Minneapolis. The roadway is classified as an A minor reliever roadway. The bridge was built in 1923, repaired in 1973, has a planning index of 47 and is structurally deficient. It is 63 ft. wide, has a total roadway width of 36 ft., and carries two 11 ft. lanes of traffic, two 7 ft. bike lanes, and two 12 ft. sidewalks.

MnDOT traffic data indicates that the AADT in 2015 was 8,900. This segment of Nicollet Avenue currently includes Metro Transit local bus Route 18 which runs from Downtown Minneapolis to South Bloomington. Metro Transit is in the planning stages of providing a future Bus Rapid Transit (BRT) line along Nicollet Avenue South including the bridge. An on-street bikeway was added to Nicollet Avenue South and Bridge 90591 in 2016.

The bridge was last inspected by the City of Minneapolis on July 7, 2021. Cracks, concrete spalls, deteriorated concrete, and exposed/rusted reinforcement were found on the underside of the deck, spandrel columns, cap beams, and pier walls. The concrete deck is in poor condition which is reflected in its NBI rating of 4. The 2021 report states, "SB lane has a spall that is 2'x5'x2" deep". The deck joint system has failed allowing salt water to penetrate through the joints and into the cap beams and spandrel columns. The 2019 report states, "Most of the underside of the deck has advanced spalls, rebar is exposed and there is section loss through the 2<sup>nd</sup> reinforcement mat". The funds from the Met Council regional solicitation will go toward repairs and rehabilitation of Bridge 90591. The bridge is eligible for listing on the National Register of Historic Places and rehabilitation is the City's preferred solution. Rehabilitation will allow this bridge to continue as an important transportation artery for over 30 more years. In general, the funds will support deck removal and replacement, spandrel column and beam removal and replacement, concrete surface repairs at the arch ribs and piers, sidewalk replacement, a new concrete railing, protected bike lanes, a new drainage system, and a new lighting system.

### **Project Benefit**

The bridge supports Nicollet Avenue South over Minnehaha Creek and Parkway in a beautiful park setting. This portion of the parkway is heavily used, providing a scenic route for over 1000 cyclists and over 600 pedestrians per day as well as many kayakers, rafters and canoers who utilize the creek. This cost effective rehabilitation will save taxpayers millions of dollars and improve the safety conditions for drivers, bicyclists, pedestrians and kayakers. Repairing the bridge will improve the planning index and functional capacity of the bridge for increased roadway, bicycle, and pedestrian usage. Repairs will maintain the structure as an important historic resource and will improve the aesthetics of the bridge, enhancing the livability and quality of life for Minneapolis residents and all parkway/trail/creek users.



### **DESIGN DATA**

DESIGNED IN ACCORDANCE WITH 2020 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

HL-93 LIVE LOAD

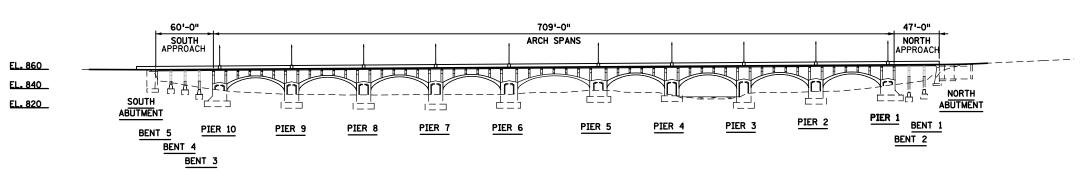
MATERIAL DESIGN PROPERTIES: SEE GENERAL NOTES

DECK AREA = 49,232 SQ. FT. DESIGN SPEED: 30 MPH

HL-93 LRFD BRIDGE OPERATING RATING FACTOR RF = X.XX

### TRAFFIC VOLUMES

ADT. (CURRENT YEAR) 2020 - 8,950 ADT. (FUTURE YEAR) 2040 - 11,800 HCADT (FUTURE YEAR) 2040 - 684



### **GENERAL ELEVATION**

#### BRIDGE REPAIR SUMMARY

IN GENERAL TERMS, THE INTENT OF THE WORK IS TO REHABILITATE THE CURRENT BRIDGE.

THE MAJORITY OF THE REHABILITATION WORK IS TO BE PERFORMED ON THE NINE ARCH SPANS.

THE BRIDGE IS ELIGIBLE FOR LISTING ON THE NATIONAL REGISTER OF HISTORIC PLACES INDIVIDUALLY AND AS PART OF THE GRAND ROUNDS HISTORIC DISTRICT.

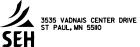
THE REHABILITATION SHALL COMPLY WITH THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES AND WILL NOT CONSTITUTE AN ADVERSE EFFECT UNDER CHAPTER 138.

THE REHABILITATION WORK WILL CONSIST OF THE FOLLOWING:

- 1. REPLACEMENT OF THE ENTIRE BRIDGE DECK.
- 2. NEW STRIP SEAL EXPANSION JOINTS AT BEGINNING AND END OF BRIGE AND AT ALL ARCH PIERS (12 TOTAL).
- 3. SIX FOOT PROTECTED BIKEWAY AND EIGHT FOOT WALK ALONG EAST AND WEST SIDES OF THE DECK.
- 4. NEW CRASH TESTED CONCRETE RAILING ALONG WALKS ALONG EAST AND WEST SIDES OF THE DECK.
- 5. REMOVAL AND REPLACEMENT OF ALL CONCRETE FLOOR BEAMS (57 TOTAL).
- 6. REMOVAL AND REPLACEMENT OF ALL SPANDREL COLUMNS (114 TOTAL).
- 7. REPAIRS TO DETERIORATED CONCRETE ON PIERS AND ARCH RIBS.
- 8. PASSIVE CATHODIC PROTECTION TO ALL ARCH RIBS.
- 9. SPECIAL SURFACE COATING OF PIERS, SPANDREL COLUMNS, FLOOR BEAMS, ARCH RIBS AND RAILINGS.



Olson & Nesvold Engineers, P.S.C. 8000 West 78th Street, Suite 410 Edina, MN 55439-2547



MINNESOTA
DEPARTMENT OF TRANSPORTATION

### PRELIMINARY BRIDGE PLAN BRIDGE NO. 90591

NICOLLET AVENUE SOUTH OVER MINNEHAHA CREEK AND MINNEHAHA PARKWAY

IDENTIFICATION NO. 109 - SPANS 1-3 IDENTIFICATION NO. 112 - SPANS 4-12

IDENTIFICATION NO. 109 - SPANS 13-16

GENERAL PLAN AND ELEVATION SEC. 15 TWP. 28 N. R. 24 W.

HENNEPIN CO.

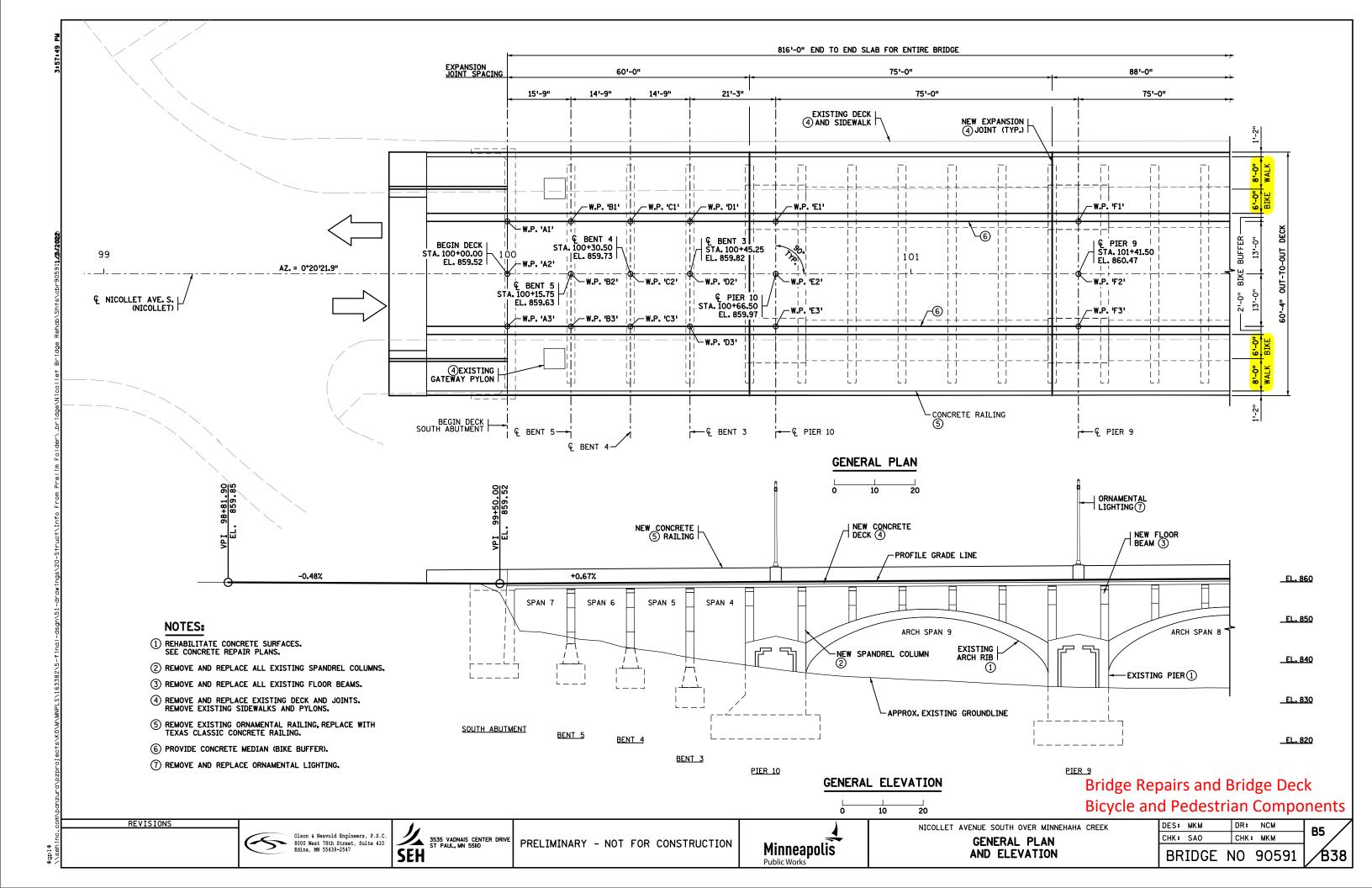
CITY OF MINNEAPOLIS

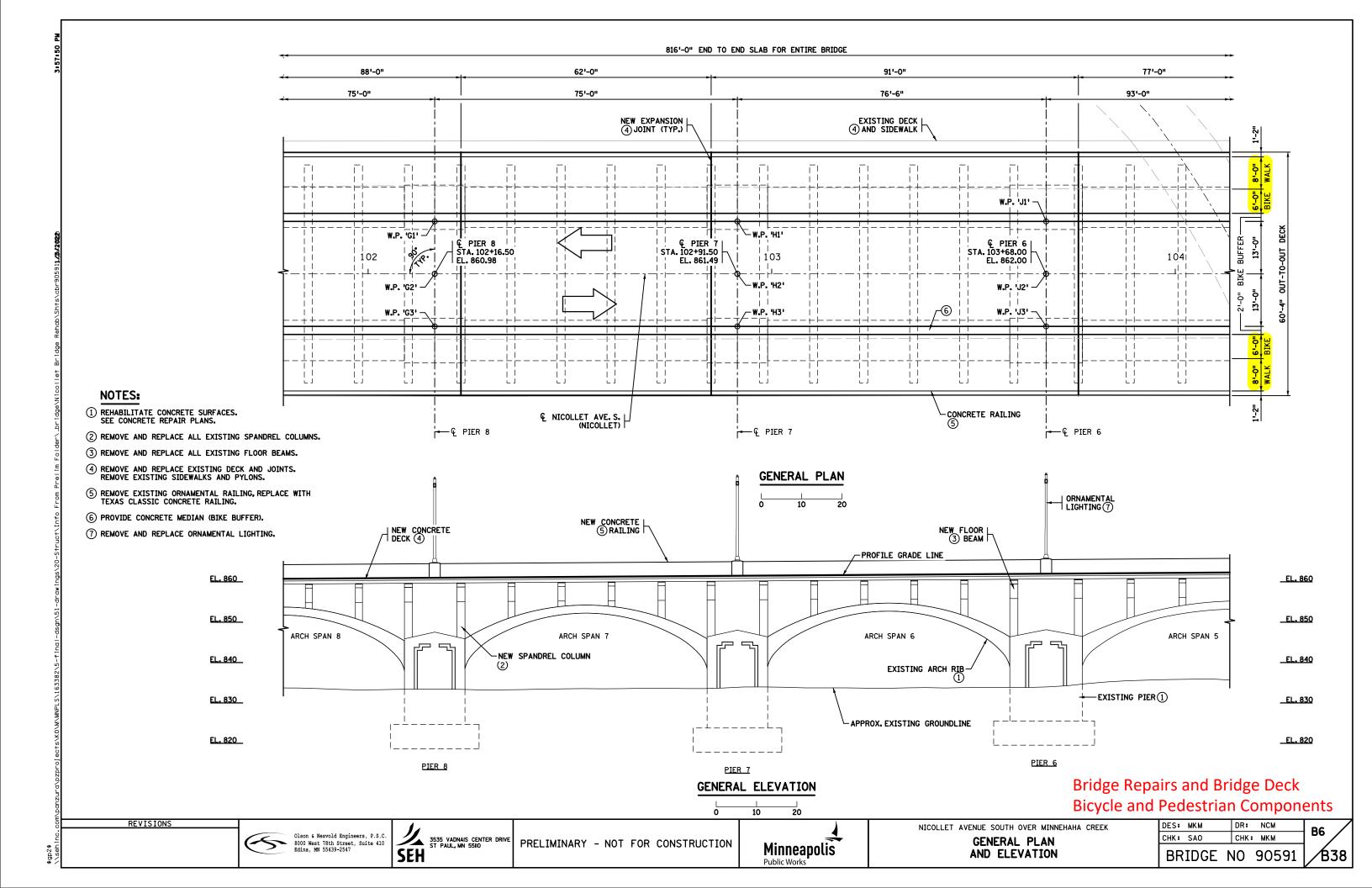
APPROVED ......STATE BRIDGE ENGINEER

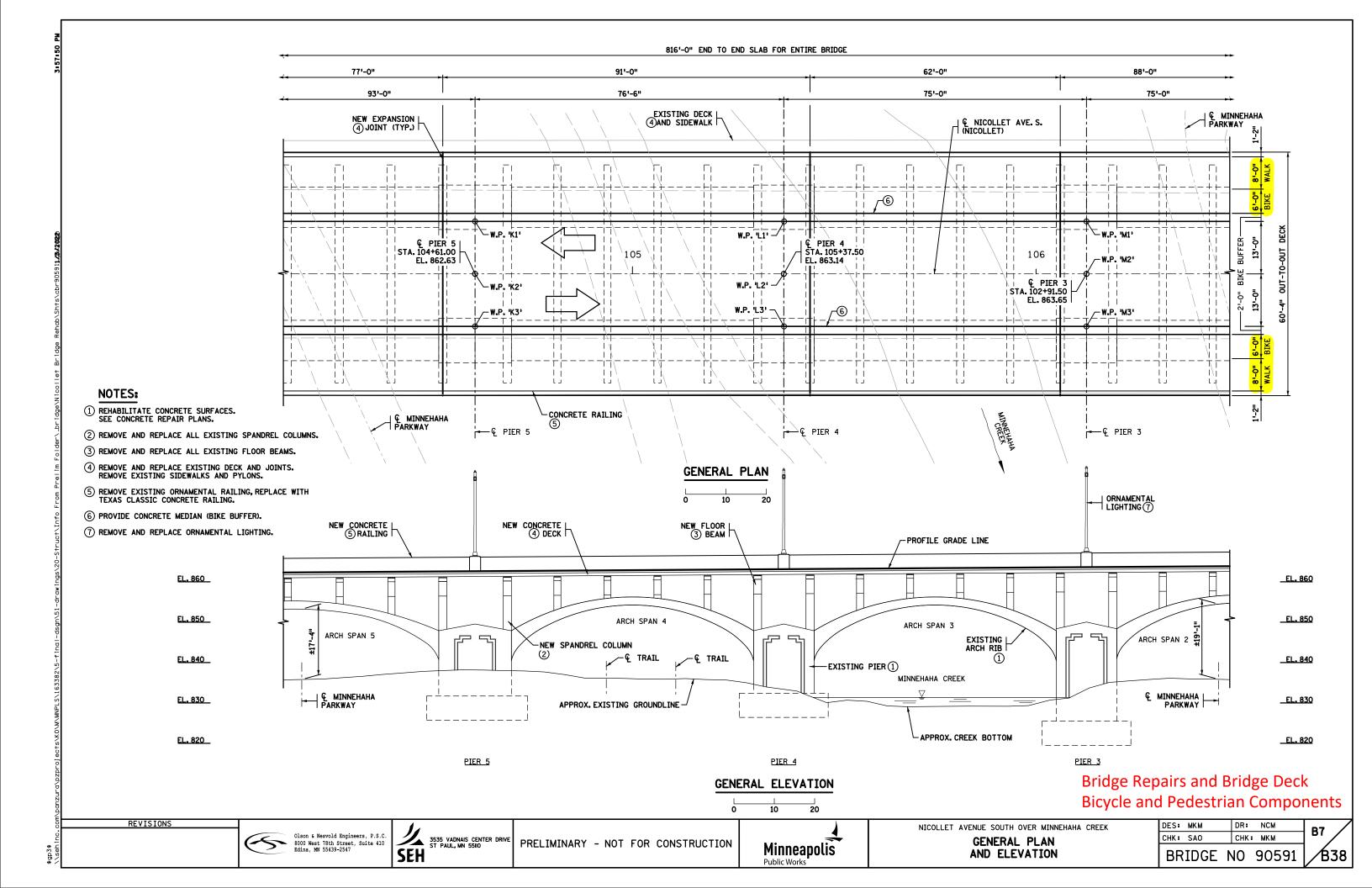
90591 CHK<sub>2</sub> MKM CHK: SAO

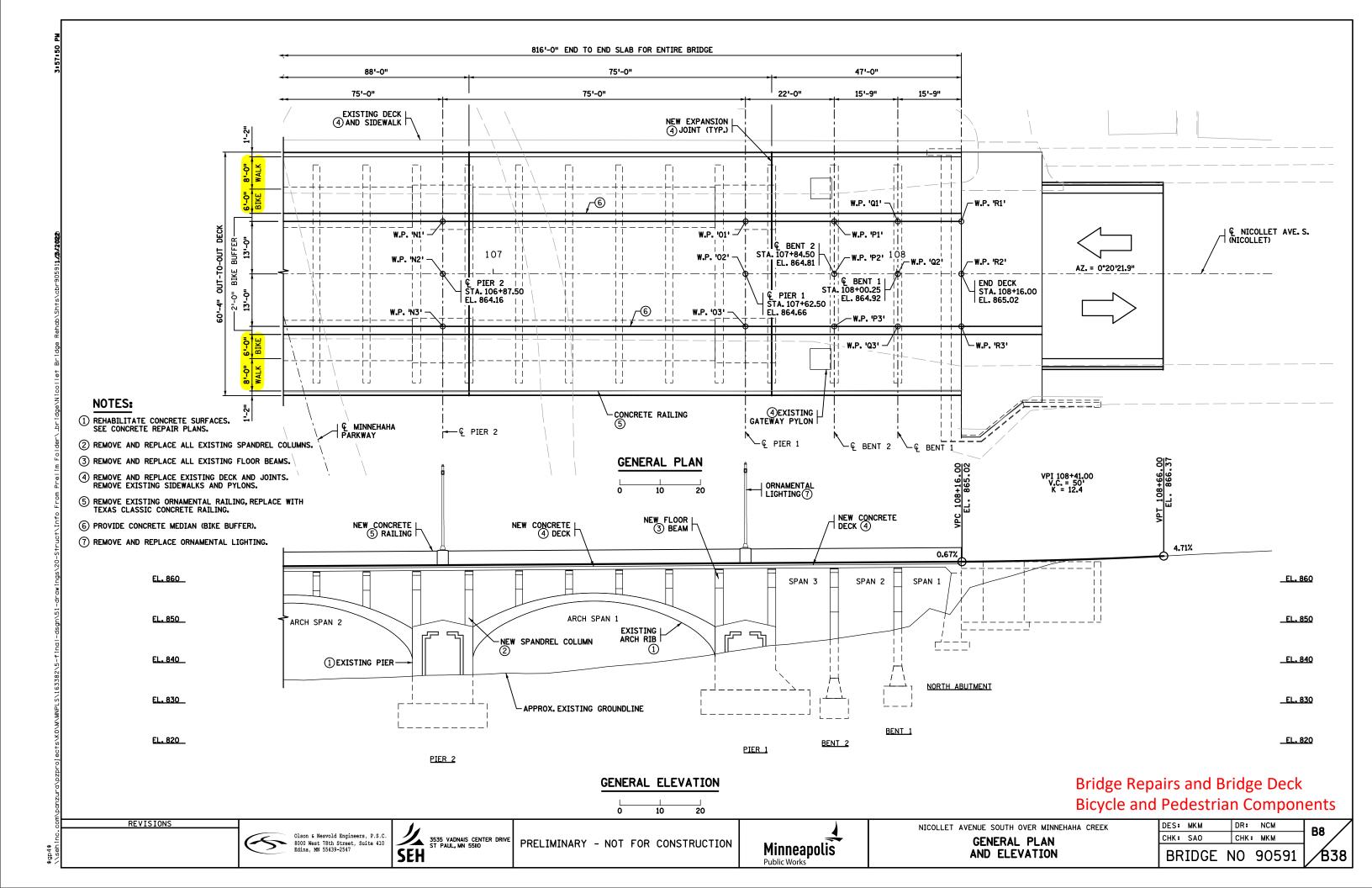
SHEET NO B1 OF B38 SHEETS

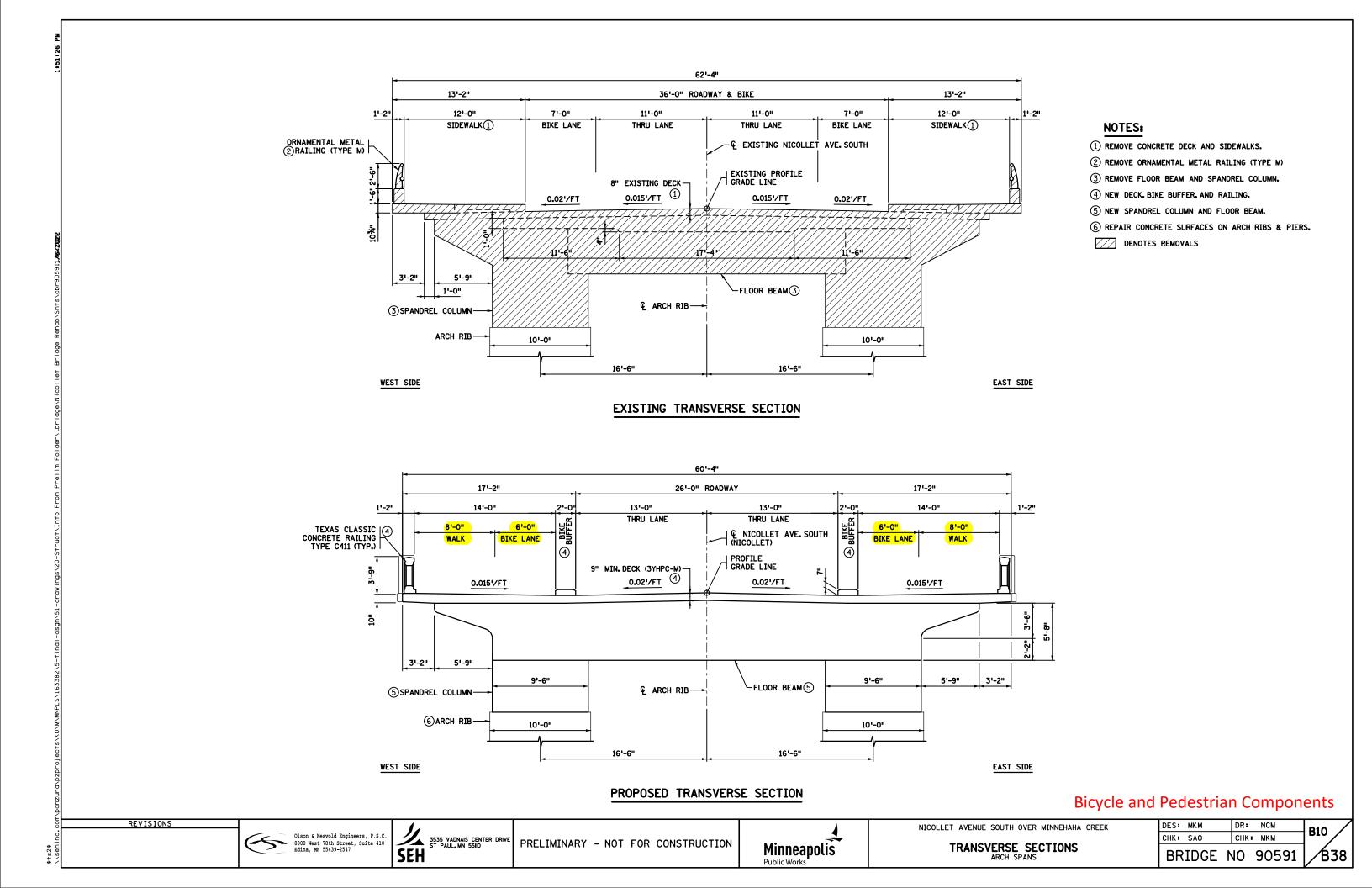
**Proposed Bridge Improvements** 

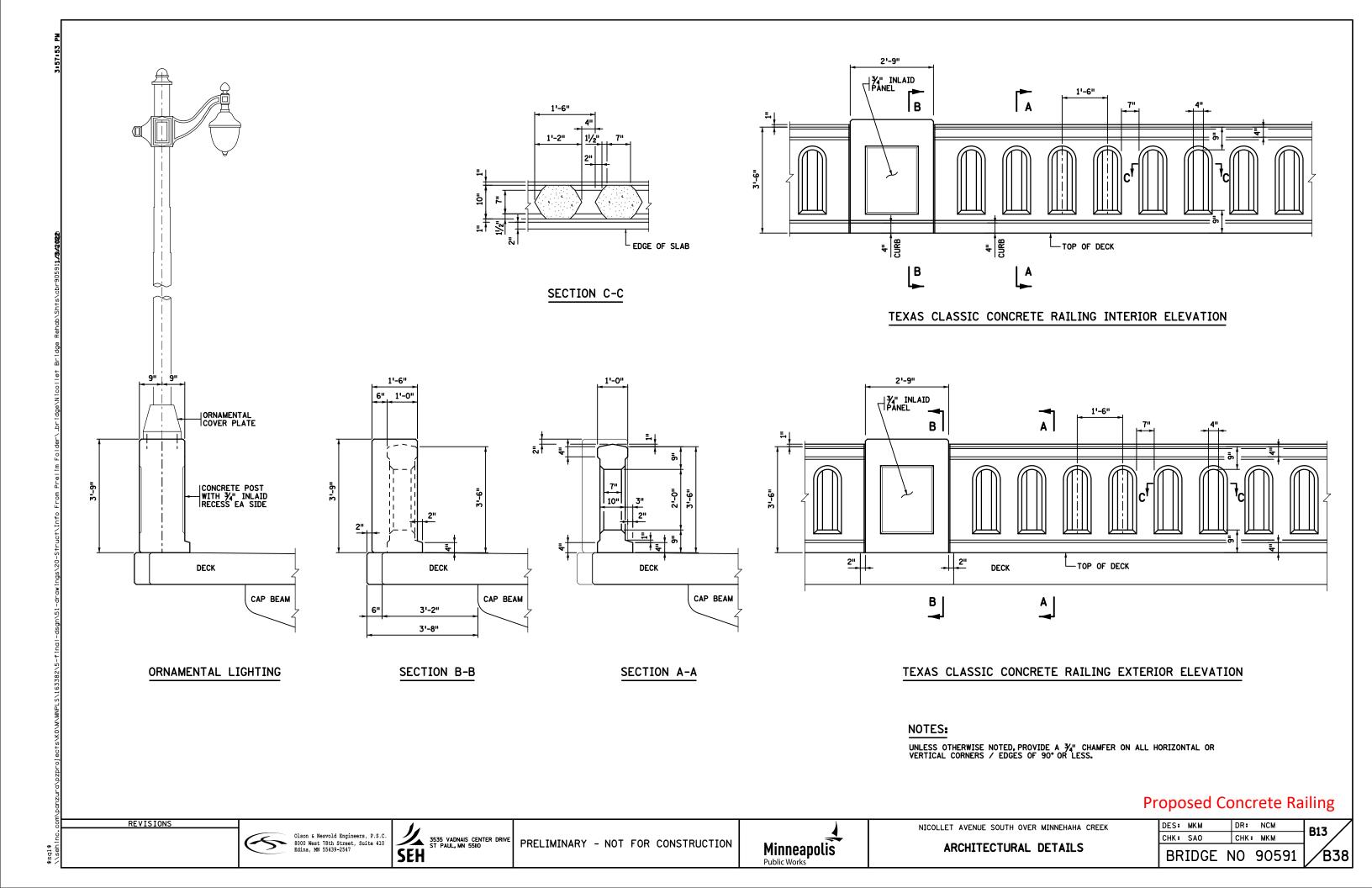


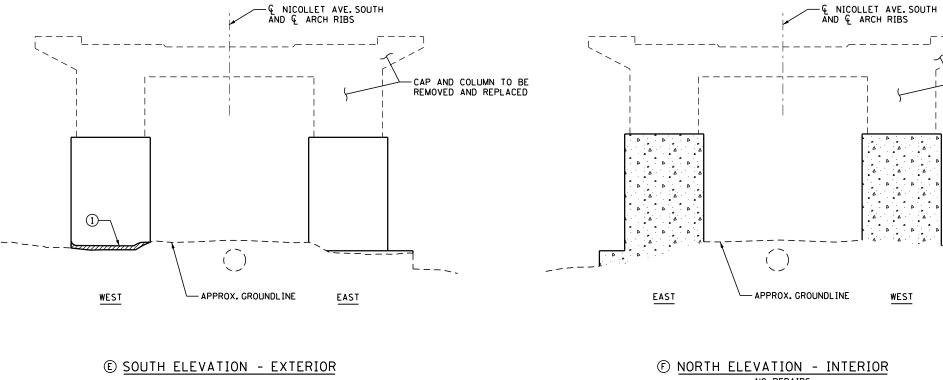












— € PIER 3 - € NICOLLET AVE. SOUTH 0 EAST

NO REPAIRS

PIER 3 PLAN

### NOTES:

SEE SHEETS B20 TO B27 FOR CONCRETE SURFACE REPAIR DETAILS.

① DENOTES CONCRETE SURFACE REPAIR - TYPE 4



LOCATION KEY

## **Typical Arch Pier Repairs**

NO. BY DATE REVISIONS

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3535 VADNAIS CENTER DRIVE ST PAUL, MN 55110

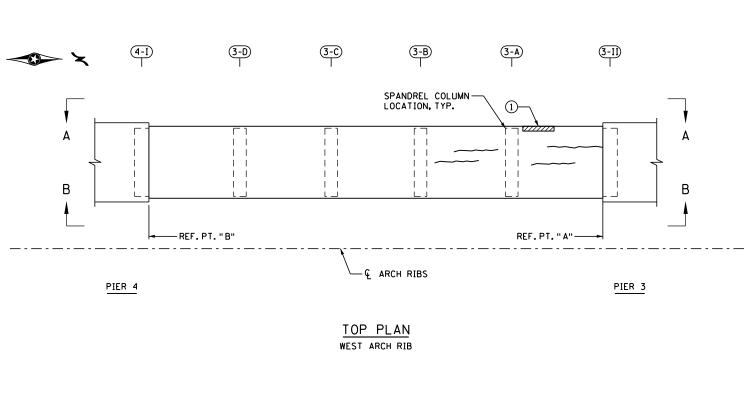
PRELIMINARY - NOT FOR CONSTRUCTION

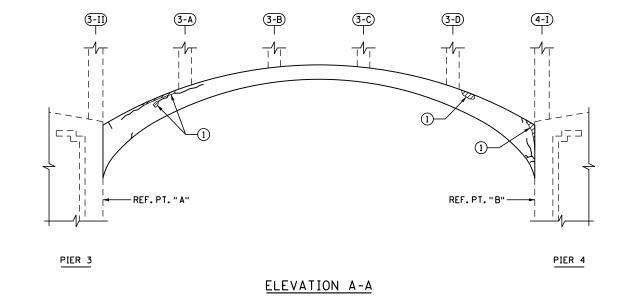


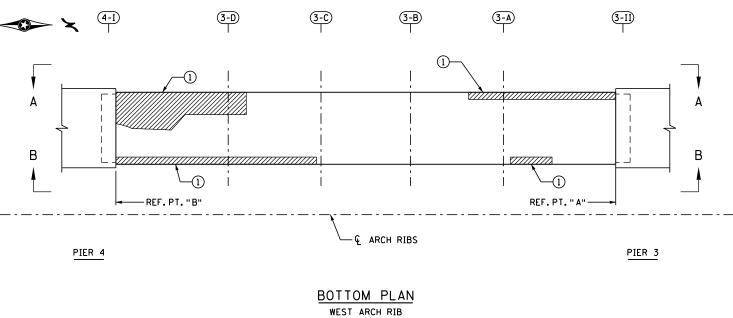
NICOLLET AVENUE SOUTH OVER MINNEHAHA CREEK REPAIR LOCATIONS - PIER 3 (3 OF 4)

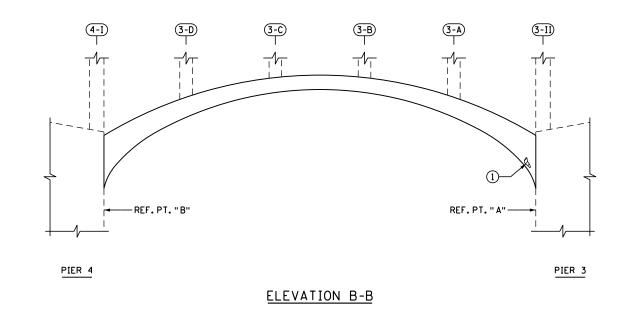
-CAP AND COLUMN TO BE REMOVED AND REPLACED

DES:	SAO	DR:	DPC	B16 /
CHK:	DPC	CHK:	SAO	
BRII	DGE I	10 S	0591	B38





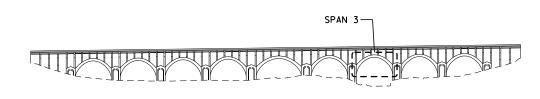




## NOTES:

SEE SHEETS B20 TO B27 FOR CONCRETE SURFACE REPAIR DETAILS.

- X-Y DENOTES SPANDREL COLUMN (X-SPAN, Y-COLUMN)
- ① DENOTES CONCRETE SURFACE REPAIR TYPE 4
- \_\_\_\_ ② DENOTES REPAIR TYPE AR-C.



### LOCATION KEY

## Typical Arch Rib Repairs

₽ REVISIONS										
De										
:										
MODEI										
M	NO.	BY	DATE	REVISIONS						

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SEH 3535 VADNAIS CENTER DRIVE

PRELIMINARY - NOT FOR CONSTRUCTION



NICOLLET AVENUE SOUTH OVER MINNEHAHA CREEK REPAIR LOCATIONS - ARCH - SPAN 3 (1 OF 2)

DES:	SAO	DR:	DPC	B18 /
CHK:	DPC	CHK:	SAO	
BRII	OGE	NO 9	0591	B38

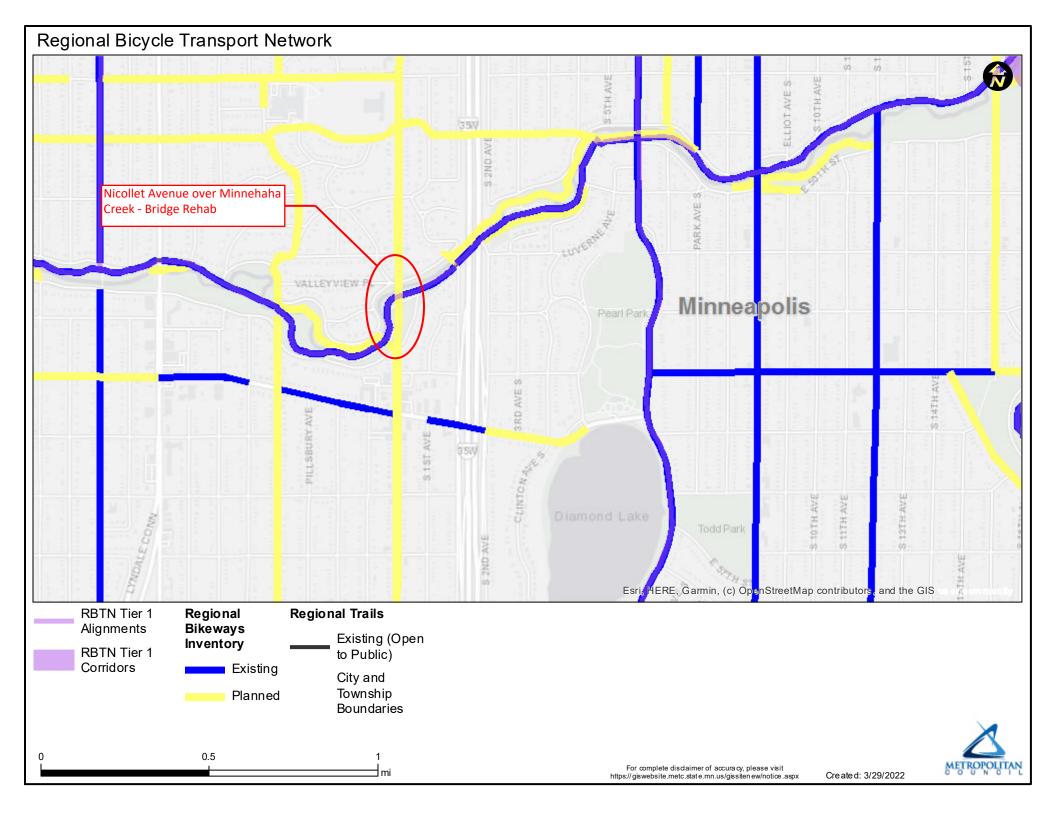






Figure 2: Major Crack and Concrete Deterioration on Arch Rib



Figure 3: Cracks and Concrete Spalling on Arch Rib





Figure 4: Cracks on Arch Rib



Figure 5: Deck Delamination (2011)





Figure 6: Deck Delamination (2019)



Figure 7: Spall on Deck, Spandrel Column Bracket with Strap Plate





Figure 8: Pier Delaminated Concrete with Exposed Reinforcement



Figure 9: Floorbeam with Spalled Concrete and Exposed Reinforcement, Column Repaired with Shotcrete





Figure 10: Concrete Spalls and Cracks on all Elements



Figure 11: West Pier at Creek (2012)





Figure 12: West Pier at Creek (2019)



Figure 13: Crack on Floorbeam