



Application

19830 - 2024 Bridges

20038 - CSAH 121 (Fernbrook Ln) Bridge Replacement Project
Regional Solicitation - Roadways Including Multimodal Elements

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Primary Contact

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Name: He/him/his Jason Richard Pieper
Pronouns First Name Middle Name Last Name

Title: Transportation Engineer

Department: Hennepin County - Transportation Department

Email: jason.pieper@hennepin.us

Address: 1600 Prairie Drive

***** Medina Minnesota 53340
City State/Province Postal Code/Zip

Phone: 612-596-0241
Phone Ext.

Fax:

What Grant Programs are you most interested in? Regional Solicitation - Roadways Including Multimodal Elements

Organization Information

Name: HENNEPIN COUNTY

Jurisdictional Agency (if different):

Organization Type: County Government

Organization Website:

Address: DPT OF PUBLIC WORKS
1600 PRAIRIE DR

***** MEDINA Minnesota 55340
City State/Province Postal Code/Zip

County: Hennepin

Phone: 763-745-7600
Ext.

Fax:

PeopleSoft Vendor Number 0000028004A9

Project Information

Project Name CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Primary County where the Project is Located Hennepin

Cities or Townships where the Project is Located: Maple Grove

Jurisdictional Agency (If Different than the Applicant):

Brief Project Description (Include location, road name/functional class, type of improvement, etc.) This project includes the replacement of the CSAH 121 (Fernbrook Ln) Bridge #90617 over Rush Creek in the City of Maple Grove as shown in Attachment 02. CSAH 121 (Fernbrook Ln) is classified as a Major Collector.

The existing bridge (built in 1949) consists of a cast-in-place concrete box culvert that spans Rush Creek. The structure is in relatively poor condition, and therefore, has been classified as structurally deficient. The culvert is showing evidence of cracking and spalling that has exposed the structural rebar, especially at the base of the south wall. Routine maintenance activities are no longer cost effective in extending the useful life of this bridge, therefore, a full replacement is recommended. In addition, the shoulders surrounding the structure are showing signs of erosion. The local planning index for this bridge is 46 as shown in Attachment 03. Photos depicting the structure's existing conditions are included in Attachment 04.

The proposed project will replace the deteriorating structure with a modern concrete box culvert that will be designed to provide a 75-year service life. For people walking and biking, it is anticipated the culvert barrels and end sections will be designed to accommodate future multiuse trails along one or both sides of CSAH 121 (Fernbrook Ln).

This project will construct two box culverts. In addition, a separate box culvert exclusive for people walking and biking will be considered as part of the project development process to provide a grade separated crossing for multimodal users along the future Three Rivers Park District Rush Creek Regional Trail. Any pavement, sidewalk, and drainage structures impacted by the project will be replaced in-kind.

This project is located within close proximity to Three Rivers Park District's Elm Creek Park Reserve that serves as a destination for the Crystal Lake Regional Trail, Medicine Lake Regional Trail, and Rush Creek Regional Trail.

Preservation of this structure is key in supporting future residential development that's occurring in this area of Maple Grove and nearby Dayton. Without additional improvements, the bridge structure will continue to deteriorate, and weight restrictions will likely be required. The potential typical section for this project is included in Attachment 05 and the potential concept can be found in Attachment 06.

(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. CSAH 121 (Fernbrook Ln) over Rush Creek in Maple Grove - Replace Bridge #90617

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) 0.06

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project? No

If yes, please identify the source(s)

Federal Amount \$1,968,000.00

Match Amount \$492,000.00

Minimum of 20% of project total

Project Total \$2,460,000.00

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

Match Percentage 20.0%

Minimum of 20%
Compute the match percentage by dividing the match amount by the project total

Source of Match Funds Hennepin County

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: 2028

Select 2026 or 2027 for TDM and Unique projects only. For all other applications, select 2028 or 2029.

Additional Program Years: 2027

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

Project Information-Roadways

NOTE: If your project has already been assigned a State Aid Project # (SAP or SP), please indicate SAP# here

SAP#:

County, City, or Lead Agency Hennepin County

Functional Class of Road Major Collector

Road System CSAH

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

Road/Route No. 121

i.e., 53 for CSAH 53

Name of Road Fernbrook Ln

Example; 1st ST., MAIN AVE

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

From:

Road System

Road/Route No.

i.e., 53 for CSAH 53

Name of Road

Example; 1st ST., MAIN AVE

To:

Road System

DO NOT INCLUDE LEGAL DESCRIPTION

Road/Route No.

i.e., 53 for CSAH 53

Name of Road

Example; 1st ST., MAIN AVE

In the City/Cities of:

(List all cities within project limits)

OR:

At:

Road System

(TH, CSAH, MSAS, CO. RD., TWP. RD., City Street)

Road/Route No.

i.e., 53 for CSAH 53

Name of Road

Bridge 90617

Example; 1st ST., MAIN AVE

In the City/Cities of:

Maple Grove

(List all cities within project limits)

PROJECT LENGTH

Miles 0.06

(nearest 0.1 miles)

Primary Types of Work (check all the apply)

New Construction

Reconstruction

Resurfacing

Bituminous Pavement

Concrete Pavement

Roundabout

New Bridge

Bridge Replacement Yes

Bridge Rehab

New Signal

Signal Replacement/Revision

Bike Trail

Other (do not include incidental items)

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

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

OTHER INFORMATION:

Zip Code where Majority of Work is Being Performed	55369
<u>Approximate</u> Begin Construction Date	05/01/2028
<u>Approximate</u> End Construction Date	10/31/2028
Miles of Trail (nearest 0.1 miles)	0
Miles of Sidewalk (nearest 0.1 miles)	0
Miles of trail on the Regional Bicycle Transportation Network (nearest 0.1 miles):	0
Is this a new trail?	No

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.

Briefly list the goals, objectives, strategies, and associated pages:

A) Transportation System Stewardship (p 2.2-2.4)

Objectives A & B; Strategies A1 & A2

The project will replace a structurally deficient box culvert that provides key connections to Maple Grove Parkway, County Road 81 and I-94. The replacement project serves as a cost-effective manner to preserve the transportation system. The bridge is approaching the end of useful life and deferred replacement would result in closure of the bridge and roadway.

B) Safety and security (p 2.5-2.9)

Objectives A & B; Strategies B1, B3, B4 & B6

The project will address structural safety concerns related to the deficiency of the bridge. Deteriorating assets result in unsafe conditions and will worsen over time. The project will widen the shoulders making it feel safer for all users and provide pull off locations for incidents on the bridge.

C) Access to destinations (p 2.10-2.25)

Objectives A, B, C, D & E; Strategies C1, C2, C3, C4, C8, C9, C15, C16 & C17

CSAH 121 (Fernbrook Ln) serves as a major collector for north-south travel in Maple Grove and Dayton. The project provides direct connection to residential and recreational destinations, including the Elm Creek Park Reserve.

D) Competitive economy (p 2.26-2.29)

Objectives A, B & C; Strategies D1, D3 & D4

The project area serves needs for people to access residential and recreational locations. Replacing the bridge will allow the roadway to remain open to provide access to residents in the northeastern region of the county. The project is within the proximity of a significant planned multiuse development including single-family homes, townhomes and senior living.

E) Healthy and equitable communities (p 2.30-2.34)

Objectives A, B, C & D; Strategies E1, E2, E3, E4, E5, E6 & E7

The project will replace the bridge and reconstruct the culvert. The culvert replacement sets up a future trail connection to the Elm Creek Park Reserve. The future trail connection may align with timing of future developments, making this area healthier with active transportation options.

F) Leveraging transportation investments to guide land use (p 2.35-2.41)

Objectives A & C; Strategies F1, F2, F3, F5, F6, F7

The project supports a design that suits the suburban edge area. The adjacent properties are actively developing into multifamily units for single family, townhomes and senior housing. Replacing the bridge asset ensures that the area is attractive and suitable for development opportunities in the community.

Limit 2,800 characters, approximately 400 words

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.

List the applicable documents and pages: Unique projects are exempt from this qualifying requirement because of their innovative nature. 1) Hennepin County 2024-2028 Capital Improvement Plan (Attachment 07)

2) Hennepin County 2040 Transportation Plan (pages 2-11 - 2-18)

URL: hennepin.us/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/2040-comprehensive-plan-full.pdf

3) Hennepin County Climate Action Plan (pages 50-54)

URL: hennepin.us/climate-action/-/media/climate-action/hennepin-county-climate-action-plan-final.pdf

4) Hennepin County Complete and Green Streets Policy (pages 10-11)

URL: hennepin.us/-/media/hennepinus/your-government/projects-initiatives/complete-streets/Complete-and-Green-Streets-Policy_Oct2023.pdf

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 2024 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 future Regional Solicitation funding cycles, this requirement may include that the plan has undergone a recent update, e.g., within five years prior to application.

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.

Date plan completed: 08/31/2015

Link to plan: hennepin.us/-/media/hennepinus/residents/transportation/documents/ada-sidewalk-transition-plan.pdf

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. This includes assurance of year-round use of bicycle, pedestrian, and transit facilities, per FHWA direction established 8/27/2008 and updated 4/15/2019. 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 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. Bridge Rehabilitation/Replacement projects must be located on a minor collector and above functionally classified roadway in the urban areas or a major collector and above in the rural areas.

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.

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 MnDOT's "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.

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 in-place structure is 20 feet or longer.

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

6. The bridge must have a Local Planning Index (LPI) of less than 60 OR a National Bridge Inventory (NBI) Rating of 3 or less for either Deck Geometry, Approach Roadway, or Waterway Adequacy as reported on the most recent Minnesota Structure Inventory Report.

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 David Elvin at MnDOT (David.Elvin@state.mn.us or 651-234-7795) 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.

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$97,000.00
Removals (approx. 5% of total cost)	\$81,000.00
Roadway (grading, borrow, etc.)	\$49,400.00
Roadway (aggregates and paving)	\$105,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$184,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$97,000.00
Striping	\$3,100.00
Signing	\$4,500.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$92,000.00
Bridge	\$625,000.00
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	\$404,400.00
Other Roadway Elements	\$0.00
Totals	\$1,742,400.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$0.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$92,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$165,600.00
Other Bicycle and Pedestrian Elements	\$460,000.00
Totals	\$717,600.00

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

PROTECT Funds Eligibility

One of the new federal funding sources is Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT). Please describe which specific elements of your project and associated costs out of the Total TAB-Eligible Costs are eligible to receive PROTECT funds. Examples of potential eligible items may include: storm sewer, ponding, erosion control/landscaping, retaining walls, new bridges over floodplains, and road realignments out of floodplains.

INFORMATION: [Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation \(PROTECT\) Formula Program Implementation Guidance \(dot.gov\)](#).

Response:

Based on a planning level review of the proposed scope of work that's primarily focused on a bridge replacement, county staff did not identify any project elements that were obviously eligible for the PROTECT Program.

Totals

Total Cost	\$2,460,000.00
Construction Cost Total	\$2,460,000.00
Transit Operating Cost Total	\$0.00

Measure A: Distance to the nearest parallel bridge

RESPONSE:

Location of nearest parallel bridge crossing:

TH 169 Route (approximately 14 miles)

Explanation:

CSAH 121 (Fernbrook Ln) serves north/south trips between Maple Grove and Dayton. The roadway includes one lane in each direction and is classified as a Major Collector.

Attachment 08 highlights potential alternate routes, including one route labelled the Brockton Ln Route, which requires the utilization of CSAH 13 (Brockton Ln), CSAH 144 (Diamond Lake Rd), CSAH 12 (Dayton River Rd), and a local street (129th Ave N) to approach Bridge #90617 from the west and north. The TH 610 route utilized both TH 610 and TH 169 to approach Bridge #90617 from the east and south. Given the rural context of the proposed project location, there are limited direct connections to access Bridge #90617 in the event of a need to close the area around the structure; however, county staff have identified two additional collector routes that are highlighted in Attachment 08. It is unlikely that these collector routes will be the signed detour route during construction since these routes rely on roadways under local jurisdiction.

For people walking and biking, it is possible to utilize the off-street trail network within Three Rivers Park District's Elm Creek Park Reserve to bypass CSAH 121 (Fernbrook Ln) if traveling north/south to the east of the roadway.

Prior to construction, county staff will coordinate with staff in the City of Maple Grove, City of Dayton, and Three Rivers Park District to ensure there are adequate detours for all modes during construction activities.

(Limit 2,800 characters; approximately 400 words)

Distance from one end of proposed project to nearest non-local functionally classified parallel crossing and then back to the other side of the proposed project (calculated by Council Staff):

0

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

Existing Employment within 1 Mile:

4183

Existing Manufacturing/Distribution-Related Employment within 1 Mile:

27

Existing Post-Secondary Students within 1 Mile:

0

Upload Map

1702237481743_RS3_CSAH 121 Fernbrook Ln_Regional Economy.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):

0

If box above is checked, fill in length.

Along Tier 2:

(60 Points)

Miles (to the nearest 0.1 miles):

0

If box above is checked, fill in length.

Along Tier 3:

(55 Points)

Miles (to the nearest 0.1 miles):

0

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

CSAH 121 N of CSAH 81 (Seq ID #42610)

Current AADT Volume	7500.0
Existing Transit Routes on the Project:	N/A
<i>Select all transit routes that apply.</i>	
Upload "Transit Connections" map	1702237623507_RS2_CSAH 121 Fembrook Ln_Transit Connections.pdf
<i>Please upload attachment in PDF form</i>	

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	9750.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume No

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

Hennepin County conducted a comprehensive travel demand forecasting analysis based on the Metropolitan Council's regional activity based model. Forecast traffic volumes were based on a combination of socio-economic and land use assumptions. It should be noted that the future transportation network was assumed to include projects identified in the county's Capital Improvement Program. Attachment 9 illustrates the forecast traffic volumes.

Forecast (2040) ADT volume 12400

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:

1. What engagement methods and tools were used?
2. How did you engage specific communities and populations likely to be directly impacted by the project?
3. What techniques did you use to reach populations traditionally not involved in community engagement related to transportation projects?
4. How were the project's purpose and need identified?
5. How was the community engaged as the project was developed and designed?
6. How did you provide multiple opportunities for of Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing to engage at different points of project development?
7. How did engagement influence the project plans or recommendations? How did you share back findings with community and re-engage to assess responsiveness of these changes?
8. If applicable, how will NEPA or Title VI regulations will guide engagement activities?

Response:

The CSAH 121 (Fernbrook Ln) is on the developing suburban edge in Maple Grove. Currently, there is an estimated population of 199 within 0.5 miles of the project area. However, directly southwest of the proposed project is a new development known as Rush Hollow which is anticipated to construct over 500 units of housing as well. Rush Hollow is proposed to include a mix of single-family homes, townhomes, as well as a senior housing complex. This will ensure a mix of affordability levels and household sizes that will create a significant population of users that will be driving, walking, and biking through the project area.

While formal project engagement has not begun, if the project is funded Hennepin County will collaborate with the City of Maple Grove, City of Dayton, Three Rivers Park District, and other key stakeholders to identify appropriate strategies to engage residents, particularly Black, Indigenous and People of Color (BIPOC), low-income households, youth, and older adults. In particular, Hennepin County will coordinate with Three Rivers Park District to accommodate the development of a future alignment for a Rush Creek Regional Trail as outlined in a Rush Creek Regional Trail Master Plan completed in 2008.

Historically, public engagement has included providing project updates across multiple communication streams as applicable; including a project website, mobile texts, social media, and portable message display boards prior to construction activities. Outreach efforts often also include direct conversations with businesses and residents impacted by the proposed project. Outreach efforts will likely include staff from the county's Communications Team to ensure the use of best practices and plain language during all public engagement efforts.

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

Measure B: Disadvantaged Communities Benefits and Impacts

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

- ? pedestrian and bicycle safety improvements;
- ? public health benefits;
- ? direct access improvements for residents or improved access to destinations such as jobs, school, health care, or other;
- ? travel time improvements;
- ? gap closures;
- ? new transportation services or modal options;
- ? leveraging of other beneficial projects and investments;
- ? and/or community connection and cohesion improvements.

This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Disadvantaged communities residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Disadvantaged communities 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.

- ? Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
- ? Increased speed and/or cut-through traffic.
- ? Removed or diminished safe bicycle access.
- ? Inclusion of some other barrier to access to jobs and other destinations.

Response:

The CSAH 121 (Fernbrook Ln) Bridge Replacement Project will provide benefit to BIPOC populations, low-income households, youth, and disadvantaged communities by replacing aging infrastructure to maintain mobility while implementing complete and green streets improvements as feasible. Attachment 10 provides an overview of key community resources proximate to the proposed project. Most notably, CSAH 121 (Fernbrook Ln) provides access to various trailheads to the north for the Elm Creek Park Reserve, the largest park in the Three Rivers Park District system that provides amenities for almost every outdoor activity and serves as a major draw for families from across the region. In addition, the project provides an opportunity to coordinate further access via a planned alignment for the extensions of the Rush Creek Regional Trail.

The existing facility along CSAH 121 (Fernbrook Ln) is an aging box culvert with a roadway that provides no accommodation for people biking and walking, including very narrow shoulders. Replacement of the existing facility will provide opportunities to implement context sensitive complete and green streets features to expand modal choices along the corridor as well as to set the stage for future multimodal investments. This will be of particular benefit to seniors and families living in the Rush Creek development proposed directly southwest of the proposed project, which will be connected to the proposed project via a new alignment for Maple Grove Pkwy. Given the current posted speed limits of 55 mph, complete streets measures implemented by the proposed project is necessary to expand the modal choices for people living within 0.5 miles of the proposed project.

During construction, increased noise and impacts to the travelling public are anticipated. Bridge closures and detours will be carefully coordinated with stakeholders, and all efforts will be made to clearly communicate any construction impact via a project website, phone hotline, and appropriate signage.

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

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

- ? specific direct access improvements for residents
- ? improved access to destinations such as jobs, school, health care or other;
- ? new transportation services or modal options;
- ? and/or community connection and cohesion improvements.

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:

While there are not any subsidized housing developments located within a 0.5 mile buffer of the proposed project along CSAH 121 (Fernbrook Ln), the project will serve future senior housing at the Rush Creek development. CSAH 121 (Fernbrook Ln) also provides mobility for people living in affordable housing in the Cities of Champlin and Maple Grove. Attachment 11 provides a map and full detail summary of affordable housing in a wider geographic context; including unit sizes and affordability limits based on area median incomes. As identified in the Met Council generated Socio-Economic Conditions map, the census tracts the project intersects contain 90 units of subsidized housing.

The project will provide benefit for residents of affordable housing in the wider region by preserving mobility to several trailheads at Elm Creek Park Reserve, a recreational destination of regional importance that provides activities for people of all ages, abilities, and income levels. In addition, the project will explore opportunities to expand the regional trail network through coordination with Three Rivers Park District relative to their proposed Rush Creek Regional Trail, expanding options for active transportation for all residents. While not subsidized, the Rusk Creek Development directly southwest of the project will provide a mix of housing types and prices, including dedicated senior housing, meaning that there will be a greater demand for multimodal accommodations along the CSAH 121 (Fernbrook Ln) corridor in the near future. Replacement of the existing aging box culvert will present opportunities to implement immediate complete and green streets improvements as well as setting the stage for future multimodal investments.

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

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:

Project's 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): Yes

Upload the 'Socio-Economic Conditions' map used for this measure. 1702258296866_RS4_CSAH 121 Fernbrook Ln_Socio Economic.pdf

Measure A: Bridge Condition

- Deck Rating: 0
- Superstructure Rating: 0
- Substructure Rating: 0
- Channel Rating: 4.0
- Culvert Rating: 4.0

Lowest National Bridge Inventory Condition Rating: 4.0

Upload Structure Inventory Report 1702237714876_CSAH 121 Fernbrook Ln Bridge Inventory 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

Response:

While CSAH 121 (Fernbrook Ln) is not located along the Regional Bicycle Transportation Network (RBTN), the proposed project will provide a critical connection to a future extension of Three Rivers Park District's Rush Creek Regional trail. A separate box culvert exclusive to people walking and biking will be considered as part of the project development process to provide a grade separated crossing for multimodal users along the future Rush Creek Regional Trail. Consideration for maximizing light and visibility to promote user comfort, along with strategies to avoid (or minimize) sediment buildup during rainfall events will also be discussed as part of the project development process. In addition, the separate structure will be designed to satisfy vertical clearance requirements. The addition of the exclusive culvert for people walking and biking will provide a cost savings when constructing the future regional trail as the box culvert infrastructure to accommodate the trail will already be in place.

For people walking and biking today, a very narrow shoulder space exists that does not comfortably separate vulnerable roadway users from people driving. As part of the proposed project, the bridge deck will include shoulder space that can accommodate future multimodal connections on one or both sides of CSAH 121 (Fernbrook Ln) should they be constructed north and south of the structure. The future Three Rivers Park District Trail will also better connect multimodal users to Elm Creek Park Reserve and the extensive trail system within the park. One entrance to the group camp sites located at Elm Creek Park Reserve is located approximately 25 ft north of the CSAH 121 (Fernbrook Ln) Bridge Replacement Project. Attachment 12 highlights key multimodal connections around the project area.

Furthermore, Met Council's Regional Bicycle Barriers webmap shows that the proposed project will address a Stream Barrier (Rush Creek). This project will address the barrier by providing space for future multimodal accommodations on the bridge deck as well as a separate box culvert to connect to Three Rivers Park District's future regional trail.

People walking will be able to utilize the trail as well, and the wider shoulders above the structure will provide more comfort if walking along CSAH 121 (Fernbrook Ln).

There is no transit located along the corridor, but a smooth surface on the bridge deck will provide people driving with a more safe and comfortable user experience. The replacement of Bridge #90617 will ensure that CSAH 121 (Fernbrook Ln) remains open without restrictions for all modes.

(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 related to a larger planning effort.

25%

No outreach has led to the selection of this project.

Yes

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:

This project was selected for pursuit of Regional Solicitation funding based on the overall asset condition. No public outreach specific to the project has taken place at this time, but it is expected to occur during the design phase of the project. Future outreach is likely to be coordinated with the City of Maple Grove, City of Dayton, and Three Rivers Park District.

(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 project's 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, stand-alone 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

1702562898247_Attachment 06 - Potential Concept.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

Yes

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

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

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 Yes

25%

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

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): \$2,460,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$2,460,000.00

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
Attachment 00 - List of Attachments.pdf	Attachment 00 - List of Attachments	77 KB
Attachment 01 - Project Narrative.pdf	Attachment 01 - Project Narrative	80 KB
Attachment 02 - Project Location Map.pdf	Attachment 02 - Project Location Map	748 KB
Attachment 03 - Minnesota Structure Inventory Report.pdf	Attachment 03 - Minnesota Structure Inventory Report	117 KB
Attachment 04 - Existing Condition Photos.pdf	Attachment 04 - Existing Condition Photos	371 KB
Attachment 05 - Potential Typical Section.pdf	Attachment 05 - Potential Typical Section	296 KB
Attachment 06 - Potential Concept.pdf	Attachment 06 - Potential Concept	310 KB
Attachment 07 - Hennepin County 2024-2028 Transportation CIP.pdf	Attachment 07 - Hennepin County 2024-2028 Transportation CIP	239 KB
Attachment 08 - Bridge Alternate Routes Map.pdf	Attachment 08 - Bridge Alternate Routes Map	1.8 MB
Attachment 09 - 2040 Forecast Traffic Volumes.pdf	Attachment 09 - 2040 Forecast Traffic Volumes	1.0 MB
Attachment 10 - Disadvantaged Communities and Resources Map.pdf	Attachment 10 - Disadvantaged Communities and Resources Map	414 KB
Attachment 11 - Affordable Housing Access Map and Detail Summary.pdf	Attachment 11 - Affordable Housing Access Map and Detail Summary	647 KB
Attachment 12 - Multimodal Connections Map.pdf	Attachment 12 - Multimodal Connections Map	216 KB
Attachment 13 - City of Maple Grove Support Letter.pdf	Attachment 13 - City of Maple Grove Support Letter	161 KB
Attachment 14 - Three Rivers Park District Support Letter.pdf	Attachment 14 - Three Rivers Park District Support Letter	260 KB

Regional Economy

Bridges Project: CSAH 121 (Fernbrook Ln) Bridge Replacement Project | Map ID: 1702237251460

Dayton

Results

WITHIN ONE MI of project:

Postsecondary Students: 0

Totals by City:

Dayton

Population: 1061

Employment: 102

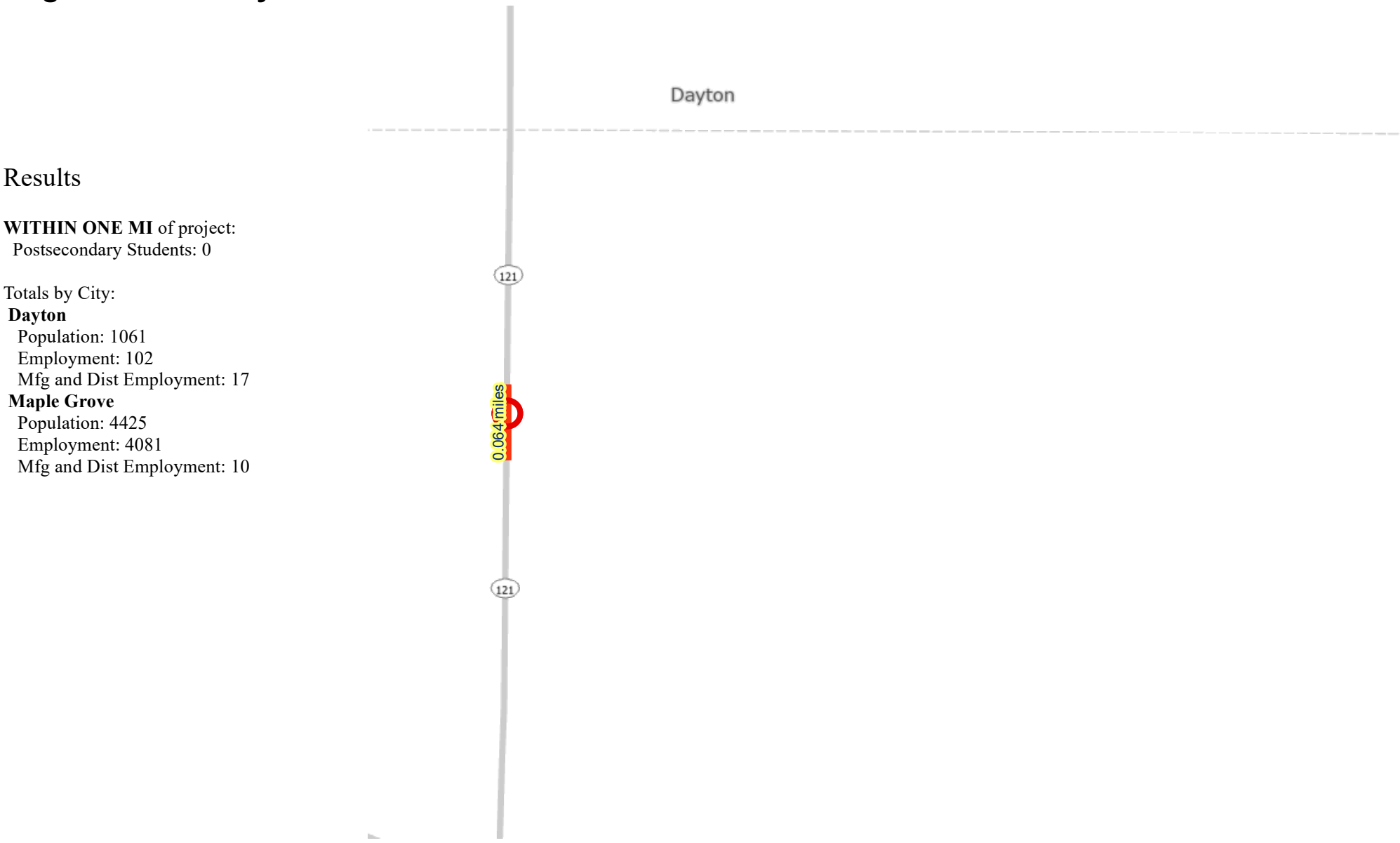
Mfg and Dist Employment: 17

Maple Grove

Population: 4425

Employment: 4081

Mfg and Dist Employment: 10



Project Points



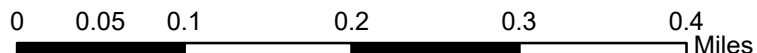
Manufacturing/Distribution Centers



Project



Job Concentration Centers



Created: 12/10/2023
LandscapeRSA5



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<http://giswebsite.metc.state.mn.us/gis/itenew/notice.aspx>



Transit Connections

Bridges Project: CSAH 121 (Fernbrook Ln) Bridge Replacement Project | Map ID: 1702237251460

Dayton

Results

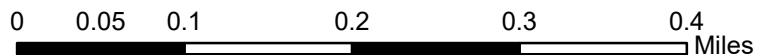
Transit with a Direct Connection to project:
-- NONE --

**indicates Planned Alignments*

Transit Market areas: 4



- | | | | | | | | | | | | |
|--|----------------------------|--|-----------------------------|--|-----------------------------|--|-----------------------------|--|-----------------------------|--|---------------------------|
| | Project Points | | Commuter Rail | | Commuter Rail | | Dedicated Bus Rapid Transit | | Arterial Bus Rapid Transit | | Modern Streetcar |
| | Project | | Dedicated Bus Rapid Transit | | Dedicated Bus Rapid Transit | | Highway Bus Rapid Transit | | Commuter Rail | | Undetermined |
| | Project Area | | Highway Bus Rapid Transit | | Highway Bus Rapid Transit | | Light Rail | | Dedicated Bus Rapid Transit | | Highway Bus Rapid Transit |
| | Active Stop | | Light Rail | | Light Rail | | Modern Streetcar | | Highway Bus Rapid Transit | | Light Rail |
| | Arterial Bus Rapid Transit | | Arterial Bus Rapid Transit | | Arterial Bus Rapid Transit | | Undetermined | | Light Rail | | |



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LandscapeRSA3



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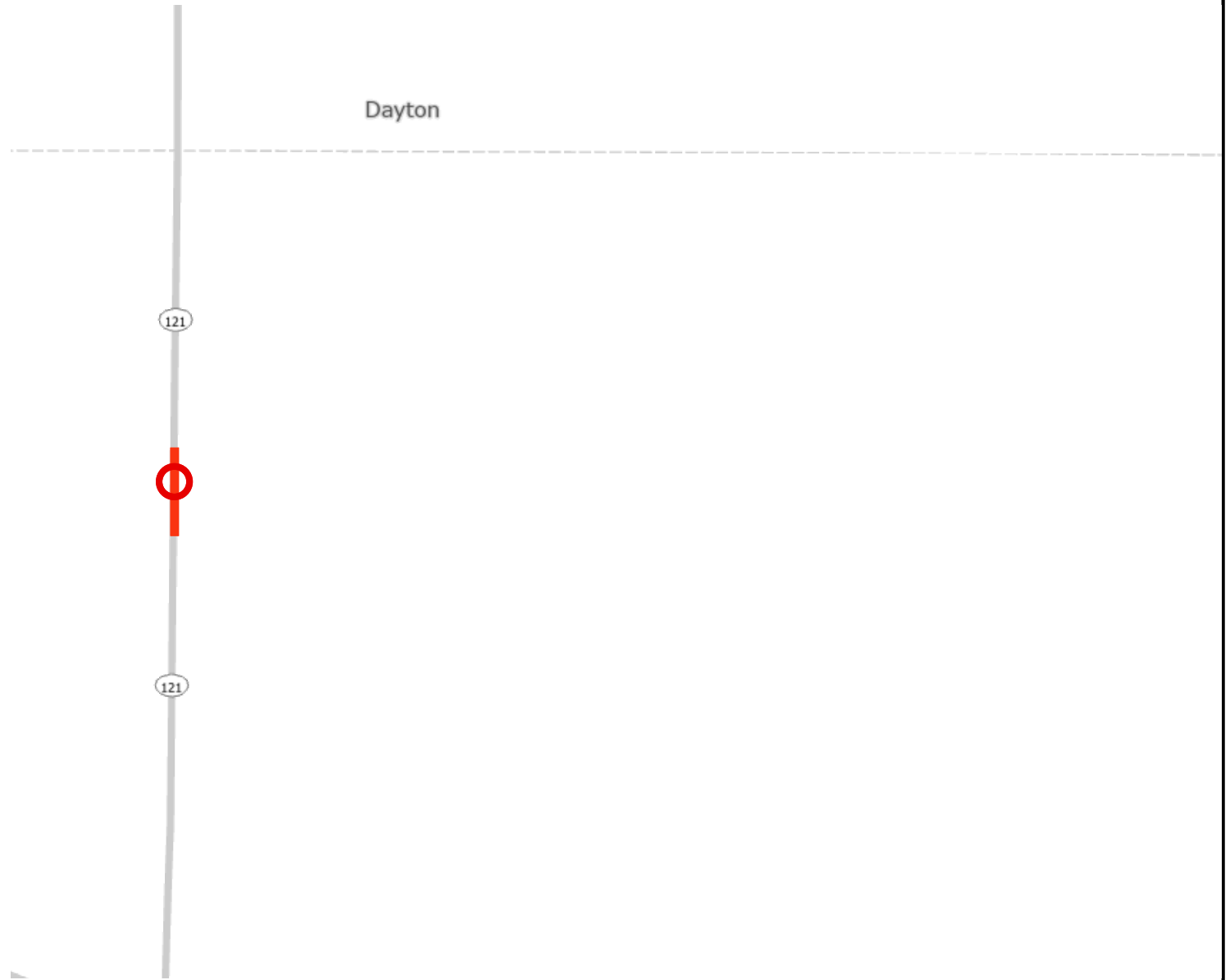
Socio-Economic Conditions




Bridges Project: CSAH 121 (Fernbrook Ln) Bridge Replacement Project | Map ID: 1702237251460

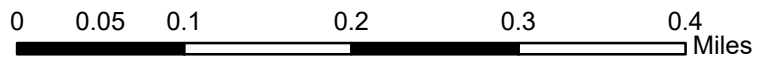
Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 90

Project located in census tracts that are BELOW the regional average for population in poverty or population of color.



 Points  Area of Concentrated Poverty
 Lines



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LandscapeRSA2



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MINNESOTA STRUCTURE INVENTORY REPORT

Bridge ID: 90617

FERNBROOK LA over RUSH CREEK

Date: 12/10/2023

+ GENERAL +			+ ROADWAY ON BRIDGE +		+ INSPECTION +	
Agency Br. No.	207	Crew	Facility	CSAH 121	Local Plan. Index	46
District	METRO	Maint. Area	LRS Mile Point	2.680	Overall Condition	POOR
County	27 - HENNEPIN		Functional Class	MAJOR COLLECTOR	Last Routine Insp Date	09-14-2023
City	MAPLE GROVE		Urban Code	57628 - TWIN CITIES	Routine Insp Frequency	12
Township			ADT (YEAR)	7,500 (2019)	Inspector Name	HENNEPIN COUNTY
Desc. Loc.	0.7 MI N OF JCT CSAH 81		HCADT		Status	A-OPEN
Sect., Twp., Range	03 - 119N - 22W		Speed Limit			
Latitude	45d 09m 00.32s		National Highway System	N	+ NBI CONDITION RATINGS +	
Longitude	93d 27m 42.97s		Detour Length	5 mi.	Deck	N
Custodian	COUNTY		Lanes	2 Lanes ON Bridge	Superstructure	N
Owner	COUNTY		Control Section (TH Only)		Substructure	N
Insp Responsibility	HENNEPIN COUNTY		Function	MAINLINE	Channel	4
Year Built	1949		Type	2 WAY TRAF	Culvert	4
Date Opened to Traffic	01-01-1949		Bridge Match ID	1	+ NBI APPRAISAL RATINGS +	
MN Year Remodeled			Roadway Key	1-ON	Structure Evaluation	4
FHWA Year Reconstructed					Deck Geometry	N
Bridge Plan Location	COUNTY		+ RDWY DIMENSIONS ON BRIDGE +		Underclearances	N
Potential ABC	N.A.		If Divided	NB-EB SB-WB	Waterway Adequacy	8
+ STRUCTURE +			Roadway Width	30.0 ft	Approach Alignment	8
Service On	HIGHWAY		Vertical Clearance		+ SAFETY FEATURES +	
Service Under	STREAM		Max. Vert. Clear.		Bridge Railing	N-NOT REQUIRED
Main Span Type	CONC BOX CULV		Horizontal Clear.		GR Transition	N-NOT REQUIRED
Main Span Detail			Appr. Surface Width	30.0 ft	Appr. Guardrail	1-MEETS STANDARDS
Appr. Span Type			Bridge Roadway Width		GR Termini	1-MEETS STANDARDS
Appr. Span Detail			Median Width on Bridge	NA	+ SPECIAL INSPECTIONS +	
Skew			+ MISC. BRIDGE DATA +		NSTM	N
Culvert Type	W1010D		Structure Flared	NO	Underwater	N
Barrel Length	39 ft		Parallel Structure	NONE	Pinned Asbly.	N
No of Spans	Main: 2 Appr: 0 Total: 2		Field Conn. ID		+ WATERWAY +	
Main Span Length	10.0 ft		Cantilever ID		Drainage Area	48.4 sq mi
Structure Length	22.5 ft		+ FOUNDATIONS +		Waterway Opening	200 sq ft
Deck Width			Abut.		Navigation Control	NO PRMT REQD
Deck Material	N/A		Pier	N/A	Pier Protection	
Deck Install Year			Historic Status	NOT ELIGIBLE	Nav. Vert./Horz. Clr.	
Deck Rebar Layers	UNKN		On - Off System	ON	Nav. Vert. Lift Bridge Clear.	
Deck Rebar (NBI)	N/A		+ PAINT +		MN Scour Code	E-CULVERT
Wear Surf Type	N/A		Year Painted		Scour Evaluation Year	1990
Wear Surf Install Year			Painted Area		+ CAPACITY RATINGS +	
Wear Course/Fill Depth	4.20 ft		Primer Type		Design Load	UNKN
Structure Area			Finish Type		Operating Rating	HS 22.00
Roadway Area			+ BRIDGE SIGNS +		Inventory Rating	HS 13.00
Sidewalk Width - L/R			Posted Load	NOT REQUIRED	Posting	
Curb Height - L/R			Traffic	NOT REQUIRED	Rating Date	02-04-2014
Rail Codes - L/R	37	37	Horizontal	OBJECT MARKERS	Overweight Permit Codes	
			Vertical	NOT APPLICABLE	A: X	B: X C: X

12/10/2023

Crew:

MINNESOTA BRIDGE INSPECTION REPORT

Insp Responsibility: HENNEPIN COUNTY

BRIDGE 90617 FERNBROOK LA OVER RUSH CREEK

INSP. DATE: 09-14-2023

County: HENNEPIN	Location: 0.7 MI N OF JCT CSAH 81	Length: 22.5 ft
City: MAPLE GROVE	Facility: CSAH 121 Mile Pt: 2.680	Deck Width:
Township:	Control Section: Maint. Area:	Rdwy. Area
Section: 03 Township: 119N Range: 22W	Local Agency Bridge Nbr: 207	Paint Area
Main Span Type: CONC BOX CULV	Open, Posted, Closed: OPEN	Culvert : W1010D / 39 ft
NBI Deck: N Super: N Sub: N Chan: 4 Culv: 4		
Appraisal Ratings - Approach: 8 Waterway: 8	MN Scour Code: E-CULVERT	Local Plan. Index 46
Required Bridge Signs - Load Posting: NOT REQUIRED	Traffic: NOT REQUIRED	Overall Condition: Poor
Horizontal: OBJECT MARKERS	Vertical: NOT APPLICABLE	

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0

Notes: 800.'23-No critical structural deficiencies or serious safety hazards present on this structure at time of inspection.

241	CONCRETE CULVERT	09-14-2023	79 LF	0	25	47	7
		09-27-2022	79 LF	0	25	47	7

Notes: 241. Water depth = 1.0' in S barrel. Numerous areas of large honeycomb, diag cracks w/ deterioration, leakage & efflor. Many areas w/ rebar exp in top slab. Drains are plugged, w/ some leakage @ E drains of both barrels. Form ties are protruding.

NORTH BARREL- Conc deterioration @ base of walls. Areas of honeycomb.

'13-Fine to mod vert cracks w/ efflor.

'14-Efflor @ honeycombing on N wall in center. 3' minor horiz crack w/ efflor in N fillet on E end.

'15-Horiz crack w/ efflor in N upper fillet from CL to W.

'16-Heavy efflor @ W end & along CL.

'21-3' to 3.5' of sediment with vegetation growing. Mod crack in the S wall, approx @ CL.

'22-Continued vegetative growth.

'23-No change.

SOUTH BARREL - Severe honeycomb w/ rebar exp on top & walls. Some vert cracks in both walls.

'18-8" diameter spall in S wall fillet @ E end.

'20-1' delam in top of S wall @ W end. Mod crack in the N wall, approx @ CL.

'21-Heavy, active leakage/efflor from areas of honeycombed concrete in S wall. Spall @ base of S wall 3' from W end of barrel is 4'L x 11"H & up to 10"D (Plans show wall thicknesses = 10"). N wall has a 1'L x 9"H x 10"D spall at base, 6' from W end of barrel. Other smaller spalls along S wall @ the water line are up to 5"D. Spalls in S wall +/-6" in diameter and 3'-6' off the floor are 4" - 5"D - these are in the E half of the barrel.

'23-No change in depth of any spalls.

870	CULVERT END TREATMENT	09-14-2023	2 EA	0	0	2	0
		09-27-2022	2 EA	0	0	2	0

Notes: 870. Vert cracks in both headwalls. Both headwalls spalled.

EAST: Spalled @ SE wing connection to barrel. 5 SF delams on SE wing.

'13-5 SF spall in SE. Spalls in E center wing.

'15-Mod efflor @ cracks in SE wing.

'16-3 SF delam in NE wing. Rust staining in SE wing.

'17-SE has heavy efflor. NE has heavy efflor.

'18-Crack w/ efflor in NE.

'22-Increased loose delams and scale in NE WW.

'23-No change.

WEST: Diag cracks, some moderate in size, w/ efflor in all 3 wings.

'14-Mod diag cracks in outer wings. 1 SF of spall @ SW wing in center of wall.

'15-Mod efflor @ cracks in SE wing. Diag cracks in wings are mod in size. 2-1 SF spalls in SW wing.

'17-NW has full height vert crack @ barrel connection.

'18-Efflor @ diag cracks in NW. 4 LF of spall in W headwall. Full height vert crack in NW has efflor.

'23-Minor increase of efflorescence in N.

871	ROADWAY OVER CULVERT	09-14-2023	1 EA	0	1	0	0
		09-27-2022	1 EA	0	1	0	0
Notes: 871.'19-Dip in SBL shoulder on S side of structure. '21-Most cracks sealed. 1 mod-large unsealed random crack in SBL N of culv. Minor settlement of roadway at culvert edges. '23- No changes at time of inspection.							
891	OTHER BRIDGE SIGNING	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0
Notes: 891. Clearance markers X4-4 @ all corners. Plow up/down X4-5 @ ends of guardrails. '17-Rush Creek signs in NW & SE. '23-Signs in place and in good condition.							
892	SLOPES & SLOPE PROTECTION	09-14-2023	1 EA	0	0	1	0
		09-27-2022	1 EA	0	0	1	0
Notes: 892. '13-Mod erosion @ SW & SE corners. '20-Road run off is causing slope erosion & large wash out behind SW wing wall. '21-Large, deep (18") washout in SBL gravel shoulder @ S edge of culv. Update- 10/26/21- deep (18") erosion washout in SBL had been repaired w/ bit by HC. '22-Failed SB shoulder repair, continued erosion. '23-No change.							
893	GUARDRAIL	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0
Notes: 893. NE corner turns for Rush Creek Group Camp entry & all others have crashworthy end treatments. '23-All ok.							
894	DECK & APPROACH DRAINAGE	09-14-2023	1 EA	0	0	1	0
		09-27-2022	1 EA	0	0	1	0
Notes: 894. '13-Deck runoff has caused erosion behind SW & SE wing walls. '20-Road run off has resulted in significant erosion behind SW wing wall and pile of sediment in channel. '22-Erosion of both shoulders.							
899	MISCELLANEOUS ITEMS	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0
Notes: 899. Buried gas pipeline E of culvert. '18-4' deep scour hole in W channel, 10'-15' from end of apron.							
900	PROTECTED SPECIES	09-14-2023	1 EA	0	0	1	0
		09-27-2022	1 EA	0	0	1	0
Notes: 900. '23-Swallow nests in both barrels.							

General *Bridge 90617 (207) CSAH 121/Rush Creek

Notes:

9/14/23 MAM & ADT.

9/27/22 MAM & ADT.

Recommended Repairs:

241. Monitor deterioration of culvert @ base of walls.

241. Clean sediment & vegetation out of N barrel.

870. Repair wing walls & head walls.

899. Remove brush from headwalls & wingwalls.

Appr [1] '20-west rail is at adequate height.

Guardrail:

Channel: [4] '23- (4) aggradation along North slope restricts flow of proper use of both barrels.

'18-(4)-aggradation of channel restricts flow thru N barrel.

'16-sediment aggradation in north barrel.

Culvert: [4] '23- (4) Weathering and significant deterioration of base of walls in both barrels, but especially the south one. Heavy efflor at cracks.

Waterway [8] '23- (8) water has slight chance of overtopping road approaches.

Adeq:

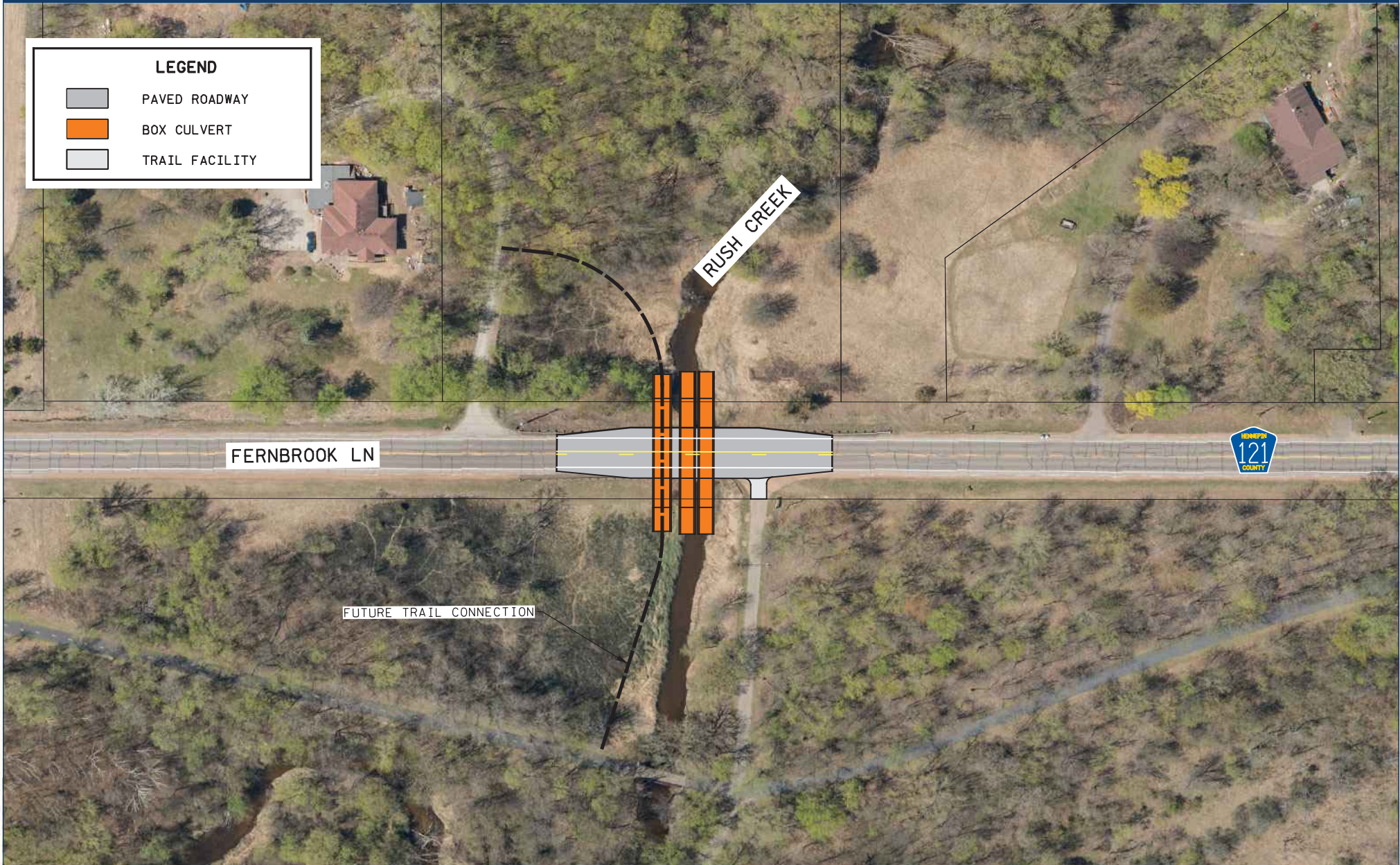
Appr Roadway [8] '23- (8) No speed reduction required.

Alignment:

CSAH 121 (Fernbrook Ln) Culvert Reconstruction Project

HENNEPIN COUNTY
MINNESOTA

Attachment 06 | Potential Concept



CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 00 | List of Attachments

1. Project Narrative
2. Project Location Map
3. Minnesota Structure Inventory Report
4. Existing Condition Photos
5. Potential Typical Section
6. Potential Concept
7. Hennepin County 2024-2028 Transportation CIP
8. Bridge Alternate Routes Map
9. 2040 Forecast Traffic Volumes
10. Disadvantaged Communities and Resources Map
11. Affordable Housing Access Map and Detail Summary
12. Multimodal Connections Map
13. City of Maple Grove Support Letter
14. Three Rivers Park District Support Letter

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 01 | Project Narrative

Project Name

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

City(ies)

Maple Grove

Commissioner District(s)

7

Capital Project Number

CP 2181700

Project Category

Bridge Replacement

Scoping Manager

Emily Buell

Scoping Form Revision Dates

11/15/2023

Project Summary

Replace Bridge #90617 along Fernbrook Lane (CSAH 121) over Rush Creek in the City of Maple Grove.

Roadway History

The existing bridge (built in 1949) consists of a cast-in-place concrete box culvert that spans Rush Creek. The structure is in relatively poor condition, and therefore, has been classified as structurally deficient. The culvert is showing evidence of cracking and spalling that has exposed the structural rebar. Routine maintenance activities are no longer cost effective in extending the useful life of this bridge, therefore, a full replacement is recommended.

Project Description and Benefits

The proposed project will replace the deteriorating structure with a modern concrete box culvert that will be designed to provide a 75-year service life. For people walking and biking, it is anticipated that a wider bridge deck will be introduced in order to accommodate a future trail. Any pavement, sidewalk, and drainage structures impacted by the project will be replaced in-kind.

This project is located within close proximity to Three Rivers Park District's Elm Creek Park Reserve that serves as a destination for the Crystal Lake Regional Trail, Medicine Lake Regional Trail, and Rush Creek Regional Trail. Therefore, a trail crossing for the future Three Rivers Park District Rush Creek Regional Trail will be considered as part of the project development process.

Preservation of this structure is key in supported future residential development that's occurring in this area of Maple Grove and nearby Dayton. Without additional improvements, the bridge structure will continue to deteriorate, and weight restrictions will likely be required.

Project Risks & Uncertainties

The proposed design of the new bridge to accommodate a grade separated crossing for the future Rush Creek Regional Trail.

Project Map



Initial Project Timeline

Scoping: 2019 - 2024

Design: Q1 2025 - Q4 2027

R/W Acquisition: Q1 2026 - Q4 2027

Bid Advertisement: Q1 2028

Construction: Q2 2028 - Q3 2028

Project Delivery Responsibilities

Preliminary Design: Hennepin County

Final Design: Hennepin County

Construction Services: Hennepin County

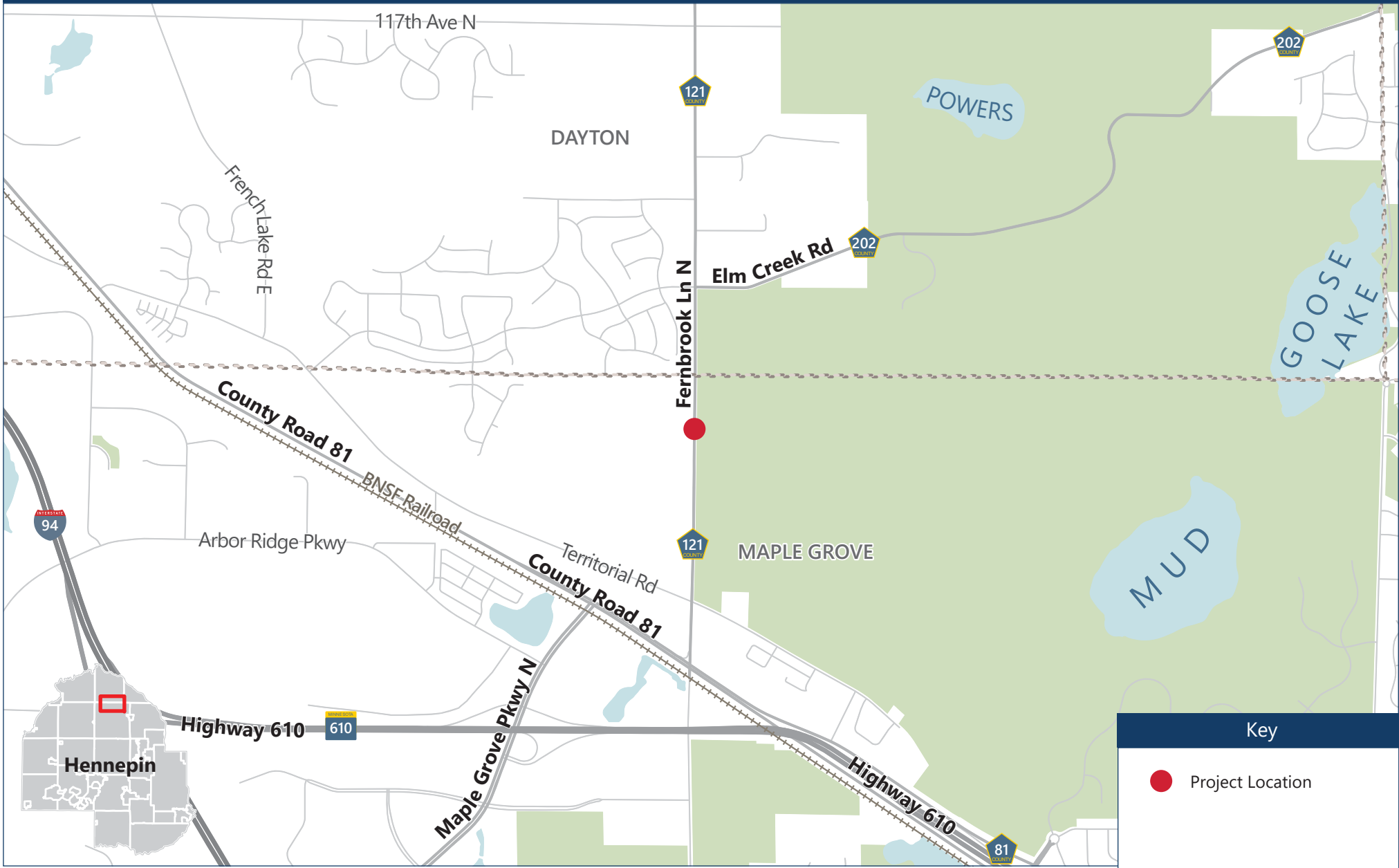
Project Budget -	Project Level
Construction: \$	1,890,000
Cost Estimate Year:	2023
Construction Year:	2023
Annual Inflation Rate:	2.0%
Inflated Construction: \$	2,090,000
Design Services: \$	180,000
R/W Acquisition: \$	130,000
Other (Utility Burial): \$	-
Construction Services: \$	-
Contingency: \$	630,000
Total Project Budget: \$	3,030,000

Funding Notes

This project is eligible for federal funding through the Metropolitan Council's Regional Solicitation given the roadway's functional classification of Major Collector and a Local Planning Index value of 46.

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 02 | Project Location Map



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

Publication date: 7/11/2023

Data sources (if applicable):



CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 03 | Minnesota Structure Inventory Report

1

MINNESOTA STRUCTURE INVENTORY REPORT

Bridge ID: 90617

FERNBROOK LA over RUSH CREEK

Date: 12/10/2023

+ GENERAL +			+ ROADWAY ON BRIDGE +		+ INSPECTION +	
Agency Br. No.	207	Crew	Facility	CSAH 121	Local Plan. Index	46
District	METRO	Maint. Area	LRS Mile Point	2.680	Overall Condition	POOR
County	27 - HENNEPIN		Functional Class	MAJOR COLLECTOR	Last Routine Insp Date	09-14-2023
City	MAPLE GROVE		Urban Code	57628 - TWIN CITIES	Routine Insp Frequency	12
Township			ADT (YEAR)	7,500 (2019)	Inspector Name	HENNEPIN COUNTY
Desc. Loc.	0.7 MI N OF JCT CSAH 81		HCADT		Status	A-OPEN
Sect., Twp., Range	03 - 119N - 22W		Speed Limit			
Latitude	45d 09m 00.32s		National Highway System	N	+ NBI CONDITION RATINGS +	
Longitude	93d 27m 42.97s		Detour Length	5 mi.	Deck	N
Custodian	COUNTY		Lanes	2 Lanes ON Bridge	Superstructure	N
Owner	COUNTY		Control Section (TH Only)		Substructure	N
Insp Responsibility	HENNEPIN COUNTY		Function	MAINLINE	Channel	4
Year Built	1949		Type	2 WAY TRAF	Culvert	4
Date Opened to Traffic	01-01-1949		Bridge Match ID	1	+ NBI APPRAISAL RATINGS +	
MN Year Remodeled			Roadway Key	1-ON	Structure Evaluation	4
FHWA Year Reconstructed					Deck Geometry	N
Bridge Plan Location	COUNTY		+ RDWY DIMENSIONS ON BRIDGE +		Underclearances	N
Potential ABC	N.A.		If Divided	NB-EB SB-WB	Waterway Adequacy	8
+ STRUCTURE +			Roadway Width	30.0 ft	Approach Alignment	8
Service On	HIGHWAY		Vertical Clearance		+ SAFETY FEATURES +	
Service Under	STREAM		Max. Vert. Clear.		Bridge Railing	N-NOT REQUIRED
Main Span Type	CONC BOX CULV		Horizontal Clear.		GR Transition	N-NOT REQUIRED
Main Span Detail			Appr. Surface Width	30.0 ft	Appr. Guardrail	1-MEETS STANDARDS
Appr. Span Type			Bridge Roadway Width		GR Termini	1-MEETS STANDARDS
Appr. Span Detail			Median Width on Bridge	NA	+ SPECIAL INSPECTIONS +	
Skew			+ MISC. BRIDGE DATA +		NSTM	N
Culvert Type	W1010D		Structure Flared	NO	Underwater	N
Barrel Length	39 ft		Parallel Structure	NONE	Pinned Asbly.	N
No of Spans	Main: 2 Appr: 0 Total: 2		Field Conn. ID		+ WATERWAY +	
Main Span Length	10.0 ft		Cantilever ID		Drainage Area	48.4 sq mi
Structure Length	22.5 ft		+ FOUNDATIONS +		Waterway Opening	200 sq ft
Deck Width			Abut.		Navigation Control	NO PRMT REQD
Deck Material	N/A		Pier	N/A	Pier Protection	
Deck Install Year			Historic Status	NOT ELIGIBLE	Nav. Vert./Horz. Clr.	
Deck Rebar Layers	UNKN		On - Off System	ON	Nav. Vert. Lift Bridge Clear.	
Deck Rebar (NBI)	N/A		+ PAINT +		MN Scour Code	E-CULVERT
Wear Surf Type	N/A		Year Painted		Scour Evaluation Year	1990
Wear Surf Install Year			Painted Area		+ CAPACITY RATINGS +	
Wear Course/Fill Depth	4.20 ft		Primer Type		Design Load	UNKN
Structure Area			Finish Type		Operating Rating	HS 22.00
Roadway Area			+ BRIDGE SIGNS +		Inventory Rating	HS 13.00
Sidewalk Width - L/R			Posted Load	NOT REQUIRED	Posting	
Curb Height - L/R			Traffic	NOT REQUIRED	Rating Date	02-04-2014
Rail Codes - L/R	37	37	Horizontal	OBJECT MARKERS	Overweight Permit Codes	
			Vertical	NOT APPLICABLE	A: X	B: X C: X

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 03 | Minnesota Structure Inventory Report

12/10/2023

Crew:

MINNESOTA BRIDGE INSPECTION REPORT

Insp Responsibility: HENNEPIN COUNTY

BRIDGE 90617 FERNBROOK LA OVER RUSH CREEK

INSP. DATE: 09-14-2023

County: HENNEPIN

Location: 0.7 MI N OF JCT CSAH 81

Length: 22.5 ft

City: MAPLE GROVE

Facility: CSAH 121 Mile Pt: 2.680

Deck Width:

Township:

Control Section: Maint. Area:

Rdwy. Area

Section: 03 Township: 119N Range: 22W

Local Agency Bridge Nbr: 207

Paint Area

Main Span Type: CONC BOX CULV

Open, Posted, Closed: OPEN

Culvert : W1010D / 39 ft

NBI Deck: N Super: N Sub: N Chan: 4 Culv: 4

Appraisal Ratings - Approach: 8 Waterway: 8

MN Scour Code: E-CULVERT

Local Plan. Index 46

Required Bridge Signs - Load Posting: NOT REQUIRED

Traffic: NOT REQUIRED

Overall Condition: Poor

Horizontal: OBJECT MARKERS

Vertical: NOT APPLICABLE

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0

Notes: 800.'23-No critical structural deficiencies or serious safety hazards present on this structure at time of inspection.

241	CONCRETE CULVERT	09-14-2023	79 LF	0	25	47	7
		09-27-2022	79 LF	0	25	47	7

Notes: 241. Water depth = 1.0' in S barrel. Numerous areas of large honeycomb, diag cracks w/ deterioration, leakage & efflor. Many areas w/ rebar exp in top slab. Drains are plugged, w/ some leakage @ E drains of both barrels. Form ties are protruding.

NORTH BARREL- Conc deterioration @ base of walls. Areas of honeycomb.

'13-Fine to mod vert cracks w/ efflor.

'14-Efflor @ honeycombing on N wall in center. 3' minor horiz crack w/ efflor in N fillet on E end.

'15-Horiz crack w/ efflor in N upper fillet from CL to W.

'16-Heavy efflor @ W end & along CL.

'21-3' to 3.5' of sediment with vegetation growing. Mod crack in the S wall, approx @ CL.

'22-Continued vegetative growth.

'23-No change.

SOUTH BARREL - Severe honeycomb w/ rebar exp on top & walls. Some vert cracks in both walls.

'18-8" diameter spall in S wall fillet @ E end.

'20-1' delam in top of S wall @ W end. Mod crack in the N wall, approx @ CL.

'21-Heavy, active leakage/efflor from areas of honeycombed concrete in S wall. Spall @ base of S wall 3' from W end of barrel is 4'L x 11"H & up to 10"D (Plans show wall thicknesses = 10"). N wall has a 1'L x 9"H x 10"D spall at base, 6' from W end of barrel. Other smaller spalls along S wall @ the water line are up to 5"D. Spalls in S wall +/-6" in diameter and 3'-6' off the floor are 4" - 5"D - these are in the E half of the barrel.

'23-No change in depth of any spalls.

870	CULVERT END TREATMENT	09-14-2023	2 EA	0	0	2	0
		09-27-2022	2 EA	0	0	2	0

Notes: 870. Vert cracks in both headwalls. Both headwalls spalled.

EAST: Spalled @ SE wing connection to barrel. 5 SF delams on SE wing.

'13-5 SF spall in SE. Spalls in E center wing.

'15-Mod efflor @ cracks in SE wing.

'16-3 SF delam in NE wing. Rust staining in SE wing.

'17-SE has heavy efflor. NE has heavy efflor.

'18-Crack w/ efflor in NE.

'22-Increased loose delams and scale in NE WW.

'23-No change.

WEST: Diag cracks, some moderate in size, w/ efflor in all 3 wings.

'14-Mod diag cracks in outer wings. 1 SF of spall @ SW wing in center of wall.

'15-Mod efflor @ cracks in SE wing. Diag cracks in wings are mod in size. 2-1 SF spalls in SW wing.

'17-NW has full height vert crack @ barrel connection.

'18-Efflor @ diag cracks in NW. 4 LF of spall in W headwall. Full height vert crack in NW has efflor.

'23-Minor increase of efflorescence in N.

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 03 | Minnesota Structure Inventory Report

3

871	ROADWAY OVER CULVERT	09-14-2023	1 EA	0	1	0	0
		09-27-2022	1 EA	0	1	0	0
Notes: 871. '19-Dip in SBL shoulder on S side of structure. '21-Most cracks sealed. 1 mod-large unsealed random crack in SBL N of culv. Minor settlement of roadway at culvert edges. '23- No changes at time of inspection.							
891	OTHER BRIDGE SIGNING	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0
Notes: 891. Clearance markers X4-4 @ all corners. Plow up/down X4-5 @ ends of guardrails. '17-Rush Creek signs in NW & SE. '23-Signs in place and in good condition.							
892	SLOPES & SLOPE PROTECTION	09-14-2023	1 EA	0	0	1	0
		09-27-2022	1 EA	0	0	1	0
Notes: 892. '13-Mod erosion @ SW & SE corners. '20-Road run off is causing slope erosion & large wash out behind SW wing wall. '21-Large, deep (18") washout in SBL gravel shoulder @ S edge of culv. Update- 10/26/21- deep (18") erosion washout in SBL had been repaired w/ bit by HC. '22-Failed SB shoulder repair, continued erosion. '23-No change.							
893	GUARDRAIL	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0
Notes: 893. NE corner turns for Rush Creek Group Camp entry & all others have crashworthy end treatments. '23-All ok.							
894	DECK & APPROACH DRAINAGE	09-14-2023	1 EA	0	0	1	0
		09-27-2022	1 EA	0	0	1	0
Notes: 894. '13-Deck runoff has caused erosion behind SW & SE wing walls. '20-Road run off has resulted in significant erosion behind SW wing wall and pile of sediment in channel. '22-Erosion of both shoulders.							
899	MISCELLANEOUS ITEMS	09-14-2023	1 EA	1	0	0	0
		09-27-2022	1 EA	1	0	0	0
Notes: 899. Buried gas pipeline E of culvert. '18-4' deep scour hole in W channel, 10'-15' from end of apron.							
900	PROTECTED SPECIES	09-14-2023	1 EA	0	0	1	0
		09-27-2022	1 EA	0	0	1	0
Notes: 900. '23-Swallow nests in both barrels.							

General *Bridge 90617 (207) CSAH 121/Rush Creek

Notes:

9/14/23 MAM & ADT.

9/27/22 MAM & ADT.

Recommended Repairs:

241. Monitor deterioration of culvert @ base of walls.

241. Clean sediment & vegetation out of N barrel.

870. Repair wing walls & head walls.

899. Remove brush from headwalls & wingwalls.

Appr [1] '20-west rail is at adequate height.

Guardrail:

Channel: [4] '23- (4) aggradation along North slope restricts flow of proper use of both barrels.

'18-(4)-aggradation of channel restricts flow thru N barrel.

'16-sediment aggradation in north barrel.

Culvert: [4] '23- (4) Weathering and significant deterioration of base of walls in both barrels, but especially the south one. Heavy efflor at cracks.

Waterway [8] '23- (8) water has slight chance of overtopping road approaches.

Adeq:

Appr Roadway [8] '23- (8) No speed reduction required.

Alignment:

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 04 | Existing Condition Photos



View of Fernbrook Ln (CSAH 121) roadway conditions pictured above.



East elevation of the bridge is pictured above.



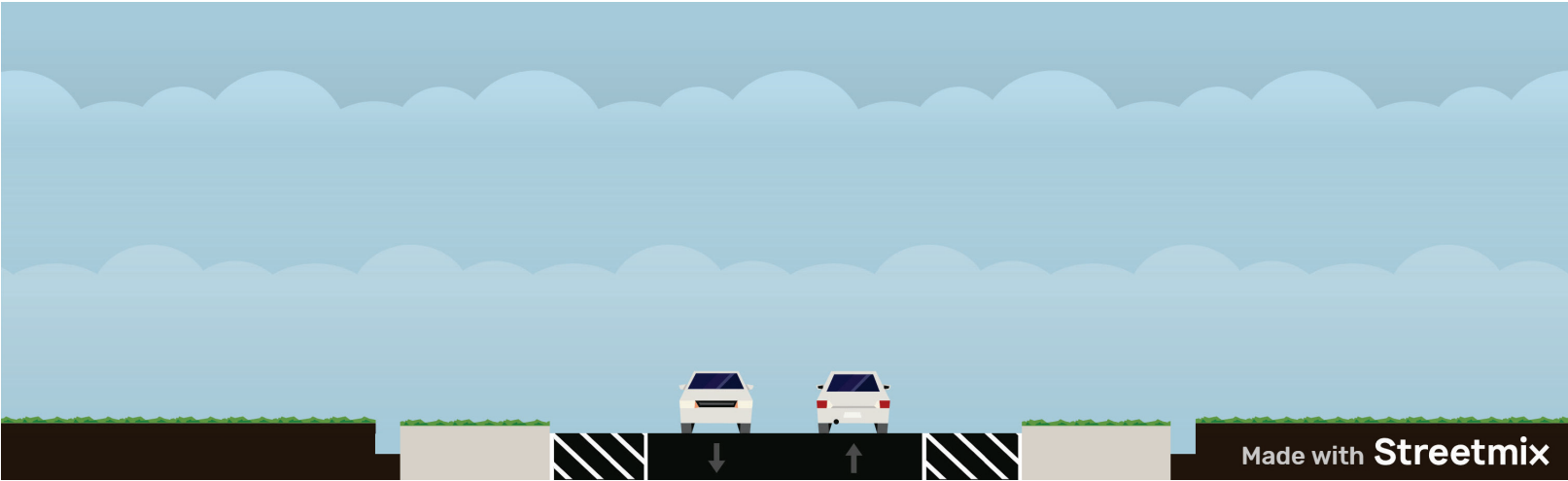
Culvert honeycomb leakage middle of south wall barrel with efflorescence requires repair.



Large spall with efflorescence on side of bridge structure pictured above.

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

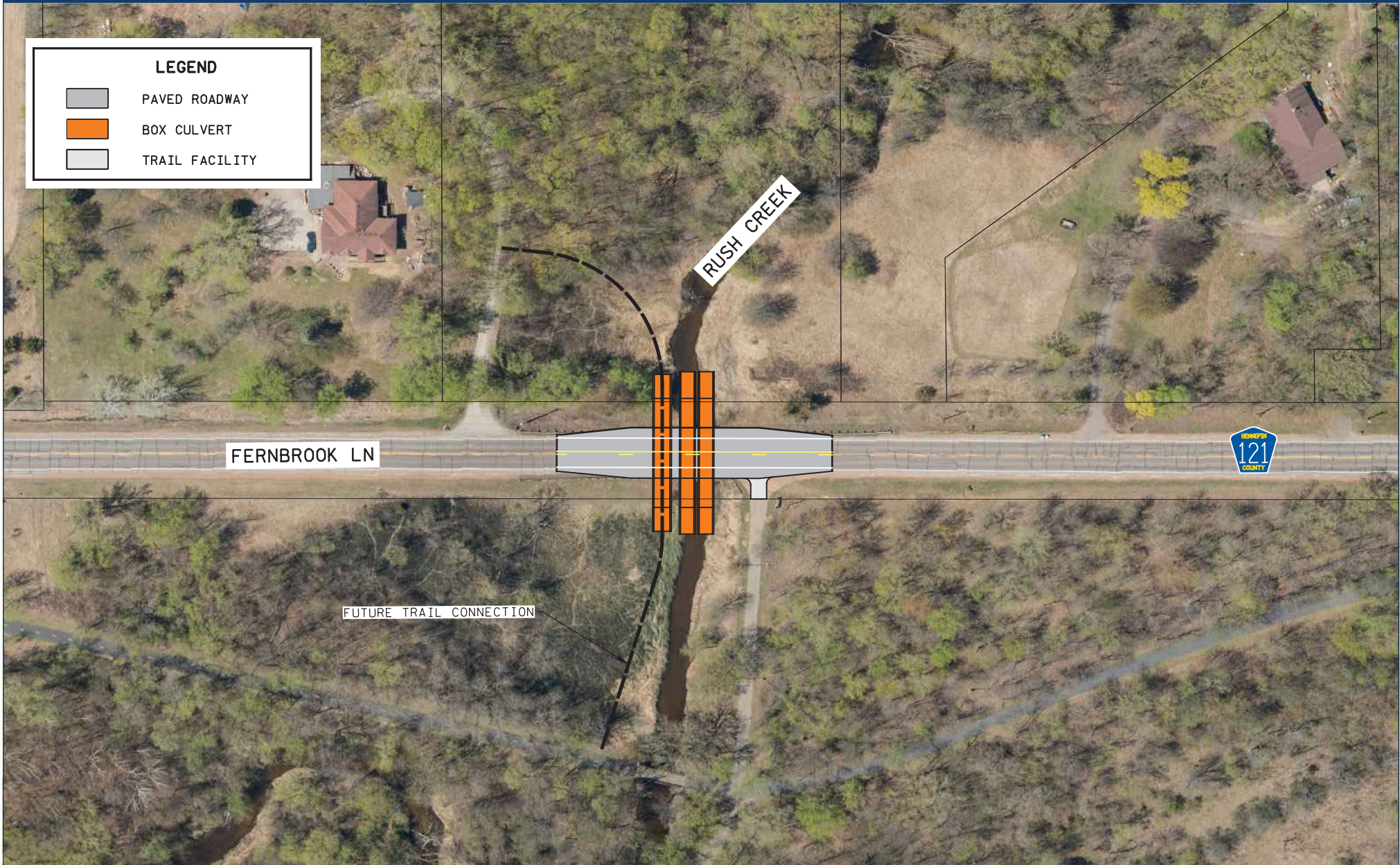
Attachment 05 | Potential Typical Section



CSAH 121 (Fernbrook Ln) Culvert Reconstruction Project

HENNEPIN COUNTY
MINNESOTA

Attachment 06 | Potential Concept



CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 07 | Hennepin County 2024-2027 Transportation CIP

Project Name: 2181700 CSAH 121 - Replace Bridge #90617 over Rush Creek
Major Program: Public Works
Department: Transportation Roads & Bridges

Funding Start: 2023
Funding Completion: 2026

Summary:

Replace Bridge #90617 along Fernbrook Lane (CSAH 121) over Rush Creek in the City of Maple Grove.

Purpose & Description:

The existing bridge (built in 1949) consists of a cast-in-place concrete box culvert that spans Rush Creek. The structure is in relatively poor condition, and therefore, has been classified as structurally deficient. The culvert is showing evidence of cracking and spalling that has exposed the structural rebar. Routine maintenance activities are no longer cost effective in extending the useful life of this bridge; therefore, a full replacement is recommended.

The proposed project will replace the deteriorating structure with a modern concrete box culvert that will be designed to provide a 75-year service life. In an effort to better accommodate people biking and walking along the corridor, it is anticipated that a wider bridge deck will be introduced. Additionally, any pavement, sidewalk, and drainage structures impacted by the project will be replaced in-kind.

Additionally, this project is located within close proximity to Three Rivers Park District's Elm Creek Park Reserve that serves as a destination for the Crystal Lake Regional Trail, Medicine Lake Regional Trail, and Rush Creek Regional Trail. As part of the Rush Creek Regional Trail Master Plan (completed in 2008), a future extension to the west was proposed. It's anticipated that a future crossing for the Rush Creek Regional Trail would be located in the general vicinity of the county's existing bridge over Rush Creek along Fernbrook Lane (CSAH 121).

Preservation of this structure is key in supporting future residential development that's occurring in this area of Dayton and Maple Grove. Without additional improvements, the bridge structure will continue to deteriorate, and weight restrictions will likely be required.



REVENUE	Budget To-Date	Act & Enc	Balance	2024	2025	2026	2027	2028	Future	Total
Property Tax	45,000		45,000	25,000	60,000					130,000
State - Other - Roads						1,120,000				1,120,000
Maple Grove	5,000		5,000	25,000	40,000	120,000				190,000
Total	50,000		50,000	50,000	100,000	1,240,000				1,440,000
EXPENSE	Budget To-Date	Act & Enc	Balance	2024	2025	2026	2027	2028	Future	Total
Right of Way				50,000	70,000					120,000
Construction						940,000				940,000
Consulting	50,000		50,000							50,000
Contingency					30,000	300,000				330,000
Total	50,000		50,000	50,000	100,000	1,240,000				1,440,000

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 07 | Hennepin County 2024-2027 Transportation CIP

Project Name: 2181700 CSAH 121 - Replace Bridge #90617 over Rush Creek	Funding Start: 2023
Major Program: Public Works	Funding Completion: 2026
Department: Transportation Roads & Bridges	

Current Year's CIP Process Summary	Budget To-Date	2024	2025	2026	2027	2028	Future	Total
Department Requested	50,000	50,000	100,000	1,240,000				1,440,000
Administrator Proposed	50,000	50,000	100,000	1,240,000				1,440,000
CBTF Recommended	50,000	50,000	100,000	1,240,000				1,440,000
Board Approved Final	50,000	50,000	100,000	1,240,000				1,440,000

Scheduling Milestones (major phases only):

Activity	Anticipated Timeframe
Planning	2019 - 2022
Design	Q3 2023 - Q4 2025
Bid Advertisement	Q1 2026
Construction	Q2 2026 - Q3 2026
Completion	Q2 2027

Project's Effect on the Operating Budget:

Staff does not anticipate that this project will have impacts to Transportation Department staff or annual operating costs. The proposed project will primarily replace existing bridge assets in-kind.

Project's Effect on County Priorities:

This project will advance disparity reduction efforts in the transportation domain by replacing a culvert nearing the end of its useful life, ensuring mobility for all modes across Rush Creek.

Changes from Prior CIP:

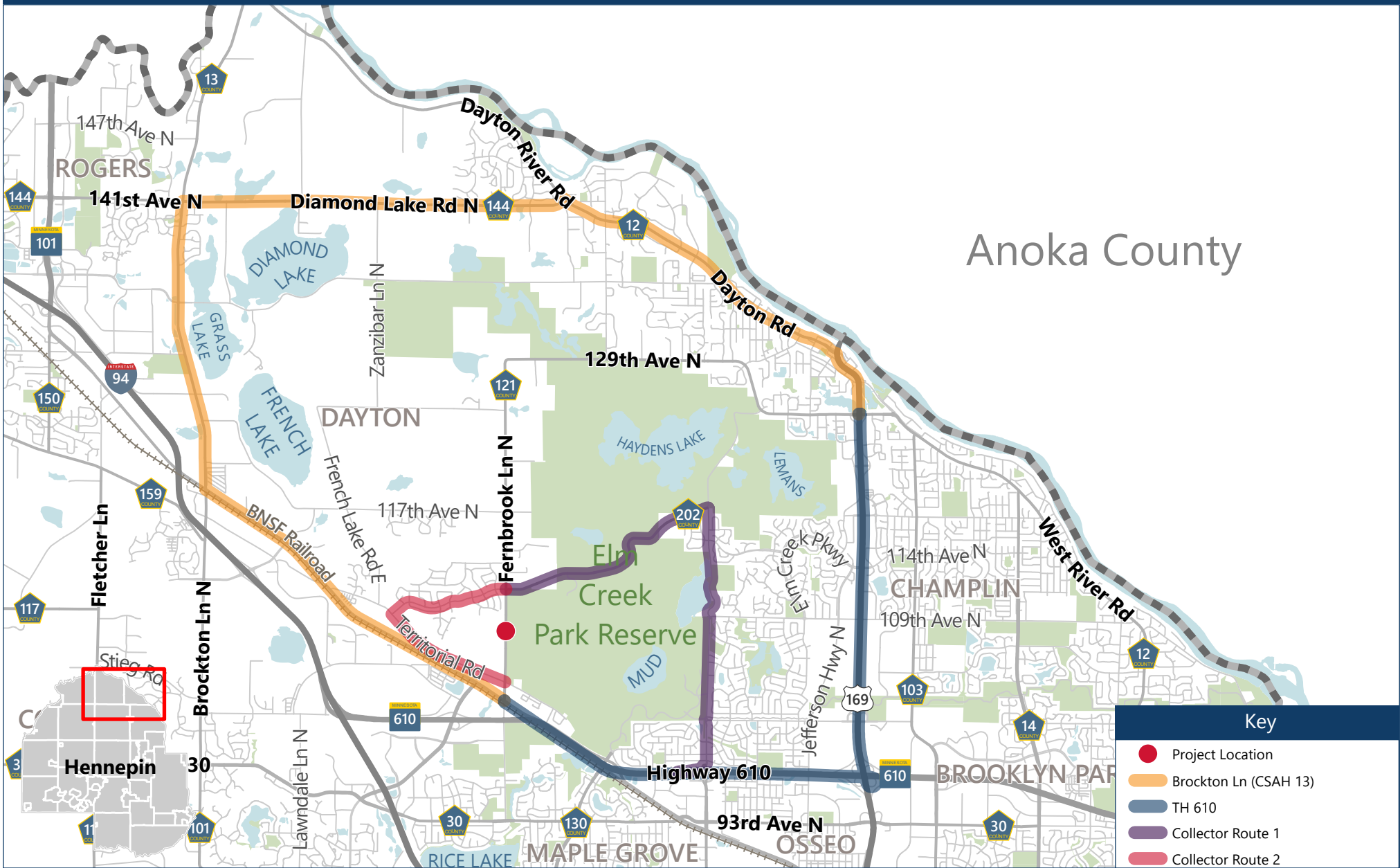
- Substituted \$1.1 million from the county's Transportation Advancement Account for County Bonds.

Board Resolutions / Supplemental Information:

Last Year's CIP Process Summary	Budget To-Date	2023	2024	2025	2026	2027	Future	Total
Department Requested		50,000	50,000	100,000	1,240,000			1,440,000
Administrator Proposed		50,000	50,000	100,000	1,240,000			1,440,000
CBTF Recommended		50,000	50,000	100,000	1,240,000			1,440,000
Board Approved Final		50,000	50,000	100,000	1,240,000			1,440,000

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 08 | Alternate Routes Map



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Publication date: 12/14/2023

Data sources (if applicable):

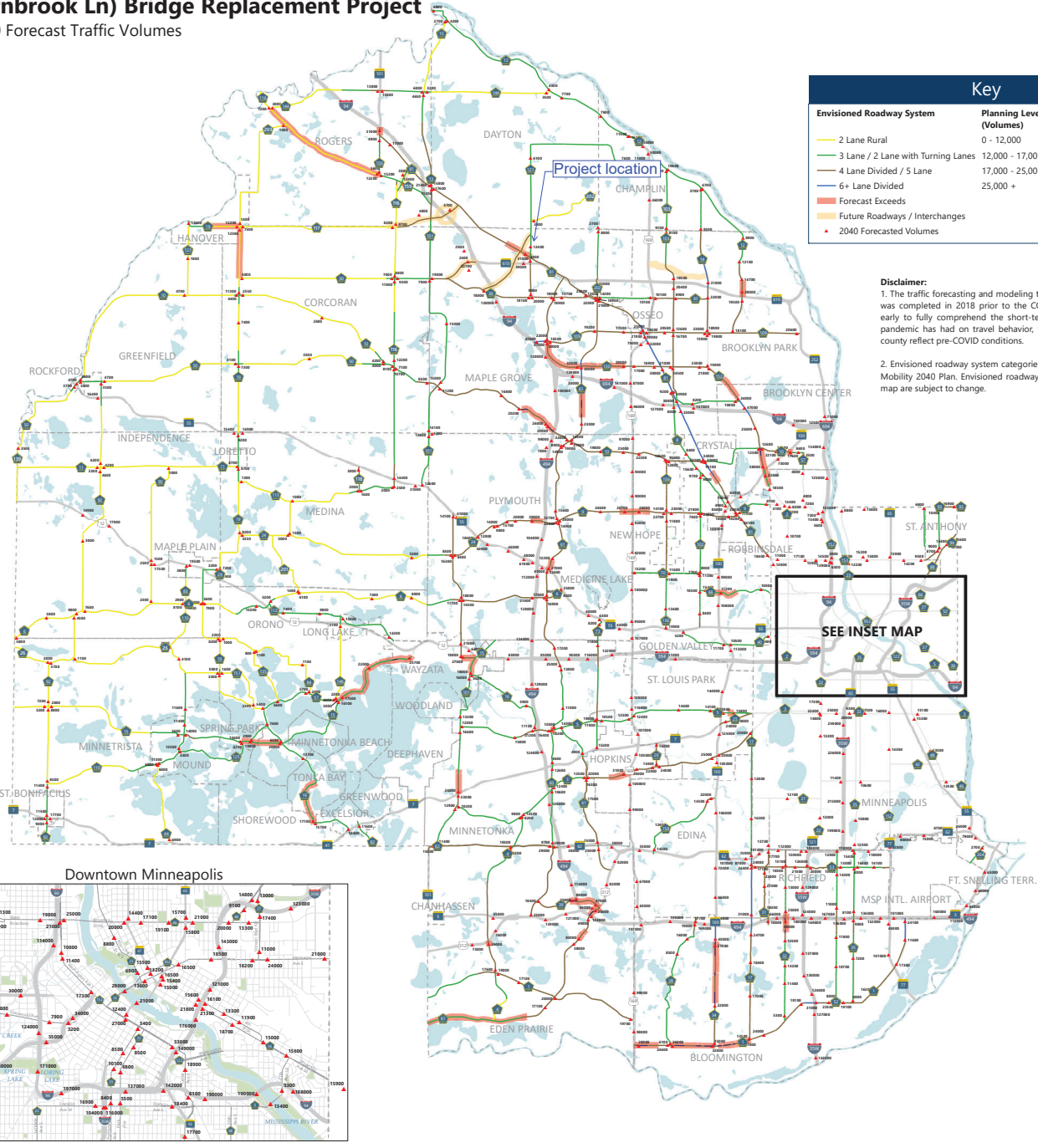


Envisioned roadway system and right-of-way needs

Transportation Planning | Hennepin County Public Works

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 09 | 2040 Forecast Traffic Volumes



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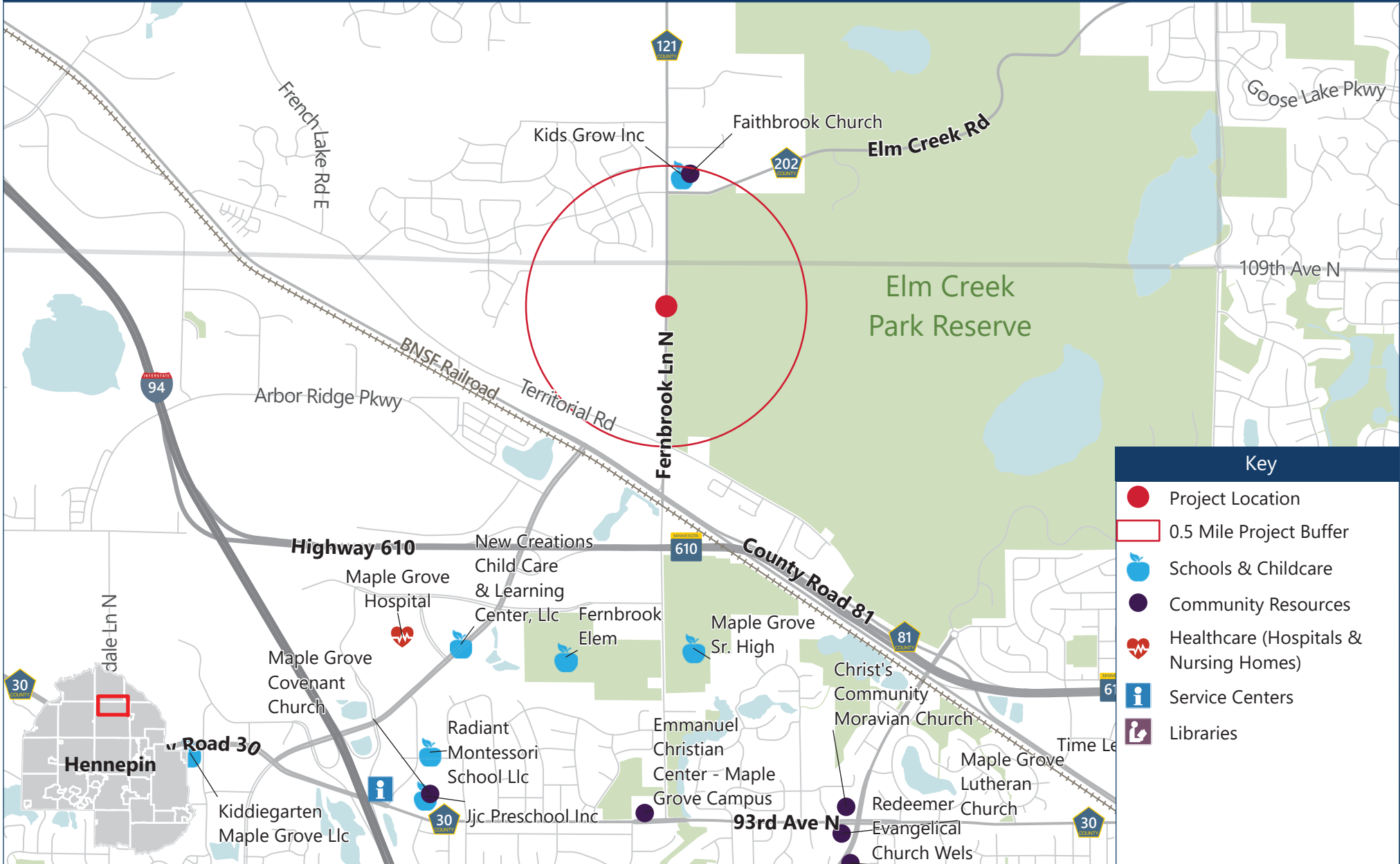
Publication date: 7/13/2023

Data sources: SRF Consulting, Hennepin County Transportation Planning



CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 10 | Disadvantaged Communities and Resources Map



Key	
●	Project Location
	0.5 Mile Project Buffer
🍏	Schools & Childcare
●	Community Resources
❤️	Healthcare (Hospitals & Nursing Homes)
i	Service Centers
📖	Libraries

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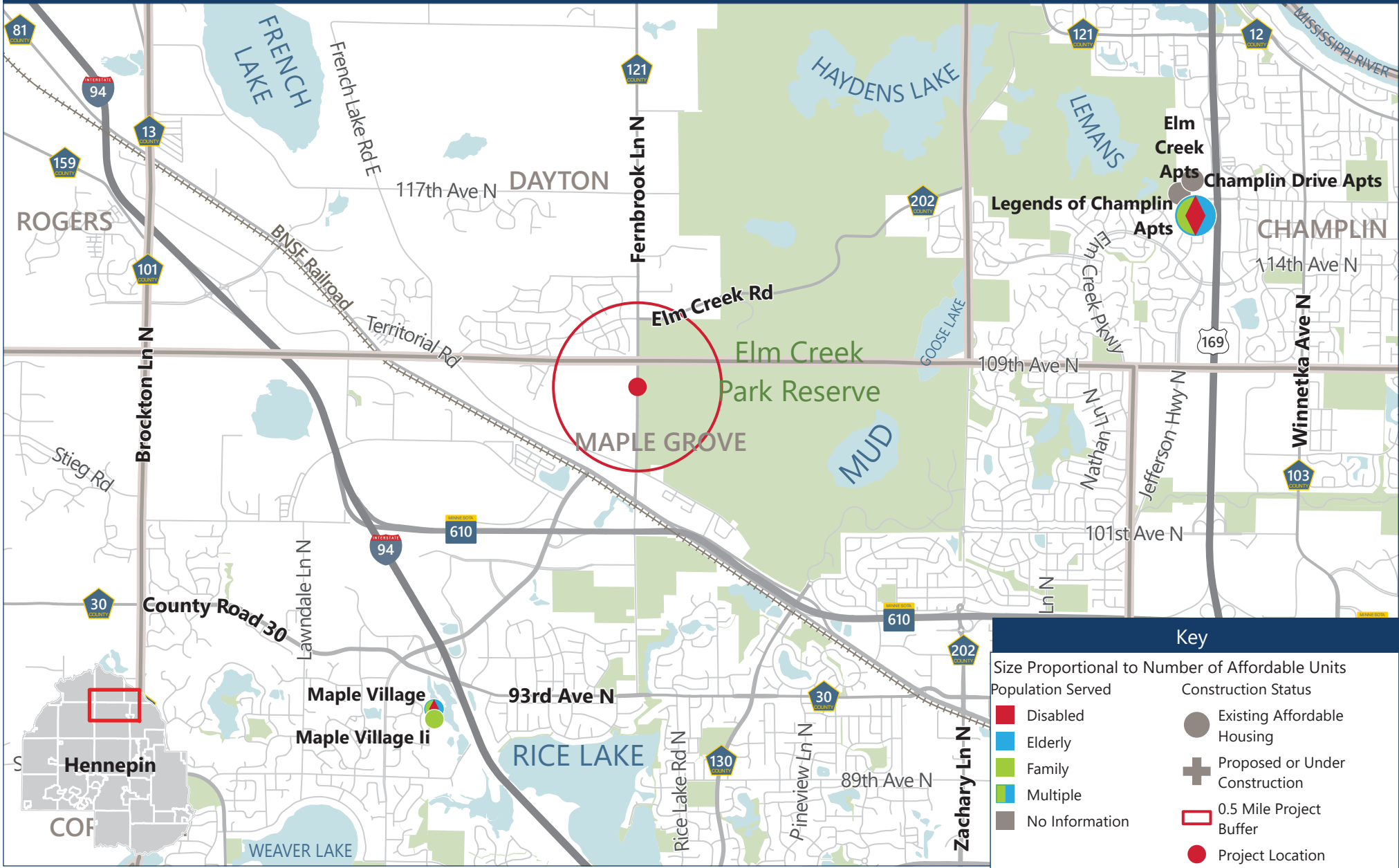
Publication date: 11/9/2023

Data sources (if applicable):



CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 11 | Affordable Housing Access Map and Detail Summary



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Publication date: 11/6/2023

Data sources (if applicable):



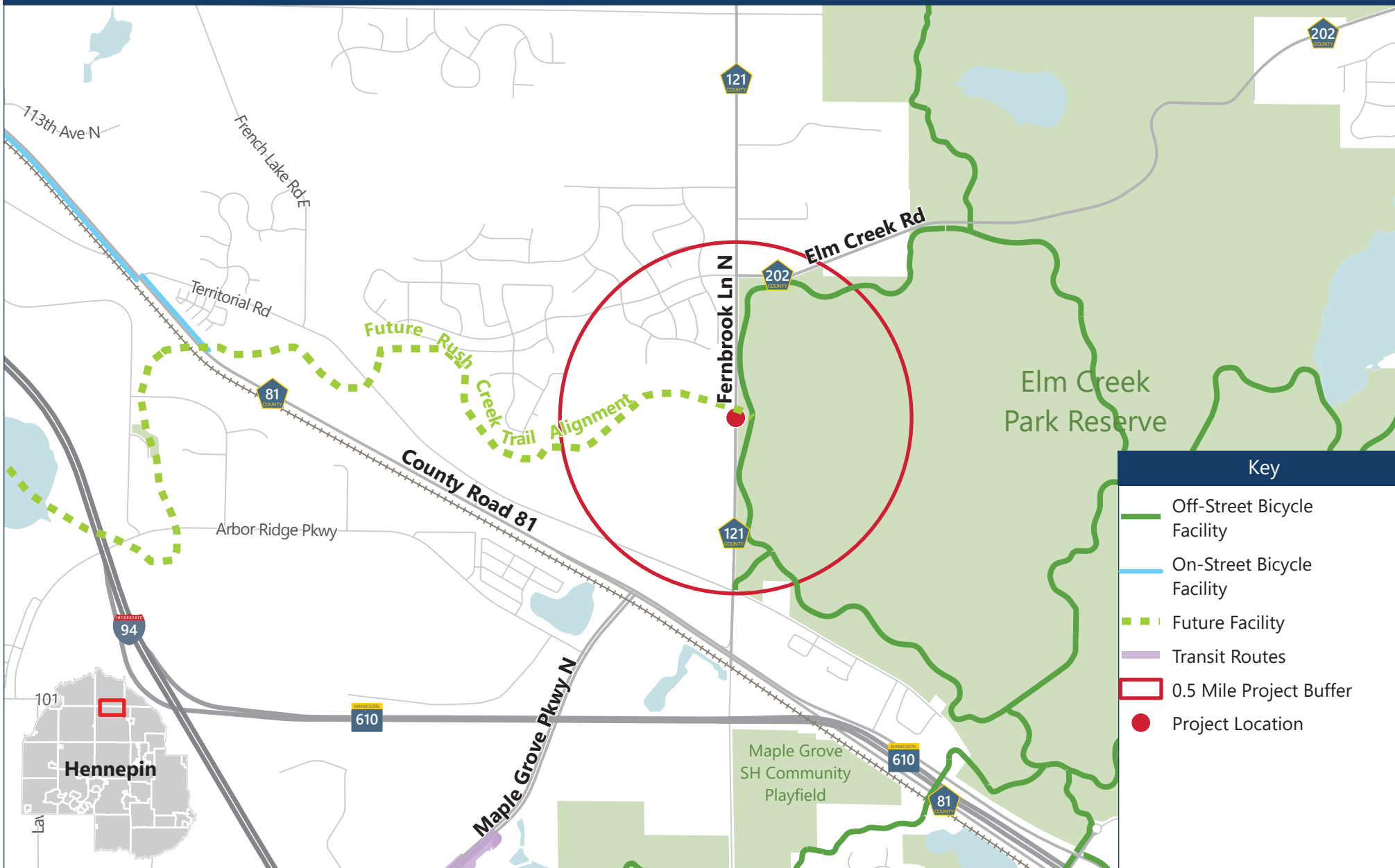
CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 11 | Affordable Housing Access Map and Detail Summary

Property ID	Property Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4 BR
4017	Maple Village	54	54	0	54	0	0	3	33	18	0
10289	Maple Village li	48	48	4	44	0	0	12	24	12	0
10476	Elm Creek Apts	72	72	0	0	72	0	14	48	10	0
10832	Champlin Drive Apts	72	72	0	7	65	0	12	42	18	0
12405	Legends of Champlin Apts	184	184	0	0	184	0	58	78	48	0

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 12 | Multimodal Connections Map



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

Publication date: 10/5/2023

Data sources (if applicable):





CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 13 | City of Maple Grove Support Letter

December 1, 2023

Carla Stueve, P.E.
Director and County Highway Engineer
Hennepin County Transportation Project Delivery
1600 Prairie Drive
Medina, MN 55340

Subject: Letter of Support for the 2024 Regional Solicitation Program:
CSAH 121 Bridge #90617 Replacement
(Hennepin County, MN)

Dear Ms. Stueve:

The City of Maple Grove hereby expresses its support for Hennepin County's 2024 Regional Solicitation federal funding application for the replacement of Bridge #90617 along Fernbrook Ln (CSAH 121) over Rush Creek in the City of Maple Grove.

This project will involve the replacement of Bridge #90617 along Fernbrook Ln (CSAH 121) over Rush Creek that is nearing the end of its useful life. This project presents an opportunity to preserve a critical asset, and also incorporate a future Three Rivers Park District regional trail into the design; thereby enhancing the livability and quality of life for Maple Grove and Hennepin County residents.

The City of Maple Grove supports this funding application. At this time, the City of Maple Grove has no funding programmed in its 2024-2028 Capital Improvement Program (CIP) for this project. The city has other priority projects on the county system that city CIP resources are currently directed towards. Therefore, the city is currently unable to commit to cost participation in this project.

Thank-you for making us aware of this application and project, and the opportunity to provide support. The city looks forward to working with you on this project.

Sincerely,



Mark Steffenson
Mayor, Maple Grove



Three Rivers
Park District
Board of
Commissioners

CSAH 121 (Fernbrook Ln) Bridge Replacement Project

Attachment 14 | Three Rivers Park District Support Letter

December 1, 2023

Marge Beard
District 1

Carla Stueve, P.E.
Director and County Highway Engineer
Hennepin County Transportation Project Delivery
1600 Prairie Drive
Medina, MN 55340

Jennifer DeJournett
Vice Chair
District 2

Dear Ms. Stueve:

Erin Kolb
District 3

Three Rivers Park District hereby expresses its support for Hennepin County's 2024 Regional Solicitation federal funding application for the replacement of Bridge #90617 along Fernbrook Ln (CSAH 121) over Rush Creek in the City of Maple Grove.

Louise M. Segreto
District 4

This project will involve the replacement of Bridge #90617 along Fernbrook Ln (CSAH 121) over Rush Creek that is nearing the end of its useful life. This project presents an opportunity to preserve a critical asset, and also incorporate the future Three Rivers Park District regional trail grade-separated crossing of Fernbrook Ln into the design and construction of the project; into the design; thereby enhancing the livability and quality of life for Maple Grove and Hennepin County residents.

John Gibbs
Chair
District 5

Three Rivers Park District acknowledges that Hennepin County is pursuing federal funding to replace #90617 along Fernbrook Ln (CSAH 121) and that the Park District may be required to cost participate on the local match for the grade-separated crossing as outlined in the county's cost participation policy. Specific details regarding cost participation and maintenance responsibilities are anticipated to be determined during the design process as project development is advanced. Additionally, Three Rivers Park District agrees to maintain the multimodal facility underneath the bridge year-round in accordance with the Hennepin County Cost Participation and Maintenance Policies.

Jan Guenther
Appointed
At Large

Thank you for making us aware of this application and project, and for the opportunity to provide support. Three Rivers Park District looks forward to working with you on this project.

Jesse Winkler
Appointed
At Large

Sincerely,

Boe Carlson
Superintendent

Boe R. Carlson, Superintendent
Three Rivers Park District