Application

17063 - 2022 Roadway Modernization

17665 - TH-47 Corridor Improvements

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	04/14/2022 8:10 AM

Primary Contact

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

Organization Information

Name:	ANOKA, CITY OF

Jurisdictional Agency (if different):	
Organization Type:	City
Organization Website:	www.ci.anoka.mn.us
Address:	2015 1ST AVE N

*	ANOKA	Minnesota	55303
	City	State/Province	Postal Code/Zip

County:	Anoka
Phone:*	763-576-2700 Ext.
Fax:	
PeopleSoft Vendor Number	0000020920A2

Project Information

Project Name	TH 47 (St Francis Blvd) Corridor Improvements
Primary County where the Project is Located	Anoka
Cities or Townships where the Project is Located:	Anoka
Jurisdictional Agency (If Different than the Applicant):	MnDOT

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

Trunk Highway 47 (St. Francis Blvd) is an A-minor connector road located in the City of Anoka. It is a heavily traveled (19,000+ ADT) two-lane road, and the segment between the Anoka County Fairgrounds and Bunker Lake Blvd (CSAH 116) historically experiences a crash rate three times higher than the statewide average. This segment of road includes no turn lanes and 10 public and 31 private access points. The lack of turn lanes coupled with high traffic volumes causes congestion, crashes and unsafe driver behavior (weaving around turning vehicles). At McKinley St, traffic backups behind left-turning vehicles movement during peak hours are common. Wait times to enter TH 47 from side streets are on average two minutes long. The neighborhood to the east of TH 47 is geographically limited by the Rum River, and TH 47 is the only outlet to move north or south. No pedestrian facilities are present within the project area.

This project focuses on improving intersection operations and safety, completing an existing trail segment for bicyclists and pedestrians, and providing accommodations for left turning movements to adjacent neighborhoods. The project consists of a new traffic signal at McKinley St which will provide a reliable access point for residents and motorizes to safety access onto or cross TH 47. Proposed access closures of two public streets will encourage use of the new traffic signal. The project includes a center turn lane for TH 47 to provide a safer access to private driveways where access control is impossible. A new trail for pedestrians and bicyclists alongside TH 47, a new sidewalk on the west side of TH 47 between East Mineral Pond Blvd and Bunker Lake Blvd, and marked crossings at the McKinley St, Wilson St and East Mineral Pond Blvd/Coolidge St intersections provide new non-motorized access. This project would convert

the existing rural roadway to an urban section and storm sewer will be constructed to provide adequate drainage conditions. Best management practices for stormwater will be used, as the nearby wild & scenic Rum River and the critical corridor of the Mississippi River are both listed as impaired.

The project ties into an Anoka County intersection improvement project at Bunker Lake Blvd (CSAH 116) and TH 47 completed in 2021 to the north, and a MnDOT-led realignment project immediately south of the project area which would remove the bottleneck imposed on the highway by a busy at-grade rail crossing which is one of the most dangerous crossing in the state. The project will add nearly 0.8 miles of new trail connection providing residents with bicycle and pedestrian access to parks along both sides of the Rum River, the Rum River Regional Trail, County Fair Grounds, and other area destinations.

(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.

TH 47, CITY OF ANOKA, FROM 0.1 MI S OF XKIMO ST TO JCT TH 47 / CSAH 116, 0.8 MI - SIGNAL, RECONSTRUCT, ADD CTR TRN LANE, MULTI-USE TRAIL, SIDEWALK, ADA, CLOSE SIDE ST ACCESS

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)

0.8

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

$4,951,600.00

Match Amount

$1,305,400.00

Minimum of 20% of project total

Project Total

$6,257,000.00

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

Match Percentage 20.86%

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

Source of Match Funds City of Anoka

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:

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

Project Information-Roadways

County, City, or Lead Agency City of Anoka

Functional Class of Road A-Minor Connector

Road System TH

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

Road/Route No. 47

i.e., 53 for CSAH 53

Name of Road St. Francis Blvd.

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55303

(Approximate) Begin Construction Date 04/01/2026

(Approximate) End Construction Date 11/30/2026

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

From:
(Intersection or Address) 0.1 Mile S of Xkimo Street

To:
(Intersection or Address) 0.1 Mile north of Coolidge Street

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Miles of Sidewalk (nearest 0.1 miles) 0.1

Miles of Trail (nearest 0.1 miles) 0.5

Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles) 0

Primary Types of Work GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, SIGNALS, LIGHTING, BIKE PATH, PED RAMPS, STORM SEWER

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.:

New Bridge/Culvert No.:

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

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:

Goal A: Transportation System Stewardship. Objective B: Strategically operate the regional transportation system efficiently and cost-effectively. Strategy A1. (p. 2.2-2.4)

Goal B: Safety & Security. Objective A: Reduce fatal and serious injury crashes and improve safety. Strategies B1, B2, B3, B4, B6. (p. 2.5-2.8).

Goal C: Access to Destinations. Objective A: Increase multimodal travel options. Objective B: Increase travel reliability and predictability. Objective D: Increase number/share of trips using transit, carpools, bicycling and walking. Objective E: Improve availability/quality of multimodal options for all ages and abilities. Strategies C1, C2, C3, C8, C9, C10, C15, C16, C17. (p. 2.9-2.24)

Goal D: Competitive Economy. Objective B: Invest in multimodal transportation system. Objective C: Support economic competitiveness through efficient freight movement. Strategies D1, D3, D5. (p. 2.26-2.29).

Goal E: Healthy & Equitable Communities. Objective A: Reduce transportation-related emissions. Objective C: Increase availability of transit/bicycling/walking. Objective D: Community cohesion for people of all ages and abilities. Strategies E1, E2, E3. (p. 2.30-2.34)

Goal F: Leveraging Transportation Investments to Guide Land Use. Objective C: Encourage land use design that integrates highways, streets, transit, walking and bicycling. Strategies F1, F5, F6. (p. 2.35-2.38)

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.

Anoka 2040 Comprehensive Plan

Figure T-2: Existing Traffic Volumes (p. 197) shows that TH 47 is at/over capacity (operating at level of service E and F).

Identifies a problem and issue location for TH 47 between W Garfield Street and the intersection with Bunker Lake Blvd (CSAH 116). This encompasses the project area. (p. 204)

References a 2017-2018 study of TH 47 examining safety, mobility, and access concerns along the project corridor. This identified access issues, pedestrian and non-motorized traffic access, and the overall configuration of TH 47 and local street intersections. (p. 206)

The plan indicates that recommendations for this segment of TH 47 are anticipated to be implemented by 2040. (p. 208)

The plans transportation safety analysis references the TH 47 project segment, again indicating that the city will advance improvements on TH 47 to from the BNSF rail line to the northern city border. (p. 218)

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.

Date plan completed: 12/31/2019

Link to plan: https://www.anokaminnesota.com/DocumentCenter/View/1189/ADA-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, 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.

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.

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.

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.

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.

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$221,000.00
Removals (approx. 5% of total cost)	$526,000.00
Roadway (grading, borrow, etc.)	$335,000.00
Roadway (aggregates and paving)	$1,308,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$800,000.00
Ponds	$500,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$377,000.00
Traffic Control	$221,000.00
Striping	$66,000.00
Signing	$66,000.00
Lighting	$50,000.00
Turf - Erosion & Landscaping	$332,000.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$300,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$835,000.00
Other Roadway Elements	$100,000.00
Totals	**$6,037,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$354,000.00
Sidewalk Construction	$31,000.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00

Pedestrian Curb Ramps (ADA)	$55,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$0.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$50,000.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$490,000.00**

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	$6,527,000.00
Construction Cost Total	$6,527,000.00
Transit Operating Cost Total	$0.00

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

Existing Employment within 1 Mile:	11006
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	1842
Existing Post-Secondary Students within 1 Mile:	0
Upload Map	1649639131995_1A_TH47_Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

RESPONSE: Select one for your project, based on the updated 2021 Regional Truck Corridor Study:

Along Tier 1:	
Miles:	0
(to the nearest 0.1 miles)	
Along Tier 2:	
Miles:	0
(to the nearest 0.1 miles)	
Along Tier 3:	Yes
Miles:	0.8
(to the nearest 0.1 miles)	
The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:	
None of the tiers:	

Measure A: Current Daily Person Throughput

Location	TH 47 between West Garfield St and CSAH 116
Current AADT Volume	185000
Existing Transit Routes on the Project	N/A

For New Roadways only, list transit routes that will likely be diverted to the new proposed roadway (if applicable).

Upload Transit Connections Map	1649639287351_2A_TH47_Transit.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	240500.0

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	Anoka County
Forecast (2040) ADT volume	21300

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:

Response:

The City of Anoka advanced the TH 47 Corridor Project from a corridor study of the trunk highway which concluded in 2017 to a preliminary design effort. The original study identified the notable safety and operations issues seen on the trunk highway, the need for better access control, as well as planning for the completing of the pedestrian gap and inaccessibility in the area. Various typical sections, improvement footprints, and intersection/access configurations were considered and evaluated. The corridor study held two public open houses, one in 2016 and one in 2017, to gain public feedback and eventual support. The City, Anoka County, and MnDOT all sat on PMT meetings throughout the study. The preliminary design project included one public open house in February 2020, which invited over 680 households and stakeholders adjacent to and in the area surround the study corridor, with over 60 attendees. Comments received helped guide trail and sidewalk needs, prioritize tree preservation, among others, and most feedback was positive. A project website was established and maintained throughout the project, including information on project location, important issues, relationship to nearby projects, draft project layout, and a flyover animation of the reconfigured corridor.

Once funding is secured, further engagement with affected property owners and corridor users will be conducted to communicate design details and construction impacts. Engagement processes will be completed in a manner consistent with the requirements for completing the NEPA environmental documentation.

In 2016, MnDOT published the Railroad Separation at Highway 47 Feasibility Study, recommending grade separation for TH 47 over the BNSF railway tracks south of the Anoka County Fairgrounds. A

public open house was held in June 2016, attracting approximately 124 people, many of whom shared concerns about this section of TH 47, ultimately leading to the TH 47 Corridor Improvements Project.

(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.

Response:

This project includes a new, ADA-compliant multi-use trail along TH 47 from Coolidge St to the Anoka County Fairgrounds. It would link to recently completed intersection improvements at TH 47 and Bunker Lake Blvd (CSAH 116) which included a new shared use path from Bunker Lake Blvd south to Coolidge St. This connection in turn links to existing paths within Rivers Bend Park in Ramsey, MN, and would connect to the CSAH 116 bridge over the Rum River to join the Anoka Rum River Regional Trail and to provide a direct, non-motorized linkage to the Anoka Nature Reserve, Anoka High School, community baseball stadium and Rum River Public Library. The project also includes a new sidewalk segment on the western side of TH 47 between E Mineral Pond Blvd and CSAH 116. Completing this pedestrian facility gap removes a barrier to north-south non-motorized mobility through this area of Anoka. Trips which required a vehicle will now be able to be made by walking or biking making movement through the area more equitable. These facilities also allow for recreational activity enhancing public health.

The neighborhoods adjacent to TH 47 in Anoka have not up to this point had sidewalks or a trail facility to access CSAH 116 and the park and trail resources adjacent to the Rum River. The entire project area is located in a regional environmental justice area; a higher-than-average number of residents live below the poverty line. Providing safe spaces for non-motorized travel allows for improved access to area attractions and services, improving quality of life.

In addition to the beneficial connections from the CSAH 116 linkage and crossing of the Rum River, this project would allow a connection to Rum River South County Park and paths through the Anoka

County Fairgrounds site. The multi-use trail along TH 47 will link to an existing sidewalk and bikeway at McKinley St (new traffic signal), allowing neighborhoods east of TH 47 non-motorized access to George Enloe Park, the Anoka Enterprise Park, a major business/industrial park and employment center home to over 70 businesses and several thousand employees, and to Anoka Technical College, the largest technical vocation school in the NW metro that serves a student population of over 2,800 and is made up of over 20% minority groups and the majority of which are first generation college students.

The establishment of a new trail, sidewalk and new linkages will improve bicycle and pedestrian safety by provided dedicated pedestrian spaces, public health (both through active recreation opportunities & access to parks or other public services), direct access to a large, regional high school; and provision of modal alternatives to access parks, a school, a public baseball stadium and library.

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

Measure C: Affordable Housing Access

Describe any affordable housing developmentsexisting, under construction, or plannedwithin 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.

There are no affordable existing affordable housing units within ½ mile of the proposed project. The City of Anoka Comprehensive Plan notes that Anoka's housing stock is affordable, more affordable than Anoka County and the 7-county metropolitan area. The Comp Plan demonstrates that, as of 2015, 6,968 housing units in Anoka were affordable at 80% Area Median Income (AMI) or below. This is almost 93% of available housing in Anoka as of 2015.

The Met Council's 2015 System Statement requires that the City of Anoka plan for an additional 113 affordable housing units over the next 20 years (58 at 30% AMI, 55 at 51 to 80% AMI). Anoka's land use designation for High Density Residential and the available acreage in that land use category would fulfill the Met Council's affordable housing allocation requirements.

Response:

There is a prevalence of housing on the lower end of the homesteaded market value spectrum along TH 47 in the Project Area. The American Community Survey estimated median home value in Anoka in 2015 was $164,700, and many properties along TH 47 ranged from $100,001 to $175,000 based on 2017 MetroGIS data. Houses tend to be small in terms of finished square feet, mostly 751 to 1,100 square feet which lends itself to affordability.

This project will improve access for vehicles, pedestrians and bicyclists. Pedestrians will be able to use the traffic signal and designated pedestrian crossing at McKinley St, as well as a new crosswalk with pedestrian refuge islands at E Mineral Pond Blvd/Coolidge St NW and Wilson Street. Easier crossing of Highway 47 improves mobility to regional job and education centers via

Anoka Enterprise Business Park and Anoka Technical College. Both bicyclists and pedestrians will enjoy enhanced access with the completion of a shared use path alongside TH 47 from the Anoka County Fairgrounds to Bunker Lake Blvd. This new path will facilitate access to public parks and trails, Anoka High School and Rum River Public Library. For vehicles, the introduction of a new traffic signal at McKinley St will facilitate turning onto TH 47.

(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):	Yes
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.	1649857954069_3C_TH47_SocioEcon.pdf

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1934	0.8	1547.2	1934.0
	1	**1547**	**1934**

Total Project Length

Total Project Length (as entered in "Project Information" form)	0.8

Average Construction Year

Weighted Year	1934

Total Segment Length (Miles)

Total Segment Length 0.8

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

Response:

McKinley St provides a primary east-west connection to Anoka Enterprise Park, an industrial park located just west of the TH 47 corridor. The traffic signal installed at McKinley St, along with the left turn lane access at this location, will provide enhanced access to the industrial park area for freight vehicles. Freight haulers will benefit from improved fuel economy with reduced delay as well as decreased and more reliable travel times.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines: Yes

Response:

There are numerous existing trees currently within the clear zone for TH 47 (17 feet for a flat section with a 45 MPH design speed and more than 6,000 vehicles per day). This project will provide new curb and additional space between the lane line and trees, resulting in improved sight lines and safety benefits. Public engagement performed helped guide tree preservation to the greatest possible extent and in improving sightlines at key locations by trimming trees and other foliage.

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics: Yes

The project will include a center turning lane, an FHWA Proven Safety Countermeasure addressing rear end crashes. More than 50% of crashes in the area have historically been rear end crashes.

Response:

The proposed typical section is context sensitive to control traffic speeds and limit impacts to adjacent properties and trees. Maintaining the nature of the surrounding environment while promoting safety are guiding principals identified during public engagement.

Center islands are proposed at Wilson St and Coolidge St to provide traffic calming and pedestrian refuge areas, as well as better channelization of left turn lanes.

(Limit 700 characters; approximately 100 words)

Access management enhancements:

Yes

Side streets will be closed at McCann Ave and Dunham Dr. Traffic will be routed to a traffic signal at McKinley St, which will improve turning onto TH 47.

Response:

A center median at E Mineral Pond Blvd/Coolidge St will prevent left turning and side street traffic from traveling through the intersection. The median will include a pedestrian refuge and new marked crosswalks and FHWA STEP guidance will be followed in determining appropriate treatment level during the next design phase.

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements:

Yes

Current roadway alignments appear to be appropriate for the posted speed of 45 MPH. The project will utilize a lower design speed and adjustments to profile and horizontal alignment will be made accordingly to manage speeds by design.

Response:

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation: Yes

Response:

The TH 47 improvements will convert the existing rural roadway to an urban section requiring storm sewer to provide adequate drainage conditions. The limited available right of way will require innovative stormwater best management practices to ensure compliance. A pond option is shown on the project layout to improve mitigation, however additional or alternative measures will be considered in design. The project is in close proximity to the wild & scenic Rum River and Mississippi River which are both listed as impaired per the MPCA's 2018 list of impaired waterways.

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades: Yes

Response:

The project includes the installation of a new, actuated traffic signal at McKinley St. Paired with the access management, this intersection will provide reliable access to Hwy 47 for residents along the corridor. McKinley St also provides a connection to the industrial park to the west and can serve as an additional access for those businesses connecting to the trunk highway system. The signal will include pedestrian APS push buttons, flashing yellow arrow capabilities, LED overhead lighting, and countdown timers.

The project will install improved intersection lighting at key intersections to provide illumination of conflict zones and pedestrian crossings along the corridor.

(Limit 700 characters; approximately 100 words)

Other Improvements Yes

Response:

This project features a new multi-use trail along the east side of TH 47 from the Anoka County Fairgrounds north to Coolidge St, where it will match into the recently completed Anoka County intersection improvement project at TH 47/CSAH 116. This new trail will provide dedicated bicycle and pedestrian access through the neighborhood, while also linking up to the larger regional trail system, a crossing of the Rum River, and to local public destinations. Median refuge islands are provided at several crossing locations and FHWA STEP countermeasures such as RRFB and PHB systems will be evaluated during the next phase of project design.

(Limit 700 characters; approximately 100 words)

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)	Volume without the Project (Vehicles per hour)	Volume with the Project (Vehicles Per Hour):	Total Peak Hour Delay Reduced by the Project:	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports

42.0	21.0	21.0	2029	2029	42609.0	42609.0	Since the project eliminates two public street accesses to Highway 47 routing more traffic to the McKinley Street intersection, and the added mid-block TWLTL?s for private driveways, a traditional Synchro intersection level MOE analysis does not fully capture the delay reduction posed by the project. This methodology shows zero reduction in delay under the proposed improvements. Performing a SimTraffic analysis of the build and no build conditions under peak	1649640287807_5A_Emissions_Packaged.pdf

		hour traffic, an arterial report shown notable improvements in northbound performance in terms of both average delay and average travel speed. The Synchro and SimTraffic delays were summed to capture all delay under both scenarios.
	42609	

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	42609.0
Total Peak Hour Delay Reduced	42609.0

Measure B:Roadway projects that do not include new roadway segments or railroad grade-separation elements

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
6.72	5.36	1.36
7	**5**	**1**

Total

Total Emissions Reduced:	1.36
Upload Synchro Report	1649816405605_Synchro Reports_Packaged.pdf

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

Measure B: Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements (for Roadway Expansion applications only):

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
0	**0**	**0**

Total Parallel Roadway

Emissions Reduced on Parallel Roadways	0
Upload Synchro Report	

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

New Roadway Portion:

Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons:	0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0.0

Measure B:Roadway projects that include railroad grade-separation elements

Cruise speed in miles per hour without the project:	0
Vehicle miles traveled without the project:	0
Total delay in hours without the project:	0
Total stops in vehicles per hour without the project:	0

Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons (F1)	0
Fuel consumption in gallons (F2)	0
Fuel consumption in gallons (F3)	0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	

Measure A: Roadway Projects that do not Include Railroad Grade-Separation Elements

Crash Modification Factor Used:

o CMF ID: 2351; Install TWLTL (two-way left turn lane) on two lane road

o Crash modification factor: 0.613 (38.7% reduction)

o CMF ID: 325; Install a traffic signal

o Crash modification factor: 0.56 (44% reduction)

o CMF ID: 9821; Install right-in/right-out (RIRO) operations at stop-controlled intersections

o Crash modification factor: 0.55 (45% reduction)

o CMF ID: 2338; Install TWLTL (two-way left turn lane) on two lane road

o Crash modification factor: 0.686 (31.4% reduction)

o CMF ID: 9240; Install sidewalk

o Crash modification factor: 0.41 (59% reduction)

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:	o CMF ID: 2351 - Install TWLTL (two-way left turn lane) on two lane road. This CMF estimates the reduction in rear end crashes with the installation of a center turn lane along the corridor and was applied to the 2 rear end crashes. o CMF ID: 326 - Install a traffic signal. This CMF was selected to determine the reduction in all crashes at the intersection of TH 47 and McKinley St with the installation of a signal. This CMF was applied to 1 crash. o CMF ID: 9821 - Install right-in/right-out (RIRO) operations at stop-controlled intersections. This CMF was selected to determine the reduction in crashes at the intersection of TH 47 and Coolidge St NW with the installation of a RIRO. This CMF was applied to the one crash. o CMF ID: 2338 - Install TWLTL (two-way left turn lane) on two lane road. This CMF was selected to estimates the reduction in all other crashes along the corridor with the installation of a center turn lane. This CMF was applied to five crashes along the corridor. o CMF ID: 9240 - Install Sidewalk. This CMF covers new pedestrian facilities where there are currently none and the effect this has on injury pedestrian and bike crashes. This CMF was applied to one "B" bike crash which occurred within the project area.
(Limit 1400 Characters; approximately 200 words)	
Project Benefit ($) from B/C Ratio	$6,363,408.00
Total Fatal (K) Crashes:	0
Total Serious Injury (A) Crashes:	0
Total Non-Motorized Fatal and Serious Injury Crashes:	0
Total Crashes:	23
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	0
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	8

Worksheet Attachment	1649815388554_TH 47_safety_packaged.pdf

Please upload attachment in PDF form.

Roadway projects that include railroad grade-separation elements:

Current AADT volume:	0
Average daily trains:	0
Crash Risk Exposure eliminated:	0

Measure A: Pedestrian Safety

Determine if these measures do not apply to your project. *Does the project match either of the following descriptions?*
If either of the items are checked yes, then ***score for entire pedestrian safety measure is zero****. Applicant does not need to respond to the sub-measures and can proceed to the next section.*

Project is primarily a freeway (or transitioning to a freeway) and does not provide safe and comfortable pedestrian facilities and crossings.	No
Existing location lacks any pedestrian facilities (e.g., sidewalks, marked crossings, wide shoulders in rural contexts) and project does not add pedestrian elements (e.g., reconstruction of a roadway without sidewalks, that doesnt also add pedestrian crossings and sidewalk or sidepath on one or both sides).	No

SUB-MEASURE 1: Project-Based Pedestrian Safety Enhancements and Risk Elements
To receive maximum points in this category, pedestrian safety countermeasures selected for implementation in projects should be, to the greatest extent feasible, consistent with the countermeasure recommendations in the Regional Pedestrian Safety Action Plan and state and national best practices. Links to resources are provided on the Regional Solicitation Resources web page.
Please answer the following two questions with as much detail as possible based on the known attributes of the proposed design. If any aspect referenced in this section is not yet determined, describe the range of options being considered, to the greatest extent available. If there are project elements that may increase pedestrian risk, describe how these risks are being mitigated.
1. Describe how this project will address the safety needs of people crossing the street at signalized intersections, unsignalized intersections, midblock locations, and roundabouts.
Treatments and countermeasures should be well-matched to the roadways context (e.g., appropriate for the speed, volume, crossing distance, and other location attributes). Refer to the Regional Solicitation Resources web page for guidance links.

Response:

The project adds a signalized intersection at McKinley Street to facilitate better access to the highway for vehicles and a protected crossing for pedestrians. The signal will feature marked crossings on all four legs and ADA/APS compliant facilities. While the highway is to be widened by between 2 and 8 feet to accommodate the three-lane section, raised center islands are proposed at key crossing locations to provide pedestrian refuge and increase comfort in crossing the highway. Design of the typical section is context sensitive to reduce impacts due to widening and added pedestrian exposure to traffic. The only existing crossing within the project area is nearly 60 feet long and crosses two directions of traffic. The proposed crossings are all either signal controlled or two-stage crossings, limiting crossing distances to 24 feet or less crossing only one direction of traffic at a time. Warning signage, high visibility pavement markings and other best practices will be used at these locations. RRFB or PHB systems will also be vetted during final design following FHWA STEP and MnDOT TEM guidance.

(Limit 2,800 characters; approximately 400 words)

Is the distance in between signalized intersections increasing (e.g., removing a signal)?

Select one: No

If yes, describe what measures are being used to fill the gap between protected crossing opportunities for pedestrians (e.g., adding High-Intensity Activated Crosswalk beacons to help motorists yield and help pedestrians find a suitable gap for crossing, turning signal into a roundabout to slow motorist speed, etc.).

Response:

(Limit 1,400 characters; approximately 200 words)

Will your design increase the crossing distance or crossing time across any leg of an intersection? (e.g., by adding turn or through lanes, widening lanes, using a multi-phase crossing, prohibiting crossing on any leg of an intersection, pedestrian bridge requiring length detour, etc.). This does not include any increases to crossing distances solely due to the addition of bike lanes (i.e., no other through or turn lanes being added or widened).

Select one: Yes

If yes,
How many intersections will likely be affected?

Response: 3

Describe what measures are being used to reduce exposure and delay for pedestrians (e.g., median crossing islands, curb bulb-outs, etc.)

Response:

While lanes are added at the tree impacted intersections, pedestrian exposure to traffic is reduced and a higher degree of pedestrian protection is provided at all three intersections. The McKinley Street intersection will feature a new signal to provide an improved level of service and safety to pedestrians crossing the highway. Median crossing islands able to provide pedestrian refuge are provided at the Wilson Street and Coolidge Street intersections with Highway 47. These crossings allow pedestrians to cross one direction of traffic at a time and limit exposure by reducing crossing distances to 24 feet or less. Enhanced, pedestrian activated systems will be further evaluated at these locations during the next phase of design to provide better visibility and operations for pedestrians attempting to cross the busy highway. Any proposed systems will be follow MnDOT and FHWA STEP guidance for the character of these crossing locations. The need for these improvements will become even more important as the bottle neck at-grade rail crossing south of the project area is removed in 2025. Gaps in traffic created by frequent train crossings allow pedestrians to cross safely, removing this bottleneck will likely remove these gaps and further isolate pedestrians.

(Limit 1,400 characters; approximately 200 words)

If grade separated pedestrian crossings are being added and increasing crossing time, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option (e.g., shallow tunnel that doesnt require much elevation change instead of pedestrian bridge with numerous switchbacks).

Response:

(Limit 1,400 characters; approximately 200 words)

If mid-block crossings are restricted or blocked, explain why this is necessary and how pedestrian crossing needs and safety are supported in other ways (e.g., nearest protected or enhanced crossing opportunity).

Response:

No pedestrian facilities are provided along this section of Highway 47 today, and no marked or signed crossings are present. The lack of facilities for pedestrians and the heavily traveled trunk highway create a barrier to pedestrian mobility, isolating residents in the area from access. The added 0.8 miles of multi-use trail will be on the east side of the highway and no mid-clock crossings will be provided. Crossing locations are spaced appropriately to minimize driver distraction by busying the roadway but still providing crossings no greater than 600 feet from any given location along the project area. Completing this important trail gap will provide improved mobility and reduce the need for pedestrians to leave the designated pedestrian areas. Improved mobility allows the neighborhood bordered by the highway and Rum River to access the greater area pedestrian network and destinations throughout the area. The completed gap also allows better access to the Anoka County Fairgrounds where parking and vehicle access are notable issues when events are taking place.

(Limit 1,400 characters; approximately 200 words)

2. Describe how motorist speed will be managed in the project design, both for through traffic and turning movements. *Describe any project-related factors that may affect speed directly or indirectly, even if speed is not the intended outcome (e.g., wider lanes and turning radii to facilitate freight movements, adding turn lanes to alleviate peak hour congestion, etc.). Note any strategies or treatments being considered that are intended to help motorists drive slower (e.g., visual narrowing, narrow lanes, truck aprons to mitigate wide turning radii, etc.) or protect pedestrians if increasing motorist speed (e.g., buffers or other separation from moving vehicles, crossing treatments appropriate for higher speed roadways, etc.).*

Response:

The existing two-lane rural highway is not fitting of the residential environment through which it travels. The proposed three-lane urban section is more fitting of the area and will promote traffic speeds that are more acceptable to local stakeholders. Raised center islands at key locations as well as curb and gutter and multi-use trail throughout the project area will give the corridor a more urbanized feel and provide a calming effect on traffic. Roadway geometry will be to trunk highway standards but be more reflective of the residential environment via tighter turning radii, raised center islands, and center left turn lane. Further evaluation of the design of these elements will be performed during the next design phase using MnDOT's Performance-Based Practical Design guide.

(Limit 2,800 characters; approximately 400 words)

If known, what are the existing and proposed design, operation, and posted speeds? Is this an increase or decrease from existing conditions?

Response:

The existing two-lane rural facility features a posted speed limit of 45 mph and operates with an average speed of 30 mph throughout the day due to congestion. Nighttime hours operate at closer to 35 mph on average when congestion is minimal, and 85th percentile speeds near 43 mph during these periods. The urbanization of the corridor, including curb and gutter, center left turn lane and raised center median are anticipated to reduce the operating speeds of the corridor; a speed study will be requested upon project completion in hopes of reducing the posted speed limit to 35 mph to better fit the residential environment of this section of the corridor.

(Limit 1,400 characters; approximately 200 words)

SUB-MEASURE 2: Existing Location-Based Pedestrian Safety Risk Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following factors are present. Applicants receive more points if more risk factors are present.

Existing road configuration is a One-way, 3+ through lanes or	
Existing road configuration is a Two-way, 4+ through lanes	
Existing road has a design speed, posted speed limit, or speed study/data showing 85th percentile travel speeds in excess of 30 MPH or more	Yes

Existing road has AADT of greater than 15,000 vehicles per day	Yes
List the AADT	18500

SUB-MEASURE 3: Existing Location-Based Pedestrian Safety Exposure Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following existing location exposure factors are present. Applicants receive more points if more risk factors are present.

Existing road has transit running on or across it with 1+ transit stops in the project area (If flag-stop route with no fixed stops, then 1+ locations in the project area where roadside stops are allowed. Do not count portions of transit routes with no stops, such as non-stop freeway sections of express or limited-stop routes. If service was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 service for this item.)	
Existing road has high-frequency transit running on or across it and 1+ high-frequency stops in the project area (high-frequency defined as service at least every 15 minutes from 6am to 7pm weekdays and 9am to 6pm Saturdays. If service frequency was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 frequency for this item.)	
Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)	Yes
If checked, please describe:	The northern project limits are within 500 feet of several mixed-use commercial developments on all four quadrants of the Highway 47 and Bunker Lake Blvd (CSAH 116). intersection, where restaurants, convenience stores, a gas station, bank and other shopping destinations are located, attracting vehicle and pedestrian trips of all types. The Anoka County Fairgrounds border the project south of McKinley Street.

(Limit 1,400 characters; approximately 200 words)

Existing road is within 500 of other known pedestrian generators (e.g., school, civic/community center, senior housing, multifamily housing, regulatorily-designated affordable housing)	Yes
If checked, please describe:	River Bend apartments are located near the northern project limits. Just outside of the project limits are other medium and high-density housing developments along Bunker Lake Blvd (CSAH 116).

(Limit 1,400 characters; approximately 200 words)

Measure A: Multimodal Elements and Existing Connections

Response:

This project includes a new traffic signal at TH 47 and McKinley St (ADA-compliant curb ramps, APS features and enhanced lighting). It includes a new marked pedestrian crossings with median refuge areas at TH 47 and E Mineral Pond Blvd/Coolidge St and Wilson St. The project includes a new multi-use trail along TH 47 extending from the Anoka County Fairgrounds north to Coolidge St, where it matches into a new trail at Bunker Lake Boulevard. The project includes a new section of sidewalk on the west side of TH 47 from E Mineral Pond Blvd to CSAH 116, providing access to the commercial node at the TH 47/CSAH 116 intersection.

These crosswalks and trails will greatly improve safety for bicyclists and pedestrians traveling along and across TH 47, which is characterized by heavy traffic and no designated crossings or pedestrian facilities of any kind. No nearby parallel trails or sidewalks presently exist. New crossings will greatly improve visibility and overall pedestrian and bicycle safety. Likewise, the trail along TH 47 provides a space for bicyclists and pedestrians to travel along the road. Today, people walking and biking must do so in the road or on a narrow shoulder (2'-3') or in grassy areas.

The new bike/ped features become part of a larger network. The trail links to the Anoka County Fairgrounds, and thereby to Rum River South County Park. It links to a north to CSAH 116, and then across the Rum River, connecting to Rivers' Bend Park, Anoka County High School, Anoka Nature Reserve, Rum River Public Library and to the Anoka Rum River Regional Trail (RBTN Tier 2 Alignment). Designated TH 47 crossings provide access via existing sidewalks to neighborhoods west of TH 47, to George Enloe Park and to Anoka Enterprise Park, a major area employment center.

McKinley St is a designated bike route. To the west, McKinley St has wide painted shoulders and prohibiting parking, functioning as bike lanes. To the east, it is a neighborhood road, with direct connections to Rum River South County Park.

The Main Street and US-10 corridor south of the Project Area is designated an RBTN Tier 1 corridor. The TH 47 Corridor Improvements Project would extend a trail to the Anoka County Fairgrounds. The advancement of MnDOT's BNSF railroad grade separation project south of the fairgrounds would likely include additional bike/ped accommodation and could potentially link to the TH 47 trail.

The Met Council's defines Regional Bicycle Barriers as freeways/expressways, railroads and streams. Nearby, these would include US-10, the BNSF railway corridor and the Rum and Mississippi Rivers. The TH 47 Project would not directly overcome any Regional Bicycle Barriers, however it completes an existing trail gap of over 0.8 miles in a largely residential area.

(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.

Yes

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.

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 genesis for this project came from public engagement for the Railroad Separation at Highway 47 Feasibility Study. This study investigated the feasibility of a grade separation for the busy BNSF rail tracks just south of the Anoka County Fairgrounds, where TH 47 (Ferry St) crosses at grade. In addition to commentary about the railroad crossing, many people commented at public open houses in June 2016 and February 2017 about safety and traffic conditions on TH 47 further north. The City of Anoka heeded this information and the TH 47 (St. Francis Blvd) Corridor Improvements Project was created.

This project has included meetings with MnDOT staff, with Anoka City Council, and many project management team meetings with City of Anoka staff. Multiple meetings were held with MnDOT regarding this project (3/17, 8/17, 10/17, 8/19, 10/19, 12/19). Workshops were held with Anoka City Council on January 27, 2020 and February 24, 2020.

A public meeting with the general public was held February 20, 2020 from 5 to 7 pm at the Greenhaven Golf Course and Event Center. A Save the Date letter was mailed to project area residents and property owners in September 2019 with background information on the TH 47 study and inviting them to attend the February 2020 public meeting. A subsequent postcard mailing was also sent in early February 2020 with specific time and location details. Approximately 60 people attended according to sign-in sheets (several more did not sign in). The meeting included a series of 8 informational boards, which included a project overview and timeline, description of key issues, and graphics showing neighborhood access, a new McKinley St signal, and nearby transportation projects. A video visualization of revised three-lane

corridor and shared use path was also available. All printed materials and the video visualization are posted on a project website, which is regularly updated with pertinent project information.

Public meeting attendees were invited to provide feedback on the proposed project concept, rating safety, vehicle access and pedestrian/bicycle accommodations. Written and verbal feedback was also recorded. Feedback indicated that between 70 and 80 percent of responding attendees had an overall positive impression of the project concept when rating for safety, access and bicycle/pedestrian aspects; conversely, between 13 and 20 percent held negative views (the balance held neutral opinions).

(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, 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

1649640790565_TH 47_Regional Solicitation Exhibit_2022.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):	$6,527,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$6,527,000.00
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
Existing TH 47_Regional Solicitation_2022.pdf	Existing Conditions Layout	555 KB
RS MnDOT City of Anoka Hwy 47 project.pdf	MnDOT Letter of Support	262 KB
Summary_Hwy 47 StFrancis One Page Description.pdf	One Page Project Summary	323 KB
TH 47 Corridor Improvements 3-lane LOS (City of Anoka).pdf	Anoka County Letter of Support	724 KB
TH 47_Existing Photos.pdf	Existing Conditions Photos	778 KB

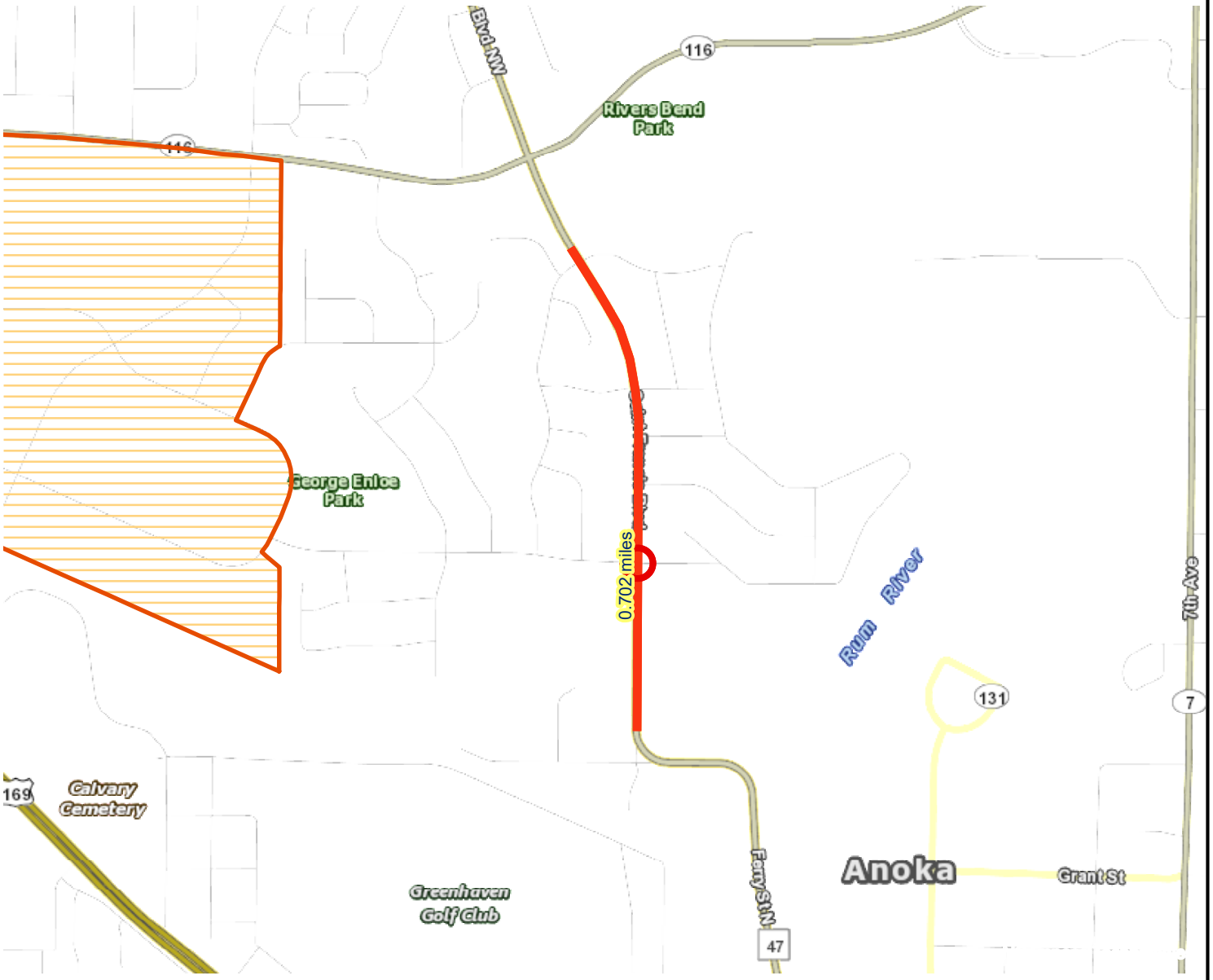
Regional Economy

Roadway Reconstruction/Modernization Project: TH 47 Corridor Improvements | Map ID: 1646797395244

Results

WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:
Anoka
Population: 13298
Employment: 10405
Mfg and Dist Employment: 1837
Ramsey
Population: 5577
Employment: 601
Mfg and Dist Employment: 5



Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.125 0.25 0.5 0.75 1 Miles

Created: 3/8/2022
LandscapeRSA5

METROPOLITAN COUNCIL

Transit Connections

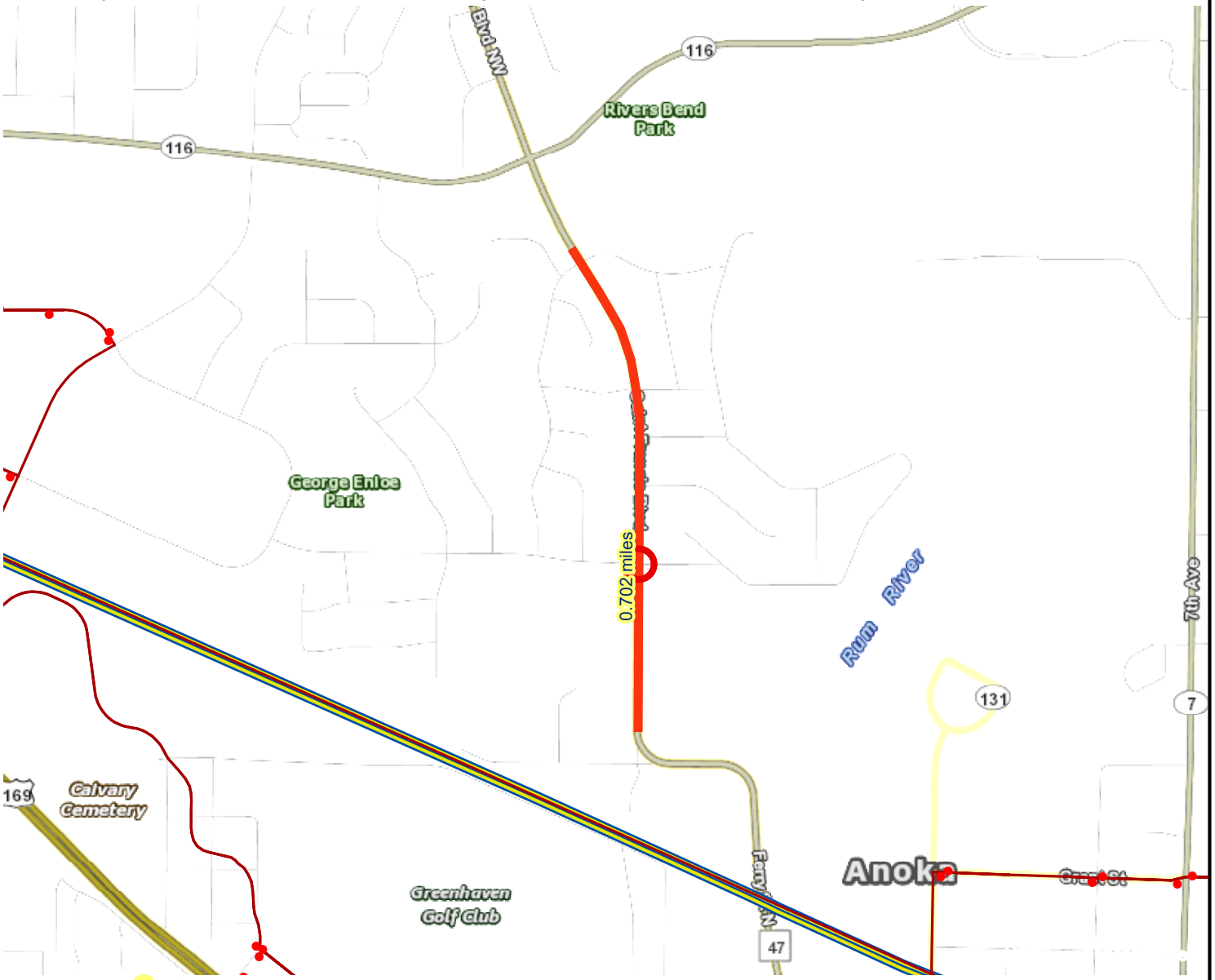
Roadway Reconstruction/Modernization Project: TH 47 Corridor Improvements | Map ID: 1646797395244

Results

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

**indicates Planned Alignments*

Transit Market areas: 3



Project Points
Project
Project Area
Active Stop
Arterial Bus Rapid Transit

Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Arterial Bus Rapid Transit

Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Transit Routes

Arterial Bus Rapid Transit
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Modern Streetcar

Undetermined
Arterial Bus Rapid Transit
Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit

Light Rail
Modern Streetcar
Undetermined

0 0.125 0.25 0.5 0.75 1 Miles

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LandscapeRSA3

For complete disclaimer of accuracy, please visit
https://giswebsite.metc.state.mn.us/gissite/notice.aspx

METROPOLITAN COUNCIL

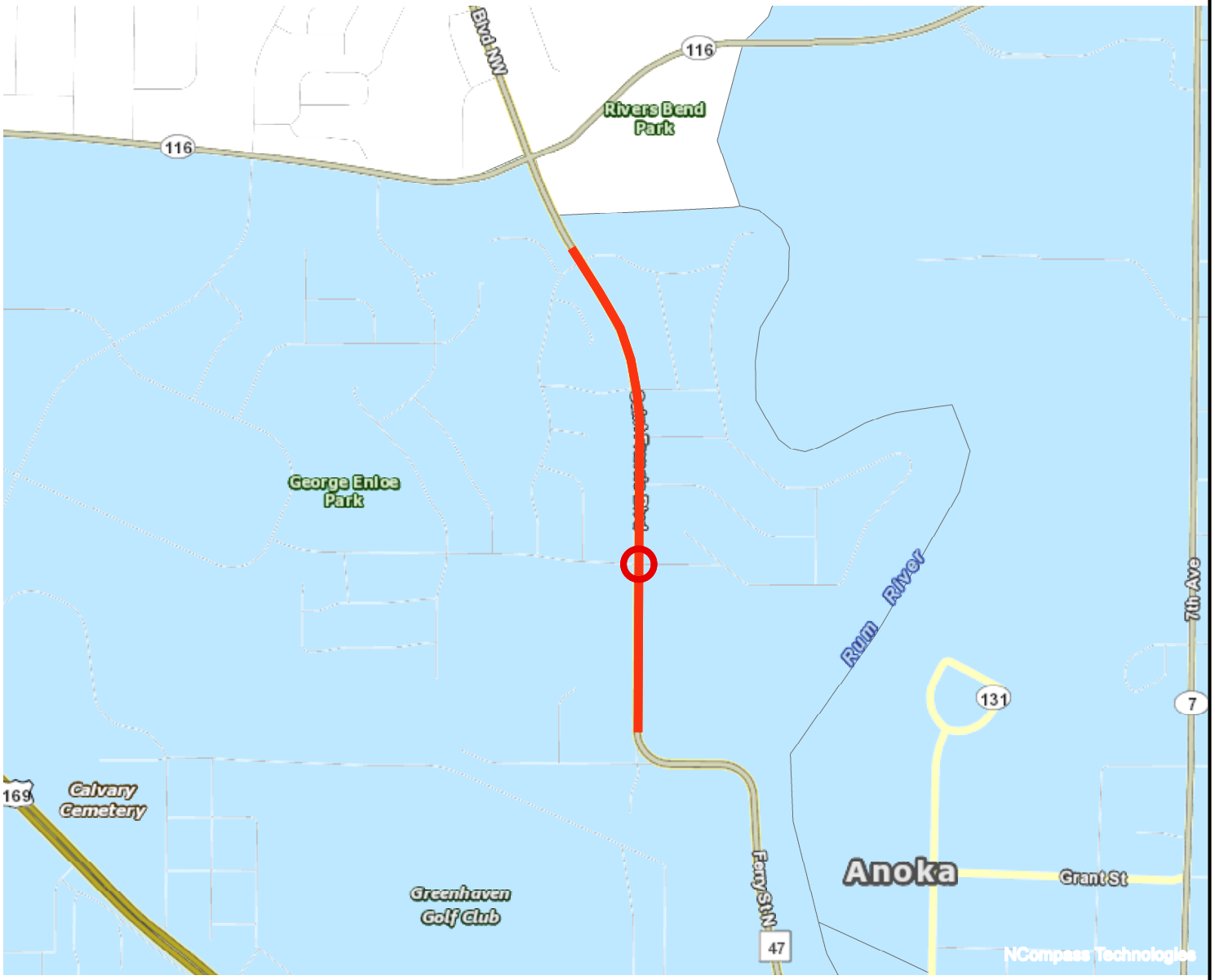
Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: TH 47 Corridor Improvements | Map ID: 1646797395244

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 183

Project located in census tract(s) that are ABOVE the regional average for population in poverty or population of color.



Points
Lines
Area of Concentrated Poverty
Regional Environmental Justice Area

0 0.125 0.25 0.5 0.75 1 Miles

Created: 3/8/2022
LandscapeRSA2

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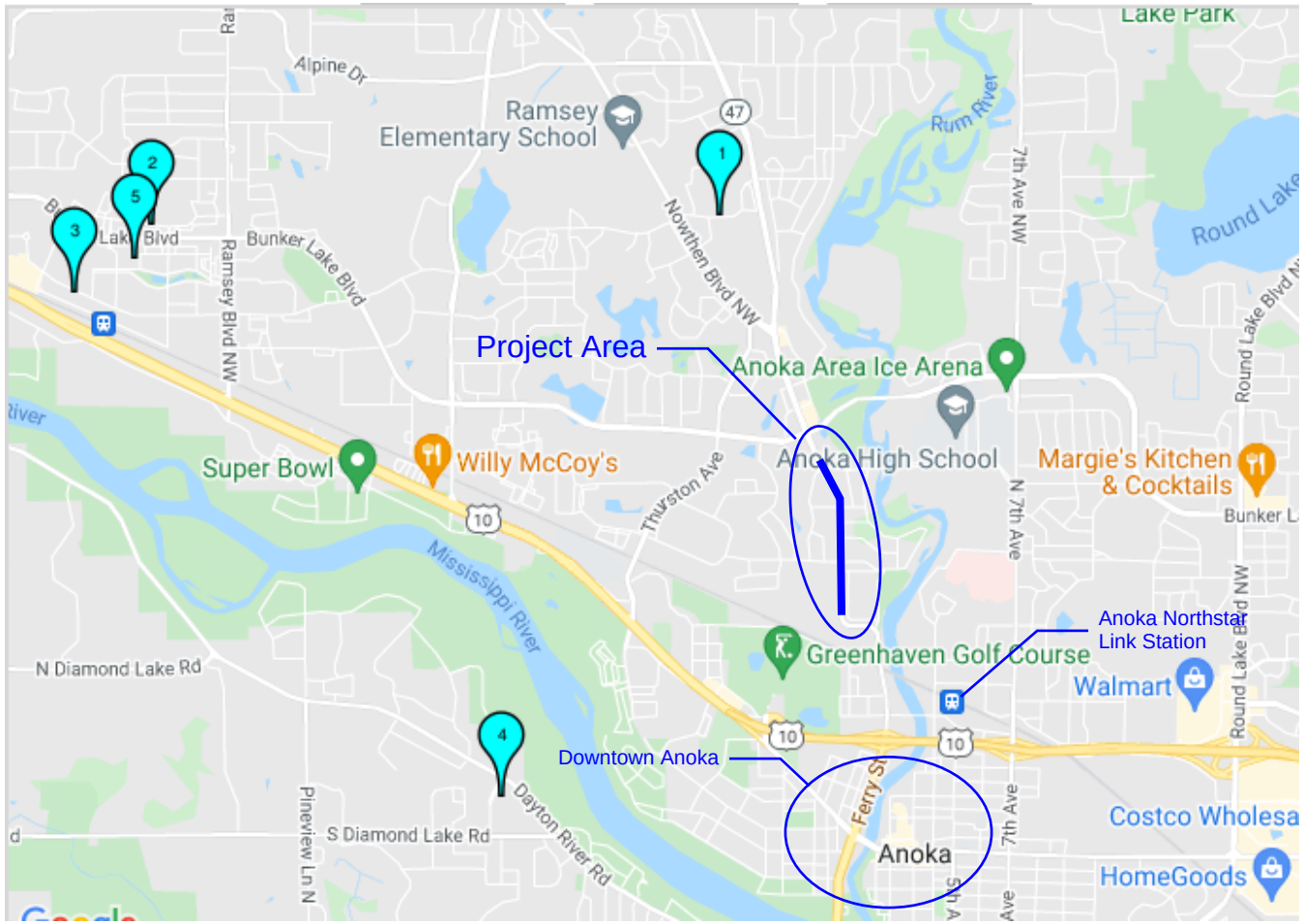
METROPOLITAN COUNCIL



Property Search Summary

Properties	Total Units	30% AMI*	50% AMI*	60% AMI*	80% AMI*	Total Aff Units*
4	186	8	93	76	0	177

* AMI level and units are estimated if not provided, set to least restrictive AMI for largest number of units.
** Obligation expiration dates are estimated based on program definition if not provided.
*** There may be other funders. This funder provided for reference.

The following developments provide affordable housing within 3.5 miles of the project:
1) The Seasons
2) Sunwood Townhomes
3) Sunwood Village
4) Ramsey Apartments

Property details on subsequent pages

HousingLink

Streams

Return to main site

Property Detail

About Streams

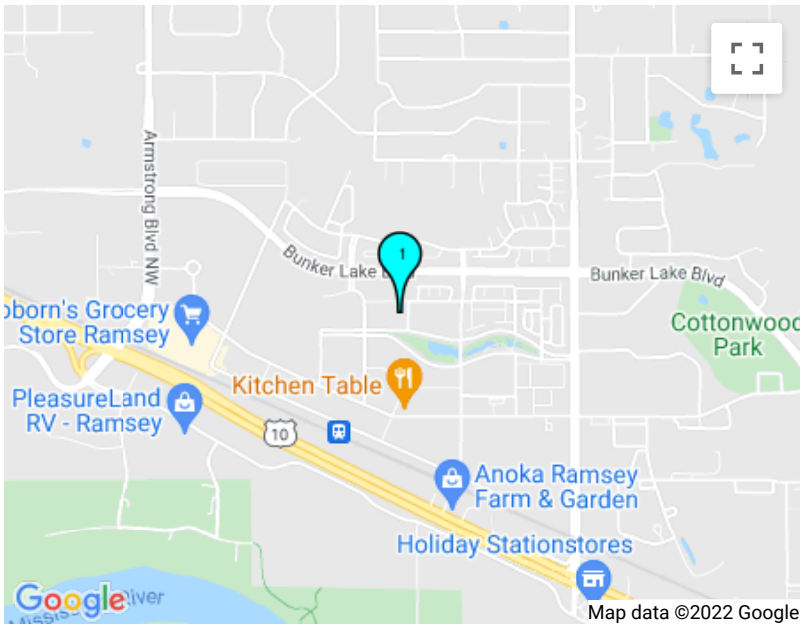
Ramsey Apts
7562 146th Ave NW
Ramsey, MN 55303

Funding Categories
Project-Based Subsidy
Subsidized-Other
Tax Credit (LIHTC 9%)

Property Information
Year Built: 2017
Building Type: Apartment
Groups Served: Family
Total Units: 54
Affordable Units: 54

Affordable Units by Bedroom
1 BR: 6
2 BR: 21
3 BR: 21
4 BR: 6

Units by Area Median Income
30%: 4
50%: 50



Housing+Transit Cost Walk Score ®: 29 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
1	10/01/2018	10/01/2018	$807	None	$807
3	10/01/2018	12/23/2021	Subsidized	$1,113	$1,250
4	10/01/2018	10/01/2018	Subsidized	Subsidized	Subsidized

Known Property Addresses

1	7562 146th Ave NW	Ramsey

Funding Dates & Programs
First known closing: 1/1/2017
Most recent closing: 10/1/2018
Earliest expiration: 9/30/2038
Last Activity: New Construction

MHFA: HOME

MHFA: LHIA

HUDPBV: HUDPBV

HUD: 811 PRA DEMO
Close Date: 10/1/2018
Expiration: 9/30/2038

MHFA: Housing Tax Credits 9%
Close Date: 1/1/2017
Estimated Expiration: 1/1/2047

Known Property Identifiers

HousingLink: 12426
MHFA: D7950
HUD: 800245631
HUDPBV: 1126965

HousingLink

Streams

Return to main site

Property Detail

About Streams

Sunwood Village
7750 Sunwood Dr NW
Ramsey, MN 55303

Funding Categories
Subsidized-Other
Tax Credit (LIHTC 4%)

Property Information
Year Built: 2016
Building Type:
Groups Served: Family
Total Units: 47
Affordable Units: 47

Affordable Units by Bedroom
1 BR: 9
2 BR: 26
3 BR: 12

Units by Area Median Income
30%: 4
50%: 43

Housing+Transit Cost Walk Score ®: 39 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
1	07/15/2016	07/15/2016	$674	$674	$674
2	07/15/2016	09/15/2016	$783	$783	$783
3	07/15/2016	07/15/2016	$901	$901	$901

Known Property Addresses

1	7750 Sunwood Dr NW	Ramsey

Funding Dates & Programs
First known closing: 1/1/2015
Most recent closing: 12/21/2016
Earliest expiration: 1/1/2045
Last Activity: New Construction

County: County

MHFA: LHIA

MHFA: Housing Tax Credits 4%
Close Date: 1/1/2015
Estimated Expiration: 1/1/2045

MHFA: LMIR
Close Date: 12/21/2016
Expiration: 3/1/2047

MHFA: Bonds
Close Date: 9/24/2015
Expiration: 4/30/2047

Known Property Identifiers

HousingLink: 10924
MHFA: D7721
HUDLIHTC4: MNA20162034

HousingLink

Streams

Return to main site

Property Detail

About Streams

Sunwood (ramsey) Townhomes (fka Ramsey Th)

Multiple addresses listed at bottom of page

Funding Categories

Subsidized-Other

Tax Credit (LIHTC 9%)

Property Information

Year Built: 2003
Building Type: Townhome
Groups Served: Family
Total Units: 35
Affordable Units: 27

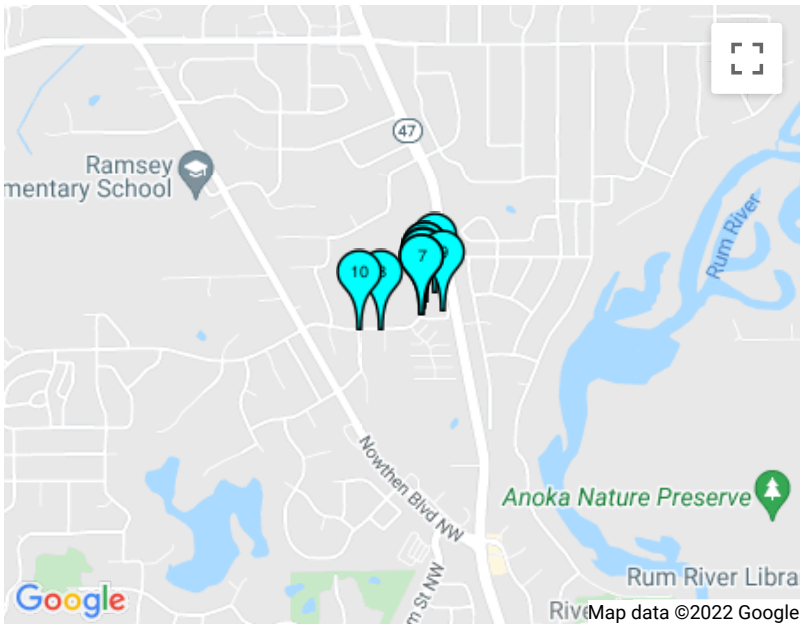
Affordable Units by Bedroom

1 BR: 2
2 BR: 12
3 BR: 12
4 BR: 1

Units by Area Median Income *

60%: 27

* AMI units are estimated because they were not provided, and have been set to the least restrictive AMI for the largest number of units



Housing+Transit Cost Walk Score ®: 9 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
2	09/06/2012	11/01/2014	$895	None	$926
3	09/06/2012	03/12/2014	$1,025	None	$1,066
5	12/14/2006	12/14/2006	$1,400	None	$1,400

Known Property Addresses

1	5350 Sunwood Dr NW	Ramsey
2	5360 Sunwood Dr NW	Ramsey
3	5370 Sunwood Dr NW	Ramsey
4	5380 Sunwood Dr NW	Ramsey
5	5390 Sunwood Dr NW	Ramsey
6	5400 Sunwood Dr NW	Ramsey
7	5410 Sunwood Dr NW	Ramsey
8	5420 Sunwood Dr NW	Ramsey
9	5430 Sunwood Dr NW	Ramsey
10	5444 Sunwood Dr NW	Ramsey

Funding Dates & Programs

First known closing: 1/1/2002
Most recent closing: 5/16/2003
Earliest expiration: 1/1/2032
Last Activity: New Construction

MHFA: Housing Tax Credits 9%
Close Date: 1/1/2002
Expiration: 1/1/2032

MHFA: LHIA
Close Date: 5/16/2003
Estimated Expiration: 5/16/2033

MHFA: ARIF
Close Date: 5/16/2003
Expiration: 5/16/2033

Known Property Identifiers

HousingLink: 4521
MHFA: D2743
HUDLIHTC9: MNA2002095

HousingLink

Streams

Return to main site

Property Detail

About Streams

The Seasons
Multiple addresses listed at bottom of page

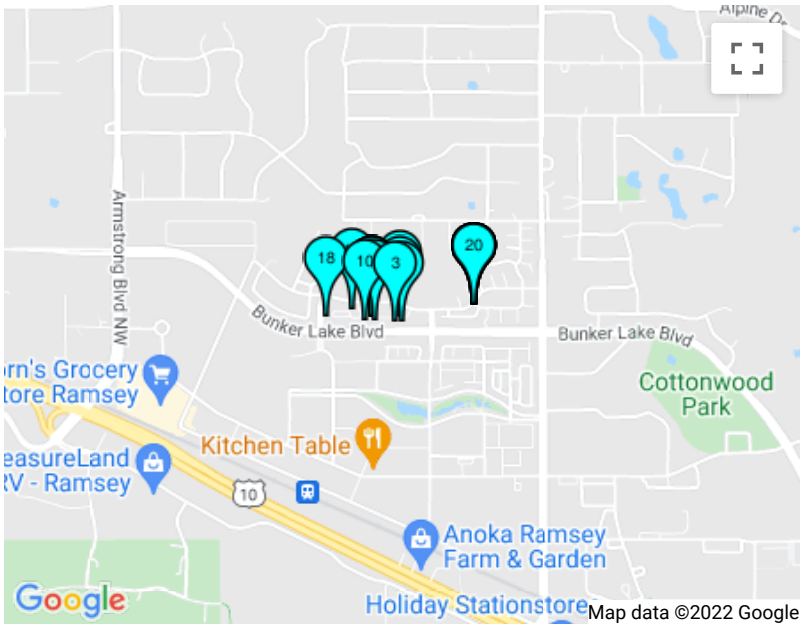
Funding Categories
Tax Credit (LIHTC 9%)

Property Information
Year Built:
Building Type: Townhome
Groups Served: Family
Total Units: 50
Affordable Units: 49

Affordable Units by Bedroom
2 BR: 22
3 BR: 27

Units by Area Median Income *
60%: 49

* AMI units are estimated because they were not provided, and have been set to the least restrictive AMI for the largest number of units



Housing+Transit Cost Walk Score ®: 23 Send us feedback

Listing Summary

BR Size	1st Listing	Last Listing	Low Rent	High Rent	Last Rent
2	10/24/2013	08/01/2015	$788	$845	$835
3	10/24/2013	06/15/2015	$906	$955	$955

Known Property Addresses

1	7436 147 Ln NW	Ramsey
2	7451 147th Cir NW	Ramsey
3	7452 147 Ln NW	Ramsey
4	7461 147th Cir NW	Ramsey
5	7492 147th Cir NW	Ramsey
6	7495 147th Cir NW	Ramsey
7	7518 147th Cir NW	Ramsey
8	7523 147th Cir NW	Ramsey
9	7541 147th Cir NW	Ramsey
10	7544 147th Cir NW	Anoka
11	7550 147th Terrace NW	Ramsey
12	7572 147th Terrace NW	Anoka
13	7573 147th Terrace NW	Ramsey
14	7579 147th Terrace NW	Ramsey
15	7580 147th Terrace NW	Ramsey
16	7581 147th Terrace NW	Ramsey

17	7586 147th Terrace NW	Ramsey
18	7590 147th Terrace NW	Ramsey
19	7591 147th Terrace NW	Ramsey
20	7598 147th Terrace NW	Ramsey

Funding Dates & Programs

First known closing: 1/1/2013
Most recent closing: 1/1/2013
Earliest expiration: 1/1/2043
Last Activity: New Construction

MHFA: Housing Tax Credits 9%
Close Date: 1/1/2013
Estimated Expiration: 1/1/2043

Known Property Identifiers

HousingLink: 10893
MHFATC9: D7574
HUDLIHTC9: MNA2013019

6: TH 47 & E Mineral Pond Blvd/Coolidge St NW

Direction	All
Future Volume (vph)	1705
Total Delay / Veh (s/v)	1
CO Emissions (kg)	0.83
NOx Emissions (kg)	0.16
VOC Emissions (kg)	0.19
Vehicles in dilemma zone (#)	0

9: TH 47 & Wilson St

Direction	All
Future Volume (vph)	1719
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.51
NOx Emissions (kg)	0.10
VOC Emissions (kg)	0.12
Vehicles in dilemma zone (#)	0

13: TH 47 & Dunham Dr

Direction	All
Future Volume (vph)	1715
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.28
NOx Emissions (kg)	0.05
VOC Emissions (kg)	0.07
Vehicles in dilemma zone (#)	0

15: TH 47 & McCann Ave

Direction	All
Future Volume (vph)	1729
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.40
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.09
Vehicles in dilemma zone (#)	0

16: TH 47 & McKinley St

Direction	All
Future Volume (vph)	2046
Total Delay / Veh (s/v)	6
CO Emissions (kg)	2.69
NOx Emissions (kg)	0.52
VOC Emissions (kg)	0.62
Vehicles in dilemma zone (#)	0

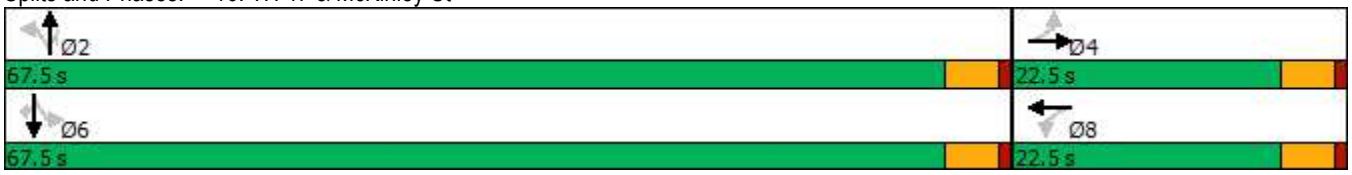
Network Totals

Number of Intersections	5
Total Delay / Veh (s/v)	2
CO Emissions (kg)	4.71
NOx Emissions (kg)	0.92
VOC Emissions (kg)	1.09
Vehicles in dilemma zone (#)	0
Performance Index	9.8

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	67.5	22.5	67.5	22.5
Maximum Split (%)	75.0%	25.0%	75.0%	25.0%
Minimum Split (s)	22.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	11	11	11	11
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	67.5	0	67.5
End Time (s)	67.5	0	67.5	0
Yield/Force Off (s)	63	85.5	63	85.5
Yield/Force Off 170(s)	63	74.5	63	74.5
Local Start Time (s)	0	67.5	0	67.5
Local Yield (s)	63	85.5	63	85.5
Local Yield 170(s)	63	74.5	63	74.5

Intersection Summary		
Cycle Length		90
Control Type	Actuated-Uncoordinated	
Natural Cycle		90

Splits and Phases: 16: TH 47 & McKinley St



6: TH 47 & E Mineral Pond Blvd/Coolidge St NW

Direction	All
Future Volume (vph)	1698
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.75
NOx Emissions (kg)	0.15
VOC Emissions (kg)	0.17
Vehicles in dilemma zone (#)	0

9: TH 47 & Wilson St

Direction	All
Future Volume (vph)	1738
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23
Vehicles in dilemma zone (#)	0

16: TH 47 & McKinley St

Direction	All
Future Volume (vph)	2048
Total Delay / Veh (s/v)	7
CO Emissions (kg)	2.03
NOx Emissions (kg)	0.40
VOC Emissions (kg)	0.47
Vehicles in dilemma zone (#)	119

Network Totals

Number of Intersections	3
Total Delay / Veh (s/v)	3
CO Emissions (kg)	3.77
NOx Emissions (kg)	0.73
VOC Emissions (kg)	0.87
Vehicles in dilemma zone (#)	119
Performance Index	6.9

Arterial Level of Service: NB TH 47

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
McKinley St	16	27.8	49.9	0.2	18
McCann Ave	15	4.3	12.8	0.1	30
Dunham Dr	13	0.8	6.4	0.1	39
Wilson St	9	0.6	6.0	0.1	40
Coolidge St NW	6	1.8	17.6	0.2	40
Total		35.4	92.8	0.7	27

Arterial Level of Service: SB TH 47

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E Mineral Pond Blvd	6	1.6	14.0	0.2	41
Wilson St	9	1.2	16.6	0.2	43
Dunham Dr	13	0.5	5.9	0.1	41
McCann Ave	15	1.1	6.7	0.1	37
McKinley St	16	1.8	10.3	0.1	37
Total		6.2	53.4	0.6	40

Arterial Level of Service: NB TH 47

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
McKinley St	16	7.6	27.0	0.2	32
Wilson St	9	4.3	23.6	0.2	37
Coolidge St NW	6	1.8	17.5	0.2	40
Total		13.7	68.1	0.7	36

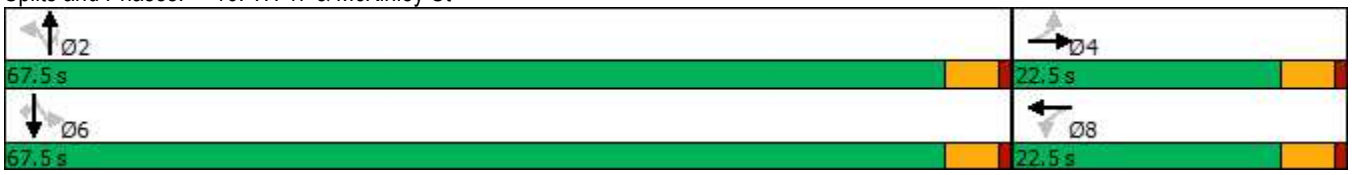
Arterial Level of Service: SB TH 47

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E Mineral Pond Blvd	6	0.6	13.2	0.2	44
Wilson St	9	0.9	16.3	0.2	43
McKinley St	16	4.7	24.0	0.2	36
Total		6.2	53.5	0.6	40

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	67.5	22.5	67.5	22.5
Maximum Split (%)	75.0%	25.0%	75.0%	25.0%
Minimum Split (s)	22.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	11	11	11	11
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	67.5	0	67.5
End Time (s)	67.5	0	67.5	0
Yield/Force Off (s)	63	85.5	63	85.5
Yield/Force Off 170(s)	63	74.5	63	74.5
Local Start Time (s)	0	67.5	0	67.5
Local Yield (s)	63	85.5	63	85.5
Local Yield 170(s)	63	74.5	63	74.5

Intersection Summary		
Cycle Length		90
Control Type	Actuated-Uncoordinated	
Natural Cycle		90

Splits and Phases: 16: TH 47 & McKinley St



6: TH 47 & E Mineral Pond Blvd/Coolidge St NW

Direction	All
Future Volume (vph)	1698
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.75
NOx Emissions (kg)	0.15
VOC Emissions (kg)	0.17
Vehicles in dilemma zone (#)	0

9: TH 47 & Wilson St

Direction	All
Future Volume (vph)	1738
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.99
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23
Vehicles in dilemma zone (#)	0

16: TH 47 & McKinley St

Direction	All
Future Volume (vph)	2048
Total Delay / Veh (s/v)	7
CO Emissions (kg)	2.03
NOx Emissions (kg)	0.40
VOC Emissions (kg)	0.47
Vehicles in dilemma zone (#)	119

Network Totals

Number of Intersections	3
Total Delay / Veh (s/v)	3
CO Emissions (kg)	3.77
NOx Emissions (kg)	0.73
VOC Emissions (kg)	0.87
Vehicles in dilemma zone (#)	119
Performance Index	6.9

6: TH 47 & E Mineral Pond Blvd/Coolidge St NW

Direction	All
Future Volume (vph)	1705
Total Delay / Veh (s/v)	1
CO Emissions (kg)	0.83
NOx Emissions (kg)	0.16
VOC Emissions (kg)	0.19
Vehicles in dilemma zone (#)	0

9: TH 47 & Wilson St

Direction	All
Future Volume (vph)	1719
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.51
NOx Emissions (kg)	0.10
VOC Emissions (kg)	0.12
Vehicles in dilemma zone (#)	0

13: TH 47 & Dunham Dr

Direction	All
Future Volume (vph)	1715
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.28
NOx Emissions (kg)	0.05
VOC Emissions (kg)	0.07
Vehicles in dilemma zone (#)	0

15: TH 47 & McCann Ave

Direction	All
Future Volume (vph)	1729
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.40
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.09
Vehicles in dilemma zone (#)	0

16: TH 47 & McKinley St

Direction	All
Future Volume (vph)	2046
Total Delay / Veh (s/v)	6
CO Emissions (kg)	2.69
NOx Emissions (kg)	0.52
VOC Emissions (kg)	0.62
Vehicles in dilemma zone (#)	0

Network Totals

Number of Intersections	5
Total Delay / Veh (s/v)	2
CO Emissions (kg)	4.71
NOx Emissions (kg)	0.92
VOC Emissions (kg)	1.09
Vehicles in dilemma zone (#)	0
Performance Index	9.8

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 47	**District**	Metro	**County**	Anoka
Begin RP	600 ft S of Xkimo St	**End RP**	Coolidge St NW	**Miles**	0.7 mile
Location	TH 47 from 600 ft south of Xkimo St to Collidge St NW				

B. Project Description

Proposed Work	Install center turn lane, signalized intersection, access restrictions, reconstruct shared use path		
Project Cost*	$6,527,000	**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

	Fatal (K) Crashes	**Reference**	*SEE OTHER ATTACHED B-C WORKSHEETS
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	**< enter target crashes >**	**< optional 2nd CMF >**
K crashes		
A crashes		
B crashes		
C crashes		
PDO crashes		

F. Benefit-Cost Calculation

$6,363,408	**Benefit (present value)**
$6,527,000	**Cost**

B/C Ratio = 0.98

Proposed project expected to reduce 0 crashes annually, 0 of which involving fatality or serious injury.

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 47	**District**	Metro	**County**	Anoka
Begin RP	600 ft S of Xkimo St	**End RP**	Coolidge St NW	**Miles**	0.7 mile
Location	TH 47 from 600 ft south of Xkimo St to Collidge St NW				

B. Project Description

Proposed Work	Install center turn lane		
Project Cost*		**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.69	**Fatal (K) Crashes**	**Reference**	CMF ID: 2338
0.69	**Serious Injury (A) Crashes**		
0.69	**Moderate Injury (B) Crashes**	**Crash Type**	All
0.69	**Possible Injury (C) Crashes**		
0.69	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	**All**	**< optional 2nd CMF >**
K crashes	0	
A crashes	0	
B crashes	1	
C crashes	1	
PDO crashes	14	

F. Benefit-Cost Calculation

$1,261,418	**Benefit (present value)**	**B/C Ratio = N/A**
$0	**Cost**	

Proposed project expected to reduce 2 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
Project Service Life	20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	0.00	0.00	$0
B crashes	0.31	0.10	$24,073
C crashes	0.31	0.10	$12,560
PDO crashes	4.40	1.47	$19,049
			$55,683

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$55,683	$55,683
2027	$56,796	$56,402
2028	$57,932	$57,130
2029	$59,091	$57,867
2030	$60,273	$58,614
2031	$61,478	$59,371
2032	$62,708	$60,137
2033	$63,962	$60,914
2034	$65,241	$61,700
2035	$66,546	$62,497
2036	$67,877	$63,303
2037	$69,234	$64,121
2038	$70,619	$64,948
2039	$72,031	$65,787
2040	$73,472	$66,636
2041	$74,942	$67,496
2042	$76,440	$68,368
2043	$77,969	$69,250
2044	$79,529	$70,144
2045	$81,119	$71,050
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0

Total = $1,261,418

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 47	**District**	Metro	**County**	Anoka
Begin RP	600 ft S of Xkimo St	**End RP**	Coolidge St NW	**Miles**	0.7 mile
Location	TH 47 at McKinley St				

B. Project Description

Proposed Work	Install signalized intersection with left turn lanes on all approaches		
Project Cost*		**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.56	**Fatal (K) Crashes**	**Reference**	CMF ID: 325
0.56	**Serious Injury (A) Crashes**		
0.56	**Moderate Injury (B) Crashes**	**Crash Type**	All
0.56	**Possible Injury (C) Crashes**		
0.56	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	**All**	**< optional 2nd CMF >**
K crashes	0	
A crashes	0	
B crashes	2	
C crashes	0	
PDO crashes	5	

F. Benefit-Cost Calculation

$1,744,335	**Benefit (present value)**	**B/C Ratio = N/A**
$0	**Cost**	

Proposed project expected to reduce 2 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
Project Service Life	20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	0.00	0.00	$0
B crashes	0.88	0.29	$67,467
C crashes	0.00	0.00	$0
PDO crashes	2.20	0.73	$9,533
			$77,000

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$77,000	$77,000
2027	$78,540	$77,994
2028	$80,111	$79,001
2029	$81,713	$80,021
2030	$83,347	$81,054
2031	$85,014	$82,100
2032	$86,715	$83,160
2033	$88,449	$84,234
2034	$90,218	$85,321
2035	$92,022	$86,423
2036	$93,863	$87,538
2037	$95,740	$88,668
2038	$97,655	$89,813
2039	$99,608	$90,972
2040	$101,600	$92,147
2041	$103,632	$93,336
2042	$105,704	$94,541
2043	$107,819	$95,762
2044	$109,975	$96,998
2045	$112,174	$98,250
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0

Total = $1,744,335

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 47	**District**	Metro	**County**	Anoka
Begin RP	600 ft S of Xkimo St	**End RP**	Coolidge St NW	**Miles**	0.7 mile
Location	TH 47 from 600 ft south of Xkimo St to Collidge St NW				

B. Project Description

Proposed Work	Install center turn lane		
Project Cost*		**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.61	**Fatal (K) Crashes**	**Reference**	CMF ID: 2351
0.61	**Serious Injury (A) Crashes**		
0.61	**Moderate Injury (B) Crashes**	**Crash Type**	Rear End
0.61	**Possible Injury (C) Crashes**		
0.61	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	**Rear End**	**< optional 2nd CMF >**
K crashes	0	
A crashes	0	
B crashes	1	
C crashes	0	
PDO crashes	12	

F. Benefit-Cost Calculation

$1,131,552	**Benefit (present value)**	**B/C Ratio = N/A**
$0	**Cost**	

Proposed project expected to reduce 2 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
Project Service Life	20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	0.00	0.00	$0
B crashes	0.39	0.13	$29,670
C crashes	0.00	0.00	$0
PDO crashes	4.68	1.56	$20,280
			$49,950

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$49,950	$49,950
2027	$50,949	$50,595
2028	$51,968	$51,248
2029	$53,007	$51,910
2030	$54,067	$52,580
2031	$55,149	$53,259
2032	$56,252	$53,946
2033	$57,377	$54,642
2034	$58,524	$55,348
2035	$59,695	$56,062
2036	$60,889	$56,786
2037	$62,107	$57,519
2038	$63,349	$58,262
2039	$64,616	$59,014
2040	$65,908	$59,776
2041	$67,226	$60,547
2042	$68,571	$61,329
2043	$69,942	$62,121
2044	$71,341	$62,923
2045	$72,768	$63,735
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0

Total = $1,131,552

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 47	**District**	Metro	**County**	Anoka
Begin RP	600 ft S of Xkimo St	**End RP**	Coolidge St NW	**Miles**	0.7 mile
Location	TH 47 from 600 ft south of Xkimo St to Collidge St NW				

B. Project Description

Proposed Work	Install shared use path		
Project Cost*		**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.41	**Fatal (K) Crashes**	**Reference**	CMF ID: 9240
0.41	**Serious Injury (A) Crashes**		
0.41	**Moderate Injury (B) Crashes**	**Crash Type**	Ped/Bike
0.41	**Possible Injury (C) Crashes**		
0.41	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	Ped/Bike	< optional 2nd CMF >
K crashes	0	
A crashes	0	
B crashes	2	
C crashes	0	
PDO crashes	0	

F. Benefit-Cost Calculation

$2,049,404	**Benefit (present value)**	**B/C Ratio = N/A**
$0	**Cost**	

Proposed project expected to reduce 1 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
Project Service Life	20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	0.00	0.00	$0
B crashes	1.18	0.39	$90,467
C crashes	0.00	0.00	$0
PDO crashes	0.00	0.00	$0
			$90,467

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$90,467	$90,467
2027	$92,276	$91,635
2028	$94,122	$92,818
2029	$96,004	$94,016
2030	$97,924	$95,229
2031	$99,883	$96,459
2032	$101,880	$97,704
2033	$103,918	$98,965
2034	$105,996	$100,243
2035	$108,116	$101,537
2036	$110,278	$102,848
2037	$112,484	$104,176
2038	$114,734	$105,521
2039	$117,028	$106,883
2040	$119,369	$108,263
2041	$121,756	$109,660
2042	$124,191	$111,076
2043	$126,675	$112,510
2044	$129,209	$113,962
2045	$131,793	$115,434
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0

Total = $2,049,404

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 47	**District**	Metro	**County**	Anoka
Begin RP	600 ft S of Xkimo St	**End RP**	Coolidge St NW	**Miles**	0.7 mile
Location	TH 47 at Collidge St NW				

B. Project Description

Proposed Work	Install right-in/right-out		
Project Cost*		**Installation Year**	2026
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.55	**Fatal (K) Crashes**	**Reference**	CMF ID: 9821
0.55	**Serious Injury (A) Crashes**		
0.55	**Moderate Injury (B) Crashes**	**Crash Type**	All
0.55	**Possible Injury (C) Crashes**		
0.55	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	**Reference**	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	**Crash Type**	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	**All**	**< optional 2nd CMF >**
K crashes	0	
A crashes	0	
B crashes	0	
C crashes	0	
PDO crashes	4	

F. Benefit-Cost Calculation

$176,699	**Benefit (present value)**	**B/C Ratio = N/A**
$0	**Cost**	

Proposed project expected to reduce 1 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
Project Service Life	20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	$0
A crashes	0.00	0.00	$0
B crashes	0.00	0.00	$0
C crashes	0.00	0.00	$0
PDO crashes	1.80	0.60	$7,800
			$7,800

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$7,800	$7,800
2027	$7,956	$7,901
2028	$8,115	$8,003
2029	$8,277	$8,106
2030	$8,443	$8,211
2031	$8,612	$8,317
2032	$8,784	$8,424
2033	$8,960	$8,533
2034	$9,139	$8,643
2035	$9,322	$8,754
2036	$9,508	$8,868
2037	$9,698	$8,982
2038	$9,892	$9,098
2039	$10,090	$9,215
2040	$10,292	$9,334
2041	$10,498	$9,455
2042	$10,708	$9,577
2043	$10,922	$9,701
2044	$11,140	$9,826
2045	$11,363	$9,953
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0
0	$0	$0

Total = $176,699

CMF / CRF Details

CMF ID: 325

Install a traffic signal

Description:

Prior Condition: Stop controlled

Category: Intersection traffic control

Study: *Accident Modification Factors for Traffic Engineering and ITS Improvements*, Harkey et al., 2008

Star Quality Rating:	★★★★★

Crash Modification Factor (CMF)	
Value:	0.56
Adjusted Standard Error:	0.03
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	44 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	3

Unadjusted Standard Error:	

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Rural
Traffic Volume:	
Time of Day:	

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	3-leg,4-leg
Traffic Control:	Stop-controlled
Major Road Traffic Volume:	3261 to 29926 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	101 to 10300 Annual Average Daily Traffic (AADT)

Development Details

Date Range of Data Used:	
Municipality:	
State:	

Country:	
Type of Methodology Used:	2
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	Yes. HSM lists this CMF in **bold** font to indicate that it has the highest reliability since it has an adjusted standard error of 0.1 or less.
Date Added to Clearinghouse:	Dec-01-2009
Comments:	Countermeasure name has been slightly modified for consistency across Clearinghouse

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CMF / CRF Details

CMF ID: 2338

Install TWLTL (two-way left turn lane) on two lane road

Description:

Prior Condition: ***No Prior Condition(s)***

Category: Roadway

Study: ***Safety Evaluation of Installing Center Two-Way Left-Turn Lanes on Two-Lane Roads*****, Lyon et al., 2008**

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)	
Value:	0.686
Adjusted Standard Error:	
Unadjusted Standard Error:	0.057

Crash Reduction Factor (CRF)	
Value:	31.4 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	

Unadjusted Standard Error:	5.7

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	2
Road Division Type:	Divided by TWLTL
Speed Limit:	
Area Type:	All
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1991 to 2004
Municipality:	
State:	CA

Country:	
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	Mile-years
Before Sample Size Used:	89 Mile-years
After Sample Size Used:	89 Mile-years

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-01-2009
Comments:	

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CMF / CRF Details

CMF ID: 2351

Install TWLTL (two-way left turn lane) on two lane road

Description:

Prior Condition: ***No Prior Condition(s)***

Category: Roadway

Study: ***Safety Evaluation of Installing Center Two-Way Left-Turn Lanes on Two-Lane Roads*****, Lyon et al., 2008**

Star Quality Rating:	★★★★★ [View score details]

Crash Modification Factor (CMF)	
Value:	0.613
Adjusted Standard Error:	
Unadjusted Standard Error:	0.04

Crash Reduction Factor (CRF)	
Value:	38.7 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	

Unadjusted Standard Error:	4

Applicability

Crash Type:	Rear end
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	2
Road Division Type:	Divided by TWLTL
Speed Limit:	
Area Type:	All
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1990 to 2004
Municipality:	
State:	AR, CA, IL, NC

Country:	
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	Mile-years
Before Sample Size Used:	582 Mile-years
After Sample Size Used:	582 Mile-years

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-01-2009
Comments:	

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CMF / CRF Details

CMF ID: 9240

Install sidewalk

Description:

Prior Condition: No sidewalk present

Category: Pedestrians

Study: *Statewide Analysis of Bicycle Crashes*, Alluri et al., 2017

Star Quality Rating:	Stars [View score details]

Crash Modification Factor (CMF)	
Value:	0.41
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	59 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	Vehicle/bicycle
Crash Severity:	K (fatal),A (serious injury)
Roadway Types:	Principal Arterial Other
Number of Lanes:	2
Road Division Type:	Divided by Median
Speed Limit:	
Area Type:	Urban
Traffic Volume:	600 to 50500 *Annual Average Daily Traffic (AADT)*
Time of Day:	Not specified

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2011 to 2014
Municipality:	
State:	FL
Country:	
Type of Methodology Used:	7
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jun-17-2018
Comments:	Minor Arterial, Major Collector, and Minor Collector facility types included.

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CMF / CRF Details

CMF ID: 9821

Install right-in-right-out (RIRO) operations at stop-controlled intersections

Description:

Prior Condition: ***No Prior Condition(s)***

Category: Access management

Study: ***Safety Effects of Turning Movement Restrictions at Stop-Controlled Intersections*****, Le et al., 2018**

Star Quality Rating:	★★★★☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.55
Adjusted Standard Error:	
Unadjusted Standard Error:	0.09

Crash Reduction Factor (CRF)	
Value:	45 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	

Unadjusted Standard Error:	9

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	4 and 6
Road Division Type:	Divided by Median
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	3-leg
Traffic Control:	Stop-controlled
Major Road Traffic Volume:	13433 to 75000 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	51 to 2600 Annual Average Daily Traffic (AADT)

Development Details

Date Range of Data Used:	
Municipality:	
State:	CA

Country:	USA
Type of Methodology Used:	Regression cross-section
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Oct-27-2018
Comments:	This CMF compares urban, three-legged, stop-controlled intersections with RIRO operation to full movement. This CMF looks at Total crashes. Total crashes are defined as all crashes within 100 ft of intersection (all types and severities combined)

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

Crash Case Listing

TH 47 Corridor Impts

Report Version 1.0
February 2020

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
03-MNTH	47	21.467	02	Anoka	00843736	09/30/20	1650	WED	Rear End	2	N
03-MNTH	47	21.504	02	Anoka	00706010	04/24/19	1550	WED	Rear End	2	N
03-MNTH	47	21.510	02	Anoka	00757242	10/25/19	1630	FRI	Rear End	2	N
03-MNTH	47	21.579	02	Anoka	00835809	08/17/20	1430	MON	SSS	2	N
03-MNTH	47	21.610	02	Anoka	00729020	06/24/19	1230	MON	Bike	1	B
03-MNTH	47	21.630	02	Anoka	00939495	08/31/21	0830	TUE	Other	2	N
03-MNTH	47	21.635	02	Anoka	00872483	01/02/21	0516	SAT	Rear End	3	B
03-MNTH	47	21.642	02	Anoka	00801067	02/27/20	1103	THU	Rear End	3	N
03-MNTH	47	21.644	02	Anoka	00935003	06/29/21	1744	TUE	Rear End	2	N
03-MNTH	47	21.646	02	Anoka	00755848	10/20/19	1455	SUN	Rear End	3	N
03-MNTH	47	21.654	02	Anoka	00736313	07/18/19	1725	THU	Rear End	3	N
03-MNTH	47	21.728	02	Anoka	00806599	04/10/20	1511	FRI	Rear End	2	N
03-MNTH	47	21.816	02	Anoka	00690811	02/22/19	1645	FRI	Angle	2	N
03-MNTH	47	21.832	02	Anoka	00801294	02/19/20	1150	WED	Rear End	2	N
03-MNTH	47	21.882	02	Anoka	00912856	06/17/21	1031	THU	Angle	2	C
03-MNTH	47	21.891	02	Anoka	00755650	10/18/19	2002	FRI	Head On	3	N
03-MNTH	47	21.894	02	Anoka	00975002	11/21/21	2055	SUN	Angle	2	N
03-MNTH	47	21.989	02	Anoka	00738424	07/26/19	1935	FRI	Head On	2	N
03-MNTH	47	22.083	02	Anoka	00849513	10/23/20	1545	FRI	Rear End	3	N
03-MNTH	47	22.089	02	Anoka	00838198	08/31/20	1612	MON	Rear End	2	N
03-MNTH	47	22.090	02	Anoka	00887208	01/29/21	1535	FRI	Rear End	2	N
03-MNTH	47	22.091	02	Anoka	00803777	03/05/20	1010	THU	Angle	2	N
05-MSAS	139	0.907	02	Anoka	00907699	05/23/21	0930	SUN	SVROR	1	B

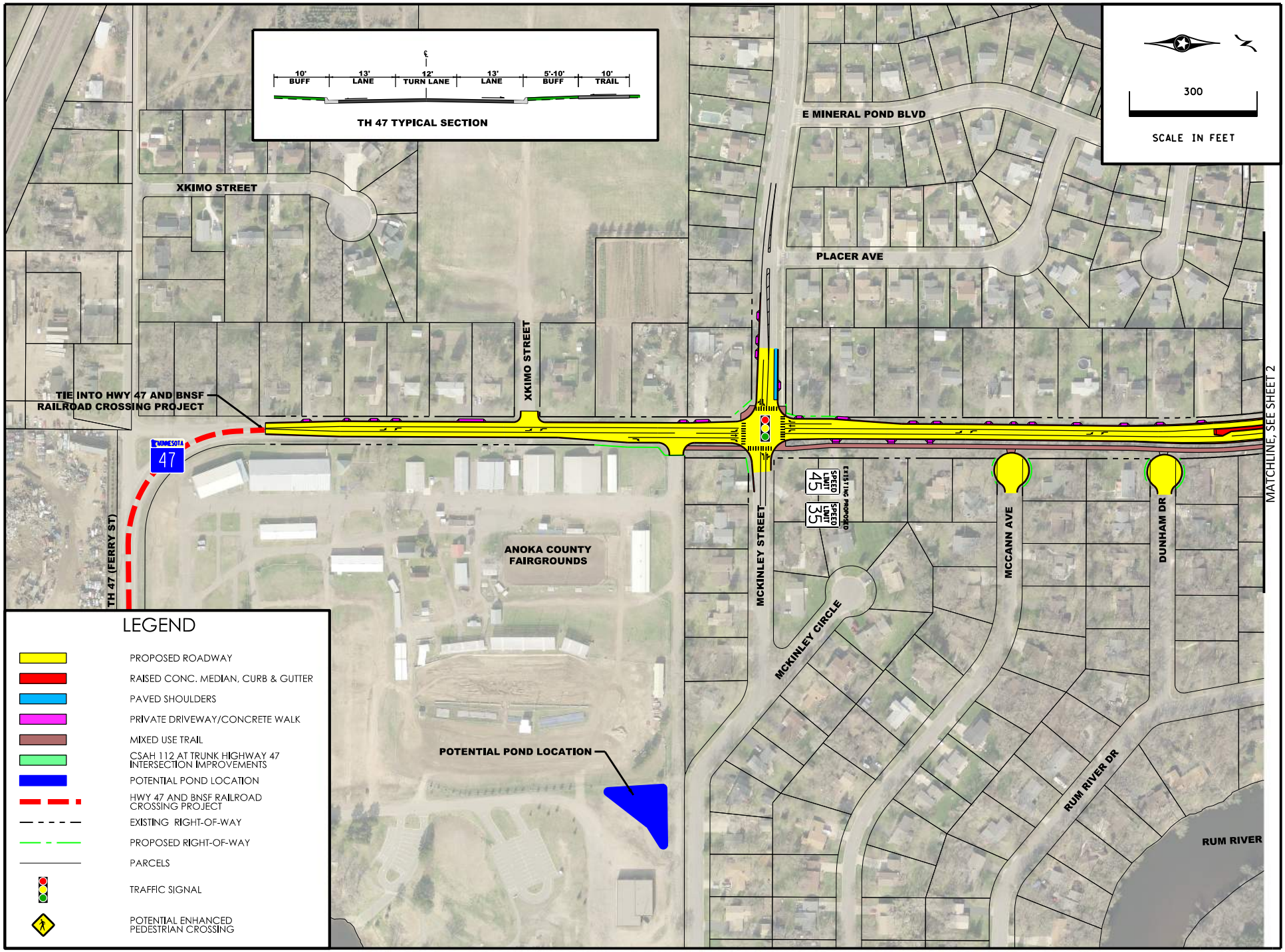
Selection Filter:

WORK AREA: County('659447') - FILTER: Year('2019','2020','2021') - SPATIAL FILTER APPLIED

Analyst:

Jacob Bongard

Notes:



TH 47 Corridor Improvements

2022 Regional Solicitation Application
City of Anoka, MN

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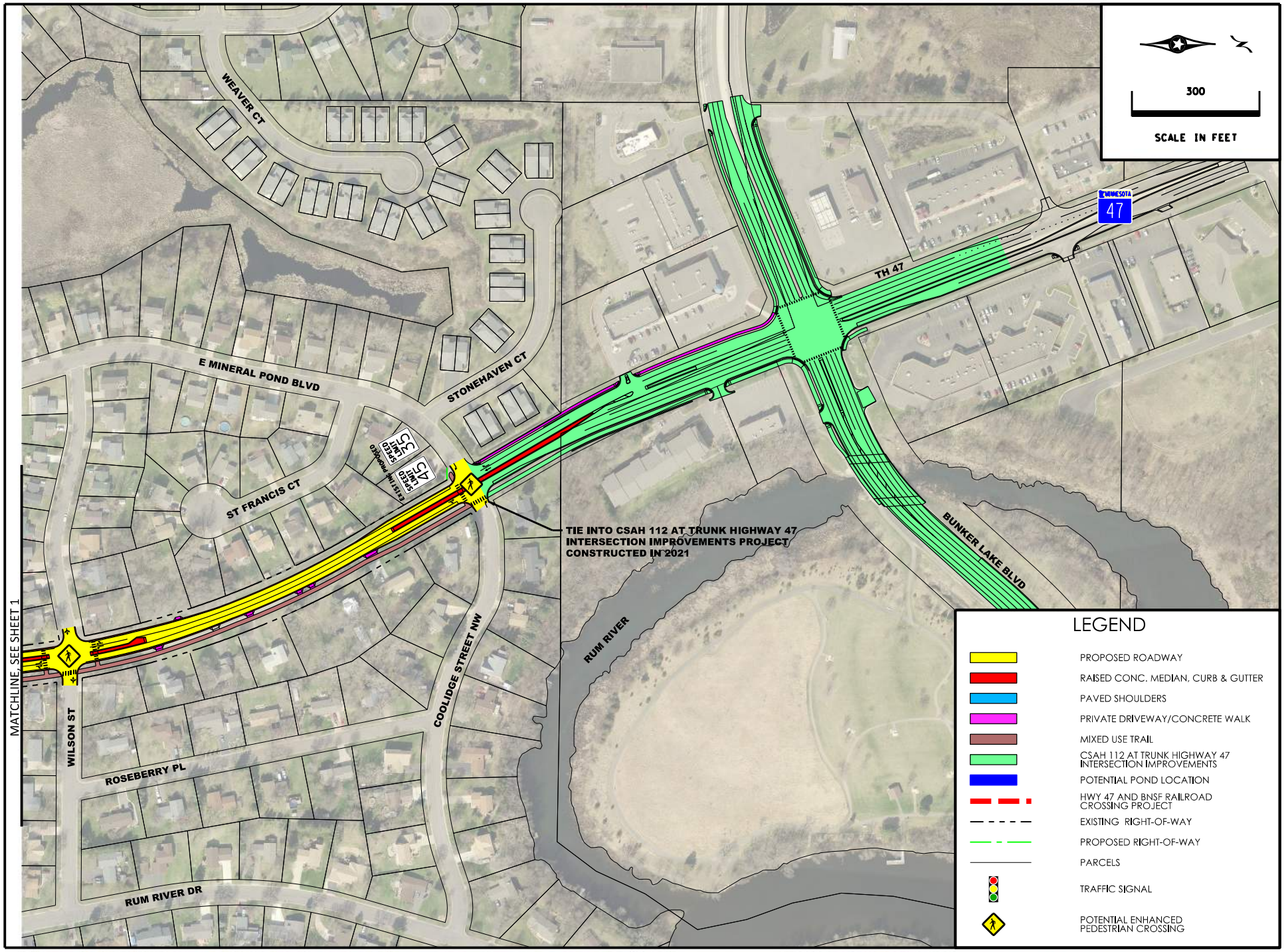
Exhibit 1 of 2



TH 47 Corridor Improvements

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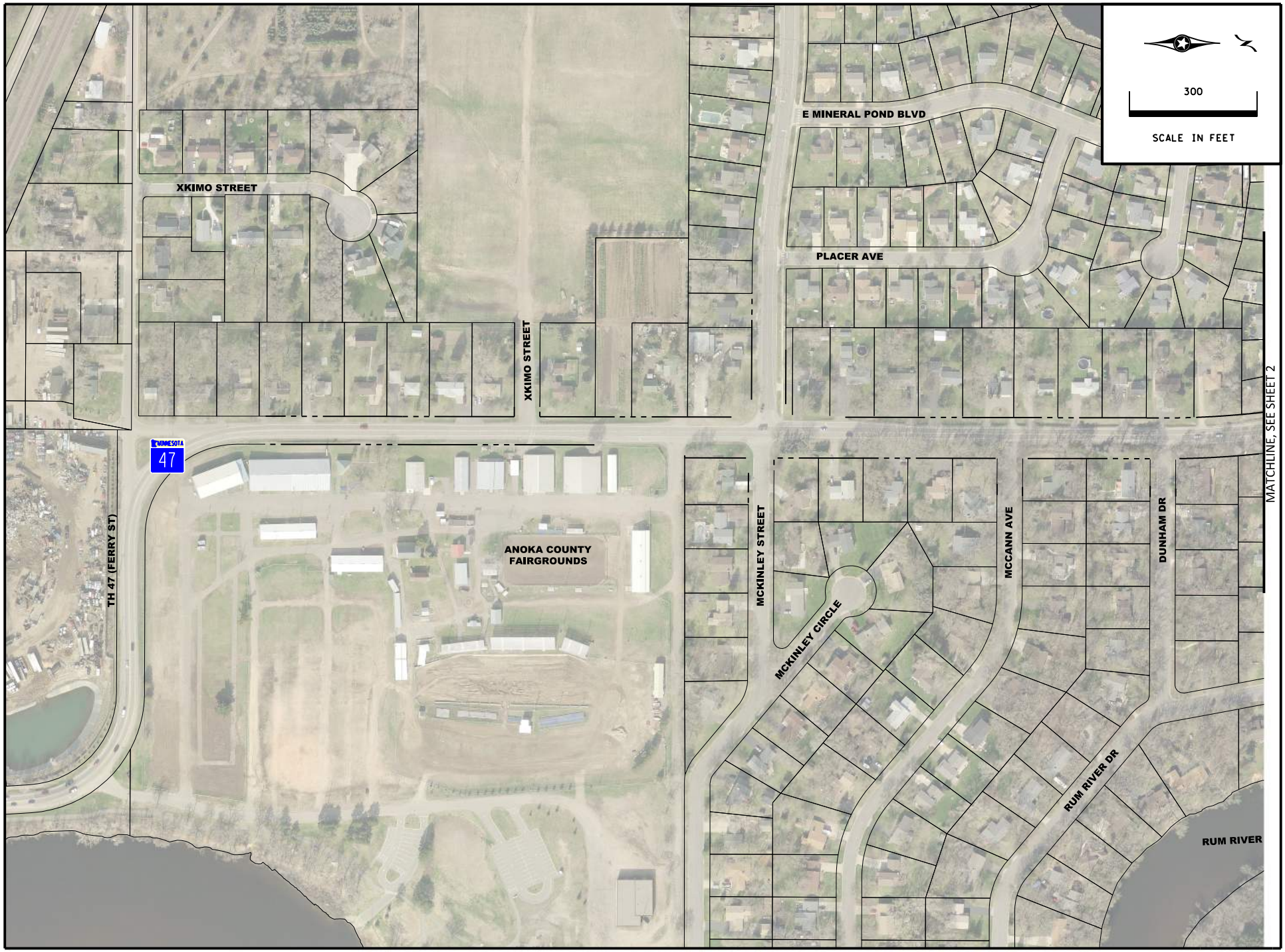

TH 47 Corridor Improvements - Existing Conditions

2022 Regional Solicitation Application
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1 of 2

TH 47 Corridor Improvements - Existing Conditions

2022 Regional Solicitation Application

City of Anoka, MN

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DEPARTMENT OF TRANSPORTATION

MnDOT Metro District
1500 West County Road B-2
Roseville, MN 55113

April 12, 2022

Ross Tillman Bolton & Menk, Inc, on behalf of,
City of Anoka

Re: MnDOT Letter for Anoka's Metropolitan Council/Transportation Advisory Board 2022 Regional Solicitation Funding Request for TH 47 Corridor Improvements

Ross Tillman,

This letter documents MnDOT Metro District's recognition for the City of Anoka to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2022 Regional Solicitation for TH 47 Corridor Improvements.

As proposed, this project impacts MnDOT right-of-way on TH 47. As the agency with jurisdiction over TH 47, MnDOT will allow Anoka to seek improvements proposed in the application. Details of any future maintenance agreement with the City will need to be determined during the project development to define how the improvements will be maintained for the project's useful life if the project receives funding.

There is no funding from MnDOT currently planned or programmed for this improvement. If your project receives funding, continue to work with MnDOT Area staff to coordinate needs and opportunities for cooperation.

MnDOT Metro District looks forward to continued cooperation with Anoka as this project moves forward and as we work together to improve safety and travel options within the Metro Area.

If you have questions or require additional information at this time, please reach out to North Area Manager Melissa Barnes at melissa.barnes@state.mn.us or 651-234-7718.

Sincerely,

Michael Barnes

Digitally signed by Michael Barnes
Date: 2022.04.12 09:36:28 -05'00'

Michael Barnes, PE
Metro District Engineer

CC: Melissa Barnes, Metro District Area Manager; Dan Erickson, Metro State Aid Engineer; Molly McCartney, Metro Program Director

TH 47 (St. Francis Blvd) Corridor Improvements Project

Applicant, Location, & Route:

City of Anoka in Anoka County, Highway 47 from 0.1 mi south of Xkimo St north to TH 47/Coolidge St NW

Application Category:

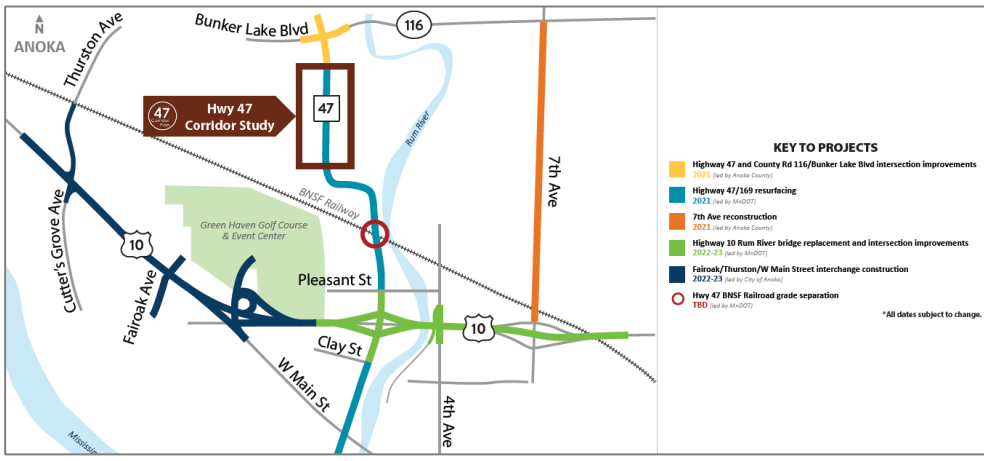
Roadways including Multimodal Elements – **Roadway Reconstruction/Modernization**

Funding Information:

Requested Award Amount: $4,951,600
Local Match: $1,305,400
Project Total: $6,527,000

Project Benefits:

- Crash reduction / safety improvements
- New traffic signal and improved side street access
- New bicycle and pedestrian shared use path, with linkage to regional parks, trails, high school and public library
- Marked/designated pedestrian crossings of TH 47 with pedestrian refuge areas
- Easier and safer left turns



Project Description

This project will focus on improving intersection operations and safety, providing a new shared use path for bicyclists and pedestrians, safe left turning movements and driveway access, and a means to accommodate future growth. Project elements consist of a new signalized intersection, side street access restrictions, a new center left turn lane, a new shared use path and marked/designated pedestrian crossings of TH 47.

Project Benefits

TH 47 is a busy (19,000+ ADT) two-lane road, and the project segment has a crash rate three times higher than the statewide average. Long queues are present along the corridor, turning from side streets is difficult, and there is no bicycle and pedestrian access. This project will improve all these factors – reducing crashes, alleviating delays, providing better access from adjacent neighborhoods, and providing new bicycle and pedestrian infrastructure to cross and travel along the highway.

Other Information

This project links directly to a recently completed Anoka County intersection improvement project at Bunker Lake Blvd/TH 47, and the MnDOT-led BNSF rail grade separation project immediately south of the project area which is scheduled for 2025 construction.

Anoka County
TRANSPORTATION DIVISION
Highway

Joseph J. MacPherson, P.E.
County Engineer

April 11, 2022

Mr. Ben Nelson, Project Manager
City of Anoka
2015 First Avenue North
Anoka, MN 55303-2270

Dear Mr. Nelson,

Anoka County supports the City of Anoka's application for federal funding through the Met Council's 2022 Regional Solicitation for the TH 47 Corridor Improvements project within the City of Anoka.

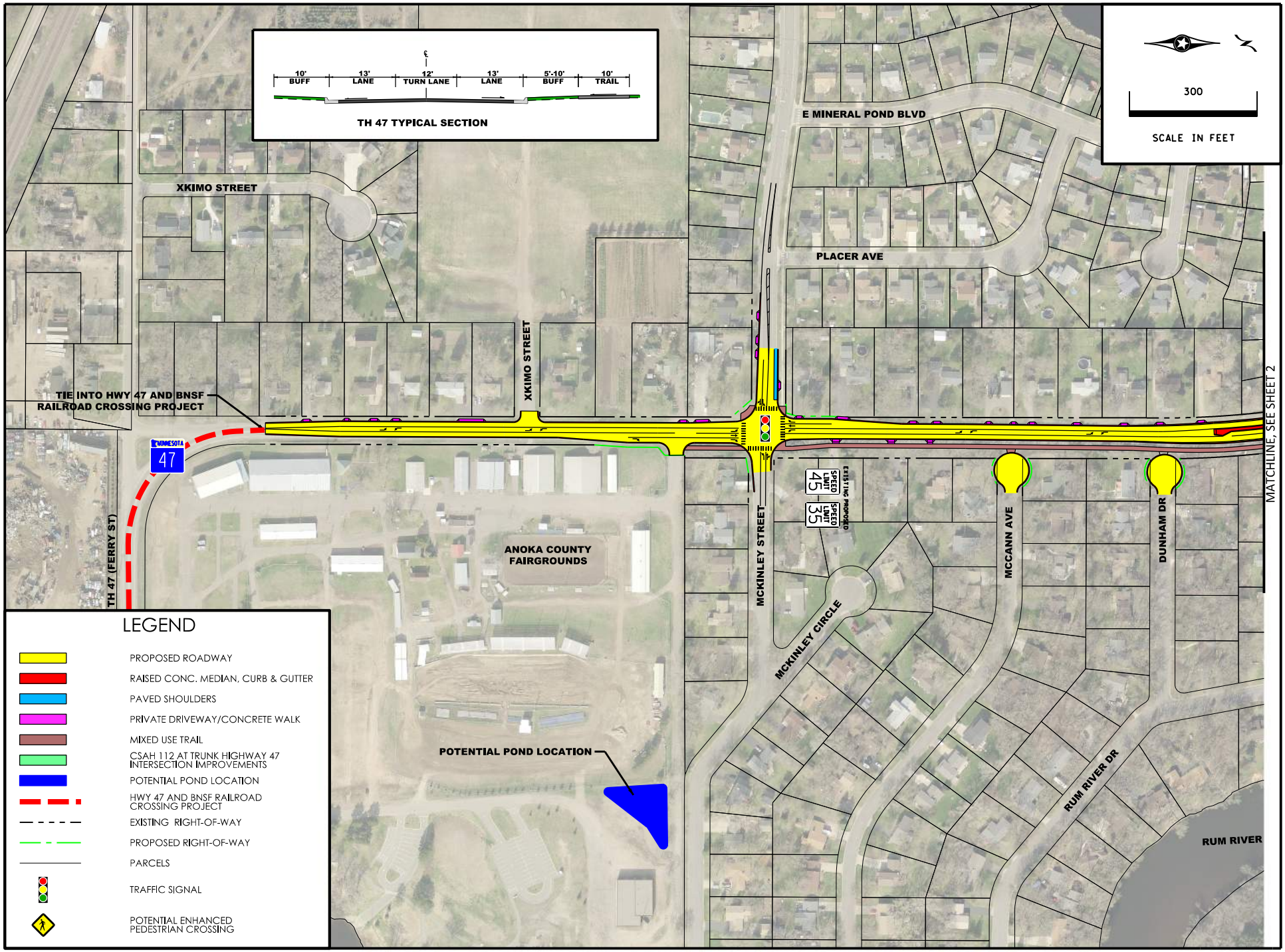
The proposed project improvements link to, and leverage, the benefits of Anoka County's recently completed TH 47 at CSAH 116 (Bunker Lake Boulevard) Intersection Improvement Project in several ways. It extends the traffic management and safety improvements south of the TH 47 and Bunker Lake Blvd intersection through the addition of a center left turn lane along TH 47, along with a new median to prevent left turns at the intersection of TH 47 and Coolidge Street NW. The TH 47 Improvement Project also included the addition of a new multi-use trail, which will link the Central Anoka Regional Trail and the Anoka Rum River Regional Trail. This trail network would provide access to the Anoka County Fairgrounds, Rum River South County Park, Rivers' Bend Park, Anoka High School, and Anoka County Rum River Library. Additional enhanced crossing improvements will allow pedestrian and bicycle access to this regional trail network.

Anoka County believes the proposed improvements will greatly improve the safety and reliability of the existing corridor, as well as promote improved local road access to TH 47 by enhancing critical access locations and closing, or reducing, movements at several other locations. The traffic safety and non-motorized access changes will have regional benefits beyond the local area, while also providing long-awaited improvements to adjacent neighborhoods and residents.

Sincerely,

Joseph MacPherson

Joseph J. MacPherson, P.E.
Transportation Division Manager/County Engineer



TH 47 Corridor Improvements

2022 Regional Solicitation Application
City of Anoka, MN

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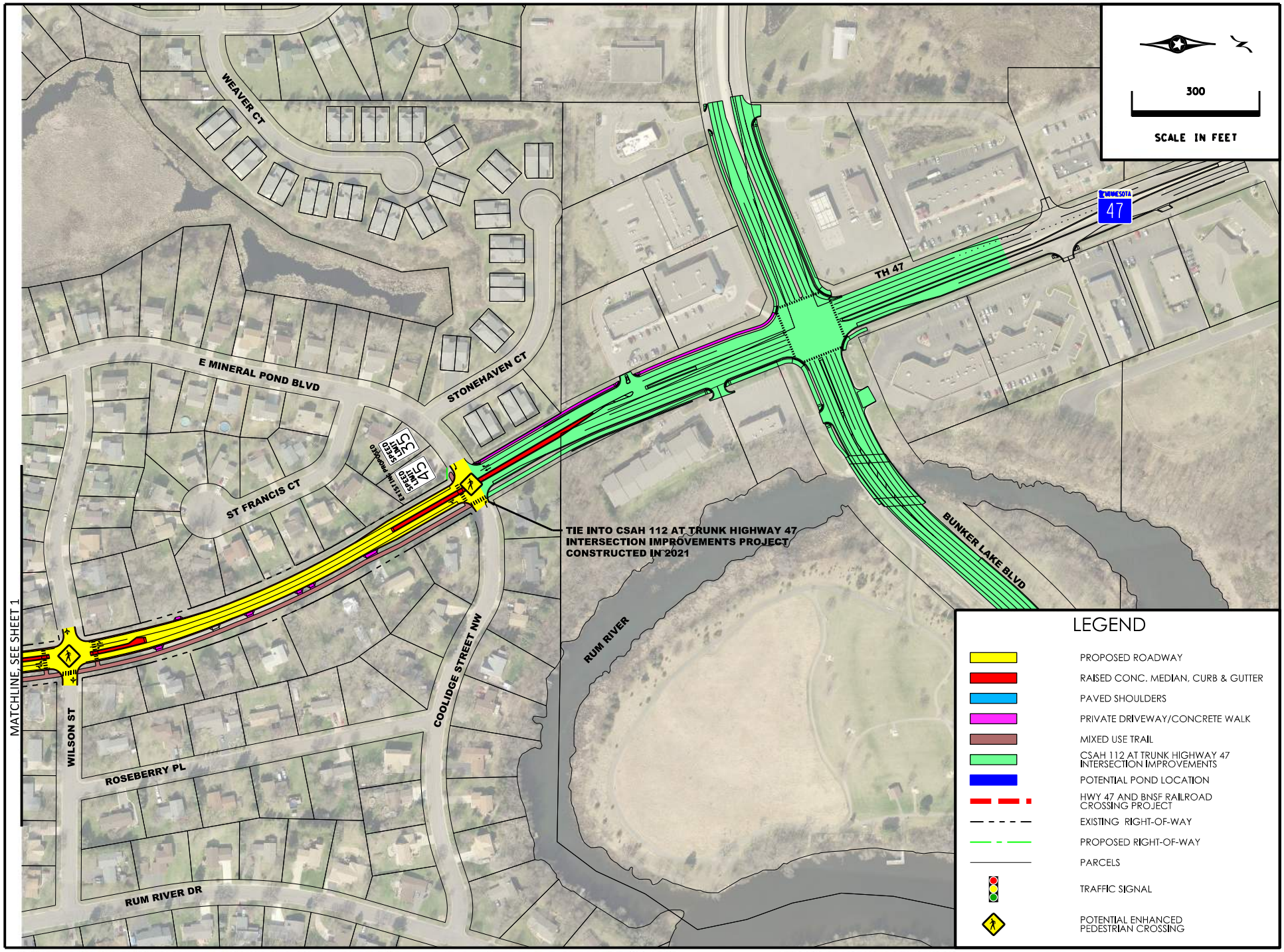

TH 47 Corridor Improvements

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City of Anoka, MN

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Exhibit 2 of 2

TH 47 Corridor Improvements – Existing Conditions: Looking north at Anoka County Fairgrounds

TH 47 Corridor Improvements – Existing Conditions: At McKinley Street, looking north

TH 47 Corridor Improvements – Existing Conditions: South of Dunham Drive, looking south

TH 47 Corridor Improvements – Existing Conditions: South of Coolidge Street, looking south