



Application

17063 - 2022 Roadway Modernization

17586 - Cedar Lake Road and Louisiana Avenue improvements

Regional Solicitation - Roadways Including Multimodal Elements

Status:

Submitted

Submitted Date:

04/14/2022 2:03 PM

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## Primary Contact

Name:\*

She/her/her

Debra

M

Heiser

Pronouns

First Name

Middle Name

Last Name

Title:

engineering director

Department:

Email:

dheiser@stlouispark.org

Address:

5005 Minnetonka Boulevard

\*

St. Louis Park

Minnesota

55416

City

State/Province

Postal Code/Zip

Phone:\*

952-924-2551

Phone

Ext.

Fax:

What Grant Programs are you most interested in?

Regional Solicitation - Unique Projects

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## Organization Information

Name:

ST LOUIS PARK, CITY OF

Jurisdictional Agency (if different):

<b>Organization Type:</b>	City		
<b>Organization Website:</b>			
<b>Address:</b>	5005 MINNETONKA BLVD		
<b>*</b>	ST LOUIS PARK	Minnesota	55416
	<small>City</small>	<small>State/Province</small>	<small>Postal Code/Zip</small>
<b>County:</b>	Hennepin		
<b>Phone:*</b>	612-924-2551		
		<small>Ext.</small>	
<b>Fax:</b>			
<b>PeopleSoft Vendor Number</b>	0000004465A1		

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## Project Information

<b>Project Name</b>	Cedar Lake Road and Louisiana Avenue Improvements
<b>Primary County where the Project is Located</b>	Hennepin
<b>Cities or Townships where the Project is Located:</b>	St. Louis Park
<b>Jurisdictional Agency (If Different than the Applicant):</b>	St. Louis Park
<b>Brief Project Description (Include location, road name/functional class, type of improvement, etc.)</b>	<p>Reconstruction of Cedar Lake Road (A-minor augmentor) and Louisiana Avenue (A-minor arterial) from TH 169 to Kentucky Avenue and 23rd Street to TH 394. Improvements include construction of new sidewalks and bikeways where currently not present along both roadways, replacement of existing sidewalks, enhancements to bus stop facilities and amenities, construction of a roundabout at Cedar Lake Road and Louisiana Avenue, modifications of traffic signal systems to meet current ADA requirements, replacement of street lighting systems, storm sewer improvements, and public utility improvements.</p>
<small>(Limit 2,800 characters; approximately 400 words)</small>	
<b>TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DESCRIPTION - will be used in TIP if the project is selected for funding. <u>See MnDOT's TIP description guidance.</u></b>	<p>MSAS 296, FROM TH 169 TO KENTUCKY AVENUE, RECONSTRUCT, ADA, BIKEWAY, SIGNAL. MSAS 276, FROM 23rd STREET TO TH 394, RECONSTRUCT, ADA, BIKEWAY, SIGNAL, ROUNDABOUT.</p>

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)**

2.4

*to the nearest one-tenth of a mile*

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## Project Funding

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

Yes

**If yes, please identify the source(s)**

RAISE Grant

**Federal Amount**

\$7,000,000.00

**Match Amount**

\$4,985,000.00

*Minimum of 20% of project total*

**Project Total**

\$11,985,000.00

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

**Match Percentage**

41.59%

*Minimum of 20%*

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

**Source of Match Funds**

LOCAL TAX LEVIES, GENERAL OBLIGATION BONDS

*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:**

2025

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

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## Project Information-Roadways

**County, City, or Lead Agency**

CITY OF ST. LOUIS PARK

**Functional Class of Road**

MINOR ARTERIAL

**Road System**

MSAS

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

**Road/Route No.**

296276

*i.e., 53 for CSAH 53*

**Name of Road**

CEDAR LAKE ROAD / LOUISIANA AVENUE

*Example; 1st ST., MAIN AVE*

**Zip Code where Majority of Work is Being Performed**

55426

**(Approximate) Begin Construction Date**

04/01/2025

**(Approximate) End Construction Date**

06/01/2027

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

**From:** TH 169 / 23RD STREET  
(Intersection or Address)

**To:** KENTUCKY AVENUE / TH 394  
(Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

**Or At**

**Miles of Sidewalk (nearest 0.1 miles)** 4.8

**Miles of Trail (nearest 0.1 miles)** 2.4

**Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)** 0.8

**Primary Types of Work** GRADE, BIT SURF, SIDEWALK, SIGNALS, LIGHTING, ROUNDABOUT, ADA, BIKEWAY

*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):

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## Requirements - All Projects

### All Projects

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

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

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

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

A. Page 42 Goal: Transportation System Stewardship

- i. Efficiently preserve and maintain the regional transportation system in a state of good repair. Rehabilitate and replace existing Cedar Lake Road and Louisiana Avenue
- ii. Operate the regional transportation system in a state of good repair. Focus on connecting all ages / abilities / underserved populations to commercial areas, parks, schools, and transit. Cedar Lake Road and Louisiana Avenue aim to improve transit services efficiency and safety.

B. Page 44: Safety and Security

- i. Reduce serious crashes and improve safety for all modes of passenger and bicycle travel. Project has a history of serious crashes with pedestrians and bicyclists

C. Page 46: Access to Destinations

- i. Increase the availability of multimodal travel options
- ii. Increase reliability and predictability of travel on urban arterials and existing bus systems
- iii. Increase the number and share of trips taken using transit, bicycling, and walking
- iv. Improve the availability and quality of multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically underrepresented populations.

D. Page 48: Competitive Economy

- i. Invest in a multimodal transportation system to attract and retain businesses and residents

E. Page 50: Healthy and Equitable Communities

- i. Reduce transportation-related air emissions
- ii. Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities through the use of active transportation options
- iii. Provide a transportation system that promotes community cohesion and connectivity for people of all ages and abilities, particularly for historically under-represented populations

*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.*

Capital Improvement Plan 2022-2026 (link to map)

CIP Projects 2022-2026

(stlouispark.org)<https://www.stlouispark.org/home/showpublisheddocument/22791>

City of St. Louis Park - Connect the Park (link to map)

<https://www.stlouispark.org/home/showpublisheddocument/21287/637649863162100000>

2040 Comprehensive Plan - Sidewalk Improvements (Page 6-210)

2040 Comprehensive Plan (stlouispark.org) - Map shown on Page 214 of PDF

<https://www.stlouispark.org/home/showpublisheddocument/15332/637110597442630000>

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

2040 Comprehensive Plan - RBTN Alignment (Page 6-217)

2040 Comprehensive Plan (stlouispark.org) - Map shown on Page 221 of PDF

<https://www.stlouispark.org/home/showpublisheddocument/15332/637110597442630000>

2040 Comprehensive Plan - RBTN Alignment (Page 6-218)

2040 Comprehensive Plan (stlouispark.org) - Map shown on Page 222 of PDF

<https://www.stlouispark.org/home/showpublisheddocument/15332/637110597442630000>

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:

Link to plan:

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

1649703337515\_ADATransitionPlan.pdf

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

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## 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 MnDOT's Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

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

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

### 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.

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**Requirements - Roadways Including Multimodal Elements**

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**Specific Roadway Elements**

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$600,000.00
Removals (approx. 5% of total cost)	\$600,000.00
Roadway (grading, borrow, etc.)	\$320,000.00
Roadway (aggregates and paving)	\$2,500,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$355,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$1,350,000.00
Traffic Control	\$125,000.00
Striping	\$170,000.00
Signing	\$20,000.00
Lighting	\$750,000.00
Turf - Erosion & Landscaping	\$125,000.00
Bridge	\$0.00
Retaining Walls	\$250,000.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$1,200,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$1,700,000.00
Other Roadway Elements	\$0.00
<b>Totals</b>	<b>\$10,065,000.00</b>



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## Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$200,000.00
Sidewalk Construction	\$600,000.00
On-Street Bicycle Facility Construction	\$450,000.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$150,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$100,000.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$100,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$320,000.00
Other Bicycle and Pedestrian Elements	\$0.00
<b>Totals</b>	<b>\$1,920,000.00</b>

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## 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
<b>Totals</b>	<b>\$0.00</b>

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## 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	\$11,985,000.00
Construction Cost Total	\$11,985,000.00
Transit Operating Cost Total	\$0.00

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

Existing Employment within 1 Mile:	13174
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	1923
Existing Post-Secondary Students within 1 Mile:	0
Upload Map	1648824722829_Regional Economy_Map.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: 0.7  
(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: Yes

None of the tiers:

## Measure A: Current Daily Person Throughput

Location	Louisiana Avenue (SEQ 68237)
Current AADT Volume	18100

**Existing Transit Routes on the Project**

9, 673

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

**Upload Transit Connections Map**

1648824998508\_Transit Connections\_Map.pdf

*Please upload attachment in PDF form.*

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**Response: Current Daily Person Throughput****Average Annual Daily Transit Ridership**

0

**Current Daily Person Throughput**

23530.0

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**Measure B: 2040 Forecast ADT**

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

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

**OR**

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

City of St. Louis Park.

**Forecast (2040) ADT volume**

16900

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**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:*

Open houses were held in 2007 to develop a City-wide Active Transportation Plan. Community engagement led to the development of the Connect the Park Plan, approved by City Council in 2013, aimed at making more livable neighborhoods by providing convenient, safe, and equitable ways for residents to move around the City. Louisiana Ave/Cedar Lake Rd were identified as Tier 1/Tier 2 RBTN corridors in need of bikeway/pedestrian facilities. Underserved and youth populations are prevalent within a ½-mile of the project, including destinations and housing such as 2 St. Louis Park District Schools; Hamilton House, Louisiana Court, and Perspectives Housing apartments; 1 church school, 2 churches; and nearly 30% of single-family homes identifying as non-white, and will benefit from the alternative-mode improvements. The City is using many engagement strategies with the public in an equitable manner. 2 virtual open house meetings have been completed and 2 more in-person meetings are planned. Virtual meeting recordings are on the City's project website. Residents have received mailers, website update notices, and social media notices of project progress. Orange construction signs are installed along the project corridor informing the public of the upcoming project with the project website link. An interactive, ADA web-compliant public feedback mapping tool is being used to compile public comments within the project area. The City has received over 200 comments. Public surveys have been created to identify the public's priorities and help the City understand what transportation modes residents utilize within the project limits. An interactive typical section creation tool was used to give the community opportunity to design their preferred typical section for the corridor, rather than reacting to alternatives provided by the City. A summary of the responses expressed by the public is posted on the City's website and through social media. The comments received reinforced the

Response:

needs for pedestrian/bikeway facilities along each corridor, consideration of the roundabout at Cedar Lake Rd/Louisiana Ave, and addressing safety concerns at 14th St and Jordan Ave. These elements are currently being developed into layouts for the public to review and comment on the City's project website and interactive mapping tool. One of the more viable concepts serves as the basis for the layout attached to this application. 7 pop-up events have been scheduled, especially affordable housing complexes, near the project limits to meet face-to-face with the community and seek out underserved populations directly that may not have the means to attend public events or utilize online resources. All engagement activities have been conducted in accordance with NEPA and Title VI regulations.

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

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## **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.*

Low-income communities and communities of color are more likely to experience health and safety consequences of living near major roads and highways, including greater rates of asthma and other illnesses. It is essential that investments in safe active transportation benefit these communities. While the area around the project is primarily white, it has a greater concentration of residents of color and low-income residents than the regional average. It is also just south of I-394, making investments in low-emissions transportation in this area especially important.

**Response:**

Most households in the area have access to at least one car. Up to 13% of households do not have access to a car in the block groups surrounding the project area. Within the five census tracts around the project area, 1,615 residents are disabled. Destinations and services in the project area include multiple parks, which youth and families need to access safely, as well as a church and school and a post office. The Louisiana Avenue portion of the improvements connects to a concentration of jobs along the 394 corridor.

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

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

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

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

*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.*

646 publicly subsidized rental housing units are located in census tracts within a half mile of the project area. At least 130 one- to three-bedroom units affordable at 30% AMI are located directly along or adjacent to the roadways being improved. These units currently have walk scores of 53, indicating that the area is somewhat walkable but could be improved. Bike scores vary from somewhat bikeable to very bikeable. It is unlikely that residents in subsidized housing can meet their daily needs by walking and biking in this area.

Response:

Housing is considered affordable if it costs less than 30% of a household's income. In several block groups adjacent to the project, median gross rent (contract rent plus cost of utilities) exceeds 30% of income. This indicates an unmet need for affordable housing in the project area. Beyond residents currently living in subsidized housing, an even greater number of people in the project area face housing cost constraints and would benefit from affordable, safe, and active transportation.

(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.

1649424797582\_Socio-Economic Conditions\_Map.pdf

### Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
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1994	8300.0	1.65502E7	1292.984
1994	1000.0	1994000.0	155.781
1992	3500.0	6972000.0	544.688
	<b>12800</b>	<b>25516200</b>	<b>1993</b>

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## Total Project Length

Total Project Length (as entered in "Project Information" form) 0

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## Average Construction Year

Weighted Year

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## Total Segment Length (Miles)

Total Segment Length 0

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## Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

Response:

Anticipated reconstruction of the existing signalized Cedar Lake Rd/Louisiana Ave intersection as a roundabout and anticipated removal of the unwarranted traffic signal at Franklin Avenue and Louisiana Avenue will reduce traffic delays. Bus pullouts will be constructed at transit stop locations to prevent buses from blocking traffic, improving vehicle delays. Replacement of failing bituminous pavements will maintain state of repair of Cedar Lake Road and Louisiana Avenue so each facility can continue to serve freight movements.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines: Yes



**Response:**

Anticipated removal of on-street parking, along with construction of pedestrian crossing curb bump outs, will improve sight lines at stop-controlled intersections for turning vehicles from and onto Cedar Lake Road. Anticipated roundabout construction at Cedar Lake Road and Louisiana Avenue fix skewed sight lines at existing signalized intersection.

*(Limit 700 characters; approximately 100 words)*

**Improved roadway geometrics:**

Yes

Anticipated Cedar Lake Rd/Louisiana Ave roundabout improves vehicle delays, pedestrian and bike crossings and access, and improves safety for all transportation modes. Fix lane configurations at 14th St/Louisiana Ave intersection to fix sub-standard lane taper that results in crashes above the state-wide average. Fix lane configurations at Nevada Ave/Cedar Lake Rd intersection to mitigate side-swipe crashes and reduce crossing distances for pedestrians. Adding bus pullouts to mitigate traffic impacts imposed by buses partially blocking travel lanes. Narrow roadway curb line geometry and add curb bump outs at intersections to promote traffic calming and safer speeds for bikes and pedestrians.

**Response:**

*(Limit 700 characters; approximately 100 words)*

**Access management enhancements:**

Yes

Enhancements to the Park Spanish Immersion Elementary School access to address traffic backups and queuing observed in Cedar Lake Road through and turn lanes. Anticipated removal of right-in/out commercial driveways within 50' of signalized / roundabout intersections. Improved site circulation for commercial properties in the vicinity of the Cedar Lake Road and Louisiana avenue intersection.

**Response:**

*(Limit 700 characters; approximately 100 words)*

**Vertical/horizontal alignment improvements:**

**Response:**

None.

*(Limit 700 characters; approximately 100 words)*

**Improved stormwater mitigation:**

**Response:**

Yes

Implementation of stormwater BMPs to address runoff from all reconstructed surfaces in accordance with the new MS4 permit requirements, improving water quality for Hannan Lake and Twin Lake.

*(Limit 700 characters; approximately 100 words)*

**Signals/lighting upgrades:**

**Response:**

Yes

Installation of new continuous LED roadway lighting along Cedar Lake Road and Louisiana Avenue. Signal reconstruction at 4 existing signals to include APS modifications and modifications to meet current MnDOT standards and technologies. Installation of 4 RRFB signalized pedestrian crossings to improve mobility and pedestrian crossings.

*(Limit 700 characters; approximately 100 words)*

**Other Improvements**

**Response:**

Yes

Implementation of ADA compliant amenities at all bus stops. Improvements include constructing sidewalks and bikeways along both sides of Cedar Lake Road and Louisiana Avenue to improve equitable, multimodal mobility. Off-street bicycle facilities currently proposed, improving safety between bicycles and vehicular traffic. Use of different pavement types, wider curb and gutter pans, and less bituminous pavement to give impression of more narrow roadway section, creating traffic calming.

*(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
16.0	10.0	6.0	13295	13295	79770.0	79770.0	N/a	164971499 4308_Synchro-HCM-Timing Reports.pdf
79770								

## Vehicle Delay Reduced

Total Peak Hour Delay Reduced	79770.0
Total Peak Hour Delay Reduced	79770.0

## 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):
21.35	19.8	1.55
21	20	2

## Total

Total Emissions Reduced:	1.55
--------------------------	------

### Upload Synchro Report

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

CMF 212 - Conversion of signalized intersection into single- or multi-lane roundabout

CMF 261 - Provide a left-turn lane on one major-road approach

CMF 285 - Provide a right-turn lane on one major-road approach

### Crash Modification Factor Used:

CMF 9024 - Install rectangular rapid flashing beacon (RRFB)

CMF 10742 - Install bicycle lanes

CMF 11026 - Improve street lighting illuminance and uniformity

(Limit 700 Characters; approximately 100 words)

A roundabout is planned at Cedar Lake Road & Louisiana Avenue. CMF 212 was used because the intersection is currently signalized. This CMF was applied to injury crashes only.

At 14th Street, CMF 261 was used for the southbound left-turn lane that is being proposed. Additionally, CMF 285 was chosen for the southbound through lane that currently ends 100 feet upstream of 14th Street that is being proposed to be extended to the intersection to become a right-turn drop lane. These CMFs were applied to all crash types and severities since most of the historic crashes were related to this intersection approach.

RRFBs are anticipated to be installed at Virginia Avenue and at 16th Street. CMF 9024 was applied to pedestrian crashes at these intersections, as a safer crossing would be provided by alerting vehicles on the road of the presence of a pedestrian.

CMF 10742 was applied to crashes along both corridors due to the planned bike lanes. This CMF is relevant to corridors that will have reduced shoulders and some increase in bike activity. This CMF was only applied at locations along the corridor where others were not already applied (as described above).

Improved LED street lighting and additional intersection lighting is planned along both corridors, so CMF 11026 was applied to nighttime crashes. This CMF is relevant to corridors that already have some amount of lighting in place.

**Rationale for Crash Modification Selected:**

*(Limit 1400 Characters; approximately 200 words)*

**Project Benefit (\$) from B/C Ratio**

\$14,409,162.00

**Total Fatal (K) Crashes:**

0

Total Serious Injury (A) Crashes:	2
Total Non-Motorized Fatal and Serious Injury Crashes:	1
Total Crashes:	74
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	1
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	1
Total Crashes Reduced by Project:	25
Worksheet Attachment	1649715436433_B-C Worksheets.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 doesn't 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.

Many treatments and countermeasures will be implemented with this project to address safety needs of pedestrians and bicyclists crossing the roadway. First, curb line bump outs will be constructed at all pedestrian crossing locations where parking lanes are present, reducing the distance in which pedestrians and bicyclists are required to cross the road. Travel lanes will be reduced to 11' lanes, from 12', and the roadway width between curb lines where feasible to serve as a traffic calming mechanism. In addition, all pedestrian curb ramps will be reconstructed to meet ADA compliance, including the installation of truncated domes, landings, and navigable slopes. The project will be providing sidewalks on both sides of Cedar Lake Road and Louisiana Avenue, compared to only one side in the current condition, that will reduce the unnecessary need for pedestrians to cross the roadway to utilize a pedestrian route.

**Response:**

At the four existing signalized intersections to remain, traffic signals will be upgraded with APS systems and new ADA compliant push button stations. 4 pedestrian crossings are planned within the project at unsignalized intersections to improve mobility and connections between signalized intersections. These crossings will include RRFB pedestrian signals, signing, and striping in accordance with the MnMUTCD and City of St. Louis Park Guidelines for Pedestrian Crossings.

A roundabout is anticipated to be implemented at the intersection of Cedar Lake Road and Louisiana Avenue, which will provide refuge landings and significantly reduce the distance pedestrians need to cross traffic. Pedestrians currently need to cross 5 lanes of traffic on all legs of the intersection, whereas pedestrians and bikes only need to cross



a maximum of two drive lanes before arriving at a safe refuge point.

Furthermore, the project will be consolidating the existing 6 striped crosswalks at unsignalized intersections along Cedar Lake Road to 2 primary locations with the RRFB amenities identified above. The reduction in crossings will direct pedestrians to locations with safer amenities and improve driver's expectations and attentiveness instead of several locations that give a false sense of security.

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

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

**Select one:**

Yes

*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.).*

The project anticipates removing the Franklin Avenue traffic signal along Louisiana Avenue. The intent is that the existing traffic signal would be replaced with a RRFB pedestrian crossing system to provide a means to help motorists yield to pedestrians. The distance between signalized intersections will be reduced further with the implementation of three other RRFB crossings within the project.

**Response:**

A roundabout is also anticipated to replace the existing Louisiana Avenue and Cedar Lake Road signalized intersection. The roundabout will slow motorist speeds, reduce the number of traffic lanes, and reduce the crossing distance for pedestrians, which in turn all provide safer pedestrian and bicycle crossings.

*(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:

No

If yes,

How many intersections will likely be affected?

Response:

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

Response:

*(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 doesn't 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:

There is one mid-block crossing being eliminated from the project due to the elimination of a park and ride facility by Metro Transit. The mid-block crossing no longer serves its intended use. Other pedestrian crossings aren't being restricted but striping and signing will not be implemented at all locations. The intent is to consolidate the number of highly visible crossings to improve driver expectations at highly traveled pedestrian crossings.

*(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.).*

The project will be reducing traffic lanes from 12' to 11' along both Cedar Lake Road and Louisiana Avenue. Along Cedar Lake Road, parking lanes will be eliminated and the width between curb lines will be reduced. In addition, reconstructed segments of curb and gutter will be reconstructed with a wider gutter pan to serve as a bike facility when bike facilities are provided within the roadway. These elements are intended to provide visual narrowing of the roadway and help maintain a posted speed of 30 mph.

**Response:**

A roundabout is anticipated at the intersection of Cedar Lake Road and Louisiana Avenue, affecting speeds in the vicinity of the intersection. The proposed roundabout also reduces the number of approaching traffic lanes between Nevada Avenue and Louisiana Avenue along Cedar Lake Road, affecting traffic speeds and bypass traffic at the Nevada Avenue / Cedar Lake Road signalized intersection.

The City recently reduced posted speeds along Cedar Lake Road and Louisiana Avenue from 35 mph to 30 mph.

*(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 City recently implemented a posted speed reduction of the roadway from 35 mph to 30 mph. The operational and posted speeds are intended to remain at 30 mph and no change in conditions is proposed with this project.

*(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 18100

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

*These factors are 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.) Yes

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.) Yes

Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant) Yes

If checked, please describe:

Westwood Shopping Center is located at the southeast and southwest quadrants of the Cedar Lake Road and Louisiana Avenue intersection. The Westwood Shopping Center includes, Sichuan Restaurant, Jerry's Hardware and Rental, Pizza Hut, and Ariana Kabob and Gyro Bistro. Walgreen's and Pizzeria Lucca are located at the northwest quadrant of Cedar Lake Road and Louisiana Avenue.

*(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:

Park Spanish Immersion Elementary School, Cedar Manor Park, Westwood Lutheran Church and School, Willow Park, Peace Presbyterian Church, Hamilton House apartments, Westwood Gardens apartments, Westwood Chateau apartments, Greensboro Condominiums, Villa at St. Louis Park Senior Living Facility, Northside Park, St. Louis Park Middle School (located 1,200 feet from project but students commute along both Cedar lake Road and Louisiana Avenue to get to school), Jersey Park, and Cedar Knoll Park.

*(Limit 1,400 characters; approximately 200 words)*

---

## Measure A: Multimodal Elements and Existing Connections

**Response:**

This project replaces existing ADA deficient sidewalks along the north side of Cedar Lake Rd and west side of Louisiana Ave, and construct new pedestrian facilities along the south side of Cedar Lake Rd and east side of Louisiana Ave. The new facilities will provide safe pedestrian connections to parks, schools, businesses, and affordable housing lacking within the project limits. Adding sidewalks along both sides of the roadway eliminates pedestrians walking in roadway shoulders and reduces the need to cross traffic. Sidewalks will be reconstructed with boulevards away from roadway to improve safety and comfort. Adding ADA compliant boarding pads to provide safe landing for transit users currently lacking in project area. Adding new bikeways lacking along both Cedar Lake Rd and Louisiana Ave. These improvements are identified in the City's Connect the Park Active Transportation Plan. The City is halfway through implementing its City-wide Connect the Park Active Transportation Plan, by providing a major bikeway facility every ½-mile or pedestrian facility every ¼-mile, to connect businesses, parks, schools, and other public congregation areas. Both Cedar Lake Rd and Louisiana Ave are critical elements in the City's Active Transportation grid, connecting the northwest part of the City to the rest of the community. The project provides necessary connections to 2 St. Louis Park District Schools, 1 church school, 2 churches, Westwood Shopping Center, and 4 parks immediately adjacent to the roadway corridor. The improvements make critical connections to the existing pedestrian and bikeway network along Cedar Lake Rd east of Louisiana Ave, connecting to the overpass facilities built over the BNSF Railroad. The BNSF railroad is a major pedestrian and bike barrier for the City of St. Louis Park, because it splits the City in half with only 4 possible crossing locations. The proposed improvements provide safe and efficient connections to the existing facilities along Virginia

Ave, one of the four crossings of BNSF tracks. In the ADA Transition Plan, dated July 2018, the City will provide and upgrade pedestrian facilities as part of transportation projects scheduled in the City's CIP. These roadways were last constructed in 1994, prior to revisions to the current versions of the ADA Accessibility Act and MnDOT ADA requirements and are deficient. This project will reconstruct all pedestrian facilities that are deficient, including pedestrian facilities at traffic signals, consistent with the City's ADA Transition Plan.

See link for ADA Transition Plan:

<https://www.stlouispark.org/home/showpublisheddocument/10499/636679511156470000>

See link for Connect the Park Plan:

<https://www.stlouispark.org/home/showpublisheddocument/21287/637649863162100000>

*(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.*



The City conducted open houses in 2007 to establish an Active Living Plan. The plan identified the need for a network of sidewalks and bikeways for residents to navigate throughout the City more easily. The vision process later became Connect the Park, an implementation plan approved by City Council in 2013 to construct a sidewalk and bikeway network around the City.

A Public Engagement Plan was developed for this project in January 2022 and is being implemented. A project website has been developed, serving as the primary virtual hub for project communications and engagement. The website outlines the project goals, schedule, and future public engagement process. 2 virtual open house meetings have been completed, and 2 additional in-person public open house meetings are planned. All properties within ½ mile of the project were notified of the open houses with individual project mailers. Notifications are provided through the City's NextDoor, Facebook, and Twitter accounts. 35 members of the public attended the first 2 open houses. Recordings of the virtual open houses have been posted on the City's Youtube Channel and project website. An interactive public engagement map has been developed for the project, where the public can comment on project concerns or issues within the corridor. The interactive map meets web-ADA accessibility guidelines. A project survey has been distributed to the public to provide feedback on what project priorities are most important. The City has already received 200 comments on the interactive engagement site. A one-page information sheet was developed notifying the public of the project and was mailed to all properties within ½ mile of the project limits. 7 pop-up events have been scheduled at City community events and Affordable Housing properties to seek input in an equitable manner from diverse and

**Response:**

underserved populations. The events and locations include, State of the Community, Parktacular, Hamilton House, Louisiana Court Apartments, and Perspectives. Public engagement and planning activities are currently planned through December 2022.

The City is partnering with the City of St. Louis Park School District to provide updates on the project through school newsletters and parent coalition groups.

Large orange construction signs have been installed on the project notifying the public of the future project and a link to the project website.

Below are links to the public engagement materials available:

<https://www.stlouispark.org/government/departments-divisions/engineering/connect-the-park>

<https://redocedarlou.com/>

Cedar Lake Road and Louisiana Avenue  
Improvements #RedoCedarLou Survey

([surveymonkey.com](https://surveymonkey.com))

*(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](mailto: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.

50%

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

Yes

25%

Layout has not been started

0%

Attach Layout

1649715859981\_C.P. 4024-1100 - FUNDING GRANT SHEETS\_4-7-22.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): \$11,985,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$11,985,000.00

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

Attach documentation of award:

Points Awarded in Previous Criteria

---

## Other Attachments

File Name	Description	File Size
4.13.22 Keller TAB LOS.pdf	Letter of Support - City of St. Louis Park	137 KB
6 - 4.6.22 Klobuchar RAISE Program LOS.pdf	Letter of Support - Amy Klobuchar	352 KB
7 - 4.14.22 Omar RAISE LOS.pdf	Letter of Support - Ilhan Omar	383 KB
8 - 2022 RAISE Grant--PSI_Letter of Support.pdf	Letter of Support - Park Spanish Immersion School	496 KB
C.P. 4024-1100 - FUNDING GRANT SHEETS_4-7-22.pdf	Concept drawings	25.3 MB
CedarLakeLouisiana_RAISEGRANT_LetterOfSupport_Metro Transitletterhead - signed.pdf	Letter of Support - Metro Transit	60 KB
Existing Conditions Photos.pdf	Existing Conditions Photos	819 KB
MetCouncilMaps_Combined.pdf	Met Council generated maps	5.5 MB
SLP Regional Selection One-Pager_v3.pdf	One-pager	1.2 MB
St. Louis Park RAISE MnDOT Letter of Support.pdf	Letter of Support - MnDOT	128 KB



# ADA transition plan

**July  
2018**



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## Introduction

The City of St. Louis Park is committed to breaking down barriers for residents and to be a fair, inclusive and equitable community in its practices, programs and services.

The Americans with Disabilities Act (ADA) enacted on July 26, 1990, is a civil rights law prohibiting discrimination against individuals based on disability. The ADA requires public transportation agencies to develop transition plans detailing how the agencies will ensure accessibility within the public right of way. See Appendix H for more detailed information on the ADA and related regulations.



The City of St. Louis Park Engineering Department has prepared this Americans with Disabilities Act (ADA) transition plan to guide its efforts to ensure pedestrian facilities located within the city's public right of way meet the accessibility needs of all residents.

This plan will be used to maintain, program and construct accessible pedestrian facilities in the right of way. It provides an inventory of pedestrian ramps and traffic signals that fall under city jurisdiction for ownership and maintenance.

This plan establishes an ADA coordinator for public right of way to provide a single point of contact for the public to report and address concerns.

Additionally, a formal grievance procedure is established with this plan for the purposes of the prompt and equitable resolution of residents' complaints, concerns and comments regarding accessibility of pedestrian facilities located within the public right of way.

## Self-evaluation

### Overview

The City of St. Louis Park Engineering Department performed a self-evaluation of its current transportation infrastructure policies, practices and programs.

The goal of the self-evaluation is to review existing policies and practices to verify that the city is providing accessibility and not adversely affecting the full participation of individuals with disabilities.

The self-evaluation included completing an inventory of all pedestrian curb ramps and traffic control signals that are located within the city right of way.



## Existing policies and practices

The engineering department will consider and respond to all accessibility improvement requests. Requests should be sent to the ADA coordinator as specified in **Appendix D**. All accessibility improvements that have been determined to be reasonable will be scheduled, consistent with transportation priorities. The city will coordinate with external agencies as necessary to ensure that all new or altered pedestrian facilities within the city jurisdiction are ADA compliant to the maximum extent possible.

Following are descriptions of the various policies and practices the city uses to assist with ADA compliance.

### Special parking permit

The city provides a special parking permit for persons with disabilities through its city code section 30-160. The purpose is to provide permits exempting residents from on-street parking restrictions on streets immediately adjacent to the homes of disabled persons. It also reserves an on-street parking space by issuing a permit to the property owner.

### Temporary pedestrian access routes

Construction and temporary traffic control zones present unique challenges for pedestrians with disabilities. According to the Public Rights of Way Accessible Guidelines [PROWAG (R205)], when an existing pedestrian access route is blocked by construction or maintenance, an ADA compliant alternative pedestrian access route should be provided. The Minnesota Department of Transportation (MnDOT) and the Minnesota Manual on Uniform Traffic Control Devices (MnMUTCD) Chapter 6D offers technical guidance on this issue. MnDOT continues to update these guidelines as necessary, and the City of St. Louis Park monitors MnDOT's evolving standards to stay in compliance. During construction, the city evaluates any temporary control zone to ensure compliance with PROWAG. The responsibility for providing compliant alternative pedestrian routes falls to the project contractor; however, staff ensures compliance by using MnDOT's pedestrian accessibility checklist (MnMUTCD Figure 6D-1) to evaluate each site.

### Transportation projects

The city's goal is to continue to provide and upgrade accessible pedestrian facilities as part of transportation projects. During the development of project plans, staff will inspect, inventory and plan for any required improvements to pedestrian facilities located in the public right of way to ensure ADA compliance. The city has established ADA design standards and procedures as detailed in Appendix C. These standards and procedures will be kept up to date with nationwide and local best management practices. The city's capital improvement plan (CIP) includes the following types of transportation projects.

### **Pavement Management Program (PMP) projects**

The majority of the city's street infrastructure is maintained through the Pavement Management Program (PMP), established by the city in June 2002. The PMP is a street maintenance plan that implements the right maintenance at the right time in a road's lifecycle to reduce the overall cost of keeping the city's streets in good condition. The PMP provides a systematic approach to managing the city's transportation infrastructure, including pedestrian facilities within the right of way. The data-driven nature of the PMP makes it a useful vehicle for ADA compliance.

To help execute the PMP, the city is divided into eight geographic areas of comparable pavement square footage and uses neighborhood boundaries to further define the boundaries. Transportation projects are planned based on these eight PMP areas. Each year, one PMP area is planned for street rehabilitation; the following year, the area is scheduled for sidewalk maintenance; two years later, it's scheduled for sealcoating.

The city incorporates ADA accessible pedestrian features into PMP projects, including street rehabilitation, sealcoating and sidewalk maintenance. The segments of street and sidewalk are selected based on condition and budget. The PMP is updated annually to reflect current infrastructure conditions. Through this process, the city works to keep its transportation infrastructure in good condition.

### **Municipal State Aid (MSA) projects**

The MSA system is a collection of higher traffic volume and key connecting roads in the city. MSA roads receive state funding for construction and maintenance. As a result, they are scheduled for improvements separately from the local streets. The majority of MSA streets are on the boundaries of the PMP areas.

The schedule to improve MSA streets is based on pavement condition and budget.

### **Bikeway, sidewalk and trail projects**

One of the city's goals is to develop a comprehensive, citywide system of bikeways, sidewalks and trails that provide local and regional connectivity, improve safety and accessibility, and enhance overall community livability. At times, it's necessary to schedule bikeway, sidewalk and trail construction separately from street rehabilitation. These projects will incorporate pedestrian facility upgrades as necessary.



## Bridge projects

The city is responsible for the maintenance of 15 bridges in St. Louis Park. At times, it is necessary to schedule bridge repair and reconstruction separately from street rehabilitation. These projects are driven by bridge condition and will incorporate pedestrian facility upgrades as necessary.

## Traffic control signal projects

The city is responsible for 29 traffic control signals in St. Louis Park. At times, it is necessary to schedule traffic signal repair and replacement separately from street rehabilitation. These projects are driven by traffic control conditions and operations at the intersection and will incorporate pedestrian facility upgrades as necessary.

## Inventory

In 2017 and 2018, the City of St. Louis Park conducted an inventory of existing pedestrian facilities within its public right of way. Pedestrian ramps and traffic control signal systems were inventoried for each PMP area, with the following results.

PMP area	Pedestrian ramps	Traffic signal systems
Area 1	424	4
Area 2	456	5
Area 3	74	1
Area 4	419	0
Area 5	211	3
Area 6	295	4
Area 7	202	5
Area 8	347	7
Total	2,428	29

A map showing the location of these facilities is in **Appendix B** and will be updated periodically.

The engineering department will further assess accessibility of pedestrian ramps and traffic signals in advance of CIP projects to allow for the design of ADA compliant pedestrian facilities. As resources allow, the department will gather additional data to assist in determining levels of ADA compliance of pedestrian facilities to assist in prioritizing and programming funds for projects to be added into the CIP.

## What activity requires an ADA upgrade?

Activity	Upgrade required?
<b>Construction</b>	
<i>New construction</i> All new construction must meet ADA requirements (i.e. curb ramps, sidewalks, trails, pedestrian crosswalks, traffic signals, pedestrian tunnels/bridges and new developments).	Yes
<i>Mill and overlay/pavement reclaim</i> ADA upgrades are required on all pedestrian facilities adjacent to the street segments being worked on. All existing curb ramps will be brought into compliance. Where there is no curb ramp, curb ramps must be installed where there is existing sidewalk. Adjacent sidewalk will be removed and replaced as needed.	Yes
<i>Reconstruction</i> ADA upgrades are required on all pedestrian facilities adjacent to the street segments being worked on. This includes projects to widen roads, add vehicle or bike lanes, change horizontal or vertical alignment, replace bridges, rehabilitate pavement, replace curb and gutter, replace traffic signals, or replace sidewalks or trails.	Yes
<b>Maintenance</b>	
<i>Crack sealing</i>	No
<i>Concrete joint sealing, surface planning or grinding</i>	No
<i>Curb replacement</i> If the curb replacement is at an existing or proposed pedestrian ramp location, then it must meet ADA requirements. All existing curb ramps will be brought into compliance. Where there is no curb ramp, curb ramps must be installed where there is existing sidewalk.	Maybe
<i>Pothole patching</i>	No
<i>Seal coating</i>	No
<i>Sidewalk panel replacement</i> Accessibility upgrades should be done to the extent feasible. If only one or two panels are being replaced, there may not be an opportunity to make changes.	Maybe
<i>Sidewalk shaving</i>	No
<i>Sidewalk panel temporary patch or ramp</i> Accessibility upgrades should be done to the extent feasible. The larger the patch section, the better the opportunity to address slope or cross slope. However, if only one or two panels are being patched, there may not be an opportunity to make changes.	Maybe
<i>Utility patch</i> If the patch is located in the middle of the street, no upgrades are required. However, if the patch disturbs curb ramps or sidewalk, upgrades are required.	Maybe
<b>Traffic</b>	
<i>Crosswalk installation</i> Any new marked and signed crosswalk must meet ADA requirements.	Yes
<i>Pavement marking modification</i> Any pedestrian-related pavement marking should meet ADA requirements.	Maybe

Private companies working in the public right of way will be required to complete ADA upgrades consistent with the above requirements (i.e. Xcel Energy or CenterPoint Energy).

## ADA coordinator

In accordance with [28 CFR 35.107\(a\)](#), the City of St. Louis Park has identified an ADA Title II coordinator to oversee the city policies and procedures for public right of way. It is the responsibility of the ADA coordinator to implement this policy. Contact information for the coordinator is in **Appendix D**.

## Implementation

### Methodology

The City of St. Louis Park is committed to improving accessibility within the city. A systematic approach to providing accessible facilities will be established to include the cost for public right of way improvements into the city's budget.

The city will use two methods for upgrading pedestrian facilities to current ADA standards. The first and most comprehensive method is the scheduled transportation projects. All pedestrian facilities affected by these projects will be upgraded to current ADA accessibility standards. The second method is ADA accessibility improvement projects. These projects will be incorporated into the capital improvement plan (CIP) on a case-by-case basis as determined by staff. The CIP includes a schedule for project improvements by year and geographic area.

### Prioritization

The city will include accessibility improvements in all transportation projects planned in the CIP. The CIP is reviewed on an annual basis and will be revised as necessary to address accessibility priorities in context with the needs of the city's overall transportation system.

### External agency coordination

Several other agencies are responsible for pedestrian facilities within St. Louis Park, including Hennepin County, MnDOT and Metro Transit. The city will coordinate with these agencies to track and assist in removing accessibility barriers along their routes and/or associated with their services.

### Schedule

St. Louis Park has set the following schedule goals for improving accessibility of pedestrian facilities within the city:

- Traffic signals, pedestrian ramps and sidewalks will be addressed through transportation projects for scheduling and constructing improvements.
- Any facilities identified as an existing hazard or compliance issue that city staff believes needs to be addressed by a set date will have a work order initiated or it will be incorporated into a capital improvement plan project.

- Our 20-year goal is to have a minimum of 80 percent of transportation accessibility features within the City of St. Louis Park ADA compliant. The remaining 20 percent would include any locations that have not had an adjacent road project within the 20-year period.

## Grievance procedure

Under the Americans with Disabilities Act (ADA), each agency is required to publish its responsibilities regarding ADA accessibility. A draft public notice is provided in **Appendix E**. If users of St. Louis Park transportation facilities and services believe the city has not provided reasonable accommodation, they have the right to file a grievance.

In accordance with [28 CFR 35.107\(b\)](#), the city has developed a grievance procedure for the purposes of the prompt and equitable resolution of complaints, concerns, comments and other grievances. This grievance procedure is outlined in **Appendix F**, with a complaint form in **Appendix G**.

## Monitor the progress

This document, including the appendices, will be updated as conditions within the city change. With each main update, a public outreach will be conducted to ask for the public's participation in plan updates.



## **Appendices**

- A. Glossary of terms**
- B. Inventory maps**
- C. Agency ADA design standards and procedures**
- D. ADA coordinator**
- E. ADA public notice**
- F. Grievance procedure**
- G. Complaint form**
- H. Transition plan needs and requirements**

## Appendix A – Glossary of terms

**ADA transition plan:** St. Louis Park’s transportation system plan that identifies accessibility needs; outlines the process to fully integrate accessibility improvements into transportation projects; and ensures all transportation facilities, services, programs and activities are accessible to all individuals.

**Accessible:** A facility that provides access to people with disabilities using the design requirements of the ADA.

**Accessible pedestrian signal (APS):** A device that communicates information about the WALK and DON’T WALK intervals at signalized intersections in non-visual (audible and vibro-tactile) formats.

**Alteration:** A change to a facility in the public right of way that affects or could affect access, circulation or use. An alteration must not decrease or have the effect of decreasing the accessibility of a facility or an accessible connection to an adjacent building or site.

**Americans with Disabilities Act (ADA):** The Americans with Disabilities Act is civil rights legislation that was passed in 1990 and went into effect in July 1992. The ADA sets design guidelines for accessibility to public facilities, including sidewalks and trails, by individuals with disabilities.

**Americans with Disabilities Act Accessibility Guidelines (ADAAG):** The guidelines include scoping and technical requirements for accessibility to buildings and public facilities by individuals with disabilities under the Americans with Disabilities Act (ADA) of 1990.

**Architectural Barriers Act (ABA):** The ABA is a federal law that requires facilities designed, built, altered or leased with federal funds to be accessible. It marks one of the first efforts to ensure access to the built environment.

**Capital Improvement Program (CIP):** The CIP includes an annual capital budget and a 10-year plan for funding new construction and reconstruction projects within the city’s transportation system.

**Detectable warning:** A surface feature of truncated domes built in or applied to the walking surface to indicate an upcoming change from pedestrian to vehicular facilities.

**Federal Highway Administration (FHWA):** A branch of the United States Department of Transportation that administers the federal-aid highway program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges.

**Pavement Management Program (PMP):** The PMP is a systematic approach used to schedule street improvement projects by year and geographic area.



**Pedestrian access route (PAR):** A continuous and unobstructed walkway within a pedestrian circulation path that provides accessibility.

**Pedestrian circulation route (PCR):** A prepared exterior or interior way of passage provided for pedestrian travel.

**PROWAG:** An acronym for the Public Rights of Way Accessible Guidelines issued in 2005 by the United States Access Board. This guidance addresses roadway design practices, slope and terrain related to pedestrian access to walkways and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking and other components of public right of way.

**Right of way:** A general term denoting land, property or interest therein, usually in a strip, acquired for the network of streets, sidewalks and trails creating public pedestrian access within a public entity's jurisdictional limits.

**Section 504:** The section of the Rehabilitation Act that prohibits discrimination by any program or activity conducted by the federal government.

**Transportation project:** A project within the right of way intended to construct or repair transportation related infrastructure, including pavement, curb and gutter, traffic signals, sidewalks, trails, bikeways and bridges.

**Uniform Accessibility Standards (UFAS):** Accessibility standards that all federal agencies are required to meet; includes scoping and technical specifications.

**United States Access Board:** An independent federal agency that develops and maintains design criteria for buildings and other improvements, transit vehicles, telecommunications equipment, and electronic and information technology. It also enforces accessibility standards that cover federally funded facilities.

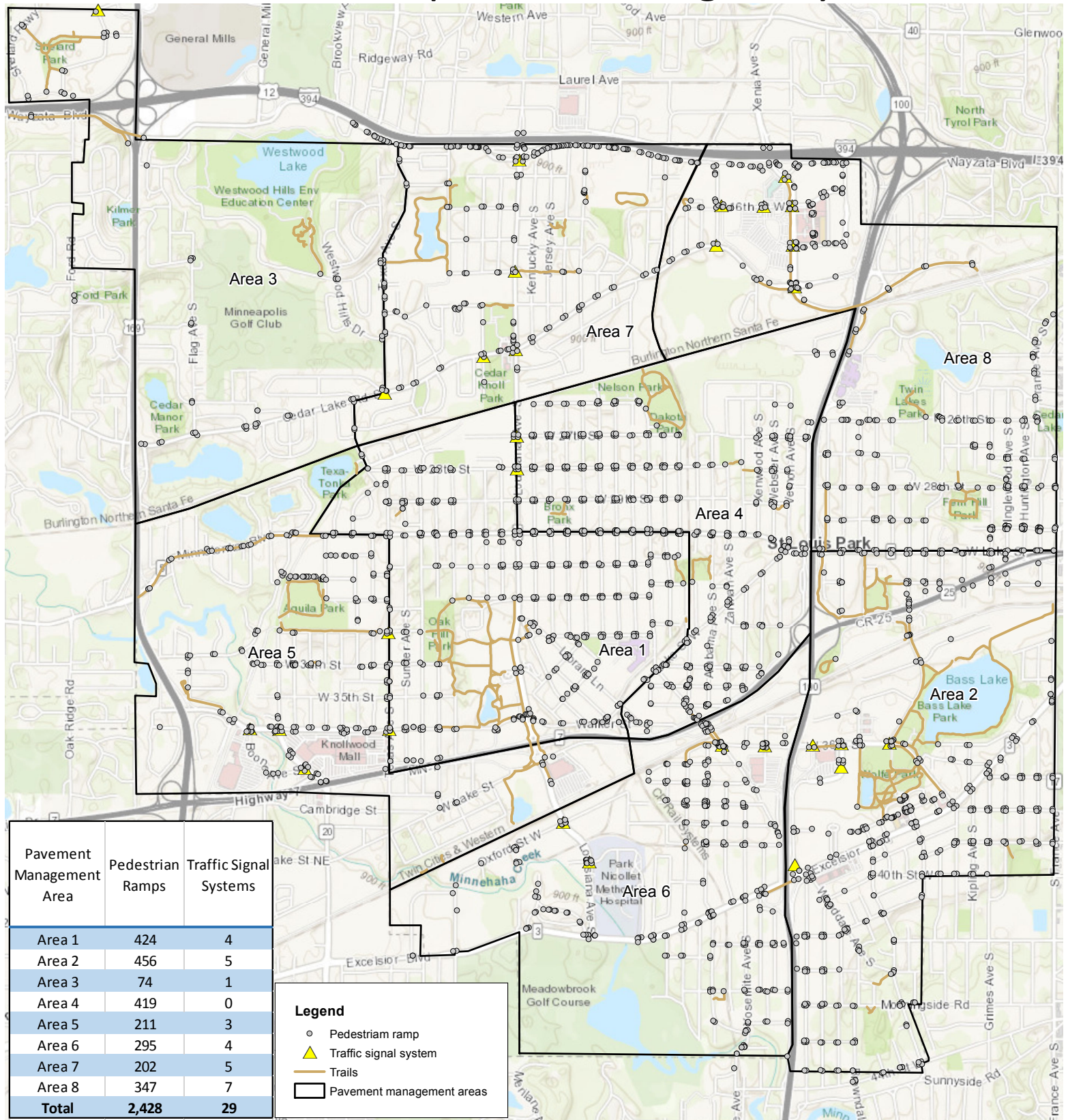
**United States Department of Justice (DOJ):** The United States Department of Justice (often referred to as the Justice Department or DOJ), is the United States federal executive department responsible for the enforcement of the law and administration of justice.

## **Appendix B – Inventory map**

The inventory of the pedestrian ramps and traffic signals in the city public right of way can be found at the city's ADA transition plan webpage: [www.stlouispark.org/ada-transition-plan](http://www.stlouispark.org/ada-transition-plan)

A map showing locations of these facilities are also included on the following page.

# Pedestrian Ramps & Traffic Signal Systems



## **Appendix C – Agency ADA design procedures and standards**

### **Design procedures**

#### **Intersection corners**

The city plans to construct or upgrade curb ramps to achieve ADA compliance as part of transportation projects. There may be limitations that make it technically infeasible for an intersection corner to achieve full accessibility within the scope of a project. Those limitations will be noted, and those intersection corners will remain on the ADA transition plan. As future projects or opportunities come up, those intersection corners will be incorporated into future work. Regardless of whether or not full compliance can be achieved, each intersection corner will be made as compliant as possible in accordance with the judgment of city staff.

#### **Bikeways, sidewalks and trails**

The city will evaluate and attempt to construct or upgrade bikeways, sidewalks and trails to achieve ADA compliance as part of transportation projects. In general, a six-foot-wide sidewalk is desirable for accessibility and maintenance purposes. A minimum five-foot-wide sidewalk may be acceptable where physical constraints limit achieving the desired six-foot width. There may be limitations that make it technically infeasible for segments of sidewalks or trails to achieve full accessibility within the scope of a project. Those limitations will be noted, and those segments will remain on the ADA transition plan. As future projects or opportunities come up, those segments will be incorporated into future work. Regardless of whether or not full compliance can be achieved, every bikeway, sidewalk or trail will be made as compliant as possible in accordance with the judgment of city staff.

#### **Traffic signals**

The city will attempt to construct or upgrade traffic control signals to achieve ADA compliance as part of transportation projects. There may be limitations that make it technically infeasible for individual traffic control signal locations to achieve full accessibility within the scope of a project. Those limitations will be noted, and those locations will remain on the ADA transition plan. As future projects or opportunities come up, those locations will be incorporated into future work. Regardless of whether or not full compliance can be achieved, each traffic signal control location will be made as compliant as possible in accordance with the judgment of city staff.

#### **Other policies, practices and programs**

Policies, practices and programs not identified in this document will follow the applicable ADA standards.

### **Design standards**

The city generally follows the guidelines identified in the Public Rights of Way Accessible Guidelines (PROWAG) when practical and feasible.

## **Appendix D – Contact information**

### **Public right of way: ADA Title II coordinator and implementation coordinator**

Name: Debra Heiser, P.E., Engineering Director

or current engineering director

Address: 5005 Minnetonka Blvd.

St. Louis Park, MN 55416

Phone: 952.924.2551

Email: [dheiser@stlouispark.org](mailto:dheiser@stlouispark.org)



## Appendix E – ADA public notice

As part of the ADA requirements the city has posted, the following notice outlining its ADA requirements:

### Public notice

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990, the City of St. Louis Park Engineering Department will not discriminate against qualified individuals with disabilities on the basis of disability in city transportation services, programs or activities.

### Employment

The city does not discriminate on the basis of disability in its hiring or employment practices and complies with all regulations promulgated by the United States Equal Employment Opportunity Commission under Title I of the Americans with Disabilities Act (ADA).

### Effective communication

The city will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities so they can participate equally in the city's programs, services and activities. This includes qualified sign language interpreters, documents in Braille and other ways of making information and communications accessible to people who have speech, hearing or vision impairments.

### Modifications to policies and procedures

The city will make all reasonable modifications to transportation policies and programs to ensure that people with disabilities have an equal opportunity to enjoy all transportation programs, services and activities. For example, individuals with service animals are welcomed in city offices, even where pets are generally prohibited.

Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a transportation program, service or activity, should contact the office of the public right of way ADA coordinator (see **Appendix D**) as soon as possible, but no later than 48 hours before any scheduled event.

The ADA does not require the city to take any action that would fundamentally alter the nature of its programs or services, or impose an undue financial or administrative burden.

The city will not place a surcharge on an individual with a disability or any group of individuals with disabilities to cover the cost of providing auxiliary aids/services or reasonable modifications of policy, such as retrieving items from locations that are open to the public but are not accessible to persons who use wheelchairs.

## Appendix F – Grievance procedure

Prior to filing a grievance, the public is strongly encouraged to contact the public right of way ADA coordinator to discuss any concerns regarding city transportation facilities. The ADA coordinator's role is designed to provide a point of contact for the public to address concerns. It is anticipated that most concerns identified will be able to be resolved by the ADA coordinator. Contact information for the ADA coordinator can be found in **Appendix D** of this document.

### Purpose

This grievance procedure is established to meet the requirements of the Americans with Disabilities Act (ADA) of 1990. It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in the provision of services, activities, programs or benefits by the City of St. Louis Park Engineering Department. The city's personnel policy governs employment-related complaints of disability discrimination.

### Procedure

The complaint should be in writing and contain information about the alleged discrimination, such as name, address, phone number of complainant, location, date and description of the problem. Alternative means of filing complaints, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities upon request.

The complaint should be submitted to the ADA coordinator by the grievant and/or their designee as soon as possible, but no later than 60 calendar days after the alleged violation. Contact information for the ADA coordinator can be found in **Appendix D** of this document.

Within 15 working days after receipt of the complaint, the ADA coordinator or their designee will meet with the complainant to discuss the complaint and possible resolutions. Within 15 working days of the meeting, the ADA coordinator or their designee will respond in writing, and where appropriate, in a format accessible to the complainant, such as large print or audio tape. The response will explain the position of the city and offer options for substantive resolution of the complaint.

If the response by the ADA coordinator or their designee does not satisfactorily resolve the issue, the complainant and/or their designee may appeal the decision to the city manager or his/her designee within 30 calendar days after receipt of the response.

Within 30 calendar days after receipt of the appeal, the city manager or his/her designee will meet with the complainant to discuss the complaint and possible resolutions. Within 30 calendar days after the meeting, the city manager or his/her designee will respond in writing, and where appropriate, in a format accessible to the complainant with a final resolution of the complaint.

All written complaints received by the ADA coordinator or their designee, appeals to the city manager or his/her designee, and responses from these two offices will be retained by the city in accordance with state and federal law.

## Method

Those wishing to file a formal written grievance with the City of St. Louis Park Engineering Department may do so by one of the following methods:

### Website

Visit the City of St. Louis Park's ADA transition plan webpage at [www.stlouispark.org/ada-transition-plan](http://www.stlouispark.org/ada-transition-plan) and click the link to the ADA complaint form. A copy of the ADA complaint form is included with this document in **Appendix G**.

### Telephone

Contact the ADA coordinator as specified in **Appendix D** to submit an oral grievance. The ADA coordinator will prepare and submit the complaint form on behalf of the person filing the grievance.

### Paper submittal

Contact the ADA coordinator as specified in **Appendix D** to request a paper copy of the complaint form. Complete the form and submit it to the ADA coordinator.

## Information required

The ADA complaint form will ask for the following information:

- The name, address, telephone number and email address for the person filing the grievance.
- The name, telephone number and email address for the person alleging an ADA violation (if different than the person filing the grievance).
- A description and location of the problem and the nature of a remedy sought, if known by the complainant.
- If the complainant has filed the same complaint or grievance with the United States Department of Justice (DOJ), another federal or state civil rights agency, a court, or others, the name of the agency or court where the complainant filed it and the filing date.

## Process

If the grievance filed does not concern a City of St. Louis Park transportation facility, the city will work with the complainant to contact the agency that has jurisdiction over the facility.



A city staff person will conduct an investigation to determine the validity of the alleged violation. As part of the investigation, the staff person may conduct an engineering study to help determine the response. The staff person will use department resources, engineering judgment, data collected and any information submitted by the complainant to develop a conclusion. A staff person will be available to meet with the complainant to discuss the matter as a part of the investigation and resolution. The city will document each resolution of a filed complaint and retain documentation in the department's ADA complaint files in accordance with state and federal law.

The city will consider all specific complaints within its particular context or setting. Furthermore, the city will consider many varying circumstances including:

- The nature of the access to services, programs or facilities at issue
- The specific nature of the disability
- The essential eligibility requirements for participation
- The health and safety of others
- The degree to which an accommodation would constitute a fundamental alteration to the program, service, facility or cause an undue hardship to the city

Accordingly, the resolution by the city of any one complaint does not constitute a precedent upon which the city is bound or upon which other complaining parties may rely.

### **File maintenance**

The city shall maintain ADA complaint files in accordance with state and federal law.

Complaints on Title II violations may also be filed with the United States Department of Justice (DOJ) within 180 days of the date of discrimination. In certain situations, cases may be referred to a mediation program sponsored by the DOJ. The DOJ may bring a lawsuit where it has investigated a matter and has been unable to resolve violations.

For more information, contact:

United States Department of Justice Civil Rights Division  
950 Pennsylvania Ave., N.W. Disability Rights Section - NYAV Washington, D.C. 20530  
[www.ada.gov](http://www.ada.gov)  
800.514.0301 (voice – toll free)  
800.514.0383 (TTY)

Title II may also be enforced through private lawsuits in federal court. It is not necessary to file a complaint with the DOJ or any other federal agency, or to receive a "right-to-sue" letter, before going to court.

## **Appendix G – Complaint form**

See the following pages for the complaint form.

## ADA complaint form

The city has developed a grievance procedure to ensure that accessibility concerns are resolved quickly and fairly, as outlined in the Americans with Disabilities Act (ADA).

If you have issues with the form, or to file an oral grievance, call 952.924.2551.

### Complainant – person filing grievance

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Street address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Phone number: \_\_\_\_\_ Email: \_\_\_\_\_

### Person claiming accessibility issue (if different from above)

Name: \_\_\_\_\_

Phone number: \_\_\_\_\_ Email: \_\_\_\_\_

### Complaint

Where is the location of the problem? Please include city, street name, intersection (if applicable), facility name and/or location if other than a roadway.

What efforts have been made to resolve this complaint?

*If you have documentation, copies would be helpful. Examples are letters, email messages, written notes, etc.*

Has the complaint been filed with any federal or state agency? ☐ Yes ☐ No

Name of agency: \_\_\_\_\_

Contact name: \_\_\_\_\_ Date filed: \_\_\_\_\_

*Please attach additional pages if you need more room.*

Signature of complainant: \_\_\_\_\_ Date: \_\_\_\_\_

**Return to:** Debra Heiser, Engineering Director  
5005 Minnetonka Blvd., St. Louis Park, MN 55416  
952.924.2551  
[dheiser@stlouispark.org](mailto:dheiser@stlouispark.org)

## **Notice of rights**

In accordance with the Minnesota Government Data Practices Act, the City of St. Louis Park is required to inform you of your rights as they pertain to the private information collected from you. The personal information we collect from you is private. Access to this information is available only to you, the agency collecting the information and other statutorily authorized agencies, unless you or a court authorizes its release.

The Minnesota Government Data Practices Act requires that you be informed that the following information, which you are asked to provide, is considered private.

### **The purpose and intended use of the requested information is:**

To assist City of St. Louis Park staff and designees to evaluate and respond to accessibility concerns within the public right of way.

### **Authorized persons or agencies with whom this information may be shared include:**

City of St. Louis Park officials, staff or designee(s)

### **Furnishing the above information is voluntary, but refusal to supply the requested information will mean:**

City of St. Louis Park staff may be unable to respond to or evaluate your request.

MINN. STAT. §13.04(2)

## Appendix H – Transition plan needs and requirements

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, is a civil rights law prohibiting discrimination against individuals on the basis of disability. ADA consists of five titles outlining protections in the following areas:

- I. Employment
- II. State and local government services
- III. Public accommodations
- IV. Telecommunications
- V. Miscellaneous provisions

Title II of ADA pertains to the programs, activities and services public entities provide. As a provider of public transportation services and programs, the City of St. Louis Park must comply with this section of the act as it specifically applies to public service agencies. Title II of ADA provides that, “...no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity.” ([42 USC. Sec. 12132](#); [28 CFR. Sec. 35.130](#))

As required by Title II of [ADA, 28 CFR. Part 35 Sec. 35.105 and Sec. 35.150](#), the city has conducted a self-evaluation of its facilities within the public right of way and has developed this transition plan detailing how the organization will ensure these facilities are accessible to all individuals. A glossary of terms is included in **Appendix A**.

This transition plan has been created to specifically cover accessibility within the public right of way and does not include information on city programs, practices or building facilities not related to public right of way.

### ADA and its relationship to other laws

Title II of ADA is companion legislation to two previous federal statutes and regulations: the [Architectural Barriers Acts of 1968](#) and [Section 504 of the Rehabilitation Act](#) of 1973.

The Architectural Barriers Act of 1968 is a federal law that requires facilities designed, built, altered or leased with federal funds to be accessible. It marks one of the first efforts to ensure access to the built environment.

Section 504 of the Rehabilitation Act of 1973 is a federal law that protects qualified individuals from discrimination based on their disability. The nondiscrimination requirements of the law apply to employers and organizations that receive financial assistance from any federal department or agency. Title II of ADA extended this coverage to all state and local government entities, regardless of whether they receive federal funding or not.

## Agency requirements

Under Title II, the City of St. Louis Park Engineering Department must meet these general requirements:

- Must operate their programs so that, when viewed in their entirety, the programs are accessible to and useable by individuals with disabilities ([28 CFR Sec. 35.150](#)).
- May not refuse to allow a person with a disability to participate in a service, program or activity simply because the person has a disability ([28 CFR Sec. 35.130 \(a\)](#)).
- Must make reasonable modifications in policies, practices and procedures that deny equal access to individuals with disabilities unless a fundamental alteration in the program would result ([28 CFR Sec. 35.130\(b\) \(7\)](#)).
- May not provide services or benefits to individuals with disabilities through programs that are separate or different unless the separate or different measures are necessary to ensure that benefits and services are equally effective ([28 CFR Sec. 35.130\(b\)\(iv\) & \(d\)](#)).
- Must take appropriate steps to ensure that communications with applicants, participants and members of the public with disabilities are as effective as communications with others ([28 CFR Sec. 35.160\(a\)](#)).
- Must designate at least one responsible employee to coordinate ADA compliance [[28 CFR Sec. 35.107\(a\)](#)]. This person is often referred to as the "ADA coordinator." The public entity must provide the ADA coordinator's name, office address and telephone number to all interested individuals [[28 CFR Sec. 35.107\(a\)](#)].
- Must provide notice of ADA requirements. All public entities, regardless of size, must provide information about the rights and protections of Title II to applicants, participants, beneficiaries, employees and other interested persons [[28 CFR Sec. 35.106](#)].
- Must establish a grievance procedure. Public entities must adopt and publish grievance procedures providing for prompt and equitable resolution of complaints [[28 CFR Sec. 35.107\(b\)](#)]. This requirement provides for a timely resolution of all problems or conflicts related to ADA compliance before they escalate to litigation and/or the federal complaint process.

# Regional Economy

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463

## Results

**WITHIN ONE MI** of project:  
Postsecondary Students: 0

Totals by City:

### Golden Valley

Population: 107

Employment: 4056

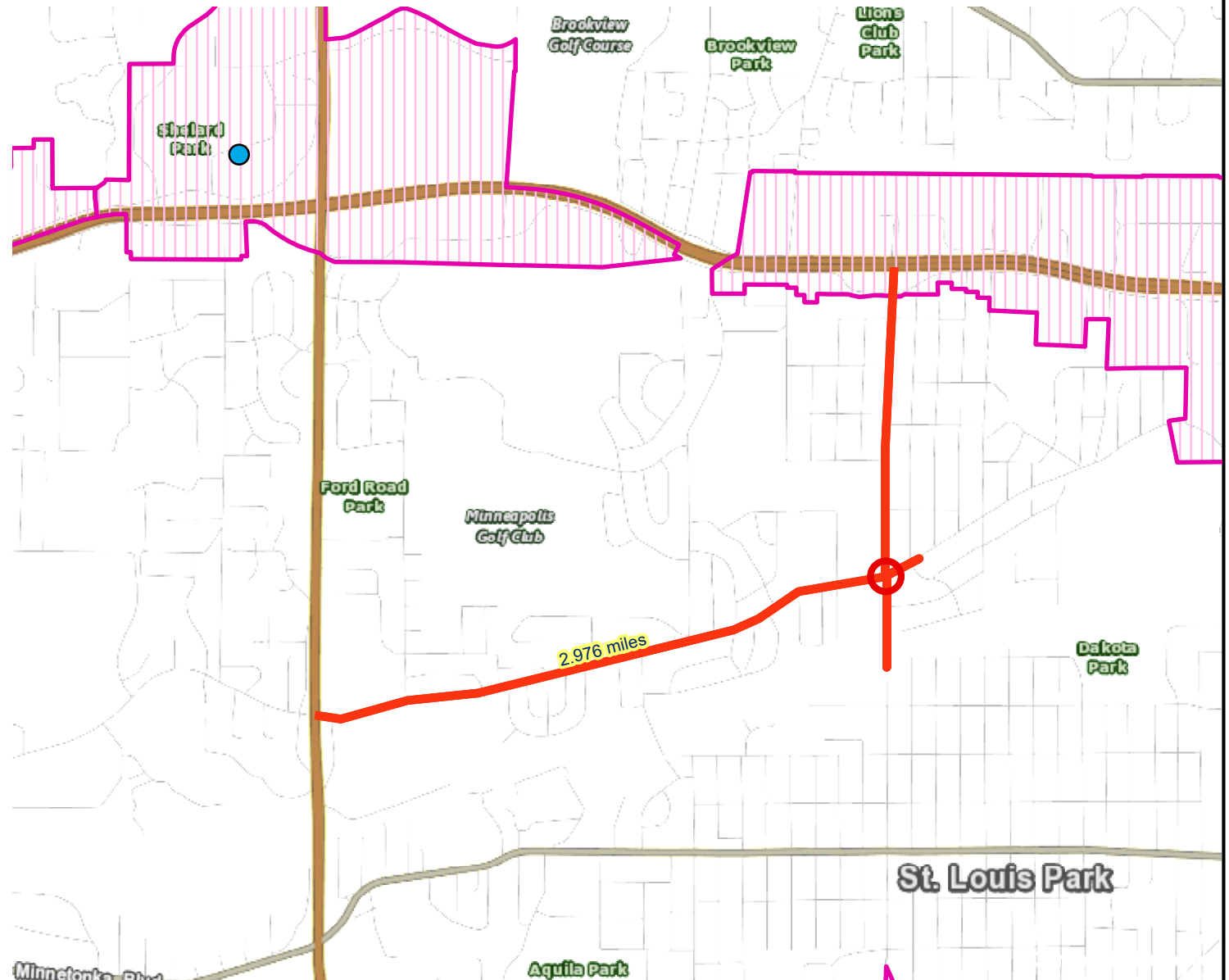
Mfg and Dist Employment: 825

### St. Louis Park

Population: 24090

Employment: 13174

Mfg and Dist Employment: 1923



Project Points



Postsecondary Education Centers



Job Concentration Centers



Project



Manufacturing/Distribution Centers

0 0.25 0.5 1 1.5 2 Miles

Created: 3/15/2022  
LandscapeRSA5



For complete disclaimer of accuracy, please visit  
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



# Transit Connections

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463

## Results

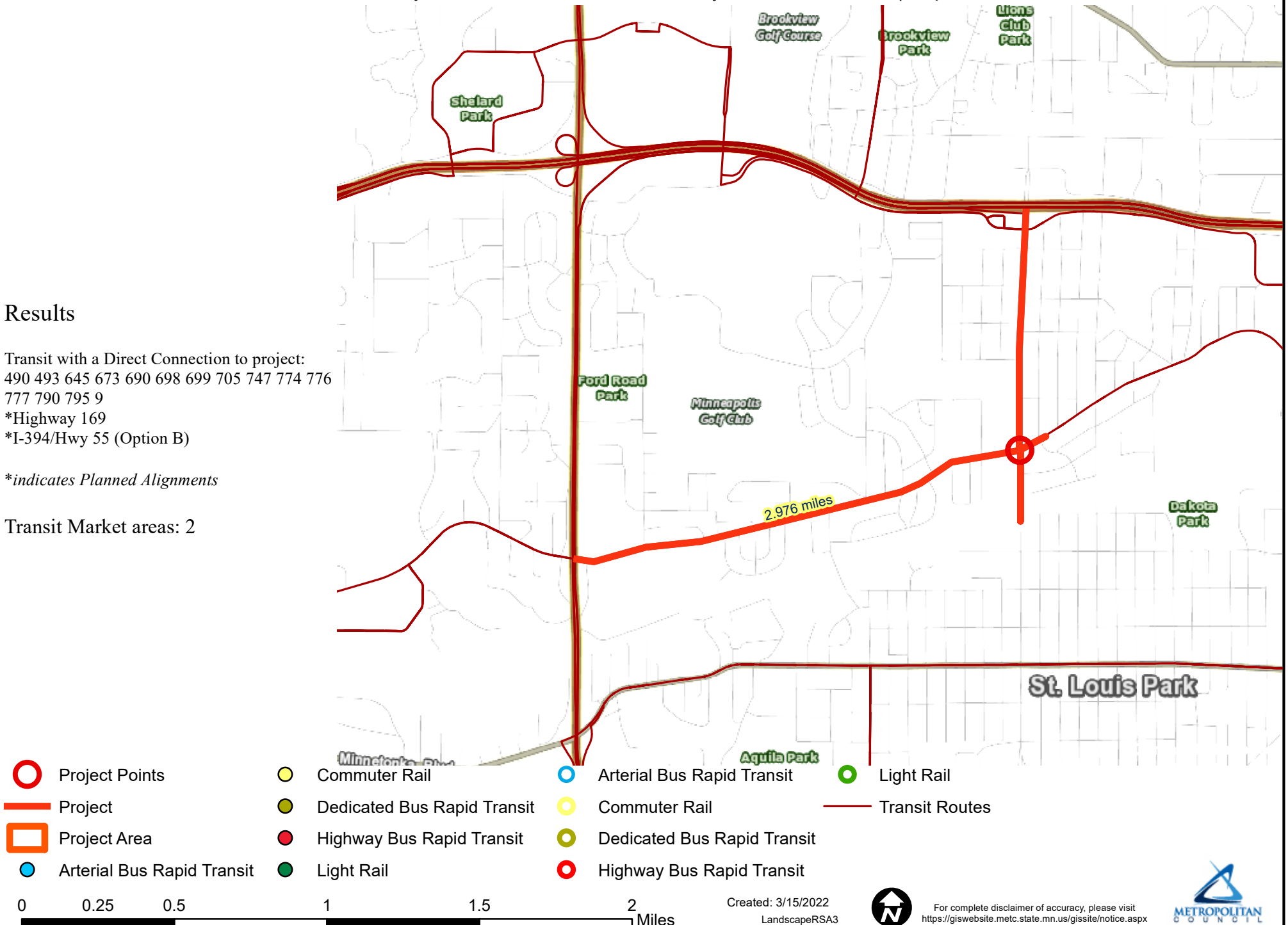
Transit with a Direct Connection to project:  
490 493 645 673 690 698 699 705 747 774 776  
777 790 795 9

\*Highway 169

\*I-394/Hwy 55 (Option B)

*\*indicates Planned Alignments*

Transit Market areas: 2





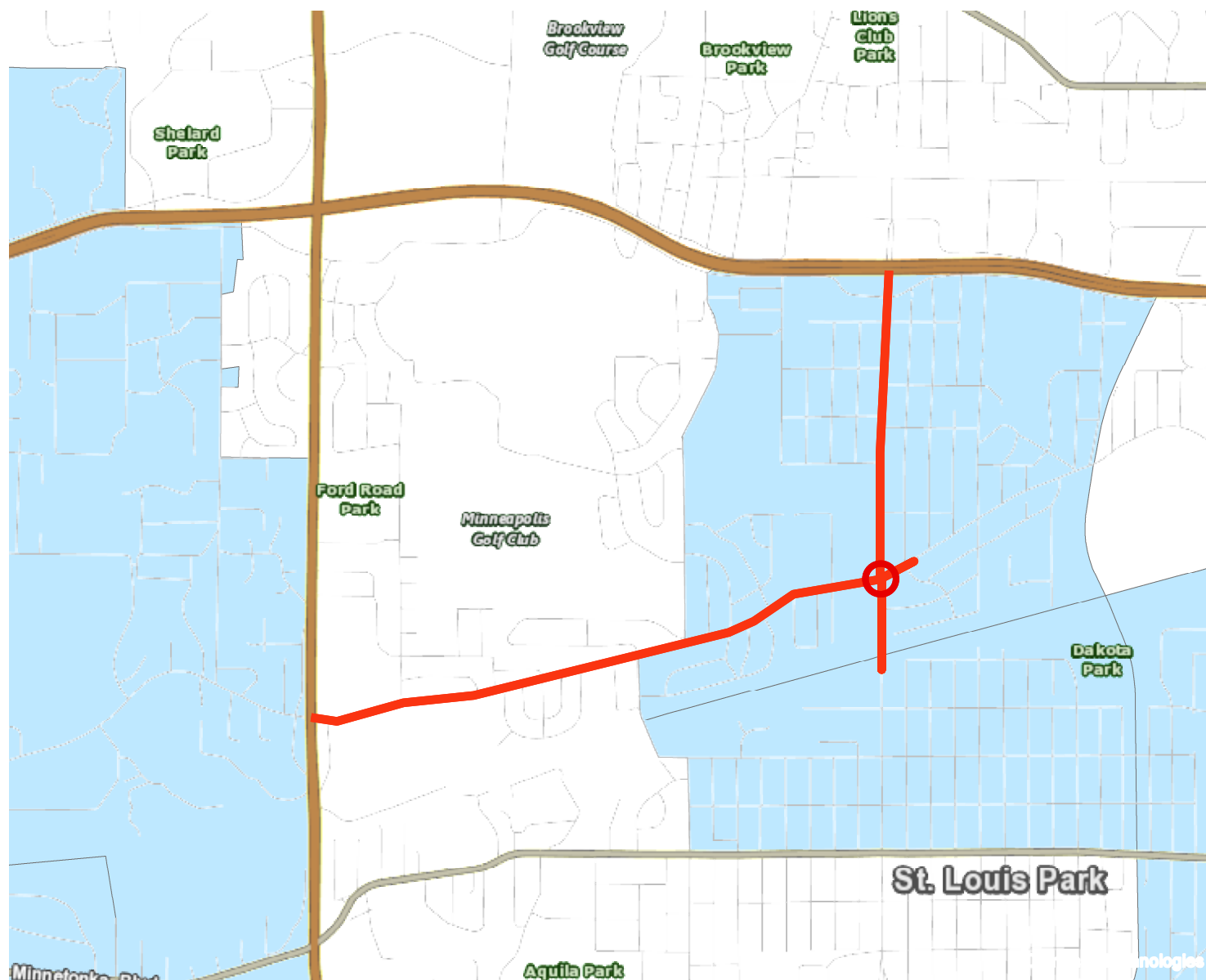
# Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463

## Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 646

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



Points



Area of Concentrated Poverty



Lines



Regional Environmental Justice Area



Created: 3/15/2022  
LandscapeRSA2




















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



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-AM  
Existing 2022 Traffic Volumes

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	15	210	180	55	360	260	25	175	95	20
Future Volume (vph)	15	210	180	55	360	260	25	175	95	20
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	NA	Perm	Perm	NA
Protected Phases		2		1	6		4			4
Permitted Phases	2		2	6		4		4	4	
Detector Phase	2	2	2	1	6	4	4	4	4	4
Switch Phase				6						
Minimum Initial (s)	1.0	1.0	1.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	34.0	34.0	34.0	13.0	31.0	18.0	18.0	18.0	18.0	18.0
Total Split (s)	34.0	34.0	34.0	13.0	47.0	28.0	28.0	28.0	28.0	28.0
Total Split (%)	45.3%	45.3%	45.3%	17.3%	62.7%	37.3%	37.3%	37.3%	37.3%	37.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		6.0	6.0	5.0	6.0		5.5	5.5		5.5
Lead/Lag	Lag	Lag	Lag	Lead						
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effect Green (s)		33.8	33.8	42.2	41.2		22.3	22.3		22.3
Actuated g/C Ratio		0.45	0.45	0.56	0.55		0.30	0.30		0.30
v/c Ratio		0.32	0.25	0.11	0.52		0.95	0.33		0.72
Control Delay		16.5	3.5	8.0	12.4		67.1	5.0		36.6
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay		16.5	3.5	8.0	12.4		67.1	5.0		36.6
LOS		B	A	A	B		E	A		D
Approach Delay		10.7			12.0		43.5			36.6
Approach LOS		B			B		D			D

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 23.7

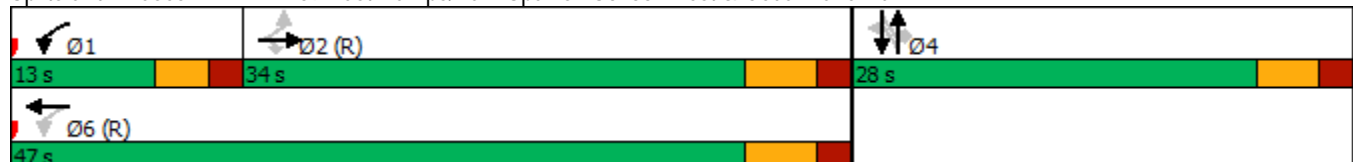
Intersection LOS: C

Intersection Capacity Utilization 73.6%

ICU Level of Service D

Analysis Period (min) 15

















Splits and Phases: 1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

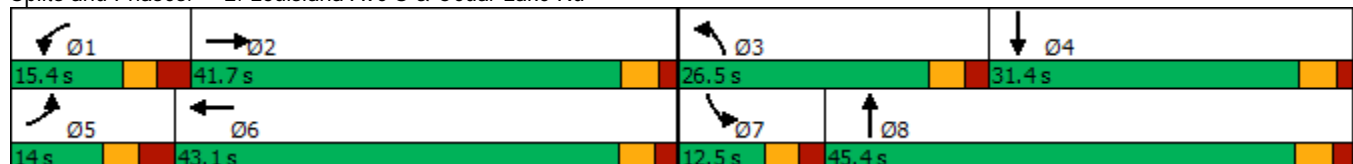
Existing-AM  
Existing 2022 Traffic Volumes

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	110	205	110	155	165	485	35	385
Future Volume (vph)	110	205	110	155	165	485	35	385
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	7.0	12.0	7.0	12.0	7.0	12.0	7.0	12.0
Minimum Split (s)	13.8	39.9	13.1	43.0	12.4	45.4	12.5	20.9
Total Split (s)	14.0	41.7	15.4	43.1	26.5	45.4	12.5	31.4
Total Split (%)	12.2%	36.3%	13.4%	37.5%	23.0%	39.5%	10.9%	27.3%
Yellow Time (s)	3.0	3.2	3.0	3.0	3.0	3.2	3.0	3.2
All-Red Time (s)	3.1	1.7	2.9	2.0	2.0	1.9	2.1	1.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	4.9	5.9	5.0	5.0	5.1	5.1	4.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	8.1	13.9	9.7	15.2	14.1	30.2	7.4	18.3
Actuated g/C Ratio	0.11	0.18	0.13	0.20	0.18	0.39	0.10	0.24
v/c Ratio	0.69	0.59	0.59	0.32	0.60	0.55	0.24	0.65
Control Delay	58.6	20.2	48.3	26.4	38.5	19.8	40.8	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.6	20.2	48.3	26.4	38.5	19.8	40.8	30.3
LOS	E	C	D	C	D	B	D	C
Approach Delay		28.8		34.5		23.6		31.0
Approach LOS		C		C		C		C

### Intersection Summary

Cycle Length: 115  
 Actuated Cycle Length: 77  
 Natural Cycle: 115  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 28.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 60.3%  
 ICU Level of Service B  
 Analysis Period (min) 15

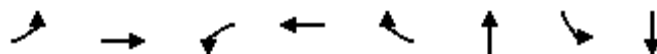
Splits and Phases: 2: Louisiana Ave S & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-AM  
Existing 2022 Traffic Volumes



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Configurations		↔		↔	↔	↔		↔
Traffic Volume (vph)	10	385	5	275	15	0	20	0
Future Volume (vph)	10	385	5	275	15	0	20	0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		6		4	
Detector Phase	2	2	6	6	6	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	7.0	7.0	7.0
Minimum Split (s)	25.1	25.1	25.0	25.0	25.0	11.8	11.8	11.8
Total Split (s)	28.0	28.0	28.0	28.0	28.0	12.0	12.0	12.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	70.0%	30.0%	30.0%	30.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.0	3.0	3.0
All-Red Time (s)	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		4.9		4.9	4.9	4.8		4.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	Min	None	None	None
Act Effect Green (s)		26.5		26.5	26.5	7.1		7.1
Actuated g/C Ratio		0.80		0.80	0.80	0.22		0.22
v/c Ratio		0.31		0.22	0.01	0.03		0.14
Control Delay		4.1		3.6	0.6	0.1		5.8
Queue Delay		0.0		0.0	0.0	0.0		0.0
Total Delay		4.1		3.6	0.6	0.1		5.8
LOS		A		A	A	A		A
Approach Delay		4.1		3.5		0.1		5.8
Approach LOS		A		A		A		A

### Intersection Summary

Cycle Length: 40

Actuated Cycle Length: 33

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.31

Intersection Signal Delay: 3.9

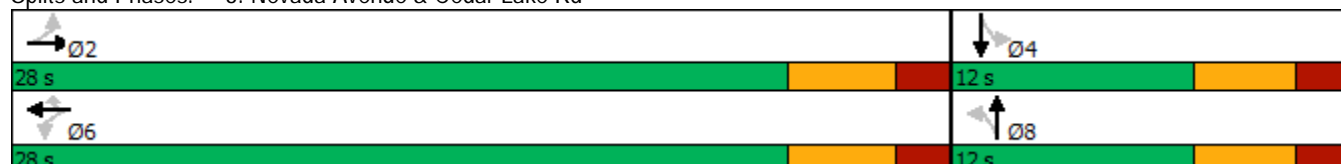
Intersection LOS: A

Intersection Capacity Utilization 48.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Nevada Avenue & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-AM  
Existing 2022 Traffic Volumes



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	110	310	260	50	100
Future Volume (vph)	110	310	260	50	100
Turn Type	pm+pt	NA	NA	Prot	Prot
Protected Phases	5	2	6	4	4
Permitted Phases	2				
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	8.0	8.0
Minimum Split (s)	15.3	23.5	33.0	23.7	23.7
Total Split (s)	15.4	51.0	35.6	24.0	24.0
Total Split (%)	20.5%	68.0%	47.5%	32.0%	32.0%
Yellow Time (s)	3.0	3.2	3.2	3.0	3.0
All-Red Time (s)	1.5	1.5	1.5	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.7	4.7	4.8	4.8
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None
Act Effect Green (s)	28.8	29.9	19.9	8.5	8.5
Actuated g/C Ratio	0.66	0.69	0.46	0.20	0.20
v/c Ratio	0.18	0.28	0.40	0.17	0.29
Control Delay	4.2	4.7	13.7	18.9	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	4.7	13.7	18.9	7.2
LOS	A	A	B	B	A
Approach Delay		4.6	13.7	11.1	
Approach LOS		A	B	B	

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 43.4

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 8.8

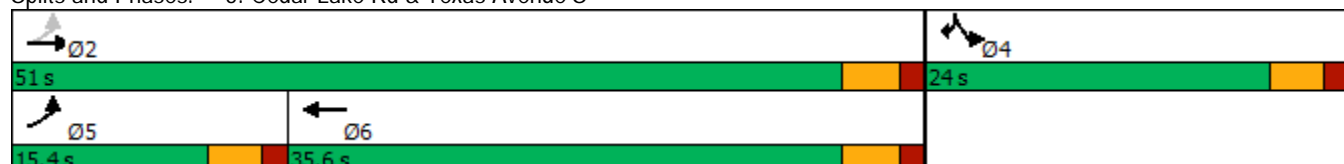
Intersection LOS: A

Intersection Capacity Utilization 39.9%

ICU Level of Service A

Analysis Period (min) 15

















Splits and Phases: 5: Cedar Lake Rd & Texas Avenue S



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-AM  
Existing 2022 Traffic Volumes

								
Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	135	55	40	225	60	640	215	350
Future Volume (vph)	135	55	40	225	60	640	215	350
Turn Type	Split	NA	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	3	4		5	2	1	6
Permitted Phases				4				
Detector Phase	3	3	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	20.0	7.0	15.0
Minimum Split (s)	15.0	15.0	15.0	15.0	15.0	25.5	15.0	23.0
Total Split (s)	15.0	15.0	15.0	15.0	15.0	27.0	18.0	30.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	20.0%	36.0%	24.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.5	3.5	3.5
All-Red Time (s)	3.0	3.0	3.0	3.0	2.5	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effect Green (s)	8.7	8.7	7.9	7.9	9.0	22.3	13.0	28.8
Actuated g/C Ratio	0.12	0.12	0.11	0.11	0.12	0.30	0.17	0.38
v/c Ratio	0.77	0.63	0.40	0.65	0.33	0.51	0.82	0.45
Control Delay	59.3	27.1	37.8	13.0	34.4	23.2	53.5	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.3	27.1	37.8	13.0	34.4	23.2	53.5	15.6
LOS	E	C	D	B	C	C	D	B
Approach Delay		42.4	18.6			24.2		26.5
Approach LOS		D	B			C		C

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 26.8

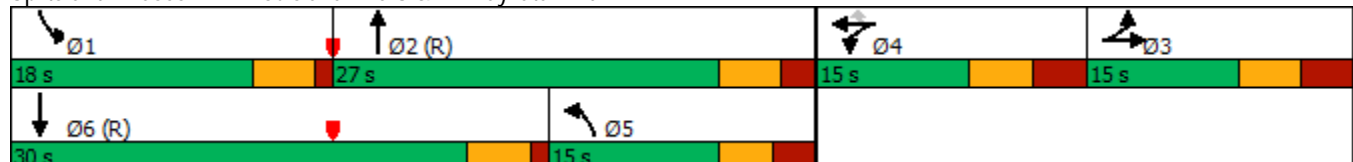
Intersection LOS: C

Intersection Capacity Utilization 68.0%

ICU Level of Service C









Analysis Period (min) 15

Splits and Phases: 7: Louisiana Ave S & W Wayzata Blvd



Timings  
Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-AM  
Existing 2022 Traffic Volumes

				
Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	60	30	515	365
Future Volume (vph)	60	30	515	365
Turn Type	Prot	Perm	NA	NA
Protected Phases	4		2	6
Permitted Phases		2		
Detector Phase	4	2	2	6
Switch Phase				
Minimum Initial (s)	7.0	12.0	12.0	12.0
Minimum Split (s)	15.0	25.1	25.1	25.0
Total Split (s)	16.0	39.0	39.0	39.0
Total Split (%)	29.1%	70.9%	70.9%	70.9%
Yellow Time (s)	3.0	3.2	3.2	3.2
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.7	4.7	4.7
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min
Act Effect Green (s)	7.9	26.6	26.6	26.6
Actuated g/C Ratio	0.20	0.67	0.67	0.67
v/c Ratio	0.29	0.06	0.49	0.36
Control Delay	12.6	4.3	6.8	5.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.6	4.3	6.8	5.5
LOS	B	A	A	A
Approach Delay	12.6		6.7	5.5
Approach LOS	B		A	A

Intersection Summary

Cycle Length: 55  
 Actuated Cycle Length: 39.9  
 Natural Cycle: 45  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.49  
 Intersection Signal Delay: 6.8  
 Intersection LOS: A  
 Intersection Capacity Utilization 40.6%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 9: Louisiana Ave S & W. Franklin Ave



1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	404	510	460	170	1544
Control Delay / Veh (s/v)	11	12	43	37	24
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	11	12	43	37	24
Total Delay (hr)	1	2	6	2	10
Stops / Veh	0.41	0.56	0.56	0.71	0.54
Stops (#)	166	286	258	120	830
Average Speed (mph)	26	12	8	9	14
Total Travel Time (hr)	6	3	9	2	20
Distance Traveled (mi)	147	35	76	22	281
Fuel Consumed (gal)	8	4	8	3	23
Fuel Economy (mpg)	19.0	8.2	9.0	7.8	12.0
CO Emissions (kg)	0.54	0.30	0.59	0.20	1.63
NOx Emissions (kg)	0.11	0.06	0.12	0.04	0.32
VOC Emissions (kg)	0.13	0.07	0.14	0.05	0.38
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: Louisiana Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	490	300	810	495	2095
Control Delay / Veh (s/v)	29	34	24	31	28
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	29	34	24	31	28
Total Delay (hr)	4	3	5	4	16
Stops / Veh	0.55	0.76	0.73	0.83	0.71
Stops (#)	271	227	588	409	1495
Average Speed (mph)	10	11	15	16	14
Total Travel Time (hr)	6	4	10	9	30
Distance Traveled (mi)	62	51	150	150	412
Fuel Consumed (gal)	7	6	13	12	37
Fuel Economy (mpg)	9.0	9.1	11.2	13.0	11.0
CO Emissions (kg)	0.48	0.39	0.93	0.81	2.61
NOx Emissions (kg)	0.09	0.08	0.18	0.16	0.51
VOC Emissions (kg)	0.11	0.09	0.22	0.19	0.60
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	9	0	0	9



### 3: Nevada Avenue & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	395	295	15	45	750
Control Delay / Veh (s/v)	4	3	0	6	4
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	4	3	0	6	4
Total Delay (hr)	0	0	0	0	1
Stops / Veh	0.35	0.31	0.00	0.36	0.33
Stops (#)	138	91	0	16	245
Average Speed (mph)	28	24	20	17	26
Total Travel Time (hr)	6	2	0	1	8
Distance Traveled (mi)	160	37	2	9	209
Fuel Consumed (gal)	8	2	0	1	11
Fuel Economy (mpg)	20.8	16.6	NA	NA	19.7
CO Emissions (kg)	0.54	0.16	0.01	0.04	0.74
NOx Emissions (kg)	0.10	0.03	0.00	0.01	0.14
VOC Emissions (kg)	0.12	0.04	0.00	0.01	0.17
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 4: Cedar Lake Rd & Park Spanish School East

Direction	EB	WB	SB	All
Future Volume (vph)	480	505	40	1025
Control Delay / Veh (s/v)	1	0	14	1
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	1	0	14	1
Total Delay (hr)	0	0	0	0
Stops / Veh	0.16	0.00	1.00	0.11
Stops (#)	76	0	40	116
Average Speed (mph)	27	30	11	29
Total Travel Time (hr)	1	13	0	14
Distance Traveled (mi)	33	377	4	414
Fuel Consumed (gal)	2	16	0	18
Fuel Economy (mpg)	17.8	24.3	NA	23.3
CO Emissions (kg)	0.13	1.08	0.03	1.24
NOx Emissions (kg)	0.03	0.21	0.01	0.24
VOC Emissions (kg)	0.03	0.25	0.01	0.29
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 5: Cedar Lake Rd & Texas Avenue S

Direction	EB	WB	SB	All
Future Volume (vph)	420	290	150	860
Control Delay / Veh (s/v)	5	14	11	9
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	5	14	11	9
Total Delay (hr)	1	1	0	2
Stops / Veh	0.37	0.69	0.45	0.49
Stops (#)	154	200	67	421
Average Speed (mph)	23	23	16	21
Total Travel Time (hr)	2	5	3	10
Distance Traveled (mi)	53	118	44	214
Fuel Consumed (gal)	3	7	3	13
Fuel Economy (mpg)	15.5	17.4	16.4	16.7
CO Emissions (kg)	0.24	0.47	0.19	0.90
NOx Emissions (kg)	0.05	0.09	0.04	0.17
VOC Emissions (kg)	0.06	0.11	0.04	0.21
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 6: Virginia Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	461	365	140	40	1006
Control Delay / Veh (s/v)	0	2	28	18	5
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	2	28	18	5
Total Delay (hr)	0	0	1	0	1
Stops / Veh	0.03	0.31	1.00	1.00	0.31
Stops (#)	16	113	140	40	309
Average Speed (mph)	30	27	12	18	27
Total Travel Time (hr)	11	2	2	1	16
Distance Traveled (mi)	344	46	24	10	425
Fuel Consumed (gal)	14	3	2	1	20
Fuel Economy (mpg)	24.1	17.5	10.0	NA	21.1
CO Emissions (kg)	1.00	0.18	0.17	0.05	1.40
NOx Emissions (kg)	0.19	0.04	0.03	0.01	0.27
VOC Emissions (kg)	0.23	0.04	0.04	0.01	0.33
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

7: Louisiana Ave S & W Wayzata Blvd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	285	290	730	745	2050
Control Delay / Veh (s/v)	42	19	24	27	27
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	42	19	24	27	27
Total Delay (hr)	3	1	5	5	15
Stops / Veh	0.65	0.33	0.79	0.67	0.66
Stops (#)	186	95	580	496	1357
Average Speed (mph)	12	18	7	14	13
Total Travel Time (hr)	7	5	6	10	28
Distance Traveled (mi)	81	90	45	145	361
Fuel Consumed (gal)	7	6	9	13	34
Fuel Economy (mpg)	11.9	16.3	5.2	11.4	10.7
CO Emissions (kg)	0.48	0.39	0.60	0.89	2.36
NOx Emissions (kg)	0.09	0.07	0.12	0.17	0.46
VOC Emissions (kg)	0.11	0.09	0.14	0.21	0.55
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

8: Louisiana Ave S & W 14th St

Direction	EB	WB	NB	SB	All
Future Volume (vph)	25	35	690	470	1220
Control Delay / Veh (s/v)	47	20	0	1	2
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	47	20	0	1	2
Total Delay (hr)	0	0	0	0	1
Stops / Veh	1.00	1.00	0.00	0.19	0.12
Stops (#)	25	35	0	88	148
Average Speed (mph)	9	12	30	27	28
Total Travel Time (hr)	1	1	8	1	11
Distance Traveled (mi)	5	6	251	29	291
Fuel Consumed (gal)	1	1	10	2	13
Fuel Economy (mpg)	NA	NA	24.3	16.3	22.1
CO Emissions (kg)	0.04	0.04	0.72	0.12	0.92
NOx Emissions (kg)	0.01	0.01	0.14	0.02	0.18
VOC Emissions (kg)	0.01	0.01	0.17	0.03	0.21
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

9: Louisiana Ave S & W. Franklin Ave

Direction	EB	NB	SB	All
Future Volume (vph)	95	545	380	1020
Control Delay / Veh (s/v)	13	7	6	7
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	13	7	6	7
Total Delay (hr)	0	1	1	2
Stops / Veh	0.57	0.51	0.44	0.49
Stops (#)	54	277	167	498
Average Speed (mph)	16	25	27	25
Total Travel Time (hr)	1	6	5	13
Distance Traveled (mi)	23	165	138	326
Fuel Consumed (gal)	2	9	7	18
Fuel Economy (mpg)	15.2	18.2	19.6	18.5
CO Emissions (kg)	0.11	0.63	0.49	1.23
NOx Emissions (kg)	0.02	0.12	0.10	0.24
VOC Emissions (kg)	0.02	0.15	0.11	0.29
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

Network Totals

Number of Intersections	9
Control Delay / Veh (s/v)	15
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	15
Total Delay (hr)	49
Stops / Veh	0.47
Stops (#)	5419
Average Speed (mph)	20
Total Travel Time (hr)	150
Distance Traveled (mi)	2933
Fuel Consumed (gal)	187
Fuel Economy (mpg)	15.7
CO Emissions (kg)	13.04
NOx Emissions (kg)	2.54
VOC Emissions (kg)	3.02
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	9
Performance Index	64.1

# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-PM  
Existing 2022 Traffic Volumes

	→	↘	↙	←	↖	↑	↗	↓
Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Configurations	↔	↔	↔	↔		↔	↔	↔
Traffic Volume (vph)	285	135	50	400	375	0	200	0
Future Volume (vph)	285	135	50	400	375	0	200	0
Turn Type	NA	Perm	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	2		1	6		4		4
Permitted Phases		2	6		4		4	
Detector Phase	2	2	1	6	4	4	4	4
Switch Phase			6					
Minimum Initial (s)	15.0	15.0	5.0	15.0	7.0	7.0	7.0	7.0
Minimum Split (s)	34.0	34.0	13.0	31.0	18.0	18.0	18.0	18.0
Total Split (s)	34.0	34.0	13.0	47.0	28.0	28.0	28.0	28.0
Total Split (%)	45.3%	45.3%	17.3%	62.7%	37.3%	37.3%	37.3%	37.3%
Yellow Time (s)	4.0	4.0	3.0	4.0	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0		5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	None	C-Max	None	None	None	None
Act Effect Green (s)	34.3	34.3	42.6	41.6		21.9	21.9	21.9
Actuated g/C Ratio	0.46	0.46	0.57	0.55		0.29	0.29	0.29
v/c Ratio	0.35	0.18	0.09	0.40		0.93	0.34	0.01
Control Delay	16.5	3.8	7.9	11.2		58.7	5.0	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	16.5	3.8	7.9	11.2		58.7	5.0	0.0
LOS	B	A	A	B		E	A	A
Approach Delay	12.4			10.8		40.0		
Approach LOS	B			B		D		

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 22.8

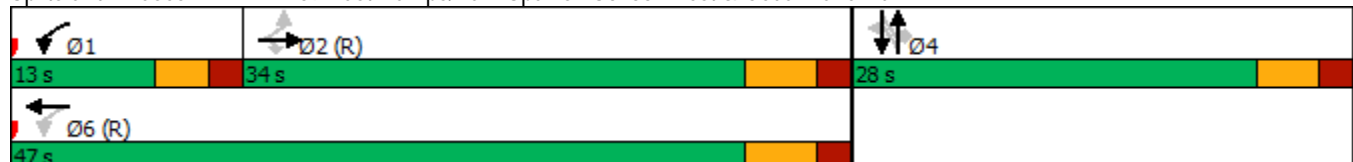
Intersection LOS: C

Intersection Capacity Utilization 78.1%

ICU Level of Service D

Analysis Period (min) 15

















Splits and Phases: 1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

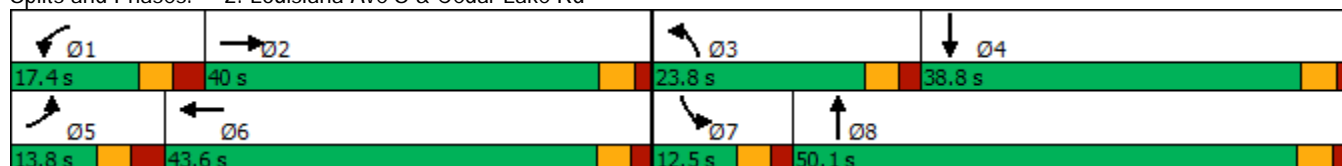
Existing-PM  
Existing 2022 Traffic Volumes

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	65	220	160	305	205	495	60	505
Future Volume (vph)	65	220	160	305	205	495	60	505
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	7.0	12.0	7.0	12.0	7.0	12.0	7.0	12.0
Minimum Split (s)	13.8	39.9	13.1	43.0	12.4	50.1	12.5	20.9
Total Split (s)	13.8	40.0	17.4	43.6	23.8	50.1	12.5	38.8
Total Split (%)	11.5%	33.3%	14.5%	36.3%	19.8%	41.8%	10.4%	32.3%
Yellow Time (s)	3.0	3.2	3.0	3.0	3.0	3.2	3.0	3.2
All-Red Time (s)	3.1	1.7	2.9	2.0	2.0	1.9	2.1	1.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	4.9	5.9	5.0	5.0	5.1	5.1	4.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	7.6	13.6	11.7	20.5	15.3	31.1	7.4	20.7
Actuated g/C Ratio	0.09	0.17	0.14	0.25	0.19	0.38	0.09	0.25
v/c Ratio	0.41	0.57	0.65	0.44	0.64	0.57	0.38	0.69
Control Delay	46.9	24.0	50.0	29.2	42.0	20.5	46.6	31.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	24.0	50.0	29.2	42.0	20.5	46.6	31.8
LOS	D	C	D	C	D	C	D	C
Approach Delay		27.4		35.4		25.2		33.1
Approach LOS		C		D		C		C

### Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 82.2  
 Natural Cycle: 120  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 29.8  
 Intersection LOS: C  
 Intersection Capacity Utilization 74.0%  
 ICU Level of Service D  
 Analysis Period (min) 15















Splits and Phases: 2: Louisiana Ave S & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-PM  
Existing 2022 Traffic Volumes

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	20	360	15	485	55	5	0	35	0
Future Volume (vph)	20	360	15	485	55	5	0	35	0
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2		6			8		4
Permitted Phases	2		6		6	8		4	
Detector Phase	2	2	6	6	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.1	25.1	25.0	25.0	25.0	11.8	11.8	11.8	11.8
Total Split (s)	28.0	28.0	28.0	28.0	28.0	12.0	12.0	12.0	12.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	70.0%	30.0%	30.0%	30.0%	30.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)		4.9		4.9	4.9		4.8		4.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		27.7		27.7	27.7		7.1		7.1
Actuated g/C Ratio		0.82		0.82	0.82		0.21		0.21
v/c Ratio		0.27		0.34	0.04		0.04		0.15
Control Delay		3.6		4.0	1.7		1.4		7.0
Queue Delay		0.0		0.0	0.0		0.0		0.0
Total Delay		3.6		4.0	1.7		1.4		7.0
LOS		A		A	A		A		A
Approach Delay		3.6		3.8			1.4		7.0
Approach LOS		A		A			A		A
Intersection Summary									
Cycle Length: 40									
Actuated Cycle Length: 33.9									
Natural Cycle: 40									
Control Type: Actuated-Uncoordinated									
Maximum v/c Ratio: 0.34									
Intersection Signal Delay: 3.9					Intersection LOS: A				
Intersection Capacity Utilization 49.7%					ICU Level of Service A				
Analysis Period (min) 15									

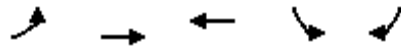
Splits and Phases: 3: Nevada Avenue & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-PM  
Existing 2022 Traffic Volumes



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	115	335	395	60	135
Future Volume (vph)	115	335	395	60	135
Turn Type	pm+pt	NA	NA	Prot	Prot
Protected Phases	5	2	6	4	4
Permitted Phases	2				
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	8.0	8.0
Minimum Split (s)	15.3	22.5	33.0	23.7	23.7
Total Split (s)	15.4	51.2	35.8	23.8	23.8
Total Split (%)	20.5%	68.3%	47.7%	31.7%	31.7%
Yellow Time (s)	3.0	3.2	3.2	3.0	3.0
All-Red Time (s)	1.5	1.5	1.5	1.6	1.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.7	4.7	4.6	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	Max	Min	Min	None	None
Act Effect Green (s)	36.9	38.2	20.4	9.0	9.0
Actuated g/C Ratio	0.72	0.74	0.40	0.17	0.17
v/c Ratio	0.18	0.25	0.67	0.20	0.35
Control Delay	3.8	3.9	18.1	23.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.8	3.9	18.1	23.9	8.3
LOS	A	A	B	C	A
Approach Delay		3.9	18.1	13.1	
Approach LOS		A	B	B	

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 51.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 50.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Cedar Lake Rd & Texas Avenue S





















# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-PM  
Existing 2022 Traffic Volumes

								
Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	155	75	60	345	75	525	290	560
Future Volume (vph)	155	75	60	345	75	525	290	560
Turn Type	Split	NA	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	3	4		5	2	1	6
Permitted Phases				4				
Detector Phase	3	3	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	7.0	7.0	7.0	15.0	7.0	23.0
Minimum Split (s)	16.5	16.5	15.0	15.0	15.0	20.5	15.0	28.5
Total Split (s)	16.5	16.5	15.0	15.0	15.0	21.5	22.0	28.5
Total Split (%)	22.0%	22.0%	20.0%	20.0%	20.0%	28.7%	29.3%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	3.0	3.0	3.0	3.0	2.5	2.0	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	5.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effect Green (s)	10.0	10.0	8.2	8.2	8.6	17.4	15.4	26.3
Actuated g/C Ratio	0.13	0.13	0.11	0.11	0.11	0.23	0.21	0.35
v/c Ratio	0.67	0.60	0.51	0.73	0.39	0.51	0.81	0.58
Control Delay	46.7	28.3	41.1	14.0	36.7	26.5	47.3	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	28.3	41.1	14.0	36.7	26.5	47.3	22.1
LOS	D	C	D	B	D	C	D	C
Approach Delay		37.1	20.1			27.7		29.6
Approach LOS		D	C			C		C

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 28.3







Intersection LOS: C

Intersection Capacity Utilization 66.8%

ICU Level of Service C

Analysis Period (min) 15









Splits and Phases: 7: Louisiana Ave S & W Wayzata Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
22 s	21.5 s	16.5 s	15 s
 Ø6 (R)	 Ø5		
28.5 s	15 s		

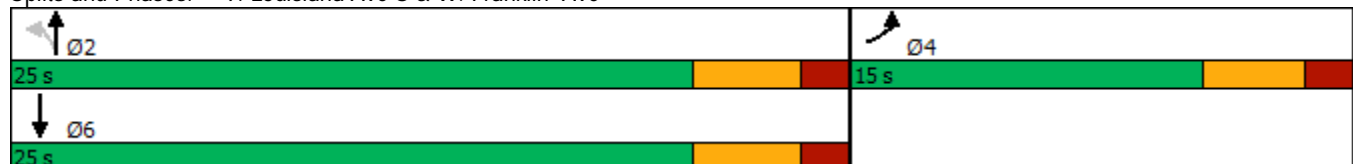
# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Existing-PM  
Existing 2022 Traffic Volumes

				
Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	55	60	540	530
Future Volume (vph)	55	60	540	530
Turn Type	Prot	Perm	NA	NA
Protected Phases	4		2	6
Permitted Phases		2		
Detector Phase	4	2	2	6
Switch Phase				
Minimum Initial (s)	7.0	12.0	12.0	12.0
Minimum Split (s)	15.0	20.1	20.1	25.0
Total Split (s)	15.0	25.0	25.0	25.0
Total Split (%)	37.5%	62.5%	62.5%	62.5%
Yellow Time (s)	3.0	3.2	3.2	3.2
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.7	4.7	4.7
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min
Act Effct Green (s)	7.5	26.1	26.1	26.1
Actuated g/C Ratio	0.21	0.73	0.73	0.73
v/c Ratio	0.22	0.11	0.41	0.43
Control Delay	10.5	4.8	5.7	5.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.5	4.8	5.7	5.8
LOS	B	A	A	A
Approach Delay	10.5		5.6	5.8
Approach LOS	B		A	A
Intersection Summary				
Cycle Length: 40				
Actuated Cycle Length: 35.6				
Natural Cycle: 40				
Control Type: Actuated-Uncoordinated				
Maximum v/c Ratio: 0.43				
Intersection Signal Delay: 6.0			Intersection LOS: A	
Intersection Capacity Utilization 57.7%			ICU Level of Service B	
Analysis Period (min) 15				

Splits and Phases: 9: Louisiana Ave S & W. Franklin Ave



1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	420	450	575	5	1450
Control Delay / Veh (s/v)	12	11	40	0	23
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	12	11	40	0	23
Total Delay (hr)	1	1	6	0	9
Stops / Veh	0.49	0.53	0.60	0.00	0.54
Stops (#)	204	240	343	0	787
Average Speed (mph)	23	11	9	20	14
Total Travel Time (hr)	7	3	11	0	21
Distance Traveled (mi)	153	31	95	1	280
Fuel Consumed (gal)	8	3	10	0	22
Fuel Economy (mpg)	18.0	10.0	9.3	NA	12.8
CO Emissions (kg)	0.59	0.22	0.72	0.00	1.53
NOx Emissions (kg)	0.12	0.04	0.14	0.00	0.30
VOC Emissions (kg)	0.14	0.05	0.17	0.00	0.35
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: Louisiana Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	434	534	935	655	2558
Control Delay / Veh (s/v)	27	35	25	33	30
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	27	35	25	33	30
Total Delay (hr)	3	5	7	6	21
Stops / Veh	0.60	0.79	0.72	0.84	0.74
Stops (#)	260	422	670	548	1900
Average Speed (mph)	11	11	14	16	13
Total Travel Time (hr)	5	8	12	13	38
Distance Traveled (mi)	55	90	173	198	516
Fuel Consumed (gal)	6	10	16	16	47
Fuel Economy (mpg)	9.0	9.1	11.1	12.7	10.9
CO Emissions (kg)	0.43	0.69	1.09	1.09	3.30
NOx Emissions (kg)	0.08	0.13	0.21	0.21	0.64
VOC Emissions (kg)	0.10	0.16	0.25	0.25	0.77
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 3: Nevada Avenue & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	384	555	15	61	1015
Control Delay / Veh (s/v)	4	4	1	7	4
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	4	4	1	7	4
Total Delay (hr)	0	1	0	0	1
Stops / Veh	0.31	0.32	0.13	0.41	0.32
Stops (#)	120	179	2	25	326
Average Speed (mph)	28	24	19	23	26
Total Travel Time (hr)	6	3	0	1	9
Distance Traveled (mi)	156	70	2	13	241
Fuel Consumed (gal)	7	4	0	1	13
Fuel Economy (mpg)	21.2	16.3	NA	NA	19.2
CO Emissions (kg)	0.51	0.30	0.01	0.05	0.88
NOx Emissions (kg)	0.10	0.06	0.00	0.01	0.17
VOC Emissions (kg)	0.12	0.07	0.00	0.01	0.20
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 4: Cedar Lake Rd & Park Spanish School East

Direction	EB	WB	SB	All
Future Volume (vph)	485	456	75	1016
Control Delay / Veh (s/v)	1	0	13	1
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	1	0	13	1
Total Delay (hr)	0	0	0	0
Stops / Veh	0.21	0.00	1.00	0.17
Stops (#)	100	0	75	175
Average Speed (mph)	27	30	14	29
Total Travel Time (hr)	1	11	1	13
Distance Traveled (mi)	33	340	8	382
Fuel Consumed (gal)	2	14	1	17
Fuel Economy (mpg)	16.5	24.3	NA	22.5
CO Emissions (kg)	0.14	0.98	0.07	1.19
NOx Emissions (kg)	0.03	0.19	0.01	0.23
VOC Emissions (kg)	0.03	0.23	0.02	0.28
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 5: Cedar Lake Rd & Texas Avenue S

Direction	EB	WB	SB	All
Future Volume (vph)	450	480	195	1125
Control Delay / Veh (s/v)	4	18	13	12
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	4	18	13	12
Total Delay (hr)	0	2	1	4
Stops / Veh	0.30	0.72	0.40	0.50
Stops (#)	136	345	78	559
Average Speed (mph)	24	22	16	21
Total Travel Time (hr)	2	9	4	15
Distance Traveled (mi)	57	195	57	308
Fuel Consumed (gal)	3	12	4	19
Fuel Economy (mpg)	16.5	16.7	16.1	16.5
CO Emissions (kg)	0.24	0.82	0.25	1.30
NOx Emissions (kg)	0.05	0.16	0.05	0.25
VOC Emissions (kg)	0.06	0.19	0.06	0.30
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 6: Virginia Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	426	520	139	15	1100
Control Delay / Veh (s/v)	0	1	22	22	4
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	1	22	22	4
Total Delay (hr)	0	0	1	0	1
Stops / Veh	0.04	0.29	1.00	1.00	0.29
Stops (#)	17	152	139	15	323
Average Speed (mph)	30	31	13	16	28
Total Travel Time (hr)	11	2	2	0	15
Distance Traveled (mi)	318	66	24	4	411
Fuel Consumed (gal)	13	4	2	0	20
Fuel Economy (mpg)	24.1	17.3	10.7	NA	21.0
CO Emissions (kg)	0.92	0.27	0.16	0.02	1.37
NOx Emissions (kg)	0.18	0.05	0.03	0.00	0.27
VOC Emissions (kg)	0.21	0.06	0.04	0.00	0.32
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 7: Louisiana Ave S & W Wayzata Blvd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	326	445	655	985	2411
Control Delay / Veh (s/v)	37	20	28	30	28
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	37	20	28	30	28
Total Delay (hr)	3	2	5	8	19
Stops / Veh	0.73	0.30	0.83	0.80	0.70
Stops (#)	237	135	542	784	1698
Average Speed (mph)	13	17	6	13	13
Total Travel Time (hr)	7	8	6	14	36
Distance Traveled (mi)	93	138	40	192	463
Fuel Consumed (gal)	8	9	8	18	43
Fuel Economy (mpg)	12.3	16.2	4.8	10.6	10.9
CO Emissions (kg)	0.53	0.60	0.58	1.27	2.98
NOx Emissions (kg)	0.10	0.12	0.11	0.25	0.58
VOC Emissions (kg)	0.12	0.14	0.13	0.29	0.69
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 8: Louisiana Ave S & W 14th St

Direction	EB	WB	NB	SB	All
Future Volume (vph)	5	30	635	695	1365
Control Delay / Veh (s/v)	50	19	0	1	1
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	50	19	0	1	1
Total Delay (hr)	0	0	0	0	0
Stops / Veh	1.00	1.00	0.03	0.22	0.15
Stops (#)	5	30	19	153	207
Average Speed (mph)	9	16	30	26	29
Total Travel Time (hr)	0	0	8	2	10
Distance Traveled (mi)	1	6	231	42	280
Fuel Consumed (gal)	0	1	10	3	13
Fuel Economy (mpg)	NA	NA	24.0	15.4	21.5
CO Emissions (kg)	0.01	0.04	0.67	0.19	0.91
NOx Emissions (kg)	0.00	0.01	0.13	0.04	0.18
VOC Emissions (kg)	0.00	0.01	0.16	0.04	0.21
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

9: Louisiana Ave S & W. Franklin Ave

Direction	EB	NB	SB	All
Future Volume (vph)	85	600	570	1255
Control Delay / Veh (s/v)	11	6	6	6
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	11	6	6	6
Total Delay (hr)	0	1	1	2
Stops / Veh	0.59	0.46	0.46	0.47
Stops (#)	50	278	264	592
Average Speed (mph)	16	26	27	25
Total Travel Time (hr)	1	7	8	16
Distance Traveled (mi)	21	181	207	409
Fuel Consumed (gal)	1	10	11	22
Fuel Economy (mpg)	15.6	18.7	19.4	18.9
CO Emissions (kg)	0.09	0.68	0.75	1.51
NOx Emissions (kg)	0.02	0.13	0.15	0.29
VOC Emissions (kg)	0.02	0.16	0.17	0.35
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0


















Network Totals

Number of Intersections	9
Control Delay / Veh (s/v)	16
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	16
Total Delay (hr)	58
Stops / Veh	0.49
Stops (#)	6567
Average Speed (mph)	19
Total Travel Time (hr)	173
Distance Traveled (mi)	3290
Fuel Consumed (gal)	214
Fuel Economy (mpg)	15.4
CO Emissions (kg)	14.97
NOx Emissions (kg)	2.91
VOC Emissions (kg)	3.47
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	76.4

# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-AM  
Existing 2022 Traffic Volumes - Build

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	15	210	180	55	360	260	25	175	95	20
Future Volume (vph)	15	210	180	55	360	260	25	175	95	20
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	NA	Perm	Perm	NA
Protected Phases		2		1	6		4			4
Permitted Phases	2		2	6		4		4	4	
Detector Phase	2	2	2	1	6	4	4	4	4	4
Switch Phase				6						
Minimum Initial (s)	1.0	1.0	1.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	34.0	34.0	34.0	13.0	31.0	18.0	18.0	18.0	18.0	18.0
Total Split (s)	34.0	34.0	34.0	13.0	47.0	28.0	28.0	28.0	28.0	28.0
Total Split (%)	45.3%	45.3%	45.3%	17.3%	62.7%	37.3%	37.3%	37.3%	37.3%	37.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		6.0	6.0	5.0	6.0		5.5	5.5		5.5
Lead/Lag	Lag	Lag	Lag	Lead						
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effect Green (s)		33.8	33.8	42.2	41.2		22.3	22.3		22.3
Actuated g/C Ratio		0.45	0.45	0.56	0.55		0.30	0.30		0.30
v/c Ratio		0.32	0.25	0.11	0.52		0.95	0.33		0.72
Control Delay		16.5	3.5	8.0	12.4		67.1	5.0		36.6
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay		16.5	3.5	8.0	12.4		67.1	5.0		36.6
LOS		B	A	A	B		E	A		D
Approach Delay		10.7			12.0		43.5			36.6
Approach LOS		B			B		D			D

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 23.7

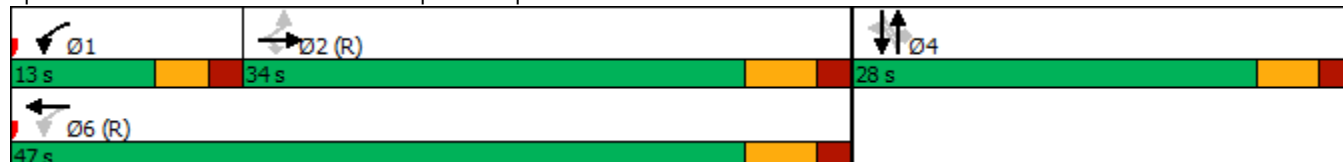
Intersection LOS: C

Intersection Capacity Utilization 73.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd



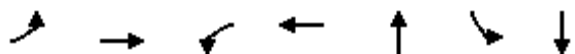


Intersection									
Intersection Delay, s/veh	10.7								
Intersection LOS	B								
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	563		344		931		569		
Demand Flow Rate, veh/h	585		365		968		597		
Vehicles Circulating, veh/h	641		908		418		521		
Vehicles Exiting, veh/h	477		478		808		752		
Ped Vol Crossing Leg, #/h	0		0		1		3		
Ped Cap Adj	1.000		1.000		0.999		0.998		
Approach Delay, s/veh	10.6		15.8		10.4		8.3		
Approach LOS	B		C		B		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	R	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.643	0.357	0.885	0.115	0.470	0.530	0.471	0.529	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	376	209	323	42	455	513	281	316	
Cap Entry Lane, veh/h	749	823	586	656	919	995	836	912	
Entry HV Adj Factor	0.962	0.962	0.942	0.952	0.961	0.962	0.951	0.954	
Flow Entry, veh/h	362	201	304	40	437	493	267	301	
Cap Entry, veh/h	720	792	552	625	883	956	794	868	
V/C Ratio	0.502	0.254	0.552	0.064	0.495	0.516	0.337	0.347	
Control Delay, s/veh	12.5	7.4	17.0	6.5	10.5	10.3	8.5	8.1	
LOS	B	A	C	A	B	B	A	A	
95th %tile Queue, veh	3	1	3	0	3	3	1	2	

# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-AM  
Existing 2022 Traffic Volumes - Build



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations		↕		↕	↕		↕
Traffic Volume (vph)	10	385	5	275	0	20	0
Future Volume (vph)	10	385	5	275	0	20	0
Turn Type	Perm	NA	Perm	NA	NA	Perm	NA
Protected Phases		2		6	8		4
Permitted Phases	2		6			4	
Detector Phase	2	2	6	6	8	4	4
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	7.0	7.0	7.0
Minimum Split (s)	25.1	25.1	25.0	25.0	11.8	11.8	11.8
Total Split (s)	28.0	28.0	28.0	28.0	12.0	12.0	12.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	30.0%	30.0%	30.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.0	3.0	3.0
All-Red Time (s)	1.7	1.7	1.7	1.7	1.8	1.8	1.8
Lost Time Adjust (s)		0.0		0.0	0.0		0.0
Total Lost Time (s)		4.9		4.9	4.8		4.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	None	None	None
Act Effect Green (s)		26.5		26.5	7.1		7.1
Actuated g/C Ratio		0.80		0.80	0.22		0.22
v/c Ratio		0.31		0.23	0.03		0.14
Control Delay		4.1		3.6	0.1		5.8
Queue Delay		0.0		0.0	0.0		0.0
Total Delay		4.1		3.6	0.1		5.8
LOS		A		A	A		A
Approach Delay		4.1		3.6	0.1		5.8
Approach LOS		A		A	A		A

### Intersection Summary

Cycle Length: 40

Actuated Cycle Length: 33

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.31

Intersection Signal Delay: 3.9

Intersection LOS: A

Intersection Capacity Utilization 43.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Nevada Avenue & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-AM  
Existing 2022 Traffic Volumes - Build



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	110	310	260	50	100
Future Volume (vph)	110	310	260	50	100
Turn Type	pm+pt	NA	NA	Prot	Prot
Protected Phases	5	2	6	4	4
Permitted Phases	2				
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	8.0	8.0
Minimum Split (s)	15.3	23.5	33.0	23.7	23.7
Total Split (s)	15.4	51.0	35.6	24.0	24.0
Total Split (%)	20.5%	68.0%	47.5%	32.0%	32.0%
Yellow Time (s)	3.0	3.2	3.2	3.0	3.0
All-Red Time (s)	1.5	1.5	1.5	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.7	4.7	4.8	4.8
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None
Act Effect Green (s)	28.8	29.9	19.9	8.5	8.5
Actuated g/C Ratio	0.66	0.69	0.46	0.20	0.20
v/c Ratio	0.18	0.28	0.40	0.17	0.29
Control Delay	4.2	4.7	13.7	18.9	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	4.7	13.7	18.9	7.2
LOS	A	A	B	B	A
Approach Delay		4.6	13.7	11.1	
Approach LOS		A	B	B	

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 43.4

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 8.8

Intersection LOS: A

Intersection Capacity Utilization 39.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Cedar Lake Rd & Texas Avenue S



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-AM  
Existing 2022 Traffic Volumes - Build



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	135	55	40	225	60	640	215	350
Future Volume (vph)	135	55	40	225	60	640	215	350
Turn Type	Split	NA	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	3	4		5	2	1	6
Permitted Phases				4				
Detector Phase	3	3	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	20.0	7.0	15.0
Minimum Split (s)	15.0	15.0	15.0	15.0	15.0	25.5	15.0	23.0
Total Split (s)	15.0	15.0	15.0	15.0	15.0	27.0	18.0	30.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	20.0%	36.0%	24.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.5	3.5	3.5
All-Red Time (s)	3.0	3.0	3.0	3.0	2.5	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effect Green (s)	8.7	8.7	7.9	7.9	9.0	22.3	13.0	28.8
Actuated g/C Ratio	0.12	0.12	0.11	0.11	0.12	0.30	0.17	0.38
v/c Ratio	0.77	0.63	0.40	0.65	0.33	0.51	0.82	0.45
Control Delay	59.3	27.1	37.8	13.0	34.4	23.2	53.5	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.3	27.1	37.8	13.0	34.4	23.2	53.5	15.6
LOS	E	C	D	B	C	C	D	B
Approach Delay		42.4	18.6			24.2		26.5
Approach LOS		D	B			C		C

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 26.8

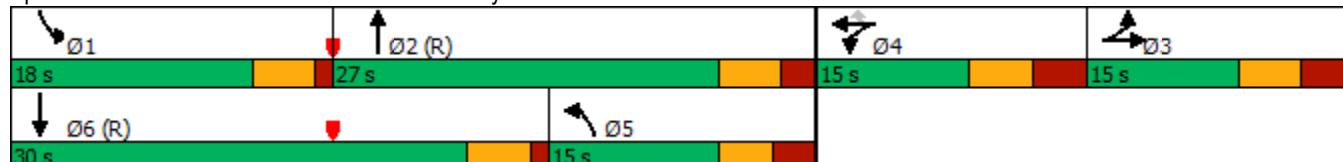
Intersection LOS: C

Intersection Capacity Utilization 68.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Louisiana Ave S & W Wayzata Blvd



1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	404	510	460	170	1544
Control Delay / Veh (s/v)	11	12	43	37	24
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	11	12	43	37	24
Total Delay (hr)	1	2	6	2	10
Stops / Veh	0.41	0.56	0.56	0.71	0.54
Stops (#)	166	286	258	120	830
Average Speed (mph)	26	12	8	9	14
Total Travel Time (hr)	6	3	9	2	20
Distance Traveled (mi)	147	35	76	22	281
Fuel Consumed (gal)	8	4	8	3	23
Fuel Economy (mpg)	19.0	8.2	9.0	7.8	12.0
CO Emissions (kg)	0.54	0.30	0.59	0.20	1.63
NOx Emissions (kg)	0.11	0.06	0.12	0.04	0.32
VOC Emissions (kg)	0.13	0.07	0.14	0.05	0.38
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: Louisiana Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	490	299	810	495	2094
Control Delay / Veh (s/v)	0	0	0	0	0
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	0	0	0
Total Delay (hr)	0	0	0	0	0
Stops / Veh	1.00	1.00	1.00	1.00	1.00
Stops (#)	490	299	810	495	2094
Average Speed (mph)	30	32	30	30	30
Total Travel Time (hr)	2	2	5	5	14
Distance Traveled (mi)	62	51	150	150	412
Fuel Consumed (gal)	5	4	11	9	29
Fuel Economy (mpg)	11.8	13.0	14.1	16.8	14.4
CO Emissions (kg)	0.37	0.27	0.74	0.62	2.01
NOx Emissions (kg)	0.07	0.05	0.14	0.12	0.39
VOC Emissions (kg)	0.09	0.06	0.17	0.14	0.46
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 3: Nevada Avenue & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	395	295	15	45	750
Control Delay / Veh (s/v)	4	4	0	6	4
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	4	4	0	6	4
Total Delay (hr)	0	0	0	0	1
Stops / Veh	0.35	0.32	0.00	0.36	0.33
Stops (#)	138	94	0	16	248
Average Speed (mph)	28	24	20	17	26
Total Travel Time (hr)	6	2	0	1	8
Distance Traveled (mi)	160	37	2	9	209
Fuel Consumed (gal)	8	2	0	1	11
Fuel Economy (mpg)	20.8	16.4	NA	NA	19.7
CO Emissions (kg)	0.54	0.16	0.01	0.04	0.74
NOx Emissions (kg)	0.10	0.03	0.00	0.01	0.14
VOC Emissions (kg)	0.12	0.04	0.00	0.01	0.17
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 4: Cedar Lake Rd & Park Spanish School East

Direction	EB	WB	SB	All
Future Volume (vph)	480	505	40	1025
Control Delay / Veh (s/v)	1	0	14	1
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	1	0	14	1
Total Delay (hr)	0	0	0	0
Stops / Veh	0.16	0.00	1.00	0.11
Stops (#)	76	0	40	116
Average Speed (mph)	27	30	11	29
Total Travel Time (hr)	1	13	0	14
Distance Traveled (mi)	33	377	4	414
Fuel Consumed (gal)	2	16	0	18
Fuel Economy (mpg)	17.8	24.3	NA	23.3
CO Emissions (kg)	0.13	1.08	0.03	1.24
NOx Emissions (kg)	0.03	0.21	0.01	0.24
VOC Emissions (kg)	0.03	0.25	0.01	0.29
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

### 5: Cedar Lake Rd & Texas Avenue S

Direction	EB	WB	SB	All
Future Volume (vph)	420	290	150	860
Control Delay / Veh (s/v)	5	14	11	9
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	5	14	11	9
Total Delay (hr)	1	1	0	2
Stops / Veh	0.37	0.69	0.45	0.49
Stops (#)	154	200	67	421
Average Speed (mph)	23	23	16	21
Total Travel Time (hr)	2	5	3	10
Distance Traveled (mi)	53	118	44	214
Fuel Consumed (gal)	3	7	3	13
Fuel Economy (mpg)	15.5	17.4	16.4	16.7
CO Emissions (kg)	0.24	0.47	0.19	0.90
NOx Emissions (kg)	0.05	0.09	0.04	0.17
VOC Emissions (kg)	0.06	0.11	0.04	0.21
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

### 6: Virginia Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	460	365	140	40	1005
Control Delay / Veh (s/v)	0	2	28	19	5
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	2	28	19	5
Total Delay (hr)	0	0	1	0	1
Stops / Veh	0.05	0.31	1.00	1.00	0.32
Stops (#)	25	113	140	40	318
Average Speed (mph)	30	27	12	17	27
Total Travel Time (hr)	11	2	2	1	16
Distance Traveled (mi)	343	46	24	10	424
Fuel Consumed (gal)	14	3	2	1	20
Fuel Economy (mpg)	24.0	17.5	10.0	NA	21.1
CO Emissions (kg)	1.00	0.18	0.17	0.05	1.41
NOx Emissions (kg)	0.19	0.04	0.03	0.01	0.27
VOC Emissions (kg)	0.23	0.04	0.04	0.01	0.33
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

7: Louisiana Ave S & W Wayzata Blvd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	285	290	730	745	2050
Control Delay / Veh (s/v)	42	19	24	27	27
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	42	19	24	27	27
Total Delay (hr)	3	1	5	5	15
Stops / Veh	0.65	0.33	0.79	0.67	0.66
Stops (#)	186	95	580	496	1357
Average Speed (mph)	12	18	7	14	13
Total Travel Time (hr)	7	5	6	10	28
Distance Traveled (mi)	81	90	45	145	361
Fuel Consumed (gal)	7	6	9	13	34
Fuel Economy (mpg)	11.9	16.3	5.2	11.4	10.7
CO Emissions (kg)	0.48	0.39	0.60	0.89	2.36
NOx Emissions (kg)	0.09	0.07	0.12	0.17	0.46
VOC Emissions (kg)	0.11	0.09	0.14	0.21	0.55
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

8: Louisiana Ave S & W 14th St

Direction	EB	WB	NB	SB	All
Future Volume (vph)	25	35	690	470	1220
Control Delay / Veh (s/v)	46	20	0	1	2
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	46	20	0	1	2
Total Delay (hr)	0	0	0	0	1
Stops / Veh	1.00	1.00	0.00	0.10	0.09
Stops (#)	25	35	0	48	108
Average Speed (mph)	9	12	30	28	28
Total Travel Time (hr)	1	1	8	1	10
Distance Traveled (mi)	5	6	251	29	291
Fuel Consumed (gal)	1	1	10	1	13
Fuel Economy (mpg)	NA	NA	24.3	19.2	22.5
CO Emissions (kg)	0.04	0.04	0.72	0.10	0.90
NOx Emissions (kg)	0.01	0.01	0.14	0.02	0.18
VOC Emissions (kg)	0.01	0.01	0.17	0.02	0.21
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0



9: Louisiana Ave S & W. Franklin Ave

Direction	EB	NB	SB	All
Future Volume (vph)	95	545	380	1020
Control Delay / Veh (s/v)	21	0	0	2
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	21	0	0	2
Total Delay (hr)	1	0	0	1
Stops / Veh	1.00	0.09	0.00	0.14
Stops (#)	95	50	0	145
Average Speed (mph)	13	30	30	27
Total Travel Time (hr)	2	6	5	12
Distance Traveled (mi)	23	165	138	326
Fuel Consumed (gal)	2	7	6	15
Fuel Economy (mpg)	12.9	23.2	24.3	22.4
CO Emissions (kg)	0.12	0.50	0.40	1.02
NOx Emissions (kg)	0.02	0.10	0.08	0.20
VOC Emissions (kg)	0.03	0.12	0.09	0.24
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

Network Totals

Number of Intersections	9
Control Delay / Veh (s/v)	10
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	10
Total Delay (hr)	31
Stops / Veh	0.49
Stops (#)	5637
Average Speed (mph)	22
Total Travel Time (hr)	133
Distance Traveled (mi)	2932
Fuel Consumed (gal)	175
Fuel Economy (mpg)	16.8
CO Emissions (kg)	12.21
NOx Emissions (kg)	2.38
VOC Emissions (kg)	2.83
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	47.0

# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-PM  
Existing 2022 Traffic Volumes - Build

	→	↘	↙	←	↖	↑	↗	↓
Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Configurations	↔	↔	↔	↔		↔	↔	↔
Traffic Volume (vph)	285	135	50	400	375	0	200	0
Future Volume (vph)	285	135	50	400	375	0	200	0
Turn Type	NA	Perm	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	2		1	6		4		4
Permitted Phases		2	6		4		4	
Detector Phase	2	2	1	6	4	4	4	4
Switch Phase			6					
Minimum Initial (s)	15.0	15.0	5.0	15.0	7.0	7.0	7.0	7.0
Minimum Split (s)	34.0	34.0	13.0	31.0	18.0	18.0	18.0	18.0
Total Split (s)	34.0	34.0	13.0	47.0	28.0	28.0	28.0	28.0
Total Split (%)	45.3%	45.3%	17.3%	62.7%	37.3%	37.3%	37.3%	37.3%
Yellow Time (s)	4.0	4.0	3.0	4.0	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0		5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	None	C-Max	None	None	None	None
Act Effect Green (s)	34.3	34.3	42.6	41.6		21.9	21.9	21.9
Actuated g/C Ratio	0.46	0.46	0.57	0.55		0.29	0.29	0.29
v/c Ratio	0.35	0.18	0.09	0.40		0.93	0.34	0.01
Control Delay	16.5	3.8	7.9	11.2		58.7	5.0	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	16.5	3.8	7.9	11.2		58.7	5.0	0.0
LOS	B	A	A	B		E	A	A
Approach Delay	12.4			10.8		40.0		
Approach LOS	B			B		D		

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 22.8

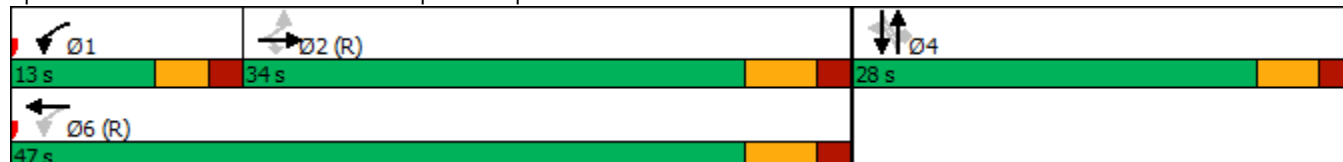
Intersection LOS: C

Intersection Capacity Utilization 78.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd

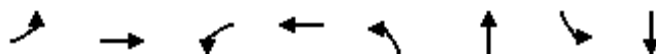


Intersection									
Intersection Delay, s/veh	12.8								
Intersection LOS	B								
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	443		545		954		668		
Demand Flow Rate, veh/h	457		555		982		681		
Vehicles Circulating, veh/h	753		803		361		698		
Vehicles Exiting, veh/h	626		540		849		660		
Ped Vol Crossing Leg, #/h	10		4		9		3		
Ped Cap Adj	0.997		0.999		0.993		0.999		
Approach Delay, s/veh	10.4		22.1		9.7		11.2		
Approach LOS	B		C		A		B		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	R	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.654	0.346	0.870	0.130	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	299	158	483	72	462	520	320	361	
Cap Entry Lane, veh/h	675	749	645	718	968	1045	710	785	
Entry HV Adj Factor	0.971	0.968	0.981	0.986	0.970	0.972	0.981	0.980	
Flow Entry, veh/h	290	153	474	71	448	506	314	354	
Cap Entry, veh/h	654	723	632	707	933	1008	696	768	
V/C Ratio	0.444	0.212	0.750	0.100	0.481	0.501	0.451	0.461	
Control Delay, s/veh	12.1	7.4	24.5	6.2	9.8	9.6	11.6	10.9	
LOS	B	A	C	A	A	A	B	B	
95th %tile Queue, veh	2	1	7	0	3	3	2	2	

# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-PM  
Existing 2022 Traffic Volumes - Build



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔		↔		↔		↔
Traffic Volume (vph)	20	360	15	485	5	0	35	0
Future Volume (vph)	20	360	15	485	5	0	35	0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	12.0	12.0	12.0	12.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.1	25.1	25.0	25.0	11.8	11.8	11.8	11.8
Total Split (s)	28.0	28.0	28.0	28.0	12.0	12.0	12.0	12.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	30.0%	30.0%	30.0%	30.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.9		4.9		4.8		4.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effect Green (s)		28.1		28.1		7.1		7.1
Actuated g/C Ratio		0.82		0.82		0.21		0.21
v/c Ratio		0.27		0.38		0.04		0.15
Control Delay		3.5		4.1		1.4		7.2
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		3.5		4.1		1.4		7.2
LOS		A		A		A		A
Approach Delay		3.5		4.1		1.4		7.2
Approach LOS		A		A		A		A

### Intersection Summary

Cycle Length: 40

Actuated Cycle Length: 34.2

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 4.1

Intersection LOS: A

Intersection Capacity Utilization 47.8%

ICU Level of Service A

Analysis Period (min) 15

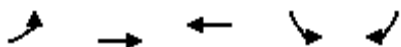
Splits and Phases: 3: Nevada Avenue & Cedar Lake Rd



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-PM  
Existing 2022 Traffic Volumes - Build



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	115	335	395	60	135
Future Volume (vph)	115	335	395	60	135
Turn Type	pm+pt	NA	NA	Prot	Prot
Protected Phases	5	2	6	4	4
Permitted Phases	2				
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	8.0	8.0
Minimum Split (s)	15.3	22.5	33.0	23.7	23.7
Total Split (s)	15.4	51.2	35.8	23.8	23.8
Total Split (%)	20.5%	68.3%	47.7%	31.7%	31.7%
Yellow Time (s)	3.0	3.2	3.2	3.0	3.0
All-Red Time (s)	1.5	1.5	1.5	1.6	1.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.7	4.7	4.6	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	Max	Min	Min	None	None
Act Effect Green (s)	36.9	38.2	20.4	9.0	9.0
Actuated g/C Ratio	0.72	0.74	0.40	0.17	0.17
v/c Ratio	0.18	0.25	0.67	0.20	0.35
Control Delay	3.8	3.9	18.1	23.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.8	3.9	18.1	23.9	8.3
LOS	A	A	B	C	A
Approach Delay		3.9	18.1	13.1	
Approach LOS		A	B	B	

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 51.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 50.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Cedar Lake Rd & Texas Avenue S



# Timings

## Cedar Lake Rd-Louisiana Ave Regional Solicitation

Build-PM  
Existing 2022 Traffic Volumes - Build



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	155	75	60	345	75	525	290	560
Future Volume (vph)	155	75	60	345	75	525	290	560
Turn Type	Split	NA	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	3	4		5	2	1	6
Permitted Phases				4				
Detector Phase	3	3	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	7.0	7.0	7.0	15.0	7.0	23.0
Minimum Split (s)	16.5	16.5	15.0	15.0	15.0	20.5	15.0	28.5
Total Split (s)	16.5	16.5	15.0	15.0	15.0	21.5	22.0	28.5
Total Split (%)	22.0%	22.0%	20.0%	20.0%	20.0%	28.7%	29.3%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	3.0	3.0	3.0	3.0	2.5	2.0	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	5.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effect Green (s)	10.0	10.0	8.2	8.2	8.6	17.4	15.4	26.3
Actuated g/C Ratio	0.13	0.13	0.11	0.11	0.11	0.23	0.21	0.35
v/c Ratio	0.67	0.60	0.51	0.73	0.39	0.51	0.81	0.58
Control Delay	46.7	28.3	41.1	14.0	36.7	26.5	47.3	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	28.3	41.1	14.0	36.7	26.5	47.3	22.1
LOS	D	C	D	B	D	C	D	C
Approach Delay		37.1	20.1			27.7		29.6
Approach LOS		D	C			C		C

### Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 28.3

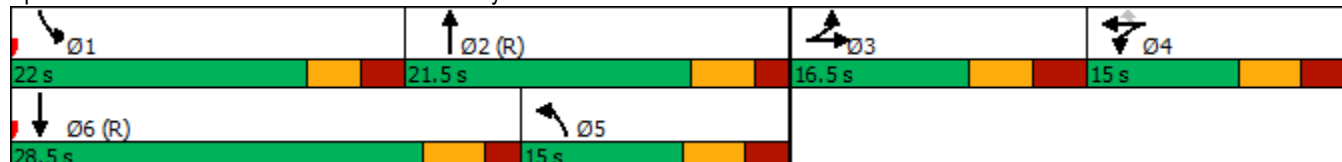
Intersection LOS: C

Intersection Capacity Utilization 66.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Louisiana Ave S & W Wayzata Blvd



1: TH 169 East Ramps/Park Spanish School West & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	420	450	575	5	1450
Control Delay / Veh (s/v)	12	11	40	0	23
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	12	11	40	0	23
Total Delay (hr)	1	1	6	0	9
Stops / Veh	0.49	0.53	0.60	0.00	0.54
Stops (#)	204	240	343	0	787
Average Speed (mph)	23	11	9	20	14
Total Travel Time (hr)	7	3	11	0	21
Distance Traveled (mi)	153	31	95	1	280
Fuel Consumed (gal)	8	3	10	0	22
Fuel Economy (mpg)	18.0	10.0	9.3	NA	12.8
CO Emissions (kg)	0.59	0.22	0.72	0.00	1.53
NOx Emissions (kg)	0.12	0.04	0.14	0.00	0.30
VOC Emissions (kg)	0.14	0.05	0.17	0.00	0.35
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

2: Louisiana Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	434	535	935	655	2559
Control Delay / Veh (s/v)	0	0	0	0	0
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	0	0	0	0
Total Delay (hr)	0	0	0	0	0
Stops / Veh	1.00	1.00	1.00	1.00	1.00
Stops (#)	434	535	935	655	2559
Average Speed (mph)	30	30	30	30	30
Total Travel Time (hr)	2	3	6	7	17
Distance Traveled (mi)	55	90	173	198	516
Fuel Consumed (gal)	5	7	12	12	35
Fuel Economy (mpg)	11.8	13.5	14.1	16.8	14.6
CO Emissions (kg)	0.33	0.47	0.86	0.82	2.47
NOx Emissions (kg)	0.06	0.09	0.17	0.16	0.48
VOC Emissions (kg)	0.08	0.11	0.20	0.19	0.57
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 3: Nevada Avenue & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	384	555	15	61	1015
Control Delay / Veh (s/v)	4	4	1	7	4
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	4	4	1	7	4
Total Delay (hr)	0	1	0	0	1
Stops / Veh	0.31	0.34	0.13	0.41	0.33
Stops (#)	118	188	2	25	333
Average Speed (mph)	28	24	19	23	26
Total Travel Time (hr)	6	3	0	1	9
Distance Traveled (mi)	156	70	2	13	241
Fuel Consumed (gal)	7	4	0	1	13
Fuel Economy (mpg)	21.2	16.0	NA	NA	19.1
CO Emissions (kg)	0.51	0.31	0.01	0.05	0.88
NOx Emissions (kg)	0.10	0.06	0.00	0.01	0.17
VOC Emissions (kg)	0.12	0.07	0.00	0.01	0.20
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

### 4: Cedar Lake Rd & Park Spanish School East

Direction	EB	WB	SB	All
Future Volume (vph)	485	456	75	1016
Control Delay / Veh (s/v)	1	0	13	1
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	1	0	13	1
Total Delay (hr)	0	0	0	0
Stops / Veh	0.21	0.00	1.00	0.17
Stops (#)	100	0	75	175
Average Speed (mph)	27	30	14	29
Total Travel Time (hr)	1	11	1	13
Distance Traveled (mi)	33	340	8	382
Fuel Consumed (gal)	2	14	1	17
Fuel Economy (mpg)	16.5	24.3	NA	22.5
CO Emissions (kg)	0.14	0.98	0.07	1.19
NOx Emissions (kg)	0.03	0.19	0.01	0.23
VOC Emissions (kg)	0.03	0.23	0.02	0.28
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0



### 5: Cedar Lake Rd & Texas Avenue S

Direction	EB	WB	SB	All
Future Volume (vph)	450	480	195	1125
Control Delay / Veh (s/v)	4	18	13	12
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	4	18	13	12
Total Delay (hr)	0	2	1	4
Stops / Veh	0.30	0.72	0.40	0.50
Stops (#)	136	345	78	559
Average Speed (mph)	24	22	16	21
Total Travel Time (hr)	2	9	4	15
Distance Traveled (mi)	57	195	57	308
Fuel Consumed (gal)	3	12	4	19
Fuel Economy (mpg)	16.5	16.7	16.1	16.5
CO Emissions (kg)	0.24	0.82	0.25	1.30
NOx Emissions (kg)	0.05	0.16	0.05	0.25
VOC Emissions (kg)	0.06	0.19	0.06	0.30
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

### 6: Virginia Ave S & Cedar Lake Rd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	425	520	139	15	1099
Control Delay / Veh (s/v)	0	1	22	23	4
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	0	1	22	23	4
Total Delay (hr)	0	0	1	0	1
Stops / Veh	0.06	0.29	1.00	1.00	0.30
Stops (#)	24	152	139	15	330
Average Speed (mph)	30	31	13	16	28
Total Travel Time (hr)	11	2	2	0	15
Distance Traveled (mi)	317	66	24	4	411
Fuel Consumed (gal)	13	4	2	0	20
Fuel Economy (mpg)	24.0	17.3	10.7	NA	21.0
CO Emissions (kg)	0.92	0.27	0.16	0.02	1.37
NOx Emissions (kg)	0.18	0.05	0.03	0.00	0.27
VOC Emissions (kg)	0.21	0.06	0.04	0.00	0.32
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

7: Louisiana Ave S & W Wayzata Blvd

Direction	EB	WB	NB	SB	All
Future Volume (vph)	326	445	655	985	2411
Control Delay / Veh (s/v)	37	20	28	30	28
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	37	20	28	30	28
Total Delay (hr)	3	2	5	8	19
Stops / Veh	0.73	0.30	0.83	0.80	0.70
Stops (#)	237	135	542	784	1698
Average Speed (mph)	13	17	6	13	13
Total Travel Time (hr)	7	8	6	14	36
Distance Traveled (mi)	93	138	40	192	463
Fuel Consumed (gal)	8	9	8	18	43
Fuel Economy (mpg)	12.3	16.2	4.8	10.6	10.9
CO Emissions (kg)	0.53	0.60	0.58	1.27	2.98
NOx Emissions (kg)	0.10	0.12	0.11	0.25	0.58
VOC Emissions (kg)	0.12	0.14	0.13	0.29	0.69
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

8: Louisiana Ave S & W 14th St

Direction	EB	WB	NB	SB	All
Future Volume (vph)	5	30	635	695	1365
Control Delay / Veh (s/v)	49	19	0	1	1
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	49	19	0	1	1
Total Delay (hr)	0	0	0	0	0
Stops / Veh	1.00	1.00	0.03	0.10	0.09
Stops (#)	5	30	19	72	126
Average Speed (mph)	9	16	30	28	29
Total Travel Time (hr)	0	0	8	2	10
Distance Traveled (mi)	1	6	231	42	280
Fuel Consumed (gal)	0	1	10	2	12
Fuel Economy (mpg)	NA	NA	24.0	19.1	22.4
CO Emissions (kg)	0.01	0.04	0.67	0.15	0.87
NOx Emissions (kg)	0.00	0.01	0.13	0.03	0.17
VOC Emissions (kg)	0.00	0.01	0.16	0.04	0.20
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

9: Louisiana Ave S & W. Franklin Ave

Direction	EB	NB	SB	All
Future Volume (vph)	85	600	570	1255
Control Delay / Veh (s/v)	26	1	0	2
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	26	1	0	2
Total Delay (hr)	1	0	0	1
Stops / Veh	1.00	0.18	0.00	0.15
Stops (#)	85	107	0	192
Average Speed (mph)	13	29	30	28
Total Travel Time (hr)	2	6	7	15
Distance Traveled (mi)	21	181	207	409
Fuel Consumed (gal)	2	8	9	18
Fuel Economy (mpg)	12.3	22.2	24.3	22.3
CO Emissions (kg)	0.12	0.57	0.60	1.28
NOx Emissions (kg)	0.02	0.11	0.12	0.25
VOC Emissions (kg)	0.03	0.13	0.14	0.30
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

Network Totals

Number of Intersections	9
Control Delay / Veh (s/v)	10
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	10
Total Delay (hr)	36
Stops / Veh	0.51
Stops (#)	6759
Average Speed (mph)	22
Total Travel Time (hr)	150
Distance Traveled (mi)	3289
Fuel Consumed (gal)	199
Fuel Economy (mpg)	16.6
CO Emissions (kg)	13.88
NOx Emissions (kg)	2.70
VOC Emissions (kg)	3.22
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	54.4

**Traffic Safety Benefit-Cost Calculation**

Highway Safety Improvement Program (HSIP) Reactive Project

**A. Roadway Description**

<b>Route</b>	Cedar Lake Rd/Louisiana Ave	<b>District</b>	Metro	<b>County</b>	Hennepin
<b>Begin RP</b>	-	<b>End RP</b>	-	<b>Miles</b>	1.5 mi (Cedar Lake Rd); 0.8 mi (Louisiana Ave)
<b>Location</b>	Cedar Lake Road & Louisiana Avenue intersection in St. Louis Park, Minnesota				

**B. Project Description**

Proposed Work	Conversion of signalized intersection to urban roundabout		
Project Cost*	\$11,985,000	Installation Year	2024
Project Service Life	25 years	Traffic Growth Factor	0.5%
* exclude Right of Way from Project Cost			

**C. Crash Modification Factor**

	<b>Fatal (K) Crashes</b>	<b>Reference</b>	CMF 212 - Convert signal to roundabout
0.26	<b>Serious Injury (A) Crashes</b>		
0.26	<b>Moderate Injury (B) Crashes</b>	<b>Crash Type</b>	All
0.26	<b>Possible Injury (C) Crashes</b>		
	<b>Property Damage Only Crashes</b>	<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>	

**D. Crash Modification Factor (optional second CMF)**

	<b>Fatal (K) Crashes</b>	<b>Reference</b>	
	<b>Serious Injury (A) Crashes</b>		
	<b>Moderate Injury (B) Crashes</b>	<b>Crash Type</b>	
	<b>Possible Injury (C) Crashes</b>		
	<b>Property Damage Only Crashes</b>	<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>	

**E. Crash Data**

<b>Begin Date</b>	1/1/2018	<b>End Date</b>	12/31/2020	3 years
<b>Data Source</b>	MnCMAT2			
<b>Crash Severity</b>	<b>All</b>	< optional 2nd CMF >		
K crashes	0			
A crashes	0			
B crashes	1			
C crashes	2			
PDO crashes	8			

**F. Benefit-Cost Calculation**

\$2,830,298	Benefit (present value)	B/C Ratio = 0.24
\$11,985,000	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](http://mndot.gov/planning/program/appendix_a.html)

Real Discount Rate: 0.7% Revised  
 Traffic Growth Rate: 0.5% Revised  
 Project Service Life: 25 years Revised

## 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	0.74	0.25	\$56,733
C crashes	1.48	0.49	\$59,200
PDO crashes	0.00	0.00	\$0

**\$115,933**

## H. Amortized Benefit

Year	Crash Benefits	Present Value
2024	\$115,933	\$115,933
2025	\$116,513	\$115,703
2026	\$117,096	\$115,473
2027	\$117,681	\$115,244
2028	\$118,269	\$115,015
2029	\$118,861	\$114,787
2030	\$119,455	\$114,559
2031	\$120,052	\$114,331
2032	\$120,653	\$114,104
2033	\$121,256	\$113,877
2034	\$121,862	\$113,651
2035	\$122,471	\$113,426
2036	\$123,084	\$113,200
2037	\$123,699	\$112,975
2038	\$124,318	\$112,751
2039	\$124,939	\$112,527
2040	\$125,564	\$112,304
2041	\$126,192	\$112,081
2042	\$126,823	\$111,858
2043	\$127,457	\$111,636
2044	\$128,094	\$111,414
2045	\$128,735	\$111,193
2046	\$129,378	\$110,972
2047	\$130,025	\$110,752
2048	\$130,675	\$110,532
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0

**Total = \$2,830,298**

**NOTE:**

This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.

**Traffic Safety Benefit-Cost Calculation**

Highway Safety Improvement Program (HSIP) Reactive Project

**A. Roadway Description**

<b>Route</b>	Louisiana Avenue	<b>District</b>	Metro	<b>County</b>	Hennepin
<b>Begin RP</b>	-	<b>End RP</b>	-	<b>Miles</b>	Approximately 0.8 miles
<b>Location</b>	Louisiana Avenue & 14th Street in St. Louis Park, Minnesota				

**B. Project Description**

<b>Proposed Work</b>	Addition of southbound left-turn lane and southbound right-turn drop lane				
<b>Project Cost*</b>	\$11,985,000	<b>Installation Year</b>	2024		
<b>Project Service Life</b>	20 years	<b>Traffic Growth Factor</b>	0.5%		

\* exclude Right of Way from Project Cost

**C. Crash Modification Factor**

0.73	Fatal (K) Crashes	Reference	CMF 261 - Add left-turn lane on major road
0.73	Serious Injury (A) Crashes		
0.73	Moderate Injury (B) Crashes	Crash Type	All
0.73	Possible Injury (C) Crashes		
0.73	Property Damage Only Crashes		<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>

**D. Crash Modification Factor (optional second CMF)**

0.86	Fatal (K) Crashes	Reference	CMF 285 - Add right-turn lane on major road
0.86	Serious Injury (A) Crashes		
0.86	Moderate Injury (B) Crashes	Crash Type	All
0.86	Possible Injury (C) Crashes		
0.86	Property Damage Only Crashes		<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>

**E. Crash Data**

<b>Begin Date</b>	1/1/2018	<b>End Date</b>	12/31/2020	3 years
<b>Data Source</b>	MnCMAT2			
<b>Crash Severity</b>	<b>All</b>	<b>All</b>		
K crashes	0	0		
A crashes	0	0		
B crashes	0	0		
C crashes	1	1		
PDO crashes	3	3		

**F. Benefit-Cost Calculation**

\$426,497	<b>Benefit (present value)</b>	<b>B/C Ratio = 0.04</b>
\$11,985,000	<b>Cost</b>	

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](http://mndot.gov/planning/program/appendix_a.html)

Real Discount Rate: 0.7% Revised  
 Traffic Growth Rate: 0.5% Revised  
 Project Service Life: 20 years Revised

## 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	0.41	0.14	\$16,400
PDO crashes	1.23	0.41	\$5,330

**\$21,730**

## H. Amortized Benefit

Year	Crash Benefits	Present Value
2024	\$21,730	\$21,730
2025	\$21,839	\$21,687
2026	\$21,948	\$21,644
2027	\$22,058	\$21,601
2028	\$22,168	\$21,558
2029	\$22,279	\$21,515
2030	\$22,390	\$21,472
2031	\$22,502	\$21,430
2032	\$22,615	\$21,387
2033	\$22,728	\$21,345
2034	\$22,841	\$21,302
2035	\$22,955	\$21,260
2036	\$23,070	\$21,218
2037	\$23,186	\$21,176
2038	\$23,302	\$21,134
2039	\$23,418	\$21,092
2040	\$23,535	\$21,050
2041	\$23,653	\$21,008
2042	\$23,771	\$20,966
2043	\$23,890	\$20,924
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
0	\$0	\$0

**Total = \$426,497**

**NOTE:**

This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.

**Traffic Safety Benefit-Cost Calculation**

Highway Safety Improvement Program (HSIP) Reactive Project

**A. Roadway Description**

<b>Route</b>	Cedar Lake Rd	<b>District</b>	Metro	<b>County</b>	Hennepin
<b>Begin RP</b>	-	<b>End RP</b>	-	<b>Miles</b>	1.5 miles
<b>Location</b>	Cedar Lake Road & Virginia Avenue intersection in St. Louis Park, Minnesota				

**B. Project Description**

Proposed Work	Addition of RRFB		
Project Cost*	\$11,985,000	Installation Year	2023
Project Service Life		Traffic Growth Factor	0.5%
* exclude Right of Way from Project Cost			

**C. Crash Modification Factor**

0.53	Fatal (K) Crashes	Reference	CMF 9024 - Install RRFB
0.53	Serious Injury (A) Crashes		
0.53	Moderate Injury (B) Crashes	Crash Type	Pedestrian
0.53	Possible Injury (C) Crashes		
0.53	Property Damage Only Crashes		<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>

**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		<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>

**E. Crash Data**

<b>Begin Date</b>	1/1/2018	<b>End Date</b>	12/31/2020	3 years
<b>Data Source</b>	MnCMAT2			
<b>Crash Severity</b>	<b>Pedestrian</b>	<b>&lt; optional 2nd CMF &gt;</b>		
K crashes	0		0	
A crashes	0		0	
B crashes	1		0	
C crashes	0		0	
PDO crashes	0		0	

**F. Benefit-Cost Calculation**

\$360,170	Benefit (present value)	B/C Ratio = 0.04
\$11,985,000	Cost	
Proposed project expected to reduce 1 crashes annually, 0 of which involving fatality or serious injury.		



**Link:** [mndot.gov/planning/program/appendix\\_a.html](http://mndot.gov/planning/program/appendix_a.html)

Real Discount Rate: 0.7% Revised

**Traffic Growth Rate:** 0.5% **Revised**

Project Service Life: 10 years Default

## G. Annual Benefit

**\$36,340**

## H. Amortized Benefit

**Total = \$360,170**

Page 2 of 2

**Traffic Safety Benefit-Cost Calculation**

Highway Safety Improvement Program (HSIP) Reactive Project

**A. Roadway Description**

<b>Route</b>	Louisiana Avenue	<b>District</b>	Metro	<b>County</b>	Hennepin
<b>Begin RP</b>	-	<b>End RP</b>	-	<b>Miles</b>	Approximately 0.8 miles
<b>Location</b>	Louisiana Avenue & 16th Street in St. Louis Park, Minnesota				

**B. Project Description**

<b>Proposed Work</b>	Addition of RRFB				
<b>Project Cost*</b>	\$11,985,000	<b>Installation Year</b>	2024		
<b>Project Service Life</b>		<b>Traffic Growth Factor</b>	0.5%		

\* exclude Right of Way from Project Cost

**C. Crash Modification Factor**

0.53	Fatal (K) Crashes	<b>Reference</b>	CMF 9024 - Install RRFB
0.53	Serious Injury (A) Crashes		
0.53	Moderate Injury (B) Crashes	<b>Crash Type</b>	Pedestrian
0.53	Possible Injury (C) Crashes		
0.53	Property Damage Only Crashes	<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>	

**D. Crash Modification Factor (optional second CMF)**

	Fatal (K) Crashes	<b>Reference</b>	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	<b>Crash Type</b>	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes	<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>	

**E. Crash Data**

<b>Begin Date</b>	1/1/2018	<b>End Date</b>	12/31/2020	3 years
<b>Data Source</b>	MnCMAT2			
<b>Crash Severity</b>	<b>Pedestrian</b>	< optional 2nd CMF >		
K crashes	0		0	
A crashes	0		0	
B crashes	0		0	
C crashes	1		0	
PDO crashes	0		0	

**F. Benefit-Cost Calculation**

\$187,915	<b>Benefit (present value)</b>	<b>B/C Ratio = 0.02</b>
\$11,985,000	<b>Cost</b>	

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](http://mndot.gov/planning/program/appendix_a.html)

Real Discount Rate: 0.7% Revised  
 Traffic Growth Rate: 0.5% Revised  
 Project Service Life: 10 years Default

## 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	0.47	0.16	\$18,960
PDO crashes	0.00	0.00	\$0

**\$18,960**

## H. Amortized Benefit

Year	Crash Benefits	Present Value
2024	\$18,960	\$18,960
2025	\$19,055	\$18,922
2026	\$19,150	\$18,885
2027	\$19,246	\$18,847
2028	\$19,342	\$18,810
2029	\$19,439	\$18,772
2030	\$19,536	\$18,735
2031	\$19,634	\$18,698
2032	\$19,732	\$18,661
2033	\$19,830	\$18,624
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
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
0	\$0	\$0
0	\$0	\$0

**Total = \$187,915**

**NOTE:**

*This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.*

# Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project



## A. Roadway Description

<b>Route</b>	Cedar Lake Rd/Louisiana Ave	<b>District</b>	Metro	<b>County</b>	Hennepin
<b>Begin RP</b>	-	<b>End RP</b>	-	<b>Miles</b>	1.5 mi (Cedar Lake Rd); 0.8 mi (Louisiana Ave)
<b>Location</b>	Cedar Lake Road and Louisiana Avenue in St. Louis Park, Minnesota				

## B. Project Description

Proposed Work	Addition of bike lanes in both directions		
Project Cost*	\$11,985,000	Installation Year	2023
Project Service Life		Traffic Growth Factor	0.5%
* exclude Right of Way from Project Cost			

## C. Crash Modification Factor

0.69	Fatal (K) Crashes	Reference	CMF 10742 - Install bicycle lanes
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		<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>

## 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		<a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a>

## E. Crash Data

<b>Begin Date</b>	1/1/2018	<b>End Date</b>	12/31/2020	3 years
<b>Data Source</b>	MnCMAT2			
<b>Crash Severity</b>	All	< optional 2nd CMF >		
K crashes	0			
A crashes	2			
B crashes	2			
C crashes	5			
PDO crashes	30			

## F. Benefit-Cost Calculation

\$3,021,233	Benefit (present value)	B/C Ratio = 0.26
\$11,985,000	Cost	
Proposed project expected to reduce 5 crashes annually, 1 of which involving fatality or serious injury		

<b>Project Service Life:</b>	10 years	Default
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**\$304,833**

*This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.*

**Traffic Safety Benefit-Cost Calculation**

Highway Safety Improvement Program (HSIP) Reactive Project

**A. Roadway Description**

<b>Route</b>	Cedar Lake Rd/Louisiana Ave	<b>District</b>	Metro	<b>County</b>	Hennepin
<b>Begin RP</b>	-	<b>End RP</b>	-	<b>Miles</b>	1.5 mi (Cedar Lake Rd); 0.8 mi (Louisiana Ave)
<b>Location</b>	Cedar Lake Road and Louisiana Avenue in St. Louis Park, Minnesota				

**B. Project Description**

<b>Proposed Work</b>	Continuous LED lighting along corridors plus additional lighting at intersections				
<b>Project Cost*</b>	\$11,985,000	<b>Installation Year</b>	2023		
<b>Project Service Life</b>	25 years	<b>Traffic Growth Factor</b>	0.5%		

\* exclude Right of Way from Project Cost

**C. Crash Modification Factor**

0.68	Fatal (K) Crashes	<b>Reference</b>	CMF 11026 - Improve street lighting
0.68	Serious Injury (A) Crashes		
0.68	Moderate Injury (B) Crashes	<b>Crash Type</b>	Nighttime
0.68	Possible Injury (C) Crashes		
0.68	Property Damage Only Crashes		

[www.CMFclearinghouse.org](http://www.CMFclearinghouse.org)

**D. Crash Modification Factor (optional second CMF)**

	Fatal (K) Crashes	<b>Reference</b>	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	<b>Crash Type</b>	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		

[www.CMFclearinghouse.org](http://www.CMFclearinghouse.org)

**E. Crash Data**

<b>Begin Date</b>	1/1/2018	<b>End Date</b>	12/31/2020	3 years
<b>Data Source</b>	MnCMAT2			
<b>Crash Severity</b>	<b>Nighttime</b>	< optional 2nd CMF >		
K crashes	0			
A crashes	1			
B crashes	6			
C crashes	5			
PDO crashes	14			

**F. Benefit-Cost Calculation**

\$7,583,049	Benefit (present value)	B/C Ratio = 0.64
\$11,985,000	Cost	
Proposed project expected to reduce 3 crashes annually, 1 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](http://mndot.gov/planning/program/appendix_a.html)

Real Discount Rate: 0.7% Revised  
 Traffic Growth Rate: 0.5% Revised  
 Project Service Life: 25 years Revised

## G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	\$0
A crashes	0.32	0.11	\$80,000
B crashes	1.92	0.64	\$147,200
C crashes	1.60	0.53	\$64,000
PDO crashes	4.48	1.49	\$19,413

**\$310,613**

## H. Amortized Benefit

Year	Crash Benefits	Present Value
2023	\$310,613	\$310,613
2024	\$312,166	\$309,996
2025	\$313,727	\$309,381
2026	\$315,296	\$308,766
2027	\$316,872	\$308,153
2028	\$318,457	\$307,541
2029	\$320,049	\$306,930
2030	\$321,649	\$306,321
2031	\$323,257	\$305,712
2032	\$324,874	\$305,105
2033	\$326,498	\$304,499
2034	\$328,131	\$303,894
2035	\$329,771	\$303,291
2036	\$331,420	\$302,688
2037	\$333,077	\$302,087
2038	\$334,743	\$301,487
2039	\$336,416	\$300,888
2040	\$338,098	\$300,291
2041	\$339,789	\$299,694
2042	\$341,488	\$299,099
2043	\$343,195	\$298,505
2044	\$344,911	\$297,912
2045	\$346,636	\$297,321
2046	\$348,369	\$296,730
2047	\$350,111	\$296,141
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0

**Total = \$7,583,049**

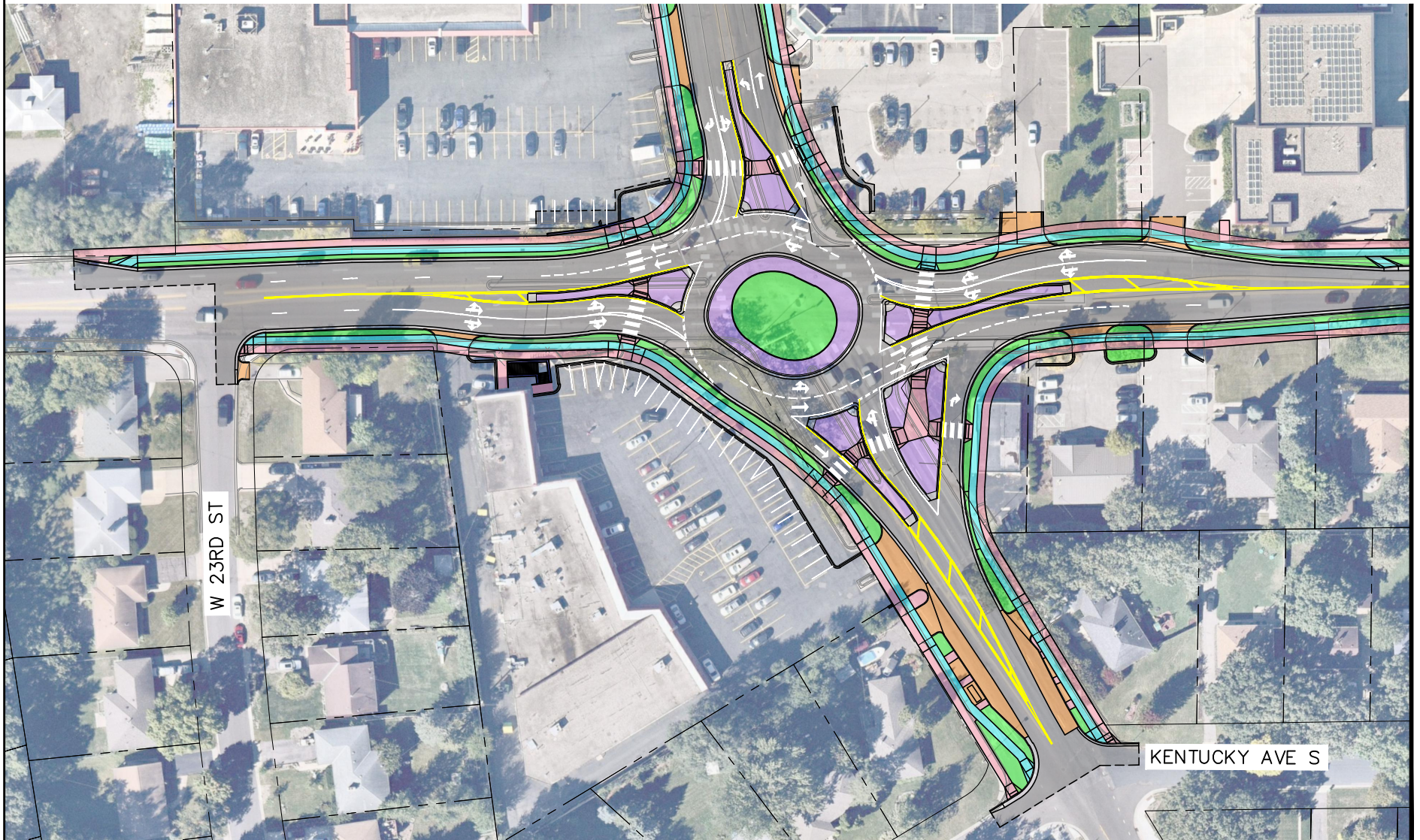
**NOTE:**

This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.



# LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

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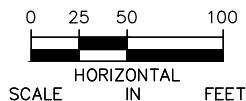


MATCH LINE  
SEE FIGURE 2

LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



## LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

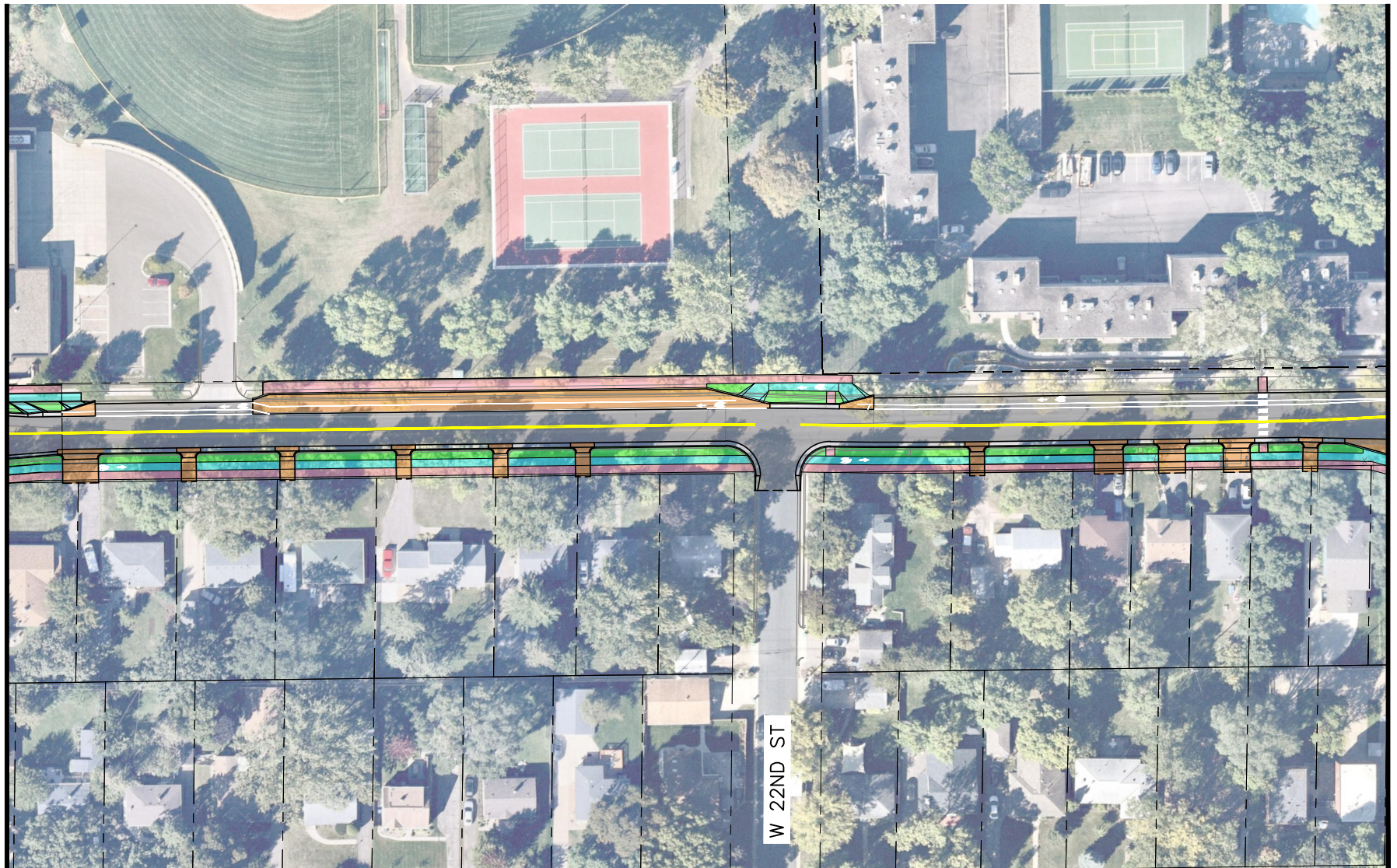
FIGURE 1



# LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

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MATCH LINE  
SEE FIGURE 1



MATCH LINE  
SEE FIGURE 3

LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



0 25 50 100  
HORIZONTAL  
SCALE IN FEET

## LEGEND

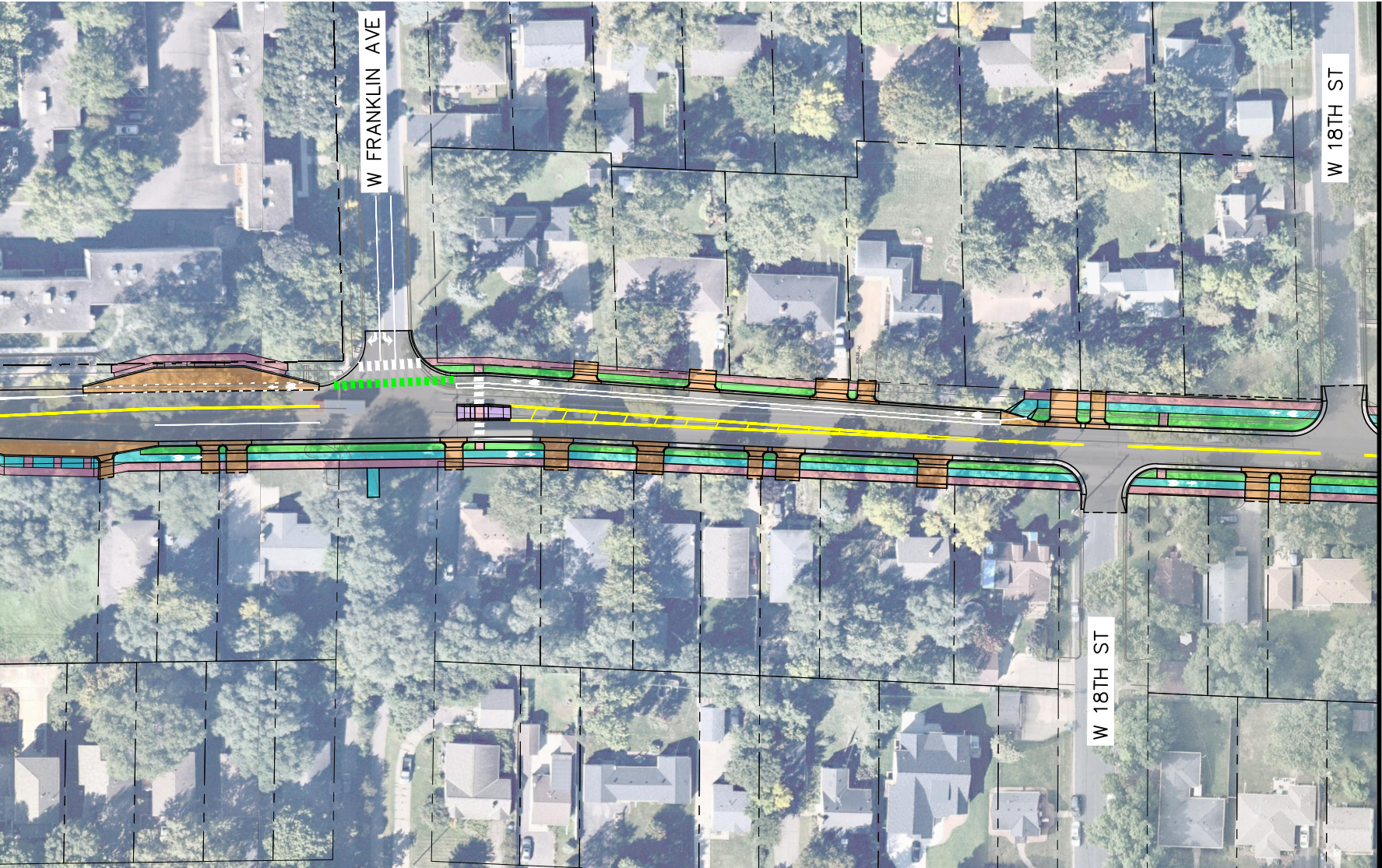
	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 2



LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

MATCH LINE  
SEE FIGURE 2

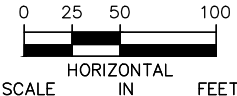


MATCH LINE  
SEE FIGURE 4

LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley**»**Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

- PROPOSED ROADWAY
- PROPOSED CYCLE TRACK
- PROPOSED SIDEWALK
- PROPOSED LANDSCAPED BOULEVARDS
- PROPOSED CONCRETE MEDIANS
- PROPOSED CONCRETE DRIVEWAYS/BUS PADS

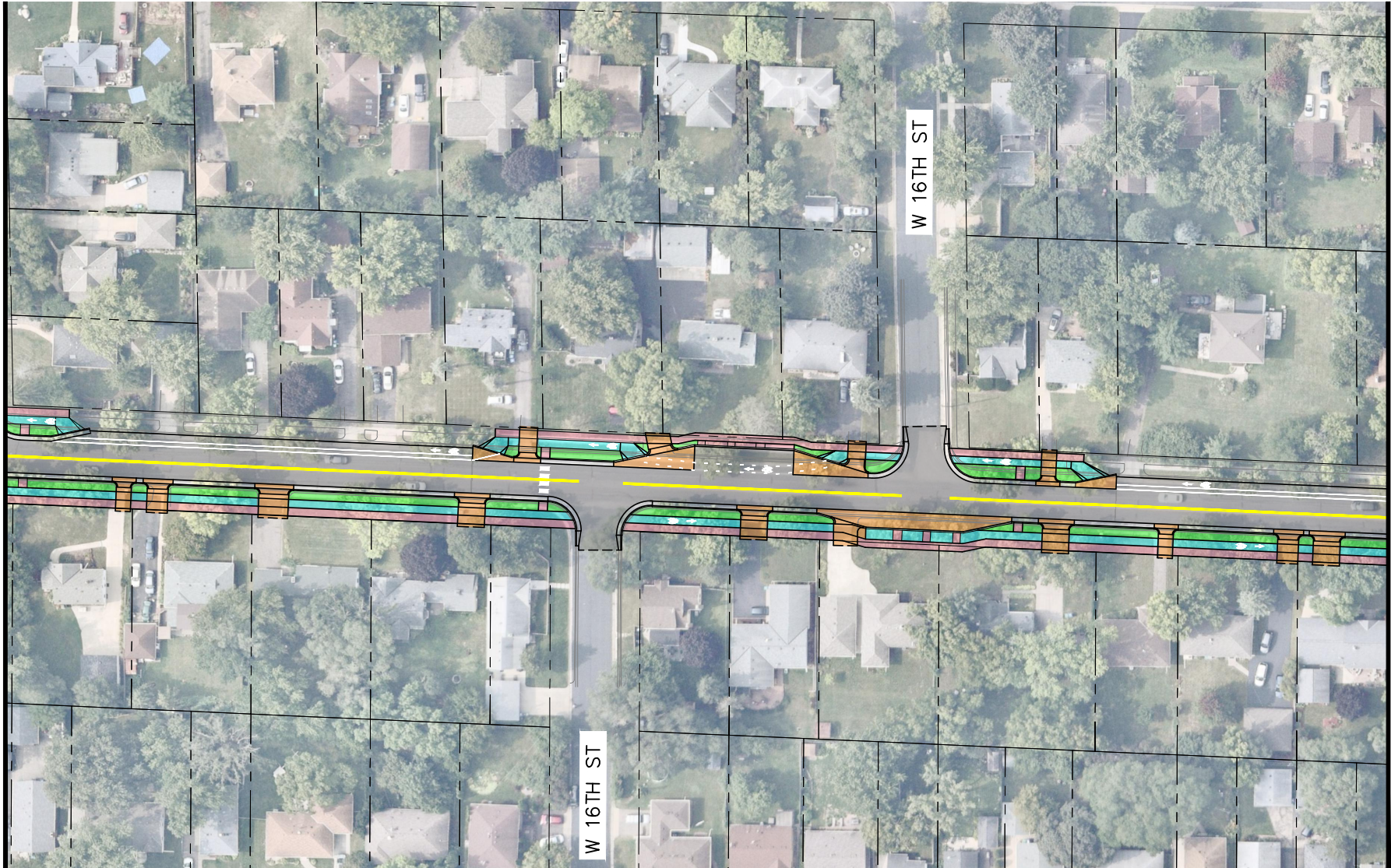
FIGURE 3



LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

MATCH LINE  
SEE FIGURE 3

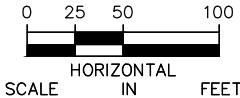
MATCH LINE  
SEE FIGURE 5



LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND







	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

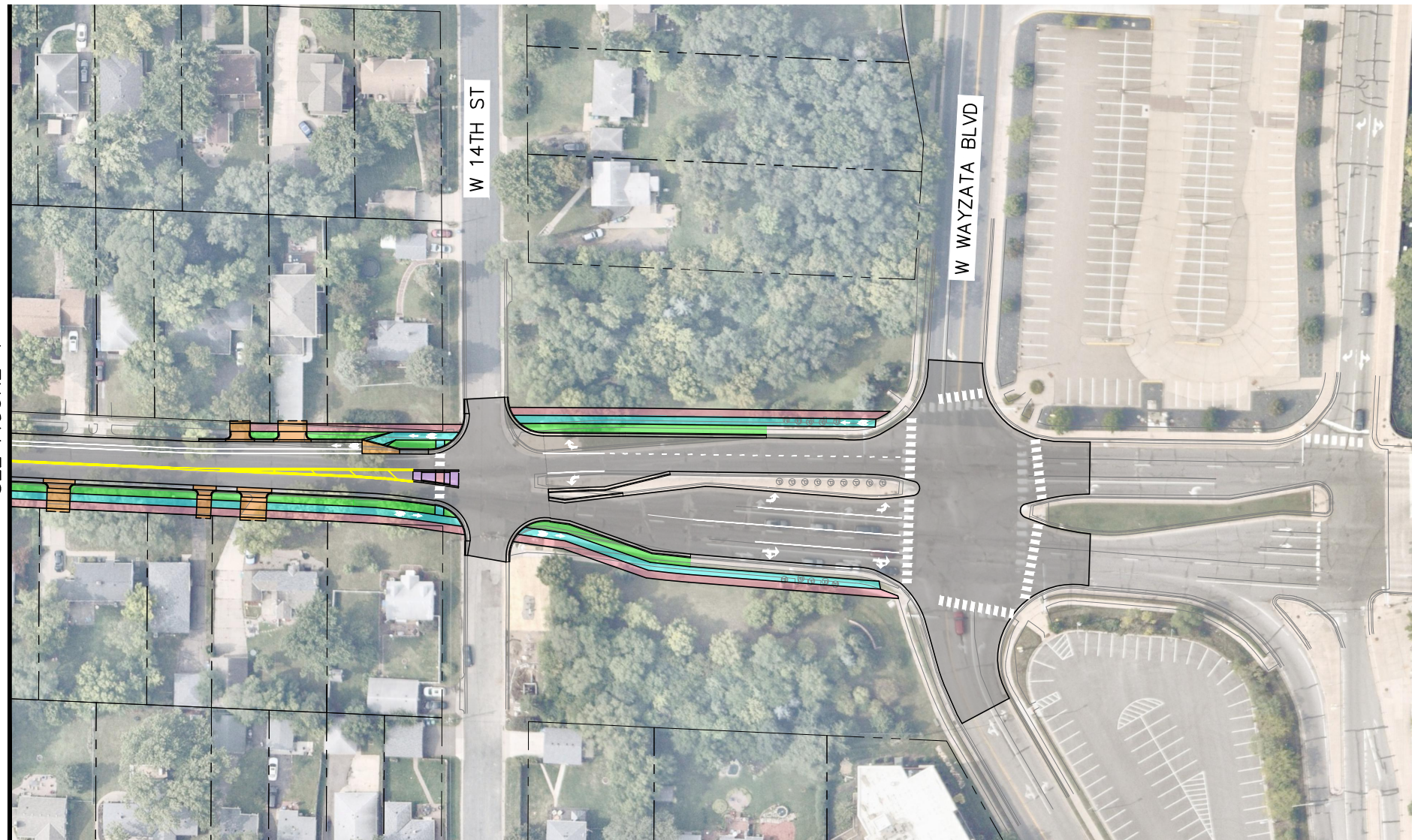
FIGURE 4



LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

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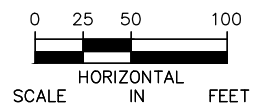
MATCH LINE  
SEE FIGURE 4



LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

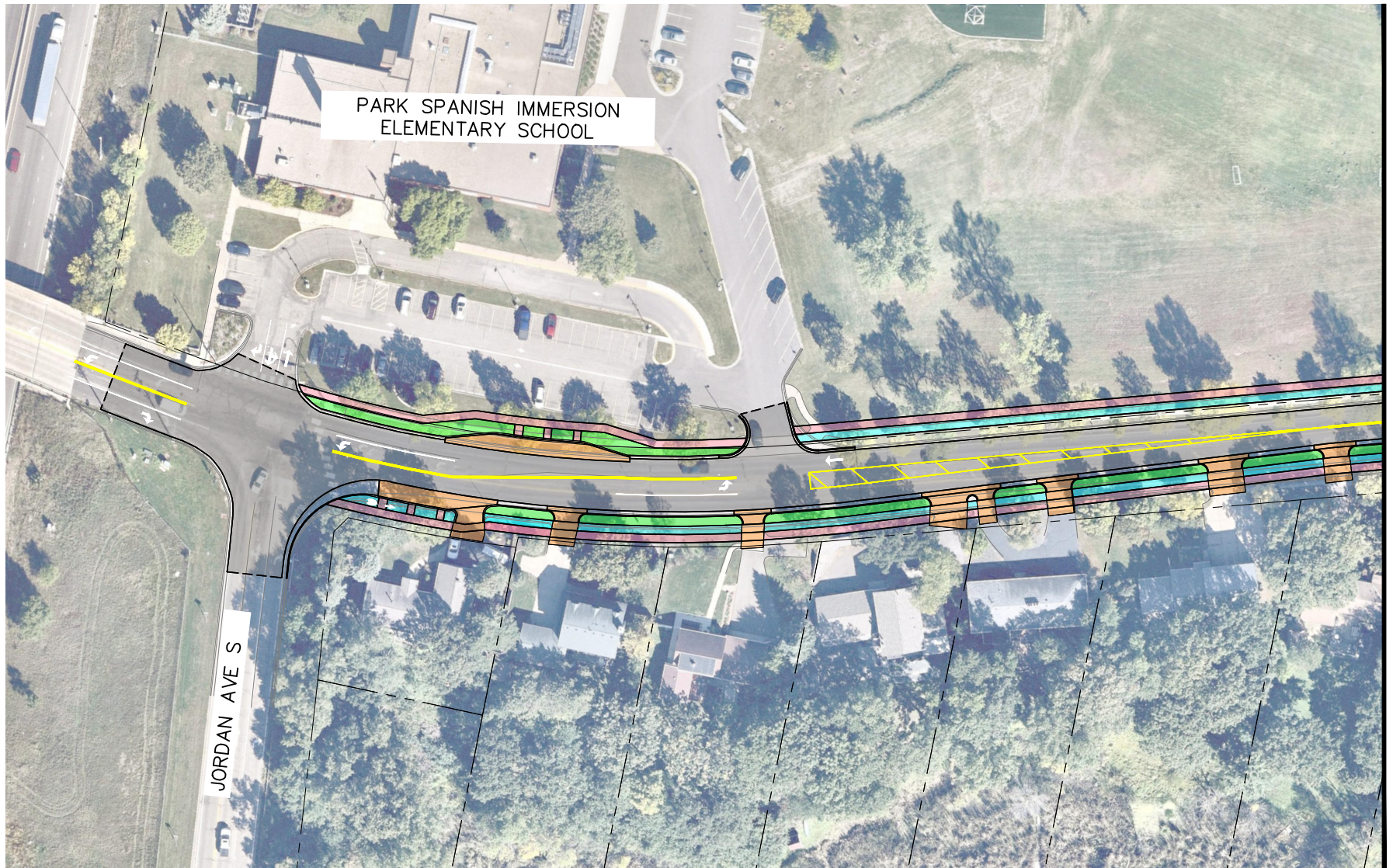
- |  |                                      |
|--|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

FIGURE 5



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

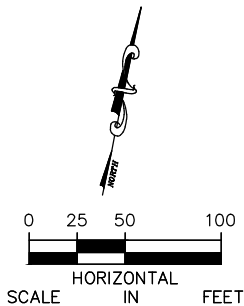
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CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

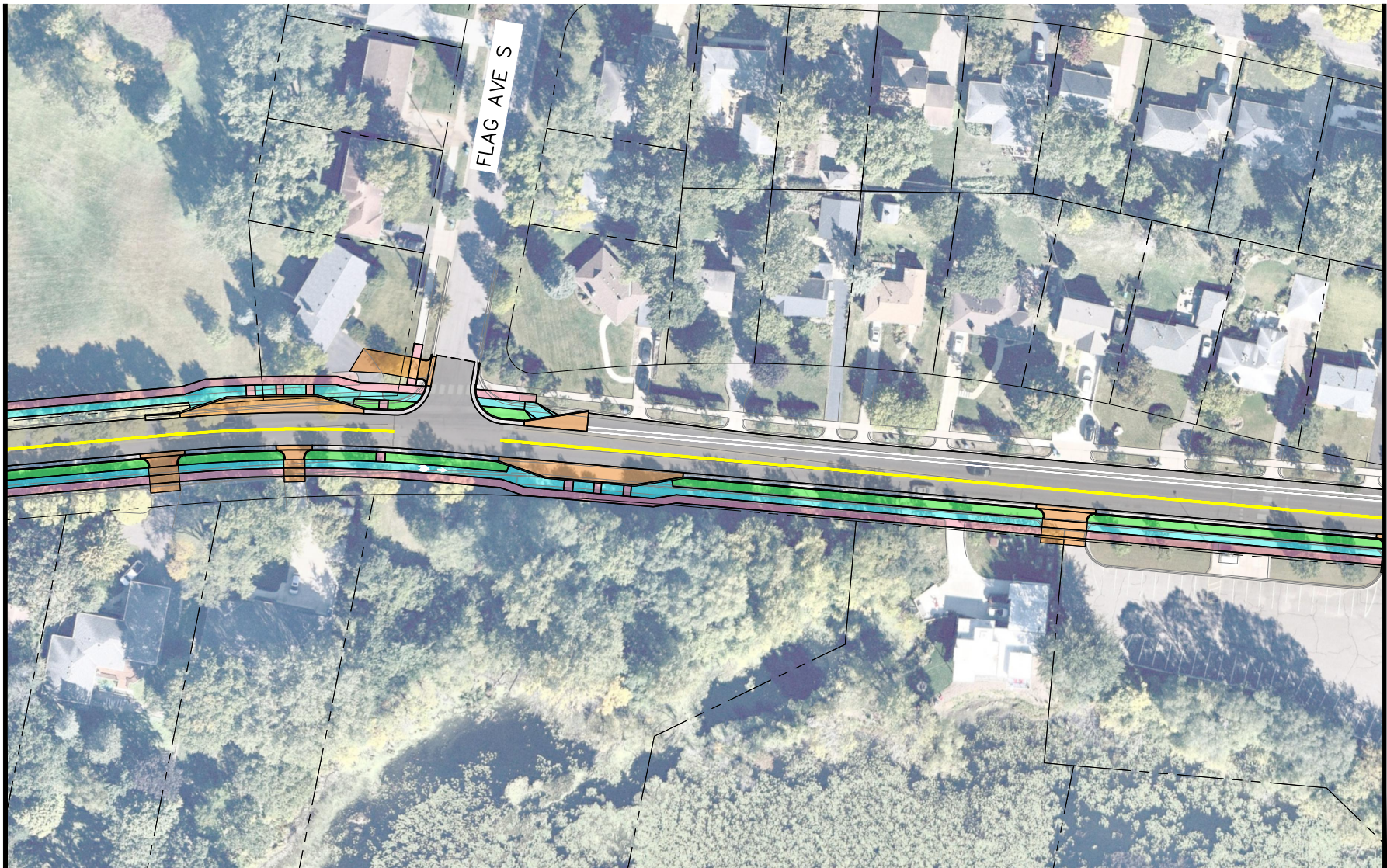
FIGURE 6



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 6

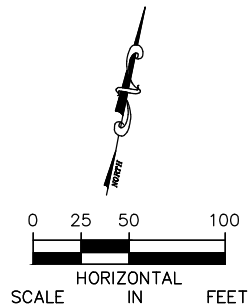


MATCH LINE  
SEE FIGURE 8

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

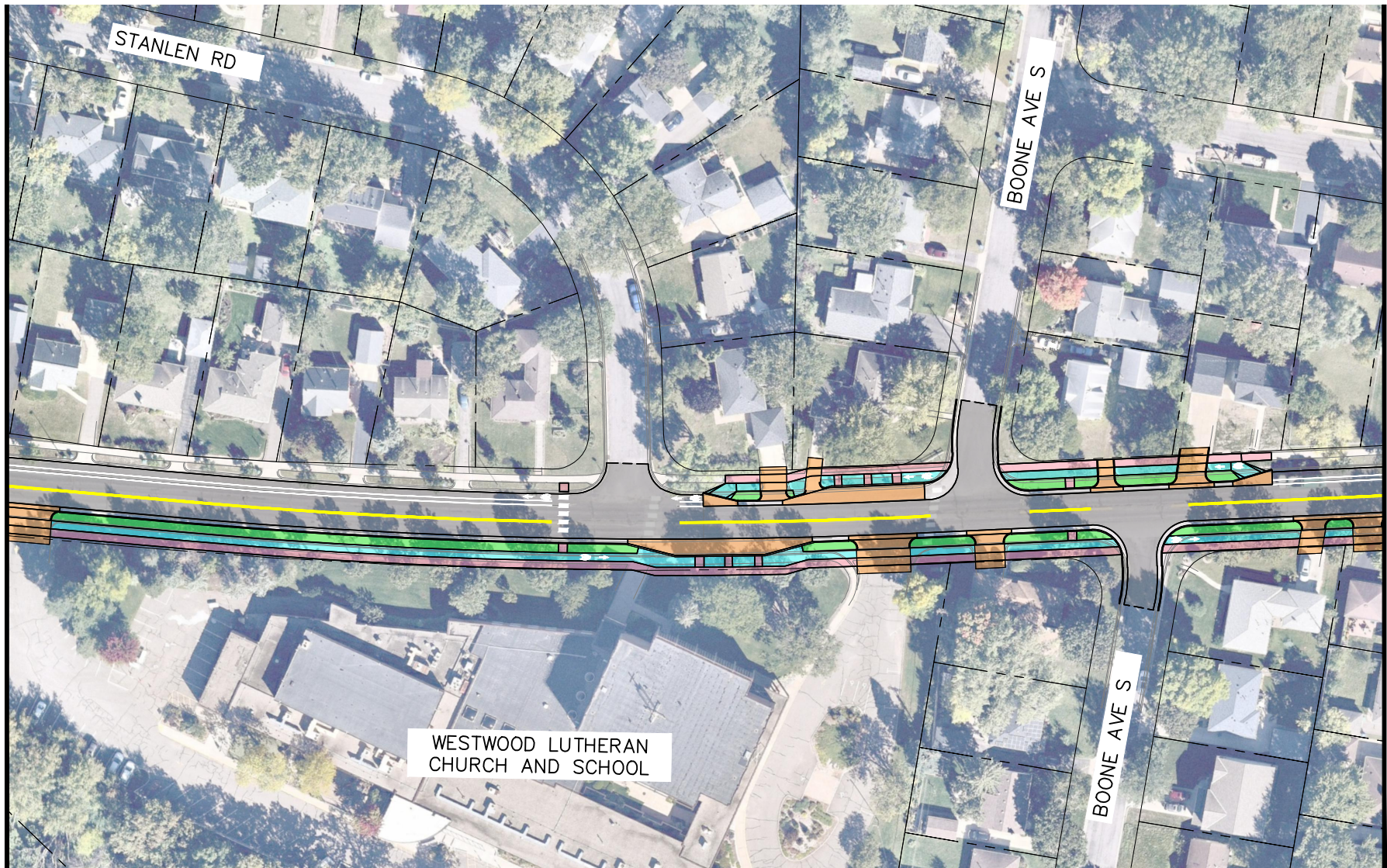
FIGURE 7



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 7

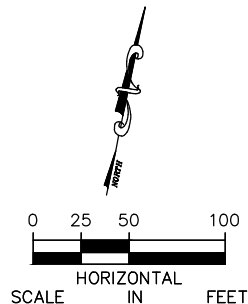


MATCH LINE  
SEE FIGURE 9

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 8

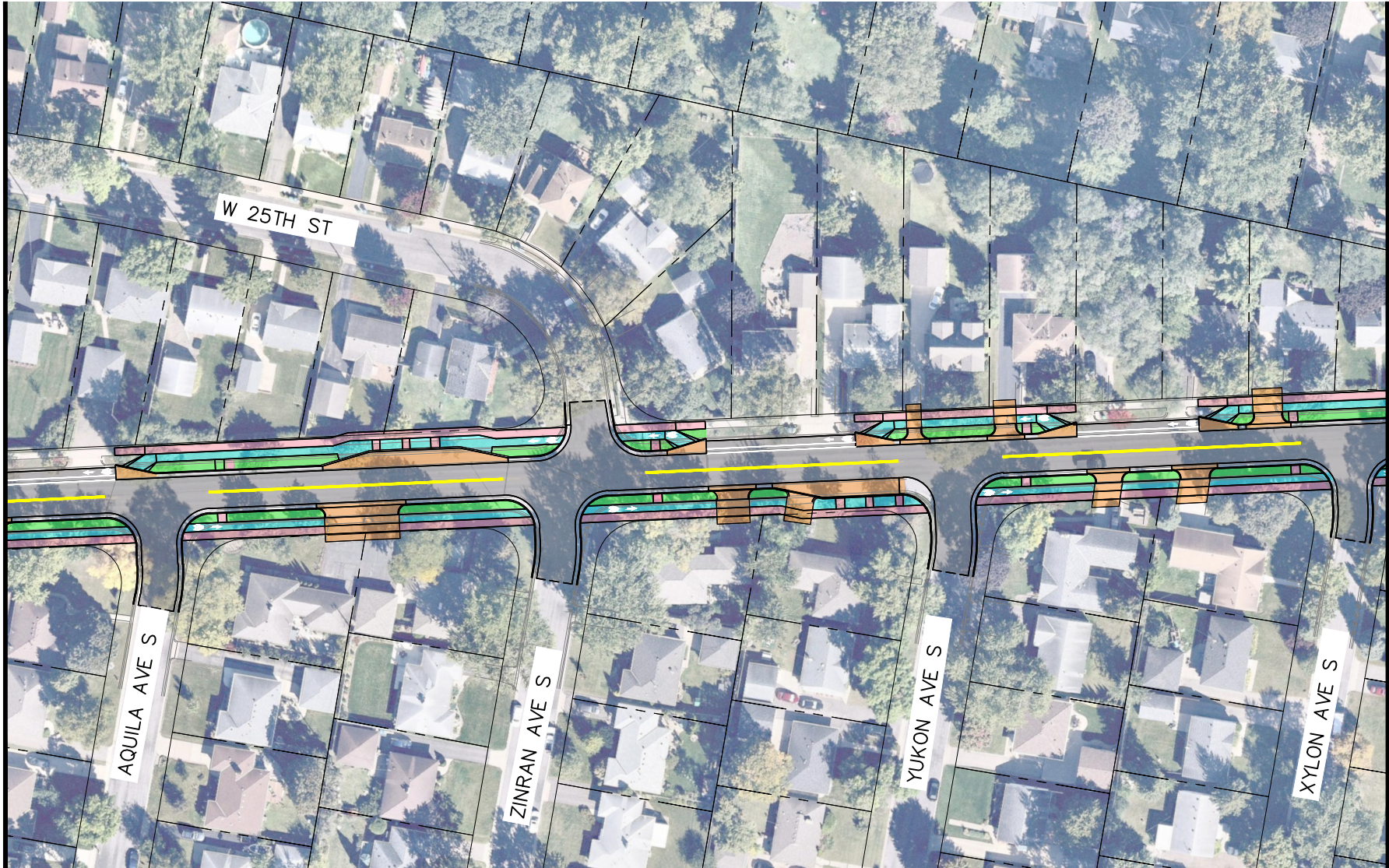


CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 8

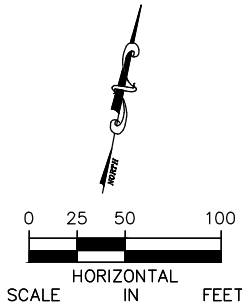
MATCH LINE  
SEE FIGURE 10



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

- |  |                                      |
|--|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

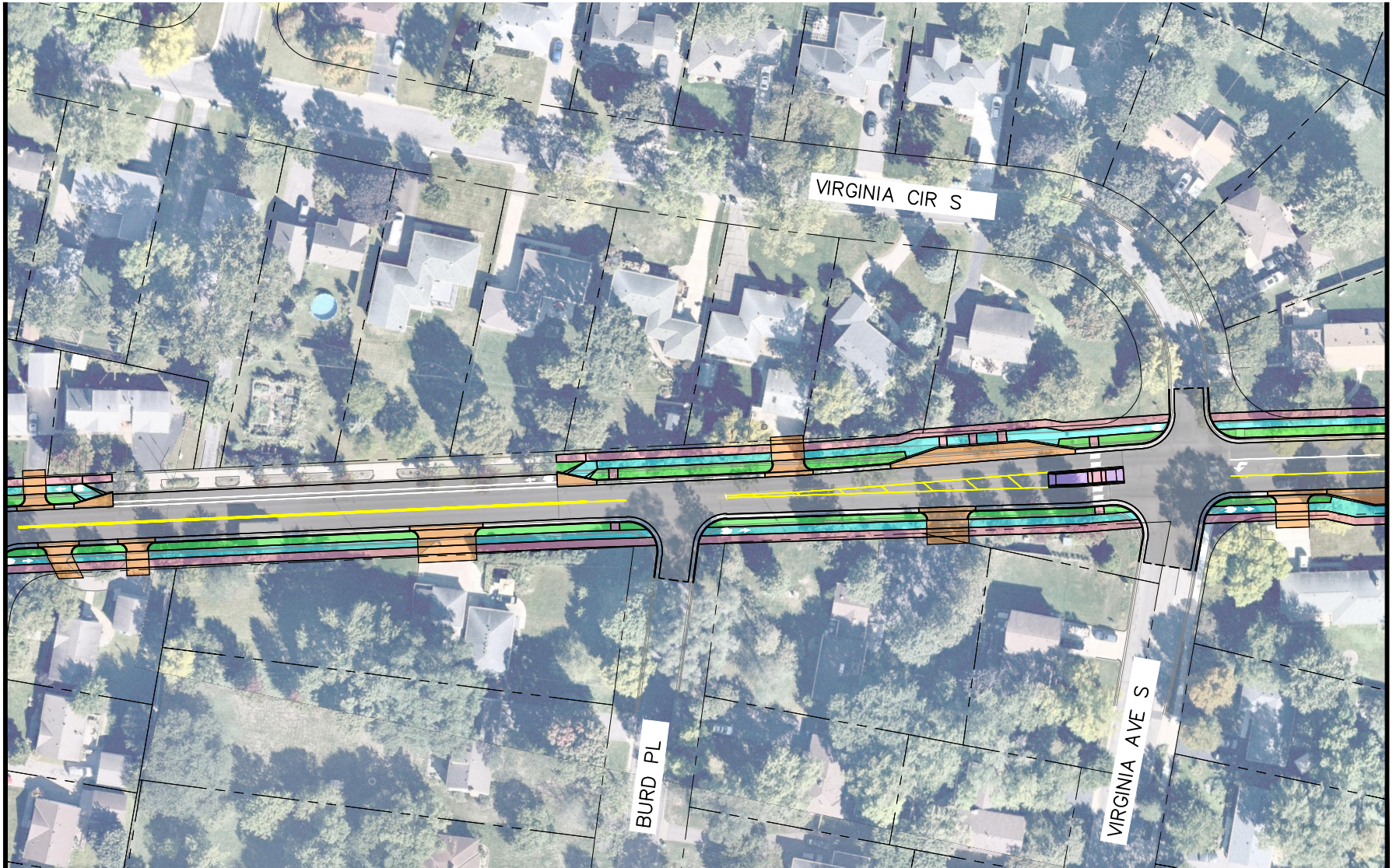
FIGURE 9



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 9

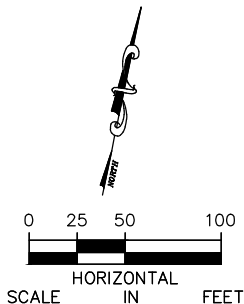


MATCH LINE  
SEE FIGURE 11

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 10

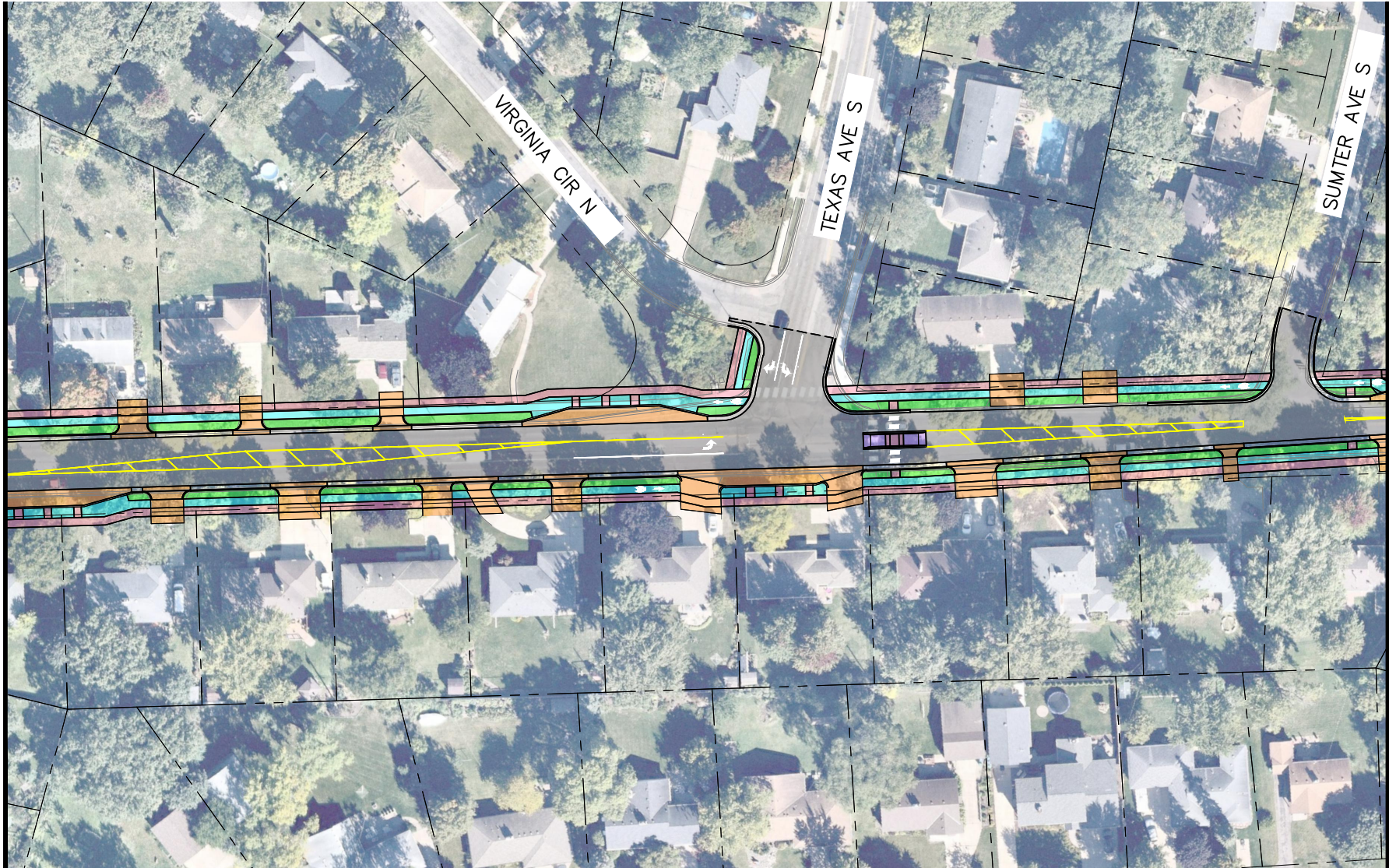


CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 10

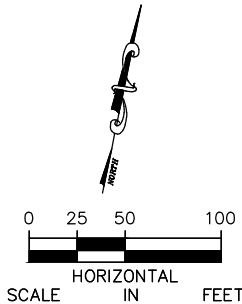
MATCH LINE  
SEE FIGURE 12



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND	
	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

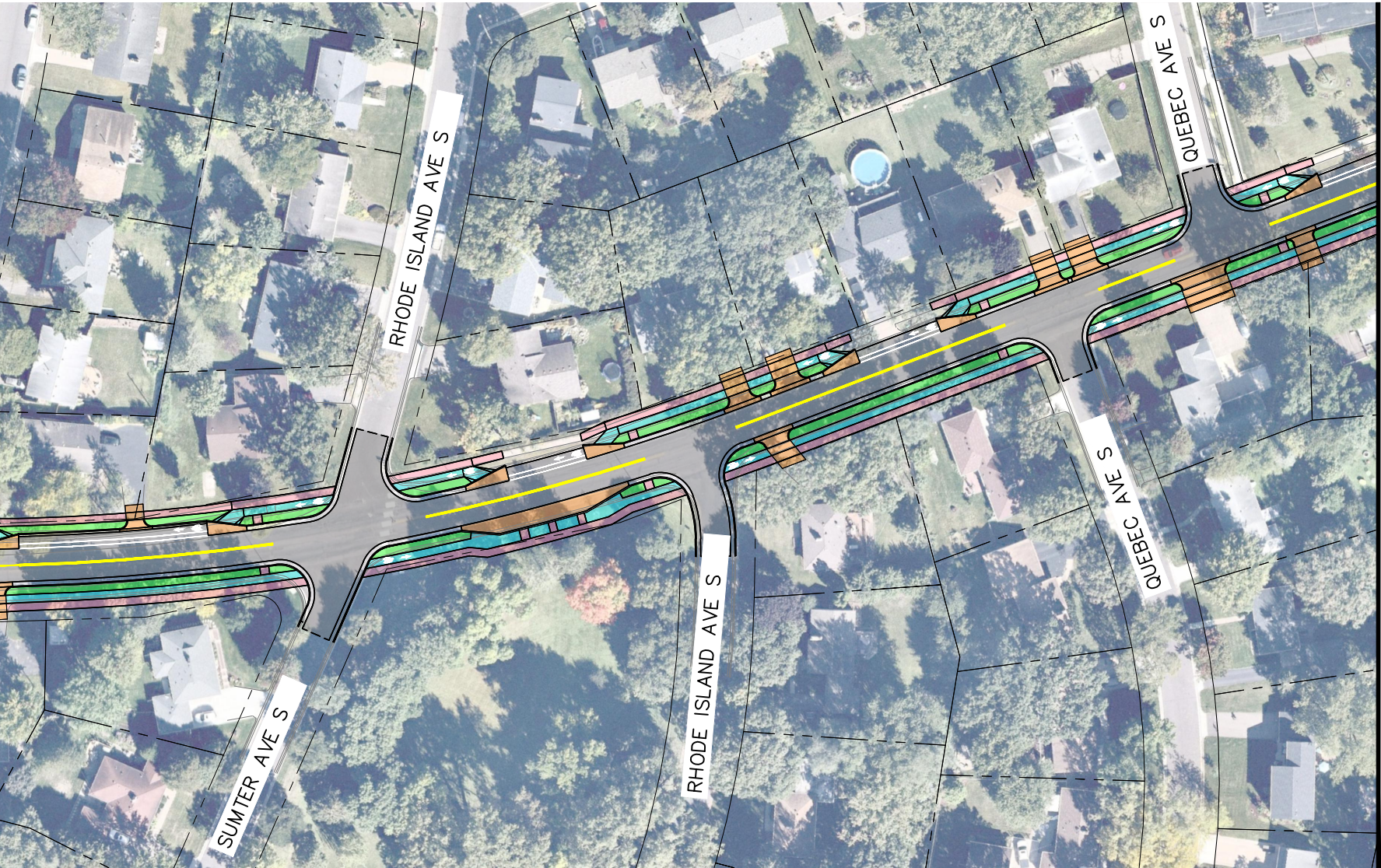
FIGURE 11



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

K:\TWC\_Civil\City\ST LOUIS PARK\CEDAR LAKE ROAD AND LOUISIANA AVENUE - PRELIM\CAD\Plan Sheets\Exhibits\C.P. 4024-1100 - FUNDING GRANT SHEETS.dwg April 07, 2022 - 6:20pm

MATCH LINE  
SEE FIGURE 11

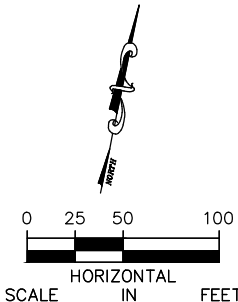


MATCH LINE  
SEE FIGURE 13

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND







- |   |                                      |
|---|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

FIGURE 12

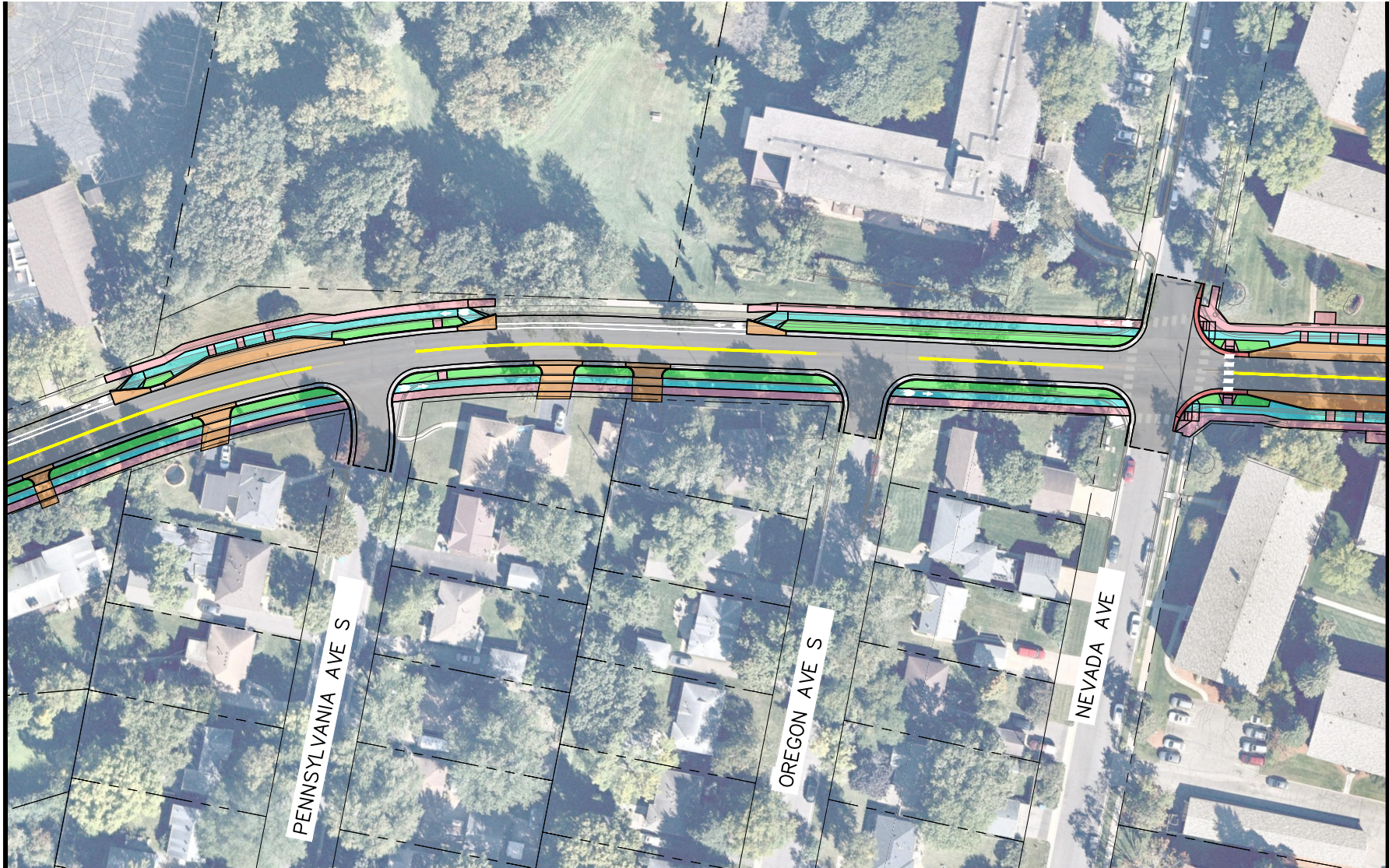


CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

K:\TWC\_Civil\City\ST LOUIS PARK\CEDAR LAKE ROAD AND LOUISIANA AVENUE - PRELIM\CAD\Plan Sheets\Exhibits\C.P. 4024-1100 - FUNDING GRANT SHEETS.dwg April 07, 2022 - 6:19pm

MATCH LINE  
SEE FIGURE 12

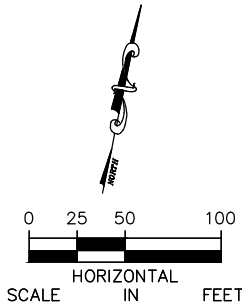
MATCH LINE  
SEE FIGURE 14



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND	
	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

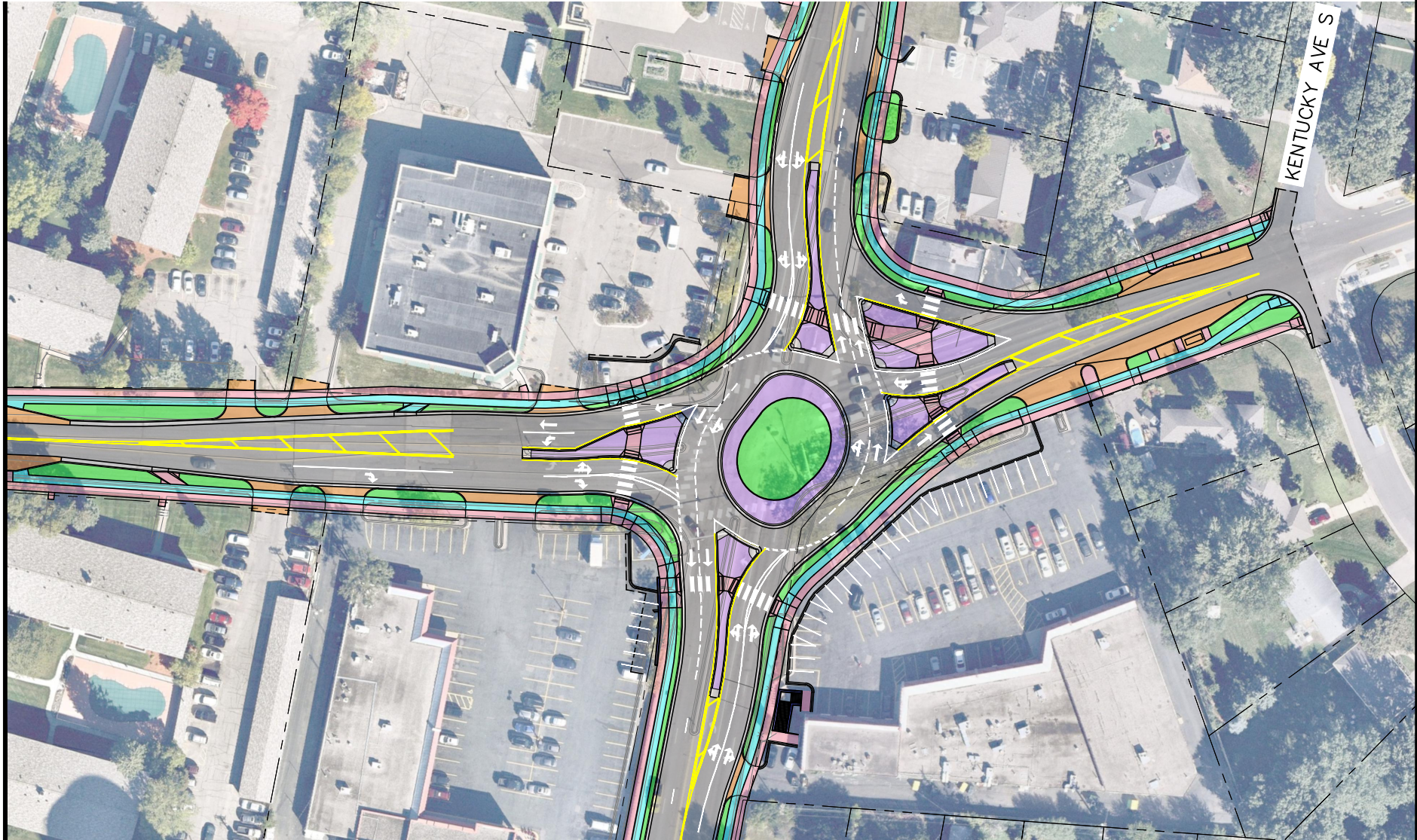
FIGURE 13



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

K:\TWC\_Civil\City\ST LOUIS PARK\CEDAR LAKE ROAD AND LOUISIANA AVENUE - PRELIM\CAD\Plan Sheets\Exhibits\C.P. 4024-1100 - FUNDING GRANT SHEETS.dwg April 07, 2022 - 6:35pm

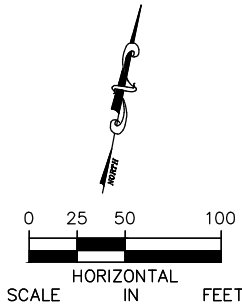
MATCH LINE  
SEE FIGURE 13



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

- |  |                                      |
|--|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

FIGURE 14



April 13, 2022

Elaine Koutsoukos  
TAB Coordinator  
Transportation Advisory Board  
390 North Robert Street, St. Paul, MN 55101

RE: Cedar Lake Road and Louisiana Avenue Improvements- grant application support

Dear Elaine Koutsoukos:

I am writing to express my support for the Cedar Lake Road and Louisiana Avenue Improvements grant application submitted by the City of St. Louis Park.

This project will significantly contribute to a state of good repair by modernizing two arterials with regional and local significance, reduce travel delays, provide relief to the regional MnDOT highways, and create safe active transportation alternatives for historically disadvantaged and underserved communities.

Cedar Lake Road and Louisiana Avenue provide connections and access for the entire northwest quadrant of the city and to three major freeways within the Twin Cities metropolitan area. Both roadway corridors provide regional movement of goods and connections to commerce, but also support livable neighborhoods connecting schools, places of worship, and parks. These roadways have reached the end of their useful life and need repair to properly serve local and regional needs.

These improvements will foster economic development by contributing to equitable outcomes for all people, including the approximate 30% non-white populations that live immediately adjacent to the corridor. The project will provide new pedestrian and bicycle connections to common destinations and improve access to the existing transit service. Consistent with the city's strategic priorities of creating a more just and inclusive community for all and providing a variety of ways to people to make their way around the city comfortably, safely, and reliably.

Finally, this project will make progress toward cleaner air, less traffic and noise, and reducing vehicle miles travelled by providing convenient and safe ways to use low-carbon and no-carbon travel methods. Making progress towards achieving the city's Climate Action Plan goals.

The city has matching funds committed to this project. Preliminary design and public engagement have begun will be completed by December 2022. Environmental clearances and construction documents will be completed by 2024. Construction is scheduled to be completed in 2027.

On behalf of the City of St. Louis Park we appreciate this opportunity and your consideration.

Sincerely,



Kim Keller, City Manager

AMY KLOBUCHAR  
MINNESOTA

COMMITTEES:  
AGRICULTURE, NUTRITION,  
AND FORESTRY  
COMMERCE, SCIENCE,  
AND TRANSPORTATION  
JOINT ECONOMIC COMMITTEE  
JUDICIARY  
RULES AND ADMINISTRATION

United States Senate  
WASHINGTON, DC 20510

April 6, 2022

The Honorable Pete Buttigieg  
United States Secretary of Transportation  
United States Department of Transportation  
1200 New Jersey Avenue Southeast  
Washington, D.C. 20590

Re: City of St. Louis Park, Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program

Dear Secretary Buttigieg:

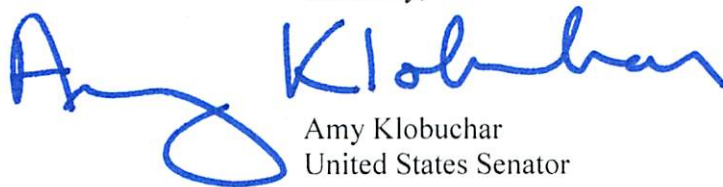
I write in support of the City of St. Louis Park's application for funding through the United States Department of Transportation's Rebuilding American Infrastructure with Sustainability and Equity Program (RAISE). If awarded, funding would support the Cedar Lake Road and Louisiana Avenue Improvements Project, which would address critical access and capacity concerns near Cedar Lake Road and Louisiana Avenue in St. Louis Park.

Cedar Lake Road and Louisiana Avenue in St. Louis Park are key regional corridors that play an essential role in supporting commuters, freight movement, and commercial transportation. Both corridors provide access to three major freeways in the Minneapolis-Saint Paul metropolitan area and are also essential to the local community—connecting residents to businesses, schools, places of worship, and recreation activities. However, both Cedar Lake Road and Louisiana Avenue are in dire need of repair and maintenance, and upgrades are necessary to ensure that local and regional needs are properly met.

Funding from the RAISE Program would be used to support improvements to the intersection of Cedar Lake Road and Louisiana Avenue, including new pedestrian and cyclist connections and upgrades to the transit service along each corridor. Completing this project would improve access, decrease congestion, enhance connectivity, and reinvigorate the local economy. The Cedar Lake Road and Louisiana Improvements Project would not only bolster quality of life in the area, but it would also help the city accommodate long-term growth and link residents to employment, education, and recreational opportunities in the region.

Again, I support the City of St. Louis Park's application for funding through the United States Department of Transportation's Rebuilding American Infrastructure with Sustainability and Equity Program. If you have any questions, please contact Rommel Lee in my Minnesota office at (612) 727-5220 or by email at [Rommel\\_Lee@Klobuchar.Senate.Gov](mailto:Rommel_Lee@Klobuchar.Senate.Gov).

Sincerely,



Amy Klobuchar  
United States Senator

ILHAN OMAR  
MEMBER OF CONGRESS  
5TH DISTRICT, MINNESOTA

1730 LONGWORTH HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515  
(202) 225-4755

404 3RD AVENUE NORTH – SUITE 203  
MINNEAPOLIS, MN 55401  
(612) 333-1272

WWW.OMAR.HOUSE.GOV



**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-2305**

COMMITTEE ON  
EDUCATION AND LABOR  
SUBCOMMITTEES ON  
HIGHER EDUCATION AND WORKFORCE  
INVESTMENT  
WORKFORCE PROTECTIONS  
HOUSE COMMITTEE  
ON FOREIGN AFFAIRS  
SUBCOMMITTEES ON  
AFRICA, GLOBAL HEALTH, AND GLOBAL HUMAN  
RIGHTS  
INTERNATIONAL DEVELOPMENT, INTERNATIONAL  
ORGANIZATIONS, AND GLOBAL CORPORATE  
SOCIAL IMPACT

US Department of Transportation  
The Honorable Peter P.M. Buttigieg  
Secretary of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

RE: RAISE 2022 – Cedar Lake Road and Louisiana Avenue Improvements

Dear Secretary Buttigieg:

I am writing to express my support for the 2022 Cedar Lake Road and Louisiana Avenue Improvements RAISE grant application submitted by the City of St. Louis Park and their partners: City of St. Louis Park School District, Metro Transit, and Minnesota Department of Transportation.

The Cedar Lake Road and Louisiana Avenue Improvements project will significantly contribute to a state of good repair by modernizing two arterials with regional and local significance, improve travel delays and provide relief to the regional MnDOT highway facilities, promote and provide equitable and safe active transportation alternatives for historically disadvantaged and underserved communities, and make progress towards achieving a 25% reduction in vehicle emissions by 2040 as outlined in the City of St. Louis Park's Climate Action Plan.

Cedar Lake Road and Louisiana Avenue provide connections and access for the entire northwest quadrant of the City of St. Louis Park and to three major freeways within the Twin Cities metropolitan area. Both roadway corridors are unique in that they provide regional movement of goods and connections to commerce, but also provide local livable communities connecting schools, places of worship, and parks. Both Cedar Lake Road and Louisiana Avenue have reached the end of their useful life and need repair to properly serve local and regional needs.

In addition, improvements to Cedar Lake Road and Louisiana Avenue will foster economic development by contributing to equitable outcomes for all people, including the approximate 30% non-white populations that live immediately adjacent to the corridor. The project will provide new pedestrian and bicycle connections to common destinations for underserved communities and improve existing transit service already provided along each roadway corridor.

Finally, this project will make progress toward cleaner air, less traffic and noise, and more livable neighborhoods by providing convenient and safe ways to use low-carbon and no-carbon travel methods, considering pedestrians, bicyclists, and transit first, before vehicles. These goals



are further reinforced by the Connect the Park and Climate Action Plans initiated and approved by City Council.

Preliminary design and public engagement have begun will be completed by December 2022. Environmental clearances and construction documents will be completed by 2024 and construction is scheduled to be completed by 2027, well in advance of both the June 30, 2026 statutory obligation of funds deadline and September 30, 2031 deadline at which time construction grant funds are to be expended.

Again, I would like to reiterate my support for the City of St. Louis Park and their partners in their efforts to obtain this 2022 RAISE grant. I ask that you give their application your full and fair consideration, consistent with applicable statutes and regulations.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ilhan Omar', with a stylized, cursive script.

Ilhan Omar  
Member of Congress



# Park Spanish Immersion Elementary School

*An academic bilingual community  
fostering global citizenship*

April 13, 2022

US Department of Transportation  
The Honorable Peter P.M. Buttigieg  
Secretary of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

RE: RAISE 2022 – Cedar Lake Road and Louisiana Avenue Improvements

Dear Secretary Buttigieg:

I am writing to express our support for the 2022 Cedar Lake Road and Louisiana Avenue Improvements RAISE grant application submitted by the City of St. Louis Park and their partners: City of St. Louis Park School District, Metro Transit, and Minnesota Department of Transportation.

The Cedar Lake Road and Louisiana Avenue Improvements project will significantly contribute to a state of good repair by modernizing two arterials with regional and local significance, promote and provide equitable and safe active transportation alternatives for historically disadvantaged and underserved communities, and make progress towards achieving a 25% reduction in vehicle emissions by 2040 as outlined in the City of St. Louis Park's Climate Action Plan.

Cedar Lake Road and Louisiana Avenue provide connections and access for the entire northwest quadrant of the City of St. Louis Park and to three major freeways within the Twin Cities metropolitan area. Both roadway corridors are unique in that they provide regional movement of goods and connections to commerce, but also provide local livable communities connecting schools, places of worship, and parks.

The project will provide new, safe, equitable, and convenient pedestrian and bicycle facilities, improving connections to St. Louis Park Schools, such as the Park Spanish Immersion Elementary School. Improving safety and mobility for all modes of transportation are especially a priority and need for the Park Spanish Immersion Elementary School since the school is located at an interchange with a freeway and arterial roadway within St. Louis Park.

Finally, this project will make progress toward cleaner air, less traffic and noise, and more livable neighborhoods by providing convenient and safe ways to use low-carbon and no-carbon travel methods, considering pedestrians, bicyclists, and transit first, before vehicles. These goals are further reinforced by the Connect the Park and Climate Action Plans initiated and approved by City Council.

Again, I would like to reiterate our support for the City of St. Louis Park and their partners in their efforts to obtain this 2022 RAISE grant.

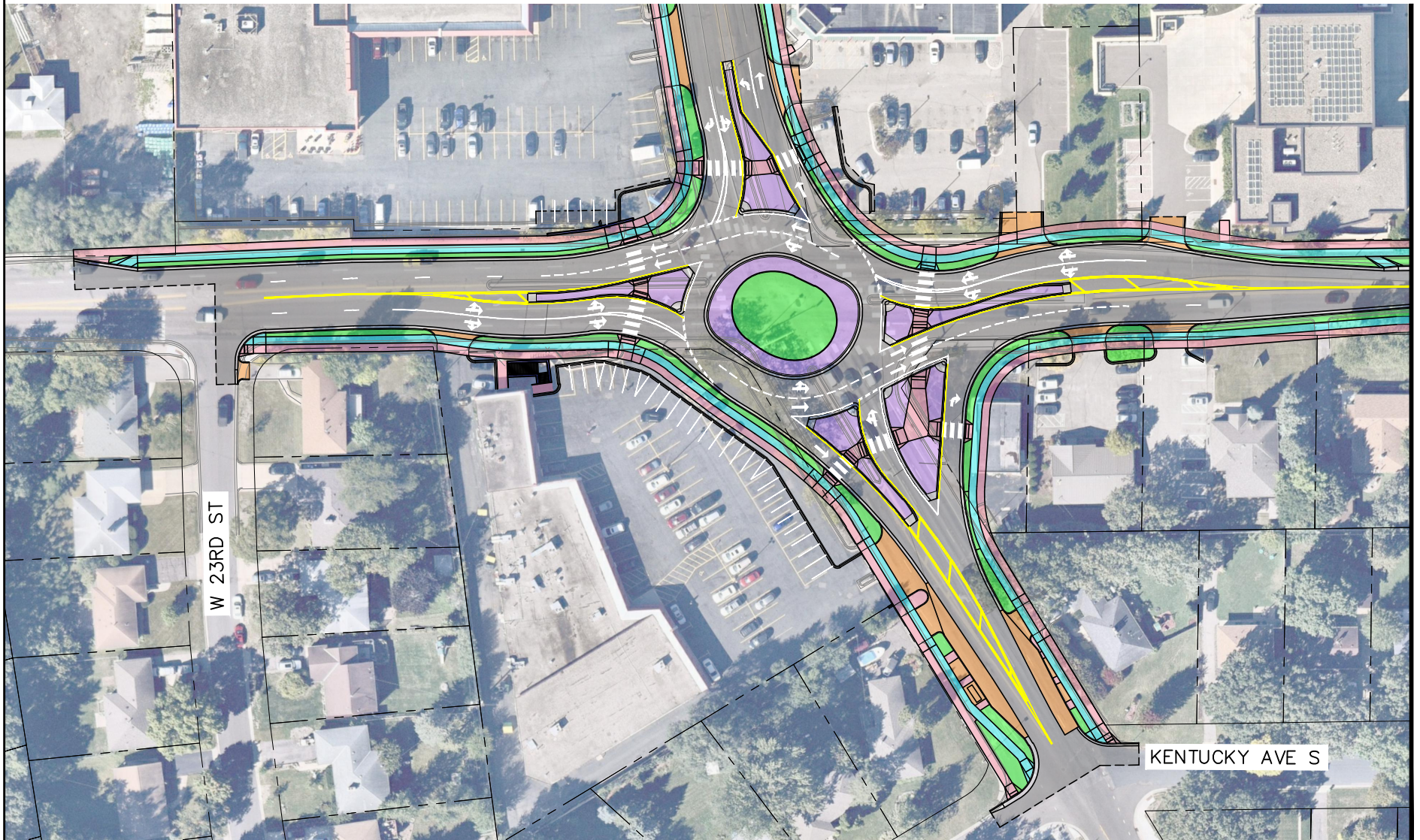
Sincerely,

Dr. Corey Maslowski, Principal  
952-928-6558  
maslowski.corey@slpschools.org



# LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

K:\TWC\_Civil\City\ST LOUIS PARK\CEDAR LAKE ROAD AND LOUISIANA AVENUE - PRELIM\CAD\Plan Sheets\Exhibits\C.P. 4024-1100 - FUNDING GRANT SHEETS.dwg April 07, 2022 - 6:36pm



MATCH LINE  
SEE FIGURE 2

LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



0 25 50 100  
HORIZONTAL  
SCALE IN FEET

## LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 1

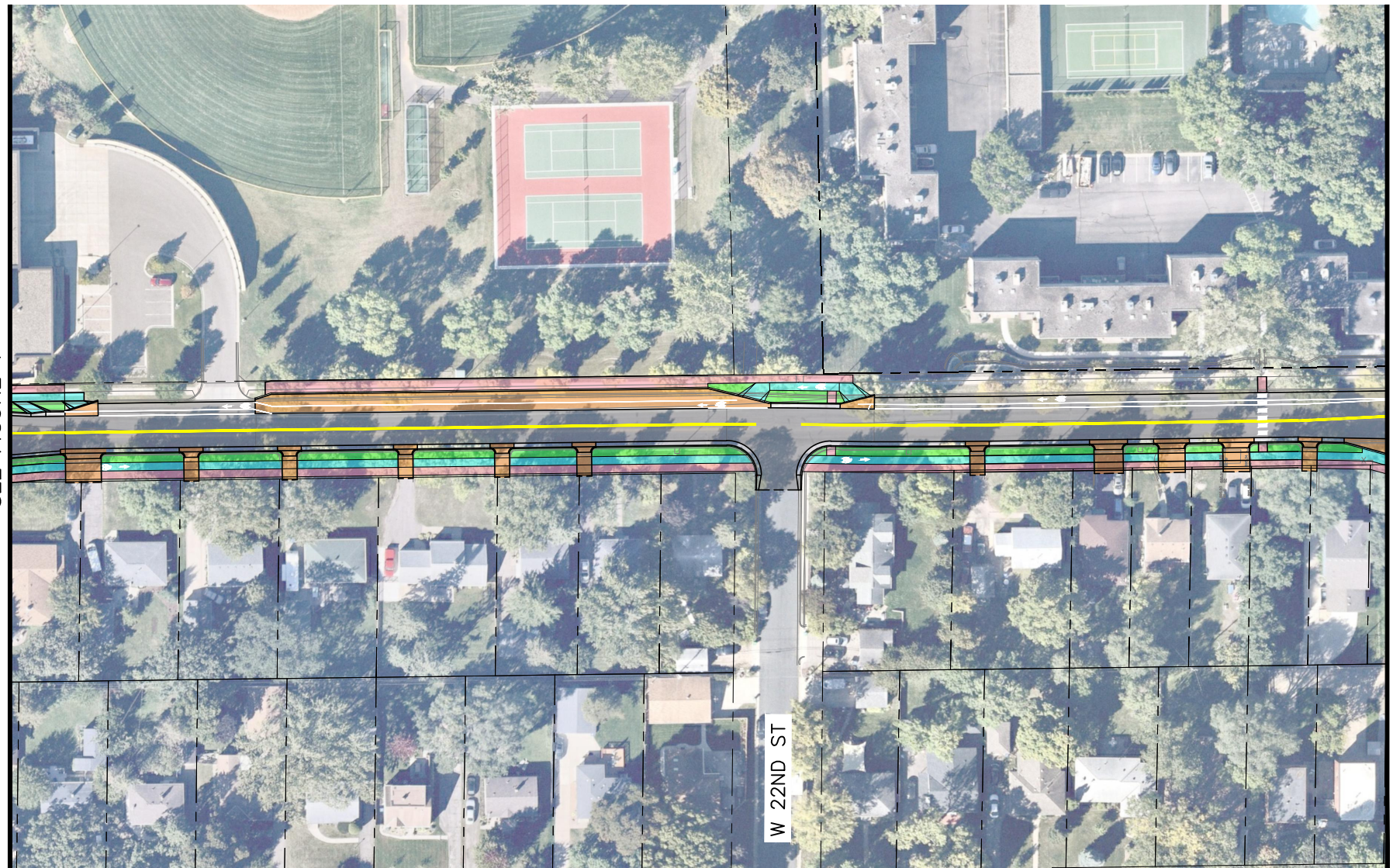


LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

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MATCH LINE  
SEE FIGURE 1

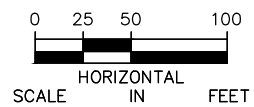
MATCH LINE  
SEE FIGURE 3



LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley**»**Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

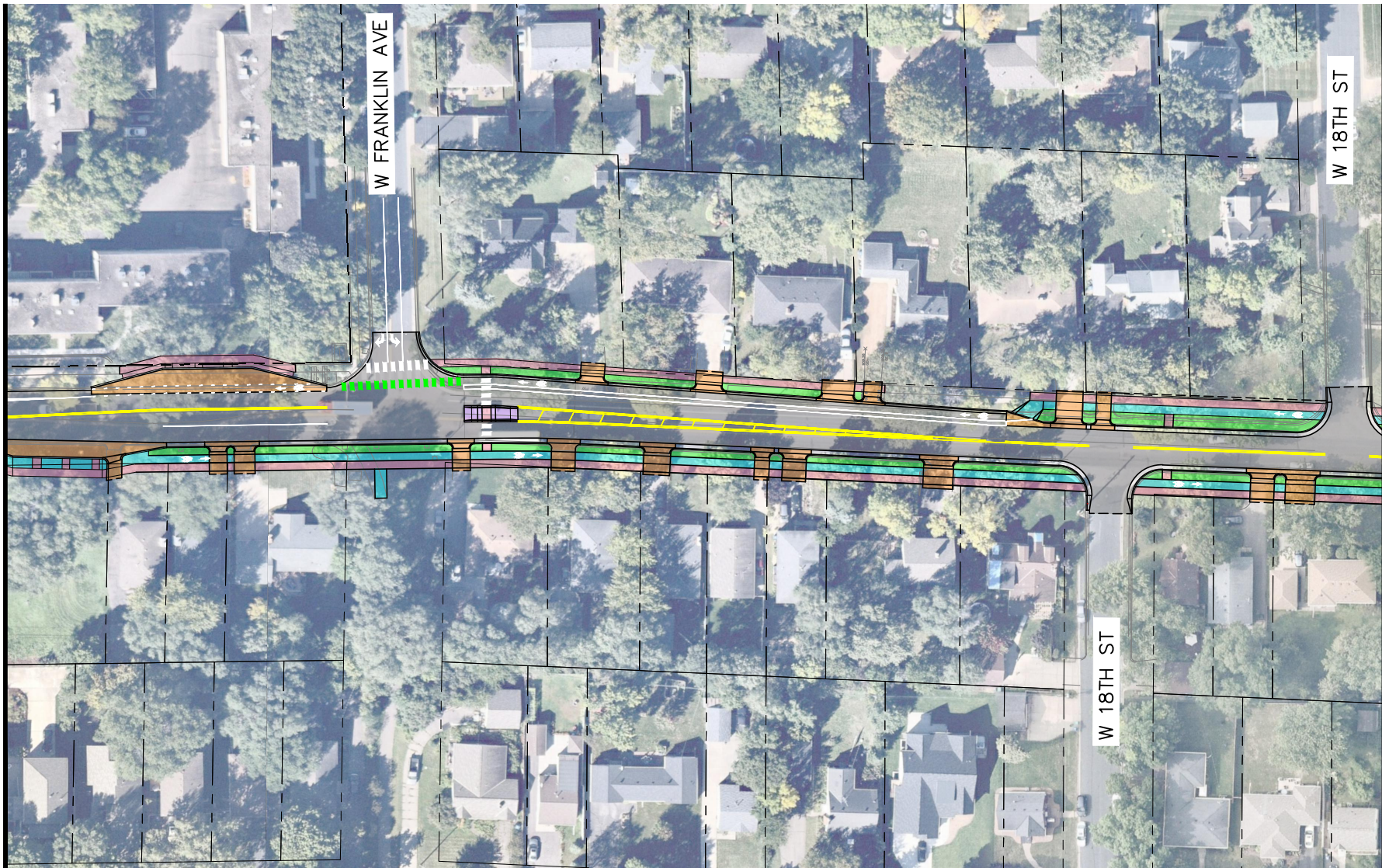
- |  |                                      |
|--|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

FIGURE 2



LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

MATCH LINE  
SEE FIGURE 2

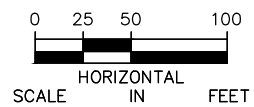


MATCH LINE  
SEE FIGURE 4

LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley**»**Horn**

 **St. Louis Park**  
MINNESOTA



LEGEND







- |   |                                      |
|---|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

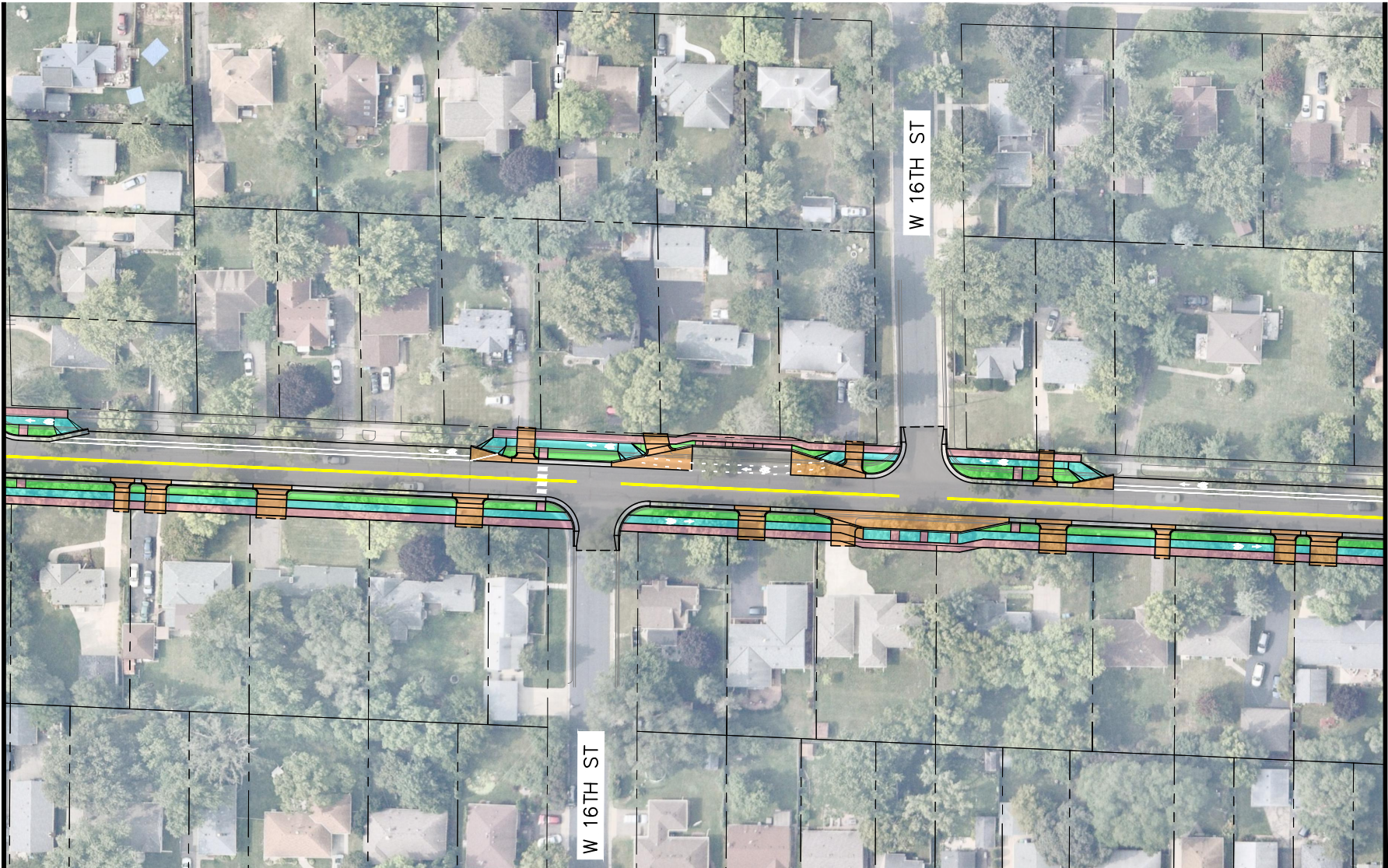
FIGURE 3



LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

MATCH LINE  
SEE FIGURE 3

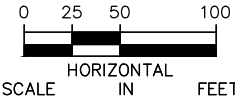
MATCH LINE  
SEE FIGURE 5



LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND







- |   |                                      |
|---|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

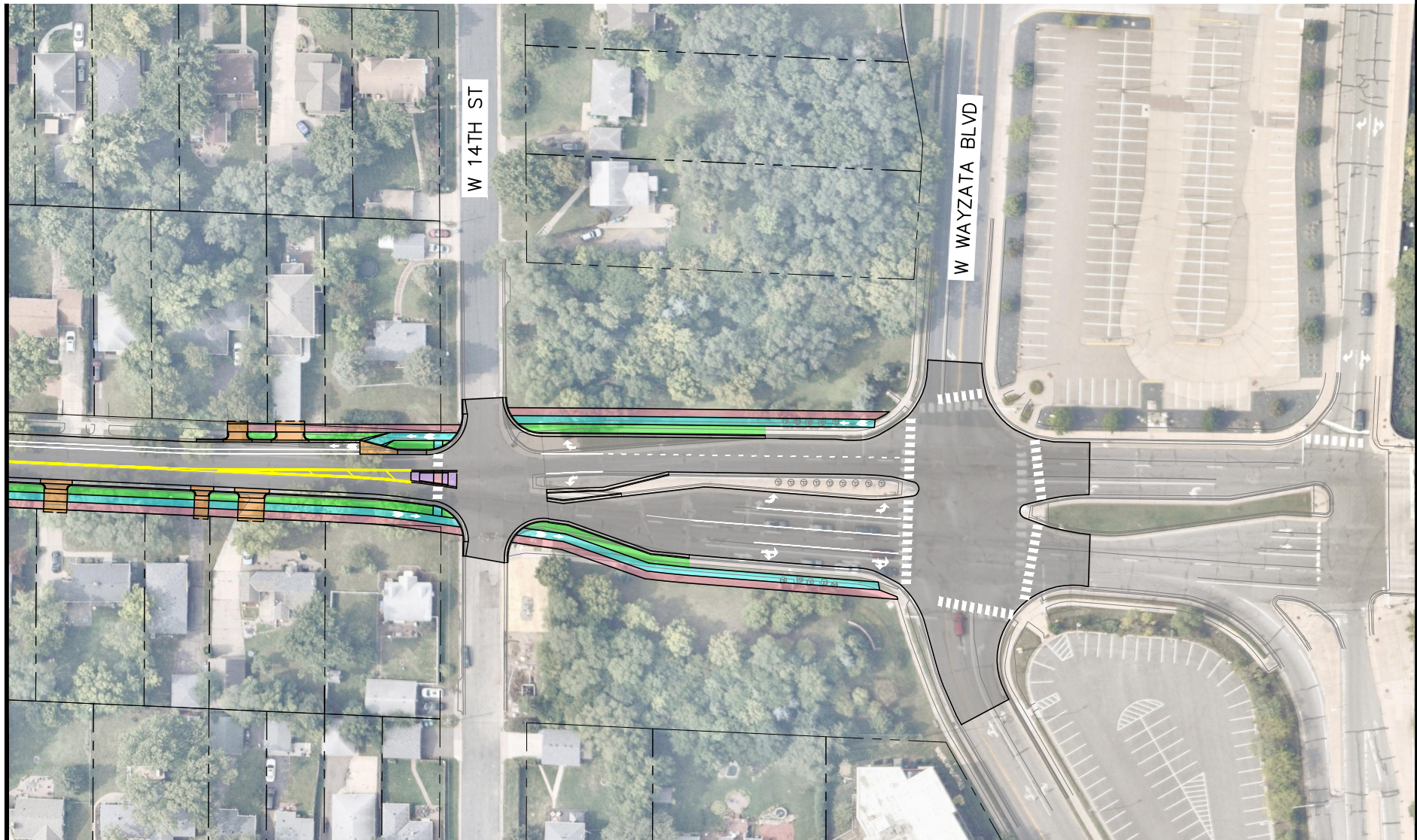
FIGURE 4



# LOUISIANA AVE IMPROVEMENTS - CITY PROJECT NO. 4024-1100

K:\TWC\_Civil\City\ST LOUIS PARK\CEDAR LAKE ROAD AND LOUISIANA AVENUE - PRELIM\CAD\Plan Sheets\Exhibits\C.P. 4024-1100 - FUNDING GRANT SHEETS.dwg April 07, 2022 - 6:11pm

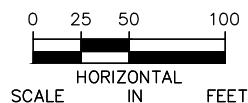
MATCH LINE  
SEE FIGURE 4



LOUISIANA AVE IMPROVEMENTS  
FROM W 23RD STREET TO W WAYZATA BLVD

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



## LEGEND

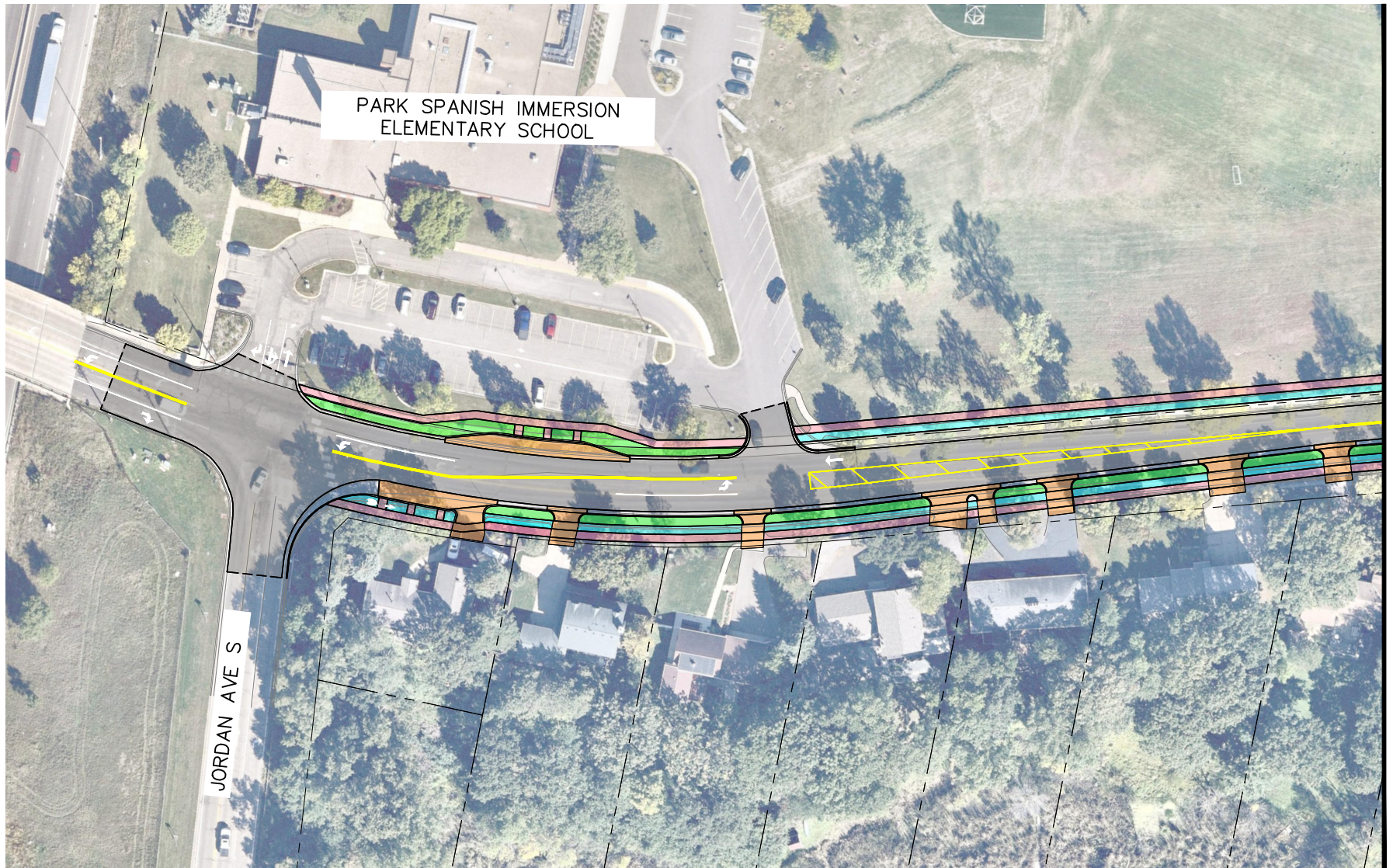
	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 5



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

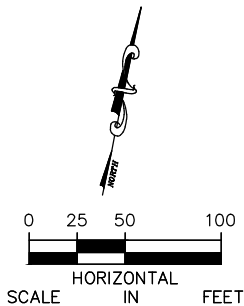
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CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

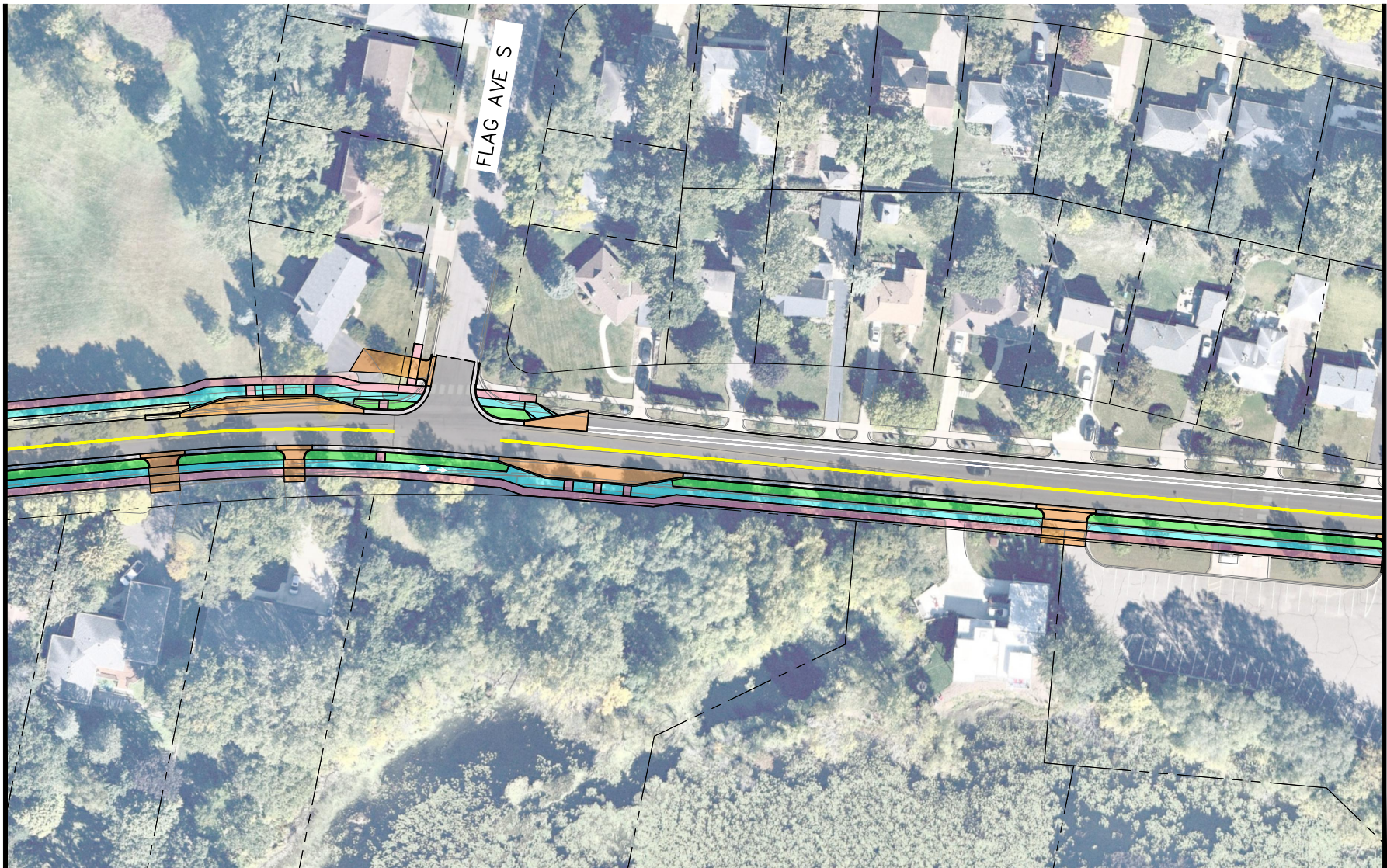
FIGURE 6



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 6

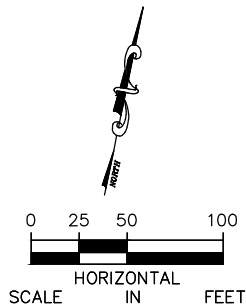


MATCH LINE  
SEE FIGURE 8

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

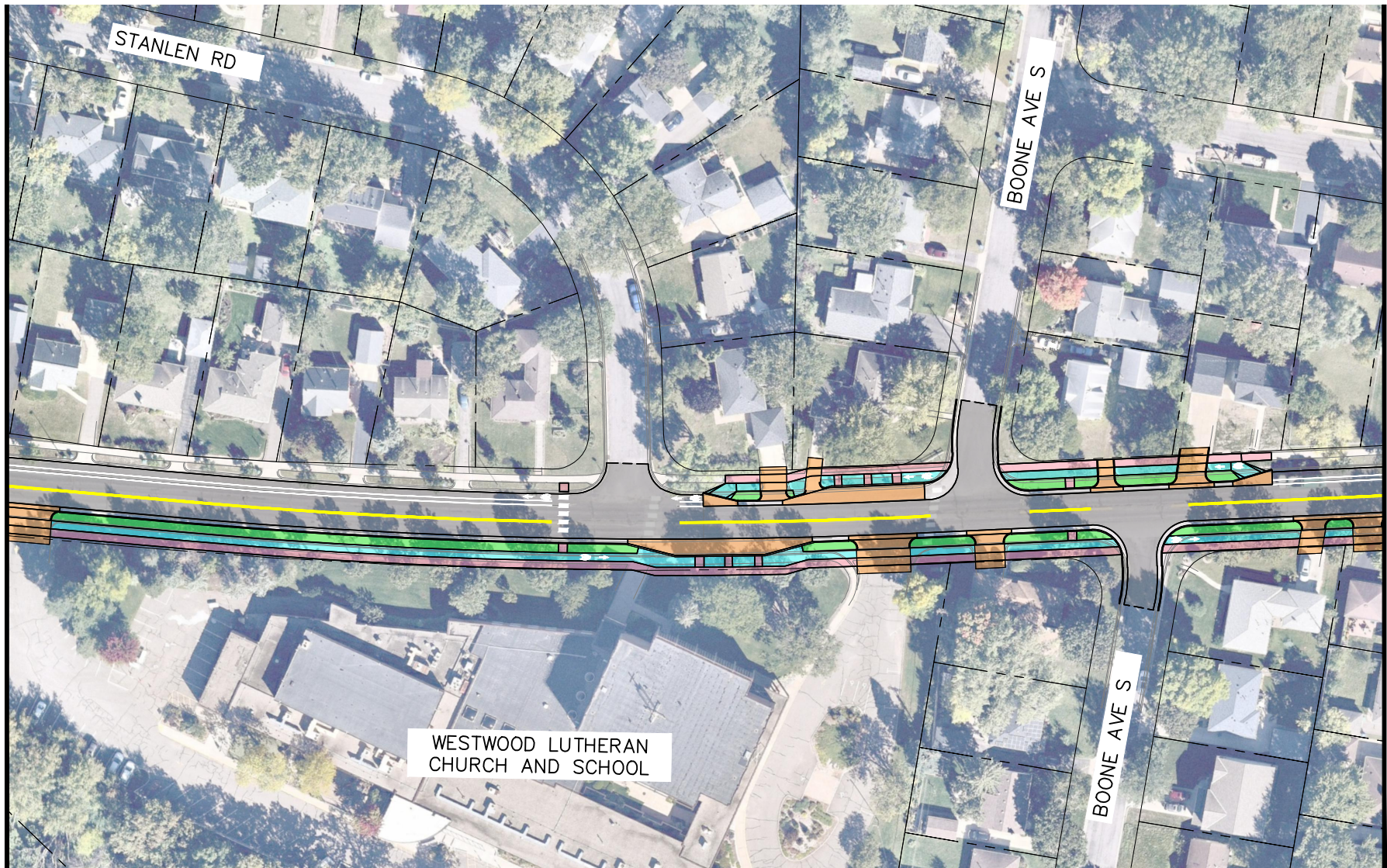
FIGURE 7



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 7

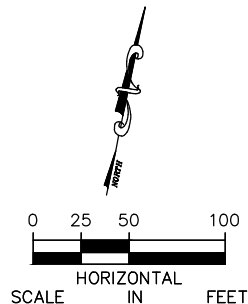


MATCH LINE  
SEE FIGURE 9

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 8

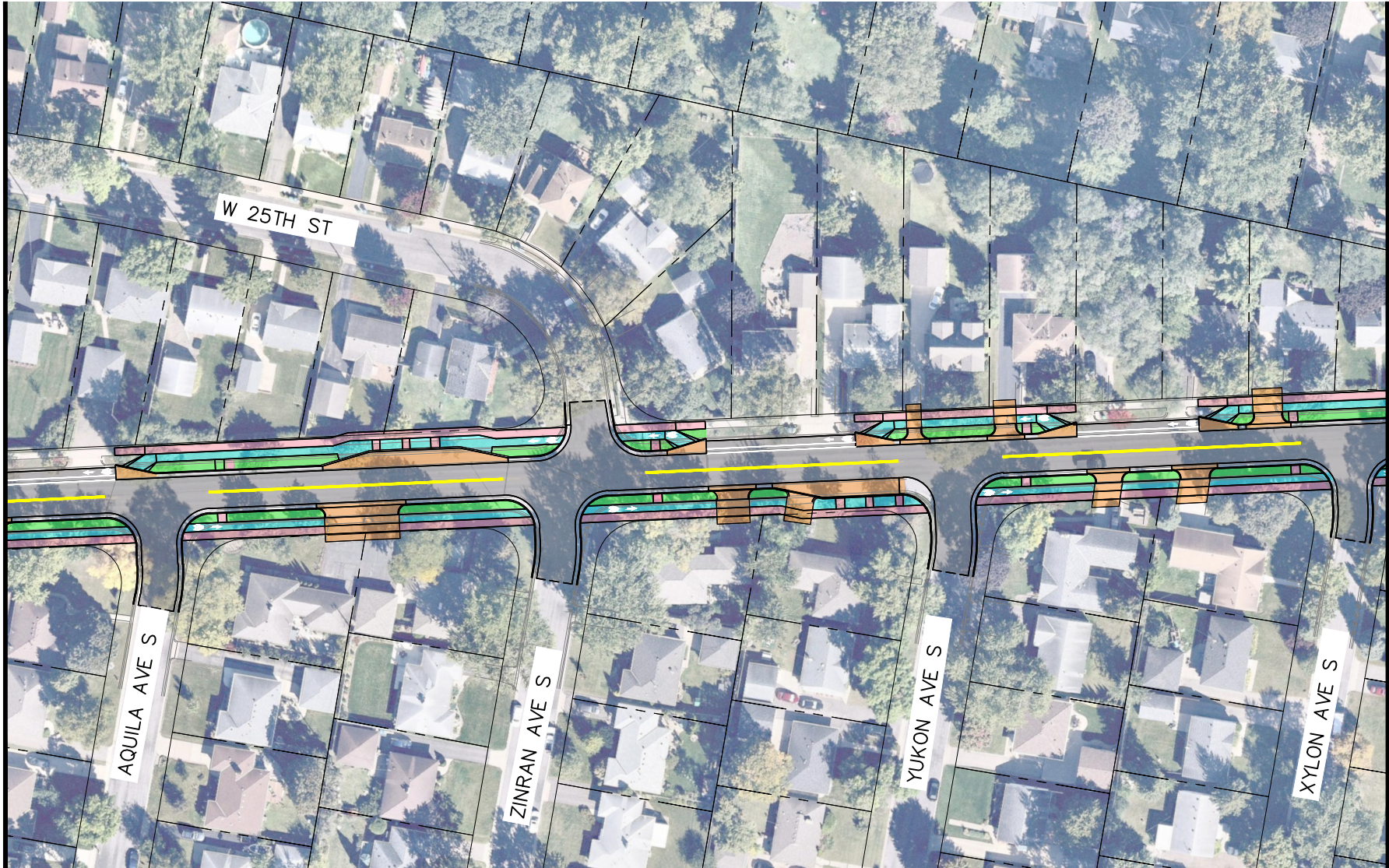


CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 8

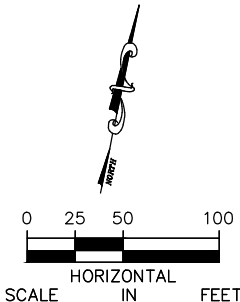
MATCH LINE  
SEE FIGURE 10



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

- |  |                                      |
|--|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

FIGURE 9

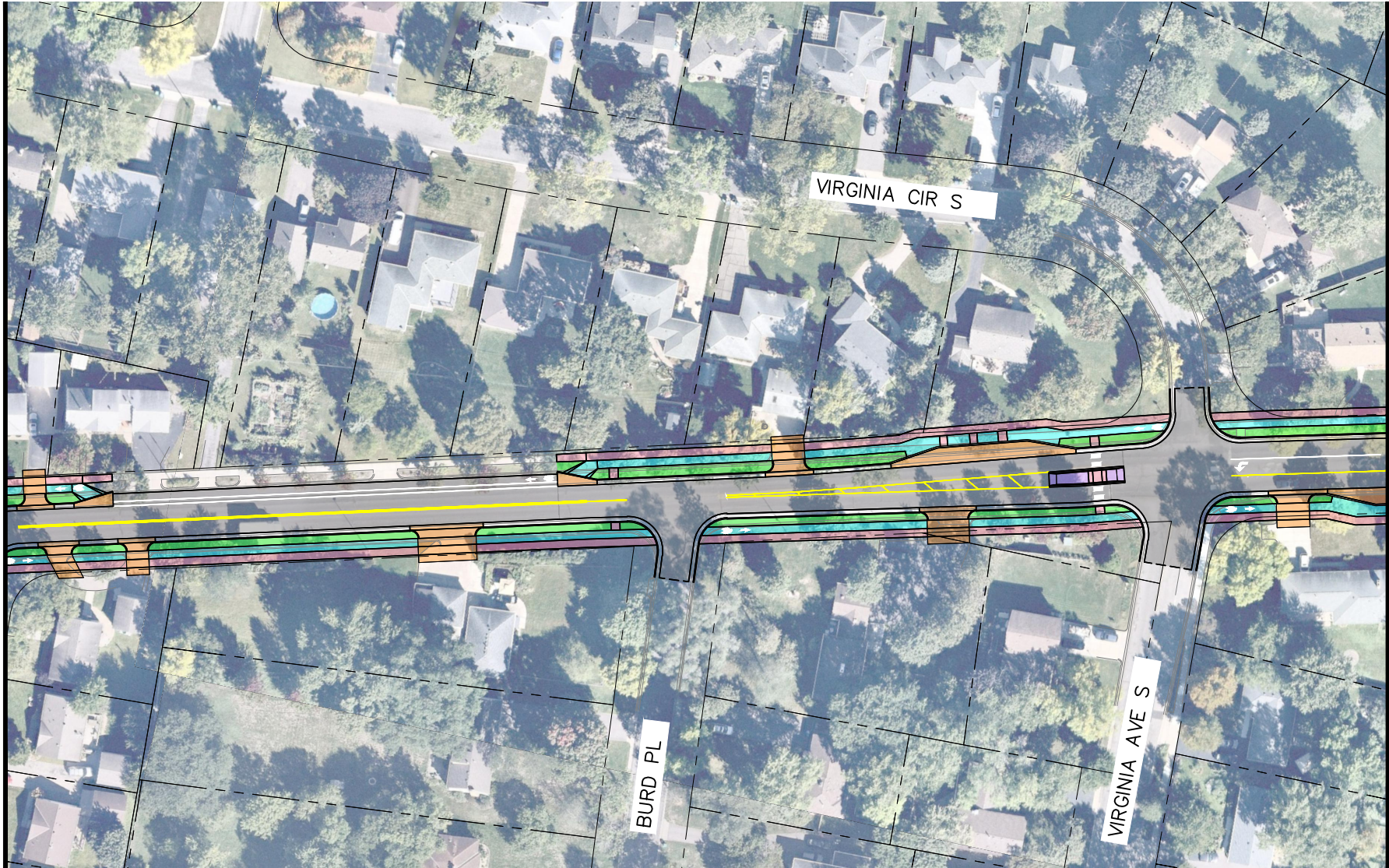


CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 9

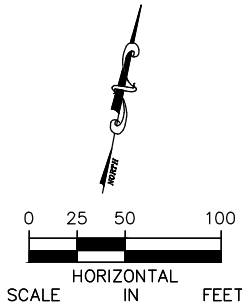
MATCH LINE  
SEE FIGURE 11



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND







- |   |                                      |
|---|--------------------------------------|
|  | PROPOSED ROADWAY                     |
|  | PROPOSED CYCLE TRACK                 |
|  | PROPOSED SIDEWALK                    |
|  | PROPOSED LANDSCAPED BOULEVARDS       |
|  | PROPOSED CONCRETE MEDIANS            |
|  | PROPOSED CONCRETE DRIVEWAYS/BUS PADS |

FIGURE 10

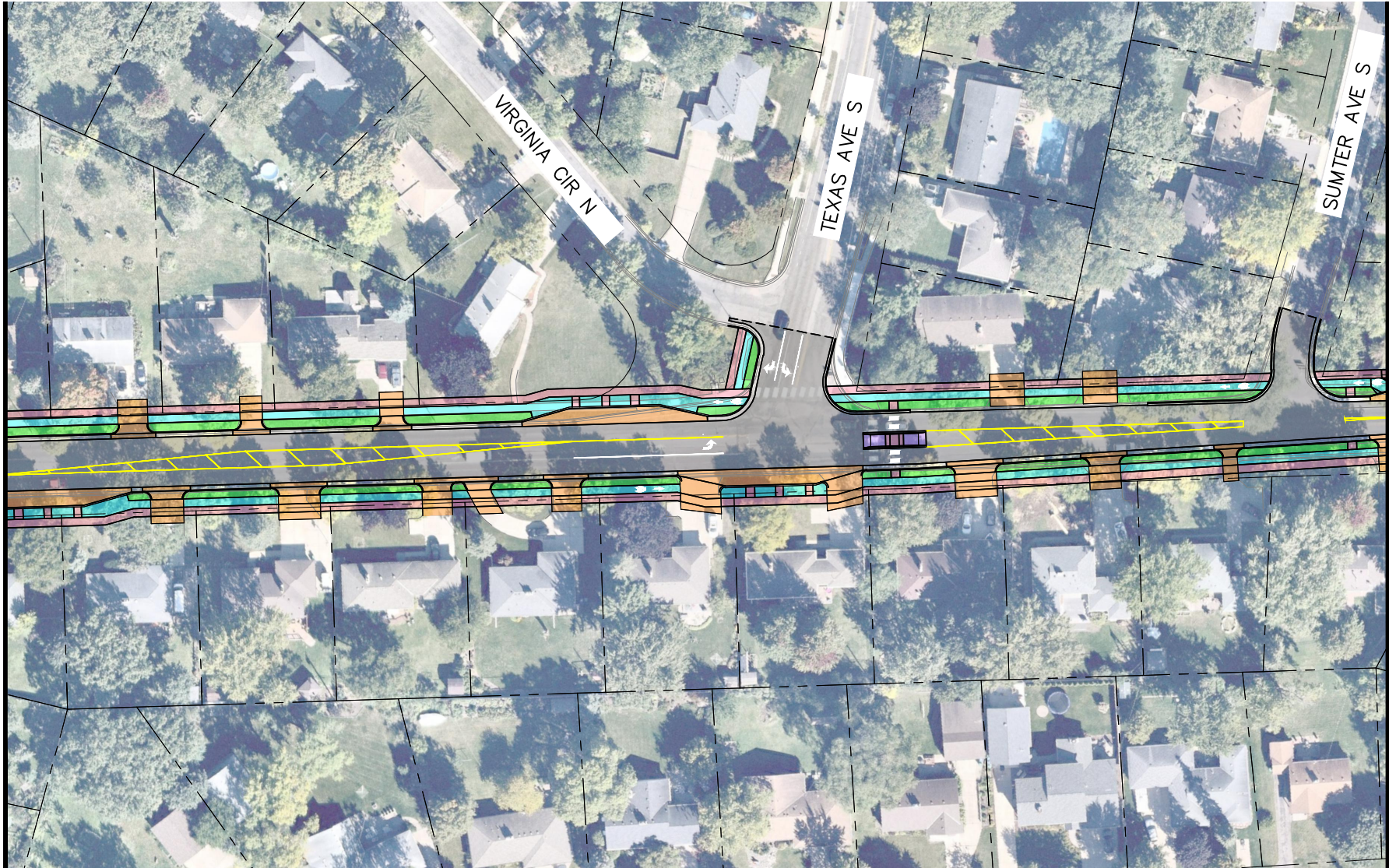


CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

K:\TWC\_Civil\City\ST LOUIS PARK\CEDAR LAKE ROAD AND LOUISIANA AVENUE - PRELIM\CAD\Plan Sheets\Exhibits\C.P. 4024-1100 - FUNDING GRANT SHEETS.dwg April 07, 2022 - 6:18pm

MATCH LINE  
SEE FIGURE 10

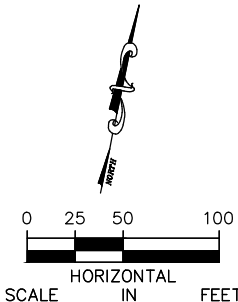
MATCH LINE  
SEE FIGURE 12



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

- PROPOSED ROADWAY
- PROPOSED CYCLE TRACK
- PROPOSED SIDEWALK
- PROPOSED LANDSCAPED BOULEVARDS
- PROPOSED CONCRETE MEDIANS
- PROPOSED CONCRETE DRIVEWAYS/BUS PADS

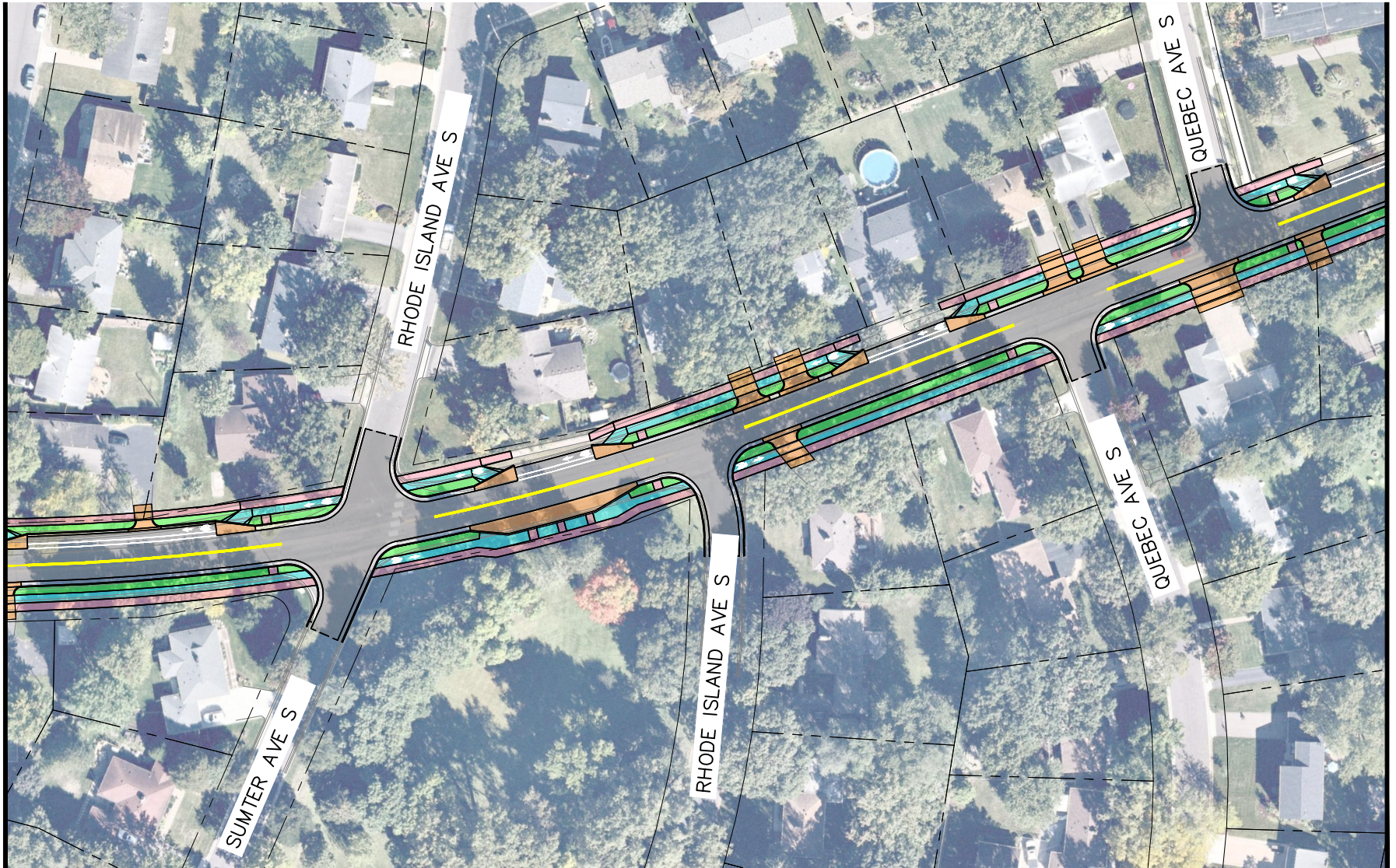
FIGURE 11



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 11

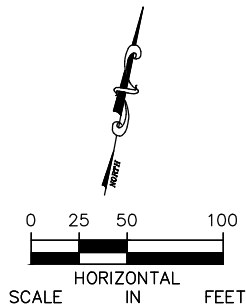


MATCH LINE  
SEE FIGURE 13

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley»Horn**

**St. Louis Park**  
MINNESOTA



LEGEND







	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

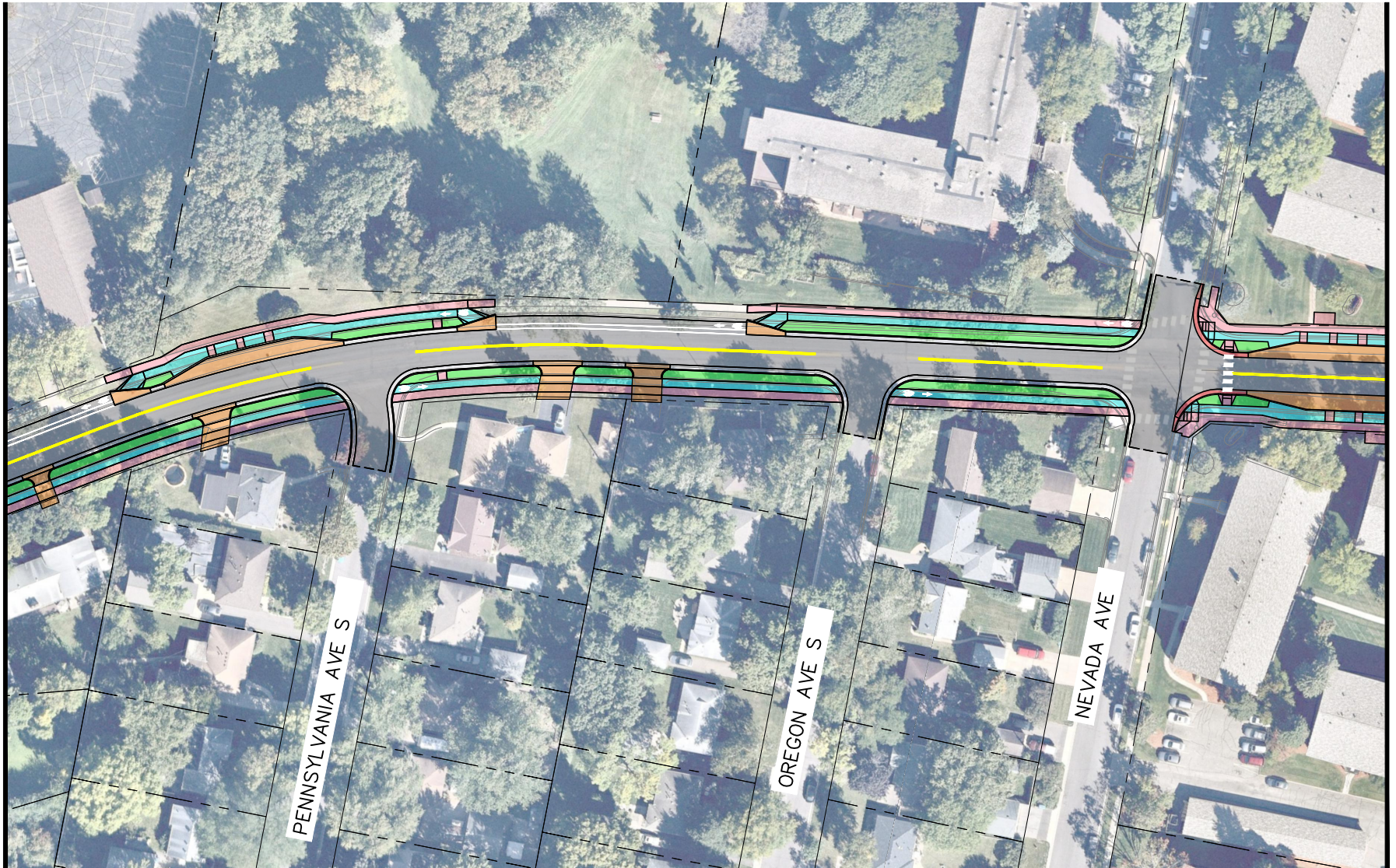
FIGURE 12



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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MATCH LINE  
SEE FIGURE 12

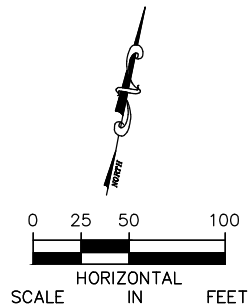


MATCH LINE  
SEE FIGURE 14

CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

**Kimley** **Horn**

**St. Louis Park**  
MINNESOTA



LEGEND

	PROPOSED ROADWAY
	PROPOSED CYCLE TRACK
	PROPOSED SIDEWALK
	PROPOSED LANDSCAPED BOULEVARDS
	PROPOSED CONCRETE MEDIANS
	PROPOSED CONCRETE DRIVEWAYS/BUS PADS

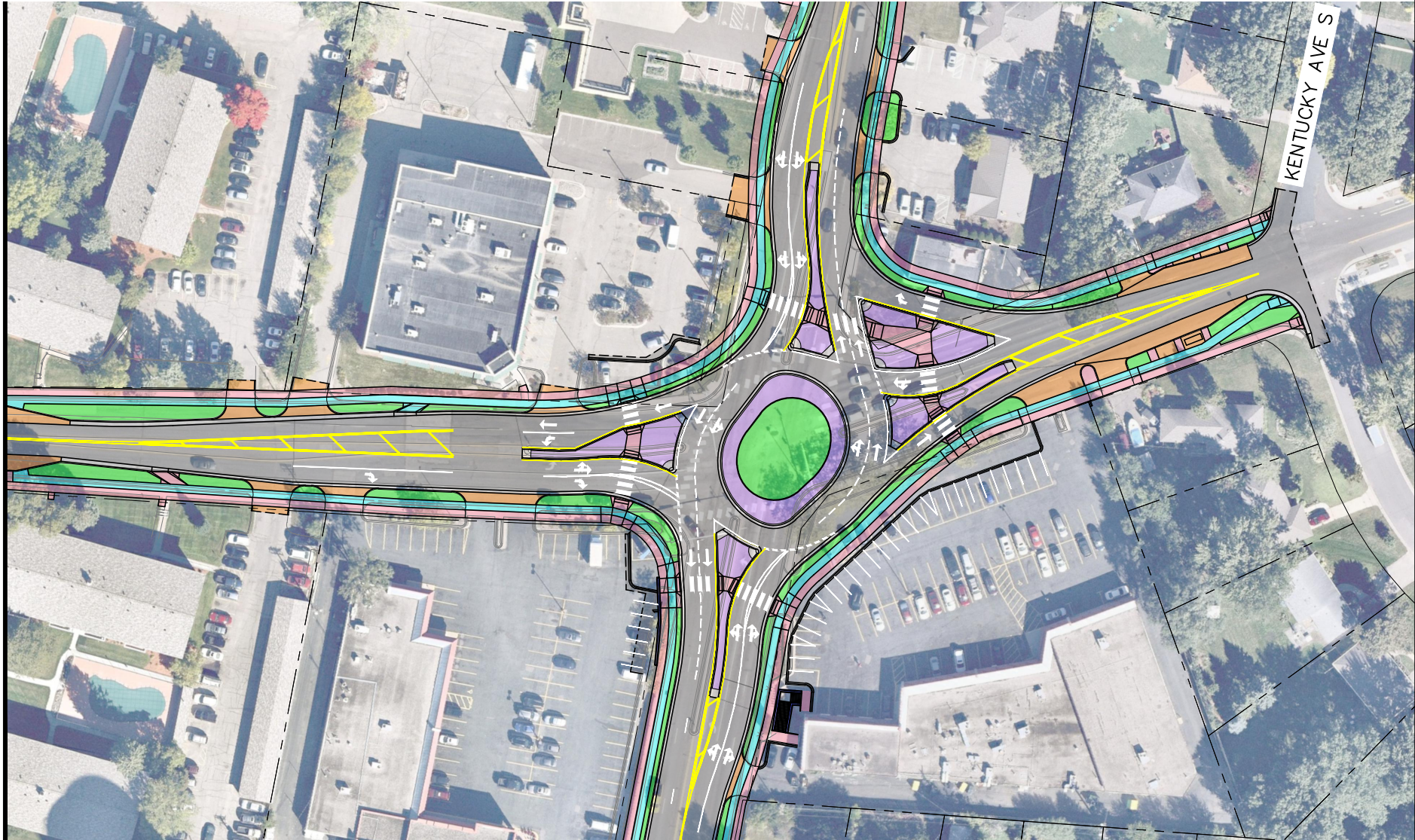
FIGURE 13



CEDAR LAKE ROAD IMPROVEMENTS - CITY PROJECT NO. 4023-1100

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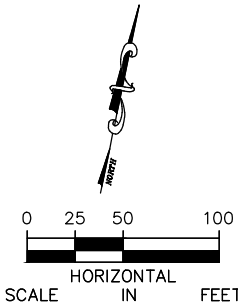
MATCH LINE  
SEE FIGURE 13



CEDAR LAKE ROAD IMPROVEMENTS  
FROM JORDAN AVE S TO NEVADA AVE

Kimley»Horn

St. Louis Park  
MINNESOTA



LEGEND

- PROPOSED ROADWAY
- PROPOSED CYCLE TRACK
- PROPOSED SIDEWALK
- PROPOSED LANDSCAPED BOULEVARDS
- PROPOSED CONCRETE MEDIANS
- PROPOSED CONCRETE DRIVEWAYS/BUS PADS

FIGURE 14



## Cedar Lake Road and Louisiana Avenue Improvements

### 2022 Regional Solicitation Application – Roadway Reconstruction / Modernization

#### Existing Conditions Photos



*Figure 1 – Louisiana Avenue south of Cedar Lake Road, looking north. No separation between sidewalk and travel lanes.*



*Figure 2 – Louisiana Avenue, looking north. No sidewalk facilities along east side of roadway and no bikeway. No landing area for transit riders.*



*Figure 3 – Louisiana Avenue at Wayzata Boulevard and 14<sup>th</sup> Street, looking south. Sub-standard lane merge taper, signing, and pavement markings. No bikeway facility.*



*Figure 4 – Cedar Lake Road looking west. Parking lanes, no sidewalk on left side of roadway, no bikeway, pavement condition in need of repair*

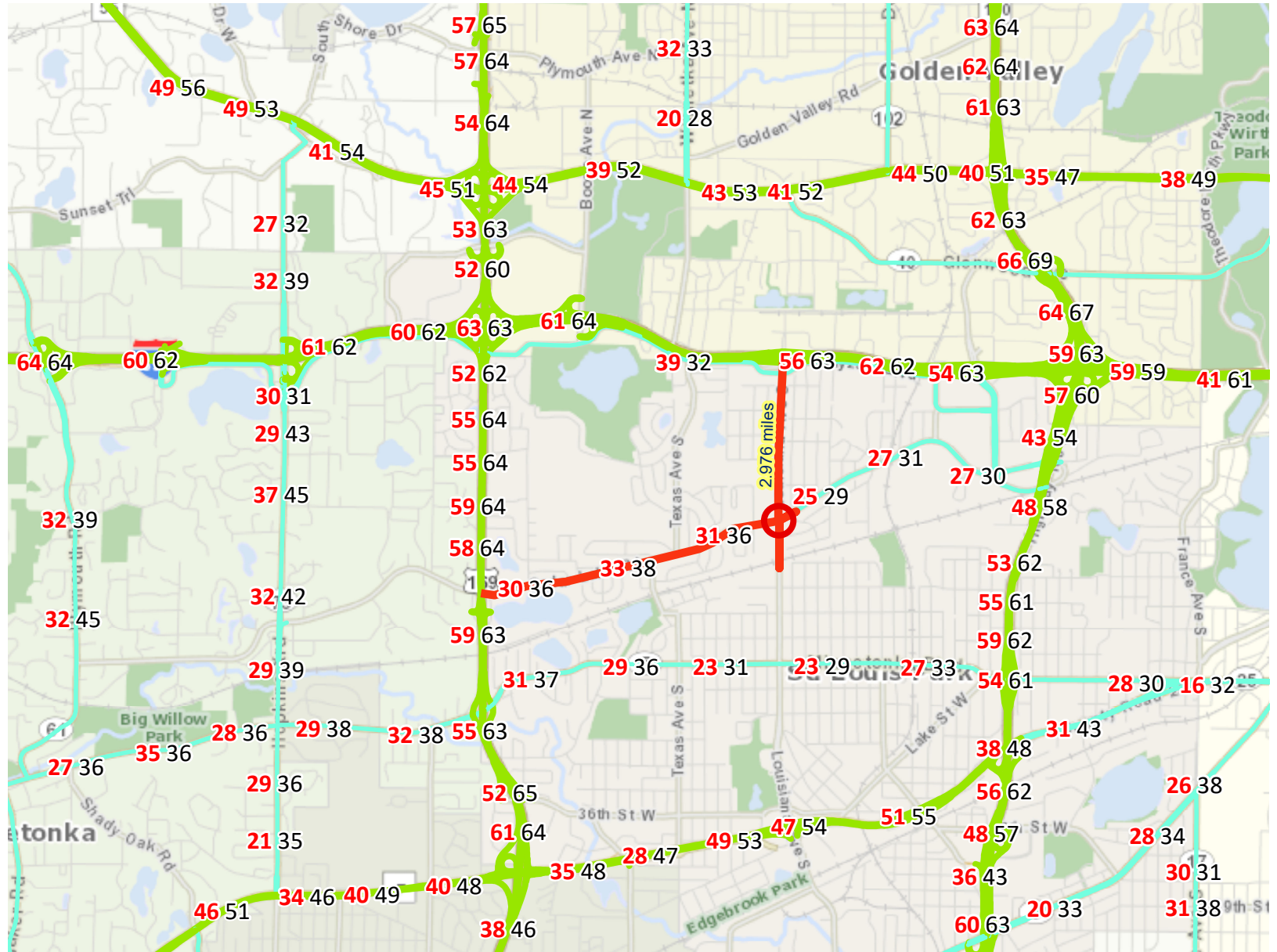


*Figure 5 – Cedar Lake Road at Texas Avenue. No separation between travel lanes and pedestrians, no sidewalk on south side, crosswalk to no facility on south side, lack of APS facilities, no dedicated bikeway.*



# Level of Congestion

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463



○ Project Points    — Principal Arterials    - - - Principal Arterials Planned

— Project    — A Minor Arterials    - - - A Minor Arterials Planned

0    0.45    0.9    1.8    2.7    3.6  
Miles

Created: 3/15/2022  
LandscapeRSA1



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





# Regional Economy

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463

## Results

**WITHIN ONE MI** of project:  
Postsecondary Students: 0

Totals by City:

### Golden Valley

Population: 107

Employment: 4056

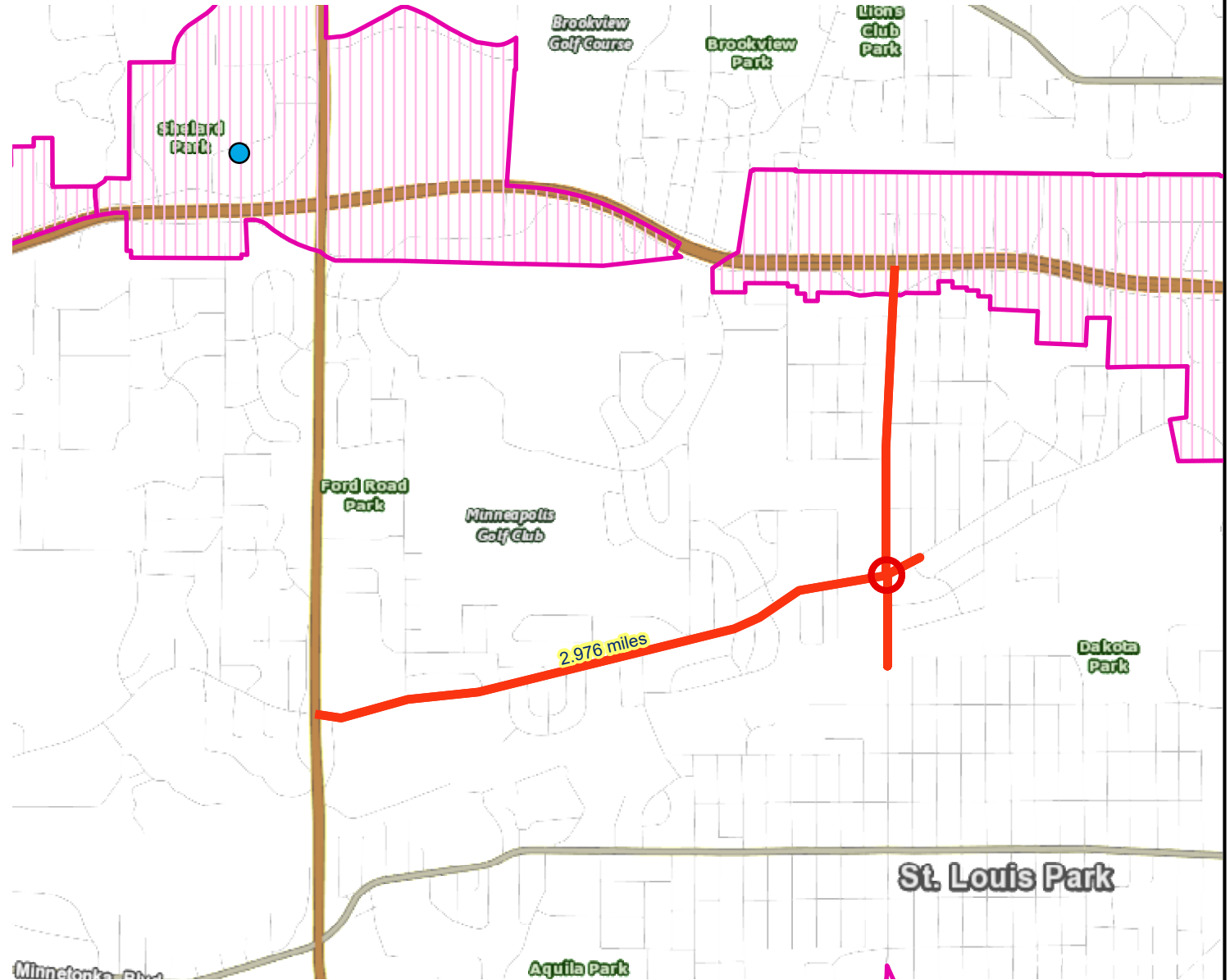
Mfg and Dist Employment: 825

### St. Louis Park

Population: 24090

Employment: 13174

Mfg and Dist Employment: 1923



Project Points



Postsecondary Education Centers



Job Concentration Centers



Project



Manufacturing/Distribution Centers

0 0.25 0.5 1 1.5 2 Miles

Created: 3/15/2022  
LandscapeRSA5



For complete disclaimer of accuracy, please visit  
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



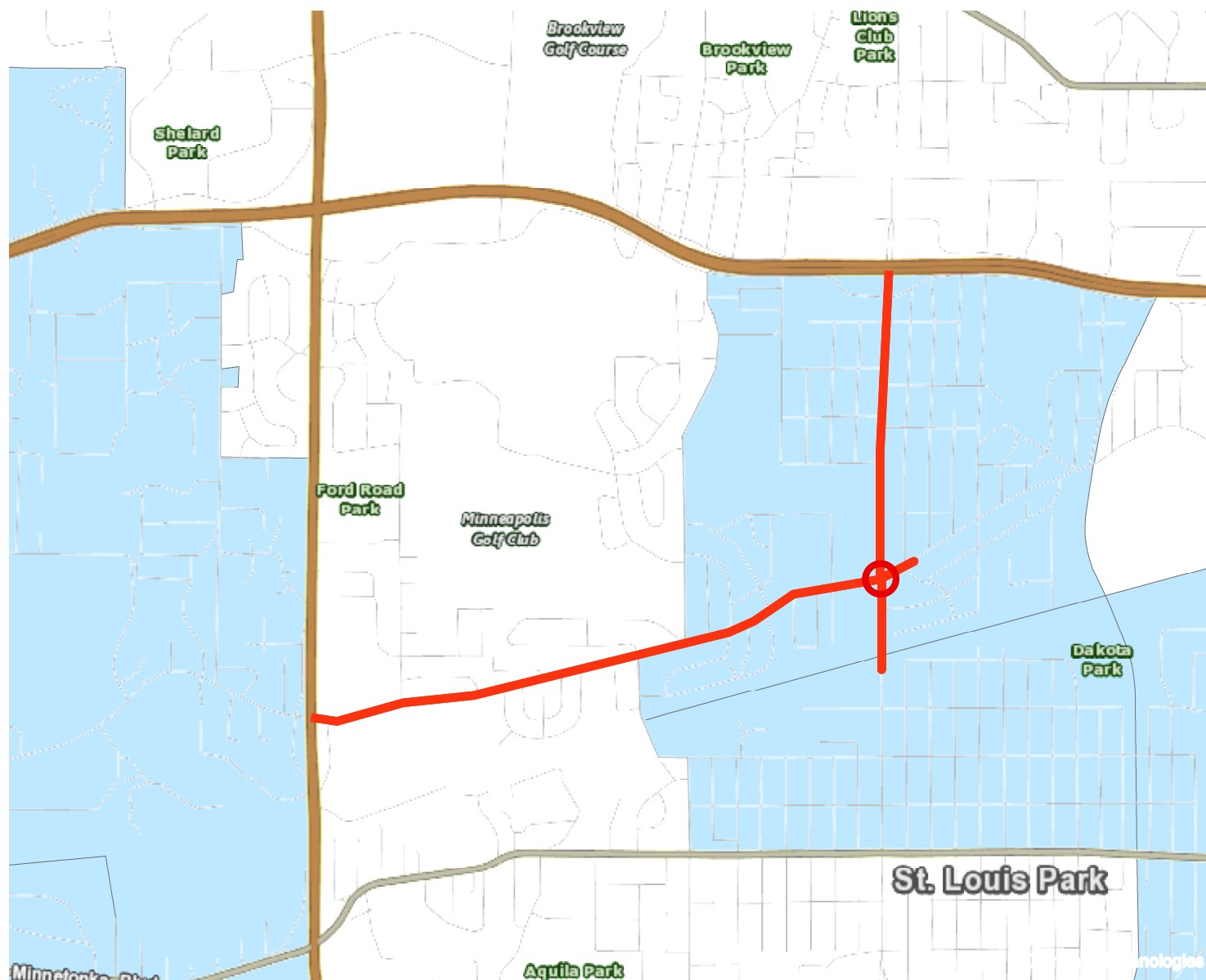
# Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463

## Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 646

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



Points



Area of Concentrated Poverty



Lines



Regional Environmental Justice Area

0 0.25 0.5 1 1.5 2 Miles

Created: 3/15/2022  
LandscapeRSA2



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



# Transit Connections

Roadway Reconstruction/Modernization Project: Cedar-Louisiana | Map ID: 1647355360463

## Results

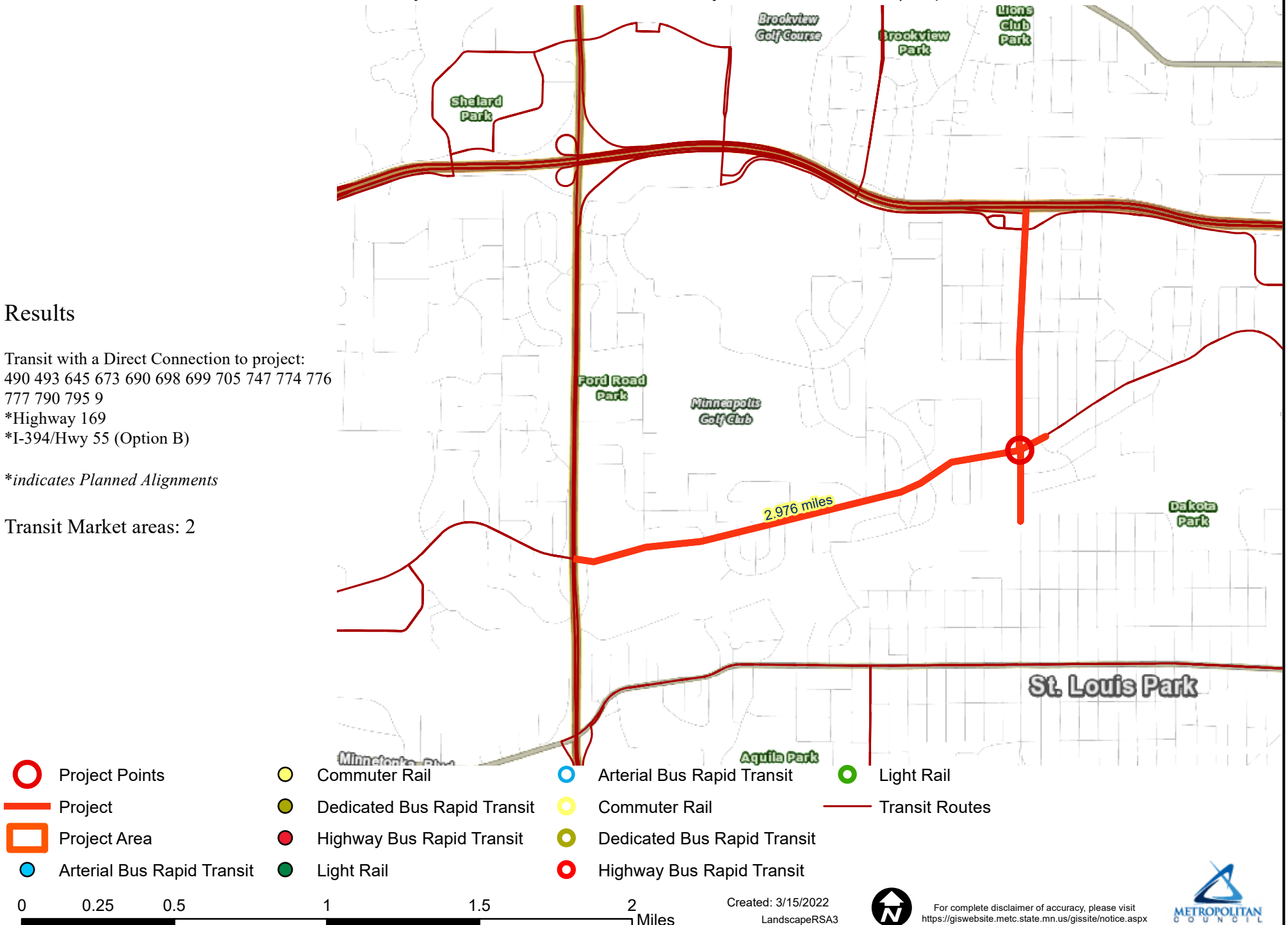
Transit with a Direct Connection to project:  
490 493 645 673 690 698 699 705 747 774 776  
777 790 795 9

\*Highway 169

\*I-394/Hwy 55 (Option B)

*\*indicates Planned Alignments*

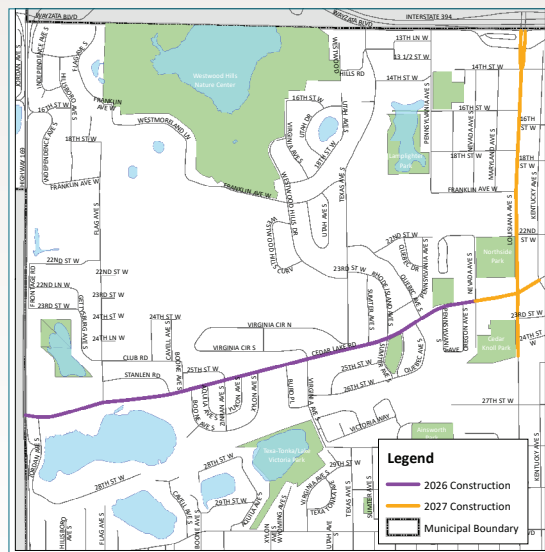
Transit Market areas: 2



# CEDAR LAKE ROAD and LOUISIANA AVENUE IMPROVEMENTS



## 2026 AND 2027 PROJECT AREAS



#RedoCedarLou

## Project Benefits:

- Anticipated roundabout at Cedar Lake Road/Louisiana Avenue reduces vehicle emissions and delay
- Provides pedestrian facilities along both sides of roadway, minimizing unnecessary roadway crossing, improving pedestrian safety
- Provides protected delineated bikeway along both roadways, improving bicycle safety and reducing serious injury accidents
- Provide curb bump-outs and median refuges to improve pedestrian safety and reduce vehicle speeds
- Addresses substandard lane merges and lane configurations resulting in vehicle crashes
- Provides ADA-compliant bus loading areas at all transit stops so riders don't wait in the roadway, improving safety
- Provides bus pull-outs to improve corridor efficiency for vehicles and buses
- Provides ADA-compliant signals and necessary upgrades that improve pedestrian and vehicle safety
- Provides new LED roadway lighting to improve driving conditions and visibility for all modes of transportation at night

APPLICANT: **City of St. Louis Park**  
 ROUTE: **Cedar Lake Road and Louisiana Avenue**  
 CITY WHERE PROJECT IS LOCATED: **St. Louis Park**

COUNTY WHERE PROJECT IS LOCATED: **Hennepin**  
 REQUESTED AWARD AMOUNT: **\$7,000,000**  
 TOTAL PROJECT COST: **\$11,985,000**

## Project History and Description:

Since 2015, the City of St. Louis Park has been implementing the Connect the Park initiative, a comprehensive Active Transportation Plan aimed at making more livable neighborhoods by providing convenient, safe, equitable, and environment-focused ways for residents to move around the City on a network system of sidewalks, bikeways, and trails. Cedar Lake Road and Louisiana Avenue are the most critical and complicated links remaining in the City's long-term vision.

Both roadways are A-minor arterials, serving the entire northwest quadrant of the City, including at least 600 affordable housing units, as well as combined regional traffic for over 25,000 vehicles daily since they intersect with three major freeways within the metropolitan area. Thus, both roadway corridors are unique in that they provide regional movement of goods and connections to commerce, but also provide local livable communities connecting schools, places of worship, and parks. Both Cedar Lake Road and Louisiana Avenue are in need of modernization to provide equitable opportunities for transportation to underserved populations and replace existing facilities at the end of their useful design life.

The proposed project will include the replacement of aging pavements, new sidewalks, new bikeways, ADA accommodations at intersections and transit stops, new bus pullouts, new LED street lighting, replacement of storm sewer systems and water quality BMPs for reconstructed impervious surfaces, replacement of existing traffic signals, and four signalized Rapid Rectangular Flashing Beacon pedestrian crossings. A roundabout is being evaluated at the intersection of Cedar Lake Road and Louisiana Avenue, and is anticipated to be incorporated into the project scope based on public input during the initial phases of public engagement. Additionally, proven traffic calming strategies, such as raised medians, curb extensions, and streetscaping, will be introduced to improve the crossing experience for pedestrians/bicyclists while managing vehicle speeds.







**395 John Ireland Boulevard  
Saint Paul, MN 55155**

April 1, 2022

The Honorable Pete Buttigieg  
Secretary, US Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg,

This letter is in reference to the Rebuilding American Infrastructure with Sustainability and Equity application for the Cedar Lake Road and Louisiana Avenue reconstruction project in the city of St. Louis Park. This project is a locally led project. The project will reconstruct sections of Cedar Lake Road and Louisiana Avenue and include pedestrian ramp improvements, transit stop enhancements, replacement of aging pavement and roadway infrastructure, and construction of new pedestrian sidewalks, bikeways, and signalized crossings. Though this project is not along a MnDOT trunk highway, the planned improvements benefit significant nodes on MnDOT's trunk highway system within St. Louis Park and the surrounding transportation network.

Currently the total project cost estimate is \$18.1 million. The city of St. Louis Park has identified \$4.3 million for this project. MnDOT currently does not have this project included in the State Transportation Improvement Program (STIP) or funding identified in MnDOT's 10-year Capital Highway Investment Plan (CHIP). It is MnDOT's assumption at this time that the local agency will be responsible for delivery costs and funding gaps. This project is planned for construction in 2025.

MnDOT looks forward to continued cooperation with the city of St. Louis Park as this effort moves forward to improve this transportation need.

Thank you for your interest and support to improve Minnesota's transportation system.

Sincerely,

A handwritten signature in black ink that reads 'Nancy Daubenberger'.

Nancy Daubenberger, P.E.  
Interim Commissioner, Minnesota Department of Transportation

CC Deb Heiser, Engineering Director, City of St. Louis Park  
Michael Barnes, MnDOT District Engineer

*Equal Opportunity Employer*