Application

17073 - 2022 Pedestrian Facilities (Sidewalks, Streetscaping, and ADA)

17570 - CSAH 3 (Lake St) Pedestrian Project

Regional Solicitation - Bicycle and Pedestrian Facilities

Status:	Submitted
Submitted Date:	04/14/2022 7:39 AM

Primary Contact

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

Title:	Transportation Engineer
Department:	Hennepin County - Transportation Department
Email:	jason.pieper@hennepin.us
Address:	1600 Prairie Drive

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

Phone:*	612-596-0241	
	Phone	Ext.

Fax:

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

Organization Information

Name:	HENNEPIN COUNTY

Jurisdictional Agency (if different):

Organization Type: County Government

Organization Website:

Address: DPT OF PUBLIC WORKS

1600 PRAIRIE DR

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

County: Hennepin

Phone:* 763-745-7600 Ext.

Fax:

PeopleSoft Vendor Number 0000028004A9

Project Information

Project Name CSAH 3 (Lake St) Pedestrian Project

Primary County where the Project is Located Hennepin

Cities or Townships where the Project is Located: Minneapolis

Jurisdictional Agency (If Different than the Applicant):

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

The CSAH 3 (Lake St) Pedestrian Project will replace or construct new pedestrian ramps, introduce pedestrian safety improvements, and add APS between Dupont Ave and 21st Ave in the City of Minneapolis. It should be noted that these improvements, which are planned at various intersections, are intended to complement the planned B Line BRT service that is scheduled to begin operation in 2024. The CSAH 3 (Lake St) Pedestrian Project may be delivered as a separate project; demonstrating independent utility. Both Hennepin County and Metro Transit are committed to coordinate project efforts to maximize pedestrian accessibility, mobility, and safety along CSAH 3 (Lake St).

CSAH 3 (Lake St) was last reconstructed in the mid-2000s, and therefore, the pedestrian infrastructure does not meet current ADA requirements in terms of ramp design, landing placement, and detectable warning surfaces. Since a 4-lane undivided roadway was selected as the preferred configuration, limited complete streets strategies were implemented. Therefore, this project has been identified to improve the accessibility, mobility, and safety of people walking; promoting first/last mile connections to B Line BRT service. See Attachment 2 for the project location map and Attachment 3 for photos of existing conditions.

CSAH 3 (Lake St) is classified as an A-Minor Augmenter that serves as a key east-west connection in Minneapolis. The corridor is home to a diverse group of businesses, restaurants, housing, and community services. Metro Transit will be constructing infrastructure to support the B Line BRT service along CSAH 3 (Lake St) between West Lake St in Minneapolis across the Mississippi

River into St. Paul. However, as part of their BRT station construction, only intersection quadrants that include a station will experience improvements. As a result, it is necessary to construct pedestrian improvements at the remaining quadrants at each station intersection. In addition, pedestrian improvements are also desired at non-ABRT intersections along CSAH 3 (Lake St) to promote first/last connections to nearby ABRT stations. Attachment 4 illustrates the potential concept for this project.

CSAH 3 (Lake St) is currently an undivided 4-lane roadway with on-street parking. Project stakeholders are evaluating options to reconfigure the travel lanes to improve mobility and safety. It's anticipated that CSAH 3 (Lake St) will experience a reduction in the number of travel lanes, addition of a shared left-turn lane, and a transit exclusive lane for westbound service. With improved transit service through Metro Transit's ABRT, pedestrian activity is anticipated to increase significantly along and across CSAH 3 (Lake St).

(Limit 2,800 characters; approximately 400 words)

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

CSAH 3 (Lake St) from Dupont Ave to 21st Ave in the City of Minneapolis

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)

2.5

to the nearest one-tenth of a mile

Project Funding

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

Yes

If yes, please identify the source(s)

2022 RAISE Solicitation

Federal Amount

$2,000,000.00

Match Amount

$2,300,000.00

Minimum of 20% of project total

Project Total $4,300,000.00

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

Match Percentage 53.49%

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

Source of Match Funds Hennepin County

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

Preferred Program Year

Select one: 2026

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

Additional Program Years: 2024, 2025

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

Project Information

County, City, or Lead Agency Hennepin County

Zip Code where Majority of Work is Being Performed 55408

(Approximate) Begin Construction Date 05/01/2024

(Approximate) End Construction Date 10/30/2024

Name of Trail/Ped Facility: CSAH 3 (Lake St) Sidewalk

(i.e., CEDAR LAKE TRAIL)

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

From:
(Intersection or Address) CSAH 3 (Lake St) and Dupont Ave

To:
(Intersection or Address) CSAH 3 (Lake St) and 21st Ave

DO NOT INCLUDE LEGAL DESCRIPTION; INCLUDE NAME OF ROADWAY IF MAJORITY OF FACILITY RUNS ADJACENT TO A SINGLE CORRIDOR

Or At:

Miles of trail (nearest 0.1 miles): 0

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

Is this a new trail? No

Primary Types of Work ADA, APS, MEDIANS, SIGNALS, LIGHTING, CURB, AND STORM SEWER

Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

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

Requirements - All Projects

All Projects

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

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

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

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

A) Transportation System Stewardship (p 2.2-2.4)

Objectives A & B; Strategies A1 & A2

The project will coordinate investments in maintaining and operating the transportation system by constructing ADA and safety improvements along the CSAH 3 (Lake St) corridor in conjunction with investment by Metro Transit and others as part of the B Line ABRT project.

B) Safety and Security (p 2.5-2.9)

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

This project will provide improved pedestrian ramps, Accessible Pedestrian Signals (APS), and pedestrian crossing enhancements at key intersections along CSAH 3 (Lake St), greatly improving safety at intersections for those walking and rolling. Safety for pedestrians will only become more important for the project area with the operation of the B Line which will increase the number of users utilizing CSAH 3 (Lake St) for first/last mile transit connections.

C) Access to Destinations (p 2.10-2.25)

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

The project corridor is a dense, mixed-use area that is home to a wide range of businesses, schools, childcare centers, service providers, and residential development. Proposed improvements to the pedestrian environment will promote a safe and comfortable user experience for those walking and

rolling and will ensure accessible first and last mile connections to the future B Line service.

D) Competitive Economy (p2.26-2.29)

Objectives A, B & C; Strategies D1, D3, D4, D5

The project area is important for the regional economy, designated as an area of job concentration in Thrive MSP 2040 and home to 53,000 jobs within a one-mile radius. This project will directly improve multimodal connections within an area of high job concentration; complementing the B Line service to create a comfortable and integrated multimodal system to attract businesses and residents.

E) Healthy and Equitable Communities (p 2.30-2.34)

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

The project will directly benefit the safety and comfort levels for the most vulnerable roadway users and will ensure that all populations will have access to the significant future transit investments coming to the corridor. Engagement will continue throughout the entirety of the project to ensure that outcomes are meeting roadway user needs.

F) Leveraging Transportation Investments to Guide Land Use (p 2.35-2.41)

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

CSAH 3 (Lake St) is a dense, multi-use corridor home to businesses, schools, community centers, and both subsidized and naturally occurring affordable housing. Improvements to the pedestrian environment will complement the diverse land use surrounding the corridor and encourage trips by walking, using transit, and biking.

(Limit 2,800 characters; approximately 400 words)

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

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

1) Hennepin County 2022-2026 Capital Improvement Program (Attachment 5)

2) Hennepin County Board Resolution 22-0109 (Attachment 6)

3) Metro Transit B Line Corridor Plan

URL: metrotransit.org/Data/Sites/1/media/b-line/b-line-final-corridor-plan.pdf

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

URL: hennepin.us/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/comp-plan-2040-2-transportation.pdf

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

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

6) Hennepin County Complete Streets Policy

URL: hennepin.us/completestreets

7) Hennepin County Bike Plan (page 36)

URL: hennepin.us/-/media/hennepinus/residents/transportation/biking/bicycle-transportation-plan.pdf

8) Hennepin County Pedestrian Plan (page 8)

URL: hennepin.us/-/media/hennepinus/residents/transportation/documents/

pedestrian-plan.pdf

9) City of Minneapolis Vision Zero Action Plan (pages 7, 16)

URL: minneapolismn.gov/media/-www-contentassets/documents/VZ-Action-Plan-2020-22.pdf

10) City of Minneapolis Pedestrian Priority Network Map (Attachment 7)

(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 in more than one funding sub-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 2020 funding cycle).
Multiuse Trails and Bicycle Facilities: *$250,000 to $5,500,000*
Pedestrian Facilities (Sidewalks, Streetscaping, and ADA): *$250,000 to $2,000,000*
Safe Routes to School: *$250,000 to $1,000,000*

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

Date plan completed: 08/31/2015

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

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

11.The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, 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

Requirements - Bicycle and Pedestrian Facilities Projects

1.All projects must relate to surface transportation. As an example, for multiuse trail and bicycle facilities, surface transportation is defined as primarily serving a commuting purpose and/or that connect two destination points. A facility may serve both a transportation purpose and a recreational purpose; a facility that connects people to recreational destinations may be considered to have a transportation purpose.

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

Multiuse Trails on Active Railroad Right-of-Way:

2.All multiuse trail projects that are located within right-of-way occupied by an active railroad must attach an agreement with the railroad that this right-of-way will be used for trail purposes.

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

Upload Agreement PDF

Check the box to indicate that the project is not in active railroad right-of-way.

Multiuse Trails and Bicycle Facilities projects only:

3.All applications must include a letter from the operator of the facility confirming that they will remove snow and ice for year-round bicycle and pedestrian use. The Minnesota Pollution Control Agency has a resource for best practices when using salt. Upload PDF of Agreement in Other Attachments.

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

Upload PDF of Agreement in Other Attachments.

Safe Routes to School projects only:

4.All projects must be located within a two-mile radius of the associated primary, middle, or high school site.

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

5.All schools benefitting from the SRTS program must conduct after-implementation surveys. These include the student travel tally form and the parent survey available on the National Center for SRTS website. The school(s) must submit the after-evaluation data to the National Center for SRTS within a year of the project completion date. Additional guidance regarding evaluation can be found at the MnDOT SRTS website.

Check the box to indicate that the applicant understands this requirement and will submit data to the National Center for SRTS within one year of project completion.

Requirements - Bicycle and Pedestrian Facilities Projects

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$170,000.00
Removals (approx. 5% of total cost)	$170,000.00
Roadway (grading, borrow, etc.)	$0.00
Roadway (aggregates and paving)	$0.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$10,000.00
Ponds	$0.00

Concrete Items (curb & gutter, sidewalks, median barriers)	$210,000.00
Traffic Control	$170,000.00
Striping	$0.00
Signing	$0.00
Lighting	$0.00
Turf - Erosion & Landscaping	$0.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$1,823,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$255,000.00
Other Roadway Elements	$0.00
Totals	**$2,808,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	**Cost**
Path/Trail Construction	$0.00
Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$810,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$337,000.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$0.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$135,000.00
Other Bicycle and Pedestrian Elements	$210,000.00
Totals	**$1,492,000.00**

Specific Transit and TDM Elements

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

Transit Operating Costs

Number of Platform hours	0
Cost Per Platform hour (full loaded Cost)	$0.00
Subtotal	$0.00
Other Costs - Administration, Overhead,etc.	$0.00

Totals

Total Cost	$4,300,000.00
Construction Cost Total	$4,300,000.00
Transit Operating Cost Total	$0.00

Measure A: Project Location Relative to Jobs and Post-Secondary Education

Existing Employment Within One-Half Mile:	45033
Existing Post-Secondary Enrollment Within One-Half Mile:	0
Upload Map	1649357573043_2022 RS Map 02 - CSAH 3 (Lake St) Pedestrian Project - Regional Economy.pdf

Please upload attachment in PDF form.

Measure A: Population Summary

Existing Population Within One-Half Mile	71767
Upload Map	1649357613277_2022 RS Map 04 - CSAH 3 (Lake St) Pedestrian Project - Population & Employment Summary.pdf

Please upload attachment in PDF form.

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:

This segment of CSAH 3 (Lake St) in South Minneapolis is home to a large proportion of BIPOC, with percentages ranging from 18 to 81% in Census tracts within the project limits and within half a mile of the project. BIPOC communities include somewhat recent arrivals from Latin America and East Africa as well as Black and Indigenous people who have been part of Lake Street's community for multiple generations.

Response:

In 2019 and 2020, Metro Transit held multiple public meetings and sought public feedback to inform the creation of a Draft Corridor Plan for the METRO B Line, which was released in February 2021. In early 2021, Metro Transit asked for feedback on the Draft Corridor Plan. More than 650 comments were submitted during the Draft B Line Corridor Plan comment period. Due to COVID-19 protocols, nearly all comments were submitted via email, with a smaller number of comments submitted as part of limited in-person conversations along the corridor or by phone. Metro Transit staff continued to engage the public through the Recommended Corridor Plan process through the summer of 2021, which involved direct door-to-door focused engagement with people who live, work, own, or use space adjacent to proposed B Line station locations. During this phase, 160 additional comments were collected. In total, Metro Transit received more than 2,500 comments across the project's planning phase. Comments included a desire to improve pedestrian access and facilities, create multimodal connections, and improve safety. These helped shape the Corridor Plan, which established the need for this application to improve the pedestrian environment around the planned B Line and provide a high level of comfort and safety along CSAH 3 (Lake St). Engagement tools included conversations at Lyndale Open Streets, business association meetings, neighborhood

group meetings and tabling at existing community events, such as the South High School Welcome Back Traditional Powwow. Attachment 8 includes a summary of Metro Transit's engagement efforts related to the B Line.

Hennepin County will coordinate with Metro Transit and organizations to further engage the CSAH 3 (Lake St) community in a way that meets community needs and expectations as designs for bus rapid transit and the related pedestrian improvements in this application are developed.

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

Measure B: Equity Population Benefits and Impacts

Describe the projects benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:
This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.
Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.
Below is a list of potential negative impacts. This is not an exhaustive list.

CSAH 3 (Lake St) is home to a variety of BIPOC communities, including somewhat recent arrivals from Latin America and East Africa, as well as Black and Indigenous people who have been part of the Lake Street community for multiple generations.

The project will help better serve people in the community by improving accessibility along the corridor. The project will upgrade pedestrian ramps, install APS, and introduce pedestrian crossing improvements; benefiting people who frequent the corridor on foot, bike, and transit rather than those who drive through it. The project will improve access and sidewalk conditions for people using Metro Transit Route 21 and the future B Line service that is expected to begin operation in 2024.

Response:

This project will improve access to the many businesses and cultural resources on CSAH 3 (Lake Street) as detailed in the Socio-Economic Access Map (Attachment 9). Some of these important resources include places of worship, YWCA, health care clinics, and the Division of Indian Work, which supports urban American Indian people through culturally based education, traditional healing, and leadership development. Furthermore, this project will improve access and safety for people crossing CSAH 3 (Lake St), and better connect nearby recreational amenities such as Powderhorn Park and the Midtown Greenway.

Metro Transit will be involved in this process to ensure that any changes to the transit system needed during this time will be conveyed to transit users along the corridor. For all modes, the project team will develop safe detour routes and will share maps and related information with the community. It

is anticipated that Metro Transit will manage a phone hotline and project website throughout the project life cycle. Metro Transit will be responsible for responding to questions and concerns from residents, business owners, and employees who live and work in the area.

Increased noise and impacts to the roadway, sidewalks and connections to on-street bicycle networks are anticipated during construction. The contractor will be required to follow temporary traffic control plans which include instructions on temporary accommodations for all users throughout the corridor.

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

Measure C: Affordable Housing Access

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

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

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

A total of 54 affordable subsidized housing developments are within 0.5 miles of the project area. Attachment 10 provides a map and full detail summary of these locations, including unit sizes and affordability limits based on area median incomes. Two locations are currently under construction within 0.5 miles of the project area. Bloom Lake Flats is a 42-unit project currently being developed by the nonprofits Clare Housing and Project for Pride in Living, and when completed, will provide supportive housing to those households living with and affected by HIV. 15 units in the project will be reserved for families. 3301 Nicollet is currently under development by Alliance Housing Inc and will create 65 units of income-restricted affordable housing, including 50 studio and 14 one-bedroom apartments. As identified in the Met Council generated Socio-Economic Conditions map, 4,933 subsidized units exist in census tracts within 0.5 miles of the project.

Response:

The proposed project will provide a direct benefit to residents of affordable housing by creating a more accessible pedestrian environment for destinations in the CSAH 3 (Lake St) corridor. For example, residents of Ebenezer Park Apartments, a 200-unit affordable senior housing development north of the project area on CSAH 33 (Park Ave), will have reduced barriers to accessing future B Line Arterial BRT stations along CSAH 3 (Lake St). Consistent ADA improvements along the corridor will ensure that those residents utilizing the B Line can also safely and reliably access end destinations such as the Hennepin Healthcare, East Lake, and Whittier Clinics, the YWCA of Minneapolis and the Midtown Exchange. Furthermore, this project will reduce barriers to crossing CSAH 3 (Lake St), providing better accessibility to the nearby Powderhorn Park and Midtown Greenway.

The corridor is also home to major healthcare destinations, such as Abbott Northwestern Hospital and the Children's Minnesota Hospital. The MTS Secondary School and Christo Rey Jesuit High School are both accessed via CSAH 3 (Lake St), as are numerous childcare centers. CSAH 3 (Lake St) is partially contained within an area of job concentration as identified in Thrive MSP 2040. Residents of affordable housing who rely on the pedestrian environment to access these destinations will significantly benefit from the proposed project as ADA improvements will ensure reliable and safe facilities throughout the corridor in conjunction with the major transit investments being made by partner agencies.

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

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:	Yes
Projects census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area):	
Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):	
Upload the Socio-Economic Conditions map used for this measure.	1649365324665_2022 RS Map 03 - CSAH 3 (Lake St) Pedestrian Project - Socio Economic Conditions.pdf

Measure A: Gaps, Barriers and Continuity/Connections

CSAH 3 (Lake St) was last reconstructed in the mid-2000s before ADA best practices were as robust as they are today. Even though the sidewalk facilities, pedestrian ramps, and streetscaping features are generally in good condition, their current design, in terms of placement, slope, and orientation, presents challenges for people walking along and across CSAH 3 (Lake St). In addition, CSAH 3 (Lake St) is a four-lane undivided roadway that includes on-street parking along both sides and a posted speed limit of 30 mph. Vehicle volumes along CSAH 3 (Lake St) are approximately 20,000 per day.

Response:

While the CSAH 3 (Lake St) corridor is programmed to receive a number of mobility and safety improvements at locations identified as future B Line BRT stations, the proposed project will focus on the entire project area to ensure that this diverse corridor of business, restaurants, housing, and community services is cohesively accessible and safe for users of all ages and abilities. Without the proposed project, intersections not identified as locations for future ABRT stations and quadrants opposite of future stations, would receive no investment. It should be noted that these improvements, which are planned at various intersections, are intended to complement the planned B Line Arterial Bus Rapid Transit (ABRT) service that is scheduled to begin operation in 2024. However, the CSAH 3 (Lake St) Pedestrian Project may be delivered as a separate project; demonstrating independent utility. Both Hennepin County and Metro Transit are committed to coordinate project efforts to maximize pedestrian accessibility, mobility, and safety along CSAH 3 (Lake St).

As a result, this CSAH 3 (Lake St) Pedestrian

Project has been identified to upgrade pedestrian ramps, install APS, upgrade traffic signals, and introduce proven safety countermeasures at both intersections identified for future ABRT service as well as non-ABRT intersections to ensure that the roadway does not serve as a barrier for first and last mile transit connections. In addition, the proposed project will create cohesion with the neighboring pedestrian network, improving connections to critical community facilities such as the YWCA of Minneapolis, the Umutal Islam Center, the Midtown Exchange, and critical healthcare destinations such as the Children's Minnesota Hospital, Abbott Northwestern Hospital, and the Hennepin Healthcare Whittier Clinic.

(Limit 2,800 characters; approximately 400 words)

Measure B: Project Improvements

CSAH 3 (Lake St) provides users with a critical connection across the Mississippi River; providing access to a dense commercial area in South Minneapolis. CSAH 3 (Lake St), which currently operates as a 4-lane undivided roadway, experiences approximately 20,000 vehicles per day. In addition, dedicated left-turn lanes are limited to key intersections. These conditions present an uncomfortable environment for people walking and biking along and across CSAH 3 (Lake St); creating a relatively high likelihood for crashes involving multimodal users.

Response:

Crash data involving people biking and walking along CSAH 3 (Lake St) was reviewed across a 10-year period representing 2012-2021. A total of 76 pedestrian related crashes were reported (including 2 crashes resulting in fatalities and 40 crashes resulting in severe injury). Whereas, a total of 61 bicycle related crashes were reported (including 3 crashes resulting in fatalities and 29 crashes resulting in severe injury). Attachment 11 includes a summary of the reported crashes along with the crash listing from MnCMAT.

It should be noted that these improvements, which are planned at various intersections, are intended to complement the planned B Line Arterial Bus Rapid Transit (ABRT) service that is scheduled to begin operation in 2024. However, the CSAH 3 (Lake St) Pedestrian Project may be delivered as a separate project; demonstrating independent utility. Both Hennepin County and Metro Transit are committed to coordinate project efforts to maximize pedestrian accessibility, mobility, and safety along CSAH 3 (Lake St).

The proposed project is anticipated to include the

following proven safety countermeasures. The specific location of improvements will be determined as part of the project development process based on data analysis, stakeholder input, and environmental review. Attachment 12 includes the applicable pages from Minnesota's Best Practices for Pedestrian and Bicycle Safety.

- Raised medians anticipated at the Portland, Park, Oakland, Longfellow, 19th, and 20th intersections (~46% reduction)

- Curb extensions anticipated at the Dupont intersection (~45% reduction)

- APS at each signalized intersection that currently do not include this feature (undetermined reduction)

In addition, the following safety improvements are planned for CSAH 3 (Lake St), however, county staff are unsure whether credit can be taken as part of the CSAH 3 (Lake St) Pedestrian Project given their relationship with the overall B Line Project.

- Conversion of CSAH 3 (Lake St) from a 4-lane roadway to a 3-lane

- Transit exclusive lanes (marked with red paint) supplemented with TSP

- Traffic signal upgrades to provide protected/permitted left-turn phasing and proper signal head visibility (due to the new lane configuration)

(Limit 2,800 characters; approximately 400 words)

Measure A: Multimodal Elements and Connections

Response:

The CSAH 3 (Lake St) Pedestrian Project will promote full ADA accessibility from Dupont Ave to 21st Ave, both to complement Metro Transit's proposed B Line project and to ensure the corridor serves as a safe and efficient connection to multimodal networks throughout Minneapolis as illustrated in Attachment 13.

Currently, CSAH 3 (Lake St) serves as a major corridor for transit service as it connects to the scheduled Hi-Lake project which will improve facilities for those walking, rolling and cycling to the Blue Line LRT. Dupont Ave is also four blocks east of the proposed E Line Arterial BRT, scheduled for service in 2025. The project area also serves existing high-frequency Metro Transit routes 5, 11, 18, and 21. By improving access along and cross CSAH 3 (Lake St), residents will be more likely to experience the benefits of future and existing transit service.

It should be noted that these improvements are intended to complement the planned B Line service that is scheduled to begin operation in 2024. However, this project may be delivered as a separate project; demonstrating independent utility. Both Hennepin County and Metro Transit are committed to coordinate project efforts to maximize pedestrian accessibility, mobility, and safety along CSAH 3 (Lake St).

The project area also connects to the City of Minneapolis's All Ages and Abilities bicycle network. This includes facilities on city roadways such as Blaisdell Ave, 17th Ave, and a future protected bikeway currently under construction on 1st Ave. CSAH 3 (Lake St) extends parallel to the grade-separated Midtown Greenway (RBTN Tier 1

corridor), located approximately 700' north of the proposed project. It is anticipated that most east-west bike traffic through this area will prefer to use the Greenway rather than CSAH 3 (Lake St). However, CSAH 3 (Lake St) includes many commercial destinations that people will bike to that requires crossing CSAH 3 (Lake St). People biking along and near CSAH 3 (Lake St) will benefit with accessible pedestrian ramps and crossing enhancements as they travel between their origin and destination. Furthermore, this project corridor intersects CSAHs 33 and 35 (Park Ave and Portland Ave), one-way pairs, both Tier 1 corridors on the RBTN.

This project will ensure transit customers have accessible facilities for the first and last portions of their journeys. Project elements such as upgraded pedestrian ramps, APS, curb extensions, and medians will improve the walking experience along and across CSAH 3 (Lake St). This project will be coordinated with planned efforts to introduce a 4 to 3 lane conversion along CSAH 3 (Lake St), including transit-exclusive lanes on CSAH 3 (Lake St) as well as the construction of BRT stations by Metro Transit.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.
Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1.Public Involvement (20 Percent of Points)

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

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

100%

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

50%

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

50%

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

25%

No outreach has led to the selection of this project.

0%

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

Response:

In 2019 and 2020, Metro Transit held multiple public meetings and sought public feedback to inform the creation of a Draft Corridor Plan for the B Line transit service, which was released in February 2021.

In early 2021, Metro Transit engaged the public and asked for feedback on the Draft B Line Corridor Plan. More than 650 comments were submitted during the Draft B Line Corridor Plan comment period. Due to COVID-19 protocols, nearly all comments were submitted via email, with a smaller number of comments submitted as part of limited in-person conversations along the corridor or by phone.

Metro Transit staff continued to engage the public through the Recommended Corridor Plan process across the summer of 2021, which involved direct door-to-door focused engagement with station neighbors, people who live, work, own, or use space adjacent to proposed B Line station locations. During this phase, 160 additional comments were collected.

In total, Metro Transit received more than 2,500 comments across the project's planning phase. These were essential in forming the Corridor Plan, which established the need for this application to improve the pedestrian environment around the planned B Line service.

Engagement tools included conversations at Lyndale Open Streets, business association meetings, neighborhood group meetings, and tabling at existing community events, such as the South High School Welcome Back Traditional Powwow.

It should be noted that these improvements, which are planned at various intersections, are intended to complement the planned B Line Arterial Bus Rapid Transit (ABRT) service that is scheduled to begin operation in 2024. However, the CSAH 3 (Lake St) Pedestrian Project may be delivered as a separate project; demonstrating independent utility. Both Hennepin County and Metro Transit are committed to coordinate project efforts to maximize pedestrian accessibility, mobility, and safety along CSAH 3 (Lake St).

(Limit 2,800 characters; approximately 400 words)

2.Layout (25 Percent of Points)

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

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

100%

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

100%

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

75%

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

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 1649877691218_Attachment 04 - Potential Concept.pdf

Please upload attachment in PDF form.

Additional Attachments

Please upload attachment in PDF form.

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

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

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

100%

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

50%

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

25%

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

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

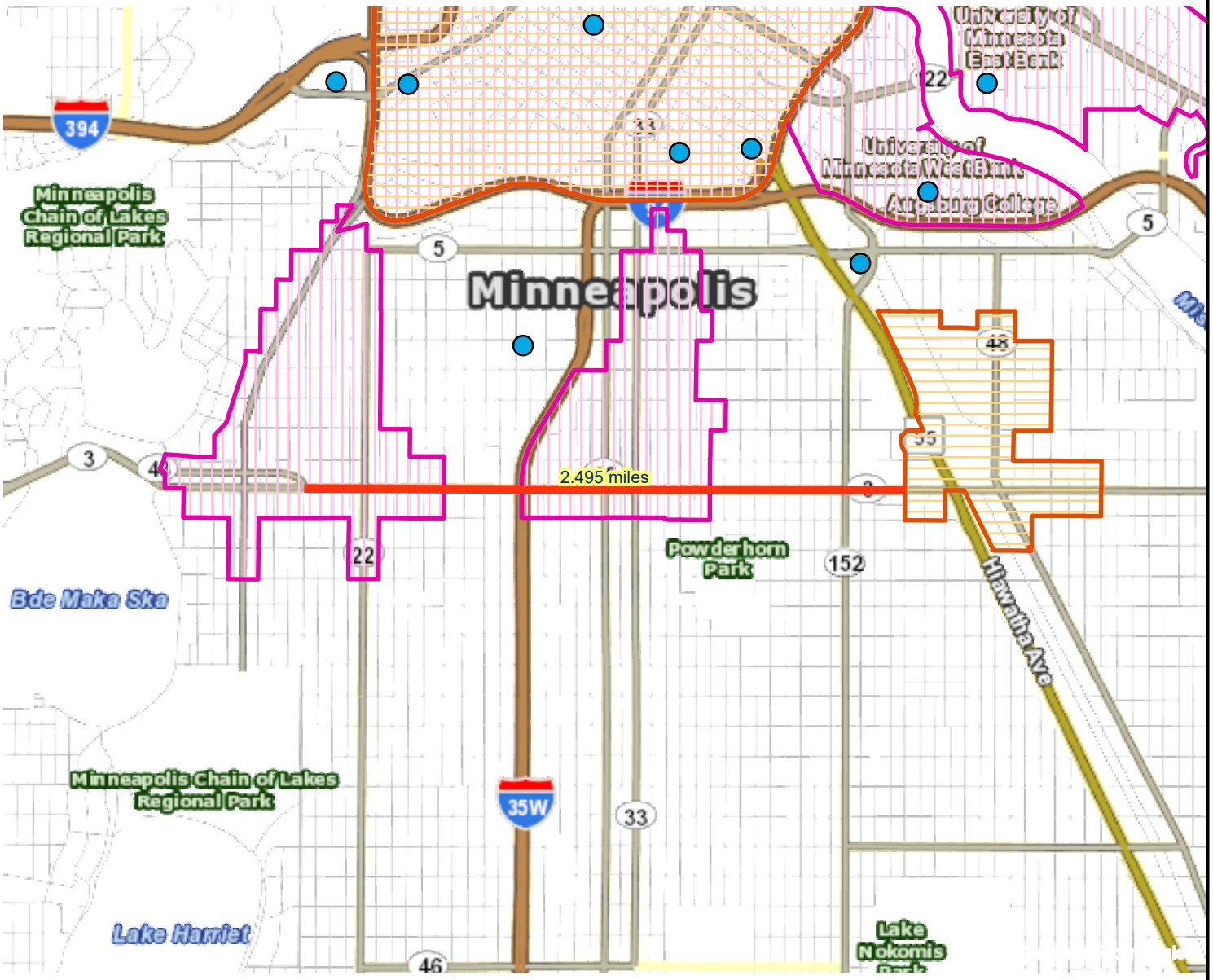
Total Project Cost (entered in Project Cost Form):	$4,300,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$4,300,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
Attachment 00 - List of Attachments.pdf	Attachment 00 - List of Attachments	59 KB
Attachment 01 - Project Narrative.pdf	Attachment 01 - Project Narrative	227 KB
Attachment 02 - Project Location Map.pdf	Attachment 02 - Project Location Map	693 KB
Attachment 03 - Existing Roadway Condition Photos.pdf	Attachment 03 - Existing Roadway Condition Photos	1.3 MB
Attachment 04 - Potential Concept.pdf	Attachment 04 - Potential Concept	7.7 MB
Attachment 05 - Hennepin County 2022-2026 Transportation CIP.pdf	Attachment 05 - Hennepin County 2022-2026 Transportation CIP	191 KB
Attachment 06 - Hennepin County Board Resolution 22-0109.pdf	Attachment 06 - Hennepin County Board Resolution 22-0109	467 KB
Attachment 07 - Minneapolis Pedestrian Priority Network.pdf	Attachment 07 - City of Minneapolis Pedestrian Priority Network	106 KB
Attachment 08 - Metro Transit B Line Engagement Summary.pdf	Attachment 08 - Metro Transit B Line Engagement Summary	113 KB
Attachment 09 - Socio-Economic Equity Map.pdf	Attachment 09 - Socio-Economic Equity Map	163 KB
Attachment 10 - Affordable Housing Access Map and Detail Summary.pdf	Attachment 10 - Affordable Housing Access Map and Detail Summary	286 KB
Attachment 11 - Crash Summary and Case Listing.pdf	Attachment 11 - Crash Summary and Case Listing	290 KB
Attachment 12 - Minnesota's Best Practices for Pedestrian and Bicycle Safety.pdf	Attachment 12 - Minnesota's Best Practices for Pedestrian and Bicycle Safety	306 KB
Attachment 13 - Multimodal Connections Map.pdf	Attachment 13 - Multimodal Connections Map	460 KB
Attachment 14 - City of Minneapolis Letter of Support.pdf	Attachment 14 - City of Minneapolis Letter of Support	277 KB
Attachment 15 - Metro Transit Letter of Support.pdf	Attachment 15 - Metro Transit Letter of Support	87 KB

Regional Economy

Pedestrian Facilities Project: CSAH 3 (Lake St) Pedestrian Project | Map ID: 1647544276727



Results

Within HALF Mi of project:
Postsecondary Students: 0

Total Population: 71767
Total Employment: 45033
Mfg and Dist Employment: 3656

Project

Postsecondary Education Centers

Manfacturing/Distribution Centers

Job Concentration Centers

0 0.4 0.8 1.6 2.4 3.2 Miles

Created: 3/17/2022
LandscapeRSA5

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

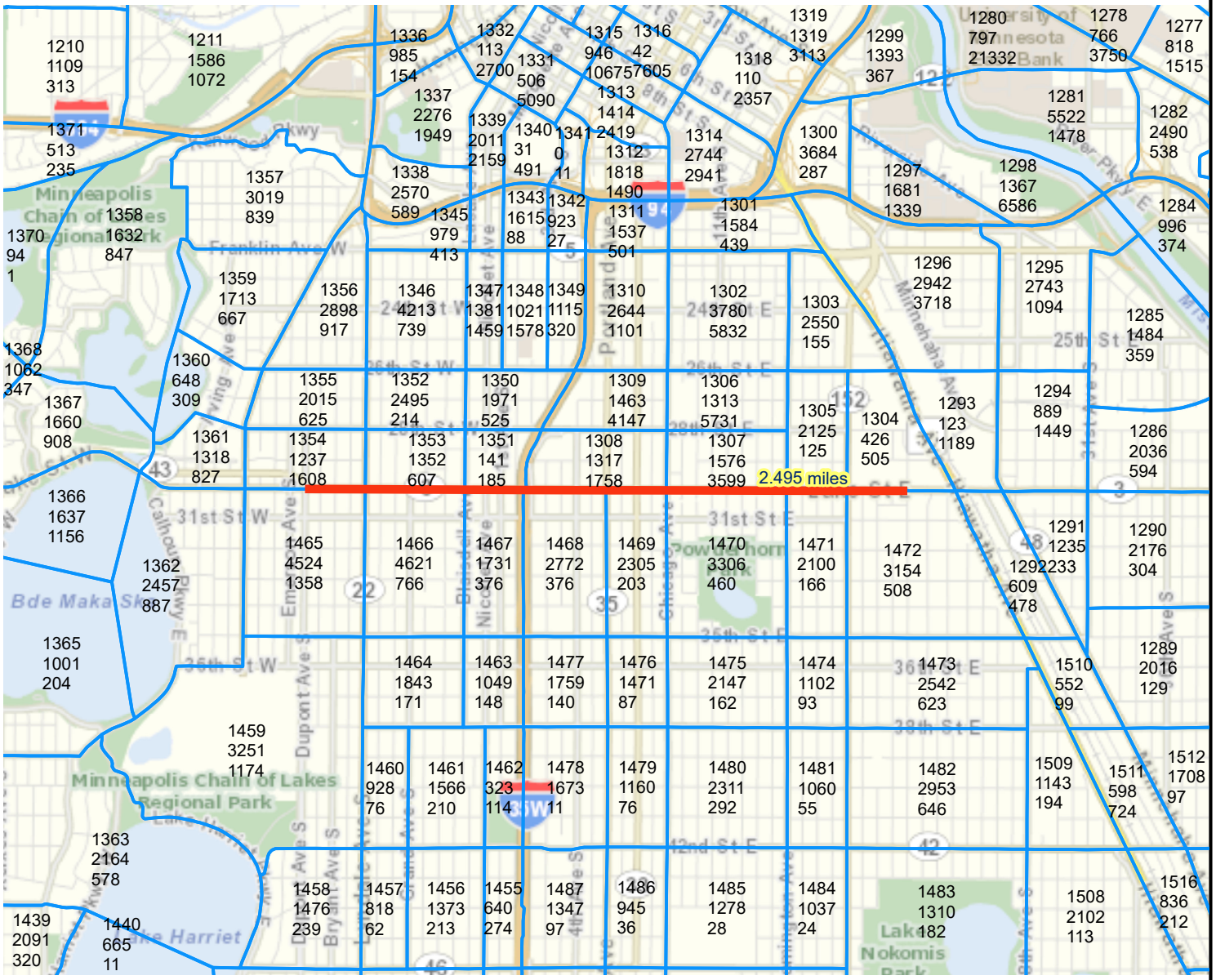
METROPOLITAN COUNCIL

Population/Employment Summary

Results

Within HALF Mile of project:
Total Population: 71767

Pedestrian Facilities Project: CSAH 3 (Lake St) Pedestrian Project | Map ID: 1647544276727



Project Points
Project
Project Area
2016 TAZ

0 0.4 0.8 1.6 2.4 3.2 Miles

Created: 3/17/2022
LandscapeRSA4

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

METROPOLITAN COUNCIL

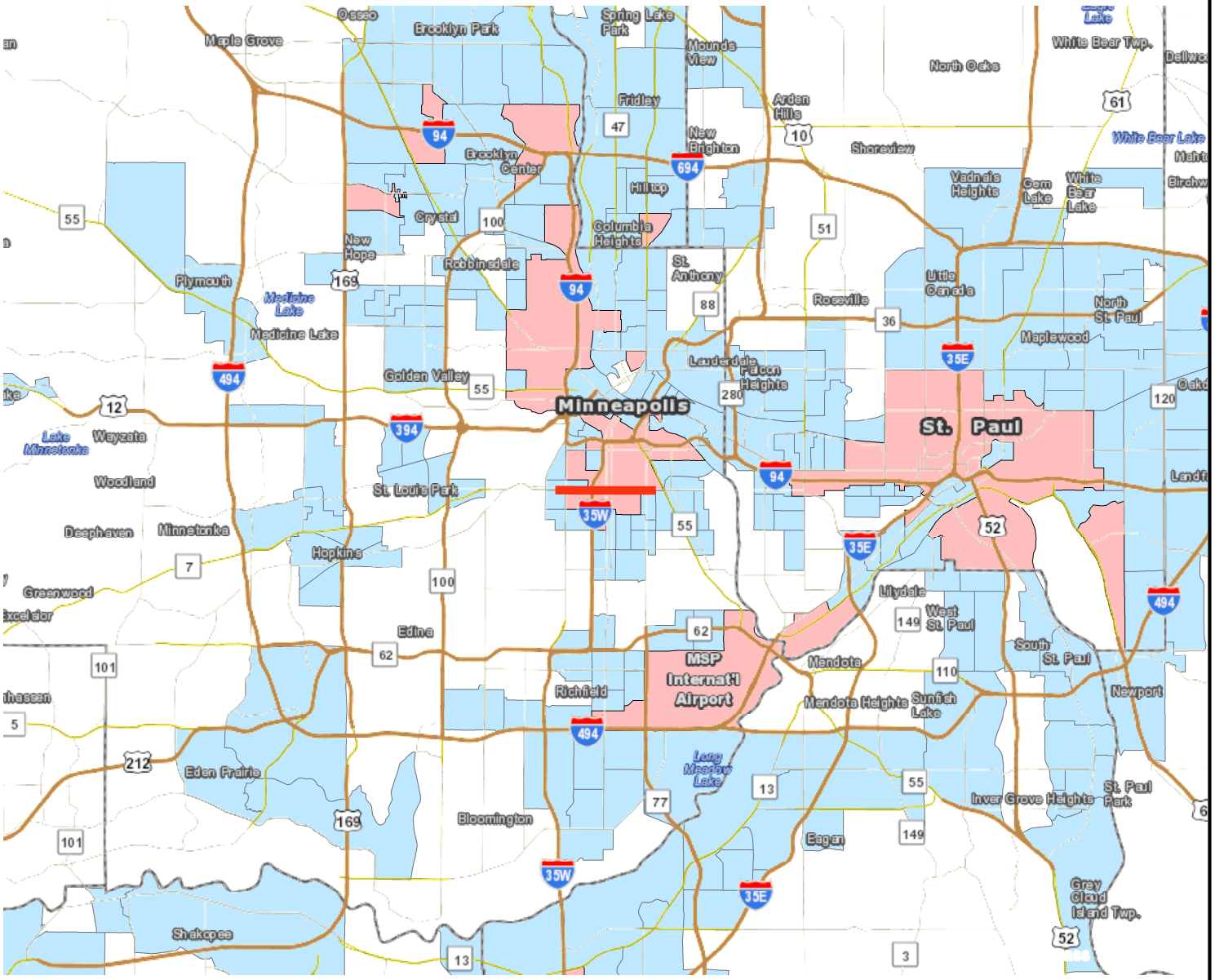
Socio-Economic Conditions

Pedestrian Facilities Project: CSAH 3 (Lake St) Pedestrian Project | Map ID: 1647544276727

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 4933

Project located IN an Area of Concentrated Poverty.



Created: 3/17/2022

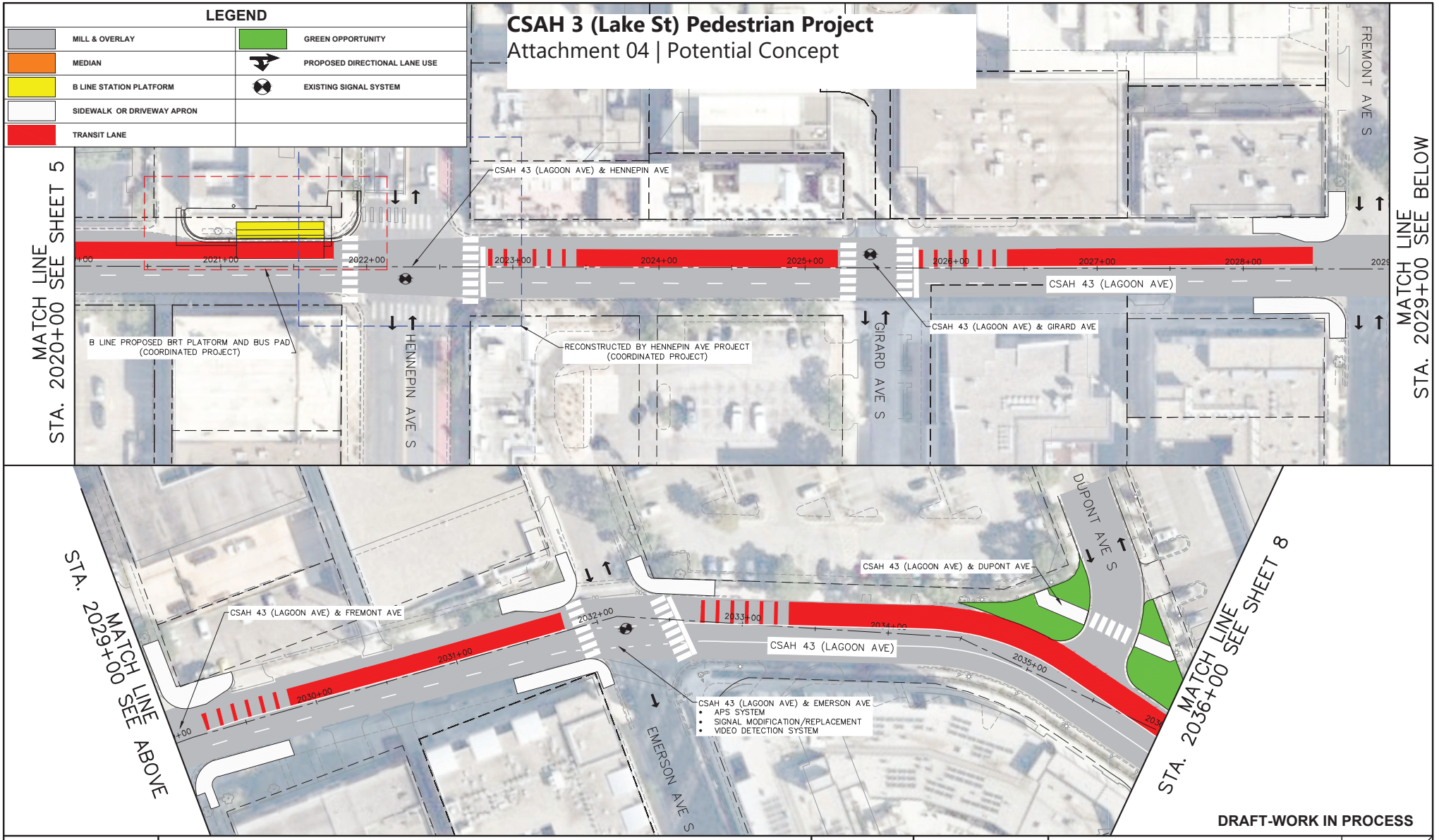
LandscapeRSA2

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

METROPOLITAN COUNCIL

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH
0 15 30 60
SCALE

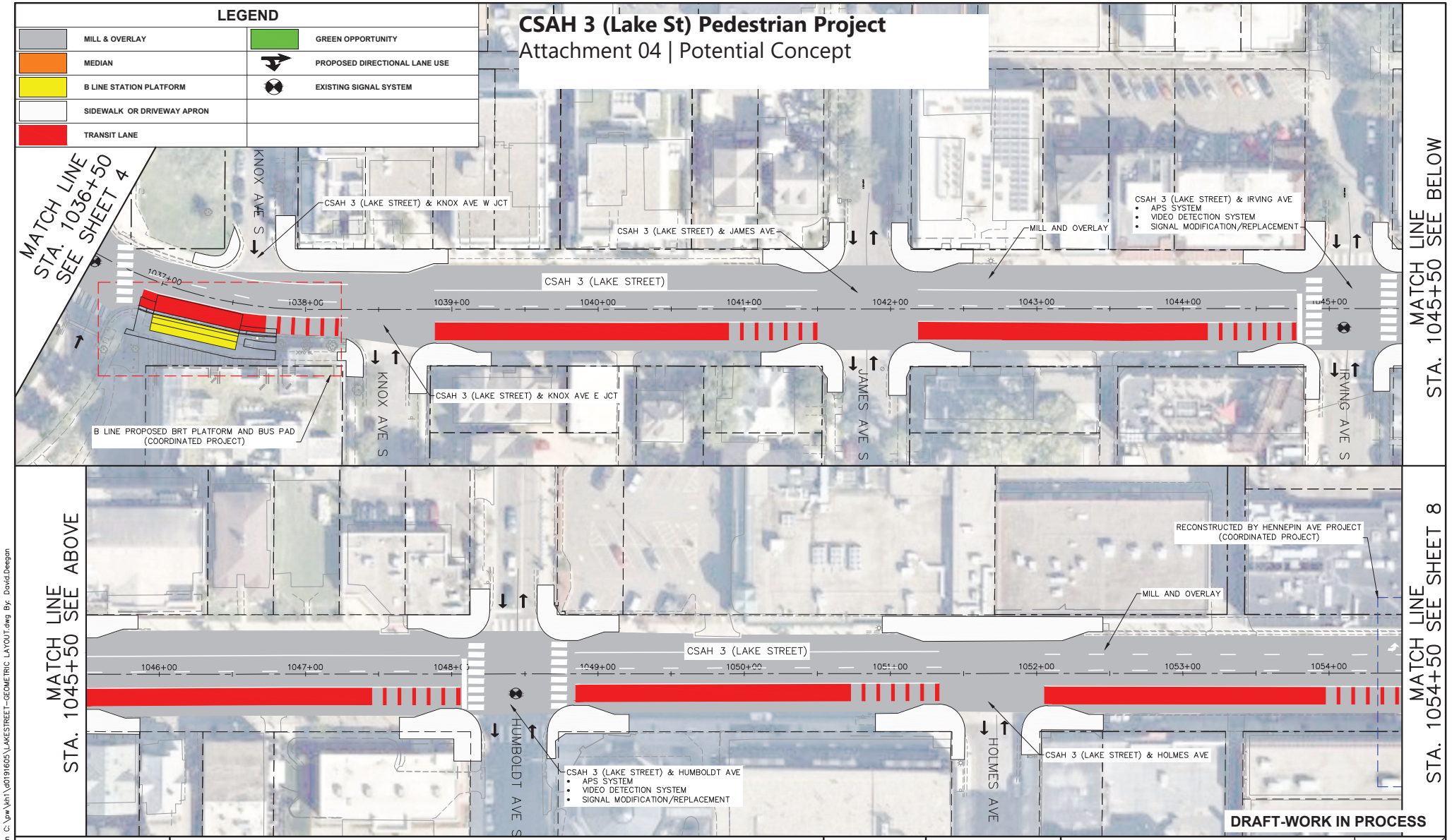
Kimley»Horn

6
16

Apr. 13 2022 08:39 am C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH

0 15 30 60

SCALE

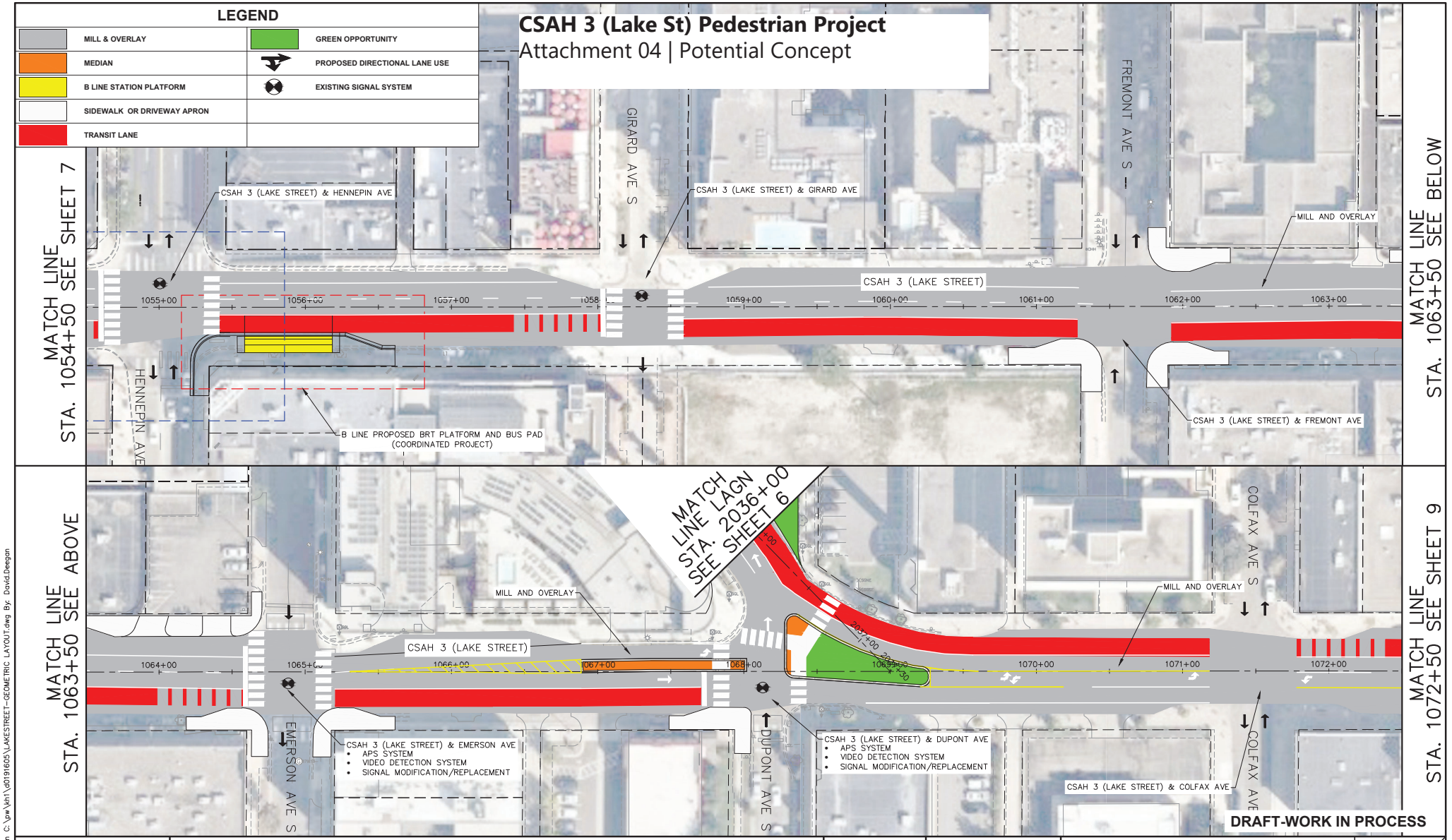
Kimley»Horn

7
16

Apr. 13 2022 08:18 am C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH

0 15 30 60

SCALE

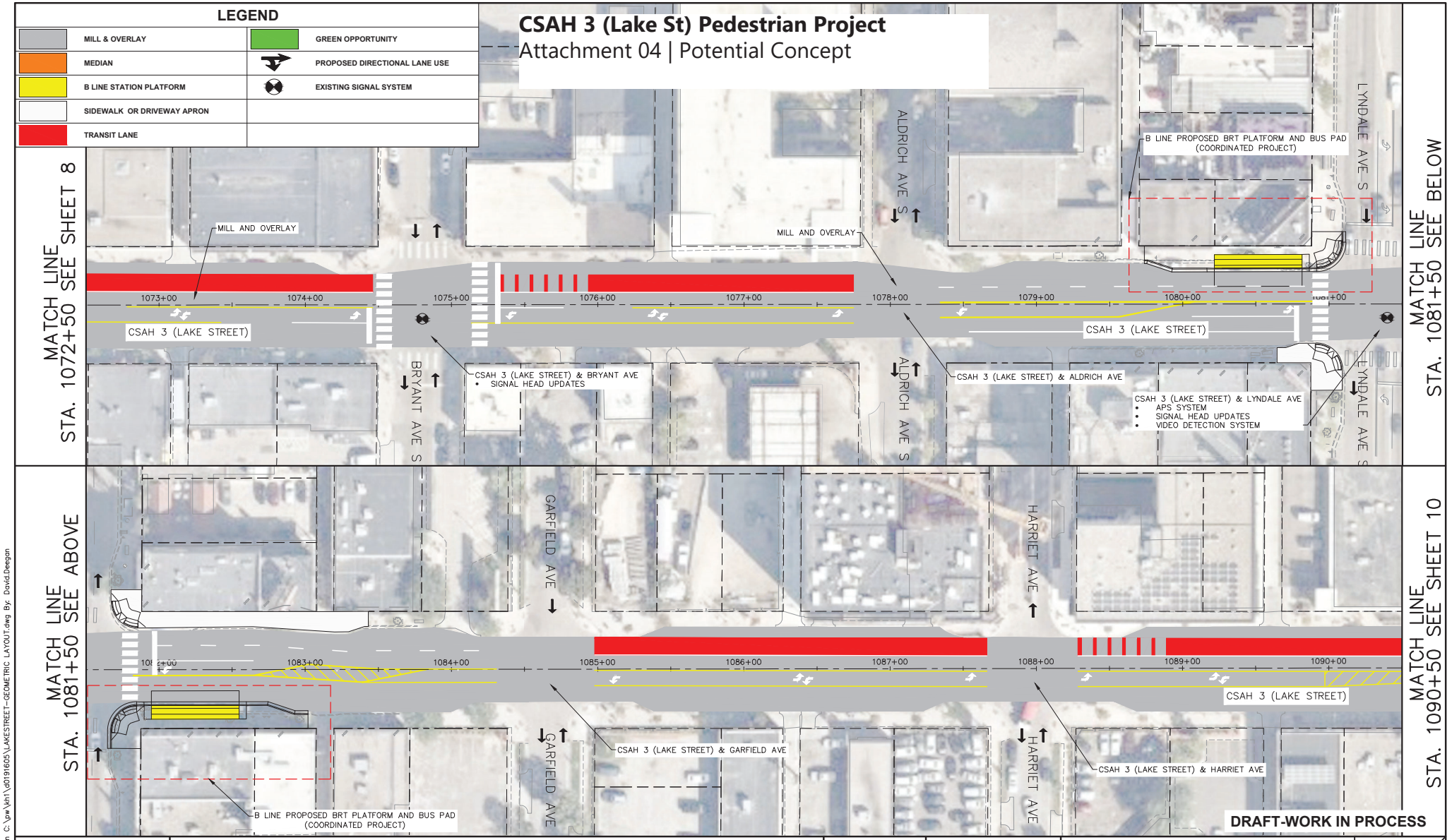
Kimley»Horn

8
16

Apr. 13 2022 08:19 am C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH
0 15 30 60
SCALE

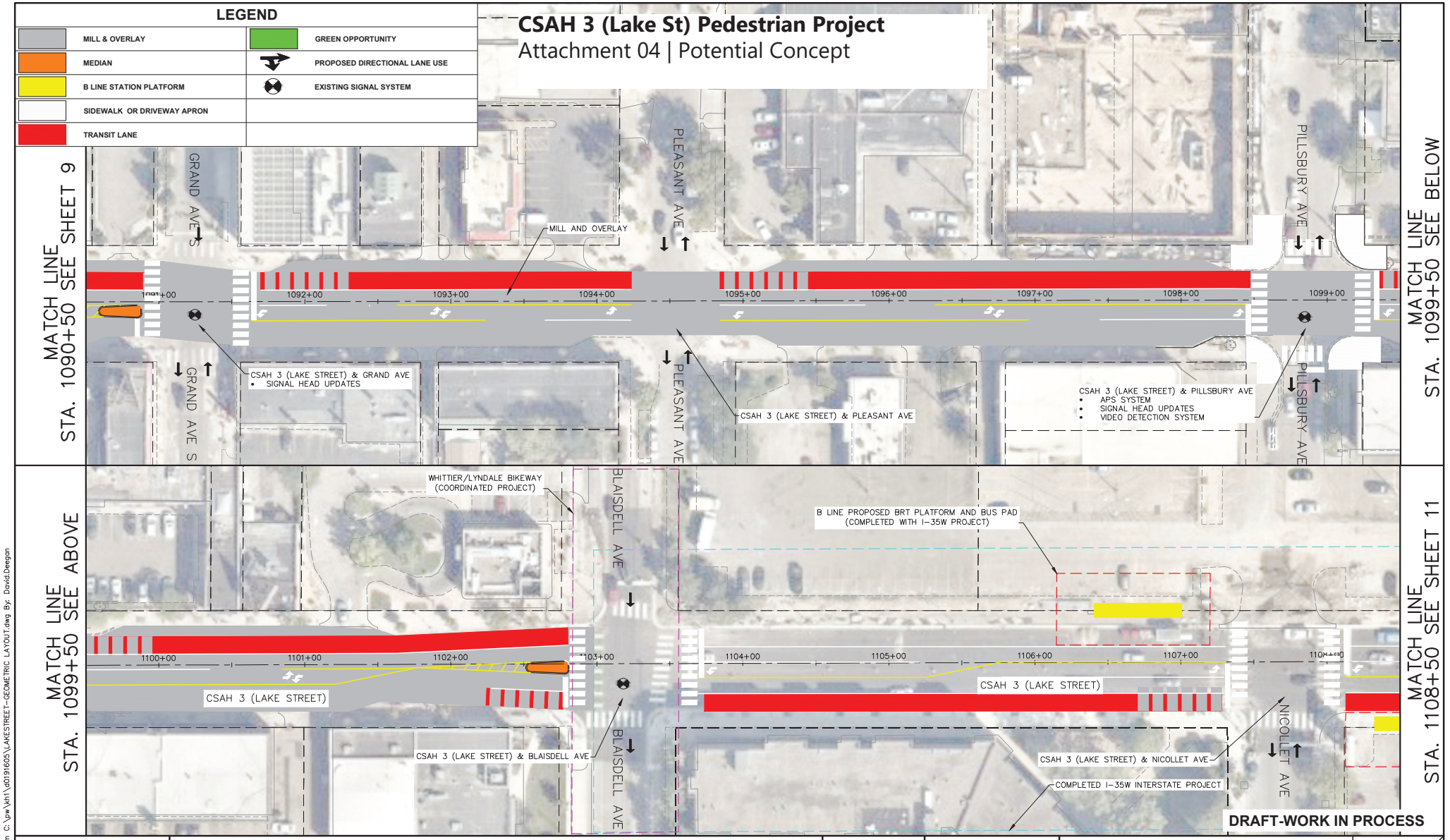
Kimley»Horn

9
16

Apr, 12 2022 06:17 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH
0 15 30 60
SCALE

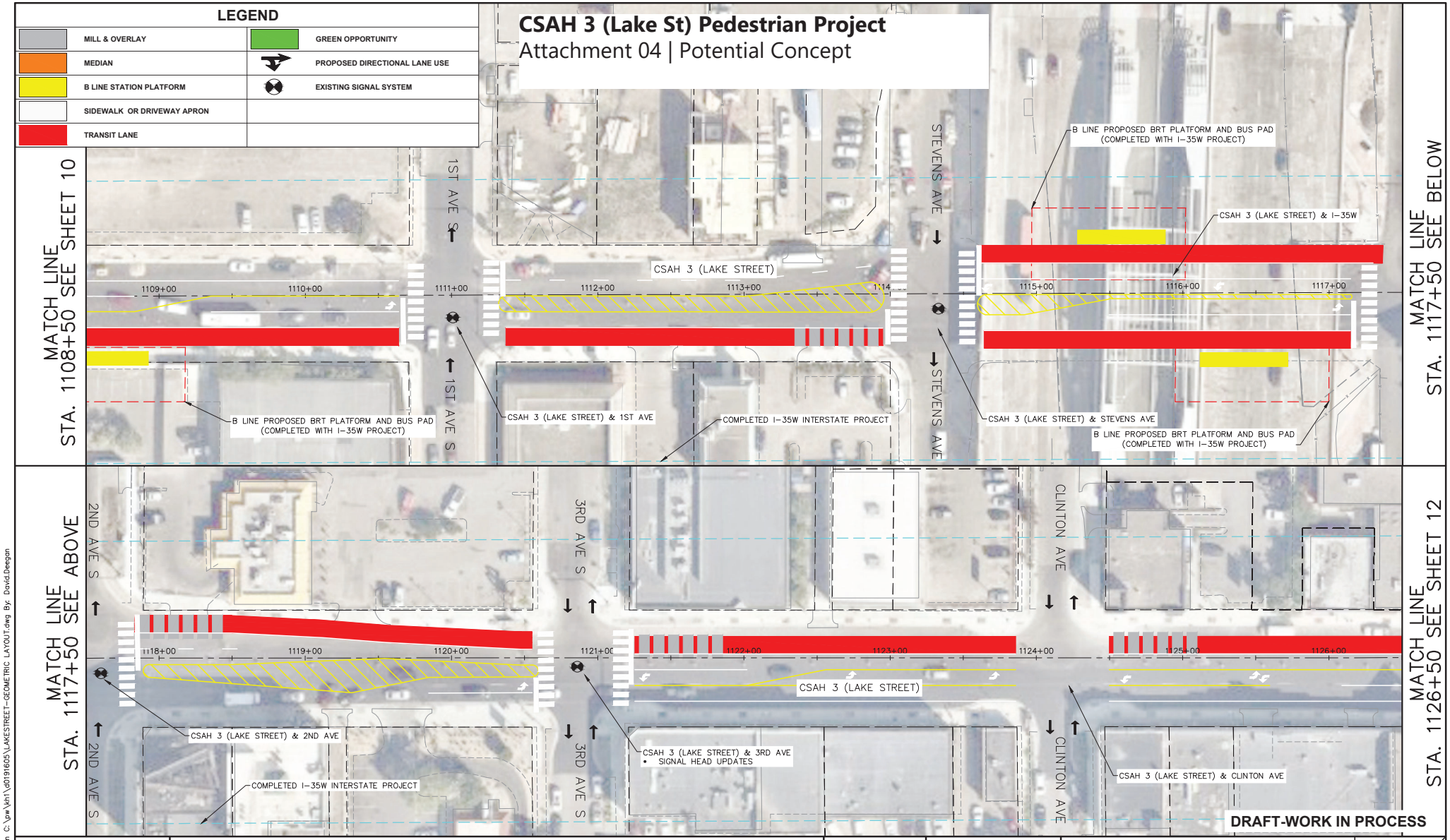
Kimley»Horn

10
16

Apr. 12 2022 06:18 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH
0 15 30 60
SCALE

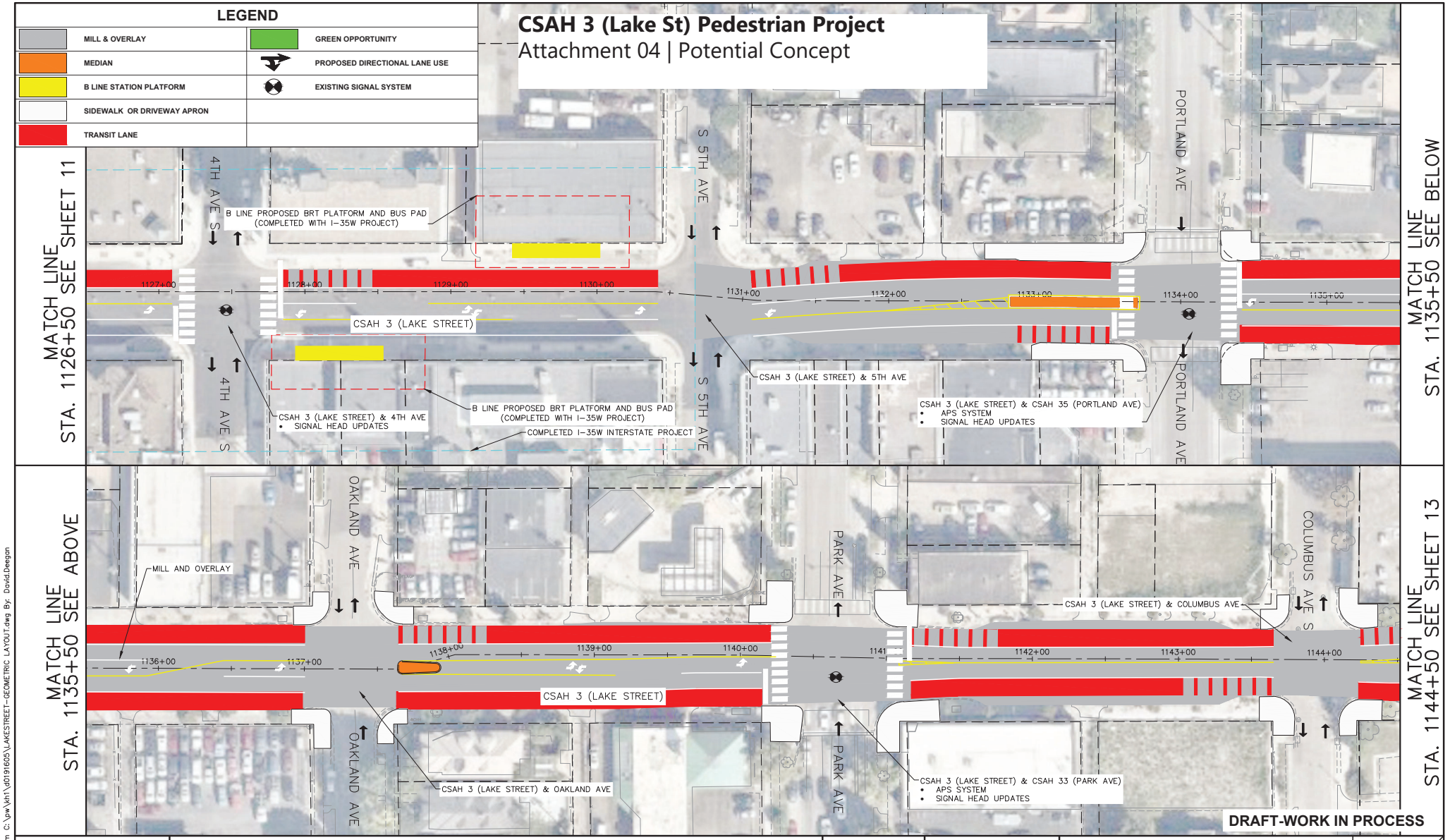
Kimley»Horn

11
16

Apr, 12 2022 06:19 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

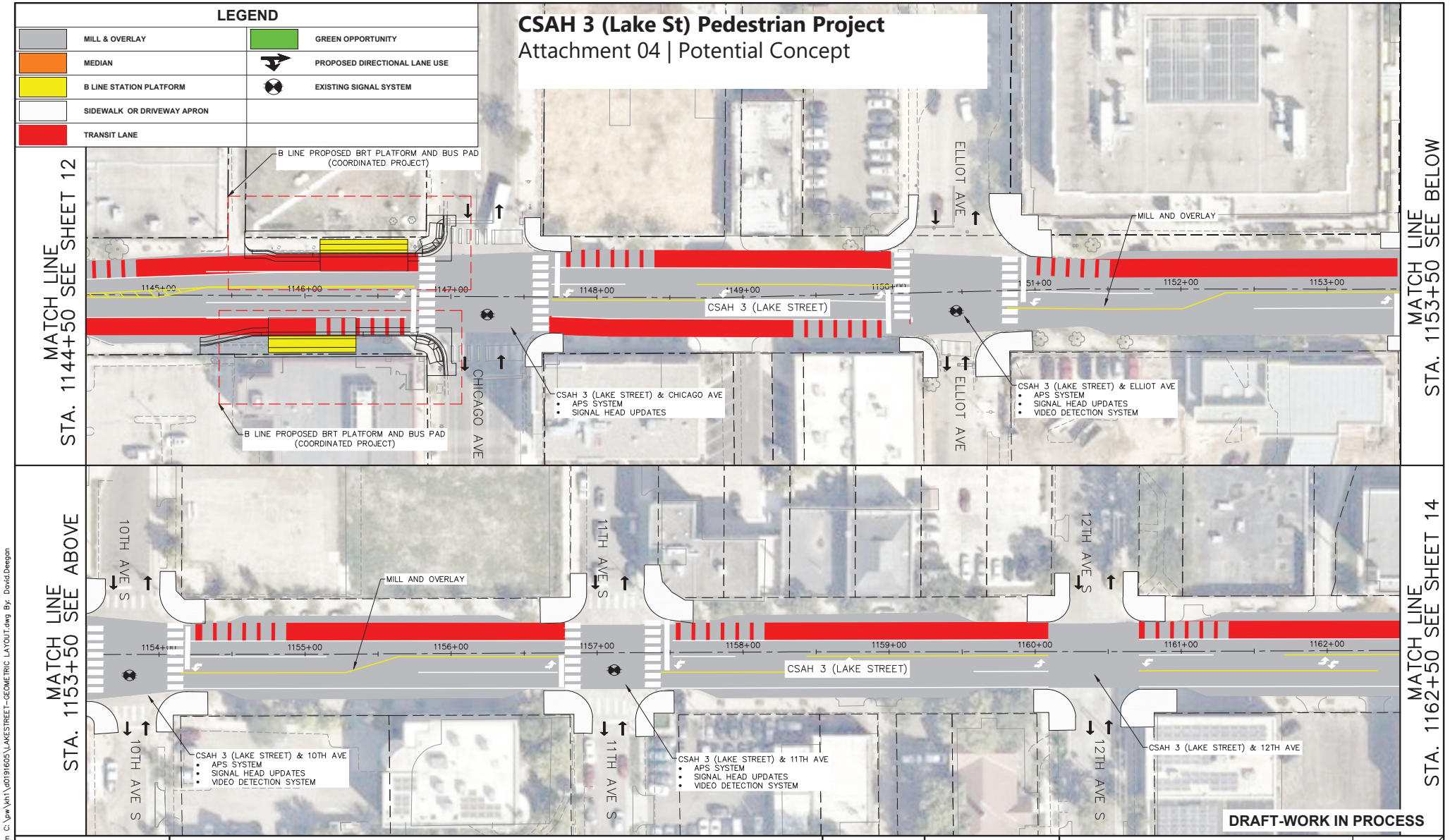
Kimley»Horn

12 / 16

Apr. 12 2022 06:20 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

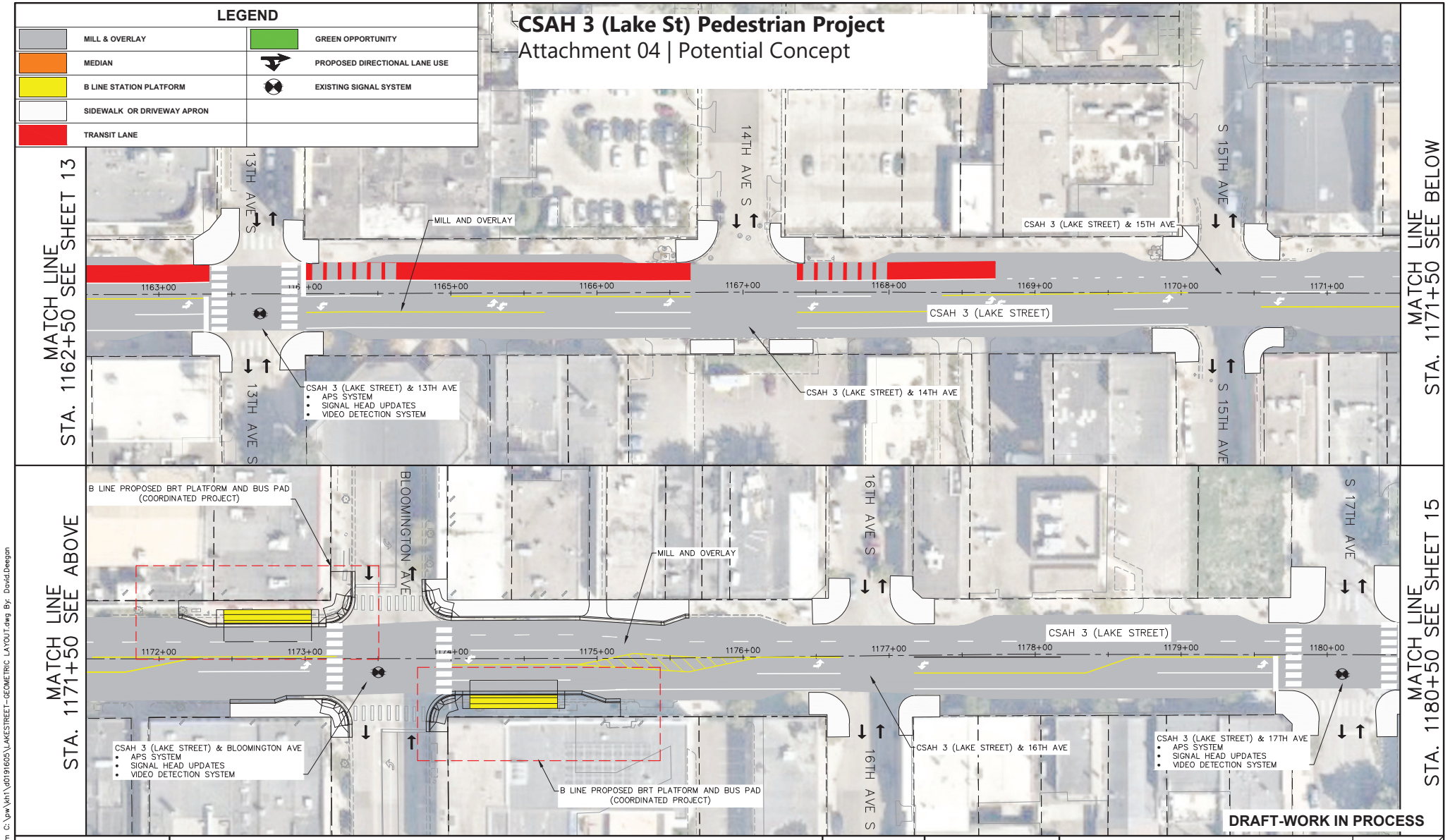
Kimley»Horn

13/16

Apr. 12 2022 06:21 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

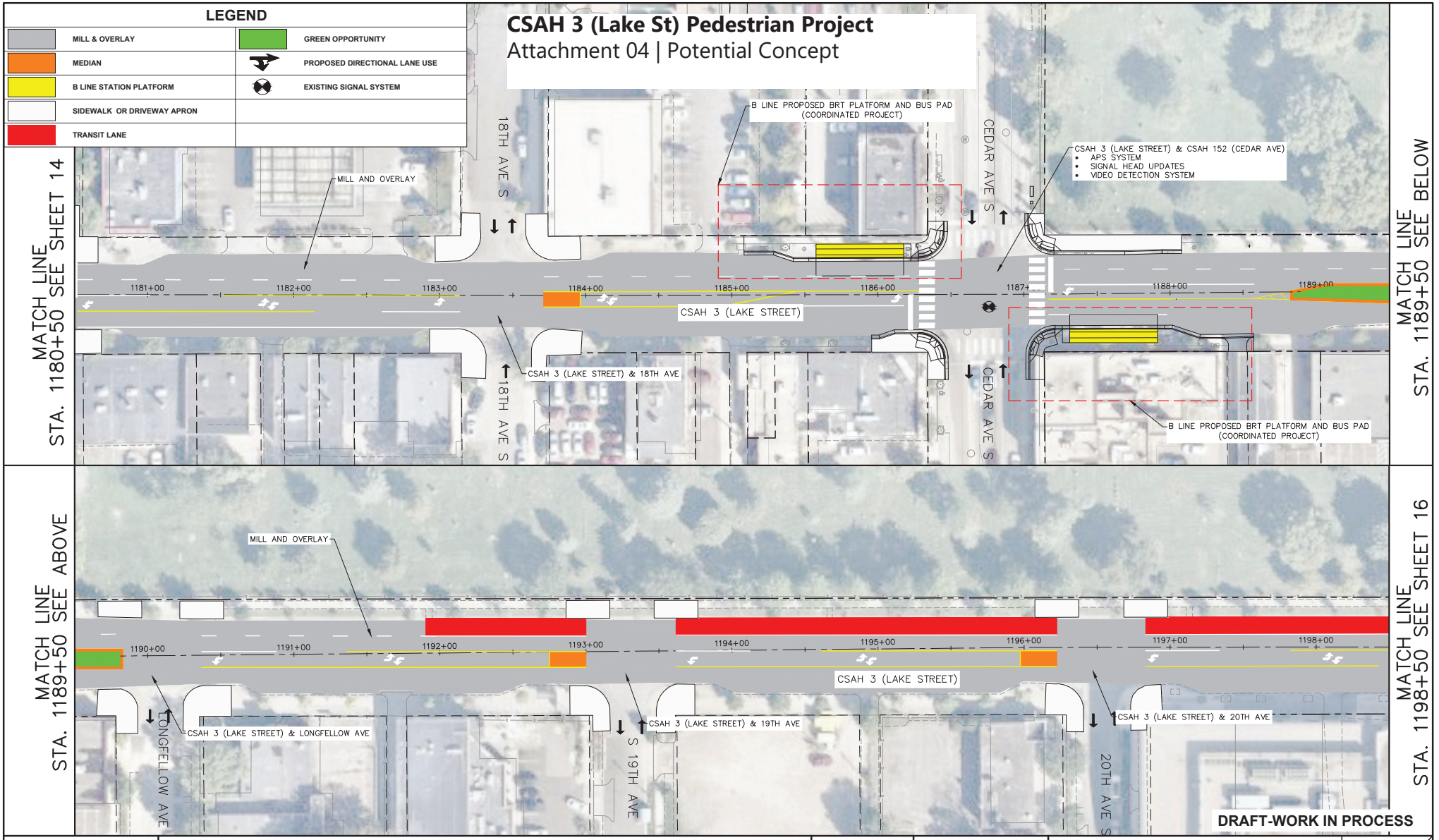
Kimley»Horn

14 / 16

Apr. 12 2022 06:22 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

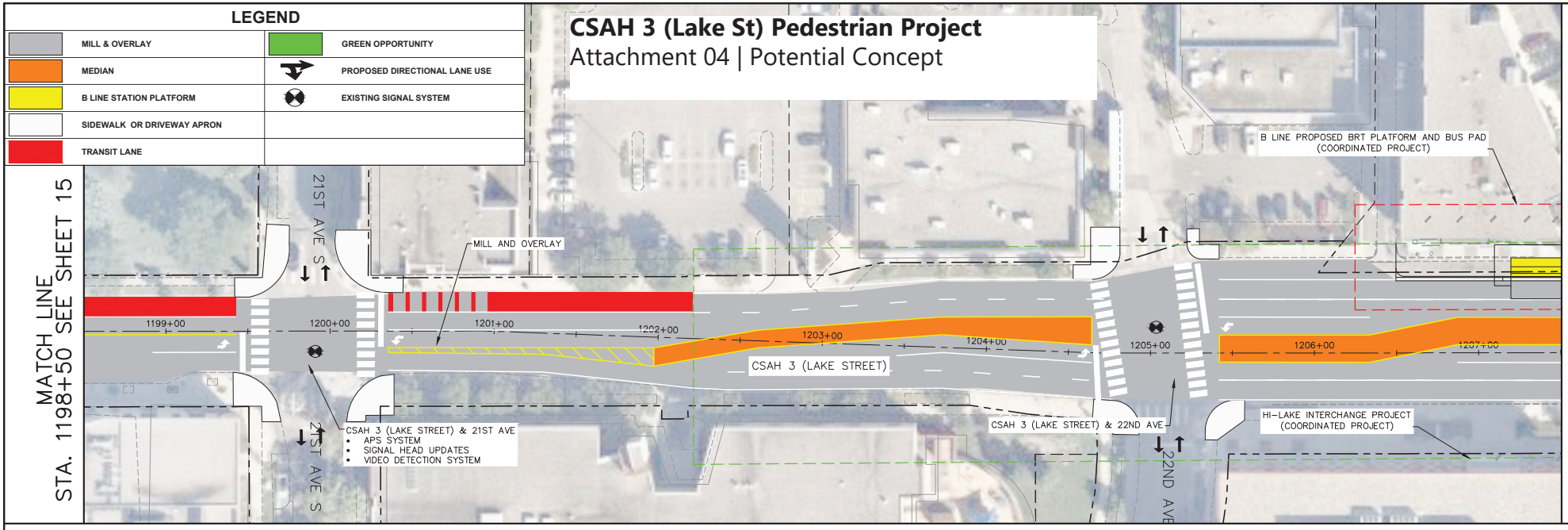
Kimley»Horn

15/16

Apr. 12 2022 06:23 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS
PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH
0 15 30 60
SCALE

Kimley»Horn

16
16

CSAH 3 (Lake St) Pedestrian Project

List of attachments

1. Project Narrative
2. Project Location Map
3. Existing Roadway Condition Photos
4. Potential Concept
5. Hennepin County 2022-2026 Transportation CIP
6. Hennepin County Board Resolution 22-0109
7. City of Minneapolis Pedestrian Priority Network Map
8. Metro Transit B Line Engagement Summary
9. Socio-Economic Equity Map
10. Affordable Housing Access Map and Detail Summary
11. Crash Summary and Case Listing
12. Minnesota's Best Practices for Pedestrian and Bicycle Safety
13. Multimodal Connections Map
14. City of Minneapolis Support Letter
15. Metro Transit Support Letter

CSAH 3 (Lake St) Pedestrian Project

Attachment 1 | Project Narrative

HENNEPIN COUNTY
MINNESOTA

Project Name
CSAH 3 (Lake St) Pedestrian Project

City(ies)
Minneapolis

Commisioner District(s)
3 4

Capital Project Number
2193300

Project Category
Pedestrian

Scoping Manager
Emily Buell

Scoping Form Revision Dates
4/7/2022

Project Summary

Pedestrian improvements at varoius locations along Lake Street (CSAH 3) from Dupont Avenue to 21st Avenue in the City of Minneapolis.

Roadway History

Metro Transit is planning ABRT service along Route 21 (nicknamed the B Line) to provide faster and more reliable transit service. Service will extend along Lake Street (CSAH 3) and Lagoon Avenue (CSAH 43). In total, the B line will construct 18 locations along Hennepin County roadways. Each station will likely include features that provide a positive customer experience (such as shelters, message boards, and automatic ticket machines). Additionally, the B Line project will upgrade pedestrian facilities in quadrants that include a station. As a result, a need exists to introduce similar upgrades in the remaining two quadrants to ensure the accessibility and comfort of pepole walking.

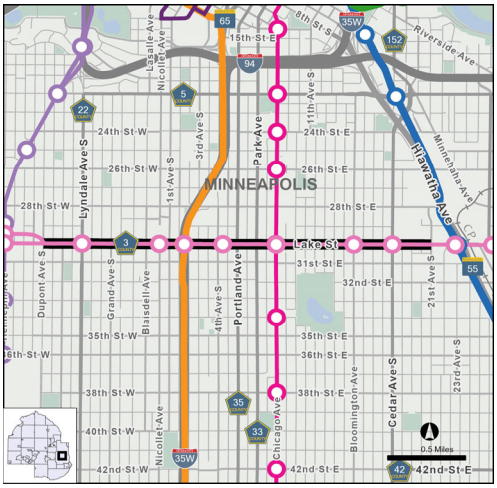
Project Description and Benefits

This proposed project will complement Metro Transit's B Line service by constructing infrastructure to serve people walking, rolling, and taking transit along and across Lake Street (CSAH 3). The B Line is expected to generate additional pedestrian activity along the corridor, and this project will provide accessible pedestrian ramps, spot safety improvements and Accessible Pedestrian Signals (APS) to support the B Line; along with the diverse businesses, restaurants, housing, and community services along the corridor.

Project Risks & Uncertainities

Given the current schedule of Metro Transit's B Line Project that's anticipated to begin service in 2024, additional coordination is needed to align construction and funding timelines.

Project Map



Project Timeline

Scoping:	2019 - 2020
Design:	Q1 2021 - Q4 2023
R/W Acquisition:	N/A
Bid Advertisement:	Q1 2024
Construction:	Q2 2024 - Q4 2024

Project Delivery Responsibilities

Preliminary Design:	Consultant
Final Design:	Consultant
Construction Services:	Consultant

Project Budget -		Project Level
Construction:	$	3,910,000
Cost Estimate Year:		2022
Construction Year:		2024
Annual Inflation Rate:		0.0%
Inflated Construction:	$	3,910,000
Design Services:	$	590,000
R/W Acquisition:	$	-
Other (Utility Burial):	$	-
Construction Services:	$	390,000
Contingency:	$	390,000
Total Project Budget:	**$**	**5,280,000**

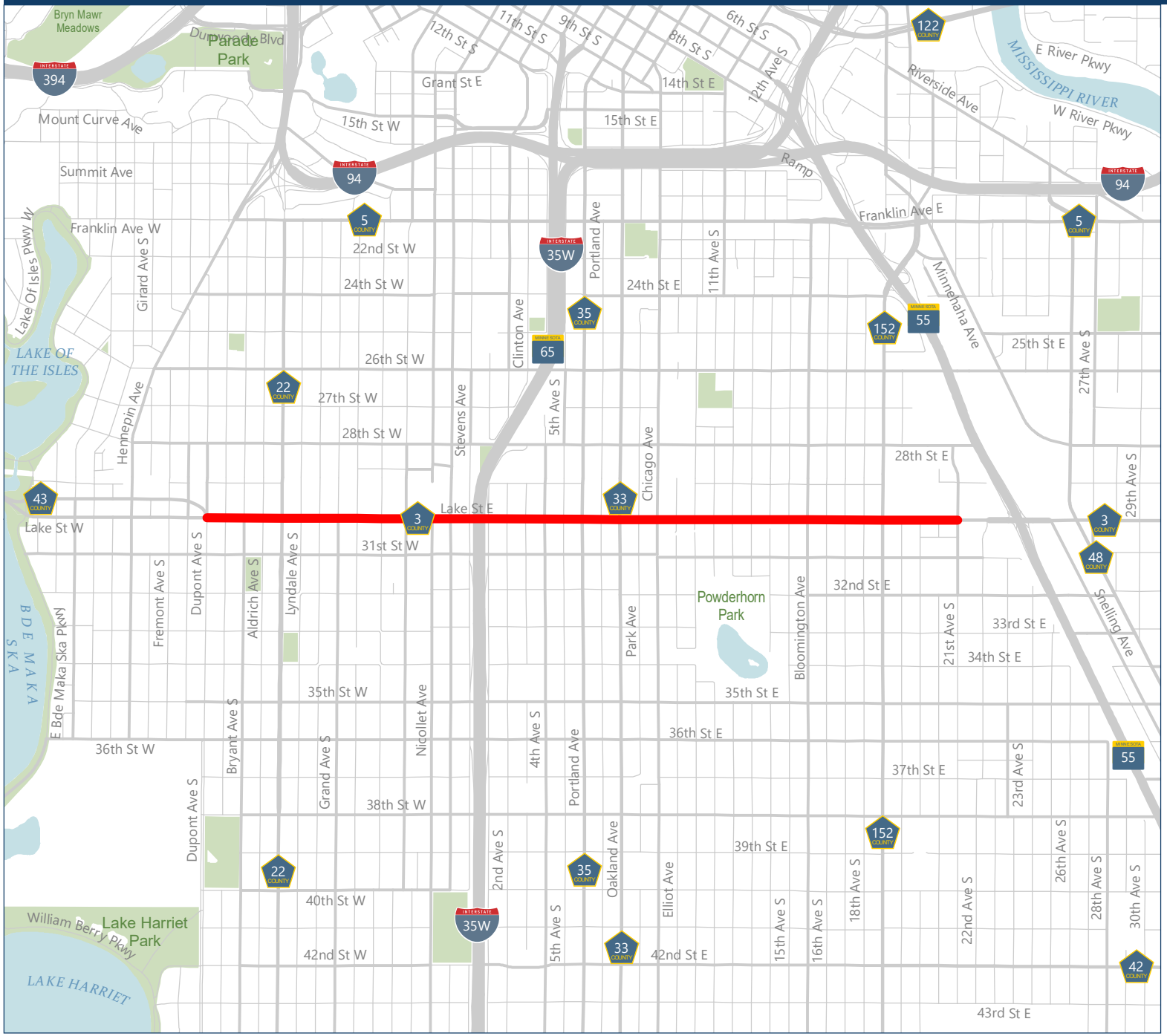
Funding Notes

This project is eligible for federal funding through the Metropolitan Council's Regional Solicitation due to the roadway's functional classification of A-Minor Arterial.

CSAH 3 (Lake St) Pedestrian Project

Attachment 02 | Project Location Map

HENNEPIN COUNTY
MINNESOTA



Key

Project Location

0 0.375 0.75 Miles

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

Published date: 3/23/2022

N

Hennepin

CSAH 3 (Lake St) Pedestrian Project

Attachment 03 | Existing Roadway Condition Photos

The intersection of Park Avenue and Lake Street which, like many intersections along the corridor, has aging pedestrian ramps that are not consistent with the newest ADA design guidelines.

Hennepin County Public Works
1600 Prairie Drive, Medina, MN 55340
612-596-0300 | hennepin.us

CSAH 3 (Lake St) Pedestrian Project

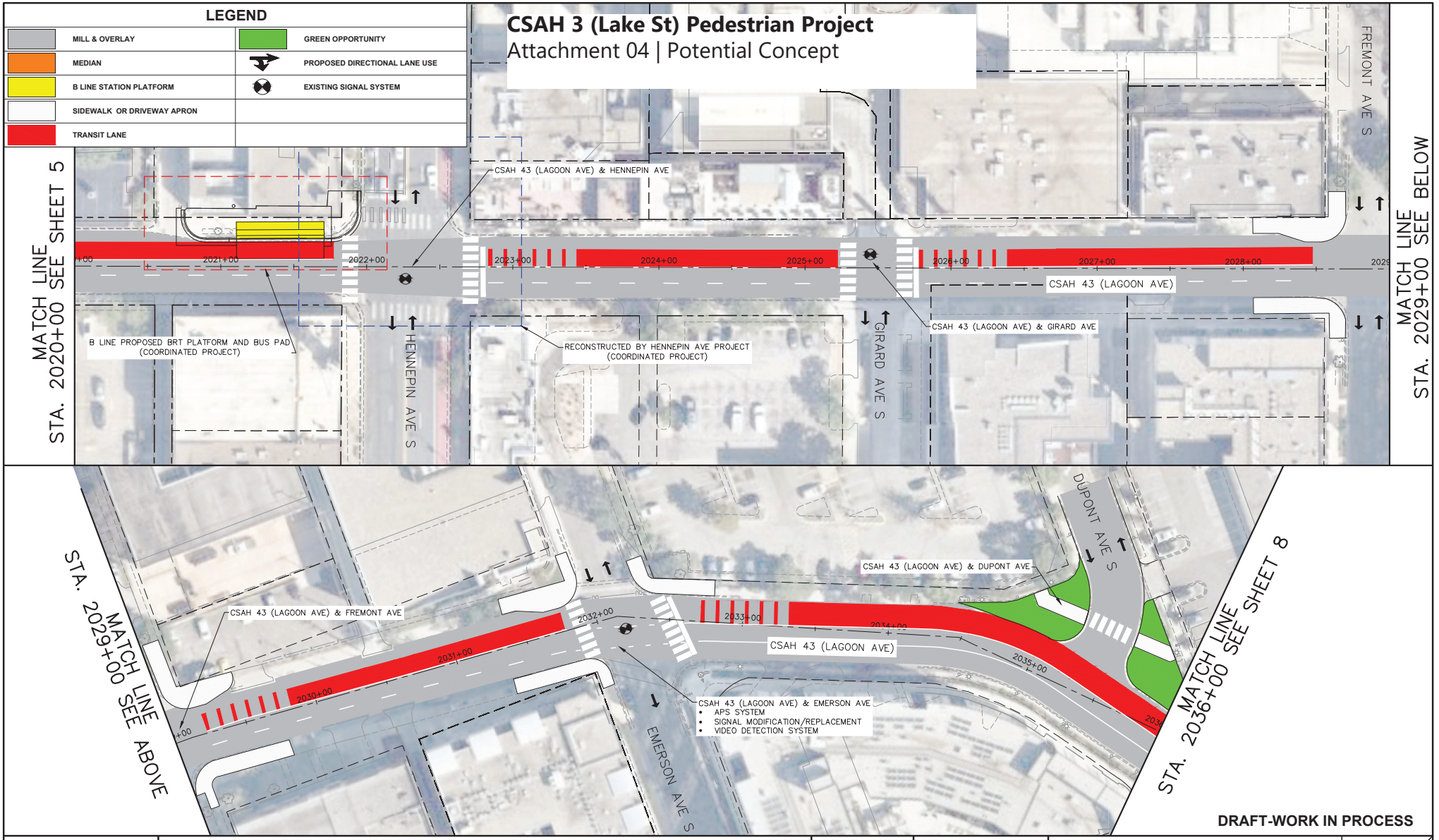
Attachment 03 | Existing Roadway Condition Photos

(Left) Sidewalk deficiencies such as this pose a barrier for future first and last mile transit connections for the Metro Transit B Line.

(Left) Sidewalk assets will be evaluated to address significant defects, such as this hole between Park and Portland Ave on Lake St.

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH
0 15 30 60
SCALE

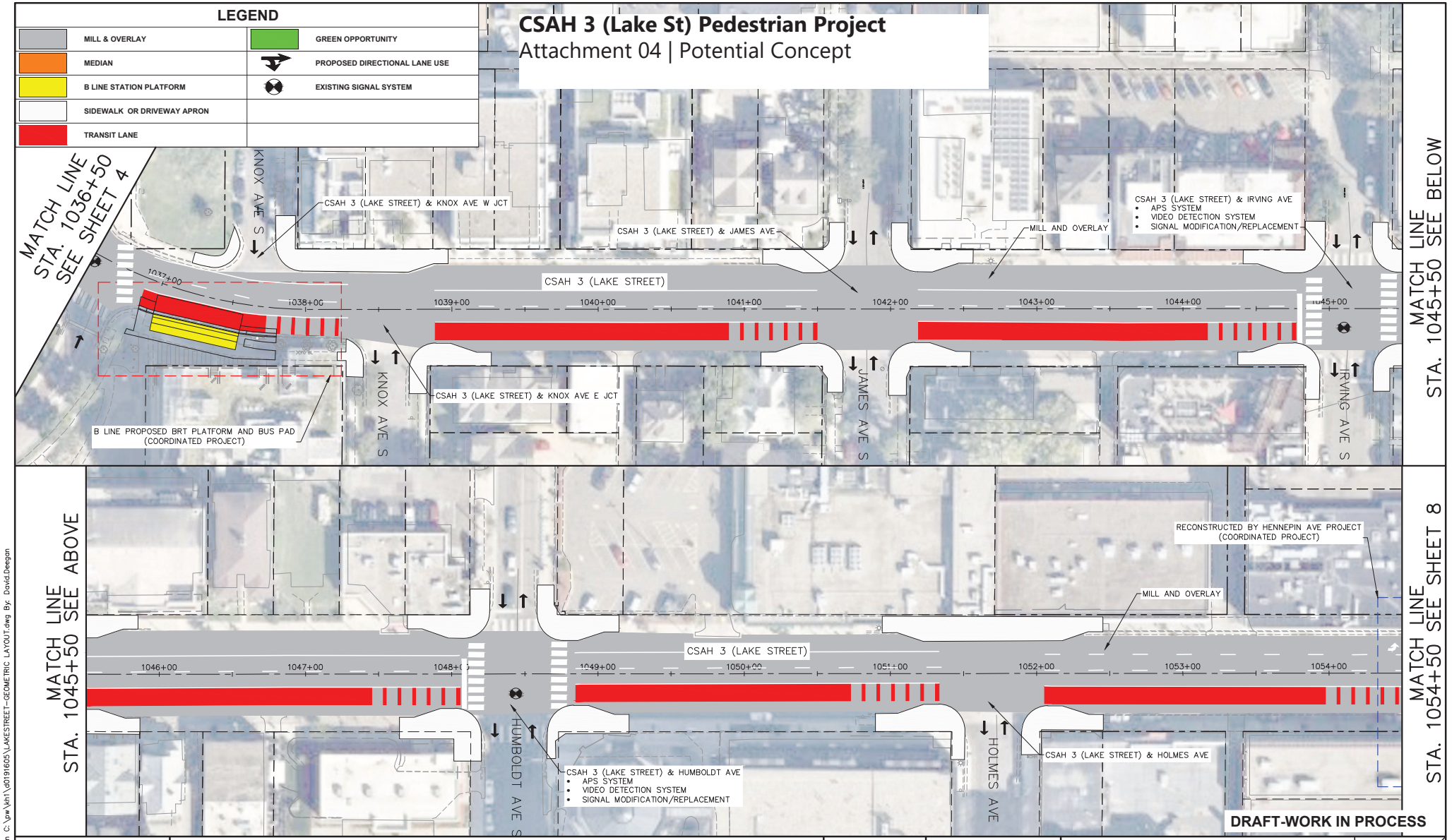
Kimley»Horn

6
16

Apr. 13 2022 08:39 am C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH

0 15 30 60

SCALE

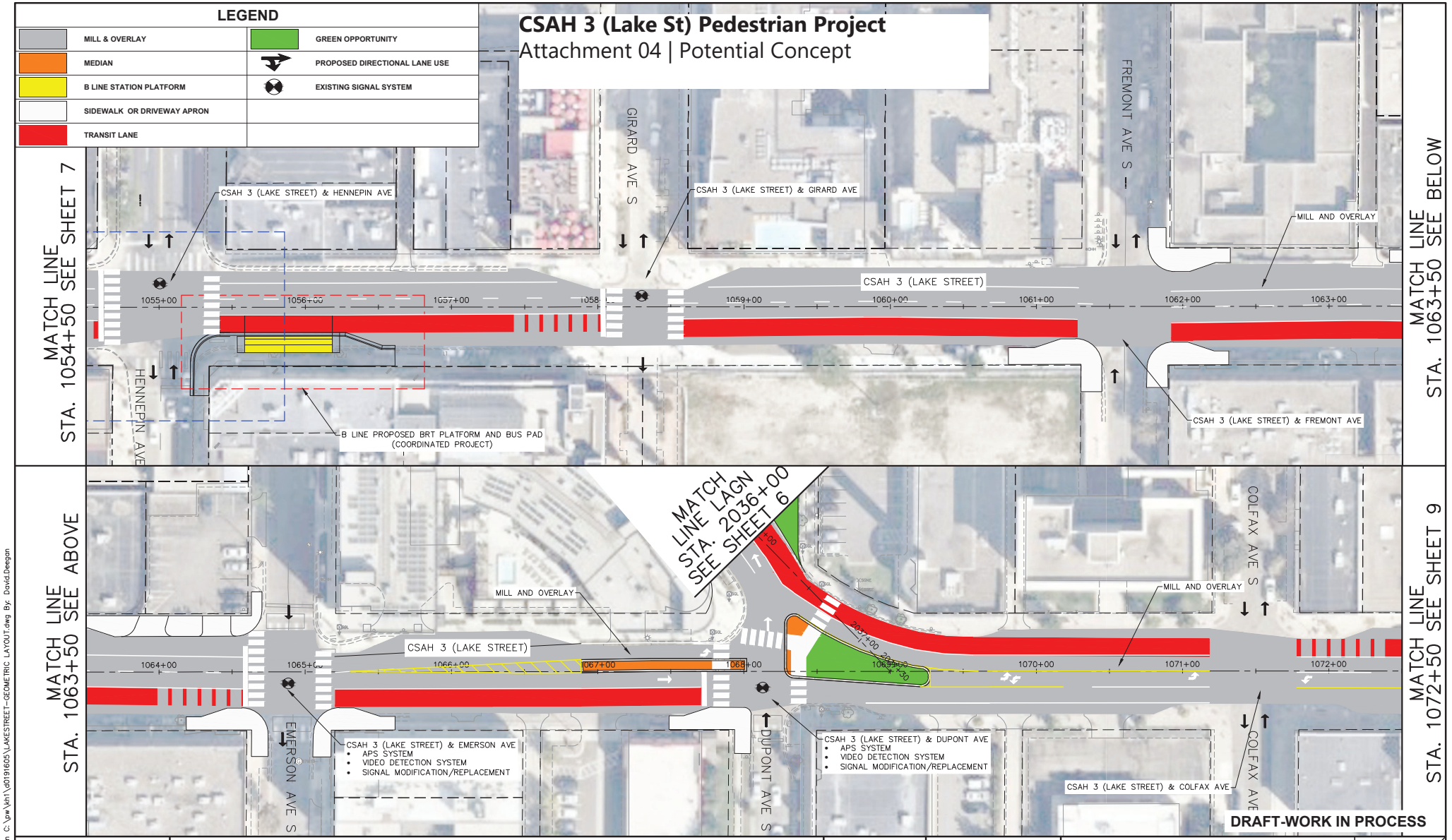
Kimley»Horn

7
16

Apr. 13 2022 08:18 am C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH

0 15 30 60

SCALE

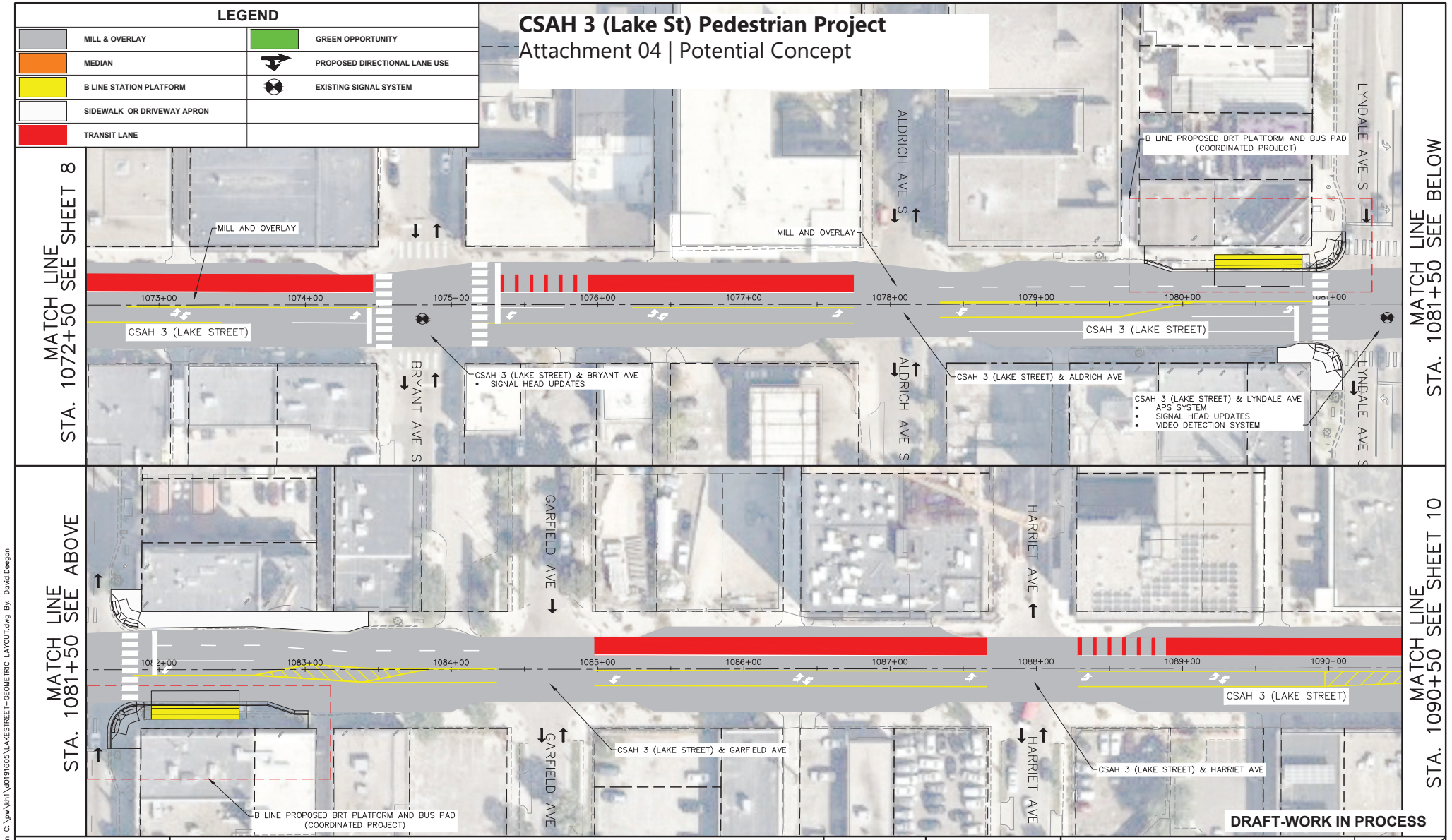
Kimley»Horn

8
16

Apr. 13 2022 08:19 am C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH
0 15 30 60
SCALE

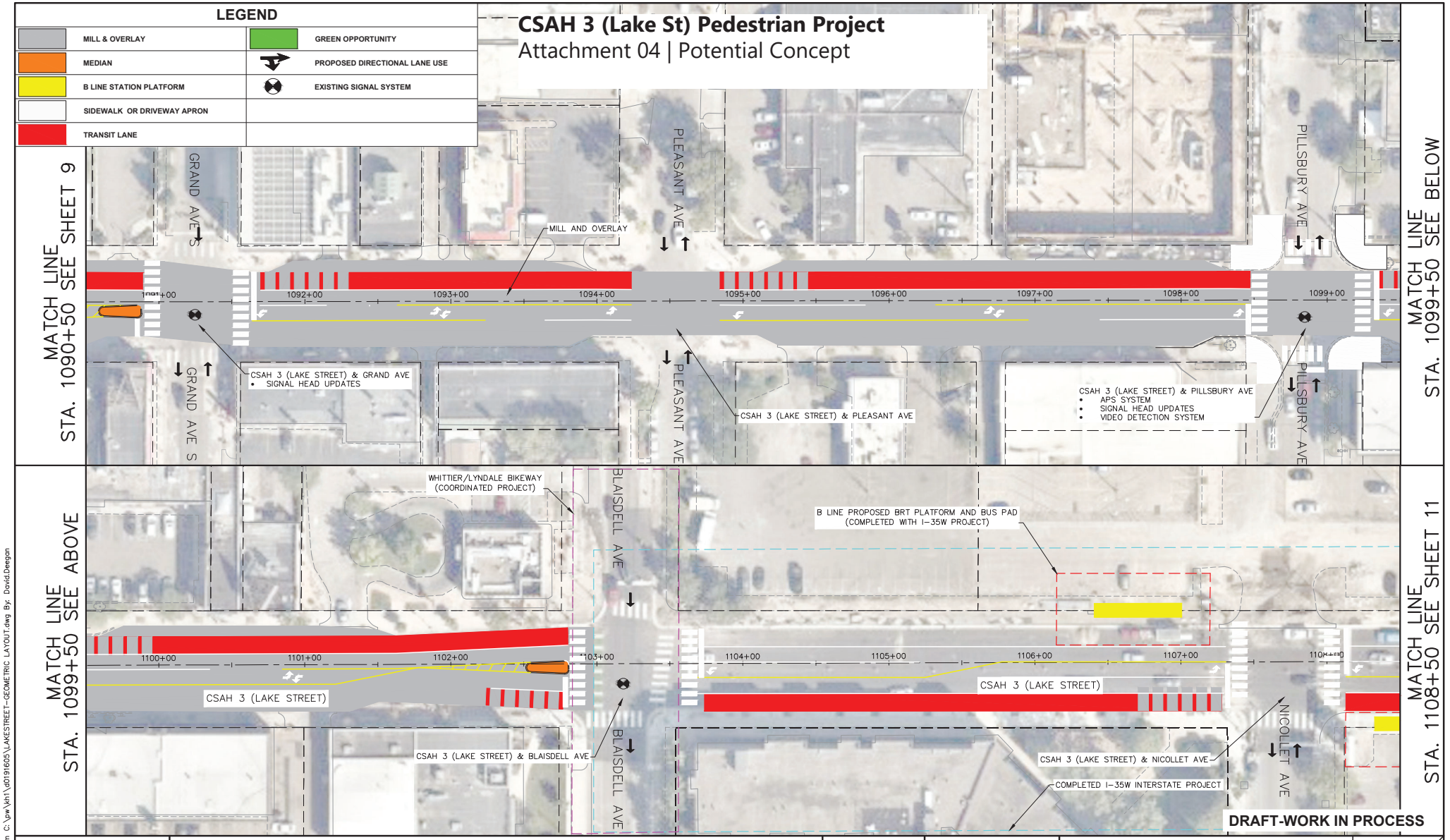
Kimley»Horn

9
16

Apr, 12 2022 06:17 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH
0 15 30 60
SCALE

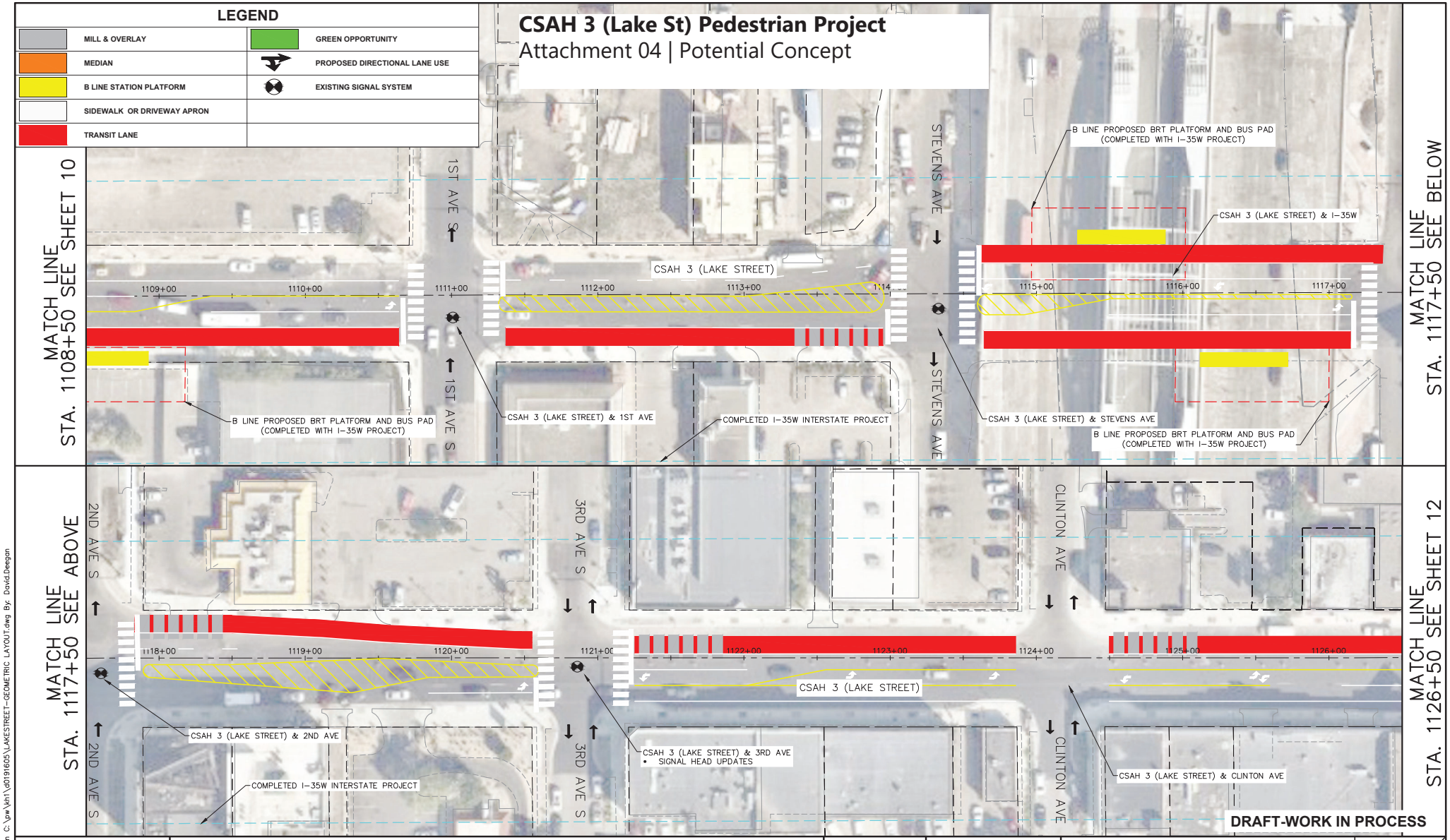
Kimley»Horn

10
16

Apr. 12 2022 06:18 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH
0 15 30 60
SCALE

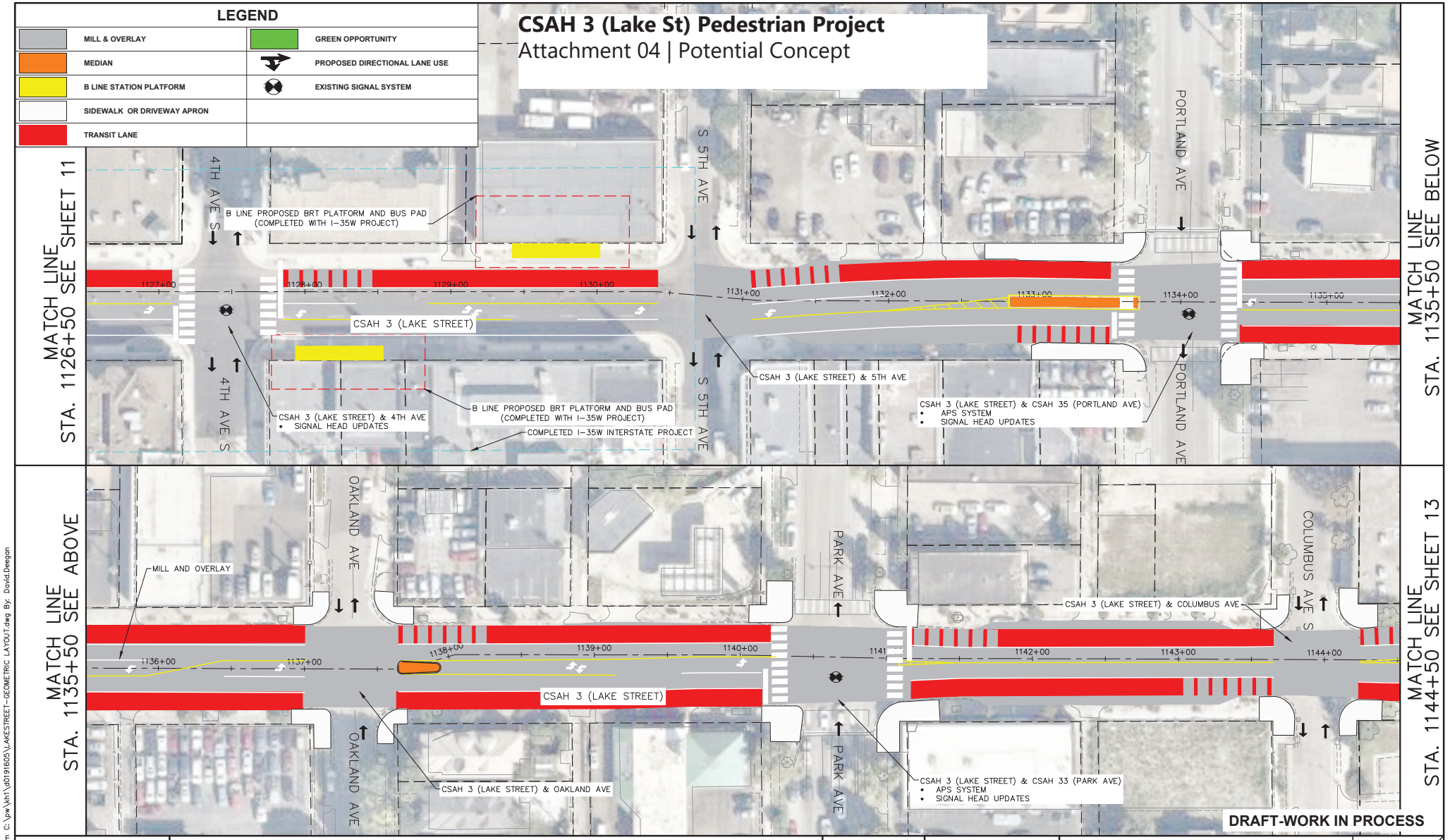
Kimley»Horn

11
16

Apr, 12 2022 06:19 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

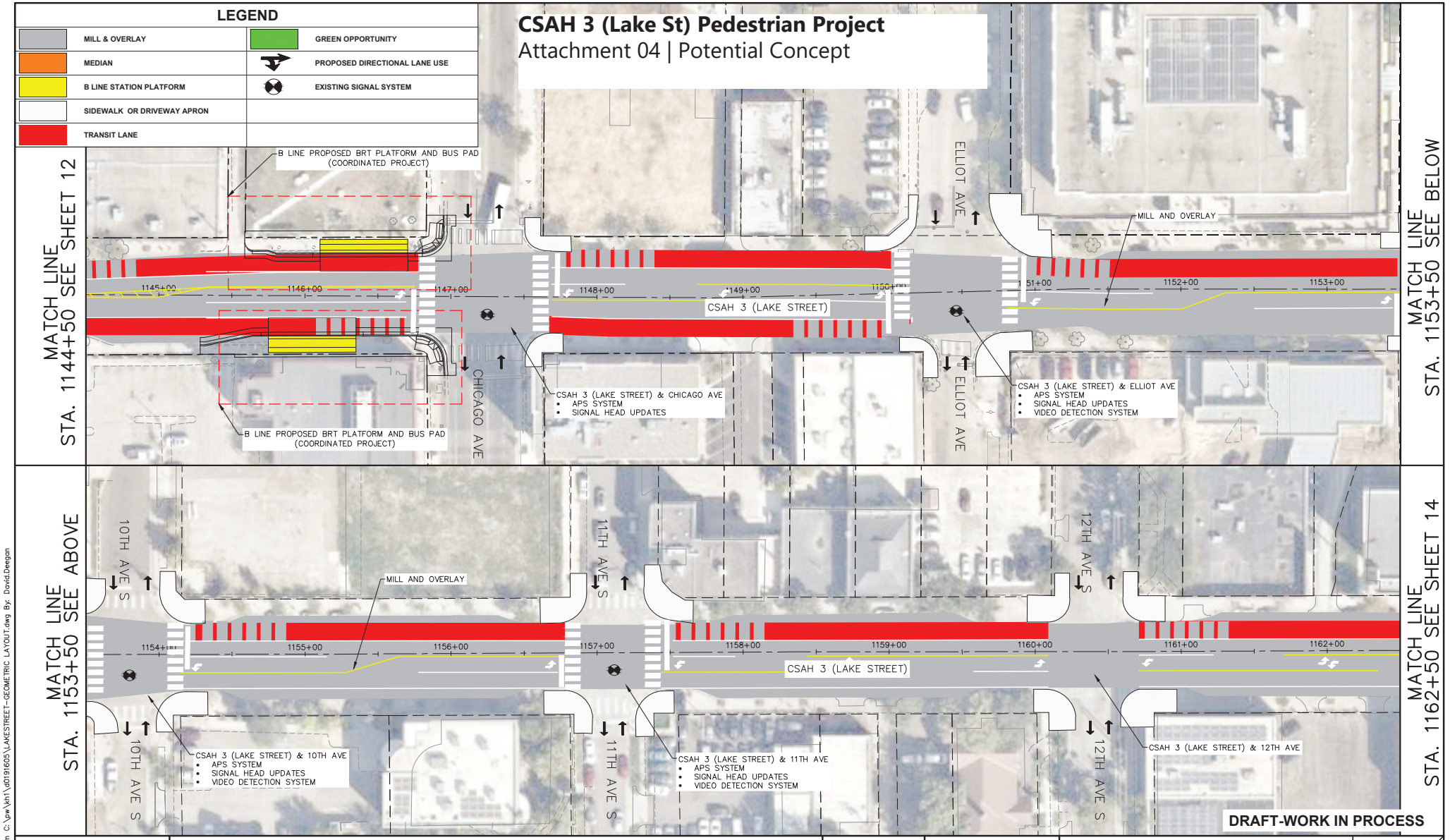
Kimley»Horn

12 / 16

Apr. 12 2022 06:20 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

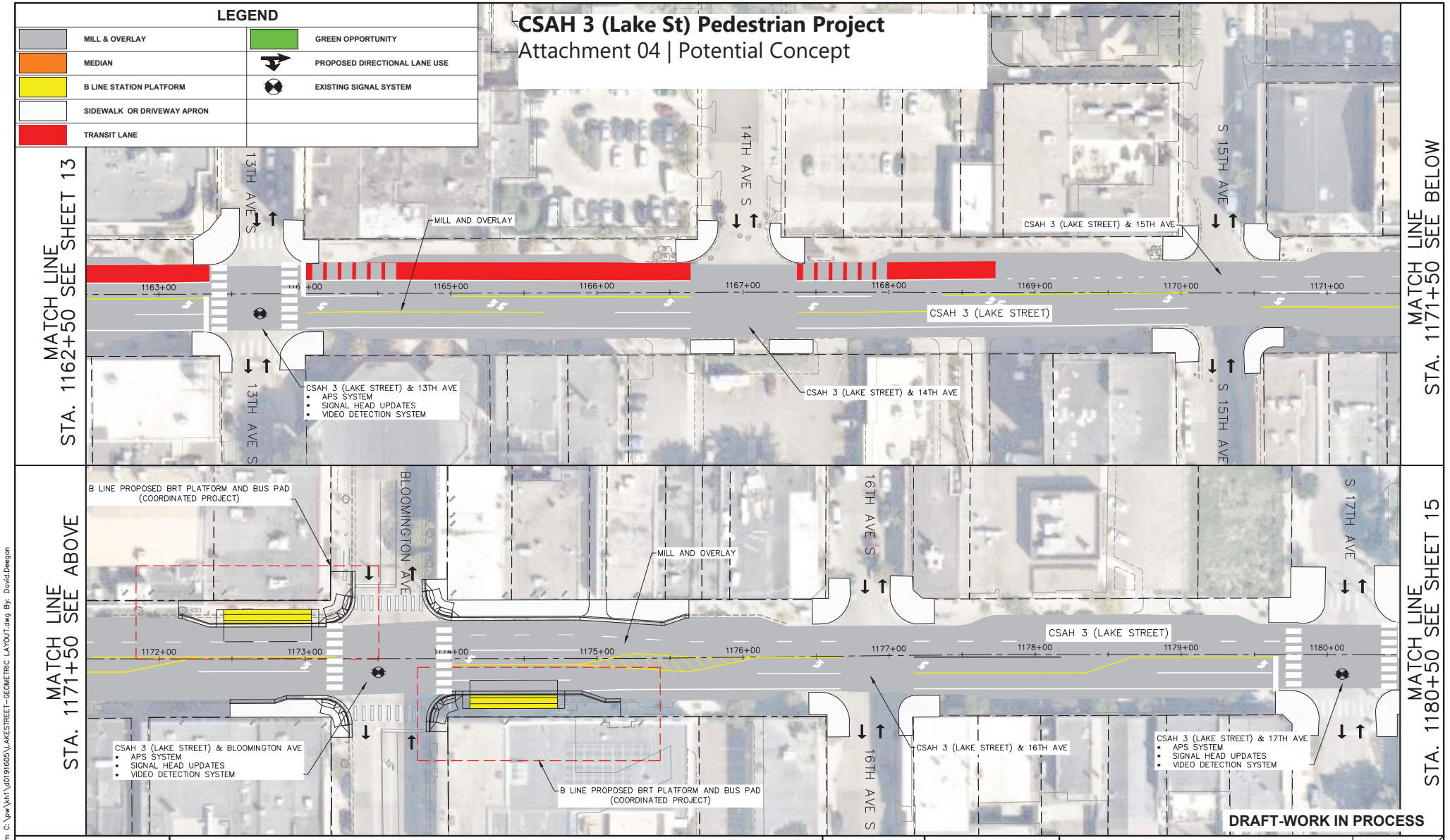
Kimley»Horn

13/16

Apr. 12 2022 06:21 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

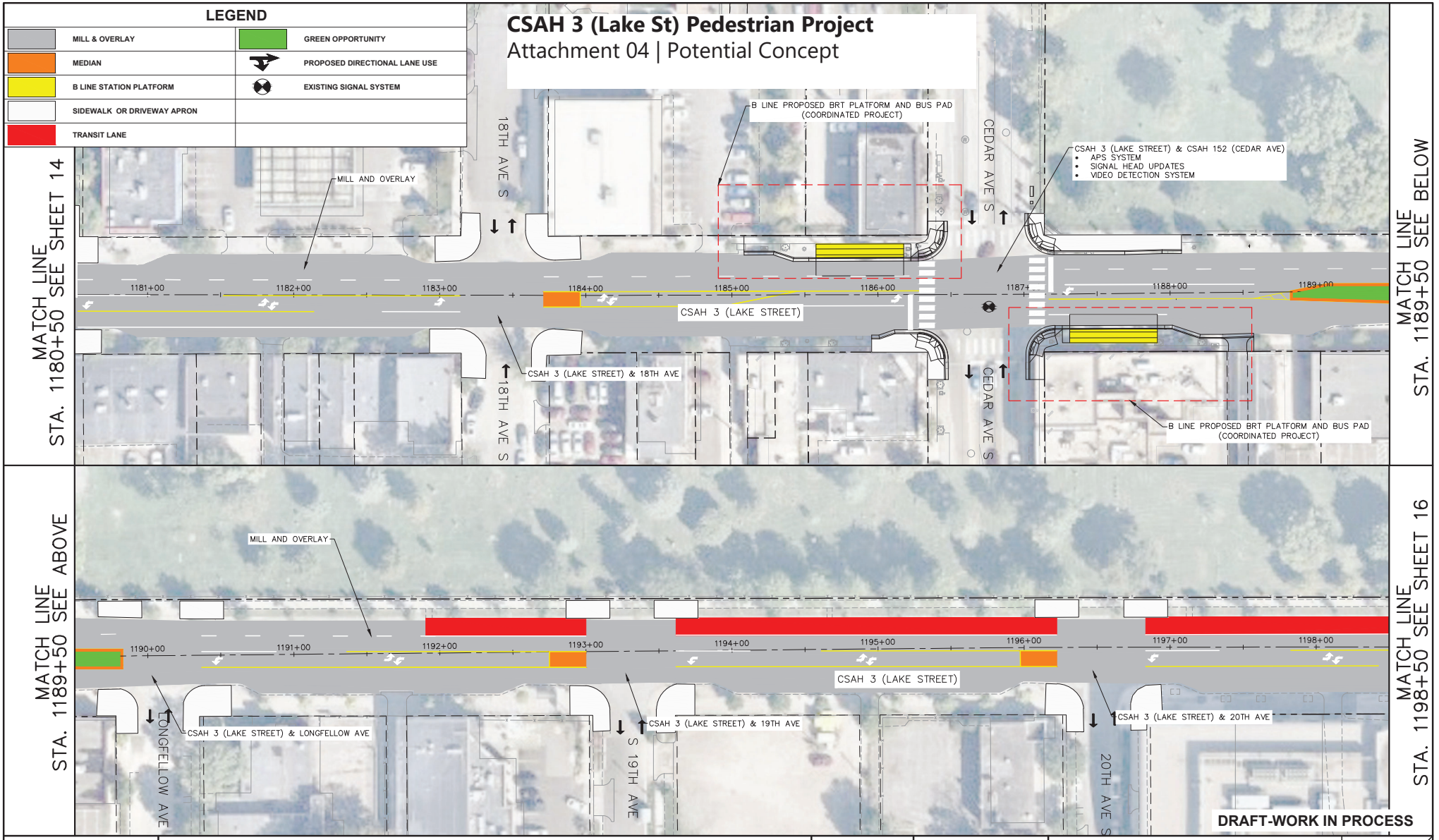
Kimley»Horn

14 / 16

Apr. 12 2022 06:22 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



Hennepin

LAKE STREET IMPROVEMENTS

PRELIMINARY LAYOUT

Rev 0
4/12/2022

NORTH

0 15 30 60

SCALE

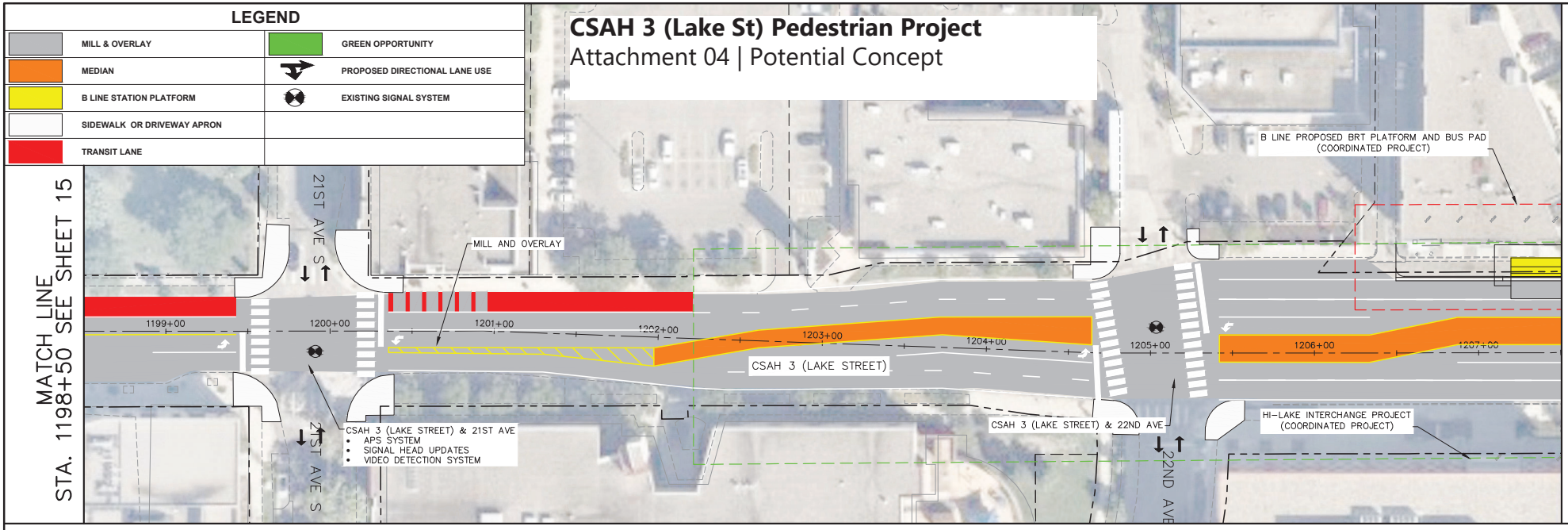
Kimley»Horn

15/16

Apr. 12 2022 06:23 pm C:\pw\kh1\d0191605\LAKESTREET-GEOMETRIC LAYOUT.dwg By: David.Deegan

CSAH 3 (Lake St) Pedestrian Project

Attachment 04 | Potential Concept



DRAFT-WORK IN PROCESS

Hennepin

LAKE STREET IMPROVEMENTS
PRELIMINARY LAYOUT

Rev 0
4/13/2022

NORTH
0 15 30 60
SCALE

Kimley»Horn

16
16

CSAH 3 (Lake St) Pedestrian Project

Attachment 05 | Hennepin County 2022-2026 Transportation CIP

BOARD APPROVED: 2022 CAPITAL BUDGET AND 2022-2026 CAPITAL IMPROVEMENT PROGRAM

Project Name: 2193300 Metro Transit B Line - Locally Requested Scope
Major Program: Public Works
Department: Transportation Roads & Bridges

Funding Start: 2022
Funding Completion: 2022

Summary:

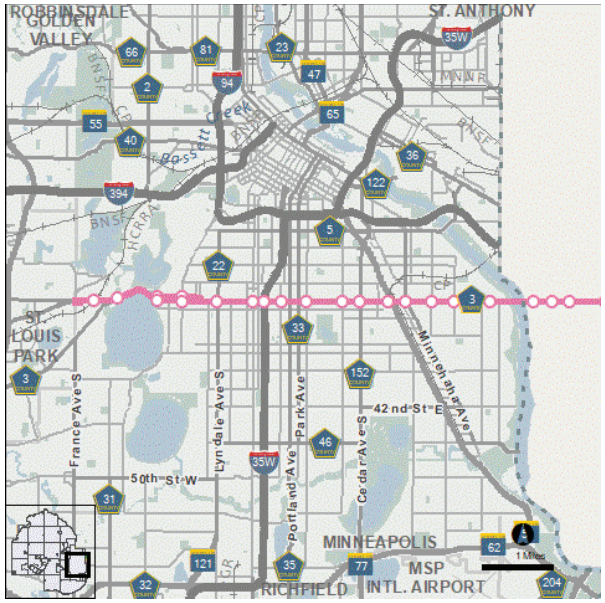
Locally requested intersection improvements at eighteen locations along the proposed B Line Arterial Bus Rapid Transit (ABRT) service in the City of Minneapolis.

Purpose & Description:

Metro Transit is planning to introduce Arterial Bus Rapid Transit (ABRT) service along the existing Route 21 (nicknamed the B Line) to provide faster and more reliable transit service to customers. Service will primarily extend along Lake Street (CSAH 3) and Lagoon Avenue (CSAH 43). In total, the B Line will construct approximately 18 locations along Hennepin County Roadways. Each ABRT station will likely include specific features (such as shelters, message boards, and automatic ticket machines) that provide a positive customer experience. Additionally, as part of the B Line ABRT project, pedestrian facilities will be upgraded in quadrants that include an ABRT station (typically in two out of the four quadrants). As a result, a need exists to introduce similar upgrades in the remaining two quadrants to ensure the accessibility and comfort of people walking.

The project provides funding to bring about additional improvements at locations that include a B Line ABRT station. Specific improvements are anticipated to include ADA upgrades, curb extensions, and/or traffic signal modifications as determined to be feasible. The improvements are key to ensuring that ABRT stations are accessible for all people; especially those with limited mobility. County staff will participate in the project development process for the overall B Line ABRT project to ensure project success.

It should be noted that these funds are not intended to replace the direct funding responsibilities of other agencies for the overall B Line ABRT project.



REVENUE	Budget To-Date	Act & Enc	Balance	2022 Budget	2023	2024	2025	2026	Beyond 2026	Total
Property Tax				500,000						500,000
Mn/DOT State Aid - Regular				500,000						500,000
Total				**1,000,000**						**1,000,000**

EXPENSE	Budget To-Date	Act & Enc	Balance	2022 Budget	2023	2024	2025	2026	Beyond 2026	Total
Consulting				1,000,000						1,000,000
Total				**1,000,000**						**1,000,000**

CSAH 3 (Lake St) Pedestrian Project

Attachment 05 | Hennepin County 2022-2026 Transportation CIP

BOARD APPROVED: 2022 CAPITAL BUDGET AND 2022-2026 CAPITAL IMPROVEMENT PROGRAM

Project Name: 2193300 Metro Transit B Line - Locally Requested Scope
Major Program: Public Works
Department: Transportation Roads & Bridges

Funding Start: 2022
Funding Completion: 2022

Current Year's CIP Process Summary	Budget To-Date	2022 Budget	2023	2024	2025	2026	Beyond 2026	Total
Department Requested								
Administrator Proposed								
CBTF Recommended								
Board Approved Final		1,000,000						1,000,000

Scheduling Milestones (major phases only):

Activity	Anticipated Timeframe
Planning	2021
Design	2022
Bid Advertisement	TBD
Construction	TBD
Completion	Q4 2025

Project's Effect on County Priorities and the Operating Budget:

County Priorities: This project will advance county climate action efforts by improving accessibility and enhancing safety for multi-modal transportation facilities and connections to B-Line arterial bus rapid transit (ABRT) stations. This is especially important as the project passes through areas that include relatively high percentages of no-vehicle households, people with limited mobility, and people with low income.

Operating Budget: Staff does not anticipate that this project will have impacts to Transportation Department staff or annual operating costs as the proposed project will primarily replace existing roadside and traffic assets in-kind.

Changes from Prior CIP:

- This is a new project request by County Administration for the 2022-2026 Transportation CIP to provide the county's share in design engineering for local scope improvements to complement the B Line ABRT project in Minneapolis.

Board Resolutions / Supplemental Information:

Project budget notes:
BAR 21-0346 (adopted on 12/14/21) authorized:

- CP 2193300 to be identified as a project in the 2022 Capital Budget with a project budget of $1,000,000 comprised of $500,000 in state aid regular and $500,000 from the Transportation Property Tax and Land Sales Suspense Account (0039996).
- The County Administrator to negotiate an agreement with the Metropolitan Council for design engineering on the Metro Transit B Line - Locally Requested Scope between January 1,2022 and December 31, 2025 in an amount NTE $1,000,000.

Last Year's CIP Process Summary	Budget To-Date	2021	2022	2023	2024	2025	Beyond 2025	Total
Department Requested								
Administrator Proposed								
CBTF Recommended								
Board Approved Final								

CSAH 3 (Lake St) Pedestrian Project

Attachment 06 | Hennepin County Board Resolution 22-0109

HENNEPIN COUNTY
MINNESOTA

Hennepin County, Board of Commissioners

RESOLUTION 22-0109

2022

The following resolution was moved by Commissioner Angela Conley and seconded by Commissioner Debbie Goettel:

BE IT RESOLVED, that Hennepin County be authorized to apply for federal funding through the Regional Solicitation for the following projects (separated by category) on various County State Aid Highways (CSAHs) throughout the county:

Roadway Reconstruction/Modernization

Projects programmed in the 2022-2026 CIP:

- Franklin Avenue (CSAH 5) from Lyndale Avenue (CSAH 22) to Blaisdell Avenue in Minneapolis
- Dayton River Road (CSAH 12) from Colburn Street to North Diamond Lake Road (CSAH 144) in Dayton and Champlin
- Lyndale Avenue (CSAH 22) from the Hennepin County Regional Railroad Authority (HCRRA) bridge to Franklin Avenue (CSAH 5) in Minneapolis

Projects identified in the county's 10-year work-plan, but not programmed in the 2022-2026 CIP:

- Penn Avenue (CSAH 32) from 75th Street to the Trunk Highway 62 South Ramp in Richfield
- Cedar Avenue (CSAH 152) from Lake Street (CSAH 3) to 24th Street in Minneapolis

Bridge Rehabilitation/Replacement

Project programmed in the 2022-2026 CIP:

- Bass Lake Road (CSAH 10) bridge over the Twin Lakes Inlet in Brooklyn Center and Crystal

Projects identified in the county's 10-year work-plan, but not programmed in the 2022-2026 CIP:

- Pioneer Trail (CSAH 1) bridge over the HCRRA corridor in Eden Prairie
- Eden Prairie Road (CSAH 4) bridge over Twin Cities and Western Railroad in Eden Prairie

Multiuse Trails/Bicycle and Pedestrian Facilities (sidewalks, streetscaping and improved accessibility)

Project partially programmed in the 2022-2026 CIP:

- Lake Street (CSAH 3) from Dupont Avenue to the Mississippi River

Project identified in the county's 10-year work-plan, but not programmed in the 2022-2026 CIP:

- Marshall Street NE (CSAH 23) from Third Avenue NE to Lowry Avenue NE (CSAH 153).

Project not currently identified in the county's 2022-2026 CIP or 10-year work-plan:

- Park Avenue (CSAH 33) and Portland Avenue (CSAH 35) from Lake Street (CSAH 3) to the I-94/I-35W Bridge in Minneapolis

Mobility and Safety

Projects not currently identified in the county's 10-year work-plan or 5-year CIP:

- Rockford Road (CSAH 9) and Northwest Boulevard (CSAH 61) in Plymouth
- Hemlock Lane (CSAH 61) and Elm Creek Boulevard (CSAH 130) in Maple Grove

The question was on the adoption of the resolution and there were 7 YEAS and 0 NAYS, as follows:

County of Hennepin
Board of County Commissioners

YEAS	NAYS	ABSTAIN	ABSENT
Marion Greene			
Debbie Goettel			
Irene Fernando			
Angela Conley			
Jeff Lunde			
Chris LaTondresse			
Kevin Anderson			

RESOLUTION ADOPTED ON **3/22/2022**

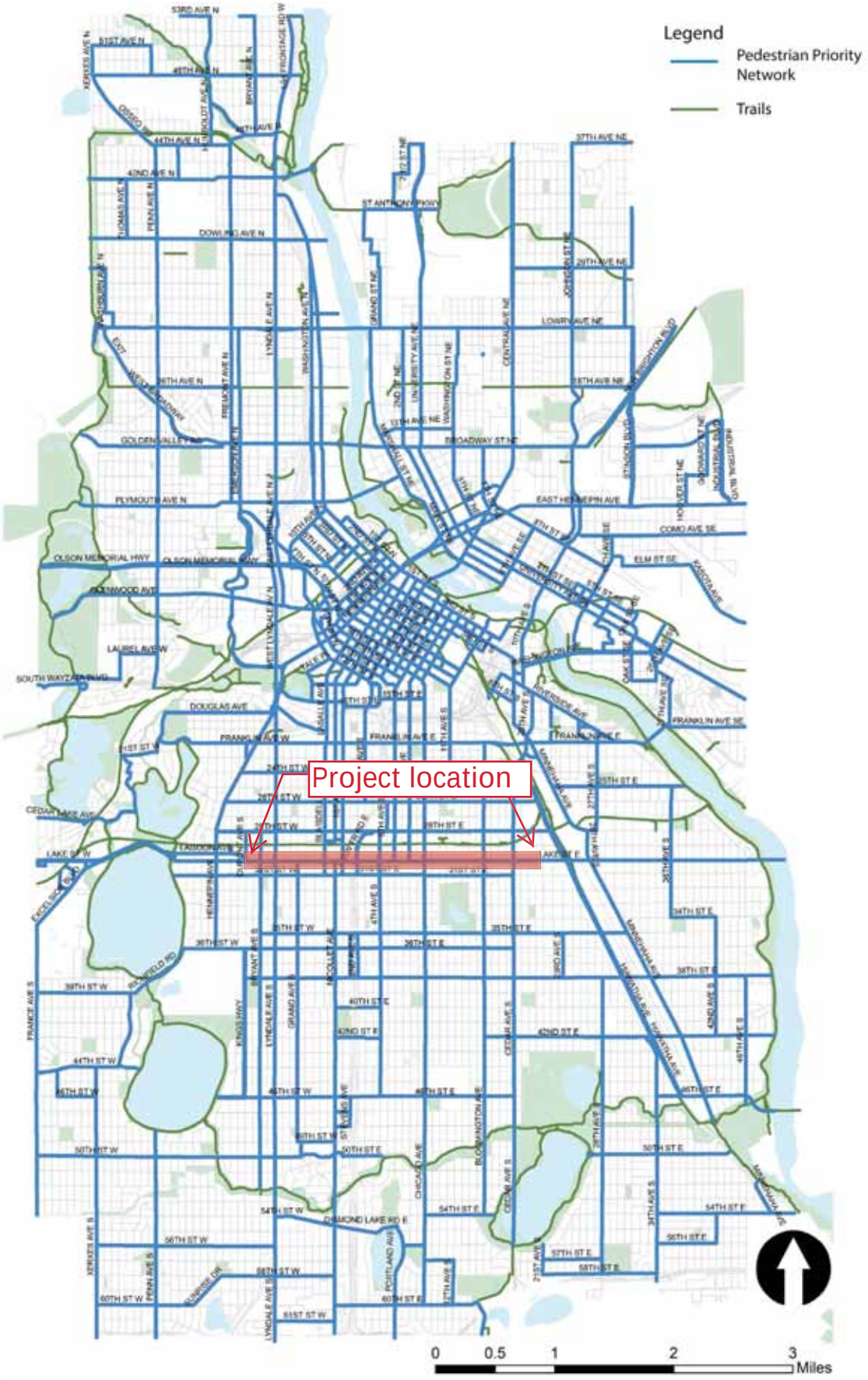
ATTEST: M. Rose

Deputy/Clerk to the County Board

Hennepin County Board of Commissioners
300 South Sixth Street, Minneapolis, MN 55487
hennepin.us

CSAH 3 (Lake St) Pedestrian Project

Attachment 07 | City of Minneapolis Pedestrian Priority Network Map



Appendix B: Corridor Plan Comment Summary

Metro Transit released a draft B Line Corridor Plan in February 2021, opening a 30-day comment period that concluded in March 2021. Metro Transit released a recommended B Line Corridor Plan in July 2021, opening a 30-day comment period that concluded in August 2021.

Due to ongoing COVID-19 guidelines surrounding in-person events, engagement was focused on the development of a website with a video, key information and station concepts, and the full corridor plan document, and comment boxes/links to enable feedback on specific stations. These materials were communicated to the public through physical and digital communications including postcards, flyers at bus stops, limited in-person conversations, partnerships with community organizations and neighborhood groups, emails to subscribers and Rider Alerts, and targeted social media posts.

Overview

Metro Transit received more than 660 comments during the draft B Line Corridor Plan comment period and more than 160 comments during the recommended B Line Corridor Plan comment period. Due to COVID-19 protocols, nearly all comments were submitted electronically. Approximately 40 comments were submitted as part of limited in-person conversations along the corridor. Several comments were submitted via phone. Formal comment letters submitted by the City of Minneapolis on both draft and recommended versions of the Corridor Plan can be found in Appendix C.

Many comments addressed similar topics, such as bus priority treatments, platform/station placement, bus service mix/alignment, or station spacing. The distribution of comment topics across the draft and recommended versions of the plan is provided below. Note that many comments addressed multiple topics, so the numbers below add to a higher number than the total number of comments received.

- Bus priority treatments: 519 comments
- Platform or station placement: 140 comments (including 47 related to the eastbound Selby & Western-Arundel platform location)
- Bus service mix or B Line alignment: 63 comments
- General project support: 48 comments
- Station spacing: 37 comments
- Bicycle safety and connections: 31 comments
- Safety (pedestrian, motorist, transit users): 19 comments
- General project opposition: 11 comments
- Parking: 7 comments
- Maintenance and cleanliness of facilities: 6 comments
- Traffic operations: 6 comments
- Reliability: 5 comments
- Ease of transfers: 5 comments
- Electric buses: 3 comments

- Enforcement: 3 comments
- Split stops: 3 comments
- B Line service frequency: 3 comments
- B Line service speed: 3 comments
- B Line service span: 2 comments
- Wayfinding: 2 comments

The most frequent comment topics are highlighted below.

Bus priority treatments

A total of 519 comments supported the implementation of bus priority treatments as part of the B Line project, including many comments specifically supporting the continued consideration of dedicated bus-only lanes along Lake Street. Four comments opposed implementation of bus-only lanes. In providing background for support of these treatments, comments mentioned a number of related goals including transit speed and reliability, reduced dependence on personal vehicles, and broader goals related to climate change, air pollution, racial and economic equity, and public health.

Comment excerpts:

- The 21 has been a frequent route for me both for work and non-work related trips. I strongly support the addition of bus lanes on Lake Street to help ensure efficient transit service for riders.
- I live near the Lake/Bloomington bus stop and strongly urge for the creation of a bus only lane. This will foster equitable transportation and access while encouraging Minneapolis residents to keep taking advantage of cheaper and more environmentally friendly transportation options.
- I would like to see the extensive bus priority concept put in place on Lake St. Having a dedicated lane will make me more likely to take more trips down Lake Street. Riding the 21 was incredibly slow, often due to traffic in the corridor. Dedicated bus lanes are needed to ensure that the line can run as quickly as possible and to make sure that the plan is in line with climate and transportation plans in the city.

Comment response:

More information regarding the process for developing a recommended set of bus priority treatments can be found in Section VI of this plan (Bus Priority Treatments). Various scenarios for bus lanes have been studied as part of the B Line corridor planning process. Metro Transit strongly supports bus lanes wherever feasible to support speed and reliability goals for transit in the B Line corridor. In addition, it is important for Metro Transit to plan for B Line stations to be in the best place to not preclude future transit lanes or other changes to the street.

Analysis of additional B Line bus priority treatment scenarios along Lake Street continues in partnership with Hennepin County and the City of Minneapolis. Metro Transit does not control streets or make decisions about vehicle lanes, so bus lanes would need to be implemented in partnership with roadway authorities.

This Plan will not make any decisions regarding bus lanes but establishes station locations that may accommodate potential future roadway changes, including bus lanes. As

interagency coordination continues through the B Line and related efforts, Metro Transit will continue to support potential bus lanes and other bus priority treatments along Lake Street.

Bus service mix/B Line alignment

Sixty-three comments focused on topics related to the proposed mix of bus service in and along the corridor, as well as the proposed B Line alignment through the Midway area of St. Paul.

Comment excerpts:

- I am really excited about having faster service on the 21 route, but I'm worried that there is going to be a loss of service to get to and from Midway. Is there going to be local service in St Paul between the river and Midway that connects with the B line and other transit?
- I am worried that this plan will now be unfeasible for us because the proposed Route 60 only runs every 30 minutes. Instead, we will have to rely on our personal vehicle for transportation to and from school.
- Will all of the local service between Hiawatha and the river be removed? I rely on block to block service and go a lot of places- I don't want to lose that option.
- I would strongly support any effort to reduce headway on the modified local Route 21. One of the hallmarks of a robust transit system is not having to check a schedule because low wait times are ensured. Headway of 30 minutes, then, is far too long.

Comment response:

This plan establishes the location of stations; while preliminary information around service is provided for context, the details of the B Line and local route service plans will be finalized closer to B Line implementation. Comments received at this stage will be considered as the service plan is developed.

More information about service and operational details such as the proposed alignment and bus frequency can be found in Section III (Termini and Alignment) and Section IV (Service) of the B Line Corridor Plan.

The B Line would be the primary transit service in the corridor, substantially replacing Route 21. It is anticipated that B Line service would generally operate every 10 minutes throughout the day, including weekends. East of Minnehaha Avenue, this represents an increase in frequency along the corridor, particularly within the Selby Avenue segment. On average, B Line stops would be placed about 0.4 miles apart (two to three stops per mile) to balance speed and access. 83 percent of existing Route 21 riders would be able to catch the B Line within 1/8 mile of their current bus stop.

Local service on Route 21 is currently proposed to run every 30 minutes on the portion of the Lake Street corridor between Hennepin Avenue and Minnehaha Avenue, where ridership is highest and additional bus service is most needed (this is similar to the existing Route 21E). A new local bus route, Route 60, is currently proposed to run every 30 minutes on Selby Avenue between the Midway area and the State Capitol area. This route would serve trips between the Midway area and Selby Avenue, maintaining a one-seat bus connection across I-94 and providing access to the METRO Green Line from Selby Avenue.

Local bus service is not proposed along Lake Street/Marshall Avenue between Minnehaha Avenue in Minneapolis and Snelling Avenue in St. Paul. Existing Route 21 riders using stops in these sections would walk or roll to the nearest B Line station.

The B Line is proposed to operate along an alignment following Marshall Avenue to Snelling Avenue to Selby Avenue to provide faster, more frequent, and more direct service for a higher number of transit users in this corridor. However, for some existing Route 21 trips that begin or end in the Midway area of St. Paul, this change would add a transfer or result in a different route selection, which could add several additional minutes to the trip.

Final service plans, including frequency and termini for local bus service along the B Line corridor, will be developed in later phases of project development as the B Line nears implementation and as recovery from the COVID-19 pandemic continues. Key considerations will include feedback from public comments, operating budget/staffing constraints, Route 21 ridership patterns, redevelopment/land use patterns, and transit speeds in the context of bus priority treatments. Additionally, Metro Transit will continue to explore potential changes to other routes in the project area and/or opportunities for shared mobility and microtransit to complement planned fixed route transit service.

Eastbound B Line platform at Selby & Western/Selby & Arundel

The Draft Corridor Plan showed two alternative concepts for an eastbound platform in this area: one located in the southwest quadrant of the intersection of Selby & Western (Concept #1) and one located in the southeast quadrant of the junction of Selby & Arundel Street (Concept #2).

Metro Transit received 47 total comments on this location, with the majority supporting the Arundel platform location.

Comment excerpts:

- I'm a resident at the historic Blair House and it has been brought my attention that Metro Council is proposing a bus stop in front of Blair Arcade on the corner of Selby and Western. I would like to voice my concern about changing this corner, I strongly oppose the placement of an obtrusive bus stop. As it stands, this would disturb the beauty of Historical Building and hamper the businesses located next to it, in particular Nina's Cafe.
- As a resident of the Blair House at Selby & Western, I'm writing to express my concern regarding the proposed bus stop at that corner, and to encourage the stop to be placed at Arundel instead. The Selby & Western corner is already very congested, especially with the sidewalk seating of the beloved Nina's cafe. Placing the stop at Arundel would allow convenient access for those riding the bus while also not interfering with the much-needed neighborhood businesses.
- Concept 1 will be much easier for most transit users. Instead of remembering that the west and eastbound stops are on different blocks, consolidating both at Western makes the most sense. Western is the real hub of the neighborhood in terms of restaurants and businesses

Comment response:

The Recommended Corridor Plan identified the southeast quadrant of Selby & Arundel as the recommended eastbound platform location in this area (Concept #2). Additional detailed review of this area suggests potential challenges for designing and constructing a standard BRT platform at Western Avenue, including the presence of a subterranean areaway in front of the adjacent Blair Arcade building, in addition to the relatively narrow right-of-way. The Arundel platform location is anticipated to provide more space for pedestrians and waiting transit customers because the right-of-way is wider at Arundel than at Western. This revision is also consistent with the majority of feedback received on the Draft Corridor Plan around this location.

Station spacing

Thirty-seven comments expressed concerns regarding spacing between BRT stations. Thirty comments requested that stations be added or moved closer together to provide additional access to the B Line. Seven comments suggested that specific stations were unnecessary or that stations in some areas would be placed too close together when considering ridership and overall project goals for transit speed and reliability.

Comment excerpts:

- Not enough stops proposed for service along a major commercial corridor. Stops are spaced too far apart to serve the large number of small local businesses - particularly for the elderly or folks with mobility issues. Too much local service would be lost for only a 20% improvement in travel time - not enough would be gained in terms of service for this to be a good tradeoff
- I've reviewed the plans for the B Line, and overall I think it is a very robust plan. I have a few ideas for additional station locations. I understand the idea of the balance of stations to keep the buses operating quickly, but a few additional stations could really help improve access in the corridor.
- I am disappointed in what will amount to a reduction of service for many riders in Minneapolis between Minnehaha Avenue and the River. I was a regular rider of the 21 bus, boarding at the 39th Avenue stop (at an intersection with a grocery store and other popular businesses). The nearest B Line stop will be three streets away, making it a much less convenient option. This area of Longfellow is somewhat sparsely served by transit already, and I fear that this change will increase car dependency for residents of this neighborhood.
- There are still too many stops in Minneapolis to make this worthwhile. I live in the Longfellow area, but four stops between the Lake St light rail station and the river is plenty. One at the light rail station, one at 36th, and one at 46th is plenty. Definitely get rid of the Minnehaha stop, as the combination of lights and train tracks in that area make for a really slow 2 blocks between the light rail and Minnehaha.
- I think a station at Lake & France (where the buses will layover) would be a great, simple addition that will go the extra step in providing a bit of extra mobility. There doesn't even have to be any sort of shelter since this is where buses will be stopped anyway, so there would be little extra capital needed.

Comment response:

The recommended B Line Corridor Plan does not add or remove any stations based on what was included in the draft plan.

More information regarding station spacing considerations is available in Section V (Stations). A key objective of arterial BRT is to offer faster trips for more people along the corridor. Faster trips depend in part upon the strategic placement of stations spaced farther apart than existing Route 21 bus stops. The existing Route 21 stops approximately every 1/8 of a mile. On average, B Line stops would be placed about 0.4 miles apart (two to three stops per mile) to balance speed and access, consistent with BRT station spacing guidelines.

In some individual locations, proposed station spacing deviates from typical spacing guidelines. This is based on context-specific features including existing transit ridership, connectivity to the existing transit network, street design, land use/geography, etc.

With the stations included in this plan, 83 percent of existing Route 21 riders would be able to catch the B Line within 1/8 mile of their current bus stop. This means that more than 4 out of 5 B Line trips would not require customers to walk/roll more than a block longer than they would to access the existing Route 21.

In some cases, customers would need to walk or roll up to ~1/4 mile to access the closest B Line station; however, local Route 21 service is recommended to be retained where ridership is highest and additional bus service is most needed. Route 60, is also proposed to provide local service to accommodate trips between the Midway area and Selby Avenue, maintaining a one-seat bus connection across I-94 and providing access to the METRO Green Line from Selby Avenue.

Platform placement

Metro Transit received 140 comments regarding recommended platform placement at various stations. Comments related to this theme varied and included considerations of space for waiting passengers, effects on adjacent businesses, convenience for reaching destinations/making transfers, and traffic/transit operations.

Comment excerpts:

- *Re: Lake & Chicago*: Although it appears that limited R/W [right of way] and building setback of Los Ocampo would prohibit it, I would've preferred to see the EB station be a farside station. This allows a quicker NB D Line to EB B Line transfer with fewer crosswalks to navigate/wait for.
- *Re: Selby & Dale*: why is the eastbound stop not moved to the far side of the intersection?
- *Re: Lake & 36th*: We love the outdoor dining at Merlin's Rest. It is a wonderful community gathering spot. I am concerned that putting a B Line platform right in front of the pub would eliminate this experience - that having the platform there would take up too much room.
- *Re: Marshall & Cleveland*: Losing 4 to 5 parking spots would be a huge detriment to the commercial businesses on this corner. At least four of the current stores are operating as takeout only, reduced hours and have barely enough parking as it is… I'd suggest a block in either direction where the station would be sitting in front of an

apartment building where the cars sit all day would only affect 5 vehicles a day as opposed to the 200+ in front of our stores.

- *Re: Selby & Hamline*: I am a resident on Selby and Hamline that will have a bus stop in front of my home with the proposed plan. No consideration is reflected about where property owners are to put trash, recycling, yard waste and snow removal. Selby has no alleys and all of the driveways are off the street. There is already a problem with traffic backups that block driveways and are safety issues to get in and out of them.
- *Re: Selby & Hamline:* This would be the nearest station to me. The layout appears functional and aesthetically pleasing. As someone who lives east of Hamline, I'm glad to see the station located east of Hamline. There are more residences east of Hamline (Ayd Mill industrial area and Concordia athletic facilities are located to the west).

Comment response:

As noted above, platforms at three station locations (Lyndale, Bloomington, and Cedar) were revised to nearside locations in the Recommended Corridor Plan, and a Selby & Arundel eastbound platform was recommended from the two options considered previously. No other revisions were made to the plan based on platform-specific comments.

More information regarding platform placement recommendations is available in Section V (Stations) and in the "Notes and Discussion" section of many individual station pages. Farside platforms are typically preferred for transit operations and they can reduce certain conflicts between right-turning vehicles and stopped transit vehicles. However, farside platforms are not always feasible or advisable due to site-specific conditions such as existing roadway access points or driveways, right-of-way/waiting space constraints, or surrounding land uses.

Several common themes emerged in comments about platform locations:

Traffic operations

Some comments raised concerns regarding effects on traffic operations from in-lane stops. Transit and traffic operations were a key consideration in making platform placement recommendations. As part of project planning, Metro Transit has completed comprehensive traffic modeling, working with City and County traffic staff. Modeling shows that adding the recommended B Line stations would not have a significant effect on traffic delays compared to future conditions without the project. Additional modeling work will continue as any other changes to the corridor, including potential bus priority treatments, are developed and refined.

Sidewalk seating at businesses

Twenty-two comments raised concerns regarding effects on sidewalk seating areas for adjacent businesses. During the design phase, Metro Transit will identify specific placement of BRT shelters and other amenities. Design will consider adjacent land uses and, where feasible, station features will be configured to minimize effects on existing outdoor seating areas. At many locations, in-lane stops will shift the curb line toward the roadway centerline and provide more space for BRT station features between the roadway and the existing sidewalk and buildings.

On-street parking

Some comments raised concerns about B Line platforms in places currently used for on-street parking. Metro Transit will work with City and County staff as part of the station design process to manage changes to on-street parking at station locations, including the potential to add on-street parking at existing bus stops that may no longer be used after B Line opening.

Shelter and platform size

More information regarding shelter sizing and platform placement recommendations is available in Section V (Stations) and in the "Notes and Discussion" section of many individual station pages.

City services (snow plowing, trash pickup, etc.)

Metro Transit will work with City staff as part of the station design process to ensure that access for City services, including garbage and recycling, will be retained. B Line design will consider snow storage needs at all platform locations as design begins, and bumpout design will be reviewed with City staff to ensure winter maintenance needs are addressed. In addition to regular snow plowing on streets, BRT platforms receive priority snow clearance as part of Metro Transit's winter maintenance operations.

Turning movements and sightlines

Vehicle turning movements and sightlines are important design considerations that will be evaluated as part of the B Line design process. If a bus is stopped at a station, turning vehicles may need to wait until a bus clears the station before turning, just as they would under existing conditions when vehicles are queued at an intersection. Through the use of off-board fare payment and all-door boarding, dwell times for B Line buses are anticipated to be shorter than regular route local buses. Turning movements near stations for larger vehicles such as trucks and buses will be evaluated during design. Sightlines for drivers making turns near stations will also be evaluated due to the addition of shelters and pylon signs to the street.

Pavement conditions

Where required, B Line improvements will include concrete pads in front of platforms to better support wear and tear caused by buses braking and accelerating from platform locations. Buses account for a small percentage of vehicles using the roadway under existing conditions, and this is anticipated to remain the case following B Line implementation. For example, under existing conditions, six to eight buses pass through the intersection of Selby & Hamline per hour (three to four in each direction), accounting for less than 0.2% of the Selby Avenue volume. In the future, sixteen buses are proposed to pass through the area per hour (six B Line buses in each direction and two Route 60 buses in each direction), accounting for 0.35% of projected volume.

Tree impacts

Design for each B Line station will consider ways to minimize impacts to existing trees and other vegetation, especially mature trees that contribute to the canopy. However, the proposed B Line platforms may require removing existing vegetation, including trees, in order to accommodate safe and accessible station areas. During design and construction, the project will seek to avoid and minimize impacts on existing trees where feasible.

Bicycle safety and connections

Twenty-nine comments raised concerns regarding potential bus/bicycle conflicts at B Line stations, particularly along Marshall Avenue, or questions about bicycle infrastructure along the B Line corridor or at BRT stations/vehicles.

Comment excerpts:

- I appreciate the location of a station at Marshall and Fairview but better accommodations must be made for cyclists. The existing design would mean that buses will have to enter and park in the bike lane on the northside station and travel through the bike lane on the southside. The bus would then be required to re-enter traffic across the bike lane. This looks like a common issue along Marshall Avenue and should be addressed.
- I would very much like to have a bus lane on Lake St, especially if that lane could be shared by bicycles.
- There are currently bike racks in the future EB station position [at Selby & Victoria]. I think it would be great to keep or relocate that bike parking at the intersection for both the bus stop and the local businesses. I think some of the "small" station concepts omit bike parking. please keep!

Comment response:

No changes have been made to the corridor plan in response to these comments, but feedback on bicycle safety/connections will be considered as project design advances.

This plan establishes two core station components: the station intersection and the location of platforms within the intersection. The preliminary design concepts in the plan are provided for additional context, but are conceptual and will be finalized throughout detailed design. This includes consideration of potential ways to minimize conflicts between buses and bicyclists, where buses would be stopping within a bike lane (as currently occurs in many instances along the corridor). Metro Transit will work with agency partners to explore design solutions that support safe operations for all roadway users. BRT reduces bus dwell (stop) time due to off-board fare payment and all-door boarding. Therefore, the amount of time in which B Line buses would be stopped in the bike lane would be expected to be shorter than is the case under existing conditions.

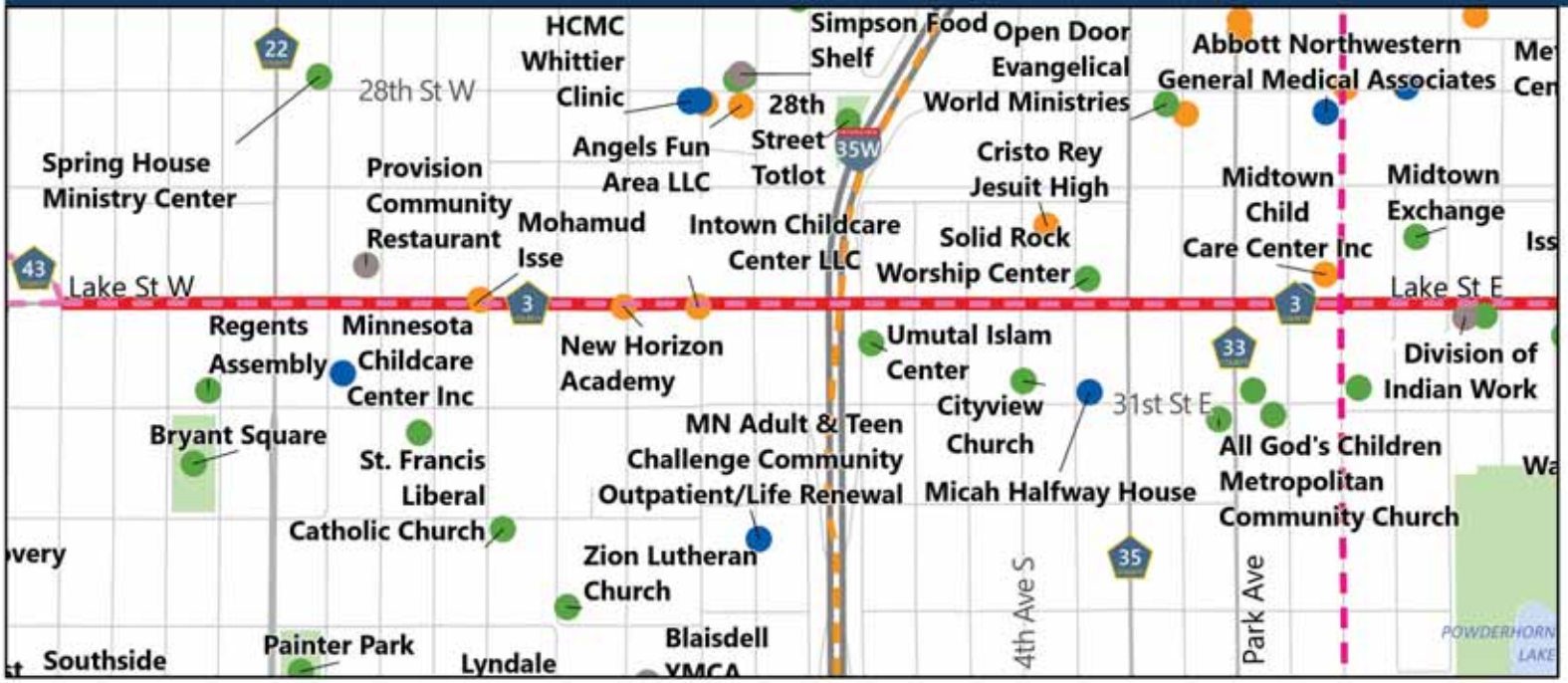
Metro Transit is coordinating with partner agencies along the corridor to design transit facilities in a way that would not preclude the implementation of bikeways in adopted plans and policies, including the Minneapolis Transportation Action Plan, which identifies two segments along Lake Street for future bicycle facilities.

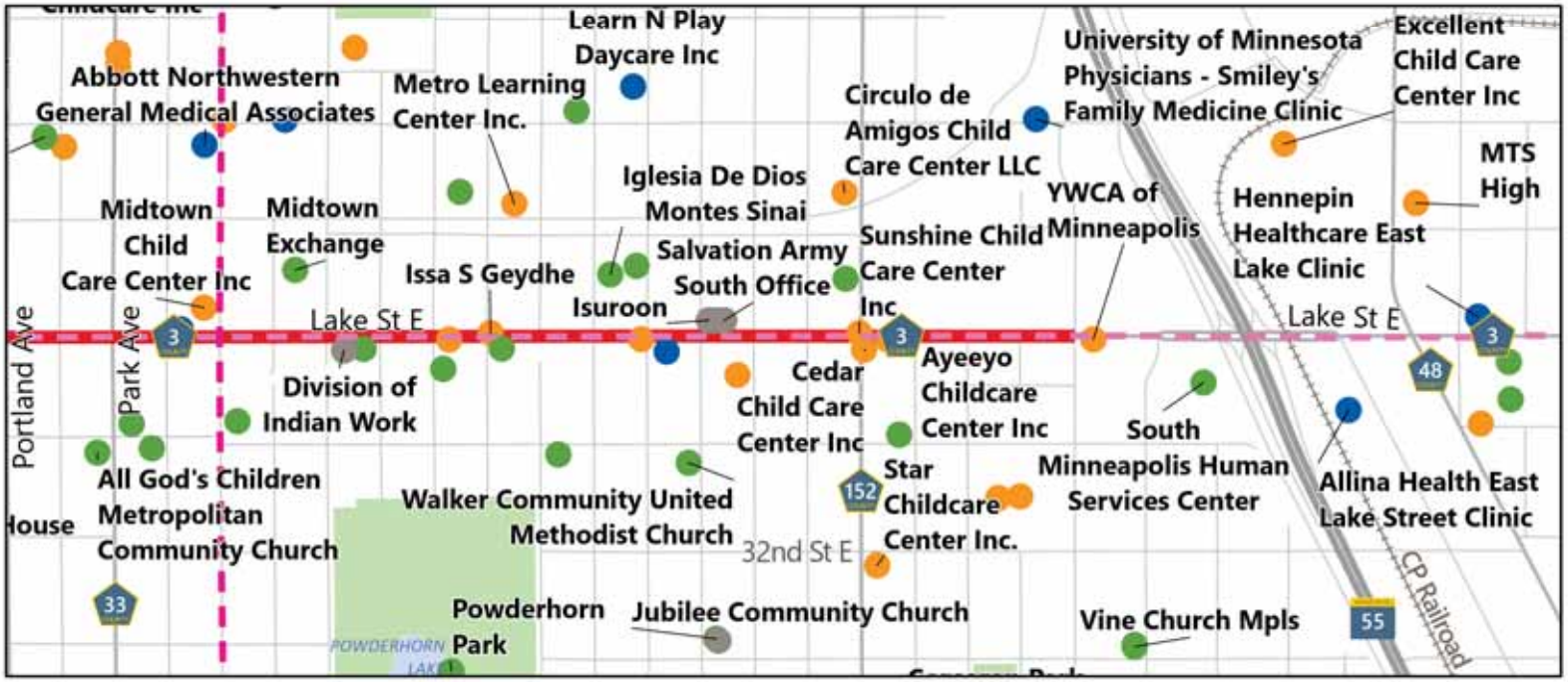
Bicycle parking is a standard BRT station amenity and will be included at all stations where feasible, and B Line station design will seek to minimize effects on existing bike parking. Metro Transit will also continue to coordinate with agency partners and other interested parties regarding shared mobility and potential “mobility hubs,” a place where people can connect to multiple modes of transportation, as a complement to transit service.

CSAH 3 (Lake St) Pedestrian Project

Attachment 09 | Socio-Economic Equity Map

HENNEPIN COUNTY
MINNESOTA





Key

- Project Location

Resource Category

- Healthcare Facilities
- Schools & Childcare
- Community Facilities
- Homeless Shelters
- Food Shelves

Arterial BRT Services

- Future B Line
- Future D Line

Highway BRT Services

- Orange Line

0 0.25 0.5 Miles

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

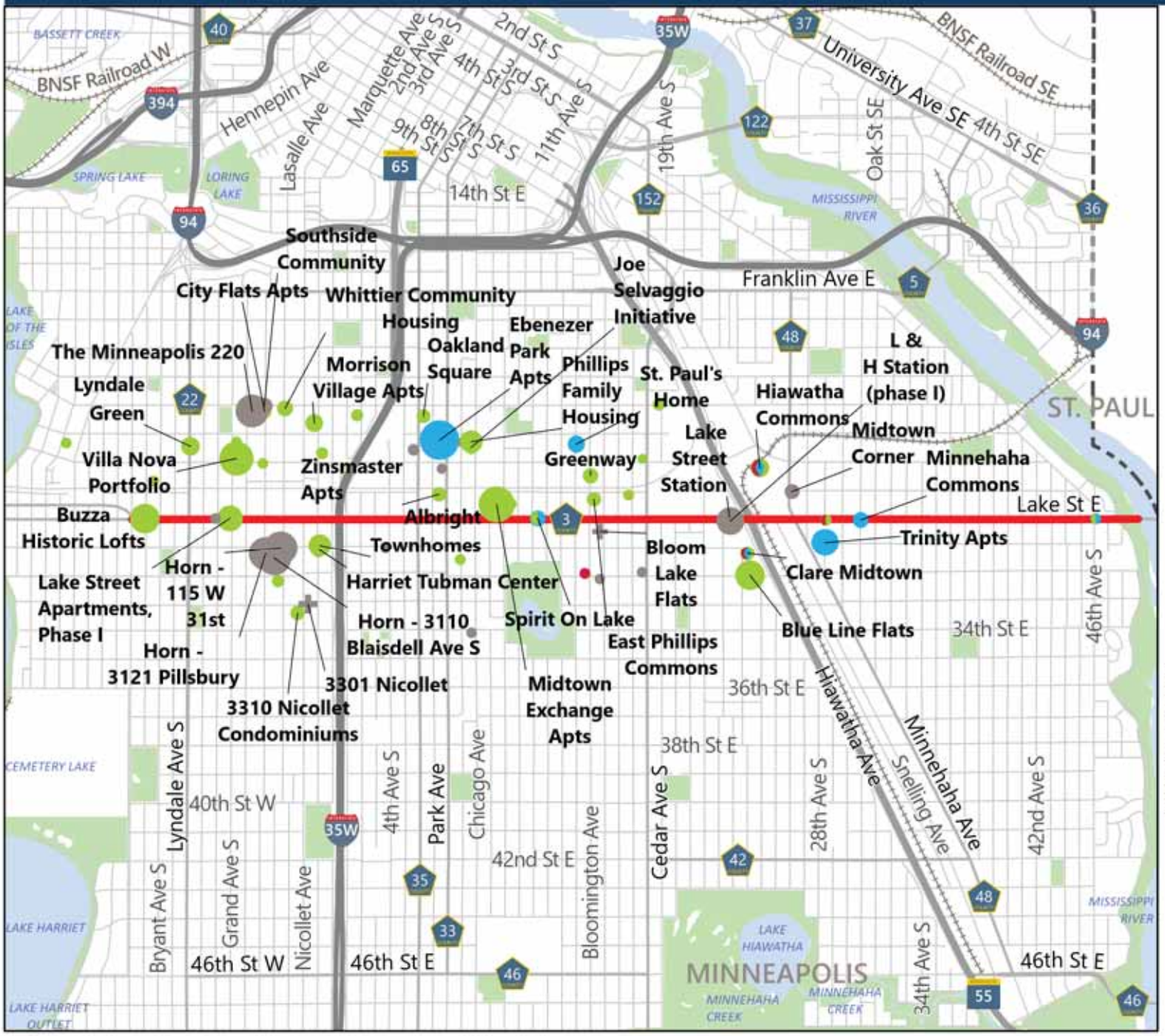
Published date: 3/20/2022

N

CSAH 3 (Lake St) Pedestrian Project

Attachment 10 | Affordable Housing Access Map and Detail Summary

HENNEPIN COUNTY
MINNESOTA



Key

- Project Location

Population Served

- Family
- Elderly
- People with Disabilities
- Multiple
- Homeless
- No Information

Affordable Units

- 1-5
- 6-70
- 71-135
- 135-200

Construction Status

- Existing Affordable Housing
- Proposed or Under Construction

0 0.5 1 Miles

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

Published date: 3/7/2022

N

Hennepin

CSAH 3 (Lake St) Pedestrian Project

Attachment 10 | Affordable Housing Access Map and Detail Summary

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Ebenezer Park Apts	200	200	0	200	0	0	190	10	0	0
St. Paul's Home	53	53	53	0	0	17	36	0	0	0
Lyndale Green	63	63	0	14	0	0	33	30	0	0
Echo Flats (fka Whittier)	20	20	0	16	0	0	0	4	12	4
City Flats Apts aka: B Flats & Calypso Flats	27	27	27	0	0	0	0	0	27	0
Hiawatha Commons	80	64	8	17	0	32	25	7	0	0
Oakland Square	31	31	31	0	0	0	1	19	10	1

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Zinsmaster Apts	36	36	0	0	0	0	5	18	13	0
East Phillips Commons	34	34	0	0	0	0	6	19	9	0
Armadillo Flats I	19	19	0	0	19	0	0	0	0	0
Armadillo Flats II	19	19	0	0	0	0	0	0	0	0
Zoom House	22	22	16	6	0	6	16	0	0	0
Central Neighborhood Apts	12	12	0	12	0	0	2	4	0	6
Morrison Village Apts (fka Jack Frost Flats)	57	57	0	0	0	5	7	24	21	0

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Joe Selvaggio Initiative	30	30	0	30	0	0	2	24	2	2
Linden Place Cooperative	8	8	0	0	0	0	0	4	4	0
Alliance Scattered Housing aka: Alliance Housing	21	21	11	10	0	11	0	4	6	0
D0886 - No Name Provided	4	4	0	0	0	0	0	0	0	0
Harriet Tubman Center	43	43	0	43	0	0	0	0	0	0
D0885 - No Name Provided	16	16	0	0	0	0	0	0	0	0
Thirtyone Hund Fourth Avenue	10	4	0	0	0	0	0	0	0	0

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Double Flats	11	11	0	11	0	0	1	1	9	0
3310 Nicollet Condominiums	35	35	0	9	26	0	5	30	0	0
Cedar28	15	5	0	3	1	0	2	3	0	0
Midtown Exchange Condos On The Greenway	57	16	0	12	2	0	13	3	0	0
Urban Village (phase I - Midtown Lofts)	72	12	0	0	8	0	12	0	0	0
Ford House	11	11	0	11	0	0	11	0	0	0
Anpa Waste Apts	10	10	0	10	0	0	0	0	0	0

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Midtown Exchange Apts	219	178	0	62	0	4	128	43	3	0
Whittier Community Housing	45	45	0	45	0	2	7	26	10	0
Albright Townhomes	89	89	0	68	0	0	10	79	0	0
Horn - 115 W 31st	163	163	163	0	0	0	162	1	0	0
Southside Community	48	48	4	44	0	2	1	33	12	0
Spirit On Lake	46	46	5	41	0	0	29	17	0	0
Buzza Historic Lofts	137	136	0	0	0	1	100	35	0	0

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Greenway	42	42	0	42	0	0	0	16	22	4
Lake Street Station	64	64	0	0	0	0	53	11	0	0
Blue Line Flats (fka Corcoran Triangle)	135	135	9	37	0	0	60	53	22	0
Clare Midtown	45	35	0	21	0	18	17	0	0	0
Horn - 3110 Blaisdell Ave S	165	165	165	0	0	0	164	1	0	0
Horn - 3121 Pillsbury	163	163	163	0	0	0	162	1	0	0
L & H Station (phase I)	123	123	0	0	123	36	69	18	0	0

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
Phillips Family Housing	89	89	0	0	0	0	0	0	0	0
Chicago Corridor (fka Dovetail Coop)	10	10	0	0	0					
27XX Grand Avenue South	12	12	0	0	0	4	8			
27XX Humboldt Avenue South	11	11	0	0	0		10	1		
29XX 18th Avenue South	12	12	0	0	0		2	10		
Lake Street Apartments, Phase I	111	111	9	36	0	16	66	29		
The Minneapolis 220	209	157	0	0	42	80	124	5	0	0

CSAH 3 (Lake St) Pedestrian Project

Attachment 10 | Affordable Housing Access Map and Detail Summary

Location Name	Total Units	Affordable Units	30% AMI	50% AMI	60% AMI	0 BR	1 BR	2 BR	3 BR	4+ BR
907 Winter Street Ne	20	4	0	0	0	0	1	8	11	0
Midtown Corner	189	38	0	0	0	11	170	8	0	0
Villa Nova Portfolio	220	165	0	0	165					
2806 Park Avenue	40	8	0	0	0					
Lake Street Housing - Phase 2	132	10	0	0	0					

CSAH 3 (Lake St) Pedestrian Project

Attachment 11 | Crash Summary and Case Listing

Table 01 | Pedestrian reported crashes: 76

Year	Total	K	A	B	C	N
2012	5	0	4	1	0	0
2013	7	0	4	3	0	0
2014	9	0	7	0	2	0
2015	8	1	5	2	0	0
2016	7	0	3	3	1	0
2017	9	0	3	4	2	0
2018	10	1	5	3	1	0
2019	8	0	4	4	0	0
2020	6	0	4	0	1	1
2021	7	0	1	2	3	1
Ten Year Totals	**76**	**2**	**40**	**22**	**10**	**2**

Table 02 | Bicycle reported crashes: 61

Year	Total	K	A	B	C	N
2012	8	0	3	3	2	0
2013	5	0	1	2	1	1
2014	16	0	11	4	1	0
2015	9	2	7	0	0	0
2016	3	0	2	1	0	0
2017	5	1	1	2	1	0
2018	5	0	2	2	1	0
2019	4	0	1	1	2	0
2020	1	0	0	1	0	0
2021	5	0	1	2	2	0
Ten Year Totals	**61**	**3**	**29**	**18**	**10**	**1**

CSAH 3 (Lake St) Pedestrian Project

Attachment 11 | Crash Summary and Case Listing

Report Version 1.0
February 2020

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	3	11.635	27	Minneapolis	10794793	04/15/12	0237	SUN	Bike	1	B
04-CSAH	3	11.635	27	Minneapolis	10870446	04/03/13	1846	WED	Bike	1	B
04-CSAH	3	11.655	27	Minneapolis	10957271	05/04/14	1511	SUN	Bike	1	B
04-CSAH	3	11.698	27	Minneapolis	10809680	09/06/12	2144	THU	Bike	1	C
04-CSAH	3	11.755	27	Minneapolis	10802389	08/24/12	2048	FRI	Bike	1	C
04-CSAH	3	11.759	27	Minneapolis	10859995	01/11/13	1700	FRI	Bike	1	C
04-CSAH	3	11.759	27	Minneapolis	10898539	09/11/13	1430	WED	Bike	1	B
04-CSAH	3	11.759	27	Minneapolis	11063633	08/21/15	2250	FRI	Bike	1	C
04-CSAH	3	11.759	27	Minneapolis	11067873	09/19/15	0119	SAT	Bike	1	C
04-CSAH	3	11.759	27	Minneapolis	11082304	12/01/15	1855	TUE	Ped	1	B
04-CSAH	3	11.762	27	Minneapolis	00754450	10/14/19	1044	MON	Ped	1	C
04-CSAH	3	11.787	27	Minneapolis	00469308	06/12/17	2320	MON	Ped	1	B
04-CSAH	3	11.813	27	Minneapolis	00452688	05/16/17	1015	TUE	Bike	1	N
04-CSAH	3	11.818	27	Minneapolis	00386445	10/14/16	0136	FRI	Ped	1	C
04-CSAH	3	11.819	27	Minneapolis	00650963	10/10/18	1640	WED	Ped	1	B
04-CSAH	3	11.820	27	Minneapolis	00653664	10/22/18	1055	MON	Ped	1	A
04-CSAH	3	11.821	27	Minneapolis	00448628	04/29/17	2058	SAT	Bike	1	A
04-CSAH	3	11.879	27	Minneapolis	10868353	02/05/13	2148	TUE	Ped	1	C
04-CSAH	3	11.883	27	Minneapolis	00581355	12/17/17	2000	SUN	Ped	1	C
04-CSAH	3	11.882	27	Minneapolis	00635119	09/16/18	0115	SUN	Ped	1	C
04-CSAH	3	11.884	27	Minneapolis	00603874	06/12/18	2147	TUE	Bike	1	B
04-CSAH	3	11.884	27	Minneapolis	00431497	03/26/17	0158	SUN	Ped	1	B
04-CSAH	3	11.885	27	Minneapolis	00773340	12/20/19	1847	FRI	Ped	1	C
04-CSAH	3	11.885	27	Minneapolis	10795057	04/20/12	0100	FRI	Ped	1	C
04-CSAH	3	11.885	27	Minneapolis	10954200	03/13/14	2022	THU	Bike	1	C
04-CSAH	3	11.885	27	Minneapolis	10985780	09/28/14	1128	SUN	Bike	1	B
04-CSAH	3	11.885	27	Minneapolis	11008120	12/23/14	2101	TUE	Ped	1	C
04-CSAH	3	11.885	27	Minneapolis	11080280	11/18/15	0622	WED	Ped	1	C
04-CSAH	3	11.886	27	Minneapolis	00886404	01/24/21	2007	SUN	Ped	1	A
04-CSAH	3	11.886	27	Minneapolis	00627518	08/13/18	1850	MON	Ped	1	B
04-CSAH	3	11.886	27	Minneapolis	00941094	09/15/21	1735	WED	Bike	1	B

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	3	11.887	27	Minneapolis	00600313	05/28/18	1825	MON	Ped	1	C
04-CSAH	3	11.890	27	Minneapolis	00338064	03/24/16	2104	THU	Ped	1	B
04-CSAH	3	11.905	27	Minneapolis	10998327	12/02/14	1143	TUE	Bike	1	C
04-CSAH	3	11.915	27	Minneapolis	00605583	06/13/18	2345	WED	Bike	1	C
04-CSAH	3	11.916	27	Minneapolis	00631187	08/29/18	1746	WED	Bike	1	B
04-CSAH	3	11.947	27	Minneapolis	10801652	08/11/12	0130	SAT	Bike	1	A
04-CSAH	3	11.947	27	Minneapolis	10802103	08/20/12	1906	MON	Ped	1	B
04-CSAH	3	11.948	27	Minneapolis	00942537	09/23/21	1958	THU	Ped	1	B
04-CSAH	3	12.009	27	Minneapolis	00905178	05/12/21	0803	WED	Ped	1	B
04-CSAH	3	12.010	27	Minneapolis	10996950	11/20/14	2030	THU	Bike	1	B
04-CSAH	3	12.058	27	Minneapolis	11051308	07/02/15	1916	THU	Bike	1	C
04-CSAH	3	12.069	27	Minneapolis	00972409	11/09/21	2248	TUE	Bike	1	A
04-CSAH	3	12.071	27	Minneapolis	10956917	04/28/14	1032	MON	Ped	1	A
04-CSAH	3	12.073	27	Minneapolis	00775048	12/28/19	2141	SAT	Ped	1	B
04-CSAH	3	12.074	27	Minneapolis	00806923	04/13/20	1430	MON	Ped	1	C
04-CSAH	3	12.075	27	Minneapolis	10982431	08/30/14	1830	SAT	Bike	1	C
04-CSAH	3	12.076	27	Minneapolis	10988786	10/22/14	2130	WED	Ped	1	C
04-CSAH	3	12.078	27	Minneapolis	00808923	05/02/20	1820	SAT	Ped	1	C
04-CSAH	3	12.134	27	Minneapolis	00778308	01/10/20	0625	FRI	Ped	1	K
04-CSAH	3	12.134	27	Minneapolis	10810477	09/29/12	1455	SAT	Bike	1	B
04-CSAH	3	12.134	27	Minneapolis	10979133	08/10/14	1814	SUN	Bike	1	C
04-CSAH	3	12.134	27	Minneapolis	11070083	10/05/15	1610	MON	Bike	1	N
04-CSAH	3	12.134	27	Minneapolis	00899154	04/04/21	1900	SUN	Ped	1	A
04-CSAH	3	12.174	27	Minneapolis	00679709	01/27/19	1100	SUN	Ped	1	C
04-CSAH	3	12.211	27	Minneapolis	00517876	11/17/17	1255	FRI	Ped	1	B
04-CSAH	3	12.213	27	Minneapolis	00817077	06/29/20	1955	MON	Ped	1	C
04-CSAH	3	12.213	27	Minneapolis	00841127	09/16/20	1950	WED	Ped	1	C
04-CSAH	3	12.214	27	Minneapolis	00322514	01/22/16	1322	FRI	Ped	1	B
04-CSAH	3	12.215	27	Minneapolis	10783484	01/13/12	2105	FRI	Ped	1	C
04-CSAH	3	12.215	27	Minneapolis	10898653	09/10/13	2135	TUE	Ped	1	B
04-CSAH	3	12.215	27	Minneapolis	10997999	11/29/14	1738	SAT	Ped	1	C

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	3	12.215	27	Minneapolis	11008007	12/21/14	1715	SUN	Ped	1	C
04-CSAH	3	12.215	27	Minneapolis	11036884	03/10/15	1157	TUE	Ped	1	C
04-CSAH	22	3.471	27	Minneapolis	00763135	11/16/19	1755	SAT	Ped	1	C
04-CSAH	22	3.472	27	Minneapolis	00457134	06/04/17	1752	SUN	Bike	1	C
04-CSAH	22	3.482	27	Minneapolis	10811475	10/15/12	0210	MON	Ped	1	A
04-CSAH	22	3.488	27	Minneapolis	10875301	06/20/13	1419	THU	Bike	1	B
04-CSAH	22	3.492	27	Minneapolis	10794223	04/03/12	2017	TUE	Ped	1	B
04-CSAH	22	3.492	27	Minneapolis	10883570	07/17/13	0105	WED	Bike	1	B
04-CSAH	22	3.492	27	Minneapolis	00673870	01/04/19	1135	FRI	Ped	1	C
04-CSAH	22	3.495	27	Minneapolis	00980547	12/14/21	2253	TUE	Ped	1	A
04-CSAH	22	3.496	27	Minneapolis	10902134	10/09/13	2217	WED	Bike	1	C
04-CSAH	22	3.497	27	Minneapolis	10800263	07/20/12	1830	FRI	Bike	1	C
04-CSAH	22	3.499	27	Minneapolis	00874081	01/12/21	1711	TUE	Ped	1	C
04-CSAH	22	3.506	27	Minneapolis	11042240	06/04/15	1820	THU	Ped	1	C
04-CSAH	22	3.509	27	Minneapolis	00935522	08/20/21	2113	FRI	Ped	1	C
04-CSAH	22	3.511	27	Minneapolis	10987396	10/11/14	1205	SAT	Bike	1	C
05-MSAS	170	0000	27	Minneapolis	00728426	06/21/19	1350	FRI	Bike	1	C
10-MUN	257	0.977	27	Minneapolis	10911040	11/23/13	1440	SAT	Ped	1	C
10-MUN	257	0.981	27	Minneapolis	00663728	11/28/18	1705	WED	Bike	1	C
10-MUN	700	0.977	27	Minneapolis	00633846	09/10/18	1700	MON	Ped	1	C
10-MUN	706	0.008	27	Minneapolis	10793030	03/08/12	2218	THU	Bike	1	C
10-MUN	708	2.751	27	Minneapolis	11038463	04/08/15	1424	WED	Bike	1	C
10-MUN	714	0.004	27	Minneapolis	00902533	04/26/21	1750	MON	Ped	1	B
10-MUN	718	0.431	27	Minneapolis	00917171	07/09/21	1649	FRI	Ped	2	C
10-MUN	718	0.434	27	Minneapolis	10783243	01/07/12	1744	SAT	Bike	1	C
10-MUN	2008	0.357	27	Minneapolis	00766348	11/29/19	1837	FRI	Ped	1	C
10-MUN	2008	0.372	27	Minneapolis	00445628	04/16/17	2141	SUN	Ped	1	B
10-MUN	2008	0.372	27	Minneapolis	00661141	11/18/18	1110	SUN	Ped	1	C
10-MUN	2008	0.375	27	Minneapolis	00523720	12/10/17	1837	SUN	Ped	1	B
10-MUN	2008	0.392	27	Minneapolis	10978461	08/04/14	1630	MON	Ped	2	C
10-MUN	2013	0.249	27	Minneapolis	00380090	09/18/16	2120	SUN	Bike	1	C

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev

Selection Filter:

WORK AREA: County('659472') - FILTER: Year('2012','2013','2014','2015','2016','2017','2018','2019','2020','2021'), Unit Type('5','6') - SPATIAL FILTER APPLIED

Analyst: Jason Pieper

Notes: Segment #01 | From Dupont Ave to Blaisdell Ave

CSAH 3 (Lake St) Pedestrian Project

Attachment 11 | Crash Summary and Case Listing

Report Version 1.0
February 2020

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	3	12.879	27	Minneapolis	10872293	05/03/13	0211	FRI	Bike	1	A
04-CSAH	3	12.879	27	Minneapolis	00674135	01/05/19	1504	SAT	Bike	1	A
04-CSAH	3	12.899	27	Minneapolis	10876293	07/03/13	2025	WED	Ped	1	C
04-CSAH	3	12.947	27	Minneapolis	00758364	10/30/19	1620	WED	Bike	1	A
04-CSAH	3	12.959	27	Minneapolis	00756965	10/24/19	1700	THU	Ped	1	C
04-CSAH	3	12.991	27	Minneapolis	00801527	02/29/20	2035	SAT	Bike	1	B
04-CSAH	3	13.002	27	Minneapolis	00902911	04/29/21	0804	THU	Bike	1	A
04-CSAH	3	13.004	27	Minneapolis	00930164	07/23/21	1300	FRI	Bike	1	B
04-CSAH	3	13.005	27	Minneapolis	10987232	10/09/14	2200	THU	Bike	1	C
04-CSAH	3	13.005	27	Minneapolis	10989402	10/28/14	0036	TUE	Ped	1	C
04-CSAH	3	13.016	27	Minneapolis	00384165	10/04/16	2100	TUE	Ped	1	B
04-CSAH	3	13.081	27	Minneapolis	10982646	07/23/14	1926	WED	Ped	1	C
04-CSAH	3	13.124	27	Minneapolis	00741361	08/19/19	1215	MON	Bike	1	C
04-CSAH	3	13.127	27	Minneapolis	00383612	10/02/16	1815	SUN	Ped	1	A
04-CSAH	3	13.132	27	Minneapolis	10808743	08/28/12	2015	TUE	Bike	1	B
04-CSAH	3	13.132	27	Minneapolis	10957424	05/07/14	0950	WED	Bike	1	C
04-CSAH	3	13.132	27	Minneapolis	10982433	08/30/14	2105	SAT	Bike	1	C
04-CSAH	3	13.132	27	Minneapolis	10994124	11/05/14	1311	WED	Bike	1	C
04-CSAH	3	13.134	27	Minneapolis	00527545	12/22/17	1715	FRI	Ped	1	B
04-CSAH	3	13.135	27	Minneapolis	11051623	07/07/15	1515	TUE	Ped	1	N
04-CSAH	3	13.137	27	Minneapolis	11070101	10/05/15	2000	MON	Ped	1	B
04-CSAH	3	13.149	27	Minneapolis	00452678	05/16/17	1800	TUE	Ped	1	C
04-CSAH	3	13.157	27	Minneapolis	00676706	10/22/18	1907	MON	Ped	1	C
04-CSAH	3	13.159	27	Minneapolis	00636415	09/21/18	0815	FRI	Bike	1	A
04-CSAH	3	13.164	27	Minneapolis	10957709	04/30/14	1850	WED	Ped	1	C
04-CSAH	3	13.191	27	Minneapolis	00582700	03/10/18	1920	SAT	Ped	1	C
04-CSAH	3	13.192	27	Minneapolis	11073095	10/27/15	1845	TUE	Bike	1	C
04-CSAH	3	13.194	27	Minneapolis	00457947	06/07/17	1753	WED	Bike	1	B
04-CSAH	3	13.193	27	Minneapolis	00520636	11/25/17	1145	SAT	Ped	1	A
04-CSAH	3	13.194	27	Minneapolis	00582083	03/07/18	2043	WED	Ped	1	B
04-CSAH	3	13.257	27	Minneapolis	10858126	01/21/13	1645	MON	Ped	1	C

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	3	13.257	27	Minneapolis	10867746	02/27/13	2040	WED	Ped	1	B
04-CSAH	3	13.257	27	Minneapolis	10958856	06/02/14	1028	MON	Bike	1	C
04-CSAH	3	13.257	27	Minneapolis	11065330	08/31/15	1250	MON	Bike	1	N
04-CSAH	3	13.258	27	Minneapolis	00384119	10/04/16	1625	TUE	Ped	1	C
04-CSAH	3	13.314	27	Minneapolis	00930827	07/28/21	0518	WED	Ped	1	A
04-CSAH	3	13.370	27	Minneapolis	00498701	09/03/17	1250	SUN	Ped	2	A
04-CSAH	3	13.372	27	Minneapolis	00516898	11/13/17	2130	MON	Bike	1	B
04-CSAH	3	13.379	27	Minneapolis	10857518	01/10/13	1727	THU	Ped	1	C
04-CSAH	3	13.379	27	Minneapolis	10982423	08/30/14	1645	SAT	Bike	1	B
04-CSAH	3	13.437	27	Minneapolis	10901411	10/04/13	0026	FRI	Ped	1	B
04-CSAH	3	13.437	27	Minneapolis	10988367	10/19/14	1915	SUN	Bike	1	C
04-CSAH	3	13.440	27	Minneapolis	10811535	10/17/12	1130	WED	Bike	1	C
04-CSAH	3	13.506	27	Minneapolis	00538321	01/18/18	1759	THU	Ped	1	N
04-CSAH	3	13.569	27	Minneapolis	10794712	04/14/12	0325	SAT	Ped	1	C
04-CSAH	3	13.569	27	Minneapolis	11073885	11/02/15	1030	MON	Bike	1	C
04-CSAH	3	13.575	27	Minneapolis	00358029	06/20/16	1657	MON	Ped	1	C
04-CSAH	3	13.578	27	Minneapolis	11091710	12/17/15	2300	THU	Ped	1	C
04-CSAH	3	13.631	27	Minneapolis	00745333	09/05/19	2319	THU	Ped	1	B
04-CSAH	3	13.632	27	Minneapolis	10956070	04/12/14	1930	SAT	Ped	1	A
04-CSAH	3	13.635	27	Minneapolis	00504716	09/28/17	2000	THU	Ped	1	C
04-CSAH	3	13.634	27	Minneapolis	00935556	08/21/21	0122	SAT	Ped	1	K
04-CSAH	3	13.636	27	Minneapolis	00351023	05/23/16	1221	MON	Bike	1	B
04-CSAH	3	13.658	27	Minneapolis	00600639	05/28/18	2155	MON	Bike	1	C
04-CSAH	3	13.712	27	Minneapolis	10801268	08/06/12	0130	MON	Ped	1	C
04-CSAH	3	13.727	27	Minneapolis	11050415	06/19/15	1515	FRI	Bike	1	C
04-CSAH	3	13.753	27	Minneapolis	11026612	02/09/15	1106	MON	Ped	1	C
04-CSAH	3	13.760	27	Minneapolis	11050684	06/23/15	1800	TUE	Bike	1	C
04-CSAH	3	13.763	27	Minneapolis	10955846	04/08/14	1930	TUE	Bike	1	C
04-CSAH	3	13.785	27	Minneapolis	00904062	05/06/21	0014	THU	Ped	1	C
04-CSAH	3	13.847	27	Minneapolis	00844320	10/03/20	2042	SAT	Ped	1	A
04-CSAH	3	13.883	27	Minneapolis	10870209	03/30/13	0217	SAT	Bike	1	K

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	3	13.883	27	Minneapolis	11036708	03/07/15	0615	SAT	Ped	1	C
04-CSAH	3	13.884	27	Minneapolis	00374543	08/26/16	2040	FRI	Bike	1	C
04-CSAH	3	13.885	27	Minneapolis	00447244	04/24/17	0830	MON	Bike	1	C
04-CSAH	3	13.888	27	Minneapolis	00719212	05/11/19	0656	SAT	Ped	1	B
04-CSAH	3	13.890	27	Minneapolis	00746026	09/09/19	1154	MON	Ped	1	B
04-CSAH	3	13.911	27	Minneapolis	00386723	10/15/16	0943	SAT	Bike	1	C
04-CSAH	3	13.962	27	Minneapolis	10987531	10/12/14	1440	SUN	Bike	2	A
04-CSAH	3	14.123	27	Minneapolis	00600205	05/27/18	0852	SUN	Ped	1	C
04-CSAH	3	14.129	27	Minneapolis	00743767	08/03/19	1645	SAT	Bike	1	B
04-CSAH	3	14.131	27	Minneapolis	10784909	02/04/12	1525	SAT	Bike	1	A
04-CSAH	3	14.134	27	Minneapolis	00940275	09/13/21	1258	MON	Bike	1	C
04-CSAH	33	1.971	27	Minneapolis	00801794	03/02/20	0825	MON	Bike	1	N
04-CSAH	33	1.973	27	Minneapolis	00666524	12/07/18	2002	FRI	Ped	1	B
04-CSAH	33	1.975	27	Minneapolis	10786403	02/28/12	2234	TUE	Ped	1	C
04-CSAH	33	1.975	27	Minneapolis	10809340	09/09/12	1856	SUN	Bike	1	B
04-CSAH	33	1.976	27	Minneapolis	00915889	07/02/21	1315	FRI	Ped	1	B
04-CSAH	33	1.980	27	Minneapolis	00817736	07/03/20	1730	FRI	Bike	1	C
04-CSAH	35	8.473	27	Minneapolis	00906155	05/17/21	1330	MON	Ped	1	B
04-CSAH	35	8.476	27	Minneapolis	00915242	06/29/21	2304	TUE	Ped	1	A
04-CSAH	35	8.478	27	Minneapolis	00723317	05/29/19	2220	WED	Bike	1	B
04-CSAH	152	14.144	27	Minneapolis	00982680	12/22/21	1433	WED	Ped	1	B
04-CSAH	152	14.145	27	Minneapolis	11038481	04/09/15	2200	THU	Ped	1	A
04-CSAH	152	14.145	27	Minneapolis	11069411	09/30/15	1710	WED	Bike	1	C
04-CSAH	152	14.170	27	Minneapolis	00589754	04/09/18	1841	MON	Ped	1	C
04-CSAH	152	23.850	27	Minneapolis	00416329	01/18/17	0750	WED	Ped	1	C
05-MSAS	160	2.964	27	Minneapolis	00377128	09/06/16	2215	TUE	Ped	1	B
05-MSAS	160	2.969	27	Minneapolis	00702234	04/07/19	2341	SUN	Ped	1	C
05-MSAS	160	2.974	27	Minneapolis	00372073	08/16/16	2130	TUE	Ped	1	B
05-MSAS	160	2.974	27	Minneapolis	00524969	12/14/17	1250	THU	Ped	1	B
05-MSAS	160	2.977	27	Minneapolis	00378912	09/13/16	1700	TUE	Ped	1	B
05-MSAS	160	2.978	27	Minneapolis	00753083	10/08/19	1852	TUE	Ped	1	C

Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
05-MSAS	165	3.732	27	Minneapolis	00764538	11/22/19	1908	FRI	Bike	1	B
05-MSAS	165	3.743	27	Minneapolis	00345376	04/28/16	1835	THU	Ped	1	C
05-MSAS	326	0.252	27	Minneapolis	00386431	10/08/16	1600	SAT	Ped	1	N
05-MSAS	326	0.253	27	Minneapolis	00385804	10/11/16	1430	TUE	Ped	1	B
10-MUN	804	0.192	27	Minneapolis	00731052	06/30/19	2305	SUN	Ped	1	A
10-MUN	804	0.195	27	Minneapolis	00334873	03/10/16	1723	THU	Ped	1	A
10-MUN	804	0.195	27	Minneapolis	00503903	09/25/17	1712	MON	Ped	2	A
10-MUN	808	0.193	27	Minneapolis	00863704	11/15/20	1955	SUN	Ped	1	A
10-MUN	816	2.276	27	Minneapolis	00662409	11/23/18	1320	FRI	Bike	1	C
10-MUN	1058	0.190	27	Minneapolis	10967140	06/10/14	0920	TUE	Bike	1	C
10-MUN	1062	2.236	27	Minneapolis	00655807	10/31/18	0945	WED	Ped	1	A
10-MUN	1062	2.237	27	Minneapolis	00751259	09/30/19	1418	MON	Ped	3	A
10-MUN	1256	2.228	27	Minneapolis	10795890	05/06/12	1652	SUN	Bike	1	C
10-MUN	1893	0.001	27	Minneapolis	00518649	11/20/17	1650	MON	Bike	1	C
10-MUN	1893	0.007	27	Minneapolis	00354251	06/05/16	1350	SUN	Bike	1	B
10-MUN	2297	0.041	27	Minneapolis	00839626	09/08/20	1215	TUE	Bike	1	B
10-MUN	2298	0.033	27	Minneapolis	00447620	04/24/17	2015	MON	Ped	1	C
10-MUN	2298	0.033	27	Minneapolis	00744059	08/31/19	0009	SAT	Bike	1	C
10-MUN	2298	0.033	27	Minneapolis	00491371	08/03/17	0815	THU	Ped	1	N
10-MUN	2298	0.043	27	Minneapolis	00730474	06/30/19	1300	SUN	Ped	1	B
10-MUN	2405	0.119	27	Minneapolis	00902378	04/25/21	1751	SUN	Ped	1	A
10-MUN	2405	0.123	27	Minneapolis	00690664	02/22/19	0815	FRI	Ped	1	C

Selection Filter:

WORK AREA: County('659472') - FILTER: Year('2012','2013','2014','2015','2016','2017','2018','2019','2020','2021'), Unit Type('5','6') - SPATIAL FILTER APPLIED

Analyst:

Jason Pieper

Notes:

Segment #02 | From 5th Ave to 21st Ave

Medians and Crossing Islands

What is their purpose?

Medians and crossing islands (also known as refuge islands or center islands) are raised areas that are constructed in the center portion of a roadway, serving as a place of refuge for people who cross the road mid-block or at an intersection. They allow pedestrians and bicyclists to concentrate their attention on one direction of traffic at a time while crossing the roadway. After crossing to the center island, users wait for motorists to stop for an adequate gap in traffic before crossing the second half of the street. Refuge islands can drastically reduce pedestrian delay and vehicle conflicts by increasing the number of safe gaps that are available.

Median at Maryland Avenue and Greenbrier Street, Saint Paul, MN

Are they a proven strategy?

FHWA research shows that median and crossing islands are a **PROVEN** safety countermeasure.

Supporting Document: FHWA Proven Countermeasures – Pedestrian Medians

Where would we use them?

When installing a median or crossing island, an agency should develop a design that allows accessibility for all users and adheres to ADA crossing standards. 6' is the minimum median width where detectable warning surfaces are required. However, to allow storage space for a bicycle and to allow space for a level landing and truncated domes, a best practice is to construct crossing islands or medians of at least 8' in width. 10' or greater width is preferred, especially where bicycle traffic is expected. Crossing islands less than 6' are not considered pedestrian refuges since they cannot include detectable warning surfaces and may not safely serve as a refuge for all users.

Crossing islands are commonly installed at:

- Mid-block crossing locations or candidate locations
- High-priority pedestrian crossing locations such as transit stops, schools, and parks
- On roadways where marked crosswalks alone may not be sufficient, including roadways with speeds greater than 35 mph, and when annual average daily traffic (AADT) is greater than 9000. The raised medians must be accessible by all users, and should adhere to ADA crossing standards.

Medians and Crossing Islands

What are the advantages?

- Separates opposing vehicle travel lanes and allows pedestrians/bicyclists to cross the roadway in two stages rather than all at once.
- Reduces certain types of motor vehicle crashes, such as head-on crashes.
- Can help slow vehicle speeds by providing visual narrowing/traffic calming of the roadway.
- Can be implemented using low-cost, interim materials such as striping, flexible posts, and other bollards until a permanent improvement can be funded through a reconstruction project or other programming.
- Can provide area for landscaping and other visual enhancements as well as stormwater treatment.
- Studies show that a **raised median can reduce up to 46% of pedestrian crashes, and a pedestrian crossing island can reduce up to 56% of pedestrian crashes.**

What are the challenges?

- Permanent medians can be costly and are recommended to be included in larger construction projects.
- May restrict driveway access and on-street parking.
- Can introduce more significant design features and construction costs if stormwater management is impacted and additional inlets are required at locations with curb extensions.
- Require additional winter maintenance considerations.

A median with a refuge island

Best practices

To accommodate all users, medians must be fully accessible by ramp or cut through, and should provide tactile cues for pedestrians with visual impairments to indicate the border between the pedestrian refuge area and the motorized vehicle roadway.

What are the maintenance impacts?

Partner with maintenance team members during design development to discuss strategies and issues related to routine maintenance, especially during winter months, to keep the crossing island clear of snow and debris, along with the rest of the sidewalk network. Median crossings can pose an obstacle to snow plows, and to reduce plow strikes on median island curbs, designers should follow the pedestrian approach nose details in MnDOT Standard Plan 5-297.250.

Supplemental treatments

Raised medians and crossing islands are often combined with the following treatments:

- High-visibility crosswalk markings
- Advanced warning signs
- Curb extensions
- Street lighting
- Advance stop bars
- RRFBs or PHBs

How much do they cost?

The average cost for a raised island or crossing island is approximately $10/sf, and the total cost can vary widely from approximately $2,000 to $45,000. Costs depend on the design, site conditions, and whether the median can be included as part of a larger construction project.

Medians and Crossing Islands

Design Features

Continuously raised medians may not be appropriate or physically possible at all locations. They may need to be weighed against other roadway features such as wider sidewalks, bicycle lanes, landscaping buffers, or on-street parking.

At both intersections and mid-block locations, short sections of median at high-priority crossings such as schools and parks provide benefit to pedestrians. Pedestrian islands may be appropriate at unsignalized and signalized crossing locations.

Raised medians must incorporate the following:

- Fully accessible ramps.
- Tactile cues for pedestrians with visual impairments, that meet ADA standards.
- Adequate visibility between pedestrian and approaching vehicles.
- The median crossing can be angled (rather than perpendicular) to allow pedestrians easier visibility of on-coming traffic.
- Crossing islands may also be staggered (also known as a Z–crossing), which is a treatment that forces pedestrians to turn in the median and face the direction of traffic. Staggered crossings may be difficult for pedestrians with vision impairments to navigate, so it's important to provide a detectable edge along the crossing.

Pedestrian approach nose shown at a refuge island

Z-crossing treatment

Resources

- Proven countermeasure: https://safety.fhwa.dot.gov/provencountermeasures/ped_medians/
- http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=6
- CRFs: https://safety.fhwa.dot.gov/tools/crf/resources/fhwasa08011/fhwasa08011.pdf
- https://www.dot.state.mn.us/ada/pdf/5-297-250.pdf

Curb Extensions and Curb Radii

What is their purpose?

A curb extension is an extension of the sidewalk into the roadway that reduces the crossing distance of a roadway for pedestrians and pedestrian exposure to vehicular traffic. Curb extensions can provide visual cues to drivers that encourage them to reduce speeds and be aware of pedestrians and bicyclists. Curb extensions also improve intersection sight distance for vehicles and pedestrians since they restrict parking near the intersection. They can also provide additional space to construct ADA-compliant curb ramps, making them an effective strategy on ADA retrofit projects where constructing and ADA-compliant ramp may be otherwise difficult. Curb extensions are used at intersections and at mid-block crosswalks.

A curb extension at an intersection

Are they a proven strategy?

Curb extensions are **PROVEN** safety strategies. Research shows that reducing the crossing distance, restricting the street width, and reducing wide corner radii improve pedestrian safety and enhance the sight distance between motorists and pedestrians.

Supporting Documentation: MnDOT Enhanced Crosswalks

Where would we use them?

Curb extensions are most appropriate in urban settings when there is an on-street parking lane or a shoulder where the extensions will not impede bicycle travel. The curb extension physically precludes vehicles parking near an intersection or pedestrian crossing, improving sight lines and visibility both for and of crossing pedestrians near parked vehicles. Beyond being used at intersections, curb extensions can be applied in a variety of ways depending on the roadway's needs. Examples include the following:

- Mid-block curb extensions or pinch points
- Offset curb extensions or chicanes
- Bus stops

What are the maintenance impacts?

Partner with maintenance team members during design development to discuss strategies and issues related to routine maintenance, especially during winter months. Curb extensions may increase the level of effort required to remove snow from the parking lane. This can be minimized by adding delineators or markers on the curb extension to help guide snow plows, and by flattening the taper rate of the curb extension to 1:5 so plows can maintain a limited forward speed while clearing snow adjacent to the curb extension.

Curb Extensions and Curb Radii

What are the advantages?

- May be temporarily implemented and evaluated using low-cost, interim materials such as gravel, planters, paint and striping, flexible posts, or bollards until a permanent improvement can be funded through a reconstruction project or other programming.
- Increase visibility of pedestrians and bicyclists crossing the street.
- Encourage slower turning speeds.
- Reduce crossing distance at mid-block crosswalks.
- Serve as a gateway or visual cue for drivers entering a slower, more residential area.
- May dedicate width for bus stops (bus bulbs).
- May dedicate width for on-street parking.
- Increase space for street furniture, landscaping, and stormwater treatment.
- Improve intersection sight distance (by prohibiting parking near the intersection)
- Provide additional space to construct ADA-compliant curb ramps.
- Studies show a reduction in crashes up to 45%.

What are the challenges?

- Design can be restricted by the turning radius of the larger design vehicles (trucks and buses).
- Stormwater management needs associated with the new curb alignment (e.g., catch basin locations) can bring additional design and construction costs.
- Require additional winter maintenance considerations.
- Curb extension retrofits may reduce the amount of available on-street parking

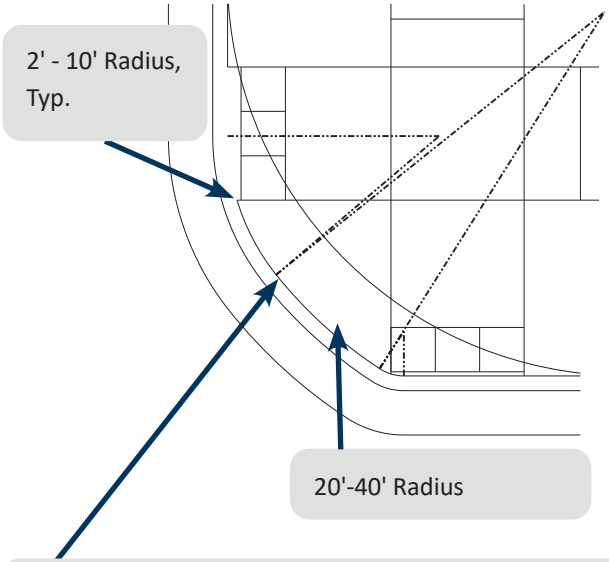
Supplemental treatments

Curb extensions and curb radii can be combined with the following treatments:

- High-visibility crosswalk markings
- Advanced warning signs
- Right turn on red restrictions at signalized intersections
- Landscaping or other aesthetic improvements

Best practices

Curb extensions can often be lengthened to provide additional space for landscaping, stormwater treatment, transit waiting areas, and bus shelters. In addition, curb extensions can create additional space to fit ADA-compliant curb ramps, improving accessibility in constrained locations where it may otherwise be difficult to do so.



A compound radius can increase available curb extension space while still allowing large vehicles to turn, especially on multi-lane roadways.

Compound radius detail, Source: MnDOT Curb Ramp Standard Plan

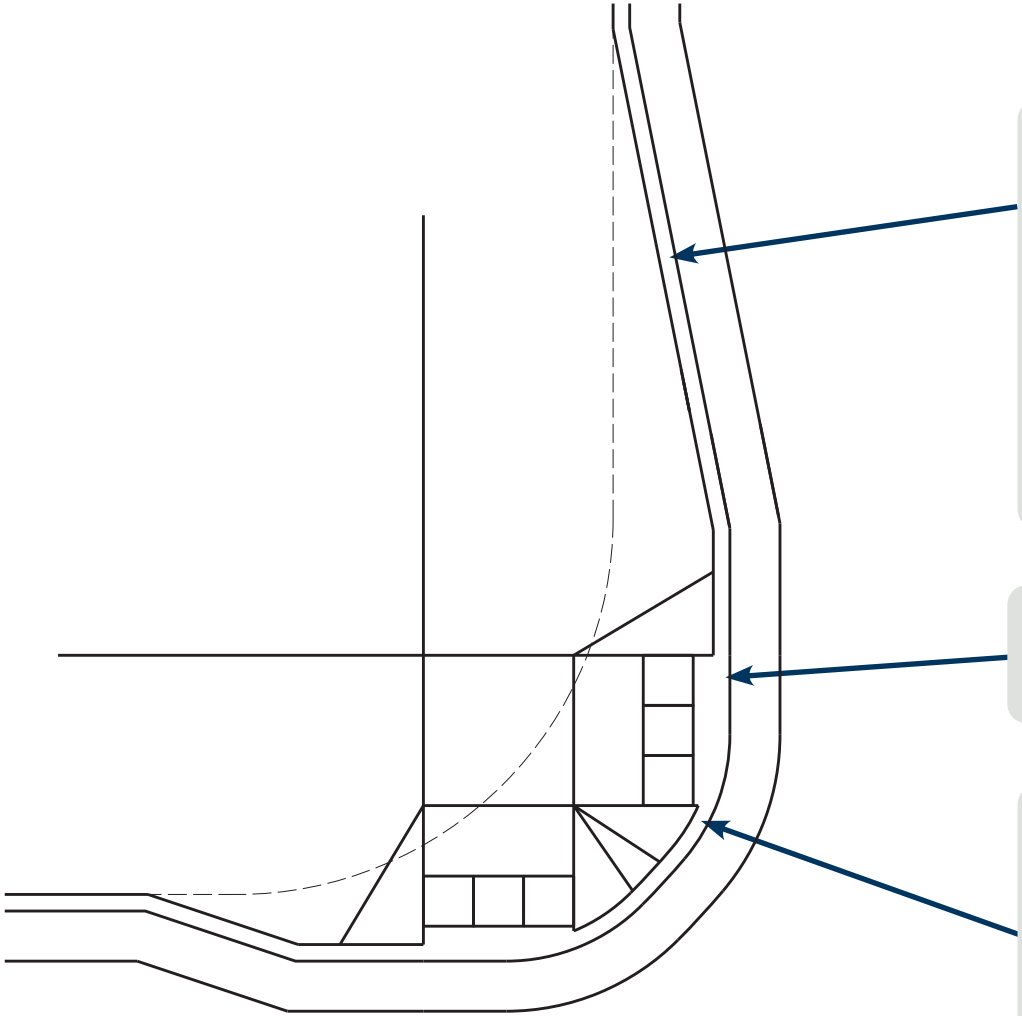
How much do they cost?

Costs depend on site conditions, drainage impacts, pavement design, and ADA accommodations. Curb extension installation can range between $2,000-$3,500 per corner if it does not cause storm sewer impacts and between $10,000-$20,000 per corner if it does cause storm sewer impacts.

Curb Extensions and Curb Radii

CSAH 3 (Lake St) Pedestrian Project

Attachment 12 | Minnesota's Best Practices for Pedestrian and Bicycle Safety



1:3 minimum taper. Using a 1:5 taper on the upstream (plow-facing) side can improve ease of maintenance, but is so flat that vehicles may still attempt to park along the taper. Even with a 1:3 taper, signage may be needed such as "no parking here to corner".

Where prohibiting parking is a primary concern, a steeper taper can be helpful (some agencies have used as steep as 1:2 taper; designers should take care to adequately delineate steep tapers).

Having at least 5' of non-zero height tangent curb helps establish the presence of the curb ramp and

With the previous curbline, it would have been difficult to construct an ADA-compliant curb ramp at this location, especially if trying to match into a doorway at the intersection. This design creates enough space to construct ADA-compliant curb ramps, while still keeping the back of the sidewalk at the existing elevation.

Curb extension detail, Source: MnDOT Curb Ramp Standard Plan

Curb Extensions and Curb Radii

Curb retrofit on Snelling Avenue, Saint Paul, MN; Source: Google

Before/after photo of curb ramp retrofit. The curb extension allowed the construction of ADA-compliant ramps on an otherwise constrained corridor. Note the upstream side of curb extension has a flatter taper than the downstream side.

Design Features

Curb extensions should be tailored to the unique characteristics of the site at which they are installed, though MnDOT's Pedestrian Curb Ramp Standard Plans has details that may be helpful. See Curb Extensions and Curb Radii section of this handbook.

Designers should also consider or incorporate the following:

- Curb extensions should extend the full width of an adjacent parking lane.
- Maintain proper sight distance between pedestrians and motorists, including street furniture and landscaping features.
- Stormwater runoff may be impacted and additional catch basins may be required as part of the design. Avoid designs that cause water to pool on the sidewalk.

Resources

- Proven: http://www.dot.state.mn.us/stateaid/trafficsafety/county/CRSP-EnhancedCrosswalks.pdf
- https://safety.fhwa.dot.gov/intersection/conventional/signalized/fhwasa13027/ch9.cfm#s911
- Minnesota DOT Roadway Design Manual, Chapter 5-1.04
- http://www.pedbikeinfo.org/cms/downloads/Countermeasure%20Costs_Report_Nov2013.pdf
- Bump Outs: http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=5
- https://nacto.org/publication/urban-street-design-guide/street-design-elements/curb-extensions/
- Curb Radii: http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=28
- https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf

Traffic Signals

Other Common Treatments:

- Fixed pedestrian phases are common at intersections with steady pedestrian activity throughout the day.
- Pedestrian push buttons are common in areas with intermittent pedestrian activity. When push buttons are installed, the design should consider implementing an Accessible Pedestrian Signal (APS). An APS is a device that communicates information about WALK and DON'T WALK intervals at signalized intersections through audible tones, speech messages, and vibrating surfaces to assist pedestrians with visual impairments.
- Implementing shorter cycle lengths (approximately 90 seconds).
- Implementing turn restrictions or left-turn phasing for vehicles.
- Ensuring that the signal has proper crossing times for pedestrians per MnMUTCD guidance.
- Exclusive pedestrian signal timings are most common in urban areas. These stop vehicles from all directions to allow pedestrians the right-of-way to cross the street in any direction (including diagonally).

Best practices

Traffic signals are used to assign right-of-way to conflicting traffic modes at intersections. There are several proven safety countermeasures that can be paired with traditional signalized intersections to enhance safety. Examples include countdown pedestrian timers, leading pedestrian intervals, backplates with retroreflective borders, and yellow change intervals.

Resources

- Crash Modification Factors
- Cost
- http://www.dot.state.mn.us/trafficeng/publ/mutcd/mnmutcd2018/mnmutcd-4.pdf
- http://guide.saferoutesinfo.org/engineering/traffic_signals.cfm
- https://www.dot.state.mn.us/trafficeng/publ/fundamentals/2015-mndot-safety-handbook-

How much do they cost?

Installing a new traffic signal can vary from approximately $250,000 to $500,000, depending on the site conditions, existing utilities, and additional enhancements. Annual maintenance costs are approximately $2,000 to $4,000 per intersection.

Design Features

Reference the MnDOT Traffic Control Signal Design Manual for a detailed review of traffic signal design elements, including signal phasing and operations, detection design, and signing and pavement markings. The goals of the design should include providing a safe and efficient operation for the intersection's unique conditions.

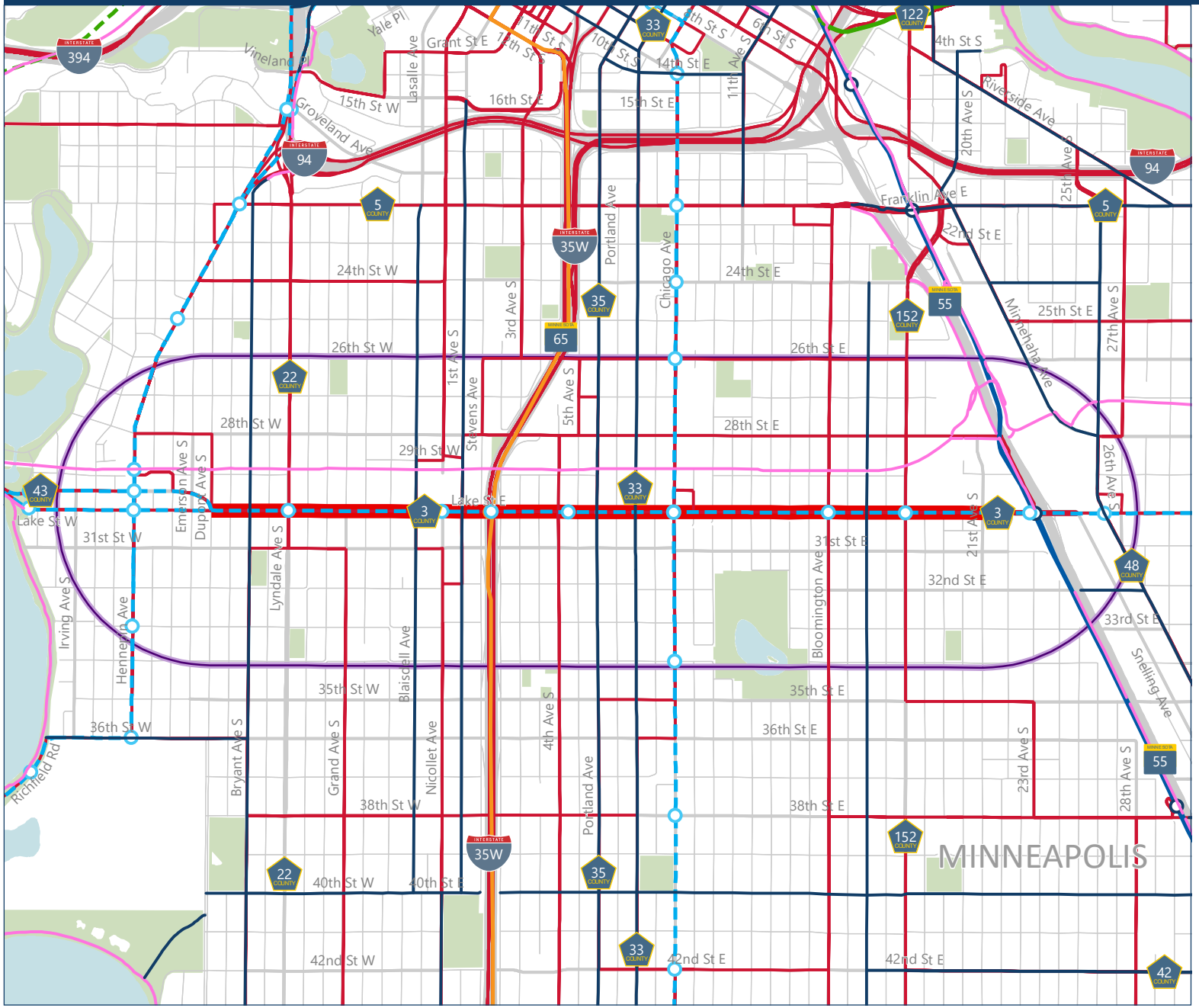
Key strategies for improving pedestrian accommodation at signalized intersections include the following:

- Adding accessible pedestrian push buttons where signals are pedestrian actuated.
- Implementing short cycle lengths (90 seconds maximum)
- Adding countdown timers, which are usually installed with pedestrian indication lights. These provide the number of seconds remaining during the pedestrian phase. MnMUTCD Chapter 4D.7 now requires countdown timers to be installed at signals with pedestrian signal heads at crosswalks with pedestrian change intervals greater than 7 seconds.
- Leading pedestrian intervals, which can be installed to improve the safety of the crossings by providing pedestrians 3-7 seconds to enter an intersection prior to giving the green indication to vehicles. More information can be found in the section on Leading and Separate Exclusive Signals.
- Using a fixed pedestrian phase - if pedestrian traffic is frequent, this timing strategy does not require pushing the pedestrian button to activate the WALK phase.
- Maintaining optimal sight distance and visibility of signals to pedestrians.
- Implementing MnMUTCD guidelines for creating optimal WALK and DON'T WALK times for pedestrians.

CSAH 3 (Lake St) Pedestrian Project

Attachment 13 | Multimodal Connections Map

HENNEPIN COUNTY
MINNESOTA



Key

- Project Locations
- 1/2 mi Buffer

Bikeways

- Off-Street
- On-Street

Transitway Stations

- Arterial BRT
- Blue Line
- Green Line / Ext
- Orange Line

Transitway Alignments

- Arterial BRT
- Orange Line BRT
- Blue / Green Line LRT
- Blue Line LRT
- Green Line LRT
- Planned Arterial BRT
- Planned Green Line LRT
- Transit Routes

0 0.35 0.7 Miles

N

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

Published date: 3/23/2022

Minneapolis
City of Lakes

Public Works
350 S. Fifth St. - Room 203
Minneapolis, MN 55415
TEL 612.673.3000
www.minneapolismn.gov

Support for Hennepin County
Regional Solicitation Applications

Dear Ms. Stueve:

Hennepin County has requested letters of support for a series of grant applications as part of the Regional Solicitation process, by which the Metropolitan Council competitively allocates federal transportation funds. As a part of this request, Minneapolis conducted a review of completed plans, studies, and community engagement, as well as documented priorities and adopted policies to identify which projects to support. Improvements along Hennepin County streets offer significant opportunities to address some of the greatest safety and mobility needs within Minneapolis and are a critical part of the city's goal to address climate change, support mode shifts, and eliminate deaths and severe injuries resulting from traffic crashes.

Minneapolis hereby supports the following applications:

Roadway Reconstruction / Modernization

- Franklin Ave (CSAH 5) Reconstruction: Lyndale Ave (CSAH 22) to approx. 250' West of Blaisdell Ave
- Lyndale Ave (CSAH 22) Reconstruction: HCRRA to Franklin Ave (CSAH 5)
- Cedar Ave (CSAH 152) Reconstruction: 150' North of Lake St (CSAH 3) TO 24TH St

Multiuse Trail and Bicycle Facilities

- *Marshall St NE (CSAH 23) Bikeway: 3rd Ave NE to (CSAH 153) Lowry Ave NE
- Park Ave (CSAH 33) and Portland Ave (CSAH 35) Bikeway: Lake St (CSAH 3) to the I-35W/I-94 Bridges

Pedestrian Facilities

- *Marshall St NE (CSAH 23) Pedestrian Improvements: 3rd Ave NE to (CSAH 153) Lowry Ave NE
- Lake St (CSAH 3) Pedestrian Improvements: Dupont to the Mississippi River

*Whereas the County is pursuing grant funding in the Multiuse Trail and Bicycle Facilities and Pedestrian Facilities categories, the city supports the County applications with the understanding that this funding is applied to fully reconstruct Marshall St NE.

At this time, Minneapolis has no funding programmed in its adopted 2023-2028 Transportation Capital Improvement Program (CIP) for these projects. Therefore, Minneapolis is currently unable to commit cost participation in these projects. However, we request that Hennepin County includes city staff as part of the design process to ensure project success. Furthermore, Minneapolis agrees to provide maintenance, such as sweeping and plowing, for protected bikeways until such time Hennepin County has the resources to do so.

Thank you for making us aware of this application effort and the opportunity to provide support. Minneapolis Public Works looks forward to working with you on these projects.

Sincerely,

Margaret Anderson Kelliher

Margaret Anderson Kelliher
Director of Public Works
City of Minneapolis

Metro Transit

April 7, 2022

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

Re: Metro Transit Support for Hennepin County 2022 Regional Solicitation Application: CSAH 3 (Lake Street) from Dupont Avenue to 21st Avenue Pedestrian Project

Dear Ms. Stueve:

Metro Transit is supportive of Hennepin County's Regional Solicitation federal funding application for the proposed pedestrian project on CSAH 3 (Lake St) from Dupont Ave to 21st Avenue in Minneapolis.

This project for this funding application will involve safety and accessibility upgrades along CSAH 3 (Lake St) to complement the METRO B Line bus rapid transit project. Both the transit project and the pedestrian project have independent utility and individually accruable benefits, and each could be implemented without the other. However, both agencies are committed to coordinating project efforts to ensure the best possible multimodal solution in the corridor. These proposed improvements will provide additional accessibility, safety, and mobility for people walking and taking transit; thereby enhancing the livability and quality of life for Minneapolis and Hennepin County residents.

Thank you for making us aware of this application and the opportunity to provide support. Metro Transit looks forward to working with you on this project.

Sincerely,

Wes Kooistra
General Manager