Application

17074 - 2022 Multiuse Trails and Bicycle Facilities
17582 - Phase 1 Bruce Vento Regional Trail Extension
Regional Solicitation - Bicycle and Pedestrian Facilities

Status: Submitted
Submitted Date: 04/11/2022 9:56 AM

Primary Contact

Name:*  Mr. Scott Yonke
Pronouns First Name Last Name

Title: Director of Planning and Development
Department: Parks and Recreation
Email: scott.yonke@co.ramsey.mn.us
Address: 2015 Van Dyke St.

City State/Province Postal Code/Zip
Maplewood Minnesota 55109

Phone:* 651-266-0370
Phone Ext.
Fax:

What Grant Programs are you most interested in? Parks Legacy Fund

Organization Information

Name: RAMSEY COUNTY

Jurisdictional Agency (if different):
Project Information

Project Name

Phase 1 Bruce Vento Regional Trail Extension

Primary County where the Project is Located

Ramsey

Cities or Townships where the Project is Located:

White Bear Lake, White Bear Township, Gem Lake, Vadnais Heights

Jurisdictional Agency (If Different than the Applicant):
The Bruce Vento Regional Trail corridor is thirteen miles in length and extends from the east side of downtown Saint Paul to the north county line in White Bear Township. The southern seven-mile segment of the regional trail was completed in 2005 from downtown Saint Paul to Buerkle Road in White Bear Lake on former Burlington Northern Santa Fe (BNSF) railway. The remaining six miles of trail is still undeveloped due to active rail use.

This project will construct a 2.7-mile extension of the Phase 1 Bruce Vento Regional Trail extension between Buerkle Road and the intersection of Hoffman Road/Trunk Highway 61 in White Bear Lake. This project provides an alternate trail alignment in an active railway corridor, completes approximately one-half of a major gap in both the Regional Bike Transportation Network and National US Bike Route 41, and extends through the cities Gem Lake, White Bear Lake, White Bear Township and Vadnais Heights.

Significant access barriers will be eliminated from industrial areas and major vehicular transportation routes, providing a new multi-modal trail and increased access to multi-modal transportation facilities between Buerkle Road and Highway 96. The trail provides benefits for racially diverse populations, people of color, low-income populations, and substantial concentrations of youth, elderly, and residents with disabilities.

The trail will provide connections to other regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, Gateway State Trail, South Shore Boulevard Trail, and future connection to the proposed Hardwood Creek Regional Trail extension in Washington County at County Road J. In addition, the trail will connect populations near the southern Saint Paul segment.
of the existing Bruce Vento Trail which extends through highly urban and concentrated areas of poverty making it a regionally important connection that will directly benefit diverse populations.

Bruce Vento Regional Trail extension from Buerkle Rd to Hoffman Road/US 61 - Construct 12-foot wide trail, at-grade trail crossings, concrete, retaining walls, landscaping, restoration, fencing, signage, stormwater management, and amenities.

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

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) 2.7 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) MN State bonding
Federal Amount $4,000,000.00
Match Amount $3,000,000.00
Minimum of 20% of project total
Project Total $7,000,000.00
For transit projects, the total cost for the application is total cost minus fare revenues.

Match Percentage 42.86%
Minimum of 20%
Compute the match percentage by dividing the match amount by the project total

Source of Match Funds MN State bonding, Ramsey County CIP

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 Ramsey County
Zip Code where Majority of Work is Being Performed: 55110
(Approximate) Begin Construction Date: 04/01/2024
(Approximate) End Construction Date: 11/30/2024
Name of Trail/Ped Facility: Bruce Vento Regional Trail
(i.e., CEDAR LAKE TRAIL)

TERMENI:(Termini listed must be within 0.3 miles of any work)
From: Buerkle Road and BNSF Railway
To: Hoffman Road and Trunk Highway 61

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): 2.7
Miles of trail on the Regional Bicycle Transportation Network (nearest 0.1 miles): 2.7
Is this a new trail? Yes

Primary Types of Work
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): County Road E Bridge, Highway 61 Bridge

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.
The project is consistent with several goals, objectives, and strategies for Ch 2 of the 2040 TP.

**Goal(A): Transportation Stewardship**

Obj.(B): Operate a regional trans. system to efficiently & cost-effectively connect people to destinations.

Strategy: A1, A2, A3 (pgs. 2.2-2.4)

**Goal(B): Safety & security**

Obj.(B): Reduce the trans. system vulnerability to natural & man-made incidents & threats.

Strategy: B1, B6 (pgs. 2.5, 2.8)

**Goal(C): Access to Destination**

Obj:(A) Increase the avail. of multi-modal travel options especially in Hwy corridors, (D) Increase transit ridership & the share trips taken using transit/bicycling/walking, (E) Improve multi-modal travel options for people of all ages & abilities to connect with jobs & other opportunities particularly in underrepresented areas.

Strategy: C1, C15, C17 (pgs. 2.10, 2.22-2.24)

**Goal(D): Competitive Economy**

Obj:(A) Improve multi-modal access to regional job concentrations, (D) Invest in a multi-modal trans. system to attract & retain business/residents.
Strategy: D1,D3 (pgs. 2.26-2.28)

Goal(E): Healthy Env.

Obj:(C) Increase the avail. & attractiveness of transit/bicycling/walking to encourage healthy communities/active care-free lifestyles, (D) Provide a trans. system that promotes community cohesion/connectivity for people of all ages/abilities particularly in underrepresented areas.

Strategy: E3,E7 (pgs. 2.31-2.32, 2.34)

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.

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: 05/01/2016

Link to plan:

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

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.  Yes

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.  Yes

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.

### Specific Roadway Elements
### Construction Project Elements/Cost Estimates

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization (approx. 5% of total cost)</td>
<td>$600,000.00</td>
</tr>
<tr>
<td>Removals (approx. 5% of total cost)</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>Roadway (grading, borrow, etc.)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Roadway (aggregates and paving)</td>
<td>$600,000.00</td>
</tr>
<tr>
<td>Subgrade Correction (muck)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Storm Sewer</td>
<td>$420,000.00</td>
</tr>
<tr>
<td>Ponds</td>
<td>$0.00</td>
</tr>
<tr>
<td>Concrete Items (curb &amp; gutter, sidewalks, median barriers)</td>
<td>$244,130.00</td>
</tr>
<tr>
<td>Traffic Control</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>Striping</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>Signing</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Lighting</td>
<td>$0.00</td>
</tr>
<tr>
<td>Turf - Erosion &amp; Landscaping</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>Bridge</td>
<td>$600,000.00</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>$1,220,900.00</td>
</tr>
<tr>
<td>Noise Wall (not calculated in cost effectiveness measure)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>$0.00</td>
</tr>
<tr>
<td>Wetland Mitigation</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other Natural and Cultural Resource Protection</td>
<td>$0.00</td>
</tr>
<tr>
<td>RR Crossing</td>
<td>$0.00</td>
</tr>
<tr>
<td>Roadway Contingencies</td>
<td>$550,000.00</td>
</tr>
<tr>
<td>Other Roadway Elements</td>
<td>$40,000.00</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$4,965,030.00</strong></td>
</tr>
</tbody>
</table>

### Specific Bicycle and Pedestrian Elements

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path/Trail Construction</td>
<td>$1,100,000.00</td>
</tr>
<tr>
<td>Sidewalk Construction</td>
<td>$34,970.00</td>
</tr>
<tr>
<td>On-Street Bicycle Facility Construction</td>
<td>$0.00</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pedestrian Curb Ramps (ADA)</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)</td>
<td>$25,000.00</td>
</tr>
</tbody>
</table>
### Pedestrian-scale Lighting
- Cost: $0.00

### Streetscaping
- Cost: $20,000.00

### Wayfinding
- Cost: $25,000.00

### Bicycle and Pedestrian Contingencies
- Cost: $400,000.00

### Other Bicycle and Pedestrian Elements
- Cost: $400,000.00

### Totals
- Cost: $2,034,970.00

#### Specific Transit and TDM Elements

<table>
<thead>
<tr>
<th>CONSTRUCTION PROJECT ELEMENTS/COST</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Guideway Elements</td>
<td>$0.00</td>
</tr>
<tr>
<td>Stations, Stops, and Terminals</td>
<td>$0.00</td>
</tr>
<tr>
<td>Support Facilities</td>
<td>$0.00</td>
</tr>
<tr>
<td>Transit Systems (e.g. communications, signals, controls, fare collection, etc.)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$0.00</td>
</tr>
<tr>
<td>Contingencies</td>
<td>$0.00</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other Transit and TDM Elements</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

### Totals
- Cost: $0.00

#### Transit Operating Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Platform hours</td>
<td>0</td>
</tr>
<tr>
<td>Cost Per Platform hour (full loaded Cost)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other Costs - Administration, Overhead, etc.</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

### Totals

- **Total Cost**: $7,000,000.00
- **Construction Cost Total**: $7,000,000.00
- **Transit Operating Cost Total**: $0.00

### Measure A: Project Location Relative to the RBTN
Select one:

Tier 1, Priority RBTN Corridor  Yes
Tier 1, RBTN Alignment  Yes
Tier 2, RBTN Corridor
Tier 2, RBTN Alignment

Direct connection to an RBTN Tier 1 corridor or alignment
Direct connection to an RBTN Tier 2 corridor or alignment

OR

Project is not located on or directly connected to the RBTN but is part of a local system and identified within an adopted county, city or regional parks implementing agency plan.

Upload Map
1647272969714_Bike Corridors Map.pdf

Please upload attachment in PDF form.

---

**Measure A: Population Summary**

Existing Population Within One Mile (Integer Only)  25819
Existing Employment Within One Mile (Integer Only)  21832

Upload the “Population Summary” map
1647273174070_Population-Employment Map.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:
Populations are shown in the Population Summary attachment. At the south end of the project area, there is a high concentration of youth, minority, and low-income populations, and a high concentration of job and activity centers. To the north, there is a high concentration of elderly.

Engagement activities were completed through a public, stakeholder, and agency involvement process over the course of several years from 2015-2020. Engagement tactics included open houses, popup events, web site, social media, and fliers provided to schools, churches, libraries and local businesses and organizations. Focused engagement sessions connected with people of color, elders, or with disabilities.

In 2015, multiple engagement events for the Ramsey County Bike and Pedestrian Plan engaged project area communities. In 2016, two trail project-specific open houses invited residents and businesses along the route to provide input on the alignment. The connection to St. Paul employment and activity centers was frequently mentioned as a major advantage of the trail extension, making the trail extension a priority for Ramsey County. Three interactive workshops were held in 2018 - 2020 to allow the community to influence details of the trail project and the master plan amendment. In addition, multiple coordinated engagement events for the Purple Line BRT project also addressed trail design and included several on-trail activities that allowed trail users to provide input.

Engagement activities completed strived to connect with underrepresented communities living and working near the trail corridor. Underrepresented communities are those whose input has been
disproportionately unheard in public decision making, including people of color, people with disabilities and people with low incomes.

Engagement opportunities were developed and prioritized events to attend using the following criteria: equity, inclusivity, maximizing voices heard, and geographic representation

The engagement activities outlined above resulted in several comments and themes which generally resonated with most of the diverse populations that participated in the engagement. The following is a summary of findings that helped shape planning and design activities such as prioritizing safety and security, trail amenities, maintain the natural character, utilize BNSF right-of-way and existing crossing structures, screening/buffer elements, and connection to other trail networks.

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.

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

Below is a list of potential negative impacts. This is not an exhaustive list.
The Bruce Vento Regional Trail benefits people with low-incomes, minority populations, populations with disabilities, youth, and elders by providing a safe, multiuse trail between housing, shopping, schools, jobs, services, and Rush Line BRT stations. The trail alignment includes two areas in White Bear Lake with higher-than-average shares of the population that are people of color and low-income. Several senior housing properties located within a half mile of the trail will have more safe and direct access. The project directly serves a high number of persons with a disability in White Bear Lake census tract 404.01, where 15% of residents have a disability. There are 3 subsidized affordable housing developments within a half mile, who are more likely to make trips on foot, by bicycle, or using transit and will benefit from direct and convenient access to both a multiuse trail and transit. At its northern terminus, the project provides a connection for a substantial population of children in White Bear Township census tract 405.04, where 20% of residents are under age 15. The project provides a safe walking/biking route to students within a half-mile of Willow Lane Elementary and Frassati Catholic Academy, and within one mile of the White Bear Lake Area middle and high north school campus.

This project will provide an ADA-accessible off-road multiuse trail where none exists today, and complete approximately one-half of the six-mile gap within the RBTN network and the National US Bike Route 41. The trail extension will provide new connections to regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, South Shore Trail and Gateway Regional Trail south of the project area. These regionally significant connections will allow diverse populations to access the project area, including people living in concentrated poverty at the existing...
southern/St. Paul segment of the Bruce Vento Trail. The project will provide improved access to proposed Purple Line BRT station stops and existing Metro Transit bus route 265.

Anticipated negative externalities created by the trail project include temporary construction inconveniences such as dust, noise, and temporary detours. As the proposed trail will be constructed where there is none today, detours are only anticipated in the locations where the trail crosses an existing roadway. Construction in these areas is anticipated to be limited in duration and scope and will not result in significant impact to the traveling public.

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

Measure C: Affordable Housing Access

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

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

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.
There are 12 existing affordable housing developments within ½ mile of the project corridor, as shown in BVT_AffordableHousing.pdf. There are no planned developments near the project corridor. Of those identified, three developments guarantee affordability through some form of subsidy - Hoffman Place and Willow Wood Apartments in White Bear Lake and Wyngate Townhomes in Maplewood. The remaining nine developments are naturally occurring affordable housing identified by Ramsey County because they fall within the AMI monthly rental cost as established by the Metropolitan Council.

The Bruce Vento Trail extension project will directly improve multimodal access for residents of these housing locations by providing a multimodal trail where none exists today. It will improve access for the residents to the regional bike transportation network by extending a safe, dedicated trail facility from Maplewood and St. Paul with connections to the Highway 96 Regional Trail, Lake Links Regional Trail, and the planned South Shore Regional Trail.

The proposed trail extension will also greatly improve access for people in affordable housing to the Rush Line BRT and to the existing Metro Transit bus route 265. Four proposed Rush Line BRT station locations are directly adjacent to the Bruce Vento Trail. Two are on the southern, built segments of the trail and two will be directly on the proposed trail extension at Cedar Lake Road and Hwy 96. The trail project will support people who rely on public transit in accessing areas in White Bear Lake and St. Paul outside the Rush Line station areas. Filling this gap in the regional bicycle and pedestrian network benefits residents of affordable housing or with low incomes by providing more safe and convenient multimodal
transportation and recreational opportunities.

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:

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

Yes

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

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

1647290176474_Socio-Economic Conditions Map.pdf

Measure A: Gaps closed/barriers removed and/or continuity between jurisdictions improved by the project

PART 1: Qualitative assessment of project narrative discussing how the project will close a bicycle network gap, create a new or improved physical bike barrier crossing, and/or improve continuity and connections between jurisdictions. Specifically, describe how the project would accomplish the following: Close a transportation network gap, provide a facility that crosses or circumvents a physical barrier, and/or improve continuity or connections between jurisdictions.

Bike system gap improvements include the following:
• Providing a missing link between existing or improved segments of a local transportation network or regional bicycle facility (i.e., regional trail or RBTN alignment);

• Improving bikeability to better serve all ability and experience levels by:

• Providing a safer, more protected on-street facility or off-road trail;

• Improving safety of bicycle crossings at busy intersections (e.g., through signal operations, revised signage, pavement markings, etc.); OR

• Providing a trail adjacent or parallel to a highway or arterial roadway or improving a bike route along a nearby and parallel lower-volume neighborhood collector or local street.

Physical bicycle barrier crossing improvements include grade-separated crossings (over or under) of rivers and streams, railroad corridors, freeways and expressways, and multi-lane arterials, or enhanced routes to circumvent the barrier by channeling bicyclists to existing safe crossings or grade separations. Surface crossing improvements (at-grade) of major highway and rail barriers that upgrade the bicycle facility treatment or replace an existing facility at the end of its useful life may also be considered as bicycle barrier improvements. (For new barrier crossing projects, distances to the nearest parallel crossing must be included in the application to be considered for the full allotment of points under Part 1). Examples of continuity/connectivity improvements may include constructing a bikeway across jurisdictional lines where none exists or upgrading an existing bicycle facility treatment so that it connects to and is consistent with an adjacent jurisdictions bicycle facility.
The proposed project will complete a 2.7-mile gap in the Tier 1 RBTN regional system and National USBR 41 bicycle and pedestrian network, remove access barriers, improve bikability/walkability, and expand local access to four planned Rush Line BRT stations. The Bruce Vento Trail is a Tier 1 RBTN between Saint Paul and White Bear Lake. The existing trail intersects the Gateway State Trail (Tier 2 RBTN alignment) and a network of other local trails south of Buerkle Road. The proposed trail extension from Buerkle Road to the intersection of Hoffman Road/US Highway 61 will remove barriers to additional local pedestrian facilities and regional connections like the Highway 96 Regional Trail, Lake Links Regional Trail, and South Shore Boulevard Trail, making the proposed trail extension regionally significant for filling gaps in the RBTN.

The existing Bruce Vento Regional Trail terminates at Buerkle Rd and transitions to on-street bike lanes on Buerkle Road ending at White Bear Ave (1/2-mile to the east), US Highway 61 to the west (1/4-mile to the west) and does not connect with other dedicated bike or pedestrian facilities. Currently, there are limited north/south and east/west pedestrian and bicycle facilities north of Buerkle Road due to current land use designations, high traffic roadways, and BNSF railway. By extending the trail north to the intersection of Hoffman Road/ US Highway 61, the Bruce Vento Trail will remove access barriers on Buerkle Road, direct connection to business and the Willow Marsh community (between Buerkle Road and County Road E), dedicated trail crossing under County Road E and connection to pedestrian and bike lanes along County Road E, enhanced connections to the adjacent community north of County Road E and along Hoffman, dedicated trail access under Highway 61, and enhanced connections along Hoffman Road to US Highway 61.
In addition to filling a network gap and providing safe, separated facilities, the proposed trail will provide improved access to the Rush Line BRT (Purple Line) corridor. Overall, the project would increase access to four Purple Line Station Stops. Two proposed station stops are directly adjacent to the proposed trail extension (Buerkle Road and Whitaker Street), and two station stops are within a ¼-mile walking distance with local connections provided through the Purple Line project. This trail project will provide a unique synergy between transit, pedestrian, and bicycle modes that will enhance usage, safety, and convenience for all modes.

PART 2: Regional Bicycle Barrier Crossing Improvements and Major River Bicycle Barrier Crossings

DEFINITIONS:
Regional Bicycle Barrier Crossing Improvements include crossings of barrier segments within the Regional Bicycle Barrier Crossing Improvement Areas as updated in the 2019 Technical Addendum to the Regional Bicycle Barriers Study and shown in the RBBS online map (insert link to forthcoming RBBS Online Map). Projects must create a new regional barrier crossing, replace an existing regional barrier crossing at the end of its useful life, or upgrade an existing barrier crossing to a higher level of bike facility treatment, to receive points for Part 2.

Major River Bicycle Barrier Crossings include all existing and planned highway and bicycle/pedestrian bridge crossings of the Mississippi, Minnesota and St. Croix Rivers as identified in the 2018 update of the 2040 Transportation Policy Plan. Projects must create a new major river bicycle barrier crossing, replace an existing major river crossing at the end of its useful life, or upgrade the crossing to a higher level of bike facility treatment, to receive points for Part 2.

Projects that construct new or improve existing Regional Bicycle Barrier Crossings or Major River Bicycle Barrier Crossings will be assigned points as follows: (select one)

Tier 1
Tier 1 Regional Bicycle Barrier Crossing Improvement Area segments & any Major River Bicycle Barrier Crossings

Tier 2
Tier 2 Regional Bicycle Barrier Crossing Improvement Area segments

Tier 3
Tier 3 Regional Bicycle Barrier Crossing Improvement Area segments

Non-tiered
Crossings of non-tiered Regional Bicycle Barrier segments

No improvements
No Improvements to barrier crossings

If the project improves multiple regional bicycle barriers, check box.

Multiple
Yes

Projects that improve crossing of multiple regional bicycle barriers receive bonus points (except Tier 1 & MRBBCs)
Measure B: Project Improvements
Currently, there are no north/south, and limited east/west ped-bike facilities north of Buerkle Road to the intersection of Hoffman/Highway 61 due to current land use designations, high traffic roadways (Buerkle Road, County Rd E, Hwy 61), and BNSF railway.

The project will provide a dedicated 12-foot off-road bituminous trail, ADA safety and access improvements, safety improvements, safe crossings, and underpasses to avoid at-grade ped-bike conflicts at County Rd E (18,300 ADT) and Hwy 61 (30,500 ADT). Safety improvements will be gained throughout the project such as safety fencing, pedestrian bridge facilities in the Willow Marsh area, minimization of at-grade crossings (two signalized, one stop controlled proposed along entire 2.7-mile corridor), and a curb separated facility when adjacent to Hoffman Rd (2,000 ADT). Additional connections are proposed to connect to existing bike lanes on Buerkle Road and County Road E.

Buerkle Rd crossing improvements will be provided through the Purple Line BRT project (2024-2026) consisting of a new signalized crossing, safe connections to existing bike lanes, and safe crossing over the BNSF tracks. Ramsey County will also assess curb bump outs, signage, striping, and high visibility markings/beacons at the Scheuneman Road at-grade crossing. The project has been designed to complement Purple Line BRT improvements, including its Hoffman Rd/Hwy 61/White Bear Ave intersection reconstruction, ADA access/safety improvements for access to other local trails to the east. Other local sidewalk connections to station stops will be provided through the Purple Line project at County Road E and at Cedar Avenue.
These trail improvements are critical for many reasons. At Highway 61, there are only shoulders, which do not provide safe pedestrian and bicycle passage. In the last 10 years, there have been 10 ped-bike crashes on or near Hwy 61, showing a need for safe, separated pedestrian and bike facilities where there are none. Two crashes involved serious injuries, seven involved minor or suspected injuries, and one was property damage only. Crash data is included as an attachment to this application. By providing a separated, off-road trail, the project will reduce pedestrians and bicyclists travelling on high ADT roadways. Rates of injury and death to people walking and biking in Ramsey County are notably higher than other parts of Minnesota. Ramsey County has the highest estimated pedestrian fatality rate, and the second highest serious injury rate of bicyclists. 40% of all crash fatalities are pedestrians, which is four times the state average.
The trail extension will provide a multimodal facility that does not exist today and fills a gap in Regional RBTN and National USBR 41 bike networks. This trail project will increase multimodal access to the Metro Transit bus Route 265, Purple Line BRT stations, regional and local trail facilities, and adjacent neighborhoods-business. The project will extend the Bruce Vento trail (RBTN Tier 1; 491,514 trail users in 2019) 2.7 miles and provide connections to the Highway 96 Regional Trail (RBTN Tier 1; 356,456 trail users in 2019), the Lakes Link Regional Trail (RBTN Tier 2; 400,352 trail users in 2019), and the planned South Shore Boulevard Trail (RBTN Tier 1, construction planned for 2022). In addition, the trail will connect populations near the southern Saint Paul segment of the existing Bruce Vento Trail which extends through highly urban and concentrated areas of poverty including the Gateway State Trail making it a regionally important connection that will directly benefit diverse populations regionally.

The project also removes barriers to multiple activity centers via existing trails/facilities, including large commercial/office areas along Buerkle Rd; Maplewood Mall Transit Center via the highly used existing segment south of Buerkle Rd; TCO Sports Garden (1/4-mile west walking distance at County Rd E); South Shore Boulevard Trail (1/2-mile east of north terminus), and terminates within a ¼ mile of the Hwy 96 Regional Trail and Lakes Link Regional Trail (Aka. Lake Avenue Trail in White Bear Lake), for access to critical east-west corridors. By providing connection to the Purple Line BRT, residents will be able to access downtown St. Paul via a combination of the Bruce Vento Trail and the Purple Line BRT. Trail users be able to utilize the Bruce Vento Regional Trail to Rush Line BRT station stops that are planned directly adjacent to the planned trail at Buerkle Rd,
Co Rd E & Hwy 61, Cedar Ave & Hwy 61, and Whitaker St. By providing this critical bike/pedestrian connection, the linked multimodal corridors of Purple Line and Bruce Vento Trail will have safety and access improvements that benefits all users - directly within the project area and regionally.

In addition, planning for future phases is currently underway with White Bear Lake and White Bear Township to extend the trail north of the northern terminus of this project for connection to County Road J and Hardwood Creek Trail in Washington County.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

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

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

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1. Public Involvement (20 Percent of Points)

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

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

Yes

100%

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

50%

At least online/mail outreach effort specific to this project with the general public has been used to help identify the project need.
50%

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

25%

No outreach has led to the selection of this project.

0%

Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.
Engagement activities were completed through a public, stakeholder, and agency involvement process over the course of several years from 2015-2020. Engagement tactics included open houses, popup events, web site, social media, and fliers provided to schools, churches, libraries and local businesses and organizations. In 2015, multiple engagement events were conducted for the Ramsey County Bike and Pedestrian Plan. In 2016, two trail project-specific open houses invited residents and businesses along the route to provide input on the alignment. Three interactive workshops were held in 2018 - 2020 to allow the community to influence details of the trail project and master plan amendment in addition to a 30-day public review of the master plan amendment.

Open houses were advertised through a variety of online platforms, direct mailings and were shared by cities, local advocacy groups, and community organizations. Local businesses including schools and libraries near the trail were directly engaged and provided flyers. During the open house staff were available for one-on-one discussion and layouts were provided for attendees to provide comments. In addition to public open houses, Ramsey County convened 5 meetings of municipal stakeholder agencies related to the project.

As part of Purple Line BRT, a series of engagement events were held on the Bruce Vento Trail to educate and solicit feedback on the future relationship between the transit corridor and the multimodal trail. Engagement during the summer of 2019 helped develop a Visioning Framework to guide the design of Ramsey County rail ROW and the Bruce Vento trail area.

Due to the proposed use of railroad ROW along several segments of the project, Ramsey County conducted several meetings with BNSF and
Minnesota Commercial staff to discuss the project, review details of the layout and obtain feedback on railroad criteria to obtain the necessary permits to construct and operate the trail. The current layout incorporates design criteria and feedback from railroad engagement process, including location of the trail at least 50 feet from track centerline.

Comments from engagement were supportive of the trail and its potential to connect to other existing and proposed trail facilities, and the Purple Line BRT. Engagement also established the desire to eventually connect the length of the trail all the way to Co Rd J and the Hardwood Creek Trail in Washington County. The overall connection to the greater St. Paul was frequently mentioned by stakeholders as a major advantage of the trail extension.

(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.

Yes

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

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

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

100%

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

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)

100%

Signature Page

1649173892350_railway coordination letter.pdf

Please upload attachment in PDF form.

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

Yes

50%

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

0%

---

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): $7,000,000.00

Enter Amount of the Noise Walls: $0.00

Total Project Cost subtract the amount of the noise walls: $7,000,000.00

Points Awarded in Previous Criteria

Cost Effectiveness $0.00

---

Other Attachments
<table>
<thead>
<tr>
<th>File Name</th>
<th>Description</th>
<th>File Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce Vento Regional Trail Project Photo.pdf</td>
<td>1. Summary - Existing Conditions Photo</td>
<td>2.1 MB</td>
</tr>
<tr>
<td>Bruce Vento Trail Crash Data 2010-2022.pdf</td>
<td>4. Other - Bruce Vento Crash Data</td>
<td>3.1 MB</td>
</tr>
<tr>
<td>BVT_AffordableHousing.pdf</td>
<td>2. Maps - Affordable Housing Map</td>
<td>263 KB</td>
</tr>
<tr>
<td>Letter of support - Ramsey County Master Plan Amendment Resolution.pdf</td>
<td>3. Coordination - Letter of Support - RC Board Resolution</td>
<td>162 KB</td>
</tr>
<tr>
<td>Phase 1 Bruce Vento - Development Graphic.pdf</td>
<td>2. Maps - Development Graphic</td>
<td>16.1 MB</td>
</tr>
<tr>
<td>Phase 1 Bruce Vento Regional Trail Project Summary - 2022 Regional Solicitation.pdf</td>
<td>1. Summary - One-Page Project Summary</td>
<td>367 KB</td>
</tr>
<tr>
<td>railway coordination letter.pdf</td>
<td>3. Coordination - BNSF Railway Letter</td>
<td>125 KB</td>
</tr>
<tr>
<td>Transit Connections Map.pdf</td>
<td>2. Maps - Transit Connection Map</td>
<td>4.2 MB</td>
</tr>
</tbody>
</table>
Ramsey County Parks and Recreation Department

Transition Plan
November 30, 2015

Scott Yonke
Director of Planning and Development
Ramsey County Parks and Recreation Department
2015 North Van Dyke Street
Maplewood, MN  55109-3796

Dear Scott:

Please accept this letter as the introduction to our final report to the Ramsey County Parks and Recreation Department, in regard to our access audit of Department buildings and sites.

Authority

Title II of the Americans with Disabilities Act (42 USC 12131) prohibits more than 89,000 units of state and local government, such as the Ramsey County Parks and Recreation Department from discrimination on the basis of disability in the delivery of programs and services. The definition of programs and services is broad and includes public parks, recreation programs, and the many opportunities made available for the enjoyment of your residents by the Department.

The Department of Justice (DOJ) issued an amended implementing regulation for title II, which became effective on March 15, 2011. This supplemented the regulation issued January 26, 1992. The DOJ regulation is integral to this audit and can be found at 28 CFR Part 35. The amended regulations were anticipated for quite a few years.

Title II requirements that come into play in our work for the Department include:

- section 35.105 self evaluation;
- the section 35.133 maintenance requirement;
- the section 35.150 program access test regarding existing sites;
- the section 35.151 requirements for new facilities and alterations to old facilities, and
- the section 35.163 requirements regarding building signage.
Final and Enforceable Regulations…and Final Guidelines

Regarding parks and recreation site and facility design, two sets of federal guidelines were applied to the Department access audit. One is the Americans with Disabilities Act Accessibility Guidelines, also known as ADAAG.

Published by the US Department of Justice (DOJ) on July 26, 1991 as Appendix A to 28 CFR Part 36, this final and enforceable regulation is now known as the 1991 Standards. This older Standard adequately addresses entries, showers, curb cuts, doors, service counters, ramps, decks, and other typical building elements.

On September 14, 2010 the DOJ published the 2010 Standards for Accessible Design. As these Standards were already available as a final guideline, we have long used this as our guide for an access audit. It addresses many recreation environments.

The US Access Board developed the 2010 Standards, which include requirements for playgrounds, fishing areas, boating areas, and more. This process started in 1993 and lasted for almost 20 years.

It is important to know that there is not yet a final standard for some Ramsey County assets. Still pending are standards for trails, picnic areas, campsites, viewing areas, and outdoor constructed elements such as grills. Where we encountered those assets we used the most recent work of the US Access Board to guide our evaluation. The Access Board, a federal agency, develops all access guidelines.

We cite to the 2010 Standards in our work. Where Minnesota access standards are more stringent, we cite to those. Additionally, as a smart practice we cite to the work of the US Access Board.

Approach and Analysis

Section 35.150 of the DOJ regulation implementing the ADA makes it clear that not necessarily every facility or site of the same type must be made accessible. We interpret this requirement to mean that with similar sites, such as play areas, the Department has some flexibility in determining which site it will make accessible.

However, for unique sites, such as Battle Creek Water Works, the Department has no choice with regard to which site it will make accessible, as there is only one such site. Where we know the Department plans work at certain sites, we have tried to incorporate that in our phased retrofit recommendations.

In an access audit, it is critical to measure each feature of each element of each site, as we have done here. Where we found a variance from access requirements or a smart practice variance, we have digital images so that the Department will better understand the variance.
Our scope of work for the Department also included the identification of a severity rating for retrofit work, as well as facility diagrams. The diagrams don’t address every deficit, but do illustrate the correction to be made.

An additional issue is whether a building has been altered since 1992. If so, there is little flexibility in how access requirements are applied to that site. That site or building should have fully complied with the 1991 Standards.

Settlement agreements by federal agencies (Justice, Interior, and Education) adhere to what are now the 2010 Standards. While these were effective for new construction on March 15, 2012, the 2010 Standards are to be used in evaluating recreation sites now in existence.

Report Format

Our audit included an examination of 41 facilities or parks. Each facility or park has its own section in our final report. Our Conclusion section is found at the end of the site reports.

Here is an order of the reports:

1. This cover letter;
2. 41 site reports from the Aldrich Arena to White Bear Lake County Park;
3. Conclusion report with summarized recommendations;
4. A phased transition plan with cost references as well as severity rating; and
5. Program access grid and maps for playgrounds, ball fields, sports fields and picnic areas.

The Department is receiving one hard copy in six binders. The first and second binders have all the final site reports, the program access grid and maps, and the transition plan grid. The remaining four binders have all of the checklists.

Finally, you'll receive a user name and password to our FTP site, where all reports, checklists, and images are available for Department employees and contractors as you wish. Once downloaded; on your screen, the text in the reports section includes a hyperlink to the checklist and the photo being referenced. The checklists also have a hyperlink to the same access deficit images

Title II Program Access

As mentioned above, the title II program access test in 35.150(b) gives the Department great flexibility in making existing facilities and sites that have similar features accessible. For example, we counted 20, 5 to 12 play areas. Not all of those sites must be accessible.
The program access test requires the Department to make the “program of play areas” accessible to all Department residents. Our goal was then to have at least 1 of every 3 five to twelve play areas accessible, or able to be made accessible. Here is a summary of the results.

There are 20 playgrounds for children aged 5 to 12. Three are currently accessible. The Department could create access to four more without much difficulty and leave the remaining 13 playgrounds “as is” and inaccessible, until those are renovated due to age or for other purposes.

This exceeds the ratio we recommend of 1 of every 3 recurring sites.

Where we believe a site should be made accessible to comply with the program access test, leading into the recommended corrective work our reports will use language like that below:

"Recommendations (Long Lake Regional Park is designated with an accessible 5 to 12 play area so 1.4.1 through 1.4.6 is integral to compliance with title II program access test):"

Conversely, where we believe a site need not be made accessible, leading into the recommended corrective work our reports will use language like that below:

“Recommendations (in the alternative to 1.3.1, leave as is and designate other Department play areas as accessible):"

We applied this concept to the duplicated elements of volleyball, tennis, basketball, baseball, athletic fields and picnic areas. We believe our recommendations to you make these “programs” accessible to Department residents.

How to Use this Information

First, read this final report cover letter to Scott Yonke. It describes the concepts and requirements invoked throughout the reports.

Second, read the Conclusion section. This is a big picture review of the issues and solutions we recommend.

Third, read the 41 site reports. Use your computer and you’ll have instant access to the report for that site, the images of access deficits, and the checklists. Resist the urge to visit these first…do so at the risk of being buried in detail.

Fourth, use your knowledge of the sites and of your staffs’ expertise. You know Ramsey County Parks and Recreation Department sites very well, and you know the staff better than we do. Blend in what you know with what we recommend in the report. There is always another way to solve an access problem…perhaps you’ll be the one to see that solution.
Conclusion

The final reports identify, we believe, every access deficit at the sites, as required by section 35.105 of title II. We have, in our approach to program access, made recommendations so that not every access deficit needs to be corrected.

Our recommendations are flexible enough that later modifications, should your own plans change, can occur. We worked well with all Ramsey County Parks and Recreation Department staff, but owe a special thanks to you, Scott, for your assistance.

The Ramsey County Parks and Recreation Department has shown its commitment to making parks and recreation available for all in the community, including people with disabilities. Addressing our recommendations will assure that those services are available to Ramsey County residents, including those with disabilities.

If there are any questions, please call me at 224/293-6451 or on my cell at 847/363-9384.

Sincerely,

John N. McGovern, J.D.
President

JNM/RCPRD COVER LETTER 201501
<table>
<thead>
<tr>
<th>Summary</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>CO</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldrich Arena</td>
<td>$279,888.50</td>
<td></td>
<td></td>
<td></td>
<td>$279,888.50</td>
</tr>
<tr>
<td>Bald Eagle-Otter Lakes Regional Park</td>
<td>$33,219.75</td>
<td>$21,035.00</td>
<td></td>
<td></td>
<td>$54,254.75</td>
</tr>
<tr>
<td>Battle Creek Regional Park</td>
<td>$115,722.50</td>
<td>$39,901.25</td>
<td>$0</td>
<td></td>
<td>$155,623.75</td>
</tr>
<tr>
<td>Battle Creek Waterworks</td>
<td>$54,126.75</td>
<td>$9,100.00</td>
<td></td>
<td></td>
<td>$63,226.75</td>
</tr>
<tr>
<td>Beaver Lake County Park</td>
<td>$11,152.50</td>
<td>$1,695.00</td>
<td>$1,792.50</td>
<td>$65,425.00</td>
<td>$80,065.00</td>
</tr>
<tr>
<td>Birch Lake Regional Trail</td>
<td>$3,892.50</td>
<td></td>
<td></td>
<td></td>
<td>$3,892.50</td>
</tr>
<tr>
<td>Bruce Vento Regional Trail</td>
<td>$10,631.25</td>
<td></td>
<td></td>
<td></td>
<td>$10,631.25</td>
</tr>
<tr>
<td>Charles M. Schultz - Highland Arena</td>
<td>$155,652.50</td>
<td></td>
<td></td>
<td></td>
<td>$155,652.50</td>
</tr>
<tr>
<td>Goodrich Golf Course</td>
<td></td>
<td></td>
<td></td>
<td>$68,146.50</td>
<td>$68,146.50</td>
</tr>
<tr>
<td>Gustafson-Phalen Arena</td>
<td></td>
<td></td>
<td></td>
<td>$125,808.50</td>
<td>$125,808.50</td>
</tr>
<tr>
<td>Harding Arena</td>
<td></td>
<td></td>
<td></td>
<td>$125,958.75</td>
<td>$125,958.75</td>
</tr>
<tr>
<td>Highway 96 Regional Trail</td>
<td></td>
<td></td>
<td></td>
<td>$5,092.50</td>
<td>$5,092.50</td>
</tr>
<tr>
<td>Island Lake County Park</td>
<td>$67,214.25</td>
<td>$27,006.25</td>
<td>$7,400.00</td>
<td>$14,400.00</td>
<td>$116,020.50</td>
</tr>
<tr>
<td>Island Lake Golf Course</td>
<td></td>
<td></td>
<td></td>
<td>$34,274.75</td>
<td>$34,274.75</td>
</tr>
<tr>
<td>Keller Golf Course</td>
<td>$121,099.50</td>
<td></td>
<td>$49,161.25</td>
<td></td>
<td>$170,260.75</td>
</tr>
<tr>
<td>Keller Regional Park</td>
<td></td>
<td></td>
<td></td>
<td>$20,425.00</td>
<td>$205,966.25</td>
</tr>
<tr>
<td>Ken Yachel - West Side Arena</td>
<td></td>
<td></td>
<td></td>
<td>$78,631.00</td>
<td>$78,631.00</td>
</tr>
<tr>
<td>Lake Gervais County Park</td>
<td>$46,695.00</td>
<td>$4,985.00</td>
<td>$7,472.50</td>
<td>$56,618.75</td>
<td>$115,771.25</td>
</tr>
<tr>
<td>Lake Josephine County Park</td>
<td>$36,243.50</td>
<td>$15,652.50</td>
<td>$6,687.50</td>
<td></td>
<td>$58,583.50</td>
</tr>
<tr>
<td>Lake McCarrons County Park</td>
<td>$28,845.00</td>
<td>$9,217.50</td>
<td>$9,072.50</td>
<td>$10,700.00</td>
<td>$57,835.00</td>
</tr>
<tr>
<td>Lake Owasso County Park</td>
<td>$17,472.50</td>
<td>$32,850.00</td>
<td></td>
<td>$25,637.50</td>
<td>$75,960.00</td>
</tr>
<tr>
<td>Long Lake Regional Park</td>
<td>$182,118.25</td>
<td>$20,218.75</td>
<td></td>
<td>$1,460.00</td>
<td>$203,797.00</td>
</tr>
</tbody>
</table>
## RAMSEY COUNTY PARKS AND RECREATION DEPARTMENT

### TRANSITION PLAN SUMMARY

*December 16, 2015*

<table>
<thead>
<tr>
<th>Summary</th>
<th>Phase</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>CO</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Name</td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Manitou Ridge Golf Course</td>
<td></td>
<td>68,263.25</td>
<td></td>
<td>30,089.50</td>
<td></td>
<td>98,352.75</td>
</tr>
<tr>
<td>Oscar Johnson Arena</td>
<td></td>
<td></td>
<td></td>
<td>87,325.00</td>
<td></td>
<td>87,325.00</td>
</tr>
<tr>
<td>Parks and Recreation HQ</td>
<td></td>
<td></td>
<td>266,283.75</td>
<td></td>
<td>266,283.75</td>
<td></td>
</tr>
<tr>
<td>Pleasant Arena</td>
<td></td>
<td></td>
<td>83,005.75</td>
<td></td>
<td>83,005.75</td>
<td></td>
</tr>
<tr>
<td>Poplar Lake County Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Rice Creek North Regional Trail</td>
<td></td>
<td></td>
<td>13,472.50</td>
<td>6,068.75</td>
<td>19,541.25</td>
<td></td>
</tr>
<tr>
<td>Rice Creek Water Trail</td>
<td></td>
<td></td>
<td></td>
<td>8,335.00</td>
<td></td>
<td>8,335.00</td>
</tr>
<tr>
<td>Rice Creek West Regional Trail</td>
<td></td>
<td></td>
<td>8,081.25</td>
<td></td>
<td>8,081.25</td>
<td></td>
</tr>
<tr>
<td>Shoreview Arena</td>
<td></td>
<td>$ 92,440.25</td>
<td></td>
<td></td>
<td>92,440.25</td>
<td></td>
</tr>
<tr>
<td>Tamarack Nature Center Regional Park</td>
<td></td>
<td>111,836.75</td>
<td>57,348.75</td>
<td>13,597.50</td>
<td>182,783.00</td>
<td></td>
</tr>
<tr>
<td>The Ponds at Battle Creek Golf Course</td>
<td></td>
<td></td>
<td></td>
<td>58,107.75</td>
<td></td>
<td>58,107.75</td>
</tr>
<tr>
<td>Tony Schmidt Regional Park</td>
<td></td>
<td>95,066.50</td>
<td>28,708.00</td>
<td>174,968.75</td>
<td>298,743.25</td>
<td></td>
</tr>
<tr>
<td>Trout Brook Regional Trail</td>
<td></td>
<td></td>
<td>13,935.00</td>
<td></td>
<td>13,935.00</td>
<td></td>
</tr>
<tr>
<td>Turtle Lake County Park</td>
<td></td>
<td>24,580.00</td>
<td>800.00</td>
<td>27,825.00</td>
<td>53,205.00</td>
<td></td>
</tr>
<tr>
<td>Vadnais Sports Center</td>
<td></td>
<td>$ 199,460.75</td>
<td></td>
<td></td>
<td>199,460.75</td>
<td></td>
</tr>
<tr>
<td>Vadnais-Snail Lakes Regional Park</td>
<td></td>
<td>96,787.75</td>
<td>19,676.25</td>
<td>8,168.75</td>
<td>124,632.75</td>
<td></td>
</tr>
<tr>
<td>Vadnais-Sucker Lakes Regional Park</td>
<td></td>
<td>53,192.50</td>
<td>13,560.00</td>
<td>17,400.00</td>
<td>84,152.50</td>
<td></td>
</tr>
<tr>
<td>White Bear Arena</td>
<td></td>
<td></td>
<td>87,522.25</td>
<td></td>
<td>87,522.25</td>
<td></td>
</tr>
<tr>
<td>White Bear Lake County Park</td>
<td></td>
<td></td>
<td>83,335.49</td>
<td></td>
<td>83,335.49</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>$ 1,149,007.50</td>
<td>$ 935,441.50</td>
<td>$ 717,889.25</td>
<td>$ 1,292,245.74</td>
<td>$ 4,094,583.99</td>
</tr>
</tbody>
</table>
INTRODUCTION
In 2015, the Ramsey County Parks and Recreation department contracted with Recreation Accessibility Consultants, LLC (RAC) to assess compliancy with the American Disability Act (ADA) across Parks & Recreation areas and facilities. RAC identified items across all Parks & Recreation facilities that do not comply with the 2010 ADA Standards, and compiled this information into an extensive Transition Plan for Parks & Recreation. The Transition Plan details all the noncompliant items in each Parks & Recreation site, with the corrective action required, recommended priority level, and estimated repair costs.

Due to the magnitude and estimated cost of the required repairs (over 5,000 noncompliant items were listed, with a total estimated repair cost of nearly $5 million), Parks & Recreation created an ADA Implementation Team (ADAIT) to assist the department in developing a medium-term plan to implement the ADA corrections. The ADAIT, consists of Parks & Recreation staff, a Parks & Recreation Commission member, and individuals from various local ADA advocacy groups and organizations. This Implementation Plan is the product of that group’s work.

ASSESSING PROGRESS
Overall, this ADA Implementation Plan strives to:
- Provide direction on the utilization of available 2018-19 ADA funding
- Lay out medium-term plan for funding and implementing corrections not included in 2018-19 plan
- Support the department’s efforts in requesting funding in future budget cycles
- Provide a concise document for residents to reference to understand the department’s goals and strategies for this project

Currently, the ADA Implementation Plan provides a general guide for Parks & Recreation as they address ADA items. There will be quarterly meetings to update the ADAIT and important stakeholders on the progress of ADA implementation, and maintain Parks & Recreation’s accountability. The plan will also be updated every two years to reflect progress of the implementation plan, and any changes to funding and ADA standards in the future that may affect this plan.

SOURCES OF FUNDING
Maintenance of County parks, ice arenas, and golf courses is funded through the County, through its Comprehensive Asset Management Preservation Program (CCAMP) and Capital Improvement Program (CIP). Regional park maintenance is funded through the Metropolitan Council. For the 2018-2019 budget cycle, Parks and Recreation has requested and received $100,000 per year from both the CIP program and the Metropolitan County for ADA implementation. Parks and Recreation will continue to request this funding for future budget cycles, but this funding is not guaranteed to continue beyond 2019. The implementation of this Transition Plan will require significant funding to complete. Parks and Recreation will make every attempt to secure this funding, in addition to other project/grant opportunities that may become available, but the priorities set forth in this Plan may need to be adjusted based on availability of funding.

FACILITY CATEGORIES
Parks & Recreation facilities can be broken down into the following four categories:
1. Ice Arenas
The County ice arena system is in the midst of a medium-term capital plan to modernize the facilities in compliance with current and future codes and regulation. ADA items will be addressed as part of these larger projects. Three projects are funded for the 2018-19 budget cycle: Aldrich Arena, Shoreview Arena, and White Bear arena. These projects include funding to address ADA issues.

2. Golf Courses
   - Recommendations regarding golf courses will be on hold until a golf study is released in late 2018.
   - The report will guide the capital improvement plan for golf courses and guide ADA priorities.

3. Administrative Buildings
   - ADA items will be addressed when buildings receive funding for improvement/redevelopment projects.
   - Parks and Recreation requested CIP funding for 2018-19 for a significant remodel of the Parks administration building, which included budget for ADA items. This project was not funded. Parks and Recreation will request funding again for the 2020-21 cycle.
   - Tamarack Nature Center is in the midst of a multi-phase 15-year campus buildout project. The final phase of construction is anticipated to begin in 2020-21 and will include funding for ADA items.

4. County and Regional Parks
   - Parks scheduled to be redeveloped or re-master planned by 2020 will incorporate ADA corrections into project plans and budgets.
   - For parks or areas that are not planned to be addressed for two years or more, the implementation plan will detail the strategy for corrections.

IMPLEMENTATION PROCESS & TIMELINE

The implementation process consists of two phases:
   - Phase 1: ADA implementation of physical aspects.
   - Phase 2: ADA implementation of programming aspects.

Phase 1 of the implementation process is designed to make the built environment at Parks & Recreation facilities accessible. This would include areas such as parking lots, sidewalks, entrances, vertical transportation (elevators), restrooms, spectator areas, recreation areas, and others.

Phase 2 will focus on improving the accessibility of the programs and recreation services those offered by Parks & Recreation, such as summer camps or sport recreational activities. As Phase 1 items are completed, Phase 2 programming will be addressed when practical. Parks & Rec will not wait for all of Phase 1 or for all ADA items, regardless of priority tier, to be fully completed because we understand that this process will span several years. Phase 2 programming will be rolled in as Phase 1 items are addressed, to ensure that some programming aspects are also ADA compliant throughout the implementation process.

The following are current or future projects that will include ADA corrections:
   - Lake Owasso
   - Aldrich Ice Arena
   - Keller Golf Course Driving Range
   - Shoreview Ice Arena
   - White Bear Lake Ice Arena
As an example, Lake Owasso is scheduled to be 100% ADA compliant by the end of September, 2018. This park will begin Phase 2 programming that will serve to model Phase 2 implementation at other parks.

For facilities not included in current or upcoming projects, the ADAIT recommends prioritizing county and regional parks for utilizing existing ADA specific funding. The other facility categories can be addressed through current and future projects (arenas, administration) or once long-term plans become clearer (golf).

Within individual parks, the ADAIT determined that the department’s focus in implementing ADA corrections should mirror the experience of a user who has disabilities—i.e. from the parking lot to sidewalks/access routes to the shelter/restroom to the picnic areas to recreational areas such as beaches, playgrounds, fishing piers. Three tiers will be used to prioritize ADA corrections within individual parks:

- Tier 1: Parking and access/routes
- Tier 2: Bathrooms and picnic areas
- Tier 3: Recreation areas

There is an additional fourth tier noted in the ADA Transition Plan. Tier 4 items are considered best practices, and will not be considered for the time being.

Following the tiers of priority, the ADAIT decided to begin addressing ADA items at the following facilities:

1. Lake Gervais County Park
2. Lake Josephine County Park
3. Turtle Lake County Park
4. White Bear County Park
5. Bald Eagle-Otter Lake Regional Park
6. Vadnais-Snail Lakes Regional Park
7. Vadnais-Sucker Lakes Regional Park

The four County Parks were selected since there are no immediate plans to re-develop or re-master plan these spaces in the near future. The selected Regional Parks were selected because there is existing funding to allocate to them, and are areas that are not currently being re-master planned.

Within each park, it will be a good rule to follow the tier 1, 2 and 3 timeline. If it makes economical and/or logistical sense, some tier 2 or 3 aspects might be completed at a particular park or across all parks.

Appendix A contains a general implementation strategy for each Parks & Recreation facility. The end goal is to have all Ramsey County Parks & Recreations facilities to be 100% accessible. The implementation process will require years of planning and collaboration across various organizations and agencies, as well as whether the County receives adequate funding to fold in all the changes and ADA items we would like to implement. Parks & Recreation will continue to address ADA items at Parks facilities, following the three-tier approach, and we will roll in additional ADA items as Parks & Recreation facilities are subject to re-master planning/redevelopment, or makes economical/logistical sense to address some tiers at the same time.

If ADA standards change, Parks & Recreation will continue to update this plan accordingly and adapt to such changes, given the budgets and resources available.
Project to RBTN
Orientation

Results

Project IN TIER 1
Bicycle Transport Corridor.
Results

Within ONE Mile of project:
Total Population: 25819
Total Employment: 21832
Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 1238

Project located in census tracts that are BELOW the regional average for population in poverty or population of color.
MINNESOTA DEPARTMENT OF TRANSPORTATION
RAMSEY COUNTY PARKS AND RECREATION DEPARTMENT

STATE AID PROJECT NUMBER xxx-xxxx-xxxx

CONSTRUCTION PLAN FOR...GRADING, AGGREGATE BASE, STORM SEWER, BLITZMANN TRAIL, BLITZMANN MILL & OVERLAY, AND ADA IMPROVEMENTS.
LOCATED ON JEFFERSON ROAD FROM...TO...IN WHITE BEAR LAKE...

STATE AID PROJ. NO. xxx-xxxx-xxxx
CROSS LENGTH: 2343.28 FEET, 0.432 MILES
BRIDGES-LX: 320.00 FEET, 0.020 MILES
EXCEPTION LENGTH: 0.00 FEET, 0.000 MILES
NET LENGTH: 2343.28 FEET, 0.432 MILES

END SAP xxx-xxxx
BRUCE VENTO TRAIL STA. 178494.77

BEGIN SAP xxx-xxxx
BRUCE VENTO TRAIL STA. 50+41.68

SAP xxx-xxxx-xxxx

Kimley-Horn

STATE/LOCAL FUNDS
GOVING SPECIFICATIONS

THE GUIDELINES OF CI/ASCE 38-2, ENTITLED...THERESISTANCE REQUIREMENTS FOR CONSTRUCTION AND DO NOT NOTIFY THE CIVIL ENGINEER OF ANY HAZARDS.

INDEX

1. TITLE SHEET
2. GENERAL LAYOUT
3. ESTIMATED QUANTITIES
4. SOIL & CONSTRUCTION NOTES
5-9. INDEX MAPS
10-23. STANDARD PLAN SHEETS
24-26. ALLOCATION PLAN
27-28. ALLOCATION INDICATION
29-33. UTILITY PLAN AND TOPOGRAPHIC
34-36. REMOVAL PLAN
37-48. CONSTRUCTION PLAN & PROFILE
49-53. PIPELINE PLAN
54. INTERSECTION DETAIL PLAN
55-58. RETURN WALL PLAN & PROFILE
59. RETURN WALL DETAILS
60-64. SOIL WALL PLAN
65-74. DRAINAGE PLAN AND PROFILE
75-16. DRAINAGE DETAILS
17. CONTROLL PLAN
76-80. STORM WATER POLLUTION PROTECTION PLAN
81-88. TRAIL NAME AND LANDSCAPING PROFILE
89-94. DRAINAGE CONTROL AND LANDSCAPING PLAN
95. CROSS SECTION LAYOUT
96-132. CROSS SECTIONS

THIS PLAN CONTAINS 32 SHEETS

PRINT NAME: 65-74
STATE/LOCAL FUNDS: 55-58
DATE: 2019
SIGNATURE: 2019

RECOMMENDED FOR APPROVAL
PROJECT SUPERVISOR
COUNTY OF RAMSEY DISTRICT

RECOMMENDED FOR APPROVAL
SAP xxx-xxxx-xxxx

SHEET NO. 1 OF 95 SHEETS
BEGIN S.P. XXXX-XX (BRUCE VENTO TRAIL)
BEGIN CONSTRUCTION
STA. 50+12.17

END S.P. XXXX-XX (BRUCE VENTO TRAIL)
END CONSTRUCTION
STA. 178+54.77
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ITEM DESCRIPTION</th>
<th>UNIT</th>
<th>QUANTITY</th>
<th>TOTAL EST. QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL EST. COST</th>
<th>LOCAL FUND</th>
<th>ESTIMATED QUANTITY</th>
<th>TOTAL EST. QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL EST. COST</th>
<th>LOCAL FUND</th>
<th>ESTIMATED QUANTITY</th>
<th>TOTAL EST. QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL EST. COST</th>
<th>LOCAL FUND</th>
<th>ESTIMATED QUANTITY</th>
<th>TOTAL EST. QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL EST. COST</th>
<th>LOCAL FUND</th>
<th>ESTIMATED QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>011-010</td>
<td>CONCREDT OIL BORROW</td>
<td>TON</td>
<td>500</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>021-010</td>
<td>MOBILIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>015-010</td>
<td>PROGRESSIVE PAVING MIXER</td>
<td>TON</td>
<td>2000</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>023-030</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-010</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>1200</td>
<td>1200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-020</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-030</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>720</td>
<td>720</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-040</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>600</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-050</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>480</td>
<td>480</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-060</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>360</td>
<td>360</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-070</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>240</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-080</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>120</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-090</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>60</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024-100</td>
<td>24&quot; OF الأسمنت PAVEMENT</td>
<td>SQ FT</td>
<td>30</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-010</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-020</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-030</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>25</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-040</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-050</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-060</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-070</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>033-080</td>
<td>WATER MAIN DUCTILE IRON FITTINGS</td>
<td>TON</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**STATEMENT OF ESTIMATED QUANTITIES**

BRUCE VENTO TRAIL

NON-FEDERAL AID PARTICIPATING

FEDERAL AID PARTICIPATING

STATE OF MINNESOTA

LICENSED PROFESSIONAL ENGINEER

DESIGNED BY: KJC

DRAWM BY: KJC

CHECKED BY: GSB

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:

Printed Name: Bruce Vento Trail

Date:
SOILS AND CONSTRUCTION NOTES

1. Strip and stockpile all existing topsoil material in areas to be disturbed by construction and
   reuse. Payment for striping is excluded in excavation-common.

2. Construction slopes must be covered with 1.5" of topsoil material. In the absence of topsoil,
   refer to Subgrade Zoning for grading requirements.

3. Any existing vegetation not utilized on this project shall be the property of the owner and
   removed by the contractor in accordance with common easement.

4. No extra payment will be made for temporary stockpiling of excavation and embankment material.

5. Any excavated materials not used on this project shall become the property of the contractor.
   Disposal of excavated material shall be in accordance with MNDOT Standard Specification 208.

6. Temporary and intermediate excavation limits and slopes are to be determined by the contractor.
   Existing groundline as depicted on the plans shall be considered the contractor's limits.

7. Grading is defined as the bottom of the proposed creative 5 basin. MNDOT standard spec 208-01.

8. When removing topsoil, full-depth stockpiles shall be made perpendicular to the roadway centerline.

9. Where matching to existing intersecting pavement structures, cut vertically to the bottom of the
   proposed grading. The bottom of the proposed grading shall be the bottom of the adjacent
   pavement, then rounded to the top of the adjacent pavement.

10. Where matching to existing roadways at the top edge of the proposed new construction cut edge
to the existing road edge. Where the top edge of the proposed grading is below the edge of the
    existing roadway, the contractor shall round the cutback to the top edge of the proposed
    grading.

11. Non-structural grading material shall consist of uniform select grading material.

12. Storm sewer connecting to manholes and catch basins shall be in accordance with MNDOT
    Standard Specification 208. Sediment and backfill shall consist of soil unless otherwise directed by
    the contractor.

13. Where usable material is encountered during common or subgrade excavation, the contractor
    shall preserve usable material found even when per the plans. All excavated topsoil shall be
    removed and placed in stockpile.


15. The following standard plates are approved by the Federal Highway Administration.

16. The following standard plates are approved by the Federal Highway Administration.

17. The following standard plates are approved by the Federal Highway Administration.

18. The following standard plates are approved by the Federal Highway Administration.

19. The following standard plates are approved by the Federal Highway Administration.

20. The following standard plates are approved by the Federal Highway Administration.

21. The following standard plates are approved by the Federal Highway Administration.

22. The following standard plates are approved by the Federal Highway Administration.

23. The following standard plates are approved by the Federal Highway Administration.

24. The following standard plates are approved by the Federal Highway Administration.

25. The following standard plates are approved by the Federal Highway Administration.

26. The following standard plates are approved by the Federal Highway Administration.

27. The following standard plates are approved by the Federal Highway Administration.

28. The following standard plates are approved by the Federal Highway Administration.

29. The following standard plates are approved by the Federal Highway Administration.

30. The following standard plates are approved by the Federal Highway Administration.

31. The following standard plates are approved by the Federal Highway Administration.

32. The following standard plates are approved by the Federal Highway Administration.

33. The following standard plates are approved by the Federal Highway Administration.

34. The following standard plates are approved by the Federal Highway Administration.

35. The following standard plates are approved by the Federal Highway Administration.

36. The following standard plates are approved by the Federal Highway Administration.

37. The following standard plates are approved by the Federal Highway Administration.

38. The following standard plates are approved by the Federal Highway Administration.

39. The following standard plates are approved by the Federal Highway Administration.

40. The following standard plates are approved by the Federal Highway Administration.

41. The following standard plates are approved by the Federal Highway Administration.

42. The following standard plates are approved by the Federal Highway Administration.

43. The following standard plates are approved by the Federal Highway Administration.

44. The following standard plates are approved by the Federal Highway Administration.

45. The following standard plates are approved by the Federal Highway Administration.

46. The following standard plates are approved by the Federal Highway Administration.

47. The following standard plates are approved by the Federal Highway Administration.

48. The following standard plates are approved by the Federal Highway Administration.

49. The following standard plates are approved by the Federal Highway Administration.

50. The following standard plates are approved by the Federal Highway Administration.

51. The following standard plates are approved by the Federal Highway Administration.

52. The following standard plates are approved by the Federal Highway Administration.

53. The following standard plates are approved by the Federal Highway Administration.

54. The following standard plates are approved by the Federal Highway Administration.

55. The following standard plates are approved by the Federal Highway Administration.

56. The following standard plates are approved by the Federal Highway Administration.

57. The following standard plates are approved by the Federal Highway Administration.

58. The following standard plates are approved by the Federal Highway Administration.

59. The following standard plates are approved by the Federal Highway Administration.

60. The following standard plates are approved by the Federal Highway Administration.

61. The following standard plates are approved by the Federal Highway Administration.

62. The following standard plates are approved by the Federal Highway Administration.

63. The following standard plates are approved by the Federal Highway Administration.

64. The following standard plates are approved by the Federal Highway Administration.

65. The following standard plates are approved by the Federal Highway Administration.

66. The following standard plates are approved by the Federal Highway Administration.

67. The following standard plates are approved by the Federal Highway Administration.

68. The following standard plates are approved by the Federal Highway Administration.

69. The following standard plates are approved by the Federal Highway Administration.

70. The following standard plates are approved by the Federal Highway Administration.

71. The following standard plates are approved by the Federal Highway Administration.

72. The following standard plates are approved by the Federal Highway Administration.

73. The following standard plates are approved by the Federal Highway Administration.

74. The following standard plates are approved by the Federal Highway Administration.

75. The following standard plates are approved by the Federal Highway Administration.

76. The following standard plates are approved by the Federal Highway Administration.

77. The following standard plates are approved by the Federal Highway Administration.

78. The following standard plates are approved by the Federal Highway Administration.

79. The following standard plates are approved by the Federal Highway Administration.

80. The following standard plates are approved by the Federal Highway Administration.

81. The following standard plates are approved by the Federal Highway Administration.

82. The following standard plates are approved by the Federal Highway Administration.

83. The following standard plates are approved by the Federal Highway Administration.

84. The following standard plates are approved by the Federal Highway Administration.

85. The following standard plates are approved by the Federal Highway Administration.

86. The following standard plates are approved by the Federal Highway Administration.

87. The following standard plates are approved by the Federal Highway Administration.

88. The following standard plates are approved by the Federal Highway Administration.

89. The following standard plates are approved by the Federal Highway Administration.

90. The following standard plates are approved by the Federal Highway Administration.

91. The following standard plates are approved by the Federal Highway Administration.

92. The following standard plates are approved by the Federal Highway Administration.

93. The following standard plates are approved by the Federal Highway Administration.

94. The following standard plates are approved by the Federal Highway Administration.

95. The following standard plates are approved by the Federal Highway Administration.
PROPOSED BRUCE VENTO TRAIL
STA. 50+12 TO STA. 57+20
STA. 58+90 TO STA. 65+50

REINFORCED SOIL SLOPE
STA. 52+40 TO 53+30
STA. 56+40 TO 57+40
SEE STANDARD PLANS FOR DETAILS.

6" TOPSOIL, SEED, AND FERTILIZER

INSET A

COMMON EMBANKMENT MATERIAL (QUALITY COMPACTION)

INSET A

COMMON EMBANKMENT MATERIAL (COMPACTED TO CODE STANDARD PROCTOR)

GRADE PROFILE

1.5% 100% STANDARD PROCTOR)

MATERIAL (COMPACTED TO

COMMON EMBANKMENT

1.5% GRADE PROFILE

6" TOPSOIL, SEED, AND FERTILIZER

6" TOPSOIL, SEED, AND FERTILIZER

VARIES

6" TOPSOIL, SEED, AND FERTILIZER

VARIES

6" TOPSOIL, SEED, AND FERTILIZER

VARIES

6" TOPSOIL, SEED, AND FERTILIZER

VARIES

6" TOPSOIL, SEED, AND FERTILIZER

VARIES

GENERAL NOTES:
1. MAXIMUM SLOPE OF 0.015 FOOT PER FOOT ON TRAIL.
2. UNLESS OTHERWISE SPECIFIED THE GRADING GRADE
   CROSS SLOPES SHALL BE THE SAME AS THE FINISHED
   GRADE.
3. SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION ON
   PLANTING, SEEDING, AND SODDING ADEQUATE TO TRAIL.
4. MODULAR RETAINING WALL DESIGN TO BE COMPLETED
   BY THE CONTRACTOR, SEE SPECIAL PROVISIONS.

PROPOSED BRUCE VENTO TRAIL
BRIDGE SECTION
STA. 57+30 TO STA. 58+80

SEE BRIDGE PLANS FOR ADDITIONAL DETAILS

PROPOSED TRAIL
STA. 65+50 TO STA. 71+00
STA. 80+00 TO STA. 90+00

VARIES 50' TO 90'

TRAFFIC ACCESS AGREEMENT LIMIT

MIN. 50' SEPARATION FROM TRACK

6" UNDERLAYER, 4" MODULAR BLOCK RETAINING WALL DESIGN TO BE

PLANTING, SEEDING, AND SODDING ADJACENT TO TRAIL.

SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION ON

PLANTING, SEEDING, AND SODDING ADJACENT TO TRAIL.

SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION ON

30" WIDE X 24" DEEP CONCRETE EDGE STRIP

10" RIVERBEND CONCRETE LEVELING PAD

60V-9322 WIRE FENCE DESIGN

SMALL RESTORATION ZONE

30" WIDE X 24" DEEP CONCRETE EDGE STRIP

10" RIVERBEND CONCRETE LEVELING PAD

60V-9322 WIRE FENCE DESIGN

SMALL RESTORATION ZONE
TYPICAL SECTIONS

PROPOSED BRUCE VENTO TRAIL

STA. 71+00 TO STA. 75+00
STA. 90+50 TO STA. 92+45
STA. 106+57 TO STA. 109+00
STA. 110+27 TO STA. 112+90

GENERAL NOTES:
1. Maximum slope of 0.05 foot per foot on trail.
2. Unless otherwise specified, the grading grade cross slopes shall be the same as the finished grade.
3. See landscaping plans for additional information on planting, seeding, and sodding adjacent to trail.
4. Modular block retaining wall design to be completed by the contractor.

1.5" TYPE 9.5 WEARING COURSE MIXTURE (SPWEA230B)
6.0" AGGREGATE BASE, CLASS 6 (CV)
3.0" TYPE 12.5 NON-WEARING COURSE MIX (SPNWB430B)
GRADING GRADE

TRADE ACCESS AGREEMENT LIMITS

EXISTING BITUMINOUS PAVEMENT

2.0" TYPE 12.5 WEARING COURSE MIXTURE (SPWEB440F)
6.0" AGGREGATE BASE, CLASS 6 (CV)
GRADING GRADE

INSET A

6" TOPSOIL, SEED, AND FERTILIZER

1.5" TYPE 9.5 WEARING COURSE MIXTURE (SPWEA230B)
1.5" TYPE 9.5 WEARING COURSE MIXTURE (SPWEA230B)
6.0" AGGREGATE BASE, CLASS 6 (CV)
GRADING GRADE

INSET A

6" TOPSOIL, SEED, AND FERTILIZER

INSET C

BNSF R.R.
PRIVATE PROPERTY
RAMSEY COUNTY

INSET B

INSET C

6" TOPSOIL, SEED, AND FERTILIZER

INSET C

PROPOSED BRUCE VENTO TRAIL

STA. 82+40 TO STA. 84+95

INSET A

PROPOSED BRUCE VENTO TRAIL

STA. 92+45 TO STA. 106+57
STA. 112+91 TO STA. 145+00

INSET A

INSET A

INSET C

BNSF R.R.
PRIVATE PROPERTY
COUNTY
RAMSEY
PROPOSED BRUCE VENTO TRAIL
STA. 145+00 TO STA. 173+77

GENERAL NOTES:
1. Maximum slope of 0.015 foot per foot on trail.
2. Unless otherwise specified, the grading grade cross slopes shall be the same as the finished grade.
3. See landscaping plans for additional information on planting, seeding, and sodding adjacent to trail.
4. Modular block retaining wall design to be completed by the contractor.

INSET A
1.5" TYPE 9.5 WEARING COURSE MIXTURE (SPWPA230B)
1.5" TYPE 9.5 WEARING COURSE MIXTURE (SPWPA230B)
6.0" AGGREGATE BASE, CLASS 6 (CV)
GRADE

INSET B
2" MILL & OVERLAY
36"CAG

INSET C
2.0" TYPE 12.5 WEARING COURSE MIXTURE (SPWPA400I)
EXISTING BITUMINOUS PAVEMENT

PROPOSED BRUCE VENTO TRAIL
WATER QUALITY TREATMENT ZONE A
STA. 75+00 TO STA. 77+50

INSET A
COMMON EMBANKMENT MATERIAL (QUALITY COMPACTION)

INSET B
COMMON EMBANKMENT MATERIAL (COMPACTED TO LOCK STANDARD PROCTOR)

INSET C
COMMON EMBANKMENT MATERIAL (QUALITY COMPACTION)

INSET D
COMMON EMBANKMENT MATERIAL (QUALITY COMPACTION)

MONDAY, MAY 31, 2021
2:15 PM

Kimley-Horn
RAMSEY COUNTY, MINNESOTA
BRUCE VENTO TRAIL
STATE PROJ. NO. XXXX-XX (BRUCE VENTO TRAIL)

DESIGNED BY: KJR
DRAWN BY: KJR
CHECKED BY: GSB

REV 3/23/2021
TYPICAL SECTIONS
GENERAL NOTES:

1. MAXIMUM SLOPE OF 0.015 FOOT PER FOOT ON TRAIL.

2. UNLESS OTHERWISE SPECIFIED THE GRADING GRADE CROSS SLOPES SHALL BE THE SAME AS THE FINISHED GRADE.

3. SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION ON PLANTING, SEEDING, AND SODDING ADJACENT TO TRAIL.

PROPOSED BRUCE VENTO TRAIL

1. STA. 173+77 TO STA. 177+36
2. STA. 177+36 TO STA. 178+59

TYPICAL SECTIONS
PROPOSED TRAIL - UNDER TH 61  
STA. 109+00 TO STA. 110+27

EXISTING TH 61 BRIDGE

PROPOSED TRAIL - UNDER GR E  
STA. 84+95 TO STA. 85+00

EXISTING CO RD E BRIDGE

GENERAL NOTES:
1. Maximum slope of 0.005 foot per foot on trail.
2. Unless otherwise specified the grading grade cross slopes shall be the same as the finished grade.
3. See landscaping plans for additional information on planting, seeding, and sodding adjacent to trail.
4. Soil nail retaining wall design to be completed by the Contractor.
**PEDESTRIAN CURB RAMP DETAILS**

**NOTES:**
- Positive flow line drainage shall be maintained through the pedestrian access route (PAR) at a 2% maximum.
- No ponding shall be present in the PAR.
- Any vertical lip that occurs at the flow line shall not be greater than 1/4 inch.
- Curbs used at curb cuts where the pedestrian's path of travel is assumed perpendicular to the gutter flow line. Ramp types include: perpendicular, tiered perpendicular, parallel, and diagonal ramps.
- Use of PAR cuts where the pedestrian's path of travel is assumed non-perpendicular to the gutter flow line. Ramp types include: fans & depressed corners.
- For use at curb ramps where the pedestrian's path of travel is assumed perpendicular to the gutter flow line. Ramp types include: fans & depressed corners.
- ADA curb extension with compound radius.
- Optional sill curb when sidewalk is at back of curb. Concrete sill to be used only when specified in the plan.
- Concrete sill to be used only when specified in the plan.

**PAVEMENT TREATMENT OPTIONS IN FRONT OF CURB & GUTTER**

**FOR USE ON CURB RAMP REHABILITATION**

- Positive flow line drainage shall be maintained through the pedestrian access route (PAR) at a 2% maximum.
- No ponding shall be present in the PAR.
- Any vertical lip that occurs at the flow line shall not be greater than 1/4 inch.
- Curbs used at curb cuts where the pedestrian's path of travel is assumed perpendicular to the gutter flow line. Ramp types include: perpendicular, tiered perpendicular, parallel, and diagonal ramps.
- Use of PAR cuts where the pedestrian's path of travel is assumed non-perpendicular to the gutter flow line. Ramp types include: fans & depressed corners.
- ADA curb extension with compound radius.
- Optional sill curb when sidewalk is at back of curb. Concrete sill to be used only when specified in the plan.

**PEDESTRIAN CURB RAMP DETAILS**

**NOTES:**
- Positive flow line drainage shall be maintained through the pedestrian access route (PAR) at a 2% maximum.
- No ponding shall be present in the PAR.
- Any vertical lip that occurs at the flow line shall not be greater than 1/4 inch.
- Curbs used at curb cuts where the pedestrian's path of travel is assumed perpendicular to the gutter flow line. Ramp types include: perpendicular, tiered perpendicular, parallel, and diagonal ramps.
- Use of PAR cuts where the pedestrian's path of travel is assumed non-perpendicular to the gutter flow line. Ramp types include: fans & depressed corners.
- ADA curb extension with compound radius.
- Optional sill curb when sidewalk is at back of curb. Concrete sill to be used only when specified in the plan.
PEDESTRIAN APPROACH NOSE DETAIL
FOR RETURNED CURB SIDE TREATMENTS

- **Radial Detectable Warning:**
  - Place detectable warnings at the edge of the curb.
  - Use Epoxy Coated No. 4 12" long reinforcement bars with 3" minimum cover.
  - Ensure a minimum clearance between the sidewalk and curb.

- **Rectangular Detectable Warning:**
  - Place detectable warnings at the edge of the curb.
  - Use Epoxy Coated No. 4 12" long reinforcement bars with 3" minimum cover.
  - Ensure a minimum clearance between the sidewalk and curb.

- **Notes:**
  - See standard plate 7028 and this sheet for additional details on detectable warning.
  - A walkable surface is defined as a paved surface adjacent to a curb ramp without detectable warnings.
  - Detectable warnings are required when there is a 3-inch high curb, curb flare, or curb ramp.
  - Detectable warnings are not required when there is a 0-inch high curb, curb flare, or curb ramp.

- **Typical Side Treatment Options:**
  - **Graded Plates:**
    - Place detectable warnings at the edge of the curb.
    - Use Epoxy Coated No. 4 12" long reinforcement bars with 3" minimum cover.
    - Ensure a minimum clearance between the sidewalk and curb.

- **Railroad Crossing Plan View:**
  - Place detectable warnings at the edge of the curb.
  - Use Epoxy Coated No. 4 12" long reinforcement bars with 3" minimum cover.
  - Ensure a minimum clearance between the sidewalk and curb.
NOTES:
1. CURB CONSTRUCTION JOINTS SHALL MATCH INPLACE SIDEWALK GRADES.
2. ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
3. BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.
4. EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.
5. TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A POTENTIAL A-P SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PAR.
6. LANDINGS - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX. 2' MIN. RAMP LENGTH.
7. PUSH BUTTON TRAVERSING THE FLARE.
8. ADJACENT TO LANDSCAPE V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.
9. TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A POTENTIAL A-P SLOPE IN ALL DIRECTIONS.
10. TRANSITION PANEL(S) - TO BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB MOUNTING LEVEL.
11. END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
12. ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
13. ALL V CURB CONSTRUCTION JOINTS SHALL MATCH INPLACE SIDEWALK GRADES.
14. END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
15. TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A POTENTIAL A-P SLOPE IN ALL DIRECTIONS.
16. TRANSITION PANEL(S) - TO BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB MOUNTING LEVEL.
17. PUSH BUTTON STATION (V-CURB) (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS) APS PUSH BUTTON (SADDLE ADAPTORS) (MOUNTING SPACERS)APS P

Curb and Road Crossing Adjustments

Expansion Material Placement for Concrete and Bituminous Roadways

Curvature Edge of Through Lane

Landing

Allowable Ramps or as much as possible while adhering to the following criteria:

- Raising of curb lines should occur in vertically constrained areas.
- Raise the curb lines enough to ensure proper drainage.
- Use minimum flow line of pedestrian ramps to maintain positive drainage.
- Use minimum flow line of either side of pedestrian ramps to maintain positive drainage.

Additional details include:

- The use of joint filler material per MNDOT Spec. 3702.
- The pregnancy of joint filler material per MNDOT Spec. 3702.
- The use of joint filler material per MNDOT Spec. 3702.
- The use of joint filler material per MNDOT Spec. 3702.
- The use of joint filler material per MNDOT Spec. 3702.
- The use of joint filler material per MNDOT Spec. 3702.
PRUNING

(MnDOT 2572.3.1)

1. PRUNE USING CLEAN AND SHARP SCISSOR-TYPE PRUNER OR PRUNING SAW.
2. THE BEST TIME TO PRUNE IS LATE DORMANT SEASON OR EARLY SPRING.
3. AVOID PRUNING OAKS IN APRIL, MAY, JUNE OR JULY.
4. IF PRUNING IS NECESSARY OR IF WOUNDS OCCUR TO OAK TREES IN APRIL, MAY, JUNE OR JULY, IMMEDIATELY PAINT CUT SURFACE OR WOUND WITH LATEX PAINT OR SHELLAC.

TEMPORARY FENCE

(MnDOT 2572.3A.1)

1. FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SPECIFIED, PRIOR TO ANY CONSTRUCTION.
2. WHEN POSSIBLE PLACE FENCE 25 FEET BEYOND THE DRIP LINE.
3. PLACE TREE PROTECTION SIGNS ALONG FENCE AT 50 INTERVALS.

UTILITY CONSTRUCTION

(MnDOT 2572.3A.3)

1. ANY FILL REQUIRED WITHIN THE DRIP LINE OF TREES IS UNCOMPACTED TOPSOIL BORROW.
2. EXCESSIVE FILL MAY REQUIRE PLACING PERFORATED PIPES WITH AT LEAST ONE DIALIGHT END OPENING AS AN AERATION SYSTEM.

OTHER VEGETATION PROTECTION MEASURES

(MnDOT 2572.3A.12)

1. WHEN DESIGNATED IN THE PLAN OR DIRECTED BY THE ENGINEER, PRIOR TO EXCAVATION, ALL TREE ROOTS WILL BE CLEANLY CUT BY A VIBRATORY PLOW OR OTHER APPROVED ROOT CUTTER.
2. THE TREE ROOTS WILL BE CUT CLEANLY TO THE MINIMUM DEPTH NECESSARY FOR CONSTRUCTION.
3. IMMEDIATELY AND CLEANLY CUT DAMAGED AND EXPOSED ROOTS.
4. ROOT ENDS EXPOSED BY EXCAVATION ACTIVITIES SHALL BE IMMEDIATELY COVERED WITH A 6 INCH LAYER OF SOIL OR SIMILAR MATERIAL.
5. EXPOSED OAK ROOTS SHALL BE IMMEDIATELY COVERED WITH A 6 INCH LAYER OF SOIL OR SIMILAR MATERIAL.
6. EXPOSED TIMBERS OR TUBES PLACED HORIZONTALLY OR VERTICALLY SHALL BE TRASHED OR CLEANED BEFORE USE.
7. WOODCHIP MULCH BEDS ARE PREPARED BY PLACING A 6 INCH LAYER OF WOODCHIP MULCH OVER A TYPE III GEOTEXTILE (MnDOT 3722).

CLEAN ROOT CUTTING

(MnDOT 2572.3A.2)

1. FABRICATE 12" X 8" X 3/8" SIGN WITH 0.75" RADIUS CORNERS.
2. SIGN SHALL BE WHITE WITH BLACK LETTERING.
3. ATTACH SIGN TO POST USING 1" LENGTH WOOD SCREWS.

ROOTING TOPSOIL BORROW

(MnDOT 2572.3A.4)

1. PLACE THE TEMPORARY FENCE.
2. REDUCE SLOPE ROUNDOVER WHERE ROOT ZONES ARE DISTURBED BY NORMAL SLOPE ROUNDOVER.
3. VARY BACKSLOPE STEEPNESS TO AVOID TREE LOSS OR UNNECESSARY ROOT DAMAGE.

SLOPE ROUNDOVER

1. ANY FILL REQUIRED WITHIN THE DRIP LINE OF TREES IS UNCOMPACTED TOPSOIL BORROW.
2. EXCESSIVE FILL MAY REQUIRE PLACING PERFORATED PIPES WITH AT LEAST ONE DIALIGHT END OPENING AS AN AERATION SYSTEM.
3. SIGNIFICANT TREES NEAR THE PROPOSED CONSTRUCTION LIMITS WILL BE IDENTIFIED IN THE PLAN OR BY THE ENGINEER AND WILL BE PRESERVED BY THE CONTRACTOR.

STATE PROJ. NO. XXXX-XX (TH XX)
SEDIMENT CONTROL LOGS

1" X 2" X 24" LONG WOODEN STAKES AS NEEDED. STAKES SHALL BE DRIVEN OVER THE TOP OF THE STAKE POINTING UPSTREAM.

SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL. PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON FILTER BERM.

TYPES: WOOD CHIPS, COMPOST, OR ROCK

TYPES: STRAW, WOOD FIBER, OR COIR

WATER PROFILE

FLOW

TWO 2" X 2" WOOD STAKES OR REINFORING BARS IN EACH BALE EMBEDDED 10" MINIMUM IN THE GROUND.

EMBEDMENT DEPTH

EMBED BALES 4" INTO GROUND

EMBEDMENT METHOD

REPP CATEGORY 25

6" STAPLES AT 1' O.C.

REPP (BLANKET) METHOD (ALTERNATIVE)

NOTES:

REPP = ROLLED EROSION PREVENTION PRODUCT.

SEE SPECS. 2573, 2519, 3874, 3882, 3885, 3886, AND 3897.

SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1' FOR DITCH CHECKS OR 2' FOR OTHER APPLICATIONS.

PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.

TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS.

MAXIMUM DEPTH, BALES SHALL CONSIST OF TYPE 1 MULCH OR TYPE 1 WOOD CHIP, COMPOST, OR ROCK WEEPER

INSTEAD OF TRENCHING, PLACE BALE ON THE REPP (BLANKET) AND WRAP BLANKET AROUND THE BALES.

NOTE: SEDIMENT CONTROL LOGS ON TOP OF THE STAKE POINTING UPSTREAM.

SEEDS, STAKES SHALL BE DRIVEN OVER THE TOP OF THE STAKE POINTING UPSTREAM.

STAKES SHALL BE DRIVEN OVER THE TOP OF THE STAKE POINTING UPSTREAM.
FILTER BAG INSERT can be installed in any inlet type with or without a curb box.

FILTER BAG INSERT

SEDIMENT CONTROL INLET HAT

NOTES:

1. SEE SPEC. 2973, 3137, & 3886.

2. SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC-MONOFILAMENT RISER SIZED TO FIT INTO THE CATCH BASIN/MANHOLE, HAVE SEAM JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A WIRE OR PLASTIC TIES REINFORCED WITH 36" GEOTEXTILE BAND.

3. SEDIMENT CONTROL INLET HAT USES INLET DRAINS IN AN AREA WITH SLOPES AT 1:4 OR LESS.

4. GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER, SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A WELT BONDED SEAM (OR APPROVED EQUIVALENT). FILTER BAG INSERT WITH OPEN GREASE AGGREGATE AGGREGATE CONFORMING TO SPEC. TABLE 3137-1, CA-3 GRADATION.


6. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OF SAND BAGS IN PLACE OF THE FLAP POCKETS.

7. SUCH MEASURES MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.

8. GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER, SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A WELT BONDED SEAM (OR APPROVED EQUIVALENT). FILTER BAG INSERT WITH OPEN GREASE AGGREGATE AGGREGATE CONFORMING TO SPEC. TABLE 3137-1, CA-3 GRADATION.
SILT FENCE TYPE HI ②
(HAND INSTALLED)

SILT FENCE TYPE MS ③
(MACHINE SLICED)

SILT FENCE TYPE PA ④
(PREASSEMBLED)

SILT FENCE ONLY ⑤

SILT FENCE WITH SAND BAGS ⑥

SILT FENCE WITH SHEETING ⑦

INSTALLATION AT BRIDGE EMBANKMENT ADJACENT TO WATER

LOCATION AT TOE OF ROADWAY EMBANKMENT

NOTES:

1. SEE SPECTS 2973, 3149 & 3886.
2. COARSE FILTER AGGREGATE (SPEC. 3149) SHALL BE INCIDENTAL.
3. TO PROTECT AREAS FROM SHEET FLOW, MAXIMUM CONTRIBUTING AREA 1 ACRE.
4. TO PROTECT AREAS FROM SHEET FLOW, MAXIMUM CONTRIBUTING AREA 0.25 ACRE.
5. WATER COURSE FLOW VELOCITY<STANDING.
6. WATER COURSE FLOW VELOCITY>7 FT./SEC.
7. WATER COURSE FLOW VELOCITY>15 FT./SEC.
8. CONTRIBUTING SLOPE AREAS<1 ACRE.
9. CONTRIBUTING SLOPE AREAS<3 ACRES.
10. NATURAL SOIL BACKFILL WITH TAMPED FABRIC ANCHORAGE TRENCH.
11. MACHINE SLICE 8 IN. - 12 IN. DEPTH
12. GEOTEXTILE FABRIC, 36 IN. WIDE
13. 6 IN. - 12 IN. DEPTH
14. 5 FT. MIN. LENGTH POST AT 6 FT. MAX. SPACING
15. PLASTIC ZIP TIES (50 LB. TENSILE) EMBEDMENT 2 FT. MIN. POST LOCATED IN TOP 8 IN.
16. PLASTIC ZIP TIES EMBEDMENT 18 IN. MIN. POST LOCATED IN TOP 8 IN.
17. STAPLES (TYP.) AT 6 FT. MAX. SPACING 5 FT. MIN. LENGTH POST
18. GEOTEXTILE Fabric, 36 IN. WIDE
19. PLASTIC ZIP TIES LOCATED IN TOP 8 IN.
20. FABRIC ANCHORAGE TRUSS WITH TAMPED NATURAL SOIL.

SILT FENCE NEAR TOE OF SLOPE AND OUTSIDE OF CONSTRUCTION LIMITS

STREAM BANK OR TOE OF SLOPE

PLAN VIEW

PERSPECTIVE VIEW

J-HOOK INSTALLATION

STREAM BANK OR TOE OF SLOPE

LOCATION AT TOE OF ROADWAY EMBANKMENT

STATE PROJ. NO. XXXX-XX (TH XX) SHEET NO. 20 OF 95 SHEETS

TEMPORARY SEDIMENT CONTROL

SILT FENCE

STANDARD PLAN 5-297.405 6 OF 8

MINNESOTA TRANSPORTATION
STATE HIGHWAY ENGINEER

APPROVED: 2-28-2017
REVISED:

REVISION:

APPROVED: 2-28-2017

STATE DESIGN ENGINEER

6 OF 8 SHEET NO.

LOCATION AT TOE OF ROADWAY EMBANKMENT

NOTES:

1. SEE SPECTS 2973, 3149 & 3886.
2. COARSE FILTER AGGREGATE (SPEC. 3149) SHALL BE INCIDENTAL.
3. TO PROTECT AREAS FROM SHEET FLOW, MAXIMUM CONTRIBUTING AREA 1 ACRE.
4. TO PROTECT AREAS FROM SHEET FLOW, MAXIMUM CONTRIBUTING AREA 0.25 ACRE.
5. WATER COURSE FLOW VELOCITY<STANDING.
6. WATER COURSE FLOW VELOCITY>7 FT./SEC.
7. WATER COURSE FLOW VELOCITY>15 FT./SEC.
8. CONTRIBUTING SLOPE AREAS<1 ACRE.
9. CONTRIBUTING SLOPE AREAS<3 ACRES.
10. NATURAL SOIL BACKFILL WITH TAMPED FABRIC ANCHORAGE TRENCH.
11. MACHINE SLICE 8 IN. - 12 IN. DEPTH
12. GEOTEXTILE FABRIC, 36 IN. WIDE
13. 6 IN. - 12 IN. DEPTH
14. 5 FT. MIN. LENGTH POST AT 6 FT. MAX. SPACING
15. PLASTIC ZIP TIES (50 LB. TENSILE) EMBEDMENT 2 FT. MIN. POST LOCATED IN TOP 8 IN.
16. PLASTIC ZIP TIES EMBEDMENT 18 IN. MIN. POST LOCATED IN TOP 8 IN.
17. STAPLES (TYP.) AT 6 FT. MAX. SPACING 5 FT. MIN. LENGTH POST
18. GEOTEXTILE Fabric, 36 IN. WIDE
19. PLASTIC ZIP TIES LOCATED IN TOP 8 IN.
20. FABRIC ANCHORAGE TRUSS WITH TAMPED NATURAL SOIL.

SILT FENCE NEAR TOE OF SLOPE AND OUTSIDE OF CONSTRUCTION LIMITS

STREAM BANK OR TOE OF SLOPE

PLAN VIEW

PERSPECTIVE VIEW

J-HOOK INSTALLATION

STREAM BANK OR TOE OF SLOPE

LOCATION AT TOE OF ROADWAY EMBANKMENT

STATE PROJ. NO. XXXX-XX (TH XX) SHEET NO. 20 OF 95 SHEETS

TEMPORARY SEDIMENT CONTROL

SILT FENCE

STANDARD PLAN 5-297.405 6 OF 8

MINNESOTA TRANSPORTATION
STATE HIGHWAY ENGINEER

APPROVED: 2-28-2017
REVISED:

REVISION:

APPROVED: 2-28-2017

STATE DESIGN ENGINEER

6 OF 8 SHEET NO.
LOADING CASES

UP TO 250 PSF LIVE LOAD SURCHARGE

REINFORCED SOIL SLOPE (45° MAX.)
250 PSF - LL SURCHARGE

CASE A & B

TABLE 1: REINFORCED SOIL SLOPES (70° MAX.)
250 PSF - LL SURCHARGE

CASE 2

DEFINITION OF TERMS

W = REINFORCED SOIL SLOPE
L L = LIVE LOAD
S = WIDTH OF USED ACROSS REINFORCEMENT SPACING
H = SLOPE HEIGHT
R = REINFORCEMENT COVERAGE
C = INTERNAL ANGLE OF FRICTION
\( \theta \) = INTERNAL ANGLE OF FRICTION
T = WALL UNIT WEIGHT
M = MOIST UNIT WEIGHT
N = MATERIAL THAT IS GRADED FROM COARSE TO FINE THAT 100% OF SPECIFIED PURPOSES, MAY BE ANY PIT-RUN OR CRUSHER-RUN MODIFICATION: SELECT GRANULAR MATERIAL MODIFIED, FOR SPECIAL MODIFICATIONS AND REQUIRE SPECIAL CONSIDERATION BY THE FOUNDATIONS UNIT.

REINFORCEMENT COVERAGE SHALL BE 100%.

TABLE 2: REINFORCED SOIL SLOPE FILL CHARACTERISTICS

EXTERNAL: 1.3
INTERNAL: 1.3
SLIDING: 1.3

TABLE 3: SOIL REINFORCEMENT CHARACTERISTICS:

VERIFIED TO PLAN TOP OF SLOPE ELEVATION.

REFERENCES TO TABLES, FOR APPLICABLE REINFORCED SOIL FILL TYPE AND MAXIMUM SPACING AND STRENGTH SHALL CONFORM TO MINIMUMS IN DESIGN REQUIREMENTS:

MOIST UNIT WEIGHT

SAME ESTIMATED QUANTITIES FOR REINFORCED SOIL SLOPES

<table>
<thead>
<tr>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>TON</td>
<td>0.10</td>
</tr>
<tr>
<td>TON</td>
<td>0.10</td>
</tr>
<tr>
<td>TON</td>
<td>0.10</td>
</tr>
<tr>
<td>TON</td>
<td>0.10</td>
</tr>
</tbody>
</table>

SAMPLE ESTIMATED QUANTITIES FOR REINFORCED SOIL SLOPES

(1) VERTICAL FACE AREA OF SLOPE AS MEASURED FROM PLAN ELEVATION TO PLAN TOP OF SLOPE ELEVATION.
(2) REFER TO TABLES / ESTIMATE SHEETS FOR QUANTITIES.

GENERAL NOTES

UPLAND:
EXISTING AND IMPROVED UTILITIES ARE SHOWN ON THE GROUND PLAN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING FACILITIES AND SHALL EXERCISE CARE IN ADJACENT EROSION AND GAS PREVENTION. ALL EXCAVATION AND ENVIRONMENT WORK SHALL CONFORM TO AGGREGATE 24001, CONSTRUCTION.

CONSTRUCTION SHALL BE IN ACCORDANCE WITH Mn/DOT 24001, EXCEPT AS NOTED.

COMPACT MODIFIED SELECT GRANULAR MATERIAL IN ACCORDANCE WITH Mn/DOT SPEC 2005.3F1, UNLESS RECOMMENDED OTHERWISE BY THE SOILS ENGINEER.

COMPACT MODIFIED SELECT CLAYY MATERIAL IN ACCORDANCE WITH Mn/DOT SPEC 2005.3F1, UNLESS RECOMMENDED OTHERWISE BY THE SOILS ENGINEER.
REINFORCED SOIL SLOPE

CASE 2 - 70° MAXIMUM SLOPE ANGLE
MODIFIED SELECT GRANULAR BORROW REINFORCED SOIL FILL

MAXIMUM LONG-TERM STRENGTH \( f_{lt} \) (PSF)

<table>
<thead>
<tr>
<th>MAX SLOPE ANGLE (DEGREES)</th>
<th>MAX REINFORCEMENT (DEGREES)</th>
<th>MINIMUM SOIL REINFORCEMENT LENGTH ( L ) (FT)</th>
<th>MAXIMUM ( S_1 ) (IN)</th>
<th>ZONE 1</th>
<th>ZONE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>35</td>
<td>1.5 H</td>
<td>21.3</td>
<td>40</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Notes:

- Secondary reinforcement shall have a minimum long term strength of 400 PLF.

Typical Section

- Slope away from face

- Retained soil

- Primary reinforcement

- Secondary reinforcement

- Erosion control blanket

- Secondary geosynthetic reinforcement wrap

- Geosynthetic wrap shall be a geogrid stabilized for long-term ultraviolet light exposure.

- Minimal limits of structural excavation, equal to angle of slope face, 70° maximum actual excavation slope is determined by soil conditions and in situ soil strength beyond limits of structural excavation may be contractor's expense.

- Welded wire mesh face form design by contractor. Galvanized steel not required.

- Primary soil reinforcement types 1, 3, and 131 are found on MnDOT's approved/qualified products list.

Notes:

- Impact excavation slopes for active surface and place additional drains where seepage occurs as directed by the engineer.

- Spec. 3149.2B1 or 3149.2B2, primary soil reinforcement types I, II, and III are found on MnDOT's approved/qualified products list.

- Screened soil, with seed and fertilizer as specified in plans, develop site specific recommendations for highly eroded areas, highly vulnerable drain applications on in sensitive areas.

- Geosynthetic blanket shall be a geogrid stabilized for long-term ultraviolet light exposure.

- Maintenance is required and incidental. Maintenance consists of monitoring and erosion repair restoration. Since the face of the slope will be fully vegetated maintenance includes a minimum of 45 growing days and terminates when a vegetative density of 40% is achieved. After that slope to erosion or seeding failure will be restored within three calendar days and will require an additional 20 growing days of maintenance. Growing days are defined as per standard specification 2575.

- A plant growth height of 6" is achieved. Areas that succumb to erosion or seeding failure will be restored with three calendar days. A minimum of 45 growing days and terminates when a vegetative density of 80% and 6" (MAX.) of structural erosion control is achieved.

- Monitoring and erosion repair restoration such that the face of the slope will be fully vegetated. Maintenance includes a minimum of 45 growing days and terminates when a vegetative density of 40% is achieved. After that slope to erosion or seeding failure will be restored within three calendar days and will require an additional 20 growing days of maintenance. Growing days are defined as per standard specification 2575.

- Maintenance is required and incidental. Maintenance consists of monitoring and erosion repair restoration. Since the face of the slope will be fully vegetated maintenance includes a minimum of 45 growing days and terminates when a vegetative density of 40% is achieved. After that slope to erosion or seeding failure will be restored within three calendar days and will require an additional 20 growing days of maintenance. Growing days are defined as per standard specification 2575.

- A plant growth height of 6" is achieved. Areas that succumb to erosion or seeding failure will be restored with three calendar days. A minimum of 45 growing days and terminates when a vegetative density of 80% and 6" (MAX.) of structural erosion control is achieved.

- Monitoring and erosion repair restoration such that the face of the slope will be fully vegetated. Maintenance includes a minimum of 45 growing days and terminates when a vegetative density of 40% is achieved. After that slope to erosion or seeding failure will be restored within three calendar days and will require an additional 20 growing days of maintenance. Growing days are defined as per standard specification 2575.

- A plant growth height of 6" is achieved. Areas that succumb to erosion or seeding failure will be restored with three calendar days. A minimum of 45 growing days and terminates when a vegetative density of 80% and 6" (MAX.) of structural erosion control is achieved.

- Monitoring and erosion repair restoration such that the face of the slope will be fully vegetated. Maintenance includes a minimum of 45 growing days and terminates when a vegetative density of 40% is achieved. After that slope to erosion or seeding failure will be restored within three calendar days and will require an additional 20 growing days of maintenance. Growing days are defined as per standard specification 2575.

- A plant growth height of 6" is achieved. Areas that succumb to erosion or seeding failure will be restored with three calendar days. A minimum of 45 growing days and terminates when a vegetative density of 80% and 6" (MAX.) of structural erosion control is achieved.

- Monitoring and erosion repair restoration such that the face of the slope will be fully vegetated. Maintenance includes a minimum of 45 growing days and terminates when a vegetative density of 40% is achieved. After that slope to erosion or seeding failure will be restored within three calendar days and will require an additional 20 growing days of maintenance. Growing days are defined as per standard specification 2575.
**ALIGNMENT TABULATION**

<table>
<thead>
<tr>
<th>STATION</th>
<th>DEGREE</th>
<th>RADIUS</th>
<th>TANGENT LENGTH</th>
<th>LENGTH</th>
<th>COORDINATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>178+55.504</td>
<td>2° 49' 34.65&quot;</td>
<td>3,022.000'</td>
<td>34.087'</td>
<td>3,022.000'</td>
<td></td>
</tr>
</tbody>
</table>

**CIRCULAR CURVE DATA**

<table>
<thead>
<tr>
<th>ANGLE (Deg')</th>
<th>DEGREE</th>
<th>ST</th>
<th>LT</th>
<th>LS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2° 49' 34.65&quot;</td>
<td>3,022.000'</td>
<td>34.087'</td>
<td>3,022.000'</td>
<td></td>
</tr>
</tbody>
</table>

**DESIGNED BY:**

State of Minnesota.
Licensed Professional Engineer under the laws of Ramsey County, Minnesota
and that I am a duly

**DRAWN BY:**

Kimley-Horn

**CHECKED BY:**

GSC
1. Significant Trees (> 6" diameter) depicted within clearing zones will be paid by the acre. Only - payment for clearing all trees within clearing zones will be incidental to bid price per acre.

2. Removal of significant trees (> 6" diameter) depicted outside of tree clearing zones will be paid by each tree.

NOTES:

- Protect Tree
- Protect Private Fences
- Protect Concrete Pavement
- Remove Bituminous Pavement
- Remove Chain Link Fence
- Remove Concrete Pavement
- Remove Bituminous Pavement
- Clear and Grub Acre
- Clear and Grub Tree

BEGIN CONSTRUCTION
BEGIN S.P. XXXX-XX
STA. 50+11.68

STATE PROJECT NO. XXXX-XX (BRUCE VENTO TRAIL)
RAMSEY COUNTY, MINNESOTA
REMOVAL PLAN
STA. 50+00 TO STA. 76+00
MATCH LINE BRUCE VENTO TRAIL
STA. 76+00 TO STA. 104+00 REMOVAL PLAN
9/23/2021

LEGEND
- CLEAR AND GRUB ACRE
- REMOVE CONCRETE PAVEMENT
- REMOVE BISMARCK PAVEMENT
- REMOVE CHAIN LINK FENCE
- SAVING PAVEMENT FULL DEPTH
- CLEAR AND GRUB TREE

PROTECT CONCRETE APRAON, SAWCUT AS NECESSARY TO FACILITATE TRAIL CONSTRUCTION.

PROJECT EXISTING STORM SEWER

REMOVE WATERMAIN. COORDINATE WITH GEM LAKE

REMOVE SIGN TYPE C SALVAGE

SEE DRAINAGE PLANS FOR CLEAR AND GRUB TREE

REMOVE 3 FEET OF TRANSITION SECTION AT MATCH POINT.

SEE DRAINAGE PLANS FOR PROTECTION TO EXISTING STORM SEWER

REMOVE CHAIN LINK FENCE

SAWING PAVEMENT FULL DEPTH

PREVIOUSLY PROBABLE COST:
- CLEAR AND GRUB ACRE
- REMOVE CONCRETE PAVEMENT
- REMOVE BISMARCK PAVEMENT
- REMOVE CHAIN LINK FENCE
- SAVING PAVEMENT FULL DEPTH
- CLEAR AND GRUB TREE

1. SIGNIFICANT TREES (> 6" DIAMETER) DEPICTED WITHIN CLEARING ZONES WILL BE PAID BY THE ACRE ARE SHOWN FOR INFORMATIVE PURPOSES

2. REMOVAL OF SIGNIFICANT TREES (> 6" DIAMETER) DEPICTED OUTSIDE OF TREE CLEARING ZONES WILL BE PAID BY EACH TREE.

ONLY - PAYMENT FOR CLEARING ALL TREES WITHIN CLEARING ZONE WILL BE INCIDENTAL TO BID PRICE PER ACRE.

NOTES:
NOTES:

1. SIGNIFICANT TREES (> 6" DIAMETER) DEPICTED WITHIN CLEARING ZONES PAID BY THE ACRE ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY - PAYMENT FOR CLEARING ALL TREES WITHIN CLEARING ZONE WILL BE INCIDENTAL TO BID PRICE PER ACRE.

2. REMOVAL OF SIGNIFICANT TREES (> 6" DIAMETER DEPICTED OUTSIDE OF TREE CLEARING ZONES WILL BE PAID BY EACH TREE).

REM03

SCALE IN FEET

STANDARD SCALE

MATCHLINE BRUCE VENTO TRAIL STA 104+00 TO STA 132+00 REMO3

MATCHLINE BRUCE VENTO TRAIL STA 118+00 SEE BELOW

MATCHLINE BRUCE VENTO TRAIL STA 132+00 SEE SHEET REM04

MATCHLINE BRUCE VENTO TRAIL STA 104+00 SEE SHEET REM02
END CONSTRUCTION
END S:P, XXX-XX
STA, 178+54.77

NOTES:
1. SIGNIFICANT TREES (> 6" DIAMETER) DEPICTED WITHIN CLEARING ZONES PAID BY THE ACRE ARE SHOWN FOR INFORMATIONAL PURPOSES.
2. REMOVAL OF SIGNIFICANT TREES (> 6" DIAMETER DEPICTED OUTSIDE OF TREE CLEARING ZONES WILL BE PAID BY THE EACH (TREE).

REMOVE CHAIN LINK FENCE
SAWING PAVEMENT FULL DEPTH

LEGEND
CLEAN AND GRUB ACRE
REMOVE CONCRETE PAVEMENT
REMOVE DISTURBANCE PAVEMENT
REMOVE CHAIN LINK FENCE
SAWING PAVEMENT FULL DEPTH
CLEAN AND GRUB TREE

SCALE IN FEET
100

NOTE: TRAIL PROFILE GRADES ALONG HOFFMAN ROAD HAVE BEEN DESIGNED TO PROVIDE A BALANCE BETWEEN EXISTING ROADWAY GRADES, EXISTING GRADE AT BNSF ROW LINE AND A UNIFORM TRAIL PROFILE. THE PROPOSED BOULEVARD SLOPE BETWEEN THE TRAIL AND HOFFMAN ROAD VARIES FROM -10% TO +10% TO ASSIST WITH THIS BALANCE. CONTRACTORS SHALL CONSTRUCT PROPOSED ROADWAY CURB TO FIT EXISTING ROADWAY GRADES AND AS DIRECTED BY THE ENGINEER TO IMPROVE AREAS OF SUBSTANDARD DRAINAGE IN CONJUNCTION WITH THE PROPOSED MILL AND OVERLAY. THE ENGINEER MAY MODIFY TRAIL PROFILES AND CORRESPONDING BOULEVARD SLOPES BASED ON CONSTRUCTED CURB.

NOTE: FOOTPRINT OF WAYSIDE REST NODE TO BE DETERMINED BY THE ENGINEER IN THE FIELD. SEE DETAIL SHEETS FOR FURTHER DETAILS.

MATCHLINE BRUCE VENTO TRAIL STA 90+00 SEE SHEET CP03
MATCHLINE BRUCE VENTO TRAIL STA 90+00 SEE SHEET CP03

MATCHLINE BRUCE VENTO TRAIL STA 104+00 SEE SHEET CP05
MATCHLINE BRUCE VENTO TRAIL STA 104+00 SEE SHEET CP05

LEGEND
- PROPOSED TRAIL
- CONSTRUCTION LIMITS
- EXISTING ROW
- PROPOSED CHAIN LINK FENCE
- DRAINAGE FLOW DIRECTION
- RETAINING WALL

HOFFMAN ROAD WELL AND OVERLAY
XCEL TOWER
MATCH EXIST. TRACK
C&G STA. 90+34.9
BEGIN B624 C&G

CONSTRUCTION PLAN AND PROFILE
CP04
STA 90400 TO STA 104400
RAMSEY COUNTY, MINNESOTA
STATE PROJ. NO. XXXX-XX (BRUCE VENTO TRAIL)
The design for the Bruce Vento Trail involves considerations such as drainage flow direction, proposed trail alignment, and existing road conditions. The trail and Hoffman Road vary from -10% to +10% to assist with trail and Hoffman Road transitions. The trail profile grades along Hoffman Road have been designed to provide a balance between existing roadway grades, existing grade at BSF ROW line, and Hoffman Road variances from -10 to +10 to assist with trail and Hoffman Road transitions. The engineer may modify trail profiles and corresponding boulevard slopes based on constructed curbs.

**Legend**
- PROPOSED TRAIL
- CONSTRUCTION LIMITS
- PREEXISTING ROW
- PROPOSED CHAIN LINE
- DRAINAGE FLOW DIRECTION
- FINISHING WALL
- SOIL NAIL FINISHING WALL

**Profile Grade**

1.00' V.C. at 110

**Node Type 2**
- PROFILE GRADE
- GRADING GRADE

**Other Notations**
- MATCHLINE BRUCE VENTO TRAIL STA 104+00 TO STA 118+00
- SHEET CP05

**Construction Plan and Profile**

Ramsey County, Minnesota

State Project: XXXX-XX (Bruce Vento Trail)
NOTE: PROFILE GRADES ALONG HOFFMAN ROAD HAVE BEEN DESIGNED TO PROVIDE A BALANCE BETWEEN EXISTING ROADWAY GRADES, EXISTING GRADE AT BNSF ROW LINE AND A UNIFORM TRAIL PROFILE. THE PROPOSED BOULEVARD SLOPE BETWEEN THE TRAIL AND HOFFMAN ROAD VARIES FROM -10% TO +10% TO ASSIST WITH THIS BALANCE. CONTRACTORS SHALL CONSTRUCT PROPOSED ROADWAY CURB TO FIT EXISTING ROADWAY GRADES AND AS DIRECTED BY THE ENGINEER TO IMPROVE AREAS OF SUBSTANDARD DRAINAGE IN CONJUNCTION WITH THE PROPOSED MILL AND OVERLAY. THE ENGINEER MAY MODIFY TRAIL PROFILES AND CORRESPONDING BOULEVARD SLOPES BASED ON CONSTRUCTED CURB.
NOTE:
TRAIL PROFILE GRADES ALONG HOFFMAN ROAD HAVE BEEN DESIGNED TO PROVIDE A BALANCE BETWEEN EXISTING ROADWAY GRADES, EXISTING GRADE AT BNSF ROW LINE AND A UNIFORM TRAIL PROFILE. THE PROPOSED BOULEVARD SLOPE BETWEEN THE TRAIL AND HOFFMAN ROAD VARIES FROM -10% TO +10% TO ASSIST WITH THIS BALANCE. CONTRACTORS SHALL CONSTRUCT PROPOSED ROADWAY CURB TO FIT EXISTING ROADWAY GRADES AND AS DIRECTED BY THE ENGINEER TO IMPROVE AREAS OF SUBSTANDARD DRAINAGE IN CONJUNCTION WITH THE PROPOSED MILL AND OVERLAY. THE ENGINEER MAY MODIFY TRAIL PROFILES AND CORRESPONDING BOULEVARD SLOPES BASED ON CONSTRUCTED CURB.
TRAIL PROFILE GRADES ALONG HOFFMAN ROAD HAVE BEEN DESIGNED TO PROVIDE A BALANCE BETWEEN EXISTING ROADWAY GRADES, EXISTING GRADE AT BNSF ROW LINE AND A UNIFORM TRAIL PROFILE. THE PROPOSED BOULEVARD SLOPE BETWEEN THE TRAIL AND HOFFMAN ROAD VARIES FROM -10% TO +10% TO ASSIST WITH THIS BALANCE. CONTRACTORS SHALL CONSTRUCT PROPOSED ROADWAY CURB TO FIT EXISTING ROADWAY GRADES AND AS DIRECTED BY THE ENGINEER TO IMPROVE AREAS OF SUBSTANDARD DRAINAGE IN CONJUPTION WITH THE PROPOSED MILL AND OVERLAY. THE ENGINEER MAY MODIFY TRAIL PROFILES AND CORRESPONDING BOULEVARD SLOPES BASED ON CONSTRUCTED CURB.
BRUCE VENTO TRAIL

DESIGNED BY:

DRAWN BY:

CHECKED BY:

DESIGNED IN ACCORDANCE WITH 9TH EDITION SPECIFICATIONS FOR CONSTRUCTION SMALL COUNTRY.


NOTES:

1. BACKFILL BEHIND ABUTMENTS SHALL BE STRUCTURAL GRADE 60 (EPOXY COATED) FOR REINFORCEMENT DESIGNATIONS.
North Abutment Footing Plan

South Abutment Footing Plan

Notes:
- Location of helical piles shall be determined by helical pile design and shown in helical pile shop drawings.
- F means front face
- B means back face
- E means each face

North Abutment Details

South Abutment Details

Ramsey County, Minnesota

BRIDGE ABUTMENT DETAILS 1

BRIDGE FOOTING PLAN

DESIGNED BY: JCB
DRAWN BY: PHH
CHECKED BY: MDJ

Kimley-Horn

BRUCE VENTO TRAIL
STATE PROJ. NO. XXXX-XX (BRUCE VENTO TRAIL)
**Helical Pile Notes:**

- Contractors are responsible for selecting, furnishing, and installing helical piles and all pile connections that meet the requirements of the special provisions. Calculations shall be provided per the special provisions.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.

- The contractor shall provide shop drawings that include pile loadings and all pile connections that meet the requirements of the special provisions. Calculations shall be provided per the special provisions.

- Contractors shall be responsible for designing, furnishing, and installing helical piles and all pile connections that meet the requirements of the special provisions. Calculations shall be provided per the special provisions.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.

- Contractors shall provide shop drawings that include longitudinal and transverse pile spacing for the entire length of abutment and wingwalls. Pile loads are shown based on the plan file specification angles to be shown in shop drawings. See shop drawings prior to pile installation.
NOTES
1. PROVIDE (2)-2/3" x 5/8" CARRIAGE BOLTS, WASHERS AND NUT AT EACH RAIL AND POST INTERSECTION.
2. PROVIDE 2" x 6" END CAP, PROVIDE (2)-3/8" x 5/8" CARRIAGE BOLTS, WASHERS AND NUT AT EACH RAIL AND POST INTERSECTION.
3. PROVIDE 2" x 10" TOP RAIL, NAIL TO TOP OF POST WITH (2)-30d SS, RING SHANK NAILS OR EQUIVALENT SCREWS TO RAIL EVERY 2 FT. O.C., PR OVIDE (2)-30d SS SCREWS TO MUX. END AND EACH RAIL AND POST INTERSECTION.

ALL LUMBER SHALL BE S4S (SURFACED 4 SIDES) GRADED UNDER THE SOUTHERN PINE INSPECTION BUREAU (SPIB) RULES. ALL LUMBER SHALL BE SYP GRADE MINIMUM (SYP). ALL ITEMS SHOWN SHALL BE INCIDENTAL TO PREFABRICATED STEEL TRUSS BRIDGE.

ELEVATION - APPROACH PROTECTION FENCE
INSIDE FACE TO TRAIL SHOWN.
PRECAST MODULAR BLOCK RETAINING WALL

TYPICAL SECTION: LARGE BLOCK (WETCAST) RETAINING WALL

TYPICAL SECTION NOTES:

1. EXCAVATION, LEVELING PADS, AND BACKFILL INCIDENTAL TO 30% PRECAST MODULAR BLOCK WALL.
2. 4" THERMOPLASTIC PERFORATED PIPE, SPEC. 250, WRAP WITH TYPE I GEOTEXTILE, SPEC. 3733 (TYP.). INSTALLATION AS PER SPEC. 2502 (INCIDENTAL). CONNECT TO DRAINAGE SYSTEM OR OUTLET TO PRECAST CONCRETE MATERIAL, INCIDENTAL.
3. HEADWALL ALIGNMENTS LOCATED ALONG REFERENCE LINE WHICH IS ALONG FRONT FACE OF WALL AT BASE OF BOTTOM BLOCK.
4. 3/4" COARSE AGGREGATE PER MANUFACTURER'S RECOMMENDATION.
5. EXPOSED FACES OF MODULAR BLOCKS SHALL BE TEXTURED, SEE SPECIAL PROVISIONS.
6. BLOCK SIZES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL BLOCK SIZES TO BE PER MANUFACTURER'S DESIGN.
7. CONTRACTOR TO DESIGN CABLE HARDWARE AND TENSOING SYSTEM. CONTRACTOR TO DESIGN BRACING/ANCHORING SYSTEM FOR FENCE.
GENERAL NOTES AND SOIL NAIL WALL DESIGN PARAMETERS:

1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIAL PROVISIONS.

2. CONCRETE MINIMUM COMPRESSIVE STRENGTHS.
   
   SHOTCRETE: \( F'c = 4 \text{ KSI} \)
   
   NAIL GROUT: \( F'c = 3 \text{ KSI} \)

3. UNLESS NOTED OTHERWISE ON THE PLANS, MINIMUM CONCRETE OR SHOTCRETE COVER MEASURED FROM THE FACE OF CONCRETE OR SHOTCRETE TO THE FACE OF ANY REINFORCING BAR OR METALLIC ELEMENT SHALL BE AS FOLLOWS:
   
   - FRONT SIDE OF FINAL FACING EXPOSED TO WEATHER: \( 2 \text{ IN.} \)
   - FINAL SHOTCRETE FACING EXPOSED TO SOIL: \( 2 \text{ IN.} \)
   - FINAL CAST-IN-PLACE CONCRETE CAST AGAINST INITIAL SHOTCRETE: \( 1.5 \text{ IN.} \)

4. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL EXTERIOR CORNERS AND EDGES SHALL HAVE A 0.75 INCH CHAMFER AND ALL INTERIOR CORNERS SHALL HAVE A 0.75 INCH FILLET.

5. PROVIDE GEOTECHNICAL INVESTIGATION REPORT, APPROVED BY THE ENGINEER, THAT INCLUDES REPRESENTATIVE SOIL VALUES TO BE USED IN THE DESIGN OF THE SOIL NAIL WALL. SEE SPECIAL PROVISIONS.

6. ALL DRILLED NAIL LENGTHS (L) AND NAIL SIZES SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES.

8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING STABLE SLOPES ABOVE AND BELOW THE SOIL NAIL WALL.

9. NO GENERAL EXCAVATION OPEN CUTS STEEPER THAN 1H:1V SHALL BE MADE WITHIN 15 FEET IN FRONT OF THE WALLS WITHOUT APPROVAL OF THE ENGINEER.

10. UNLESS SPECIFIED OTHERWISE, THE ENGINEER WILL PROVIDE SURVEY CONTROL POINTS FOR TOP OF WALL ALIGNMENT. THE CONTRACTOR IS RESPONSIBLE FOR SURVEY CONTROL DURING EXCAVATION.

11. AT THE CONTRACTOR'S OPTION, NAILS MAY BE DRILLED AND PLACED THROUGH A TEMPORARY STABILIZING BERM.

12. EXCAVATION IN THE VICINITY OF THE WALL FACE SHALL REQUIRE SPECIAL CARE AND EFFORT COMPARED TO GENERAL ROADWAY EXCAVATION. SEE SPECIAL PROVISIONS.

TYPICAL CONSTRUCTION SEQUENCE:

1. WALLS SHALL BE BUILT FROM THE TOP DOWN IN ACCORDANCE WITH THE STAGED EXCAVATION LIFTS SHOWN ON SHEET SNW04 AND SPECIAL PROVISIONS.

2. THE FOLLOWING WALL CONSTRUCTION SEQUENCE FOR EACH EXCAVATION LIFT SHALL BE COMPLETE PRIOR TO INITIATING WORK ON THE NEXT EXCAVATION LIFT UNLESS OTHERWISE APPROVED BY THE ENGINEER.

2.1. FURNISH & INSTALL PRE-PRODUCTION VERIFICATION TEST NAILS.

2.2. FURNISH & INSTALL INCLINOMETER(S) AS SHOWN.

2.3. EXCAVATE TO STAGE 1 ROUGH GRADE.

2.4. TRIM TO FINAL WALL FACE EXCAVATION LINE OR TO STABILIZING BERM (IF USED).

2.5. FURNISH & INSTALL SOIL NAILS. TRIM STABILIZATION BERM (IF USED) TO FINAL WALL FACE EXCAVATION LINE.

2.6. FURNISH & INSTALL GEOCOMPOSITE DRAINAGE STRIP.

2.7. PERFORM NAIL PULLOUT TESTS PER SPECIFICATIONS BEFORE SHOTCRETE IS APPLIED AND AFTER NAIL GROUT HAS ATTAINED ITS SPECIFIED STRENGTH.

2.8. PLACE REINFORCING AND APPLY SHOTCRETE. NO EXPOSED EXCAVATION SHALL BE LEFT UNSTABILIZED BY SHOTCRETE AT THE END OF THE WORK DAY UNLESS ENGINEER APPROVES OTHERWISE.

2.9. CONDUCT VERIFICATION AND PROOF LOAD TESTS PER SPECIFICATIONS. PROTECT PROOF TEST LOCATIONS FROM SHOTCRETE. GROUT PROOF TEST SOIL NAILS.

2.10. CONDUCT QUALITY CONTROL OF MATERIALS, INCLUDING GROUT AND SHOTCRETE PER SPECIFICATIONS.

2.11. CONSTRUCT FOOTING DRAIN. FURNISH & INSTALL PVC CONNECTOR PIPES DURING CONSTRUCTION OF THE FINAL SHOTCRETE LIFT TO PROVIDE DRAINAGE OF THE GEOCOMPOSITE DRAINAGE STRIPS INTO THE FOOTING DRAIN OR WALL BASE AS SHOWN ON SHEET SNW05.

2.12. FURNISH & INSTALL CAST-IN-PLACE FINAL FACING.
EXPANSION AND CONTRACTION JOINTS NOT REQUIRED THROUGH SHOTCRETE. PLACE EXPANSION JOINTS AT 60'-0" MAX SPACING. PLACE CONTRACTION JOINTS AT 30'-0" MAX SPACING FROM ADJACENT EXPANSION JOINT OR CONTRACTION JOINT. COORDINATE JOINT LOCATIONS WITH AESTHETIC TREATMENT. SUBMIT PROPOSED EXPANSION AND CONTRACTION JOINTS TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

Provide concrete surface texture and color to match recons weathered edge block. Submit proposed texture and color to engineer for approval prior to construction. Coordinate aesthetics to align with adjacent retaining walls at soil nail wall 1.

1) Structural Shotcrete Facing
2) Construct C.I.P. Concrete Facing in accordance with aesthetic requirements. C.I.P. concrete facing shall be MNDOT mix 3562, see special provisions.

Expansion and Contraction Joint Details:

- Structural Shotcrete
- Joint Sealant with Tooled Surface
- Joint May Be Formed with Mortarboard and Cut Back to the Root of the Changer on Hardboard and Cut Back to 2" Wide Pre Molded Joint Filler
- 1" Chamfer (Typ.)
- Reinforcement

Typical Wall Section Detail:

- Structural Shotcrete Facing
- Prefabricated Drainage Mat
- Prefabricated Drain Grate Supplied by Drain Grate Manufacturer
- Rebar Size to Be Determined by Designer

Detail:

- 4X4 - W4XW4 Grade 60 WWR Drainage Mat
- Prefabricated Synthetic Drainage Mat
- Anchorage Nuts
- Bevel Washers
- Studs @ 6 OC A325 Heeded #8 GRADE 75 Dwydag Threadbar with Anchor Nut
- 8X8X1/2 PL GRADE 50 Studs @ 6 OC

Top of Wall

NOT TO SCALE

EXPANSION AND CONTRACTION JOINT DETAILS

NOT TO SCALE
LEGEND
- PROPOSED STORM SEWER
- EXISTING BNSF DITCH FLOW
- DRAINAGE FLOW DIRECTION
- PROPOSED DITCH FLOW
- STORM STRUCTURE NUMBER
- PROPOSED CATCHMENT AREA
- RANDOM RIPRAP WITH GEOTEXTILE FILTER
- WETLAND

SCALE IN FEET
100

PROPOSED STORM SEWER

BNSF DITCH FLOW

DRAINAGE FLOW DIRECTION

PROPOSED DITCH FLOW

STORM STRUCTURE NUMBER

PROPOSED CATCHMENT AREA

RANDOM RIPRAP WITH GEOTEXTILE FILTER

WETLAND

MATCHLINE BRUCE VENTO TRAIL
STA 104+00 SEE SHEET DR04

MATCHLINE BRUCE VENTO TRAIL
STA 118+00 SEE SHEET DR06

MATCHLINE BRUCE VENTO TRAIL
STA 104+00 SEE SHEET DR04

MATCHLINE BRUCE VENTO TRAIL
STA 118+00 SEE SHEET DR06

LIMITS

CONSTRUCTION

BNSF TRACK

FROM BNSF DITCH 20'

STORAGE BMP

UNDERGROUND

HOPFMAN ROAD

BNSF TRACK

FROM BNSF DITCH 20'

STORAGE BMP

UNDERGROUND

HOPFMAN ROAD

S T A .

S E E  S H E E T

M A T C H L I N E

104+00

B R U C E  V E N T O  T R A I L

D R 0 4

118+00

B R U C E  V E N T O  T R A I L

D R 0 6

104+00

B R U C E  V E N T O  T R A I L

D R 0 4

118+00

B R U C E  V E N T O  T R A I L

D R 0 6

104+00

B R U C E  V E N T O  T R A I L

D R 0 4

118+00

B R U C E  V E N T O  T R A I L

D R 0 6

104+00

B R U C E  V E N T O  T R A I L

D R 0 4

118+00

B R U C E  V E N T O  T R A I L

D R 0 6

104+00

B R U C E  V E N T O  T R A I L

D R 0 4

118+00

B R U C E  V E N T O  T R A I L

D R 0 6

DRAINAGE PLAN AND PROFILE

STATE PROJ. NO. XXXX-XX (BRUCE VENTO TRAIL)

BRUCE VENTO TRAIL

STA 104+00 TO STA 118+00

P A L C E  S H E E T

M O D E L N A M E

$ M O D E L N A M E $

DESIGNED BY

KJC

DRAWN BY

KJC

CHECKED BY

GSB

PRINTED NAME:

LICENSED PROFESSIONAL ENGINEER

CERTIFIED BY:

LIC. NO.

DATE:

Printed Name:

LICENSED PROFESSIONAL ENGINEER

CERTIFIED BY:

LIC. NO.

DATE:

Printed Name:

LICENSED PROFESSIONAL ENGINEER

CERTIFIED BY:

LIC. NO.

DATE:

the State of Minnesota.

Licensed Professional Engineer under the laws of

or under my direct supervision and that I am a duly

I hereby certify that this plan was prepared by me

DESIGNED BY

KJC

DRAWN BY

KJC

CHECKED BY

GSB

PRINTED NAME:

LICENSED PROFESSIONAL ENGINEER

CERTIFIED BY:

LIC. NO.

DATE:

Printed Name:

LICENSED PROFESSIONAL ENGINEER

CERTIFIED BY:

LIC. NO.

DATE:

Printed Name:

LICENSED PROFESSIONAL ENGINEER

CERTIFIED BY:

LIC. NO.

DATE:
PROPOSED WETLAND MITIGATION AREA = 8,150 SF
PROPOSED WETLAND IMPACT = 4,260 SF
PROPOSED EXCAVATION BELOW ELEV 915.6 = 1,821 CY
PROPOSED FILL BELOW 100 YEAR FLOODPLAIN 915.6 = 1,900 CY
LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS MAY BE LOCATED IN MANY PLACES WITHIN THE PLAN AS WELL AS IN THE SPECIAL PROVISIONS. SWPPP SPECIFIC SWPPP ELEMENTS MENTIONED IN THIS STORMWATER POLLUTION PREVENTION PLAN ARE INTENDED TO BE A QUICK REFERENCE FOR THE CONTRACTOR AND PROJECT ENGINEER TO USE IN THE FIELD. THERE MAY BE OTHER SWPPP REQUIREMENTS NOT LISTED IN THIS PLAN WHICH ARE NOT IDENTIFIED IN THIS SHEET.

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

LOCATION

DESCRIPTION

TEMPORARY EROSION CONTROL MEASURES
Sheets No. 87-92

PERMANENT EROSION CONTROL MEASURES
Sheets No. 87-92

FINAL STABILIZATION
Sheets No. 87-92

SOILS AND CONSTRUCTION NOTES
Sheets No. 4

BRAHMAE TABULATION
Sheets No. 80-99

BRAHMAE SEEDING SHEETS
Sheets No. 80-99

ESCAIIBLE SETTLEMENT LENGTHS
Sheets No. 87-92

CONC ESTABLISHMENT TABULATION
Sheets No. 87-92

SITE MAP
Sheets No. 1

WATER RESOURCES NOTES
Sheet No. 78

SITE INSPECTION AND MAINTENANCE

INSPECT THE ENTIRE CONSTRUCTION SITE A MINIMUM OF EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECT ALL TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT, EROSION PREVENTION AND SEDIMENT CONTROL UMPS AT THE SITE. HAVE UNDERGONE FINAL STABILIZATION AND THE UMP HAS BEEN SUBMITTED. INSPECT SURFACE WATER INDrains FOR SIGNS OF EROSION AND SEDIMENT DEPOSITION. ENSURE CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF TRACKING ONTO PAVED SURFACES. INSPECT SURFACING PROPERTIES FOR EVIDENCE OF OFF SITE SEDIMENT ACCUMULATION. INSPECT TERRITORY LIMITS FOR SIGNS OF SEDIMENT DEPOSITION AND COMPLIANCE TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE AREA.

RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES IN WRITING WITHIN 24 HOURS. SUBMIT INSPECTION REPORTS IN A FORMAT THAT IS ACCEPTABLE TO THE PROJECT ENGINEER. INCLUDE THE FOLLOWING IN THE RECORDS OF EACH INSPECTION: A. DATE AND TIME OF INSPECTIONS
B. NAME OF PERSON PERFORMING INSPECTIONS
C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS
D. PREPARATION OF CORRECTIVE ACTIONS
E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS
F. DOCUMENTS AND CHANGES MADE TO THE SITE SINCE THE PRECEDING INSPECTION

REPLACE, REPAIR OR SUPPLEMENT ALL NONFUNCTIONAL UMPS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY UNLESS LISTED DIFFERENTLY BELOW:
A. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN 27 BECOMES NONFUNCTIONAL OR SEDIMENT REMOVAL AND STABILIZATION REQUIREMENTS FOR SEDIMENT BASINS HAVE BEEN MET. ENSURE THAT THE UMPS HAS SUCCEEDED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
B. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN 27 BECOMES NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE DEVICE.
C. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
D. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN 27 BECOMES NONFUNCTIONAL OR SEDIMENT DEPOSITS 27 IN ANY AREA THAT IS DISCOVERED BY INSPECTION OR SURVEYING.
E. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
F. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
G. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
H. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
I. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
J. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
K. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
L. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
M. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
N. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
O. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
P. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
Q. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
R. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
S. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
T. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
U. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
V. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
W. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
X. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
Y. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
Z. REPLACE, REPAIR OR SUPPLEMENT PERIODIC CONTROL DEVICES WHEN THE UMPS HAS BEEN MEETED BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.

ENVIRONMENTAL REVIEW

THE CONTRACTOR MUST PERFORM ALL MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS. THIS PROJECT IS NOT LOCATED IN A WELL HEAD PROTECTION AREA.

THIS PROJECT IS NOT LOCATED IN A DRINKING WATER SUPPLY MANAGEMENT AREA (OWMA). THE OWMA VULNERABILITY IS CLASSIFIED AS XXXX.
**STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)**

**STABILIZATION TIME FRAMES**

<table>
<thead>
<tr>
<th>AREA</th>
<th>TIME FRAME</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAST 200 LUAL FEET OF DRAINAGE DITCH OR SWALE</td>
<td>( T = 0.5 )</td>
<td>( T = 0.5 )</td>
</tr>
<tr>
<td>REMAINING PORTIONS OF DRAINAGE DITCH OR SWALE</td>
<td>( T = 0.7 )</td>
<td>( T = 0.7 )</td>
</tr>
<tr>
<td>DRAINAGE OUTLETS</td>
<td>( T = 1.0 )</td>
<td>( T = 1.0 )</td>
</tr>
<tr>
<td>PUMP AND DRAINAGE OUTLETS</td>
<td>( T = 1.0 )</td>
<td>( T = 1.0 )</td>
</tr>
<tr>
<td>EXPOSED SOILS AND GRADES</td>
<td>( T = 1.0 )</td>
<td>( T = 1.0 )</td>
</tr>
</tbody>
</table>

1. Place Silt Curtains as Necessary. If Silt Curtains are placed, immediately begin stabilizing the disturbed area using one or more of the following stabilization methods:
   - Seed immediately. Seed is to be a rapid stabilization mix designed to germinate quickly in all conditions.
   - Mulch, hydro-mulch, tackifier, or polyacrylamide.
   - Rapid stabilization or hydro-seeding.
   - Silt curtains are to be placed and stabilized as indicated on plans. Silt curtains are to be placed so that they extend at least 5 feet beyond the toe of any slope.

2. DEWATERING AND DRAINAGE
   - Use approved methods for dewatering and drainage.
   - Drainage facilities are to be designed and placed to convey water from construction operations to an approved area.
   - Sediment basins are to be placed and maintained in good working order.

3. PROTECT STORM SEWER INLETS AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION. PROVIDE INLET PROTECTION DEVICES WITH EMERGENCY OVERFLOW CAPABILITIES. SILT FENCE PLACED IN THE DRAINAGE SYSTEM TO CAPTURE EXCESS SEDIMENT. INLET PROTECTION DEVICES ARE TO BE MAINTAINED IN GOOD WORKING ORDER.

4. PROTECT CONSTRUCTION ACTIVITIES SUCH AS MILLING, MACHINING, AND ROAD BASE PLACEMENT.
   - Use approved methods for protection of construction activities.
   - Use approved methods for protection of construction activities.
   - Use approved methods for protection of construction activities.

5. PROVIDE PERIODIC INSPECTIONS OF INLET PROTECTION DEVICES TO ENSURE PROPER FUNCTIONING.
   - Use approved methods for periodic inspections of inlet protection devices.
   - Use approved methods for periodic inspections of inlet protection devices.
   - Use approved methods for periodic inspections of inlet protection devices.

6. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

7. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

8. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

9. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
   - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

10. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

11. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

12. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

13. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

14. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

15. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.

16. USE LABORATORY TESTING TO DETERMINE THE APPROPRIATE SIZE AND TYPE OF INLET PROTECTION DEVICES.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
    - Use approved methods for laboratory testing to determine the appropriate size and type of inlet protection devices.
STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

WATER RESOURCES NOTES

These Notes along with the Stormwater Pollution Prevention Plan (SWPPP) Narrative are intended to give information on critical drainage features, natural resources, and contractor operations that may impact drainage and natural resources.

1. The size and elevation of culverts, storm sewer pipes, catch basins, ponds, infiltration/filtration basins, permeable drain blocks and overflow devices have been specifically designed to conform to MnDOT design standards. Minnesota Pollution Control Agency (MPCA) and Watershed District Permit Requirements. The design computations are on file with MnDOT and are available for review.

2. Subsoil all disturbed green spaces except as listed in 254.3a.2.

3. Perform post installation manhole testing of all plastic pipe.

4. Any subsurface drainage tiles damaged during construction shall be repaired, replaced or rerouted, and connected to the existing tile or drainage system to ensure that existing upland drainage is perpetuated. This should be done to the approval and satisfaction of the engineer.

5. The following water related permits apply to this project:

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>TYPE OF PERMIT</th>
<th>WATERED DISTRICT</th>
<th>DEPARTMENT OF NATURAL RESOURCES</th>
<th>NAME</th>
<th>AUTH CORPS OF ENGINEERS</th>
<th>NAME</th>
</tr>
</thead>
</table>

REVIEW ALL PERMITS FOR ANY SPECIAL CONDITIONS THAT WILL EFFECT CONSTRUCTION OF THE PROJECT.

Temporary dewatering activities may be required for roadway construction and utility work. Therefore, it is important to know that a permit for the temporary appropriation of waters of the State, non-potable from MPCA or under my direct supervision and that I am a duly licensed professional engineer under the laws of Minnesota. Licensed Professional Engineer

767 EUSTIS STREET, SUITE 100
SAINT PAUL, MINNESOTA 55114
Ph: 651-645-4197 www.kimley-horn.com

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

POND CONSTRUCTION NOTES

1. Do not stockpile materials or park equipment or vehicles in a constructed pond.

2. Wet ponds may be used as temporary sediment traps or temporary sediment basins. Clean out all permanent stormwater basins to the design capacity after all upgradient land disturbing activity has been completed and the drainage area has been stabilized. Provide rigorous erosion prevention and sediment control BMPs at the toe of the adjacent slope immediately after placement of amended topsoil.

3. Install sediment control BMPs at the toe of the adjacent slope immediately after placement of amended topsoil.

4. Submit a site management plan to the engineer for the construction of filtration areas.

5. Stabilize side slopes prior to placing any amended topsoil in the bottom of the infiltration area.

6. Do not drain turbid or sediment laden water to the infiltration area.

7. Use only low impact tracked vehicles within infiltration areas.

8. The contractor may not drive any equipment on finished filtration areas or adjacent side slopes, restore disturbed filtration areas and adjacent side slopes to pre-disturbance conditions within 24 hours, any rutted or damaged turf that could create sediment discharge to filtration areas must be repaired within 24 hours. Subsoil the infiltration area to remove any compaction caused by vehicle traffic.

9. Excavate any sediment that washes into infiltration areas, remove and replace any damaged topsoil that has become disturbed visible at the surface.

10. Report any signs of high water table or compaction of the in place soils to the engineer.

FILTRATION CONSTRUCTION NOTES

1. Do not stockpile materials or park equipment or vehicles in a constructed filtration area. Stabilize or otherwise mark off filtration areas to prevent heavy construction vehicles and equipment from driving through.

2. Do not place filter material in filtration basins until all upgradient land disturbance activity has been completed and the drainage area has been stabilized. Provide rigorous erosion prevention and sediment control BMPs if the filtration area must be completely excavated prior to completion of ground disturbing activities.

3. Install sediment control BMPs at the toe of the adjacent slope immediately after placement of amended topsoil.

4. Submit a site management plan to the engineer for the construction of filtration areas.

5. Do not drain turbid or sediment laden water to the filtration area after the filter material has been installed.

6. The contractor may not drive any equipment on finished filtration areas or adjacent side slopes, restore disturbed filtration areas and adjacent side slopes to pre-disturbance conditions within 24 hours, any ruts or damaged turf that could create sediment discharge to filtration areas must be repaired within 24 hours.

7. Excavate any sediment that washes into filtration areas, remove and replace any amended topsoil that has become disturbed visible at the surface.

8. Report any signs of high water table or compaction of the in place soils to the engineer.

LANDSCAPE NOTES

1. Filter logs shall be placed, as needed, to trap sediment on the lower end of beds or tree holes.

2. Filter logs will be left to photo degrade.

3. Tilling for beds or tree holes must be planted and mulched with wood chip.

4. Eighty days or straw mulch until planting operations can be completed.

5. Any pond corners opened due to tilling for shrub beds or tree holes must be planted and mulched with wood chip within 24 hours or straw mulch until planting operations can be completed.
NOTE:
1. OWNER TO PROVIDE ALL SIGN COMPONENTS, INCLUDING METAL, CAPS & BASES, WOOD POSTS, SIGN PANELS, AND ASSOCIATED SCREWS, BOLTS AND ANCHORS

CONTRACTOR SHALL PROVIDE CUTTING AND ROUTING OF TIMBERS AND INSTALLATION WHERE REQUIRED

ALUMINUM SIDETOP CAP SCREW TO WOOD POST, TYP.

GALV. BASE PLATE VERTICAL PLATE PRE-DRILL WOOD AND USE (4) 1/2" x 5.5" LAG SCREWS, TYP.

GALV. BASE PLATE DRILL, CONC. AND USE (4) 1/2" x 9" TAPCON ANCHOR, TYP.

CONC. FIND, TYP.

NOTE:
1. OWNER TO PROVIDE ALL SIGN COMPONENTS, INCLUDING METAL, CAPS & BASES, WOOD POSTS, SIGN PANELS, AND ASSOCIATED SCREWS, BOLTS AND ANCHORS

CONTRACTOR SHALL PROVIDE CUTTING AND ROUTING OF TIMBERS AND ASSOCIATED INSTALLATION WHERE REQUIRED

4"x4" WOOD POST, TYP.

ALUMINUM CAP BRACKET, SCREW TO POST TYP.

SIGN PANEL, SCREW TO POST, (6) TYP.

ROUTER POSTS (2 SIDES) TO FIT BASE, TYP.

GALV. BASE PLATE VERTICAL PLATE PRE-DRILL WOOD AND USE (4) 1/2" x 2" LAG SCREW, TYP.

GALV. BASE PLATE DRILL, CONC. AND USE (4) 1/2" x 9" TAPCON ANCHOR, TYP.

GENERAL ELEVATION

SECTION AA

SIGN ELEVATION

SECTION AA

1. SIGN FOUNDATION—WAYFINDING TRAIL POST (1) 24" DIAM.

SCALE 1" = 1'-0"

2. SIGN FOUNDATION—SECONDARY KIOSK/RULES SIGN (2) 16" DIAM.

SCALE 1" = 1'-0"

DESIGNED BY: KJC

DRAWN BY: KJC

CHECKED BY: GSB
### GENERAL NOTES:

1. **IN BOULEVARD CONDITIONS, CENTER TREES IN BOULEVARD BETWEEN TRAIL EDGES AND BACK OF CURB**
2. **WHEN NOT A BOULEVARD CONDITION, PLACE TREES 3' FROM EDGE OF TRAIL**
3. **SEE DETAILS FOR TREE SPACING AT NODE TYPE 3. REFER TO EROSION CONTROL AND LANDSCAPING PLANS FOR TREES AT OTHER NODE LOCATIONS**

### PLANT SCHEDULE BOULEVARD TREES

<table>
<thead>
<tr>
<th>TRES</th>
<th>QTY</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>SPECIFICATIONS</th>
<th>CALIPER</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFM</td>
<td>19</td>
<td>Acer x freemanii 'APFY'</td>
<td>Firefall Maple</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>ARM</td>
<td>6</td>
<td>Acer rubrum 'JS9-KW78'</td>
<td>Armstrong Maple</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>ABS</td>
<td>6</td>
<td>Amelanchier x grandiflora 'Autumn Brilliance'</td>
<td>Autumn Brilliance Serviceberry</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>FSB</td>
<td>4</td>
<td>Carpinus caroliniana 'J.N. Upright'</td>
<td>Firespire Beech</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>CHB</td>
<td>18</td>
<td>Celtis occidentalis</td>
<td>Common Hackberry</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>IHG</td>
<td>1</td>
<td>Gleditsia triacanthos inermis 'Impole'</td>
<td>Imperial Honeylocust</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>SKH</td>
<td>8</td>
<td>Gleditsia triacanthos inermis 'Skyline' TM</td>
<td>Skyline Honeylocust</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>RRC</td>
<td>4</td>
<td>Malus 'JFS-KW5'</td>
<td>Royal Ramaspur Crabapple</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>SWO</td>
<td>2</td>
<td>Quercus bicolor</td>
<td>Swamp White Oak</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>JTL</td>
<td>2</td>
<td>Syringa reticulata 'Ivy Silk'</td>
<td>Ivy Silk Japanese Tree Lilac</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>NHE</td>
<td>12</td>
<td>Ulmus americana 'New Harmony'</td>
<td>New Harmony Elm</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
<tr>
<td>PRE</td>
<td>1</td>
<td>Ulmus americana 'Princeton'</td>
<td>Princeton Elm</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
</tr>
</tbody>
</table>

### PLANT SCHEDULE RESIDENTIAL BUFFER AREA

<table>
<thead>
<tr>
<th>TRES</th>
<th>QTY</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>CONT.</th>
<th>SIZE</th>
<th>SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFM</td>
<td>5</td>
<td>Acer x freemanii 'APFY'</td>
<td>Firefall Maple</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
<td>TO BE DETERMINED IN FIELD - SEE NOTE ON PLANS</td>
</tr>
<tr>
<td>CHB</td>
<td>5</td>
<td>Celtis occidentalis</td>
<td>Common Hackberry</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
<td></td>
</tr>
<tr>
<td>WHO</td>
<td>5</td>
<td>Quercus alba</td>
<td>White Oak</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>5</td>
<td>Quercus rubra</td>
<td>Red Oak</td>
<td>B &amp; B</td>
<td>2&quot; CAL.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHRUBS</th>
<th>QTY</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>CONT.</th>
<th>SIZE</th>
<th>SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI</td>
<td>23</td>
<td>Cornus sericea 'Iceni'</td>
<td>Iceni Red-Twig Dogwood</td>
<td>CONTAINER</td>
<td>#5</td>
<td>Varies 5 TO 7 D.C., Irregular, Natural Spacing and Arrangement as Shown in Plans</td>
</tr>
<tr>
<td>RA</td>
<td>25</td>
<td>Rhus aromatica</td>
<td>Fragrant Sumac</td>
<td>CONTAINER</td>
<td>#5</td>
<td></td>
</tr>
<tr>
<td>VD</td>
<td>20</td>
<td>Viburnum dentatum 'Arrowwood'</td>
<td>Arrowwood Viburnum</td>
<td>CONTAINER</td>
<td>#5</td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>28</td>
<td>Viburnum dentatum 'Chaste'</td>
<td>Blue Muffin Viburnum</td>
<td>CONTAINER</td>
<td>#5</td>
<td></td>
</tr>
</tbody>
</table>
LANDSCAPING DETAILS

**UTILITY CONSTRUCTION**

**TEMPORARY FENCE**

**SLOPE ROUNDED**

**OTHER VEGETATION PROTECTION MEASURES - CLEAN ROOT CUTTING**

**SANDY LOAM TOPSOIL**

**CONSTRUCTION UNITS**

**TREE PROTECTION AREA**

**DRIP LINE CRITICAL ROOT ZONE**

**DRIP LINE CRITICAL ROOT ZONE**

**CLEAN ROOT CUTTING**

**ROOT SYSTEM BRIDGE**

**ROOT SYSTEM BRIDGE**

**EXCAVATION AREA**

**SANDY LOAM FILL**

**SANDY LOAM FILL**

**NORMAL ROUNDED**

**SIGNIFICANT TREES NEAR THE PROPOSED CONSTRUCTION UNITS WILL BE REASSESS USING THE CHART BELOW**

**TREE PROTECTION ZONE**

**LA05**

**RAMSEY COUNTY, MINNESOTA**

**STATE PROJ. NO. XXXX-XX (BRUCE VENTO TRAIL)**

**DESIGNED BY:** KJC

**DRAWN BY:** KJC

**CHECKED BY:** GSB

**Printed Name:**

**Licensed Professional Engineer**

**Certified By:**

**Lic. No.:**

**Date:** 9/23/2021

**Ph: 651-645-4197**

**www.kimley-horn.com**

**SAINT PAUL, MINNESOTA 55114**

**767 EUSTIS STREET, SUITE 100**

**REDUCED ROUNDED**

**SIGNIFICANT TREES NEAR THE PROPOSED CONSTRUCTION UNITS WILL BE REASSESS USING THE CHART BELOW**

**TREE PROTECTION ZONE**

**LA05**

**RAMSEY COUNTY, MINNESOTA**

**STATE PROJ. NO. XXXX-XX (BRUCE VENTO TRAIL)**

**DESIGNED BY:** KJC

**DRAWN BY:** KJC

**CHECKED BY:** GSB

**Printed Name:**

**Licensed Professional Engineer**

**Certified By:**

**Lic. No.:**

**Date:** 9/23/2021

**Ph: 651-645-4197**

**www.kimley-horn.com**

**SAINT PAUL, MINNESOTA 55114**

**767 EUSTIS STREET, SUITE 100**
### General Notes

- See special provisions for specific project requirements.
- Refer to MnDOT specifications 2571, 3861, and the "A" inspection and contract administration manual for MnDOT landscape projects for general requirements.
- Complete preparatory work before starting initial planting operations.
- Accept all plant stock in accordance with MnDOT 3861 prior to planting.

### Project Location

#### Planting Details

- **Planting Stock:** Must be in the species specified on the planting plan. If it is post-planting, the full planting quantity must be eliminated from the planting plan.
- **Planting Time:** In general, planting should be done during the dormant season. However, planting may be done after the dormant season if necessary. The planting depth shall be determined by the planting plan.

#### Plant Installation Period

- **MnDOT 2571.3F2:**
  - **Branches Pruned at Trunk:**
  - **Pruning Plan:**
  - **Growing Details:**
  - **Cultivated Invasive Soil Depth:**
  - **Planting Soil:**

#### Planting Soil

- **Soil Type:**
- **Texture:**
- **Organic Matter:**
- **pH:**
- **Drainage:**

### Planting Plan Dimensions

- **Stated Dimensions:**
- **Supercede Scaling from Plan:**

#### Watering Guidelines

- **MnDOT 2571.3D:**
- **Average Gallons of Water per Application:**

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Average Gallons of Water per Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Transplanted Trees</td>
<td>50-100</td>
</tr>
<tr>
<td>Gabion and Burlapped Trees</td>
<td>20</td>
</tr>
<tr>
<td>Large Root and Container Trees</td>
<td>15</td>
</tr>
<tr>
<td>Balled and Burlapped Shrubs</td>
<td>10</td>
</tr>
<tr>
<td>Large Root and Container Shrubs</td>
<td>7</td>
</tr>
<tr>
<td>Woody Seedlings</td>
<td>4</td>
</tr>
<tr>
<td>Perennials and Vines</td>
<td>3</td>
</tr>
</tbody>
</table>

### Acceptable Plant Stock Growing Range Limits

- **Source:** USDA Plant Hardiness Zone Map (MnDOT 3861.20)

### Licensing Information

- **Printed Name:**
- **Licensed Professional Engineer:**
- **Certified By:**
- **Lic. No.:**
- **Date:**
- **State of Minnesota:**
- **Licensed Professional Engineer under the laws of**

### Revision Information

- **Rev.:**
- **Printed Name:**
- **Date:**
- **MnDOT 2571.3D:**
- **Branches Pruned at Trunk:**
- **Pruning Plan:**
- **Growing Details:**
- **Cultivated Invasive Soil Depth:**
- **Planting Soil:**

### Design Information

- **DESIGNED BY:**
- **DRAWN BY:**
- **CHECKED BY:**
- **Ph.: 651-645-4197**
- **www.kimley-horn.com**
- **SAINT PAUL, MINNESOTA 55114**
- **767 EUSTIS STREET, SUITE 100**

---

**Bruce Vento Trail**

**Ramsey County, Minnesota**

**State Project No.: XXXXX-XX (Bruce Vento Trail)**

**Kimley-Horn**

**LA06**

**LA06 of L430**
NOTE:
CONTRACTOR TO GRADE EMBANKMENTS BETWEEN STA 51+00 AND 66+30 TO CREATE THE LOOK AND FEEL OF A NATURAL LANDSCAPE. GRADING OPERATIONS MAY REQUIRE A RANGE OF EQUIPMENT INCLUDING SMALL EXCAVATORS, SKIDSTEERS AND LABORERS WITH HANDTOOLS TO GENERATE VARIABLE SLOPES WITH IRREGULAR CONTOURS AND INCLUSION OF LANDSCAPE BOULDERS IN RANDOM FASHION TO PROVIDE INTEREST AND PLATFORMS FOR TREE AND SHRUB PLANTINGS. GRADING OF EMBANKMENTS AND PLACEMENT OF BOULDERS SHALL BE DONE UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT. ADDITIONAL EQUIPMENT AND LABOR COSTS THAT MAY BE ASSOCIATED WITH LOWER PRODUCTION GRADING IN THIS COMMON EMBANKMENT.

RESIDENTIAL BUFFER AREA:
1. LOCATE 20 TREES PER FIELD STAKING IN COORDINATION WITH LANDSCAPE ARCHITECT FROM SPECIES WITHIN RESIDENTIAL BUFFER AREA PLANT SCHEDULE ON SHEET LA04. CONTRACTOR MAY BE DIRECTED TO PLANT ALL, PART, OR NONE OF THE TREES IN THIS LOCATION. TREES NOT PLANTED HERE WILL BE PLANTED ELSEWHERE ALONG TRAIL CORRIDOR NORTH OF BUERKLE ROAD. SEE ENLARGEMENTS ON SHEETS EC06 FOR DETAILED SHRUB PLANTING.
2. SEE ENLARGEMENTS ON SHEETS ECO1 FOR DETAILED SOD PLANTING.

SCALE IN FEET

MATCHLINE BRUCE VENTO TRAIL
STA, 62+00 SEE BELOW

MATCHLINE BRUCE VENTO TRAIL
STA, 76+00 SEE SHEET ECO2

MATCHLINE BRUCE VENTO TRAIL
STA, 50+11.68

CAP
CULVERT END PROTECTION

LEGEND

E BRUCE VENTO TRAIL

SECTION 5
SCALE IN FEET

MATCH LINE BRUCE VENTO TRAIL
STA 62+00 SEE BELOW

MATCH LINE BRUCE VENTO TRAIL
STA 76+00 SEE SHEET ECO2

MATCH LINE BRUCE VENTO TRAIL
STA 50+11.68

BEGIN CONSTRUCTION
BEGIN S.P. XXXX-XX
STA. 50+11.68
BEGIN S.P. XXXX-XX (BRUCE VENTO TRAIL)
BEGIN CONSTRUCTION
STA. 50+12.17

MATCHLINE BRUCE VENTO TRAIL
STA. J19+00 SEE ABOVE

END S.P. XXXX-XX (BRUCE VENTO TRAIL)
END CONSTRUCTION
STA. 178+54.77
BRUCE VENTO TRAIL

Sheet No. 19 of 32 Sheets
BRUCE VENTO TRAIL
STA. 139+00.000 - 143+50.000

Sheet No. X24 of X32 Sheets
February 28, 2022

Mr. Scott Yonke
Director of Planning and Development
Ramsey County Parks and Recreation Department
2015 Van Dyke Street
Maplewood, MN 55109

Dear Mr. Yonke:

This letter is intended to acknowledge the planning discussions between BNSF, Minnesota Commercial Railway and Ramsey County related to the County’s proposed extension of the Bruce Vento Trail north from Buerkle Road to US61 a total of approximately 2.7 miles. Approximately 0.6 miles of the trail is proposed to utilize BNSF right of way including the eastern portals of bridge underpasses at County Road E and US Highway 61.

The County has been working productively with BNSF to produce an acceptable design and we will continue to participate in that effort. It appears that remaining design problems are likely to have feasible solutions that will satisfy both parties.

BNSF will not make any commitment to allowing this use of its right-of-way until final designs have been approved and BNSF and the County have executed agreements covering the terms and conditions of use. However, at the moment BNSF believes that the project can move forward with a reasonable likelihood of a successful agreement.

Please contact me with any questions.

Sincerely,

Alex Fiorini
Manager Public Projects
Buerkle Rd/Highway 61

Crash Count: 55

- Pedestrian: 0
- Biker: 0
- Single Vehicle Run Off Road: 0
- Single Vehicle Over: 3
- Single Vehicle Same Direction: 6
- Single Vehicle Diverging: 0
- Rear End: 24
- Head On: 0
- Left Turn: 0
- Angle: 18
- Other: 4

Graph showing crash counts for various types of collisions.
Buerkle Rd/Bruce Vento Trail Crossing

Crash Count: 9

- Pedestrian: 0
- Bike: 0
- Single Vehicle Run Off Road: 1
- Single Vehicle Other: 0
- Sideimpact Same Direction: 1
- Sideimpact Opposing: 0
- Rear End: 1
- Head On: 2
- Left Turn: 1
- Angle: 2
- Other: 1
County Rd E/Hoffman Rd

Crash Count: 4

- Rest End: 2
- Left Turn: 1
- Angle: 1

Categories:
- Pedestrian
- Bike
- Single Vehicle Run Off Road
- Single Vehicle Other
- Sideswipe Same Direction
- Sideswipe Opposing
- Head On
- Obset
County Rd E/Highway 61

Report next page
## Crash Detail Report - Short Form

### County Rd E/Highway 61

**Incident ID:** 11050469  
**Route Sys:** 02-USTH  
**Measure:** 143.954  
**Route Num:** 0061  
**Route Name:** County Rd E/Highway 61  
**Route ID:** 0200000000000061-I  
**County:** 62-Ramsey  
**City:** Vadnais Heights  
**Intersect With:** # Ven 1  
**Date:** 06/08/15  
**Time:** 22:34  
**Day:** Mon  
**LAT:** 45.05303  
**Long:** -93.03588  
**UTM X:** 497174.4  
**UTM Y:** 4988538.2  
**Work Zone Type:** Not Applicable

### Basic Info

**Basic Type:** Bike  
**Crash Severity:** B - Minor Injury  
**First Harmful:** Pedalcyclist (Bicyclist)  
**Light Condition:** Dark (Str Lights On)  
**Weather Primary:** Clear

### Unit Information

<table>
<thead>
<tr>
<th>Unit</th>
<th>Vehicle Type</th>
<th>Maneuver</th>
<th>Age/Sex</th>
<th>Physical Cond</th>
<th>Contributing Factor 1</th>
<th>Contributing Factor 2</th>
<th>Contributing Factor 3</th>
<th>Contributing Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Motor Vehicle in Transport</td>
<td>Passenger Car</td>
<td>Northbound</td>
<td>Moving Forward</td>
<td>56 F</td>
<td>Apparently Normal</td>
<td>No Clear Contributing Action</td>
<td></td>
</tr>
<tr>
<td>Unit 2</td>
<td>Bicycle</td>
<td>BICYCLIST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PED XNG AGNT SIG</td>
<td>13 M</td>
<td>Failure to Yield Right-of-Way</td>
</tr>
<tr>
<td>Unit 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Officer Sketch

**Narrative:**

Unit 1 was stopped at red light northbound on Hwy 61/Co Rd E. When light turned green, Unit 1 proceeded forward and did not see a bike rider crossing in front of her against the light. She estimates her speed was approximately 5 MPH. Unit 2 stated that he intended to cross Westbound on County Rd E across Hwy 61. He saw that Westbound traffic on County Rd E had a green arrow and started crossing. He knew that the crosswalk traffic had a red but wanted to make it to the center island. He got struck and sustained cuts to legs and elbows. None appeared to require stitches. Unit 1 had valid insurance and no damage. Unit 2 evaluated by medics and transported as precaution.
Hoffman Rd from County Rd E to Cedar Ave

![Graph showing crash count for various types of accidents on Hoffman Rd from County Rd E to Cedar Ave.]
Hoffman Rd Cul-de-Sac to Hwy 61

Report next page
# Hoffman Rd Cul-de-Sac to Hwy 61 Crash Details

## Crash Detail Report - Short Form

**Hoffman cul de sac to hwy 61**

<table>
<thead>
<tr>
<th>INCIDENT ID</th>
<th>ROUTE SYS</th>
<th>ROUTE NUM</th>
<th>MEASURE</th>
<th>ROUTE NAME</th>
<th>COUNTY</th>
<th>CITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>00405599</td>
<td>07-CR</td>
<td>0095</td>
<td>0.002</td>
<td>COUNTY ROAD F</td>
<td>62-Ramsey</td>
<td>White Bear Lake</td>
</tr>
</tbody>
</table>

**Intersect With**

- FVEN 1
- KILL 0

**Date**

- 05/28/17

**Time**

- 17:26

**Light Condition**

- Daylight

**Weather Primary**

- Clear

**Officer Sketch**

**Narrative**

VEHICLE 1 WAS WESTBOUND ON COUNTY ROAD F WHEN THE DRIVER CLAIMED HE PASSED OUT AT THE WHEEL AFTER A LONG DAYS WORK ON THE ROOF OF HIS HOUSE. DRIVER CLAIMED HE HAD 2 BEERS THROUGHOUT THE DAY. VEHICLE 1 PBT .06 BAC. VEHICLE 1 LEFT THE ROADWAY AND DROVE INTO THE LAWN ON THE NORTH SIDE OF COUNTY ROAD F. VEHICLE 2 WAS MOWING THE LAWN OF HIS BUSINESS WITH A PUSH MOWER. VEHICLE 2 SAW DRIVER 1 LEAVE THE ROADWAY. VEHICLE 2 MOVED OUT OF THE WAY TO AVOID GETTING HIT. VEHICLE 1 RAN OVER THE LAWN MOWER. NO INJURIES OR CITATIONS. 1 TOW.
Highway 61 from Buerkle Rd to Hoffman Rd
Highway 61 from Buerkle Rd to Hoffman Rd Crash Details

Crash Detail Report - Short Form
Hwy 61 from Buerkle to Hoffman

<table>
<thead>
<tr>
<th>INCIDENT ID</th>
<th>ROUTE SYS</th>
<th>ROUTE NUM</th>
<th>MEASURE</th>
<th>ROUTE NAME</th>
<th>ROUTE ID</th>
<th>COUNTY</th>
<th>CITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>10596119</td>
<td>02-USTH</td>
<td>061</td>
<td>145</td>
<td>HIGHWAY 61</td>
<td>02000000000000011</td>
<td>02-Ramsey</td>
<td>White Bear Lake</td>
</tr>
</tbody>
</table>

INTERSECT WITH
Veh KILL: 1
DATE: 08/17/13
TIME: 13:35
LAT: 45°05'47"71"
LNG: 93°02'46"63"
UTM X: 4980590
UTM Y: 4980145
WORK ZONE TYPE: NOT APPLICABLE

BASIC TYPE
Bike

CRASH SEVERITY
C - Possible Injury

FIRST HARMFUL
Pedalcyclist (Bicyclist)

LIGHT CONDITION
Daylight

WEATHER PRIMARY
Clear

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Type</td>
<td>Motor Vehicle in Transport</td>
<td>Bicycle</td>
<td></td>
</tr>
<tr>
<td>Vehicle Type</td>
<td>Passenger Car</td>
<td>BICYCLIST</td>
<td></td>
</tr>
<tr>
<td>Direction of Travel</td>
<td>Southbound</td>
<td>Eastbound</td>
<td></td>
</tr>
<tr>
<td>Maneuver</td>
<td>Moving Forward</td>
<td>18 M</td>
<td></td>
</tr>
<tr>
<td>Age/Sex</td>
<td>63 M</td>
<td>Apparently Normal</td>
<td></td>
</tr>
<tr>
<td>Physical Condition</td>
<td>Apparently Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributing Factor 1</td>
<td>No Clear Contributing Action</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OFFICER SKETCH

NARRATIVE
VEH #1 SD US HWY 61 IN LEFT TRAFFIC LANE. LIGHT WAS GREEN FOR NORTH AND SOUTHBOUND TRAFFIC. BICYCLIST (UNIT 2) CROSSED IN CROSSWALK AGAINST RED LIGHT. BICYCLIST RAN INTO RIGHT REAR DOOR OF VEH #1. BICYCLIST SUSTAINED MINOR INJURIES TO HIS ELBOW. CITATION ISSUED TO BICYCLIST FOR FAIL TO STOP AT RED LIGHT.
Highway 61 from Buerkle Rd to Hoffman Rd Crash Details

Crash Detail Report - Short Form

<table>
<thead>
<tr>
<th>INCIDENT ID</th>
<th>ROUTE SY'S</th>
<th>MEASURE</th>
<th>ROUTE NUM</th>
<th>MEASURE</th>
<th>ROUTE NAME</th>
<th>ROUTE ID</th>
<th>COUNTY</th>
<th>CITY</th>
<th>CITY</th>
<th>WORK ZONE</th>
<th>WORK ZONE</th>
<th>WORK ZONE</th>
<th>WORK ZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1105246066</td>
<td>02 - USTH</td>
<td>0061</td>
<td>142 - 054</td>
<td>HIGHWAY 61</td>
<td>02000000000000614</td>
<td>52 Ramsey</td>
<td>Vadnais Heights</td>
<td>NOT APPLICABLE</td>
<td>NOT APPLICABLE</td>
<td>NOT APPLICABLE</td>
<td>NOT APPLICABLE</td>
<td>NOT APPLICABLE</td>
<td></td>
</tr>
</tbody>
</table>

INTERSECT WITH
VER 1
# KILL 0

BASIC TYPE
Bike

CRASH SEVERITY
B - Minor Injury

FIRST HARMFUL
Pedalcyclist (Bicyclist)

LIGHT CONDITION
Dark (Str Lights On)

WEATHER PRIMARY
Clear

Unit 1
Motor Vehicle in Transport
Passenger Car
Northbound
Moving Forward
56 F
Apparently Normal
No Clear Contributing Action

Unit 2
Bicycle
BICYCLIST
PED XNG AGNT SIG
13 M
NOT APPLICABLE
Failure to Yield Right-of-Way

Unit 3

Unit 4

OFFICER SKETCH

NARRATIVE
UNIT 1 WAS STOPPED AT RED LIGHT NORTHBOUND ON HWY 61/CO RD E. WHEN LIGHT TURNED GREEN UNIT 1 PROCEEDED FORWARD AND DID NOT SEE A BIKE RIDER CROSSING IN FRONT OF HER AGAINST THE LIGHT. SHE ESTIMATES HER SPEED WAS APPROXIMATELY 5 MPH. UNIT 2 STATED THAT HE INTENDED TO CROSS WESTBOUND ON COUNTY RD E ACROSS HWY 61. HE SAW THAT WESTBOUND TRAFFIC ON COUNTY RD E HAD A GREEN ARROW AND STARTED CROSSING. HE KNEW THAT THE CROSSWALK TRAFFIC HAD A RED, BUT WANTED TO MAKE IT TO THE CENTER ISLAND. HE GOT STRUCK AND SUSTAINED CUTS TO LEGS AND ELBOWS. NONE APPEARED TO REQUIRE STITCHES. UNIT 1 HAD VALID INSURANCE AND NO DAMAGE. UNIT 2 EVALUATED BY MEDICS AND TRANSPORTED AS PRECAUTION.
# Highway 61 from Buerkle Rd to Hoffman Rd Crash Details

## Crash Detail Report - Short Form

**Hwy 61 from Buerkle to Hoffman**

<table>
<thead>
<tr>
<th>INCIDENT ID</th>
<th>ROUTE SYS</th>
<th>ROUTE NUM</th>
<th>MEASURE</th>
<th>ROUTE NAME</th>
<th>ROUTE ID</th>
<th>COUNTY</th>
<th>CITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>60935743</td>
<td>02.0/STH</td>
<td>0001</td>
<td>413.077</td>
<td>USTH 61</td>
<td>0200000000000051.0</td>
<td>62 Ramsey</td>
<td>Vadnais Heights</td>
</tr>
</tbody>
</table>

**INTERSECT WITH**

- Invert Fail: 1
- Time: 09/03/21 05:54
- Lat: 45.043393
- Long: 33.038948
- UTM X: 465910.0
- UTM Y: 4638236.1

**BASIC TYPE**

- Pedestrian

**CRASH SEVERITY**

- C: Possible Injury

**FIRST HARMFUL**

- Pedalcyclist (Bicyclist)

**LIGHT CONDITION**

- Dark (St. Lights On)

**WEATHER PRIMARY**

- Cloudy

### Unit 1

- **Vehicle Type**: Motor Vehicle in Transport
- **Direction of Travel**: Southbound
- **Maneuver**: Turning Left
- **Speed**: 51 M
- **Condition**: Apparently Normal
- **Failure to Yield Right-of-Way**

### Unit 2

- **Vehicle Type**: Pedestrian
- **Location**: Walk/Cycle Across Traffic (X: 25 M)
- **Condition**: Apparently Normal
- **Visibility**: Not Visible (Dark Clothing, No)

### Unit 4

**NARRATIVE**

DARK, WITH RAIN AND LIMITED VISIBILITY. UNIT 1 MAKING LEFT HAND TURN INTO SOUTHBOUND HWY 61 FROM OR E. PEDESTRIAN CROSSING HWY 61 ON SOUTH SIDE OF OR E IN THE CROSSWALK ON A BICYCLE. UNIT 1 HAD GREEN LIGHT FOR LEFT HAND TURN, BUT PEDESTRIAN ALSO HAD CROSSWALK LIGHT ADVISING THEM TO CROSS. UNIT 1 FAILED TO YIELD THE RIGHT-OF-WAY TO PEDESTRIAN AS THEY WERE IN THE LANES OF SOUTHBOUND HWY 61. UNIT 1 HIT THE PEDESTRIAN WITH ITS DRIVER’S SIDE FRONT QUARTER PANEL. PEDESTRIAN STATED HE WAS SORRY AND DECLINED MEDICS. PEDESTRIAN WAS NOT WEARING A HELMET OR REFLECTIVE GEAR AND HAD DARK CLOTHING ON. NO UNITS TOWED.

**OFFICER SKETCH**

![Officer Sketch](image-url)
Bicycle and Pedestrian Crashes in Project Area (2013 - 2015)

- Bicycle crash reported at County Road E (GIS data unavailable)
- Pedestrian crash reported at crossing south of Highway 96 (GIS data unavailable)
- Buerkle Road 7,300 AADT
- White Bear Ave 28,000 AADT
- County Road E Bridge 13,700 AADT
- Highway 61 Bridge 25,000 AADT
- Highway 61 28,000 - 33,500 AADT
- Highway 96 15,500 AADT
- Otter Lake Road 6,800 AADT

Prepared by Active Living Ramsey Communities | ALRC@Co.Ramsey.MN.US
Bruce Vento Trail Extension Bike Ped Crashes 2 | 7/13/2018
Bicycle and Pedestrian Crashes in Project Area (2010 - 2014)

- Buerkle Road: 7,300 AADT
- Otter Lake Road: 6,800 AADT
- County Road E Bridge: 13,700 AADT
- White Bear Ave: 28,000 AADT
- Highway 61 Bridge: 25,000 AADT
- Highway 61: 28,000 - 33,500 AADT
- Highway 96: 15,500 AADT

Prepared by Active Living Ramsey Communities | ALRC@Co.Ramsey.MN.US
Bruce Vento Trail Extension Bike Ped Crashes
7/13/2018
Vento Trail Corridor- 2013, 2014, 2015 Bicycle Crash Severity

Wyngate Townhomes at Maplewood
Funding: LIHTC 9%
Units: 50
Bedrooms: 42 3-BR; 8 4-BR
Affordability by AMI: 50%

White Bear Manor (Woodbridge Terrace)
Units: 72
Bedrooms: 2 1-BR; 70 2-BR
Affordability by AMI: 50-60%

White Bear Terrace
Units: 72
Bedrooms: 72 2-BR
Affordability by AMI: 50%

Linden Apartments
Funding: Accepts Sec. 8 Vouchers
Units: 44
Bedrooms: 43 1-BR; 1 2-BR
Affordability by AMI: 50%

Pinehurst & Linden Apartments
Funding: Accepts Sec. 8 Vouchers
Units: 102
Bedrooms: 30 1-BR; 72 2-BR
Affordability by AMI: 50-60%

The Boulders Apartments (Senior)
Units: 93
Bedrooms: 58 1-BR; 35 2-BR
Affordability by AMI: 60-80%

Cedar Eight Apartments
Units: 8
Bedrooms: 8 1-BR
Affordability by AMI: 50%

Mount Vernon Apartments
Units: 51
Bedrooms: 4 Eff; 15 1-BR; 20 2-BR; 12 3-BR
Affordability by AMI: 50%

White Bear Royal Apartments
Units: 80
Bedrooms: 34 1-BR; 46 2-BR
Affordability by AMI: 50-60%

Hoffman Place
Funding: Tax Credit, LIHTC 9%
Units: 60
Bedrooms: 6 1-BR; 39 2-BR; 15 3-BR
Affordability by AMI: 50%

Willow Wood Apartments
Funding: Section 8, 4D, Section 202 HUD
Units: 46
Bedrooms: 45 1-BR; 1 2-BR
Affordability by AMI: 30-50%

*All developments shown are built and occupied as of May 2020. No planned developments are within the project area.
March 1, 2022

Scott Yonke
Director of Planning & Development
Ramsey County Parks and Recreation
2015 Van Dyke Street
Maplewood MN 55109

Dear Scott,

Thanks to you and Ramsey County for your commitment to fund and implement Phase One of the Bruce Vento Regional Trail, advancing it from Buerkle Road to the intersection of Hoffman Road / Hwy 61 on the edge of White Bear Lake’s downtown.

With this letter full support for this project, I am including for reference the regional trail overview map from the 2001 Lake Links Trail Network Master Plan. These regional trails, many in RBTN corridors, were deemed essential by the region decades ago and their completion brings on-line an expansive non-motorized transportation vision interconnecting large segments of Washington and Ramsey Counties.

On the attached master plan map, the Bruce Vento Trail shows up as a bright orange line in the corridor of Hwy 61. It runs the length of the map as it is quite literally the north-south “spine” to the regional network connecting St. Paul to Hugo, and the trails that extend north. A completed Vento will also provide USBR 41 a safe multi-mile facility in its connection of St. Paul to Grand Portage.

As any planner or planning agency knows first-hand, a completed network has exponentially more value and ROI than an unfulfilled network plan. Lake Links has seen first-hand that the longer a bike/ped network remains uncompleted it can progressively lose funding momentum to newer initiatives who better meet evolving funding criteria.

Partially completed multi-segment bike and ped trails like the Bruce Vento Regional Trail have the same effect as partially completed networks; both keep regional policies and State initiatives to increase active lifestyles and bicycle use from being realized.

Each year the lack of a “spine” trail like the Vento causes untold numbers of would-be active users to “recalculate” their route and consider how best to link-up with established trail segments. Often these alternatives are much less safe and less direct. Uncompleted networks and multi-segment trails, then, have a direct, highly negative influence on people’s activity level and the use of a bicycle for...
transportation. I can say unequivocally from my interactions as a bicycle safety instructor that a dead-end Vento trail has kept a lot of bikes in the garage from St. Paul to the Greater White Bear Lake Area.

Completing this next segment of the Bruce Vento Trail promises to accelerate diversity by opening up a two-wheel powered cultural exchange of bicyclists from St. Paul to White Bear Lake.

Last summer, Lake Links welcomed Hispanic bicycle club members from the Cathedral Hill area to its annual ride-around-the-lake. They described their uncertainty in how to get to West Park on the shores of White Bear Lake, where the ride begins, when the Bruce Vento Trail suddenly stopped at Buerkle Road with no signage or clues as to how to get to White Bear Lake. St. Paul and White Bear Lake have wonderful Farmer’s Markets. Completion of Phase One offers a way to shop by bicycle at either of these summer-fall markets. Isn’t that the regional vision?

Thank you again Scott. All of us at Lake Links Association have our fingers crossed that Phase One gets funded this time around and the region can take a huge step forward in realizing the “network effect.”

Enjoy the day

Michael Brooks
Chair
Lake Links Association
March 15, 2022

Scott Yonke, Director of Planning and Development
Ramsey County Parks and Recreation
2015 Van Dyke Street
Maplewood, MN 55109

Re: 2022 Regional Solicitation—Multi-use Trail and Bicycle Facilities/Phase 1 Bruce Vento Trail Extension Buerkle Road to Hoffman Road

Dear Mr. Yonke,

This letter is to share our support for Ramsey County to extend Phase 1 Bruce Vento Regional Trail Section from Buerkle Road to the intersection of Hoffman Road/US Highway 61 in the City of White Bear, near the border of Gem Lake.

The Phase 1 Bruce Vento Regional Trail extension project is important and helps create a connected bicycle and pedestrian transportation system throughout Ramsey County.

The City of Gem Lake passed a unanimous resolution of support to the extension project in October of 2020. That resolution is attached to this letter.

Sincerely,

Gretchen Artig-Swomley
Mayor, City of Gem Lake
City of Gem Lake
Ramsey County, Minnesota

RESOLUTION NO. 2020-0013
BRUCE VENTO TRAIL SUPPORT – CITY OF GEM LAKE

WHEREAS, Ramsey County and the City of Saint Paul established a joint master plan for the Bruce Vento Regional Trail in 1989; and

WHEREAS, Ramsey County has submitted a master plan update to update the Bruce Vento Regional Trail master plan section between Larpenteur Avenue and County Road J; and

WHEREAS, the 2020 master plan update incorporates several changes to the regional trail corridor between Larpenteur Avenue and County Road J to address, boundary expansion and acquisition, trail alignment changes, long-term site and infrastructure improvements, recreation improvements, and additional recreational opportunities throughout the Ramsey County section of the Bruce Vento Regional Trail corridor; and

WHEREAS, the City of Gem Lake’s City Council have reviewed the plan and supports the master plan update for the Bruce Vento Regional Trail corridor between Larpenteur Avenue and County Road J; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Gem Lake, Minnesota, supports the Bruce Vento Regional Trail Master Plan update within the City of Gem Lake.

The foregoing Resolution was offered by Councilor Lindner and was supported by Councilor Kuny and was declared adopted based upon the following vote:

<table>
<thead>
<tr>
<th>NAME</th>
<th>ARTIG-SWOMLEY</th>
<th>AMLEE</th>
<th>CACIOPOPO</th>
<th>KUNY</th>
<th>LINDNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote</td>
<td>yes</td>
<td>yes</td>
<td>Yes</td>
<td>Yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Attest

I, Gloria Tessier, the duly qualified Acting City Clerk for the City of Gem Lake, County of Ramsey, State of Minnesota, do hereby certify that the foregoing Resolution is a true and accurate representation of action taken by the City Council of the City of Gem Lake on the date first written.

[Signature]

GLORIA TESSIER, City Clerk

October 20, 2020
March 23, 2022

Scott Yonke, Director of Planning and Development  
Ramsey County Parks and Recreation  
2015 Van Dyke Street  
Maplewood, MN 55109

RE: 2022 Regional Solicitation – Multiuse Trail and Bicycle Facilities  
Phase 1 Bruce Vento Regional Trail Extension – Buerkle Road to Hoffman Road/Highway 61

Dear Mr. Yonke:

This letter is to share our support for Ramsey County to extend the Phase 1 Bruce Vento Regional Trail section from Buerkle Road to the intersection of Hoffman Road/US Highway 61 in the City of White Bear Lake.

The Bruce Vento Regional Trail corridor is thirteen miles in length and extends from the east side of downtown Saint Paul to the north county line in White Bear Township spanning through the cities of Saint Paul, Maplewood, Vadnais Heights, Gem Lake, White Bear Lake and White Bear Township. The Ramsey County portion of the regional trail between Larpenteur Avenue to County Road J has approximately 6 miles of undeveloped trail north of Buerkle Road.

This project will construct a 2.7-mile extension of the Phase 1 Bruce Vento Regional Trail section and provides an alternate trail alignment in an active railway corridor, completes approximately one-half of a major gap in both the Regional Bike Transportation Network and National US Bike Route 41. Significant access barriers will be eliminated from industrial areas and major vehicular transportation routes, providing a new multi-modal trail and increased access to alternate transportation facilities. Critical connections will be provided to other regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, Gateway State Trail, South Shore Boulevard Trail, and future connection to the proposed Hardwood Creek Regional Trail extension in Washington County at County Road J. In addition, the trail will connect racially diverse populations and poverty, with substantial concentrations of youth, elderly, and residents with disabilities.

The Phase 1 Bruce Vento Regional Trail extension project is extremely important and helps create a connected bicycle and pedestrian transportation system throughout Ramsey County.

Sincerely,

Melinda Coleman, City Manager
Background and Rationale:
The Parks and Recreation department has prepared a master plan amendment for the Bruce Vento Regional Trail to accurately reflect boundary adjustment, long-term acquisition, natural resource improvements, public participation, equity analysis, trail corridor realignment, long-term regional trail improvements, and coordination with Rush Line Bus Rapid Transit (BRT) improvements. The Bruce Vento Regional Trail corridor extends 13.3 miles from downtown Saint Paul to County Road J at the northern border of Ramsey County. Currently seven miles of regional trail is constructed from Saint Paul to Buerkle Road in Maplewood.

This master plan amendment amends the 1993 Burlington Regional Trail Master Plan for the Ramsey County section of regional trail north of Larpenteur Street to County Road J. It is written to fulfill the Metropolitan Council requirements for regional linking trails as outlined in the 2040 Regional Parks Policy Plan and to meet the expectations set forth in the 2018 Ramsey County Parks and Recreation System Plan.

The Parks and Recreation department worked in coordination with Metropolitan Council staff throughout the master plan amendment development process. If approved by the Ramsey County Board of Commissioners, the master plan amendment will be forwarded to the Metropolitan Council for review and approval. Once the master plan amendment is approved by the Metropolitan Council, costs associated with all improvements identified in the master plan amendment will be eligible for reimbursement through grants administered by the Metropolitan Council for Regional Parks and Trails.

For more information on the Bruce Vento Trail Master Plan, please visit: <https://www.ramseycounty.us/residents/parks-recreation/parks-planning-projects/bruce-vento-regional-trail>.

Recommendation:
The Ramsey County Board of Commissioners resolved to:

1. Approve the Bruce Vento Regional Trail Master Plan Amendment dated April 23, 2021.
2. Authorize submission of the Bruce Vento Regional Trail Master Plan Amendment to the Metropolitan Council.

A motion to approve was made by Commissioner Reinhardt, seconded by Commissioner McDonough.
Motion passed.
Aye: - 7: Carter, Frethem, MatasCastillo, McDonough, McGuire, Ortega, and Reinhardt
By: [Signature]

Abby Goldsmith, Interim Chief Clerk - County Board
May 14, 2020

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

RE: 2020 Regional Solicitation for Multi-Use Trail and Bicycle Facilities - Bruce Vento Regional Trail

Dear Ms. Koutsoukos:
Ramsey County is excited about the opportunity to submit the 2020 Regional Solicitation Application for the extension of the Bruce Vento Regional Trail in the Multi-Use Trails and Bicycle Facilities Category. Ramsey County is committed to providing the local match, and operation/maintenance of the Bruce Vento Regional Trail for this trail project. Local match funds are anticipated to be provided by Ramsey County to start construction in 2024.

This trail project will provide a 2.7-mile extension to the Bruce Vento Regional Trail from Buerkle Road to the intersection of Hoffman Road/U.S. Highway 61/White Bear Avenue in White Bear Lake. This trail project provides an alternate trail alignment in an active railway corridor, complete approximately one-half of a major gap in both the Regional Bike Transportation Network and National US Bike Route 41, and extends through the cities White Bear Lake, White Bear Township, and Vadnais Heights. This project is the first of two steps to provide a multiuse trail facility for pedestrians and bicycles that currently does not exist today, and will also set the stage for future connections north of Highway 96 to County Road J. In addition, the project will provide critical bicycle and pedestrian connection to the proposed Rush Line Bus Rapid Transit (BRT) through the project corridor.

The trail project provides benefits for low-income populations, people of color, people with disabilities and the elderly by providing a safe route to and from shopping, schools, jobs, services, and Rush Line BRT stations. The trail alignment traverses two areas of population with above average race and poverty constituencies in White Bear Lake. The trail will also provide critical connections to other regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, Gateway Regional Trail, planned South Shore Trail, and connect populations south of the trail project for the southern St. Paul segment of the existing Bruce Vento Trail which extends through highly urban and concentrated poverty areas making it a regionally important connection that will directly benefit diverse populations more distant than those directly adjacent to the corridor area.

Enclosed are the required materials for the 2020 Regional Solicitation Application. If you have any questions or require additional information, please do not hesitate to call me at 651-266-0370 or email to scott.yonke@co.ramsey.mn.us.

Scott Yonke, PLA | Director of Planning and Development
Ramsey County Parks and Recreation Department
2015 Van Dyke Street
Maplewood, MN 55109-3796
651-363-3786, www.co.ramsey.mn.us
Project Summary

Project Name: Phase 1 Bruce Vento Regional Trail Extension – Buerkle Road to Hoffman Road/Highway 61
Applicant: Ramsey County
Total Project Cost: $7,000,000
Requested 2022 Regional Solicitation Amount: $4,000,000

Project Description:
The Bruce Vento Regional Trail corridor is thirteen miles in length and extends from the east side of downtown Saint Paul to the north county line in White Bear Township. The southern seven-mile segment of the regional trail was completed in 2005 from downtown Saint Paul to Buerkle Road in White Bear Lake on former Burlington Northern Santa Fe (BNSF) railway. The remaining six miles of trail is still undeveloped due to active rail use.

This project will construct a 2.7-mile extension of the Bruce Vento Regional Trail between Buerkle Road and the intersection of Hoffman Road/Highway 61 in White Bear Lake. This project provides an alternate trail alignment in an active railway corridor, completes approximately one-half of a major gap in both the Regional Bike Transportation Network and National US Bike Route 41, and extends through the cities Gem Lake, White Bear Lake, White Bear Township and Vadnais Heights.

Significant access barriers will be eliminated from industrial areas and major vehicular transportation routes, providing a new multi-modal trail and increased access to multi-modal transportation facilities between Buerkle Road and Highway 96.

The trail will provide connections to other regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, Gateway State Trail, South Shore Boulevard Trail, and future connection to the proposed Hardwood Creek Regional Trail extension in Washington County at County Road J. In addition, the trail will connect populations near the southern Saint Paul segment of the existing Bruce Vento Trail which extends through highly urban and concentrated areas of poverty making it a regionally important connection that will directly benefit diverse populations.

Project Benefits:
- Completes approximately three miles of a six-mile gap in the regional and nation trail system.
- Eliminates several barriers and provides north-south multi-use trail and pedestrian facilities in an area that does not have facilities.
- Connects two areas - both with racially diverse populations and poverty, with substantial concentrations of youth, elderly, and residents with disabilities - for increased access to multi-modal transportation facilities.
- Provides connections to other local and regional trail systems.
- Provides connections to the Purple Line BRT.
- Reduces the risk of crashes and conflicts between ped/bikes and vehicles.
- Increased access to multi-modal transportation facilities, schools, places of work, shopping, and local/regional park and trail facilities.
February 28, 2022

Mr. Scott Yonke  
Director of Planning and Development  
Ramsey County Parks and Recreation Department  
2015 Van Dyke Street  
Maplewood, MN 55109

Dear Mr. Yonke:

This letter is intended to acknowledge the planning discussions between BNSF, Minnesota Commercial Railway and Ramsey County related to the County’s proposed extension of the Bruce Vento Trail north from Buerkle Road to US61 a total of approximately 2.7 miles. Approximately 0.6 miles of the trail is proposed to utilize BNSF right of way including the eastern portals of bridge underpasses at County Road E and US Highway 61.

The County has been working productively with BNSF to produce an acceptable design and we will continue to participate in that effort. It appears that remaining design problems are likely to have feasible solutions that will satisfy both parties.

BNSF will not make any commitment to allowing this use of its right-of-way until final designs have been approved and BNSF and the County have executed agreements covering the terms and conditions of use. However, at the moment BNSF believes that the project can move forward with a reasonable likelihood of a successful agreement.

Please contact me with any questions.

Sincerely,

Alex Fiorini  
Manager Public Projects
**Regional Trails – Standard Maintenance Level of Service**
Ramsey County Parks and Recreation strives to provide the highest quality park and recreation amenities. Below is a summary of standard maintenance level of service operations for regional trails.

**Standard Regional Trail Maintenance Activities: (Daily or Weekly Maintenance)**

**Spring maintenance**
- **Damaged Areas** – After frost thaw, access trail corridor for damaged pavement and adjacent turf areas along trail. Complete repairs as needed.
- **General Cleanup** - Remove any downed trees or branches. Blow the trails off.

**Summer – Fall Maintenance**
- **Mowing** – Weekly or as needed if rain lessons during the mowing season.
- **Tree and Brush Trimming** – As needed, cut back vegetation overgrowth adjacent to trails. If further action is needed beyond general trimming, determine if removal is required. All vegetation either removed or cut back will be disposed of offsite.
- **Trash / recycling** – Conduct trash and recycling by emptying of receptacles weekly or twice a week depending on use
- **Site Amenities** – Access site amenities such as benches, wayfinding signs, trail crossing infrastructure, fencing, etc. for damage, graffiti, or general repair. Repair or replace site amenities as needed. Remove any graffiti as needed.

**Winter Maintenance (Snow Removal)**
- **Snow removal** – Access regional trails weekly for snow buildup. Plow regional trails when snowfall is two inches or greater.
- **Salting** – Access regional trails weekly for ice buildup on trails. Regional trails are typically not salted, but limited salting may be required for freezing rain conditions or ice buildup.

**Standard Pavement Schedule for Regional Trails:**
Below is a summary of standard pavement maintenance schedule for regional trails. Pavement maintenance conditions are identified in a Park and Trails Bituminous Management Report and is updated every 4-5 years.

**Regional Trailhead Parking Lots:** Trailhead parking lots are set up on 5-year increments for pavement maintenance. This would start out from new construction and set every 5-years following.
- **Year lot development or redevelopment**
- **Year 5 – Crack seal joints**
- **Year 10 – Crack seal joints and chip seal pavement**
- **Year 15 – Crack seal joints and various chip seal if needed**
- **Year 20 – Mill/overlay with selective concrete curb replacement, etc.**
- **Year 25 – Crack seal joints**
- **Year 30 – Crack seal joints and chip seal pavement**
- **Year 35 - Crack seal joints and various chip seal if needed**
- **Year 40 - Assess for either mill/overlay or determine if reconstruct is needed**
**Regional Trails:** Regional trails are set up on 6-year increments for pavement maintenance. This would start out from new construction and set every 6-years following.

- Trail development or redevelopment
- Year 6 – Crack seal joints
- Year 12 – Crack seal joints and seal coat pavement
- Year 18 – Crack seal joints and various seal coat if needed, determine if trail sections need to have replacement where cracks are bad.
- Year 24 – Trail reconstruction
March 23, 2022

Scott Yonke, Director of Planning and Development
Ramsey County Parks and Recreation
2015 Van Dyke Street
Maplewood, MN 55109

RE: 2022 Regional Solicitation – Multiuse Trail and Bicycle Facilities
    Phase 1 Bruce Vento Regional Trail Extension -- Buerkle Road to Hoffman Road/Highway 61

Dear Mr. Yonke:

This letter is to share the City of White Bear Lake’s support for Ramsey County to extend the Phase 1 Bruce Vento Regional Trail section from Buerkle Road to the intersection of Hoffman Road/US Highway 61 in the City of White Bear Lake.

The Bruce Vento Regional Trail corridor is thirteen miles in length and extends from the east side of downtown Saint Paul to the north county line in White Bear Township spanning through the cities of Saint Paul, Maplewood, Vadnais Heights, Gem Lake, White Bear Lake and White Bear Township. The Ramsey County portion of the regional trail between Larpenteur Avenue to County Road J has approximately 6 miles of undeveloped trail north of Buerkle Road.

This project will construct a 2.7-mile extension of the Phase 1 Bruce Vento Regional Trail section and provides an alternate trail alignment in an active railway corridor, completes approximately one-half of a major gap in both the Regional Bike Transportation Network and National US Bike Route 41. Significant access barriers will be eliminated from industrial areas and major vehicular transportation routes, providing a new multi-modal trail and increased access to alternate transportation facilities. Critical connections will be provided to other regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, Gateway State Trail, South Shore Boulevard Trail, and future connection to the proposed Hardwood Creek Regional Trail extension in Washington County at County Road J. In addition, the trail will connect racially diverse populations and poverty, with substantial concentrations of youth, elderly, and residents with disabilities.

The Phase 1 Bruce Vento Regional Trail extension project is extremely important and helps create a connected bicycle and pedestrian transportation system throughout Ramsey County.

Thank you for your consideration. If you have any questions, please contact me at lcrawford@whitebearlake.orr, or call 651-429-8516.

Sincerely,

Lindy Crawford, City Manager
City of White Bear Lake
RESOLUTION NO. 12952

RESOLUTION AUTHORIZING THE CITY MANAGER TO SUBMIT A LETTER OF SUPPORT FOR RAMSEY COUNTY’S 2022 REGIONAL SOLICITATION FUNDING APPLICATION FOR THE BRUCE VENTO REGIONAL TRAIL EXTENSION

WHEREAS, Ramsey County has requested a letter of support for Ramsey County’s 2022 Regional Solicitation Funding application for the Bruce Vento Regional Trail Extension; and

WHEREAS, Ramsey County had submitted its preliminary design study in 2018, and submitted another funding application in 2020, but this project was not selected for funding; and

WHEREAS, the proposed trail improvement project will be of tremendous benefit to the community and will help create a connected and safe regional recreation and bicycle and pedestrian transportation system; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of White Bear Lake hereby authorizes the City Manager to submit a letter of support to Ramsey County for its 2022 Regional Solicitation Application to extend the Bruce Vento Regional Trail north from its current terminus at Buerkle Road.

The foregoing resolution, offered by Councilmember Jones and supported by Councilmember Edberg, was declared carried on the following vote:

Ayes: Edberg, Hughes, Jones, Walsh
Absent: Engstran
Nays: None
Passed: March 22, 2022

ATTEST:

[Signature]
Kara Coutry, City Clerk

[Signature]
Dan Louismet, Mayor
Transit Connections

Results

Transit with a Direct Connection to project:
*Purple Line

*indicates Planned Alignments

Transit Market areas: 3