

ENGINEERING DIVISION

2026 MILL & OVERLAY AND MILL TOWNS STATE TRAIL IMPROVEMENTS PROJECT

Feasibility Report

This report examines the proposed street improvements including curb and gutter, street and sidewalk construction, trail construction, bikeway construction, and associated boulevard improvements for the proposed mill and overlay project on Maple Street from Meadow View Drive to Jefferson Parkway, Maple Court, Prairie Street from Woodley Street to Jefferson Parkway, Jefferson Parkway from Division Street (TH 246) to Spring Creek Road, and the Mill Towns State Trail from Division Street to Spring Creek Road.

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Certification

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

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By:

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City of Northfield

Date: 7-25-25

2026 Mill & Overlay and Mill Towns State Trail Improvements Project

Feasibility Report

Introduction

This report examines the proposed street improvements including curb & gutter, street, trail, sidewalk and bikeway construction as well as any associated improvements that may be required in the boulevard for the 2026 Mill & Overlay and Mill Towns State Trail Improvements Project. The scope of work includes the following:

• 2" Mill and Overlay on Jefferson Parkway form Division Street (TH 246) to Spring Creek Road, Prairie Street from Meadow View Drive to Jefferson Parkway, Maple Street from Meadow View Drive to Jefferson Parkway and Maple Court. Bikeway improvements on Prairie Street from Prospect Court to Pleasant View Court. New sidewalk on Prairie Street from Lia Drive to Prairie View Court. Trail repair on the trail south of Prairie View Court. New trail on Jefferson Parkway from Prairie Street to Spring Creek Road and from Division Street to Washington Street. Mill Towns State Trail construction along Jefferson Parkway from Division Street to Prairie Street, then north through Spring Creek Park to Spring Creek Road. Appendix A provides maps of the proposed project area. Appendix B provides a detailed project process. Appendix C contains figures of the proposed intersection improvements. Appendix D contains the arborist report. Appendix E contains the geotechnical report. Appendix F contains feedback received from the public

Background

The City of Northfield has a Capital Improvement Plan (CIP) that has been developed in order to address upcoming maintenance, repair and new construction projects. The adopted 2025 – 2029 CIP includes these areas mentioned above to be completed during the 2026 budget cycle. Additionally, the CIP identifies the estimated costs and funding methods to complete these projects. During the preparation of the approved 2025 – 2029 CIP, these various areas throughout the City of Northfield were identified as areas for needed improvement.

As part of the initial planning for this project, two neighborhood meetings were held on April 16, 2025, and June 11, 2025, to inform the affected property owners adjacent to the project area of the improvements being considered. This meeting also served as an opportunity to gather input from the impacted residents and discuss potential design alternatives for this project. The comments received from the meetings are included in appendix F.

At their June 4, 2024, meeting, the Northfield City Council ordered the preparation of this Feasibility Report via Council Resolution No. 2024-057. This resolution directed the following:

The proposed improvement be referred to the City Engineer for study and the City Engineer is instructed to report to the Council with all convenient speed advising the Council in a preliminary way as to whether the proposed improvement is necessary, cost-effective, and feasible; whether it should best be made as proposed or in connection with some other improvement; the estimated cost of the improvement as recommended.

Existing Conditions



The existing streets proposed in this project are shown in Appendix A of this report. The project area is located in the southeastern portion of Northfield near Spring Creek Park and just south of Spring Creek Elementary. The area is relatively new residential with areas of pavement distress, and a large number of smaller boulevard trees. Sidewalk is located on both sides of the streets on all but Prairie Street and Maple Court.

A. Streets

The streets within the project area are bituminous surfaced with concrete curb and gutter. Pavement widths vary from 30'-59' through street segments, all measured from curb face to curb face. As-built information on the streets within the project area indicates that they were originally constructed anywhere from the mid 1980's to the early 2000's. The streets are aged and exhibit wear and distress to different degrees. The pavement is generally in fair to poor condition, and exhibits transverse and

longitudinal cracking, alligator cracking, potholes and rutting. Some street segments have settlements, which allow water to pond, infiltrate and weaken the subgrade. This has led to frost heaving, and additional transverse cracking during freeze-thaw cycles.

The City surveyed road distress data such as number and size of cracks and potholes and other statistics that describe the condition of the pavement on every street in the City. This information is used to calculate a Pavement Condition Index (PCI) for each street section. The PCI is a tool for comparing streets when considering where roadway improvements are needed the most. A summary of the PCI rating system is provided below.

| Pavement Condition Index (PCI) Rating Summary | | | | |
|---|--------------------|--|--|--|
| PCI Rating Number | Pavement Condition | | | |
| 100-91 | Excellent | | | |
| 90-81 | Very Good | | | |
| 80-71 | Good | | | |
| 70-61 | Fair | | | |
| 60-51 | Poor | | | |
| 50-41 | Very Poor | | | |
| 40-0 | Failing | | | |

Using PCI data from 2024 project Streets pavement condition is summarized below.

| Street Pavement Condition Index | | | | | | |
|---------------------------------|--------------------|-----------------------|--|--|--|--|
| Segment | Pavement Condition | | | | | |
| Maple Street | 70-40 | Fair - Failing | | | | |
| Maple Court | 60-51 | Poor | | | | |
| Prairie Street | 70-51 | Fair - Poor | | | | |
| Jefferson Parkway | 90 - 41 | Very good – Very Poor | | | | |

The existing concrete curb and gutter is in fair condition throughout the project area. Curb settlements have caused areas of poor drainage along the edge of the pavement in various locations. Significant cracking has occurred in sections of the curb.

An Arborist report has been completed for all project areas. This report provides recommendations for removal, protection, and trimming as a part of the proposed construction. Removals will also follow the guidelines of the City's Emerald Ash Borer Management Plan which calls for Ash trees to be removed that are under 13" in diameter, and all trees with fair or worse rating condition. Some trees will need to be removed due to construction.

B. Pedestrian & Bicycle Facilities

The project area has an existing sidewalk on both sides of Jefferson Parkway and Maple Street. Prairie Street has an existing sidewalk on both sides south of Prairie View Court, and on the west side from Jefferson Parkway to Meadow View Drive and Pleasant View Court to Woodley Street. The existing sidewalk is in fair condition with some cracking and heaving in areas. Maple Street has an on-street protected bikeway on the west side of the street that connects to an off-street trail south of Jefferson Parkway that will be constructed in 2025. Prairie Street has an on-street two-way bikeway on the west side from Jefferson Parkway to Lia Drive and from Pleasant View Court to Woodley Street. The Prairie Street bikeway moves to an off-street shared use trail between Lia Drive and Pleasant View Court. Jefferson Parkway has no bicycle facilities east of Division Street. There are two pedestrian trails on the east side of Prairie Street connecting the road to the Mill Towns State Trail. The Trail North of Prairie Circle was constructed in 2023 and is in Excellent condition, the trail south of Prairie View Court is in poor condition with settlements and significant cracking.

C. Storm Water

The condition of the existing storm sewer system was determined from as-built information, storm sewer televising reports, inspections and discussions with City Staff. The current pipe network consists of Reinforced Concrete Pipe (RCP) with sizes ranging from 12" to 54" in diameter. The catch basins in the project area consist of precast concrete and block structures with 2'x3' castings. The structures are in overall fair condition, with 3 structures and 2 flared end sections having significant cracking and are in failing condition. With some maintenance, the storm water system will last the life cycle of the street maintenance being recommended until a full reconstruction is warranted.

Two properties on the project were determined to have inadequate grade to drain storm runoff resulting in poor drainage causing nuisance water conditions.

The city reviewed its surface water management plan which was last updated in 2020 and identified no storm sewer capacity issues within the project area.

D. Sanitary Sewer

Conditions of the sanitary sewer system have been determined from as-built information, sewer televising reports, as well as discussions with the City Staff. The current pipe network consists of Polyvinyl Chloride (PVC), with sizes ranging from 8" to 24" in diameter. From the information that has been gathered, the sewers in the project corridor are determined to be in an overall good condition, and with some maintenance will last the life cycle of street maintenance being recommended until a full reconstruction is warranted.

The sanitary sewer manholes along the project area are primarily pre-cast concrete and are in good condition. Castings throughout the project will be inventoried to ensure castings with open pick-holes are replaced to reduce unwanted inflow of storm water into the sanitary system. In addition, all castings will be reset, and minor grouting or sealing of the structures is warranted in some locations.

E. Watermain

The existing watermain was evaluated within the proposed project area. Conditions of the watermain system have been determined from as-built information, field evaluation, and discussions with the City Staff. The current pipe network consists of Ductile Iron Pipe (DIP) and Cast-Iron Pipe (CIP) with sizes ranging from 6"-18" and is in good operational condition and has sufficient capacity and redundancy for the service area. There is not a history of watermain breaks in the area and the system will last the life cycle of the street maintenance recommended until a full reconstruction is warranted.

Proposed Improvements

A. Streets

The proposed improvement recommended is a 2 - Inch Mill and Overlay for all streets in the project area. Pavement conditions and existing as-builts show a sufficient existing road base suitable for a mill and overlay rehabilitation of the streets. In addition to the mill and overlay, some isolated areas indicated the need for deeper repairs and potential subgrade corrections may be required where severe distresses are present.

A mill and overlay is considered a maintenance operation that involves the removal of the top layer of pavement and installation of a new wearing surface that prolongs the expected life of the pavement by 15 years. This maintenance ensures continued serviceability to users and keeps the road's entire life cycle cost low.

Additionally, spot concrete cub and gutter will be replaced if it is severely damaged or settled/heaved and not allowing proper drainage.

B. Pedestrian Facilities

All existing sidewalks will be assessed for significant cracking, settling, and heaving that necessitates spot replacement. These spot replacements to the existing concrete sidewalks will be completed in conjunction with the upgrades to each of the existing pedestrian ramps to meet current ADA standards. Pedestrian ramp upgrades involve the removal and replacement of the concrete curb and gutter, ramps and truncated domes, landings, and concrete sidewalk to the proper longitudinal and transverse grades at each crosswalk location. Concrete 'v-curb' may be necessary behind the walk at some locations with difficult grades.

The east side of Prairie Street, from Prairie View Court to Lia Drive will have a new sidewalk installed. This sidewalk is part of the City's walking and biking plan and will connect to a future sidewalk on the east side of Lia Drive. Public feedback on the section showed significant concern about the number of trees that would need to be removed to install this walk. During design, methods to save as many trees as possible will be explored such as meandering the sidewalk and removing street parking to provide more space for the sidewalk.

Prairie Street currently has an on-street bikeway on the west side from Woodley to Sibley Swale Park and from the park to Jefferson Parkway. As part of this project this bikeway from Prospect Court to Pleasant View Court would be protected by adding a raised concrete median where the on-street paint is currently. The City's pedestrian and bike analyzation report shows protecting the bikeway for the full length from Woodley Street to Jefferson Parkway for improving the safety of bikers by separating them from motorists. While staff recommend protecting the entire bikeway there was significant public concern about the median. Due to public feedback the recommendation of this report is to protect only the section from Prospect Court to Pleasant View Court due to the increased likelihood of vehicles entering the bike lane while traversing the hill and corner. Shrinking the length of the median on Prairie Street was presented at neighborhood meeting #2 and was received well with mostly positive comments.

The Mill Towns State Trail is a future state trail that will pass through Northfield, including through this project corridor along the south side of Jefferson Parkway from the east project extents until it reaches Prairie Street where it then crosses Jefferson Parkway and continues along the north side of the road. The trail continues north just west of Michigan Drive where it will meander along the east side of the creek through Spring Creek Park until it reaches Spring Creek Road. The Mill Towns State Trail section adjacent to Spring Creek Road will be constructed as part of the City's 2026 Spring Creek Road Reconstruction project. When complete, the Mill Towns Trail will include approximately 25 miles of trail connecting the cities of Faribault, Dundas, Northfield, Waterford, Randolph, and Cannon Falls.

The 30% preliminary design plans for the state trail identify wayfinding signage and a stormwater basin to be considered for installation. This stormwater basin is discussed in further detail in the storm water section of this report.

Additional new trails will be added separate from the Mill Towns State Trail. This new trail will be on the north side of Jefferson Parkway from Division Street to the trail just east of Washington Street, and from just west of Michigan Drive to Spring Creek Road. This new trail will provide bike facilities for the entire length of Jefferson Parkway, connect to existing trails in the area, and provide for future connections to developments east of Spring Creek Road. In addition to the new

trails the trail just south of Prairie View Court that connects Prairie Street to the Mill Towns State Trail in Spring Creek Park will be rebuilt due to its current poor condition.

Intersection improvements are being considered at ten locations along Jefferson Parkway within the project area. These locations include intersections with Washington Street, Afton Street, the west leg of Bunker Drive, Wilcox Boulevard West, Wilcox Boulevard East, the east leg of Bunker Drive, Maple Street, Prairie Street, a mid-block crossing just west of Michigan Drive, and the intersection of Maple Street and Meadow View Drive. These improvements largely include curb extensions, enhanced pedestrian crossing pavement markings and signage, and pedestrian refuge medians. The intersection improvements included in this project were evaluated by a multimodal design expert to determine if and where enhanced pedestrian crossings may be needed. Benefits from these improvements will include reduced vehicle speed, shorter pedestrian crossing distances, and an overall increase in safety for multimodal travel along the project corridor. These intersection improvements can be seen on the proposed improvements figures included in Appendix C of this report. During development of the Feasibility Report, Staff considered additional curb cut openings related to bikes accessing the Mill Towns State Trail on the south side of Jefferson Parkway. These additional access points are not being recommended for approval based on public feedback collected at Neighborhood Meeting #2.

Benefits from these improvements will include reduced vehicle speed, shorter pedestrian crossing distances, and an overall increase in safety for multimodal travel along the project corridor. These intersection improvements can be seen on the proposed improvements figures included in Appendix C of this report.

C. Storm Water

City Staff performed video inspection and visual inspection on the entire storm sewer system including the storm piping and storm structures within the project corridor and have determined that it is in satisfactory condition. As such, limited rehabilitation work is needed for the storm sewer system at this time.

Work on the storm sewer as part of this project includes adjusting/replacing the storm sewer castings and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. This work will include the replacement of all concrete adjustment rings for each structure. Minor grouting and concrete patching of the structures may also be completed to prevent infiltration/exfiltration in/out of the storm sewer manholes for a majority of the applicable structures. Structures with significant deterioration will be replaced/reconstructed in lieu of rehabilitation. Properties identified with flooding issues will have additional storm sewer added, sizing and location of these improvements will be determined during design.

The project's stormwater management analysis and design include a volume control requirement, enforced by the City of Northfield and the new municipal separate storm sewer system (MS4) permit, and a rate control requirement enforced by the City of Northfield. The volume control requirement states that the greater of 1-inch of runoff over the new impervious area or 0.5-inches of runoff over the new and reconstructed impervious area for linear projects must be treated. Although this project is almost evenly split between the new impervious from the addition of sidewalk/trail and the reconstructed areas, the required water quality volume is controlled by the

new impervious. Therefore, this project will require a treatment volume of approximately 3,271 cubic feet. The actual treatment volume will be verified during the final design. The rate control requirement states that for the two-year, ten-year, and 100-year NOAA Atlas 14 24-hour rainfall depths with MSE 3 rainfall distribution and the 100-year ten-day snowmelt event with an SCS Spillway One-Day Ten-Day distribution, the proposed post construction runoff rate must not exceed the existing conditions runoff rate at all points leaving the site.

It is proposed to have runoff from the project area treated with a filtration basin located on the downhill side of a section of the proposed Mill Towns State Trail, Segment C. The optimal BMP location will be selected during final design by evaluating existing and proposed site conditions, drainage patterns, and cost effectiveness. We will also assess the project area for locations where additional BMPs could be added to provide a bank of treatment volume for other projects now or in the future.

This treatment option location was initially determined as part of the 30% preliminary Mill Towns State Trail plans. This option would not require property acquisition, since it is located in an outlot owned by the City. Additional investigation will need to be conducted to determine whether an infiltration, or filtration basin would be the best decision.

For this report and the associated cost estimate, it is assumed that the recommended filtration basin will be utilized to satisfy all stormwater management requirements. During final design, the proposed BMP location will be evaluated further relative to available soil borings to verify groundwater levels and determine if infiltration is feasible. If deemed feasible, infiltrometer testing may need to be completed to confirm the actual infiltration rate.

D. Sanitary Sewer

City Staff performed video inspection and visual inspection on the entire sanitary sewer system including the sanitary piping and sanitary sewer manhole structures and has determined that it is in satisfactory condition. As such, limited rehabilitation work is anticipated to be needed for the sanitary sewer system at this time.

Work on the sanitary sewer as a part of this project is proposed to include adjusting the sanitary sewer castings and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. This work will include the replacement of all concrete adjustment rings for each structure. Castings and covers that are damaged or allow for inflow of storm water will be replaced. Minor grouting and concrete patching of the structures may also be completed to seal the structures and prevent infiltration/exfiltration in/out of the sanitary sewer manholes.

E. Watermain

The City of Northfield has reviewed the condition of the existing watermain system located within the boundaries of the project and have determined that it is in satisfactory condition. As such, limited rehabilitation work is needed to the watermain system at this time.

Work on the watermain system as part of this project includes adjusting the water gate valve boxes and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. Some damaged valve box tops may require replacement.

Estimated Costs and Project Funding

The estimated construction costs for the proposed improvements are based on costs from recent street maintenance projects that have been completed in the City of Northfield. These costs can fluctuate significantly; however, at this point in the project, staff feel that all the costs below are properly accounted for in the estimate.

Should the project be authorized it is typical to reduce the contingency as the design is developed, and more certainty is brought to bear on the project scope. The overhead portion of the estimate is used to cover the necessary legal, administrative, engineering, and financing costs for the project.

The funding for the proposed improvements will come from several sources. General Fund monies, bonding, and Enterprise Funds will be used to fund this project.

The cost estimate includes one alternative for protecting the bikeway for the entire length on Prairie Street from Woodley Street to Jefferson Parkway. The base cost includes protecting just the portion from Prospect Court to Pleasant View Drive. The alternate adds approximately \$212,000 to the base cost.

Estimated Project Costs

| | BASE COSTS W/ PARTIAL PRAIRIE St. MEDIAN | ALTERNATE COSTS W/ FULL PRAIRIE St. MEDIAN |
|--------------------------------|---|---|
| Street | \$3,134,713 | \$3,280,557 |
| Storm Sewer | \$337,030 | \$337,030 |
| Sanitary Sewer | \$55,780 | \$55,780 |
| Watermain | \$15,690 | \$15,690 |
| Construction Subtotal | \$3,543,213 | \$3,689,057 |
| Construction Contingency (20%) | \$708,642 | \$737,811 |
| Art (1%) | \$42,519 | \$44,269 |
| Total with Art | \$4,294,374 | \$4,471,137 |
| Overhead (20 %) | \$858,875 | \$894,227 |
| Total Project Costs | \$5,153,249 | \$5,365,365 |

Estimated Project Funding

| | BASE COSTS W/ PARTIAL PRAIRIE St. MEDIAN | ALTERNATE COSTS W/ FULL PRAIRIE St. MEDIAN |
|---------------------|---|---|
| Bonding | \$3,834,237 | \$4,046,352 |
| Franchise Fees | \$774,400 | \$774,400 |
| Storm Fund | \$449,328 | \$449,328 |
| Sanitary Fund | \$74,366 | \$74,366 |
| Water Fund | \$20,918 | \$20,918 |
| Total Project Costs | \$5,153,279 | \$5,365,365 |

Conclusion

I. Schedule

Appendix B shows the proposed process and schedule for completing this project during the 2026 construction season.

II. Feasibility and Recommendation

From an engineering standpoint this project, as proposed, is feasible, cost effective and necessary. It can best be accomplished by letting competitive bids for the work. Due to the similarity in the scope and nature of the work it is also recommended that the work be completed under one contract in order to have the work done in the most efficient, cost-effective and orderly manner possible.

Appendix A - Location Maps



Appendix B - Project Process

| Date ¹ | Project Step | Purpose of Step |
|------------------------------|---|--|
| June 4, 2024 | Order preparation of Feasibility Report | Ordering the Feasibility Report will allow Staff to create a Feasibility Report that will allow the Engineer to analyze the potential project, and estimate initial project costs. |
| July 9, 2024 | Approve Professional Services Agreement | Approve Professional Services Agreement for Design and Construction Services |
| April 16, 2025 | Neighborhood Meeting | The intent of this meeting is to inform the neighborhood of the upcoming project and seek input on the improvements, which will be summarized for City Council. |
| May 20, 2025 | Council discussion of Draft Feasibility Report / Intersection Improvements | |
| June 11, 2025 | 2 nd Neighborhood Meeting | The intent of this meeting is to inform the neighborhood of the upcoming project and seek input on the improvements, which will be summarized for City Council. |
| August 4, 2025 | Accept Feasibility Report and Authorize Preparation of Plans and Specifications | The engineer will present the Feasibility Report, the proposed project, and an initial cost estimate. |
| November 18, 2025 | Publish Street Recon Plan Hearing Ad in Northfield News | A step in the project financing process for bonding |
| December 2, 2025 | Public Hearing – 5-Year Street Reconstruction Plan and adoption of plan | Authorization of bonds requires a public hearing and adoption of a 5-year street reconstruction plan. Plan must be approved by two-thirds of the governing body members present, publish at least 10-day before hearing but no more than 28-days. Once plan and preliminary authorization of bonds is adopted, the public has a 30-day period where a petition signed by at least 5% of the votes cast in the last election can require that the bonding be subject to a referendum. 2/3 of majority of governing body present at the meeting for approval |
| January 14, 2026 | 3 rd Neighborhood Meeting | The intent of this meeting is to inform the neighborhood of the upcoming project and seek input on the improvements, which will be summarized for City Council. |
| February 3, 2026 | Approve Plans and Order Advertisement for Bids | Final approval of plans for bidding |
| February 11, 18, 25, 2026 | Publish Ad for Bid in Northfield News | A step in the bidding process. The project will also be advertised on the MnDOT e- Advert website. |
| March 5, 2026 | Bid Opening – 2:00 P.M. | Final step in the bidding process. Bids are opened by staff and tabulated. From here staff will make a recommendation to the City Council for award. |
| March 17, 2026 | Accept Bids and Award Contract | This step follows the uniform municipal contracting law, 471.345, the City's purchase policy and allows for the project to move forward with beginning the actual construction process. |
| May 2026 | Property Owner Meetings | Individual meetings with property owners will be scheduled to go over the details of construction and document existing conditions. |
| May - October, 2026 | Construction | The City Engineer recommends to City Council when the final payment should be made to the Contractor. The City Council may accept the work by resolution; however, if the city fails to pay the amount due within 30 days of a monthly estimate, or 90 days after the final estimate, the city must pay interest on the past due amount as prescribed by law. |
| July 2027 | Accept Improvements and Authorize Final Payment | |

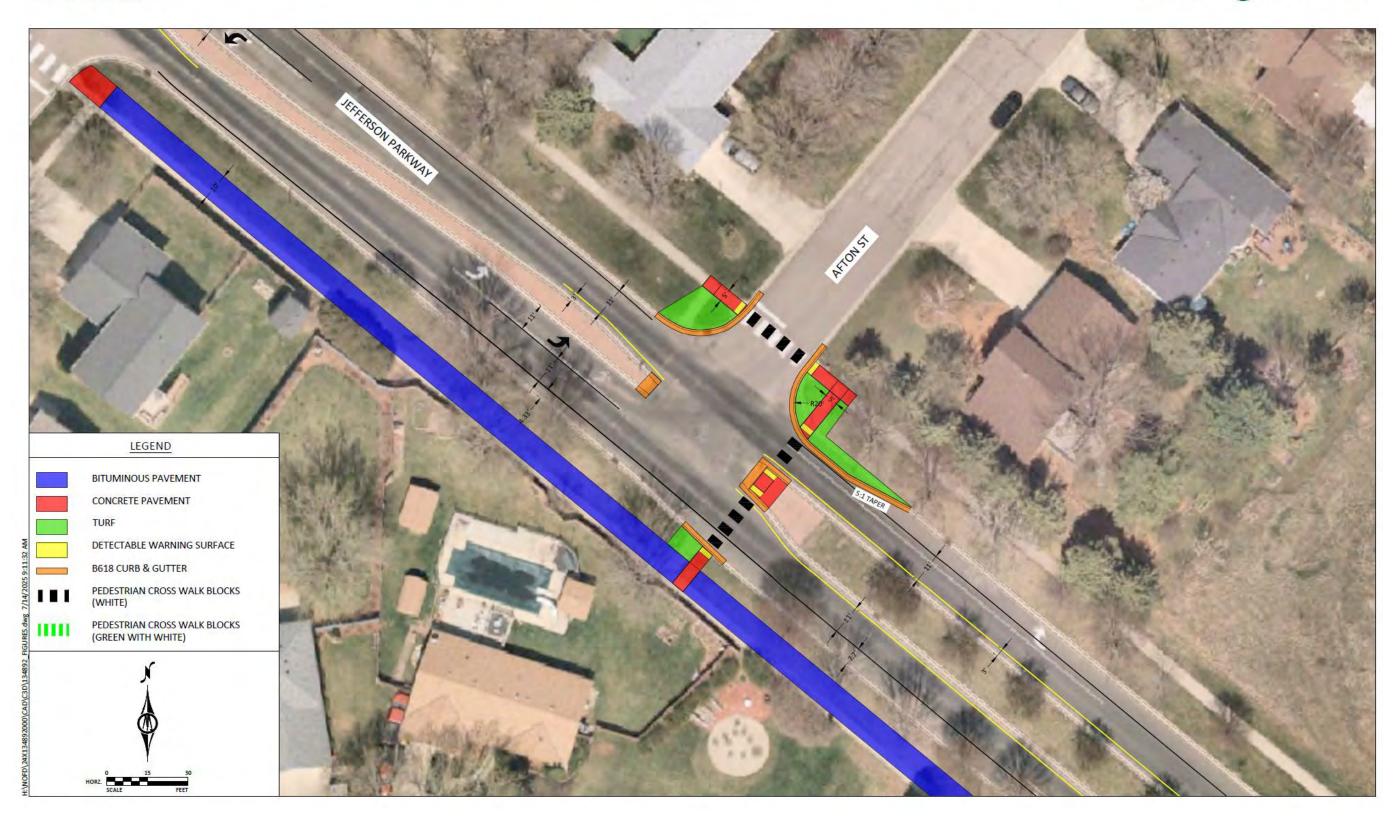
Appendix C - Intersection Improvements

2026 JEFFERSON PKWY M&O & MTST IMPROVEMENTS

FIGURE 1: JEFFERSON PKWY & WASHINGTON ST PROPOSED IMPROVEMENTS

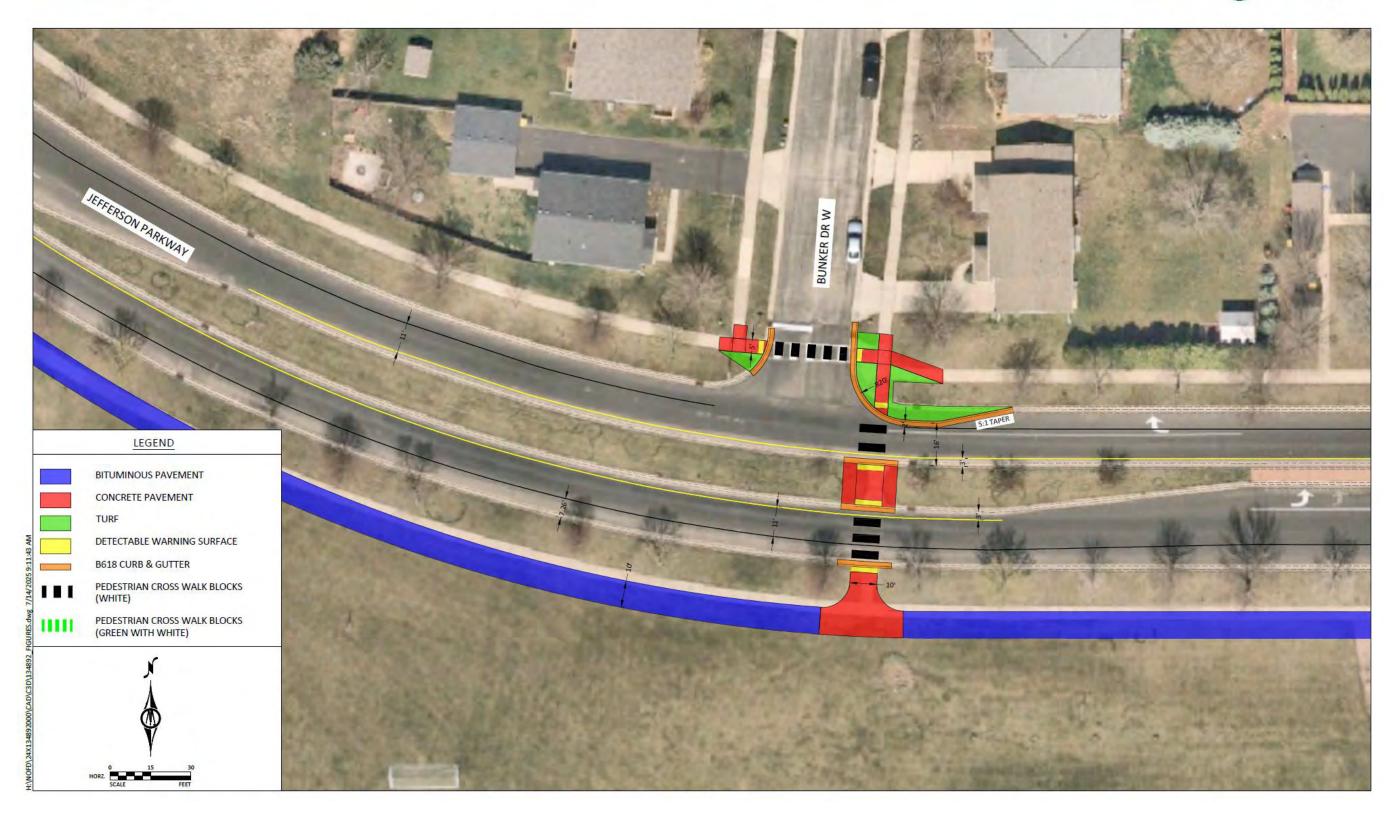


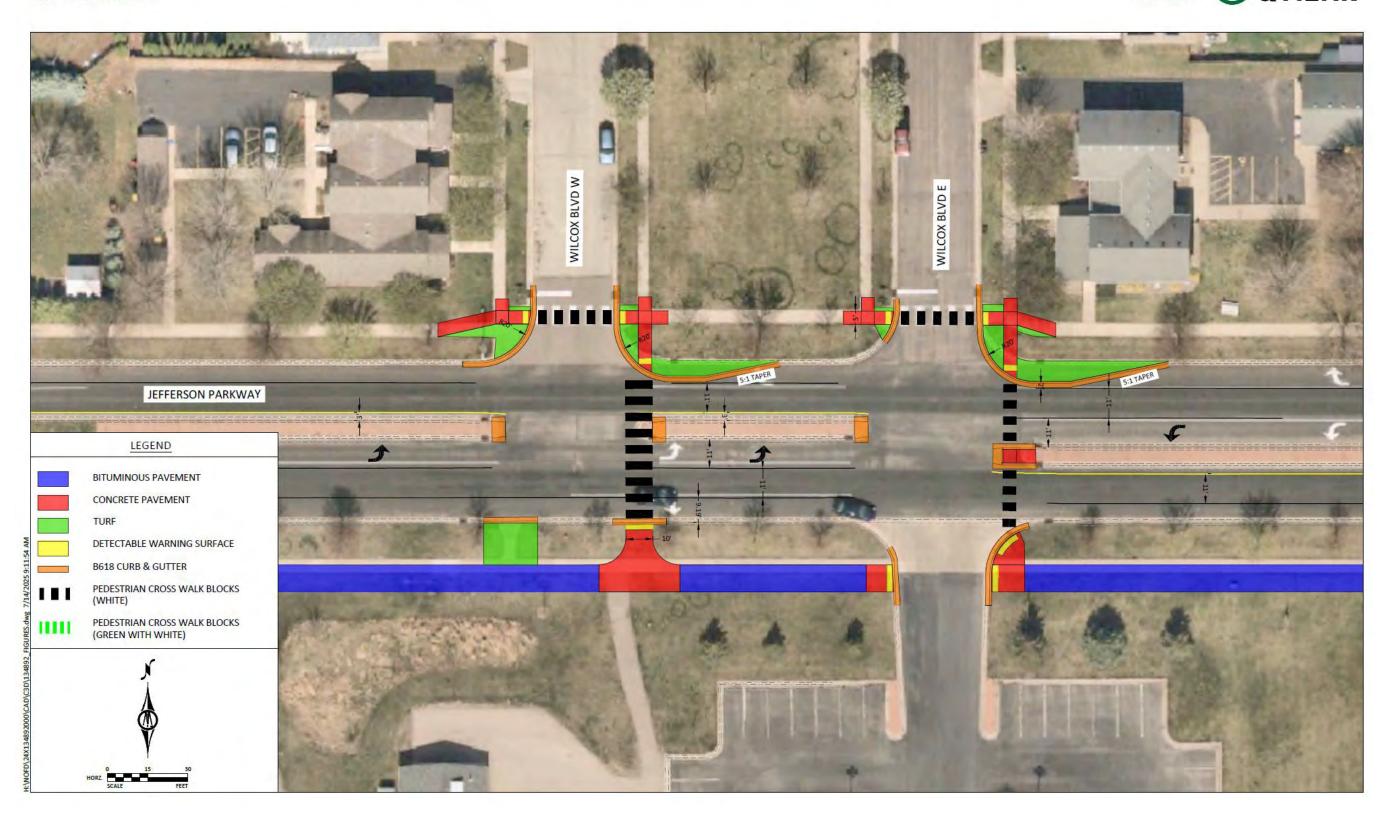
CITY OF NORTHFIELD LEGEND **BITUMINOUS PAVEMENT** CONCRETE PAVEMENT DETECTABLE WARNING SURFACE B618 CURB & GUTTER PEDESTRIAN CROSS WALK BLOCKS (WHITE) PEDESTRIAN CROSS WALK BLOCKS (GREEN WITH WHITE) шш



JULY 2025

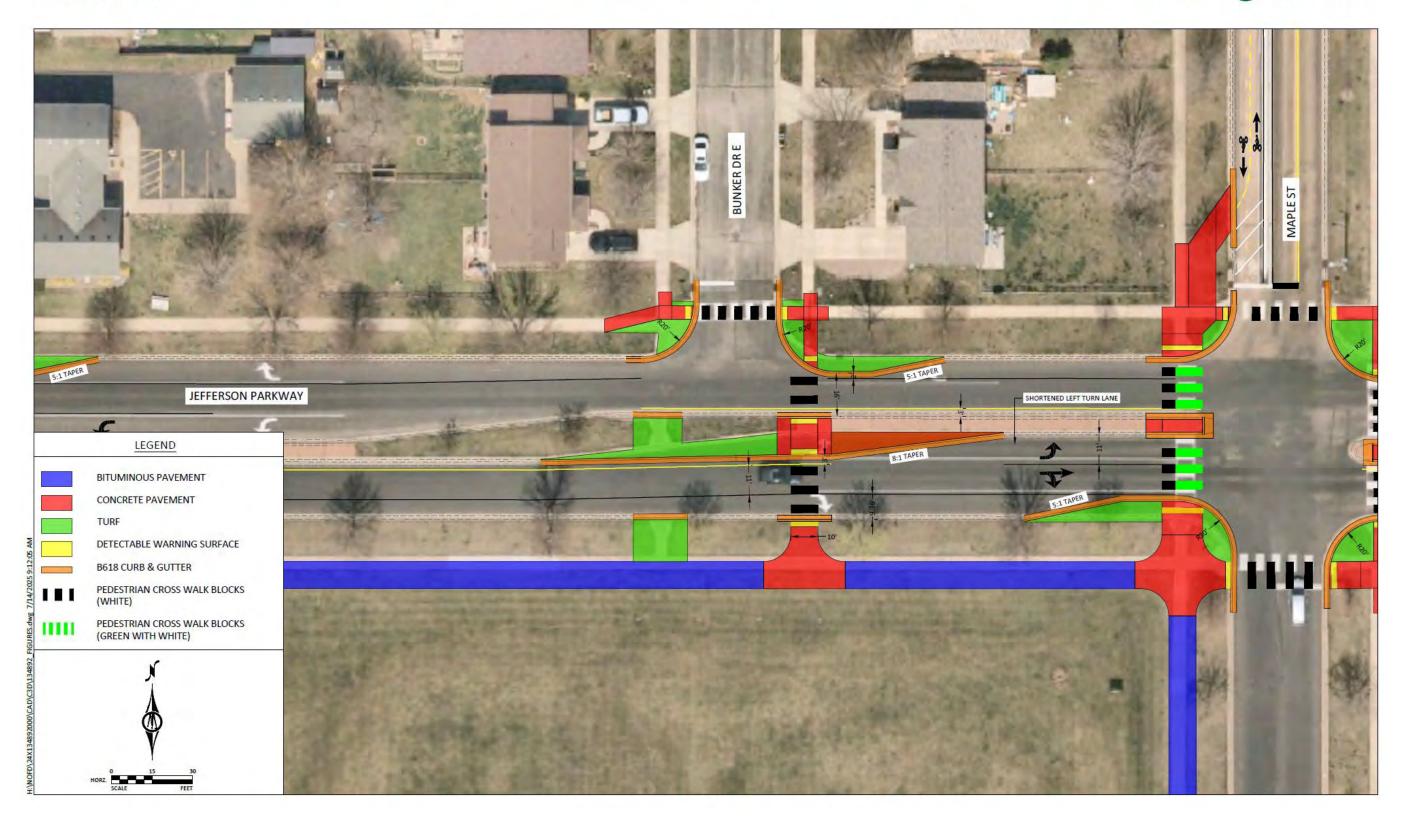






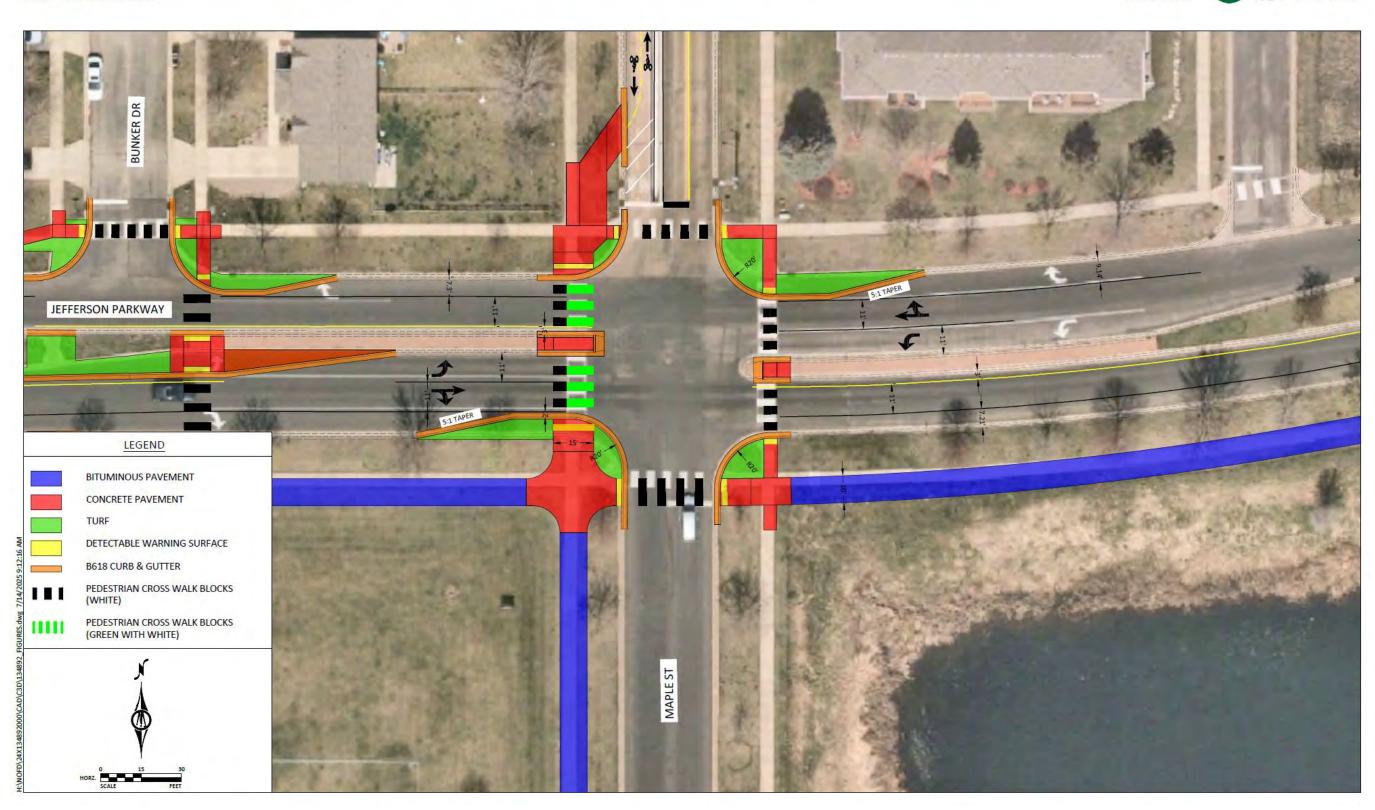


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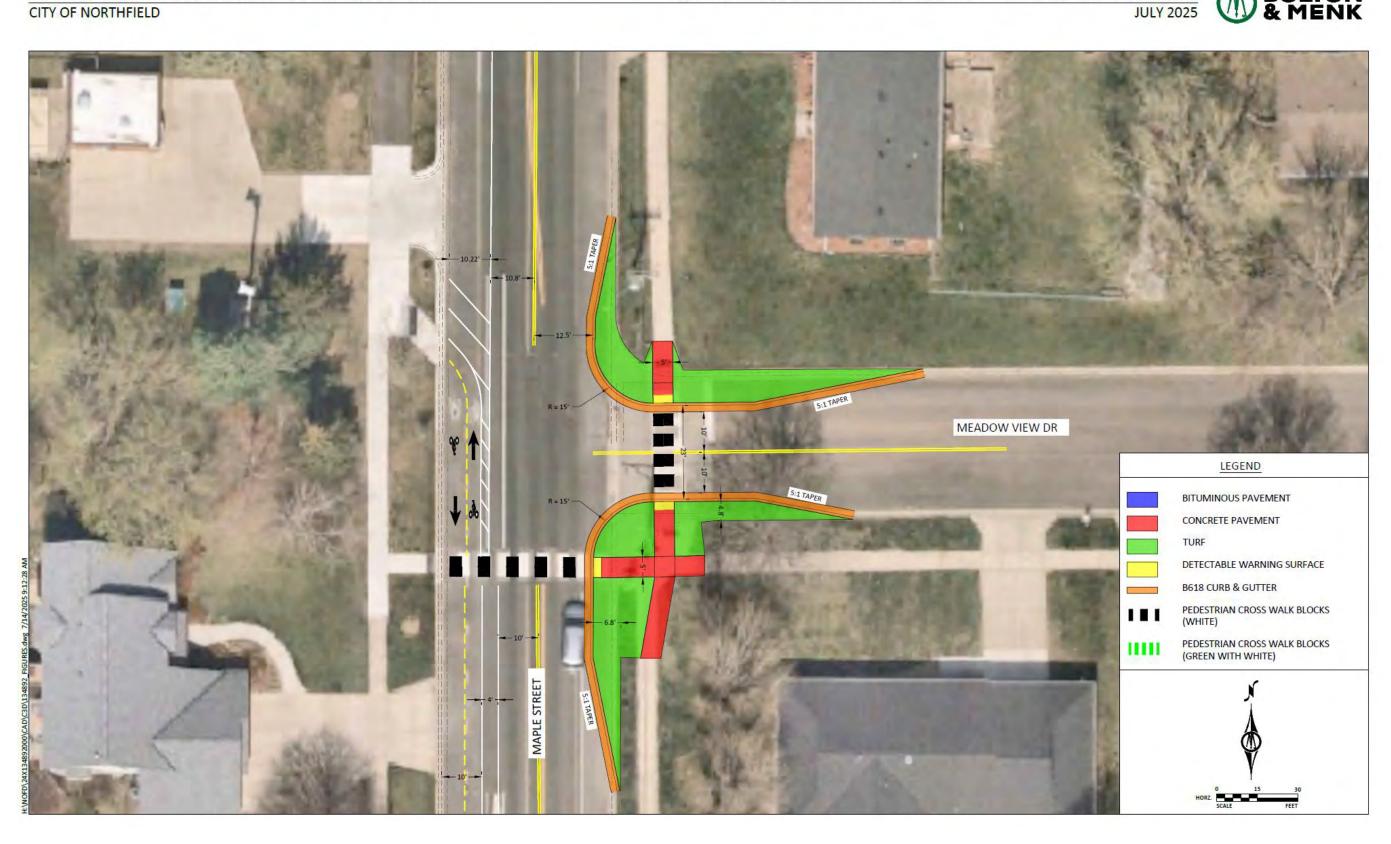
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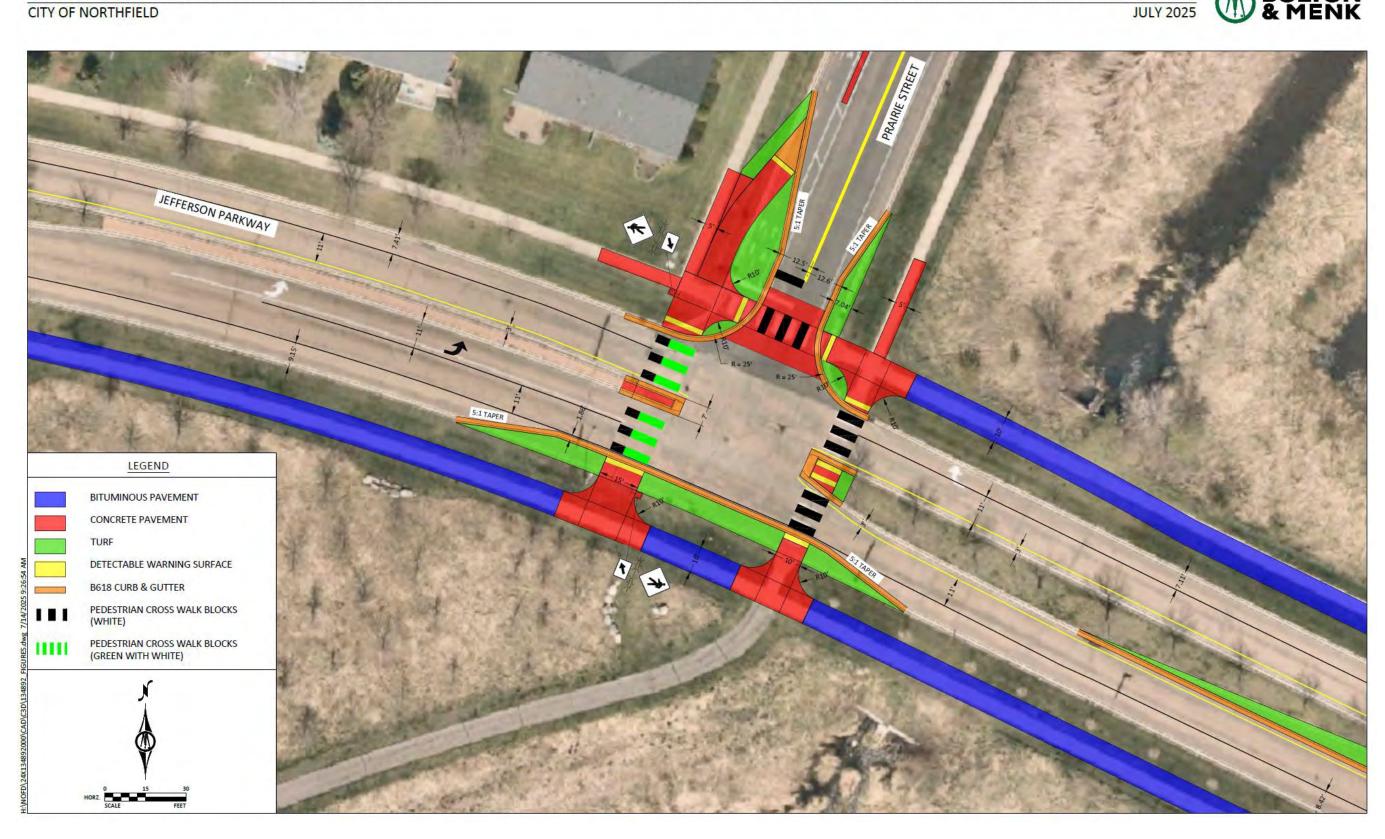


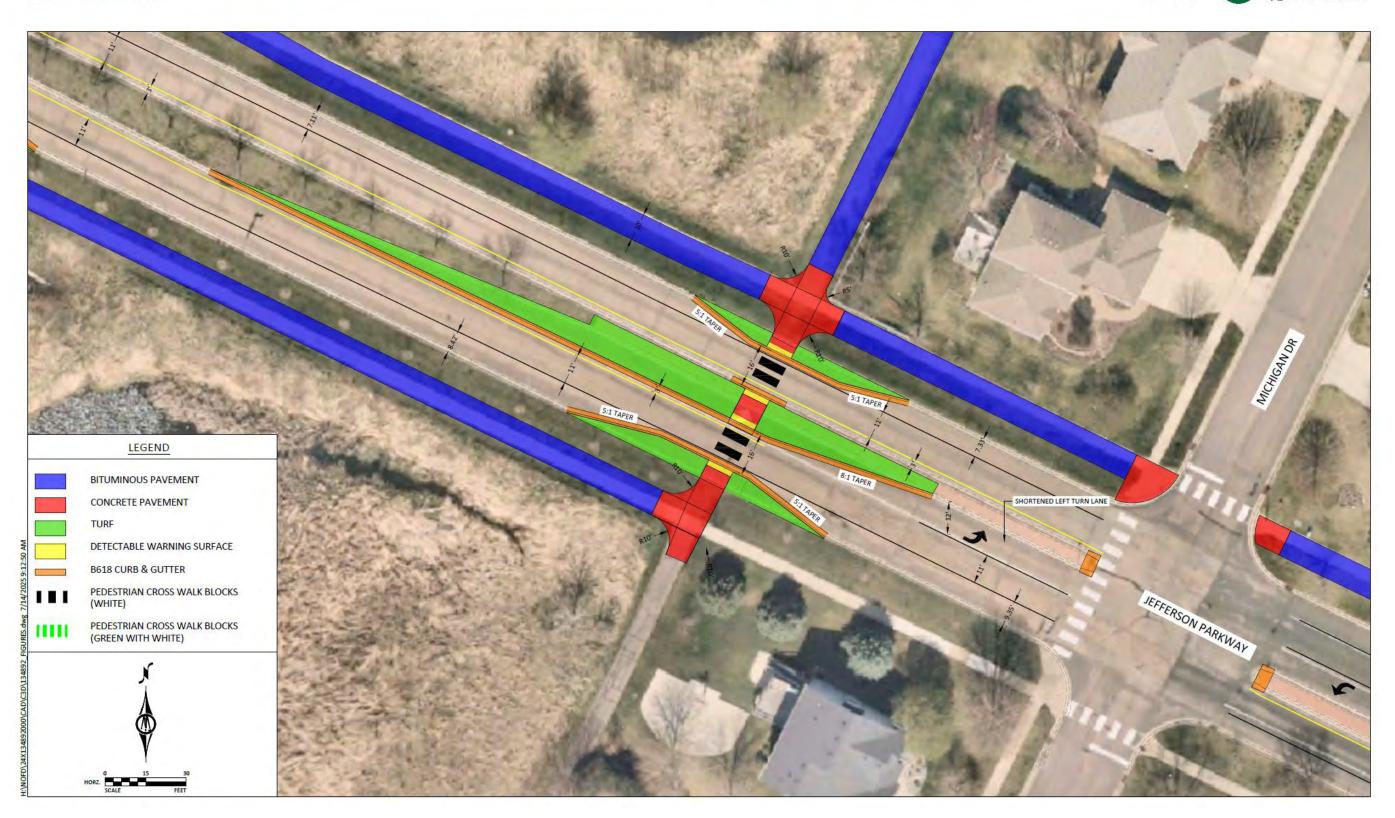


CITY OF NORTHFIELD









Appendix D - Arborist Report

2026 Jefferson Parkway Mill and Overlay and Mill Towns State Trail Improvements

Introduction

As part of the proposed 2026 Mill and Overlay Project, an inventory and report detailing the species, size, location and condition of trees within the proposed construction envelope. The project area includes a proposed trail connection at the north end of Spring Creek Trail which will extend south along the existing trail to Jefferson Parkway. Also part of the project area are trees within the road right of way on Jefferson Parkway from Spring Creek Road west to Division Street, Maple Street and Prairie Street from Jefferson Parkway north to Meadowview Drive and Maple Court. This report discusses the findings of the tree inventory and makes some general recommendations that may relate to the care and fate of these trees moving forward. Field work associated with the tree inventory was performed in summer and early fall of 2024.

Methods

All data recorded in the field were input into an ESRI shapefile and submitted to Bolton & Menk for inclusion in project plans and for planning information.

Live trees within the Right of Way (ROW) 1 inches in diameter or greater were included in the inventory. Dead trees in the ROW and trail corridor were included.

Tree diameter was measured at 4.5 feet above grade (DBH). Where trees have multiple stems, the diameter recorded is the total diameter of all stems. Location of each tree was determined using sub-meter GNSS equipment and converted into the Rice County Coordinate System. All trees in the inventory were tagged with a unique number for reference.

Condition of each tree was assessed and assigned a number using a scale from 0-9. The best quality trees were given the highest number, trees of low quality were given a low number with zero being a dead tree. Trees in good condition are those that appear vigorous and free of significant defects (cavities, decay, large dead or broken branches, cracks, etc.). Trees of low (poor or very poor) quality may have large wounds, significant decay, insect damage or very poor form or a combination of negative factors. Trees in fair condition (rated 4 or 5) may have, for example, an odd form, slight lean, one or two large dead branches, but appear healthy and are expected to survive for many years barring any significant negative impacts in future.

Findings

A total of 554 trees were found and the data associated with those trees are detailed in tabular form. These 554 trees represent 41 different species and range in size from 1 inches DBH to 44.5 inches (a cottonwood on the south side of Jefferson Parkway at the west end of the project). Fifty-four ash trees were found. Four of these are either dead or heavily infested with emerald ash borer (EAB). Six trees, all red maples, show signs of chlorosis. This condition is often caused by high pH soils which are not uncommon along road right of ways.

Many different species make up the 554 trees found: 42 species in total. Most of the trees close to Spring Creek are naturally occurring. On the north end of the proposed trail as it moves away from the creek and closer to Spring Creek Road, many red pine can be found. It is likely that these were planted rather than naturally occurring.

Discussion

The presence of 42 unique species is an indication of a significant amount of tree diversity within the project area. However, many species are not abundant as they are represented by very few trees; in many instances less than five individuals. Twenty-two species each comprise less than one percent of all trees and six species are represented by a single individual. How many of these trees were planted by humans and how many occur naturally may not be relevant but the fact that so many species appear to be thriving (condition greater than average) gives an indication of soils well suited to a variety of trees.

The most common species present is Linden, either the native basswood or non-native ornamental varieties. Other common trees are green ash (52), Arborvitae (49) and red pine (42). Many species are represented by less than five individuals.

Average condition of the 554 trees is 6.4. The most common condition was 7, accounting for over 29 percent. Twenty-five trees are dead. A couple have been dead long enough so that positive species identification isn't possible. These are shown as "Unknown" in the tree list. Factors that prevent a tree from receiving the highest rating (9) include: decay, thin canopy, disease, wounds, decay, etc.

A few of the tree species here are considered by some to be "low quality" or undesirable. These include Siberian elm and boxelder. Siberian elm is a non-native tree that can spread aggressively. Boxelder is a fast-growing, native tree that few people like but has a role as one of the first trees to become established after a disturbance like land clearing or fire. Regardless of the perception of the casual or professional observer, desirability was not a factor in assessing condition.

At the time of this report, 2026 improvements to the proposed project area have not been finalized. This makes projections for the fate of individual trees or groups of trees virtually impossible to predict. Removal of dead trees could occur at any time, preferably before other work commences to ensure the safety of workers and the public.

Recommendations

- Since soils in this project area appear to be ideal for growing trees, it is important to protect them
 throughout the construction process by keeping as much of the native soil on site as possible,
 limiting compaction wherever possible and assuring no change to soil chemistry due to chemical
 spills or concrete washout. This is particularly true in the area where the trail along the creek will
 be constructed.
- 2. Prune saved trees to limit the risk from falling branches once the project is over. Preventive pruning should be considered for saved trees that have branches that conflict with or could be damaged by large and/or equipment like backhoes close to construction.
- 3. Despite the existing species diversity, there remain many opportunities to increase the number of some of the under-represented species. These include: honeylocust, Kentucky Coffeetree, sugar maple, and some oaks. Trees not now present but should be considered include bitternut hickory and black cherry. Smaller trees for consideration include serviceberry, redbud (non-native), ironwood, musclewood (hornbeam), hawthorn, and witch hazel. These trees should do well along Spring Creek Trail, enhancing the natural environment already present. The area between the trail and the creek provides good sites for river birch, bur oak, bicolor oak and Kentucky coffeetree. These trees can withstand some flooding. Black cherry would make a good choice on the east side of the trail along with some of the smaller trees listed above. Lindens account for over 10% of the existing trees so near-future plantings of these should be limited. Red maple should be avoided in the boulevard along Jefferson Avenue due to high soil pH. However, these trees might thrive along the trail near the creek.

Trees not mentioned above may also make good selections but should be used judiciously. The use of too many non-native trees could considerably change the rural ambience of this stretch of road.

- 4. Replacement tree spacing recommendations is difficult at this time since it is not known how many trees might be removed or where new planting spaces may be created by this project. Many communities use a spacing of 30-40 feet between trees on linear projects. This is a good rule of thumb for larger trees like oaks or basswood. Smaller trees could be planted closer together, perhaps as close as 20 feet.
- 5. Though only a few ash trees show signs of emerald ash borer infestation, it is safe to assume that all ash trees may already be at least lightly infested and all will die eventually. If insecticide injection to save these trees is not an option, the removal of all fifty-four ash trees is recommended. Removal will slow the spread of this insect to other trees in the area.

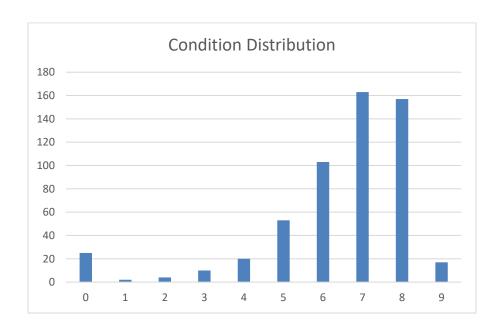
Prepared by: Stephen Nicholson CF TreeBiz LLC

Species Count

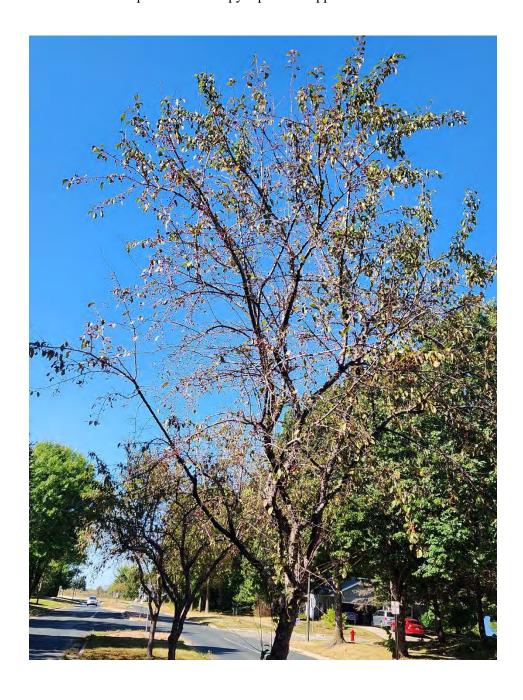
| Species | Count | % of Total |
|----------------------|-------|------------|
| Linden | 60 | 10.8 |
| Ash, green | 52 | 9.4 |
| Arborvitae | 49 | 8.8 |
| Pine, red | 42 | 7.6 |
| Boxelder | 31 | 5.6 |
| Maple, Norway | 31 | 5.6 |
| Crabapple | 30 | 5.4 |
| Maple, hybrid | 27 | 4.9 |
| Walnut | 26 | 4.7 |
| Hackberry | 25 | 4.5 |
| Maple, Red | 25 | 4.5 |
| Maple, sugar | 17 | 3.1 |
| Oak, red | 16 | 2.9 |
| Juniper | 13 | 2.3 |
| Cottonwood | 10 | 1.8 |
| Elm, hybrid | 10 | 1.8 |
| Oak, bicolor | 10 | 1.8 |
| Elm, Siberian | 8 | 1.4 |
| Spruce, white | 8 | 1.4 |
| Oak, bur | 7 | 1.3 |
| Hickory, shagbark | 5 | <1.0 |
| Aspen | 4 | <1.0 |
| Elm, American | 4 | <1.0 |
| Maple, silver | 4 | <1.0 |
| Pine, white | 4 | <1.0 |
| Apple | 3 | <1.0 |
| Ginkgo | 3 | <1.0 |
| Honeylocust | 3 | <1.0 |
| Coffeetree, Kentucky | 3 | <1.0 |
| Treelilac | 3 | <1.0 |

| Maple, amur | 3 | <1.0 |
|------------------|---|------|
| Oak, pin | 3 | <1.0 |
| Oak, white | 3 | <1.0 |
| Unknown | 2 | <1.0 |
| Ash, white | 2 | <1.0 |
| Catalpa | 2 | <1.0 |
| Birch, river | 1 | <1.0 |
| Ironwood | 1 | <1.0 |
| Poplar, white | 1 | <1.0 |
| Spruce, blue | 1 | <1.0 |
| Oak, eastern pin | 1 | <1.0 |
| Sumac, staghorn | 1 | <1.0 |

| Condition | Count |
|-----------|-------|
| 0 | 25 |
| 1 | 2 |
| 2 | 4 |
| 3 | 10 |
| 4 | 20 |
| 5 | 53 |
| 6 | 103 |
| 7 | 163 |
| 8 | 157 |
| 9 | 17 |
| Total | 554 |



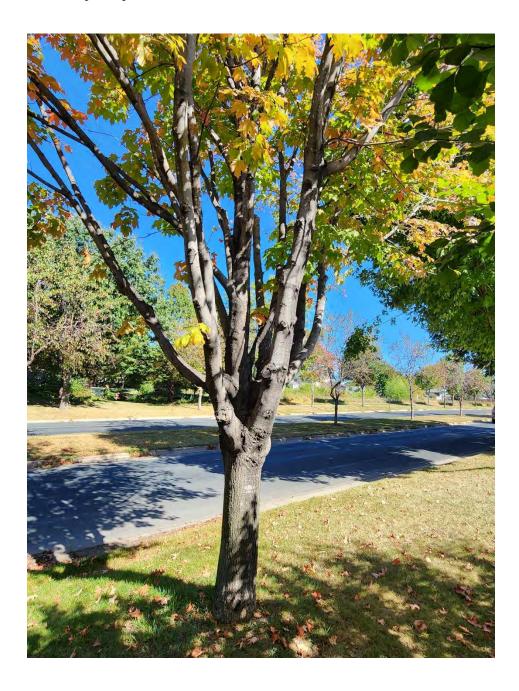
Example of thin canopy – possible apple scab as cause



Example of Sprouts – these interfere with growth of more desirable parts of the plant



Example of poor form – trees should have one main leader in the center



Tree List (EAB in notes indicates Emerald Ash borer)

| Tree # | Species | DBH | Condition | Stems | Notes |
|--------|---------------|------|-----------|-------|-------|
| 68 | Pine, red | 11.0 | 4 | 1 | |
| 69 | Pine, white | 16.5 | 7 | 1 | |
| 70 | Pine, red | 9.5 | 0 | 1 | |
| 71 | Pine, red | 8.0 | 0 | 1 | |
| 72 | Pine, red | 7.0 | 6 | 1 | |
| 73 | Pine, red | 12.5 | 0 | 1 | |
| 74 | Hackberry | 9.5 | 7 | 1 | |
| 75 | Pine, red | 8.5 | 0 | 1 | |
| 76 | Pine, red | 6.0 | 0 | 1 | |
| 77 | Juniper | 12.0 | 7 | 1 | |
| 78 | Pine, red | 6.0 | 7 | 1 | |
| 79 | Pine, red | 9.0 | 7 | 1 | |
| 80 | Pine, red | 9.0 | 7 | 1 | |
| 81 | Boxelder | 9.0 | 7 | 1 | |
| 82 | Pine, white | 12.0 | 8 | 1 | |
| 83 | Pine, red | 13.0 | 0 | 1 | |
| 84 | Walnut | 10.0 | 8 | 1 | |
| 85 | Hackberry | 12.0 | 8 | 1 | |
| 86 | Walnut | 13.0 | 8 | 1 | |
| 87 | Elm, American | 7.5 | 7 | 1 | |
| 88 | Walnut | 9.0 | 8 | 1 | |
| 89 | Walnut | 8.0 | 8 | 1 | |
| 90 | Juniper | 8.0 | 6 | 1 | |
| 91 | Juniper | 6.0 | 5 | 1 | |
| 92 | Walnut | 8.5 | 8 | 1 | |
| 93 | Pine, red | 13.5 | 7 | 1 | |
| 94 | Juniper | 9.0 | 8 | 1 | |
| 95 | Pine, red | 12.5 | 8 | 1 | |
| 96 | Pine, red | 12.5 | 0 | 1 | |

| 97 | Pine, red | 9.0 | 0 | 1 | |
|-----|---------------|------|---|---|--|
| 98 | Pine, red | 12.0 | 6 | 1 | |
| 99 | Walnut | 10.0 | 8 | 1 | |
| 100 | Pine, red | 8.0 | 0 | 1 | |
| 101 | Boxelder | 8.5 | 0 | 1 | |
| 102 | Pine, red | 9.0 | 0 | 1 | |
| 103 | Pine, white | 16.0 | 8 | 1 | |
| 104 | Pine, red | 10.5 | 6 | 1 | |
| 105 | Poplar, white | 6.5 | 4 | 1 | |
| 106 | Pine, red | 12.5 | 7 | 1 | |
| 107 | Pine, red | 9.5 | 7 | 1 | |
| 108 | Pine, red | 14.0 | 7 | 1 | |
| 109 | Boxelder | 7.0 | 6 | 1 | |
| 110 | Aspen | 6.0 | 9 | 1 | |
| 111 | Pine, red | 9.5 | 8 | 1 | |
| 112 | Pine, red | 8.5 | 6 | 1 | |
| 113 | Juniper | 18.0 | 7 | 2 | |
| 114 | Pine, red | 12.0 | 0 | 1 | |
| 115 | Pine, red | 9.0 | 4 | 1 | |
| 116 | Pine, white | 13.5 | 0 | 1 | |
| 117 | Pine, red | 7.5 | 0 | 1 | |
| 118 | Walnut | 7.0 | 0 | 1 | |
| 119 | Pine, red | 7.5 | 0 | 1 | |
| 120 | Walnut | 10.5 | 7 | 1 | |
| 121 | Walnut | 12.5 | 8 | 1 | |
| 122 | Pine, red | 9.5 | 7 | 1 | |
| 123 | Pine, red | 10.5 | 6 | 1 | |
| 124 | Hackberry | 6.0 | 7 | 1 | |
| 125 | Elm, American | 6.0 | 0 | 1 | |
| 126 | Unknown | 6.5 | 0 | 1 | |
| 127 | Pine, red | 9.5 | 7 | 1 | |
| 128 | Pine, red | 13.5 | 7 | 1 | |
| 129 | Pine, red | 12.5 | 7 | 1 | |

| 130 | Pine, red | 11.0 | 0 | 1 | |
|-----|---------------|------|---|---|-------------|
| 131 | Boxelder | 6.0 | 7 | 1 | |
| 132 | Pine, red | 12.0 | 6 | 1 | |
| 133 | Pine, red | 12.0 | 7 | 1 | |
| 134 | Pine, red | 12.0 | 6 | 1 | |
| 135 | Pine, red | 8.0 | 6 | 1 | |
| 136 | Pine, red | 10.0 | 7 | 1 | |
| 137 | Unknown | 9.0 | 0 | 1 | |
| 138 | Pine, red | 11.5 | 6 | 1 | |
| 139 | Apple | 8.5 | 5 | 1 | |
| 140 | Elm, Siberian | 11.0 | 7 | 1 | |
| 141 | Boxelder | 6.5 | 0 | 1 | |
| 142 | Pine, red | 6.0 | 8 | 1 | |
| 143 | Elm, American | 9.5 | 4 | 1 | |
| 144 | Elm, Siberian | 11.0 | 0 | 1 | |
| 145 | Walnut | 6.0 | 4 | 1 | |
| 146 | Juniper | 12.5 | 7 | 1 | |
| 147 | Elm, American | 11.5 | 1 | 1 | almost dead |
| 148 | Boxelder | 8.0 | 7 | 1 | |
| 149 | Boxelder | 12.0 | 7 | 2 | |
| 150 | Boxelder | 11.0 | 5 | 2 | |
| 151 | Boxelder | 16.5 | 5 | 2 | |
| 152 | Boxelder | 12.5 | 6 | 2 | |
| 153 | Boxelder | 9.0 | 6 | 1 | |
| 154 | Walnut | 14.0 | 7 | 1 | |
| 155 | Pine, red | 10.0 | 7 | 1 | |
| 156 | Walnut | 10.0 | 7 | 1 | |
| 157 | Boxelder | 6.5 | 6 | 1 | |
| 158 | Boxelder | 6.5 | 8 | 1 | |
| 159 | Boxelder | 11.0 | 5 | 1 | |
| 160 | Boxelder | 6.5 | 7 | 1 | |
| 161 | Boxelder | 7.0 | 7 | 1 | |
| 162 | Boxelder | 7.0 | 6 | 1 | |

| 163 | Boxelder | 7.0 | 6 | 1 | |
|-----|---------------|------|---|---|--|
| 164 | Boxelder | 8.0 | 5 | 1 | |
| 165 | Juniper | 11.0 | 7 | 1 | |
| 166 | Ash, green | 7.0 | 6 | 1 | |
| 167 | Ash, green | 6.5 | 7 | 1 | |
| 168 | Juniper | 15.0 | 6 | 1 | |
| 169 | Juniper | 16.0 | 7 | 1 | |
| 170 | Juniper | 11.5 | 7 | 1 | |
| 171 | Apple | 13.0 | 5 | 1 | |
| 172 | Walnut | 6.0 | 8 | 1 | |
| 173 | Maple, amur | 18.0 | 7 | 8 | |
| 174 | Oak, bur | 7.0 | 8 | 1 | |
| 175 | Walnut | 6.0 | 8 | 1 | |
| 176 | Elm, Siberian | 10.5 | 7 | 1 | |
| 177 | Ash, green | 6.0 | 8 | 1 | |
| 178 | Elm, Siberian | 20.0 | 6 | 2 | |
| 179 | Juniper | 8.0 | 7 | 1 | |
| 180 | Elm, Siberian | 16.0 | 7 | 1 | |
| 181 | Elm, Siberian | 6.0 | 6 | 1 | |
| 182 | Ash, green | 26.5 | 6 | 5 | |
| 183 | Walnut | 6.5 | 8 | 1 | |
| 184 | Ash, green | 6.0 | 7 | 1 | |
| 185 | Ash, green | 7.0 | 7 | 1 | |
| 186 | Ash, green | 8.0 | 7 | 1 | |
| 187 | Ash, green | 7.0 | 7 | 1 | |
| 188 | Ash, green | 7.5 | 7 | 1 | |
| 189 | Elm, Siberian | 19.5 | 4 | 1 | |
| 190 | Walnut | 9.5 | 8 | 1 | |
| 191 | Boxelder | 10.0 | 6 | 1 | |
| 192 | Boxelder | 6.0 | 7 | 1 | |
| 193 | Boxelder | 8.5 | 7 | 1 | |
| 194 | Juniper | 7.5 | 8 | 1 | |
| 195 | Ash, green | 9.0 | 6 | 1 | |

| 196 | Ash, green | 6.0 | 7 | 1 | |
|-----|---------------|------|---|---|--|
| 197 | Walnut | 14.0 | 9 | 1 | |
| 198 | Walnut | 15.0 | 7 | 1 | |
| 199 | Walnut | 14.0 | 7 | 1 | |
| 200 | Walnut | 11.0 | 8 | 1 | |
| 201 | Walnut | 6.5 | 9 | 1 | |
| 202 | Walnut | 6.5 | 8 | 1 | |
| 203 | Boxelder | 7.5 | 7 | 1 | |
| 204 | Ash, green | 11.0 | 7 | 2 | |
| 205 | Cottonwood | 22.0 | 9 | 1 | |
| 206 | Walnut | 15.5 | 8 | 1 | |
| 207 | Walnut | 23.0 | 8 | 1 | |
| 208 | Boxelder | 12.0 | 4 | 2 | |
| 209 | Boxelder | 40.0 | 5 | 4 | |
| 210 | Boxelder | 11.0 | 5 | 2 | |
| 211 | Boxelder | 6.5 | 7 | 1 | |
| 212 | Boxelder | 7.0 | 5 | 1 | |
| 213 | Boxelder | 12.0 | 7 | 1 | |
| 214 | Cottonwood | 16.5 | 9 | 1 | |
| 215 | Cottonwood | 26.0 | 6 | 1 | |
| 216 | Boxelder | 8.0 | 7 | 1 | |
| 217 | Cottonwood | 14.5 | 8 | 1 | |
| 218 | Cottonwood | 26.0 | 6 | 1 | |
| 219 | Cottonwood | 36.0 | 6 | 1 | |
| 220 | Ash, green | 7.0 | 7 | 1 | |
| 221 | Cottonwood | 22.5 | 9 | 1 | |
| 222 | Cottonwood | 29.5 | 5 | 3 | |
| 223 | Juniper | 6.0 | 9 | 1 | |
| 224 | Ash, green | 6.0 | 7 | 1 | |
| 225 | Ash, green | 8.5 | 6 | 1 | |
| 226 | Elm, Siberian | 13.0 | 7 | 1 | |
| 227 | Oak, red | 9.5 | 9 | 1 | |
| 228 | Maple, silver | 10.0 | 6 | 1 | |

| 229 | Oak, white | 6.5 | 9 | 1 | |
|-----|-----------------|------|---|---|--------------|
| 230 | Oak, white | 6.0 | 9 | 1 | |
| 231 | Maple, silver | 13.0 | 5 | 1 | sprouts |
| 232 | Oak, pin | 10.0 | 9 | 1 | |
| 233 | Ash, green | 8.0 | 8 | 1 | |
| 234 | Maple, silver | 11.0 | 5 | 1 | sprouts |
| 235 | Sumac, staghorn | 5.0 | 8 | 1 | |
| 236 | Maple, amur | 18.0 | 6 | 3 | |
| 237 | Maple, amur | 13.0 | 6 | 1 | |
| 238 | Spruce, blue | 19.0 | 7 | 1 | |
| 239 | Walnut | 9.5 | 7 | 1 | |
| 240 | Hackberry | 16.0 | 8 | 1 | |
| 241 | Apple | 10.0 | 7 | 1 | |
| 242 | Boxelder | 16.0 | 6 | 2 | |
| 243 | Oak, red | 13.0 | 9 | 1 | |
| 244 | Maple, sugar | 4.0 | 5 | 1 | trunk wounds |
| 245 | Ash, green | 12.0 | 7 | 1 | |
| 246 | Linden | 9.0 | 8 | 1 | |
| 247 | Ash, green | 7.5 | 7 | 1 | |
| 248 | Linden | 12.5 | 8 | 1 | |
| 249 | Maple, sugar | 7.5 | 8 | 1 | |
| 250 | Ash, green | 9.5 | 6 | 1 | |
| 251 | Aspen | 21.5 | 6 | 3 | |
| 252 | Ash, green | 9.5 | 5 | 1 | sprouts |
| 253 | Maple, sugar | 9.5 | 7 | 1 | |
| 254 | Ash, green | 9.5 | 7 | 1 | |
| 255 | Linden | 9.0 | 8 | 1 | |
| 256 | Maple, hybrid | 6.0 | 7 | 1 | |
| 257 | Elm, hybrid | 10.0 | 6 | 1 | |
| 258 | Maple, hybrid | 11.0 | 7 | 1 | |
| 259 | Maple, hybrid | 10.5 | 7 | 1 | |
| 260 | Maple, hybrid | 5.5 | 8 | 1 | |
| 261 | Elm, hybrid | 6.5 | 8 | 1 | |

| 262 | Maple, hybrid | 5.5 | 8 | 1 | |
|-----|-------------------|------|---|---|--------------|
| 263 | Elm, hybrid | 6.5 | 7 | 1 | |
| 264 | Maple, hybrid | 5.0 | 8 | 1 | |
| 265 | Elm, hybrid | 5.5 | 7 | 1 | |
| 266 | Maple, hybrid | 4.0 | 9 | 1 | |
| 267 | Elm, hybrid | 6.5 | 8 | 1 | |
| 268 | Linden | 13.5 | 7 | 1 | |
| 269 | Ash, green | 12.5 | 8 | 1 | |
| 270 | Maple, sugar | 8.0 | 8 | 1 | |
| 271 | Linden | 14.0 | 8 | 1 | |
| 272 | Ash, green | 12.0 | 5 | 1 | thin canopy |
| 273 | Maple, sugar | 9.0 | 8 | 1 | |
| 274 | Linden | 10.5 | 8 | 1 | |
| 275 | Ash, green | 8.0 | 7 | 1 | |
| 276 | Maple, sugar | 7.5 | 7 | 1 | |
| 277 | Ash, green | 7.5 | 0 | 1 | EAB |
| 278 | Maple, Norway | 6.0 | 2 | 1 | trunk wounds |
| 279 | Hackberry | 6.0 | 7 | 1 | |
| 280 | Ginkgo | 6.0 | 7 | 1 | |
| 281 | Ash, green | 8.5 | 2 | 1 | EAB |
| 282 | Maple, hybrid | 8.0 | 2 | 1 | almost dead |
| 283 | Ginkgo | 6.0 | 6 | 1 | trunk wound |
| 284 | Ash, green | 7.5 | 1 | 1 | EAB |
| 285 | Ash, green | 7.5 | 4 | 1 | trunk wound |
| 286 | Hackberry | 1.5 | 8 | 1 | |
| 287 | Oak, bicolor | 1.0 | 8 | 1 | |
| 288 | Oak, white | 1.5 | 8 | 1 | |
| 289 | Oak, pin | 1.5 | 8 | 1 | |
| 290 | Linden | 1.5 | 8 | 1 | |
| 291 | Hickory, shagbark | 1.5 | 6 | 1 | |
| 292 | Hickory, shagbark | 1.5 | 8 | 1 | |
| 293 | Hickory, shagbark | 1.5 | 8 | 1 | |
| 294 | Hickory, shagbark | 1.5 | 6 | 1 | |

| 295 | Hickory, shagbark | 1.5 | 6 | 1 | |
|-----|-------------------|------|---|---|----------------------|
| 296 | Oak, pin | 1.5 | 7 | 1 | |
| 297 | Linden | 1.5 | 8 | 1 | |
| 298 | Linden | 1.5 | 8 | 1 | |
| 299 | Linden | 1.5 | 8 | 1 | |
| 300 | Linden | 6.5 | 3 | 1 | trunk damage, borers |
| 301 | Maple, Norway | 7.0 | 7 | 1 | |
| 302 | Maple, Norway | 9.5 | 7 | 1 | |
| 303 | Linden | 7.0 | 6 | 1 | |
| 304 | Oak, bicolor | 14.0 | 8 | 1 | |
| 305 | Ash, green | 11.0 | 5 | 1 | |
| 306 | Maple, Norway | 9.0 | 6 | 1 | |
| 307 | Maple, Norway | 10.5 | 7 | 1 | |
| 308 | Ash, green | 11.0 | 5 | 1 | |
| 309 | Maple, Norway | 9.0 | 7 | 1 | |
| 310 | Linden | 10.5 | 8 | 1 | |
| 311 | Maple, red | 8.0 | 6 | 1 | |
| 312 | Linden | 13.0 | 7 | 1 | |
| 313 | Ash, green | 14.0 | 5 | 1 | |
| 314 | Maple, red | 8.5 | 7 | 1 | |
| 315 | Maple, Norway | 12.0 | 5 | 1 | stem girdling root |
| 316 | Maple, sugar | 9.5 | 6 | 1 | |
| 317 | Maple, Norway | 10.5 | 6 | 1 | |
| 318 | Linden | 11.5 | 7 | 1 | |
| 319 | Oak, bicolor | 12.5 | 8 | 1 | |
| 320 | Elm, hybrid | 9.5 | 8 | 1 | |
| 321 | Oak, bicolor | 9.0 | 9 | 1 | |
| 322 | Ash, green | 11.5 | 6 | 1 | |
| 323 | Linden | 9.5 | 7 | 1 | stem girdling root |
| 324 | Maple, Norway | 7.0 | 7 | 1 | |
| 325 | Maple, hybrid | 13.0 | 5 | 1 | trunk wound |
| 326 | Linden | 10.0 | 8 | 1 | |
| 327 | Maple, hybrid | 12.5 | 8 | 1 | |

| 328 | Linden | 10.5 | 6 | 1 | stem girdling root |
|-----|---------------|------|---|---|----------------------|
| 329 | Oak, red | 6.0 | 8 | 1 | |
| 330 | Oak, red | 6.5 | 8 | 1 | |
| 331 | Oak, red | 6.5 | 8 | 1 | |
| 332 | Oak, red | 5.5 | 8 | 1 | |
| 333 | Oak, red | 5.5 | 8 | 1 | |
| 334 | Oak, red | 5.5 | 8 | 1 | |
| 335 | Oak, red | 6.0 | 8 | 1 | |
| 336 | Ash, green | 9.5 | 5 | 1 | thin canopy |
| 337 | Maple, Norway | 9.0 | 8 | 1 | |
| 338 | Hackberry | 8.0 | 8 | 1 | |
| 339 | Ash, green | 9.5 | 2 | 1 | EAB |
| 340 | Catalpa | 8.0 | 8 | 1 | |
| 341 | Maple, hybrid | 4.5 | 9 | 1 | |
| 342 | Birch, river | 10.0 | 8 | 1 | |
| 343 | Maple, hybrid | 11.0 | 8 | 1 | |
| 344 | Oak, red | 12.0 | 9 | 1 | |
| 345 | Oak, bicolor | 7.5 | 7 | 1 | |
| 346 | Ginkgo | 5.0 | 8 | 1 | |
| 347 | Ash, white | 15.5 | 7 | 1 | |
| 348 | Linden | 11.5 | 7 | 1 | |
| 349 | Ash, green | 12.0 | 7 | 1 | |
| 350 | Oak, bur | 11.0 | 9 | 1 | |
| 351 | Ash, green | 10.0 | 6 | 1 | |
| 352 | Maple, sugar | 7.0 | 7 | 1 | |
| 353 | Linden | 8.0 | 7 | 1 | suckers |
| 354 | Linden | 9.0 | 7 | 1 | suckers |
| 355 | Maple, Norway | 7.0 | 6 | 1 | |
| 356 | Hackberry | 10.5 | 8 | 1 | |
| 357 | Maple, hybrid | 14.5 | 7 | 1 | |
| 358 | Maple, Norway | 12.0 | 7 | 1 | |
| 359 | Crabapple | 3.5 | 5 | 1 | thin canopy |
| 360 | Crabapple | 6.0 | 5 | 1 | thin canopy, sprouts |

| 361 | Crabapple | 8.0 | 5 | 1 | thin canopy, sprouts |
|-----|---------------|------|---|---|--------------------------|
| 362 | Crabapple | 7.0 | 5 | 1 | thin canopy, sprouts |
| 363 | Crabapple | 6.5 | 4 | 1 | trunk wound, thin canopy |
| 364 | Maple, hybrid | 13.5 | 7 | 1 | |
| 365 | Maple, Norway | 10.9 | 7 | 1 | excessive lean |
| 366 | Linden | 7.0 | 7 | 1 | |
| 367 | Maple, Norway | 13.0 | 4 | 1 | trunk wound |
| 368 | Linden | 7.0 | 6 | 1 | thin canopy, sprouts |
| 369 | Linden | 11.5 | 6 | 1 | sprouts |
| 370 | Ash, green | 11.0 | 5 | 1 | thin canopy |
| 371 | Crabapple | 5.0 | 3 | 1 | trunk wound |
| 372 | Crabapple | 3.5 | 3 | 1 | mower damage |
| 373 | Ash, green | 15.5 | 4 | 1 | dieback, sprouts |
| 374 | Maple, Norway | 10.5 | 7 | 1 | |
| 375 | Linden | 12.5 | 8 | 1 | |
| 376 | Ash, green | 11.5 | 5 | 1 | sprouts |
| 377 | Linden | 12.5 | 7 | 1 | |
| 378 | Maple, Norway | 6.0 | 7 | 1 | |
| 379 | Ash, green | 10.5 | 6 | 1 | |
| 380 | Maple, Norway | 7.5 | 8 | 1 | |
| 381 | Linden | 8.0 | 8 | 1 | |
| 382 | Maple, Norway | 9.0 | 6 | 1 | stem girdling root |
| 383 | Linden | 11.0 | 7 | 1 | |
| 384 | Ash, green | 14.5 | 6 | 1 | |
| 385 | Oak, bicolor | 10.5 | 6 | 1 | |
| 386 | Hackberry | 12.0 | 6 | 1 | |
| 387 | Oak, bicolor | 13.0 | 7 | 1 | |
| 388 | Crabapple | 4.5 | 5 | 1 | thin canopy |
| 389 | Crabapple | 4.5 | 5 | 1 | thin canopy |
| 390 | Crabapple | 4.0 | 5 | 1 | suckers, thin canopy |
| 391 | Crabapple | 3.5 | 4 | 1 | trunk wound |
| 392 | Maple, Norway | 11.5 | 7 | 1 | |
| 393 | Linden | 10.0 | 7 | 1 | |

| 394 | Maple, sugar | 6.5 | 7 | 1 | |
|-----|------------------|------|---|---|----------------------|
| 395 | Ash, green | 12.5 | 6 | 1 | sprouts |
| 396 | Maple, Norway | 10.0 | 6 | 1 | old wound |
| 397 | Linden | 11.5 | 7 | 1 | |
| 398 | Maple, red | 9.0 | 7 | 1 | |
| 399 | Oak, bur | 12.0 | 7 | 1 | sprouts |
| 400 | Linden | 15.5 | 7 | 1 | |
| 401 | Maple, sugar | 8.0 | 0 | 1 | dead |
| 402 | Maple, Norway | 9.5 | 8 | 1 | |
| 403 | Maple, sugar | 9.5 | 8 | 1 | |
| 404 | Maple, red | 7.0 | 6 | 1 | mower damage |
| 405 | Linden | 12.5 | 6 | 1 | |
| 406 | Maple, red | 7.5 | 4 | 1 | trunk wounds |
| 407 | Ash, green | 12.5 | 5 | 1 | |
| 408 | Ironwood | 8.0 | 6 | 1 | |
| 409 | Oak, bur | 16.0 | 8 | 1 | |
| 410 | Linden | 27.0 | 5 | 2 | |
| 411 | Oak, red | 17.5 | 8 | 1 | |
| 412 | Crabapple | 8.5 | 6 | 1 | |
| 413 | Ash, green | 36.0 | 5 | 6 | poor form |
| 414 | Oak, Eastern pin | 16.0 | 8 | 1 | |
| 415 | Linden | 17.5 | 8 | 1 | |
| 416 | Crabapple | 7.5 | 5 | 1 | thin canopy |
| 417 | Crabapple | 6.5 | 5 | 1 | thin canopy |
| 418 | Crabapple | 7.0 | 5 | 1 | thin canopy, sprouts |
| 419 | Crabapple | 6.5 | 5 | 1 | thin canopy, sprouts |
| 420 | Crabapple | 6.5 | 5 | 1 | thin canopy, sprouts |
| 421 | Maple, sugar | 12.0 | 5 | 1 | poor form |
| 422 | Maple, sugar | 13.5 | 7 | 1 | |
| 423 | Aspen | 14.5 | 7 | 1 | |
| 424 | Linden | 18.0 | 7 | 1 | |
| 425 | Linden | 13.5 | 7 | 1 | |
| 426 | Maple, Norway | 12.0 | 8 | 1 | |

| 427 | Linden | 13.0 | 7 | 1 | |
|-----|---------------|------|---|----|--------------------|
| 428 | Maple, red | 8.0 | 7 | 1 | |
| 429 | Ash, green | 17.5 | 6 | 1 | |
| 430 | Maple, sugar | 9.0 | 5 | 1 | trunk wounds |
| 431 | Linden | 11.5 | 8 | 1 | |
| 432 | Maple, Norway | 11.0 | 8 | 1 | |
| 433 | Maple, sugar | 8.5 | 3 | 1 | borers |
| 434 | Linden | 11.0 | 7 | 1 | |
| 435 | Hackberry | 10.0 | 8 | 1 | |
| 436 | Linden | 8.5 | 7 | 1 | |
| 437 | Hackberry | 8.5 | 8 | 1 | |
| 438 | Linden | 11.5 | 7 | 1 | stem girdling root |
| 439 | Hackberry | 10.0 | 8 | 1 | |
| 440 | Maple, Norway | 11.5 | 8 | 1 | |
| 441 | Maple, sugar | 7.5 | 8 | 1 | |
| 442 | Oak, bicolor | 14.5 | 7 | 1 | |
| 443 | Ash, green | 14.5 | 6 | 1 | |
| 444 | Oak, bur | 10.5 | 7 | 1 | |
| 445 | Hackberry | 9.5 | 8 | 1 | |
| 446 | Aspen | 10.0 | 8 | 1 | |
| 447 | Oak, bicolor | 8.5 | 8 | 1 | |
| 448 | Maple, red | 4.0 | 4 | 1 | trunk wounds |
| 449 | Hackberry | 6.0 | 7 | 1 | |
| 450 | Linden | 6.0 | 6 | 1 | |
| 451 | Maple, Norway | 7.0 | 7 | 1 | |
| 452 | Linden | 6.5 | 8 | 1 | |
| 453 | Arborvitae | 16.0 | 7 | 12 | |
| 454 | Arborvitae | 7.0 | 6 | 3 | |
| 455 | Arborvitae | 15.0 | 7 | 4 | |
| 456 | Arborvitae | 17.0 | 7 | 10 | |
| 457 | Arborvitae | 14.0 | 7 | 6 | |
| 458 | Arborvitae | 20.0 | 6 | 5 | |
| 459 | Arborvitae | 15.0 | 7 | 4 | |

| 460 | Arborvitae | 20.0 | 6 | 8 | |
|-----|---------------|------|---|---|--|
| 461 | Arborvitae | 11.0 | 6 | 5 | |
| 462 | Arborvitae | 15.0 | 6 | 4 | |
| 463 | Arborvitae | 10.0 | 6 | 7 | |
| 464 | Arborvitae | 10.0 | 6 | 5 | |
| 465 | Arborvitae | 13.0 | 6 | 4 | |
| 466 | Arborvitae | 15.0 | 5 | 4 | |
| 467 | Walnut | 14.0 | 4 | 7 | |
| 468 | Arborvitae | 10.0 | 5 | 3 | |
| 469 | Arborvitae | 12.0 | 4 | 8 | |
| 470 | Arborvitae | 14.0 | 6 | 4 | |
| 471 | Arborvitae | 13.0 | 5 | 6 | |
| 472 | Arborvitae | 10.0 | 6 | 3 | |
| 473 | Arborvitae | 12.0 | 7 | 3 | |
| 474 | Arborvitae | 8.0 | 7 | 4 | |
| 475 | Arborvitae | 10.0 | 7 | 6 | |
| 476 | Arborvitae | 9.0 | 7 | 3 | |
| 477 | Arborvitae | 13.0 | 7 | 4 | |
| 478 | Arborvitae | 12.0 | 7 | 5 | |
| 479 | Arborvitae | 14.0 | 7 | 1 | |
| 480 | Arborvitae | 8.0 | 7 | 3 | |
| 481 | Arborvitae | 13.0 | 7 | 5 | |
| 482 | Arborvitae | 11.0 | 7 | 3 | |
| 483 | Arborvitae | 7.5 | 7 | 3 | |
| 484 | Arborvitae | 9.0 | 7 | 4 | |
| 485 | Arborvitae | 9.0 | 7 | 3 | |
| 486 | Arborvitae | 6.5 | 7 | 2 | |
| 487 | Arborvitae | 13.0 | 7 | 7 | |
| 488 | Spruce, white | 14.0 | 6 | 1 | |
| 489 | Spruce, white | 15.5 | 6 | 1 | |
| 490 | Spruce, white | 14.0 | 6 | 1 | |
| 491 | Spruce, white | 12.5 | 6 | 1 | |
| 492 | Spruce, white | 14.5 | 5 | 1 | |

| 493 | Spruce, white | 11.0 | 3 | 1 | diseased |
|-----|---------------|------|---|---|--------------------|
| 494 | Spruce, white | 11.5 | 3 | 1 | diseased |
| 495 | Spruce, white | 12.0 | 3 | 1 | diseased |
| 496 | Ash, green | 18.5 | 7 | 1 | |
| 497 | Oak, red | 13.5 | 8 | 1 | |
| 498 | Ash, green | 14.5 | 7 | 1 | |
| 499 | Oak, red | 17.5 | 7 | 1 | stem girdling root |
| 500 | Linden | 23.0 | 7 | 1 | suckers |
| 501 | Oak, red | 13.0 | 7 | 1 | |
| 502 | Linden | 18.5 | 7 | 1 | |
| 503 | Oak, red | 15.0 | 7 | 1 | |
| 504 | Crabapple | 4.5 | 5 | 1 | thin canopy |
| 505 | Crabapple | 5.0 | 6 | 1 | suckers |
| 506 | Crabapple | 4.0 | 5 | 1 | thin canopy |
| 507 | Crabapple | 4.0 | 5 | 1 | thin canopy |
| 508 | Cottonwood | 44.5 | 8 | 1 | |
| 509 | Arborvitae | 21.0 | 8 | 6 | |
| 510 | Arborvitae | 12.0 | 8 | 6 | |
| 511 | Arborvitae | 18.0 | 8 | 4 | |
| 512 | Arborvitae | 18.0 | 8 | 4 | |
| 513 | Arborvitae | 17.0 | 8 | 6 | |
| 514 | Arborvitae | 18.0 | 8 | 5 | |
| 515 | Arborvitae | 17.0 | 8 | 6 | |
| 516 | Arborvitae | 17.0 | 8 | 6 | |
| 517 | Arborvitae | 2.0 | 8 | 7 | |
| 518 | Arborvitae | 19.0 | 8 | 4 | |
| 519 | Arborvitae | 18.0 | 8 | 5 | |
| 520 | Arborvitae | 27.0 | 8 | 7 | |
| 521 | Arborvitae | 17.0 | 8 | 1 | |
| 522 | Arborvitae | 19.0 | 8 | 4 | |
| 523 | Arborvitae | 25.0 | 8 | 1 | |
| 524 | Hackberry | 22.5 | 5 | 1 | large wound |
| 525 | Hackberry | 7.0 | 6 | 1 | |

| 526 | Maple, silver | 22.0 | 5 | 1 | poor form |
|-----|---------------|------|---|---|-------------|
| 527 | Linden | 11.5 | 8 | 1 | |
| 528 | Linden | 10.5 | 8 | 1 | |
| 529 | Linden | 9.0 | 8 | 1 | |
| 530 | Linden | 7.0 | 8 | 1 | |
| 531 | Maple, red | 8.5 | 5 | 1 | chlorotic |
| 532 | Maple, red | 8.0 | 6 | 1 | chlorotic |
| 533 | Maple, red | 8.5 | 6 | 1 | chlorotic |
| 534 | Maple, red | 7.0 | 6 | 1 | chlorotic |
| 535 | Maple, red | 11.5 | 6 | 1 | chlorotic |
| 536 | Maple, red | 4.0 | 6 | 1 | chlorotic |
| 537 | Maple, red | 7.0 | 4 | 1 | trunk wound |
| 538 | Maple, red | 7.5 | 8 | 1 | |
| 539 | Maple, red | 9.5 | 8 | 1 | |
| 540 | Maple, red | 9.5 | 8 | 1 | |
| 541 | Ash, green | 9.5 | 6 | 1 | |
| 542 | Elm, hybrid | 17.5 | 7 | 1 | |
| 543 | Ash, green | 12.0 | 6 | 1 | |
| 544 | Linden | 17.5 | 8 | 1 | |
| 545 | Maple, hybrid | 24.0 | 6 | 1 | poor form |
| 546 | Linden | 16.0 | 8 | 1 | |
| 547 | Maple, red | 9.0 | 7 | 1 | |
| 548 | Maple, red | 9.0 | 4 | 1 | |
| 549 | Maple, hybrid | 16.0 | 6 | 1 | poor form |
| 550 | Maple, hybrid | 15.0 | 6 | 1 | poor form |
| 551 | Maple, hybrid | 17.5 | 6 | 1 | poor form |
| 552 | Maple, hybrid | 17.5 | 6 | 1 | poor form |
| 553 | Maple, hybrid | 19.5 | 6 | 1 | poor form |
| 554 | Treelilac | 6.0 | 8 | 1 | |
| 555 | Treelilac | 3.5 | 8 | 1 | |
| 556 | Treelilac | 5.5 | 8 | 1 | |
| 557 | Oak, red | 8.5 | 8 | 1 | |
| 558 | Ash, white | 15.5 | 8 | 1 | |

| 559 | Linden | 8.0 | 8 | 1 | |
|-----|---------------|------|---|---|-----------------------|
| 560 | Maple, Norway | 8.5 | 7 | 1 | |
| 561 | Maple, red | 5.0 | 4 | 1 | trunk wounds |
| 562 | Linden | 20.0 | 5 | 3 | |
| 563 | Maple, hybrid | 2.5 | 7 | 1 | |
| 564 | Hackberry | 9.5 | 8 | 1 | |
| 565 | Oak, bur | 8.5 | 8 | 1 | |
| 566 | Oak, bicolor | 2.0 | 3 | 1 | dead top |
| 567 | Maple, Norway | 10.5 | 7 | 1 | |
| 568 | Honeylocust | 2.0 | 8 | 1 | |
| 569 | Maple, red | 9.5 | 7 | 1 | |
| 570 | Linden | 13.0 | 8 | 1 | |
| 571 | Linden | 12.0 | 6 | 1 | suckers & sprouts |
| 572 | Hackberry | 10.5 | 6 | 1 | |
| 573 | Hackberry | 2.0 | 6 | 1 | |
| 574 | Maple, Norway | 11.5 | 3 | 1 | trunk wound and decay |
| 575 | Hackberry | 10.0 | 8 | 1 | |
| 576 | Maple, hybrid | 5.0 | 8 | 1 | |
| 577 | Maple, hybrid | 6.0 | 8 | 1 | |
| 578 | Ash, green | 26.5 | 6 | 3 | |
| 579 | Linden | 15.5 | 6 | 1 | |
| 580 | Catalpa | 12.5 | 8 | 1 | |
| 581 | Ash, green | 16.0 | 6 | 1 | |
| 582 | Hackberry | 10.0 | 8 | 1 | |
| 583 | Maple, red | 10.0 | 8 | 1 | |
| 584 | Hackberry | 7.0 | 7 | 1 | |
| 585 | Hackberry | 9.5 | 8 | 1 | |
| 586 | Elm, hybrid | 3.0 | 0 | 1 | |
| 587 | Maple, hybrid | 10.0 | 8 | 1 | |
| 588 | Maple, red | 8.0 | 8 | 1 | |
| 589 | Maple, hybrid | 10.5 | 7 | 1 | |
| 590 | Maple, hybrid | 8.0 | 3 | 1 | trunk wound |
| 591 | Maple, Norway | 12.0 | 6 | 1 | |

| 592 | Maple, Norway | 11.0 | 8 | 1 | |
|-----|----------------------|---------|------|---|--------------|
| 593 | Linden | 10.5 | 6 | 1 | sprouts |
| 594 | Crabapple | 8.0 | 7 | 1 | sprouts |
| 595 | Crabapple | 10.5 | 7 | 1 | |
| 596 | Maple, red | 7.5 | 8 | 1 | |
| 597 | Crabapple | 12.5 | 7 | 1 | |
| 598 | Cottonwood | 7.5 | 6 | 1 | sprouts |
| 599 | Crabapple | 11.0 | 7 | 1 | sprouts |
| 600 | Crabapple | 4.5 | 4 | 1 | poor form |
| 601 | Maple, red | 3.0 | 8 | 1 | |
| 602 | Crabapple | 1.0 | 8 | 1 | |
| 603 | Crabapple | 1.0 | 8 | 1 | |
| 604 | Crabapple | 1.0 | 8 | 1 | |
| 605 | Crabapple | 1.0 | 6 | 1 | suckers |
| 606 | Honeylocust | 2.5 | 8 | 1 | |
| 607 | Elm, hybrid | 14.5 | 8 | 1 | |
| 608 | Linden | 9.5 | 8 | 1 | |
| 609 | Hackberry | 9.0 | 8 | 1 | |
| 610 | Maple, Norway | 10.5 | 8 | 1 | |
| 611 | Elm, hybrid | 2.5 | 8 | 1 | |
| 612 | Hackberry | 7.0 | 8 | 1 | |
| 613 | Linden | 2.0 | 7 | 1 | |
| 614 | Oak, bur | 9.0 | 6 | 1 | |
| 615 | Honeylocust | 2.0 | 8 | 1 | |
| 616 | Linden | 18.5 | 7 | 1 | |
| 617 | Maple, sugar | 7.5 | 5 | 1 | trunk wounds |
| 618 | Maple, hybrid | 9.0 | 7 | 1 | |
| 619 | Coffeetree, Kentucky | 8.5 | 8 | 1 | |
| 620 | Coffeetree, Kentucky | 8.5 | 8 | 1 | |
| 621 | Coffeetree, Kentucky | 2.0 | 8 | 1 | |
| 554 | Total # of Trees | Average | 6.34 | | |



Appendix E - Geotechnical Report



REPORT OF GEOTECHNICAL EXPLORATION

2026 Mill and Overlay and Mill Towns Trail Project Northfield, Minnesota

AET Project No. P-0034268

Date:

March 12, 2025

Prepared for:

Bolton & Menk, Inc. 12224 Nicollet Ave Burnsville, MN 55337

Geotechnical • Materials
Forensic • Environmental
Building Technology
Petrography/Chemistry

American Engineering Testing

550 Cleveland Avenue North St. Paul, MN 55114-1804 TeamAET.com • 800.972.6364 March 12, 2025



Bolton & Menk, Inc. 12224 Nicollet Ave Burnsville, MN 55337

Attn: Jason Malecha, PE

RE: Report of Geotechnical Exploration

2026 Mill and Overlay and Mill Towns Trail Project

Northfield, Minnesota

AET Project No. P-0034268

Dear Mr. Malecha:

American Engineering Testing, Inc. (AET) is pleased to present the results of our subsurface exploration program and geotechnical engineering review for the 2026 Mill and Overlay and Mill Towns Trail Improvement Project in Northfield, Minnesota. These services were performed according to our proposal to you dated May 31, 2024.

We are submitting an electronic copy (PDF) of the report to you. Please contact me if you have any questions about the report. I can also be contacted to arrange construction observation and testing services.

Sincerely,

American Engineering Testing, Inc.

Neil G. Lund, PE (MN) Principal Engineer

nlund@teamAET.com

612-369-3163



SIGNATURE PAGE

Prepared for:

Bolton & Menk, Inc. 12224 Nicollet Ave Burnsville, MN 55337

Attn: Jason Malecha, PE

Prepared by:

American Engineering Testing, Inc. 550 Cleveland Avenue North Saint Paul, MN 55114 (651) 659-9001/www.TeamAET.com

was Gara

Authored by:

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly License Professional Engineer under Min Section 326.02 to 326.15

Name: Neil G. Lund, PE

Date: March 12, 2025 License #: 46212

Reviewed by:

Thomas Evans, PE (MN) Senior Engineer



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APPENDIX A - Geotechnical Field Exploration and Testing

Boring Log Notes
Unified Soil Classification System
AASHTO Soil Classification System
Boring Location Maps
Pavement Core Logs
Subsurface Boring Logs

APPENDIX B – Geotechnical Report Limitations and Guidelines for Use



1.0 INTRODUCTION

The City of Northfield (City) 2026 Mill and Overlay and Mill Towns Trail Improvement Project will include upgrades to several City street segments and various bikeway, trail and sidewalk areas. To assist with planning and design, Bolton & Menk, Inc. (BMI) authorized American Engineering Testing, Inc. (AET) to conduct a subsurface exploration program at the site, conduct soil laboratory testing, and perform a geotechnical engineering review for the project. This report presents the results of the above services and provides our engineering recommendations based on this data.

2.0 SCOPE OF SERVICES

AET's services were performed according to our revised proposal to BMI dated May 31, 2024. The authorized scope included the following:

- GPS staking and arranging to clear the exploration locations of underground utilities.
- Nine pavement cores with shallow hand auger borings on street segments were mill and overlay was proposed.
- Traffic control necessary to complete the above work.
- Eight hand auger borings to an estimated depth of 3 feet along proposed Mill Towns Trail segments.
- Soil laboratory testing.
- Geotechnical engineering review based on the data collected and preparation of this report.

Due to changes in the project scope, we added a 10th core on an existing segment of trail. We also added two hand auger borings to collect additional data along the new segment and a new connection near Hall Ave.

These services were intended for geotechnical purposes only. The scope was not intended to explore for the presence or extent of environmental contamination in the soil or groundwater.

3.0 PROJECT INFORMATION

The City is proposing pavement improvements or new trails along several street segments as part of the 2026 project. The proposed street improvements include mill and overlay and spot repair of curb and gutter; trail or sidewalk improvements are also proposed along with several intersection improvements as summarized below:



Mill and Overlay (8,560 ft)

- Jefferson Pkwy, TH 246 Roundabout to Spring Creek Rd (5,480 ft)
- Maple St, Jefferson Pkwy to Meadow View Dr (1,400 ft)
- Maple Ct, Maple St to Cul-de-sac (180 ft)
- Prairie St, Jefferson Pkwy to Meadow View Dr (1,500 ft)

Off-Road Trails

- Mill Towns Trail, TH 246 to Spring Creek Rd (new construction, 5,480 ft)
- Jefferson Pkwy Trail, Mill Towns Trail to Spring Creek Rd on the north side (new construction, 430 ft)

The above stated information represents our understanding of the proposed construction. This information is an integral part of our engineering review. It is important that you contact us if there are changes from that described so that we can evaluate whether modifications to our recommendations are appropriate.

4.0 SUBSURFACE EXPLORATION AND TESTING

4.1 Field Exploration Program

The amended subsurface exploration program conducted for the project consisted of 10 pavement cores and 10 hand auger borings performed in September 2024. We estimated the number of cores and borings based on an approximate 1,000-foot spacing along the project lengths for mill and overlay and 500-foot spacing for the new trail alignments. AET chose the boring and core locations and hand auger boring depths.

The boring and core locations are shown on the Boring Location Map in Appendix A. The locations were collected by AET personnel using GPS equipment with sub-meter accuracy. Please note that the elevations provide relative consistency for presenting geotechnical data and they do not represent the precision of a licensed land surveyor.

Pavement core photographs are provided in Appendix A.

The logs of the borings and details of the methods used appear in Appendix A. The logs contain information concerning soil layering, soil classification, geologic origins, and moisture condition. The coordinates and elevations are provided on the boring logs in the appendix.



4.2 Laboratory Testing

The soils were visually-manually classified by the Unified Soil Classification System (USCS) and the American Association of State Highway and Transportation Officials (AASHTO) system. Water content test results appear on the individual boring logs in Appendix A, adjacent to the samples upon which they were performed.

5.0 SITE CONDITIONS

5.1 Pavement Summary

At the core locations, we observed a pavement section consisting of bituminous pavement over mixed, mostly granular fill that was likely a possible aggregate base. Table 5.1 presents the thickness of the bituminous layer with comments on material condition.

Table 5.1 – Bituminous Thickness and Condition Summary

| Location | Core | Recovered Core Thickness (in) | Downhole Core Thickness (in) ^A | Material Condition | | | | |
|----------------|------|--|--|--|--|--|--|--|
| | C-01 | 4.6 | 4.75 | Good condition | | | | |
| | C-02 | 3.6 | 3.75 | Good condition | | | | |
| Jefferson Pkwy | C-03 | 4.4 | 4.5 | Debonding at 1 ½ inches; stripping near debonded interface | | | | |
| | C-04 | 4.1 4 | | Good condition | | | | |
| | C-05 | 5.2 | 5 | Good condition | | | | |
| Maple Ct | C-06 | 3.0 | 4 | Low-severity stripping present | | | | |
| Maple St | C-07 | 4.2 | 4 | Low-severity stripping present | | | | |
| Duninia Ot | C-08 | 4.6 | 4.75 | Good condition | | | | |
| Prairie St | C-09 | 3.7 | 3.75 | Good condition | | | | |
| Multiuse Trail | C-10 | 2.5 | 2.75 | Good condition | | | | |

A. Measured to the nearest 1/4"

We visually evaluated the condition of the bituminous pavements based on the pavement cores obtained at the site and our observations of the pavement surface during our field exploration. Photographs of the pavement cores are provided on the pavement core logs in Appendix A.

The core condition varied, but they were generally good or only included low severity stripping. Core C-03 was debonded near the surface, with some stripping present at the former bond.

Stripping occurs when water or water vapor gets between the asphalt film and the aggregates, thereby breaking the adhesive bond between the aggregate and asphalt binder. This will "strip"



the asphalt from the aggregate, eventually leading to pavement failure. When stripping within the pavement becomes excessive, severe deformation and fatigue cracking will occur, with traffic loadings will result in local failures such as alligator cracking, potholes, and rutting in the wheel paths.

The pavement surface distress on much of Jefferson Pkwy included mostly transverse cracks, with some longitudinal/block cracking and edge distress. A chip seal, mostly in fair condition, may have been obscuring other distresses. Conditions were poorer at the west end of the project, with areas of possible alligator cracking and greater surface weathering; the east end included a different chip seal application, greater edge distress, and more crack seal.

Maple St and Maple Ct were in similar condition to Jefferson Pkwy, though a chip seal in good condition on Maple Ct was also likely obscuring surface distress.

Prairie Street appeared to be in the poorest condition overall, with transverse cracking, frequent alligator cracking and possible rutting.

5.2 Subsurface Soils/Geology

The site geology below the pavement and topsoil layers consisted of fill soils.

In paved areas, the underlying materials consisted of mostly gravelly silty sand with occasional inclusions of recycled bituminous (A-1-b). A small amount of this material was recovered mixed with clayey soils or trace roots (A-6, A-7-6).

Along proposed trail alignments, the topsoil varied in depth from about 2 to 6 inches thick and averaged about 4 inches. The underlying soils included mixed fill that was mostly silty sand with gravel (A-1-b), sometimes mixed with clayey sand or sandy lean clay (A-6, A-7-6).

5.3 Groundwater

We observed the hand auger boreholes for the presence of groundwater after the boring termination depth was reached. Groundwater was not observed at the time of our exploration.

Longer-term monitoring of water levels using temporary piezometers will provide more accurate water level measurement; however, this was not part of our scope of services. Groundwater levels fluctuate due to varying seasonal and annual rainfall and snow melt amounts, as well as other factors. A discussion of the water level measurement methods is presented in Appendix A.



5.4 Subgrade Soil Properties

The soils encountered within the critical subgrade zone, which includes the top 3 feet of subgrade, were variable but consisted mostly of A-1-b sands (silty sand and sand with silt with variable amounts of gravel), with occasional silty or clayey layers or inclusions. We judge the A-1-b silty sands to have low to moderate frost susceptibility, moderately fast drainage characteristics, and moderately high strength and stability characteristics regarding pavement support.

6.0 RECOMMENDATIONS

6.1 Specifications

This report references the 2020 MnDOT Standard Specifications for Construction (MnDOT Spec.). The ensuing sections refer to the following words, which are defined below:

Grading grade is the bottom of the aggregate base layer.

Granular or Select Granular Material should meet the requirements of MnDOT Specification 3149, including Table 3149.2-1, which requires 0% to 20% (Granular) or 0% to 12% (Select Granular) for the ratio of the percent passing the No. 200 sieve/1-inch sieve.

Select Grading Material is mineral soil, excluding organic soils (>5% organic material by weight), silt (soil containing 80 percent or more silt-sized particles), and marl (soil consisting of clay and lime or unconsolidated sedimentary rock).

Top of Subgrade is the surface of material immediately beneath a granular material layer meeting MnDOT Spec. 3149, which is usually placed as a sand subbase layer. If there is no granular material layer, then the top of subgrade is the grading grade.

Uniform soils have the same USCS soil class, and they have similar color, moisture content, and performance characteristics.

Road Core is the area below the grading grade extending down and out from the grading grade point of intersection (PI) to the bottom of the excavation at a 1V:1H slope for embankments less than or equal to 30 feet high or at a 1V:1.5H slope for embankments greater than 30 feet high.

6.2 Discussion

We understand the City is proposing mill and overlay for the 2026 project. Mill and overlay consists of removing a portion of the in-place bituminous pavement, usually at least 1½ inches,



and replacing it with new bituminous pavement layers. This approach is typically used with pavements in fair or better condition to renew the surface, improve structure and ride, and extend the overall pavement service life.

When selecting a pavement to rehabilitate by mill and overlay, the following should be considered:

- Pavement surface condition the amount of surface distress will have a proportional effect on mill and overlay service life. Cracks and other damage in the pavement below the milling will inevitably reflect to the new surface, which will require maintenance to limit water intrusion and excessive crack propagation.
- Material condition it is typically undesirable to leave highly stripped bituminous pavements as support for the new overlay. Stripped pavements will bond poorly to the overlay materials, reducing the effective pavement structure. Additionally, they can complicate construction and will result in an inconsistent finished product.
- Pavement thickness about 1 ½ inches of intact bituminous pavement should be left in place to support construction equipment and provide adequate structure for new pavements.

Overall, the pavements we evaluated have variable surface condition, with portions of some segments such as Prairie St in poor condition. However, the material condition was generally good, with adequate thickness of bituminous pavement, making mill and overlay a viable option.

We expect mill and overlay, if completed properly, will generally have a service life of 10 to 15 years. This service life will be greater on roads with better surface condition and may be less where conditions are relatively poor, such as on Prairie St. Distresses will quickly reappear through new surfaces, and supplemental patching and repair work will improve the service life of new overlays.

6.3 Mill and Overlay Recommendations

We recommend the following construction sequence for mill and overlay segments. Mill and overlay should be performed in general accordance with MnDOT Specifications 2232 (Mill Pavement Surface) and 2360 (Plant Mixed Asphalt Pavement):

- 1. Mill the pavement with appropriate self-propelled cold milling equipment to a depth of 1 1/2 inches. The mill depth may need to be adjusted or extended to remove damaged pavements.
 - a. A greater mill and overlay depth will provide some additional service life



- 2. Sweep or clean the surfaces until they are free of loose materials.
- 3. Review the surfaces of the bituminous pavements, for areas of distress that may benefit from additional milling, removals, or patching.
- 4. Distribute a uniform tack coat on the clean surfaces and protect it from dirt and debris.
- 5. Place and compact the required thickness of bituminous pavement. We recommend a minimum of 1 1/2 inches of SPWEA340B.

One method to improve service life of a mill and overlay is by using an "underseal" (also called a "Texas underseal"). The process includes placing a chip seal on the existing or milled surface prior to the pavement overlay. Because the chip seal provides stress relief and impedes water intrusion, the underseal retards or delays reflective cracking. The underseal should be designed as a typical chip seal, usually with a greater rate of emulsion application for the rougher milled surface. The underseal will also work as the tack layer between the in-place pavement and new overlay.

6.4 Trail Construction

6.4.1 Removals and Excavation

We recommend removing the existing topsoil materials. Excavations should continue to allow for placement of the recommended trail pavement section.

6.4.2 Subgrade Preparation

The soils exposed following the excavation recommended in Section 7.2.1 should be prepared per MnDOT Spec. 2112, Subgrade Preparation. This includes scarification, mixing, moisture conditioning, and compaction of the upper 6 inches of the subgrade.

If unstable soils or soils which do not meet the requirements for Select Grading Material are encountered during subgrade preparation, we recommend removing these unsuitable materials and replacing them with Select Grading Material. Unstable soils typically have a water content exceeding the standard optimum water content as defined in ASTM D698 (Standard Proctor test). We caution that instability of soils beneath those being reworked and compacted may limit the ability to compact the upper soils; therefore, greater depths of subcutting and stability improvement may be needed.

6.4.3 Fill and Compaction

Fill soils used to re-attain pavement subgrade may consist of on-site, non-organic, debris-free soils, and they should be moisture conditioned for compaction. Imported fill soils should consist



of Select Grading Material and should generally match the adjacent soils when placed within 3 feet of grading grade.

All new fill and reworked soils for pavement support should be placed and compacted per MnDOT Spec. 2106, including the moisture content and compaction requirements shown in MnDOT Tables 2106.3-1 and 2106.3-4, respectively. In ASTM terms, this specification requires soils placed within 3 feet of grading grade within the road core be compacted to a minimum of 100% of the standard maximum dry unit weight defined in ASTM D 698 (Standard Proctor test). A reduced minimum compaction level of 95% of the standard maximum dry unit weight can be used below the critical subgrade zone for non-granular materials (those which do not meet MnDOT Spec 3149.2B).

6.4.4 Subgrade Stability

The final subgrade should have proper stability within the critical subgrade zone. Where clayey soils are exposed, stability should be evaluated using the test roll procedure. Where unstable soils are found using the test roll process, these soils should be improved by means of scarification, drying, and recompaction; or by subcutting and replacement. If highly variable conditions are present (either stability-wise or soil type), a compaction subcut should be performed to provide a more consistent subgrade condition. We recommend the final soils remaining in place be capable of passing a test roll prior to placing the aggregate base.

Where granular soils are exposed (i.e., sands to silty sands), we recommend applying surface compaction. This compaction should take place with a self-propelled vibratory roller compactor having a drum diameter of at least 3 feet. Overall stability should be evaluated during the compaction process (judged by an AET geotechnical/pavement engineer or their representative). Instability will likely be a result of wetter clayey/silty soils beneath the exposed sandy soils. The unstable soils should be improved by means of scarification, drying, and recompaction; or by subcutting and replacement.

6.4.5 Aggregate Base

Aggregate base placed for pavement support should meet the gradation and quality requirements for Class 5 per MnDOT Spec. 3138, modified as required by the City. Any millings or reclaimed material placed as aggregate base should meet the gradation requirements of MnDOT Table 3138.2-6. Aggregate base placement and compaction should be performed according to MnDOT Spec. 2211. All aggregate base material (including existing, imported, or reclaimed) should be tested for compaction using the Penetration Index Method per the requirements of MnDOT Table 2211.3-3.



After the aggregate base has been placed, compacted, and tested, it is the contractor's responsibility to maintain the base in a suitable condition for paving. If the subgrade or aggregate base materials become saturated or contaminated by clayey or silty soils after testing, it may be rendered unsuitable for paving due to softness and pumping. This action would require remedial action before pavement can be placed.

6.4.6 Trail Pavement Design

Table 6.4.6 below shows the pavement sections for various project trails including Mill Towns Trail based on the City standards.

Table 6.4.6 – Bituminous Pavement Thickness Design STR-9 (Mill Towns Trail)

| Pavement Course | MnDOT Material Type (Spec.) | Thickness | | |
|-----------------|-----------------------------|-----------|--|--|
| Bituminous Wear | SPWEB230B (PG 58S-28) | 3" | | |
| Aggregate Base | Class 5 or 6 (3138) | 8" | | |

Please note that the pavement thickness design recommended above is for minimum thicknesses, not average thicknesses. This should be noted as such on the project plans and specifications.

7.0 CONSTRUCTION CONSIDERATIONS

7.1 Potential Difficulties

7.1.1 Runoff Water in Excavation

Water can be expected to collect in the excavation bottom during times of inclement weather or snow melt. To allow observation of the excavation bottom, to reduce the potential for soil disturbance, and to facilitate filling operations, we recommend water be removed from within the excavation during construction. Based on the soils encountered, we anticipate the groundwater can be handled with conventional sump pumping.

7.1.2 Disturbance of Soils

The on-site soils can be disturbed under construction traffic, especially if the soils are wet. If soils become disturbed, they should be subcut to the underlying undisturbed soils. The subcut soils can then be dried and recompacted back into place, or they should be removed and replaced with drier imported fill.



7.1.3 Cobbles and Boulders

The soils at this site can include cobbles and boulders. This may make excavating procedures somewhat more difficult than normal if they are encountered.

7.2 Excavation Backsloping

If excavation faces are not retained, the excavations should maintain maximum allowable slopes in accordance with OSHA Regulations (Standards 29 CFR), Part 1926, Subpart P, "Excavations" (can be found on www.osha.gov). Even with the required OSHA sloping, water seepage or surface runoff can potentially induce sideslope erosion or sloughing which could require slope maintenance.

7.3 Observation and Testing

The recommendations in this report are based on the subsurface conditions found at our test boring locations. Since the soil conditions can be expected to vary away from the soil boring locations, we recommend on-site observation by a geotechnical engineer/technician during construction to evaluate these potential changes. Soil density testing should also be performed on new fill placed to document that project specifications for compaction have been satisfied.

8.0 TEST STANDARDS

When we refer to an ASTM Standard in this report, we mean that our services were performed in general accordance with that standard. Compliance with any other standards referenced within the specified standard is neither inferred nor implied.

9.0 LIMITATIONS

Within the limitations of scope, budget, and schedule, we have endeavored to provide our services according to generally accepted geotechnical engineering practices at this time and location. Other than this, no warranty, express or implied, is intended.

Important information regarding risk management and proper use of this report is given in Appendix B entitled "Geotechnical Report Limitations and Guidelines for Use."



Appendix A

Geotechnical Field Exploration and Testing
Boring Log Notes
Unified Soil Classification System
AASHTO Soil Classification System
Boring Location Maps
Pavement Core Logs
Subsurface Boring Logs

Appendix A Geotechnical Field Exploration and Testing Report No. P-0034268

A.1 FIELD EXPLORATION

The subsurface conditions at the site were explored by performing 10 pavement cores with hand auger borings, plus 10 supplemental hand auger borings. The locations of the borings and cores appear on the Boring Location Maps, preceding the Pavement Core Logs and Subsurface Boring Logs in this appendix.

A.2 SAMPLING METHODS

A.2.1 Hand Auger Sampling (HA)

Sample types described as "HA" on the boring logs are continuous core samples collected by the hand auger method. The method consists of a 3.25 inch OD hand auger tool that is manually twisted continuously into the ground to the desired depth or refusal.

A.2.2 Sampling Limitations

Unless observed in a sample, contacts between soil layers are estimated based on the spacing of samples and the action of drilling tools. Cobbles, boulders, and other large objects generally cannot be recovered from test borings, and they may be present in the ground even if they are not noted on the boring logs.

Determining the thickness of "topsoil" layers is usually limited, due to variations in topsoil definition, sample recovery, and other factors. Visual-manual description often relies on color for determination, and transitioning changes can account for significant variation in thickness judgment. Accordingly, the topsoil thickness presented on the logs should not be the sole basis for calculating topsoil stripping depths and volumes. If more accurate information is needed relating to thickness and topsoil quality definition, alternate methods of sample retrieval and testing should be employed.

A.3 CLASSIFICATION METHODS

Soil descriptions shown on the boring logs are based on the Unified Soil Classification System (USCS). The USCS is described in ASTM: D2487 and D2488. Where laboratory classification tests (sieve analysis or Atterberg Limits) have been performed, accurate classifications per ASTM: D2487 are possible. Otherwise, soil descriptions shown on the boring logs are visual-manual judgments. Charts are attached which provide information on the USCS, the descriptive terminology, and the symbols used on the boring logs.

Visual-manual judgment of the AASHTO Soil Group is also noted as a part of the soil description. A chart presenting details of the AASHTO Soil Classification System is also attached.

The boring logs include descriptions of apparent geology. The geologic depositional origin of each soil layer is interpreted primarily by observation of the soil samples, which can be limited. Observations of the surrounding topography, vegetation, and development can sometimes aid this judgment.

A.4 WATER LEVEL MEASUREMENTS

The groundwater level measurements are shown at the bottom of the boring logs. The following information appears under "Water Level Measurements" on the logs:

- Date and Time of measurement
- Sampled Depth: lowest depth of soil sampling at the time of measurement
- Casing Depth: depth to bottom of casing or hollow-stem auger at time of measurement
- Cave-in Depth: depth at which measuring tape stops in the borehole
- Water Level: depth in the borehole where free water is encountered
- Drilling Fluid Level: same as Water Level, except that the liquid in the borehole is drilling fluid

The true location of the water table at the boring locations may be different than the water levels measured in the boreholes. This is possible because there are several factors that can affect the water level measurements in the borehole. Some of these factors include: permeability of each soil layer in profile, presence of perched water, amount of time between water level readings, presence of drilling fluid, weather conditions, and use of borehole casing.

Appendix A Geotechnical Field Exploration and Testing Report No. P-0034268

A.5 LABORATORY TEST METHODS

A.5.1 Water Content Tests

Conducted per AET Procedure 01-LAB-010, which is performed in general accordance with ASTM: D2216 and AASHTO: T265.

A.6 TEST STANDARD LIMITATIONS

Field and laboratory testing is done in general conformance with the described procedures. Compliance with any other standards referenced within the specified standard is neither inferred nor implied.

A.7 SAMPLE STORAGE

Unless notified to do otherwise, we routinely retain representative samples of the soils and pavement cores recovered from the borings for a period of 30 days.

UNIFIED SOIL CLASSIFICATION SYSTEM ASTM Designations: D 2487, D2488

AMERICAN ENGINEERING TESTING, INC.



| | | | | | | ENGINEERING TESTING |
|--|---------------------------------------|---|---|-----------------------------|-----------------------------------|--|
| | | | | | Soil Classification | <u>Notes</u> |
| Criteria fo | r Assigning Group Sy | mbols and Group Nai | mes Using Laboratory Tests ^A | Group Symbol | Group Name ^B | ^A Based on the material passing the 3-in (75-mm) sieve. |
| Coarse-Grained Soils More | Gravels More than 50% coarse | Clean Gravels Less than 5% | Cu≥4 and 1≤Cc≤3 ^E | GW | Well graded gravel ^F | ^B If field sample contained cobbles or boulders, or both, add "with cobbles or |
| than 50% retained on | fraction retained on No. 4 sieve | fines ^C | Cu<4 and/or 1>Cc>3 ^E | GP | Poorly graded gravel ^F | boulders, or both" to group name. ^C Gravels with 5 to 12% fines require dual |
| No. 200 sieve | | Gravels with Fines more | Fines classify as ML or MH | GM | Silty gravel ^{F.G.H} | symbols: GW-GM well-graded gravel with silt |
| | | than 12% fines ^C | Fines classify as CL or CH | GC | Clayey gravel ^{F.G.H} | GW-GC well-graded gravel with clay GP-GM poorly graded gravel with silt |
| | Sands 50% or more of coarse | Clean Sands Less than 5% | Cu≥6 and 1≤Cc≤3 ^E | SW | Well-graded sand ^I | GP-GC poorly graded gravel with slav DS Sands with 5 to 12% fines require dual |
| | fraction passes No. 4 sieve | fines ^D | Cu<6 and/or 1>Cc>3 ^E | SP | Poorly-graded sand ^I | symbols: SW-SM well-graded sand with silt |
| | No. 4 sieve | Sands with Fines more | Fines classify as ML or MH | SM | Silty sand ^{G.H.I} | SW-SC well-graded sand with clay SP-SM poorly graded sand with silt |
| | | than 12% fines D | Fines classify as CL or CH | SC | Clayey sand ^{G.H.I} | SP-SC poorly graded sand with shr |
| Fine-Grained Soils 50% or | Silts and Clays Liquid limit less | inorganic | PI>7 and plots on or above "A" line ^J | CL | Lean clay ^{K.L.M} | $(D_{30})^2$ |
| more passes the No. 200 | than 50 | | PI<4 or plots below "A" line ^J | ML | Silt ^{K.L.M} | $^{E}Cu = D_{60}/D_{10}, \qquad Cc = \frac{C_{30}}{D_{10} \times D_{60}}$ |
| sieve | | organic | Liquid limit–oven dried <0.75 | OL | Organic clay ^{K.L.M.N} | FIf soil contains >15% sand, add "with |
| (see Plasticity Chart below) | | | Liquid limit – not dried | | Organic silt ^{K.L.M.O} | sand" to group name. GIf fines classify as CL-ML, use dual |
| Chart below) | Silts and Clays Liquid limit 50 | inorganic | PI plots on or above "A" line | СН | Fat clay ^{K.L.M} | symbol GC-GM, or SC-SM. HIf fines are organic, add "with organic |
| | or more | | PI plots below "A" line | МН | Elastic silt ^{K.L.M} | fines" to group name. If soil contains >15% gravel, add "with |
| | | organic | Liquid limit–oven dried <0.75 | ОН | Organic clay ^{K.L.M.P} | gravel" to group name. JIf Atterberg limits plot is hatched area, |
| | | | Liquid limit – not dried | | Organic silt ^{K.L.M.Q} | soil is a CL-ML silty clay. |
| Highly organic soil | | | Primarily organic matter, dark in color, and organic in odor | PT | Peat ^R | KIf soil contains 15 to 29% plus No. 200 add "with sand" or "with gravel", whichever is predominant. |
| Screen Opening | SIEVE ANALYSIS (in.) Sieve Number | m | For classification of fine-grained soils and fine-grained fraction of coarse-grained soils. | | | LIf soil contains ≥30% plus No. 200, predominantly sand, add "sandy" to group name. |
| ASSING .80 .80 .80 .80 .80 .80 .80 .80 .80 .80 | D ₈₀ = 15mm | TAINED 0 | Equation of 'A'-line Horizontal at PI = 4 to LL = 25.5. then PI = 0.73 (LL-20) Equation of 'U'-line Vertical at LL = 16 to PI = 7. then PI = 0.9 (LL-8) | CH of OH | .; ut | MIf soil contains ≥30% plus No. 200, predominantly gravel, add "gravelly" to group name. NPl≥4 and plots on or above "A" line. Pl<4 or plots below "A" line. |
| PERCENT PASSING | D ₂₀ = 2.5mm | Description of the control of the c | 10 | MH o | ROH | PPI plots on or above "A" line. QPI plots below "A" line. RFiber Content description shown below. |
| . 0 Library R | 5 5 10 05 01 E SIZE IN MILLIMETERS | 100 | | 50 .60 .7 JID LIMIT (LL) | 0 80 90 .100 .110 | |
| _ D ₆₀ .15 | (Day) ² 2.5 ² | | | | | |

| ADDITIONAL TERMINOLOGY NOTES USED BY AET FOR SOIL IDENTIFICATION AND DESCRIPTION | | | | | | | | | | |
|---|--|---|---|---|---|---|--|--|--|--|
| Grain Size | Gravel Percentages | | Consistenc | y of Plastic Soils | Relative Density of Non-Plastic Soils | | | | | |
| <u>Term</u> <u>Particle Size</u> | | Percent | <u>Term</u> | N-Value, BPF | <u>Term</u> | N-Value, BPF | | | | |
| Over 12" 3" to 12" #4 sieve to 3" #200 to #4 sieve Pass #200 sieve | A Little Gravel With Gravel Gravelly | 3% - 14% 15% - 29% 30% - 50% | Very Soft Soft Firm Stiff Very Stiff Hard | less than 2 2 - 4 5 - 8 9 - 15 16 - 30 Greater than 30 | Very Loose Loose Medium Dense Dense Very Dense | 0 - 4 5 - 10 11 - 30 31 - 50 Greater than 50 | | | | |
| sture/Frost Condition | Layering Notes | | Peat Description | | Organic Description (if no lab tests) | | | | | |
| (MC Column) Absence of moisture, dusty, dry to touch. Moist): Damp, although free water not visible. Soil may still have a high water content (over "optimum"). Wet/ Free water visible, intended to | | ½" thick of differing material or color. nses: Pockets or layers greater than ½" thick of differing | | Fiber Content (Visual Estimate) Greater than 67% 33 – 67% Less than 33% | and is judged to hat content to influence to slightly organic used Root In: With roots: Judged of roots: propert Trace roots: Small roots to be in | clusions to have sufficient quantity s to influence the soil ies. bots present, but not judged sufficient quantity to | | | | |
| 5 | Grain Size Particle Size Over 12" 3" to 12" #4 sieve to 3" #200 to #4 sieve y) Pass #200 sieve Sture/Frost Condition (MC Column) Absence of moisture, dusty, dry to touch. Damp, although free water not visible. Soil may still have a high water content (over "optimum"). Free water visible, intended to describe non-plastic soils. Waterbearing usually relates to | Grain Size Particle Size Over 12" 3" to 12" #4 sieve to 3" #200 to #4 sieve y) Pass #200 sieve Sture/Frost Condition (MC Column) Absence of moisture, dusty, dry to touch. Damp, although free water not visible. Soil may still have a high water content (over "optimum"). Free water visible, intended to describe non-plastic soils. Waterbearing usually relates to sands and sand with silt. Gravel 1 Term A Little Gravel With Gravel Gravelly Laminations: I Lenses: | Grain Size Particle Size Over 12" 3" to 12" #4 sieve to 3" #200 to #4 sieve Pass #200 sieve Sture/Frost Condition (MC Column) Absence of moisture, dusty, dry to touch. Damp, although free water not visible. Soil may still have a high water content (over "optimum"). Free water visible, intended to describe non-plastic soils. Waterbearing usually relates to sands and sand with silt. Gravel Percentages Term Percent With Gravel 3% - 14% With Gravel 15% - 29% Gravelly 30% - 50% Layering Notes Laminations: Layers less than ½" thick of differing material or color. Lenses: Pockets or layers greater than ½" thick of differing material or color. | Grain Size Particle Size Over 12" 3" to 12" #4 sieve to 3" #200 to #4 sieve y) Pass #200 sieve A Little Gravel 3% - 14% With Gravel 15% - 29% Gravelly 30% - 50% Firm Stiff Very Stiff Hard Layering Notes Laminations: Layers less than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Lenses: Pockets or layers greater than 1/2" thick of differing material or color. Sapric Peat: | Grain Size Particle Size Over 12" 3" to 12" 44 sieve to 3" Fare With Gravel A Little Gravel Gravelly A Little Gravel Gravelly A Little Gravel With Gravel Gravelly 30% - 14% With Gravel 15% - 29% Firm 5 - 8 Stiff 9 - 15 Very Stiff 16 - 30 Hard Greater than 30 Sture/Frost Condition (MC Column) Absence of moisture, dusty, dry to touch. Damp, although free water not visible. Soil may still have a high water content (over "optimum"). Free water visible, intended to describe non-plastic soils. Waterbearing usually relates to sands and sand with silt. Gravel Percentages Term Percent Soft 1 2 - 4 Firm 5 - 8 Stiff 9 - 15 Very Stiff 16 - 30 Hard Greater than 30 Fiber Content (Visual Estimate) Fibric Peat: Greater than 67% Hemic Peat: 33 - 67% Sapric Peat: Less than 33% | Particle Size Particle Size Term Percent Term N-Value, BPF Term | | | | |

Plasticity Chart

 $C_{u} = \frac{D_{00}}{D_{10}} = \frac{.15}{0.075} = 200 \qquad \qquad C_{o} = \frac{(D_{00})^{2}}{D_{10} \times D_{00}} = \frac{2.5^{2}}{0.075 \times 15} = 5.6$

DRILLING AND SAMPLING SYMBOLS

| Symbol | Definition |
|---------------|--|
| AR: | Sample of material obtained from cuttings blown out |
| | the top of the borehole during air rotary procedure. |
| B, H, N: | Size of flush-joint casing |
| CAS: | Pipe casing, number indicates nominal diameter in |
| COT. | inches |
| COT: DC: | Clean-out tube |
| DC. DM: | Drive casing; number indicates diameter in inches |
| DM. DR: | Drilling mud or bentonite slurry Driller (initials) |
| DK. DS: | Disturbed sample from auger flights |
| DS. DP: | Direct push drilling; a 2.125 inch OD outer casing |
| DI. | with an inner $1\frac{1}{2}$ inch ID plastic tube is driven |
| | continuously into the ground. |
| FA: | Flight auger; number indicates outside diameter in |
| 171. | inches |
| HA: | Hand auger; number indicates outside diameter |
| HSA: | Hollow stem auger; number indicates inside diameter |
| | in inches |
| LG: | Field logger (initials) |
| MC: | Column used to describe moisture condition of |
| | samples and for the ground water level symbols |
| N (BPF): | Standard penetration resistance (N-value) in blows per |
| , , | foot (see notes) |
| NQ: | NQ wireline core barrel |
| PQ: | PQ wireline core barrel |
| RDA: | Rotary drilling with compressed air and roller or drag |
| | bit. |
| RDF: | Rotary drilling with drilling fluid and roller or drag bit |
| REC: | In split-spoon (see notes), direct push and thin-walled |
| | tube sampling, the recovered length (in inches) of |
| | sample. In rock coring, the length of core recovered |
| | (expressed as percent of the total core run). Zero |
| ~~ | indicates no sample recovered. |
| SS: | Standard split-spoon sampler (steel; 1.5" is inside |
| | diameter; 2" outside diameter); unless indicated |
| CII | otherwise |
| SU | Spin-up sample from hollow stem auger |
| TW: | Thin-walled tube; number indicates inside diameter in inches |
| WASH: | Sample of material obtained by screening returning |
| WASII. | rotary drilling fluid or by which has collected inside |
| | the borehole after "falling" through drilling fluid |
| WH: | Sampler advanced by static weight of drill rod and |
| ** 11. | hammer |
| WR: | Sampler advanced by static weight of drill rod |
| 94mm: | 94 millimeter wireline core barrel |
| ▼ : | Water level directly measured in boring |
| _ | • |
| $\overline{}$ | E 4 |

Estimated water level based solely on sample

TEST SYMBOLS

| Symbol | Definition |
|------------------|---|
| CONS: | One-dimensional consolidation test |
| DEN: | Dry density, pcf |
| DST: | Direct shear test |
| E: | Pressuremeter Modulus, tsf |
| HYD: | Hydrometer analysis |
| LL: | Liquid Limit, % |
| LP: | Pressuremeter Limit Pressure, tsf |
| OC: | Organic Content, % |
| PERM: | Coefficient of permeability (K) test; F - Field; |
| | L - Laboratory |
| PL: | Plastic Limit, % |
| q _p : | Pocket Penetrometer strength, tsf (approximate) |
| q _c : | Static cone bearing pressure, tsf |
| q _u : | Unconfined compressive strength, psf |
| R: | Electrical Resistivity, ohm-cms |
| RQD: | Rock Quality Designation of Rock Core, in percent |
| | (aggregate length of core pieces 4" or more in length |
| | as a percent of total core run) |
| SA: | Sieve analysis |
| TRX: | Triaxial compression test |
| VSR: | Vane shear strength, remolded (field), psf |
| VSU: | Vane shear strength, undisturbed (field), psf |
| WC: | Water content, as percent of dry weight |
| %-200 : | Percent of material finer than #200 sieve |
| | |

STANDARD PENETRATION TEST NOTES

The standard penetration test consists of driving a split-spoon sampler with a drop hammer counting the number of blows applied in each of three 6" increments of penetration. If the sampler is driven less than 18" (usually in highly resistant material), permitted in ASTM: D1586, the blows for each complete 6" increment and for each partial increment is on the boring log. For partial increments, the number of blows is shown to the nearest 0.1' below the slash.

The length of sample recovered, as shown on the "REC" column, may be greater than the distance indicated in the N column. The disparity is because the N-value is recorded below the initial 6" set (unless partial penetration defined in ASTM: D1586 is encountered) whereas the length of sample recovered is for the entire sampler drive (which may even extend more than 18").

appearance

 ∇ :

AASHTO SOIL CLASSIFICATION SYSTEM

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

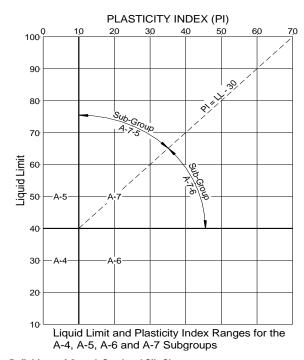
Classification of Soils and Soil-Aggregate Mixtures

| General Classification | | Granular Materials | | | | | | | | Silt-Clay Materials | | | |
|---|---------------|-------------------------------------|--------------|---------------------------------|---------|---------|--------------|------------------|---------------------------------------|---------------------|----------------|--|--|
| | | (35% or less passing No. 200 sieve) | | | | | | | (More than 35% passing No. 200 sieve) | | | | |
| Group Classification | | A-1 | | A-2 | | | | | | A-7 | | | |
| | | A-1-b | A-3 | A-2-4 | A-2-5 | A-2-6 | A-2-7 | A-4 | A-5 | A-6 | A-7-5 A-7-6 | | |
| Sieve Analysis, Percent passing: | | | | | | | | | | | | | |
| No. 10 (2.00 mm) | .00 mm) | | | | | | | | | | | | |
| No. 40 (0.425 mm) | 40 (0.425 mm) | | 51 min. | | | | | | | | | | |
| No. 200 (0.075 mm) | | 25 max. | 10 max. | 35 max. | 35 max. | 35 max. | 35 max. | 36 min. | 36 min. | 36 min. | 36 min. | | |
| Characteristics of Fraction Passing No. 40 (0.425 mm) | | | | | | | | | | | | | |
| Liquid limit | | | | 40 max. | 41 min. | 40 max. | 41 min. | 40 max. | 41 min. | 40 max. | 41 min. | | |
| Plasticity index | 6 max. | | N.P. | 10 max. | 10 max. | 11 min. | 11 min. | 10 max. | 10 max. | 11 min. | 11 min. | | |
| Usual Types of Significant Constituent Materials Stone Fragments Gravel and Sand | | | Fine Sand | Silty or Clayey Gravel and Sand | | | | Silty Soils Clay | | Claye | y Soils | | |
| General Ratings as Subgrade | | Excellent to Good | | | | | Fair to Poor | | | | | | |

The placing of A-3 before A-2 is necessary in the "left to right elimination process" and does not indicate superiority of A-3 over A-2.

Plasticity index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity index of A-7-6 subgroup is greater than LL minus 30.

Group A-8 soils are organic clays or peat with organic content >5%.



Definitions of Gravel, Sand and Silt-Clay

The terms "gravel", "coarse sand", "fine sand" and "silt-clay", as determinable from the minimum test data required in this classification arrangement and as used in subsequent word descriptions are defined as follows:

GRAVEL - Material passing sieve with 3-in. square openings and retained on the No. 10 sieve.

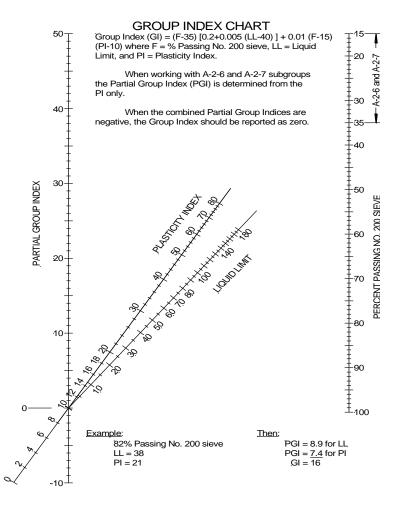
COARSE SAND - Material passing the No. 10 sieve and retained on the No. 40 sieve.

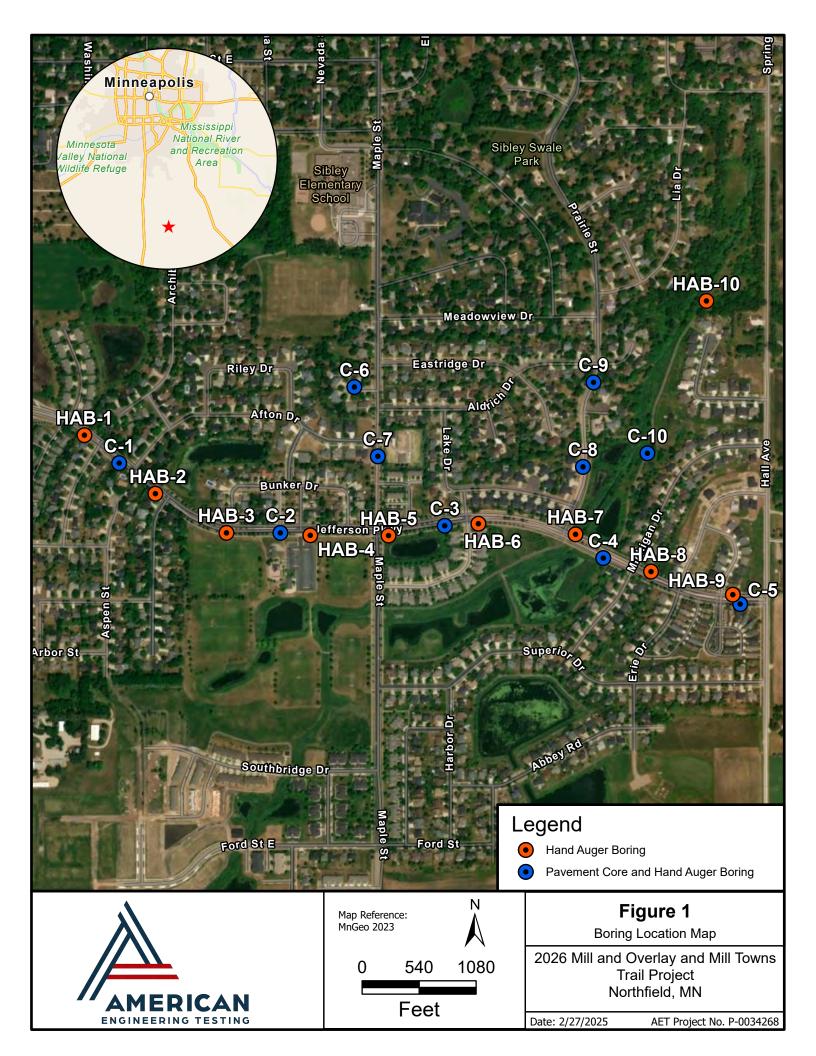
 $\ensuremath{\mathsf{FINE}}$ SAND - Material passing the No. 40 sieve and retained on the No. 200 sieve.

COMBINED SILT AND CLAY - Material passing the No. 200 sieve

BOULDERS (retained on 3-in. sieve) should be excluded from the portion of the sample to which the classificaiton is applied, but the percentage of such material, if any, in the sample should be recorded.

The term "silty" is applied to fine material having plasticity index of 10 or less and the term "clayey" is applied to fine material having plasticity index of 11 or greater.





C-01





Pavement Core Photographs

Core C-01

2026 Mill and Overlay and Mill Towns Trail Improvements

Northfield, Minnesota

C-02





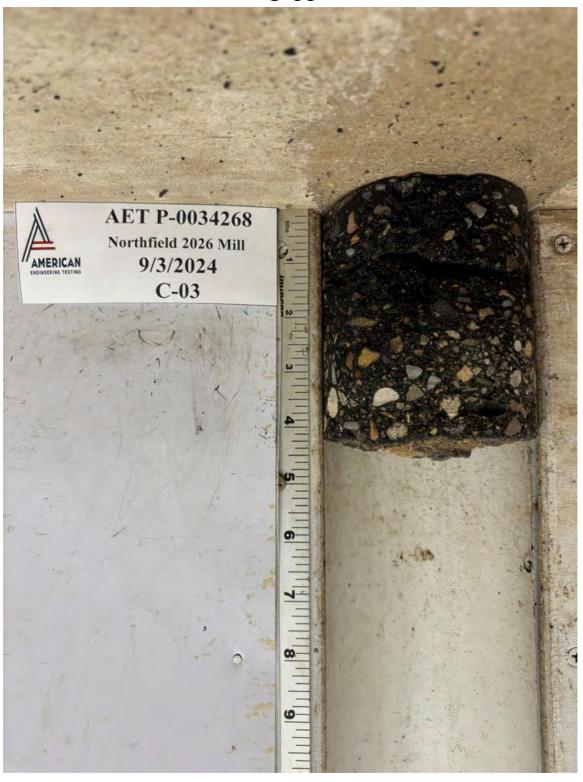
Pavement Core Photographs

Core C-02

2026 Mill and Overlay and Mill Towns Trail Improvements

Northfield, Minnesota

Date: 9/2024 AET Project P-0034268





Pavement Core Photographs

Core C-03





Pavement Core Photographs

Core C-04





Pavement Core Photographs

Core C-05





Pavement Core Photographs

Core C-06

2026 Mill and Overlay and Mill Towns Trail Improvements

Northfield, Minnesota

Date: 9/2024 AET Project P-0034268





Pavement Core Photographs

Core C-07

2026 Mill and Overlay and Mill Towns Trail Improvements

Northfield, Minnesota

Date: 9/2024

AET Project P-0034268





Pavement Core Photographs

Core C-08

2026 Mill and Overlay and Mill Towns Trail Improvements

Northfield, Minnesota

Date: 9/2024

AET Project P-0034268





Pavement Core Photographs

Core C-09





Pavement Core Photographs

Core C-10



| AET JO | DB NO: P-0034268 | | | | | LO | G OF | BORING N | O | C- | -01 | (p. 1 o | f 1) | |
|---------------------|--|--------------------------|------------|------------------|-----------|------------|--------|---------------------|------------|--------------|-----|---------|--------|--------|
| PROJEC | CT: Northfield 2026 | Mill & O | verlay and | | | Proj | ect; l | Northfiel | | | | | | |
| | CE ELEVATION: | | LATITUD | E: 44. 4 | 3977033 | | LON | IGITUDE: | -93 | 3.1577 | | | | |
| DEPTH IN FEET | MATERIAL D | ESCRIPTIC | N | | GEOLOGY | N | MC | SAMPLE TYPE | REC IN. | | | ABORAT | | |
| FEET | 4.75" Bituminous pavemen | ıt | | F | LL | | | | 1111 | WC | DEN | I LL | PL | %-#200 |
| | 4.75 Bitaininous pavemen | | | | | | | CORE | | | | | | |
| | | | | | | | | Ш | | | | | | |
| | 19.25" FILL, mostly gravel bituminous present, brown | lly silty sar (A-1-b) | nd, | | | | | | | | | | | |
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| 2 — | END OF BORING | | | | | | | | | | | | | |
| | END OF BURING | | | | | | | | | | | | | |
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| DED | TH. DDH I INC METHOD | | | WATER | LEVEL MEA | CIDE | MENT | | | | | | | |
| DEP | TH: DRILLING METHOD | DATE | TDAT | 1 | LEVEL MEA | | | | IG | WATF | | NOTE: | | - 1 |
| (| 0-2' Core/HA | DATE | TIME | SAMPLEI DEPTH | | CAV DEI | | DRILLIN FLUID LE | VĒL | WATE LEVE | _ | THE A | | - 1 |
| | | 9/3/24 | | 2.0 | 0.0 | 2. | .U | | | None | | SHEET | | I |
| BORIN | IG LETED: 9/3/24 | | | | + | | | | | | | ERMIN | | I |
| | S LG: Rig: HA | | | | | | | | | | | TH | IS LOC | ĩ |

03/2011

AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25

01-DHR-060



| | AET JO | B NO: P-0034268 | 3 | | | | | LC | OG OF | BOI | RING N | o | C | -02 (| p. 1 o | f 1) | |
|---|---------------------|---|-------------|-------------|------------------|-----------|---------------------------|-----------|-----------------|-----|-------------------|-----------|---------------------|---------------|---|------------------------|----------------|
| | PROJEC | Northfield 2026 | Mill & O | verlay and | d Mill | Tow | ns Trail | Proj | ect; l | Nor | thfield | d, Mi | nneso | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUD | Σ: | 44.43 | 84767 | | LO | NGI | ΓUDE: | -93 | .1535 | 1615 | | | |
| | DEPTH IN FEET | MATERIAL I |)ESCRIPTIO |)N | | GE | OLOGY | N | MC | SA | MPLE YPE | REC | FIELI |) & LA | BORA | ORY ' | ΓESTS |
| | FEET | | JESCKII TR | J1 \ | | | | 11 | IVIC | Т | TYPE | IN. | WC | DEN | LL | PL | %-#20 0 |
| | | 4" Bituminous pavement | | | | FILI | | | | Ш | CORE | | | | | | |
| VD MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | 2 — | 20" FILL, mostly gravelly clayey sand, brown (A-1-b | silty sand, | a little | | | | | | | HA | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL. GDT 3/12/25 | BORIN | 0-2' Core/HA | DATE 9/3/24 | TIME | WAT SAMP DEP 2.0 | LED TH | EVEL MEA CASING DEPTH 0.0 | CAV DE | EMEN' VE-IN PTH | | DRILLIN UID LE | JG VEL | WATE LEVE Non | ER EL e | NOTE: THE A SHEET EXPLA ERMIN | TTAC S FOI NATIC | HED R AN |
| AET_C | DR: R | | | | | | | | | | | | | | TH | IS LO | Ĵ |



| | AET JO | P-0034268 | 3 | | | | LC | OG OF | BOR | ING NO | Э | C | -03 (| p. 1 o | f 1) | |
|--|---------------------|----------------------------|-------------|-------------|---------------|------------------|-----------|--------------|------------------|------------------|-------|--------------|--------|------------------|-------|----------------|
| | PROJEC | Northfield 2026 | Mill & O | verlay and | d Mill | Towns Trail | Proj | ject; l | Nort | thfield | l, Mi | nnesc | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUD | E:4 | 4.43860822 | | LO | NGIT | UDE: . | -93 | .1492 | 4909 | | | |
| | DEPTH IN FEET | MATERIAL I | |)N | | GEOLOGY | N | MC | SAN | MPLE YPE | REC | FIELI |) & LA | BORAT | ORY ' | ΓESTS |
| | FEET | | |) | | | IN | IVIC | TY | YPE | IN. | WC | DEN | LL | PL | %-#20 0 |
| | | 4.5' Bituminous pavement | | | | FILL | | | | CORE | | | | | | |
| | | | | | | | | | \mathbb{H}^{c} | CORE | | | | | | |
| | | 19.5' FILL, mostly gravell | y sand with | silt, browr | 1 | - | | | Ħ | | | | | | | |
| | | (A-1-b) | | | | | | | | | | | | | | |
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| SDT 3 | 2 | END OF BORING | | | | | | | | | | | | | | |
| VELL. | | | | | | | | | | | | | | | | |
| PT+V | | | | | | | | | | | | | | | | |
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| .GPJ | | | | | | | | | | | | | | | | |
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| L PRC | | | | | | | | | | | | | | | | |
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| MILL | | | | | | | | | | | | | | | | |
| 2026 | | | | | | | | | | | | | | | | |
| FIEL | | | | | | | | | | | | | | | | |
| JORT | | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEP | TH: DRILLING METHOD | | | WAT | ER LEVEL MEA | SURI | L EMEN' | TS | | | <u> </u> | Ι, | IOTE | DEFE | D TC |
| P-003 | | | DATE | TIME | SAMPI DEPT | | _ | VE-IN PTH | | RILLIN VID LE | IG | WATE LEVE | | NOTE: | | |
| ONG | (| 0-2' Core/HA | | I IIVIE | | | _ | | FLU | JID LE | VEL | | _ | THE A SHEET | | |
| LAT-L | | | 9/3/24 | | 2.0 | 0.0 | 2 | 2.0 | | | | Non | | SHEE I EXPLAI | | |
| ₹P W-, | BORIN | G . | | | | | - | | | | | | | ERMIN | | |
| T_COF | | LETED: 9/3/24 | | | | | - | | | | | | | | IS LO | |
| AET, | DR: R | S LG: Rig: HA | | | | | | | | | | | | 111 | | ~ |



| | AET JO | B NO: P-0034268 | <u> </u> | | | | LO | OG OF | BORING N | O | C | -04 (| p. 1 o | f 1) | |
|--|---------------------|---------------------------|--------------|------------|---------------|-----------------|--------|---------------|---------------------|-----------|--------------|--------|---------------|--------|--------|
| | PROJEC | Northfield 2026 | Mill & O | verlay and | | | il Pro | ject; l | Northfiel | d, Mi | nnesc | ota | | | |
| | SURFAC | CE ELEVATION: | | LATITUD | E: 4 | 4.43800959 | | LO | NGITUDE: | -93 | 3.145 | 1334 | | | |
| | DEPTH IN FEET | MATERIAL I | DESCRIPTIO |)N | | GEOLOGY | N | MC | SAMPLE TYPE | REC | FIELI |) & LA | BORA | ORY 7 | TESTS |
| | FÉÉT | | olociui II | | | | | IVIC | TYPE | IN. | WC | DEN | LL | PL | %-#200 |
| | | 4" Bituminous pavement | | | | FILL | | | CORE | | | | | | |
| | | 20" FILL, mostly gravelly | silty sand | brown | | _ | | | | | | | | | |
| | | (A-1-b) | sirty saira, | 010 //11 | | | | | | | | | | | |
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| L.GDT | | END OF BORING | | | | | | | | | | | | | |
| T+WEL | | | | | | | | | | | | | | | |
| ET+CP. | | | | | | | | | | | | | | | |
| PJ AE | | | | | | | | | | | | | | | |
| JECT.G | | | | | | | | | | | | | | | |
| PRO, | | | | | | | | | | | | | | | |
| TRAIL | | | | | | | | | | | | | | | |
| OWNS | | | | | | | | | | | | | | | |
| MILLT | | | | | | | | | | | | | | | |
| / AND | | | | | | | | | | | | | | | |
| (ERLA) | | | | | | | | | | | | | | | |
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| MILL A | | | | | | | | | | | | | | | |
| 2026 | | | | | | | | | | | | | | | |
| FIELD | | | | | | | | | | | | | | | |
| VORTE | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEP | TH: DRILLING METHOD | | | WAT | ER LEVEL MI | EASUR | L EMEN' | TS | | | | NOTE: | BEEE | R TO |
| , P-00; | | | DATE | TIME | SAMPI DEPT | | | VE-IN EPTH | DRILLIN FLUID LE | NG VEI | WATI LEVE | | THE A | | |
| -LONG | (| 0-2' Core/HA | 9/3/24 | | 2.0 | | | 2.0 | LEOID LE | · V LiL | Non | _ | SHEET | | |
| W-LAT | | | >. | | | | 1 | | | | - 1011 | | EXPLA | NATIO | N OF |
| ORP/ | BORIN COMPI | G LETED: 9/3/24 | | | | | | | | | | T | ERMIN | OLOC | Y ON |
| AET_C | DR: R | | | | | | | | | | | | TH | IS LOC | j |



| | AET JO | P-0034268 | 3 | | | | LC | OG OF | BORING N | NO | C | -05 (| p. 1 o | f 1) | |
|--|---------------------|---|-------------|------------|--------------|-------------|-----------|------------------------|---------------------|------------|---------------------|---------------|----------------|-------|----------------|
| | PROJEC | Northfield 2026 | Mill & O | verlay and | d Mill | Towns Trail | Proj | ject; I | Northfie | ld, Mi | inneso | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUD | E: | 4.4371574 | | LO | NGITUDE: | -93 | .1415 | 7868 | | | |
| | DEPTH IN FEET | MATERIAL : | DESCRIPTIO |)N | | GEOLOGY | N | MC | SAMPLE TYPE | REC | FIELI | O & LA | BORA | ORY ' | ΓESTS |
| | FEET | | DESCRII TR |) | | | IN | IVIC | TYPE | IN. | WC | DEN | LL | PL | %-#20 0 |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | 1 - | 5" Bituminous pavement 19" FILL, mostly gravelly present, brown (A-1-b) END OF BORING | silty sand, | bituminous | 3 | FILL | | | CORE | | WC | DEN | | PL | %-#20(|
| AT-LONG P-0034268 NORTHFIELD 2026 | DEP (| TH: DRILLING METHOD 0-2' Core/HA | DATE 9/3/24 | TIME | WAT SAMP DEP | | CAV DE | EMEN' VE-IN CPTH | TS DRILLI FLUID LI | NG EVEL | WATI LEVE Non | ER EL e | NOTE: THE A | TTAC | HED R AN |
| ₽W-L | DODE | | | | | | | | | | | | XPLA | | |
| CORF | BORIN COMP | G LETED: 9/3/24 | | | | | | | | | | T | | | GY ON |
| AET_ | DR: R | S LG: Rig: HA | | | | | | | | | | | TH | IS LO | ί |



| | AET JO | P-0034268 | 3 | | | | | LC | G OF | ВО | RING N | O | C | -06 (| р. 1 о | f 1) | |
|--|--|--|-------------|---------------|------------------------------|---------------|---|-----------|-----------------------|-----|-------------------|-----------|---------------------|---------------|-----------------------------------|----------------------------------|-------------------------------|
| | PROJEC | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; l | Noi | rthfiel | d, Mi | nnesc | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUD | E: | 4.44 1 | 118029 | | LON | NGI | TUDE: | -93 | .1515 | 9543 | | | |
| | DEPTH IN FEET | MATERIAL I | DESCRIPTIO | ON | | GE | COLOGY | N | MC | SĄ | AMPLE ГҮРЕ | REC | | I | BORAT | I | 1 |
| | FEET | | | | | EILI | r | | | | LIFE | 1111. | WC | DEN | LL | PL | %-#200 |
| OWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | 1 - | 4" Bituminous pavement 24" FILL, mixture of grave clayey sand,t race roots, bit black and dark brown (A-1) END OF BORING | elly sand w | rith silt and | | FILI | | N | MC | | CORE | | WC | DEN | LL | PL | %-#200 |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEPTH: DRILLING METHOD 0-2' Core/HA BORING COMPLETED: 9/3/24 DR: RS LG: Rig: HA | | DATE 9/3/24 | TIME | WATI SAMPI DEPT 2.0 | ED | EVEL MEA CASING DEPTH 0.0 | CAV DE | EMENT /E-IN PTH | _ | ORILLIN UID LE | NG VEL | WATE LEVE Non | ER EL e | NOTE: THE A SHEET EXPLAI | TTAC TS FOR NATIC IOLOC | HED R AN ON OF GY ON |
| AET_C | | | | | | \top | | | | | | | | | TH | IS LO | Ĵ |



| | AET JO | B NO: P-0034268 | <u> </u> | | | | LC | OG OF | BORING N | O | C | -07 | p. 1 o | f 1) | |
|--|---------------------|---------------------------|-------------|------------|---------------|------------------------|--------|--------------|---------------------|------------|--------------|------|--------|--------|--------|
| | PROJEC | CT: Northfield 2026 | Mill & O | verlay and | d Mill | Towns Trail | l Proj | ject; l | Northfiel | d, Mi | nnesc | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUD | E:4 | 4.43989605 | | LO | NGITUDE: | -93 | .1509 | 8674 | | | |
| | DEPTH IN FEET | MATERIAL I | DESCRIPTIO | ON | | GEOLOGY | N | MC | SAMPLE TYPE | REC IN. | | | BORA | | |
| ŀ | FEET | 4" Dituminaus payament | | | | FILL | | | IIII | 111. | WC | DEN | LL | PL | %-#200 |
| | | 4" Bituminous pavement | | | | FILL | | | CORE | | | | | | |
| | | 20" FILL, mostly gravelly | silty sand, | brown | | | | | | | | | | | |
| | | (A-1-b) | | | | | | | | | | | | | |
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| 3/12/2 | 2 — | END OF BORING | | | | | | | | | | | | | |
| L.GDT | | END OF BORING | | | | | | | | | | | | | |
| T+WEI | | | | | | | | | | | | | | | |
| \ET+CF | | | | | | | | | | | | | | | |
| GPJ ∤ | | | | | | | | | | | | | | | |
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| 2026 N | | | | | | | | | | | | | | | |
| FIELD | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | | | | | | | | | | | | | | | |
| 334268 | DEP | TH: DRILLING METHOD | | | WAT | ER LEVEL ME. | ASURI | EMEN | TS | I | | | NOTE: | REFE | R TO |
| IG P-0(| |)-2' Core/HA | DATE | TIME | SAMPI DEPT | LED CASING TH DEPTH | CAV | VE-IN PTH | DRILLIN FLUID LE | NG VEL | WATI LEVE | | THE A | | |
| VI-LON | | | 9/3/24 | | 2.0 | | + | 2.0 | | | Non | | SHEET | ΓS FOR | AN |
| P-W-LA | DORRY | | | | | | | | | | | | EXPLA | | |
| COR | | LETED: 9/3/24 | | | | | | | | | | T | ERMIN | | |
| AET | DR: R | S LG: Rig: HA | | | | | | | | | | | IH | IS LOC | J |



| | AET JO | B NO: P-0034268 | | | | | LC | OG OF | BORING | NO | C | -08 (| p. 1 o | f 1) | |
|--|---------------------|---------------------------|---|------------|---------------|----------------------|------|--------------|------------------|-------------|--------------|----------|---------------|-------|----------------|
| | PROJEC | Northfield 2026 | Mill & O | verlay and | d Mill | Towns Trail | Proj | ect; I | Northfie | ld, Mi | innesc | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUD | E:4 | 4.4397008 | | LO | NGITUDE | -93 | .1456 | 6035 | | | |
| | DEPTH IN FEET | MATERIAL D | DESCRIPTIO | DΝ | | GEOLOGY | N | MC | SAMPLI TYPE | E REC | | | BORAT | | Г |
| | FÉÉT | | | | | | 1 | MC | TYPE | IN. | WC | DEN | LL | PL | % -#200 |
| | | 4.75" Bituminous pavemen | nt | | | FILL | | | | | | | | | |
| | | | | | | | | | COR | | | | | | |
| | | 19.25" FILL, mostly grave | lly silty sar | nd, brown | | | | | | | | | | | |
| | | (A-1-b) | | | | | | | | | | | | | |
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| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT. GPJ AET+CPT+WELL. GDT 3/12/25 | 2 — | END OF BODING | | | | | | | | | | | | | |
| GDT. | | END OF BORING | | | | | | | | | | | | | |
| WELL | | | | | | | | | | | | | | | |
| -CPT | | | | | | | | | | | | | | | |
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| T.GPJ | | | | | | | | | | | | | | | |
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| NOR | | | | | | | | | | | | | | | |
| 34268 | DEP | TH: DRILLING METHOD | | | WATI | ER LEVEL MEA | SURE | EMEN | TS | ' | | | NOTE: | REFE | R TO |
| 2 P-0C | 4 |) 2! | DATE | TIME | SAMPL DEPT | ED CASING H DEPTH | CAV | /E-IN PTH | DRILL FLUID L | ING EVET | WATE LEVE | | THE A | | |
| LONG | • | 0-2' Core/HA | 9/3/24 | | 2.0 | 0.0 | | .0 | LEOIDE | ا طنا ۲ ب | Non | | SHEET | | |
| V-LAT | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 2.0 | | | | | | . , 011 | | EXPLA | NATIC | N OF |
| ORP V | BORIN | G LETED: 9/3/24 | | | | | | | | | | -T | ERMIN | OLOC | SY ON |
| AET_C | DR: R | | | | | | | | | | | \dashv | TH | IS LO | 3 |
| | 03/2011 | | <u> </u> | <u> </u> | | | | | 1 | | | | | 01-DF | IR-060 |

03/2011



| PROJECT: Northfield 2026 Mill & Overlay and Mill Towns Trail Project; Northfield, Minnesota Surface Flevation: Latitude: 44.44126644 Longitude: -93.145386 | | |
|--|-------|-----------------------|
| 14 44126644 02 14 5 296 | ~ ~ | |
| Better Elle Vittori. | | |
| IN MATERIAL DESCRIPTION GEOLOGY N MC SAMPLE REC | | TORY TESTS |
| | EN LL | PL %-#20 |
| 3.75" Bituminous pavement FILL CORE | | |
| 16.25" FILL, mostly gravelly silty sand, brown | | |
| (A-1-b) | | |
| | | |
| | | |
| 1 – HA | | |
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| END OF BORING | | |
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| 4 Red B | | |
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| DEPTH: DRILLING METHOD DEPTH: DRILLING METHOD WATER LEVEL MEASUREMENTS O-1.67' Core/HA DATE TIME SAMPLED CASING DEPTH FUID LEVEL LEVEL 9/3/24 1.7 0.0 1.7 None BORING COMPLETED: 9/3/24 | | |
| DEPTH: DRILLING METHOD WATER LEVEL MEASUREMENTS SAMPLED CASING CAVE-IN DRILLING WATER | 1 | REFER TO |
| DATE TIME SAMPLED CASING CAVE-IN DRILLING WATER DEPTH DEPTH DEPTH FLUID LEVEL LEVEL | _ | ATTACHED TS FOR AN |
| 위 9/3/24 1.7 0.0 1.7 None | _ | NATION OF |
| BORING COMPLETED: 9/3/24 | | NOLOGY ON |
| DR: RS LG: Rig: HA | | HIS LOG |

03/2011

01-DHR-060



| | AET JO | B NO: | P-0034268 | } | | | | | LO | G OF | ВО | RING N | O | C | -10 (| р. 1 о | f 1) | |
|--|---------------------|----------------|---|--------------|------------|---------------------|----------|---------------------------|-----------|-----------------------|-----|-------------------|-----------|---------------------|-------------------|-------------------------|---------------|----------------------|
| | PROJEC | CT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; l | Voi | rthfield | | | | | | |
| | SURFA | CE ELEV | ATION: | | LATITUD | E:4 | 4.43 | 995238 | | LON | \GI | TUDE: | -93 | .1439 | | | | |
| | DEPTH IN FEET | | MATERIAL I | DESCRIPTIO | ON | | GE | EOLOGY | N | MC | SĄ | AMPLE ГҮРЕ | REC | | Ι | BORAT | | |
| | FEET | 2.75" | | | | | EIL | т | | | | LIFE | IN. | WC | DEN | LL | PL | % -#200 |
| | | 2.75" | Bituminous pavemer | 11 | | | FIL | L | | | Ш | CORE | | | | | | |
| T.GPJ AET+CPT+WELL.GDT 3/12/25 | 2 — | sandy brown | FILL, mixture of gr lean clay, slightly or and dark brown (A- | ganic, trace | e roots, | | | | | | | HA | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEP |)-2' | DRILLING METHOD | DATE 9/3/24 | TIME | WATI SAMPI DEPT 2.0 | LED H | EVEL MEA CASING DEPTH 0.0 | CAV DE | EMENT VE-IN PTH | _ | DRILLIN UID LE | NG VEL | WATE LEVE Non | ER L e E | NOTE: THE A SHEET | TTAC S FOF | HED R AN ON OF |
| CORP | BORIN COMPI | G LETED: | 9/3/24 | | | | | | | | | | | | Т | ERMIN | | |
| AET_(| DR: R | S LG: | Rig: HA | | | | | | | | | | | | | TH | IS LO | į |



| | AET JO | B NO: | P-0034268 | } | | | | | LC | G OF | BO | RING N | O | HA | B-01 | (p. 1 | of 1) | |
|--|---------------------|----------------------|--|-------------|----------------|---------------|-------|-----------------|-----------|--------------|-----|-------------------|--|--------------|------|--------|-------|--------|
| | PROJEC | CT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; I | Nor | thfield | | | | | | |
| | | CE ELEV | ATION: | | LATITUD | E:4 | 4.440 | 026939 | | LO | NGI | ΓUDE: | -93 | .1586 | | | | |
| | DEPTH IN FEET | | MATERIAL I | DESCRIPTIO | ON | | GE | EOLOGY | N | MC | SA | MPLE | REC IN | | | BORAT | | |
| T.GPJ AET+CPT+WELL.GDT 3/12/25 | 1 - | 36" FI clayey (A-1-b | LL, mostly gravelly sand, trace roots at | sand with s | silt, a little | | FILI | | N | MC | | НА | N. The state of th | WC | DEN | LL | PL | %-#200 |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | 3 — | END | OF BORING | | | | | | | | | | | | | | | |
| 00342t | DEP | TH: I | DRILLING METHOD | | 1 | | | EVEL MEA | | | _ | | | | | NOTE: | REFE | R TO |
| NG P- | | 0-3' I | Hand Auger | DATE | TIME | SAMPI DEPT | ED | CASING DEPTH | CAV DE | /E-IN PTH | FL | ORILLIN UID LE | VEL | WATE LEVE | | THE A | | |
| AT-LO | | | | 9/3/24 | | 3.0 | | 0.0 | 3 | .0 | | | | Non | | SHEET | | |
| -W-L | DOBB | C | | | | | | | | | | | | | | [XPLA] | | |
| | | G LETED: | 9/3/24 | | | | | | | | _ | | | | T | ERMIN | | |
| AET | | S LG: | Rig: HA | | | | | | | | | | | | | TH | IS LO | Ĺ |



| | AET JO | B NO: | P-0034268 | 3 | | | | | LO | G OF | BOI | RING N | O | HA | B-02 | (p. 1 | of 1) | |
|--|---------------------|---------------|---|--------------|------------|---------------|----------|-----------------|------|--------------|-----|-------------------|-----------|--------------|------|-------|-------|----------------|
| | PROJEC | CT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; l | Nor | thfield | | | | | | |
| | SURFA | CE ELEV | ATION: | | LATITUD | E:4 | 4.43 | 920889 | _ | LON | NGI | ΓUDE: | -93 | .1568 | | | | |
| | DEPTH IN FEET | | MATERIAL I | DESCRIPTIO | ON | | GI | EOLOGY | N | MC | SA | MPLE TYPE | REC | | | BORA | | |
| | FEET | 211 T- | :1 | | | | FIL | т | | | Ľ | ITE | IN. | WC | DEN | LL | PL | %- #200 |
| | | 2" Top | | 1 | 11 | | FIL - | L | | | | | | | | | | |
| .GPJ AET+CPT+WELL.GDT 3/12/25 | 2 — | 34" FI clayey | LL, mostly sand with sand, brown (A-1-b | h silt and g | ravel and | | | | | | | НА | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | 3 — | END | OF BORING | | | | | | | | | | | | | | | |
| 34268 | DEP | TH: I | ORILLING METHOD | | | WAT | ER L | EVEL MEA | SURE | EMEN | ΓS | | | 1 | 1 | NOTE: | REFE | R TO |
| 3 P-00 | |)-3' I | Hand Auger | DATE | TIME | SAMPI DEPT | ED | CASING DEPTH | CAV | /E-IN PTH | FL | ORILLIN UID LE | IG VEL | WATE LEVE | | THE A | | |
| -LON(| | , I | ianu Augei | 9/3/24 | | 3.0 | _ | 0.0 | | .0 | 1 | | | Non | | SHEET | S FOR | R AN |
| W-LA | | | | | | | | | | | | | | | | XPLA | NATIC | N OF |
| ORP | BORIN COMPI | G LETED: | 9/3/24 | | | | | | | | | | | | T | ERMIN | OLOC | SY ON |
| AET_C | | | Rig: HA | | | | | | | | | | | | | TH | IS LO | Ĵ |



| | AET JO | B NO: | P-0034268 | 3 | | | | | LO | G OF | BOI | RING N | O | HA | B-03 | (p. 1 | of 1) | |
|--|---------------------|--------------------|--------------------------|------------|------------|---------------|---------|-----------------|-----------|--------------|-----|-------------------|-----------|--------------|---------|-------|-------|----------------|
| | PROJEC | CT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; l | Nor | thfield | | | | | | |
| | SURFA | CE ELEV | ATION: | | LATITUD | E:4 | 4.43 | 844648 | _ | LON | NGI | ΓUDE: | -93 | .1549 | | | | |
| | DEPTH IN FEET | | MATERIAL I | DESCRIPTIO | ON | | GE | EOLOGY | N | MC | SĄ | MPLE TYPE | REC | | | BORAT | | |
| | FEET | 4" T | | | | | FILI | т | | | | ITE | IN. | WC | DEN | LL | PL | %- #200 |
| | | 4" To ₁ | pson | | | | FILI | L | | | | | | | | | | |
| | | 22" E | ILL, mixture of silty | and and a | andrilaan | | | | | | | | | | | | | |
| | | clay, a | a little gravel, dark br | own (A-1- | b) (A-7-6) | | | | | | | | | | | | | |
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| 12/25 | | | | | | | | | | | | | | | | | | |
| 3DT 3/ | 2 - | | | | | | | | | | | | | | | | | |
| VELL. | | | | | | | | | | | | | | | | | | |
| CPT+V | | | | | | | | | | | | | | | | | | |
| AET | | | | | | | | | | | | | | | | | | |
| T.GPJ | | | | | | | | | | | | | | | | | | |
| ROJEC | 3 - | END | OF BORING | | | | | | | | | | | | | | | |
| AIL PF | | END | OF BOKING | | | | | | | | | | | | | | | |
| NS TF | | | | | | | | | | | | | | | | | | |
| L TOW | | | | | | | | | | | | | | | | | | |
| JIM QI | | | | | | | | | | | | | | | | | | |
| AY AN | | | | | | | | | | | | | | | | | | |
| OVERL | | | | | | | | | | | | | | | | | | |
| AND | | | | | | | | | | | | | | | | | | |
| 6 MILL | | | | | | | | | | | | | | | | | | |
| D 202 | | | | | | | | | | | | | | | | | | |
| THFIEL | | | | | | | | | | | | | | | | | | |
| 8 NOR | | | | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEP | TH: I | DRILLING METHOD | | | | | EVEL MEA | | | _ | | | | | NOTE: | REFE | R TO |
| JG P-0 | | 0-3' 1 | Hand Auger | DATE | TIME | SAMPI DEPT | ED H | CASING DEPTH | CAV DE | /E-IN PTH | FL | ORILLIN UID LE | IG VEL | WATE LEVE | ER L | THE A | TTAC | HED |
| T-LON | | | | 9/3/24 | | 3.0 | | 0.0 | 3 | .0 | | | | Non | e | SHEET | S FOF | R AN |
| ≥W-LA | Bonn | | | | | | | | | | | | | | | XPLA | | |
| | | IG LETED: | 9/3/24 | | | | | | | | | | | | T | ERMIN | | |
| AET | | S LG: | Rig: HA | | | | | | | | | | | | | TH | IS LO | j |



| | AET JC | DB NO: P-00342 | 268 | | | | | LC | G OF | BO | RING N | O | HA | B-04 | (p. 1 | of 1) |) |
|---|---------------------|---|----------------|------------|---------------|----------|-----------------|------|--------------|---------|-------------------|-----|--------------|----------|----------------|-------|---------------|
| | PROJE | CT: Northfield 202 | 26 Mill & O | verlay and | | | | Proj | ect; l | Noi | rthfiel | | | | | | |
| | SURFA | CE ELEVATION: | | LATITUD | E: | 44.43 | 38432 | | LO | NGI | TUDE: | -93 | .1527 | | | | |
| | DEPTH IN FEET | MATERIA | L DESCRIPTION | ON | | GE | EOLOGY | N | MC | SA | AMPLE ΓΥΡΕ | REC | | | BORAT | | |
| | FEET | | | | | FILI | <u> </u> | | | | IIFE | IN. | WC | DEN | LL | PL | %-#200 |
| | | 6" Topsoil | | | | FILI | L | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | 20" EILL mivtum of so | nd and condu | loom alaxy | | | | | | | | | | | | | |
| | | 30" FILL, mixture of sa little gravel, dark brown | i (A-1-b) (A-7 | 7-6) | a | | | | | | | | | | | | |
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| | 1 - | | | | | | | | | | | | | | | | |
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| 2/25 | | | | | | | | | | | | | | | | | |
| JT 3/1 | 2 — | | | | | | | | | | | | | | | | |
| ELL.GE | | | | | | | | | | | | | | | | | |
| PT+W | | | | | | | | | | | | | | | | | |
| \ET+C | | | | | | | | | | | | | | | | | |
| GPJ ∤ | | | | | | | | | | | | | | | | | |
| JECT | 3 — | | | | | | | | | | | | | | | | |
| IL PRO | 3 | END OF BORING | | | | | | | | | | | | | | | |
| IS TRA | | | | | | | | | | | | | | | | | |
| TOWN | | | | | | | | | | | | | | | | | |
| MILL | | | | | | | | | | | | | | | | | |
| Y AND | | | | | | | | | | | | | | | | | |
| ERLA | | | | | | | | | | | | | | | | | |
| ND O | | | | | | | | | | | | | | | | | |
| MILL A | | | | | | | | | | | | | | | | | |
| 2026 | | | | | | | | | | | | | | | | | |
| FIELD | | | | | | | | | | | | | | | | | |
| ORTH | | | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT GPJ AET+CPT+WELL. GDT 3/12/25 | DEF | PTH: DRILLING METHOI |) | | WAT | ER LE | EVEL MEA | SURF | EMFN' | ∐ TS | | | | <u> </u> | JOTE | DETT | D TC |
| P-003 | | | DATE | TIME | SAMPI DEPT | | CASING DEPTH | | /E-IN PTH | _ | ORILLIN UID LE | NG | WATI LEVE | | NOTE: THE A | | |
| ONG | (| 0-3' Hand Auger | 9/3/24 | THVIL | 3.0 | - | | | .0 | FL | UID LE | VEL | | | SHEET | | |
| /-LAT-L | | | 9/3/24 | | 3.0 | <u>'</u> | 0.0 | 3 | .U | | | | Non | | XPLA | | |
| ORP W | BORIN | NG LETED: 9/3/24 | | | | | | | | | | | | | ERMIN | | |
| AET_C(| DR: R | | | | | | | | | | | | | \dashv | TH | IS LO | G |



| | AET JO | B NO: | P-0034268 | 3 | | | | | LC | G OF | BOI | RING N | O | HA | B-05 | (p. 1 | of 1) | |
|--|---------------------|--------------------|-----------------------|------------|-------------|---------------|------|-----------------|------|--------------|---------|-------------------|------------|--------------|------|----------------|-------|----------------|
| | PROJEC | CT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; l | Nor | thfield | | | | | | |
| | | CE ELEV | ATION: | | LATITUD | E:4 | 4.43 | 384268 | | LO | NGI | ΓUDE: | -93 | .1507 | | | | |
| | DEPTH IN FEET | | MATERIAL I | DESCRIPTIO | ON | | GI | EOLOGY | N | MC | SA | MPLE TYPE | REC IN. | | I | BORAT | I | |
| | FEET | 4" To ₁ | nsoil | | | | FIL | Ι. | | | | | 1111 | WC | DEN | LL | PL | %-#20 0 |
| | | 1 10 | ρσοι | | | | 112 | | | | | | | | | | | |
| | | 32" Fl | ILL, mixture of silty | sand and c | lavey | | | | | | | | | | | | | |
| | | sand,a | little gravel, dark b | rown (A-1- | -b) (A-7-6) | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
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| | 1 - | | | | | | | | | | | | | | | | | |
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| 25 | | | | | | | | | | | | | | | | | | |
| T 3/12 | 2 - | | | | | | | | | | | | | | | | | |
| LL.GD | | | | | | | | | | | | | | | | | | |
| >T+WE | | | | | | | | | | | | | | | | | | |
| AET+CI | | | | | | | | | | | | | | | | | | |
| GPJ / | | | | | | | | | | | | | | | | | | |
| OJECT | 3 - | | OF POPULA | | | | | | | | | | | | | | | |
| AIL PR | | END | OF BORING | | | | | | | | | | | | | | | |
| NS TR | | | | | | | | | | | | | | | | | | |
| L 70V | | | | | | | | | | | | | | | | | | |
| ND MIL | | | | | | | | | | | | | | | | | | |
| RLAY A | | | | | | | | | | | | | | | | | | |
| OVEF | | | | | | | | | | | | | | | | | | |
| LL AN | | | | | | | | | | | | | | | | | | |
| 026 MI | | | | | | | | | | | | | | | | | | |
| FIELD 2 | | | | | | | | | | | | | | | | | | |
| ORTH | | | | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEP | <u> </u> тн∙ г | ORILLING METHOD | | | WAT | ER I | EVEL MEA | SURF | EMFN' | L TS | | | | | JOTE | DEEE | D 750 |
| P-003 | DEI | | | DATE | TIME | SAMPI DEPT | | CASING DEPTH | | /E-IN PTH | _ | ORILLIN UID LE | IG. | WATE LEVE | | NOTE: THE A | | |
| LONG | <u> </u> | 0-3' 1 | Hand Auger | 9/3/24 | 111111 | 3.0 | _ | 0.0 | | .0 | FL | UID LE | VEL | Non | | SHEET | | |
| V-LAT- | | | | 7/5/27 | | 3.0 | | 0.0 | | •• | | | \dashv | 11011 | | XPLA | | |
| CORP V | BORIN COMP | IG LETED: | 9/3/24 | | | | | | | | | | \top | | T | ERMIN | OLOC | SY ON |
| AET_C | | | | | | | | | | | | | | | | TH | IS LO | Ĵ |



| | AET JO | B NO: | P-0034268 | 3 | | | | | LO | G OF | BOI | RING N | O | HA | B-06 | (p. 1 | of 1) | |
|--|---------------------|-------------|------------------------------|---------------|------------|---------------|------|-----------------|------|--------------|------|-------------------|---------|--------------|------|-------|--------|----------------|
| | PROJEC | CT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; I | Nor | thfiel | | | | | | |
| | SURFA | CE ELEV | ATION: | | LATITUD | E:4 | 4.43 | 864688 | _ | LON | NGI' | ΓUDE: | -93 | .1483 | | | | |
| | DEPTH IN FEET | | MATERIAL I | DESCRIPTIO | ON | | GE | EOLOGY | N | MC | SA | MPLE YPE | REC | | | BORAT | | Г |
| | FEET | 411 T | | | | | EIL | т | | | | IFE | IN. | WC | DEN | LL | PL | % -#200 |
| DT 3/12/25 | 2 — | 4" Top | LL, mostly sand with (A-1-b) | h silt, light | brown and | | FIL | L | | | | НА | | | | | | |
| TRAIL PROJECT.GPJ AET+CPT+WELL.GI | 3 — | END | OF BORING | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | | | | | | | | | | | | | | | | | | |
| -00342 | DEP | тн: Ι | DRILLING METHOD | | | | | EVEL MEA | | | _ | DILLE | IC | W/A TT | | NOTE: | | |
| NG P | | 0-3' 1 | Hand Auger | DATE | TIME | SAMPI DEPT | H | CASING DEPTH | DE | /E-IN PTH | FL | ORILLIN UID LE | VEL | WATE LEVE | | THE A | | |
| AT-LC | | | | 9/3/24 | | 3.0 | | 0.0 | 3 | .0 | | | | Non | | SHEET | | |
| PW-L | B∪bini | IG. | | | | | | | | | | | _ | | | EDMIN | | |
| | | G LETED: | 9/3/24 | | | | | | | | | | \perp | | 1 | ERMIN | | |
| AET, | DR: R | S LG: | Rig: HA | | | | | | | | | | | | | ΙH | IS LOC | J |



| | AET JC | DB NO: P-0034 | 268 | | | | | LC | G OF | ВО | RING N | O | HA | B-07 | (p. 1 | of 1) |) |
|--|---------------------|----------------------------|----------------|-----------|---------------|-----------|-----------------|-----------|--------------|-----|-------------------|-----------|--------------|----------|-------|-------|---------------|
| | PROJE | CT: Northfield 20 |)26 Mill & O | verlay an | | | | Proj | ect; I | Noi | rthfiel | | | | | | |
| | SURFA | CE ELEVATION: | | LATITUE | DE:4 | 4.43 | 844988 | | LO | NGI | TUDE: | -93 | .1458 | | | | |
| | DEPTH IN FEET | MATERI | AL DESCRIPTION | ON | | GI | EOLOGY | N | MC | SĄ | AMPLE ΓΥΡΕ | REC | | | BORA | | |
| | FEET | | | | | FIL | т | | | | IIFE | IN. | WC | DEN | LL | PL | %-#200 |
| | | 6" Topsoil | | | | FIL | L | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | 30" FILL, mostly silty | cand with area | zal dork | | | | | | | | | | | | | |
| | | brown (A-1-b) | sand with grav | ci, uaik | | | | | | | | | | | | | |
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| DT 3/ | 2 - | | | | | | | | | | | | | | | | |
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| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | DEP | TH: DRILLING METHO |)D | | WAT | ER L | EVEL MEA | SURE | EMEN | TS | | | • | | NOTE: | REFE | R TO |
| G P-0 | | 0-3' Hand Auger | DATE | TIME | SAMPI DEPT | LED TH | CASING DEPTH | CAV DE | /E-IN PTH | FL | ORILLIN UID LE | NG VEL | WATI LEVE | ER EL | THE A | TTAC | HED |
| T-LON | <u> </u> | o manu migu | 9/3/24 | | 3.0 | - | 0.0 | | .0 | | | | Non | | SHEET | S FOF | R AN |
| W-LA | | | | | | | | | | | | | | F | EXPLA | NATIO | ON OF |
| CORP | BORIN COMP | IG LETED: 9/3/24 | | | | | | | | | | | | T | ERMIN | | |
| AET | | S LG: Rig: HA | | | | | | | | | | | | | TH | IS LO | G |



| | AET JO | DB NO: P-0034268 | | | | | LC | G OF | BORING N | O | HA | B-08 | (p. 1 | of 1) |) |
|--|---------------------|-------------------------------------|-------------|-------------|---------------|----------------------|------|--------------|---------------------|------------|--------------|----------|-------|-------|----------------|
| | PROJEC | CT: Northfield 2026 | Mill & O | verlay and | Mill | Towns Trail | Proj | ect; I | Northfiel | d, Mi | nnesc | ota | | | |
| | SURFA | CE ELEVATION: | | LATITUDI | E: 4 | 4.43775939 | | LON | NGITUDE: | -93 | .1438 | 9346 | | | |
| | DEPTH IN FEET | MATERIAL D |)ESCRIPTIC | N | | GEOLOGY | N | MC | SAMPLE TYPE | REC IN. | FIELI |) & LA | BORA | TORY | TESTS |
| | FEET | | DESCRIPTION | 71 1 | | | IN . | IVIC | TYPE | IN. | WC | DEN | LL | PL | % -#200 |
| | | 2" Topsoil | | | | FILL | | | | | | | | | |
| GDT 3/12/25 | 1 — 2 — | 25" FILL, mostly silty sand (A-1-b) | l with grav | el, brown | | | | | НА | | | | | | |
| AET_CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | | END OF BORING | | | | | | | | | | | | | |
| 34268 | DEP | TH: DRILLING METHOD | | | WAT | L ER LEVEL MEA | SURE | EMEN | ΓS | | | <u> </u> | NOTE: | RFFF | R TO |
| P-00. | ο / | 2.21 Hand A | DATE | TIME | SAMPI DEPT | ED CASING H DEPTH | CAV | /E-IN PTH | DRILLIN FLUID LE | NG VEI | WATI LEVE | | THE A | | |
| -LONG | U | 2.3' Hand Auger | 9/3/24 | | 2.3 | | + | .3 | I LOID LE | 1 11 | Non | _ | SHEET | | |
| V-LAT | | | , - | | | | | - | | | | | XPLA | NATIC | ON OF |
| ORPV | BORIN | IG LETED: 9/3/24 | | | | | | | | | | T | ERMIN | IOLOC | GY ON |
| AET_C | DR: R | | | | | | | | | | | | TH | IS LO | G |

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| AET J | IOB NO: | P-0034268 | } | | | | | LO | G OF | BOI | RING N | O | HA | B-09 | (p. 1 | of 1) | |
|--|----------|--|------------|-------------|---------------|----------|-----------------|------|-------------|-----|-------------------|------------|--------------|------|----------------|-------|----------------|
| PROJ | ECT: | Northfield 2026 | Mill & O | verlay and | | | | Proj | ect; I | Nor | thfield | | | | | | |
| SURF. | ACE ELE | EVATION: | | LATITUD | E:4 | 4.43 | 733192 | _ | LO | NGI | ΓUDE: | -93 | .1417 | | | | |
| DEPTH IN FEET | I | MATERIAL I | DESCRIPTIO | ON | | GE | EOLOGY | N | MC | SA | MPLE TYPE | REC IN. | | I | BORAT | | |
| FEET | 1 | opsoil | | | | FILI | r | | | | ITE | 111. | WC | DEN | LL | PL | %-#20 0 |
| | | = | cond and a | lovov gond | | FILL | L | | | | | | | | | | |
| T+CPT+WELL.GDT 3/12/25 | a litt | FILL, mixture of silty le gravel, dark brown (| | layey sand, | | | | | | | НА | | | | | | |
| PROJECT.GPJ AET | END | O OF BORING | | | | | | | | | | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT.GPJ AET+CPT+WELL.GDT 3/12/25 | EPTH: | DRILLING METHOD | | | WATI | ER LŁ | EVEL MEA | SURE | EMEN | TS | | | | | NOTE: | DEFE | P. TO |
| P-003 | | | DATE | TIME | SAMPI DEPT | | CASING DEPTH | | E-IN PTH | _ | DRILLIN UID LE | IG_ | WATI LEVE | | NOTE: THE A | | |
| ONG | 0-3' | Hand Auger | | THVIE | | _ | | | | FL | UID LE | VEL | | | THE A | | |
| -LAT- | | | 9/3/24 | | 3.0 | | 0.0 | 3 | .0 | | | \perp | Non | | XPLA | | |
| BORI | NG NG | 0/2/24 | | | | | | | | | | \dashv | | | ERMIN | | |
| S COM DR: | PLETED: | | | | | \dashv | | | | | | \dashv | | - | | IS LO | |
| ∡l nk∷ | IND L | J. KIg: MA | | | | | | | | | | | | | | | |



| | AET JO | B NO: | P-0034268 | | | | | LC | OG OF | BORING | NO | HA | B-10 | (p. 1 | of 1) | <u> </u> |
|--|---------------------|-------------|---|---------------------------|------------------------|---------------|----------------------|-----------|--------------|---------------|---------------|--------------|----------|--------|--------|----------------|
| | PROJEC | CT: | Northfield 2026 | Mill & Ov | verlay and | Mill | Towns Trail | Proj | ect; l | Northfi | eld, M | inneso | ota | | | |
| | SURFAC | CE ELEV | ATION: | | LATITUDI | E: 4 | 1.44277637 | | LO | NGITUD | 3: 93 | 3.1424 | 5579 | · | | |
| | DEPTH IN FEET | | MATERIAL D | ESCRIPTIO |)N | | GEOLOGY | N | MC | SAMPI TYPE | E REC | FIELI |) & L/ | ABORAT | TORY T | TESTS |
| | FÉÈT | | | | | | | 1 | IVIC | TYPE | IN. | WC | DEN | LL | PL | % -#200 |
| GDT 3/12/25 | 2 - | sandy | LL, mixture of grave lean clay, trace roots (A-1-b) | elly sand was at surface. | ith silt and , dark | | FILL | | | HA | | | | | | |
| CORP W-LAT-LONG P-0034268 NORTHFIELD 2026 MILL AND OVERLAY AND MILL TOWNS TRAIL PROJECT. GPJ AET+CPT+WELL. GDT 3/12/25 | | END | OF BORING | | | | | | | | | | | | | |
| 30342¢ | DEP | TH: I | DRILLING METHOD | | Г | | ER LEVEL MEA | | | | | | | NOTE: | REFE | R TO |
| G P. | 0-2 | 2.2' I | Hand Auger | DATE | TIME | SAMPI DEPT | ED CASING H DEPTH | CAV DE | VE-IN PTH | DRIL FLUID | LING LEVEL | WATI LEVE | ER EL | THE A | TTAC | HED |
| I-LO | | | | 9/3/24 | | 2.2 | 0.0 | 2 | 2.2 | | | Non | e | SHEET | TS FOF | RAN |
| W-L | | _ | | | | | | | | | | | | EXPLA1 | | |
| | BORIN COMPI | G LETED: | 9/3/24 | | | | | | | | | |]7 | ERMIN | | |
| Ā | DR: R | S LG: | Rig: HA | | | | | | | | | | | | IS LOC | |
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Report of Geotechnical Exploration 2026 Mill and Overlay and Mill Towns Trail Project, Northfield, MN March 12, 2025 AET Report No. P-0034268



Appendix B

Geotechnical Report Limitations and Guidelines for Use

Appendix B Geotechnical Report Limitations and Guidelines for Use Report No. P-0034268

B.1 REFERENCE

This appendix provides information to help you manage your risks relating to subsurface problems which are caused by construction delays, cost overruns, claims, and disputes. This information was developed and provided by GBA¹, of which we are a member firm.

B.2 RISK MANAGEMENT INFORMATION

B.2.1 Understand the Geotechnical Engineering Services Provided for this Report

Geotechnical engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical engineering services is typically a geotechnical engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

B.2.2 Geotechnical Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client.

Likewise, geotechnical engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Geoprofessional Business Association, 15800 Crabbs Branch Way Suite 300, Rockville, MD 20850 Telephone: 301/565-2733: www.geoprofessional.org, 2019

Appendix B Geotechnical Report Limitations and Guidelines for Use Report No. P-0034268

B.2.3 Read the Full Report

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. Read and refer to the report in full.

B.2.4 You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- · project ownership.

As a general rule, always inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

B.2.5 Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

B.2.6 This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations only after observing actual subsurface conditions exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.

B.2.7 This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- · confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

B.2.8 Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical engineering report, along with any attachments or appendices, with your contract documents, but be certain to note conspicuously that you've included the material for information purposes only. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the

Appendix B Geotechnical Report Limitations and Guidelines for Use Report No. P-0034268

report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, only from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and be sure to allow enough time to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

B.2.9 Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. Read these provisions closely. Ask questions. Your geotechnical engineer should respond fully and frankly.

B.2.10 Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical engineering study. For that reason, a geotechnical engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Unanticipated subsurface environmental problems have led to project failures. If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

B.2.11 Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. Geotechnical engineers are not building-envelope or mold specialists.



Appendix F - Public Feedback

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.lves@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

| 1. | ROADWAY PAVEMENT CONDITION | |
|----|---|---|
| | Do you feel the pavement surface has deteriorated to the point it r | needs to be fixed? |
| | Yes or No 🔀 | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE | EROSION |
| | I have observed street ponding after a significant rain locate | ed at: 🖊 🗸 |
| | | (address) |
| | I have observed areas of erosion along the boulevard at: | No! |
| | | (address) |
| | Does your home or business have a sump pump? | |
| | | (address) |
| | Yes or No | |
| | If yes, would you be interested in a sump line extended beyond theYes or | e curb to hook your sump pump discharge to? |
| 3. | SANITARY SEWER | |
| | <u>X</u> We have <u>not</u> experienced any problems with our sanitary so | ewer service. |
| | We have experienced problems with our sanitary sewer ser | vice. |
| | | (address) |

| | perienced problems with our water service. |
|--------------------|--|
| | (address) |
| | |
| DEWALKS AND | TRAILS (WALKING AND BIKING) |
| e there sidewalks | s or trails that you believe are missing that need to be added to the project? |
| Yes or 🔾 | ∠ No |
| Yes, please provi | de location: |
| | |
| | |
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| | |
| | |
| | ENTS / QUESTIONS |
| ENERAL COMM | |
| | dditional information you would like to be considered as a part of these improvements: |
| lease offer any ad | |
| lease offer any ad | STOP SPENDING +AX DOLLAY MONEY ON VANT AND ONLY ON NEEDS! YOUR DOING BEST to fax me out of my Home TAXEN CITY IN THE STATE! |



PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.lves@northfieldmn.gov or dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
|). | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| , | 1 have observed street ponding after a significant rain located at: |
| | (address) |
| | No I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes or No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | (address) |
|--------------|---|
| SIDEWAI K | S AND TRAILS (WALKING AND BIKING) |
| | dewalks or trails that you believe are missing that need to be added to the project? |
| Yes | or No |
| | e provide location: |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| GENERAL (| COMMENTS / QUESTIONS |
| Please offer | any additional information you would like to be considered as a part of these improvements: |
| Plea | will have. Our toyes increased over for 2025, + there are more increased in the offine. Please Boroider this. |
| this | will have. Our toyes increased over |
| P/410 | in the offine. Please consider this |
| - | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

dents who live along the project corridor as you have first hand knowledge of how

| ROADWAY PAVEMENT CONDITION |
|--|
| Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| Yes or No |
| STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| I have observed street ponding after a significant rain located at: |
| (address) |
| I have observed areas of erosion along the boulevard at: |
| (address) |
| |
| Does your home or business have a sump pump? |
| (address) |
| Yes orNo |
| If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| Yes or No |
| SANITARY SEWER |
| We have not experienced any problems with our sanitary sewer service. |
| We have experienced problems with our sanitary sewer service. |
| (address) |
| |

| | (address) |
|-------------------|--|
| S | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| 4 | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| _ | ✓_Yes or No |
| ŀ | f Yes, please provide location: |
| | Walking biking paths between Michigan & Prairie, going South, turing left towards Marrie (Crossing Midg) |
| The second second | letelen Biken paths auth of Tefferson Plugand Praise apong toward Superior, Maple, Con and back warred (circulated) |
| | Walkers Bikers Path South of Superior Cereling around largest Pand (abbey Rd Grean) prevenent around these areas are beading counter carese soprey for walkery lessures |
| (| GENERAL COMMENTS / QUESTIONS |
| F | Please offer any additional information you would like to be considered as a part of these improvements: |
| | |
| | |
| _ | * |
| | |
| | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| ROADWAY PAVEMENT CONDITION |
|---|
| Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| Yes or No |
| STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| I have observed street ponding after a significant rain located at: |
| (address) |
| I have observed areas of erosion along the boulevard at: |
| (address) |
| Does your home or business have a sump pump? (address) |
| Yes or No |
| |
| If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to?Yes or No |
| |
| Yes or No |
| SANITARY SEWER |

| _ | We have experienced problems with our water service. |
|----|---|
| | (address) |
| 0 | IDEWALKS AND TRAILS (WALKING AND BIKING) |
| | |
| A | re there sidewalks or trails that you believe are missing that need to be added to the project? |
| _ | Yes orNo |
| lf | Yes, please provide location: |
| | |
| - | |
| _ | |
| | |
| | |
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| _ | |
| | |
| G | SENERAL COMMENTS / QUESTIONS |
| P | Please offer any additional information you would like to be considered as a part of these improvements: |
| _ | 7 111 Dist |
| - | The new bike lanes on Mairie, Di, are perfectly adogual |
| | The new bike lanes on Prairie St. are perfectly adequate for the minimal like traffic. A separated bikeway is NOT necessary, and is a waste of money. |
| _ | 15 NOT nicessary, and is a waste of money. |
| _ | |
| | |
| - | |

Thoughts on Installation of Concrete Barriers on Prairie Street Bike Lanes

A number of us in the Prairie Street area have met to discuss City Council's proposal to install concrete barriers on the existing bike lanes on Prairie Street. We have spoken with a large number of adult bikers, parents of child bikers, residents on Prairie Street and its cul-de-sacs, auto and service/delivery truck drivers, residents who have already had barriers installed, and those with whom we interact in our social venues.

We support safe biking for all ages and abilities. However, we believe the current painted bike lanes you have designed are working well and that installing permanent barriers would cause unnecessary problems including:

- *Reduced Safety for Young and Inexperienced Riders: Concrete barriers present rigid obstacles that can cause crashes and injuries, especially among children.
- *Increased Difficulty for Drivers: In driving down streets with cement barriers we've noted tire marks on the side of the barriers, indicating that cars are hitting them. We've heard concerns that drivers, especially inexperienced ones, who hit the barriers might then oversteer and connect with oncoming traffic. Some have noted damage to cars, as well as concern that these hits can cause off balance wheels which could get the driver in trouble in future driving.
- *Negative Impact on Neighborhood Aesthetics: Bright poles, concrete structures and street bulges would drastically alter the visual character of our residential street.
- *Lack of Justification: Prairie Street has low bicycle traffic volumes and no direct access to an elementary school or sports fields. There is no demonstrated need for additional bike infrastructure.
- *Allocation of City Resources: If possible, funds might be better reallocated to repairing potholes, maintaining existing streets or addressing greater safety concerns.

In talking with various Northfielders we concluded that the large majority feel that the current painted bike lanes balance safety and the neighborhood's quality of life. In short, they are doing the job! We urge the City Council to preserve the current street design and prioritize smart, resident-supported improvements for our community.

We realize that your job is a difficult one, and we thank you for your consideration!





2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| | Yes X or No or No Street! |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | 2.2 |
| | XYes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or X No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | We <u>have</u> experienced problems with our water service. |
|---|--|
| | (address) |
| 6 | IDEWALKS AND TRAILS (WALKING AND BIKING) |
| 1 | re there sidewalks or trails that you believe are missing that need to be added to the project? |
| , | ✓ Yes orNo |
| f | Yes, please provide location: |
| | on lefterson Pkwy my children ride bike to feel safe on |
| | the sidewalks when the street narrows + there is |
| | no bike path - Every time they vide bike on the sideu |
| | in these places along letterson Pruy, they get |
| | flicked off, cyroled at, honked at + heckled |
| | by pedestrians screaming at them to get of the Sidewalk with their bikes |
| | They he longer vide bike in town |
| | In the reverse I have walked on the numbite lanes |
| | on Made Street + have been screamed at + told |
| | to get out Because it is only for bikes so I no |
|) | on Maple Street + have been screamed at + told to get out Because it is only for bikes so I no ENERAL COMMENTS / QUESTIONS longer walk in my neighborhood- |
| | lease offer any additional information you would like to be considered as a part of these improvements: |
| | The efferson Play Crossings, are bad + |
| | The congestion is bad + it is |
| | very dangerous for pedestrians+ |
| | bikers - both physically + |
| | emotionally dengerous |
| | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes X or No maple Street and Maple Court Fix the recessed manhole covers! |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | X I have observed street ponding after a significant rain located at: |
| | Corner of Maple St and Afton Dr. (address) Corner of Maple St and East Ridge Dr. |
| | Corner of Maple St and East Ridge Dr. |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| | Yes or X No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or No |
| | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | xperienced problems with our water service. |
|-------------------|--|
| | (address) |
| IDEWALKS AND | TRAILS (MALIZING AND DUZING) |
| | TRAILS (WALKING AND BIKING) |
| | ss or trails that you believe are missing that need to be added to the project? |
| Yes or _ | X_No |
| Yes, please pro | vide location: |
| | |
| | |
| | |
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| | |
| | MENTO / OUTOTIONS |
| | MENTS / QUESTIONS |
| lease offer any a | dditional information you would like to be considered as a part of these improvements: |
| See | attached sheets, |
| | |
| | |
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| | |
| | |

General Comments to 2026 Mill and Overlay & Mill Towns State Trail Improvement Project

- 1. We both have concerns about the Mill Towns State Trail proposed improvement project. Could the trail along Jefferson Parkway be extended all the way to Spring Creek Road rather extending the pedestrian path behind existing homes and disturbing the area around the ponds and stream? It appears that you have already proposed an off-street trail to do that. Why do you need both? By not having the Mill Street State Trail as proposed, the walking path could remain as is and a larger bike path wouldn't be needed. Will the Mill Towns State Trail be built further down on Spring Creek Road past the entrance indicated on the map? Who is paying for this? Will this be an increase to our already overtaxed property taxes and City taxes? We are opposed if it is an increase to our city taxes.
- 2. We are totally against the proposed On-Street Separated Bikeway for Prairie Street. Tom Gill Construction Inc developed much of Maple Street. We live on Maple Court and cannot believe what the on-street separated bikeway has done to our neighborhood and neighbors. We frequently walk these streets. There are very few bike riders using the bikeway on Maple Street and Prairie Street. When we have seen a bike rider, many times they aren't even using the dedicated curbed bikeway. They are riding on the right side of the street on which we were taught to ride....with the flow of traffic. Even with the dedicated on-street separated bikeway, riding on the right side is riding against the traffic. It just doesn't feel right and can be dangerous even with the curbed bikeway. Since our Northfield streets are all different on which side of the road bike riders are to ride, adding expense to redo Prairie Street that already has bike markings and signage doesn't make sense!

Another reason we are against on-street separated bikeways is the poor snow removal we have seen these past two winters. After a heavy snow, the bikeway usually gets plowed several times during the day because the plows on the actual driving lanes throw snow onto the bikeway, thus additional plowing is necessary. Then, the special sweeper plow that is used to clean the bikeway throws its huge amount of snow onto the neighbor's driveways. The neighbors need additional plowing and removal because of this. The build up of snow that our neighbors have endured at the end of their driveway is ridiculous, just because of the on-street separated bikeway. Our experience living on Maple Court is that the on-street bikeway gets precedence over plowing our court. That doesn't make sense.

When out of town visitors come to our house, most are shocked by the raised curb, narrow roadway and curved street that Maple Street has become. The lines on the street, if visible, and the raised curb, can't be seen after a heavy snowfall. Many of our

visitors have turned onto the bikeway and damaged their car because of it. One of our neighbors had an additional cement pad poured as she couldn't back out of her driveway safely without being concerned that she would hit the raised bikeway curb or have an accident with oncoming traffic.

Another occurrence we have experienced these past few years with the on-street separated bikeway on Maple Street is that there is hardly room for two cars to pass one another due to the narrow street. If there is a car parked on the designated parking side, we have to come close to or cross the center median line to get past it. There are many vehicles that don't fit onto the designated parking side.

The biggest reason that an on-street separated bikeway curbed lane isn't needed is that there are hardly any bike riders that use it. Has there ever been a study to see how many bike riders actually use these bike lanes? The exuberant cost and chaos of these onstreet separated bikeway lanes cannot be justified for the few that use it! Why is an on-street separated bikeway even being proposed for Prairie Street? Bike riders can use Maple Street if they want to get to Woodley Street. Or, they can use the Mill Towns State Trail once completed to get there.

We are vehemently against our on-street separated bikeway on Maple Street and would like to have it removed. We can't believe that there is another on-street separated bikeway proposed for Prairie Street. Please do not consider installing it there too!

From: To:

Subject: 2026 Mill and Overlay & Mill Town trail - Jefferson Parkway Signage

Date: Tuesday, April 15, 2025 9:58:55 AM

You don't usually receive emails from this address. Make sure you trust this sender before taking any actions.

Jacob,

With this proposed project, please review the street name signage for Jefferson Parkway from the roundabout going east. The signage all states "Jefferson Parkway" with no east designation. Highway 246 (Division street) is the dividing line for east and west street designations in the city of Northfield. Jefferson Parkway going to the east of Highway 246 has never been labeled as "Jefferson Parkway East".

The map that came with the mailing about this project is the first I have ever seen Jefferson Parkway labeled "Jefferson Parkway East". I think it's time to get the street name correct and inline with all the other streets in town. Would you agree?

Please let me know your conclusion.

Thanks,



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | |
|----|--|---|
| | Do you feel the pavement surface has deteriorated to the point it no | eeds to be fixed? |
| | Yes or No | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE E | ROSION |
| | 1 have observed street ponding after a significant rain located | d at: |
| | Corner of East Ridge + Maple | |
| | I have observed areas of erosion along the boulevard at: | |
| | | (address) |
| | | - 14 - 124 |
| | Does your home or business have a sump pump? | |
| | Yes | (address) |
| | X Yes or No | |
| | | |
| | If yes, would you be interested in a sump line extended beyond the | curb to hook your sump pump discharge to? |
| | Yes or _X_No | |
| 3. | SANITARY SEWER | |
| | We have <u>not</u> experienced any problems with our sanitary sev | ver service. |
| | We have experienced problems with our sanitary sewer servi | |
| | | (address) |
| | | |

| 4. | WATERMAIN |
|----|--|
| | We have not experienced any problems with our water service. |
| | We have experienced problems with our water service. |
| | (address) |
| 5. | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or No |
| | If Yes, please provide location: |
| | Please do not build any more bike paths with concrete dividers. |
| | |
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| | |
| 6. | GENERAL COMMENTS / QUESTIONS |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
| | It's very dangerous to enter the bike path |
| | needs to be removed at that interspection. |
| | Riding a bike up the hill on the bike path |
| | & trying to turn night onto Aldrich Dr. one |
| | has to look behind and also hope that a |
| | usu turn. The concrete opening at Aldrich Dr. |
| | should be as wide as they are on all of the |
| | other streets that intersect the maple St. |
| | bike path. |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No / |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | We have experienced problems with our water service. |
|-------|---|
| | |
| | (address) |
| SIDE | WALKS AND TRAILS (WALKING AND BIKING) |
| Are t | here sidewalks or trails that you believe are missing that need to be added to the project? Yes or No |
| If Ye | s, please provide location: |
| | |
| | |
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| - | |
| | |
| GEN | ERAL COMMENTS / QUESTIONS |
| | ERAL COMMENTS / QUESTIONS se offer any additional information you would like to be considered as a part of these improvements: |
| | |
| | se offer any additional information you would like to be considered as a part of these improvements: |
| | se offer any additional information you would like to be considered as a part of these improvements: |
| | se offer any additional information you would like to be considered as a part of these improvements: |
| | se offer any additional information you would like to be considered as a part of these improvements: |
| | lease offer any additional information you would like to be considered as a part of these improvements: Lease discontinue adding the loncrete parties between streets and bake paths! he bake paths all vary & I is ve |
| | se offer any additional information you would like to be considered as a part of these improvements: |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | |
|----|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | | | |
| | Yes or No | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | |
| | I have observed street ponding after a significant rain located at: | | | |
| | have observed street ponding after a significant rain located at: (address) CIN FRONTOF MY HOUSE | | | |
| | I have observed areas of erosion along the boulevard at: | | | |
| | (address) | | | |
| | Does your home or business have a sump pump? | | | |
| | · 'mal | | | |
| | Yes orV No | | | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? | | | |
| | Yes orNo | | | |
| 3. | SANITARY SEWER | | | |
| | We have not experienced any problems with our sanitary sewer service. | | | |
| | We have experienced problems with our sanitary sewer service. | | | |
| | (address) | | | |
| | | | | |

| We have experienced problems with our water service | |
|--|---|
| we have expenenced problems with our water service | |
| | (address) |
| | |
| SIDEWALKS AND TRAILS (WALKING AND BIKING) | |
| Are there sidewalks or trails that you believe are missing that | need to be added to the project? |
| ✓Yes orNo | |
| f Yes, please provide location: | |
| | 1 A. 12 |
| SIBLEY DRIVE COULD USE A | SIDEWACK |
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| | |
| GENERAL COMMENTS / QUESTIONS | |
| | ments: |
| Please offer any additional information | 7 1 |
| Please offer any additional information. PLEASE do Not and year | ne pavement without |
| Please offer any additional information PLEASE do not and rive addressing the woefully in | ne pavement without adequate + out dated drawn |
| Please offer any additional information. PLEASE do not and read addressing the workfully in system. I have had to | ne pavement without adequate + out dated drawn neplace competing my lower |
| Please offer any additional information. PLEASE do not and really in addressing the woefully in system. I have had to level 3 times in 15 years a | ne pavement without adequate to ent dated drawn replace competin my lower lucto water coming into on- |
| Please offer any additional information. PLEASE do not and read addressing the woefully in system. I have had to level 3 times in 15 years a lower level after backing up and | ne pavement without adequate to ent dated drawn replace competin my lower lucto water coming into one it our front lawn. The st |
| addressing the woefully in system. I have had to level 3 times in 15 years a lower level after backing up and drain is not adequate. Done | ne pavement without adequate to ent dated drawn replace competin my lower lucto water coming into one it our front lawn. The st |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| ROADWAY PAVEMENT CONDITION |
|--|
| Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| Yes or No |
| STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| I have observed street ponding after a significant rain located at: |
| intersection of Maple & End Rids o (address) |
| I have observed areas of erosion along the boulevard at: |
| (address) |
| Does your home or business have a sump pump? |
| (address) |
| Yes orNo |
| If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| Yes or \sum No |
| SANITARY SEWER |
| We have <u>not</u> experienced any problems with our sanitary sewer service. |
| We have experienced problems with our sanitary sewer service. |
| (address) |
| |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | intersection of Maple & Fast Kinds o (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or \sum No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |
| | |

| WATERMAIN |
|--|
| We have <u>not</u> experienced any problems with our water service. |
| We <u>have</u> experienced problems with our water service. |
| (address) |
| |
| SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| Yes orNo |
| If Yes, please provide location: |
| |
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| |
| CENEDAL COMMENTS / OUTSTIONS |
| GENERAL COMMENTS / QUESTIONS |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| |
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| |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | |
|----|---|---|
| | Do you feel the pavement surface has deteriorated to the point it r | needs to be fixed? |
| | Yes or NoX | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE | EROSION |
| | l have observed street ponding after a significant rain locate | ed at: |
| | | (address) |
| | I have observed areas of erosion along the boulevard at: | |
| | | _ (address) |
| | Does your home or business have a sump pump? | |
| | | _(address) |
| | Yes orNo | |
| | If yes, would you be interested in a sump line extended beyond the | e curb to hook your sump pump discharge to? |
| | Yes or No | |
| 3. | SANITARY SEWER | |
| | We have not experienced any problems with our sanitary se | wer service. |
| | We have experienced problems with our sanitary sewer sen | vice. |
| | | _ (address) |

| 4. | WATERMAIN |
|----|--|
| | We have not experienced any problems with our water service. |
| | We have experienced problems with our water service. |
| | (address) |
| 5. | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or _X_No |
| | If Yes, please provide location: |
| | It looks on the deagram that a sidewall is contemplated on the last side of Diains of from Prairie then Ch. to Lie Dine |
| | and there is a walking lane on the east and Prairie St. algo, |
| | between Prairie View Ct. And Premi Circle. |
| | The macadan surfacion Mill Cown State Trail does Keed |
| 6. | GENERAL COMMENTS / QUESTIONS |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
| | to be could be asked to pay for a sidewall on the cast side |
| | |
| | |
| | |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or XNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes orX No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We <u>have</u> experienced problems with our sanitary sewer service. |
| | (address) |
| | |

| | | (address) | |
|----------------|----------------------------------|---|------|
| IDEWALKS A | ND TRAILS (WALKING AND B | IKING) | |
| re there sidew | | missing that need to be added to the project? | |
| | ovide location: | | |
| | | | |
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| | | | |
| | | | |
| ENERAL CO | IMENTS / QUESTIONS | | |
| ease offer an | additional information you would | l like to be considered as a part of these improvemen | nts: |
| | | | |
| | | | |
| | | | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| ** | |
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after, a significant rain located at: |
| | (address) The Powesh part of the streeth is in |
| | X I have observed areas of erosion along the boulevard at: |
| | but of muhan |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) Frement Ciary |
| | Yes or _X No |
| | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |
| | |

| _ | (address) |
|--------|---|
| SIDEV | ALKS AND TRAILS (WALKING AND BIKING) |
| | ere sidewalks or trails that you believe are missing that need to be added to the project? |
| | please provide location: |
| | |
| | |
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| | |
| GENE | RAL COMMENTS / QUESTIONS |
| Please | offer any additional information you would like to be considered as a part of these improvements: |
| | The buke lones are fine - there is n |
| | need for coverte barriers. |



Project questionnaire - PRAIRIE ST,

(N. OF JEFFERSON; S. OF WOODLEY)

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

The City values input from all residents, especially those who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments and concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire.

Completed questionnaires can be hand-delivered at the Neighborhood Meeting, dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street or emailed to Jacob.lves@northfieldmn.gov.

| Roddwdy pavement condition - PRAIRIE ST | |
|---|----|
| Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | |
| | |
| Storm sewer, storm water drainage and surface erosion | |
| I/We have observed street ponding after a significant rain | |
| Located at: | |
| I/We have observed areas of erosion along the boulevard | |
| Located at: | |
| Does your home or business have a sump pump? | |
| Yes orNo | |
| Address | |
| If yes, would you be interested in a sump line extended beyond the curb to hook your sump pur | np |
| discharge to? | |
| Ves or X No | |

| Sanitary sewer |
|--|
| |
| I/We <u>have</u> experienced problems with our sanitary sewer service |
| Address |
| Watermain |
| I/We have <u>not</u> experienced any problems with our water service |
| I/We <u>have</u> experienced problems with our water service |
| Address |
| Sidewalk and trails (walking and biking) |
| Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| Yes or X_No |
| If yes, please provide location: |
| |
| Conord comments and questions |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: |
| REVERT TO THE PREVIOUS LANES, & REMOVE BIKE |
| TRAILS TO IMPROVE SAFETY. BIKE TRAFFIC IS MINIMA |
| SINCE NO SCHOOL, BIKERS GOING NORTH FROM JEFFERSO |
| TO WOODLEY, ALMOST ALL USE THE EAST PARKING CANE |
| WHICH IS SELDOM USED FOR RAPKING. |
| PERHAPS CONVERT TO 15 MPH ZONE, BUTE TO HILYCURVE @ POPPY ST. OF THEN SIBLEY SWALE PARK. |



3.

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| displication at the Engineering Office located at Northheld Oily H. | an, ovi washington onest. |
|---|---------------------------------------|
| 1. ROADWAY PAVEMENT CONDITION | |
| Do you feel the pavement surface has deteriorated to the point it | needs to be fixed? |
| Yes or No | |
| | |
| 2. STORM SEWER, STORM WATER DRAINAGE AND SURFAC | |
| I have observed street ponding after a significant rain loc | cated at: |
| Lia Drive a Lindberg Ct. | (address) Intersection |
| I have observed areas of erosion along the boulevard a | at: |
| | (address) |
| | |
| Does your home or business have a sump pump? | |
| | (address) |
| | |
| Yes or No | ** |
| | to back your sump nump discharge to? |
| If yes, would you be interested in a sump line extended be | eyond the curb to nook your sump pump |
| | |
| Yes orNo | |
| - THE STATE | |
| SANITARY SEWER | maitary sewer service. |
| We have <u>not</u> experienced any problems with our | Samary Sonor Constant |
| We have experienced problems with our sanitary | sewer service. |
| We have experienced problems with | |
| We <u>liave</u> exponent | · Almon |
| We <u>liave exponents</u> | (address) |

| 4 | . WATERMAIN |
|----|--|
| | We have not experienced any problems with our water service. |
| | We have experienced problems with our water service. |
| | Tree Roots Back up (address) |
| | (audiess) |
| 5. | SAFER AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes orNo |
| | |
| | If Yes, please provide location: |
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| | WATER LANGUE BY AND LONG BURNEY AND AND ADDRESS OF THE PARTY OF THE PA |
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| 6. | GENERAL COMMENTS / QUESTIONS |
| | Please offer any additional information you would like to be considered as a part of these improven |
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| | THE RESERVE THE PROPERTY OF THE PARTY OF THE |
| | THE RESERVE OF THE PARTY OF THE |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | | | | | |
|----|---|--|--|--|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | | | | | | | |
| | Yes or No Please pave Hall Ave/Spring Creek Rd between Huron and Woodley. It is always really rough- | | | | | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | | | | | |
| | I have observed street ponding after a significant rain located at: | | | | | | | |
| | (address) | | | | | | | |
| | I have observed areas of erosion along the boulevard at: | | | | | | | |
| | (address) | | | | | | | |
| | | | | | | | | |
| | Does your home or business have a sump pump? | | | | | | | |
| 3. | (address) | | | | | | | |
| | Yes orNo | | | | | | | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo | | | | | | | |
| | SANITARY SEWER | | | | | | | |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. | | | | | | | |
| | We have experienced problems with our sanitary sewer service. | | | | | | | |
| | (address) | | | | | | | |
| | Scannad with Camscannor | | | | | | | |



| | Ve <u>have</u> | experie | nced pro | oblems | with our v | aler servi | ice. – u | pressure | e told is prof | very la | | Water Not re |
|-----|----------------|-----------|-----------|--------|------------|------------|------------|-----------|-------------------|---------|-------|-----------------|
| | sidewa | lks or tr | ails that | | | | nat need t | o be adde | d to the pr | oject? | | |
| Ye | ease pro | | | | | | | | | | | |
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| | Mark | ing / | Signa | ge. | Than | ks! | | | | | | |
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| | ffer any | additio | nal infor | mation | you would | | | | art of these | | | o ,¥. |
| | Please | 4 | ave | Spet | ng Cre | ek Rd | / Hau | Ave n | orth at | Hun | on C+ | . The |
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| | grav | | | | • | | | t ro | | | | |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | I have observed street ponding after a significant rain located at: LOCHER OF LOCATION TO A CONTROL (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |
| | |

| 4. | WATERMAIN |
|----|--|
| | We have <u>not</u> experienced any problems with our water service. |
| | We <u>have</u> experienced problems with our water service. |
| | (address) |
| 5. | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes orNo |
| | If Yes, please provide location: |
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| | |
| 6. | GENERAL COMMENTS / QUESTIONS |
| o. | |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|---|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| | Yes orNo |
| 11 | yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes orNo |
| | |
| S | ANITARY SEWER |
| - | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| 4. WATERMAIN We have not experienced any problems with our water service. |
|--|
| We have not experienced problems with our water service. We have experienced problems with our water service. |
| We have experienced production (address) |
| 5. SIDEWALKS AND TRAILS (WALKING AND BIKING) Are there sidewalks or trails that you believe are missing that need to be added to the project? Yes or No If Yes, please provide location: |
| Museada improving with Mill Town Trill |
| - Minally getting Grant |
| Luovid signification of the second of the se |
| Road Porton on Hall the Pased + Co |
| year. There was a vollower last |
| year its Very unsate |
| Jew 1 2 very |
| GENERAL COMMENTS / QUESTIONS |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| Horon Ct. |
| City Resurtaced with Tar & Covered with |
| Ground Shale. Almost three years Still |
| Succeing Coldesac gallans. En 400 pleas |
| Run Street Sweeper entire Coldesact |
| Street Coming down 7 |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No 🔀 |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | Maple + Afton (address) |
| | have observed areas of erosion along the boulevard at: |
| | |
| | (address) |
| | Does your home or business have a sump pump? |
| | |
| | (address) |
| | X_Yes orNo |
| | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or XNo |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |
| | [address] |

| | We have <u>not</u> experienced any problems with our water service. |
|-----|---|
| | We have experienced problems with our water service. |
| | (address) |
| 5. | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | X Yes or The Mill Town 1700 |
| | 11 res, piedos provide reculieri. |
| - 9 | It appear that the officer costing at on left |
| | illow the star due were so the early lite |
| | were in took the to the court of the start of the |
| < | = mody, unofficial crowing uses by walkers crossing |
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| 7 | and the plane of the state the state of the |
| 50 | Jours de martin There, dorpite the official fector for |
| 6. | GENERAL COMMENTS / QUESTIONS |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
| | Please offer any additional information you would like to be considered as a part of alloss improvements. |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | Corner of Lia Dr & Lindberg Ct (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or XNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | (address) |
|---------------|---|
| IDEWALKS | AND TRAILS (WALKING AND BIKING) |
| re there sid | ewalks or trails that you believe are missing that need to be added to the project? |
| Yes | or No |
| Yes, please | e provide location: |
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| SENERAL C | OMMENTS / QUESTIONS |
| Please offer: | any additional information you would like to be considered as a part of these improvements: |
| | any additional information you would like to be considered as a part of those improvements. |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| ROADWAY PAVEMENT CONDITION |
|---|
| Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| Yes or No V |
| STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| I have observed street ponding after a significant rain located at: |
| (address) |
| I have observed areas of erosion along the boulevard at: |
| (address) |
| Does your home or business have a sump pump? (address) |
| Yes orNo |
| If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo |
| SANITARY SEWER |
| We have not experienced any problems with our sanitary sewer service. |
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| We have experienced problems with our sanitary sewer service. |
| |

| | (address) |
|------|--|
| IDE | WALKS AND TRAILS (WALKING AND BIKING) |
| | here sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or No |
| | s, please provide location: |
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| ENI | ERAL COMMENTS / QUESTIONS |
| leas | se offer any additional information you would like to be considered as a part of these improvements: |
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ROADWAY PAVEMENT CONDITION

PROJECT QUESTIONNAIRE

2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
|----|--|
| | YesX or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION I have observed street ponding after a significant rain located at: For 20 year's |
| | Intersection of Maple St. & EAST ridge DRaddress) |
| | XI have observed areas of erosion along the boulevard at: |
| | INTERSECTION of Aldrich : Fastonder Orive (address) |
| | Does your home or business have a sump pump?(address) |
| | XYes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes or |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | (address) |
|------|--|
| SII | DEWALKS AND TRAILS (WALKING AND BIKING) |
| Are | e there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes orNo |
| If \ | es, please provide location: |
| _ | Meadowview Drive: 2-3-4 spots where the |
| - | Meadowview Drive: 2-3-4 spots where the sidewalk is raised. Do homeowners fix sidewal |
| | or the city? |
| _ | |
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| - | |
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| _ | |
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| G | ENERAL COMMENTS / QUESTIONS |
| P | ease offer any additional information you would like to be considered as a part of these improvements: |
| - | Thank you for action those questions |
| - | Thank you for asking these questions. Best guestionnains ever! |
| - | Desi greates in 2 |
| - | |
| - | |

From: Sean Simonson

To: <u>David Bennett</u>; <u>Jacob Ives</u>

Subject: FW: Online Form Submittal: Email Sean Simonson

Date: Monday, April 14, 2025 1:10:48 PM

FYI

From: noreply@notifyme.NorthfieldMN.gov <noreply@notifyme.NorthfieldMN.gov>

Sent: Monday, April 14, 2025 1:08 PM

To: Sean Simonson <Sean.Simonson@northfieldmn.gov> **Subject:** Online Form Submittal: Email Sean Simonson

External sender <noreply@notifyme.northfieldmn.gov>
Make sure you trust this sender before taking any actions.

Email Sean Simonson

| First Name | |
|---------------|--|
| Last Name | |
| Reply Email | |
| Subject | Road Improvements |
| Attachment(s) | Field not completed. |
| Comments | Sean, I have covid so am unable to attend the meeting on road improvements. I would like to say that I DO NOT support bike paths on Prarie Street. I also DO NOT support more bump outs. In my opinion these "improvements" are costly and unwanted. If you disagree, look to Northfield Happenings on Facebook to see all of the angry responses. These are very difficult times for many people and working on WANTS rather than needs is NOT spending our tax dollars wisely. Also, there are many other streets that need mill and overlay. Have you driven down Washington? It is a veritable maze to try and make it through without hitting potholes. PLEASE keep the spending to things that need repair instead of implementing money sucking wants. Another option is to increase police traffic stops to get drivers to slow down. The added bonus is that there is revenue generated! A win, win in my opinion. Thank you for your time, |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| | Yes or No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| - | (address) |
|----|--|
| S | IDEWALKS AND TRAILS (WALKING AND BIKING) |
| Α | re there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes orNo |
| lf | Yes, please provide location: |
| | |
| _ | |
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| _ | |
| G | ENERAL COMMENTS / QUESTIONS |
| | ENERAL COMMENTS / QUESTIONS |
| | ENERAL COMMENTS / QUESTIONS lease offer any additional information you would like to be considered as a part of these improvements: |
| P | lease offer any additional information you would like to be considered as a part of these improvements: THERE ARE SECTIONS OF THE SIDEWALK AUDING |
| P | PRAIRE THAT HAVE LIETED AND/OR SETTLED |
| P | PRAIRIE THAT HAVE LIKTED AND/OR SETTLED CREATING THAT STOP ME |
| P | PRAIRE THAT HAVE LIETED AND/OR SETTLED |
| P | PRAIRIE THAT HAVE LIKTED AND/OR SETTLED CREATING THAT STOP ME |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | | |
|----|---|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | | | | |
| | Yes or No (just A few Areas) | | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | | |
| | I have observed street ponding after a significant rain located at: | | | | |
| | just before Wishington St. (address) | | | | |
| | I have observed areas of erosion along the boulevard at: | | | | |
| | (address) | | | | |
| | Does your home or business have a sump pump? (address) | | | | |
| Į | | | | | |
| | Yes orNo | | | | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo | | | | |
| 3. | SANITARY SEWER | | | | |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. | | | | |
| | We have experienced problems with our sanitary sewer service. | | | | |
| | (address) | | | | |

| | Ne <u>have</u> experienced problems with our water service. |
|--------|---|
| | (address) |
| SIDEW | ALKS AND TRAILS (WALKING AND BIKING) |
| re the | re sidewalks or trails that you believe are missing that need to be added to the project? |
| Y | es or No |
| Yes, | please provide location: |
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| SENER | AL COMMENTS / QUESTIONS |
| lease | offer any additional information you would like to be considered as a part of these improvements: |
| 1/1 | eall suking the land smuch at chance Tours |
| in | This town are so ligh that Another Assessment |
| or | recesse to my property taxes will be bugh to Accep |
| | and the state of the state of |
| 1: | not in support of A let 1 lot short of stall |
| Th | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|---|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or NoX |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | DRAIN WEST OF STREET (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| | (address) |
| | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or XNO Curb deteriation, Fugus from consistent water and standing water, from current sump pump and standing water, from current sump pump and scharge at end of our driveway from Neighbors discharge. X We have not experienced any problems with our sanitary sewer service |
| 3. | SANITARY SEWER discharge at end of our driveway from Neighbors discharge. |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |
| | |

| We have <u>not</u> experienced any problems with our water service. |
|--|
| We have experienced problems with our water service. |
| (address) |
| SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| Yes or X No |
| If Yes, please provide location: |
| |
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| |
| GENERAL COMMENTS / QUESTIONS |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| DON'T ADD SIDE WALK CROSSING EXTENSIONS TO CUR |
| THAT RESTRICT AUTOMOBILES SIDE LANGS AS WERE |
| |
| DONE SENIOR CENTER. |
| DONE SENIOR CENTER. |
| Crosswalk added to Jefferson Parkway and |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | |
|----|--|---|--|--|
| | Do you feel the pavement surface has deteriorated to the point it no | | | |
| | Yes X or No DIVISION STREE | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE E | ROSION | | |
| | I have observed street ponding after a significant rain locate | d at: | | |
| | | _ (address) | | |
| | I have observed areas of erosion along the boulevard at: | | | |
| | | _ (address) | | |
| | Does your home or business have a sump pump? | | | |
| | | _ (address) | | |
| | Yes orNo | | | |
| | If yes, would you be interested in a sump line extended beyond theYes orNo | curb to hook your sump pump discharge to? | | |
| 3. | SANITARY SEWER | | | |
| | We have not experienced any problems with our sanitary se | wer service. | | |
| | We have experienced problems with our sanitary sewer service. | | | |
| | | _ (address) | | |

| | (address) |
|-----------|--|
| SIDEWALKS | S AND TRAILS (WALKING AND BIKING) |
| | ewalks or trails that you believe are missing that need to be added to the project? |
| . / | or No |
| | e provide location: |
| ALONO | |
| 7(, , | |
| THE 2 | 2026 Mill XIS Overlay PROJECT Will XISLESS. |
| 7 | ion Street AS one APPROXIMES DOWN FORM |
| | All Directors. |
| (none | |
| THE 1 | WORTH SIDE OF JE PLEASON PARKWAY ON THE APPL E DIVISIONSTREET ROUNDARDONT FURE THE CAST |
| TO Th | & DIVISIONS/ Red ROUNDABOUTTION THE CAST |
| | |
| GENERAL C | COMMENTS / QUESTIONS |
| | any additional information you would like to be considered as a part of these improvements: |
| | * 1. The control of t |
| 1HQ C | Types or TAXIES IT IS VERY INCONSISTENT |
| MACY | 1) CONFRESING. |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1, | ROADWAY PAVEMENT CONDITION | |
|----|--|---|
| | Do you feel the pavement surface has deteriorated to the point it r | needs to be fixed? |
| | Yes or No _X | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE | EROSION |
| | I have observed street ponding after a significant rain locat | ed at: |
| | | (address) |
| | ✓ I have observed areas of erosion along the boulevard at: | |
| | | (address) |
| | Description to the second seco | |
| | Does your home or business have a sump pump? | |
| | | _ (address) |
| | Yes orNo | |
| | If yes, would you be interested in a sump line extended beyond theYes orNo | e curb to hook your sump pump discharge to? |
| | res or _/No | |
| 3. | SANITARY SEWER | |
| | We have <u>not</u> experienced any problems with our sanitary se | ewer service. |
| | We have experienced problems with our sanitary sewer set | vice. |
| | | (address) |

| | We <u>have</u> experienced problems with our water service. |
|---|---|
| | (address) |
| 3 | IDEWALKS AND TRAILS (WALKING AND BIKING) |
| ١ | re there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or X No |
| f | Yes, please provide location: |
| | |
| | |
| | |
| _ | |
| | |
| | |
| _ | |
| | |
| 3 | ENERAL COMMENTS / QUESTIONS |
| 0 | lease offer any additional information you would like to be considered as a part of these improvements: |
| | My wife and I bike daily in Northfield, when to |
| | trails on Prarie Street are very safe and offe |
| | elicles. We strongly discourage the construction |
| r | of more concrete barrier trails on residential stre |
| | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | |
|----|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | | | |
| | Yes or No | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | |
| | have observed street ponding after a significant rain located at: | | | |
| | (address) | | | |
| | I have observed areas of erosion along the boulevard at: | | | |
| | (address) | | | |
| | Does your home or business have a sump pump? | | | |
| | (address) | | | |
| | No | | | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? | | | |
| | Yes orNo | | | |
| 3, | SANITARY SEWER | | | |
| | We have not experienced any problems with our sanitary sewer service. | | | |
| 3 | We have experienced problems with our sanitary sewer service. | | | |
| | (address) | | | |

| We <u>have</u> experienced problems with our water service. | | | |
|--|--|--|--|
| (address) | | | |
| SIDEWALKS AND TRAILS (WALKING AND BIKING) | | | |
| Are there sidewalks or trails that you believe are missing that need to be added to the project? | | | |
| Yes or No | | | |
| If Yes, please provide location: | | | |
| | | | |
| Not missing but surface improvement for Section of The State Trail from Lefferson north to spring | | | |
| or the state trace trace | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| GENERAL COMMENTS / QUESTIONS | | | |
| Please offer any additional information you would like to be considered as a part of these improvements: | | | |
| | | | |
| | | | |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1, | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | 1 have observed street ponding after a significant rain located at: |
| | Ontario Lane (address) |
| | have observed areas of erosion along the boulevard at: |
| | Lots of weeds along boulevard pavemat (address) |
| | Does your home or business have a sump pump? |
| | |
| | (address) |
| | Yes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes orNo |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |
| | |

| | (address) | |
|---------------|--|-----|
| DEWALKS | AND TRAILS (WALKING AND BIKING) | |
| e there side | ewalks or trails that you believe are missing that need to be added to the project? | |
| Yes o | or <u>X</u> No | |
| | e provide location: | |
| | | |
| | | |
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| | | |
| | | |
| | | |
| | | |
| | | |
| | COMMENTS / QUESTIONS | |
| lease offer a | any additional information you would like to be considered as a part of these improvemen | ts: |
| | | |
| | | |
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| | | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | | |
|----|--|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | | | | |
| | Yes or No | | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | | |
| | I have observed street ponding after a significant rain located at: | | | | |
| | (address) | | | | |
| | I have observed areas of erosion along the boulevard at: | | | | |
| | (address) | | | | |
| | Does your home or business have a sump pump? | | | | |
| | (address) | | | | |
| | _XYes orNo Nover Comes con | | | | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? | | | | |
| | Yes or X No | | | | |
| 3. | SANITARY SEWER | | | | |
| | We have not experienced any problems with our sanitary sewer service. | | | | |
| | We have experienced problems with our sanitary sewer service. | | | | |
| | (address) | | | | |

| | | | | | (add | lress) | | | |
|---------------|-------------|----------------|-------------|--------------|----------------|------------|--------------|-----|------|
| DEWALKS A | ND TRAII | LS (WALK | ING AND E | BIKING) | | | | | |
| e there sidew | alks or tra | ils that you l | oelieve are | missing th | at need to be | added to | the project? | | |
| Yes or | ∠ No | | | | | | | | |
| ∕es, please p | rovide loc | ation: | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | *** |
| | | | | | | | | | |
| ENERAL COI | MENTS | / OUESTIO | NS | | | | | | |
| | | | | d lika ta ba | , aanaidarad a | a a nort o | f thana lmnr | a | ata: |
| | | | 3 1 2 2 | | considered a | | | 100 | |
| plea | 150 | NO | M | ore | bile | - f | ATA | 5 | On |
| Ou. | <u> </u> | 5/he | eT? | | | | | | |
| | | | | | | | | | |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1. | 1. ROADWAY PAVEMENT CONDITION | |
|----|---|---|
| | Do you feel the pavement surface has deteriorated to | the point it needs to be fixed? |
| | Yes _X or No | |
| 2. | 2. STORM SEWER, STORM WATER DRAINAGE AND | SURFACE EROSION |
| 1 | I have observed street ponding after a signification | ant rain located at: |
| | | (address) |
| J | Mo I have observed areas of erosion along the bo | ulevard at: |
| | | (address) |
| | Does your home or business have a sump pump? | (address) |
| | If yes, would you be interested in a sump line extended Yes or No | ed beyond the curb to hook your sump pump discharge to? |
| 3. | 3. SANITARY SEWER | |
| | We have <u>not</u> experienced any problems with o | our sanitary sewer service. |
| | We have experienced problems with our sanit | ary sewer service. |
| | Same | (address) |

| We <u>have</u> experienced problems w | vith our water service. |
|--|--|
| same | (address) |
| SIDEWALKS AND TRAILS (WALKING | G AND BIKING) |
| re there sidewalks or trails that you beli | leve are missing that need to be added to the project? |
| Yes or X No . | |
| Yes, please provide location: | |
| | |
| | |
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| | |
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| | |
| | |
| | |
| | |
| SENERAL COMMENTS / QUESTIONS | |
| lease offer any additional information y | ou would like to be considered as a part of these improvements: |
| We are against cre | ating the cement curb barriers eet if that is part of the plan |
| along Prairie Str | eet if that is part of the plan |
| Further, we are | - against any of these improvemen |
| il it adds to 4 | - against any of these improvement he already burdensome tax lever persencing. |
| of the wither | . , |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | | | |
|----|--|---|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? | | | | | |
| | Yes or No | | | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | | | |
| | I have observed street ponding after a significant rain locate | ed at: | | | | |
| | | _ (address) | | | | |
| | I have observed areas of erosion along the boulevard at: | | | | | |
| | | _ (address) | | | | |
| | Book of the Art Control of the A | | | | | |
| | Does your home or business have a sump pump? | | | | | |
| | - | _ (address) | | | | |
| | Yes or No | | | | | |
| | If yes, would you be interested in a sump line extended beyond the | e curb to hook your sump pump discharge to? | | | | |
| | Yes or 💥 No | | | | | |
| 3. | SANITARY SEWER | | | | | |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. | | | | | |
| | We have experienced problems with our sanitary sewer ser | rvice. | | | | |
| | | (address) | | | | |

| | (address) | |
|----------------|---|----|
| SIDEWALKS | AND TRAILS (WALKING AND BIKING) | |
| Are there side | walks or trails that you believe are missing that need to be added to the project? $ \underline{\hspace{1cm}} $ | |
| | provide location: | |
| | | |
| | | |
| | | |
| | | |
| | | |
| SENERAL CO | DMMENTS / QUESTIONS | |
| Please offer a | ny additional information you would like to be considered as a part of these improvements: | |
| Fix | potholes in streets - more important than trans | la |
| | | |
| | | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | | | | | |
|----|---|---|--|--|--|--|
| | Do you feel the pavement surface has deteriorated to the point it | needs to be fixed? | | | | |
| | Yes or No | | | | | |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION | | | | | |
| | I have observed street ponding after a significant rain locat | ed at: | | | | |
| | | (address) | | | | |
| | I have observed areas of erosion along the boulevard at: | | | | | |
| | | (address) | | | | |
| | Does your home or business have a sump pump? | | | | | |
| | | (address) | | | | |
| | Yes or No | | | | | |
| | If yes, would you be interested in a sump line extended beyond th | e curb to hook your sump pump discharge to? | | | | |
| | Yes or No | | | | | |
| 3. | SANITARY SEWER | | | | | |
| | We have <u>not</u> experienced any problems with our sanitary s | ewer service. | | | | |
| | We have experienced problems with our sanitary sewer se | rvice. | | | | |
| | | (address) | | | | |

| 4. \ | WATERMAIN |
|------|--|
| | We have not experienced any problems with our water service. |
| | We have experienced problems with our water service. |
| | (address) |
| | |
| 5. | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| - 5 | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | X_Yes orNo |
| | If Yes, please provide location: |
| | The trails just east of Prairie street that encer the pond there are in dis-repair. The Bridge was hired but there is quite a height difference from |
| | The path to the bridge level. This path is heavily used by walkers, runners, bikers t balks with strollars. So many crucks t |
| | Supheavals on the surface. |
| 4 | drive & cul-de-sac held attention for re-surface Seems to be an overlooked area |
| 6. | GENERAL COMMENTS / QUESTIONS |
| | |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
| | I don't see the need for the like barricade |
| | on Prairie St. The bike lane is clearly man |
| | a separated by white strepping, I walk This |
| | ared a lot - there are many more people |
| 0 6 | evalking on the sidewalk + pond path than |
| | biking, I and evenal that bikers are often |
| | sturing on the sidewalk or riding on the opposi |
| | side of the road in just the space marked |
| | off by a single while line I see the same the |
| | against biking but NF is spinding + not in like lanes. |
| | · · · · · · · · · · · · · · · · · · · |

Project Location Map



Sign up for text/email updates Scan with camera on cell phone



northfieldmn.gov/notify

Visit the project website Scan with camera on cell phone



northfieldmn.gov/2026project



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|---|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or 🗶 No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| - | We <u>have</u> experienced problems with our water service. |
|------|---|
| _ | (address) |
| SID | EWALKS AND TRAILS (WALKING AND BIKING) |
| Are | there sidewalks or trails that you believe are missing that need to be added to the project? |
| | _Yes orNo |
| If Y | es, please provide location: |
| | |
| | |
| | |
| - | |
| - | |
| | |
| | |
| - | |
| | |
| GE | NERAL COMMENTS / QUESTIONS |
| | NERAL COMMENTS / QUESTIONS ase offer any additional information you would like to be considered as a part of these improvements: |
| Ple | ase offer any additional information you would like to be considered as a part of these improvements: |
| Ple | ase offer any additional information you would like to be considered as a part of these improvements: |
| Ple | ase offer any additional information you would like to be considered as a part of these improvements: |
| Ple | ase offer any additional information you would like to be considered as a part of these improvements: If your want safe but laner they should be If street bike on street bile laner are longeum for long, not enough room |
| Ple | ase offer any additional information you would like to be considered as a part of these improvements: If your want safe but laner they should be If street bike on street bile laner are longeum for long, not enough room |
| Ple | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes X or No Lia Drive |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | North corner of Lia & Prairie (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or _\times_No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | X We have experienced problems with our sanitary sewer service. |
| | We have a lift station in our house (address) that has needed replacement we are below grade of sewer line. |

| | (addraga) |
|------------------|---|
| | (address) |
| OIDEIM/ | LIKO AND TRAILO. (MALIKINO AND BIKINO) |
| SIDEWA | LKS AND TRAILS (WALKING AND BIKING) |
| Are ther | e sidewalks or trails that you believe are missing that need to be added to the project? |
| Y | es or X No |
| lf Yes n | lease provide location: |
| We | believe the proposed sidewalk on the East side |
| os | Prairie from Lia Drive to Prairie View court |
| 15 | redundant since there is a sidewalk on |
| Th | e West side of that same area. The |
| C | ends could be used for 3" pedestrian |
| C | rossing improvements" at 1- Lia Drive 2- Prairieli |
| 8 | 3 - Prairie View Court. |
| | |
| | |
| | |
| - | |
| | |
| | |
| 001.52 | |
| GENER | AL COMMENTS / QUESTIONS |
| | AL COMMENTS / QUESTIONS offer any additional information you would like to be considered as a part of these improvements: |
| Please | offer any additional information you would like to be considered as a part of these improvements: |
| Please o | offer any additional information you would like to be considered as a part of these improvements: Nave observed confusion for anyers on Prairie |
| Please (| offer any additional information you would like to be considered as a part of these improvements: Nave observed confusion for anvers on Prairie ect South of Woodley due to lack q |
| Please of We Sty | offer any additional information you would like to be considered as a part of these improvements: Nave observed confusion for anvevs on Prairie et South of Woodley due to lack of he definition for cars and bikes. There |
| Please (| Mare observed confusion for anvers on Prairie et South of Woodley due to lack a There no yellow center line for car lanes. |
| Please of We Sty | Mare observed confusion for anvers on Prairie et South of Woodley due to lack of these improvements: |



Project questionnaire

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

The City values input from all residents, especially those who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments and concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire.

Completed questionnaires can be hand-delivered at the Neighborhood Meeting, dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street or emailed to Jacob.lves@northfieldmn.gov.

Roadway pavement condition

| o you feel the pavement surface has deteriorated to the point it needs to be fixed? |
|---|
| Yes or No |
| storm sewer, storm water drainage and surface erosion |
| I/We have observed street ponding after a significant rain |
| Located at: |
| I/We have observed areas of erosion along the boulevard |
| Located at: |
| oes your home or business have a sump pump? |
| |
| Address |
| yes, would you be interested in a sump line extended beyond the curb to hook your sump pump |
| ischarge to? |
| Yes orNo |

| Sanit | ary sewer |
|------------|--|
| // | We have not experienced any problems with our sanitary sewer service |
| | We <u>have</u> experienced problems with our sanitary sewer service |
| А | ddress |
| Wate | ermain ermain |
| XI | We have <u>not</u> experienced any problems with our water service |
| | We <u>have</u> experienced problems with our water service |
| А | ddress |
| Side | walk and trails (walking and biking) |
| Are ther | e sidewalks or trails that you believe are missing that need to be added to the project? |
| Y | res or No |
| If yes, pl | ease provide location: |
| | |
| | |
| - | |
| | |
| | |
| | |
| Gene | eral comments and questions |
| | y additional information you would like us to consider as a part of these improvements: |
| | |
| | |
| | |
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| | |
| | |



Project questionnaire

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

The City values input from all residents, especially those who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments and concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire.

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| Roady | vay pavement condition |
|---------------------------------|---|
| | el the povement surface has deteriorated to the point it needs to be fixed? or No |
| Storm | sewer, storm water drainage and surface erosion |
| | e have observed street ponding after a significant rain ated at: |
| ho i/w | e have observed areas of erosion along the boulevard ated at: |
| | home or business have a sump pump? orNo |
| | dress |
| lf yes, wou discharge Yes | ld you be interested in a sump line extended beyond the curb to hook your sump pump to? orNo |

| I/We have | experienced problems with our sanitary sewer service |
|-------------------|---|
| | |
| | |
| | not experienced any problems with our water service |
| | experienced problems with our water service |
| | experienced problems with our water service |
| | |
| | and trails (walking and biking) |
| | lks or trails that you believe are missing that need to be added to the project? |
| Yes or v | No No |
| f yes, please pro | vide location: |
| | |
| | omments and questions nal information you would like us to consider as a part of these improvements |
| | omments and questions |
| | omments and questions nal information you would like us to consider as a part of these improvements |
| | omments and questions nal information you would like us to consider as a part of these improvements |
| | omments and questions nal information you would like us to consider as a part of these improvements |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project
Northfield, Minnesota

The City values input from residents who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments / concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire. Completed questionnaires can be collected at the Neighborhood Meeting, emailed to Jacob.lves@northfieldmn.gov or

dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street.

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? What area specifically? |
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? What area specifically? Yes or No Some parts are good and some are not |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) |
| | X_Yes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| F | X Yes or No Depends on what it is |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| 0 | We have experienced problems with our sanitary sewer service. |
| 1 | We have experienced problems with our sanitary sewer service. - would like to connect sump pump to sanitary sewer - would like to connect sump pump keep sump pump run-off from sidewalk creating an ice dan on the sidewalk, furs is a hazard to those who walk the area regularly, sidewalk is not and sustaining damage free |
| | run-off from sidewalk creating an ice dans on the sidewalk, |
| | This is a hazard to those who walk the area regularly, sidewalk |

| | (address) |
|----------|--|
| IDEWA | LKS AND TRAILS (WALKING AND BIKING) |
| | sidewalks or trails that you believe are missing that need to be added to the project? |
| Yes, ple | ease provide location: |
| | |
| | |
| | |
| | |
| | |
| | |
| | COMMENTS / QUESTIONS Ifer any additional information you would like to be considered as a part of these improvements: |
| No | t interested in concrete medians in the roadway separated Bikeway on the roadway!!! |
| | |
| | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|------|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No on my block of Prair |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes orNo |
| | |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| - | Yes orNo |
| 3. § | SANITARY SEWER |
| - | We have not experienced any problems with our sanitary sewer service. |
| 100 | We have experienced problems with our sanitary sewer service. |
| - | (address) |

| WATERMAIN tlade cater ber |
|--|
| We have <u>not</u> experienced any problems with our water service. |
| ٨ ١١ . ٧ |
| We have experienced problems with our water service. |
| (address) |
| SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| Yes or No |
| |
| If Yes, please provide location: |
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| GENERAL COMMENTS / QUESTIONS |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Stafform Wood leef to |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfrom Wood leef to |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfrom Wood leef to end feel that Current bille |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfron Wood leef to end feel that Current bille Puth Isparling very well. Bitets are few, but concur. |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfrom Wood leef to end feel that current bike Puth is resorting very well, Biters are few, but concur, we feel that money for, |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfron Wood leef to end feel that Current bille puth Ispacion leng very well. Biters are few, but concur. - We feel that money for Street in provement and cleaning |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Staffrown Wood leef to end feel that Current bike puth is safe and very well. Biters are few, but concur. - We feel that money for Street improvement and cleaning is more important then bike pat |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Strown Wood leef to end feel that current bike puth is safe or leing very well. Bitets are few, but concur. - we feel that money for Street improvement and cleaning is more important then bike patelevations. |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfrom Wood leaf to end feel that Current bike Puth Ishworking very well, Biters are few, but concur. - We feel that money for Street in provement and cleaning Is more important then bike part elevations. - Concern from where out of our |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfrom Wood leaf to end feel that Current bike Path Ishtworking very well, Biters are few, but concur. - We feel that money for Street improvement and cleaning Is more important then bike path elevations. - Concern from others out of our |
| Please offer any additional information you would like to be considered as a part of these improvements: - Prairie Styfrom Wood leaf to end feel that Current bike Puth Ishworking very well, Biters are few, but concur. - We feel that money for Street in provement and cleaning Is more important then bike part elevations. - Concern from where out of our |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| ROADWAY PAVEMENT CONDITION |
|---|
| Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| Yes or No |
| STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| I have observed street ponding after a significant rain located at: The corner of the feet a lacroce (address) |
| (address) |
| I have observed areas of erosion along the boulevard at: |
| (address) |
| |
| Does your home or business have a sump pump? |
| (address) |
| Yes orNo |
| If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| Yes or No |
| SANITARY SEWER |
| We have <u>not</u> experienced any problems with our sanitary sewer service. |
| We have experienced problems with our sanitary sewer service. |
| (address) |
| |

| ۷ | VATERMAIN |
|---|--|
| | We have <u>not</u> experienced any problems with our water service. |
| | We have experienced problems with our water service. |
| | (address) |
| | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | |
| | Yes or No |
| | Yes, please provide location: |
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| | GENERAL COMMENTS / QUESTIONS |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
| | -lease offer any additional information you would like to be considered as a part of whose improvement |
| | Then we releine a heavy snall how is |
| | the sieke / new lane alexand. |
| | |
| | I live on the NW corner of Prospect Cure & |
| | graine. The school aus piens up The |
| | Allidents each morning (grades 140 12), Sincere |
| | myse those therenes could easter to be perkel |
| | of the state of th |
| | when the streets are cleared and the |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes X or No On Prairie only LAKE DR 15 FINE - OTHER ROIS DS NEED FIXING |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | No I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or X No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We <u>have</u> experienced problems with our sanitary sewer service. |
| | (address) |

| | We <u>have</u> experienced problems with our water service. |
|----|--|
| | (address) |
| וכ | EWALKS AND TRAILS (WALKING AND BIKING) |
| Э | there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes orXNo |
| 16 | es, please provide location: |
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| | NERAL COMMENTS / QUESTIONS |
| le | ease offer any additional information you would like to be considered as a part of these improvements: |
| | No Concerte barriers |
| _ | I live on Prourie & witness people |
| _ | Cars Tross lanes when muting on the |
| | Cars cross lanes when muling on the |
| | |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|---|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? |
| | (address) |
| | Yes or No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| | (address) |
|----------------|--|
| DEWALKS | AND TRAILS (WALKING AND BIKING) |
| re there side | walks or trails that you believe are missing that need to be added to the project? |
| | r No |
| | provide location: |
| 2.6 | walk on par block has thee josts from |
| ZIVIK | +1000 Dushing 40 and Bouding to |
| Rous | y |
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| ENEDAL C | OMMENTS / QUESTIONS |
| | any additional information you would like to be considered as a part of these improvements: |
| rlease offer a | In y additional information you would like to be considered as a part of alloss improvement. |
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| V Bec | 1 do not 81 Used (-OARy |
| 270 | V. + Orgens USP HERS! |
| 1 | IDP/S /V/D |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION | |
|----|---|---|
| | Do you feel the pavement surface has deteriorated to the point it n | eeds to be fixed? |
| | Yes X or No Fill potholes as ol | served. |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE | EROSION |
| | I have observed street ponding after a significant rain locate | ed at: |
| | | _ (address) |
| | I have observed areas of erosion along the boulevard at: | |
| | | _ (address) |
| | Does your home or business have a sump pump? | |
| | | _ (address) |
| | Yes or X No | |
| | If yes, would you be interested in a sump line extended beyond theYes orXNo | e curb to hook your sump pump discharge to? |
| 3. | SANITARY SEWER | |
| | We have <u>not</u> experienced any problems with our sanitary se | ewer service. |
| | We have experienced problems with our sanitary sewer ser | vice. |
| | | _ (address) |

| | We have experienced problems with our water service. |
|---|---|
| | (address) |
| | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or X No |
| | If Yes, please provide location: |
| | 1) Maintain what is in place is cracks/bumps. |
| (| 2) No need to add small section of sidewalk on (A) side of Prairie from Liabr to 2nd court. It would know mean taking down several mature plac trees of Beat The bite path on the east side of their house is already decorated withday peop!!! |
| | GENERAL COMMENTS / QUESTIONS Please offer any additional information you would like to be considered as a part of these improvements: |
| 0 | Direction plans for "on street separated bikeway" on SE side of Prairie: current painted bikeway goes AGAINST traffic on a curve-VERY DANGEROUS and in conflict with Msta. Biking statut to bike WITH Mass |
| | 2) The map does NOT show the path East off Prairiest that goes the Golden Bridge over Spring creek-why NOT? |



Project questionnaire

Roadway pavement condition

2026 Mill and Overlay & Mill Towns State Trail Improvements Project

The City values input from all residents, especially those who live along the project corridor as you have first-hand knowledge of how the streets and utilities function. Your comments and concerns will assist us during the preliminary design and layout of the project. We encourage you to take a few minutes to fill out the following questionnaire.

Completed questionnaires can be hand-delivered at the Neighborhood Meeting, dropped off at the Engineering Office located at Northfield City Hall, 801 Washington Street or emailed to Jacob.lves@northfieldmn.gov.

Do you feel the pavement surface has deteriorated to the point it needs to be fixed? ____Yes or __✓ No Storm sewer, storm water drainage and surface erosion No__I/We have observed street ponding after a significant rain Located at: _____ Located at: _____ Does your home or business have a sump pump? ____Yes or __✓ No Address _____ If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? ____Yes or __✓ No

| We have not experienced any problems with our sanitary sewer service I/We have experienced problems with our sanitary sewer service Address | anitary sewer |
|---|--|
| Watermain If we have not experienced any problems with our water service If we have experienced problems with our water service Address Sidewalk and trails (walking and biking) Are there sidewalks or trails that you believe are missing that need to be added to the project? Yes or No If yes, please provide location: General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lake the project are many and a curbed the project and the project? The fike lane is not used much and a curbed the project and provider is not used to be added to the project? The fike lane is not used much and a curbed the project and provider is not used much and a curbed the project. | / I/We have <u>not</u> experienced any problems with our sanitary sewer service |
| Watermain I/We have not experienced any problems with our water service I/We have experienced problems with our water service Address Sidewalk and trails (walking and biking) Are there sidewalks or trails that you believe are missing that need to be added to the project? Yes or No f yes, please provide location: General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lake the first lake and a curbed and the project? The fike lave is not used much and a curbed and and a curbed and | I/We have experienced problems with our sanitary sewer service |
| I/We have not experienced any problems with our water service I/We have experienced problems with our water service Address Sidewalk and trails (walking and biking) Are there sidewalks or trails that you believe are missing that need to be added to the project? Yes or No If yes, please provide location: General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lawe the bike lawe are mark and a curbed dividur is NoT going to improve safety or usage | Address |
| Address | Vatermain |
| Sidewalk and trails (walking and biking) Are there sidewalks or trails that you believe are missing that need to be added to the project? Yes or No fyes, please provide location: General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street to bike lake The bike lave is not used much and a curbed dividur is Not going to improve safety or usage | / |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street to bike lave are missing that need to be added to the project? Yes or No If yes, please provide location: General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street to bike lave the bike lave and a curbed and a curbed any during the safety or usage. | I/We <u>have</u> experienced problems with our water service |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lawe The bike lawe is not used much and a curbed and improve safety or usage | Address |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lawe the first law and a curbed havider is Not going to improve safety or usage | Sidewalk and trails (walking and biking) |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street to bike lawe. The tike lave is not used much and a curbed divider is NoT going to improve safety or usage. | |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lake The bike lave is not used much and a curbed Airidar is NoT going to improve safety or usage | |
| General comments and questions Give any additional information you would like us to consider as a part of these improvements: No bike curbs in the street for bike lake The bike lave is not used much and a curbed Airidar is NoT going to improve safety or usage | ives please provide location: |
| Give any additional information you would like us to consider as a part of these improvements: NO bike curbs in the street for bike lake The bike lane is not used much and a curbed divider is NoT going to improve safety or usage | |
| Give any additional information you would like us to consider as a part of these improvements: NO bike curbs in the street to bike lake The bike lane is not used much and a curbed divider is NoT going to improve safety or usage | |
| The bike lave is not used much and a curbed divider is NoT going to improve safety or usage | Operated commonts and allections |
| The bike lane is not used much and a curbed divider is NoT going to improve safety or usage | |
| divider is NOT going to improve sately or usage | Give any additional information you would like us to consider as a part of these improvements |
| | Give any additional information you would like us to consider as a part of these improvements |
| | Give any additional information you would like us to consider as a part of these improvements NO bike curbs in the street for bike law The bike lave is not used much and a curbe |
| | Give any additional information you would like us to consider as a part of these improvements NO bike curbs in the street for bike law The bike lave is not used much and a curbe Airidur is NoT going to improve safety or usage |
| | Give any additional information you would like us to consider as a part of these improvements NO bike curbs in the street for bike law The bike lave is not used much and a curbe Airidur is NoT going to improve safety or usage |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes tor No Sealing a coating |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | Nave observed street ponding after a significant rain located at: |
| | In front of Zooo Michigan Dr (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | XYes orNo |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or X_No |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| | (address) |

| 4. | WATERMAIN |
|------------|--|
| | We have <u>not</u> experienced any problems with our water service. |
| | We have experienced problems with our water service. |
| | |
| | (address) |
| 5. | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or X_No |
| | If Yes, please provide location: |
| | I prefer the on-street bille trails without a |
| | raised Curb (like on Brugh) |
| | Prairie |
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| | GENERAL COMMENTS / QUESTIONS |
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| 3 , | GENERAL COMMENTS / QUESTIONS Please offer any additional information you would like to be considered as a part of these improvements: |
| 5, | Please offer any additional information you would like to be considered as a part of these improvements: |
| ò, | Please offer any additional information you would like to be considered as a part of these improvements: The speed of Vehicles travelling lastbound on Jef |
| ò, | Please offer any additional information you would like to be considered as a part of these improvements: The speed of vehicles travelling castbound on fellowers between Maple Strand Spring Creek views |
| 5, | Please offer any additional information you would like to be considered as a part of these improvements: The species of uehioley travelling lastbound on Jefferskuren between Maple Strand Spring Creek volume on the bump ou |
| ò., | Please offer any additional information you would like to be considered as a part of these improvements: The species of vehicles travelling castbound on Jeffersland between Maple Strand Spring Creek very Can be in excess of 45 mph. The bump our installed between Jefferson Road and Bridgewater |
| ò, | Please offer any additional information you would like to be considered as a part of these improvements: The speed of uehing travelling lastbound on flet forstwar, between Maple Strand Spring Creek value of the bump out installed between Tefferson Road and Bridgewater Elementary have made a positive impact |
| 6, | Please offer any additional information you would like to be considered as a part of these improvements: The species of vehicles travelling lastbound on flef person between Maple Strand Spring Creek ve Can be in excess of 45 mph. The bump our installed between Jefferson Road and Bridgewater |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | YesX or No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| | I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | |
| | Does your home or business have a sump pump? |
| | (address) |
| | X Yes or No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? |
| | Yes or X_No |
| 3. | SANITARY SEWER |
| | X We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We have experienced problems with our sanitary sewer service. |
| 1 | (address) |

| | X We have <u>not</u> experienced any problems with our water service. |
|---|--|
| | We have experienced problems with our water service. |
| Ì | |
| | (address) |
| S | SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| | Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| | Yes or X_No |
| | If Yes, please provide location: |
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| | GENERAL COMMENTS / QUESTIONS |
| | Please offer any additional information you would like to be considered as a part of these improvements: |
| | Please add painted centerline on Prairie St "NOW"; and after resurfacing in 2026. |
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2026 Mill and Overlay & Mill Towns State Trail Improvements Project Northfield, Minnesota

| | ROADWAY PAVEMENT CONDITION |
|-----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? |
| | Yes or No |
| | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION |
| - | I have observed street ponding after a significant rain located at: |
| | (address) |
| Sie | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| 1 | X_Yes orNo |
| 1 | f yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo |
| | AND THE STATE OF T |
| | SANITARY SEWER |
| - | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| - | We have experienced problems with our sanitary sewer service. |
| | (address) |

| We have not experienced any problems with our water service. |
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| |
| We have experienced problems with our water service. |
| (address) |
| SIDEWALKS AND TRAILS (WALKING AND BIKING) |
| Are there sidewalks or trails that you believe are missing that need to be added to the project? |
| Yes orNo |
| If Yes, please provide location: |
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| GENERAL COMMENTS / QUESTIONS |
| Please offer any additional information you would like to be considered as a part of these improvements: |
| The state of the s |
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| FIR I'M GOUD WARD THE POYED TRAILS + PRAIRIE + |
| JOST. PRICURY DRE OUBRDUE FOR OVERLAY. I'M ALSO OR |
| THE PRIMATED LINES FOR BIKES BUT WE DO NOT NEED MOR |
| JEST. PRICURY DRE OUBRDUE FOR OVERLAY. I'M ALDO OR WITH PRINTED LINES FOR BIKES BUT WE DO NOT NEED MOR CONCRETE BARRIERS! I TRAVEL ON MAPLE S/OR PRAIRIE DAILY, |
| DEST. PRICURY DRE OVERDUE FOR OVERLAY. I'M ALSO OR WITH PAINTED LINES FOR BIKES BUT WE DO NOT NEED MOR CONCRETE BARRIERS! I TRAVEL ON MAPLE & JOR PRAIRIE DAILY, MARIE ST. 15 TOO NARROW - PRAIRIE IS AS WELL BUT SINCE |
| JEST. PRICURY DRE OUBRDUE FOR OVERLAY. I'M ALOO OR WITH PRINTED LINES FOR BIKES BUT WE DO NOT NEED MOR CONCRETE BARRIERS! I TRAVEL ON MAPLE S/OR PRAIRIE DAILY, |



2026 Mill and Overlay & Mill Towns State Trail Improvements Project

Northfield, Minnesota

| 1. | ROADWAY PAVEMENT CONDITION |
|----|--|
| | Do you feel the pavement surface has deteriorated to the point it needs to be fixed? Yes or _No |
| 2. | STORM SEWER, STORM WATER DRAINAGE AND SURFACE EROSION I have observed street ponding after a significant rain located at: |
| | (address) |
| | I have observed areas of erosion along the boulevard at: |
| | (address) |
| | Does your home or business have a sump pump? (address) |
| | Yes or X No |
| | If yes, would you be interested in a sump line extended beyond the curb to hook your sump pump discharge to? Yes orNo |
| 3. | SANITARY SEWER |
| | We have <u>not</u> experienced any problems with our sanitary sewer service. |
| | We <u>have experienced problems with our sanitary sewer service.</u> |
| | Same as above (address) |

| | ith our water service | |
|--|---|--|
| We have <u>not</u> experienced any problems with our water service. | | |
| We <u>have</u> experienced problems with our w | vater service. | |
| Same | (address) | |
| | | |
| SIDEWALKS AND TRAILS (WALKING AND B | IKING) | |
| Are there sidewalks or trails that you believe are r | missing that need to be added to the project? | |
| Yes or 🔀 No | | |
| Yes orNo | | |
| f Yes, please provide location: | | |
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| GENERAL COMMENTS / QUESTIONS | | |
| | I like to be considered as a part of these improvements: | |
| Please offer any additional information you would | | |
| Please offer any additional information you would | Prarie st: Proposed bikeway he | |
| Please offer any additional information you would Sibley Surle park + f | Prarice St: Proposed bikeway he | |
| Please offer any additional information you would Sibley Surle park + f | Prarice St: Proposed bikeway he | |
| Please offer any additional information you would Sibley Surle park + f | Prarice St: Proposed bikeway he | |
| Please offer any additional information you would Sibley Surle park of f Serious Flaws, i) the ex 13 many used by redea 16(155 the play ground. | Prarie st: Proposed bikenry he risting path through sibley surve pe strians including small children in this puts commuting bikes mand to whe | |
| Please offer any additional information you would Sibley Surle park of f Serious Flaws, i) the ex 13 many used by redea 16(155 the play ground. | Prarie st: Proposed bikenry he wisting path through sibley surve per strians including small children with this puts commuting bikesmand of the sound | |
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| roviding this inforr | nation is Optional, but helps us better understand your concerns: |
|----------------------|---|
| ame: _ | |
| ddress: | |
| mail: _ | |
| hone: | |
| hank you for shari | ng your Feedback: |
| S () MISE | 11 151 1 +00 00 |
| There are mo | of sign is needed on Maple It, and Jetterson Pky. |
| city during | le summer. |
| , 0 | |





| Providing this information is Optional, but helps us better understand your concerns: |
|---|
| lame: |
| Address: _ |
| mail: |
| Phone: |
| hank you for sharing your Feedback: |
| I'm in towar of all of the buke line |
| additions and path extensions. |
| Thanks for making biking easien; |
| |
| |





Providing this information is Optional, but helps us better understand your concerns:

| Address: | |
|-------------------------------------|------------------------|
| Email: | |
| Phone: | |
| Thank you for sharing your Feedback | : |
| terrible Meeting - | We do not need the |
| Concrete biba lone | very dongorous for Car |
| Markage trucks a | bihea |





| Providing this information is Optional, but helps us better understand your concerns: |
|---|
| Name: _ |
| Address |
| Email: _ |
| Phone: _ |
| Thank you for sharing your Feedback: |
| I am in favor of bike lanes & I see them. My |
| Proces I think the current bulk lanes on |
| Procee I think the current bike lanes on |
| Practice are sofficient and the new plan |
| is overkill. |





| Providing this information is Optional, but helps us better understand your concerns: |
|---|
| Name: |
| Addres |
| Email:/ |
| Phone: |
| Thank you for sharing your Feedback: |
| STAFF WHE CLEARLY 120 DING THEIR |
| HOADS AND WAITING FOR MOBHRORS |
| TO GOT THEP OF THICKING |
| EVERYTHING IS A DONE DONE AND THIS |
| JUST KOTHER TO THOM SO THEY |
| CAN TELL THE COUNTRY THEY DID TO |





| Providing this information is Optional , but helps us better understand your concerns: |
|---|
| Name: |
| Address: _ |
| Email: |
| Phone: |
| Thank you for sharing your Feedback: |
| - Notification internet intemption for those who |
| work from rune and must have connection. |
| Thee replacement |
| Retaining Wall addition |
| Responsibility to shovel side walk |
| Plow drivers Will need training & change |
| from now they currently plowldump at end |
| of Prairie Circle + don't come back for hours |

- Re-paint crosswalk at Prairie St. & Prainie Circle. - I'm interested in the safety data associated wy the seperated bike lanes. You mention it helps increase traffic of walkers/bikers but does it help w/ Safety? Do when even have a safety issue? (w/ bike lines) - This planning feels complete I However, those being effected by the sidewalk installation between Lia & Prairie Circle are very unhappy!





| Provid | ing this information is Christian four heine its herrer understand your concerns: |
|--------|---|
| Name | |
| Addre | ss: _ |
| Email: | |
| Phone | : <u>1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1</u> |
| Thank | you for sharing your Feedback: |
| | Very supportive of bike + pedestrian improvements |
| | was gived nease do everything got sein |
| 25 | of many hads moving shere safet. There are |
| 200 | MUSSIE? Chrs word michile out at the foundabor |
| 1 | Si traffic colonis is stally needed going into |





| rioviding this information is Optional , but helps us better und | derstand your concerns: |
|---|-------------------------|
| Name: | |
| Addres | |
| Email: | |
| Phone: | |
| Thank you for sharing your Feedback: | |
| I am concerned about putting the | emerete barner on |
| Pravie Street. I bike to work a a | |

of the redesign of the bike lanes to put the bikes on one side of the road as opposed to the lanes on each side of the road have made bootstop biking on priorie of mo difficult to even the lanes from Jefferson Pork way of them the lanes stop at Woodley or I have to cross back to the side of the street I should have been an all along of

Continue on France Street until I get to 5th where el leave Pranie St. The most urgent biting concern is highway 3 North of Highway 19. Note: Pranie St used to have like lanes on each Side of the street until they redesigned the road to put then both an me side of the road. This was much better in my

opinon.





| Providing this | information is Optional , but helps us better understand your concerns: |
|----------------|--|
| Name: _ | |
| Address: | |
| Email: | |
| Phone: | |
| Thank you for | r sharing your Feedback: |
| P/2015 | e consider removing the Mill Town Trains of of th |
| proseque | to Province where there will be new coment barries |
| | Jales for bikes - sales for pedestrian |
| | |

NORTHFIELD-PRAIRIE ST. - SOUTH OF WOODLEY
EANSINGUSON Comment Card viding this information is Optional, but helps us better understand your concerns: Name: Address: Email: Phone: Thank you for sharing your Feedback: 1) INSTALL STREET LIGHT@SIBLEY SWALE PARK. 10 NOT INSTALL CURBS/BOULEVARDS BETWEEN VEHICLE + BIKE LAUES, VEHICLE LANES ARE TOONARROW FOR SCHOOL BUSES + DELIVERY TRUCKS, SO VEHICLES GOING SOUTH ON PRAIRIE HAVE RIGHT WHEELS IN EETY LANE TO AVOID SIDE-SWIPING SECTION @PRAIRIE/POPPY/PLEASAUT VIEW, AT A SMALL HILL+ CURVE, 13 ESPECIALLY DANGEROUS (TOOTIGHT) VERY FEWBIKERS GOING NORTH EVEN USE THE BIKE LANE. MUCH SAFER TO USE THE FAR RIGHT (EAST) PARKING LANE FOR BIKING TO WOODLEY.