City of Northfield

March 15, 2019

Proposal for

TH 246 and Jefferson Parkway Roundabout Improvement Project

Contact:
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Request for Proposals
City of Northfield, MN
TH 246 and Jefferson Parkway Roundabout Improvement Project
March 14, 2019

RFP Addendum No. 1

1. Respondent's attention is called to Section IX. The submittal date for proposals is extended from March 15, 2019 to March 22, 2019.

2. Please acknowledge in your proposal receipt of this Addendum by inserting the attached page immediately following the cover page of your proposal.

I hereby certify that this addendum 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.

David E. Bennett

David Bennett, P.E. Lic. No. 45867 March 14, 2019 Date

*****END OF ADDENDUM*****

Respondent hereby acknowledges receipt of the following Addenda:

Addendum Number	Date Received	Signature of Respondent
1	March 14, 2019	
2	_____	_____
3	_____	_____
4	_____	_____

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March 15, 2019

David Bennett, Public Works Director/City Engineer
City of Northfiel
801 Washington Street
Northfield, MN 5505

RE: Proposal for Trunk Highway 246 and Jefferson Parkway Roundabout Improvement Projec

Dear Mr. Bennett:

The City of Northfield has initiated the Trunk Highway (TH) 246 and Jefferson Parkway Roundabout Improvement Project to assess the safety of pedestrians using the intersection and provide development, design, and construction phase services for the proposed improvements. Like you, Bolton & Menk, Inc. takes great pride in designing and managing projects that are safe, sustainable, and beautiful. Our approach to engineering services makes the City of Northfield s priorities our priorities. We understand what needs to be accomplished for the successful completion of the roundabout improvement project.

Proven and Experienced Team – Our team has been selected based on their familiarity with the project area, direct experience leading and delivering similar projects, and knowledge and experience working with the City of Northfield. Our team will be led by Jake Bongard as project manager and myself as project principal. Together we are supported by specialized experts Derek Arens, KC Atkins, and Tim Olson who have extensive experience designing roundabouts and are familiar with city staff preferences and expectations. We have partnered with Toole Design to complete the communication and multimodal aspects and will incorporate their knowledge of the city and planning documents.

Clear Project Understanding – Our team will lead project partners through issues identification, development f the preliminary design alternative, and production of final design plans and supporting documentation. We will deliver a fully supported vision that minimizes right-of-way impacts, supports the city's future pedestrian connections, and improves safety and operations for the intersection, both opening day and the next 20 years. Our team has assisted in the construction phase of several projects within the city and is familiar with city practices and staff

Quality, Value, and Service – Like all public agencies, the City of Northfield is concern d about schedule, budget, and public satisfaction. As your project manager, Jake will proactively communicate with all involved, keeping everyone informed and on the same page. His project management style prevents schedule delays that can turn into budget overruns. In addition, we understand the structure of the RFP and are confident our team can deliver a fully supported, high-quality product for construction in 2020. The City of Northfield can expect Jake and his team to be available 24/7 to answer questions, resolve issues, and track progress. You can sleep at night knowing we are sweating the small stuff—and the big stuff.

In continued service to the City of Northfield, we are excited at the opportunity to complete the roundabout improvements project. Jake Bongard will serve as your lead client contact and project manager. Please contact him at 952-201-9488 or Jacob.Bongard@bolton-menk.com if you have any questions regarding our proposal.

Respectfully submitted,
Bolton & Menk, Inc.

Brian Hilgardner, P.E.
Principal Engineer

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UNDERSTANDING
Section 1

PROJECT **UNDERSTANDING**

Corridor Setting

The Trunk Highway (TH) 246 and Jefferson Parkway Roundabout Improvement Project focuses on the intersection of a minor arterial and major collector roadway near the southern limits of the City of Northfield. The current all-way stop intersection serves as a key connection to a variety of users from tractors traveling to and from the rural areas south of town to senior citizens visiting the Northfield Community Resource Center (NCRC) to a future use of cyclists making their way along the planned Mill Town State Trail. Nearby, adjacent uses include Northfield High School and Northfield Middle School, and Bridgewater Elementary. Commercial and residential properties, institutional uses including the NCRC to the west and, Spring Creek Soccer Complex to the east, are also near the intersection.

NEARBY INSTITUTIONS, INCLUDING NORTHFIELD SENIOR HIGH SCHOOL DRIVE THE NEED FOR IMPROVED PEDESTRIAN CROSSINGS AND FACILITIES.

Importance of the Corridor

TH 246/Division Street South is an important corridor for residents and commuters in the City of Northfield as well as those in the rural areas south of the city limits. TH 246 functions as a two-lane undivided minor arterial roadway that accommodates between 4,800 (south) and 5,800 (north) vehicles per day (vpd). Traffic levels ar expected to increase to between 8,100 (north) and 10,300 (south) vpd in 2040. Pedestrian facilities are available to users along the corridor in the form of sidewalks and shared-use trails. An off-street trail is currently provided along the west side of Division Street South beginning south of the Jefferson Parkway intersection and extending to the school entrance where it transitions into a sidewalk. There is also a trail on the east side of TH 246, south of Northfield High School. Jefferson Parkway serves as ke east-west corridor and connection to TH 3, located west of the TH 246 at Division Street South intersection.

Jefferson Parkway functions as a two-lane divided major collector roadway with turn lanes provided at key intersections and access points. The roadway currently accommodates between 4,900 (east) and 8,500 (west) vpd today. Levels are expected to increase to 8,000 (east) and 14,800 (west) at the intersection by 2040. To the east of TH 246, Jefferson Parkway ends at Hall Avenue. It provides a vital connection to a densely populated area of town. West of TH 246, the roadway serves as a key route for pedestrians and motorists traveling to Northfield High and Bridgewater Elementary. Jefferson Parkway is also identified as a key route for the future Mill Towns State Trail that is expected to use the corridor for a segment of the planned alignment.

JEFFERSON BLVD SERVES AS A KEY CONNECTION TO VEHICLES AND PEDESTRIANS BOTH LOCALLY AND AS A LINK TO HIGH PRIORITY ROADWAYS LIKE TH 3.

At the juncture of these two roadways lies an all-way-stop controlled intersection that adequately serves traffi today; however, it is expected to see increased delays and vehicles queues as traffic volumes continue to gr . It is the intent of this project to construct intersection and corridor improvements that not only efficiently and safel accommodate existing and future traffic volumes but als meet the needs of pedestrians and bicyclists using each corridor to access nearby destinations or passing through on a long-distance route.

THE CITY IS LOOKING TO IMPROVE ON THE CURRENT ALL-WAY STOP TRAFFIC CONTROL.

Project Funding

Each project comes with its own set of circumstances accompanying the funding package needed to move ahead with an improvement project. Our team is familiar with both the Local Partnership Program (LPP) and Local Road Improvement Program (LRIP) solicited by MnDOT. We understand the additional processes required to attain and incorporate the funds. It is our understanding that the remaining funding gap will be filled with a combination of state aid dollars and potential funds from a local bonding request. Our team is familiar with the design requirements/recommendations that accompany the variety of funding sources mentioned. We will ensure the necessary practices are followed through every phase of the project to satisfy these requirements.

Project Considerations

Our team has prepared a project considerations map on page 6. The map provides an evaluation of the intersection and surrounding corridors focusing on the deficiencies and opportunities within the immediate corridor.

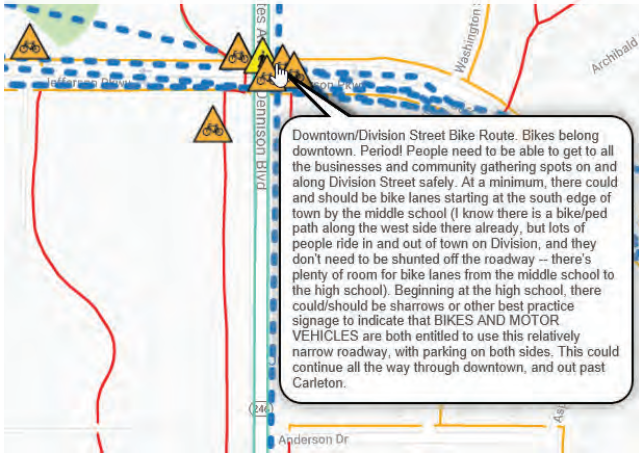
2016 Intersection Study

The City of Northfield completed a study of the TH 246 and Jefferson Parkway intersection to identify intersection and corridor improvements for today and 25-30 years into the future. Findings from the study led to the recommendation of a single-lane roundabout to provide the greatest safety and operation benefit at the intersection. An ICE study indicating the installation of a roundabout was adopted by the Northfield City Council in early 2017. The approved design concept will be carried through design and is planned for construction Summer of 2020.

ADA and Pedestrian Routes

Toole Design Group is currently working with the city to develop the *City of Northfield Pedestrian, Bike, and Trail System Report*. This document will summarize the content of several existing City of Northfield plans and policies and develop recommendations for policy revisions.

PUBLIC INPUT WAS GATHERED BY TOOLE DESIGN FOR PEDESTRIAN, BIKE, AND TRAIL PLANNING ACCROSS THE CITY, INCLUDING THE INTERSECTION OF TH 246 AT JEFFERSON PARKWAY DURING THEIR ONGOING PROJECT.



Our team will build on the work completed with this study to implement improvements that are consistent with the latest city plan/policy initiatives and work to accommodate additional pedestrian connections identified as part of the project. Pedestrian issues that we will consider include

- ADA-compliant pedestrian accommodations with future intersection improvements
- Realignment of existing trail/sidewalk facilities to connect at TH 246/Jefferson Parkway intersectio
- Feasibility of grade-separated pedestrian underpasses for all four legs of the intersection
- Sidewalk extension on the east side of Division Street from Marvin Lane to a proposed marked crossing near Northfield High School
- Review of enhanced pedestrian crossing treatments at the roundabout and mid-block crossing near the high school
- Accommodation of the Mill Towns State Trail routing along Jefferson Parkway at the TH 246 intersection

The system report also identifies several other deficiencies that can be explored during the preliminary design phase of the project. These pedestrian features include

- Extension of sidewalk/bicycle facility along the east side of Division Street from Jefferson Parkway to Sumner Street
- Extension of the Aster Drive sidewalk connections to proposed trail connections along east side of Division Street

GRADE-SEPARATED PEDESTRIAN CROSSINGS WILL BE REVIEWED ON ALL LEGS OF THE INTERSECTION IN LIEU OF THE EXISTING MARKING CROSSWALKS.

Landscape/Streetscape Elements

The City of Northfield finalized the Gateway Corrido Improvement Plan in May of 2012 to establish consistent streetscape elements across the city's major roadways. Recommendations are included for the TH 246/Jefferson Parkway intersection and nearby corridors to improve pedestrian connections, signage, lighting, and possibly incorporate aesthetic treatments such as decorative pavement and limestone entry walls. Landscape and streetscape elements are also identified along TH 246 to include naturalized forest plantings and a boulevard evergreen wind row south of Jefferson Parkwa . Our team will work with project stakeholders to gain consensus on which elements will be incorporated with the 2020 construction project.

THE GATEWAY CORRIDOR IMPROVEMENT PLAN WILL SERVE AS THE FOUNDATION FOR STREETSCAPE DESIGN RECOMMENDATIONS ALONG THE TH 246 CORRIDOR.

WE DELIVER THE RIGHT SOLUTIONS.

Through client collaboration, we identify the best solutions for each project, incorporating innovation based on client/project objectives.

Project Objectives

We have developed the following key project objectives based on our discussion with project stakeholders and our understanding of project details.

- Generate a vision for the intersection and surrounding corridor with full stakeholder support
- Incorporate context sensitivity into roadway and trail alternatives
- Complete design and associated work to ready the project for construction in 2020
- Engage the public fully throughout the project, seeking input and collaboration

Project Approach

We have tailored our approach based on conversations with the City of Northfield, as well as our history working on similar projects with city staff and in neighboring communities. We understand stakeholder involvement is crucial. We have done our homework and developed a detailed approach tailored for this project.

Sustainability

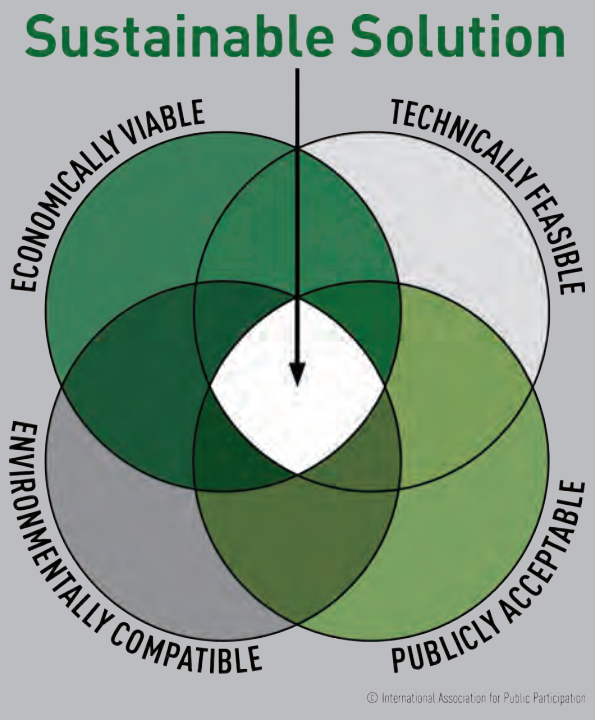
Our team will implement a **Sustainable Decision-Making Approach** that will address the identified goals and objectives by including evaluation of key elements such as **Technically Feasible, Economically Viable, Environmentally Compatible, and Publicly Acceptable.**

A **Technically Feasible** plan includes one that builds upon work already completed, establishes technical objectives based on sound planning and engineering principles, and applies extensive design experience to finding flexibility and feasib solutions at the planning level.

An **Economically Viable** plan will be sensitive to initial capital costs as well as lifecycle costs and focus on individual design details such as construction materials or site planning details.

An **Environmentally Compatible** plan identifies sensitiv features of the site, determines what levels of environmental review may be necessary, and balances design alternatives to protect and accentuate environmental, historic, and cultural resources while accommodating the fundamental purpose of the roadway improvements.

A **Publicly and Politically Acceptable** plan identifies and involves stakeholders early in the decision-making process, listens and understands issues, and informs and maintains communication.



Our Approach

Our team will work with project partners and stakeholders to fully understand existing conditions, develop feasible roadway and trail alternatives, evaluate alternatives, provide a preliminary design concept, develop a final design plan and specification package, and provide services through construction. We have outlined a process below we feel will effectively develop a project to be construction in 2020 with full support by all project partners.

Phase I – Preliminary Design

April 2019 - July 2019

Phase I of the project will consist of data collection and information gathering to understand the current issues and opportunities that accompany the proposed intersection and corridor project. We will gain a complete understanding of the existing physical characteristics of the corridor through field reviews, topographic survey, right-of-way practices, and evaluation of other existing systems. In concurrence with this work, our team will engage key area stakeholders to better understand the priorities relative to landscape/streetscape features, school district initiatives, and key design components such as pedestrian crossings/facilities/connections, accommodation for agricultural vehicles, and overall aesthetics of the intersection and corridor. Once a unified vision is achieved, we will work to develop and finalize a staff approved layout fo submittal to the city council and review/approval by the MnDOT Layout Committee and Roundabout Committee before moving into Phase II – Final Design.

Phase II – Final Design

July 2019 - January 2020

Once approval of the preliminary design is attained from the city council and required MnDOT groups, preparation of the detailed plans and specifications will begin. Our team will coordinate the completion of all project deliverables, provide extensive quality control measures to minimize plan revisions during construction, and complete/submit all required permits and documentation required with governing agencies and the LPP and LRIP funding programs. All plan submittal procedures and project checklists will be identified early in the process and incorporated within the project and deliverables schedule to ensure timely and accurate submittals at key project milestones. The project item management and specifications will then be developed using the City's One Office Software an our team will solicit and manage all bid activities until opening and later award of the project.

Phase III – Construction Services

February 2020 – Summer 2020

Phase III will begin with selection of a contractor and award of the project. We will identify an experienced team to administer the work, provide timely and accurate construction staking, and monitor the daily activities. Our emphasis on active and open communication will continue to be at the forefront of our work to maintain good public relations with residents and property owners during construction. We will coordinate with our geotechnical subconsultant, American Engineering Testing (AET), throughout the process to ensure the final product will be a solution that meets the needs of the community for the next 25-30 years.

City Of Northfield Minnesota

TH 246-Jefferson Parkway Roundabout Issues Map

City of Northfield March 2019

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TOOLE DESIGN

Legend

- School
- Half-mile radius

Network Opportunities

- Off-street trail/path
- On-street bikeway
- Sidewalk

Exissting Opportunities

- Sidewalk
- On-street bikeway
- Off-street trail/path
- Enhanced crossing
- Project Area

General Information

- Pedestrian/bicycle accommodations only proposed in identified project areas. Remaining connections will reviewed for inclusion in this or future projects.
- Other planned connections will be reviewed and incorporated as directed by the city.

Existing Network

TH 246/Division St - 35 MPH
Jefferson Pkwy - 30 MPH

Functional Classification

Minor Arterial

Sidewalk Extension Project Area

A sidewalk extension is proposed between Marvin Lane and the proposed mid-block crossing to avoid shortcutting through the church site east of TH 246.

Mid-block Crossing: Currently no crossing between Woodley St and Jefferson Trl.

Northfield High School

Project Area

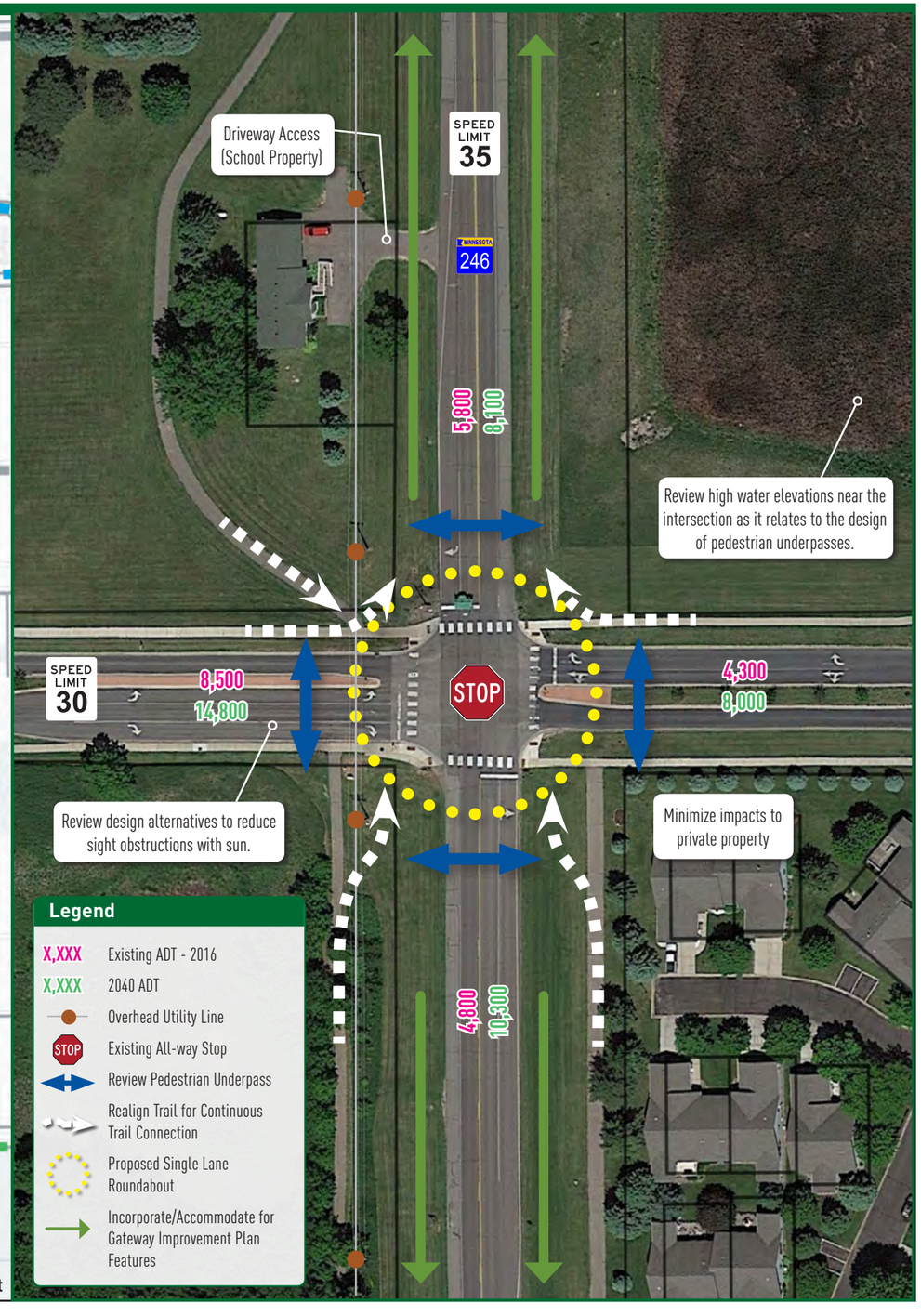
Bridgewater Elementary

Northfield Middle School

0 ft 800 ft 1600 ft

Note

All pedestrian network opportunities located outside of the defined project areas are expected to be complete outside of the current project."



Legend

- X,XXX Existing ADT - 2016
- X,XXX 2040 ADT
- Overhead Utility Line
- STOP Existing All-way Stop
- Review Pedestrian Underpass
- Realign Trail for Continuous Trail Connection
- Proposed Single Lane Roundabout
- Incorporate/Accommodate for Gateway Improvement Plan Features

FIRM
EXPERIENCE
Section 2

FIRM **EXPERIENCE**

Bolton & Menk specializes in providing infrastructure services for municipalities. Over our 69-year history, the firm has continued to grow and expand its expertise based on the unique needs and challenges of cities. In addition to basic services such as infrastructure maintenance, reconstruction, and expansion, we offer specialized expertise in traffic a transportation engineering, landscape architecture, water resources, environmental services, surveying and mapping, water and wastewater treatment, city planning, as well as airport planning and engineering. This range of municipal services enables our firm to easily accommodate the diverse needs of our clients. We have highlighted several projects as examples of recent and related team experience. Client satisfaction remains a top priority for us as evidenced by quality deliverables, cost-effective rates, and timely project deliver . Additional project information is available upon request.

CSAH 10 Realignment in Waconia, Carver County, Minnesota

CSAH 10 serves as the backbone of Carver County. It cuts through urban Waconia at low speeds with many access points. The city and county planned for a beltway to re-route the corridor to the edge of the community, serving as a high-speed corridor with highly managed access. In 2014, the school district passed a referendum that called for expansion of their facilities. This was to occur on land split by the beltway vision, accelerating the planning and implementation of the western portion of the beltway.

VISUALIZATION OF NEW ROUNDABOUT AT CSAH 10

Bolton & Menk worked with Carver County and the City of Waconia to successfully obtain competitive funding to relocate the roadway to the west, with funds being used to manage access on TH 5 and construct a roundabout at new CSAH 10. A comprehensive corridor study was completed to identify the corridor alignment, focusing on items such as cost, safety, sight distance, typical section, trail accommodations, access management, intersection safety and control, and property impacts. We also completed traffic studies, wetland delineations, hydraulic analysis, utilit coordination, trail design, pedestrian underpass design, and right-of-way acquisition assistance. The partners agreed on a recommended alignment that balanced the key issues.

Old Crystal Bay Road Feasibility Study, City of Orono, Minnesota

This summer, Old Crystal Bay Road will be fully reconstructed from Wayzata Boulevard to 6th Avenue North to improve traffic fl and pedestrian safety in and around the area. This work includes widening the roadway, adding turn lanes and center medians in key locations, and improving street lighting. School parking lot entrances will also be reconstructed to better accommodate traffic flow duri peak pick-up and drop-off times. Pavement and curb will also be replaced during this project, as well as watermain and storm sewer.

OLD CRYSTAL BAY ROAD ENHANCED PEDESTRIAN CROSSING

When I saw the proposed changes in the design phase, I really had my doubts that the relatively small changes they were proposing were going to have that big of an impact on the congestion. But whatever traffic engineer they hired, really knew her stuff, because the improvement in flow -- and reduction in delays/waiting -- has been dramatic!
- Shawn Myhre, OHS parent

Project Website/Video/Map: https://clients.bolton-menk.com/orono/old-crystal-bay-project-summary/

Project Twitter: https://twitter.com/OronoRoads

TH 21 & TH 3 Trail, Pedestrian Underpasses, & Intersection Improvements, City of Faribault, Minnesota

Bolton & Menk provided preliminary and final design services related to the construction of the Northern Link Trail improvements and the additional fourth leg of the intersection at TH 21 and TH 3. Bolton & Menk assisted the city with several issues while concurrently completing the construction drawings including right-of-way acquisition, wetland mitigation plans, relocation of major utility lines, federal aid documentation, and coordination with MnDOT to approve the design of the intersection and installation of a traffic signa

The trail improvements support Faribault's plan to connect North Alexander Park to the Mill Towns Trail, the Straight River Trail, and the Sakatah Singing Hills Trail. The new pedestrian and bicycle trail is located along the south side of TH 3 and west side of TH 21. The project included the construction of underpasses beneath TH 21 and TH 3. Due to several topographical limitations and to comply with ADA design standards, the construction of the underpasses required that the grade of TH 21 and TH 3 remain unchanged due to the in-place intersection. Lighting improvements inside and outside the underpass were included to enhance safety.

Bolton & Menk worked closely with the City of Faribault and MnDOT to develop the Level 2 Geometric Layout of the roadway, complete of the project memorandum for federal funding, prepare the ICE report, acquire right-of-way, and complete final construction plans. The project was funded by DNR State Trail Grants, Municipal State Aid Funds, Federal STP and Enhancement funds, as well as local funds.

TRAIL, PEDESTRIAN UNDERPASSES, AND INTERSECTION IMPROVEMENTS AT TH 21 AND TH 3

CH 21 Downtown Prior Lake Reconstruction, Scott County, Minnesota

Scott County, in coordination with the City of Prior Lake and MnDOT, is currently planning intersection improvements on County Highway (CH) 21 and State Highway (TH) 13 in Downtown Prior Lake. This intersection has been identified as needing improvement due to mobility concerns and safety concerns associated with existing and forecasted traffi

Bolton & Menk led an innovative and comprehensive public engagement effort using various outreach formats. Our work included a Corridor Visioning Group, pop-up meetings, parade flyers, presentations to o ganized groups and high school students, and more traditional formats such as open houses, newsletters, website, and social media. We cast a wide net. Bolton & Menk also realized the community would talk and if we expected our message to carry, we needed to be part of the conversation. This helped create project advocates.

"This is the first meeting I have been to where I felt heard; not only heard, but listened to—I had my questions answered directly."
- Participant of the Corridor Visioning Group

Our team considered a variety of concepts, knowing some violated policy. Why? To quantify, explain, and illustrate the deficiencies so we could lead stakeholders to make informed decisions. To the surprise of some stakeholders, this process identified many concepts that could work, adding credibility with even our greatest skeptics.

The project evaluated potential improvements to intersections in close proximity to the CH 21/TH 13 intersection, in particular CH 21/Main Avenue. It also considered traffic impacts on surrounding streets, including impacts on pedestria safety and accessibility.

The focus of the effort was on Downtown Prior Lake, with a corridor visioning for the longer segment of CH 21 from CH 82/154th Street to Franklin Trail. The Corridor Visioning Study helped identify how the intersection reconstruction project holistically fit into the future vision of the corridor and its surroundings

The ultimate configuration was a ¾ intersection at Duluth Avenue, a roundabout at Arcadia, followed by a ¾ at Main Avenue, and completed with a roundabout at TH 13. This configuration improves traffic movement and increases safety. The two roundabouts prior to entering t Main Avenue intersection from both directions slow drivers through the heavily traveled area of pedestrians/bicyclists. It also provides improved aesthetics to the downtown area creating a sense of a destination when traveling between the roundabouts.

Our flexible approach was key to project success. After several months of identifying and evaluating concepts and conducting public engagement, a single vision was supported and adopted by MnDOT, Scott County, and the City of Prior Lake. Because of our informed consent process, the council was not put in a position to make a difficult decision The TH 13/CSAH 21 project has now moved into final design for 2019 construction

"There was plenty of good public input...unlike before, county and city officials didn't come up with a plan and tell the community to "take it or leave it..." Will it please everyone? Will is resolve all the issues? No, I don't believe anything will. It's a consensus, and consensus takes compromise. Like all plans it has some flaws, but I don't believe they're fatal."
- Excerpt from the Prior Lake American

Toole Design is the nation's leading planning, engineering, and landscape architecture firm specializing in bicycle and pedestrian transportation. As a firm, our mission is to create livable communities where walking and bicycling are safe, convenient, and enjoyable for everyone. We focus on developing cost-effective and implementable solutions that move people efficiently while also improving health quality of life, and economic vitality.

We believe that the transportation system is the backbone of all infrastructure, and that the key to creating vibrant places lies in how well people can get around. Our keen understanding of context sensitivity, placemaking, and safety shines through in each of our projects. Starting from the earliest planning stages and working all the way through project completion, we consider all modes of transportation as well as environmental and health impacts to create functional, inviting public spaces for all.

We have a national reputation for excellent community engagement, safe routes to school, bicycle and pedestrian facility planning and design, and roundabout design, among a variety of other related subjects. Our staff have assessed tens of thousands of miles of roadways to develop networks of bicycle and pedestrian friendly streets throughout the United States, and we have extensive experience working with municipalities, community organizations, and other non-traditional transportation planning and engineering clients.

Northfield Pedestrian Bike, and Trail System Update, City of Northfield, Minnesota

Toole Design is working with the City of Northfield on a variety of tasks aimed at creating a more comfortable and connected walking and bicycling network throughout the city. The primary task is updating the Northfield's Planned Trail System map, which includes sidewalks, on-street bicycle facilities, and off-street trails. The project team is leading an interactive public engagement process to identify the most important walking and bicycling gaps in Northfield and prioritize city investments. Public input was gathered from an online interactive map and at five community meetings, including a pop-up meeting in downtown Northfield and a meeting with students at Northfield High School

Another project task is determining the final route alignment for the Mill Towns State Trail through Northfield. Community members voted on two trail alignment options and were asked about the advantages and disadvantages of each. The input received will be used to recommend a final trail route alignment to the Minnesota Department of Natural Resources. Toole Design is also assisting city staff with updating their Safe Routes to School plan to include Northfield High School and Arcadia Charter School. The project team conducted walking audits around each school to analyze existing infrastructure and observe walking and bicycling patterns. Following the audits, they developed two maps for each school—one map with identified walking and bicycling issues, and another with infrastructure recommendations. The recommendations are all aimed at increasing safety and comfort of students walking and bicycling to school.

Lastly, Toole Design staff are working with the city to update their Street Type Chart, which guides street design decisions any time the City is resurfacing, restriping, or rebuilding a street. The chart includes technical street design specifications such as recommended widths for sidewalks, drive lanes, boulevards, bicycle facilities, and parking spaces. The purpose of updating the chart is to build streets that better reflect the vision of the city s complete streets policy, which strives to create a network of streets that safely accommodates people walking, bicycling, and driving. Toole Design will build upon the valuable input and city relationships from this project to ensure the TH 246 and Jefferson Parkway project aligns with community goals

Northfield Complete Streets - 2018 Street Improvements, City of Northfield, Minnesota

The City of Northfield contracted with Toole Design to develop Complete Streets concepts for two roadway projects in advance of their typical engineering process. The projects included a reconstruction of Division Street and Seventh Street and a resurfacing project on Washington Street in downtown Northfield. Toole Design provided educational materials for city residents and stakeholders about the importance of Complete Streets and design elements frequently used to achieve them. Toole Design led two community engagement activities, one to solicit input on existing conditions and one to share and discuss three alternatives for the two concept areas. An online survey was also conducted.

Based on community and stakeholder input, three concepts were developed for the roadways. These concepts included curb extensions, median refuge islands, bicycle boulevard treatments, valley gutters, landscaped areas, streetscaping elements, and a raised intersection. These traffic calming elements are intended to reduce travel speeds and mak walking more comfortable in the already walkable City of Northfield—two objectives that were high priorities for community members.

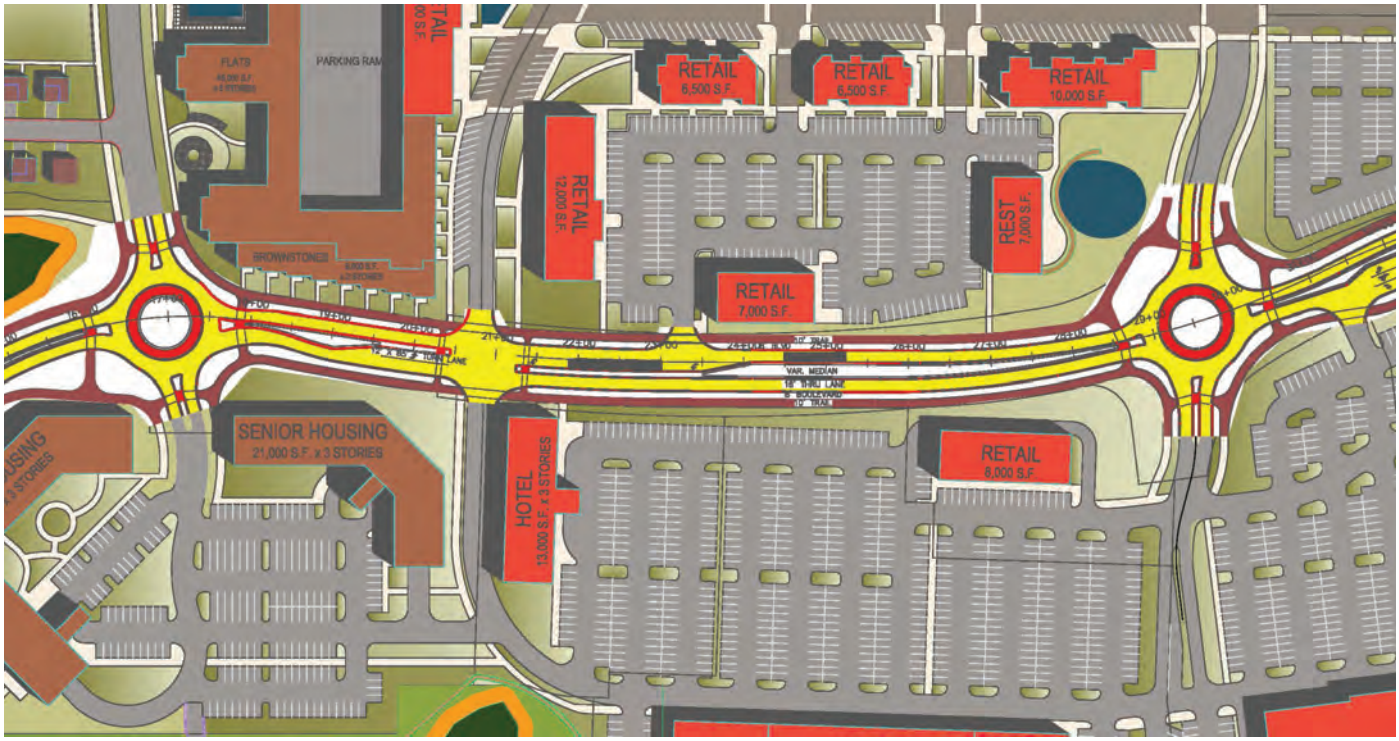
The concepts for Seventh Street and Division Street will extend the downtown street typology farther south, while the Washington Street concepts will reduce traffic speeds and create a more bicycle friendly environment on this critica north-south bicycle connection. The City of Northfield prioritizes clea , understandable communication with their residents. During this fast-paced concept design process, Toole Design prepared CAD-based plan-view concepts that were both to scale and legible to non-engineers. Toole Design also prepared cross sections and illustrative renderings of the concepts to further communicate the concepts. Toole Design has subsequently provided peer-review for preliminary engineering designs and construction documents.

Toole Design will apply a similar approach to concepts that focus not only on people driving but also people walking and biking. Similar to this project, Toole Design will develop legible concepts to communicate design options with the community.

Avienda Development, Bluff Creek Boulevard, City of Chanhassen, Minnesota

Toole Design is leading the preliminary and detailed design of Bluff Creek Boulevard, a roadway that will serve as the primary access to a proposed town center development in Chanhassen, MN. The design includes sidewalks, shared-use paths, two roundabouts, and other traffic calming features Toole Design is also providing traffic engineerin analysis and modeling for the development's proposed connections to existing roadways, analyzing potential traffi impacts, and developing mitigation strategies.

Toole Design is bringing national expertise on multimodal design to aid the developer in creating a destination that is comfortable and convenient for non-motorized users, a significant challenge for a site that must also accommodate a large number of delivery and motor vehicles. Toole Design has worked with the developer to include traffic calmin and bicycle and pedestrian facilities in all stages of the project design to help make this vision a reality. In addition to the developer, Toole Design has also coordinated with city, county, and Minnesota Department of Transportation staff and has modified the preliminary designs as needed based on their feedback The conceptual designs will be incorporated into construction drawings.



KEY **PERSONNEL**

Section 3

KEY **PERSONNEL**

Jacob Bongard, P.E., PTOE
Project Manager

Brian Hilgardner, P.E.
Principal-in-Charge

Public Engagement

Connor Cox (T)
Engagement Lead

Brian Hilgardner
Engagement

Jacob Bongard, P.E., PTOE
Engagement

Preliminary Design

KC Atkins, P.E. (T)
Prelimnary Design Lead

Chris Bower, P.E. (T)
Senior Engineer

Brian Tang (T)
Design Engineer

Final Design

Derek Arens, P.E.
Roadway Design Lead

Tim Olson, P.E., CFM
Water Resources Lead

Josh Stier, P.E.
Water Resources Engineer

Streetscape

Jonathan Nelsen, PLA
Streetscape Lead

Sam Kessel, PLA
Landscape Architect

John Dempsey, PLA (T)
Landscape Architect

Construction Administration and Survey

Eric Wilfahrt, L.S.
Survey Lead

Roger Ness
Construction Administration

Bolton & Menk understands the importance of developing design solutions that can be supported by stakeholders and implemented efficiently. On the following pages, we have provided a brief background and description of key individual roles. These individuals have track records of successful projects and, just as importantly, are enthusiastic and committed to meeting and exceeding your expectations. We can provide detailed resumes of all personnel upon request.

Jake Bongard, P.E., PTOE
Project Manager

As project manager, Jake will serve as the primary point-of-contact for the City of Northfield and regularly communicate with staff and project partners. He will coordinate all aspects of project delivery and be responsible for on-time delivery, meeting the schedule, and scope management processes.

During his nearly 10 years at Bolton & Menk, Jake has led or contributed to a variety of projects from project conception to providing inspection services in the field during construction. **Jake has been directly involved in the planning, preliminary design, and final design of more than a dozen roundabouts and knows what is needed in each phase of the project to meet the expectations of project stakeholders while respecting the schedule and budget.** Jake will use these experiences to guide a team of specialized experts through each project phase while keeping project stakeholders informed and engaged in the decision-making process.

Jake uses the knowledge and experience obtained through his education and professional practice to identify the needs of a project, work toward a solution, and communicate results to those in and outside the field of engineering. Jake loves to solve challenging problems and enjoys seeing the impact our work can have on improving the way people safely and efficiently get fro one place to another.

Brian Hilgardner, P.E.
Principle-in-Charge

Brian will be responsible for committing sufficient personnel and resources to accomplish the project work plan and schedule within the time frame defined.

Brian will work closely with Jake to monitor progress, schedule, and budget to address critical issues effectivel , comprehensively, and in a timely manner. He will facilitate consistent communication with city staff and project partners. His coordination and leadership will ensure successful delivery.

When it comes to clients, Brian takes time to get to know them on a deeper level, building trust in him and the Bolton & Menk team. Since beginning his career in 1998, he has gained a range of experience in project administration from conception through construction. His background as a project manager includes development and design of municipal reconstruction projects, with an expertise in trenchless technology techniques. Over the years, Brian has fostered strong relationships with both his clients and employees. He is passionate about mentoring and helping train young EIT's on proper construction observation skills and career development.

Derek Arens. P.E.
Roadway Design Lead

Derek will apply his extensive experience with roundabout design and delivery gained across the State of Minnesota. The City of Northfield will benefit from his solid approach to client service, getting the details right, and plan design.

Since starting as a roadway design engineer in 2011, Derek has been responsible for preliminary and final roadway and intersection design layouts, cost estimates, and construction plans and specifications. He has all around experience from concept design to construction on a variety of transportation projects. Derek's strength includes expertise in a range of design from retaining walls to trails to access management. He specializes in roundabout design and has a history of geotechnical experience and understanding. Derek supports project management tasks and is passionate about helping bring clients' roadway visions to life with 3D design. He is fluent in software such as MicroStation/GEO AK, Openroads, and Site/Corridor Modeler.

WE CARE.

We consider projects from our clients' perspective and treat them as partners—putting their best interest ahead of our own.

Tim Olson, P.E.
Water Resources Lead

Tim will lead all stormwater management and hydraulics evaluation tasks, including related coordination efforts with the city and other agencies.

Tim has been a water resources engineer with Bolton & Menk since 2006. His experience includes project management in both design and construction of complex water resources and environmentally sensitive projects. He specializes in comprehensive surface water management planning; innovative best management practice design; detailed hydraulic and hydrologic modeling; drainage design and construction plan review; NPDES Phase I & II MS4 and construction stormwater permitting requirements; and coupling GIS techniques with water resources design and analysis. Tim has a passion for stormwater and water quality education and participates in several stormwater-related steering committees and stakeholder groups. He enjoys facilitating partnerships, developing new relationships, and collaborating with stakeholders to define a common vision and work toward shared goals.

Josh Stier, P.E.
Water Resources Engineer

Josh will support Tim on all water resources.

Josh began his career as a water resources design engineer in 2012. He assists in the design and development of comprehensive stormwater management plans and hydrologic and hydraulic studies. His responsibilities include storm sewer and pond design, hydrologic and hydraulic modeling, identification and discussion of NPDES Phase I and II requirements, and identification of alternatives for proposed improvements. Josh has served as the lead water resources engineer on multiple project involving roundabouts on trunk highways over the past year.

Josh has a collection of stormwater computer modeling experience using XPSWMM, Autodesk Storm and Sanitary Analysis (SSA), Hec-RAS, Culvert Master, and HydroCAD software. His experience with Hec-RAS modeling includes interfacing Hec-RAS with GIS using Hec-GeoRAS. His GIS experience coupled with his watershed modeling experience makes him a valuable team member for stormwater management planning.

Jonathan Nelsen, PLA
Streetscape Lead

As the streetscape lead, Jonathan will work with the city, MnDOT and project stakeholders to incorporate a streetscape aesthetic consistent with city practices/standards and meets MnDOT standards.

Jonathan joined Bolton & Menk as a landscape architect in 2012. Previously, he held positions with both city and university planning departments and has worked directly with the public, policy makers, and developers on master planning and development projects. Jonathan is involved in the design of park and streetscape projects with responsibilities ranging from conceptual design to presentation graphics to construction documentation. He works on different aspects of projects, including park master planning, trail design, branding and identity, streetscape design, site planning, urban design, development guidelines and review, campus master planning, and GIS analysis. Jonathan enjoys the creative challenges of the design field and uses new technologies to foster the best possible outcome for the client.

Sam Kessel, PLA
Streetscape Design

Sam will assist Jonathan in all aspects of the streetscape and landscape design.

Sam is a landscape architect for Bolton & Menk, beginning his career in 2005. He has developed a broad knowledge and extensive design experience in downtown redevelopments, urban parks, and recreation complex master plans. Sam has worked on a number of successful projects that incorporate multimodal strategies from conceptual design and public involvement to construction administration. His passion for landscape architecture is exemplified though his use of innovative techniques and creative solutions that have resulted in many successful public and private projects throughout Iowa, Minnesota, and Colorado. His proficient design approach actively engages city staff and the public, effectively fosterin public support that produces a product that will stand the test of time.

Eric Wilfahrt, L.S.
Licensed Surveyor

Eric will lead and coordinate all survey work on the project including topographic survey, and right-of-way and construction staking.
Eric likes to complete projects that have complex and challenging right-of-way and boundary determinations. He is a project surveyor who manages survey operations for the firm s south metro locations. He began his surveying career in 2004. He is responsible for researching, preparing, calculating, interpreting, and writing legal descriptions related to ALTA, topographic, plats, boundary, and engineering surveys. He has additional quality control and oversight duties. Eric is proficient in AutoCAD, AutoCAD Map, COGO, CG-Survey for AutoCAD, Eagle Point Software, Civil 3D, Trimble Business Center, Leica Cyclone 9, and Leica Topo II Software.

Roger Ness
Construction Administration

Roger will lead the construction administration phase of the project. He has helped deliver many projects with the City of Northfield over the years and knows what it takes to be successful in the community.
Roger began his profession as a senior engineering design technician and construction observer in 1988. He has extensive experience in the inspection, detailed design, cost estimating, and construction observation of municipal public works projects including sanitary sewer, storm sewer, water main, streets, sidewalks, and trails. Roger enjoys the problem-solving aspects of both construction and design related issues. He also has extensive experience with documentation and testing requirements for state and federal aid projects and is proficient in the use of AutoCAD and Eagle Point software.

Roger has experience as a project manager and street and parks maintenance manager for the City of Northfield. During his time there, he developed excellent leadership and management skills to compliment his technical design capabilities. In his free time, Roger can be found landscaping or remodeling around his house.

Subconsultants

KC Atkins, P.E.
Preliminary Design Lead

KC will lead the preliminary design effort and will coordinate with Jake regularly to ensure consistency within the project team
KC is a professional engineer with experience in transportation engineering and project management. She leads Toole's Midwestern region design practice. She has extensive experience in preliminary and final design for bicycle/pedestrian accommodations, urban/rural roadways, interchanges, local roads, and context-sensitive design solutions. KC has experience in traffi engineering, performing traffic analysis, and dela calculations, as well as traffic safe , performing crash analysis, safety plans, and road safety audits. Her wide range of knowledge allows her to incorporate multiple elements of engineering into her work to provide safe multimodal infrastructure. KC currently serves as the North-Central Section Institute of Transportation Engineers Pedestrian and Traffic Safety Committee C Chair. She recently served as the Publications Member for the American Society of Civil Engineers Committee on Younger Members.

Connor Cox
Engagement Lead

Connor will build on his current relationships with the city and lead the public engagement effort for the project.
Connor is a transportation planner with over five years of experience working on a variety of bicycle and pedestrian planning and design projects. He has a wealth of community engagement experience, including at the statewide, regional, and local community levels. Connor has developed public engagement plans, produced engagement materials and toolkits, facilitated community meetings and workshops, and developed multiple online surveys and interactive maps. He is adept at analyzing results of community engagement efforts and synthesizing community input and feedback into actionable strategies for plans and projects. Connor has recently led engagement for the Northfield Pedestrian, Bicycle and Trail System Update project. He will build upon his existing relationships and work with the city council, community members, and stakeholders to gather support for the proposed design.

Chris Bower, P.E.
Senior Engineer

Chris will assist in the preliminary design of the roundabout and pedestrian facilities. He will also assist in the final design of pedestrian facilities and QA/QC of the project.

Chris has an extensive background in transportation engineering, including his time working for MnDOT's District 7 and Metro District offices before joinin Toole Design. He has a broad background in project management, highway design, pavement design, traffic engineering, environmental documentation, an construction oversight. During his time with MnDOT, he managed a variety of projects, which included urban reconstruction, bridge replacement, sidewalk and trail improvements, and pavement preservation. With his multidisciplinary background and project management experience, Chris can work with a wide range of project stakeholders to reach a collaborative project outcome. He is also a leader in bikeway maintenance, having developed bikeway maintenance strategies and recommendations at a local, state, and national level. Having previously managed projects and consultant contracts for MnDOT, Chris understands the challenges commonly encountered during project development. He will proactively work with the MnDOT and the project team to identify and head off issues for the TH 246 and Jefferson Parkway project.

John Dempsey, PLA
Landscape Architect

John will assist in the planning of pedestrian facilities and connections established as part of the project.

John has a unique blend of professional practice in design and planning, streetscape improvements, and non-motorized transportation projects. He has direct experience working on a wide range of on- and off-street bicycle facilities, bicycle parking design, streetscape and complete streets design, feasibility studies, and urban design projects. John brings his passion for landscape architecture and urban design to effectively communicate design intent throughout the entire design process—initiating with conceptual design and culminating with project implementation. His well-developed knowledge of design and planning principles make him an integral component in the multimodal transportation field. John has collaborated with Safe Routes to School teams on previous projects and will draw on that history to develop bicycle and pedestrian facilities that are comfortable for the school-age users of the TH 246 and Jefferson Parkway intersection.

Brian Tang, EIT
Engineer

Brian will assist KC and Chris in the final design phase of the project.

Brian is an engineer with a broad range of experience across all stages of multimodal planning and design in a variety of contexts. His design work ranges from concept through final design and construction documents. Brian s work includes signing and striping plans, sidewalk and curb ramp design, separated bike lane design, and trail design. In addition, he is skilled in using graphic production, CADD, and mapping software to quickly visualize project concepts. Brian will draw upon his background in multimodal design to develop a design for TH 246 and Jefferson Parkway that respects the natural landscape, while providing critical trail, agricultural, freight and motor vehicle connections.

AMERICAN ENGINEERING TESTING, INC.

AET is a full-service geotechnical, environmental and construction materials testing operation. The experienced, MnDOT-Certified field staff are ready to support the geotechnic services on the project. AET has provided geotechnical engineering and review of thousands of transportation projects over the past decade, many of which have federal funds attached. They have also provided quality assurance testing services on an equal amount of transportation projects. The range of their testing services for these transportation projects includes aggregates, soils, bituminous, concrete, metals, and chemicals. They fulfill both the field testing and the inspection o bituminous and concrete batch plants providing materials to the projects. ***AET has worked with Bolton & Menk on many projects, providing testing services including soil boring, concrete sampling, and other geotechnical services.***

WORK PLAN
AND SCHEDULE
Section 4

WORK PLAN **AND SCHEDULE**

The tasks we have included are not verbatim to tasks stated in the RFP. We have added tasks to provide a greater level of detail and clarity for key project components.

Task 1: Project Management

One of the most significant components of this project will be the establishment of a strong project management process to ensure all work is coordinated with City of Northfield, MnDO , and other affected agencies and the general public. Our proactive and effective project management is critical for successful completion of the project resulting in full support. We will schedule all meetings, complete all agendas, maintain meeting records, and offer regular updates on next steps and upcoming study requirements.

1.1 Project Management Plan

We will develop a project management plan (PMP) to lead this project through consistent communication, firm schedules, and established milestones, while building consensus along the way. The PMP will detail:

- Project management approach
- Key project milestones
- Schedule management plan (WBS)
- Cost management plan
- Scope management plan and change process
- Communication management plan
- Risk management plan
- Staff management pla
- Quality management plan

1.2 Administration

Bolton & Menk will prepare and provide miscellaneous project correspondence, scheduling, invoicing, and budget management necessary for expediting work products and project decision-making. Schedule updates will be provided on a regular basis.

1.3 General Coordination

Our team will have ongoing discussions and regularly scheduled check-in meetings with the city. The purpose will be to understand individual agency perspectives, gain insight relative to key issues or perceived impacts, discuss potential mitigation strategies to minimize negative impacts, and identify considerations that could influence the project s conclusion.

1.4 Quality Control

Bolton & Menk has developed and implemented a comprehensive quality assurance and quality control (QA/QC) program designed to meet the particular needs of our firm and our clients. Our program systematically and dramatically reduces the potential for issues. Routine product reviews are an integral part of the quality control process, which effectively ta get conceptual, constructability, environmental impact, public impact, and economic engineering issues.

Expected County Participation: Process monthly invoices and progress reports, ongoing communication

Deliverables: PMP, Regular Communication with Project Partners, Schedule and Updates, Monthly Invoices and Progress Reports, QA/QC Review, Schedule Meetings

1.5 Project Management Team Meetings

The primary meeting group for this project will be the project management team (PMT). The PMT will meet monthly, comprised of project representatives from City of Northfield and MnDO . Bolton & Menk will facilitate regular meetings with this group through the course of the project. It is anticipated that up to six meetings will be held with the PMT at project kickoff and other milestones. These meetings will discuss findings, issues, schedule, cost sharing, and needs to keep the project progressing.

A key component of the PMT will be ensuring that each project partner contributes to the cost sharing of the proposed improvements. Our experience on past cooperative agreement projects has helped us develop a successful approach to engaging all partners and building support for the project. We will work with all project partners to develop alternatives that meet the needs of all agencies, building support and trust along the way.

Task 2: Topographic Survey/Right-of-Way Services

Subtask 2.1 Topographic Survey and Right-of-Way

We will perform a field control survey and create a base map identifying existing above- and below-ground infrastructure features in electronic format. This base map will be used as the basis and background for preliminary and final design

Pertinent field information on city infrastructure, adjacent buildings, right-of-way, contours, and private small utilities will be gathered. Underground utility information will be located and described per available as-builts, field markings, and private utility map information facilitated through Gopher State One Call. Right-of-way and property lines will be illustrated based on found field monumentation and plat information received from the city.

Deliverables: Topographic Base Mapping Information, Defined and Survey Accurate ROW and Easements

Subtask 2.2 Right-of-way (ROW) Acquisition Support

It is anticipated that ROW acquisition will be needed for this project. Our team will provide easement descriptions and depictions of temporary and permanent easements for the City of Northfield. Our team will prepare preliminary and final permanent and temporary easements

If acquistions are required for construction, we will develop preliminary and final permanent and temporary easement descriptions and depictions. Bolton & Menk will stake all temporary and permanent easements prior to acquisition for property owner's review.

Deliverables: Right-of-Way Figures, Supplemental Layouts, Staking Information

Task 3: Design

Subtask 3.1 Existing Plans

Our team will **p**repare a base plan with consideration given to existing record or as-built plans. The base plan will lay out the existing roadway profiles and rights-of way for use during preliminary and final design

We will review record and as-built plans provided by city staff and incorporate the findings in the base pla

Deliverables: Electronic Base Plan in AutoCAD Civil3D File Format and Printed Drawings for Use in Discussion at Project Coordination Meetings with City Staff

Subtask 3.2 Utility Coordination

Description: Our team will coordinate with utility owners within the project corridor to ensure a complete and accurate set of construction plans are assembled. This will help avoid unnecessary project delays and costs during construction.

UTILITY POLES ON THE WEST SIDE OF TH 246 MAY BE IMPACTED BY THIS PROJECT. COORDINATION WITH THE LOCAL ELECTRICAL MUNICIPALITY IS A MUST.

Bolton & Menk will facilitate two utility coordination meetings at the 30% stage (completed geometric layout) and 95% stage for final coordination efforts The purpose of the meetings are to confirm the location of all utilities within the corridor, identify all future improvements planned by each utility, and develop a strategy to incorporate this work into construction phasing. A utility layout with all known existing utilities and possible proposed utilities will be supplied.

Deliverables: Private Utility Relocation Plans, Utility Layout, Utility Tabulations, Utility Meetings

Subtask 3.3 Preliminary Design

The preliminary design will be a significant task critical to the schedule and final deliverable. Our team will lead a highly detailed preliminary design effort that will include detailed typical sections, cross sections, construction limits, profiles, refined geometric improvements

and drainage improvements. A robust preliminary design effort that includes options analysis for design alternatives and sufficient design detail to establish limit of construction will be important to the overall process and schedule.

Our team will provide the City of Northfield with various options for widening, clear zone requirements, stormwater treatment, safety enhancements. We will refine the design based on PM meetings and city and MnDOT direction. We will review the proposed design alternatives based on existing grades, utility poles, and soil conditions. Identification of these design elements early will help to expedite the project schedule to allow permitting, right-of-way, and other schedule drivers to occur concurrently with contract document preparation in final design

The preliminary design process will result in more than the layout for the project, the final result will include details necessary to expedite right-of-way acquisition and wetland permitting, as necessary, and will include the following deliverables:

- Approved geometric layout, typical sections, and profil
- Defined wetland impacts and figures for permi preparation, as necessary
- Refined right-of-way needs and figures for impacte parcels
- Utility impacts for facilities along the corridor
- Stormwater treatment locations for right-of-way needs
- Refined project cost estimat

Typical Sections

Careful planning will detail improvements to the at-grade intersection and pedestrian underpasses providing a balance of safety, mobility, and capacity. We will prepare typical sections that correspond with the alternative layouts.

Bike/Pedestrian and Grade Separated Crossing Analysis

We will review the project area pedestrian facilities and the planned grade separated trail crossings for each leg of the TH 246/ Jefferson Parkway intersection. We will prepare a technical memorandum documenting the need, location alternatives, costs, and next steps. The documentation will also detail implementation of the improvements with recommended timing for final design and construction

"We must prioritize kids ability to get to school safely on a bike. Jefferson and 246 is proven unsafe.

- Community Engagement Quote

Design Alternatives

A range of alternatives will be considered through the study corridor. Careful planning will detail improvements to the intersections providing a balance of safety, mobility, and capacity. Alternatives will also assess potential side slopes, sections, guard rail, retaining walls, etc. The alternatives will be developed in planning level layouts demonstrating a general footprint, operations, capacity, and cost. These planning level layouts will display preliminary property impacts, cross sections, and pedestrian improvements. Corresponding cost estimates will be prepared for various alternatives. To maintain progress, it is key that the project team remains flexible through the preliminary design phase; project funding is currently a moving target and may influence the fina treatment.

Level 1 Geometric Layout

Our team will develop a geometric layout of the roadway, trail, and stormwater management improvements and prepare roadway and trail alignments, profiles, geometry, and construction limits. A color geometric layout will be prepared at 100-scale and will display plan and profile view of all geometr , typical sections, intersection locations, and construction limits. The layout will be prepared consistent with the Highway Project Development Process (HPDP) Manual. The layout will also include intersection turning movement data, design vehicle turn path analysis, curve data, existing and proposed typical sections, and signature blocks. The geometric layout will be presented to project partners for review and approval.

Bolton & Menk will prepare a design memorandum that documents the decision-making process relative to roadway design parameters and the 13 critical design elements on both the local roadways and stormwater management needs. It will summarize the prepared schematics, project issues, project decisions, and timeline for near-term and long-term access configurations

Preliminary Cost Estimate

Our team will develop a preliminary construction cost estimate that corresponds with the final geometric layout, including a detailed breakdown of the required cost sharing for the proposed improvements. Our team has significant experience delivering projects with MnDO and local agencies.

Deliverables: Level 1 Geometric Layout, Design Memo and Cost Estimate

Subtask 3.4 Preliminary and Final Design Plans and Specifications

Our team will complete final design and develop plans and specifications consistent with city and MnDO standards.

Preliminary and final plans and specifications will b prepared in coordination with city staff. Preliminary and final easement exhibits and descriptions will be prepared for recording purposes. Major design components will include the following

- Roadway alignments and setting alignments and grades for sidewalks, trails, and grade-separated underpass
- Roadway and trail profiles including pedestrian underpasses
- Cross-sections at 50-foot intervals, driveways, and critical design locations including roundabout approaches
- Removal plan for all portions of the project
- Storm sewer sizing and design, including discussions with governing agencies and city staff to develop a stormwater management plan that meets the city's regional goals and follows specific ordinance
- Stormwater Pollution Prevention Plan (SWPPP), erosion and sediment control plan and specifications
- Existing and proposed sanitary sewer locations, elevations, and replacement/realignment as needed
- Existing and proposed watermain locations, elevations, and replacement/realignment as needed
- Signing and striping for the roundabout and pedestrian crossings
- Intersection layouts with curb and gutter elevations, including ADA compliant design of all pedestrian ramp facilities; RRFBs will also be evaluated and incorporated in the design if recommended and approved by MnDOT
- Sidewalk segment along design TH 246 from Marvin Lane to the identified crossing location; our team will provide a recommendation for the appropriate enhanced crossing treatment (bumpouts, two-stage crossing, RRFB, pedestrian hybrid beacon, etc.)
- Incorporation of landscape, streetscape and complete streets elements designed by others into the project; assumed elements include colored concrete, trees, and other features identified in the Gateway Enhancement Plans
- Traffic control and construction phasing plan with a emphasis on minimizing closures and provide access to residents during construction
- Intersection lighting for the roundabout, pedestrian crossings, trails and underpasses that conform to current City of Northfield and MnDO Standards for lighting.
- Statement of estimated quantities including street, utilities, and miscellaneous construction items, all consistent with MnDOT practices and the city's standard specifications and, specifical , the city's method of measurement and payment
- Contract documents prepared and assembled based on City of Northfield and MnDO standards including project specifications and all necessary bid documents; we will also prepare all documents/reports required by the LPP and LRIP process for MnDOT submittal
- Plan submittals: Bolton & Menk will submit final design plans and other documents for review at the following stages of completion:
  - *60% Plan Review -* submittal to include topography, utility plans, profiles, alignments, intersection layouts, drainage plans, typical cross sections, preliminary utility relocations, and engineer's estimate
  - *90% Plan Review -* submittal to include complete plan set, specifications, and enginee 's estimate
  - *Final Plan Approval -* submittal of final design plans, specifications, and enginee 's estimate for approval and signatures
- Cost estimates: a detailed engineer's cost estimate will be prepared at each plan submittal; quantities and costs will be split by project areas, storm sewer work, participating/non-participating items, needs ineligible items, and funding sources.

Deliverables: Preliminary and Final Plans, Specifications, and Contract Document

Subtask 3.5: Permits

Bolton & Menk will prepare and coordinate all necessary permits for the project, which may include an MPCA NPDES Construction Stormwater Permit. We do not anticipate any wetland impacts or work within a public water. Also, we have recently assisted the city in rewriting their erosion and sediment control and stormwater ordinances and have intrinsic knowledge of the city's requirements. We intend to follow the city's ordinance and provide supporting information for a grading permit and stormwater data sheets, as needed.

Deliverables: Permits and Approvals

Task 4: Public Engagement

A key part of the process will include engagement with local stakeholders, the Northfield School District, and Northfield City Council to better understand their priorities and to solicit feedback on the proposed design concept.

Subtask 4.1: Understand the Public's Landscape/Streetscape Priorities

To help inform the concept plan, we will solicit community members preferences for landscape/ streetscape features such as

- Planting design
- Furnishings
- Lighting
- Materials
- Wayfindin

To effectively manage the project budget and reach a large audience, we propose conducting outreach for this subtask with a combination of strategies, including

- Information posted to the city's website and social media accounts with a link to an online survey, which can also be passed along to Northfield Public Schools for further distribution
- Direct mailing to adjacent property owners (up to 200 letters)
- Public input workshop to present landscape/ streetscape concepts and collect feedback
- Meetings with interested citizen groups
- Staffing an outreach booth during a public event, suc as the Riverwalk Market Fair or First Friday's Art Nights

Subtask 4.2: Understand Northfield School District's Future Improvements

We will meet with Northfield School District officials understand any future projects planned for the area. This information will be used to integrate the project with future land uses and potential bicycle/pedestrian routes.

Subtask 4.3: Gather Public Feedback on the Design Concept

After the design concept has been developed, we will hold a public townhall to solicit feedback on it. Project Team staff will be on hand to present the proposed concept and answer questions, followed by an open house for stakeholders to ask detailed questions about specific elements of the design. This information will be used to develop the public engagement report to be shared during the presentation of the design concept to the city council. Outreach for this subtask will include

- Information posted to the city's website and social media accounts
- Direct mailing to adjacent property owners (up to 200 letters)
- Public townhall to present the design concept and collect feedback

Subtask 4.4: Present Information to City Council

We will present our progress on the design concept to the Northfield City Council at three points – concept designs, 30% plans and design and for approval of final plans and specifications

4.5 Agency Coordination Meetings

Bolton & Menk will have ongoing communication with agencies as needed to move the project forward. Meetings will likely be needed as issues (DNR, stormwater, etc.) are identified and worked through. We assume up to two meetings.

4.6 Stakeholder Meetings

The goal of these meetings is to hear individual perspectives on issues and opportunities. Meetings will be targeted to those who have direct impacts or perceived impacts to their property. We assume up to four meetings.

Deliverables: Meeting Leadership, Meeting Materials, Mailings/Newsletters, and Updates

Task 4 Deliverables:
- Develop materials for two public meetings, up to four citizen group meetings, and two city council presentations
- Attend and facilitate two public meetings
- Attend one community pop-up event
- Conduct up to four citizen group meetings
- Meet with Northfield Public Schools offici
- Public engagement report summarizing input received during public meetings
- Three presentations to city council

Task 4 Requested City Participation:
- Post project information, including links to surveys, on the city's website and social media accounts and distribute project information in the city's newsletter or other channels
- Provide a list of addresses and names for residents near proposed routes (if direct mailing is desired)
- Provide a public meeting space for project workshop, citizen group meetings, and townhall meetings

Task 5: Bidding Administration

Subtask 5.1 Prepare Advertisement for Bids

Our team will work with the city to post an advertisement for bids. Bolton & Menk will prepare the advertisement for bids using the City of Northfield s format and submit to the city. City staff will submit to required publications

Deliverables: Not Applicable

Subtask 5.2 Answer Bidder's Questions

We will answer all written and verbal questions from potential bidders.

Deliverables: Not Applicable

Subtask 5.3 Issue Addenda

If addenda are required and/or requested, our team will prepare addenda for distribution by the city.

Deliverables: Addenda in Electronic and Hard Copy Versions

Subtask 5.4 Bid Opening and Tabulation

We will facilitate bid opening and tabulation with the city

Deliverables: Not Applicable

Subtask 5.5 Prepare Letter of Award Recommendation

Working with the city, we will prepare the Letter of Award recommendation to the contractor.

Deliverables: Letter of Award

Task 6: Construction Services

Subtask 6.1 Construction Administration

Our team will perform construction administration.The project manager will perform the following construction administration responsibilities:
- Attend preconstruction meeting
- Perform on-site review pertaining to work and progress as needed
- Attend weekly progress meetings as needed
- Prepare change orders and written directives
- Review shop drawings, material lists, and suppliers
- Review and approve pay requests

Deliverables: Copies of Meeting Notes, Change Orders, Directives, Shop Drawings, Materials Lists, Supplier's Lists, and Pay Requests

Subtask 6.2 Construction Staking

We will complete necessary field staking. Survey crews will complete field staking on the following feature
- Construction limits
- Temporary and Permanent Easements
- Grading
- City utilities
- Curb and gutter
- Signage
- Landscaping amenities
- Miscellaneous infrastructure features

Deliverables: Field Stakes and Documentation of All Survey Points Installed

Subtask 6.3 Construction Observation Support

Our team will complete construction observation. We will perform daily construction inspection and contract management. We will coordinate with city staff as needed.

Deliverables: Not Applicable

Task 7: Project Close-out

Subtask 7.1 Final Project Review

Our team will review the project site with the city and contractor. We will walk the site with project stakeholders and identify any punchlist items that need to be addressed. Punchlist items will be reviewed until acceptable by the city. Our team will also prepare final documents to MnDOT to satisfy the LPP and LRIP processes. Bolton & Menk will prepare record drawings in AutoCAD for and GIS consistent with the City of Northfield Record Plan Requirements

Deliverables: Copy of Any Punchlist Items, Final Project Close-out Documentation, Record Drawings

Task 8: Geotechnical Testing Services

Subtask 8.1 Soil Borings

Bolton & Menk has teamed with American Engineering Testing (AET) to obtain soil borings and a geotechnical report for pavement and utility design from the selected geotechnical consultant.

Deliverables: Report and Correspondence

Subtask 8.2 Field Testing Services

This project requires construction and materials testing. Materials testing will be performed by the city's retained geotechnical consultant in accordance with the MnDOT Schedule for Materials Control.

Deliverables: Material Testing Reports, Laboratory Analyses, and Required Documentation to Fulfill Construction Testing Requirements

Subtask 8.3 Pavement Design Based on R-Values

This project requires geotechnical recommendation on pavement design. The city's retained geotechnical consultant will provide final geotechnical recommendations related to soil and pavement conditions. Based on the R-value of in-place soils, anticipated traffi loading conditions, the preliminary layout, and the improvements recommended in the preferred alternative and other general design recommendations, Bolton & Menk will prepare a pavement design and coordinate with the geotechnical consultant.

Deliverables: Pavement Design

Subtask 8.4 Design Recommendations

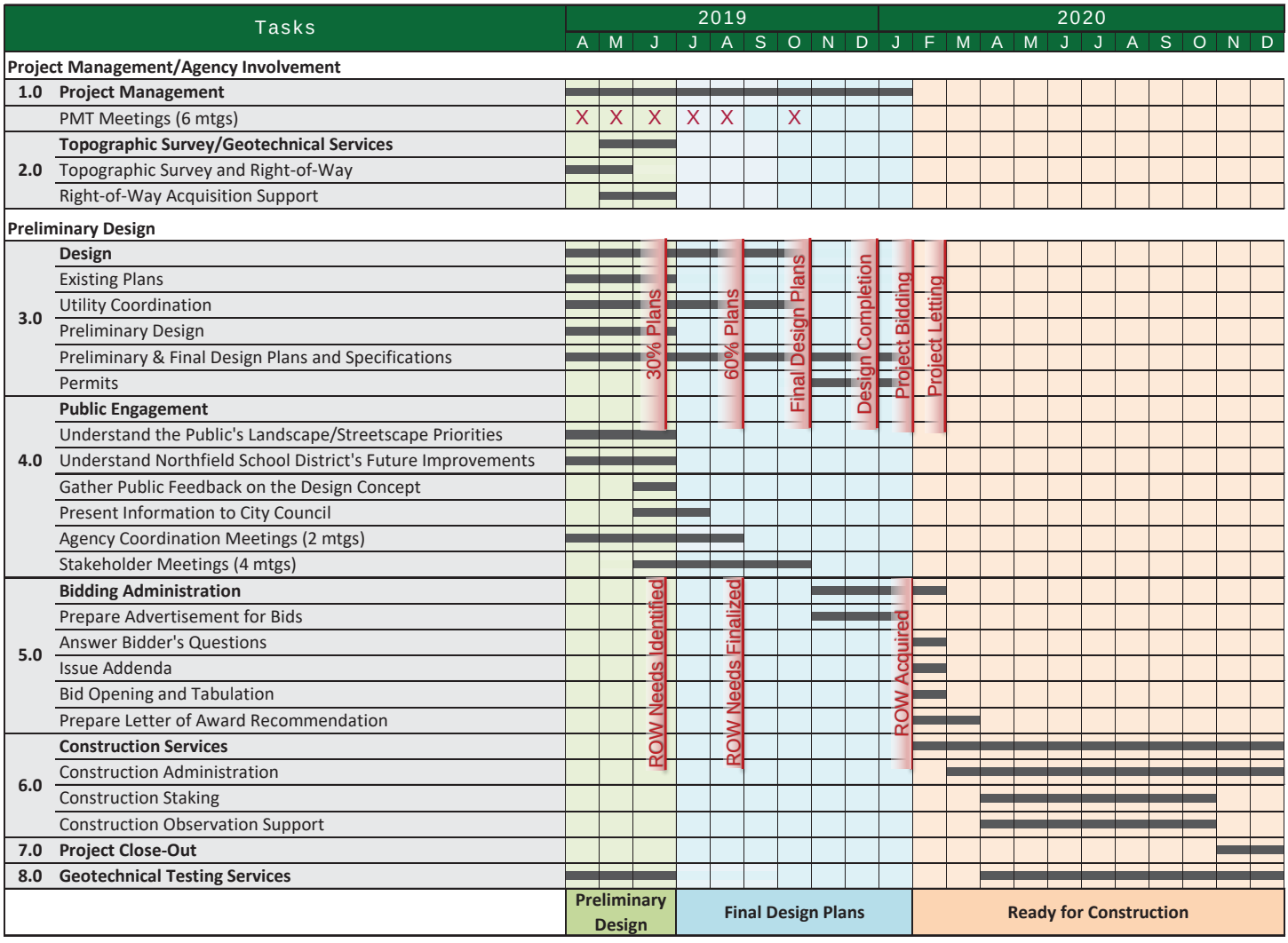
This project requires geotechnical recommendations on pedestrian underpass locations near the TH 246 and Jefferson Parkway intersection. The geotechnical consultant will make recommendations for soil correction needs for the grade-separated pedestrian underpasses near the TH 246 at Jefferson Parkway intersection.

Deliverables: Design Recommendations

Project Schedule

We have developed a schedule detailing the anticipated work tasks, task relationships, critical path timeline, deliverable due dates, and completion dates. This schedule is based on our review of the project background, description, and scope of services included in the request for proposals and our experience on other similar projects. Upon selection, Bolton & Menk will work with city staff and other project partners to revise and update this schedule as needed to ensure successful delivery of this project.

This schedule reflects our anticipation of notice to proceed in April. We will complete the preliminary design and have right-of-way needs identified by July 2019. We anticipate 60% plans in September 2019 and final design plans in November 2019. The project will be ready to bid in the winter of 2019/2020 and construction will begin summer 2020. A detailed schedule has been included below.



Estimated Hours

Client: City of Northfield Project: TH 246 and Jefferson Parkway Roundabout Improvement Project		Bolton & Menk, Inc.													Toole Design					
Task No.	Work Task Description	Principal-in-Charge	Project Manager	Roadway Design Lead	Water Resources Lead	Water Resources Engineer	Streetscape Lead/Design	EIT/Technician	Licensed Surveyor	Survey Technician	Survey Crew	Construction Administration	Construction Observation	Clerical	Preliminary Design Lead	Senior Engineer	Design Engineer	Public Engagement Lead	Streetscape Design	Totals
1.0	**Project Management**																			
1.1	Project Management Plan	2	12	8										6						28
1.2	Administration		10																	10
1.3	General Coordination	2	10																	12
1.4	Quality Control	6	4																	10
1.5	Project Management Team Meetings (6 mtgs)	2	18	8										6	12					46
	Subtotal Hours - Task 1	12	54	16	0	0	0	0	0	0	0	0	0	12	12	0	0	0	0	**106**
2.0	**Topographic Survey/Right-of-Way Services**																			
2.1	Topographic Survey and Right-of-Way								29	22	89			3						143
2.2	Right-of-Way Acquisition Support								15	19	8									42
	Subtotal Hours - Task 2	0	0	0	0	0	0	0	44	41	97	0	0	3	0	0	0	0	0	**185**
3.0	**Design**																			
3.1	Existing Plans		2	4				4												10
3.2	Utility Coordination		8	30											8					46
3.3	Preliminary Design and Layout	4	24	24	24		12								40	120	160		40	448
3.4	Preliminary and Final Design Plans and Specifications	9	40	220	40	60	80	376						8	80	120	200			1233
3.5	Permits		4	8	4	16														32
	Subtotal Hours - Task 3	13	78	286	68	76	92	380	0	0	0	0	0	8	128	240	360	0	40	**1769**
4.0	**Public Engagement**																			
4.1	Understand the Public's Landscape/Streetscape Priorities		2												4			16	32	54
4.2	Understand Northfield School District's Future Improvements		2												4			6		12
4.3	Gather Public Feedback on the Design Concept	2	6												6	4		32		50
4.4	Present Information to the City Council	3	6												9					18
4.5	Agency Coordination Meeting (2 mtgs)	2	6	2											3					13
4.6	Stakeholder Meetings (4 mtgs)	2	8																	10
	Subtotal Hours - Task 4	9	30	2	0	0	0	0	0	0	0	0	0	0	26	4	0	54	32	**157**
5.0	**Bidding Administration**																			
5.1	Prepare Advertisement for Bids			2																2
5.2	Answer Bidder's Questions			5																5
5.3	Issue Addenda			6																6
5.4	Bid Opening and Tabulation																			0
5.5	Prepare Letter of Award Recommendation			2																2
	Subtotal Hours - Task 5	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
6.0	**Construction Services**																			
6.1	Construction Administration		2	8								192								202
6.2	Construction Staking								19	24	170									213
6.3	Construction Observation Support												600							600
	Subtotal Hours - Task 6	0	2	8	0	0	0	0	19	24	170	192	600	0	0	0	0	0	0	**1015**
7.0	**Project Close-Out**																			
7.1	Final Project Review	2	4	12				16									4			38
	Subtotal Hours - Task 7	2	4	12	0	0	0	16	0	0	0	0	0	0	0	0	4	0	0	**38**
8.0	**Geotechnical Testing Services**																			
8.1	Soil Borings																			0
8.2	Field Testing Services																			0
8.3	Pavement Design Based on R-Values																			0
8.4	Design Recommendations																			0
	Subtotal Hours - Task 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**

HOURS & COST

The following tables summarize the hours and cost breakdown for each major work task item. The estimated fee includes labor, general business, and other normal and customary expenses associated with operating a professional business. Unless otherwise noted, the fees include vehicle and personal expenses, mileage, telephone, survey stakes, and routine expendable supplies; no separate charges will be made for these activities and materials. Expenses beyond the agreed scope of services and non-routine expenses, such as large quantities of prints, extra report copies, out-sourced graphics and photographic reproductions, document recording fees, outside professional and technical assistance, and other items of this general nature will be invoiced separately.

Project Assumptions

Project Management and Public Involvement

In addition to the work tasks identified in the RFP, the following tasks were included to bolster communications as a project team and with stakeholders.

- Project Management Plan
- Project Management Team Meetings (six)
- Agency Coordination Meeting (up to two)
- Stakeholder Meetings (up to four meetings)

Preliminary and Final Design

The provided estimated fee includes the design of roadway and pedestrian facilities identified within the RFP. An assumption was made that two underpasses would be included in the preliminary and final design

Construction Services

- Length of Construction Schedule - 12 weeks
- Construction Administration - 18 hours/week
- Construction Observation - 50 hours/week

Detailed Cost Estimate

Client: City of Northfield Project: TH 246 and Jefferson Parkway Roundabout Impı		Bolton & Menk, Inc.												Toole Design						
Task No.	Work Task Description	Principal-in-Charge	Project Manager	Roadway Design Lead	Water Resources Lead	Water Resources Engineer	Streetscape Lead/Design	EIT/Technician	Licensed Surveyor	Survey Technician	Survey Crew	Construction Administration	Construction Observation	Clerical	Preliminary Design Lead	Senior Engineer	Design Engineer	Public Engagement Lead	Streetscape Design	Total Hours	Total Cost
1.0	Project Management	12	54	16	0	0	0	0	0	0	0	0	0	12	12	0	0	0	0	106	$14,996
2.0	Topographic Survey/Right-of-Way Services	0	0	0	0	0	0	0	44	41	97	0	0	3	0	0	0	0	0	185	$25,653
3.0	Design	13	78	286	68	76	92	380	0	0	0	0	0	8	128	240	360	0	40	1769	$219,535
4.0	Public Engagement	9	30	2	0	0	0	0	0	0	0	0	0	0	26	4	0	54	32	157	$20,202
5.0	Bidding Administration	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	$2,025
6.0	Construction Services	0	2	8	0	0	0	0	19	24	170	192	600	0	0	0	0	0	0	1015	$134,445
7.0	Project Close-Out	2	4	12	0	0	0	16	0	0	0	0	0	0	0	0	4	0	0	38	$4,756
8.0	Geotechnical Testing Services	--- See Subconsultant Fee ---																			
Total Hours		36	168	339	68	76	92	396	63	65	267	192	600	23	166	244	364	54	72	3285	
Average Hourly Rate		$171.00	$145.00	$135.00	$138.00	$130.00	$115.00	$115.00	$155.00	$110.00	$145.00	$145.00	$125.00	$86.00	$160.14	$143.08	$93.58	$103.71	$115.84		
Subtotal		$6,156	$24,360	$45,765	$9,384	$9,880	$10,580	$45,540	$9,765	$7,150	$38,715	$27,840	$75,000	$1,978	$26,583	$34,912	$34,063	$5,600	$8,340		

Subtotal Bolton & Menk	$312,113
Subtotal Toole Design	$109,499
Subconsultant - Task 8 - AET (Geotechnical Services - Soil Borings)	$21,370
Subconsultant - Task 8 - AET (Geotechnical Services - Construction)	$36,783
Total Fee	**$479,764**

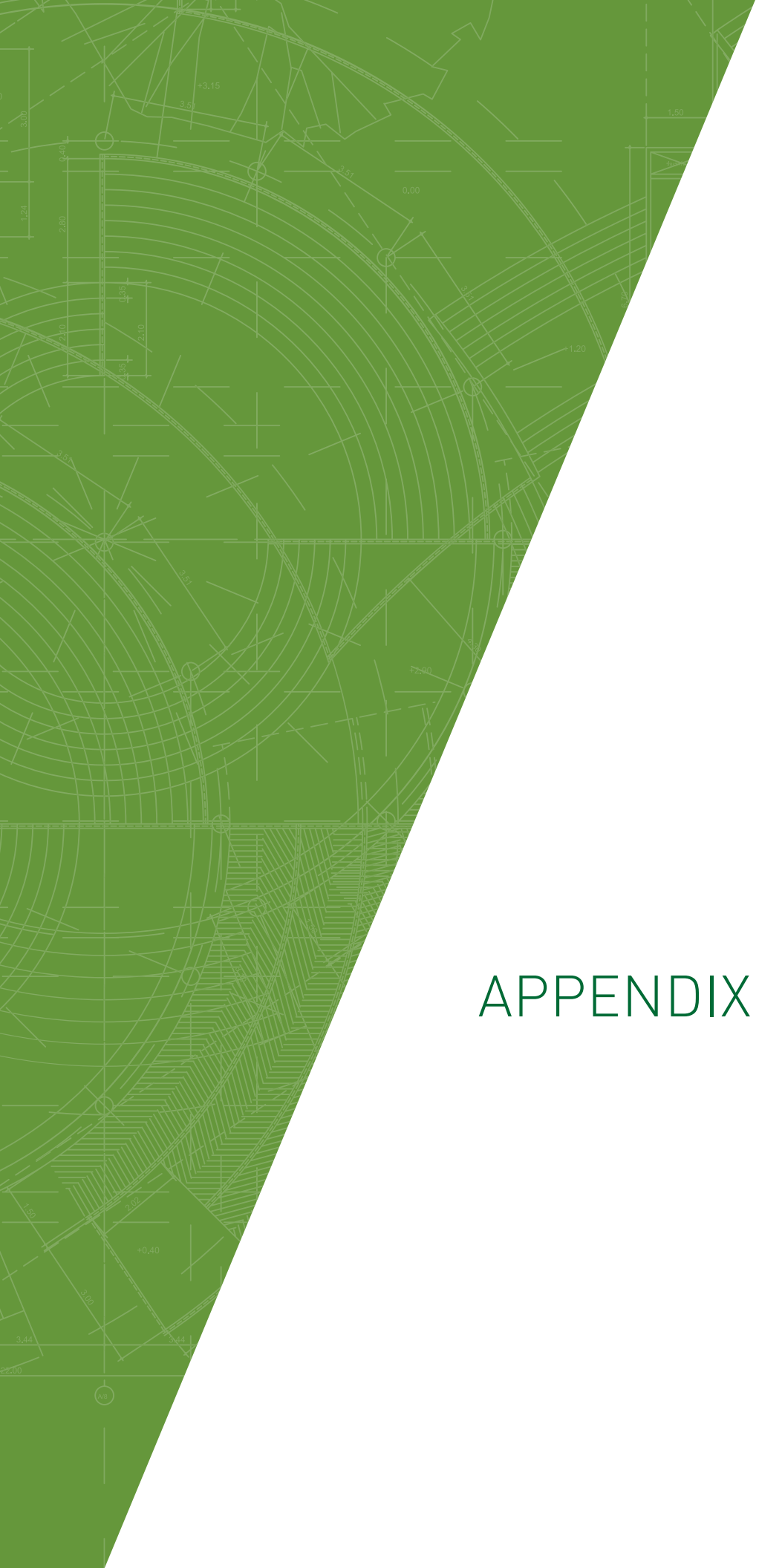
REFERENCES

Section 5

PROJECT **REFERENCES**

Past performance serves as a great indicator of future performance. Our clients tell us we're doing a great job, and they will tell you too! Please contact the following references to evaluate our performance on similar projects. Additional references are available upon request.

Client	Contact	Project	Design Schedule	Key Personnel/ Responsibilities	Project Description
Carver County	Dan McCormick, Transportation Manager 952-466-5200 dmccormick@co.carver.mn.us	CSAH 10 Realignment and other roundabout projects	Fall 2017 - Spring 2018	Jake Bongard - Traffic Lead Derek Arens - Project Manager/Design Lead	Jake and Derek have worked with Dan on several projects in Carver County, including the CSAH 10 Realignment, CSAH 33/34 Roundabout Improvement, and a variety of other preliminary and final design efforts.
City of Waconia	Craig Eldred, Public Services Director 952-442-4265 celdred@waconia.org	CSAH 10 Realignment	Spring 2016 - Spring 2017	Jake Bongard - Traffic Lead Derek Arens - Design Lead	A corridor study was completed recommending three roundabouts be designed and constructed. Bolton & Menk delivered on each project phase including performing construction administration.
Scott County	Jake Balk, Program Delivery Manager 952-496-8436 jbalk@co.scott.mn.us	CH 21 Downtown Reconstruction	Spring - Winter 2018/2019	Jake Bongard - Deputy Project Manager/Traffic Lead Derek Arens - Design Lead	The project evaluated potential improvements to intersections in close proximity to the CH 21/TH 13 intersection, in particular CH 21/Main Avenue. It also took into consideration traffic impacts on surrounding streets, including impacts on pedestrian safety and accessibility. Ultimately, two roundabouts were added along with two 3/4 intersections.
City of Northfield (Toole)	David Bennett, P.E., Public Works Director/City Engineer 507-645-3006 david.bennett@ci.northfield.mn.us	Northfield Complete Streets - 2018 Street Improvements	Summer 2017 - Spring 2018	Chris Bower - Project Engineer John Dempsey - Landscape Architect Brian Tang - Engineer Connor Cox - Planner	Complete streets concepts for two roadway projects in advance of their typical engineering process.
	Tim Berhrendt, Streets and Parks Manager 507-645-3027 tim.behrendt@ci.northfield.mn.us	Northfield Pedestrian, Bike, and Trail System Update	Spring 2018 - Spring 2019	Connor Cox - Project Manager Brian Tang - Engineer	Update the city's trail system map including planned sidewalks, on-street bicycle facilities, off-street trails, develop Safe Routes to School infrastructure recommendations for two schools, update the city's street type chart to reflect the city's complete streets policy



APPENDIX - RÉSUMÉS

Section 6

Jacob J. Bongard, P.E., PTOE

Senior Transportation Project Engineer

BOLTON & MENK

Real People. Real Solutions.

Education

Bachelor of Science - Civil Engineering
University of North Dakota

Registration

Professional Engineer, Minnesota

Professional Traffic Operations Engineer, Transportation Professional Certification Board, Inc.

Certifications

MnDOT Certifications

- Signal and Lighting Technician

Continuing Education

Towards Zero Deaths Annual Conference, MnDOT

NCITE Meetings

Presenting Data and Information: A One-Day Course Taught by Edward Tufte

TZD Annual Conference

TRB Annual Meeting

Organizations

Institute of Transportation Engineers

Minnesota Society of Engineers and Surveyors

North Central Section Institute of Transportation Engineers

Summary

As a transportation project engineer who began his career in 2009, Jacob works on a variety of projects ranging from high-level planning studies to in-depth final design projects. He uses the knowledge and experience obtained through his education and professional practice to identify the needs of a project, work toward a solution, and communicate results to those in and outside the field of engineering. Jacob loves to solve challenging problems and enjoys seeing the impact our work can have on improving the way people safely and efficientl get from one place to another on a daily basis. He is knowledgeable in extensive data collection procedures and proficient with MicroStation, AutoCAD, Synchro and SimTraffic, SignCAD, and a variety of data processing softwar

Experience

Roadway Design and Construction

- CH 101 Infrastructure Replacement in Shakopee, Scott County, MN
- CSAH 83 EAW and Preliminary Design, Shakopee Mdewakanton Sioux Community
- Cedar Grove Redevelopment, City of Eagan, MN
- CSAH 69 Reconstruction, Scott County, MN
- TH 169 Reconstruction in Blue Earth, MnDOT District 7
- CH 17/Vierling Drive/US 169 Exit Ramp Reconstruction, City of Shakopee, MN
- TH 4 Reconstruction in St. James, MnDOT District 7
- Campus Water, Sewer Infrastructure Replacement, North Dakota State College of Science
- CSAH 50 Expansion, Dakota County, MN
- TH 14/TH 15 New Ulm, MnDOT District 7
- TH 60 Windom, MnDOT District 7
- CSAH 10 Realignment, Carver County, MN
- TH 12 Litchfield, MnDO District 8
- Aquila Avenue Design, City of St. Louis Park, MN
- TH 13 Prior Lake Reconstruction, MnDOT Metro
- CH 21 Downtown Reconstruction, Scott County, MN
- Southview Boulevard Final Design, Dakota County, MN
- CSAH 33 and CSAH 34 Roundabout, Carver County, MN
- Cedar Lake Road Reconstruction, City of St. Louis Park, MN
- Commerce Drive Reconstruction, City of North Mankato, MN
- CR 45 Roundabout, Sherburne County, MN

Lighting Design

- CH 101 Infrastructure Replacement in Shakopee, Scott County, MN
- CSAH 69 Reconstruction, Scott County, MN
- TH 169 Reconstruction in Blue Earth, MnDOT District 7

- Cedar Grove Redevelopment, City of Eagan, MN
- Broadway Avenue Streetscape, City of Albert Lea, MN
- North Creek Greenway (157th Street Segment), City of Apple Valley, MN

Corridor Studies/Operations Modeling and Simulation

- Downtown Subarea Traffi Analysis, City of Mankato, MN
- CSAH 83 EAW, Prior Lake and Shakopee, Scott County, MN
- Washington Avenue Link, City of Saint Peter, MN
- TH 169/Le Sueur Hill Access Study, City of Le Sueur, MN
- CSAH 3 at TH 169 Interchange Study in Belle Plaine, Scott County, MN
- US 10 Access Management Study, Lake Park, MnDOT
- Watertown River Crossing Study, Carver County, MN
- CSAH 17 at US 169 North Ramp and Vierling Drive, Shakopee, Scott County, MN
- US 169 and Old Minnesota Avenue Corridor Study, City of Saint Peter, MN
- County Road E (B-2 District) Implementation Plan, City of Arden Hills, MN
- Downtown South Study, City of Prior Lake, MN
- Pilot Knob Corridor Study, Dakota County, MN
- Roosevelt Cultural District Streetscape Study, City of Des Moines, IA
- County Road E Improvements Study, City of Arden Hills, MN
- CSAH 10 Bridge Replacement, Carver County, MN
- TH 10 Access Planning Study, MnDOT
- Dale Street Four-Lane to Three-Lane Conversion, Ramsey County, MN
- Southview Boulevard & 3rd Avenue Preliminary Design, Dakota County, MN
- CH 83 Corridor Readiness Study, City of Shakopee, MN
- ISD 110 Expansion Transportation Study, City of Waconia, MN
- Mayer Lutheran School Zone Study, City of Mayer, MN
- CSAH 61/TH 41 Improvements in Carver County, MN
- Carver County Safety Study, Carver County, MN
- CSAH 10 Alignment Study, City of Waconia, MN
- CSAH 92 Corridor Study, City of Waconia, MN
- Powers Boulevard Pedestrian Crossings, Carver County, MN
- CSAH 5 Extension in Winsted, McLeod County, MN
- NW 4th Street Study, City of Brainerd, MN

Intersection Control Evaluation/Signal Justification Report

- CSAH 11 at Edgewater Farms Drive and Ranchette Drive, Crow Wing County, MN
- 84th Street at Xerxes Avenue, City of Bloomington, MN
- 98th Street at Collegeview Road, City of Bloomington, MN
- 90th Street at Lyndale Avenue, City of Bloomington, MN
- 84th Street at Lyndale Avenue, City of Bloomington, MN
- TH 5 at TH 284, City of Waconia, MN
- TH 5 at Cherry Street, City of Waconia, MN
- TH 25 at 62nd Street, City of Mayer, MN
- 94th Street at Lyndale Avenue, City of Bloomington, MN
- 86th Street at Lyndale Avenue, City of Bloomington, MN

Brian J. Hilgardner, P.E.

Principal Engineer

BOLTON & MENK

Real People. Real Solutions.

Education

Bachelor of Science - Civil Engineering
University of Minnesota

Registration

Professional Engineer, Minnesota

Certifications

MnDOT Certifications

- Aggregate Production

U of M Certifications

- SWPPP Design

Organizations

Minnesota Society of Professional Engineers

National Society of Professional Engineers

North American Society for Trenchless Technology

Minnesota Public Works Association

City Engineers Association of Minnesota

Summary

When it comes to clients, Brian takes time to get to know them on a deeper level, building trust in him and the Bolton & Menk team. Since beginning his career in 1998, he has gained a range of experience in project administration from conception through construction. His background as a project manager includes development and design of municipal reconstruction projects, with expertise in pedestrian facility construction and street construction. Over the years, Brian has fostered strong relationships with both his clients and employees. He is passionate about mentoring and helping train young EIT's on proper construction observation skills and career development.

Experience

City of Red Wing, Minnesota

- TH 61 Downtown Improvements
- TH 61/Spring Creek Road Reconstruction

City of Hastings, Minnesota

- Riverfront Renaissance Improvements

City of Northfield, Minnesota

- Woodley Street Improvements
- Maple and Prairie Street Reclaim
- 6th and 9th Street Reconstruction
- 2012 Street Reconstruction
- Linden, 2nd, and Plum Street Reconstruction
- 4th Street Improvements
- 1st Street Improvements
- Water Street Parking/5th Street Enhancements and Reconstruction
- Municipal State Aid Improvements
- 5th Street Improvements

Empire Township, Minnesota

- 170th Street/Whitetail Woods Regional Park Access
- TH 3 Safety Improvements
- 190th and TH 3 Roundabout
- CR 58 (170th Street) Turnback
- Infrastructure Management Plan
- GIS Smart Mapping
- Biscayne Avenue (190th-197th) Improvements
- Maintenance Facility Site Plan
- Well No. 3 and Transmission Watermain
- Mining EIS
- UMore Park Development Review (Transportation Study and Gravel EIS)
- Construction Administration and Design Review of Private Developments

City of West St. Paul, Minnesota

- Marie Avenue Improvements
- 2013 Street & Utility Improvements

City of Hampton, Minnesota

- Main Street and Lincoln Street Improvements
- Fire Hall/238th Street Project (Cooperative Agreement with MnDOT)
- Infrastructure Management Plan
- TH 52 CR 47 Interchange Frontage Road

City of Inver Grove Heights, Minnesota

- Argenta District Trunk Utility Improvements
- 65th Street Improvements
- Northwest Area Trunk Utility Improvements

City of Burnsville, Minnesota

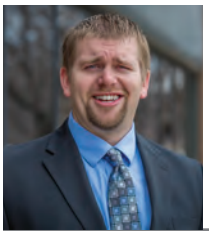
- Private Development Review

Douglas Township, Minnesota

- Ongoing General Engineering Services

Marshan Township, Minnesota

- Ongoing General Engineering Services



Derek J. Arens, P.E.

Transportation Project Engineer

BOLTON & MENK

Real People. Real Solutions.

Education

Bachelor of Science - Civil Engineering
University of Minnesota

Bachelor of Arts - Engineering Science
Bethel University

Registration

Professional Engineer, Minnesota

Certifications

MnDOT Certifications

- Aggregate Production I
- Bituminous Street I & II
- Concrete Field I
- Grading and Base I & II

American Concrete Institute Certifications

- ACI Field Testing Tech I

Continuing Education

- Roundabout Training, MnDOT
- ITS Project Management Design, MnDOT
- Traffic Signals 101, MnDOT
- Writing Style for 2014 Standard Specifications, MnDOT
- Preliminary Layout & Geometric Design, MnDOT
- Guide Sign Design Training, MnDOT
- MnDOT ADA Training
- Metro State Aid Construction Administration

Organizations

American Council of Engineering Companies
Emerging Professionals

Institute of Transportation Engineers

American Society of Civil Engineers

Summary

Since starting as a roadway design engineer in 2011, Derek has been responsible for preliminary and final roadway and intersection design layouts, cost estimates, and assembling construction plans and specifications. He has al -around experience from concept design to construction on a variety of transportation projects. Derek's strength includes knowing a range of design from retaining walls to trails to access management. He specializes in roundabout design and has a history of geotechnical experience and understanding from his previous employment. Derek backs project management tasks and is passionate about helping bring clients' visions to life with the 3D design aspect of roadway design technology. He is fluent in software such as MicroStation/GEO AK, Openroads, and Site/Corridor Modeler.

Experience

Roundabouts

- CSAH 33/CSAH 34, Carver County, MN
- CSAH 10 in Waconia, Carver County, MN
- CR 45 Roundabout in Princeton, Sherburne County, MN
- CSAH 21 Downtown Reconstruction in Prior Lake, Scott County, MN
- Pioneer Drive/Interlachen Parkway Roundabout, City of Woodbury, MN
- Woodbury Drive (CSAH 19), Washington County, MN
- TH 59/Willow Road Roundabout, MnDOT District 4
- Route 109, MoDOT
- US 20/Harmony Road Roundabout, IDOT

Roadway Design and Construction

- CSAH 10 in Waconia, Carver County, MN
- CSAH 30 Diffley Road/Braddoc Trail, City of Eagan, MN
- I-94 Pavement Rehabilitation and Guardrail Replacement, City of St. Joseph, MN
- TH 169 Flood Mitigation Reconstruction, MnDOT District 7
- CR E, City of Arden Hills, MN
- CR 42 Trail, Dakota County, MN
- Troutbrook Regional Trail and Nature Sanctuary, St. Paul Parks and Recreation
- 76th Street, City of Richfield, M
- Federal Bikeways Project, City of Richfield, M
- Roads Acting as Dams (RAAD) in Devils Lake, Spirit Lake Tribe

Lighting Design

- TH 59/Willow Road Roundabout, MnDOT District 4
- Woodbury Drive (CSAH 19), Washington County, MN
- Troutbrook Regional Trail and Nature Sanctuary, St. Paul Parks and Recreation

Corridor Studies/Operations Modeling and Simulation

- TH 75/50th Intersection, MnDOT District 4
- TH 75/TH 210, MnDOT District 4
- US 52 from Cannon Falls to Hader, MnDOT District 6
- TH 10 Corridor in Anoka, MnDOT Metro

Intersection Control Evaluation

- TH 75/50th Intersection, MnDOT District 4
- TH 59/Willow Road Roundabout, MnDOT District 4
- TH 75/TH 210, MnDOT District 4

Timothy J. Olson, P.E., CFM

Water Resources Project Manager

BOLTON & MENK

Real People. Real Solutions.

Education

Master of Science - Civil Engineering, Water Resources
South Dakota School of Mines & Technology

Bachelor of Science - Civil Engineering, Water Resources
South Dakota School of Mines & Technology

Registration

Professional Engineer, Minnesota, Iowa, Wisconsin, North Dakota

Certifications

FEMA Certified Floodplain Manager

U of M Certifications

- SWPPP Design

Organizations

Minnesota Society of Professional Engineers

Summary

Mr. Olson has been a water resources engineer with Bolton & Menk since 2006. His experience includes project management in both design and construction of complex water resources and environmentally sensitive projects. He specializes in comprehensive surface water management planning; innovative best management practice design; detailed hydraulic and hydrologic modeling; drainage design and construction plan review; NPDES Phase I & II MS4 and construction stormwater permitting requirements; and coupling GIS techniques with water resources design and analysis. Mr. Olson has a passion for stormwater and water quality education and participates in several stormwater-related steering committees and stakeholder groups. He enjoys facilitating partnerships, developing new relationships, and collaborating with stakeholders to define a common vision and work toward shared goals

Experience

Site Design and Stormwater Management Design

- Clear Lake Water Quality Improvements, City of Forest Lake, MN
- Jarvis Street and 165th Road Reconstruction and Trail Improvements, City of Elk River, MN
- Washington County Public Works Schematic Design Report, Washington County, MN
- River to River Greenway Stormwater Management, Dakota County, MN
- CSAH 12 (Spring Lake Road) Water Quality and Wetland Restoration, Scott County, MN
- Willow Creek Drainage Improvements, City of Buffalo, M
- Bluff Street Trail Improvements, City of Minneapolis, MN
- Mississippi River Trail, City of Anoka, MN
- Ravine Restoration, Benco Electric, City of Mankato, MN
- CSAH 23, Ottawa Bypass, Le Sueur County, MN
- Backflow Prevention and Lift Stations, City of Belmond, I
- Urban Village Stormwater Management, City of Woodbury, MN
- TH 295/TH 233 Turnbacks, City of Saint Peter, MN
- 2006/2010 Wal-Mart Stores, Cities of Osceola, Denison and Shenandoah, IA
- 2006/2010 Various Water and Wastewater Treatment Facilities, Site and Stormwater Management Design, SWPPP Preparation
- 2010 CSAH 41 Wetland Restoration and Industrial Park Regional Stormwater Management Design, City of North Mankato, MN
- 2009-2010 Comprehensive Airport Site Design, Stormwater Management Design, and Phased SWPPP Design, City of Blue Earth, MN
- 2009-2010 Northwest Industrial Area, Regional Stormwater Management Design, City of Marshall, MN
- 2009 Tiger Lake Expansion and SWPPP Preparation, City of Marshall, MN
- 2008-2009 Eastwood Industrial Park, Comprehensive Stormwater Management Design and SWPPP Preparation, City of Mankato, MN

- 2008-2009 Stormwater Management Design and SWPPP and Construction Permit Preparation, Crystal Valley Coop
- 2007-2008 Owatonna Public Utilities Flood Mitigation and Stormwater Lift Station Design, City of Owatonna, MN
- 2007 Silver Lake Road (CSAH 136) Storm Sewer Design, Hennepin County, MN

Stormwater Managements Plans (SWMP)

- SWMP, Shakopee Mdewakanton Sioux Community
- 2010 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Paynesville, MN
- 2010 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, Minnesota State University, Mankato, MN
- 2009 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Saint Francis, MN
- 2008 Citywide Hydraulic and Hydrologic Modeling, Comrehensive Report Preparation, and Detailed ArcGIS Analysis, City of Wells, MN
- 2008 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Jordan, MN
- 2008 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Ramsey, MN

Hydraulics and Hydrologic Modeling

- CSAH 4 Trail Improvements, Dakota County, MN
- Heart River Levee Freeboard Analysis, City of Mandan, ND
- TH 5 Corridor Improvements Study, City of Waconia, MN
- Lake Washington Outlet Sill Dam, Lake Washington, MN
- East Central Stormwater Improvements, City of Storm Lake, IA
- Flood Mitigation & Culvert Replacements, Crow Wing County, MN
- Turtle Creek Flood Mitigation, City of Austin, MN
- Walnut Street Flood Mitigation, City of Owatonna, MN
- 2010 Stormwater Utilities Inventory, Citywide Hydraulic Modeling, ArcGIS Analysis, and ArcGIS Web Mapping, City of Osseo, MN
- 2010 Iowa River Floodplain Modeling, ArcGIS Analysis, and Stormwater Lift Station Design, City of Belmond, IA
- 2010 County Ditch 56 Digital Flood Insurance Rate Map (DFIRM) Review and Floodplain Study, City of Lake Crystal, MN
- 2009 County Ditch 12 Floodplain Modeling, Including a Conditional Letter of Map Revision Based on Fill (CLOMR-F), City of Worthington, MN
- 2007 Countywide DFIRM Study, Hydraulic Model of 53 Stream Miles along 7, Meeker County, MN
- Major Streams, Floodplain Delineation and ArcGIS Analysis, Flood Insurance Study (FIS) Document Preparation, and Preparation of the Technical Support Data Notebook (TSDN)

Water Quality Improvements

- Water Quality Best Management Practice (BMP) Selection Study, City of Marine on St. Croix, MN
- Government Center Campus, Washington County, MN
- Hardee's Water Quality Tree Planter Box, City of Mankato, MN
- Broadway Avenue Streetscape, Albert Lea, MN

- 2010 Preliminary ArcSWAT Modeling, Best Management Practice (BMP) Feasibility Analysis, and Detailed ArcGIS Analysis, Lake Washington District, MN
- 2008-2009 Eastwood Industrial Park, Regional Bioswale and Bioretention System Design, City of Mankato, MN
- 2008 SWPPP Implementation, P8 Modeling, and Detailed ArcGIS Analysis, City of North Mankato, MN
- 2008 SWPPP Implementation, P8 Modeling, and Detailed ArcGIS Analysis, City of Saint Peter, MN
- 2008 MN SWPPP Implementation, P8 Modeling, and Detailed ArcGIS Analysis, City of New Ulm, MN

Floodplain Analysis, Mapping and FEMA Coordination

- Sand Creek Flood Analysis and Remapping, City of Jordan, MN
- Turtle Creek Flood Mitigation, City of Austin, MN
- Meeker County DFIRM, Meeker County, MN
- Count Ditch 12 Flood Mitigation, City of Worthington, MN
- Sunset Pond Dam Safety Analysis, City of Burnsville, MN
- FEMA DFIRM Study, Lake Crystal, MN

Joshua G. Stier, P.E.

Project Engineer

BOLTON & MENK

Real People. Real Solutions.

Education

Bachelor of Science - Civil Engineering
Minnesota State University, Mankato

Registration

Professional Engineer, Minnesota,
Iowa, North Dakota

Certifications

U of M Certifications

- SWPPP Design
- SWPPP Site Management

ISWEP

- SWPPP Design (IA)

American Concrete Institute Certifications

- ACI Field Testing Tech I

Organizations

Minnesota Society of Professional Engineers

Summary

Mr. Stier began his career as a water resources engineer in 2012. He is responsible for the planning, design, and preparation of construction plans and specifications for a variety of municipal, count , MnDOT, and private projects. He specializes in stormwater management including the design of storm sewer and best management practices, hydrologic and hydraulic modeling, comprehensive Surface Water Management Plans (SWMPs), identification and discussion of NPDES requirements, developing stormwater pollution prevention plans (SWPPPs), and wetland restoration projects.

Mr. Stier has extensive experience in stormwater modeling using Innovyze's XPSWMM & InfoSWMM, Autodesk's Storm and Sanitary Analysis, HydroCAD, GeoPAK Drainage, and Hec-RAS software programs. He is experienced in 2-dimensional modeling to determine ponding extents and overflo routing. His expertise in these programs is used to analyze complex urban and rural floodin scenarios and provide practical solutions to stormwater planning.

Mr. Stier has experience working with regulatory agencies to obtain the necessary permits and clearances including the MnDNR, MnDOT State Aid, USACE, FEMA, BSWR, Watershed Management Organizations and other local government agencies. His experience working with project stakeholders coupled with his stormwater modeling skills make him a valuable team member when approaching stormwater planning and design.

Experience

Stormwater Management and Design

- Penn-American Linear Stormwater Storage, City of Bloomington, MN
- 2018 Surface Water Management Plan Update, City of Carver
- TH 41 Reconstruction & Expansion, Carver County
- CR 21/TH 13 Improvements, City of Prior Lake, MN
- CSAH 83/Local Roadway Improvements, Shakopee Mdewakanton Sioux Community
- Turtle Creek Flood Mitigation, City of Austin, MN
- Hengen St Stormwater Improvements, City of Fairmont, MN
- Lake Outlet Storm Sewer Project, City of Saint James, MN
- Sibley Meadows Wetland Restoration, Sibley County, MN

2D Hydrologic and Hydraulic Modeling

- Stevens Drive Stormwater Lift Station, City of Iowa City, IA
- Surface Water Management Plan, City of Mound, MN
- Eastside Stormwater Study, City of Fairmont, MN
- TH 12 Reconstruction in Litchfield, MnDO
- TH 14/15 Interchange in New Ulm, MnDOT
- Clinton/Baker St. Drainage Improvements, City of Arlington, MN

Jonathan D. Nelsen, PLA, ASLA

Landscape Architect

BOLTON & MENK

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Education

Bachelor of Science - Community and Regional Planning – Iowa State University

Bachelor of Landscape Architecture – Iowa State University

Master of Landscape Architecture – Iowa State University

Graduate Certificate in Geographic Information Systems – Iowa State University

Registrations

Professional Landscape Architect, Minnesota

Organizations

American Society of Landscape Architects

American Planning Association

Sensible Land Use Coalition

Minnesota Design Team

Summary

Mr. Nelsen joined Bolton & Menk, Inc. as a landscape architect in 2012. Previously, he held positions with both city and university planning departments and has worked directly with the public, policy makers, and developers on master planning and development projects. In his role as a landscape architect, he has been involved in the design of park and streetscape projects with responsibilities ranging from conceptual design to the presentation graphics to construction documentation. He has worked on different aspect of various-sized projects including park master planning, trail design, branding and identity, streetscape design, site planning, urban design, development guidelines and review, campus master planning, and GIS analysis. Mr. Nelsen enjoys the creative challenges of the design field and uses new technologies to foster the best possible outcome for the client.

Experience

Downtown Streetscapes

- The Artery Streetscape Master Plan, City of Hopkins, MN
- Roosevelt Cultural District Streetscape, City of Des Moines, IA
- Riverfront Renaissance, City of Hastings, MN
- Downtown Tree Lighting, City of Belle Plaine, MN
- Broadway Avenue Streetscape, City of Albert Lea, MN
- Mainstreet Improvement Project, City of Hopkins, MN
- 2015 Downtown Improvements Project, City of Jordan, MN

Roadway Projects

- TH 14 Roundabout Landscaping, City of North Mankato, MN
- TH 169 Roundabout Landscaping, City of Blue Earth, MN
- Lair Road Bridge Landscaping, City of Fairmont, MN
- Living Streets Guidelines, City of Maplewood, MN
- Broadway Avenue Streetscape, City of Albert Lea, MN
- County Highway 2 Streetscape, City of Elko New Market, MN
- Mainstreet Improvement Project, City of Hopkins, MN
- 2015 Downtown Improvements Project, City of Jordan, MN
- TH 61 Reconstruction, White Bear Lake, MN

Recreation and Parks Facilities

- Hamlet Park Sports Complex, City of Cottage Grove, MN
- Benson Park, City of North Mankato, MN
- Riverfront Renaissance-Depot Park, City of Hastings, MN
- Riverfront Renaissance-Levee Park, City of Hastings, MN
- Wagner Park Skatepark Improvements, City of Elko New Market, MN
- Pete's Hill Park Trail and Overlook, City of Elko New Market, MN
- Eldorado Park Master Plan, City of Clearwater, MN

- Valley View Park Master Plan, City of Oak Park Heights, MN
- Emmetsburg Campground, City of Emmetsburg, IA

GIS

- Campus-Wide Addressing Project, Iowa State University and City of Ames, IA
- Cedar River Watershed Analysis, Black Hawk County, IA
- Emergency Management Map Books, City of Ames, IA
- Development of Statewide Structures Point Theme, Iowa State University and Iowa Department of Natural Resources

Other

- Iowa Living Roadways Community Visioning Projects in Paullina, Perry, and Schaller, Iowa State University, IA
- Storm Lake CDBG, City of Storm Lake, IA
- Ghent Lift Station Floodwall, City of Ghent, MN
- Variance and Zoning Code Reviews, City of Ames, IA
- Site Plan Reviews, City of Ames, IA
- Campus Master Plan Updates, Iowa State University
- Campus Plant Inventory, Iowa State University
- Christian Peterson Art Museum Courtyard Landscaping, Iowa State University
- Landscape Planning for Iowa State Center, Iowa State University

Sam J. Kessel, PLA, LEED AP

Landscape Architect

BOLTON & MENK

Real People. Real Solutions.

Education

Bachelor of Landscape Architecture -
Iowa State University

Associate of Applied Science - Commercial Horticulture
Des Moines Area Community College

Registration

Professional Landscape Architect, Iowa, Minnesota

Certifications

Leadership in Energy and Environmental Design Accredited Professional (LEED AP)

Summary

Mr. Kessel is a landscape architect for Bolton & Menk, Inc., beginning his career in 2005. He has developed a broad knowledge and extensive design experience in downtown redevelopments, urban parks, and recreation complex master plans. Mr. Kessel has worked on a number of successful projects that incorporate multimodal strategies from conceptual design and public involvement to construction administration. His passion for landscape architecture is exemplified though his use of innovative techniques and creative solutions that have resulted in many successful public and private projects throughout Iowa, Minnesota, and Colorado. His proficient design approach actively engages city staff and the public, effectively fostering public suppor that produces a product that will stand the test of time.

Experience

Downtown Streetscapes

- Broadway Avenue Streetscape, City of Albert Lea, MN
- Roosevelt Cultural District Streetscape, City of Des Moines, IA
- Riverfront Renaissance, City of Hastings, MN
- The Artery Streetscape Master Plan, City of Hopkins, MN
- Downtown Tree Lighting, City of Belle Plaine, MN

Roadway Projects

- Central Avenue Bridge, City of Estherville, IA
- 8th Street Design, City of Hopkins, MN
- TH 61 Reconstruction, White Bear Lake, MnDOT

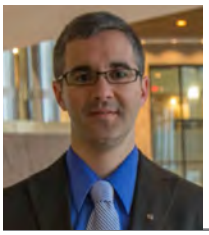
Recreation and Parks Facilities

- Riverfront Renaissance, Hastings Riverwalk, City of Hastings, MN
- Three Affiliate Tribes Amphitheater, New Town, ND
- Fountain Lake Park Reconstruction, City of Albert Lea, MN
- Emmetsburg Marina, City of Emmetsburg, IA
- Trails Master Plan, City of Ogden, IA
- Hamlet Park Sports Complex, City of Cottage Grove, MN
- Recreation Complex Master Plan, City of Elko New Market, MN
- Benson Park, City of North Mankato, MN
- German Park Amphitheater, City of New Ulm, MN
- Water Trails Tool Kit, Iowa DNR
- State Bridge Amphitheater Concept Design, City of Bond, CO
- Single Track Trails Master Plan, Rockinghorse, City of Aurora, CO

Other

- Copper Mountain Fire Station, Copper Mountain, CO
- Heartland Baptist Church, City of Ames, IA

- Iowa Living Roadway Community Visioning Projects, Iowa State University
- Stormwater Management/Treatment Plan, City of Storm Lake, IA
- Living Street Manual, City of Maplewood, MN
- Rockinghorse Development, City of Aurora, CO
- Riverton on the Platte Development, City of Sheridan, CO
- Central Park Towers Complex, Al Reem Island, United Arab Emirates
- ProLogis Global Headquarters, City of Denver, CO
- Iowa Motor Truck Association Campus Design, City of Des Moines, IA



Eric R. Wilfahrt, L.S.

Survey Manager

BOLTON & MENK

Real People. Real Solutions.

Education

Bachelor of Science - Land Surveying
St. Cloud State University

Associate of Applied Science - Land Surveying Technology
South Central College

Associate of Applied Science - Civil Engineering Technology
South Central College

Registration

Licensed Land Surveyor, Minnesota

Organizations

Minnesota Society of Professional Surveyors

National Society of Professional Surveyors

Summary

Mr. Wilfahrt began surveying with Bolton & Menk, Inc. in 2001. He currently manages survey operations for the firm s South Metro offices. He is responsible for research, preparation, calculations, interpreting, and writing legal descriptions related to ALTA, topographic, plats, boundary, and engineering surveys, in addition to quality control and oversight. Mr. Wilfahrt is proficient in AutoCAD, AutoCAD Map, COGO, CG-Survey for AutoCAD, Eagle Point Software, Civil 3D, Trimble Business Center, Leica Cyclone 9, and Leica Topo II Software.

Experience

Land Acquisition and Control Surveys

- CSAH 42 Right-of-Way Plat, Dakota County, MN
- CSAH 42 Right-of-Way Plat, Scott County, MN
- CSAH 12 Right-of Way Plats, Scott County, MN
- Right-of-Way Plat, City of Hopkins, MN
- Right-of-Way Plats, City of Jordan, MN
- Official Map, City of Burnsville, M
- Official Map, Olmsted Count , MN
- Right-of-Way Plat, City of Waconia, MN
- CSAH 44 Right-of-Way Plat, Scott County, MN
- CSAH 27 Right-of-Way Plat, Scott County, MN
- CSAH 12 Right-of-Way Plat, Wright County, MN
- Hennepin Avenue/Lyndale Avenue Improvements, City of Minneapolis, MN
- St. Anthony Parkway and Bridge Improvements, City of Minneapolis, MN
- Granary Road Improvements, City of Minneapolis, MN
- HARN Leveling, City of Golden Valley, MN

Construction Staking

- Street & Public Utility Improvements, City of Elko, MN
- Street & Public Utility Improvements, City of Hopkins, MN
- Street & Public Utility Improvements, City of Burnsville, MN
- Street & Public Utility Improvements, City of Prior Lake, MN
- CSAH 96 Reconstruction, Ramsey County, MN
- Glen Road, City of Newport, MN
- Chili's Restaurant, City of Shakopee, MN
- Public Trail, City of Elko New Market, MN
- Marschall Road (CSAH 17) and Vierling Drive Improvements, City of Shakopee, MN

Subdivision Platting and Development

- Registered Land Survey, Shakopee Mdewakanton Sioux Community
- Tacoma West Industrial Park, City of Norwood Young America, MN

- Cannon Greens, City of Cannon Falls, MN
- Curren Addition, City of Lakeville, MN
- Registered Land Surveys, City of Jordan, MN
- Lone Oak Center, City of Eden Prairie, MN
- Crossroads Station, City of Plymouth, MN
- Big Lake Center C.I.C., City of Big Lake, MN
- Forest Park Heights, City of Burnsville, MN
- U-Haul Addition, City of Burnsville, MN
- Vista View 9th Addition, City of Burnsville, MN

Topographic and Design Surveys

- 2nd Street Sanitary Sewer Improvements, City of Hopkins, MN
- Granary Road, City of Minneapolis, MN
- Wal-Mart Site in Waverly, IA, Wal-Mart Stores, Inc.
- Performing Arts Center, City of Burnsville, MN
- 18th Avenue Trail NE, City of Minneapolis, MN
- Church Street, City of Elko New Market, MN
- NE Penn Drainage Area Survey, City of Bloomington, MN
- Hennepin Avenue/Lyndale Avenue Improvements, City of Minneapolis, MN
- St. Anthony Parkway and Bridge Improvements, City of Minneapolis, MN
- Dinkytown Greenway, City of Minneapolis, MN
- State Capital Complex Topographic and Boundary Survey, State of Minnesota Real Estate and Construction Services

Mining and Landfill Surveys

- Demolition Landfill Topographic Survey in Nicollet County, M.R. Construction
- Landfill Records Research, Various Sites in Minnesota, MPCA

Roger A. Ness

Senior Engineering Technician

BOLTON & MENK

Real People. Real Solutions.

Education

Coursework - General Studies
Northern State University

Certifications

MnDOT Certifications:

- Aggregate Production
- Bituminous Street I & II
- Concrete Field I & II
- Grading and Base I & II

U of M Certifications

- SWPPP Installer
- SWPPP Site Management

Summary

Mr. Ness began his profession as a senior engineering design technician and construction observer in 1988. He has extensive experience in the layout, detailed design, cost estimating, and construction observation of municipal public works projects. He also has extensive experience with documentation and testing requirements for State and Federal Aid projects. Mr. Ness is proficient in the use of AutoCAD, Eagle Point, Word, and Excel software.

His capability to perform technical design during the winter months followed by observing and administering difficult projects during the summer has allowe him to become an outstanding Senior Engineering Technician. He also has experience as a Project Manager and Street and Parks Maintenance Manager for the City of Northfield. During his time there, he developed excellent leadership and management skills to compliment his technical design capabilities.

Experience

Scott County, Minnesota

- Public Works Sanitary Sewer and Forcemain Improvements

City of Arden Hills, Minnesota

- CP Rail Trail Crossing Improvements (State Aid)

City of Eagan, Minnesota

- Duckwood Drive Street & Utility Improvements

City of Medford, Minnesota

- Trunk Water and Sewer Improvements
- Wencl 1st and 2nd Addition - Street & Utility Improvements

City of Mendota Heights, Minnesota

- Visitation Drive and Mendota Road Roundabout (Federal Aid)

City of Fridley, Minnesota

- Street Improvement Project - Design and Drafting

City of Burnsville, Minnesota

- Judicial Road Street & Utility Construction
- Forest Park Heights Residential Development

City of Jordan, Minnesota

- TH 282 Street & Utility Construction (State Aid)
- TH 282/TH 21 Intersection and Signal Improvements (StateAid)
- County Road 66/County 61 Safe Routes to School Trail Project (Federal Aid)

- County Road 66/TH 21/Sawmill Road Realignment
- Park Drive Street & Utility Improvements
- Mill Pond Dredging and Shoreline Stabilization
- Fire Hall Expansion Project
- Sawmill Woods 2nd Addition
- Bridle Creek 7th and 8th Additions
- Stonebridge 1st and 2nd Additions
- Arborview Addition
- Sawmill Road Hope Pond Avenue Improvements

City of Northfield, Minnesota

- 4th Street Improvements
- 1st Street Improvements
- 5th Street Improvements

City of Arlington, Minnesota

- Northwest Improvements - Construction Observation

City of Inver Grove Heights, Minnesota

- NW Area Trunk Utilities - Design and Cost Estimating

City of Hampton, Minnesota

- 238th Street Cooperative Agreement Project
- Fire Hall Project
- Street & Utility Improvements

City of Belle Plaine, Minnesota

- Chatfield Development on the Cree

Empire Township, Minnesota

- Town Hall and Maintenance Facility

Previous Experience

City of Northfield - Project Manager/Streets & Parks Maintenance Manager

Mr. Ness served the City of Northfield for approximately 1 years, 6 of which was spent exclusively working in the engineering department preparing plans, estimates, feasibility reports, and specifications. M . Ness also served as project manager for numerous projects including infrastructure replacement, several thousand feet of interceptor sewer installation, new developments, ponds, and parking lots. During the remaining 5 years, Mr. Ness was responsible for managing the activities of the City's park and street maintenance departments. This also required him to serve as project manager on numerous maintenance related projects such as reclamation and reconstruction projects, seal coating and crack filling. M . Ness continued to stay active in municipal engineering activities during his tenure as Street & Parks Maintenance Manager by preparing all the plans, feasibility reports, and specification related to the maintenance projects as well as completing several designs for new development projects.

KC ATKINS, P.E.

SENIOR ENGINEER

PROFESSIONAL HIGHLIGHTS

Years of Experience: 12

Toole Design: 2014-Present

CH2M HILL: 2007-2014

EDUCATION/ CERTIFICATION

Bachelor of Science, Civil Engineering, Institute of Technology, University of Minnesota: 2007

Professional Engineer: MN, KS, MO, ND, OH, WI, SD, TX

APPOINTMENTS/ AFFILIATIONS

Women's Transportation Seminar

North-Central Institute of Transportation Engineers

American Society of Civil Engineers

KC brings experience in preliminary and final design, including urban/rural roadways, bicycle/pedestrian accommodations, interchanges, local roads, and context-sensitive design solutions. KC has worked on projects such as rural freeway reconstruction with multilane roundabouts, urban reconstruction, new frontage road construction, and mill and overlay projects for varying roadway classifications. Her experience includes geometric layouts, alignments and profiles, intersection details, ADA improvements, cross sections, earthwork, erosion control, construction staging (including temporary bypass construction), signing and pavement marking, construction details, utility review and coordination, special provisions, and engineering estimates. KC also has experience in traffic engineering, performing traffic analysis, and delay calculations, as well as traffic safety, crash analysis, safety plans, and road safety audits. Her wide range of knowledge will allow her to incorporate multiple elements of engineering into the design of TH 246 and Jefferson Parkway to provide safe multimodal infrastructure.

SELECTED PROJECT EXPERIENCE

Avienda Development - Bluff Creek Boulevard, Chanhassen, MN
As Project Manager, KC is leading final design for a new, MnDOT State Aid road to serve a planned development in Chanhassen, MN. The roadway includes 2 roundabouts that accommodate pedestrians and bicyclists for a livable, mixed-use town center development. KC is coordinating with City staff, MnDOT, and the developer to develop a design to meet the needs of all users with a focus on livability.

US 41, Oshkosh/Neenah, WI
As lead design engineer at a former firm, KC designed preliminary and final plans for 12.5 miles of US 41 in Oshkosh and Neenah Wisconsin. The design included 10 multi-lane, spiral roundabouts and bicycle/pedestrian facilities under multiple construction contracts. KC developed shared use paths adjacent to roundabouts and adjacent to the freeway across Lake Butte des Morts providing connections to existing trails across the lake. She also coordinated with landscape architects and Native American designers to incorporate historic images and lessons to provide informative kiosks for trail users. KC also led tasks including the geometric layout, intersection details, construction staging, roadway modeling, cost estimates, Design Study Report, 401/404 Permit application, utility relocation review, structure survey reports, design exceptions, and special provisions.

US 10/WIS 441, Winnebago County, WI
While at her previous firm, KC served as design engineer for a roundabout feasibility study of 11, multi-lane, spiral roundabouts at 4 interchange ramp terminals and adjacent intersections along US 10/WIS 441 in Winnebago County. She performed traffic analysis, roundabout layout, including lane continuity, lane balancing, functional roundabout and roadway geometric design and marking, and design recommendation and estimates. After review, only some of the roundabout locations were recommended for design and construction due to project constraints.

OTHER RELEVANT EXPERIENCE

Winona Pedestrian and Bicycle Master Plan and Complete Streets, Winona, MN
Capital City Bikeway and Jackson Street Reconstruction, Saint Paul, MN

TOOLE DESIGN

CONNOR COX

ENGAGEMENT LEAD

PROFESSIONAL HIGHLIGHTS

Years of Experience: 6

Toole Design: 2014–Present

Institute for Transportation & Development Policy (ITDP): 2012–2013

EDUCATION/ CERTIFICATION

Master of Science, International Cooperation and Urban Development, Technical University of Darmstadt (Germany): 2013

Bachelor of Art, Sustainability (Sustainable Urban Development), Arizona State University: 2010

APPOINTMENTS/ AFFILIATIONS

Association of Pedestrian and Bicycle Professionals Minnesota Chapter: 2015–present

Connor is a transportation planner with over five years of experience working on a variety of bicycle and pedestrian planning and design projects. He has a wealth of community engagement experience, including at the statewide, regional, and local community levels. Connor has developed public engagement plans, produced engagement materials and toolkits, facilitated community meetings and workshops, and developed multiple online surveys and online interactive maps. He is adept at analyzing results of community engagement efforts and synthesizing community input and feedback into actionable strategies for plans and projects. Connor has recently led engagement for the Northfield Pedestrian, Bicycle and Trail System Update project. He will build upon his existing relationships and work with the City Council, community members, and stakeholders to gather support for the proposed design.

SELECTED PROJECT EXPERIENCE

City of Northfield Bicycle, Pedestrian, and Trail System Update, Northfield, MN
Connor is the Project Manager for this project, which includes a variety of bicycle and pedestrian planning tasks. Toole Design is developing an updated Trail System Plan map, determining the final alignment for the Mill Towns State Trail within Northfield, and developing infrastructure recommendations to enhance safety around Northfield High School and Arcadia Charter School. In addition to managing the project, Connor is facilitating public engagement meetings, leading Safe Routes to School infrastructure assessments, and developing recommendations for the City's Street Type Table and planned bicycle and pedestrian network.

Northfield Street Improvement Project, Northfield, MN
Toole Design developed Complete Streets concepts for two downtown roadway projects in Northfield for 2018 roadway resurfacing and reconstruction projects. Connor was a planner on the project, and was responsible for developing community engagement activities, helping facilitate a community meeting, and analyzing community member and stakeholder priorities.

Minnesota Walks: Public Outreach and Engagement Assistance
Connor served as a planner on this joint statewide pedestrian planning effort between the Minnesota Departments of Health and Transportation. The goal of Minnesota Walks was to create policies and strategies that improve pedestrian environments throughout Minnesota. Connor was responsible for helping develop the public engagement plan, developing and facilitating in-person public engagement materials and toolkits, and producing multiple online surveys and analyzing public engagement results. The planning process for Minnesota Walks made a thorough effort to engage with populations who have less access and fewer opportunities to safely walk than others, including low-income populations, older adults, persons with disabilities, and children and youth. Connor led engagement activities targeted at these populations, including at local community events, walking workshops, and focus group interviews.

OTHER RELEVANT EXPERIENCE

Capital City Bikeway and Jackson Street Reconstruction, Saint Paul, MN
Minneapolis Complete Streets Implementation, Minneapolis, MN
Minnesota Department of Transportation District Bicycle Plans

CHRIS BOWER, P.E.

SENIOR ENGINEER

PROFESSIONAL HIGHLIGHTS

Years of Experience: 11

Toole Design: 2016-Present

Minnesota Department of Transportation: 2008-2016

EDUCATION/ CERTIFICATION

Bachelor of Science, Civil Engineering, Minnesota State University: 2010

Professional Engineer: MN

Mn/DOT Aggregate Production

University of Minnesota Erosion and Stormwater Site Management

APPOINTMENTS/ AFFILIATIONS

MnDOT Above and Beyond (x2)

Chris has an extensive background in transportation engineering, including his time working for the Minnesota Department of Transportation's (MnDOT) Mankato and Metro District offices before joining Toole Design. He has a broad background in project management, highway design, pavement design, traffic engineering, environmental documentation, and construction oversight. During his time with MnDOT, he managed a variety of projects, which included urban reconstruction, bridge replacement, sidewalk and trail improvements, and pavement preservation. With his multidisciplinary background and project management experience, Chris can work with a wide range of project stakeholders to reach a collaborative project outcome. He is also a leader in bikeway maintenance, having developed bikeway maintenance strategies and recommendations at a local, state, and national level. Having previously managed projects and consultant contracts for MnDOT, Chris understands the challenges that are commonly encountered during project development, and will proactively work with the MnDOT and the project team to identify and proactively head off issues for the TH 246 and Jefferson Parkway project.

SELECTED PROJECT EXPERIENCE

Avienda Development - Bluff Creek Boulevard, Chanhassen, MN
Chris is currently working on the preliminary and final plans for this roadway serving a planned development. Chris worked with the developer to design a street that met the site's goals of being a pedestrian-friendly mixed-use town center development. The roadway design includes roundabouts, shared use paths, and enhanced pedestrian crossings to calm traffic and create a safe and comfortable environment for bicycles and pedestrians.

Winona Pedestrian and Bike Master Plan and Complete Streets Policy, Winona, MN
Chris developed several intersection concepts for inclusion in the Plan to improve pedestrian and bicycle accommodations. Chris developed the concepts in response to location-specific concerns, such as maintaining turn lanes at critical intersections or preserving on-street parking. At one intersection with heavy volumes of turning trucks, Chris developed a concept that included mountable truck aprons to facilitate heavy vehicle movements while still preserving pedestrian space within the existing right of way. Chris also prepared cost estimates for all of the pedestrian and bicycle improvements recommended in the plan.

Improving the Arborway, Boston, MA
Chris worked on the 25% design for the reconstruction of the Arborway, a key automotive and bicycle corridor through Boston's historic Emerald Necklace park system. The project design included separated bikeways and replaced two high-volume traffic circles with modern roundabouts.

OTHER RELEVANT EXPERIENCE

Snelling Avenue Multimodal Design, Falcon Heights, MN
University of Minnesota Protected Bikeway Preliminary Design, Minneapolis, MN
Hennepin County Bikeway Maintenance Study, Hennepin County, MN

JOHN DEMPSEY, PLA

LANDSCAPE ARCHITECT

PROFESSIONAL HIGHLIGHTS

Years of Experience: 15

Toole Design: 2009-Present

SE Group: 2006-2008

Camp Dresser & McKee: 2004-2006

EDUCATION/ CERTIFICATION

Bachelor of Landscape Architecture, SUNY College of Environmental Science and Forestry: 2003

Professional Landscape Architect: MN, MA, NY

APPOINTMENTS/ AFFILIATIONS

American Society of Landscape Architects

Association of Pedestrian and Bicycle Professionals

John is a licensed Landscape Architect with a unique blend of professional practice in design and planning, streetscape improvements, and non-motorized transportation projects. John has direct experience working on a wide range of on- and off-street bicycle facilities, bicycle parking design, streetscape and Complete Streets design, feasibility studies, and urban design projects. He brings his passion for landscape architecture and urban design to effectively communicate design intent throughout the entire design process- initiating with conceptual design and culminating with project implementation. John's well developed knowledge of design and planning principles make him an integral component in the multimodal transportation field. John has collaborated with Safe Routes to School (SRTS) teams on previous projects and will draw on that history to develop bicycle and pedestrian facilities that are comfortable for the school-age users of the TH 246 and Jefferson Parkway intersection.

SELECTED PROJECT EXPERIENCE

Northfield 2018 Street Improvement Project, Northfield, MN
John was the Landscape Architect for Northfield Complete Streets project. The project focused on preparing conceptual streetscape design for two roadway projects to be constructed in 2018. He used innovative traffic calming measures and Complete Streets approach to incorporate curb extensions, median islands, bicycle boulevard treatments, valley gutters, street trees, and a raised intersection. As part of this condensed design process, John assisted with community engagement and public outreach to take initial design concepts to approval from City Council within a six-week timeframe.

Las Vegas Street Environmental Overview and Corridor Analysis, Colorado Springs, CO
John was the Landscape Architect on the Las Vegas Street corridor in Colorado Springs, CO. The multimodal planning and alternatives project looked at incorporating pedestrian and bicycle modifications for a lightly-traveled and undeveloped street that is home to largely industrial and institutional uses. Preliminary design concepts included a modern roundabout, a shared use path facility, and vibrant streetscape components to implement a Complete Streets design. He was responsible for developing conceptual graphic renderings to convey the overall design intent.

FHWA *Guide for Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts*
John assisted with the development of the Federal Highway Administration's Guide for Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts. The purpose of the guide is to assist jurisdictions in reducing conflicts where various modes intersect. As part of the project, he prepared supporting graphics and layout of materials to effectively communicate design guidance.

OTHER RELEVANT EXPERIENCE

Rush Line BRT- Environmental Analysis, Ramsey County, MN
Hennepin Avenue Reconstruction, Minneapolis, MN
City of Ames Complete Streets Plan, Ames, IA

TOOLE DESIGN

BRIAN TANG

ENGINEER

PROFESSIONAL HIGHLIGHTS

Years of Experience: 5

Toole Design: 2016–Present

CDM Smith: 2014–2016

New Haven Transportation, Traffic & Parking Department: Summer 2009

EDUCATION/ CERTIFICATION

Bachelor of Science, Environmental Engineering, University of Connecticut: 2016

Bachelor of Arts, Environmental Studies, Yale University: 2012

Engineer in Training: CT

APPOINTMENTS/ AFFILIATIONS

American Society of Landscape Architects: 2017–Present

Elm City Cycling Bicycle Advocacy and Community, Board Member and Bike Plan Co-Chair: 2009–2015

Brian is an engineer with a broad range of experience across all stages of multimodal planning and design in a variety of contexts. His design work ranges from concept through final design and construction documents. Brian's work includes signing and striping plans, sidewalk and curb ramp design, separated bike lane design, and trail design. In addition, Brian is skilled in using graphic production, CADD, and mapping software to quickly visualize project concepts. Brian will draw upon his background in multimodal design to develop a design for TH 246 and Jefferson Parkway that respects the natural landscape, while providing critical trail, agricultural, freight and motor vehicle connections.

SELECTED PROJECT EXPERIENCE

Avienda Development - Bluff Creek Boulevard, Chanhassen, MN
Brian is serving as an engineer helping to design roadway geometry, typical sections, turn templates, and layout documents. Brian is also assisting with the design of two roundabouts by helping to document analysis of fastest paths, demarcating vehicle paths using AutoTURN, and mapping roundabout intersection sightline clear zones.

Northfield 2018 Street Improvement Project, Northfield, MN
Brian served as an engineer helping to develop and depict concept designs for improvements to three downtown streets in this small college town. The modifications span four blocks of full reconstruction and eight blocks of resurfacing with traffic calming and intersection improvements. Concept designs developed for the reconstructed blocks call for a raised intersection, curb extensions, large plantings, and valley gutters to visually narrow the roadway and facilitate flush streets. Brian used CAD software to lay out the proposed concepts in plan view according to Toole Design's graphic standards and used a combination of 3D modeling and graphic production software to create typical sections and isometric illustrations.

Winona Pedestrian and Bike Master Plan and Complete Streets Policy, Winona, MN
Brian served as an engineer providing GIS mapping and analysis to help plan Winona's future pedestrian and bicycle facility network. Brian prepared maps to present and communicate the outcomes of participatory mapping activities conducted to help gather community input on route preference and deficiencies in the existing network. He also produced maps presenting implementation phases for Winona's planned active transportation network. Brian's work helped develop and present a consensus vision for the future pedestrian and bicycle networks in and around Winona.

OTHER RELEVANT EXPERIENCE

Northern Avenue Conceptual Designs, Boston, MA
Hennepin County Bikeway Maintenance Study, Hennepin County, MN
CSAH 25 East Highway 100 Ramps to France Avenue, Saint Louis Park, MN
Improved Bicycle Facilities on the Arborway, Boston, MA
46th Street Bikeway Feasibility Study, Minneapolis, MN