



Spring Street and Fremouw Avenue Railroad Crossing Improvements Project and Quiet Zone Background Information

CITY COUNCIL MEETING

Approve Professional Services Agreement

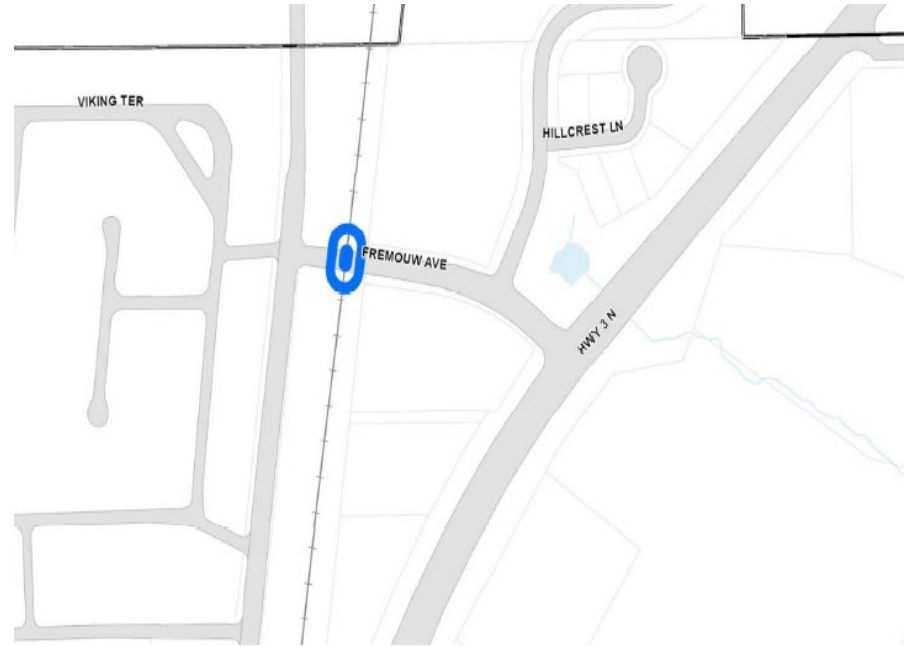
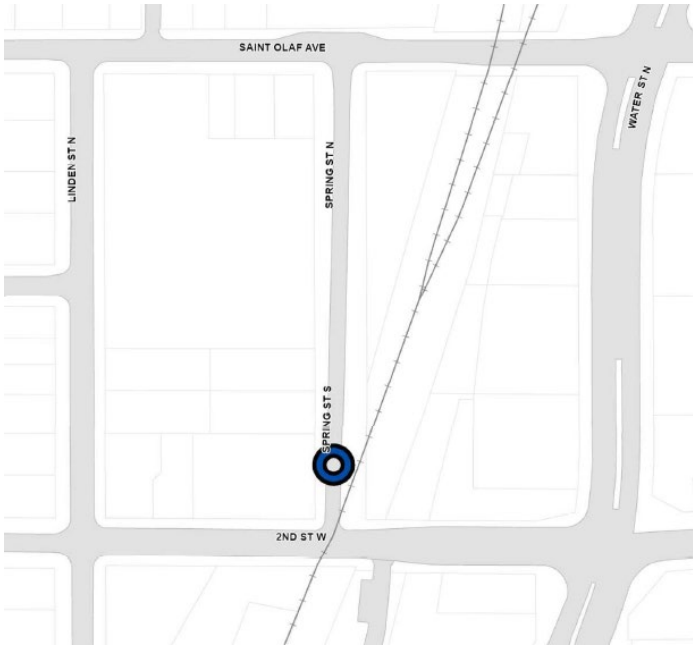
4/15/2025

Tonight's Outline



- Project Location
- Project Scope
- Proposed Improvements
- Timeline
- Northfield Quiet Zone Background Information
- Questions / Comments

Project Location



Project Scope Spring Street



- **Spring Street**

- Close off access to Second Street
- Add a turnaround on the south dead end
 - Hammerhead
 - Cul-de-sac
 - Both options will likely will require easement acquisition



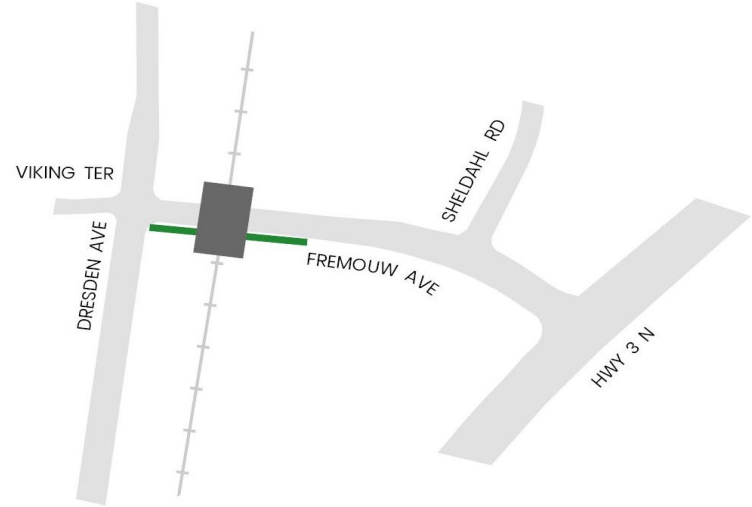
- Turnaround
- Street Improvement

Project Scope Fremouw Avenue



- **Fremouw Avenue**

- Add non-traversable median
- Extend trail on the south side to Dresen Avenue



■ Railroad Crossing Improvement
— Proposed Trail

Project Timeline



Date	Project Step
April 15, 2025	Approve Professional Services Agreement
Dec 17, 2025	Neighborhood Meeting
Aug 2025 – Mar 2026	ROW / Easement acquisition
Mar 3, 2026	Approve Plans and Order Advertisement for Bids
Mar 11, 18, 25, 2026	Publish Ad for Bid in Northfield News
April 2, 2026	Bid Opening – 2:00 P.M.
April 21, 2026	Accept Bids and Award Contract
May 2026	Property Owner Meetings
May – Aug 2026	Construction
Dec 2026	Accept Improvements and Authorize Final Payment

Northfield Quiet Zone History



- **June 2005**
 - Federal Railroad Administration (FRA) issued a new Quiet Zone Rule
 - Defined actions necessary to obtain a federally approved Quiet Zone (QZ), with legal standing and railroad acceptance.
- **June 2006**
 - City of Northfield completes a Quiet Zone Assessment
- **January 2022**
 - Quiet Zone Assessment Update

What is a Quiet Zone?

- A railroad quiet zone is a designated stretch of track where train horns are not routinely sounded at railroad crossings, requiring specific safety improvements to compensate for the absence of horn warnings



Quiet Zone Minimum Requirements



- Quiet Zone must be at least 1/2-mile long and include all crossings within the quiet zone limits
- All public grade crossings must meet pre-qualifying criteria:
 - Flashing lights
 - Vehicle gates
 - Constant warning time
 - Power Out indicators

Northfield Railroad Crossings



- **Union Pacific Railroad**
 - Primary Focus
- **Progressive Railroad**
 - Low volume track

Quiet Zone Intersections



- TH 19/Fifth Street
- Third Street
- Second Street
- St. Olaf Avenue
- Fremouw Avenue

Supplemental Safety Measures (SSMs)



- Four-quadrant vehicle gates
- Medians/channelization devices
- Closure (temporary or permanent)
- One-way Street
- Wayside horns

Four-Quadrant Gate Example



Non-Traversable Medians



Non-Traversable Medians



Railroad–Highway Crossings (Section 130) Program



- Federal Highway Administration (FHWA) apportions funds to each state transportation fund (MnDOT) through the Section 130 Program to improve safety at railroad crossings
 - Funds can be used at any public rail crossing
 - Pavement Markings
 - Traffic Control Signs
 - Flashing Lights
 - Gates
- FHWA covers 90% of the costs, City would be responsible for 10% of the costs

Quiet Zone Improvements



TH 19

- Non-Traversable Medians - needed*

Proposed improvements are scheduled for 2028

Quiet Zone Improvements



- **Third Street**

- Non-Traversable Medians – completed
- Gate Improvements – needed*
- Signal Improvements – needed*

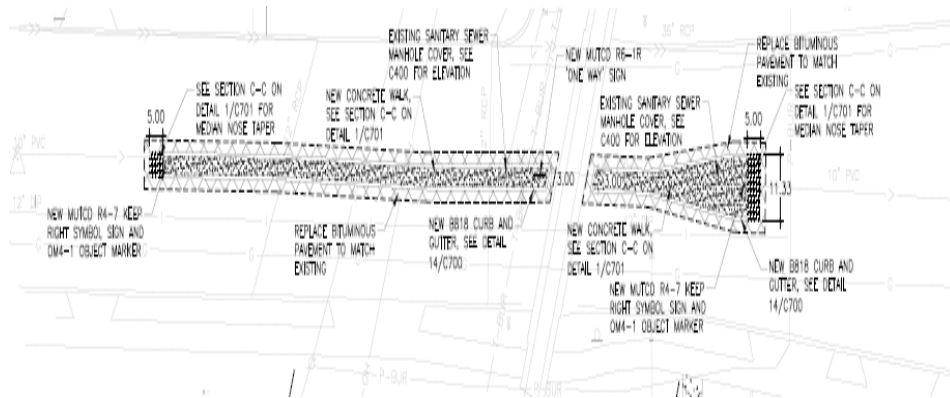
*Proposed improvements are scheduled for 2026 Utilizing Section 130 program funding



Quiet Zone Improvements



- Second Street



- Non-Traversable Medians – scheduled for Spring 2025
- Gate Improvements – needed*
- Signal Improvements – needed*

*Proposed improvements are scheduled for 2026 Utilizing Section 130 program funding

Quiet Zone Improvements



- St. Olaf Avenue

- Non-Traversable Medians – completed
- Gate Improvements – needed*
- Signal Improvements – needed*

*Proposed improvements are scheduled for 2026 Utilizing Section 130 program funding



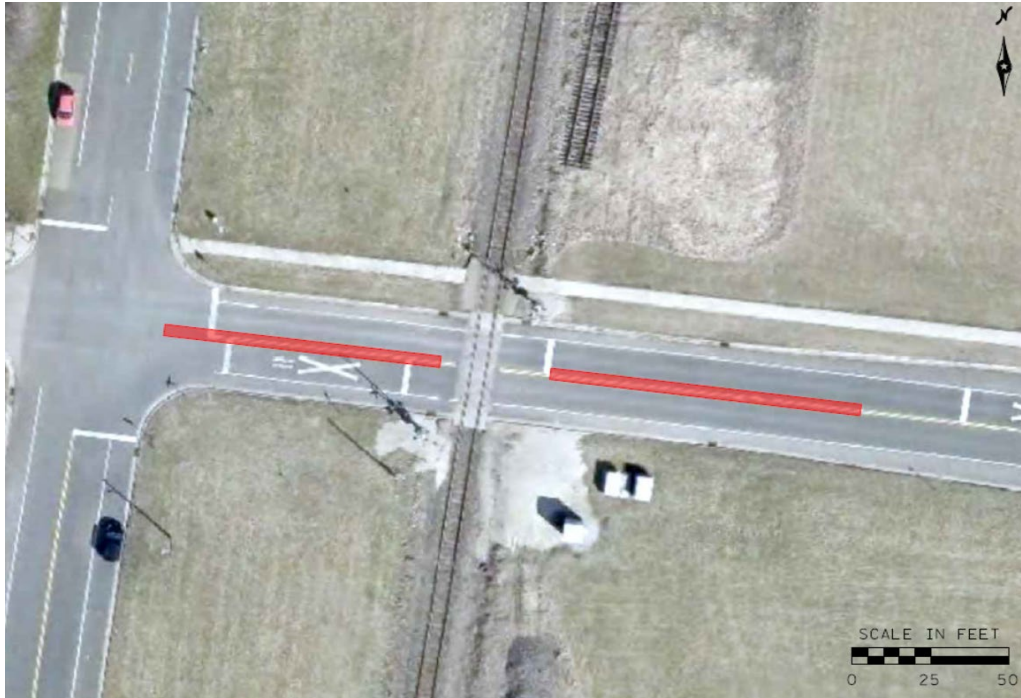
Quiet Zone Improvements



- Fremouw Avenue

- Non-Traversable Medians – needed
- Signal Improvements – needed*

*Proposed improvements are scheduled for 2026 Utilizing Section 130 program funding



Quiet Zone Implementation



- **2028**

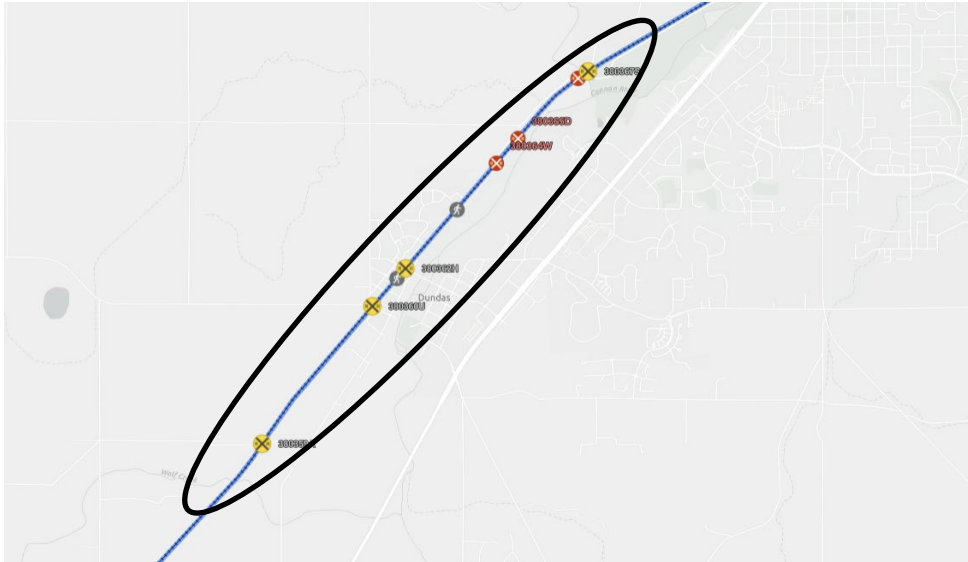
- MnDOT Improvement of TH 19 is the last scheduled improvement to establish the Quiet Zone
- Once all SSM's are constructed and operational, final application and federally mandated notification process is initiated
- QZ is established and routine locomotive horn sounding ceases

Quiet Zone Expansion



- **South (Dundas)**

- Possible expansion of Quiet Zone to South of Dundas
- This would positively impact both Dundas and Northfield

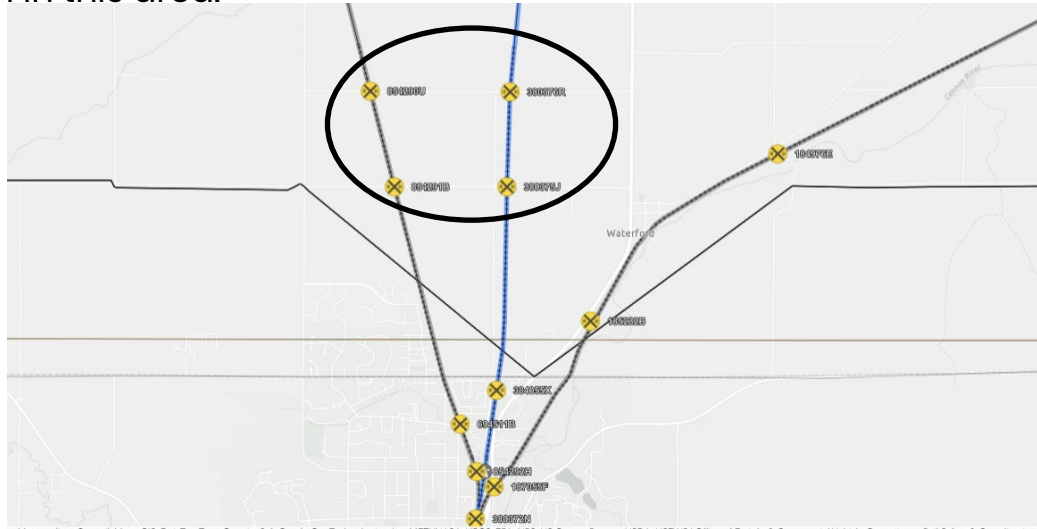


Quiet Zone Expansion



- North

- Possible expansion of Quiet Zone north to Include 320th Street (County Road 96)
- This would positively impact resident that live on the north side of Northfield, and future residential growth in this area.





Questions?