

Highway 52 Southbound Improvement Project

Noise Analysis and
Noise Wall Voting



DEPARTMENT OF
TRANSPORTATION





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TRANSPORTATION**

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ABOUT THE PROJECT

The Highway 52 corridor has been identified in several major transportation planning studies for needing improvements. One planning study called, The Highway 52 Interregional Corridor Management Plan, prompted the development to transition the highway to a freeway design with no direct access.

In 2017, MnDOT received additional highway funding from the Minnesota Legislature. Through public outreach, community members concerned about highway safety were asked to share feedback and priorities for roadway improvements.

After reviewing the public's feedback, MnDOT developed a list of investment priorities and selected a section of southbound Highway 52 to receive improvements.

The project stretches along Highway 52, from south of Cannon Falls to just north of Zumbrota.

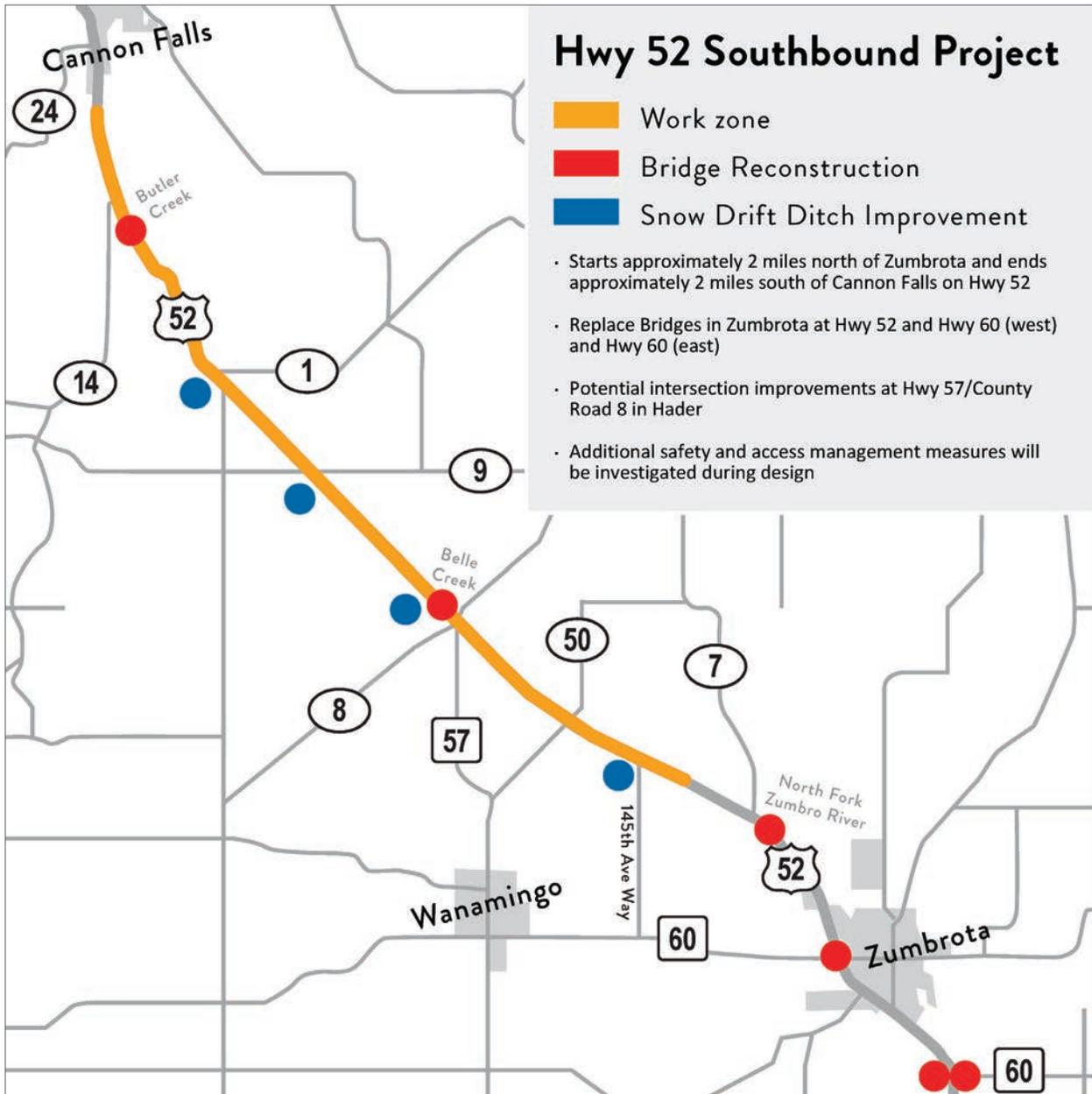
MnDOT is also proposing to replace the east and west bridges at Highway 52 and Highway 60 in Zumbrota.

The intersection of Highway 57/Goodhue County Road 8 and Highway 52 in Hader has been designated for an interchange design. Throughout the design phase of the improvement project, additional safety and access management may be required.



PROJECT WEBSITE:

www.dot.state.mn.us/d6/projects/hwy52-hader-southbound-improvements



NOISE ANALYSIS

NOISE WALL 1

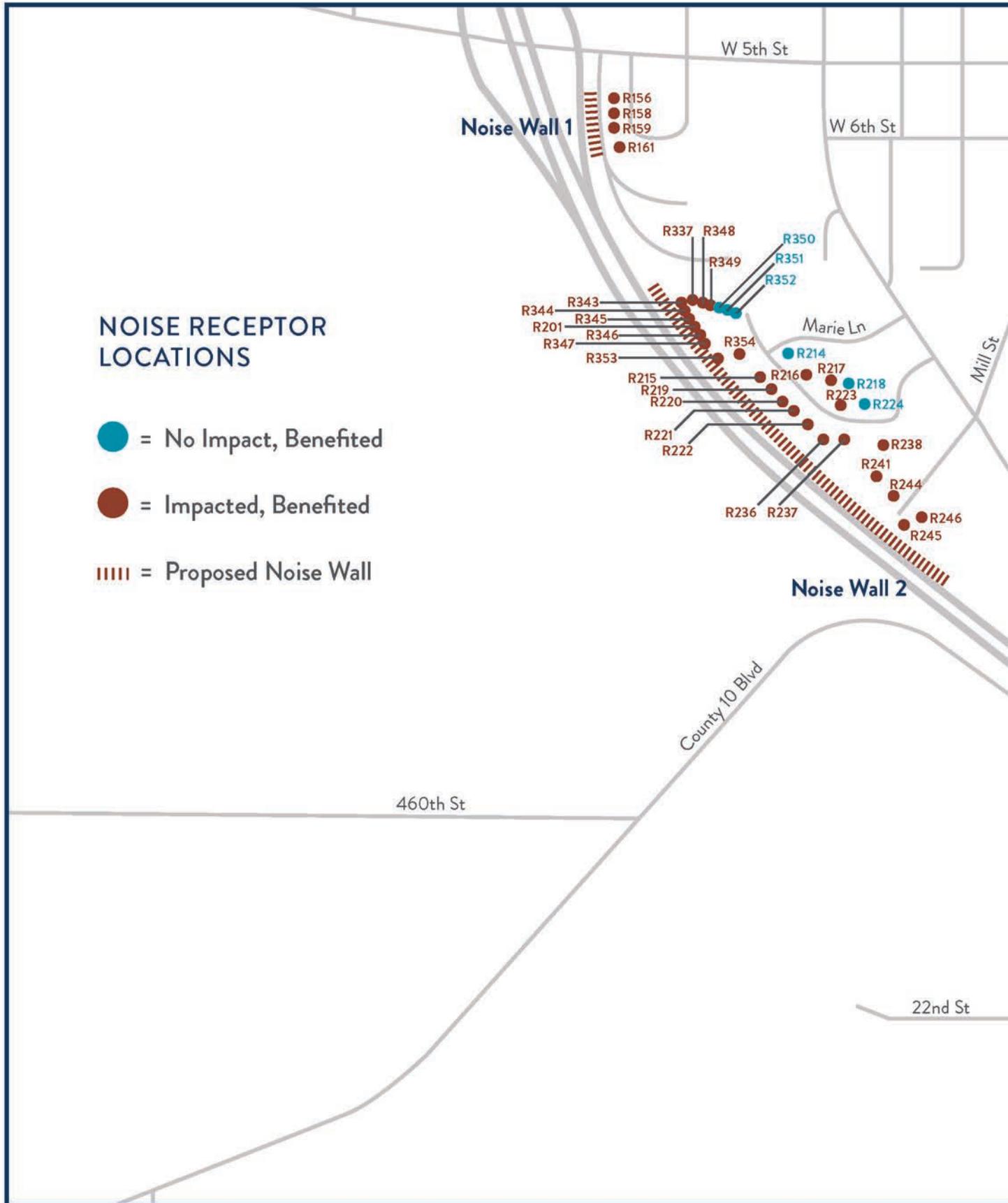
Receptors	Leq Noise Level (dBA)		Reduction (in dBA) With Wall	Impact
	No Wall	With Wall		
R156 (R)	67.8	61.0	6.8	Impacted, Benefited
R158 (R)	69.5	62.3	7.2	Impacted, Benefited
R159 (R)	70.5	63.5	7.0	Impacted, Benefited
R161 (R)	71.5	66.3	5.2	Impacted, Benefited

NOISE WALL 3

Receptors	Leq Noise Level (dBA)		Reduction (in dBA) With Wall	Impact
	No Wall	With Wall		
R310 (R)	70.0	63.6	6.4	Impacted, Benefited
R311 (R)	71.5	63.3	8.2	Impacted, Benefited
R312 (R)	70.2	63.1	7.1	Impacted, Benefited
R313 (R)	68.8	62.8	6.0	Impacted, Benefited
R314 (R)	67.6	62.5	5.1	Impacted, Benefited
R340 (R)	71.0	63.5	7.5	Impacted, Benefited
R341 (R)	71.9	63.3	8.6	Impacted, Benefited
R342 (R)	67.2	62.0	5.2	Impacted, Benefited
R341 (R)	71.9	62.7	9.2	Impacted, Benefited
R342 (R)	67.2	61.4	5.8	Impacted, Benefited

NOISE WALL 2

Receptors	Leq Noise Level (dBA)		Reduction (in dBA) With Wall	Impact
	No Wall	With Wall		
R201 (R)	76.1	61.7	14.4	Impacted, Benefited
R214 (R)	65.3	59.8	5.5	No Impact, Benefited
R215 (R)	71.4	61.9	9.5	Impacted, Benefited
R216 (R)	67.9	61.7	6.2	Impacted, Benefited
R217 (R)	66.8	61.2	5.6	Impacted, Benefited
R218 (R)	65.6	60.5	5.1	No Impact, Benefited
R219 (R)	72.0	61.8	10.2	Impacted, Benefited
R220 (R)	71.9	61.8	10.1	Impacted, Benefited
R221 (R)	72.1	62.1	10.0	Impacted, Benefited
R222 (R)	71.9	62.2	9.7	Impacted, Benefited
R223 (R)	66.0	59.8	6.2	Impacted, Benefited
R224 (R)	65.7	60.2	5.5	No Impact, Benefited
R236 (R)	71.7	62.6	9.1	Impacted, Benefited
R237 (R)	69.3	62.7	6.6	Impacted, Benefited
R238 (R)	66.9	61.7	5.2	Impacted, Benefited
R241 (R)	70.5	62.9	7.6	Impacted, Benefited
R244 (R)	70.4	63.0	7.4	Impacted, Benefited
R245 (R)	74.3	64.9	9.4	Impacted, Benefited
R246 (R)	71.5	65.0	6.5	Impacted, Benefited
R337 (R)	71.4	63.5	7.9	Impacted, Benefited
R343 (R)	75.0	61.9	13.1	Impacted, Benefited
R344 (R)	75.3	61.7	13.6	Impacted, Benefited
R345 (R)	75.7	61.6	14.1	Impacted, Benefited
R346 (R)	76.3	62.1	14.2	Impacted, Benefited
R347 (R)	76.6	62.1	14.5	Impacted, Benefited
R348 (R)	67.8	61.2	6.6	Impacted, Benefited
R349 (R)	66.4	59.9	6.5	Impacted, Benefited
R350 (R)	65.5	59.4	6.1	No Impact, Benefited
R351 (R)	65.0	59.2	5.8	No Impact, Benefited
R352 (R)	64.7	59.1	5.6	No Impact, Benefited
R353 (R)	76.4	61.8	14.6	Impacted, Benefited
R354 (R)	70.1	61.4	8.7	Impacted, Benefited



NOISE RECEPTOR LOCATIONS

- = No Impact, Benefited
- = Impacted, Benefited
- ▨▨▨▨ = Proposed Noise Wall



FREQUENTLY ASKED QUESTIONS

WHEN DOES MnDOT CONDUCT NOISE STUDIES?

TWO PROGRAMS ACTIVATE A NOISE ANALYSIS:

- The first is for a major reconstruction project in which the road would be expanded with additional lanes for more than a mile or would significantly change the alignment of the road. This type of project usually requires an in-depth environmental review process in which many issues are looked at - in this case, noise and noise barriers.
- The other program is commonly referred to as a retro-fit project. It is for stand-alone noise walls where major reconstruction is not planned in the near future. As part of this program, areas are ranked by existing noise levels, length of barrier and number of homes.

HOW DOES MNDOT DETERMINE WHETHER A NOISE BARRIER CAN BE CONSTRUCTED?

A noise barrier must be both feasible and reasonable if it is to be constructed with a highway project. The reasonability of a noise wall is determined by factors such as cost, amount of reduction in noise, safety and site features. Decisions on noise mitigation locations are determined on a case-by-case basis.

HOW DO NOISE BARRIERS WORK?

Noise barriers block the direct path of sound waves from the highway to homes and businesses along the highway. They do not eliminate noise; they only reduce it. To be considered effective, a noise barrier must reduce noise impact to receptors by at least 5 decibels.



CAN NOISE INCREASE AS IT PASSES OVER THE BARRIER?

No. Noise does not increase as it passes over the barrier. The further noise travels, the greater the reduction in noise.

COULD TREES BE PLANTED TO BLOCK TRAFFIC NOISE?

There isn't enough space to plant the amount and size of trees needed to reduce traffic noise. To effectively reduce traffic noise there needs to be room for at least 100 feet of dense evergreen trees that are 15 feet tall or higher. Additionally, when trees are used to reduce noise impacts, they need to be maintained. MnDOT lacks the necessary resources to maintain trees or other vegetation for the area.

DO NOISE BARRIERS AFFECT PROPERTY VALUES?

There haven't been any studies that link property values to noise barriers. Future buyers may either appreciate the noise reduction the barrier provides, or they may have aesthetic concerns about its presence.



WATCH A VIDEO ABOUT NOISE WALLS AT:
www.youtube.com/watch?v=b9CI6BYE6qg



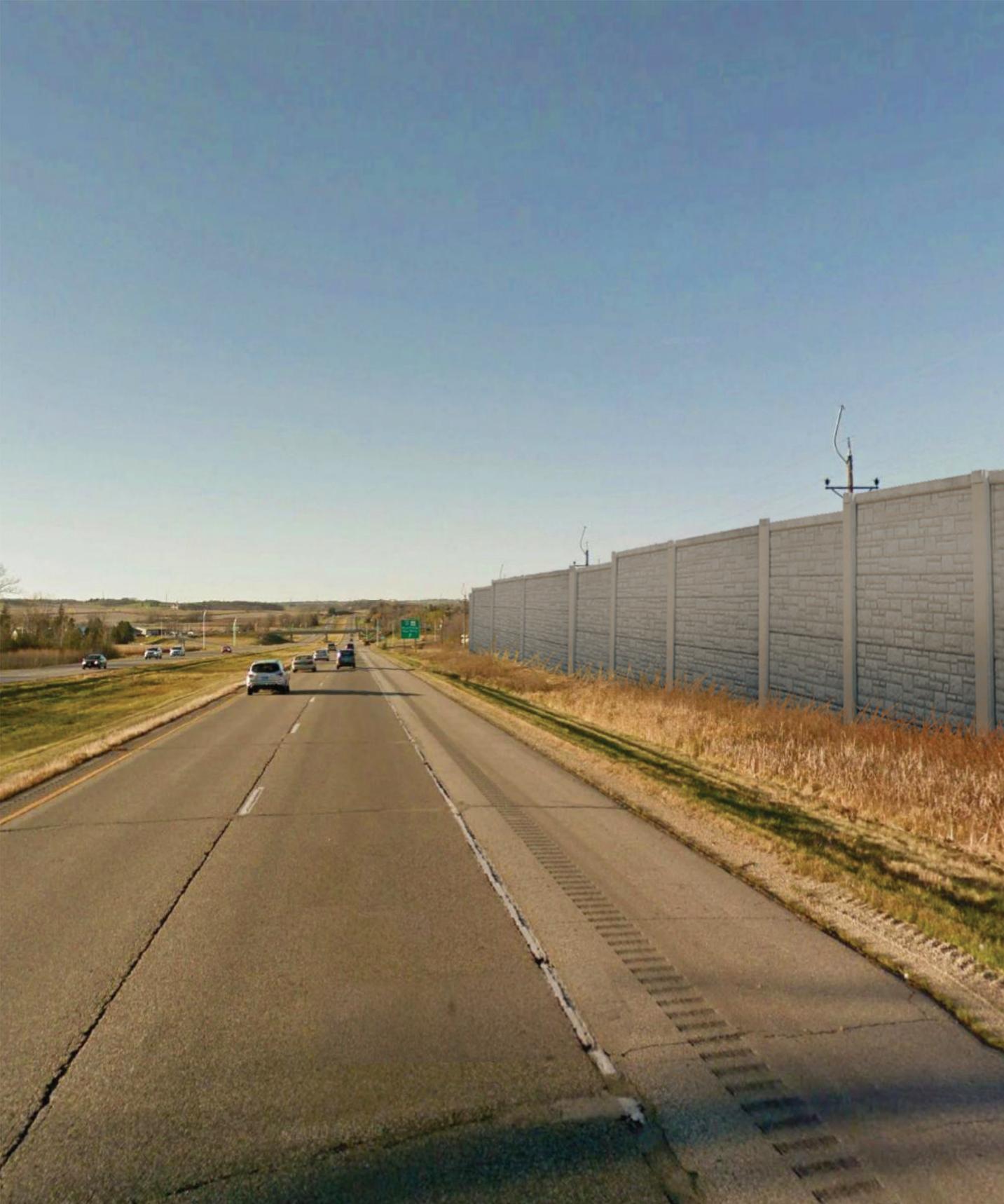
READ OTHER FREQUENTLY ASKED QUESTIONS AT:

www.dot.state.mn.us/environment/noise/pdf/guidance/faqs.pdf



PROPOSED NOISE WALL LOCATIONS





PROPOSED DESIGNS

LOCATION A



EXISTING



PROPOSED

LOCATION B



EXISTING



PROPOSED

LOCATION C



EXISTING



PROPOSED

LOCATION D



EXISTING



PROPOSED

LOCATION E



EXISTING



PROPOSED

LOCATION F



EXISTING



PROPOSED

NOISE WALL VOTING PROCESS

WHO IS ELIGIBLE TO VOTE ON WHETHER A NOISE BARRIER SHOULD BE CONSTRUCTED?

MnDOT will send notices and noise wall ballots to community members who are eligible to vote. Only property owners or residents who experience a noise level reduction of at least five decibels from the proposed improvements will be considered eligible.

HOW DOES VOTING WORK?

- If 50 percent or more of all possible voting points from eligible voters are received after the initial request for votes, the majority (based upon the votes received) will determine the outcome. If less than 50 percent of the possible voting points are received after the initial request, a second ballot will be mailed to the remaining eligible voters who did not respond.
- If 25 percent or more of all possible voting points are received after the second request for ballots, then the outcome will be determined by majority of votes received. If less than 25 percent of total possible points are received after the second request for ballots, the noise barrier will NOT be constructed. If there is a tie in voting, where there are equal points for and against a noise wall, the noise wall WILL be constructed.

WHAT HAPPENS IF I DIDN'T VOTE?

If you don't vote, the voting points assigned to you do not count for or against the noise wall.

HOW ARE THE VOTES COUNTED?

MnDOT uses a weighted voting system. Points are determined by how much your property or unit will be impacted by the noise wall and whether or not you own the property or unit. If noise wall construction is voted down, it will not be reconsidered.



READ MORE INFORMATION ON MnDOT'S NOISE POLICY AT:

www.dot.state.mn.us/environment/noise/policy



If a noise wall meets the necessary criteria, the wall's benefited residents are requested to vote on the proposed noise wall.

For questions, please contact:

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