

MEMORANDUM

TO: Trevor Walter, PE - Public Works Director and City Engineer

FROM: Justin Anibas, PE, PTOE, RSP1 (Lic. MN)

Paul Sandy, PE (Lic. MN, ND)

DATE: June 11, 2025

RE: Request for Stop Sign Placement Review – Intersection of Edgewood Drive with

Novotny Road

SEH No. 183117 - Task 1.0 14.00

City Staff received a request on May 23, 2025 to review the current stop sign configuration and pavement markings on Edgewood Drive at its intersection at Novotny Road. The City referred the request to SEH for review of applicable standards, City policy, and to provide a summary of potential options related to the proposed enhancement or changes at this location.

EXISTING CONDITIONS AND OBSERVATIONS

The existing "STOP" signs on Edgewood Drive, approaching the intersection from both the north and south, appear to be positioned partially around the curve and set back from the travel lane. This placement is likely due to the wide turning radii required to accommodate truck movements. Specifically, the northbound stop sign is located too far to the east, and the southbound stop sign is positioned too far to the west, relative to the intersection's curvature.

Prior to the 2024 full-depth reclamation project on Edgewood Drive, historical aerial imagery suggests that stop bars were present on the southbound approach to this intersection. While stop bars remain on the northbound approach, they have significantly faded and are now barely visible on the pavement. It is also possible they were removed during the recent reconstruction of Novotny Road. Refer to Figures 1 and 2 below for images of the current conditions on the northbound and southbound approaches.



Figure 1 - Edgewood Drive Northbound at Novotny Road



Figure 2 - Edgewood Drive Southbound at Novotny Road

STANDARDS AND POLICY REVIEW

A review of Chapter 6 of the MnDOT Traffic Engineering Manual, with an emphasis on intersection design and traffic control, suggests that several enhancements could be made to improve driver awareness of the stop condition on both the northbound and southbound approaches. Recommended improvements include:

- Relocating the existing stop, closer to the beginning of the curb radiuses, to improve visibility and compliance.
- Adding pavement markings such as stop bars and the word "STOP" to reinforce the stop requirement.
- Increasing the size of the stop signs to enhance their visibility.
- Installing "Stop Ahead" warning signs in both directions to alert drivers in advance of the intersection.
- Adding a secondary stop sign on the left side of the roadway to improve visibility and recognition, especially for drivers in wider lanes or larger vehicles.

ALTERNATIVES AND CONCLUSION

Several potential improvements can be considered to enhance safety and driver awareness at this intersection. These are generally listed in priority order and can be done sequentially if compliance with the stop-controlled intersection is still an issue after each improvement:

Relocate Existing "STOP" Signs

Move the existing "STOP" signs on both approaches back to near the begin of the curb radius in both directions. This adjustment will help improve sign visibility and ensure better compliance.

Repaint Stop Bars

Repaint the stop bars on both the northbound and southbound approaches to clearly indicate the stopping point for vehicles. These should be placed in line with the relocated stop signs and span the full width of the travel lanes to maximize visibility.

Increase Sign Size

Upgrade the existing "STOP" signs to a larger size to improve their visibility and prominence for approaching drivers.

Install "STOP AHEAD" Warning Signs

Add advanced warning "STOP AHEAD" signs on both approaches to alert drivers to the upcoming stop condition, especially in cases where visibility of the stop signs may be limited.

Add Secondary "STOP" Signs

Install additional "STOP" signs on the left side of the roadway, aligned with the primary stop signs, to enhance visibility—particularly for wider roadways or drivers in larger vehicles.

Pavement Markings - "STOP"

Paint the word "STOP" on the pavement in advance of the stop bars to reinforce the requirement to stop and provide an added visual cue.

We recommend evaluating the feasibility of relocating the existing "STOP" signs further back—northbound and southbound—near to the beginning of the curb radius points. If compliance is still an issue at this location, it is recommended that the stop bars on both the northbound and southbound approaches be re-established in line with the relocated stop signs to clearly define the intended stopping locations for approaching vehicles. Further improvements at this intersection could be considered pursuant to the above if compliance with the stop-condition is still found to be an issue after the first two improvements are exhausted.

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c: Neil Heinonen, SEH

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