

Appendix A

Corridor Objectives and Evaluation Criteria

COUNTY STATE AID HIGHWAY 1 (CSAH 1) CORRIDOR PRESERVATION STUDY BALDWIN AVENUE TO TH 246 IN RICE COUNTY



STUDY GOAL:

Identify a safe and efficient corridor alignment option for further planning, preservation, and environmental analysis based on an objective evaluation of alternatives.

CORRIDOR OBJECTIVES AND EVALUATION CRITERIA:

FOCUS AREA 1 - Regional Transportation System

Objective 1.1 – The proposed corridor meets the long-term regional transportation mobility needs as described in the 2025 Rice County Transportation Plan.

Evaluation Criteria:

1. Corridor achieves a direct, continuous route between I-35 and TH 246 that is an attractive alternative to TH 19 between Northfield and I-35.
2. Design speed of 45 mph or greater can be met in urbanizing areas, 55 mph or greater in rural areas.
3. Roadway intersection access spacing of ¼ mile or greater can be achieved.
4. Controlled intersection spacing of ½ mile or greater can be achieved.
5. A 150' or greater right-of-way width can be accommodated.
6. Proposed corridor can accommodate a grade-separated crossing of the Union Pacific Railroad.
7. The length of the roadway is minimized while still meeting other study objectives.
8. Connectivity to north/south existing or future collector roadways can be accommodated.
9. Access and controlled intersection spacing along TH 3 can be planned for consistent with Mn/DOT's access spacing guidelines and agreed to by participating agencies.
10. Corridor location could enhance future commuter rail or transit station opportunities.

Objective 1.2 – The proposed corridor alleviates existing safety concerns and avoids potential future safety issues.

Evaluation Criteria:

1. The intersection of TH 246, CSAH 1, CR 81, and CSAH 22 can be arranged to meet driver expectation and Mn/DOT access spacing guidelines.
2. The intersection of TH 3 and CSAH 20 can be arranged to meet Mn/DOT access spacing guidelines.
3. Proposed corridor intersections are at ninety-degree angles.
4. The number of horizontal curves along the corridor is minimized.
5. Distance between horizontal curves is sufficient to achieve desired super elevation transition.

6. Horizontal curvature is provided consistent with driver expectation.
7. Intersection sight distance can be met at each proposed intersection.
8. Connecting roadways intersect the corridor in a way that minimizes the potential for excessive weaving on the corridor.
9. Roadway profile grades are 4% or less.
10. Roadway profile grades at horizontal curves are minimized.

Objective 1.3 – The proposed corridor is fiscally responsible.

Evaluation Criteria:

1. Estimated project construction cost.
2. Portion of estimated project cost that can be shared by private developers
3. Proposed corridor minimizes the number of potential relocations.
4. Proposed corridor minimizes the number of new acres of right-of-way needed.
5. The length of the roadway is the shortest possible, while still meeting other study objectives.
6. Corridor has a good likelihood of soils suitable for roadway construction.

FOCUS AREA 2 – Local Land Use and Transportation

Objective 2.1 – The proposed corridor meets the long-term local transportation mobility needs in the Northfield/Dundas area:

Evaluation Criteria:

1. The proposed corridor and the planned local collector street system are able to be integrated.
2. Proposed corridor provides sufficient access to existing and future land uses, while meeting state and county access spacing guidelines.
3. Corridor does not hinder the City of Northfield's pursuit of a Cannon River crossing.
4. Corridor provides for future bicycle/pedestrian trail continuity to local and regional trails and in a manner that is compatible with the local and regional roadway systems.

Objective 2.2 – The proposed corridor meets the long-term local land use and infrastructure needs in Dundas and Northfield:

Evaluation Criteria:

1. Corridor provides a reasonable opportunity for future land use planning and development, while considering existing plans and development.
2. Corridor allows for the orderly extension of sewer and water trunk line extensions.
3. Corridor minimizes acreage and number of park land impacts.
4. Corridor minimizes impacts to highly desirable future residential areas.
5. Corridor allows for railroad spur lines for future industrial activities.

FOCUS AREA 3 – Environmental and Cultural Resources

Objective 3.1 – The proposed corridor minimizes impacts to farm operations:

Evaluation Criteria:

1. Corridor minimizes acreage of prime farmland impacts.
2. Corridor minimizes the number of farmland severances.

Objective 3.2 – The proposed corridor minimizes impacts to wetland, floodplain, river/stream crossings, and other natural features:

Evaluation Criteria:

1. Corridor minimizes the acreage of wetland impacts and provides opportunity for mitigation.
2. Corridor avoids impacts to DNR protected waters.
3. Corridor avoids crossing in a Cannon River wild and scenic designated area.
4. Corridor minimizes cuts into the steepest bluff/ravine areas.
5. Corridor minimizes acreage of floodplain impacts and provides opportunity for mitigation.
6. Corridor minimizes the number of new stream/watercourse crossings.
7. Corridor minimizes impacts to quality wooded areas.

Objective 3.3 – The proposed corridor minimizes impacts to hazardous sites:

Evaluation Criteria:

1. Corridor avoids impacts to known hazardous waste sites.

Objective 3.4 – The proposed corridor minimizes impacts to the natural heritage or threatened and endangered species:

Evaluation Criteria:

1. Corridor has a low likelihood of impacting the natural heritage as documented through the State Historic Preservation Office and cultural resources field review.
2. Corridor has a low likelihood of impacting threatened or endangered species as documented through the DNR National Heritage Database.

Objective 3.5 – The proposed corridor minimizes impacts to protected groups of people or low-income people:

Evaluation Criteria:

1. Corridor has a low likelihood of impacting disadvantaged groups of persons.