

PROJECT EXPERIENCE

CSAH 1 CORRIDOR PRESERVATION STUDY, RICE COUNTY, MINNESOTA

Client Name

Rice County Highway Department

The Rice County 2025 Transportation Plan identified the need for a continuous east-west corridor through northeast Rice County to serve regional mobility needs. The existing CSAH 1 corridor weaves its way through the City of Dundas with three intersections requiring a left or right turn. The Rice County Transportation Plan identified a high crash rate west of Dundas and increasing travel demand due to growth in Dundas and Northfield. The County, Cities of Dundas and Northfield, Bridgewater and Northfield Townships, and Mn/DOT initiated a corridor preservation study to identify a long-term, safe and efficient minor arterial corridor alignment for further planning, preservation, and environmental analysis.

A scan of environmental and cultural resources was undertaken to identify where known natural features and sensitive areas may be encountered to understand potential impacts associated with each alignment concept. The Cannon River has a wild and scenic designation through the study area, and its associated wetland complexes and floodplain were carefully considered. Early in the study, potential river crossing locations were identified and alignment concepts were developed off these locations. Other natural resources considered included among others wooded bluff land, the designation trout stream of Rice Creek, and threatened and endangered species. Sensitive areas reviewed included cemeteries, protected groups of people, historic sites, archeological sites, and hazardous wastes sites.

This study also included two sub-area studies to establish a vision for TH 3 primary and secondary intersection spacing, as well as intersection configuration, traffic operations, and traffic control needs TH 246 and CSAH 1. The six planning alignment concepts developed to achieve the study objectives and avoid impacts to known resources were also evaluated on their ability to accomplish sub-area study objectives. Specific study objectives considered included meeting long-term regional mobility needs, alleviating existing safety concerns and avoiding potential safety issues, considering fiscal responsibility, meeting long-term local mobility and land use needs, and minimizing impacts to farm operations, natural features, hazardous sites, natural heritage, threatened or endangered species, or protected groups of people.

A preferred concept was recommended for further planning, preservation, and environmental analysis based on its ability to serve both regional and local travel demands with only one new Cannon River Crossing. A secondary concept was also recommended to be carried forward for further environmental review, despite its inability to adequately serve the travel demand needs in the Northfield area.

Study governmental units, elected officials, land owners, and state agencies were engaged throughout the study to build understanding for the current corridor deficiencies, identify previously undocumented environmental and cultural resources, review alternatives and how they compare with one another, and reach consensus on the preferred alternative.

