GATEWAY DESIGNS FOR THE
NORTH SHORE SCENIC DRIVE
Lester River, Duluth Minnesota

THE CENTER FOR CHANGING LANDSCAPES
UNIVERSITY OF MINNESOTA
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**INTRODUCTION**

**PROJECT SCOPE**

This work is the result of a collaboration between the North Shore Scenic Byway Committee, Lester River Neighborhood residents, and the Center for Changing Landscapes of the University of Minnesota. A number of public meetings were held to identify issues and review proposed designs. Other partners consisted of the Minnesota Department of Transportation (MN DOT), the City of Duluth, St. Louis County, University of Minnesota Duluth, and the North East Regional Sustainable Development Partnerships.

The North Shore Scenic Drive committee chose the Lester River Community in Duluth as the area of the southern gateway to the North Shore Scenic Drive. It is the experiential transition from the city to the North Shore. Containing a number of established and potential public amenities, it offers a rich environment for interpretation, enhanced public use, and provides an opportunity to create new connections between the Lester River Neighborhood and Lake Superior.

The project covers the area from the Lester River Community through the intersection of the NSSD and highway 61 to the first rest stop location just beyond Brighton Beach/Gitchi Gami Park. A variety of existing experiential gates through this corridor created a natural location for the design of the southern gateway. The work operates at a variety of scales to create an integrated whole, gateway, and design elements for the NSSD. The design strategies reinforce the Lester River business district while making stronger neighborhood connections to the Lester River and Lake Superior. Care was taken to use elements from this spectacular environment while creating an environmentally sustainable design.
NSSD GATEWAY PROJECT:
LESTER RIVER DULUTH, MN

LESTER PARK EXPANSION

GATEWAY SIGNAGE

LESTER RIVER CROSSING

LAKE FRONT SUSTAINABILITY

LIMNOLOGY STATION CAMPUS

NSSD INTERCHANGE

TRAIL CONNECTIONS

BRIGHTON BEACH/GITCHI GAMI PARK

REST STOP

EASTBOUND GATEWAY: NSSD
INTRODUCTION

THE SCENIC BYWAY PROGRAM
NORTH SHORE SCENIC DRIVE:
ALL AMERICAN ROAD

WHAT DOES IT MEAN

In order to design a place or space that resides within scenic byway, it is helpful to understand what a scenic byway really is. The following information was quoted and paraphrased from the following web sites: www.byways.org/learn, www.bywaysonline.org/nominations/docs

A BRIEF HISTORY

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. The program is a grass-roots collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States. Since 1992, the National Scenic Byways Program has provided funding for almost 1500 state and nationally designated byway projects in 46 states. The U.S. Secretary of Transportation recognizes certain roads as All-American Roads or National Scenic Byways based on one or more archeological, cultural, historic, natural, recreational and scenic qualities. The National Scenic Byways Program was created by the Intermodal Surface Transportation Act of 1991 (ISTEA) to promote the message that “an outstanding collection of nationally acclaimed and designated roads exist in America.” To earn their designation, roads must be certified as possessing one or more of the following six intrinsic qualities:

- **Natural Quality**
  applies to those features in the visual environment that are in a relatively undisturbed state. These features predate the arrival of human populations and may include geological formations, fossils, landform, water bodies, vegetation, and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances.

- **Scenic Quality**
  is the heightened visual experience derived from the view of natural and man-made elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape—landform, water, vegetation, and man-made development contribute to the quality of the corridor’s visual environment. Everything present is in harmony and shares in the intrinsic qualities.

- **Historic Quality**
  encompasses legacies of the past that are distinctly associated with physical elements of the landscape, whether natural or man-made, that are of such historic significance that they educate the viewer and stir an appreciation for the past. The historic elements reflect the actions of people and may include buildings, settlement patterns, and other examples of human activity. Historic features can be inventoried, mapped, and interpreted. They possess integrity of location, design, setting, material, workmanship, feeling, and association.
Cultural Quality
is evidence and expressions of the customs or traditions of a distinct group of people. Cultural features including, but not limited to, crafts, music, dance, rituals, festivals, speech, food, special events, vernacular architecture, etc., are currently practiced. The cultural qualities of the corridor could highlight one or more significant communities and/or ethnic traditions.

Recreational Quality
involves outdoor recreational activities directly association with and dependent upon the natural and cultural elements of the corridor’s landscape. The recreational activities provide opportunities for active and passive recreational experiences. They include, but are not limited to, downhill skiing, rafting, boating, fishing, and hiking. Driving the road itself may qualify as a pleasurable recreational experience. The recreational activities may be seasonal, but the quality and importance of the recreational activities as seasonal operations must be well recognized.

Archaeological Quality
involves those characteristics of the scenic byways corridor that are physical evidence of historic or prehistoric human life or activity that are visible and capable of being inventoried and interpreted. The scenic byway corridor’s archaeological interest, as identified through ruins, artifacts, structural remains, and other physical evidence have scientific significance that educate the viewer and stir an appreciation for the past.

TWO TIERS OF DESIGNATION:

National Scenic Byways
Are considered to be regionally significant, contain at least one outstanding intrinsic quality, and are generally a means to a traveler’s predetermined end.

All American Roads
Are considered to be nationally significant, contain at least two outstanding intrinsic qualities, are called the “best of the best”, and are destinations unto themselves.

WHY SCENIC
Our definition of “scenic” reaches beyond breathtaking vistas. All of America’s Byways™ are “scenic”, representing the depth and breadth of scenery in America—natural and man-made panoramas; electrifying neon landscapes; ancient and modern history coming alive; native arts and culture; and scenes of friends, families and strangers sharing their stories.
LAKE SUPERIOR

Water covers 70% of the earth’s surface area, but only 3% of it is freshwater. Saltwater makes up 97% of the earth’s water supply. Of the earth’s freshwater, 90% is locked up in glaciers, polar ice caps, and groundwater aquifers. Only 0.32% of the world’s water is available in freshwater lakes and rivers. Lake Superior is the largest freshwater lake in the world, and contains 10% of the world’s fresh surface water. Lake Superior, with a volume of 2,934 cubic miles, or 3 quadrillion gallons, holds as much water as all of the other Great Lakes combined, enough water to cover all of North and South America to a depth of 1 foot.

Lake Superior is 350 miles long and 160 miles wide, with a shoreline length of 2,726 miles and a maximum lake depth of 1,279 feet. The average lake depth is 489 feet. Lake Superior’s water surface area of 31,700 square miles is equal to the area of Massachusetts, Rhode Island, Vermont, and New Hampshire combined. It takes the sun 30 minutes to cross Lake Superior. It is large enough to influence local weather patterns, creating cooler summer temperatures and warmer winter temperatures along the shore than occur just a few miles inland.

Lake Superior has its own periodic seiche (SAYSH), caused by wind and barometric pressure, which pushes and pulls water from one side of the lake to the other, much like oceanic tides. The lake is classified as ultra-oligotrophic by limnologists who study lakes, meaning its cold, sterile water has few nutrients and slow growth rates. Water temperatures average 40 degrees in the summer. Lake Superior is the cleanest of the Great Lakes, with an unmatched water clarity that allows visibility of 30 feet or more. Because of its large volume, however, the lake has a slow replacement rate, making it highly susceptible to pollution. It takes 191 years for natural processes to replace all the water currently in Lake Superior.

The lake first filled with glacial meltwater 10,000 years ago. The drainage basin of Lake Superior is relatively small, at 49,300 square miles, when compared to the lake’s large 31,700 square mile surface area. The drainage basin is 89% forested, which helps contribute to water clarity. The elevation of Lake Superior is 602 feet above sea level. Over 1,000 ships a year visit the twin ports of Duluth-Superior, making Duluth-Superior the largest freshwater port in the world. Ships export grain, iron ore, and lumber from Minnesota. Fierce storms hit the lake in November and March, whipping up waves 10 to 20 feet high. There are more than 350 shipwrecks in Lake Superior.