Reinventing
Minnesota Highway 1

Design Flexibility in Rural Settings

This is Highway 1…

Highway 1 Project Location

Kawishiwi River to CSAH 2

Brief History

A ST. CROIX GRAY "SIX"
St. Croix Lumber & Manufacturing Co.
Winton, Minnesota.

Fast Forward 70 Years…

- U.S. Forest Service and Lake County proposed project
- Designated Forest Highway Funds to be used on a State Highway – First time ever

Standards of Today

- Rural two-lane highway
- 50-70 mph design speed
- Minimum 1:4 inslopes
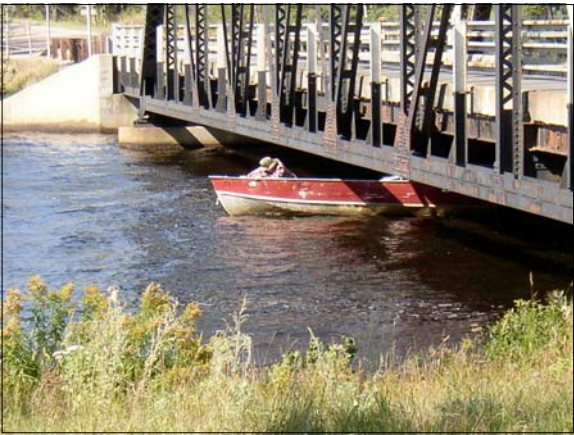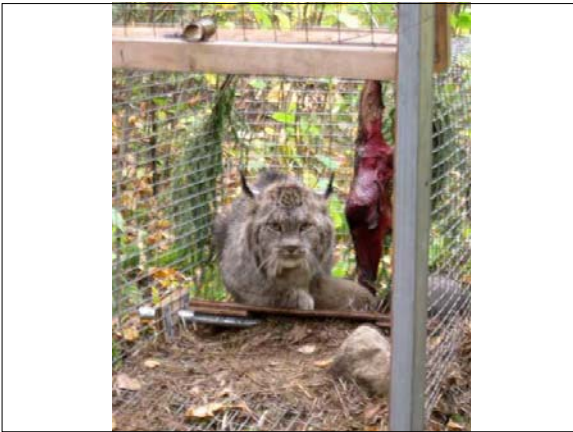- Minimum 1:3 backslopes
- Minimum 6-foot shoulder

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- 420 vehicles per day (14% commercial)
- Posted speed limit is 50 mph.
- Actual average running speed is 41 mph

Design Standard

- Natural Preservation Route Standards
  - http://www.revisor.leg.state.mn.us/arule/8820
- Established a **vision** of what the road could be

42 Primary Issues

- The most notable are…

BEARING TREE

CORNER IS APPROXIMATELY

DIRECTION   DISTANCE

T.   R.   SEC.
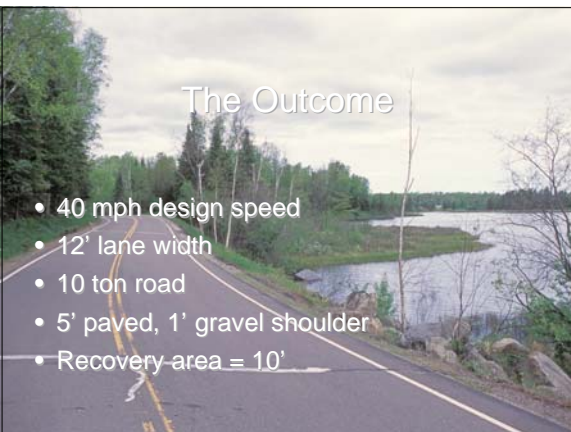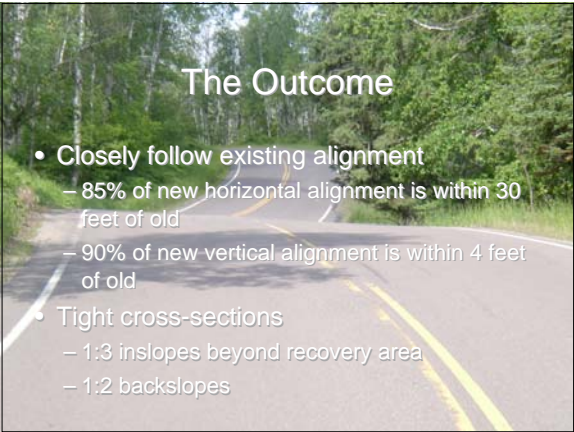
CORNER   TRACT

POSTED BY   DATE
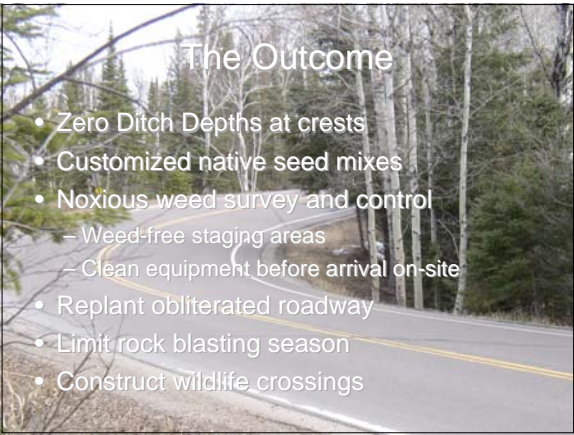
54 - 3

And Some of them Heated…

- Right-sizing the project
- Crash rate and severity, or a lack thereof - **SAFETY**
- Noxious Weeds and ATVs
- Clear zone width and slope
- Seed Mix
- Bicycle Use
- Driver Experience

The Outcome

- 40 mph design speed
- 12' lane width
- 10 ton road
- 5' paved, 1' gravel shoulder
- Recovery area = 10'

The Outcome

- Closely follow existing alignment
  - 85% of new horizontal alignment is within 30 feet of old
  - 90% of new vertical alignment is within 4 feet of old
- Tight cross-sections
  - 1:3 inslopes beyond recovery area
  - 1:2 backslopes

The Outcome

- Zero Ditch Depths at crests
- Customized native seed mixes
- Noxious weed survey and control
  - Weed-free staging areas
  - Clean equipment before arrival on-site
- Replant obliterated roadway
- Limit rock blasting season
- Construct wildlife crossings

Process to get to Outcome

- Project Team
  - Agency Involvement
  - Local Advisory Committee
  - The Public
- Communication
- Find Precedents
- Persistence
- Documentation

Agency Involvement

Foresters
Landscape Architects
Archeologists
Historians
Biologists
Botanists
Aquatic & Wildlife Specialists
Engineers

Local Advisory Committee Representation

- Chamber of Commerce
- Area Home Group
- Loggers
- Tribes
- Area Residents
- Environmentalists
- City, Township, & County
- U.S. Forest Service
- Mn/DOT

Communication

- Web Site
- E-Mail mailing list
- Snail Mail mailing list

Highway 1 Reconstruction
From the Kawishiwi River Bridge to County Road 2

Welcome to the Highway 1 Reconstruction Project Web Site.

Environmental Assessment Process is complete!

On February 28, 2005, the Federal Highway Administration (FHWA) signed the Finding of No Significant Impact (FONSI) for the Highway 1 reconstruction project. This signed document concludes the environmental process.

All of the documents that make up the Findings of Facts and Conclusions and the associated submittal and approval letters are available on this website:

www.dot.state.mn.us/d1/projects/hwy1/environment.html

Thank you for your interest.

PUBLIC HEARING SET TO DISCUSS ENVIRONMENTAL ASSESSMENT FOR RECONSTRUCTING A PORTION OF HIGHWAY 1 SOUTH OF ELY

The Minnesota Department of Transportation (Mn/DOT) is proposing to reconstruct about 15 miles of Highway 1, south of Ely, from the Kawishiwi River in Fall Lake Township to Lake

Find Good Examples

And Bad Examples

Persistence

- This is the toughest part…

Documentation

- The Environmental Assessment
- Written in the agency concurrence letters
- Listed in the cover letter (signed by the District Engineer to the FHWA) submitting the Findings Package
- Posted on the PROJECT'S WEB SITE and in the MEDIA – make it public

In the end…

- Challenge Convention
  - It's a good thing!!

Thank you

Kimberly Sannes, P.E.

Compass Rose, Inc.