2010
MINNESOTA PUBLIC ENGINEERS
TECHNOLOGY CONFERENCE & TRADESHOW

November 17 & 18, 2010
Holiday Inn, St. Cloud, MN.
ITS to Address Non-Signalized Rural Intersection Safety

A County’s Perspective

Presented by Wayne Fingalson & Bill Cordell, Wright County
$144,000.00 Federal STIP Dollars Awarded to Wright County
VEHICLE DETECTION
ADVANCE WARNING SYSTEM

LOOK FOR TRAFFIC
A. Provide a Warning to a Stopped Motorist at the Intersection that an Oncoming Vehicle is Approaching on the Cross Street.

B. Provide a Warning to a Vehicle on the Thru Roadway that a Vehicle is Stopped at or Approaching from the Side Street.
Request For Proposals
Design Build

- Modular & Scalable
- Radio Based Wireless Communications
- Radar Detection
- Solar Powered
- Battery for Power System Stored Below Ground
Request For Proposals
Design Build

- System Configured with On Board Keypad & Display
- Develop Customized Warning Signs
- Mount Systems on Sign Post Structures Provided by the County
- Train County Personnel in the Use & Operation of the Systems
Request For Proposals
Design Build

Proposals Sent to Four Firms that Expressed Interest
PROJECT AWARDED TO

- SHORT ELLIOT HENDRICKSON, INC.

In Association with,

- NETWORK TRANSPORTATION TECHNOLOGIES, LLC
SIDE STREET STRUCTURE

- Solar Panel
- Whipple Antennae
- Fault Indicator
- Telespar
- Slip Base
- Breakaway
- Control Box
- Battery Box
- Sonic Radar
- Doppler Radar
UNIQUE ISSUES

- Mounting Flasher Bracket to Square Tube
- Strength of Mounting Hardware
- Placement of Battery Box
- Proper Angle of LED Sign to Motorist
UNIQUE ISSUES
UNIQUE ISSUES

SPECIAL BRACKET
UNIQUE ISSUES

- Advance Detection was Added to the Project

- Placement Location of Sonic Radar for Stop Bar Detection.

- Larger Solar Panels Were Required to Sufficiently Charge the Batteries.
SYSTEM INSTALLATION
SYSTEM INSTALLATION
RUSSIAN VISIT
LOOK FOR TRAFFIC
### PROJECT COSTS

- **Initial System Price**: $39,780.00
- **Additional Advance Radar**: $3,978.00
- **County Slip Base Posts**: $2,129.00
- **Larger Solar Panels**: $1,850.00
- **TOTAL SYSTEM COST**: $47,737.00
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THANK YOU

Wayne Fingalson, Wright County Engineer

Bill Cordell, Senior Traffic Technician