

**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**

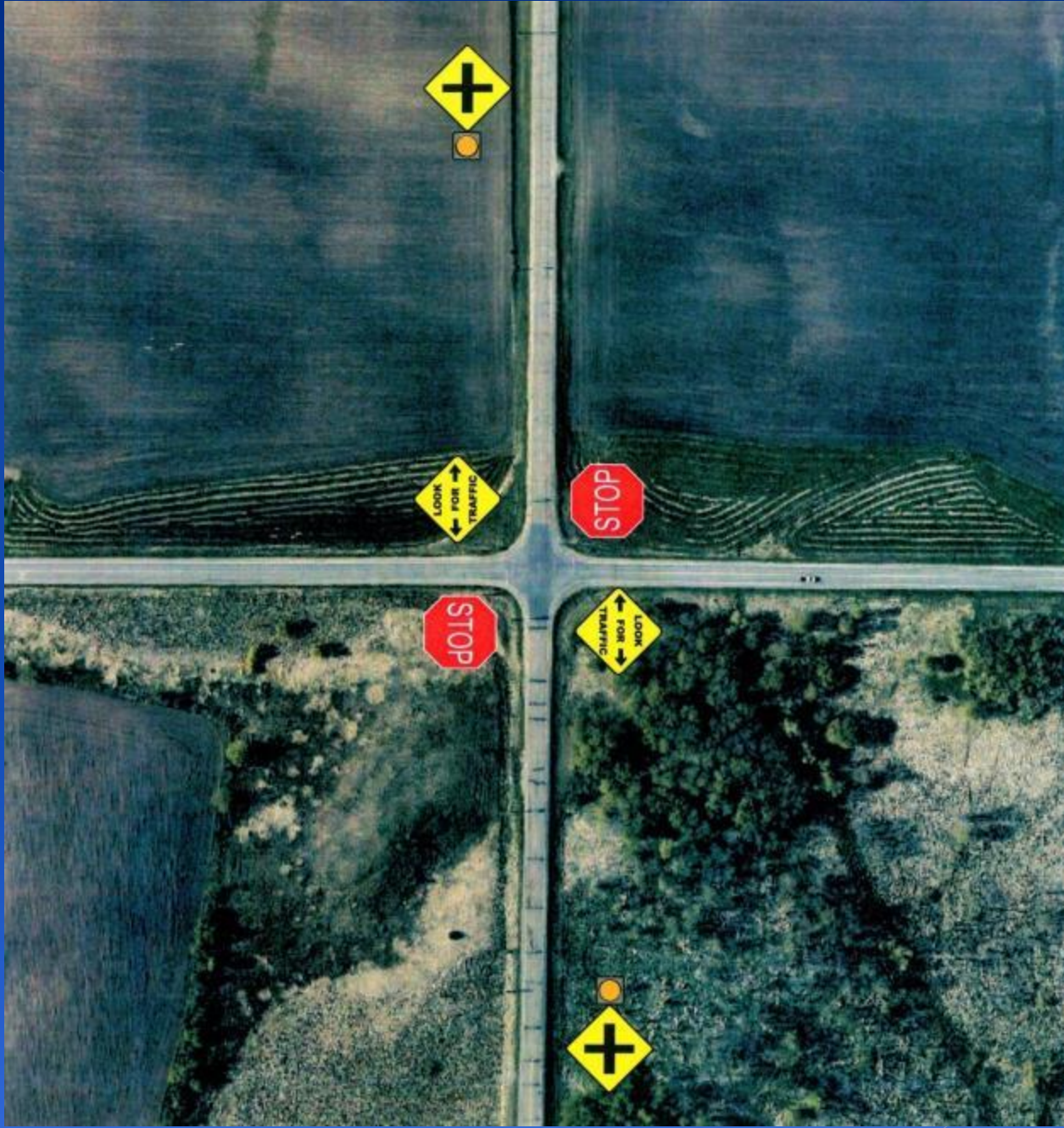


VEHICLE DETECTION ADVANCE WARNING SYSTEM

\$144,000.00 Federal STIP Dollars Awarded
to Wright County

VEHICLE DETECTION ADVANCE WARNING SYSTEM





Request For Proposals Design Build

- 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



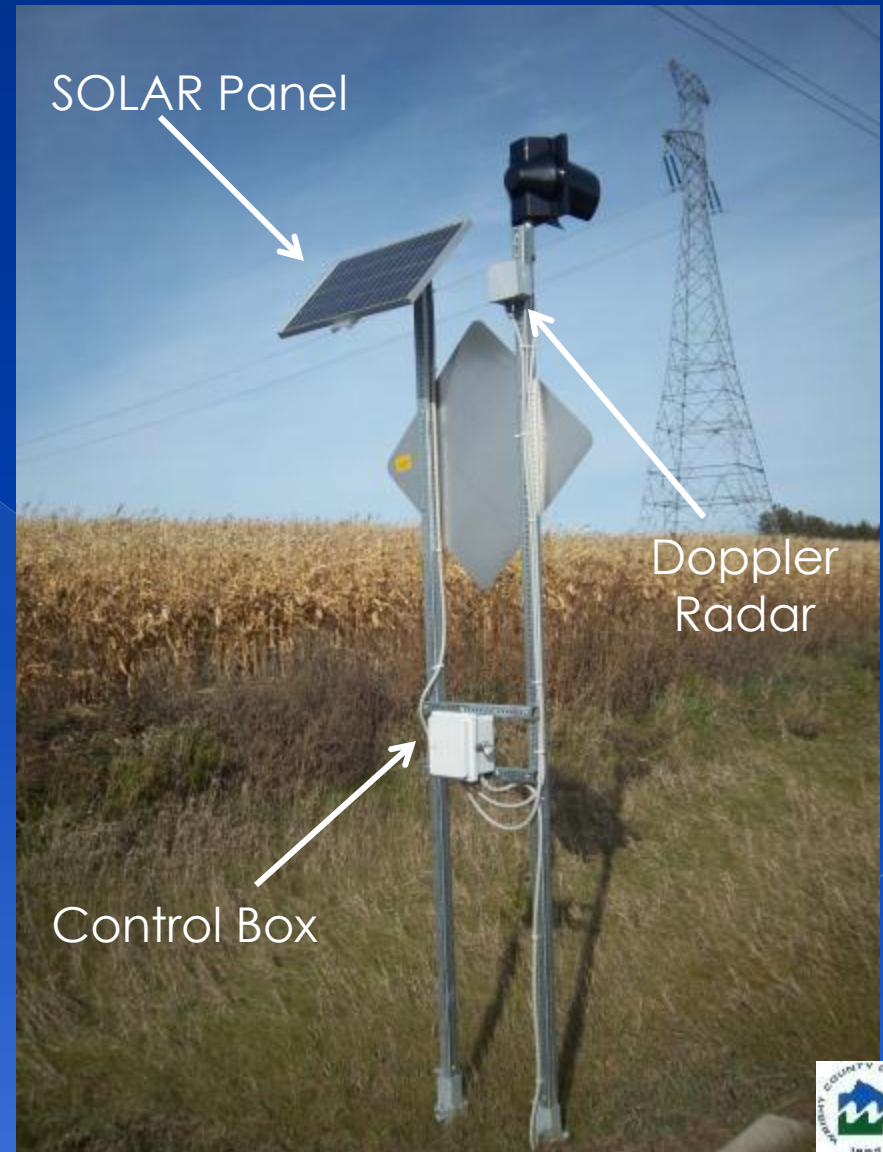
PROJECT AWARDED TO

- SHORT ELLIOT HENDRICKSON, INC.

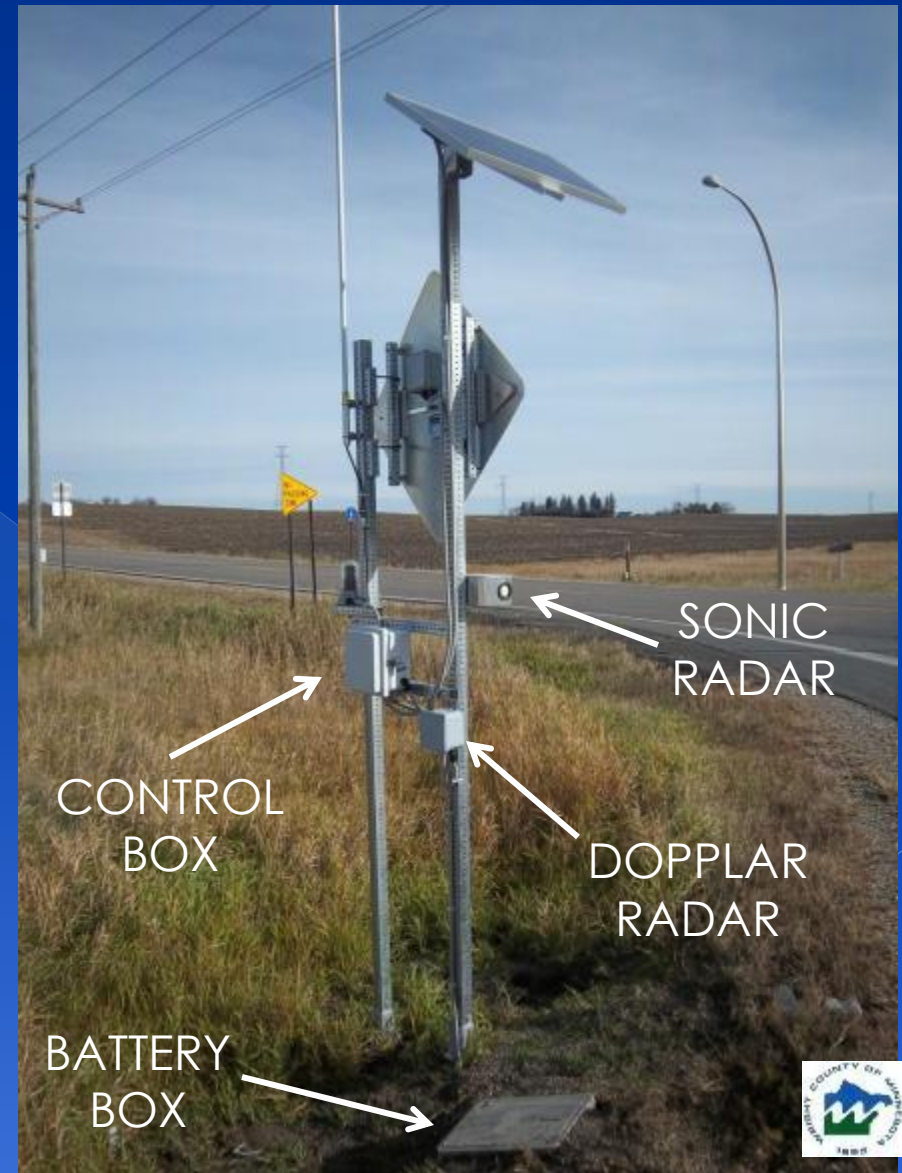
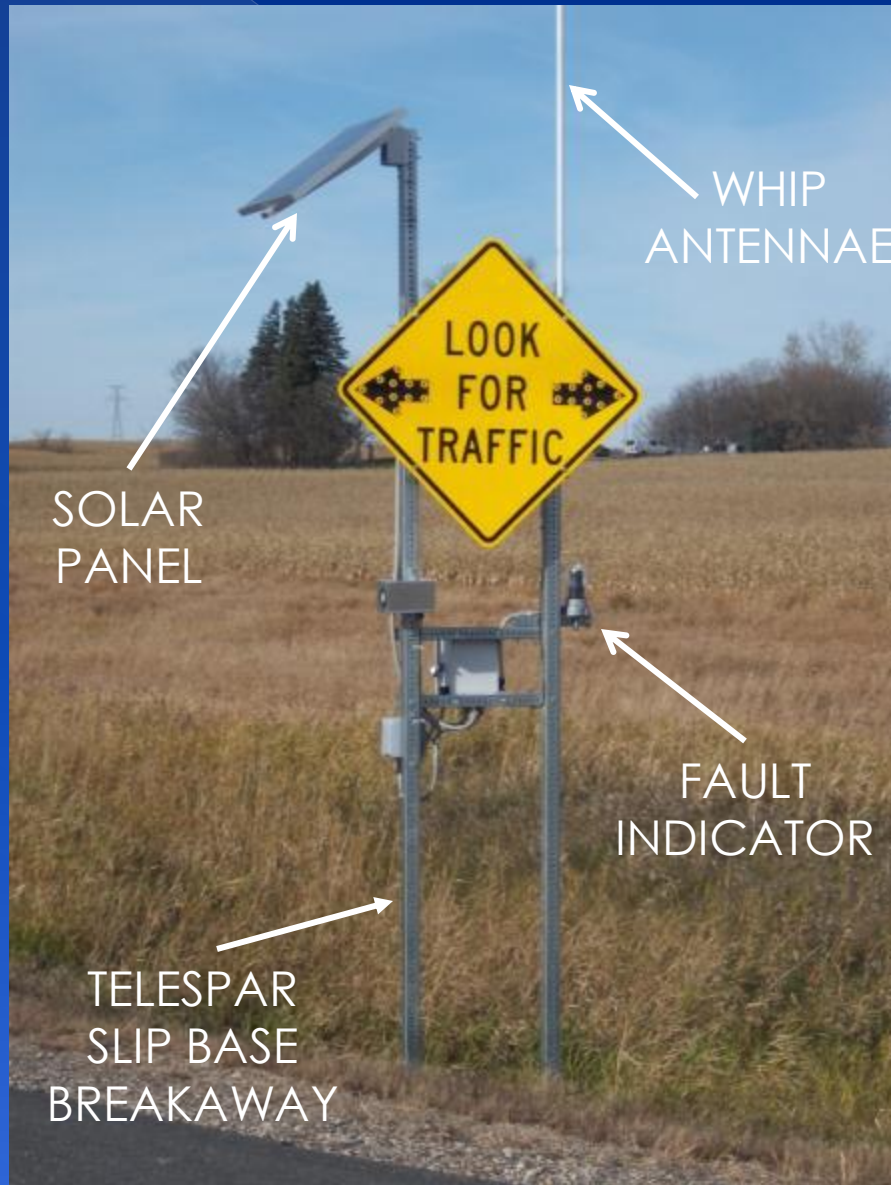
In Association with,

- NETWORK TRANSPORTATION
TECHNOLOGIES, LLC

MAINLINE STRUCTURE



SIDE STREET STRUCTURE



UNIQUE ISSUES

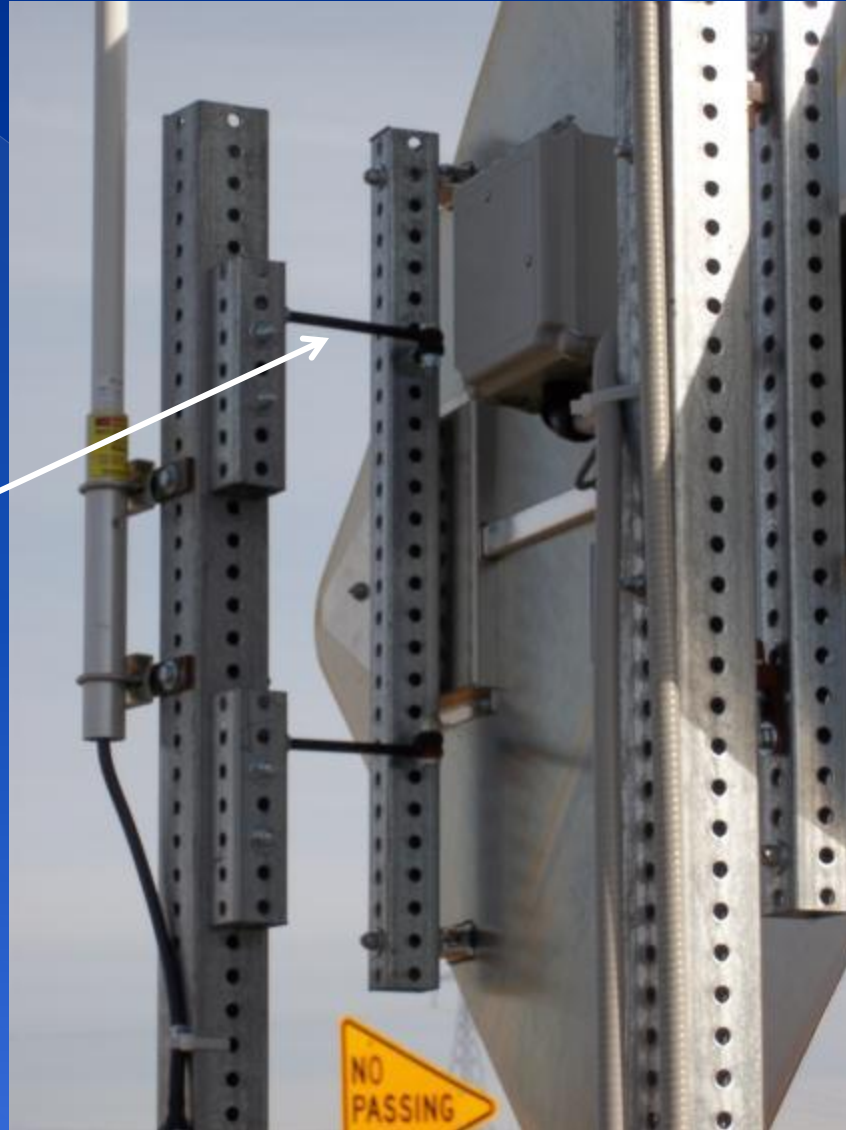
- Mounting Flasher Bracket to Square Tube
- Strength of Mounting Hardware
- Placement of Battery Box
- Proper Angle of LED Sign to Motorist

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



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SYSTEM INSTALLATION



RUSSIAN VISIT



RUSSIAN VISIT





PROJECT COSTS

● Initial System Price	\$39,780.00
● Additional Advance Radar	\$ 3,978.00
● County Slip Base Posts	\$ 2,129.00
● Larger Solar Panels	<u>\$ 1,850.00</u>
● TOTAL SYSTEM COST	\$47,737.00



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THANK YOU

Wayne Fingalson, Wright County Engineer

Bill Cordell, Senior Traffic Technician

