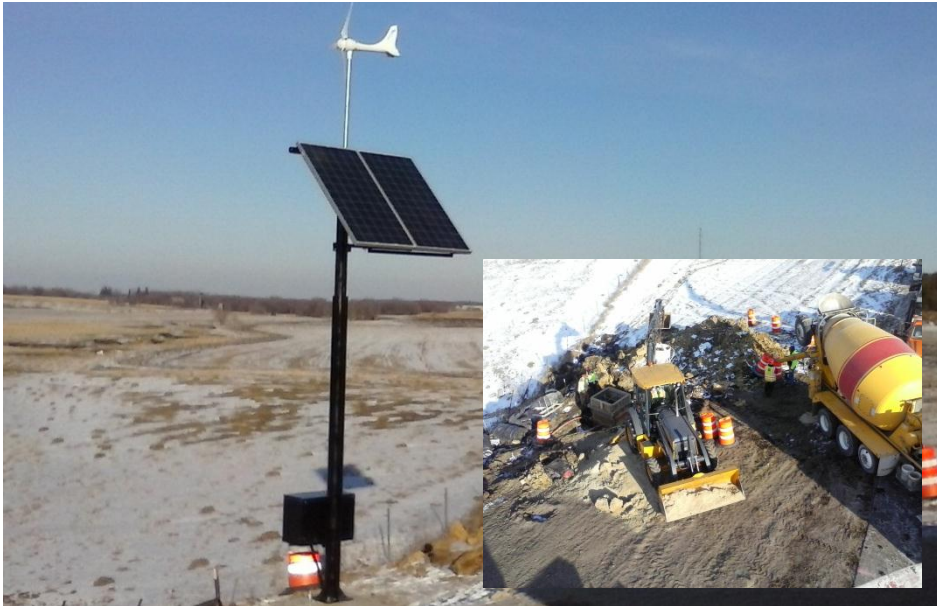




# Maintenance Research Bulletin: January 2015

**NTREC New Technology Research Equipment Committee  
MOR Maintenance Operations Research**



## Solar Powered Culvert Heat Tape System

As a northern snow state, every district within MNDOT must keep all drainage structures (culverts) open. Maintaining year-round water flow prevents freezing, which can cause water to back up and freeze onto roadways. Over the years, MNDOT has tried ice chippers, shovels, heaters, jetters, etc. but have been unsuccessful at averting this predicament. The Solar Powered Culvert Heat Tape System uses solar energy or wind produced energy to heat the tape that is placed through the center of a drainage structure. It should keep just enough water flowing through the culvert to prevent it from freezing. District 6 crews will monitor these units to see if enough energy is generated to keep the tape hot enough to allow water to flow through the culvert, eliminating the need to go out and mechanically remove the ice that forms.

**For more information contact:  
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District 6 Rochester**

## Upcoming Events

Road Salt Symposium  
Chaska  
February 5, 2015

TERRA  
Pavement Conference  
St. Paul  
February 12, 2015

Minnesota Transportation  
Conference  
Bloomington  
March 3-5, 2015

Northland Chapter  
ATSSA  
"How To"  
Ramada Inn, Fargo ND  
March 17-18, 2015

NTREC  
Update Meeting  
St. Cloud Training Center  
April 22, 2015

Comments? Questions?  
Maintenance Research  
Program Administrator  
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Ryan Otte

We all have a stake in **A  B**

