

**State Planning and Research Program  
Quarterly Report**

**PROJECT TITLE:** Geocomposite Capillary Barrier Drain (GCBD)

**OBJECTIVES:**

Monitor and collect data from the sensors of the GCBD Research project at the MnROAD site.  
1<sup>st</sup> Quarter 2007 Report (January-March, 2007)

**PERIOD COVERED:** Jan.-March, 2007

**PARTICIPATING AGENCIES:** Minnesota Department Of Transportation, Michigan Department Of Transportation, New York Department Of Transportation, CRREL, University of New Mexico

**PROJECT MANAGER:**

Andrew Eller

**SP&R PROJECT NO:**

TPF 5(126)

**PROJECT IS:**

         Planning  
  X   Research & Development

**LEAD AGENCY:**

Minnesota Dept. of Transportation

**PRINCIPAL INVESTIGATOR:**

Andrew Eller, John Stormont, Karen Henry

**ANNUAL BUDGET:**

A majority of the budget covered the 2006 construction. Year two will be significantly less.

1<sup>st</sup> year ~ 225,000

2<sup>nd</sup> year ~ 30,000

**PROJECT EXPENDITURES TO DATE:** \$222,494.03

**Construction**

HardDrives Inc. 179,224.20

**Supplies/Instrumentation**

Tenex (geonet) 7,763.16

Campbell(sensors) 17,844.59

Decagon (sensors) 5,705.09

Misc. equipment. 740.18

**Salaries**

District 3:Design 5,247.72

GCBD material prep & assembly,  
(Student worker salary, etc) 4,375.16

**Travel/Misc**

MI 645.21

NY 928.72

**WORK COMPLETED:**

Data collection and monitoring operation of the sensors.

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

Monitor operation of TDR, heat dissipation, ECH<sub>2</sub>O, tipping buckets, thermocouples, open standpipes with pressure transducers, and resistivity probes; and collect data for analysis.

**STATUS AND COMPLETION DATE:**

Data collection is ongoing, with completion of data collection in 7/2008.