State of Wisconsin/Department of Transportation

RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: September 30, 2006

Program: SPR-0010(36) FFY99	Part: II Research and Development
Project Title: Perpetual Pavement Instrumentation For the Marquette Interchange Project	**Project ID: 0092-06-01**
Administrative Contact: James McDonnell	**Sponsor: WHRP**
WisDOT Technical Contact: Leonard Makowski	**Approved Starting Date: Oct 20, 2005**
Approved by COR/Steering Committee: $64,851	**Approved Ending Date: Nov 30, 2006**
Project Investigator (agency & contact): Marquette University, James A. Crovetti	

Percent Complete: 90

Project Description:
This project is investigating the in-service performance of the HMA perpetual pavement being constructed within the North Leg of the Marquette Interchange project. A wide variety of pavement sensors will be procured and installed within the pavement structure during normal construction operations. The sensors are intended to provide real-time recordation of axle loads and resultant stress/strain at critical pavement locations.

Progress This Quarter:
(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)

Verification testing and calibration of imbedded sensors is complete. Field installations of all sensors, except the piezo wander strips and the weigh in motion system, are complete. The controller cabinet is completed and installed and environmental data has been transmitted with our wireless link. Database development is ongoing. A presentation of progress was made to the Flexible Pavement TOC on Friday, Sep 22.

Work Next Quarter:

The piezo wander strips and WIM system will be installed, tested and demonstrated in early October. The final report will be prepared and submitted for review.

Circumstances Affecting Progress/Budget:

Final paving was not completed until Thursday, Sept 14th. With the pavement being opened to traffic on Friday, Sept 15th , there was not enough time to install the piezo wander strips and the weigh in motion system. Installation was planned for September 29-30 but this installation was shifted to October 3-4 due to predicted rains.

Gantt Chart:

Task	CY 2005			CY 2006										
	O	N	D	J	F	M	A	M	J	J	A	S	O	N
1 – Literature Review	P	P	P											
(7% of total)		A	A											
2 – Installation Plan		P	P	P	R	R								
(9% of total)			A	A	A									
3 – Procurement & Installation							P	P	P	P	P			
(74% of total)						A	A	A	A	A	A	A		
4 – System Demonstration											P			
(4% of total)														
5 – Final Report										P	P	P	R	P
(6% of total)														

P – Proposed
A – Actual
R – WisDOT Review