State of Wisconsin/Department of Transportation

RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: September 30, 2007

Program: SPR-0010(36) FFY99	Part: II Research and Development
Project Title: BRIDGE DECK CRACK SEALERS (IMPLEMENTATION PROJECT)	Project ID: #0092-07-22
Administrative Contact: Nikki Hatch	Sponsor: Wisconsin Department of Transportation
WisDOT Technical Contact: Travis McDaniel	Approved Starting Date: July 30th 2007
Approved by COR/Steering Committee: $15,000	Original End Date: December 31st, 2007
Project Investigator (agency & contact): Jose Pinchei	Current End Date: December 31st, 2007
	Number of Extensions: 0

Percent Complete: 15%

Request a No Cost Time Extension (Please Select One): ☐ **YES** ☒ **NO**

Reason for No Cost Time Extension:

Project Description:

The main purpose of this study is to conduct additional tests in order to provide a wider selection of crack sealers for use in the field. This will be done by:

a) conducting additional tests on sealants in Category I and II for crack widths other than those specified by the manufacturer. For example, Dural 335 in Category I was tested only for hairline crack widths according to manufacturer specifications. It is possible, however, that the Dural 335 product could be used for wider crack widths and still provided a good performance. Similarly, none of the products in Category I or II were tested for wide crack widths (per manufacturer specifications) and again, it is possible that one or more products could be used for wide cracks offering a similar performance.

b) identifying and testing new crack sealers that may be now available in the market since the previous study was conducted.

Progress This Quarter:

(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)

The table below shows the products to be tested.

Proposed test program

Sealant Name	Hairline Crack Width (< 0.06")	Narrow Crack Width (0.06" to 0.1")	Medium Crack Width (0.1" to 0.19")	Wide Crack Width (> 0.2")
	1/32"	1/16"	1/8"	1/5"
Dural 335	—	✓	✓	✓
Sikadur 55 SLV	—	—	—	✓
Degadeck	—	—	—	✓
Denedeck	—	—	—	✓
Sikadur 52	—	—	—	✓
Others	✓	✓	✓	✓

✓ : crack widths to be tested in this study

— : crack widths previously tested.

Materials have been ordered and fabrication of the specimens are underway.

Work Next Quarter:

- A meeting will be scheduled with the POC to review the list of sealants and determine whether additional sealants should be tested.
- Fabrication of the specimens will be completed.
- Specimens will be cracked and sealed for the appropriate crack widths and with the appropriate sealants.

Circumstances Affecting Progress/Budget: The project start date was July 2007. However, a student dedicated to the project could not be appointed until the beginning of the Fall semester in September. Thus, fabrication of the specimens has been delayed.

Gantt Chart:

Task		Month 1	Month 2	Month 3	Month 4	Month 5	Month6
PHASE I	Selection of Sealants/Meet w/POC						
	Specimen Preparation						
	Bond Tests of Specimens *without* Freeze-thaw cycles						
PHASE II	Freeze-thaw cycles						
		Month 7	**Month 8**	**Month 9**	**Month 10**	**Month 11**	**Month 12**
	Bond Tests of Specimens *with* Freeze-thaw cycles						
	Data Analysis and Evaluation						
	Final Report						

	Planned
	Completed