Iowa Department of Transportation
Form 541001 (20071213)

Research Progress Report

For Quarter Ending June 30, 2008

Today's Date
07/10/2008

Project Number	Project Title
RT204	285 Self Consolidating Concrete, Phase II

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Percent of Dollars Paid	Dollars Allocated	Dollars Paid	Percent Project Completion
32	130,000.00	42,232.29	10

Original Project Start Date	Original Project End Date	Current Completion Date
12/01/2006	12/31/2007	12/06/2010

DESCRIPTION OF RESEARCH

Task Title	Start Date of Task	Original Completion Date	Completion Date
Mix Design Refinement and Fiel Trial Testing	12/01/2006	12/31/2007	
Phase 2 Field Investigation of SF SCC Paving		08/01/2008	
Performance Monitoring and Technology Transfer		12/31/2010	

Research Progress Report

Technical Advisory Committee Names	Telephone No.	E-mail address
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Technical Advisory Committee Names	**Telephone No.**	**E-mail address**
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Technical Advisory Committee Names	**Telephone No.**	**E-mail address**

TAC Meeting Dates	TAC Meeting Dates	TAC Meeting Dates	TAC Meeting Dates	TAC Meeting Dates	TAC Meeting Dates
05/17/2007					

Primary Investigator Concerns, Problems, Needs or No-Cost Extension Requests

TAC members

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Project Progress to Date and other pertinent information

• Coordinated the schedule, material, equipment, and documentation requirements for two possible field trial sites, Webster City and Ames City bike paths.
• Worked with Ames City on modification of an asphalt paver to accommodate 5" thick pavement for Ames City bike path.
• Designed a mix proportion for the Webster City project using materials obtained from American Concrete, Webster, IA.
• Studied the rheological properties of SF SCC and the sieved mortar using IBB and Brookfield rheometers, respectively.
• Designed/tested two mix proportions (with and without ActiGel, working with NW) for the Ames City project.
• Extended rheological correlations with slump-flow test for concrete from cement paste (NW).

Main emphasis for next quarter:
1.Coordinate and prepare for the field SF SCC applications in summer
2.Finalize the mix designs for the Ames City project: (a) with fiber and (b) with ActiGel clay and for the Webster City project: (a) with WR and fiber.
3.Test the general properties (set time, heat of hydration, and F-T resistance) of concrete for the field SF SCC projects.
4.Continued refinement and validation of correlations between slump-flow test and rheological parameters (NW).

The research team still is finding it difficult to find field sites for SF SCC application.

Subject	self consolidating concrete	**Keywords**	SCC