

**Quarterly Progress Report –
For the period January 1, 2011 to March 31 2011
TPF-5(098)**

Project Dates: December 7, 2006 – May 31, 2011
Project Title: Self-Consolidating Concrete-Applications for Slip-Form Paving, Phase 2
Principal Investigator: Kejin Wang, voice: 515-294-2152, email: kejinw@iastate.edu

Progress Report:

Project is on schedule Yes (with extension to May 31, 2011)
 Project is within budget Yes
 Significant changes in project description Yes (Please see the March 2009 report)

Problems (current or anticipated):

Products and tangible results this quarter (reports/articles written, oral reports/interviews):

K. Wang, S.P. Shah, G.R. Lomboy and G. Lu (2011), “Self-Consolidating Concrete For Slip Form Construction: Field Application And Performance Monitoring”, 9th Symposium on High Performance Concrete, 9-12 August 2011, Rotorua, NZ , to be presented.

G.R. Lomboy, K. Wang, P. Taylor, S.P. Shah, J. Grove, P. Wiegand (2011) “Economic and Environmental Benefits of Using Semi-Flowable Self-Consolidating Concrete for Slip-Form Paving” TRB 11-2690 , 2011 TRB annual meeting.

G.R. Lomboy, K. Wang, P. Taylor, S.P. Shah (2011) “Guidelines for design, testing, production and construction of Semi-Flowable SCC for slip-form paving”, Int. J. Pavement Engg, submitted.

Interaction with Technical Monitor and/or Project Advisory Committee (brief recount of meetings):

An ISU and NU team meeting was held on March 30, 2010.

Brief summary of this quarter’s research:

1. Field SFSCC monitoring - there is no additional deterioration in the SFSCC pavements.
2. Project report preparation – the draft is finalized, and revision is in progress.

Main emphasis for next quarter:

1. Submit the project report.

Task #	Phase II Task Description	Completion date planned	% of task completed
1	Mix Design Refinement and Field Trial Testing		
1.1	<i>Further Study SF SCC Materials and Mix Proportions</i>	December 2007	100
1.2	<i>Conduct Quality Control Tests for Selected SF SCC Mixtures</i>	December 2007	95
1.3	<i>Investigate Engineering Properties and Durability of SF SCC Candidates</i>	December 2007	100
1.4	<i>Conduct Field Paving Trial Tests (combined with field applications)</i>	August 2008	100
1.5	<i>Develop SF SCC Mix Design Methodology and Acceptance Criteria</i>	August 2008	100
1.6	<i>Further Study the “Green” Strength, Shape-holding Ability, and Compaction of SF SCC</i>	December 2008	100
1.7	<i>Test Data Analyses/Task 1 Report (combined with the final report)</i>	December 2008	-
2	Field Investigation of SF SCC Paving		
2.1	<i>Select/Modify Paving Equipment (stopped due to the scope change)</i>	August 2008	-

2.2	<i>Determine Construction Times and Locations (will determine if an additional field application is necessary, see note 3/31/2010 project meeting)</i>	August 2008	-
2.3	<i>Perform Field Tests to Characterize SF SCC Performance</i>	August 2008	100
2.4	<i>Analyze Field Test Data/Establish Primary Guidelines for SF SCC Pav</i>	December 2008	100
2.5	<i>Prepare Task 2 Report (combined with the final report)</i>	December 2008	-
3	Performance Monitoring and Technology Transfer		
3.1	<i>Field Performance Monitoring of SF SCC Pavement</i>	September 2010	100
3.2	<i>Technology Transfer (not performed due to the scope change)</i>	December 2010	-
3.3	Prepare Final Report for Entire Project	December 2010	90

**QUARTERLY BUDGET REPORT FOR
Project Title: SELF CONSOLIDATING CONCRETE**

DATA FOR THE QUARTER ENDING MARCH 31, 2011

BUDGET CATEGORY DESCRIPTION	AMOUNT BUDGETED	EXPENDITURES THIS PERIOD	CUMULATIVE EXPENDITURES
TRAVEL	\$10,000.00	\$0.00	\$0.00
SUPPLIES/MATERIALS	\$2,000.00	\$0.00	\$2,654.09
SUBCONTRACTS(subj to IDC)	\$25,000.00	\$0.00	\$25,000.00
SUBCONTRACTS(not subj to)	\$66,999.00	\$363.35	\$66,998.10
OTHER DIRECT COSTS	\$13,000.00	\$0.00	\$21,462.50
TOTAL DIRECT COSTS	\$116,999.00	\$363.35	\$116,114.69
INDIRECT COSTS (University Overhead)	\$13,001.00	\$0.00	\$12,770.31
CATEGORY TOTALS	\$130,000.00	\$363.35	\$128,885.00

NOTES:

THE ISU SPONSORED PROGRAM ACCOUNTANT IS THE ONLY PERSON ABLE TO CERTIFY THE ACCURACY OF FINANCIAL DATA. THE INFORMATION PROVIDED ABOVE IS BASED ON DATA AVAILABLE TO DEPARTMENT PERSONNEL AND MAY DEVIATE SLIGHTLY FROM FINANCIAL REPORTS SUBMITTED BY ISU ACCOUNTANT.