



QUARTERLY PROGRESS REPORT

Project Title:	A Proposal for the Development of High Performances Concrete for Transportation Structures in New Jersey		
RFP NUMBER: N/A	NJDOT RESEARCH PROJECT MANAGER: Tony Chmiel		
TASK ORDER NUMBER/Study Number: 62 / 4-23806	PRINCIPAL INVESTIGATOR: Hani Nassif		
Study Start Date: 05/10/1999 Study End Date: 01/01/2003	Period Covered: 4 th Quarter 2001		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Selection of Final Mixes	5%	80%	80%	4%
Collection of Data and Preparation of Samples During the Field Samples	20%	50%	50%	10%
Evaluation of Field Samples	10%	20%	20%	2%
Creep and Shrinkage Set-up and Testing	50%	30%	30%	15%
Preparation of Specifications for HPC	10%	10%	0%	0%
Final Report	5%	10%	0%	0%
TOTAL	100%			31%

1. Progress this quarter by task:

- A. The Creep chamber is upgraded and currently it is being tested for performance in terms of temperature and relative humidity. There is a high fluctuation in the relative humidity range and manufacturers will be asked to re-calibrate the system.
- B. A total of eight Creep rigs are built and ready to start creep testing.
- C. The freeze and Thaw machine is up and running after it has been overhauled completely. Currently samples are being mixed to start the actual testing of specimens.
- D. A draft of the first phase of the HPC study has been submitted to NJDOT during the last Quarterly meeting. Since then many editorial and technical changes has been made and added.

2. Proposed activities for next quarter by task

- A. Eight more rigs will be manufactured and assembled by the end of this year and ready for creep testing.
- B. Creep/Environmental chamber calibration.
- C. Freeze and Thaw machine testing to start on specimens from Phase I.
- D. Field/Plant mixing will commence in January as per the coordination with Clayton Concrete in Edison.
- E. Tests on concrete with different size aggregates will continue.
- F. Rapid Chloride permeability testing will be performed on Specimens with different size aggregate.
- G. Sensors for the creep specimens arrived and will be tested.

3. List of deliverables provided in this quarter by task (product date)

N/A



CAIT

Center for Advanced Infrastructure & Transportation
Rutgers, The State University of New Jersey

4. Progress on Implementation and Training Activities

N/A

5. Problems/Proposed Solutions

N/A

6. Budget Summary*

Total Project Budget (# of years)	1.5 Years	\$70,533.00
Total Project Expenditure to date		\$145,989
% of Total Project Budget Expended		38%
Task Order Number/Study Number:		62 / 4-23806
Current Task Order Budget (# of years)	Year 1.5	\$384,320.00
Actual Expenditure to date against current task order		\$145,989
% of current task order budget expended		38%

* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
623 BOWSER RD. PISCATAWAY NJ 08854-8014
TEL: 732-445-0579 FAX: 732-445-0577