Temperature: N/A

Reflective Cracking:

In March, the first round of full-scale tests was completed. During the course of 2641-cycle testing, some hydraulic control and data collection issues were identified. The preliminary data analysis was focused on actuator forces, horizontal displacement of concrete, and asphalt strain gage (embedded and surface) response.

The milling of the asphalt overlay is tentatively scheduled in May, 2012.

Procure, Install, and Test Pavement Instrumentation Sensors

Based upon the preliminary data analysis of the trial test, it was concluded that the surface strain gages were not performing satisfactorily due to a demanding testing environment (temperature and moisture). Therefore, on the Reflective Cracking project, the focus was placed on exploring appropriate types of sensors for crack detection. A number of candidates were investigated and evaluated. The final selections include Micro Wire and Crack Detector Gage from Micro-Measurements, Strain gage from Texas Measurements, and Strain Transducer from Campbell Scientific.

During the trial test of reflective cracking, a special version of the TenView program was created for data monitoring.

PLANNED ACTIVITIES:

Two tasks are expected to be completed for the Reflective Cracking Project:

1. Finalization of hydraulic control program.
2. Instrumentation experimentation for crack detection.

Upon the completion of the above tasks, the full-scale test will resume on the 17" uncracked pavement.