Oklahoma Department of Transportation

Construction Joints in Continuous Reinforced Concrete Pavement Construction Control Directive No. **19940218**

February 15, 2002

Scope: To establish the procedure for monitoring the construction of joints in continuously reinforced concrete pavement.

There have been some failures detected at the construction joints in Continuous Reinforced Concrete Pavement (CRCP) below the reinforcing steel on the "start-up" side of the joint. The concrete is found to be poorly consolidated, having voids at the bottom of the slab. This is no doubt related to the low concrete slump and the additional steel required in the joint.

To avoid this type of failure, the concrete must be consolidated with a mechanical type, hand vibrator, as specified on the standard drawings. The effort should extend at least 3 feet from the joint (to beyond the added steel). A sketch depicting this problem is enclosed.

A test core should be taken in the problem area to inspect for this lack of consolidation.

George Raymond, P.E. Construction Engineer