



# Illinois Department of Transportation

Division of Highways / Bureau of Construction  
2300 South Dirksen Parkway, Springfield, Illinois 62764

**Subject:**  
**Sequential Deck Pours**

**CONSTRUCTION MEMORANDUM NO. 07-64**

**Effective:**           **May 15, 2007**

**Expires:**           **Indefinite**

This Construction Memorandum supersedes Construction Memorandum 95-64, dated January 3, 1995.

Sequential deck pours are included in bridge plans to reduce stresses and minimize the potential for cracking the concrete deck. A proposal by a Contractor to either change the pouring sequence shown in the plans or to add a pouring sequence (i.e. add longitudinal or transverse construction joints not shown in the plans) should not be permitted without approval from the Bureau of Bridges and Structures.

Contractors should be advised that any proposal to either change the pouring sequence or to add a pouring sequence should be submitted at an early date to permit adequate review time. Contractor deck pouring sequence proposals shall address issues relating to the proposed rate of placement including: haul times and concrete supply rates, equipment and crew requirements, minimum placement rates, anticipated concrete set times, and contingency plans. Proposals shall also address potential deflections (including uplift conditions at supports) due to the proposed pouring sequence. This may require an analysis by an Illinois licensed structural engineer.

Pouring sequences that require the use of retarders, or combinations of admixtures, to delay normal concrete set times for the purpose of extending or altering the deck pour sequence will not be allowed. The Resident Engineer is advised that when a retarder is used, its function is to counter the rapid setting caused by high temperatures in order to maintain the normal concrete set time.

Whenever a sequential deck pour is made, at least 72 hours shall have elapsed since the previous section was placed and its concrete strength shall have attained a minimum flexural strength of 650 p.s.i (4500 kPa) or a minimum compressive strength of 3500 p.s.i. (2400 kPa). This includes sections separated by longitudinal as well as transverse joints. Extra test beams or cylinders, in addition to those required by the Project Procedures Guide or contract QC/QA special provisions, shall be made and tested for the minimum required strength. The extra test beams or cylinders shall be made and field cured according to the Illinois Modified AASHTO T 23 test method which is maintained in the Manual of Test Procedures for Materials. A note should be included on the bridge plans with the above minimum time and strength requirements. On continuous structures, simultaneous pours will be allowed if permitted by the pouring sequence shown in the plans.

A handwritten signature in black ink that reads "Roger L. Driskell".

Roger L. Driskell, P.E.  
Engineer of Construction