



Memorandum

DATE September 9, 2008
TO Claude Oie, Moe Jamshidi
FROM Andy Dearmont
SUBJECT Concrete Pavement Random Coring Waiver Policy

It has been my understanding that Materials and Research has generally waived the random coring requirement for concrete pavement whenever the quantity of a given pavement item on a given project is less than 5000 square yards. Recently the FHWA has become concerned with the way in which random coring is being waived – stating that it is not consistent with paragraph 4 a. (7) in section 603.05 which reads:

(7) At the option of the Engineer cores may not be required from irregular areas, with widths less than 8 feet (2.4 m) or from an entire contract involving less than 5,000 square yards (4200 m²) of pavement.

In recent dialogue with Frank Rick, I have indicated that the Department focuses random coring efforts on mainline pavement with large quantities where it is better suited than on smaller concrete pours. Larger concrete pours require more emphasis on overall process. The vastness of these pours make it difficult to field verify thickness to the same degree as smaller pours. I also pointed out that smaller pours – not subject to random coring – remain subject to strength verification by cylinder tests and thickness verification by field observation. Lastly, I indicated that paving items having less than 5000 square yards generally represent pavement such as shoulders, intersections, left turn lanes, and short sections of mainline pavement, that all have more redundancy.

FHWA has indicated they are willing to accept the Department's current random coring methods, that will require a modification to the specification to match the practice described above – provided the Department develop a written policy to define the criteria that can be used to determine when random coring *may* be waived. To that effect, I have attached two drafts to accomplish the FHWA condition. One is a proposed special provision that will modify the above listed paragraph to allow the Department to waive random coring as described. The second is a draft policy memorandum that defines criteria to determine when random coring may be waived.

AWD/awd

Special Provision
Concrete Pavement Random Coring Waiver

Paragraph 4. A. (7) of Section 603.05 of the Standard Specifications for Highway Construction is void and superseded by the following:

(7) At the option of the Engineer cores may not be required from irregular areas, with widths less than 8 feet (2.4 m) or from an individual pavement types that involve less than 5,000 square yards (4200 m²) of pavement.

Policy for Waiving Random Coring for Concrete Pavement

Concrete pavement shall be randomly cored for the evaluation of strength and thickness in accordance with the requirements of Section 603.05 of the Standard Specifications for Highway Construction. However paragraph 4. A. (7) of Section 603.05 allows that – **at the Engineers option** – segments of pavement **may** be excluded from this requirement if the pavement areas:

- are irregularly shaped,
- are less than 8-feet wide, or
- involve a pavement type with less than 5,000 square yards.

The Pavement Design section of the Material and Research Division shall initiate the **Engineers option** to waive the random coring and shall issue a document stating pavement type that will not be subject to the random coring requirements. This document shall be issued to the Construction Division with copies to the Project Manager, and District Construction Engineer. The document shall indicate that **the information is not to be given to the Contractor.** The District or Construction Office shall have the authority to cancel the waiver and require the random coring.

Random coring may be waived for pavement types with less than 5,000 square yards provided that the following conditions apply:

- The pavement is *not* mainline pavement and will not be used as future mainline pavement.
- The pavement is mainline pavement, but at least one of the following apply:
 - is oversized by 1-inch or more for constructability reasons,
 - will be removed and replaced by a future project planned for construction in less than 15 years,
 - includes no segments of pavement longer than 250 linear feet , or
 - is not on the Interstate or National Highway systems.

Waived pavement sections shall remain subject to special cores that may be collected at any location that is believed to have a thickness or strength deficiency, or any other condition considered to be detrimental to the performance of the pavement.