



Wisconsin Department of Transportation

March 2, 2015

**Division of Transportation Systems
Development**

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NOTICE TO ALL CONTRACTORS:

Proposal #02: 1007-10-72
Illinois State Line - Madison
USH 51/STH 73 Interchange
IH 39
Dane County

Letting of March 10, 2015

This is Addendum No. 2, which provides for the following:

Special Provisions

Added Special Provisions	
Article No.	Description
82	Curing Concrete Pavement

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 2

1007-10-72

March 2, 2015

Special Provisions

82. Curing Concrete Pavement

This special provision only applies to work done under the following contract bid items:

<u>Item Number</u>	<u>Description</u>
415.0060 – 0199	Concrete Pavement (inch)
415.0210	Concrete Pavement Gaps
415.0410	Concrete Pavement Approach Slab
415.1080 – 1199	Concrete Pavement HES (inch)
415.1410	Concrete Pavement Approach Slab HES

Replace standard spec 415.2.4 with the following:

415.2.4 Concrete Curing Compounds

- (1) Furnish poly-alpha-methylstyrene (PAM) liquid curing compounds conforming to ASTM C309, type 2, class B as modified here in 415.2.4 and as modified for testing in 501.2.9.
- (2) Furnish curing compound with a resin consisting of 100 percent poly-alpha-methylstyrene and with, by weight, 42 percent or more total solids. Modify ASTM C309 to ensure the following:
 - Loss of water in 24 hours does not exceed 0.15 kg/m².
 - Loss of water in 72 hours does not exceed 0.40 kg/m².
 - Reflectance in 72 hours is greater than or equal to 65 percent.
 - The volatile organic compound (VOC) content does not exceed 350 g/L.

Replace standard spec 415.3.12 with the following:

415.3.12 Curing Concrete

415.3.12.1 General

- (1) Maintain adequate moisture throughout the concrete mass to support hydration until the concrete develops sufficient strength to open it to service. Except as allowed under 415.3.12.3, apply curing compound as specified in 415.3.12.2. Use PAM except, use curing compound conforming to 501.2.9 on pavement that will get an overlay under the contract.
- (2) If the contractor does not cure concrete as specified in this subsection, the engineer may suspend concrete placement operations.

415.3.12.2 Impervious Coating Method

- (1) After finishing operations, and as soon as the free water disappears, spray the concrete surface with a uniform coating of curing compound. Seal moisture in the concrete by applying a continuous water-impermeable film on exposed concrete surfaces.
- (2) Provide sufficient agitation while spraying to ensure uniform consistency and dispersion of pigment within the curing compound during application.
- (3) Apply the curing compound with an engineer-approved self-propelled mechanical power sprayer whenever practicable. The contractor may use hand-operated spraying equipment for the following:
 - Irregular, narrow, or variable width sections.
 - Re-coating applications or after form removal.
 - Special applications the engineer approves.

- (4) For tined surfaces, apply the curing compound uniformly at or exceeding a minimum rate of one gallon per 150 square feet. For other surface finishes, apply the curing compound uniformly at or exceeding a minimum rate of one gallon per 200 square feet.
- (5) If the curing compound coating is damaged within 72 hours after application, immediately recoat the affected area. If removing forms within 72 hours after placing the concrete, coat newly exposed surfaces within 30 minutes after form removal.

415.3.12.3 Alternate Curing Methods

- (1) If the contractor requests, the engineer may approve the use of alternate materials or curing methods. If the engineer requests, supply technical specifications, test results, or performance records to support the proposed alternative method.
- (2) The engineer will approve delayed application of curing compound if the contractor uses the impervious sheeting method as specified in 502.3.8.1.2 to protect freshly placed concrete from rain damage, protect adjacent property from overspray damage, or to otherwise accommodate specific job conditions. Apply PAM curing compound immediately after removing the impervious sheeting.

END OF ADDENDUM