**PORTLAND CEMENT CONCRETE PAVEMENT:**

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| (02-05-15) | 700, 710 | SP7 R01 |

Revise the *2012* *Standard Specifications* as follows:

**Page 7-1, Article 700-1, DESCRIPTION,** lines 16-17, replace fifth paragraph with:

Submit for approval a Process Control Plan addressing all operations necessary in the production and placement of concrete pavement a minimum of 30 calendar days prior to placing concrete pavement.

**Page 7-2, Subarticle 700-5(A)(1),** lines 29-31, replace first paragraph with:

A descending air temperature at the location of the concrete paving operation and away from artificial heat reaches 35°F. Paving may resume when the weather forecast is projected to reach a high of 40°F on that day’s operation and the morning ambient temperature is above 32°F.

**Page 7-2, Subarticle 700-5(A), General,** lines 38 and 40, replace “3500 psi” with “3000 psi.”

**Page 7-4, Subarticle 700-8(B), Cold Weather,** lines 38-42, replace the first paragraph with the following:

When the air temperature is projected to drop below 35°F for more than four hours, insulate the Portland cement concrete pavement to prohibit the concrete surface temperature from dropping below 35°F during the curing period.

**Page 7-5, Subarticle 700-9(A), General,** line 9, first sentence of the first paragraph, replace “methods herein” with “curing methods herein”.

**Page 7-5, Subarticle 700-9(A), General,** lines 12-15, delete the third paragraph and replace with the following:

Curing is required until the concrete compressive strength has exceeded 3,000 psi using the maturity method in accordance with Article 700-13.

**Page 7-6, Subarticle 700-11(A), General,** lines 20-29, delete the first and last sentence of the second paragraph. Add the following as the last sentence of the second paragraph on   
lines 25-26. Move third paragraph (lines 27-29) to between the first and second paragraph before line 20.

To estimate the time of sawing, it is recommended to use the latest version of FHWA’s High Performance Paving software entitled HIPERPAV.

**Page 7-8, Subarticle 700-11(G), Verification of Dowel Bar Alignment,** line 7, in the second sentence of the second paragraph on the page replace “vertical tilt,” with “vertical tilt, and total misalignment”. Line 25, in the fourth sentence of the seventh paragraph on the page replace “greater misalignment” with “total misalignment”. Lines 26-27, delete the last sentence of the seventh paragraph on the page. Line 29, in the first sentence of the sixth paragraph on the page replace “score of 10” with “score of 12”.

**Page 7-8, Subarticle 700-11(G), TABLE 700-1, TOLERANCE FOR DOWEL BAR ALIGNMENTA**, replace with the following:

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| **TABLE 700-1 TOLERANCE FOR DOWEL BAR ALIGNMENTA** | |
| **Misalignment Category, inches** | **Weight** |
| 0 ≤ **d** ≤ 0.6 | 0 |
| 0.6 < **d** ≤ 0.8 | 2 |
| 0.8 < **d** ≤ 1.00 | 4 |
| 1.00 < **d** ≤ 1.50 | 5 |
| 1.50 ≤ **d** | 10 |

1. Where **d** is the individual dowel bar misalignment.

**Page 7-9, Subarticle 700-12, (B) Age of Pavement,** line 6, delete “14 calendar days old.” and replace with “7 calendar days old and concrete is dry based on sealant manufacturer’s recommendations.”

**Page 7-9, Article 700-13, USE OF NEW PAVEMENT OR SHOULDER**, line 31, in the first sentence of the first paragraph replace “3,500 psi, unless otherwise permitted.” with “3,000 psi.” Line 36, add the following as the third sentence of the second paragraph:

Install loggers in slabs after every 2 lots approximately 4 inches from the concrete surface.

**Page 7-10, Article 700-13, USE OF NEW PAVEMENT OR SHOULDER**, lines 6-11, replace the second paragraph on the page with the following:

Validate the strength-maturity relationship and the correlation between cylinders and beams during the first day’s production by casting cylinders and beams and performing strength tests. Use the TTF developed during the mix design process to verify the production strength-maturity relationship. Validate the strength-maturity relationship and the correlation between cylinders and beams by casting cylinders and beams and performing strength tests least every 30 calendar days, or when the TTF varies by more than 10% from the latest approved maturity curve or there is a material change from the approved concrete mix design. If the verification sample’s compressive strength when tested at TTF is less than 3,000 psi, immediately suspend early opening of traffic on pavement that has not obtained TTF until a new strength-maturity relationship is developed.

**Page 7-13, Article 710-6, FINISHING**, lines 5-10, replace the second paragraph on the page with the following:

Produce the final surface finish on all mainline pavement, auxiliary lanes, and ramps by mechanical equipment for longitudinally tined grooves while the concrete is plastic. The tining shall be done with a mechanical device such as a wire comb. The comb shall have a single row of tines. Each shall have a nominal width of 5/64 inch to 1/8 inch. The nominal spacing of the tines shall be 3/4 ± 1/8 inch center-to-center. The nominal depth of tined groove in the plastic concrete shall be 1/8 ± 1/32 inch.

Longitudinal tining shall be accomplished by equipment with automated horizontal and vertical controls to ensure straight, uniform depth tined grooves. The texture geometry shall be the same as imparted throughout the length of the tining comb. A 2-inch to 3-inch wide strip of pavement surface shall be protected from tining for the length of and centered about longitudinal joints.

The tining operation shall be done so that the desired surface texture will be achieved while minimizing displacement of the larger aggregate particles and before the surface permanently sets. Where abutting pavement is to be placed, the tining shall extend as close to the edge as possible without damaging the edge. If abutting pavement is not to be placed, the 6-inch area nearest the edge or one foot from the face of the curb shall not be tined. Hand-operated tining equipment that produces an equivalent texture may be used only on small or irregularly shaped areas. Tines shall be thoroughly cleaned at the end of each day’s use and damaged or worn tines replaced.

When surface corrections for pavement smoothness are made in the hardened concrete, no additional texturing is required.

**Page 7-13, Article 710-7, FINAL SURFACE TESTING**, lines 41-42, replace the third and fourth sentences of the fourth paragraph with the following:

The profile data shall be filtered with a cutoff wavelength of 250 ft. The interval at which relative profile elevations are reported shall be a maximum of 1".

**Page 7-14, Article 710-7, FINAL SURFACE TESTING**, line 38, in the first sentence of the ninth paragraph on the page, replace “(DVD-R or CD-R)” with “(USB flash drive, external hard drive, or DVD)”.

**Page 7-15, Subarticle 710-7(B), Localized Roughness**, line 33, in the third sentence of the first paragraph, replace “125 in/mile” with “150 in/mile”.

**Page 7-17, Subarticle 710-10(A), General**, lines 18-21, replace the fourth paragraph with the following:

Payment for all work of surface testing will be incidental to the contract unit price for *Portland Cement Concrete Pavement, Through Lanes, (with dowels)* for *Surface Testing Concrete Pavement*.

**Page 7-19, Subarticle 710-10(E), Compensation**, lines 1-5, delete the second paragraph (the paragraph at the top of the page).

**Page 7-19, Subarticle 710-10(F), Pay Items**, line 7, delete *Surface Testing Concrete Pavement* *(Lump Sum)* from the Pay Item table.