SECTION 411 - PORTLAND CEMENT CONCRETE PAVEMENT

Make the following amendments to said Section:

(I) Amend **Subsection 411.03(A)** — **Paving Plan** by adding the following after line 38:

- "(7) Certified Concrete Flatwork Finisher Requirement. Perform the placement and finishing operations of concrete flatwork with a minimum ratio of one certified ACI Concrete Flatwork Finisher and Technician with 4,500 hours of acceptable work experience (certified craftsman) per three concrete finishers (concrete finishers without ACI Concrete Flatwork Finisher and Technician certification and 4,500 hours of acceptable work experience) at each location on the project site having flatwork done. The concrete flatwork shall be under the direct supervision of a certified craftsman. Designate the certified craftsman who will be supervising and responsible for determining the quality of the finish of the concrete flatwork being performed. No flatwork shall be performed without the required amount of certified craftsman present.
 - a. Flatwork concrete is defined as any concrete work that requires tools or machines to be used during the placement and finishing operations of concrete. Concrete flatwork includes concrete work that requires a specified finishing, smoothness or rigid surface tolerances such as sidewalks, walkways, portland cement concrete pavement, concrete white-topping, girder seats, pier caps, bridge decks, on-grade concrete slabs, approach slabs, concrete overlays, and concrete repairs which exceed one square foot per day.
 - b. Areas that are not considered flatwork concrete are the top of foundations or structures that will have backfill material placed directly on the concrete surface.
 - c. Submit copies of the craftsman's current ACI certification 30 days before concrete flatwork begins for the Engineer's review and acceptance. The Engineer has the right to require the removal, replacement, retraining and re-certification of a certified craftsman if that person does not, in the opinion of the Engineer, demonstrate the ability to place and finish concrete in accordance with the practices recommended in the ACI Concrete Flatwork Finisher Certification Program and to meet the finishing standards required by the contract documents.
 - d. Any cost or impact to the contractor in providing, training, certification, retraining, replacement, or re-certification is incidental to the contract items that require concrete flatwork.

48 49	(II) Amend Subsection 411.03(I)(1) — General by revising the first paragraph from line 205 to 210 to read:
50 51 52 53 54 55 56 57	"(1) General. Make advance arrangements for preventing delay in concrete delivery and placement. An interval of more than 30 minutes between placement of two consecutive batches or loads shall constitute cause for stopping paving operations and requiring construction joint to be placed, at no increase in contract price or contract time, at location and of the type ordered by the Engineer."
58 59	(III) Amend Subsection 411.03(M) — Final Strike-Off, Consolidation, and Finishing by adding the following after Line 629:
60 61 62 63 64 65 66	"(6) Evaporation Retarders and Finishing Aids. Evaporation retarders and finishing aids solutions may be used. Adjust dilution rates to fit local climate. Evaporation retarders and finishing aids shall not be used interchangeably, using them interchangeably will damage the concrete surface and shall be cause for the pavement being non-compliant and its removal or remedial repair."
67 68 69	(IV) Amend Subsection 411.03(M) — Final Strike-Off, Consolidation, and Finishing by revising the subsection title on line 631 to read:
70 71	"(7) Straightedge Testing and Surface Correction."
72 73 74	(V) Amend Subsection 411.03(M) — Final Strike-Off, Consolidation, and Finishing by revising the subsection title on line 646 to read:
75 76 77	"(8) Final Finish."
78 79	(VI) Amend Subsection 411.03(M) — Final Strike-Off, Consolidation, and Finishing by revising the subsection title on line 631 to read:
80 81 82	"(9) Edging at Forms and Joints."
83 84	(VII) Amend 411.04 — Measurement by revising lines 955 to 961 to read as follows:
85 86	"411.04 Measurement.
87 88 89 90 91 92 93 94	(A) The Engineer will measure concrete pavement per cubic yard in accordance with the contract documents."

95	(VIII) Amend 411.05 — Payment by revising lines 971 to 983 to read as follows:		
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97	"Pay Item	Pay Unit	
98 99	11-Inch Portland Cement Concrete Pavement (Bus Pad)	Cubic Yard	
100	,		
101	4-Inch Portland Cement Concrete Pavement (Center Island)	Cubic Yard	
102			
103			
104	The Engineer will not pay for longitudinal joints, transverse expansion joints		
105	transverse contraction joints, or construction joints separately and will consider the cos		
106	for those items as included in the contract price for the concrete pavement pay item. The		
107	cost is for the work prescribed in this section, Section 411 — Portland Cement		
108 109	Concrete Pavement, and the contract documents."		
110			
111			
112			
113	END OF SECTION 411		