State of Illinois
DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads and Streets

SPECIAL PROVISION FOR PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL)

Effective May 12, 1964
Revised January 2, 2007

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

All work shall be according to Section 420 and applicable provisions of Section 606 except as follows:

420.01 Description. Revise Article 420.01 to read:

"Description. This work shall consist of a pavement with an integral concrete curb composed of portland cement concrete with or without reinforcement, constructed on a prepared subgrade, or subbase, with or without forms."

420.03 Equipment. The following equipment will not be required:

(c) Mechanical Concrete Spreader
(e) Mechanical Longitudinal Float

Add the following paragraph to this Article:

"The integral concrete curb shall be formed with a moving finishing template or "mule" of a design approved by the Engineer. The template may be either a part of or separate from the pavement finishing machine and shall be designed so as to produce uniform curb of the exact dimensions required by the plans. It shall incorporate a means of consolidation of the concrete in the curb either by hand spreading or other method approved by the Engineer. If separate from the pavement finishing machine, the template shall be so designed as to cause a minimum displacement of the plastic pavement concrete.

The subgrade template shall be of a design approved by the Engineer and shall be capable of accurately indicating high and low spots in the subgrade with relation to the side forms."

420.04 Preparation of Subgrade or Subbase. Revise the third paragraph of Article 301.06 to read:

"The subgrade shall be brought to true shape by means of a subgrade planer, subgrade machine, and/or other methods approved by the Engineer according to the following:"

Add the following subparagraph (c) to Article 301.07:

"(c) Other methods when approved by the Engineer."

420.06 Forms and Form Setting. Add the following paragraph to Article 420.06:

"Forms for the integral concrete curb with a base width less than the height may be used provided they are stable while the finishing equipment is operated upon them and do not settle under the weight of the finishing machine. If additional form height is added to accommodate the curb template after the passage of the pavement finishing equipment, the form arrangement shall meet with the approval of the Engineer.

420.07 Placing. Add the following paragraphs to Article 420.07:

"An integral concrete curb shall be cast monolithically with the pavement. It shall be formed either as a part of, or immediately following, the placing of the concrete pavement or by other methods approved by the Department.

When the curb is formed in a separate operation from the pavement, it shall be placed immediately following the longitudinal floating operation. Curb concrete shall be thoroughly rodded or spaded into the surface of the pavement concrete while the latter is still in a completely plastic state."

420.05 Joints. Add the following to subparagraph (a) and (b) of Article 420.05:

"Longitudinal construction joints conforming to the details shown on the plans will be permitted at any longitudinal joint location."

Add the following paragraph to subparagraph (c)(2) of this Article:

"The requirement for load transfer assemblies will be as shown on the plans."

Revise subparagraph (e) of this Article to read:

"Transverse Construction Joints. Transverse construction joints shall be constructed in accordance with the details shown on the plans. Transverse construction joints that occur at regular construction joints shall be keyed but not tied, and the thickness of the pavement for a distance of 600 mm (2 feet) in each direction from the joint shall be not less than 200 mm (8 inch). Joints that the contractor makes within the limits of a contraction panel shall be tied with deformed tiebars."

Add the following subparagraph (f) to this Article:

"Integral Concrete Curb Contraction Joint. Contraction joints shall be constructed in the curb in prolongation of the joints in the pavement and shall be constructed in accordance with the plans or as directed by the Engineer."

420.09 Strike Off, Consolidation, and Finishing, Longitudinal Floating, Straitedging, Edging, and Final Finish.

Revise the first sentence of subparagraph (b)(3) of this Article to read:

"This method may be used when approved by the Engineer."

420.19 Method of Measurement. Revise the first paragraph of subparagraph (b) of Article 420.19 to read:

"Portland cement concrete pavement (special) will be measured in place and the area computed in square meters (square yards) completed and accepted. The width for measurement shall be the width from the outsides of the completed pavement, including integral curb when required, as shown on the plans or as directed by the Engineer."

420.20 Basis of Payment. Revise the first paragraph of Article 420.23 to read:

"This work will be paid for at the contract unit prices per square meter (square yard) for PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL), PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL) WITH INTEGRAL CURB, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL), HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL), WITH INTEGRAL CURB of the thickness specified; and at the contract unit price per square meter (square yard) for PAVEMENT FABRIC."

Article 1103.13 Finishing Machine. Revise Article 1103.13 to read:

"The finishing machine shall be of a type approved by the Engineer, shall be self-propelled and shall be capable of striking off, consolidating and finishing concrete of the consistency required by the specifications to the proper crown and grade."