

Amend **Section 609 - Curb and/or Gutter** to read as follows:

**"SECTION 609 - CURB AND/OR GUTTER**

**609.01 Description.** This work includes constructing or resetting curb and/or gutter according to the contract.

The contract designates the types of curb and/or gutter as follows:

- (1) Type 1 - (Unassigned)
- (2) Type 2 - Cast-in-place concrete curb and/or gutter
- (3) Type 3 - Precast concrete curb and/or gutter
- (4) Type 4 - Dowelled concrete curb
- (5) Type 5 - (Unassigned)
- (6) Type 6 - Bituminous curb
- (7) Type 7 - Bituminous gutter

**609.02 Materials.** Materials shall conform to following:

Bed Course Material for Sidewalks & Curbing	703.16(A)
Joint Fillers	705.01
Joint Mortar	705.02
Reinforcing Steel	709.01
Precast Concrete Curb and/or Gutter	712.05

Concrete for curb and/or gutter shall conform to Section 601 - Structural Concrete and shall be Class A.

Weed killer shall be a nonemergent and nonselective type, EPA approved for highway application, and suitable for use under the designed thickness of pavements. The materials shall be free of solvents or other substances deleterious to the pavement. Application rates shall be at the highest recommended dosage stated on the label. The Contractor shall submit a sampler label containing the pertinent data for acceptance by the Engineer before use.

Concrete mixes and manufactured curb and/or gutter materials will be subject to inspection and tests at the plants for compliance with the quality requirements.

The condition of materials will be subject to inspection for acceptance before or during incorporation of materials into the work.

### **609.03 Construction Requirements.**

#### **(A) Precast Concrete Curb and/or Gutter.**

(1) **Excavation.** Excavate to the required depth and compact the base to a firm, even surface. Remove and replace soft and unsuitable material with suitable material so that the Contractor can compact thoroughly.

(2) **Installation.** Set the curb so that the front top arris line conforms to the line and grade required. Fill the spaces under the curb and/or gutter with bed course material. Tamp this material thoroughly.

(3) **Joints.** Set the precast blocks approximately 0.5 inch apart. Fill these joints with mortar as specified.

When constructing portland cement concrete pavement abutting the curb and/or gutter, construct the joints in the curb and/or gutter directly in line with pavement expansion joints. The joint in curb and/or gutter shall be 0.75 inch in width. Fill the joint in curb and/or gutter with an expansion joint filler of the same nominal thickness as the pavement joint. Fill the voids between the joint filler and the curb and/or gutter with mortar.

(4) **Backfilling.** After setting the curb and/or gutter, fill the remaining excavated areas with accepted material. Place and tamp this material thoroughly in layers not exceeding 6 inches in depth.

#### **(B) Cast-in-Place Concrete Curb and/or Gutter.**

(1) **Excavation.** Excavation and bedding shall conform to Subsection 609.03(A)(1) - Excavation.

(2) **Forms.** Forms shall be of wood or metal, straight, free from warp and of construction that there shall be no interference with the inspection of grade or alignment.

Forms shall extend for the entire depth of the curb and/or gutter. Brace and secure the forms sufficiently so that no deflection from alignment or grade shall occur during the placing of the concrete.

**(3) Placing of Concrete.** Place the concrete according to Section 503 - Concrete Structures. Moisten the subgrade and forms thoroughly ahead of placing concrete.

Work the surfaces of concrete gutters with proper floats and round the exposed edges with an edging tool. Before the concrete has fully set, remove and finish the face form of the curb with a float and steel trowel to a uniform finish. Broom finish other exposed surfaces longitudinally. The Contractor may require special trowels to shape curbs and/or gutters.

To match adjacent concrete finishes, the Engineer may permit other methods of finishing. The Engineer will not permit plastering.

**(4) Sections.** Construct curb and/or gutter in sections having a uniform length of 15 feet. Separate the sections by weakened plane joints approximately one-eighth inch wide and cut to a depth of one-fourth the gutter thickness. When curb and/or gutter abut Portland cement concrete pavement, install weakened plane joints in the curb and/or gutter continuously with the weakened plane joints in the abutting pavement.

**(5) Expansion Joints.** Form the expansion joints at the intervals shown in the contract using a preformed expansion joint filler having a thickness of 0.5 inch. When constructing curb and/or gutter next to or on concrete pavement, locate the expansion joints opposite to or at expansion joints in the pavement.

Construct expansion joints in curb and/or gutter at structure abutments and at the ends of returns. Do not construct expansion joints within 20 feet of a traffic island nose.

Shape expansion joints filler to the cross section of the curb and/or gutter.

**(6) Curing.** Immediately upon completion of the finishing, the Contractor shall:

(a) moisten and keep the curb and/or gutter moist for three days or

(b) cure the curb and/or gutter by using membrane forming material.

The method and details of curing will be subject to acceptance.

(7) **Backfilling.** After the concrete has set sufficiently, refill the spaces in front and back of the curb and/or gutter to the required elevation with suitable material. Tamp the material thoroughly in layers of not more than 6 inches.

(8) **Curb Machine.** With the acceptance of the Engineer, the Contractor may construct the curb and/or gutter by using a curb and/or gutter forming machine.

(9) **Construction Joints.** Build construction joints in cast-in-place curbs and/or gutters:

- (a) when the delays are greater than 45 minutes between two consecutive batches in concrete operations,
- (b) at the end of each day of pouring, or
- (c) when specified by the Engineer.

Build the construction joints according to the details shown in the contract and shall coincide with the spacing of weakened plane joints. Coat the dowels for the joints uniformly with a thin film of heavy lubricating oil immediately before placement of concrete at the joint. Support the dowels firmly during concrete placement. The forms shall remain in place until the Contractor resumes concrete operations on the other side of the joint.

**609.04 Method of Measurement.** The Engineer will not measure curb and/or gutter for payment.

**609.05 Basis of Payment.** The Engineer will not pay for the accepted curb and/or gutter separately. The Engineer will consider the cost for curb and/or gutter as included in the contract price of the various contract items.

The cost is for removing and disposing the existing curb and/or gutter; excavating; backfilling; installing reinforcing steel; furnishing, placing and compacting the bed course material; installing expansion joint material and weakened plane joint; and furnishing labor, materials, equipment, tools, and incidentals necessary to complete the work."

**END OF SECTION**