

## SECTION 03303 - SIDEWALK, CURB AND GUTTER

### PART 1 – GENERAL

#### 1.1 DESCRIPTION

- A. The WORK under this Section includes providing all labor, materials, tools, and equipment necessary for furnishing and installing sidewalk, curb, and gutter as shown on the Drawings and Standard Details.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Materials shall conform to the requirements of Section 03302 – Concrete Structures, except "Concrete International Corporation" Ashford Formula, or approved equal, shall be used instead of the specified curing materials.
- B. Synthetic fibers may be substituted for rebar or wire mesh upon approval of the ENGINEER.

### PART 3 - EXECUTION

#### 3.1 METHODS OF CONSTRUCTION

- A. Sidewalk, concrete slabs, curb and gutter, and valley gutter shall conform to the applicable requirements of Section 03302 - Concrete Structures, and as shown on the Drawings, except "Concrete International Corporation" Ashford formula, or approved equal, shall be used as a curing compound.
  - 1. The curing compound shall be sprayed on the surface with a low-pressure sprayer immediately following the finishing operation.
  - 2. The entire surface shall be kept wet for 30 minutes by brooming excess material onto the dry spots or by re-spraying them immediately. No areas on the concrete surface shall be allowed to dry during the initial 30 minute period.
  - 3. As the curing compound begins to dry into the surface and becomes slippery, lightly sprinkle the surface with water to aid the penetration of the curing compound and to bring any alkali to the surface.
  - 4. After 30 to 40 minutes, squeegee or broom the surface to remove any excess curing compound and alkali or other impurities brought to the surface. All WORK required for the application of the curing compound shall conform to the manufacturer's recommendations.
- B. All exposed or unprotected edges of sidewalks shall be tooled to a radius of not more than one-half inch. After floating, trowel finish the entire surface using steel trowels. Final finish shall be obtained by brooming the surface, including the tooled edge, to a gritty finish after all free moisture has disappeared from the surface. Sprinkling of cement or sand for blotting will not be permitted.
- C. Concrete curb and gutter, curb, and valley gutter shall be integral, one course construction, and molded in place on a gravel subgrade. The face forms of the integral curb and gutter shall be removed as soon as practicable. The top and inclined surface

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- D. shall then be worked with float or steel trowels to a gritty finish. Glazing, sprinkling of sand or cement, or blotting will not be permitted. Both front and back edges shall be tooled to a radius of one-half inch.
- E. Use of monolithic curb and gutter machines will be permitted only on the written approval of the ENGINEER. Mortar may be added to the curb machine in a quantity approved by the ENGINEER.
- F. Expansion joints shall be placed at 30-foot, maximum, intervals along all structures and about all features that project into, through, or against the concrete. An expansion joint shall be constructed at the intersection of sidewalks, between sidewalk crossings and sidewalks and at the beginning and end of curb returns. Expansion joints shall not be placed between the sidewalk and the curb.
- G. Expansion joint material shall conform to the requirements of AASHTO M 213. This material shall extend the full width of the structure and shall be cut to such dimensions that the base of the expansion joint shall extend to the subgrade and the top shall be depressed not less than one-quarter inch nor more than one-half inch below the finished surface of the concrete. The material shall be one piece in the vertical dimension and shall be securely fastened to the existing concrete face against which fresh concrete is to be poured.
- H. Transverse contraction joints, cut to a depth of one inch prior to the final set of the concrete, shall be tooled in the sidewalk at intervals approximately equal to the width of the sidewalk, and at ten foot intervals in the curb and gutter. Where the sidewalk adjoins the curb (parallel to it), contraction joints in the sidewalk and curb shall be made to match where practicable.
- I. The top and face of the finished curb shall be true and straight and the top surface of curbs shall be of uniform width, free from lumps, sags, or other irregularities. When a straightedge 10 feet long is laid on the top or face of the curb, or on the surface of gutters, the surface shall not vary more than 0.02 foot from the edge of the straightedge except at grade changes or curves. All discolored concrete shall be cleaned at the CONTRACTOR's expense. The concrete may be cleaned by abrasive blast cleaning or other methods approved by the ENGINEER. Repairs shall be made by removing and replacing the entire unit between scoring lines or joints.
- J. Sidewalks at driveway approaches shall have a minimum thickness of six (6) inches.

**END OF SECTION**