

## for 19 April 2024

## SP 5.3-003 (2013)

# Standard Specifications for Construction City of Waco 2013

Special Provision Section 5.3 Concrete Curb and Gutter SP.3-003 (2013)

The Standard Specifications for Construction City of Waco 2013 Section 5.3 Concrete Curb and Gutter

Part 2: Product

B. Material Testing

and

The Standard Specifications for Construction City of Waco 2013 Section 5.3 Concrete Curb and Gutter

Part 3: Execution

A. Construction Methods

Concrete Placement

and

6. Finishing

are hereby additionally revised beyond SP5.3-002 as follows effective for all Developer projects submitted to the City June 1, 2024 and thereafter; for all City projects with bid opening date of June 1, 2024 and thereafter; and for right-of-way permit requests received April 22 and thereafter:

## Part 2: PRODUCT

#### **B. MATERIAL TESTING**

Refer to Section 5.6, Materials Testing.

#### **Part 3: EXECUTION**

### A. CONSTRUCTION METHODS

#### 5. Concrete Placement -

No concrete shall be placed when the air temperature is less than 35°F, unless permission to do so is granted by the Owner in writing. When such permission is granted, the Contractor shall furnish sufficient protective material and devices to enclose and protect the fresh concrete in such a way as to maintain the temperature of the air surrounding the fresh concrete at not less than 45°F for a period of at least five days.

Concrete shall be deposited so as to maintain a horizontal surface and shall be thoroughly and continuously worked into all spaces and around all reinforcement so as to form a dense voidless mass.

The coarse aggregate shall be worked away from contact with the forms so as to form a smooth, hard exposed concrete surface. For conventionally formed concrete strike off concrete with a steel "mule" approximately  $\frac{1}{2}$ " less than <u>as Option A or equal to as Option B</u> the dimensions of the finished curb and gutter surfaces to be exposed <del>unless otherwise approved</del>.

The concrete for curb and gutter shall preferably be placed continuously between expansion joints. If construction joints are allowed at other locations by the Owner, they shall be properly constructed with wooden bulkheads so as to completely separate adjacent concrete sections.

Curb and gutter forms must be "tapped" to minimize voids for conventionally formed concrete. Proper care must be exercised to ensure effective crack control joints. Any voids in curb and gutter sections shall be immediately patched with portland cement mortar as specified in Section 5.1 Concrete and Reinforcement Part 2: Product A. Materials 13. Mortar for Application.

When extruded or slipformed concrete is placed by an approved self-propelled curb machine the forming tube of the extrusion machine or the form of the slipform machine shall be easily adjustable vertically during the forward motion of the machine to provide variable heights necessary to conform to the established gradeline. Concrete shall be Class A with coarse Aggregate No. 4. Attach a pointer of gauge to the machine so that a continual comparison can be made between the extruded or slipform work and the grade guideline. Other methods may be used when approved.

Integral curb, with or without gutter, shall be placed in sections equal to the adjoining concrete slab length, with expansion joints provided as specified herein.

## 6. Finishing -

After the concrete has been struck off and while it is still plastic, for conventionally <u>formed placed</u> concrete <u>Option A</u> the exposed surfaces shall be plastered with a ½" mortar topping <u>as specified in Section 5.1 Concrete and Reinforcement Part 2: Product A. Materials 13. <u>Mortar for Application</u>. The mortar topping shall be applied with a steel "mule," or a finishing tool or method, which produces results</u>

equivalent to that obtained with the "mule." For concrete (coarse aggregate grade 4) placed by a self-propelled curb machine finish surface immediately after extrusion or slipforming with mortar from within placed concrete. For all types of placed concrete conventionally formed concrete Option A and Option B and for extruded or slipformed concrete all exposed surfaces shall then be floated or troweled and lightly brushed as required by the Owner to produce a smooth and uniform finish. Excess working of the surfaces shall be avoided. Excess water, laitance and inert materials shall be removed from the surfaces.

The top of all the work and the face of all curbs shall be checked for irregularities as soon as the surface is finished, using a 10-foot straightedge. The maximum distance from the straightedge to the concrete shall not exceed ¼". All variations greater than ¼" shall be immediately corrected. All honeycombed areas disclosed by removal of forms shall be immediately chipped out and patched with portland cement mortar as defined in Section 5.1 Concrete and Reinforcement Part 2: Product A. Materials 13. Mortar for Application.

One method, either conventionally formed concrete Option A, or conventionally formed concrete Option B, or extruded or slipformed concrete, shall be selected by the Contractor and used throughout the project to the extent possible for uniformity of finished curb and gutter.

Sincerely,

Thomas M. Dahl, P.E.