

SECTION 603 – CONCRETE CURB AND COMBINED CURB AND GUTTER

603-1 DESCRIPTION

This work shall consist of the construction of air-entrained portland cement concrete standard curb, combined curb and gutter with 6-inch or 8-inch gutters sections, and mountable curb and gutter in accordance with these specifications and standard details at the locations and to the lines and grades shown on the plans or as directed by the ENGINEER.

This work shall also include the removal of old curbing and curb and gutter when listed on the proposal, as shown on the plans, or as directed by the ENGINEER.

603-2 MATERIALS

603-2.1 Materials shall meet the requirements of Subsection 501-2.

603-3 CLASSIFICATION

603-3.1 STANDARD CURB. The curb constructed under this designation shall be one course unreinforced or reinforced concrete construction as shown on the standard details. All curbing constructed on a straight line or on a curve shall be considered standard curb.

603-3.2 STANDARD CURB AND GUTTER. The work to be completed under this item shall be one course reinforced or unreinforced concrete construction as shown on the standard details as a combined curb and gutter section or 8-inch gutter section (8-inch gutter section shall be used in all commercial sites). All curb and gutter constructed on a straight line or on a curve shall be considered standard curb and gutter.

603-3.3 MOUNTABLE CURB AND GUTTER. The work to be completed under this item shall be one course reinforced or unreinforced concrete construction as shown on the standard details as a combined mountable curb and gutter section. All mountable curb and gutter constructed on a straight line or on a curve under this item shall be classified as mountable curb and gutter.

603-4 CONSTRUCTION REQUIREMENTS

Construction requirements shall conform to Subsection 501-3 with the following additional provisions:

603-4.1 GENERAL. The curb and curb and gutter constructed under this item shall be one course concrete construction.

When curb and gutter sections are removed for repairs or new construction of driveways or a valley gutter, the curb and gutter shall be removed to the nearest joint. If

the existing curb is cracked, the cracked joint shall be sawed. The sawed joint shall be no closer than 5 feet to the existing joint in place. All jagged joints shall be sawed.

When new curb and gutter is installed, and ends do not tie into an existing curb, the ends of the curb and gutter shall have the curb tapered down from 6 inches to 1 inch for 2 feet in length which shall be paid for as standard curb and gutter..

603-4.2 FORMS. Forms for use on curves shall be capable of installation to within 1/2 inch of the true curve, and if the radius is less than 400 feet, they shall be either flexible material or shaped to fit the curve. On small radius curves such as driveways and street intersections, the CONTRACTOR may use Masonite or equal, metal, or 1/2 inch dimension lumber.

603-4.3 DOWEL BARS. All dowel bars as detailed shall be considered incidental to each item of curb or curb and gutter construction.

603-4.4 DOWELED EXPANSION JOINTS. Doweled expansion joints shall consist of two (2) dowels and one (1) expansion boot, three (3) reinforcement bars, and one (1) expansion boot in accordance with Subsections 501-2.8 "Expansion Joint Material" or 501-2.10 "Reinforcing Steel." Doweled expansion joint boots shall be 1/2 to 1/4 inch lower than the surfaces of the top of the curb and gutter.

One (1) doweled expansion joint shall be placed every 100 feet on any new or repaired curb and gutter sections and at both ends of street intersection radii.

Every attempt should be made to center or position the doweled expansion joint to improve the overall appearance of the curb and gutter section.

603-4.5 SURFACE FINISH. The final surface finish shall be obtained by uniformly brushing or brooming the surface. No plastering will be permitted.

603-4.6 BACKFILL. The curbing shall be backfilled within 14 days of placement to a level width of at least 2 feet along the front of the gutter and back of the curb to a height equal to the top finished grade of the curbing. The backfill shall be compacted in accordance with Section 202 "Excavation and Embankment."

603-4.7 CONTRACTOR'S STAMP OR NAME PLATE. CONTRACTOR shall mark every 100 linear feet for continuous pours of new curb and gutter laid, and every curb and gutter patch done per city lot, by stamping or by inlaying an approved metal plate conforming to Subsection 501-3.15.

603-4.8 CURB OR CURB AND GUTTER REMOVAL. All curb or curb and gutter removed shall be disposed of in accordance with Subsection 501-3.16.

603-4.9 CURB AND GUTTER EXTRUSION MACHINE. This type of machine shall be capable of producing concrete curb, curb and gutter, or mountable curb and gutter to conform to the requirements of this section and line, grade, shape, and dimensions

given in the plans and specifications or approved by the ENGINEER using materials conforming to the specifications.

The CONTRACTOR shall provide the ENGINEER with the following information prior to being given permission to produce a test section with the machine:

1. Complete machine specifications regarding the machine and its performance.
2. Details of the proposed section of curb or curb and gutter to be produced by the machine.
3. Provide evidence of having previous experience of operating and maintaining the proposed machine.

If the above items are found to be satisfactory to the ENGINEER, written permission will be given to the CONTRACTOR to provide a 100-foot test section in place with the proposed machine.

If the manufacture of the test section and the performance of the extrusion machine prove to be satisfactory, the ENGINEER shall then issue final written approval to the CONTRACTOR. If during the course of construction on the project said manufacture and said performance becomes unsatisfactory, the ENGINEER shall disallow the continued use of said machine.

603-4.10 SEALING JOINTS. All expansion joints shall be sealed in accordance with Subsections 501-3.22 and 501-2.9.

603-4.11 CONCRETE QUALITY CONTROL AND SUBGRADE TESTING. Testing shall meet the requirements of Subsection 501-3.4. Payment shall be considered incidental.

603-5 MEASUREMENT AND PAYMENT

603-5.1 STANDARD CURB. Standard Curb shall be measured by the linear foot (LF) and paid for at the unit price bid for "Standard Curb" complete, in place, and accepted by the ENGINEER.

603-5.2 STANDARD CURB AND GUTTER. Standard Curb and Gutter shall be measured by the linear foot (LF) and paid for at the unit price bid for "Standard Curb and Gutter" complete, in place, and accepted by the ENGINEER. When reinforcing steel is required, the reinforcing steel shall be considered incidental.

603-5.3 CURB AND GUTTER (8-INCH GUTTER). Curb and Gutter (8-Inch Gutter) shall be measured by the linear foot (LF) and paid for at the unit price bid for "Curb and Gutter (8-Inch Gutter)", complete, in place, and accepted by the ENGINEER. When reinforcing steel is required, the reinforcing steel shall be considered incidental.

603-5.4 MOUNTABLE CURB AND GUTTER. Mountable Curb and Gutter shall be measured by the linear foot (LF) and paid for at the unit price bid for "Mountable Curb and Gutter" complete, in place, and accepted by the ENGINEER. When reinforcing steel is required, the reinforcing steel shall be considered incidental.

603-5.5 CURB AND GUTTER REMOVED. Curb and Curb and Gutter Removed shall be measured by the linear foot (LF) and paid for at the unit price bid for "Curb and Gutter Removed" complete, in place, and approved by the ENGINEER.