

CITY OF ODESSA
STANDARD SPECIFICATIONS

ITEM 55
CONCRETE SIDEWALKS AND DRIVEWAYS

55.1 DESCRIPTION

This item shall consist of sidewalks and driveways with or without reinforcing steel, composed of Portland cement concrete construction as herein specified on an approved subgrade, in conformity with the lines and grades established by the Engineer and the details shown on the plans.

55.2 MATERIALS

Materials and proportions used in construction under this item shall conform to the requirements of Class "A" concrete under Item 400 "Concrete Construction". Reinforcing steel, if required, and expansion joint filler shall conform to the requirements of Item 400.

55.3 CONSTRUCTION METHODS

The subgrade shall be excavated and shaped to line, grade, and cross-section, and if necessary, tamped and sprinkled. The subgrade shall be moist at the time the concrete is placed.

Forms shall be of wood or metal, of sufficient section to be straight, free from warp, and of depth equal to the thickness of the finished work. They shall be securely staked to line and grade and maintained in true position during the depositing of concrete.

Reinforcing steel, if required, shall be placed in position as shown on the plans. Care shall be exercised to keep all steel in its proper location.

Sidewalks shall be constructed in sections of the lengths shown on the plans. The different sections shall be separated by a premolded expansion joint of the thickness shown on the plans, placed vertically and at right angles to the longitudinal axis of the sidewalk. Where the sidewalks or driveways abut between curbs and/or rigid structures, approved expansion material shall be placed along all such contacts and around all obstructions protruding through sidewalks or driveways.

Concrete shall be mixed in accordance with Item 400 "Concrete Construction", placed in the forms to the depth specified, and spaded and tamped until thoroughly compacted and mortar entirely covers the surface.

The placing shall be a continuous operation and under no circumstance shall concrete that has partly hardened be used in any part of the work. Immediately after the concrete is placed the surface shall be "floated" or "darbied" and dusted, if dust is used. When dust is used it shall consist of one part cement and one and one-half parts sand and it must be sprinkled on the wet concrete not more than 20 minutes after the concrete is placed. Not more than 10 minutes after the first coat of dust is applied, the work shall be struck off with a straight edge or darby and the

second coat applied as soon as the concrete (with or without dust coats) has become firm it shall be floated with a wood float and then troweled with a steel trowel to a uniform, smooth surface. The work shall then be edged and grooved as indicated on the plans. Grooves shall be 3/16" wide, and 1/2" deep and shall joint the surface with 1/8" radius.

Sidewalk surfaces on grades up to and including 3% shall be given a smooth float finish, and on grades over 3% shall be given a fine brush finish, to obtain a suitable brush finish. A fine-haired brush not less than 4" wide shall be swept lightly on the surface of the concrete with a sweeping circular motion immediately after troweling. The entire surface shall be brushed until a uniform appearance is obtained. Care shall be exercised to preserve the edges and jointer tool marks.

To obtain a smooth float finish, the concrete shall be floated with a wood float to a uniform smooth surface as soon as it has become firm. Following this, the walk shall be edged and grooved and then again floated transversely or longitudinally. Care shall be exercised to preserve edger and jointer marks.

Sidewalks placed as a portion of a driveway shall be finished as sidewalks.

Edging tools shall be of steel, 3" wide with 1/2" radius and shall be on edges against forms, expansion joints, and all existing work. Jointer marks shall be spaced at not over 5-foot intervals and shall meet jointer marks in the curb. The jointer shall leave a mark 3/16" wide and 1/2" deep. Marks made by these tools shall be a true straight line.

Driveway flat work shall be given a smooth wood float finish.

When completed, the sidewalks and driveways shall be covered with cotton mats or two thicknesses of 10 to 12 ounce burlap and kept thoroughly wet for a period of 72 hours, at which time the covering may be removed. Other methods of curing, as outlined in Item 400, will be acceptable.

55.4 MEASUREMENT

Concrete sidewalks and driveways will be measured by the square yard, complete in place.

55.5 PAYMENT

The work performed and materials furnished as prescribed by this item, measured as provided under "Measurement", will be paid for at the unit price bid for "Concrete Slab", which prices shall each be full compensation for preparing the subgrade; furnishing and placing all materials including reinforcing steel and expansion material; for furnishing, placing, and shaping and tamping backfill; and for all manipulation, labor, tools, equipment, and incidentals necessary to complete the work.