

SECTION 02660**SIDEWALKS****02660.01 GENERAL****A. Description**

Sidewalk construction shall include, but not necessarily be limited to, the construction of Portland cement concrete, bituminous concrete, or sand asphalt sidewalks as shown on the Plans on an approved surface, to the lines and grades, at the locations shown on the Plans and in accordance with the Contract Documents.

B. Related Work Included Elsewhere

1. Bituminous concrete pavement; Section 02641.
2. Portland cement concrete; Section 03310.

C. Quality Assurance

1. Quality assurance requirements for Portland cement concrete shall be as specified in Section 02651.01.
2. Quality assurance requirements for bituminous concrete shall be as specified in Section 02641.01.

D. Submittals

1. Submittals for Portland cement concrete sidewalk shall be as specified in Section 02651.01.
2. Submittals for bituminous concrete and sand asphalt sidewalks shall be as specified in Section 02641.01.

02660.02 MATERIALS**A. Materials Furnished by the County**

1. The County will not furnish any materials for Portland cement concrete or bituminous concrete sidewalks.
2. The Contractor may obtain water from the County's potable water system in accordance with current County policies and procedures. The Contractor shall contact the Bureau of Utilities, Meter Section, for requirements.

B. Contractor's Options

Not applicable.

C. Detailed Material Requirements

1. Portland Cement Concrete

Portland cement concrete shall be Mix No. 2 as specified in Section 03310.

2. Form Release Compounds

Form release compounds shall effectively prevent the bond of the concrete to the forms. The form release compounds shall not cause discoloration of the concrete nor adversely affect the quality or rate of hardening at the interface of the forms. The compounds will be tested in accordance with MSMT 503.

The flash point of the material shall not be less than 100°F when tested in accordance with AASHTO T 73.

3. Prefomed Joint Fillers

Prefomed joint fillers shall be as specified in Section 02651.02.

4. Curing Material

Curing material shall be as specified in Section 02651.02.

5. Bituminous Concrete

a. Bituminous concrete for sidewalks shall be manufactured in accordance with Section 02641.01.

b. Bituminous concrete shall be B.I. gradation meeting the requirements of Section 02641.02.

6. Sand Asphalt

a. Sand asphalt for sidewalks shall be manufactured in accordance with Section 02641.01.

b. Sand asphalt shall be as specified in Section 02641.02.

02660.03 EXECUTION**A. General**

1. Excavation shall be made to the required depth and to a width that will permit the installation and bracing of forms. The foundation shall be shaped and compacted to a firm, even surface in accordance with the section shown on the Plans. All soft and unsuitable material shall be removed and replaced with suitable material. Unless otherwise specified, the thickness shall be 4 inches.
2. The subgrade shall be compacted to 92% maximum density as determined by AASHTO T 180, Method A, after which it shall be accurately trimmed to the proper shape and required grade.

B. Portland Cement Concrete Sidewalks

1. Forms may be either steel or wood and shall extend to the full depth of the concrete. All forms shall be straight, free from warp, and of sufficient strength to resist the pressure of the concrete without displacement. Bracing and staking of forms shall be such that the forms remain in both horizontal and vertical alignment until their removal. Before concrete is placed against the forms, they shall be thoroughly cleaned and coated with a form release compound each time they are used. Forms shall not be stripped until the concrete has set for at least 12 hours, and every precaution shall be taken to avoid damaging the concrete.
2. Slip-form construction shall meet the requirements for the slip-form method specified in Section 02721.03 except that joint construction shall be in accordance with Paragraph 5 of this Article.
3. When the subgrade is dry, it shall be moistened with as much water as it can absorb. The concrete shall be mixed in accordance with Section 03310.03. Volumetric batching and continuous mixing will be permitted on this work. Concrete shall be deposited on the subgrade in successive batches to the full width of the sidewalk. It shall be thoroughly spaded along the edges and shall be tamped to eliminate voids. It shall be struck off with an approved screed to the elevation of the top of the forms and then be floated with a wooden float.
4. The surface shall have a broomed finish. No plastering of the surface will be permitted. All outside edges and all joints shall be edged with a 1/4 inch edging tool.
5. Joints shall be placed as indicated on the Plans. Dummy joints shall be formed by a jointing tool or other acceptable means and shall extend into the concrete for at least one-quarter the depth. Joints shall match as nearly as possible adjacent joints in curb or pavement. Expansion joint material shall extend the full depth of the concrete.

6. Concrete shall be cured in accordance with Section 02651.03. It shall be protected from cold weather by means acceptable to the Engineer. During the cure period, all pedestrian and vehicular traffic shall be excluded.

C. Bituminous Sidewalks

Bituminous sidewalks shall be constructed in accordance with the following requirements:

1. Bituminous concrete shall be placed in accordance with the requirements of Section 02641.03.
2. Compaction shall be accomplished by means of a roller approved by the Engineer. In areas inaccessible to the roller, a vibrating plate compactor or hand tamping will be permitted. In any case, the bituminous sidewalk material shall be uniformly compacted. Compactive effort shall start as soon as the bituminous concrete can be compacted without displacement. Compactive effort shall continue until the material is thoroughly compacted and all surface marks have disappeared.
3. Where the sidewalk is not adjacent to curbs or other structures, backfill material approved by the Engineer shall be used to form an earth shoulder for the bituminous concrete for a width of 18 inches and/or in compliance with the typical cross section of improvement. This backfilling shall be done in accordance with the requirements of Section 02265.03.

02660.04 METHOD OF MEASUREMENT**A. Portland Cement Concrete Sidewalk**

Measurement for Portland cement concrete sidewalk will be made of the finished surface area. Width measurement will be the width indicated on the Plans, and the length will be measured along the centerline.

B. Bituminous Concrete Sidewalk

Measurement for bituminous concrete sidewalk will be made of the weight of bituminous mixture placed. The weight shall be determined as specified in Section 02641.01, Article C, Paragraph 5, Item m.

02660.05 BASIS OF PAYMENT**A. General**

1. Payment will be made at the unit prices bid. The prices bid shall include all excavation, backfill, and disposal of surplus materials and furnishing all labor, tools, equipment, and materials necessary to satisfactorily complete the work as shown and

specified in strict accordance with the Contract Documents, and accepted by the Engineer.

2. Payment will be made for contingent items when ordered by the Engineer. Payment will be made as specified in Sections 02951, 02952, 02953, 02954, 02955, 02956 and 02957.

B. Portland Cement Concrete Sidewalk

Payment for Portland cement concrete sidewalk will be made at the price bid per square foot. The price bid shall include furnishing, placing, and removing forms and furnishing water, as necessary, and all other incidentals necessary to complete the work.

C. Bituminous Concrete Sidewalk

Payment for bituminous concrete sidewalk will be made at the price bid per ton.