SPECIFICATIONS FOR CONSTRUCTION OF SIDEWALKS

870. 1 SCOPE

These Specifications govern all operations for and pertaining to the excavation and replacement of unsuitable subgrade material, preparation of a sand bed on the subgrade, and construction of a 100 mm concrete sidewalk on the prepared sand bed.

1.1 Excavation

The limit of excavation shall be determined by the Engineer. The base of the excavation shall be uniformly shaped and firmly compacted. Approved replacement material shall be placed in uniform layers and compacted to 95% of the maximum dry density.

1.2 Sand Bed

A sand bed shall be placed on the compacted subgrade and rolled or tamped to a sound bearing condition. The sand bed shall be a minimum of 50 mm in thickness and shall consist of clean granular material.

1.3 Protection from Damage

Where required, temporary crossings shall be provided by the Contractor during sidewalk construction. The Contractor shall provide a watchman for a continuous period of twelve hours after pouring concrete. The duties of the watchman shall be to protect the concrete from damage.

870. 3 MATERIALS

Materials and the mix design shall conform to the requirements of the Specifications for Concrete Pavement. Normal Portland cement will be supplied by the Department. Aggregate shall be supplied by the Contractor and in accordance with the Specifications for Aggregate for Portland Cement Concrete. Suitable straight edges, brooms, foot bridges, edges, small tools and other equipment necessary to complete the specified work shall be provided by the Contractor.

870. 5 CONSTRUCTION METHODS

5.1 Side Forms

Side forms shall be properly cleaned and set to exact lines and grades well in advance of placing concrete. They shall be set on a well compacted, stable foundation so as to provide firm and uniform bearing over the base of the forms.

5.2 Placing Concrete

The sand bed shall be moist at the time of placing the concrete. If it is dry, it shall be sprinkled with water in such a manner as to avoid forming pools.

Concrete shall be deposited rapidly on the prepared base to the required depth and for the entire width of sidewalk in a continuous operation without bulkheads. Concrete shall be properly worked so as to ensure consolidation and filling of forms.

870. 5.2 Placing Concrete (Cont'd)

When the placing of concrete is suspended for more than 30 minutes, a contraction joint shall be formed to close the section.

5.3 Finishing

Newly poured concrete shall be struck off so that it will form a true and even surface.

After excess moisture has disappeared, the slab surface shall be given a broom finish before the initial set has developed. Clean brooms shall be used and the strokes shall be made for the full width of the lane with adjacent strokes overlapping.

The outside edge and joints of the sidewalk shall be finished with an approved edging tool.

5.4 Expansion Joints

Expansion joints shall be provided every 7.5 m by placing a 6 mm by 100 mm strip of filler fully across the walk. An expansion joint shall be provided where sidewalk meets the curb, and where it butts against buildings, poles, hydrants or any other object which could restrict expansion.

5.5 Contraction Joints

Contraction joints shall be sawn at least 25 mm deep, at 1.5 m intervals.

870. 9 METHOD OF MEASUREMENT

The quantity of sidewalk actually constructed will be in square metres, as derived from measurements made by the Engineer.

870. 11 BASIS OF PAYMENT

The unit price per square metre for "Construction of Sidewalks", will be payment in full for supplying materials, except those materials designated as being supplied by the Department, and for the construction of sidewalks and for performing all operations pertaining or incidental thereto, as herein described.