



### SPECIFICATIONS FOR VILLAGE CONCRETE SIDEWALKS.

All concrete walks shall be laid with outer edges 12 inches from boundary lines of streets, the finished surface of the walk to be not less than 6 inches above the top of the street curb and rise one inch in three feet towards the lot line and shall be constructed in the following manner:

A foundation shall be prepared by cutting down or filling up the natural surface of the ground to a point thirteen and one-fourth (13 1/4) inches below the grade above fixed for the top surface of the walk, which foundation shall be properly smoothed, wetted and compacted and covered with a uniform layer of thoroughly compacted, clean, coarse cinders eight (8) inches in thickness, upon which layer of cinders so prepared there shall be placed a uniform layer of concrete four and one-half (4 1/2) inches in thickness, composed of one part of the best American Portland cement and two parts of clean torpedo sand thoroughly mixed with four parts of clean, crushed limestone, varying in size from one-half inch to three-quarter inch cubes. Before the layer last mentioned has set, a layer or finishing coat shall be placed thereon three-quarter inch in thickness, to be made of one part of the best American Portland cement and one part of clean torpedo sand mixed to the proper consistency with water and spread smoothly before the under layer has set, and thoroughly troweled to a perfect finish. Said sidewalk shall be constructed under the supervision and subject to the approval of the sidewalk committee of the board of trustees, who are hereby appointed to superintend the construction of the same.—Cement and Engineering News.

### PAVEMENT AND SIDEWALK CONSTRUCTION IN TORONTO.

The annual report of the City Engineer of Toronto shows that during 1901 there were constructed 15.6 miles of pavements and roadways, and 17.8 miles of concrete and brick sidewalks. During the past four years 86 miles of pavements and roadways have been constructed, which is 34 per cent. of the total mileage of the streets of the city.

Concerning the different classes of work the City Engineer says:

The repairs to asphalt pavements during the year were carried out under contract at \$1.23 per square yard for 2 1/2-inch surface, \$1.09 per square yard for 2-inch surface, and \$4.75 per cubic yard for concrete foundations.

There has been a considerable decrease in the mileage of brick pavements constructed during the year, but all pavements of this class were laid on a concrete foundation. After six years' experience

with bricks manufactured by local companies, I am quite satisfied that this material makes a desirable and satisfactory pavement for residential streets, its noisiness being the only objection to it.

With the exception of one street, all cedar block work consisted of relaying existing worn out block pavements. New blocks can be relaid on existing foundations for about 65 cents a square yard. A pavement thus relaid is good for at least five or six years.

During the year about 2.7 miles of macadam roadways were constructed. The objection to this class of road is the dust and dirt, and the impossibility of obtaining from the council a sufficient appropriation to keep such roadways in good repair. A tar macadam road was constructed on Cawthra Square. As this class of roadway is still in the experimental stage, its merits cannot be definitely judged, but I consider it a great improvement upon the ordinary macadam road, the addition of the tar rendering it noiseless, and, comparatively speaking, free from dust. The cost is about 30 per cent. more than for the ordinary macadam, and I am of opinion that for residential streets it will make a very satisfactory roadway.

The number of concrete sidewalks constructed was very much in excess of those laid in any previous year. Comparing the lifetime of concrete with that of plank sidewalks, the former is much cheaper. Class B can be laid for 11 cents a square foot, with a five-year guarantee, and I trust that within two or three years the construction of plank walks will be entirely discontinued.

Only one or two brick sidewalks were laid. This class of material does not appear to be very popular for sidewalk purposes, and the cost is very little below that of concrete walks.

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