

RUNNYMEDE AND SWANSEA SEWERAGE SCHEME

IN addition to the reports on the proposed sewerage schemes for the eastern and western divisions of the township of York, Ontario, abstracts of which were published in *The Canadian Engineer* for December 18th and 25th, the engineers, Frank Barber and his associate, R. Wynne-Roberts, have submitted a preliminary report on a sewerage scheme for the Runnymede and Swansea division of York township, from which report the following information is abstracted.

This division includes the part of the township extending along the western limit of the city of Toronto, from Corbett avenue on the north to the lake on the south, and between the city limits on the east and Scarlett road, Langmuir avenue, Baby Point Road and Riverside Drive on the west, an area measuring about 743 acres.

About 320 acres situated between the above area and the Humber river are not included in this division, as the land is too low-lying to drain by gravity into the proposed sewers. Should such low-lying land be built upon, it will be necessary either to treat the sewage in small independent plants, or to pump it to the sewers included in the scheme.

The works commissioner of Toronto stated on November 3rd, 1915, that the sewage from the upper area from Florence avenue to Annette street, measuring about 280 acres, could be drained into the city sewers, as they are of ample capacity to accommodate the dry weather flow and also to take the storm water from the area bounded by Jane street, Runnymede road, Annette street and south side of St. John's road. The area for which complete accommodation could be provided would be about 88 acres. The city authorities stipulated that the storm water from the upper portion of the Runnymede district should have a storm water intercepting sewer on St. John's road, discharging into the Humber river.

To Drain Into Toronto's Sewers

For the present it is proposed that Runnymede road, Norval, Crisco, Ravenal, Hertford, Henrietta and Cobourg streets shall drain into the city sewers.

Although the houses on one side of Runnymede road and Annette street are in the township, the streets are in the city, and it is considered advisable that the city system should receive their drainage, and also that from Windermere, Durie, and Beresford avenues between St. John's road and Annette street, because the natural outlet from these streets lies in the direction of the city sewers.

These areas measure about 71 acres, of which about 10 acres drain into the city sewers in Runnymede road and Annette street. The cost of the township sewers would be about \$46,000, and the annual capital cost about 40 cents per foot frontage, exclusive of city charges. The average frontage in these areas is about 230 ft. per acre.

Inasmuch as the city authorities state they cannot afford facilities for the discharge of this sewage and storm water into their sewers, the engineers propose draining the remainder of the Runnymede district into a trunk sewer in Jane street at St. Clair avenue, crossing through the Jane St. subway, and thus obviate the floods which occur there. This trunk sewer will join St. John's road and continue along that street to Brookside avenue, Brunell avenue, Raymond avenue, and Old Belt Line as far as Cataract avenue, where a relief sewer will discharge the volume over six times the dry weather flow into the Humber river. The trunk sewer will continue along the old Belt Line to Morningside avenue, along Morningside avenue, Lavinia avenue, McConnell avenue and Runnymede avenue extension to a sewerage treatment plant, say between Windermere avenue and Ellis avenue, opposite Ormskirk avenue.

To Cost \$1,256,200

Owing to the topography of the Swansea district and Riverside estate, an area included by the old Belt Line, Garboyd avenue, Southport road, Windermere avenue (south of Ormskirk) and Ellis avenue (south of St. Olave's road), must be seweraged on the separate system. A separate sewer will be provided and the sewage pumped into the above-mentioned treatment works, and the effluent and storm water will be discharged into the river near Ormskirk avenue.

About seven acres of land will be required for the works in this section, to which the drainage of 6.72 acres will be led.

The estimated cost of the scheme (excluding those portions which the engineers recommend should drain into the city sewers) is as follows:—

Trunk sewers	\$593,800
Laterals	436,400
Relief sewers	20,000
Treatment works	200,000
Pumps, etc.	6,000

Total\$1,256,200

The annual capital cost of the scheme is \$121,000, assuming that the debentures for trunk sewers and treatment

