

bonds was allowed to obtain the necessary amount. The work was started in 1878 and completed in 1886 at a total cost of \$921,130. In 1888 the Canadian Government relieved the Quebec Harbor Commission of all obligations to refund the sum expended on the dry dock and in 1890 it was placed upon the control of the Department of Public Works; the writer was then placed in charge.

In 1906 the Quebec Harbor Commissioners urged upon the government the necessity for a large dry dock for Quebec harbor. In the autumn of that year the writer

equipped repairing plant, capable of effecting all sorts of repairs, including machine shops and tools, foundry, administration buildings, etc., together with the dock itself, but does not include marine slips or other installation used in the construction of ships.

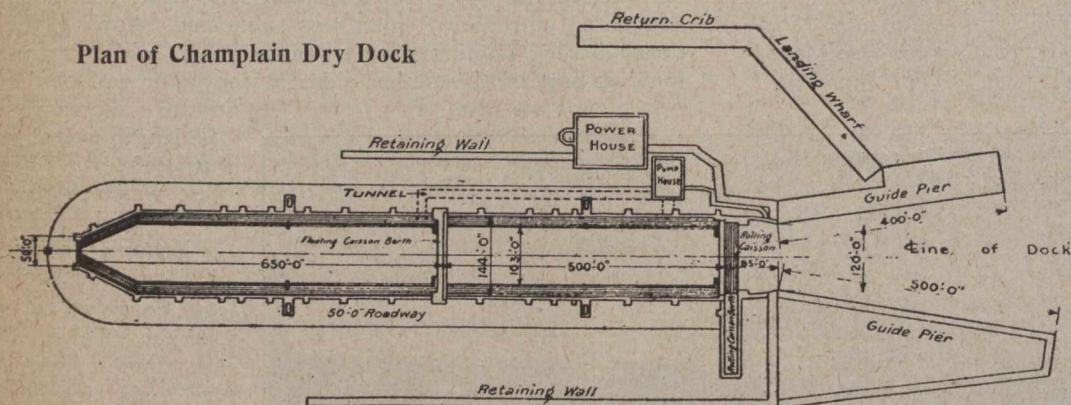
According to the act, the subsidy on dry docks of the first class is $3\frac{1}{2}\%$ per annum on the estimated cost for 35 years from the time it has been reported that the dry dock is entirely completed. The subsidy on the second class is $3\frac{1}{2}\%$ per annum for 25 years from the time of completion.

On the third class, the subsidy is 3% for not exceeding 20 years from the time of completion. In all cases the company making the application must furnish plans, with a detailed list of the plant and a complete estimate of the cost. These are revised and corrected, if found advisable; and, upon a report from the chief engineer of the Public Works Department that the works intended to be built are in the public interest,

the application is granted upon certain conditions of management and maintenance. The works are to be executed under the superintendence of an officer of the department.

The above act was amended in April, 1912, by making the length of the first class dry docks 1,150 ft., the entrance 110 ft. and the estimated cost \$5,500,000. Another

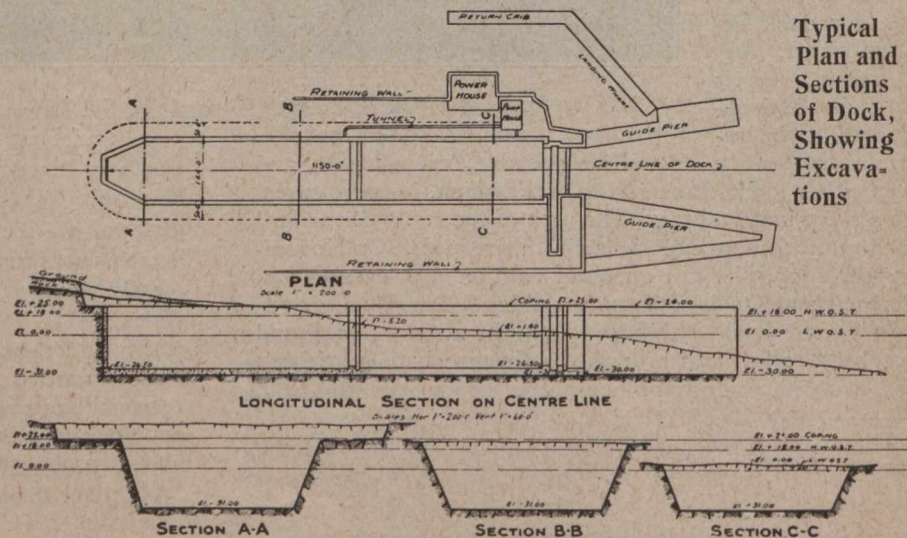
Plan of Champlain Dry Dock



was instructed to make a survey of the locality surrounding the old dry dock and report on the best location. Two sites were examined, but the position to the east of the present dock was considered the most advantageous for three principal reasons. A larger area of land could be acquired. A better foundation could be obtained. The repairing plant of G. T. Davie & Sons could have better access to both the new and old docks. A plan and report were submitted in the early part of 1907; the dock then proposed was 1,000 ft. long with an entrance width of 100 ft. The proposition was not immediately acted upon; the question as to whether the government should build the dock or induce some shipbuilding firm to build it under a subsidy from the government was unsettled. The result of the discussion was the passing at the session of 1910 of an Act to encourage the Construction of Dry Docks.

Under this act dry docks were divided into three classes. The first class included dry docks estimated to cost not more than \$4,000,000, and capable of receiving and repairing the largest ships of the British navy and of the following dimensions: Clear length on bottom, 650 ft.; clear width of entrance, 85 ft.; depth of water on sill at ordinary high water spring tides, 30 ft., if in tidal waters; or 25 ft. on sill, if constructed in non-tidal waters. Floating dry docks of a lifting capacity of 15,000 tons. The third class consisted of dry docks estimated to cost not more than \$1,500,000, of the following dimensions: Clear length on bottom, 400 ft.; clear width of entrance, 65 ft.; depth of water on sill at ordinary high water spring tides, 22 ft., if in tidal waters; and 18 ft., if in non-tidal waters. Floating dry docks of a lifting capacity of 3,500 tons. The estimated cost in all cases includes the totally

Typical Plan and Sections of Dock, Showing Excavations



amendment was made in May, 1914, by which a subsidy of 4% on the estimated cost is allowed for first class dry docks. The act was further amended in 1917, by which the dimensions of the first class dry docks shall be: length on bottom, 1,150 ft.; width of entrance, 125 ft.; depth on sill at high water spring tides, 38 ft. A subsidy of $4\frac{1}{2}\%$ on the estimated cost of \$5,500,000 is allowed, payable half-yearly for 35 years from the time of completion. By this amendment no bonds or debentures are to be issued until \$1,000,000 shall have been expended on the construction of the dry dock.

After the passing of the act of 1910, shipbuilding firms were invited to build a dry dock at Lauzon, in Quebec harbor, under the subsidy act of that year. Two companies submitted plans and offered to build under contract