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Overland Pipe System, Ottawa Waterworks

New Pumping Plant at Lemieux Island Has Normal Rating of 40,000,000 Gallons a Day—Water Carried Overland through Two Lock-Bar Steel Pipes to City's Distributing System—Bridge Built to Carry the Pipes from Lemieux Island to Mainland

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THE scheme for bringing Ottawa's water supply through a system of overland pipes from the Lemieux Island intake to the city, instead of through a tunnel as formerly, was necessitated by the fact that the fire insurance underwriters had placed a very heavy premium rate on risks in the city of Ottawa, and also by the typhoid epidemic which swept Ottawa during 1911. The overland system is free from any possible contamination by sewage, and is a surer supply for fire-fighting purposes, the pipe line being readily accessible, throughout its entire length, both for inspection and for repair in case of accident.

The new intake is in the same location as the old intake, at Lemieux Island. This was found to be the most preferable location, having been tried out for years and found free from ice troubles.

The entrance to the suction tunnel under the pump house at Lemieux Island is protected by a heavy rack. The stop-log checks and screens are located inside the pump house and are operated by a travelling crane. Fig. No. 1 shows plan and Figs. Nos. 2, 3 and 4 show sections of the Lemieux Island pumping station, which contains two high-lift pumping units and provision for extensions as required. The centrifugal pumps now installed are each rated to deliver 20,000,000 Imperial gallons per twenty-four hours, against a total head of 280 ft. These pumps are driven by induction motors of 1,600 horse-power **each.**

Fig. No. 5 shows pump house nearing completion.

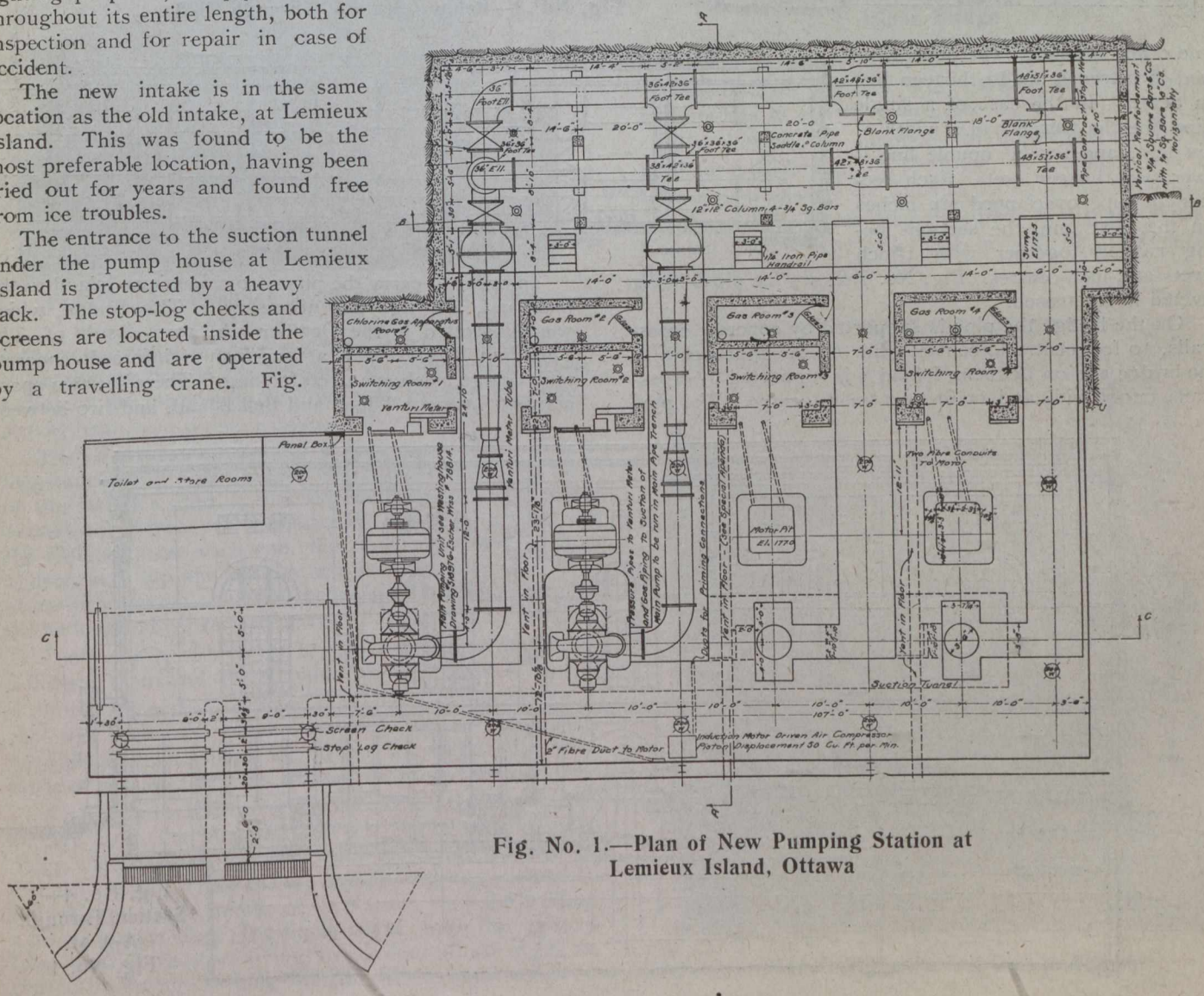

Fig. No. 1.—Plan of New Pumping Station at Lemieux Island, Ottawa