

It does not appear that the Company have been notified to extend their mains. The City has a right to ask, under the above clause, for an extension of mains equal to, approximately, 22.35 miles, as shown by the detailed statement attached.

4. As to the capacity of power and supply now in use by the Company being sufficient should such an extended service as the City may have a right to call for be demanded. The present supply is taken from the Assiniboine River, which at low water has a flow of 416,000 cubic feet per minute. The following table shows the capacity of the present works—the capacity of works required for the present population of Winnipeg estimated at 20,000 and the capacity of works for a population of 40,000, upon which works for the City of Winnipeg should be based.

It will be seen that the capacity of the present works is not sufficient for the present requirements.

	Present Works for population 10,000.	20,000.	40,000.
Capacity of pumping machinery, gallons per day	1,500,000	3,600,000	7,200,000
Quantity of water in cubic ft. per min. delivered at cor. of Main St. and Portage Ave., with a pressure equal to a head of 150 ft Domestic supply		200	400
Fire supply		200	400
Total maximum quantity which works are capable of delivering, cubic feet per minute, with an effective head of 150 feet	55	400	800

The calculations in the above table for 40,000 population are based upon the following data :

Average domestic consumption per head per day, gallons.	60
Maximum domestic consumption per head per day, gallons.	90

Fire supply providing for the occurrence of two fires at the same time, each requiring ten-hose streams of 20 cubic feet per minute.

The maximum capacity of the works has been based upon the maximum consumption which would occur if two fires took place at the same time of day when the greatest draught was being made upon the domestic supply.

A 24-inch main, or its equivalent in smaller mains, has been calculated to deliver the maximum quantity of water at the intercession of