

an expenditure of \$1,500,000, in round numbers, would be incurred. In answering a question, the other day, in reference to the depth of water on the mitre sills of the canals, he stated that it was inexpedient to attempt to obtain more than twelve feet, the reason being that it would be difficult to get fourteen feet of water in the river itself. The Government did not consider it expedient in the public interest that they should endeavor to obtain more than twelve feet. It would not be at all impossible to get fourteen at a future time if it should be found that the traffic of the country required it. For the present the Government intended to confine themselves to the operations indicated. He had also stated on a former occasion that there was no very particular hurry with the works on the St. Lawrence Canals, between Prescott and Lachine, until the Lachine works, which were the heaviest, were completed. He had merely given a general explanation, and was prepared to answer any specific question.

Mr. LANTHIER said as a report on the proposed extension of the Beauharnois Canal had been prepared, he would like to know what would be the length of the line adopted.

Hon. Mr. MACKENZIE said the engineer reported as follows:—

“Between Lachine and Beauharnois, through Lake St. Louis, a distance of about 15½ miles, there is abundance of water, except at a few places, through the shoals on which the light ships are moored. These are of a nature, however, that can be readily removed. But at Lachine a rocky shoal extends out for a considerable distance, so that it becomes questionable whether the present entrance should be deepened or a new outlet formed about 1¼ miles higher up. Two lines were lately surveyed on the north shore of the St. Lawrence opposite the Beauharnois Canal, both commencing at McIntyre's Bay, a little below the old steamboat landing and the lower entrance of the Ordinance Canal at the Cascades. One line passes chiefly on the upland, and is about 14½ miles in length, with 7 locks, 5 of which are of 14 feet lift, 1 of 11½ ft. lift, and the guard lock 1 to 5 ft. lift. Estimated cost, including tow-path, \$3,360,000. The other line, which is suitable only for tug navigation, passes through Chambery and Rivière à la Grasse Gullies, and is about 14½ miles long, with seven locks of the same respective lifts as those of the other line. Estimated cost, \$3,000,000. Another line adopted exclusively to steam navigation, was examined with a view of utilizing that part of the River St. Lawrence between the Coteau and Cedar Rapids. Apart from permanent objectionable features met with on this route, the probable expenditure necessary to render it navigable is

greater than required on the last of the two lines above described.”

Mr. LANTHIER said this contained no reference to the expense of re-constructing the Beauharnois Canal or of making harbors. There was no harbor, no depth of water, and no channel at either end of the canal. The engineers had ascertained that the only available channel for vessels drawing twelve feet of water was on the north side of Lake St. Francis. Vessels entering the canal had to pass by that channel and cross the lake to the other side. The experience of navigators had shown that there was no way of making an entrance at the west end of Beauharnois Canal unless it was done at an immense expense. The bottom was of solid rock, and this was so well known that the Chief Engineer of the Public Works Department had given instructions to run an extension line about two miles from the present entrance through the back country to give the canal a new outlet. With the extension below, it would be some three miles longer, giving about seventeen miles of canal, and that he believed was the shortest distance. The Committee would like to know what would be the expenditure on the Beauharnois Canal on this new plan, and the means of having a harbor at each end. It was always practicable to make a ditch through a country, but if vessels could not reach it, it would be of no use for navigation. That was precisely the difficulty with the Beauharnois Canal. There was nothing in the report which had been read to explain to the committee what was to be done to ascertain whether it would be possible to deepen the channel on the south side. He had come to the conclusion that it was a matter of utter impossibility to obtain the proper depth of water there unless at an immense cost—at a greater expenditure, in fact, than would be incurred in constructing a new canal on the north shore. To re-construct the Beauharnois Canal would interfere with trade for one year at least, which would not be the case if a new canal were built on the north shore. The ice remained longer on the south than on the north shore. In fact last summer seven or eight vessels were moored alongside of the ice, and the Government had to obtain the services of a large number of men with saws and axes to cut the ice and open the

Hon. Mr. Mackenzie.