

NOTES AND AMENDMENTS TO THE ADVANCE PROOF OF  
"SCHEMES SHOWING THE POSSIBILITIES OF  
ST. JOHN, N. B."

Submitted in April, 1906.

At the end of Scheme 1 add as follows:

If the canal is built a number of most interesting engineering problems will be crowded into this short half mile of work:

(1) The proper location and facilities for the entrance from the harbour: whether the approach should be further to the left in a cross current or in an eddy as shown: along the face of continuous wharf work or along the ends of several dock piers.

(2) The arrangement of sea walls, guiding the currents and counter currents and reclaiming useful lands, not adapted for ordinary dock use.

(3) The very high dock gates, possibly 45 or 50 feet, adapted to hold back the water pressure from either side.

(4) The partition wall separating the twin locks; a chance for reinforced concrete work, to take up as little width as possible.

(5) The fitting of one of the locks for use as a dry-dock, and of the repair shops connected therewith.

(6) The double track bascule bridge for the railway crossing.

(7) The bascule or pocketed bridge rolling on the dock gates, perhaps combined with an 'elevator-tower-bridge' for the Navy Island traffic bridge crossing.

(8) The unique hydraulic installation with turbines and waterways in the canal walls and the power storage arrangements.

(9) The large cutting in short space with a great variety of material and perhaps a tunnel to carry the railway along the canal.

(10) The coaling berth with elevated storage and high level railway approach.

(11) The waiting basin at the upper end of the canal with guard pier near the edge of the falls.

In line 7 of Scheme 2, page 5, add:

These breakwaters would be made in part with material from the canal excavation and in part perhaps by accumulating the drifting sands.

After Scheme 4, page 6, add: