

After giving a number of introductory statements—the value of which can be best tested by previous reports, but more especially by the contract and documents on which it is based—the contractors point out that they did not find the dams low enough, and show that this is the reason of their failure, to which it might fairly have been added that their construction was otherwise defective. They then suggest that a new dam should be built outside of the present one, and that “to diminish the weight on bottom” they state it “should be as narrow as ten feet outside to outside, and depend for a stability upon the length and strength of pile rather than upon width of base, and also upon shoring between opposite sides of dam, to the fullest extent practicable, consistent with the efficient prosecution of the work,”

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“The piles” they “propose to use would be hewed oak, 45 feet in length, 14 inches depth, driven close and so as to stand 6 feet above water, and to go 12 feet below the bottom of excavation and secured against spreading in the most efficient manner.”

The scheme mentioned for constructing a new dam, if properly carried out, would no doubt be successful; in fact it is foreshadowed in the specification on which the contract is based, but with this difference that it should occupy the site of the dam that has failed.

To form another dam outside of the ruins of the old one, or that part of the river to the north of it that would have to remain in position during the progress of the first division of the works, would, to a certainty, lead to the flooding of a large extent of country above Welland, and endanger not only the dam itself but the stability of the present aqueduct.

It is a well known fact that the new Aqueduct has to be built through the Chippawa River, and that during its construction provision has to be made for passing the heaviest snow and rain floods that occur in that locality. This matter received full consideration when preparing the plans and specifications for the work, which previous and subsequent knowledge of the fluctuations of the river leads me to the conclusion that the sites and order of building the dams, stated in the documents connected with the contract should be strictly adhered to; any deviation from which, it is to be feared, would involve results the responsibility of which I am not prepared to assume, nor am I prepared to recommend that they should be permitted to be assumed by any one else.

I therefore advise that the contractors be at once informed that the Department is unwilling to relieve them of any of the responsibilities embodied in the contract. At the same time it may be said that a dam constructed as indicated in their letter of the 31st ultimo, if carried out properly, would be likely to serve the purpose; but that portion of any dam in the middle of the river and parallel to the stream must be constructed on the site and at the place indicated in the contract, or on the site of the dam that has failed.

I have the honor, to be, Sir, Your obedient servant.

JOHN PAGE, Chief Engineer.

The Secretary of Railways and Canals.

WELLAND, June 5th, 1880.

SIR,—I beg to acknowledge the receipt on Saturday, the 5th inst., of the letter of the contractors for Section No. 27, Welland Canal enlargement, dated St. Catharines, May 31st, 1880, relative to the failure of the Aqueduct coffer-dam. As directed, I proceed at once to report upon it.

The general purport of the letter is that the contractors have attempted to build a coffer-dam for the Welland Aqueduct, that they have failed in doing so in consequence of unforeseen difficulties, that the fault is not theirs, that they should be permitted to make another attempt on a plan which is an improvement on the one which has failed, and that they should receive additional compensation for the second effort.