

1877.

NEW ZEALAND.

HOKITIKA AND GREYMOUTH PUBLIC WORKS COMMITTEE,

(REPORTS OF, TOGETHER WITH MINUTES OF PROCEEDINGS AND EVIDENCE AND APPENDICES.)

ORDERS OF REFERENCE.

(Extracts from the Journals of the House of Representatives)

WEDNESDAY, THE 5TH DAY OF SEPTEMBER, 1877.

Ordered, That a Select Committee be appointed to consider the advisability of constructing a line of railway to connect Hokitika with Greymouth, and proposed harbour works at Hokitika. Such Committee to consist of the Hon. Mr. Ormond, Mr. Woolcock, Sir R. Douglas, the Hon. Mr. Stafford, Mr. De Lautour, the Hon. Mr. Gisborne, Mr. Sheehan, Mr. Joyce, and the Mover (Mr. Barff); with power to call for persons and papers. To report in a fortnight. Five to form a quorum.—(Mr. Barff)

MONDAY, THE 10TH DAY OF SEPTEMBER, 1877.

Ordered, That the quorum of the Hokitika and Greymouth Public Works Committee be reduced from five to three members.—(Mr. Barff)

THURSDAY, THE 20TH DAY OF SEPTEMBER, 1877.

Ordered, That the time for bringing up the report of the Hokitika and Greymouth Public Works Committee be extended for fourteen days.—(Mr. Barff)

THURSDAY, THE 4TH DAY OF OCTOBER, 1877.

Ordered, That the time for bringing up the report of the Hokitika and Greymouth Public Works Committee be extended for fourteen days.—(Mr. Barff)

THURSDAY, THE 18TH DAY OF OCTOBER, 1877.

Ordered, That the time for bringing up the report of the Hokitika and Greymouth Public Works Committee be extended for fourteen days.—(Mr. Barff)

TUESDAY, THE 6TH DAY OF NOVEMBER, 1877.

Ordered, That the time for bringing up the report of the Hokitika and Greymouth Public Works Committee be extended for fourteen days.—(Mr. Barff)

THURSDAY, THE 22ND DAY OF NOVEMBER, 1877.

Ordered, That the time for bringing up the report of the Hokitika and Greymouth Public Works Committee be extended for seven days.—(Mr. Barff)

REPORT

ON THE IMPROVEMENT OF THE HARBOUR OF HOKITIKA.

I AM directed by the Committee to report that the question of improving the Harbour of Hokitika has been for some time under their consideration, and that they have taken such evidence on the subject as was available. A chart, the result of a careful survey recently made under the authority of the Hokitika Harbour Board, showing the whole of the port and the river bed from Kanieri to the sea, was before the Committee, and to it was added an explanatory hand-book. Statistics, showing the trade of the port, value of imports and exports, and Customs revenue, were also produced.

It was shown that from March, 1865, to 31st December, 1876, 5,094 vessels, of an aggregate tonnage of 765,265 tons, entered at the port; that during the same period the imports amounted to £3,241,237; while the exports amounted to no less a sum than £6,215,112. The gold duty amounted to £192,784.

The Chairman of the Hokitika Harbour Board (Mr. D. W. Virtue) visited Wellington a short time since, having been deputed by the Board to represent to the Government the heavy losses and

injury to trade which had been caused by the blocking up of the entrance to the port—to the extent of preventing the entrance or exit of vessels, and to endeavour to obtain a grant of money for harbour improvements. The evidence of Mr. Virtue shows that during the recent blocking of the Hokitika channel, there were fourteen vessels with 4,000 tons of cargo in the roadstead, and that the result had been great losses in trade, and a rise in the price of provisions. The evidence shows the Hokitika Harbour Board have an endowment of 30,000 acres of land, which is at present returning no revenue to the Board; but that the sum of £10,000 might be raised, giving the land as security for the debt. It also shows that the engineering survey recently made was carried out by Mr. Campbell, who was recommended by Dr. Hector, and that competitive plans for harbour works were invited by the Board. Since the return of Mr. Virtue to Hokitika, he has communicated with the Committee by telegram, stating that about thirty plans, accompanied by estimates and costs, had been sent in; that the cost of the works would be £30,000 or £40,000; and that the plans would be sent by the first steamer to Wellington. It may here be stated that the Hokitika Harbour Board propose to leave it entirely in the hands of the Government and their Engineering department to decide what plan of works shall be adopted.

The Hon. Mr. Bonar gave evidence before the Committee, and supplied a large amount of information as to the periodical blockades of the Port of Hokitika, the prejudicial effect thereby produced in trade generally, and the necessity of assistance being given from colonial funds for the construction of works inside the harbour.

I am directed by the Committee to recommend as follows:—

1. That it is desirable that the colony should assist in improving the Harbour of Hokitika.
2. That the plan of such improvements be approved by the General Government on the advice of their own professional officers.
3. That the cost of such improvements should not exceed the sum of £40,000.
4. That the colony should provide a sum of £25,000 towards the construction of the harbour works, on condition that the Harbour Board supply the sum of £15,000.

In reply to a telegram from the Chairman of the Committee, the Chairman of the Hokitika Harbour Board has stated that the Board pledge themselves to raise the sum of £15,000 towards the construction of the harbour improvement works, should the sum of £25,000 be given from colonial funds.

The evidence taken before the Committee, together with telegrams from the Chairman of the Hokitika Harbour Board and the Harbourmaster of Westland, are attached hereto.

EDMUND BARFF,
Chairman.

22nd October, 1877.

MINUTES OF PROCEEDINGS.

FRIDAY, 7TH SEPTEMBER, 1877.

The Committee met pursuant to notice.

PRESENT:

Mr. Barff,
Sir R. Douglas,
Hon. Mr. Gisborne,

Mr. Sheehan,
Mr. Woolcock.

The order of reference of 5th September having been read,

On the motion of Mr. Sheehan,

Resolved, that Mr. Barff be appointed Chairman.

On the motion of Mr. Sheehan,

Resolved, That the Chairman be requested to move in the House, That a message be sent to the Legislative Council, requesting the Council to give leave to the Hon. Mr. Bonar to attend and give evidence before the Committee.

On the motion of the Hon. Mr. Gisborne,

Resolved, That Mr. D. W. Virtue be requested to attend the next meeting of the Committee.

On the motion of the Hon. Mr. Gisborne,

Resolved, That the Chairman see Mr. Carruthers, with a view of getting any preliminary information he may deem necessary relative to the railway from Greymouth to Hokitika.

The Committee then adjourned.

TUESDAY, 11TH SEPTEMBER, 1877.

The Committee met pursuant to notice.

PRESENT:

Mr. Barff in the chair.

Sir R. Douglas,
Hon. Mr. Gisborne,

Mr. Sheehan,
Mr. Woolcock.

Minutes of previous meeting read and confirmed.

Order of reference, dated 10th September, read.

Mr. D. W. Virtue attended the Committee and gave evidence. (*Vide Minutes of Evidence.*)

The Committee then adjourned until Wednesday, the 12th instant, at 10.30 a.m.

WEDNESDAY, 12TH SEPTEMBER, 1877.

The Committee met pursuant to notice.

PRESENT :

Mr. Barff in the chair.

Sir R. Douglas,
Hon. Mr. Gisborne,

Mr. Joyce.

Minutes of previous meeting read and confirmed.

Orders of reference, dated 20th September and 4th October, read.

Hon. J. A. Bonar attended the Committee and gave evidence. (*Vide* Minutes of Evidence.)

The Committee then adjourned.

TUESDAY, 16TH OCTOBER, 1877.

The Committee met pursuant to notice.

PRESENT :

Mr. Barff in the chair.

Sir R. Douglas,
Hon. Mr. Gisborne,

Mr. Joyce.
Mr. Sheehan.

Minutes of previous meeting read and confirmed.

Chairman read telegrams received from the Harbourmaster at Hokitika relative to requirements for improving the port. (Appendix A.)

Chairman read letter from Secretary to Customs, forwarding statistical information relative to quantity of shipping at Port of Hokitika. (Appendix B.)

Resolved, That the Chairman telegraph to Mr. Virtue, Chairman of Hokitika Harbour Board, asking for amount required for Harbour Works, also for any more information he can give the Committee.

The Committee then adjourned.

THURSDAY, 18TH OCTOBER, 1877.

The Committee met pursuant to notice.

PRESENT :

Mr. Barff in the chair.

Sir R. Douglas,

Hon. Mr. Gisborne.

Minutes of previous meeting read and confirmed.

The Chairman read a telegram from the Chairman of the Harbour Board at Hokitika, stating that from the thirty plans received, the works could be done for £30,000 to £40,000. (Appendix C.)

Resolved, That the Chairman prepare a draft report to submit to the Committee at its next meeting.

The Committee then adjourned.

MONDAY, 22ND OCTOBER, 1877.

The Committee met pursuant to notice.

PRESENT :

Mr. Barff in the chair.

Hon. Mr. Gisborne

Mr. Woolcock.

Minutes of previous meeting read and confirmed.

Order of reference, dated 18th October, read.

The draft interim report drawn up by the Chairman was read, and, on the motion of the Hon. Mr. Gisborne, it was resolved to be adopted and reported to the House.

The Committee then adjourned.

MINUTES OF EVIDENCE

ON THE IMPROVEMENT OF THE HARBOUR OF HOKITIKA.

TUESDAY, 11TH SEPTEMBER, 1877.

Mr. D. W. VIRTUE, Chairman of the Hokitika Harbour Board, examined.

1. *The Chairman.*] You are the Chairman of the Hokitika Harbour Board?—Yes.
2. You are on a visit to Wellington in order to endeavour to obtain assistance in the construction of the Hokitika Harbour works?—Yes.
3. Would you be so kind as to state what the condition of the bar has been lately, and the position of affairs generally?—During the last two months the channel has been almost entirely closed, so much so, that all vessels, with the exception of the "Waipa," drawing about four feet, have been unable to enter the bar.

4. There has been a large number of vessels lying in the roadstead unable to come in?—At last advises the number was twenty-one.
5. Could you make an estimate as to the amount of cargo and goods in the roadstead—a rough estimate?—I should say 4,000 tons, as nearly as possible.
6. I presume that not only causes inconvenience, but has raised the price of provisions?—Yes.
7. To a very appreciable extent?—Yes.
8. The harbour authorities have made a survey of the proposed works, have they not? They have had an engineer's plan, which is on the table here?—Yes.
9. What is the revenue of the Harbour Board at the present time?—It is a little over £2,000 a year.
10. That includes everything?—Yes.
11. What charges have you upon that in the way of salaries, or anything of that kind?—The estimated disbursements are £1,350.
12. That is annual charges?—Yes. Shall I state them in detail? Wharfinger, £250—he also acts as Secretary; accounts, charges, rent, &c., £100; Engineer, £400; annual maintenance and repairs of the various works on the river, £600; that is £1,350. I may mention that all the works in connection with the Hokitika Harbour are of wood, and they have been some time in existence, and they are getting very much decayed. We find that considerable sums have to be expended annually upon these works.
13. I suppose the repairs are almost continuously going on?—Yes; from the peculiar character of the river we are obliged to make continual embankments of sand bags, and other works, in order to conserve it.
14. With all the charges you have mentioned, there would not be much of a margin for those contingencies that would arise continually or repeatedly?—Of course these would leave a surplus of £650.
15. Do you consider that insufficient for the purpose?—Totally so for the purpose of effecting improvements. There is nothing left. Suppose by the Act we were allowed to raise £10,000 on debentures at 7 per cent., and the annual charge on that would be £700, and supposing we raised these debentures, it would leave a deficit.
16. The Board has a reserve of 30,000 acres?—Yes; 30,000 acres of land.
17. In the event of any assistance being given by the Government for harbour improvements, would the Board be willing to raise any sum of money on the security of that land?—Yes. But the difficulty we find at present in regard to these works is that the Government ask us to pay the harbour staff salaries, and take over the entire cost of that department.
18. *Hon. Mr. Gisborne.*] How much is that?—About £900, the entire affair.
19. Nine hundred pounds a year?—Yes.
20. *The Chairman.*] That would be £900 a year out of the £2,000?—Yes; of course that would leave a deficit.
21. To about what extent do you think you can raise money on the securities the Board can offer either from its revenue or reserves of 30,000 acres?—We are at liberty to raise £10,000; we can raise no more.
22. Are you under the impression that the Board can raise £10,000 upon that security?—Yes. If we were relieved from the charge of the harbour staff we should have no difficulty in doing that, and raising a loan of £10,000 upon our revenue.
23. In the event of your being relieved of the charge of the harbour staff, would the Board hand over to the General Government the control of the harbour works?—I hardly understand your question.
24. In the event of the Government taking charge of the harbour staff by paying their salaries, do the Board propose to give up the management of the harbour to the Government in the event of large works being undertaken?—The Government, I may mention, have already relieved us of the harbour staff.
25. I wish to be understood as to what course the Board propose to adopt in the event of the Government taking over the concern?—The course we propose to take is very simple. As I have already stated, we have had an engineering survey of the river taken from the Kanieri to the ocean, and also taken deep sea soundings outside the bar.
26. Who was the surveyor?—Mr. Campbell, recommended by Dr. Hector. This has been done at a cost of £400 or £500. We have called for competitive designs for conserving and channelling also, and we offer a bonus of £250 for the best designs. These designs will be all in on the 15th of this month, and will be submitted to Mr. Carruthers for his approval. We thought, if the Government approved of these plans, and assist us with a money grant of £15,000, we should be able to raise a sufficient sum to complete the works ourselves. We expect to expend £40,000 or £50,000.
27. What sum of money do you propose to raise, £10,000?—We propose to raise £30,000.
28. Did Mr. Carruthers make any estimate of the cost of the proposed works?—No. It is merely a question of the engineer survey.
29. Could you not say within £5,000 or £6,000?—We think the works can be done for £40,000 altogether.
30. But that would extend over some time, I suppose?—It would extend over some two or three years. The difficulty we feel at the present moment is that all these charges would be upon a slight revenue—to meet interest on the loan, and also to carry on these works approved by the Government.
31. *Sir R. Douglas.*] You say there is 4 feet of water on the bar in the Hokitika River at the present time?—At the present moment the bar is open.
32. What depth of water is there when the channel is good?—Well, it runs from 7 to 14 feet.
33. What kind of anchorage have you inside the bar?—A very excellent harbour inside.
34. Can you say about what population you have to supply from Hokitika?—About 15,000.
35. And the nearest port other than Hokitika is what?—Greymouth.

36. What kind of country is it between yourselves and Greymouth. Is it mountainous, or is there a road that you can get along?—The road is very mountainous, but along the beach it is level enough.

37. You say these harbour works would cost about £40,000?—So far as I can approximately estimate, the cost would be about that. I may mention that, with these plans that we have invited, we have specified that the competitors should also state the cost of the works proposed in those designs.

38. What kind of harbour is the Grey; is it a good harbour?—It seems very similar to our own.

39. Is it in any great degree better than yours?—I really cannot say. Sometimes when our harbour is open, the other is closed.

40. Then, if it is a bar harbour liable to be closed, what is the greatest depth of water?—I cannot say.

41. What do you think would be the cost of a railway between the Grey and Hokitika?

The Chairman: Sir Robert Douglas means the surveyed line of railway.

Witness: I do not know.

Sir R. Douglas: They might prefer a railway from the Grey. I thought, in that case, it would be well for the Committee to know that the railway would cost so much in comparison with harbour works. If you can give some idea of the number of miles, and the kind of country, we might be able to make some estimate, because the least you can do a railway for is about £6,000 a mile.

42. *The Chairman*.] It is twenty-three or twenty-three and a half miles?—That is by the beach.

43. *Sir R. Douglas*.] Which way do the spurs run? Do they run down to the sea like one's fingers?—I think the spurs, so far as I know, are broad side on to the sea, to use a nautical phrase. They run in sort of terraces along the beach. I do not feel justified in offering any opinion about a railway to Greymouth, because I have not considered the matter at all.

44. What is the nature of the silt that comes down the Hokitika River? Is it sand or mud?—No; it is sand and gravel.

45. What distance does the bar extend from the harbour?—It is quite close; I do not suppose it is above half a mile.

46. What depth of bar do you get?—There must be 10 feet.

47. And how far from that point to the centre of the bar do you get five or six fathoms of water?—Very close, I should say; less than a quarter of a mile.

48. And which way is the set of the shingle?—It is to the north. We have found, I may state, by experience, that piling is a very effectual way of conserving the river, and also of keeping open the channel.

49. Have you ever heard of the American plan of driving piles down the centre of a river to keep it open on one side or the other?—Yes, I have heard of it. We have found it is perfectly practicable to keep it open by means of piles. The North Spit runs a great way down, and we propose to pile that, to make it a kind of breakwater against the N.W. wind and waves.

50. Is it high ground or low ground on the north side?—It is simply a gravel ridge, but it seems very solid. We have no doubt about the efficacy of piling from the experience we have had of the work hitherto.

51. *The Chairman*.] I believe a very considerable amount of money has been spent already in making the protective works in the river?—Yes.

52. Have you made any estimate as to the amount of money laid out up to the present time?—No, it is impossible.

53. Do you think it would be £20,000?—More than that; double that.

54. And that has been done from local revenue?—Yes.

55. There has been no assistance from the general funds of the colony to construct these works?—None of this was got from the Government.

56. That was from the funds of the harbour?—That was expended in river works—river conservation. Perhaps you will allow me to mention that this is one of the worst blockades we have had for some time past, and it so completely paralyzes trade that I am very much afraid our leading men will clear out. In fact one of them has done so since I left Hokitika. A blockade comes about every two or three months and completely stops trade, and it is very trying to men of moderate means, who have to pay for goods before they are received. I am afraid, if something is not done, the provincial district will rapidly collapse. Of course it has now become a colonial question, because now the Australian trade is about dried up, and large numbers of vessels are coming from the provinces; and we find goods can be bought as cheaply in the Province of Wellington and Dunedin as in Australia, and consequently the Australian trade is dying out. There are now eighteen or nineteen vessels from the neighbouring provinces floating about the roadstead. Of course that affects trade everywhere. If these vessels could come up their cargoes would be repeated once or twice; but, as it is, Hokitika is being completely ruined, and the other provinces are suffering a corresponding loss.

57. *Hon. Mr. Gisborne*.] What is the annual trade of the port, supposing the harbour were open? The imports are £250,000.

58. What are the exports?—The exports were a little in excess of the imports.

59. What is the number of ships that come in?—Twenty-three to twenty-four ships a month.

60. Do they pay pilotage?—Yes, but of course that goes to the Government in the meantime.

61. Would the Harbour Board be prepared to take over the harbour staff, if they got this assistance?—Of course.

62. They would relieve the colony of the charge?—Yes.

63. That is £900 a year?—We simply want a little assistance to enable us to prosecute works of public utility, and we believe there will be sufficient to do what is required.

64. You say £15,000 from the Government and £10,000 from the security, and you think the Harbour Board would be prepared to raise on the endowment?—Yes; at present we have no income from the endowment. The land is valueless at present.

65. Have the harbour plans been approved of?—No; they will not be in until the 15th of this month.

66. I do not mean the competitive plans; I mean the survey and general plans. I suppose you have laid down some principle to go upon?—Yes.

67. Has that been approved of?—Yes.

68. By whom?—The District Engineer, Mr. O'Connor.

69. Has he had much experience?—Yes.

70. *The Chairman.*] Is the general plan shown on any of the maps here?—The whole survey is there. That map is on a scale of four chains to the inch.

71. *Mr. Woolcock.*] Then you estimate the entire amount that would be required at £40,000?—I think so; but, of course, that is simply my opinion.

72. *Hon. Mr. Gisborne.*] Would a railway to Greymouth add to the trade of Hokitika, in your opinion?—That I cannot say. Of course it would be an advantage in many ways to have a railway in the event of the bars closing.

73. I understand there are a good many vessels lying in the roadstead. Would they not go to the Grey rather than wait two or three months, and the goods be transported across. If you had a railway, would it not increase the trade rather than by the present system of getting goods by sea?—No, it would increase the price so much that it would paralyze us.

74. I mean if a railway were completed between Greymouth and Hokitika, would it not naturally increase the trade of both places, because there would be such facility of transport?—I should think so. I may mention that some of these boats that have been lying so long in the roadstead of Hokitika have gone to Nelson to be discharged. Two vessels have gone and been discharged there to my knowledge.

75. Would these designs deepen the harbour?—Yes.

76. To what depth?—I think 12 feet.

77. At high water?—Yes.

78. *The Chairman.*] When do you expect to have these competitive designs in?—On the 15th. I may mention that I believe there is some mistake made with regard to the strength of the works that have usually been placed on these rivers. It is not strength so much as the mode of constructing the works that is of the greater importance. I think the cost would be much less if a lighter class of works were used. If the timber was of the right kind, and the works were about half the strength that is usually considered necessary, the same result would be secured. In fact, I am in favour of piling altogether in preference to stone. There is no foundation for stone, and the scouring of the water is so bad that the whole fabric is continually being upset.

79. I presume you can get the very best timber at Hokitika at very reasonable prices?—Yes.

80. *Mr. Sheehan.*] Is there totara?—Yes, we have plenty of that and rata.

81. *The Chairman.*] And silver pine?—Yes, we have that also.

82. *Hon. Mr. Gisborne.*] Is not the whole population south of Hokitika, down to Jackson's Bay, dependent upon Hokitika for supplies?—Yes. The recent discoveries we have had there—silver and copper mines—I cannot say definitely the value of these mines, but they promise very well, and I think the discoveries are very likely to cause an increase of population.

83. *Mr. Sheehan.*] What is the outlet of the Kumara country?—It lies about half-way between Greymouth and Hokitika. The Hokitika people have a good deal of advantage in the character of the country; but the Grey people have a train to it now, and that counterbalances a good many of the disadvantages they had with the road.

THURSDAY, 11TH OCTOBER, 1877.

HON. J. A. BONAR examined.

84. *The Chairman.*] You have been requested to give evidence to this Committee in reference to the state of the Hokitika Harbour, and to offer any remarks that may occur to you in connection with such measures as you think necessary for the improvement of the harbour. Mr. Virtue, Chairman of the Harbour Board, has already given his evidence, and the Committee desires to hear yourself, as being one of the oldest residents in Hokitika, and having had considerable experience with reference to the harbour works?—With reference to the harbour, the principal requirement is to have it improved so as to remove the difficulty which occurs annually—that is, its partial or almost complete closing for two or three months in the year. That is the great difficulty we have to contend against, because it involves very heavy expense, not only to those who are proprietors of ships, but also to all persons engaged in business, inasmuch as it has been no uncommon occurrence for goods to have been purchased and shipped for Hokitika, and the ships to have to remain outside the bar after they had arrived there sometimes for sixty, seventy, eighty, or even ninety days. In the ordinary course of trade these goods are drawn against at dates varying from thirty to sixty and ninety days, the result being that bills for payment absolutely mature before the goods have entered the port. That means, of course, a very great loss and embarrassment to those who are engaged in trade, and, as a natural consequence, it adds considerably to the cost of the goods, and thereby the consumer suffers greatly. Besides this, great difficulties are thereby placed in the way of trade. The principal cause of this stoppage on the bar is that during the winter months the water or rain which would otherwise come down to clear out the bar is turned into snow and ice upon the hills, so that the volume of water which would otherwise come down the river is greatly lessened, and the force of the current is insufficient to keep back the force of the sea, which rushes in and throws up sandbanks in the middle of the entrance. The bar is thus practically closed, because it is unsafe for vessels to enter in—that is, vessels drawing more than five or six feet. The bar at Hokitika is kept open partly by river water and partly by a large lagoon just inside the entrance, which adds very considerably to the volume, and if these two waters are separated, as was the case last year, and each find a different outlet, the result is that neither bar is practicable for vessels to work in. Neither channel was practicable for vessels to work in, whereas had those two waters been united into one stream, the channel would have been sufficient, or almost sufficient. It is

believed that protective works might be erected at a reasonable cost, and that the bar might be kept open all the year round; at all events that there would be an average depth sufficient for vessels to enter during any season of the year. I think that that can be done by uniting these two waters into one channel, and if that could be accomplished very great advantages would be derived therefrom. I would moreover say this in connection with the improvement of the harbour: The Harbour Board have now got full plans of the river prepared. They are calling for competitive designs, to be sent in on the 16th of this month, showing the best means for improving the harbour. It is hoped that these will show us some practical plan by which the work may be done. Of course it is more an engineering question than anything else; still, as I have resided there for a number of years, and have watched the bar very carefully, I have no hesitation in saying that I think that for a very moderate sum of money considerable improvements might be effected which will be beneficial to the whole of the districts supplied from the Port of Hokitika. The whole district, extending from Teremakau to Okarito inclusive, are supplied from the Port of Hokitika, Jackson's Bay; and other southern places are also supplied to a large extent from there. In fact, I may say that from the Teremakau South the whole traffic of the country passes through Hokitika, and that any improvement which may be made in the Hokitika Harbour must inevitably lessen the cost of articles of consumption to persons all throughout that district. One thing that adds greatly to the cost of articles is that vessels when coming to that port are uncertain how soon they will get away again, and therefore the owners charge much higher rates of freight than they otherwise would do. Besides, when vessels have to stay there for two or three months, expenses go on the whole of the time, and the owners of the vessels must get from the consumers of the goods a sum for carriage proportionate to the whole annual cost of the maintenance of the vessel.

85. Were you in Hokitika during the last block?—Part of the time.

86. Have you anything specially to say in connection with that?—I saw that five vessels were blocked in, and that the captains were obliged to pay off their crews and lay their vessels up. They were detained there, I should think, seventy or eighty days.

87. *Hon. Mr. Gisborne.*] That was inside. Were there any vessels outside?—Yes, there were some outside as well. During the present season a similar block has taken place, though not quite so protracted, and one of the vessels has lost two men overboard, while the vessels themselves have been injured. Others have had to put back to Nelson and discharge the whole of their cargo, never having yet reached their destination at Hokitika. Of course this is a very serious matter. During the last year the block led to such serious results that persons were actually starting to cart overland from Greymouth (a distance of something like forty miles) flour and similar supplies, and if the blockade had not broken up it would have been necessary to cart supplies from Christchurch and elsewhere. Of course a few small vessels were able at intervals to enter the bar with cargoes—a fourth of the ordinary cargo at increased risk—so that the freights were high, and this did not affect the market price of provisions.

88. *The Chairman.*] Are you aware whether any merchants are giving up business?—Yes. One merchant lately has gone away, owing, I hear, to the risks in the way of business; and I believe that others have left or are going in consequence of these serious impediments to trade. I am quite certain that if something is not done to remedy the present state of things very few persons will continue to remain there. I believe the population will be materially reduced. I will point out another very important feature in this case. In the neighbourhood of Hokitika there are a large number of saw-mills that give employment to a considerable working population, and these operations are very seriously hampered, indeed, so much so that several saw-mills have had to work only half time, and some have entirely stopped, although large orders are in hand. I know that during two months this year saw-millers have had large orders which they have been unable to supply owing to the blockade of the port. Therefore one of our principal industries is being very much injured in consequence of the present condition of the harbour, and this is to be the more regretted, as in a bush country like this, saw-milling must always be a very important industry.

89. Almost every vessel which leaves the port, I understand, has timber on board?—Yes. Nearly every one takes timber, in large or small quantities; and I have no doubt that, if persons could depend upon having their orders fulfilled, there would be an increased demand for timber from that part of the colony.

90. *Sir R. Douglas.*] I suppose you wish to see the work done well?—Distinctly.

91. Do you think it would be requisite before the work was commenced that proper plans should be made?—Certainly. At the present time the Harbour Board has plans. They were drawn up by an engineer under the supervision of the Government Engineer in the district, and the Board have had soundings taken in connection with the plan. Competitive designs have been called for, a bonus of £250 being offered for the best. As soon as these are sent in, I presume they will be forwarded to the Government Engineer for his approval and decision as to the best and most practical plan at a reasonable cost.

92. In the case of the Oamaru Harbour, the best advice obtainable was got. I suppose the Hokitika Board will do the same?—Yes. The circumstances of the two cases, though, are somewhat different. The Oamaru Board had to throw out a breakwater against the whole force of the sea. That is not so in our case.

93. I understood it was the shingle banks and the habit to silt up which they had to contend against in Oamaru?—That is at Timaru. I would point out this, that the bulk of our works would be inside the river. We want to throw the whole body of the river into one channel, whereas at present it is divided into two streams, each of which runs in a different direction from the other. We wish to unite the two bodies, because when united it will force itself through the sandbanks which accumulate; and if you can accomplish this, the continual scour of the stream will keep the channel clear. [Plans produced, and proposed operations described on plans by witness.]

94. What do you suppose would be the cost of doing this work?—The general idea is that a sum of £50,000 would be sufficient to do all that is required.

95. Do you think that sum of money is fairly chargeable against the colony?—Certainly.

96. Do you speak generally or only in respect of the particular case?—Of course a good deal depends upon the circumstances of each case. In this case, where the only means of communication is by shipping—where there is no railway or anything of that sort—and where a large population contributes considerably to the revenue, and is entirely dependent upon the harbour, I think the improvement of that harbour is essentially a colonial work. I may say also that the Colonial Government has already recognized this in the case of Greymouth and Westport, and have spent money on these ports, while nothing has been done for Hokitika.

97. Do you think that the improvement of harbours is essentially a colonial work?—I should think so.

98. Do you contend that there is anything special about the matter? If so, I should like to hear it. Is there a large extent of agricultural land?—Yes, there is a good deal of agricultural land, but it is covered with bush, or a great part of it is, and it would be expensive to bring it under cultivation. But we have much good country.

99. What sort of a port is Greymouth?—Very similar to Hokitika.

100. Large sums of money have been spent there, I understand?—Yes; in connection with the coal mines and the railway.

101. What distance is it from Hokitika?—About forty miles by road; but the distance direct is about twenty-two miles.

102. What sort of gradients are there on the road?—In some places they are very sharp; perhaps one in eight or ten.

103. Would it not be advantageous to run a railway between the two places?—I have always advocated that being done.

104. If it were done, would it not obviate the necessity for these harbour works?—I do not think it would, because, although large sums have been spent upon Greymouth, I am not sure that that harbour could always be relied upon. It is a bar harbour, and, though it may be improved, I do not think it would be sufficient to meet the wants of the whole of that part of the coast.

105. I am given to understand that the road goes through the centres of population. I may say at once I am quite unacquainted with the coast myself. Do you not think if there was a railway run from the one place to the other, through the centres of population, that that would meet the case. Surely a railway to the port would suit all parties better than another port simply. Which do you think would be preferable?—Supposing I had my choice, I should say most distinctly that a good port ought to be obtained. There is now a considerable population south of Hokitika, and that population I think is likely to increase, because that part of the country is practically untried. There is every evidence that it is rich, and it is sure to become more thickly populated than it is at present. Take Kumara as an instance. A few months ago there were a very few persons there; now it has a population of 5,000, and is likely to become a permanent settlement.

106. *Hon. Mr. Gisborne.*] I understand you to incline to the opinion that a good port is of more advantage to country settlers than a good road, because without a port they can neither import nor export?—Yes.

107. Greymouth, you think, would scarcely be a sufficient port to feed the whole population?—Certainly not.

108. It is during the winter months I understand that the Port of Hokitika is closed?—Yes; during July, August, and September, and then the spring freshes come down and the river regains its force.

109. Then the crops would be gathered in before May, and could be got out of the port before it was closed for the winter?—We have not got the length of crops for export yet.

110. Then, as a matter of fact, you want the port opened because it is the port to the mining district?—There is no doubt that at the present time mining is the main resource of that part of the country; but, at the same time, I look at mining as the precursor of agricultural settlement.

111. The district cannot feed itself and must be fed for some time?—Yes, for some time.

112. You say the port is closed for want of water?—The reason is this: At present the river and lagoon waters are divided into a number of different streams, and during the winter months these are not sufficient to overcome the force of the sea, consequently the bar becomes blocked up; but if these waters were combined by the erection of suitable works I have no doubt the bar might easily be kept open all the year round. A reference to the plans of the river will more fully explain this.

113. You have seen the Wanganui bar? Does this resemble that?—Yes. Perhaps it is rather worse, because the Wanganui bar is protected to a certain extent by a bluff.

114. A railway would cost about £6,000 per mile?—The line between Hokitika and Greymouth has been surveyed, and detailed plans have been prepared. The cost, I believe, is estimated at £213,000.

115. What do you consider to be the difference in the value of goods at Hokitika and Greymouth?—I could not say, because during the summer months the prices at the two places are equal; but at times of blockade the values at Hokitika are much enhanced.

116. If you got these harbour works the port charges would be increased?—They are very heavy now.

117. They would then be increased?—You cannot levy port charges above a certain rate.

118. Then the outlay in harbour works would be unproductive?—It would tend to increase the population there.

119. There would be no return in money?—If you improved the port, trade would be largely increased, and port dues thereby increase.

120. But there would be no direct return?—Perhaps not at first. I do not think it would be fair to levy heavy charges upon the present limited population, because the benefit of the work would be felt, I was going to say, by all posterity. It would lead to the permanent occupation and settlement of the surrounding country.

121. In the case of a railway there would be an immediate return, because carriage of goods would have to be paid for?—Yes.

122. Would not the railway confer the same benefit as the making of the port?—I think not to the same extent. In the first instance the railway would cost four times the amount of the harbour works.

123. I do not know anything about the particular case, but, from what you have shown us upon these plans, I should think the cost of the work would be nearly three times the amount you have stated?—I think it is a pretty correct estimate.

124. *Mr. Joyce.*] Would a railway assist your timber trade?—Yes, undoubtedly. It would lead to increased consumption, and give a better outlet, as Greymouth would form a second port of export. The benefit in the respect would be mutual, because the railway would also give Greymouth a second port of export for her coal.

125. Has it occurred to you that the railway charges would be such as to make the timber so expensive that it could not be exported?—No doubt the thing is cut very fine, but at present the timber trade has not a sufficient outlet. There is another thing to be considered: We should have increased facilities for saw-milling in the shape of cheap coal.

126. *Sir R. Douglas.*] You are aware the great cost of timber is the cost of handling?—Yes.

127. And if you once got it in the truck, away it would go to port?—Yes. I think it of the first importance to have our port at Hokitika made good. I do not mean to say that a railway should not be made. I think there should be a railway. It would be of the utmost value to both Greymouth and Hokitika, for it is a curious fact that, while we are blocked in winter, Greymouth is, at times, blocked in summer. Besides, there is no doubt that the lines will ultimately be connected across the hills with the settled districts on the East Coast. The two markets will be mutually valuable; therefore it is essential that the railway system of the colony should be extended to Hokitika. As to the harbour works at Hokitika, I have this additional to say: Suppose they cost £50,000, at 6 per cent. that would render the revenue liable to an annual charge of £3,000. The harbour dues now come to about £2,000 a year, and, with the increase of trade incidental to increased facilities and accommodation, I have no doubt that £3,000 would be reached, so that the interest would be entirely recouped. I may say we do not look to make improvements such as will allow of large vessels coming in at present.

128. *Hon. Mr. Gisborne.*] Has any professional estimate been made of the cost of the harbour works?—No; I merely stated roughly the prevalent opinion as to the cost.

129. When the competitive designs come in, will you be in possession of an estimate?—Certainly; there will be an estimate with each design.

130. Are the persons preparing designs limited to any amount?—It was stated that the funds at the disposal of the Board would be something under £50,000.

131. I understand the object of the Board is to keep the bar open continuously, with the average depth of water there is now on it?—Yes.

132. It is not to make the harbour large enough to admit large ships?—No.

133. Is it a mere temporary work, or is it a work that will last for all time?—We look to make it a permanent work.

134. Would the port of the Grey, with the improvements made and being made, in your opinion, be sufficient to properly maintain the existing condition of things in that part of the country, and, with regard to the future, conduce to its proper opening up and development and settlement, without the Hokitika Harbour at all?—Certainly not. I think it would lead to the depopulation of the southern part of the district.

135. Is there at present a large population south of Hokitika; if so, is it likely to still increase?—Yes.

136. And is not the country south dependent upon Hokitika for supplies?—It is. I may say active steps are being taken to get road connection through the whole district, in order to give facilities for the examination and prospecting of the country south of Hokitika.

137. The country south of Hokitika—Ross, Jackson's Bay, and those places—is supposed to be rich in minerals and precious metals?—Yes. Recent discoveries have pointed in that direction. There have been several discoveries lately which point to the southern country being much more important than it has been supposed to be. The silver mines at Rangitoto have been largely gone into, and considerable expense has already been gone to by the Government so as to make them available. In the event of their turning out a success, I believe there will be a large population settled there, and some very important industries established; and also further south there are many prospects of discoveries which will support a large population. In the neighbourhood of the Paringa River there has been discovered antimony, galena, and copper; and a fair prospect of coal has been obtained. In that direction, too, lithographic stone has been discovered, and steps are being taken to insure its being worked either by local capital or by a large company to be formed at Home.

138. Lithographic stone is scarce, I believe?—So far as we know the whole of the present supply comes from the Solenhofen Quarries in Bavaria, and there is a practical monopoly of those quarries. I have also been told by a gentleman, who ought to know very well, that these quarries are to a certain extent giving out; at any rate, that it is difficult to get the required supplies therefrom.

139. I suppose the demand is unlimited?—It is increasing very rapidly. There is at present a large consumption throughout the world, and the stone is daily being used for new purposes.

140. And has it been ascertained that this stone can be obtained?—Yes. Stone has been brought up and tested, and by some declared to be superior to the stone obtained in Germany. The deposits are larger in quantity, and pretty easy of access.

141. *The Chairman.*] Has a company been formed to work these quarries?—Yes.

142. Do you know for a fact whether efforts have been made to form a large company in London, and that some of the local shareholders have gone Home for that purpose?—Yes. When the company was formed here, it was proposed to make arrangements by which the quarries should be worked in a large way. Steps are now being taken to that end.

143. *Hon. Mr. Gisborne.*] Taking these things into consideration, that the present population

is dependent upon Hokitika, and the fact that great future prosperity is indicated by recent discoveries do you not think it would be penny-wisdom and pound-folly on the part of the colony to withhold a few thousand pounds expenditure in the improvement of the present harbour at Hokitika?—Yes. I think it is a colonial necessity that this harbour should be kept open; and I think that the colony ought to assist in keeping it open, more especially because of the natural difficulties.

144. Are you aware that between Ross and Okarito there are large tracts of open agricultural land?—I have been told so on good authority.

145. And good timber land?—Splendid timber land.

146. Is the Board prepared to raise money itself to assist in doing this work if the colony will also assist?—Yes. The Board is quite prepared to go to the fullest extent of its authorized borrowing powers in view of the Government giving them some assistance.

147. I understand the state of the case is this: The locality says, "We will do all we possibly can in making the harbour a good one if the colony will assist us in the same object"?—Yes. The people themselves are perfectly willing to pay a considerable amount in dues, and to raise money to the fullest extent possible in order to do the work, if the colony will assist, because they recognize that they cannot do it unassisted.

148. The endowments the Board has at present are not immediately valuable?—No; but there is a prospect that they will be worth a good deal.

149. You consider that the opening of the harbour is a cheap and sure way of conducting materially to the prosperity and settlement of the country?—I do. I may say that during the last year Hokitika was one of the few places that showed a large increase in the amount of Customs revenue collected. I think the increase was about 30 per cent. The gold export also increased to a considerable extent.

150. Would the opening of the harbour be immediately reproductive in the sense that it would increase the Customs revenue, increase the population, open up the country, and be conducive to the settlement of it?—I consider it would.

151. Do you consider a railway from Greymouth to Hokitika would be directly reproductive—would it pay working expenses?—I think it would. The experience we have gained in respect to the Greymouth line shows that. The line almost paid before the coal mines were open. I think the line between Hokitika and Greymouth would pay, because it would pass through several centres of population.

152. Would it pay interest on the money expended?—Perhaps not.

153. Do you think it would in a short time?—Yes; there would be a considerable traffic, which does not exist at the present time. Both the coal and the timber trades will increase, and materially assist the railway. I believe it would pay in a very short time.

154. What do you mean by pay?—I believe it would leave a profit over and above working expenses even at the present time.

155. And would pay interest and working expenses shortly?—Yes.

156. Would it also be a public benefit, and conduce to the settlement of the country?—It would.

157. In point of fact, the development of the resources of the country depends upon this: good interior communication, with a good port or ports?—There is no doubt about that.

158. Even when the port is open, are not the arrivals and departures of vessels very precarious. Vessels may be kept out or in by winds, I understand?—Yes; we are always exposed to that. There are natural disadvantages in bar harbours quite sufficient to create obstructions to trade, without allowing those obstructions to exist which might be done away with.

APPENDICES.

APPENDIX A.

Mr. E. BARFF to Captain TURNBULL.

(Telegram.)

Wellington, 13th October, 1877.

I AM instructed by Hokitika and Greymouth Public Works Committee to request you to supply by telegram any information you can give as to the state of the Port of Hokitika in connection with the proposal to construct harbour works, and generally as to your own opinion with regard to those works. Please reply as soon as convenient, as I am anxious to bring up a report to the House.

E. BARFF.

Captain TURNBULL to Mr. E. BARFF.

(Telegram.)

Hokitika, 13th October, 1877.

No definite plans of harbour works yet decided on, but much required for improving the port and conserving the bars. Will wire further on Monday.

T. TURNBULL.

Captain TURNBULL to Mr. E. BARFF.

(Telegram.)

Hokitika, 15th October, 1877.

I AM fully persuaded that the piling from wharf to North Spit end, and piling round South Spit end from lagoon, also piling from the Maori houses (cross-section number one on map), also near line in cross-section number ten to opposite transit shed, as proposed by the Harbour Board, would be of incalculable good in conserving the river, protecting property, and opening a good channel seaward.

T. TURNBULL.

APPENDIX B.

RETURN of the VALUE of IMPORTS and EXPORTS and of the SHIPPING ENTERED and CLEARED (Foreign and Coastwise) at the PORT of HOKITIKA, for the Years 1875 and 1876.

Years.	Value of Imports.	Value of Exports.	Shipping Entered.				Shipping Cleared.			
			Foreign.		Coastwise.		Foreign.		Coastwise.	
	£	£	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
1875	115,181	193,006	42	14,611	317	33,814	35	16,675	333	31,915
1876	116,659	89,831	48	19,512	224	25,272	23	10,977	248	31,303

Customs Department,
Wellington, 11th September, 1877.

WILLIAM SEED,
Secretary and Inspector of Customs.

APPENDIX C.

Mr. E. BARFF to Mr. D. W. VIRTUE.

(Telegram.)

Wellington, 16th October, 1877.

PLEASE forward earliest information with regard to competitive designs for harbour works. Committee met this morning, but adjourned until some information as to probable cost is received.

E. BARFF.

Mr. D. W. VIRTUE to Mr. E. BARFF.

(Telegram.)

Hokitika, 16th October, 1877.

MANY thanks. Expect all the plans in by Wednesday's coach. After examination will wire you information as to cost of works early on Thursday morning.

D. W. VIRTUE.

Mr. D. W. VIRTUE to Mr. BARFF.

(Telegram.)

Hokitika, 17th October, 1877.

AFTER examination of plans by the Board, about thirty in number, am glad to say that the proposed works can be done for thirty to forty thousand pounds. Plans will be forwarded first steamer to Wellington.

D. W. VIRTUE.

Mr. E. BARFF to Mr. D. W. VIRTUE.

(Telegram.)

Wellington, 20th October, 1877.

IN the event of twenty-five thousand pounds being given from colonial funds, would Harbour Board pledge themselves to raise fifteen thousand pounds?

E. BARFF.

Mr. D. W. VIRTUE to Mr. E. BARFF.

(Telegram.)

Hokitika, 20th October, 1877.

YES.

D. W. VIRTUE.

By Authority: GEORGE DIDSBUXY, Government Printer, Wellington.—1877.

