

1873.

NEW ZEALAND.

# RAILWAY CONTRACTS

ENTERED INTO BETWEEN THE GOVERNOR OF NEW ZEALAND  
AND MESSRS. BROGDEN AND SONS.

*Presented to both Houses of the General Assembly, by Command of His Excellency.*

## WAITARA AND NEW PLYMOUTH RAILWAY.

ARTICLES OF AGREEMENT made and entered into this 19th day of July, 1873, between the GOVERNOR of NEW ZEALAND, in the name and on behalf of HER MAJESTY the QUEEN of the one part, and ALEXANDER BROGDEN, HENRY BROGDEN, and JAMES BROGDEN, all of Queen's Square, in the City of Westminster, in England, Railway Contractors, (hereinafter referred to as "the Contractors,") of the other part :

Whereas by the sixth section of "The Railways Act, 1871," it is, amongst other things, enacted that the Governor may, if he think fit, construct and maintain, or cause to be constructed and maintained, under the provisions of "The Immigration and Public Works Act, 1870," (hereinafter referred to as "the said Act,") and "The Immigration and Public Works Act Amendment Act, 1871," (hereinafter referred to as "the said Amending Act,") certain Railways, and amongst others, a Railway from New Plymouth, in the Province of Taranaki, to Waitara, in the said Province (which said Railway is hereinafter referred to as "the Railway herein mentioned") :

And whereas by the said Amending Act it is provided that all Contracts under any Act authorizing the construction of any Railway under the said Act or the said Amending Act, shall be entered into in the name of the Queen, her heirs and successors :

And whereas the Governor of New Zealand, on behalf of the Queen, has agreed with the Contractors for the execution and construction by them of the works described or referred to herein, and in the Specifications, Conditions, Drawings, and Plans hereto annexed or herein referred to, all of which Specifications, Conditions, Drawings, and Plans are signed by the Contractors and John Carruthers, Esquire, the Chief Engineer of the said Colony, on behalf of the Colony: Now, these presents witness that Her Majesty the Queen, for herself, her heirs and successors, (all of whom are hereinafter included in the expression "the Queen,") and so far as the covenants hereinafter contained are to be performed or observed on her or their parts respectively, doth hereby covenant with the Contractors, their executors, administrators, and assigns, (all of whom are hereinafter included in the expression "the Contractors,") and the Contractors and each of them, for themselves and himself, and their respective heirs, executors, administrators, and assigns, so far as such covenants hereinafter contained are to be performed or observed on their parts, do and doth hereby covenant with the Queen, her heirs, and successors, in manner hereinafter appearing, that is to say—

1. That they, the Contractors, shall and will, in all respects subject to and in accordance with the said Conditions, Specifications, Drawings, and Plans, construct, make, complete, and maintain, and do and perform all the works, and supply all such plant and materials, as are by the said Specifications and Conditions to be supplied by the Contractor, whether such works, plant, and materials are described or referred to in the said Conditions, Specifications, Drawings, or Plans, or are extra or in addition thereto, within the time mentioned in the said Conditions, subject, however, to the provisions contained in the said Conditions for extension of time.

2. That the Queen shall and will, free of cost to the Contractors, provide and deliver to the Contractors, at the ship's side at the Harbour of Wellington, the iron rails and fastenings required for the permanent way and the rolling stock respectively mentioned in the Specification.

3. That the Queen will pay the Contractors for the construction and execution of the said works, and the maintenance thereof, for the period of three months from the completion of the works, and for the supply of all such plant and materials as the Contractors are to supply under the provisions of this Contract as aforesaid, the sum of forty-one thousand pounds (exclusive of the supply of such plant and materials as by the said Specifications and Conditions it is provided

the Queen or the Government of New Zealand shall supply, and subject to the provisions contained in the Conditions and Specifications for increase and decrease in case of extras or deductions, and to the provisions contained in the said Specifications or Conditions for extra payment to the Contractors by percentages on the cost of such works as, by such Specifications it is provided, the Contractors are to receive payment by way of percentage on the cost thereof).

4. The Queen shall and will make payments to the Contractors upon account of the said sums herein agreed to be paid, at the rate and times, and upon the terms and conditions mentioned in the said Specifications and Conditions.

Lastly. The parties hereto shall and will each respectively perform, observe, and fulfil all and singular the conditions and stipulations expressed or contained in the said General Conditions and Specifications, and which thereby it is provided shall be performed, observed, or fulfilled by such parties respectively.

In witness whereof the Seal of the Colony has hereunto been affixed, and the said Contractors have hereunto set their hands and seals, the day and year first above written.

(L.S.)

JAMES FERGUSSON, Governor.

Sealed with the Seal of the Colony, and signed by the  
Governor, in the presence of

EDWARD RICHARDSON.

ALEXANDER BROGDEN. (L.S.)

HENRY BROGDEN. (L.S.)

JAMES BROGDEN. (L.S.)

By their Attorney, JOHN HENDERSON.

Signed, sealed, and delivered by Alexander Brogden,  
Henry Brogden, and James Brogden, by their  
Attorney, John Henderson, in the presence of

WM. THOS. LOCKE TRAVERS,  
Solicitor, Wellington.

Approved in Council, 25th July, 1873.

FORSTER GORING,  
Clerk of the Executive Council.

## GENERAL CONDITIONS FOR THE WAITARA AND NEW PLYMOUTH RAILWAY.

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### INTERPRETATION CLAUSE.

1. In these Conditions the words "Minister for Public Works" shall mean the Minister for Public Works appointed under "The Immigration and Public Works Act, 1870," or any Minister or person for the time being authorized by the Governor to act for such Minister in respect of the special work contracted for; the word "Engineer" shall mean the Engineer for the time being who shall have principal charge of the works on behalf of the Government; and the word "Contractor" shall mean "Contractors" when two or more persons tender or contract jointly for the work; and the word "month" shall mean "calendar month."

### WORKS, &c., TO BE ACCORDING TO DRAWINGS AND SPECIFICATIONS, AND TO THE SATISFACTION OF THE ENGINEER.

2. All the materials used are to be the best of their respective kinds, and all works of every description throughout are, subject to the provisions hereinafter contained, to be executed conformably to the several drawings and details prepared or that may be prepared for that purpose, and herein referred to, in the strictest accordance with the provisions of the specifications, and in the best, most substantial, and workmanlike manner, and to the satisfaction of the Engineer; and should any work not be so executed, it shall be immediately altered and amended at the cost of the Contractor.

### PLANS, &c.

3. A copy of the plans and drawings, with the specifications, shall be furnished to the Contractor by the Engineer, and the plans and drawings referred to in the specification, and the specification, shall be taken together to explain each other; and if, in the execution of the works, it shall be found that anything has been omitted or mis-stated either in the drawings or specification, which is necessary for the proper performance and completion of any part or parts of the works, the Contractor shall at his own cost and expense execute the same, and provide whatever may be requisite for so doing, provided the extra cost thereof shall not exceed the sum of £200 in each particular case. Any written dimensions on the drawings shall be taken in all cases in preference to measurements by the scale attached, and anything contained either in the drawings or specification shall be equally binding on the Contractor as if it were contained in both; and in case the written or figured dimensions on the drawings shall disagree with the scaling, or in case there shall be any discrepancy between the drawings and specification, or any ambiguity in them, such occurrence shall not invalidate the contract, but the same shall be rectified by the Engineer if thought requisite, and the Contractor shall not be entitled to make any claim or demand for compensation or damages on account of such discrepancy or ambiguity. If neither the drawings nor the specification contain any notice of minor parts, the intention to include which is nevertheless clearly to be inferred, and which parts are obviously necessary for the workmanlike completion and stability of the work, all such parts are to be made and executed by the Contractor without extra charge, and are to be deemed by him as included in the sum at which he contracts for the works.

### EXTRA WORKS AND ALTERATION OF WORKS.

4. The Contractor is to make and execute, in the like manner as aforesaid, and with the like materials as aforesaid, any additions, deviations, or alterations to, from, or in the works, which the Engineer may from time to time, previously to the commencement or during the progress of the works, by an order in writing, require, at the rates mentioned in the Schedule of Prices attached. In case of non-agreement as to price, the work shall be done by the Contractor as required by the Engineer, and the price thereof shall be settled by arbitration as hereinafter provided, and shall, when so ascertained, be added to and thenceforth deemed to be part of the contract price for the works to be executed under this contract; but no additions, deviations, or alterations whatever, which shall be claimed by the Contractor, will be admitted or recognized under any circumstances, or will be allowed or paid for, which shall be done or executed without or contrary to any previous order from the Engineer in writing as aforesaid: Provided always that no addition, deviation, or alteration from the plans and specifications to be ordered by the Engineer as aforesaid shall involve an increased expenditure in connection with the works or any part thereof, unless distinctly

authorized by writing under the hand of the Minister for Public Works, who, before authorizing any such deviation, shall obtain from the Engineer an estimate of the increased expenditure arising therefrom: Provided also that in all cases where such deviation, addition, or alteration as last aforesaid, from the plans and specifications, shall involve an outlay exceeding £500, the consent of the Governor in Council shall first be obtained. And in all cases it shall be the duty of the Contractor to satisfy himself that such addition, deviation, or alteration (if any) has been duly authorized in the manner required by "The Immigration and Public Works Act, 1870," and also, that to any such outlay as aforesaid, requiring the consent of the Governor in Council as aforesaid, such consent has been obtained, as required by the said Act.

#### OMISSION OF PORTIONS OF WORKS.

5. To the Minister for Public Works there is reserved the right from time to time of requiring the omission of any particular portion or portions of works described in the specification or shown on the drawings, and of deducting the value thereof from the amount of the contract, such value to be agreed upon between the Minister for Public Works and the Contractor, or in case of difference to be settled by arbitration as hereinafter provided; but the Contractor shall be entitled to be paid a sum of ten per cent. on the agreed or ascertained value of the work omitted; such sums for omissions to be paid on the completion of the contract.

#### MATERIALS, LABOUR, &c.

6. The Contractor shall provide, at his own costs and charges, all materials, labour, tools, plant, tackle, machinery, scaffolding, waggons, cordage, cartage, stores, planking, centres, coffer dams, diving bells, staging, diving dresses, and everything necessary for the proper execution and completion of the several works, and centres must not be struck without the written authority of the Engineer. The Contractor is also to provide, at his cost, for keeping all the trenches and foundations free from water, and for preventing all slips of ground into the trenches. All material and all prepared work brought upon the ground of the works for use therein is to be considered the property of the Queen, and the Contractor shall not take away any such material or work without the written authority of the Engineer, unless the same shall be required for the purposes of other works under this contract. The Contractor will be required to set out accurately, at his own expense, all the works comprised in this contract, agreeably to the drawings and specifications, and shall be held responsible for their being so set out and executed accordingly.

#### REMOVAL OF IMPROPER MATERIALS.

7. It shall be lawful for the Engineer to order the removal from the works of any materials, whether fixed or not, which may appear to him to be of an inferior or improper description, and the Contractor shall remove the same within twenty-four hours after a written notice in that behalf given to him by the Engineer; and in case of neglect or refusal to remove the same according to such notice, the Engineer shall have power to remove the same at the cost of the Contractor.

#### CONTRACTOR TO BE REPRESENTED.

8. The Contractor at all times during the progress of the works, when he is not personally superintending them, must have a responsible agent or overseer stationed on them, to receive instructions from the Engineer, and to represent him for all the purposes of this contract.

#### PROGRESS OF WORKS.

9. If the Contractor shall, in the opinion of the Engineer, fail to make such progress with the works as the Engineer shall deem sufficient to insure their completion within the specified time, or if the Contractor shall use or employ bad or insufficient materials, or execute any work in an imperfect manner, and shall fail or neglect to rectify any such cause of complaint for fourteen days after being thereunto required in writing by the Engineer, or if the Contractor shall, in the judgment of the Engineer, commit a wilful breach of his contract, then, and in any of such cases, it shall be lawful for the Minister for Public Works, by any instrument in writing under his hand delivered to the Contractor, or to his representative on the works, or left at the Contractor's usual or last known place of abode or business, absolutely to determine this contract, and from and after the delivery of the said instrument as aforesaid, the contract shall be absolutely determined; and in the event of such determination happening, then it shall be lawful for the said Minister, after having delivered such instrument to the Contractor as aforesaid, to take the works out of the Contractor's possession, and at the option of such Minister either to carry the works on under the Engineer or by another Contractor, and that either after advertising for Contractors or without doing so, as he shall think fit; and all the materials, implements and plant then upon or used in connection with the works may be used in and applied for the purpose of completing the works; and on the final completion of the works, if it should be found that the balance of the contract price remaining unpaid, if any, and the deposit money and percentages, together with the net proceeds realized by the sale of the then residue of such materials, implements, and plant as aforesaid, after being sold in any way that may appear to be most advisable to the Minister for Public Works, is not sufficient to meet the outlay

incurred in completing the works in all respects, then the Contractor, his executors or administrators, shall be bound to pay to the Minister for Public Works the surplus expenditure above such balance, and other sums as aforesaid. But if, on the other hand, the works shall be completed within the contract price, then there shall be paid to the contractor, or his executors, administrators, or assigns, such balance as may be due to him or them, including the deposit money and percentages or retention money, if any, but without any interest thereon; and the Engineer shall, within fourteen days after such balance has been ascertained to be due, grant authority to the Contractor or his representatives for the removal of all surplus material, implements, and plant belonging to him or them, and remaining on the works after their completion, if not sold as before mentioned. But it is herein expressly provided that, in the event of any materials, implements, or plant being returned to the Contractor or his representatives, or being allowed to be removed by him or them as aforesaid, Her Majesty the Queen shall not be in any way liable for any loss, diminution, wear and tear, or injury, such materials, implements, or plant may have sustained during the completion of the work.

#### CONTRACTOR NOT TO SUBLET WORKS TO PERSONS PREVIOUSLY OBJECTED TO—BANKRUPTCY, INSOLVENCY, OR DEATH.

10. The Contractor shall not sublet any portion of the works to any person who shall have been previously objected to by the Engineer by notice in writing to the Contractor. If the Contractor become bankrupt or insolvent, or shall make an assignment of his estate for the benefit of his creditors, or shall die before the final completion of the contract, then it shall be lawful for the Minister for Public Works, on behalf of the Queen, summarily, and of his own authority, and without any process of law for that purpose, to take possession of the works, and to take them out of the hands of the Contractor, or of his executors, or administrators, or of the assignees or trustees of his estate, and to employ persons for the execution and completion of the same, and that either after advertising for contractors or without doing so, as he shall think fit; and all the then remaining materials, implements, and plant aforesaid may be used in and applied for the purposes of the works; and on the final completion of the works, if it should be found that the balance of the contract price remaining unpaid, if any, and the deposit money and percentages aforesaid, together with the value of the remaining materials, implements, and plant as aforesaid, after being sold in any way that may appear to be most advisable to the Minister for Public Works, is not sufficient to meet the outlay incurred in completing the works in all respects, then the Contractor, his executors or administrators, shall be bound to pay to the Minister for Public Works the surplus expenditure above such balance, and other sums as aforesaid; and in the case of bankruptcy or insolvency, then Her Majesty the Queen shall rank as a creditor to the amount of such surplus. But if, on the other hand, the works shall be completed within the contract price, then there shall be paid to the Contractor, or his executors, administrators, or assigns, such balance as may be due to him or them, including the deposit money and percentages or retention money, if any, but without any interest thereon; and the Engineer shall, within fourteen days after such balance has been ascertained to be due, grant authority to the Contractor or his representatives for the removal of all surplus material, implements, and plant belonging to him or them, and remaining on the works after their completion, if not sold as before mentioned. But it is herein expressly provided that, in the event of any materials, implements, or plant being returned to the Contractor or his representatives or being allowed to be removed by him or them as aforesaid, Her Majesty the Queen shall not be in any way liable for any loss, diminution, wear and tear, or injury, such materials, implements, or plant may have sustained during the completion of the work.

#### LIABILITIES OF CONTRACTOR.

11. The exercise by the Minister for Public Works, or Engineer, of any of their respective powers, shall not relieve the Contractor from any liability to which he may be subject for any breach of the contract.

#### TIME OF COMPLETION.

12. Subject as herein provided, the Contractor shall complete the whole of the works of this contract on or before the first day of April, one thousand eight hundred and seventy-five, failing which the Minister for Public Works shall be entitled to deduct from the final balance due to the Contractor a sum calculated at the rate of three pounds per cent. per annum on all moneys which shall have been paid to the Contractor under this contract, computed from the date on which the work ought to have been completed under this contract up to the date of the completion of the work: Provided that if the Minister for Public Works shall have taken over as completed any portion of the work, the cost of that portion shall not be included in the calculation last aforesaid. But in the event of the Contractor being prevented by earthquake, tempest, flood, or otherwise by the act of God or by the act of the Queen's enemies, rebellion, restraint of princes, or otherwise by anything in the nature of *vis major*, or by reason of any strike amongst the workmen engaged upon the works, or by reason of any alterations, deviations, or additions, or extra works being required, or in case of any delay in furnishing any material to be supplied to the Contractor by the Governor, the Engineer shall allow such an extension of

time as he shall think adequate for such enforced delay, or for such alterations, deviations, additions, or extra works; and at the expiration of the time so allowed, the deductions or sets-off for delay shall come into operation.

### SUSPENSION OF WORKS.

13. The Contractor, on receiving a written notice from the Engineer, shall suspend, or stop, the whole or any portion of the works as may be directed, and the Governor, on behalf of the Queen, shall make good to the Contractor any loss or damage he may sustain through such suspension or stoppage, to be ascertained, in case of non-agreement between the Contractor and the Minister, by arbitration, as hereinafter mentioned; and the Minister for Public Works shall in no case be bound to give the Contractor possession of the ground or work until thirty days after the signature of the contract by the Contractor; but a commensurate extension of time for completing the works will be allowed to the Contractor, such extension of time to be at the discretion of and to be decided by the Engineer.

### DAMAGES TO BE MADE GOOD, &c.

14. The Contractor shall also provide for effectually securing and covering the several walls and works from the weather, as occasion may require, or as the Engineer may direct; and if any damage or loss should happen to any of the works, plant, or materials—whether from fire, theft, or weather, force of waves, or from any other cause—while the works and buildings are unfinished or remain in possession of the Contractor, the Contractor must properly and immediately repair and make good the same at his own expense, and to the satisfaction of the Engineer; unless it can be shown that the damage arises from insufficient or imperfect designs, when the Contractor will not be held responsible, and, in case of dispute, the matter shall be settled by arbitration, as hereinafter provided.

### TRESPASS.

15. The Contractor shall not enter upon any lands outside the line of fences for the construction of the works, or for any purpose whatever in connection with this contract, without the consent of the occupier or owner, except at his own cost and risk, and shall not, without the consent of the Engineer, remove any trees or buildings within the line of the Railway fences, nor shall he open or throw down any part of a fence without making sufficient provision, by temporary fences, to be erected and maintained at his cost, for keeping cattle, sheep, or other stock from straying from or into any enclosure affected thereby; and any legal process causing costs or damage to the Government for any trespass incurred by the act or negligence of the Contractor or his workmen, shall be deducted from the contract price, and be taken as payment made on account of his contract.

### MAINTENANCE OF WORKS.

16. The Contractor shall be bound to keep and maintain in good and sufficient repair the whole works executed under the contract, and shall provide all labour, materials, &c., necessary for such maintenance for a period of three months from and after the time when all the works under the contract have been fully completed; and the Contractor shall, on the expiry of the said period of maintenance, be bound to deliver up the whole works in good and sufficient condition, and to the satisfaction of the Engineer. The Contractor shall also be liable for any accident, damages or injury whatsoever to the public or any private person which may be caused by his operations during the progress of the works, or during their maintenance. He shall also maintain all night-lights and temporary footpaths required by any Municipal or other authorities, or for the safety of the public, and shall make all necessary arrangements, by siding or otherwise, as required by the Engineer, to prevent stoppage of public traffic.

### LAND.

17. The Minister for Public Works will, free of all expense, put the Contractor in possession of all land required for the permanent works of the Railway, including land required for side-cutting, ballasting, spoil banks, and road approaches, road diversions, and slips, and also from time to time, as occasion may require, but at the cost of the Contractor and so far only as the Parliamentary powers possessed by the Governor or the Minister for Public Works will extend to enable them so to do, of all such land as may be necessary for temporary purposes in connection with the works.

18. The Minister for Public Works shall, within thirty days after the signing of the contract by the Contractor, put the Contractor in possession of such parts of the land for the permanent works as may be necessary for the commencement thereof, and will from time to time, after fifteen days' notice in that behalf shall have been given by the Contractor to the Engineer, put the Contractor in possession of all such other parts of the lands required for the permanent works as may be necessary for the immediate prosecution thereof.

### DELAY IN GIVING POSSESSION OF LAND.

19. If any delay shall take place in giving to the Contractor the possession of any land required for the permanent works as aforesaid, such delay shall not be deemed to be a breach of the contract, but the Contractor shall be entitled to such reasonable extension of time for the completion of the works as shall be fixed by the Engineer, or, in case of dispute, by arbitration, as hereinafter provided.

### POWER TO REQUIRE DISMISSAL OF ANY WORKMAN.

20. The Engineer may require the dismissal within twenty-four hours by the Contractor of any agent, overseer, foreman, workman, or other person employed by him on the works, for incompetency or misconduct, and any man so dismissed shall not be again employed upon the works.

### TRUCK SYSTEM NOT ALLOWED.

21. The workmen, tradesmen, and labourers of every class employed on the works to which these Conditions refer, shall be paid their wages in full in money of the current coin of the Colony, and no ticket or other system of payment by provisions, liquors, or goods will on any pretence be allowed, nor shall the Contractor, or any person or persons employed by him, or in any way connected with him, establish any shop for the supply of liquors, provisions, or goods, nor shall the Contractor oblige his workmen to take provisions, liquors, or goods of any kind from any person in particular. The workmen of every class shall be paid on the works if it be possible, or in some building adjoining, and in no case shall they be paid at a public-house, or other place where liquors or refreshments are sold.

### PAYMENTS.

22. Payments will be made monthly, for each calendar month, as the works proceed, on the certificate in writing of the Engineer, at a rate not exceeding 90 per cent. on the value of the work actually done, as estimated by the Engineer, having due regard in such estimate to the actual value thereof, and at a rate not exceeding 50 per cent. on the value of such plant and materials on the ground as may be approved by the Engineer, as fit and necessary for the work, as estimated by the Engineer, having due regard in such estimate to the actual value thereof; such certificates for work done, and materials and plant supplied, in each calendar month, to be delivered to the Contractor within fourteen days after the termination of such month, and the balance, less 5 per cent., together with the amount deposited as cash security, if any, in fourteen (14) days, or as nearly as may be, after the Engineer shall have certified under his hand that the works have been finally and satisfactorily completed, and that such balance, together with the cash security, is due to the Contractor. The said 5 per cent. will be retained for three months to insure the fulfilment of clause 19 of these Conditions, and from which sums may be deducted the costs of any repairs or defects, failing the Contractor executing the same: Provided always that no sum or sums of money shall be considered to be due or owing to the Contractor, nor shall the Contractor make any claim for or on account of any work executed or maintained by him, or for or on account of plant or materials supplied by him, unless such certificate as aforesaid shall have been given by the Engineer as aforesaid; nor shall any sum or sums of money so certified be considered to be made payable to the Contractor until the expiration of fourteen days after such certificate shall have been presented to the Minister for Public Works; nor shall any omission to pay the amount of such certificate at the time the same shall be held payable be deemed or held to be a breach of or to vitiate the contract, but in case of such omission the Contractor shall be entitled to interest on the amount certified for, at the rate of ten pounds per centum per annum, for such time as such omission shall continue.

### NEGLECT TO CERTIFY.

23. In case the Engineer shall neglect or refuse to certify the amount due to the Contractor in respect of the work, or plant or materials, in manner and within the times mentioned in the foregoing condition, and shall continue such neglect or refusal for a period of fourteen days succeeding the fourteenth day after the end of the month in which the work was done, or the plant or material supplied, as the case may be, the Contractor shall be entitled to measure and value the same, having due regard in his estimate to the actual value thereof, and the measure and value so estimated by the Contractor shall be temporarily accepted by the Governor so far as regards the progress payment to be made to the Contractor in respect thereof under the foregoing condition, and the payment provided by that condition shall be made accordingly, with interest thereon at the rate of ten pounds per centum per annum, during the period of delay occasioned by the neglect or refusal of the Engineer: Provided always that in all cases in which a certificate shall, within the period or further period hereinbefore provided, as the case may be, have actually been delivered to the Contractor, such certificate shall, for the purpose of the progress payment to be made thereunder, be conclusive; and in case of any dispute between the Contractor and the Engineer as to the estimate therein made of value of work done, or plant or materials provided, as the case may be, of which dispute notice shall have been given by the Contractor to

the Minister for Public Works within fourteen days after the delivery of the certificate to the Contractor, such dispute shall be referred to arbitration as hereinafter mentioned.

#### PROGRESS PAYMENTS WITHOUT PREJUDICE, &c.

24. No certificate given to the Contractor for the purpose of any progress payments shall prevent the Engineer, at any future time before the termination of the contract, from rejecting all unsound materials and improper workmanship discovered subsequently to the giving of the last previous certificate; and notwithstanding the giving of any certificate that portions or the whole of the works have been satisfactorily performed, the Engineer may require the Contractor to remove and amend, at any future time previously to the final payment on account of the construction or maintenance of the works, any work that may be found not to be performed in accordance with the contract, and the Contractor must remove and amend, at his own cost, all such work when so required, notwithstanding any approval made or given by the Assistant Engineer or Inspector. The Minister for Public Works shall have power, on the report of the Engineer that the work approved of as aforesaid is not in accordance with the contract, to deduct from any moneys that may be due or that may become due to the Contractor the whole amount that has been paid on account of such work.

If, in the opinion of the Minister for Public Works, further inquiry is desirable or necessary before any certificate is paid, the Minister for Public Works shall have power to suspend the payment of all or any part of the amount mentioned in any such certificate for a period not exceeding one month from the date at which, in the ordinary course, the money would have been paid; and in such case, on payment of the amount payable, the Contractor shall be entitled to receive interest at the rate of ten pounds per centum per annum during such additional delay.

#### STAMPS, LICENSE FEES, &c.

25. The Contractor shall bear and pay all costs, charges, and expenses of preparing, executing, and completing this contract, and all duty stamps, licenses, Building Surveyor's fees, or other charges or fees whatsoever lawfully demanded by the Municipal or other authorities.

#### CUSTOMS AND WHARF DUTIES, &c.

26. In the event of the Contractors being compelled to pay any Customs duties or wharf dues or fees on any goods imported into New Zealand by them for the purposes of the said works or transhipped or carried by them from any port or place in New Zealand to any other place in New Zealand, the Queen shall and will repay the same to the Contractors after one month's notice in writing by the Contractor to the Minister demanding payment thereof and giving details of such payment, and the production of vouchers or other proof of such payment.

#### ARBITRATION.

27. Should any dispute arise between the Contractor and the Engineer, or between the Contractor and the Minister for Public Works or the Government, relative to the force and intent and meaning of the specification, drawings, or conditions, or to the mode of carrying on the works, or the nature or quality of materials used or supplied to be used, or workmanship of work done, or as to the maintenance of the works, or as to the expense of additional works, or of alterations or deviations from the specifications or plans, or as to any other matter connected with the execution of the works, or with the contract, specifications, drawings, or conditions, or as to any matter which by this contract it is expressly provided is to be settled, ascertained, or determined by arbitration, such dispute shall be referred in writing to the sole determination, arbitrament, and award of the Judge of the Supreme Court assigned to that Judicial District of the Supreme Court within which the works relative to which the dispute shall have arisen have been or are to be executed, whose award shall be final, binding, and conclusive on all parties: Provided, however, that before any such dispute as aforesaid shall be so referred, the Contractor shall give to the Minister for Public Works one calendar month's notice in writing of such dispute, and of the matter and cause thereof, and in such notice the Contractor's claim shall be explicitly stated; and if such claim be for pecuniary compensation, the amount thereof shall also be stated.



## SPECIFICATION OF THE MANNER OF CONSTRUCTING THE WAITARA AND NEW PLYMOUTH RAILWAY.

### GENERAL DESCRIPTION.

1. The line of Railway included under the title "Waitara and New Plymouth Railway," and to which this Specification applies, begins at Waitara and terminates at New Plymouth, as delineated on the accompanying plans and sections; the total length of the contract being eleven miles thirteen chains and six links, or thereabouts, with an addition of half a mile of sidings.

### DRAWINGS.

2. The drawings, including general plans and longitudinal sections, as shown on List A, accompany this Specification. These show the character of the works to be executed. Further drawings of details will be issued from time to time as may be necessary. The general plan is drawn to a scale of three chains to an inch, and shows the course of the Railway, the centre line of which has been staked out on the ground, and is represented on the general plan by a red line. The road and stream diversions are shown on the general plan. The longitudinal section is drawn to a horizontal scale of three chains to the inch, and to a vertical scale of thirty feet to the inch. It represents the natural profile of the ground along the centre line of the railway. The red line shows the level of the bottom of the ballast. On the longitudinal section are shown the positions and sizes of the culverts and bridges described in the Specification.

### ALIGNMENT OF STRUCTURES.

3. In the construction of bridges, culverts, road-crossings, and generally, it is to be understood that they are to intersect the line of Railway at such angle or curve as may be necessary and approved in each case, although they may be shown on the drawings straight and at right angles; and in the interpretation of the drawings and schedules and of this Specification, it shall be distinctly understood that all works or materials necessary to the due and workmanlike completion of every erection are to be provided, whether specially described or not.

### CONTRACTOR TO PROVIDE LABOUR, PLANT, AND MATERIALS.

4. The Contractor is to provide all labour, tools, implements, plant, and materials, and is well and substantially to construct and complete the Railway in accordance with the plans and specifications, and to deliver the same complete on 1st April, 1875; and is to maintain and keep the said Railway, and all works connected therewith, in perfect order and repair for the space of three months from the delivery of the same to the Government.

The said Railway shall be made in accordance with this Specification, and with the plans and sections herein referred to, or with such modifications of the plans and sections as the Engineer shall order.

### FELLING, CLEARING, AND GRUBBING.

5. The whole of the timber within one chain and a half of the centre line is to be felled over a length of about 38·6 chains. Of this extent the central chain is to be cleared by removing all logs and underbrush, half a chain from the centre line, and to a greater distance where the formation requires it. Throughout all cuttings, and along formations on the level, all stumps and roots are to be grubbed out entirely and removed, so as to leave no loose timber whatever, and no stumps within two feet of formation level along centre or within one foot of the surface in the slopes.

### FENCING.

6. Seven and a quarter miles of the line are to be fenced on two sides; and wherever present fences are disturbed or interfered with, they are to be made good at the expense of the Contractor. At all crossings of roads and other places where cattle stops are used, fences are to be completed across the line up to the cattle stops.

The description of fencing used shall be that described in General Fencing Specification attached, viz., post and four rails, with slip panels to the number of forty-two, as shown and described therein.

### EARTHWORKS.

7. All flax, scrub, rushes, or other vegetation growing on the line of the Railway, shall be cut down and removed to the full width between the outside of the slopes, and there burnt.

No public or private road that crosses or intersects the Railway or works thereof, shall be obstructed by excavation or otherwise, until the Contractor shall have provided such temporary roads as may be necessary for the traffic.

The cuttings are to have a base at formation level of 10 feet in rock, 11 feet in loose rock, and 13 feet elsewhere, and are to be made in accordance with plan and section attached; but should the Engineer require any of the cuttings or banks to be made with different slopes from those shown on Drawing No. 3, the difference in cost shall be added to or deducted from the contract sum. Such alteration to be ordered in writing.

A drain is to be cut along the bottom of slopes of cuttings, as shown in drawings, and in all cases they must be provided with a proper outfall of at least the same size. Catchwater drains are to be dug above the top of one slope of cuttings, at a distance of from a quarter of a chain to a chain from the top of slopes. These ditches are not to average less than 5 cubic feet per lineal yard, and are to be true and regular to the inclinations directed; no stumps or roots to be left in them.

The embankments must be carried forward uniformly of the proper shape, with such an addition to the heights and widths as a due allowance for the shrinking of the material requires, so as to avoid as far as practicable the necessity for making subsequent additions either to the heights or widths of the embankments, to bring them to the correct levels and dimensions.

Whenever the foundation of an embankment is on sloping ground, the Contractor, if required, must at his own expense, cut steps and benches under the base of the embankment.

The top of embankment at formation level is to be 10 feet wide; the slopes to be trimmed off to an inclination of one and a half horizontal to one vertical, and to be maintained full and true until the completion of the contract.

The Contractor shall, unless otherwise directed by the Engineer, take care not in any way to interfere with or divert the existing drainage areas, and shall leave such stops or stanks in the side cuttings, and take such other precautions, as the Engineer shall think necessary for that purpose. The side-cuttings must be made in a regular and approved manner, and, unless specially authorized, not less than 10 feet from the foot of any embankment; and when material is run to spoil, it must be done in such a way and in such places as shall be approved by the Engineer.

Behind and around culverts and abutments of bridges, the embankments shall be wheeled in and carefully rammed.

Where shown on drawings or longitudinal section, the slopes of embankments shall be pitched with approved stone not less than 9 in. thick, and to a height of two feet above flood line, to be carried round the ends of the embankments 20 feet on the upper side, and 10 feet on the lower side, the bottom edge of the pitching to be sunk into the ground at least 1 foot; the pitching to be backed with broken stone or shingle at least 6 inches thick.

#### DITCHES AND DRAINS.

8. When the line crosses swamps of a peaty nature, catchwater drains are to be cut on the upper side of the line obliquely across the valleys, so as to tap the surface water. These ditches shall not exceed, on an average, one and one-third cubic yards per lineal yard, and are to be made at the commencement of the work, and cleaned out from time to time as may be ordered.

#### STREAM DIVERSIONS.

Stream diversions at 1 mile 73 chains, 1 mile 76 chains, and 3 miles 24 chains, to be grubbed out as described for drains, and excavated with regular slopes and inclinations, as will be set out.

#### ROAD ALTERATIONS.

9. At the places shown on the plan and section, and wherever necessary, the present roads are to be diverted.

All such diversions and road approaches to the level crossings are to be completed in a convenient, substantial, and proper manner, with the necessary drains, water tables, and side slopes. Such approaches and road diversions are to be formed with an inclination not steeper than 1 in 12 for public roads, and 1 in 12 for private roads, except where the present inclination exceeds these rates, in which case the inclination of the new road shall not exceed that of the present road, unless, in the opinion of the Engineer, a steeper is unavoidable.

Public roads and approaches to first-class crossings are to be metalled with coarse river gravel or approved hard stone, laid on and spread as directed, so as to average 22 cubic yards per lineal chain of road. Private roads are to be metalled with coarse river gravel or broken stone of approved quality, laid on and spread as directed, so as to average 9 cubic yards per lineal chain. The whole of the metal is to be broken to pass through a two and a half inch ring.

One first-class, twelve second-class, and four third-class crossings, with two cattle stops to each crossing, as per Drawing No. 22, shall be constructed at public and private roads where directed. They shall be carefully placed as to line and level, and finished in strict conformity with the drawing and the notes thereon. Each level crossing shall be metalled for a length of 66 feet on each side of the centre line, as above specified for the roads, and tile or timber box drains shall be put in the formation ditches where necessary for the drainage of the line or road.

One pair of malleable iron tubular or other approved gates, 12 feet wide, hung to strong posts, and furnished with bolts and padlocks, shall be provided and hung at a private crossing where directed; also two turnstiles of approved pattern.

Cattle stops, as shown in Drawing No. 22, are to be put in where directed, not exceeding five in number, besides those at level crossings.

Twenty-two private crossings, with guard-balks same as third-class crossings, and metalled for a distance of 33 feet on each side of the centre line, shall be placed where directed; the metalling shall be 12 feet wide and 9 inches thick, or of equal quantity otherwise disposed as to width and thickness. Box drains or drain pipes, as shown in drawings, shall be placed where directed.

#### MATERIALS.

10. Except where otherwise specified, all the materials used under this contract shall be of the following kinds and descriptions:—

All masonry to be of rubble laid in cement mortar. Bond stones, 2 feet long, or to go right through the wall, to be put in every square yard of both face and back of work. All spalls are to be set in mortar, and not laid dry and afterwards grouted. Facework must have no stone containing less than one-quarter of a cubic foot. The work shall be grouted every foot in height. The whole of the masonry is to be neatly pointed, and finished on top and ends with a coating of cement.

Cement mortar shall consist of three parts, by measure, of sharp clean sand, and one part of Portland cement.

Concrete if required shall be composed of three parts, by measure, of broken stone, two parts of sharp sand, and one part of fresh Portland cement,—or two parts of broken stone to two parts of gravel, one part of sand, and one part of fresh Portland cement. The cement shall be of approved brands, and subject to such tests as the Engineer may from time to time direct. The concrete shall be laid in 12-inch layers, and well rammed as the work progresses.

Piles to be of totara, kauri, or puriri, or other approved timber, as may be directed. Rail-strings, and floor beams shall be of puriri, iron bark, or jarrah, and all other timber shall be of matai, kauri, or totara, or other specially approved timber; the whole shall be straight and sound, free from shakes, large knots, and other imperfections, and each side of any scantling shall show nowhere less than  $\frac{3}{4}$  heart.

The whole of the straps and bolts shall be made of B.B. Crown iron, or other iron of equal quality, of the dimensions shown; the whole to be finished and fixed in a workmanlike manner.

Bolts shown or specified shall have a square head, of which the thickness shall be equal to the diameter of the bolt, and the width twice the diameter of the bolt. They are to be screwed with a good clean thread, and shall have a nut equal in size to the head of the bolt, and shall be provided with one or more washers 3 inches in diameter.

#### BRIDGES AND TIMBER OPENINGS.

11. Bridges, as per general and detail drawings, shall be erected where shown on longitudinal section.

All joints, shoulders, and sides of tenons and scarfs to be worked perfectly true, and to fit accurately, and to be covered with red lead before being put together. Tenons generally to be 5 inches long, and to be draw-bored to receive trenails of hardwood, made with hollow auger or trenailing machine. All trenails to be well seasoned and kept dry, and to be one-sixteenth of an inch more in diameter than the hole bored for them, and to be covered with red lead before being driven. All capsills and mudsills to be mortised on to posts or piles. All string pieces to be accurately notched down to capsills or floor beams by notching  $\frac{3}{4}$ -inch from each, to be scribed and accurately fitted. Diagonal braces, where placed inside the panel, are to be notched together as described for string pieces.

All piles are to be rung before driving with a 3-inch by  $\frac{3}{4}$ -inch round hoop. The piles are to be shod with substantial iron shoes, weighing not less than 30 lbs. each, securely fixed, in all bridges except the Waiwakaiho, in which the pile shoes for the main piers shall be 70 lbs. each, and chisel pointed; and in the overbridges, in which the pile shoes will be 20 lbs. each, the point of the pile to be cut true, and to be squared off at the ends to 3 inches square, and to have true bearing against the shoes. No pile-driving is to be commenced at any bridge opening or other work without giving six days' notice previously to the Engineer in charge of the works.

The Contractor shall provide all proper rods and gauges for setting out and testing the dimensions of bridges and timber openings that the Engineer may require.

#### CULVERTS AND DRAINS.

12. Timber and masonry culverts shall be erected where shown on longitudinal section.

The frames of timber culverts shall be accurately mortised and tenoned and pinned; the planking to be securely spiked on to the frames, the whole of the timber to be heart of puriri for the closed culverts, and of puriri or totara for the open culverts. The outer side of the planking need not be reduced to the dimensions given, but there must in every case be the full thickness specified of heart timber; the edges of the planking must fit truly for the whole thickness, and the planks must extend over at least two panels, and break joint as much as possible.

Sufficient catchwater and outfall drains are to be dug at culverts, and all stumps and roots occurring in the line of ditch to be taken out.

## BALLASTING AND PERMANENT WAY.

13. The ballast is to consist of shingle or broken stones, previously approved of, and is to be disposed as shown in drawings. In all cases the embankments and cuttings are to be cleared from mud, and brought to an uniform formation level before the ballast is laid on.

The permanent way is to consist of a single line of rails, laid to a gauge of 3 feet 6 inches, and sidings provided and laid where directed, amounting in all to half a mile of sidings.

The Contractor is to provide and have upon the ground at all points, when the work is proceeding, a sufficient supply of all such templates, tools, gauges, and other implements as are necessary and are usually required in the laying of permanent way, or as may be required by the Engineer.

About three thirty-seconds of an inch of space is to be left between the ends of the rails, when fixed in place, or such other space as the Engineer may direct, according to the season.

For the curves, the rails will require bending. This, as well as the straightening of all bent rails, must be effected by a press, or by striking with wooden hand-beetles on wooden blocks. In all cases, whether of straightening of bent rails or of bending rails to the necessary curves, the rails must be set permanently to the form required before being laid, and no temporary bending, springing, or straightening, either by dragging with a lever and hook, or by any other means of a like character, will on any account be permitted.

Great care must be taken to lay all the sleepers square to the rails on straights, and as near as may be on curves.

Where the line is straight, the rails will be level across the line; but where the line is curved, the rails will be canted, the difference of level between the two rails being such as the Engineer shall order.

When suitable material for ballast is not found immediately on the line, the sleepers may be laid on formation, being carefully tamped with dry earth. The Contractor will be permitted to run ballast and material trains over the line thus laid at a speed not exceeding ten miles an hour, but the ballasting and lifting must be proceeded with with all possible despatch.

The changes of gradients shall be made by a gradual curve.

There are to be 2,050 sleepers per mile, to be spaced as directed. The following timbers to be used to the extent of not less than 75 per cent. of the whole:—Totara, jarrah, Oregon pine, kauri, or puriri. The remaining 25 per cent. may be of matai (*Podocarpus spicata*) or birch (*Fagus fusca* or *Solandri*). They shall be 7 feet long and 7 inches by 5 inches, all of heart.

They are to be flatted top and bottom, true and out of wind; but any extra width beyond 7 inches need not be removed.

The rail seats are to be accurately adzed to a correct bevel.

The rails will weigh 40 lbs. to the yard; they will be jointed with Ibbotson's patent steel clip-joint, weighing about 12 lbs. each joint, and fastened to the sleepers by six fang-bolts to each rail, and two spikes to each sleeper, where fang-bolts are not used.

The rails and fastenings will be delivered to the Contractor at the ship's side at Wellington, and he shall be responsible for all materials delivered to him.

## USE OF PERMANENT WAY MATERIALS BY CONTRACTOR.

14. Permanent way materials shall not be laid down or employed, without written permission of the Engineer, within 100 yards of the face of any excavation or the end of any embankments, nor used for hauling earthwork before the ballast is laid. When the Contractor shall have complied with the above requirements, he may use the rails and other permanent way materials for the purpose of hauling earthwork or materials on parts of the line.

## SIDINGS.

15. The Contractor shall construct at his own cost, at such points as may be indicated by the Engineer, half a mile of sidings, including the necessary earthwork, ballast, sleepers, and laying of permanent way, similar to that of the main line, without the points and crossings.

He shall also make and construct, wherever required, such station-grounds, buildings, points, crossings, extra sidings, telegraph and other things required for station accommodation, and shall furnish the Engineer monthly with a detailed statement, showing their actual cost exclusive of all cost of management, properly supported by vouchers, or as otherwise directed; and to this cost a sum equal to £10 per centum shall be added for Contractor's profits, and this amount shall be in addition to the contract sum.

## ROLLING STOCK.

16. The Contractor shall take delivery from the ship's side at Wellington of the articles of rolling stock enumerated below, and shall land, erect, and place the same on the line in working order, and bear all costs of the same.

## LIST OF ROLLING STOCK.

- 2 locomotives.
- 6 carriages and brake-vans.
- 6 waggons.

## USE OF ROLLING STOCK.

17. The Government will furnish the Contractor with such locomotives and rolling-stock as they may have on the line ; the Contractor to pay the wages of the engine-drivers and stokers, who must be approved by the Engineer, and to furnish fuel, water, oil, grease, waste, &c., at his own expense.

The Contractor shall also return such rolling stock as may be lent to him in as good order as when received by him—reasonable tear and wear excepted.

In the event of the Government being unable to supply locomotives and rolling stock when needed by the Contractor, an extension of time will be granted for the completion of the contract ; such extension of time to be fixed by the Engineer.

## CONTINGENCIES, &amp;c.

18. The Contractor shall include in his tender a sum of £500, to be expended in the erection of a shipping wharf at the termination of the line, in the River Waitara, according to plans hereafter to be furnished, the work to be done at such schedule prices as will apply.

19. The Contractor shall include in his tender a sum of £500, to be expended in coffer-dams if required. Any sum not so expended shall be deducted from his contract.

## WAITARA AND NEW PLYMOUTH.

## LIST A.

Drawing No.	1.—Plan and Sections, Sheets No. 1A and 1 to 8.
"	2.—Road Crossings
"	3.—Cross Sections, Cuttings, and Embankments.
"	4.—Over Bridge (Liardet Street), at 0 mile 32 chains.
"	5.—Bridge at 0 mile 35 chains.
"	* 6.—Bridge over Huatoki River, at 0 mile 39 chains.
"	7.—Over Bridge (Powderham Street), at 0 mile 48 chains.
"	8.—Bridge over Mangotuku River, at 0 mile 55 chains.
"	9.—Bridge over Henui River, at 0 mile 39 chains.
"	10.—Details for ditto.
"	11.—Over Bridge (Mangorei Road), at 0 mile 50 chains.
"	12.—Bridge over Waiwakaiho River, at 1 mile 30 chains.
"	13.—Bridge at 1 mile 38 chains.
"	14.—Bridge at 1 mile 74 chains.
"	15.—Bridge at 2 miles 19.50 chains.
"	16.—Bridge at 2 miles 27.50 chains.
"	17.—Bridge over Mangaoraka River, at 6 miles 20 chains.
"	18.—Over Bridge (Lepper Road), at 6 miles 46 chains.
"	19.—Bridge over Waiongona River, at 7 miles 25 chains.
"	20.—Details for ditto.
"	21.—Stone and Timber Culverts.
"	22.—Level Crossings and Cattle Guards.
"	23.—Fencing, &c.

## GENERAL SPECIFICATION FOR FOUR-RAIL FENCING.

THE fence is to consist of posts and four rails, either split or sawn, as shown in accompanying sketches, which also show details of slip-panels.

All posts to be entirely of heart of totara, sound and of full dimensions. Ordinary posts to be 8 inches × 3 inches, 6 feet 9 inches long, mortised to receive four rails with mortises 6 inches by 1½ inch. To be placed 8 feet 6 inches between centres, sunk 2 feet in the ground, and securely rammed. End and corner posts to be same length and depth in ground, securely rammed, 7 inches square in section, and to have mortises 4 inches × 1½ inch.

The rails shall be of any of the following kinds of timber, viz.:—Red birch as known in Wellington, totara, black birch, or rimu of Taranaki growth, all of good sound wood, containing at least four-fifths of heart, and free from winding. To be at least 5 inches deep × 2½ inches thick, or of equal strength, and not exceeding 9 feet in length, properly bevelled at ends so as to pass 1½ inch through posts one above the other in ordinary posts, and so as to drive home in end and corner posts, in all cases driven tight, and perfectly fitting and filling the mortises. The stoutest rails to be chosen for the top, and rails slightly bent to camber upwards. Straight and bent rails not to be put in the same panel.

This means that the posts must measure 6 inches wide and 3 inches thick in the centre, or of equal strength, so that they will have an area of 24 inches in section, or equal to 2 feet of timber to the foot run. This means that the rails must measure 5 inches deep by 2½ inches thick in the centre, or of equal strength, so that they will have an area of 11 inches in section, or equal to 11 inches of timber to the foot run.

\* These are within township (on Sheet No. 1A.)

The number of slip-panels and their position will be fixed by the Engineer. Posts at slip-panels to be 10 inches  $\times$  5 inches  $\times$  8 feet 3 inches long, placed 10 feet apart, sunk 3 feet 6 inches in ground and securely rammed.

Each post to have eight mortises, four mortises to be 4 inches  $\times$  1 $\frac{3}{4}$  inch for the ordinary rails, and four mortises to be 5 inches  $\times$  2 inches for slip-rails. Those on one side to be fitted with a  $\frac{3}{4}$ -inch hard-wood pin to fasten each slip-rail.

Rails at slip-panels to be four in number, of black or red birch as above described, finished to a length of 10 feet 7 inches  $\times$  6 inches  $\times$  2 $\frac{1}{2}$  inches, reduced at ends to go freely into the mortises.

The fence is to be erected upon the boundary line of the land occupied by the Railway, or upon such other line as may be directed by the Engineer, and is to be made good up to the ends of all bridges, and up to all cattle stops; and all existing fences crossed by this fence are to be securely made good up to it, either by placing a 7-inch  $\times$  7-inch corner post at the junction, or by an additional post as in sketch.

Posts of any length and depth in ground additional to those specified are to be provided and fixed by the Contractor as may be required by the Engineer, in swampy or loose ground, for which a fair allowance will be made.

Where the fencing between the road and railway occurs on the very edge of the road formation, the bottom end of the posts will be mortised and pinned into a sole-piece of the same size as the posts, and 3 $\frac{1}{2}$  feet long, and a brace 6 inches  $\times$  2 inches,  $\times$  4 feet long, will be spiked to each with two 6-inch spikes at each end, the sole-piece projecting under the road.

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## SCHEDULE OF PRICES.

### ENDORSEMENT.

The amounts which may from time to time become due and payable by the Contractors upon or by virtue of and according to the tenor of any such promissory notes as are mentioned in the contract dated the 27th June, 1872, made or purporting to be made between Sir G. F. Bowen, the Governor of New Zealand, by Isaac Earl Featherston, the Agent-General in London for New Zealand, and the Contractors, and a copy of which is hereto annexed, may be deducted from any moneys payable to the Contractors under this contract and these conditions.

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*Note.*—A printed copy of the contract referred to in the above endorsement, being “Articles of Agreement with Messrs. Brogden for the introduction of Immigrants,” dated 27th January, 1872, (Parliamentary Paper D. No. 19D., 1872,) is attached to the original of the Waitara and New Plymouth contract, but is not reprinted here.

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## WAITAKI TO MOERAKI RAILWAY.

### MOERAKI CONTRACT.

ARTICLES OF AGREEMENT made and entered into this nineteenth day of July, 1873. between the GOVERNOR OF NEW ZEALAND, in the name and on behalf of Her MAJESTY the QUEEN of the one part, and ALEXANDER BROGDEN, HENRY BROGDEN, and JAMES BROGDEN, all of Queen's Square, in the City of Westminster, in England, Railway Contractors (hereinafter referred to as "the Contractors"), of the other part:

Whereas by the sixth section of "The Railways Act, 1871," it is amongst other things enacted that the Governor may, if he think fit, construct and maintain, or cause to be constructed and maintained, under the provisions of "The Immigration and Public Works Act, 1870," (hereinafter referred to as "the said Act"), and "The Immigration and Public Works Act Amendment Act, 1871," (hereinafter referred to as "the said Amending Act"), certain Railways, and amongst others, a Railway from Oamaru, in the Province of Otago, to Moeraki, in the said Province (which said Railway is hereinafter referred to as "the Railway herein mentioned");

And whereas by the said Amending Act it is provided that all Contracts under any Act authorizing the construction of any Railway under the said Act or the said Amending Act, shall be entered into in the name of the Queen, her heirs and successors:

And whereas the Governor of New Zealand, on behalf of the Queen, has agreed with the Contractors for the execution and construction by them of the works described or referred to herein, and in the Specifications, Conditions, Drawings, and Plans hereto annexed or herein referred to, all of which Specifications, Conditions, Drawings, and Plans are signed by the Contractors and John Carruthers, Esquire, the Chief Engineer of the said Colony on behalf of the Colony: Now, these Presents witness that Her Majesty the Queen, for herself, her heirs and successors (all of whom are hereinafter included in the expression "the Queen"): and, so far as the covenants hereinafter contained are to be performed or observed on her or their parts respectively, doth hereby covenant with the Contractors, their executors, administrators, and assigns (all of whom are hereinafter included in the expression "the Contractors"), and the Contractors and each of them, for themselves and himself, and their respective heirs, executors, administrators and assigns so far as such covenants hereinafter contained are to be performed or observed on their parts, do and doth hereby covenant with the Queen, her heirs and successors, in manner hereinafter appearing, that is to say—

1. That they, the Contractors, shall and will, in all respects subject to and in accordance with the said Conditions, Specifications, Drawings, and Plans, construct make, complete, and maintain, and do and perform, all the works, and supply all such plant and materials as are by the said Specifications and Conditions to be applied by the Contractor, whether such works, plant, and materials are described or referred to in the said Conditions, Specifications, Drawings, or Plans, or are extra or in addition thereto, within the time mentioned in the said Conditions, subject, however, to the provisions contained in the said Conditions for extension of time.

2. That the Queen shall and will, free of cost to the Contractors, provide and deliver to the Contractors, in equal proportions, on the beach at the Harbours of Oamaru, and Moeraki, the iron rails and fastenings required for the permanent way and the rolling stock respectively mentioned in the Specification.

3. That the Queen will pay the Contractors for the construction and execution of the said works, and the maintenance thereof, for the period of three months from the completion of the works, and for the supply of all such plant and materials as the Contractors are to supply under the provisions of this contract as aforesaid, the sum of one hundred and thirty-five thousand five hundred and fifty pounds (exclusive of the supply of such plant and materials as by the said Specifications and Conditions it is provided the Queen or the Government of New Zealand shall supply, and subject to the provisions contained in the Conditions and Specifications for increase and decrease in case of extras or deductions, and to the provisions contained in the said Specifications or Conditions for extra payment to the Contractors by percentages on the cost of such works as, by such Specifications it is provided, the Contractors are to receive payment by way of percentage on the cost thereof).

4. The Queen shall and will make payments to the Contractors upon account of the said sums herein agreed to be paid at the rate and times, and upon the terms and conditions mentioned in the said Specifications and Conditions.

Lastly. The parties hereto shall and will each respectively perform, observe, and fulfil all and singular the conditions and stipulations expressed or contained in the said General

Conditions and Specifications, and which thereby it is provided shall be performed, observed, or fulfilled by such parties respectively.

In witness whereof the Seal of the Colony has hereunto been affixed, and the said Contractors have hereunto set their hands and seals, the day and year first above written.

(L.S.)

JAMES FERGUSSON, Governor.

Sealed with the Seal of the Colony, and signed by the Governor, in the presence of

EDWARD RICHARDSON.

ALEXANDER BROGDEN. (L.S.)

HENRY BROGDEN. (L.S.)

JAMES BROGDEN. (L.S.)

By their Attorney, JOHN HENDERSON.

Signed, sealed, and delivered by Alexander Brogden, Henry Brogden, and James Brogden, by their Attorney, John Henderson, in the presence of

WM. THOS. LOCKE TRAVERS,  
Solicitor, Wellington.

Approved in Council, 25th February, 1873.

FORSTER GORING,  
Clerk of the Executive Council.



## GENERAL CONDITIONS FOR THE MOERAKI CONTRACT OF THE WAITAKI AND MOERAKI RAILWAY.

### INTERPRETATION CLAUSE.

1. In these conditions the words "Minister for Public Works" shall mean the Minister for Public Works appointed under "The Immigration and Public Works Act, 1870," or any Minister or person for the time being authorized by the Governor to act for such Minister in respect of the special work contracted for; the word "Engineer" shall mean the Engineer for the time being who shall have principal charge of the works on behalf of the Government; and the word "Contractor" shall mean "Contractors" when two or more persons tender or contract jointly for the work; and the word "month" shall mean "calendar month."

### WORKS, &c., TO BE ACCORDING TO DRAWINGS AND SPECIFICATIONS, AND TO THE SATISFACTION OF THE ENGINEER.

2. All the materials used are to be the best of their respective kinds, and all works of every description throughout are, subject to the provisions hereinafter contained, to be executed conformably to the several drawings and details prepared or that may be prepared for that purpose, and herein referred to, in the strictest accordance with the provisions of the specifications, and in the best, most substantial, and workmanlike manner, and to the satisfaction of the Engineer; and should any work not be so executed, it shall be immediately altered and amended at the cost of the Contractor.

### PLANS, &c.

3. A copy of the plans and drawings, with the specifications, shall be furnished to the Contractor by the Engineer, and the plans and drawings referred to in the specification, and the specification, shall be taken together to explain each other; and if, in the execution of the works, it shall be found that anything has been omitted or mis-stated either in the drawings or specification, which is necessary for the proper performance and completion of any part or parts of the works, the Contractor shall at his own cost and expense execute the same, and provide whatever may be requisite for so doing, provided the extra cost thereof shall not exceed the sum of £200 in each particular case. Any written dimensions on the drawings shall be taken in all cases in preference to measurements by the scale attached, and anything contained either in the drawings or specification shall be equally binding on the Contractor as if it were contained in both; and in case the written or figured dimensions on the drawings shall disagree with the scaling, or in case there shall be any discrepancy between the drawings and specification, or any ambiguity in them, such occurrence shall not invalidate the contract, but the same shall be rectified by the Engineer if thought requisite, and the Contractor shall not be entitled to make any claim or demand for compensation or damages on account of such discrepancy or ambiguity. If neither the drawing nor the specification contain any notice of minor parts, the intention to include which is nevertheless clearly to be inferred, and which parts are obviously necessary for the workmanlike completion and stability of the work, all such parts are to be made and executed by the Contractor without extra charge, and are to be deemed by him as included in the sum at which he contracts for the works.

### EXTRA WORKS AND ALTERATION OF WORKS.

4. The Contractor is to make and execute, in the like manner as aforesaid, and with the like materials as aforesaid, any additions, deviations, or alterations to, from, or in the works, which the Engineer may from time to time, previously to the commencement or during the progress of the works, by an order in writing, require, at such prices as are contained in the Schedule attached. In case of non-agreement as to price, the work shall be done by the Contractor as required by the Engineer, and the price thereof shall be settled by arbitration as hereinafter provided, and shall when so ascertained be added to and thenceforth deemed to be part of the contract price for the works to be executed under this contract; but no additions, deviations, or alterations whatever, which shall be claimed by the Contractor, will be admitted or recognized under any circumstances, or will be allowed or paid for, which shall be done or executed without, or contrary to any previous order

from the Engineer in writing as aforesaid: Provided always that no addition, deviation, or alteration from the plans and specifications to be ordered by the Engineer as aforesaid shall involve an increased expenditure in connection with the works or any part thereof, unless distinctly authorized by writing under the hand of the Minister for Public Works, who, before authorizing any such deviation, shall obtain from the Engineer an estimate of the increased expenditure arising therefrom: Provided also that in all cases where such deviation, addition, or alteration as last aforesaid, from the plans and specifications, shall involve an outlay exceeding £500, the consent of the Governor in Council shall first be obtained. And in all cases it shall be the duty of the Contractor to satisfy himself that such addition, deviation, or alteration (if any) has been duly authorized in the manner required by "The Immigration and Public Works Act, 1870," and also, that to any such outlay as aforesaid, requiring the consent of the Governor in Council as aforesaid, such consent has been obtained, as required by the said Act.

#### OMISSION OF PORTIONS OF WORKS.

5. To the Minister for Public Works there is reserved the right from time to time of requiring the omission of any particular portion or portions of works described in the specification or shown on the drawings, and of deducting the value thereof from the amount of the contract, such value to be agreed upon between the Minister for Public Works and the Contractor, or in case of difference to be settled by arbitration as hereinafter provided; but the Contractor shall be entitled to be paid a sum of ten per cent. on the agreed or ascertained value of the work omitted; such sums for omissions to be paid on the completion of the contract.

#### MATERIALS, LABOUR, &c.

6. The Contractor shall provide, at his own costs and charges, all materials, labour, tools, plant, tackle, machinery, scaffolding, waggons, cordage, cartage, stores, planking, centres, coffer dams, diving bells, staging, diving dresses, and everything necessary for the proper execution and completion of the several works, and centres must not be struck without the written authority of the Engineer. The Contractor is also to provide, at his cost, for keeping all the trenches and foundations free from water, and for preventing all slips of ground into the trenches. All material and all prepared work brought upon the ground of the works for use therein is to be considered the property of the Queen, and the Contractor shall not take away any such material or work without the written authority of the Engineer, unless the same shall be required for the purposes of other works under this contract. The Contractor will be required to set out accurately, at his own expense, all the works comprised in this contract, agreeably to the drawings and specifications, and shall be held responsible for their being so set out and executed accordingly.

#### REMOVAL OF IMPROPER MATERIALS.

7. It shall be lawful for the Engineer to order the removal from the works of any materials, whether fixed or not, which may appear to him to be of an inferior or improper description, and the Contractor shall remove the same within twenty-four hours after a written notice in that behalf given to him by the Engineer; and in case of neglect or refusal to remove the same according to such notice, the Engineer shall have power to remove the same at the cost of the Contractor.

#### CONTRACTOR TO BE REPRESENTED.

8. The Contractor at all times during the progress of the works, when he is not personally superintending them, must have a responsible agent or overseer stationed on them, to receive instructions from the Engineer, and to represent him for all the purposes of this contract.

#### PROGRESS OF WORKS.

9. If the Contractor shall, in the opinion of the Engineer, fail to make such progress with the works as the Engineer shall deem sufficient to insure their completion within the specified time, or if the Contractor shall use or employ bad or insufficient materials, or execute any work in an imperfect manner, and shall fail or neglect to rectify any such cause of complaint for fourteen days after being thereunto required in writing by the Engineer, or if the Contractor shall, in the judgment of the Engineer, commit a wilful breach of his contract, then, and in any of such cases, it shall be lawful for the Minister for Public Works, by any instrument in writing under his hand delivered to the Contractor, or to his representative on the works, or left at the Contractor's usual or last known place of abode or business, absolutely to determine this contract, and from and after the delivery of the said instrument as aforesaid, the contract shall be absolutely determined; and in the event of such determination happening, then it shall be lawful for the said Minister, after having delivered such instrument to the Contractor as aforesaid, to take the works out of the Contractor's possession, and at the option of such Minister either to carry the works on under the Engineer or by another Contractor, and that either after advertising for Contractors or without doing so, as he shall think fit; and all the materials, implements, and plant then upon or used in connection with the works may be used in and applied for the purpose of completing the works; and on the final completion of the works, if it

should be found that the balance of the contract price remaining unpaid, if any, and the deposit money and percentages, together with the net proceeds realized by the sale of the then residue of such materials, implements, and plant as aforesaid, after being sold in any way that may appear to be most advisable to the Minister for Public Works, is not sufficient to meet the outlay incurred in completing the works in all respects, then the Contractor, his executors or administrators, shall be bound to pay to the Minister for Public Works the surplus expenditure above such balance, and other sums as aforesaid. But if, on the other hand, the works shall be completed within the contract price, then there shall be paid to the Contractor, or his executors, administrators, or assigns, such balance as may be due to him or them, including the deposit money and percentages or retention money, if any, but without any interest thereon; and the Engineer shall, within fourteen days after such balance has been ascertained to be due, grant authority to the Contractor or his representatives for the removal of all surplus material, implements, and plant belonging to him or them, and remaining on the works after their completion, if not sold as before mentioned. But it is herein expressly provided that, in the event of any materials, implements, or plant being returned to the Contractor or his representatives, or being allowed to be removed by him or them as aforesaid, Her Majesty the Queen shall not be in any way liable for any loss, diminution, wear and tear, or injury, such materials, implements, or plant may have sustained during the completion of the work.

#### CONTRACTOR NOT TO SUBLET WORKS TO PERSONS PREVIOUSLY OBJECTED TO—BANKRUPTCY, INSOLVENCY, OR DEATH.

13. The Contractor shall not sublet any portion of the works to any person who shall have been previously objected to by the Engineer by notice in writing to the Contractor. If the Contractor become bankrupt or insolvent, or shall make an assignment of his estate for the benefit of his creditors, or shall die before the final completion of the contract, then it shall be lawful for the Minister for Public Works, on behalf of the Queen, summarily, and of his own authority, and without any process of law for that purpose, to take possession of the works, and to take them out of the hands of the Contractor, or of his executors or administrators, or of the assignees or trustees of his estate, and to employ persons for the execution and completion of the same, and that either after advertising for contractors or without doing so, as he shall think fit; and all the then remaining materials, implements, and plant aforesaid may be used in and applied for the purposes of the works; and on the final completion of the works, if it should be found that the balance of the contract price remaining unpaid, if any, and the deposit money and percentages aforesaid, together with the value of the remaining materials, implements, and plant as aforesaid, after being sold in any way that may appear to be most advisable to the Minister for Public Works, is not sufficient to meet the outlay incurred in completing the works in all respects, then the Contractor, his executors or administrators, shall be bound to pay the Minister for Public Works the surplus expenditure above such balance, and other sums as aforesaid; and in the case of bankruptcy or insolvency, then Her Majesty the Queen shall rank as a creditor to the amount of such surplus. But if, on the other hand, the works shall be completed within the contract price, then there shall be paid to the Contractor, or his executors, administrators, or assigns, such balance as may be due to him or them, including the deposit money and percentages or retention money, if any, but without any interest thereon; and the Engineer shall, within fourteen days after such balance has been ascertained to be due, grant authority to the Contractor or his representatives for the removal of all surplus material, implements, and plant belonging to him or them, and remaining on the works after their completion, if not sold as before mentioned. But it is herein expressly provided that, in the event of any materials, implements, or plant being returned to the Contractor or his representatives, or being allowed to be removed by him or them as aforesaid, Her Majesty the Queen shall not be in any way liable for any loss, diminution, wear and tear, or injury, such materials, implements, or plant may have sustained during the completion of the work.

#### LIABILITIES OF CONTRACTOR.

14. The exercise by the Minister for Public Works, or Engineer, of any of their respective powers shall not relieve the Contractor from any liability to which he may be subject for any breach of the contract.

#### TIME OF COMPLETION.

15. Subject as herein provided, the Contractor shall complete the whole of the works of this contract within two and a half years from the date of the signing of the contract, failing which the Minister for Public Works shall be entitled to deduct from the final balance due to the Contractor a sum calculated at the rate of three pounds per cent. per annum on all moneys which shall have been paid to the Contractor under this contract, computed from the date on which the work ought to have been completed under this contract up to the date of the completion of the work: Provided that if the Minister for Public Works shall have taken over as completed any portion of the work, the cost of that portion shall not be included in the calculation last aforesaid. But in the event of the Contractor being prevented by earthquake, tempest, flood, or otherwise by the act of God or by the act of the Queen's enemies, rebel-

lion, restraint of Princes, or otherwise by anything in the nature of *vis major*, or by reason of any strike amongst the workmen engaged upon the works, or by reason of any alterations, deviations, or additions, or extra works being required, or in case of any delay in furnishing any material to be supplied to the Contractor by the Governor, the Engineer shall allow such an extension of time as he shall think adequate for such enforced delay, or for such alterations, deviations, additions, or extra work; and at the expiration of the time so allowed, the deductions or sets-off for delay shall come into operation.

#### SUSPENSION OF WORKS.

16. The Contractor on receiving a written notice from the Engineer, shall suspend or stop, the whole or any portion of the works as may be directed, and the Governor on behalf of the Queen shall make good to the Contractor any loss or damage he may sustain through such suspension or stoppage, to be ascertained, in case of non-agreement between the Contractor and the Minister, by arbitration, as hereinafter mentioned; and the Minister for Public Works shall in no case be bound to give the Contractor possession of the ground or work until thirty days after the signature of the contract by the Contractor; but a commensurate extension of time for completing the works will be allowed to the Contractor, such extension of time to be at the discretion of and to be decided by the Engineer.

#### DAMAGES TO BE MADE GOOD, &c.

17. The Contractor shall also provide for effectually securing and covering the several walls and works from the weather, as occasion may require, or as the Engineer may direct; and if any damage or loss should happen to any of the works, plant, or materials—whether from fire, theft, or weather, force of waves, or from any other cause—while the works and buildings are unfinished, or remain in possession of the Contractor, the Contractor must properly and immediately repair and make good the same at his own expense, and to the satisfaction of the Engineer; unless it can be shown that the damage arises from insufficient or imperfect designs, when the Contractor will not be held responsible, and in case of dispute, the matter shall be settled by arbitration, as hereinafter provided.

#### TRESPASS.

18. The Contractor shall not enter upon any lands outside the line of fences for the construction of the works, or for any purpose whatever in connection with this contract without the consent of the occupier or owner, except at his own cost and risk, and shall not, without the consent of the Engineer remove any trees or buildings within the line of the Railway fences, nor shall he open or throw down any part of a fence without making sufficient provision by temporary fences, to be erected and maintained at his cost, for keeping cattle, sheep, or other stock from straying from or into any enclosure affected thereby; and any legal process causing cost or damage to the Government for any trespass incurred by the act or negligence of the Contractor or his workmen shall be deducted from the contract price, and be taken as payment made on account of his contract.

#### MAINTENANCE OF WORKS.

19. The Contractor shall be bound to keep and maintain in good and sufficient repair the whole works executed under the contract, and shall provide all labour, materials, &c., necessary for such maintenance for a period of three months from and after the time when all the works under the contract have been fully completed; and the Contractor shall on the expiry of the said period of maintenance be bound to deliver up the whole works in good and sufficient condition, and to the satisfaction of the Engineer. The Contractor shall also be liable for any accident, damage, or injury whatsoever to the public or any private person which may be caused by his operations during the progress of the works, or during their maintenance. He shall also maintain all night-lights and temporary footpaths required by any Municipal or other authorities, or for the safety of the public, and shall make all necessary arrangements, by siding or otherwise, as required by the Engineer, to prevent stoppage of public traffic.

#### LAND.

20. The Minister for Public Works will, free of all expense, put the Contractor in possession of all land required for the permanent works of the Railway, including land required for side-cutting, ballasting, spoil banks and road approaches, road diversions, and slips, and also from time to time, as occasion may require, but at the cost of the Contractor and so far only as the Parliamentary powers possessed by the Governor or the Minister for Public Works will extend to enable them so to do, of all such land as may be necessary for temporary purposes in connection with the works.

21. The Minister for Public Works shall, within thirty days after the signing of the contract by the Contractor, put the Contractor in possession of such parts of the land for the permanent works as may be necessary for the commencement thereof, and will from time to time, after fifteen days' notice in that behalf shall have been given by the Contractor to the Engineer put

the Contractor in possession of all such other parts of the lands required for the permanent works as may be necessary for the immediate prosecution thereof.

#### DELAY IN GIVING POSSESSION OF LAND.

22. If any delay shall take place in giving to the Contractor the possession of any land required for the permanent works as aforesaid, such delay shall not be deemed to be a breach of the contract, but the Contractor shall be entitled to such reasonable extension of time for the completion of the works as shall be fixed by the Engineer, or, in case of dispute, by arbitration, as hereinafter provided.

#### POWER TO REQUIRE DISMISSAL OF ANY WORKMAN.

23. The Engineer may require the dismissal within twenty-four hours by the Contractor of any agent, overseer, foreman, workman, or other person employed by him on the works, for incompetency or misconduct, and any man so dismissed shall not be again employed upon the works.

#### TRUCK SYSTEM NOT ALLOWED.

24. The workmen, tradesmen, and labourers of every class employed on the works to which these Conditions refer, shall be paid their wages in full in money of the current coin of the Colony, and no ticket or other system of payment by provisions, liquors, or goods will on any pretence be allowed, nor shall the Contractor or any person or persons employed by him, or in any way connected with him, establish any shop for the supply of liquors, provisions, or goods, nor shall the Contractor oblige his workmen to take provisions, liquors, or goods of any kind from any person in particular. The workmen of every class shall be paid on the works if it be possible, or in some building adjoining, and in no case shall they be paid at a public-house, or other place where liquors or refreshments are sold.

#### PAYMENTS.

25. Payments will be made monthly, for each calendar month, as the works proceed, on the certificate in writing of the Engineer, at a rate not exceeding 90 per cent. on the value of the work actually done, as estimated by the Engineer, having due regard in such estimate to the actual value thereof, and at a rate not exceeding 50 per cent. on the value of such plant and materials on the ground as may be approved by the Engineer as fit and necessary for the work, as estimated by the Engineer, having due regard in such estimate to the actual value thereof, such certificates for work done, and materials and plant supplied, in each calendar month, to be delivered to the Contractor within fourteen days after the termination of such month, and the balance, less 5 per cent., together with the amount deposited as cash security, if any, in fourteen (14) days, or as nearly as may be, after the Engineer shall have certified under his hand that the works have been finally and satisfactorily completed, and that such balance, together with the cash security, is due to the Contractor. The said 5 per cent. will be retained for three months to insure the fulfilment of clause 19 of these Conditions, and from which sums may be deducted the costs of any repairs or defects, failing the Contractor executing the same: Provided always that no sum or sums of money shall be considered to be due or owing to the Contractor, nor shall the Contractor make any claim for or on account of any work executed or maintained by him, or for or on account of any plant or materials supplied by him, unless such certificate as aforesaid shall have been given by the Engineer as aforesaid; nor shall any sum or sums of money so certified be considered to be made payable to the Contractor until the expiration of fourteen days after such certificate shall have been presented to the Minister for Public Works; nor shall any omission to pay the amount of such certificate at the time the same shall be held payable be deemed or held to be a breach of or to vitiate the contract, but in case of such omission the Contractor shall be entitled to interest on the amount certified for, at the rate of ten pounds per centum per annum, for such time as such omission shall continue.

#### NEGLECT TO CERTIFY.

26. In case the Engineer shall neglect or refuse to certify the amount due to the Contractor in respect of the work, or plant or materials, in manner and within the times mentioned in the foregoing condition, and shall continue such neglect or refusal for a period of fourteen days succeeding the fourteenth day after the end of the month in which the work was done, or the plant or materials supplied, as the case may be, the Contractor shall be entitled to measure and value the same, having due regard in his estimate to the actual value thereof, and the measure and value so estimated by the Contractor shall be temporarily accepted by the Governor so far as regards the progress payment to be made to the Contractor in respect thereof under the foregoing condition, and the payment provided by that condition shall be made accordingly, with interest thereon at the rate of ten pounds per centum per annum during the period of delay occasioned by the neglect or refusal of the Engineer: Provided always that in all cases in which a certificate shall within the period or further period hereinbefore provided, as the case may be, have actually been delivered to the Contractor, such certificate shall, for the purpose of the progress payment to be made thereunder,

be conclusive; and in case of any dispute between the Contractor and the Engineer as to the estimate therein made of value of work done or plant or materials provided, as the case may be, of which dispute notice shall have been given by the Contractor to the Minister for Public Works within fourteen days after the delivery of the certificate to the Contractor, such dispute shall be referred to arbitration, as hereinafter mentioned.

#### PROGRESS PAYMENTS WITHOUT PREJUDICE, &c.

27. No certificate given to the Contractor for the purpose of any progress payments shall prevent the Engineer, at any future time before the termination of the contract, from rejecting all unsound materials and improper workmanship, discovered subsequently to the giving of the last previous certificate; and notwithstanding the giving of any certificate that portions or the whole of the works have been satisfactorily performed, the Engineer may require the Contractor to remove and amend, at any future time previously to the final payment on account of the construction or maintenance of the works, any work that may be found not to be performed in accordance with the contract, and the Contractor must remove and amend, at his own cost, all such work when so required, notwithstanding any approval made or given by the Assistant Engineer or Inspector. The Minister for Public Works shall have power, on the report of the Engineer that the work approved of as aforesaid is not in accordance with the contract, to deduct from any moneys that may be due or that may become due to the Contractor the whole amount that has been paid on account of such work.

If, in the opinion of the Minister for Public Works, further inquiry is desirable or necessary before any certificate is paid, the Minister for Public Works shall have power to suspend the payment of all or any part of the amount mentioned in any such certificate for a period not exceeding one month from the date at which, in the ordinary course, the money would have been paid; and in such case, on payment of the amount payable, the Contractor shall be entitled to receive interest at the rate of ten pounds per centum per annum during such additional delay.

#### STAMPS, LICENSE FEES, &c.

28. The Contractor shall bear and pay all costs, charges, and expenses of preparing, executing, and completing this contract, and all duty stamps, licenses, Building Surveyor's fees, or other charges or fees whatsoever lawfully demanded by the Municipal or other authorities.

#### CUSTOMS AND WHARF DUTIES, &c.

29. In the event of the Contractors being compelled to pay any Customs duties or wharf dues or fees on any goods imported into New Zealand by them for the purposes of the said works, or transhipped or carried by them from any port or place in New Zealand to any other place in New Zealand, the Queen shall and will repay the same to the Contractors after one month's notice in writing by the Contractor to the Minister, demanding payment thereof and giving details of such payment, and the production of vouchers or other proof of such payment.

#### ARBITRATION.

30. Should any dispute arise between the Contractor and the Engineer, or between the Contractor and the Minister for Public Works or the Government, relative to the force and intent and meaning of the specifications, drawings, or conditions, or to the mode of carrying on the works, or the nature or quality of materials used or supplied to be used, or workmanship of work done, or as to the maintenance of the works, or as to the expense of additional works, or of alterations or deviations from the specifications or plans, or as to any other matter connected with the execution of the works, or with the contract, specifications, drawings or conditions, or as to any matter which by this contract it is expressly provided is to be settled, ascertained, or determined by arbitration, such dispute shall be referred in writing to the sole determination, arbitrament, and award of the Judge of the Supreme Court assigned to that Judicial District of the Supreme Court within which the works relative to which the dispute shall have arisen, have been or are to be executed, whose award shall be final, binding and conclusive on all parties: Provided, however, that before any such dispute as aforesaid shall be so referred, the Contractor shall give to the Minister for Public Works one calendar month's notice in writing of such dispute, and of the matter and cause thereof, and in such notice the Contractor's claim shall be explicitly stated; and if such claim be for pecuniary compensation, the amount thereof shall also be stated.

### Specification of the manner of Constructing the Moeraki Contract of the Waitaki and Moeraki Railway.

#### GENERAL DESCRIPTION.

1. The line of Railway included under the title "The Waitaki and Moeraki Railway," and to which this Specification applies, begins at a point opposite Wansbeck Street, near the sea

coast, within the Township of Oamaru, and terminates at the Port of Moeraki, as delineated on the accompanying plans and sections; the total length of the contract being twenty-six miles eight chains or thereby, with an addition of two miles of sidings.

### DRAWINGS.

2. The drawings, including general plans and longitudinal sections, as shown on list A, accompany this Specification. These show the character of the works to be executed. Further drawings of details will be issued from time to time as may be necessary. The general plan is drawn to a scale of three chains to an inch, and shows the course of the Railway, the centre line of which has been staked out on the ground, and is represented on the general plan by a red line. The road and stream diversions are shown on the general plan. The longitudinal section is drawn to a horizontal scale of three chains to the inch, and to a vertical scale of thirty feet to the inch. It represents the natural profile of the ground along the centre line of the railway. The red line shows the level of the bottom of the ballast. On the longitudinal section are shown the positions and sizes of the culverts and bridges described in the Specification.

### ALIGNMENT OF STRUCTURES.

3. In the construction of bridges, culverts, road-crossings, and generally, it is to be understood that they are to intersect the line of Railway at such angle or curve as may be necessary and approved in each case, although they may be shown on the drawings straight and at right angles; and in the interpretation of the drawings and schedules and of this Specification, it shall be distinctly understood that all works or materials necessary to the due and workmanlike completion of every erection are to be provided, whether specially described or not.

### CONTRACTOR TO PROVIDE LABOUR, PLANT, AND MATERIALS.

4. The Contractor is to provide all labour, tools, implements, plant, and materials, and is well and substantially to construct and complete the Railway in accordance with the plans and specifications, and to deliver the same complete, and is to maintain and keep the said Railway, and all works connected therewith, in perfect order and repair for the space of three months from the delivery of the same to the Government. The said Railway shall be made in accordance with the Specification, and with the plans and sections herein referred to, or with such modifications of the plans and sections as the Engineer shall order, provided such modifications shall not increase the cost of the work.

### FELLING, CLEARING, AND GRUBBING.

5. The whole of the timber within one chain and a half of the centre line is to be felled. Of this extent the central chain is to be cleared by removing all logs and underbrush, half a chain from the centre line, and to a greater distance where the formation requires it. Throughout all cuttings, and along formation on the level, all stumps and roots are to be grubbed out entirely and removed, so as to leave no loose timber whatever, and no stumps within two feet of formation level along centre or within one foot of the surface in the slopes.

The Contractor will be permitted to apply to his own use the timber which he has felled for the purpose of clearing the line.

The timber to be cleared on this line is on the branch to Moeraki Port from 0 mile 57 chains to 62·50 chains, from 0 mile 79 chains to 1 mile 11 chains, and from 1 mile 14 chains to 1 mile 19 chains.

### FENCING.

6. Twenty miles of single fencing shall be constructed at points to be hereafter specified; and wherever present fences are disturbed or interfered with, they are to be made good at the expense of the Contractor. At all crossings of roads and other places where cattle stops are used, fences are to be completed across the line up to the cattle stops.

Eighteen chains of existing fencing are to be removed and put up again as part of the fencing of the Railway, in addition to the twenty miles above specified.

The description of fencing used shall be that described in General Fencing Specification as qualities Nos. 2 or 3, at the option of the Contractor.

### EARTHWORKS.

7. All flax, scrub, rushes, or Maori-heads growing on the line of the Railway, shall be cut down to the full width between the outside of the slopes.

No public or private road that crosses or intersects the line of railway or works thereof, shall be obstructed by excavation or otherwise, until the Contractor shall have provided such temporary roads as may be necessary for the traffic.

The cuttings are to have a base at formation level of 10 feet in rock, 11 feet in loose rock, and 13 feet elsewhere, and are to be made in accordance with plan and section attached; but should the Engineer require any of the cuttings or banks to be made with different slopes from

those shown on drawing No. 27, the difference in cost shall be added to or deducted from the contract sum. Such alteration to be ordered in writing. Provided, however, that on the section Oamaru to Otepopo, cutting 9 shall be excavated at 13 feet base and  $\frac{3}{4}$  to 1 slopes; cutting 10 shall be excavated at 13 feet base and  $\frac{3}{4}$  to 1 slopes; cutting 39 shall be excavated at 10 feet base in rock and  $\frac{1}{4}$  to 1 slopes, and 13 feet base in earth and 1 to 1 slopes.

A drain is to be cut along the bottom of slopes of cuttings. Except in rock, this drain to average 5 cubic feet per lineal yard. Catchwater drains are to be dug above the top of one slope of cuttings, at a distance of from a quarter of a chain to a chain from the top of slopes. These ditches are to average 5 cubic feet per lineal yard, and are to be true and regular to the inclinations directed; no stumps or roots to be left in them.

The embankments must be carried forward uniformly of the proper shape, with such an addition to the heights and widths as a due allowance for the shrinking of the material requires, so as to avoid as far as practicable the necessity for making subsequent additions either to the heights or widths of the embankment, to bring them to the correct levels and dimensions.

Whenever the foundation of an embankment is on steeply sloping ground, the Contractor, if required, must at his own expense, cut steps and benches under the base of the embankment.

The top of embankment at formation level is to be 10 feet wide; the slopes to be trimmed off to an inclination of one and a half horizontal to one vertical, and to be maintained full and true until the completion of the contract.

The embankment over the bed of the Kakanui River may be made of the gravel and soil of the river bed; but all excavations for the purpose of raising the embankment must be made on the lower side next the sea, and a space of not less than 15 feet from the foot of the embankment must be left untouched; the excavations being so placed that their sides may be sloped at  $1\frac{1}{2}$  to 1 from the edge of the space above mentioned. Such side cutting shall not be excavated in continuous trenches, but stops and stanks, as directed, are to be left.

The Contractor shall, unless otherwise directed by the Engineer, take care not in any way to interfere with or divert the existing drainage areas, and shall leave such stops or stanks in the side cuttings, and take such other precautions, as the Engineer shall think necessary for that purpose.

Behind and around culverts and abutments of bridges, the embankments shall be wheeled in and carefully rammed.

#### PITCHING.

8. At the bridge over the Kaka Stream, the foot of the slope of the embankment is to be "pitched" to a height on the centre line of 2 feet up the slope with stones of not less than 6 inches deep, laid over 6 inches of shingle or broken stone, the top edge of the pitching to be carried round in a level line till it meets the natural surface of the ground; the lower edge of the pitching to be sunk in the ground to a depth of 9 inches.

At the bridge over the Wai Werowero Creek, the foot of slope of the embankment is to be pitched to a height on the centre line of five feet up the slope; the upper edge to be carried round level, and the lower edge sunk in the ground as above specified.

At the bridge over the second crossing of the Waimotu Creek, the foot of the slope of embankment on the north side is to be pitched to a height on the centre line of 6 feet up the slope, and the foot of the slope on the south side to a height of 4 feet up the slope, with stones of the same thickness and in the same manner as specified for the Kaka Creek.

At the bridge over the Big Kuri Creek, the foot of the slope on both sides is to be pitched on the centre line to a height of 4 feet up the slope, with stones of the same depth and in the same manner as specified for the Kaka Creek.

On the branch from Moeraki Road to the port, the foot of the slope of the embankment from 1 mile 37.50 chains to 42.50 chains is to be pitched up to a level line of 5 feet vertical above high water, with hard stones not less than 1 foot deep; the bottom of the pitching, where it rests on the beach, to be sunk 1 foot 6 inches in the ground. This pitching is to be thoroughly wedged tight with hard spalls of stone, and all the holes and interstices filled with gravel; it must rest on a bed of gravel one foot thick.

#### RETAINING WALLS.

9. At 8 miles 50 chains, on the portion from Otepopo to Moeraki, a retaining wall shall be built to keep the embankment. It shall be built of rubble masonry in lime mortar, well bonded. The position and dimensions of the wall will be indicated by the Engineer, but it shall not exceed 75 cubic yards, nor the excavation for the foundations 120 cubic yards.

#### PILING OF SLIPS.

10. On the branch from Moeraki Port, from 1 mile 11 chains to 13 chains, the cutting is to be protected from slipping in by two rows of piles, strutted top and bottom, and planked at back with 3-inch planking, as shown in the drawing. From 13 chains to 15.50 chains a row of piles will be driven on the right side of the line, secured with a wale, and planked at back with  $2\frac{1}{2}$ -inch planks, as shown on the drawing.



### STREAM DIVERSIONS.

11. The Contractor must make such stream diversions as the Engineer may direct, to the extent of 6,000 cubic yards of excavation.

### ROAD ALTERATIONS.

12. At the places shown on the plan and section, and wherever necessary, the present roads are to be diverted, namely :—

From Oamaru to Otepopo, at 1 mile 28 chains, 11½ chains of road-forming; the work to consist of a ditch on each side, the material out of which to be cast on the centre of road, and, where necessary, the road levelled transversely. This road is to be half a chain wide.

At 2 miles 56 chains, 4½ chains road-forming; the present main road to be shifted as shown, the old ditch filled up, and new ones excavated.

At 6 miles 2·30 chains, 10 chains of road-forming.

At 13 miles 42 chains, 4 chains of road-forming.

From Otepopo to Moeraki, beginning at 5 miles 78 chains, 53 chains of road formation: the work involved being, cutting new ditches on each side, 2 feet wide at bottom, 2 feet deep, with the sides sloped 1 to 1; one 2-feet square culvert, 62 feet long; and excavations and embankments made to the amount of not more than 6,000 cubic yards of excavation.

At 8 miles 68 chains, 3½ chains road-forming.

On the branch to Moeraki, at 0 mile 13 chains to 0 mile 40 chains, 31 chains road-forming: the work involved being, the forming of side ditches 2 feet at bottom, 2 feet deep, with the sides sloped 1 to 1; levelling the road transversely, if required; building one 2-feet culvert 64 feet long; and the forming of cuttings and embankments;—the total excavation not to exceed 607 cubic yards.

Out of the Railway cutting, at 0 miles 25 chains, 8,600 cubic yards of earth must be taken to the embankment over the valley, on the road diversion.

At 0 miles 34 chains, the old road embankment must be excavated out in order to build the culvert.

At 1 mile 11 to 22 chains, the public road must be widened to an extent involving not more than 750 cubic yards of excavation.

None of the above-mentioned road diversions will be metalled except at the level crossings over the railway, as specified below, and on those portions on the branch to Moeraki Port, which shall be metalled with hard gravel to the amount of 44 cubic yards per lineal chain.

All such diversions and road approaches to the level crossings are to be completed in a convenient, substantial, and proper manner, with the necessary drains, water tables, and side slopes. Such approaches and road diversions are to be formed with an inclination not steeper than 1 in 30 for public roads, and 1 in 20 for private roads, except where the present inclination exceeds these rates, in which case the inclination of the new road shall not exceed that of the present road, unless, in the opinion of the Engineer, a steeper is unavoidable.

### LEVEL CROSSINGS.

Four first-class crossings with cattle stops, and thirty-eight second-class with cattle stops, shall be constructed at the road crossing or where directed.

They shall be carefully placed as to line and level, and finished in strict conformity with the drawing and the notes thereon. Each level crossing shall be metalled for a length of 66 feet on each side of the centre line as above specified for the roads, and tile or timber box drains shall be put in the formation ditches where necessary for the drainage of the line or road.

Cattle stops, as shown in Drawing No. 23, are to be put in where directed, not exceeding 60 in number, not including those specified for level crossings.

### MATERIALS.

13. Except where otherwise specified, all the materials used under this contract shall be of the following kinds and descriptions :—

The masonry in piers and foundations of piers of bridges shall be built of approved quality of sandstone or Oamaru limestone laid on its natural bed. They are to be block in course set in lime mortar, the stones to be axe-dressed on bed and joint, and the courses to be at least 1 foot thick. Every superficial yard of face shall be bonded with stones 2 feet 6 inches long; the beds and joints above ground are to be pointed with cement mortar, and the top shall be plastered over with a coat of cement mortar.

At the Waimotu Creek the granite rock will be levelled off, and the piers built on it either of the same stone or of limestone; if built of granite, they shall be of uncoursed rubble, well bonded, and set in cement mortar.

At the Otepopo and the Waianakarua Rivers the soft sandstone will be excavated to a level bed and filled with 1 foot of concrete, on which the footing course of the piers is to be built of granite or other hard stone, in rubble masonry set in cement mortar, and on this the piers are to be built as above specified of block in course in sandstone or limestone.

At the bridge over the Waireka the foundations for the two piers next the river will be excavated down to the sandstone rock, which must be roughly levelled off, and the foundations of the piers built on it of block in course set in lime mortar.

At 8 miles the trap dyke must be excavated in steps to a level bed, and the foundations of the piers built on it in block in course limestone masonry set in lime mortar.

Where masonry is built below water line, it must be set in cement mortar.

Cement mortar shall consist of three parts by measure of sharp clean sand and one part of cement.

Concrete shall be composed of three parts by measure of broken stone, two parts of sharp sand, and one part of fresh Portland cement; or two parts of broken stone to two parts of gravel, one part of sand, and one part of fresh Portland cement. The cement shall be of approved brands, and subject to such tests as the Engineer may from time to time direct. The concrete shall be laid in 12-inch layers, and well rammed as the work progresses.

Rail-strings, and floor beams shall be of black birch, and all other timber shall be of matai or totara, or other specially approved timber; it shall be of heart-wood, except as shown on drawing, and shall be straight and sound, free from shakes, large knots, and other imperfections.

The whole of the straps and bolts shall be made of B.B. Crown iron, or other iron of equal quality, of the dimensions shown; the whole to be finished and fixed in a workmanlike manner.

Bolts shown or specified shall have a square head, of which the thickness shall be equal to the diameter of the bolt, and the width twice the diameter of the bolt. They are to be screwed with a good clean thread, and shall have a nut equal in size to the head of the bolt, and shall be provided with one or more washers 3 inches diameter.

#### BRIDGES AND TIMBER OPENINGS.

14. Bridges, as per detail drawings, shall be erected where shown on longitudinal section.

All joints, shoulders, and sides of tenons and scarfs to be worked perfectly true, and to fit accurately, and to be covered with red lead before being put together. Tenons generally to be 5 inches long, and to be draw-bored to receive trenails of hardwood, made with hollow auger or trenailing machine. All trenails to be well seasoned and kept dry, and to be one-sixteenth of an inch more in diameter than the hole bored for them, and to be covered with red lead before being driven. All capsills and mudsills to be mortised on to posts or piles. All string pieces to be accurately notched down to capsills or floor beams by notching  $\frac{3}{4}$ -inch from each, to be scribed and accurately fitted. Diagonal braces, where placed inside the panel, are to be notched together as described for string pieces.

All piles are to be rung before driving with a 3-inch by  $\frac{3}{4}$ -inch round hoop. The piles are to be shod with a substantial iron shoe, weighing not less than 30 pounds, securely fixed; the point of the pile to be cut true, and to be squared off at the end to 3 inches square, and to have true bearing against the shoe. No pile-driving is to be commenced at any bridge opening, or other work without giving six days' notice previously to the Engineer in charge of the works.

The Contractor shall provide all proper rods and gauges for setting out and testing the dimensions of bridges and timber openings that the Engineer may require.

#### CULVERTS AND DRAINS.

15. The culverts shall be of the sizes specified in the longitudinal section, and of the figure and dimensions shown on the drawings for each kind of culvert.

Arch culverts shall be built of limestone or sandstone of approved quality laid on the natural bed of the stone. The masonry is to be built in regular courses not less than 1 foot thick, set in lime mortar, composed of one part good lime, with two parts of clean sand. No stone shall be less size than  $1\frac{1}{2}$  cubic foot. Render stones shall be laid in the wall at intervals of 3 feet 6 inches in every course; the renders to pass quite through the thickness of the wall. All the stones are to be dressed with the axe or sawn. The arch stones should be sawn to a template, and made true in bed and joint; they shall extend quite through the arch, and must be laid with a good bond lengthwise of the arch; the string courses shall be accurately dressed in bed and joint; the parapets shall be whole stones of the total height and thickness of the walls, set true on bed and joints. If the Engineer shall think it necessary, a bed of concrete 1 foot thick shall be laid under the walls of the culvert, to project at least 8 inches beyond the footings, so that the bed of concrete shall be 16 inches wider than the wall and its footings.

The bottom of the culverts is to be paved with stones 1 foot deep, the longest dimension to be laid across the culvert, the pitching to be well packed and punned, to be carried 6 feet beyond the end of the wings; these stones shall be the hardest of the kind used in the culverts; all exposed beds and joints shall be neatly pointed with cement mortar.

Covered square culverts, if built of Oamaru limestone or sandstone, are to be of block in course masonry set in lime mortar; the stones are to be dressed on bed and joint with the axe, and the courses shall be at least 9 inches thick; they are to be pitched or paved, as shown in the drawings, with the hardest stone of the kind used in the culverts.

If built of granite, basalt, or other hard stone, these culverts shall be built of uncovered masonry set in lime mortar, with a true proportion of headers reaching quite through the walls. The covers shall be of sound stone, of the dimensions shown.

On the top of all the culverts, 9 inches of good clay puddle must be spread.

Open stone culverts, with timber superstructure, are to be built of masonry similar to that used in the covered square culverts.

250 feet of 12-inch glazed earthenware pipes shall be laid where shown on the section or where directed by the Engineer. The pipes are to be of the best manufacture, well burned and sound throughout, and shall have socket-joints threaded to receive the packing. The trenches to receive the pipes shall be excavated in the solid. The joints of the pipes shall be laid with clay, and the drain shall be bedded and encased in clay puddle.

Sufficient catch-water and outfall drains are to be dug at culverts, and all stumps and roots occurring in the line of ditch to be taken out.

### TUNNEL.

16. A tunnel is to be excavated at Otepopo; its length is 286 yards, and the figure and dimensions are shown on drawing.

The tunnel is to be taken out to the section represented by the outside of the brick lining, but the lining is only to be put in for 22 feet from the face at each end, and 159 feet at such other places as the Engineer may consider unsafe. Six recesses shall be excavated in the sides of the tunnel at intervals of about 143 feet alternately on opposite sides of it; these are to be 6 feet wide,  $2\frac{1}{2}$  feet deep, and 6 feet high from formation-line to the top of the arch on the under side; the top to be arched with two rings of bricks on edge.

A drain shall be carried down the centre of the tunnel, as shown, and led to the side ditches in the cuttings; it is to be covered with 6-inch sandstone covers 2 feet long, or a tile drain 9-inches diameter may be substituted.

The lining shall consist of 14-inch brickwork set in cement mortar; the longitudinal courses are to be laid straight and parallel with the line of the tunnel. The sides shall be laid in English bond, and the arch turned in three rings with one key brick the full depth of the point; all spaces between the lining and excavation are to be firmly packed with stone shivers, brickbats, or shingle.

The tunnel fronts shall be of the best quality of sandstone or Oamaru limestone, and the whole front shall be of the same material. The arch-stones, quoins, coping pilasters, and string-courses shall be ashlar. The sloping base of the pilasters shall be block in course, as shown on drawing, accurately dressed on the beds; the remainder of the front shall be block in course masonry, in courses of not less than 1 foot thick, except between the cope and its string-course, where the courses shall be 9 inches thick. The front joints of arch-stones, joints and beds in pilaster, the beds in front of the quoins, and the beds on inside of the base of pilasters, shall have a chisel-draft; the quoins and arch-stones are to be chamfered as shown; the edge of base of pilaster is to have a chisel-draft. The whole shall be set in cement mortar: the pilaster and its base shall be well bonded into the face.

### BALLASTING AND PERMANENT WAY.

17. The ballast is to consist of shingle, broken stones, or sand, previously approved of, and is to be disposed as shown in drawing No. 27.

In all cases the embankments and cuttings are to be cleared from mud, and brought to an uniform formation level before the ballast is laid on.

The permanent way is to consist of a single line of rails, laid to a gauge of 3 feet 6 inches, and sidings provided and laid where directed, amounting in all to 2 miles of sidings.

The Contractor is to provide and have upon the ground at all points, when the work is proceeding, a sufficient supply of all such templates, tools, gauges, and other implements as are necessary and are usually required in laying of permanent way, or as may be required by the Engineer.

About three thirty-seconds of an inch of space is to be left between the ends of the rails when fixed in place, or such other space as the Engineer may direct, according to the season.

For the curves, the rails will require bending. This as well as the straightening of all bent rails must be effected by a press, or by striking with wooden hand-beetles on wooden blocks. In all cases, whether of straightening of bent rails or of bending rails to the necessary curves, the rails must be set permanently to the form required before being laid, and no temporary bending, springing, or straightening, either by dragging with a lever and hook, or by any other means of a like character, will on any account be permitted.

Great care must be taken to lay all the sleepers square to the rails on straights, and as near as may be on curves.

Where the line is straight, the rails will be level across the line; but where the line is curved, the rails will be canted, the difference of level between the two rails being such as the Engineer shall order.

When suitable material for ballast is not found immediately on the line, the sleepers may be laid on formation being carefully tamped with dry earth. The Contractor will be permitted to run ballast and material trains over the line thus laid at a speed not exceeding 10 miles an hour, but the ballasting and lifting must be proceeded with, with all possible despatch.

The changes of gradients shall be made by a gradual curve.

There are to be 2,050 sleepers per mile, to be spaced as directed. The following timbers to be used to the extent of not less than 75 per cent. of the whole :—Totara, jarrah, Oregon pine, kauri, or puriri. The remaining 25 per cent. may be of matai (*Podocarpus spicata*) or birch (*Fagus fusca* or *Solandri*). They shall be 7 feet long and 7 inches by 5 inches, all of heart.

They are to be flatted top and bottom, true and out of wind ; but any extra width beyond 7 inches need not be removed.

The rail seats are to be accurately adzed to a correct bevel.

The rails will weigh 40 lbs. to the yard ; they will be jointed with Ibbotson's patent steel clip-joint, weighing about 12 lbs. each joint, and fastened to the sleepers by six fang-bolts to each rail, and two spikes to each sleeper, where fang-bolts are not used.

One half of the rails and fastenings will be delivered to the Contractor on the beach at Moeraki, and one half on the beach at Oamaru, and the Contractor shall be responsible for all materials delivered to him.

#### USE OF PERMANENT WAY MATERIALS BY CONTRACTOR.

18. Permanent way materials shall not be laid down or employed, without written permission of the Engineer, within 100 yards of the face of any excavation or the end of any embankments, nor used for hauling earthwork before the ballast is laid. When the Contractor shall have complied with the above requirements, he may use the rails and other permanent way materials for the purpose of hauling earthwork or materials on parts of the line.

#### SIDINGS.

19. The Contractor shall construct at his own cost, at such points as may be indicated by the Engineer, 2 miles of sidings, including the necessary earthwork, ballast, sleepers, and laying of permanent way, similar to that of the main line without the points and crossings. He shall also make and construct, wherever required, such Station grounds, buildings, points, crossings, extra sidings, telegraph and other things as may be required for Station accommodation, and shall furnish the Engineer monthly with a detailed statement, showing their actual cost exclusive of all cost of management, properly supported by vouchers, or as otherwise directed, and to this cost a sum equal to £10 per centum shall be added for Contractor's profits, and this amount shall be in addition to the contract sum.

#### TELEGRAPH.

20. A single wire telegraph will be constructed by the Government, and the use of it allowed to the Contractor during construction of the works. During the period of maintenance, the Government will transmit, free of charge, all messages sent by the Contractor on the business of the railway.

#### USE OF ROLLING STOCK.

21. The Government will furnish the Contractor with such locomotives and rolling stock as they may have on the line ; the Contractor to pay the wages of the engine-drivers and stokers, who must be approved by the Engineer, and to furnish fuel, water, oil, grease, waste, &c., at his own expense.

The Contractor shall also return such rolling stock as may be lent to him in as good order as when received by him—reasonable tear and wear excepted.

In the event of the Government being unable to supply locomotives and rolling stock when needed by the Contractor, an extension of time will be granted for the completion of the contract, such extension of time to be fixed by the Engineer.

## WAITAKI TO MOERAKI RAILWAY.

## LIST A.

	Drawing No.	1.—Trestles.
Section No. 2.	"	5.—Bridge over Oamaru Creek, 1st crossing, 25 chains.
	"	6.—Bridge over Oamaru Creek, 2nd crossing, 35 chains.
	"	7.—Over bridge, at 1 mile 78 chains.
	"	8.—Bridge over Waireka Creek, at 6 miles 43 50 chains.
	"	13.—Bridge over Swamp, at 9 miles 25 chains.
	"	14.—Bridge over Waimotu Creek, at 10 miles 67 chains.
Section No. 3.	"	15.—Bridge over Otepopo Creek, at 2 miles 43 chains.
	"	16. { Details for Bridges 40 feet span.
	"	{ Drawing No. 17.
	"	17.—Bridge over Waianakarua River, at 2 miles 76 chains.
	"	18.—Bridge over Kaka Creek, at 5 miles 49 chains.
	"	19.—Bridge over Big Kuri Creek, at 6 miles 55 to 59 chains.
Sections Nos. 1, 2, 3.	"	20.—Bridge over Little Kuri Creek, at 7 miles 66 chains.
	"	21.—Bridge over Little Wai-Werowero Creek, at 8 miles 45 chains.
	"	22.—Bridge over Big Wai-Werowero Creek, at 8 miles 51 chains.
	"	23.—Level Crossings and Cattle Stops.
	"	24.—Culverts.
	"	25.—Tunnel.
	"	26.—Area of Sap allowed in Balks.
	"	27.—Cross Sections, Cuttings, and Embankments.
	"	28.—Piled work.
	"	29.—Plan and Section, 0 miles to 26 miles 8 chains.

## GENERAL FENCING SPECIFICATION.

THE Fencing to be used shall be of three kinds, to be known as Qualities Nos. 1, 2, and 3.

Quality No. 1.—Quality No. 1 shall consist of a sod wall, 3 feet 3 inches broad at base, 1 foot 3 inches broad at top, and 4 feet 6 inches high. It shall be carefully built in uniform layers from 8 to 10 inches thick, and bonded together. A ditch at least 2 feet 6 inches wide, and 1 foot 6 inches deep, shall be dug on each side, and carried through the wall where necessary for the drainage of the line or adjoining land. The wall is to be carried over such ditches on sound totara timber 3 inches thick.

Quality No. 2.—Quality No. 2 shall consist of post, ditch, mound, three wires, and top rail.

Quality No. 3.—Quality No. 3 shall consist of post, five wires, and top rail.

The timber used in Qualities Nos. 2 and 3 shall be totara, matai, kauri, or manuka, or other specially approved timber.

The posts to be of split timber, cut square at ends, mortised for rails, and well rammed when in their places. A straining post, 9 feet long, 6 inches in diameter, and well stayed, shall be put in at intervals of not more than 5 chains, and at each crossing of existing fences.

The top rails shall also be of split timber, scarfed at ends, neatly fitted into mortise holes cut in the posts, and securely fixed with wedges.

The wires shall consist of the best black annealed wire, of No. 5 Birmingham gauge, and shall be fastened to outside of posts with suitable staples.

The mound, in fencing Quality No. 2, shall be of tough firm sods, as specified for sod wall. It shall be 3 feet wide at base, 2 feet wide at top, and 1 foot 6 inches high.

Existing fences crossed and cut down shall be connected with the railway fences, and left in a condition at least equal to that in which they were found.

The Contractor shall provide temporary slip-rails or panels in the permanent fencing where required for the accommodation of occupiers, and will give every other facility of access to their lands across the line until the permanent crossings and roads are constructed.

## SCHEDULE OF PRICES.

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ENDORSEMENT.

The amounts which may from time to time become due and payable by the Contractors upon or by virtue of and according to the tenor of any such promissory notes as are mentioned in the contract dated the 27th June, 1872, made or purporting to be made between Sir G. F. Bowen, the Governor of New Zealand, by Isaac Earl Featherston, the Agent-General in London for New Zealand, and the Contractors, and a copy of which is hereto annexed, may be deducted from any moneys payable to the Contractors under this contract and these conditions.

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*Note.*—A printed copy of the contract referred to in the above endorsement, being “Articles of Agreement with Messrs. Brogden for the introduction of Immigrants,” dated 27th January, 1872, (Parliamentary Paper D. No. 19D., 1872,) is attached to the original of the Waitaki to Moeraki contract, but is not reprinted here.

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## AUCKLAND STATION. AUCKLAND STATION TO NEWMARKET RAILWAY, AND ONEHUNGA BRANCH RAILWAY.

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ARTICLES OF AGREEMENT made and entered into this nineteenth day of July, one thousand eight hundred and seventy-three, between the Governor of New Zealand, in the name and on behalf of Her Majesty the Queen, of the one part: and Alexander Brogden, Henry Brogden, and James Brogden, all of Queen's Square, in the City of Westminster, in England, railway contractors (hereinafter referred to as the Contractors), of the other part: Whereas by "The Railways Act, 1871," it is among other things enacted that the Governor may if he thinks fit construct and maintain, or cause to be constructed and maintained, under the provisions of "The Immigration and Public Works Act, 1870" hereinafter referred to as the "said Act"), and "The Immigration and Public Works Act Amendment Act, 1871" (hereinafter referred to as the "said Amending Act"), certain Railways therein mentioned: And whereas amongst such Railways is included a line of Railway from Auckland to Mercer: And whereas by Articles of Agreement dated the tenth day of August, one thousand eight hundred and seventy-two, and made between the Governor of New Zealand, on behalf of Her Majesty the Queen of the one part, and the said Contractors of the other part, it was agreed between the parties thereto that the Contractors should in accordance with the conditions, specifications, drawings, and plans therein mentioned, construct, make, complete, and maintain, and do and perform all the works, and supply all such plant and materials as therein mentioned or referred to, and it was further agreed that the Queen should pay to the Contractors for the construction and execution of the said works and the maintenance thereof, for the period of three months from the completion thereof, and for the supply of the materials therein mentioned, the sum of one hundred and sixty eight thousand nine hundred and twenty-four pounds: And whereas in the specification annexed to the hereinbefore in part recited agreement, it was provided that the line of Railway included under the title "Auckland and Mercer Railway," to which the said specification applied, should begin at a point in the town of New Market, and terminate at the Wharf in the township of Mercer, in the Waikato River: And whereas under the provisions of the said Act the Governor of New Zealand, on behalf of the Queen, has agreed with the Contractors for the execution and construction by them of certain station works at Auckland of that portion of the line of Railway from Auckland to Mercer which lies between the City of Auckland and the town of New Market aforesaid, and also for the execution and construction of a branch line from the said Auckland and Mercer line to Onehunga, as the several works are described or referred to herein, and in the specifications, drawings, and plans hereto annexed, or herein referred to, all of which specifications, drawings, and plans are signed by the Contractors, and by John Carruthers, Esquire, the Engineer-in-Chief of the Colony of New Zealand: Now these presents witness that Her Majesty the Queen for herself, her heirs, and successors (all of whom are hereinafter included in the expression "the Queen"), and so far as the covenants hereinafter contained are to be performed

or observed on her or their part, respectively, doth hereby covenant with the Contractors, their executors, administrators, and assigns (all of whom are hereinafter called the "Contractors"), and the Contractors, and each of them for themselves, and himself, and their respective heirs, executors, and administrators, so far as such covenants hereinafter contained are to be performed or observed on their parts, do and doth hereby covenant with the Queen, her heirs, and successors, in manner hereinafter appearing; that is to say:—

1. That they, the Contractors, shall and will in all respects subject to, and in accordance with the said conditions, specifications, drawings, and plans, construct, make, complete, and maintain, and do and perform all the works, and supply all such plant and materials as are by the said specifications and conditions to be supplied by the Contractor, whether such works, plant, and materials are described or referred to in the said conditions, specifications, drawings, or plans, or are extra, or in addition thereto, within the time mentioned in the said conditions, subject, however, to the provisions contained in the said conditions for extension of time.

2. That the Queen shall and will, free of cost to the Contractors, provide and deliver to the Contractors at the ships' sides, at the Harbour of Auckland, or at the Port of Onehunga, the iron rails and fastenings required for the permanent way, and the rolling stock respectively mentioned in the specifications.

3. That the Queen will pay the Contractors for the construction and execution of the said works, and the maintenance thereof, for the period of three calendar months from the completion of the works, and for the supply of all such plant and materials as the Contractors are to supply under the provisions of this agreement as aforesaid, the sum of fifty-seven thousand seven hundred and forty-nine pounds (exclusive of the supply of such plant and materials as by the said specifications and conditions it is provided the Queen or the Government of New Zealand shall supply, and the further sum of three hundred pounds for the maintenance of the said works for the period of three months after the completion thereof, and subject to the provisions contained in the conditions and specifications for increase and decrease in case of extras or deductions, and to the provisions contained in the specifications or conditions for extra payment to the Contractors by per centages on the cost of such works as by such specifications it is provided the Contractors are to receive payment by way of per centage on the cost thereof).

4. The Queen shall and will make payments to the Contractors upon account of the sums herein agreed to be paid at the rate and times, and upon the terms and conditions mentioned in the said specifications and conditions.

5. The parties hereto shall and will each respectively perform, observe, and fulfil all and singular the conditions and stipulations expressed or contained in the said conditions and specifications, and which thereby it is provided shall be performed, observed, or fulfilled by such parties respectively.

6. From and after the completion of that portion of the works herein contracted for called the Onehunga branch, and the delivery of the same to the Minister of Public Works, the Contractors shall be entitled to the carriage, free of any charge to them, of all men and materials required to be carried along the same for the purposes of the remaining portions of the said railway, but the cost of loading and discharging any materials so carried shall be borne and paid by the Contractors.

7. The Contractors shall also be entitled from and after the completion of the Onehunga branch, and the delivery of the same to the Minister of Public Works, to use the same, free of any charge, for the purpose of the carriage to and for the use of the remaining portions of the said Railway of any men and materials which may be required for the same: Provided that in using the said portion of the said Railway they shall not obstruct or interfere with the necessary and ordinary traffic upon the same.



In witness whereof the seal of the Colony has hereunto been affixed, and the said Contractors have hereunto set their hands and seals the day and year first above written.

Sealed with the seal of the Colony,  
and signed by the Governor  
in the presence of  
EDWARD RICHARDSON.

JAMES FERGUSON,  
Governor.

Signed, sealed, and delivered by the  
above-named Alexander Brogden,  
Henry Brogden, and James  
Brogden, by their Attorney, John  
Henderson, in the presence of  
WM. THOS. LOCKE TRAVERS,  
Solicitor, Wellington.  
(Seal of the Colony.)

ALEXANDER BROGDEN.

(Seal.)

HENRY BROGDEN.

(Seal.)

JAMES BROGDEN,  
By their Attorney, John Henderson.  
(Seal.)

Approved in Council, 25th July, 1873.

FORSTER GORING,  
Clerk of the Executive Council.

# GENERAL CONDITIONS FOR THE WORKS TO BE CONSTRUCTED

## IN RESPECT OF

1. AUCKLAND STATION.
2. AUCKLAND STATION TO NEWMARKET.
3. ONEHUNGA BRANCH.

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## INTERPRETATION CLAUSE.

1. In these conditions the words "Minister for Public Works" shall mean the Minister for Public Works appointed under 'The Immigration and Public Works Act, 1870,' or any Minister or person for the time being authorized by the Governor to act for such Minister in respect of the special work contracted for: the word "Engineer" shall mean the Engineer for the time being who shall have principal charge of the works on behalf of the Government; and the word "Contractor" shall mean "Contractors" when two or more persons tender or contract jointly for the work; and the word "month" shall mean "calendar month."

WORKS, &c., TO BE ACCORDING TO DRAWINGS AND SPECIFICATIONS, AND TO THE SATISFACTION OF THE ENGINEER.

2. All the materials used are to be the best of their respective kinds, and all works of every description throughout are, subject to the provisions hereinafter contained, to be executed conformably to the several drawings and details prepared or that may be prepared for that purpose, and herein referred to, in the strictest accordance with the provisions of the specifications, and in the best, most substantial, and workmanlike manner, and to the satisfaction of the Engineer and should any work not be so executed, it shall be immediately altered and amended at the cost of the Contractor.

## PLANS, &c.

3. A copy of the plans and drawings, with the specifications, shall be furnished to the Contractor by the Engineer, and the plans and drawings referred to in the specification, and the specification shall be taken together to explain each other; and if, in the execution of the works, it shall be found that anything has been omitted or mis-stated either in the drawings or specification, which is necessary for the proper performance and completion of any part or parts of the works, the Contractor shall at his own cost and expense execute the same, and provide whatever may be requisite for so doing, provided the extra cost thereof shall not exceed the sum of £200 in each particular case. Any written dimensions on the drawing shall be taken in all cases in preference to measurements by the scale attached, and anything contained either in the drawings or specification shall be equally binding on the Contractor as if it were contained in both; and in case the written or figured dimensions on the drawings shall disagree with the scaling, or in case there shall be any discrepancy between the drawings and specification, or any ambiguity in them, such occurrence shall not invalidate the contract, but the same shall be rectified by the Engineer if thought requisite, and the Contractor shall not be entitled to make any claim or demand for compensation or damages on account of such discrepancy or ambiguity. If neither the drawings nor the specification contain any notice of minor parts, the intention to include which is nevertheless clearly to be inferred, and which parts are obviously

necessary for the workmanlike completion and stability of the work, all such parts are to be made and executed by the Contractor without extra charge, and are to be deemed by him as included in the sum at which he contracts for the works.

#### EXTRA WORKS AND ALTERATION OF WORKS.

4. The Contractor is to make and execute, in the like manner as aforesaid, and with the like materials as aforesaid, any additions, deviations, or alterations to, from, or in the works, which the Engineer may from time to time, previously to the commencement or during the progress of the works, by an order in writing, require, at and for such prices or rates as shall be agreed upon in writing between the Contractor and the Minister for Public Works. In case of non-agreement as to price, the work shall be done by the Contractor as required by the Engineer, and the price thereof shall be settled by arbitration as hereinafter provided, and shall when so ascertained be added to and thenceforth deemed to be part of the contract price for the works to be executed under this contract; but no additions, deviations, or alterations whatever, which shall be claimed by the Contractor, will be admitted or recognized under any circumstances, or will be allowed or paid for, which shall be done or executed without, or contrary to any previous order from the Engineer in writing as aforesaid: Provided always that no addition, deviation, or alteration from the plans and specifications to be ordered by the Engineer as aforesaid shall involve an increased expenditure in connection with the works or any part thereof, unless distinctly authorized by writing under the hand of the Minister for Public Works, who, before authorizing any such deviation, shall obtain from the Engineer an estimate of the increased expenditure arising therefrom: Provided also, that in all cases where such deviation, addition, or alteration as last aforesaid, from the plans and specifications, shall involve an outlay exceeding £500, the consent of the Governor in Council shall first be obtained. And in all cases it shall be the duty of the Contractor to satisfy himself that such addition, deviation, or alteration (if any) has been duly authorized in the manner required by "The Immigration and Public Works Act, 1870," and also, that to any such outlay as aforesaid, requiring the consent of the Governor in Council as aforesaid, such consent has been obtained, as required by the said Act.

#### OMISSION OF PORTIONS OF WORKS.

5. To the Minister for Public Works there is reserved the right from time to time of requiring the omission of any particular portion or portions of works described in the specification or shown on the drawings, and of deducting the value thereof from the amount of the contract, such value to be agreed upon between the Minister for Public Works and the Contractor, or in case of difference to be settled by arbitration as hereinafter provided; but the Contractor shall be entitled to be paid a sum of ten per cent. on the agreed or ascertained value of the work omitted; such sums for omissions to be paid on the completion of the contract.

#### MATERIALS, LABOUR, &c.

6. The Contractor shall provide, at his own costs and charges, all materials, labour, tools, plant, tackle, machinery, scaffolding, waggons, cordage, cartage, stores, planking, centres, coffer dams, diving bells, staging, diving dresses, and everything necessary for the proper execution and completion of the several works, and centres must not be struck without the written authority of the Engineer. The Contractor is also to provide, at his cost, for keeping all the trenches and foundations free from water, and for preventing all slips of ground into the trenches. All material and all prepared work brought upon the ground of the works for use therein is to be considered the property of the Queen, and the Contractor shall not take away any such material or work without the written authority of the Engineer, unless the same shall be required for the purposes of other works under this contract. The Contractor will be required to set out accurately, at his own expense, all the works comprised in this contract, agreeably to the drawings and specifications, and shall be held responsible for their being so set out and executed accordingly.

## REMOVAL OF IMPROPER MATERIALS.

7. It shall be lawful for the Engineer to order the removal from the works of any materials, whether fixed or not, which may appear to him to be of an inferior or improper description, and the Contractor shall remove the same within twenty-four hours after a written notice in that behalf given to him by the Engineer; and in case of neglect or refusal to remove the same according to such notice, the Engineer shall have power to remove the same at the cost of the Contractor.

## CONTRACTOR TO BE REPRESENTED.

8. The Contractor at all times during the progress of the works, when he is not personally superintending them, must have a responsible agent or overseer stationed on them, to receive instructions from the Engineer, and to represent him for all the purposes of this contract.

## PROGRESS OF WORKS.

9. If the Contractor shall, in the opinion of the Engineer, fail to make such progress with the works as the Engineer shall deem sufficient to insure their completion within the specified time, or if the Contractor shall use or employ bad or insufficient materials, or execute any work in an imperfect manner, and shall fail or neglect to rectify any such cause of complaint for fourteen days after being thereunto required in writing by the Engineer, or if the Contractor shall, in the judgment of the Engineer, commit a wilful breach of his contract, then, and in any of such cases, it shall be lawful for the Minister for Public Works, by any instrument in writing under his hand delivered to the Contractor, or to his representative on the works, or left at the Contractor's usual or last known place of abode or business, absolutely to determine this contract, and from and after the delivery of the said instrument as aforesaid, the contract shall be absolutely determined; and in the event of such determination happening, then it shall be lawful for the said Minister, after having delivered such instrument to the Contractor as aforesaid, to take the works out of the Contractor's possession, and at the option of such Minister either to carry the works on under the Engineer or by another Contractor, and that either after advertising for Contractors or without doing so, as he shall think fit; and all the materials, implements, and plant then upon or used in connection with the works may be used in and applied for the purpose of completing the works; and on the final completion of the works, if it should be found that the balance of the contract price remaining unpaid, if any, and the deposit money and percentages, together with the net proceeds realised by the sale of the then residue of such materials, implements and plant as aforesaid, after being sold in any way that may appear to be most advisable to the Minister for Public Works, is not sufficient to meet the outlay incurred in completing the works in all respects, then the Contractor, his executors or administrators, shall be bound to pay to the Minister for Public Works the surplus expenditure above such balance, and other sums as aforesaid. But if, on the other hand, the works shall be completed within the contract price, then there shall be paid to the Contractor, or his executors, administrators, or assigns, such balance as may be due to him or them, including the deposit money and percentages or retention money, if any, but without any interest thereon; and the Engineer shall, within fourteen days after such balance has been ascertained to be due, grant authority to the Contractor or his representatives for the removal of all surplus material, implements, and plant belonging to him or them, and remaining on the works after their completion, if not sold as before mentioned. But it is herein expressly provided that, in the event of any materials, implements, or plant being returned to the Contractor, or his representatives, or being allowed to be removed by him or them as aforesaid, Her Majesty the Queen shall not be in any way liable for any loss, diminution, wear and tear, or injury, such materials, implements, or plant may have sustained during the completion of the work.

CONTRACTOR NOT TO SUBLET WORKS TO PERSONS PREVIOUSLY OBJECTED TO—  
BANKRUPTCY, INSOLVENCY, OR DEATH.

13. The Contractor shall not sublet any portion of the works to any person who shall have been previously objected to by the Engineer by notice in writing to the Contractor. If the Contractor become bankrupt or insolvent, or shall make an assignment of his estate for the benefit of his creditors, or shall die before the final completion of the contract, then it shall be lawful for the Minister for Public Works, on behalf of the Queen, summarily, and of his own authority, and without any process of law for that purpose, to take possession of the works, and to take them out of the hands of the Contractor, or of his executors, or administrators, or of the assignees or trustees of his estate, and to employ persons for the execution and completion of the same, and that either after advertising for contractors, or without doing so, as he shall think fit; and all the then remaining materials, implements, and plant aforesaid may be used in and applied for the purposes of the works; and on the final completion of the works, if it should be found that the balance of the contract price remaining unpaid, if any, and the deposit money and percentages aforesaid, together with the value of the remaining materials, implements, and plants as aforesaid, after being sold in any way that may appear to be most advisable to the Minister for Public Works, is not sufficient to meet the outlay incurred in completing the works in all respects, then the Contractor, his executors, or administrators, shall be bound to pay to the Minister for Public Works the surplus expenditure above such balance, and other sums as aforesaid; and in the case of bankruptcy or insolvency, then Her Majesty the Queen shall rank as a creditor to the amount of such surplus. But if, on the other hand, the works shall be completed within the contract price, then there shall be paid to the Contractor, or his executors, administrators, or assigns, such balance as may be due to him or them, including the deposit money and percentages or retention money, if any, but without any interest thereon; and the Engineer shall, within fourteen days after such balance has been ascertained to be due, grant authority to the Contractor or his representatives for the removal of all surplus material, implements, and plant belonging to him or them, and remaining on the works after their completion, if not sold as before mentioned. But it is herein expressly provided that, in the event of any materials, implements, or plant being returned to the Contractor or his representatives, or being allowed to be removed by him or them as aforesaid, Her Majesty the Queen shall not be in any way liable for any loss, diminution, wear and tear, or injury, such materials, implements, or plant may have sustained during the completion of the work.

LIABILITIES OF CONTRACTOR.

14. The exercise by the Minister for Public Works, or Engineer, of any of their respective powers shall not relieve the Contractor from any liability to which he may be subject for any breach of the contract.

TIME OF COMPLETION.

15. Subject as herein provided the Contractor shall complete the whole of the works by the 31st August, 1873, except the reclamation of that portion of the station ground which lies to seaward of the most northerly of the lines of rail shown on the annexed plan No. 2; and except the reclamation of the land required for the Beach Road, which works shall be completed by the 31st of January, 1874. Provided that in so completing the said last-mentioned works the Contractors shall carry out and complete the same so as not, in the opinion of the Engineer, to interfere with the traffic upon the lines of railway adjacent thereto, failing which the Minister for Public Works shall be entitled to deduct from the final balance due to the Contractor a sum calculated at the rate of Three pounds per cent. per annum on all moneys which shall have been paid to the Contractor under this contract, computed from the date on which the work ought to have been completed under this contract up to the date of the completion of the work: Provided that if the Minister for Public Works shall have taken over as com-

pleted any portion of the work, the cost of that portion shall not be included in the calculation last aforesaid. But in the event of the Contractor being prevented by earthquake, tempest, flood, or otherwise by the act of God, or by the act of the Queen's enemies, rebellion, restraint of princes, or otherwise by anything in the nature of *vis major*, or by reason of any strike amongst the workmen engaged upon the works, or by reason of any alterations, deviations, or additions, or extra works being required, or in case of any delay in furnishing any material to be supplied to the Contractor by the Governor, the Engineer shall allow such an extension of time as he shall think adequate for such enforced delay, or for such alterations, deviations, additions, or extra work; and at the expiration of the time so allowed, the deductions or sets-off for delay shall come into operation.

#### SUSPENSION OF WORKS.

16. The Contractor, on receiving a written notice from the Engineer, shall suspend, or stop, the whole or any portion of the works as may be directed, and the Governor on behalf of the Queen shall make good to the Contractor any loss or damage he may sustain through such suspension or stoppage, to be ascertained, in case of non-agreement between the Contractor and the Minister by arbitration, as hereinafter mentioned; and the Minister for Public Works shall in no case be bound to give the Contractor possession of the ground or work until thirty days after the signature of the contract by the Contractor; but a commensurate extension of time for completing the works will be allowed to the Contractor, such extension of time to be at the discretion of and to be decided by the Engineer.

#### DAMAGES TO BE MADE GOOD, &c.

17. The Contractor shall also provide for effectually securing and covering the several walls and works from the weather, as occasion may require, or as the Engineer may direct; and if any damage or loss should happen to any of the works, plant, or materials—whether from fire, theft, or weather, force of waves, or from any other cause—while the works and buildings are unfinished, or remain in possession of the Contractor, the Contractor must properly and immediately repair and make good the same at his own expense, and to the satisfaction of the Engineer; unless it can be shown that the damage arises from insufficient or imperfect designs, when the Contractor will not be held responsible, and, in case of dispute, the matter shall be settled by arbitration, as hereinafter provided.

#### TRESPASS.

18. The Contractor shall not enter upon any lands outside the line of fences for the construction of the works, or for any purpose whatever in connection with this contract, without the consent of the occupier or owner, except at his own cost and risk, and shall not, without the consent of the Engineer, remove any trees or buildings within the line of the Railway fences, nor shall he open or throw down any part of a fence without making sufficient provision by temporary fences, to be erected and maintained at his cost, for keeping cattle, sheep, or other stock from straying from or into any enclosure affected thereby; and any legal process causing costs or damage to the Government for any trespass incurred by the act or negligence of the Contractor or his workmen shall be deducted from the contract price, and be taken as payment made on account of his contract.

#### MAINTENANCE OF WORKS.

19. The Contractor shall be bound to keep and maintain in good and sufficient repair the whole works executed under the contract, and shall provide all labour, materials, &c., necessary for such maintenance for a period of three months from and after the time when all the works under the contract have been fully and severally completed; and the Contractor shall on the expiry of the said period of maintenance be bound to deliver up the whole works in good and sufficient condition, and to the satisfaction of the Engineer. The Contractor shall also be liable for any accident, damage, or injury whatsoever to the public or any private

person which may be caused by his operations during the progress of the works, or during their maintenance. He shall also maintain all night-lights and temporary footpaths required by any Municipal or other authorities, or for the safety of the public, and shall make all necessary arrangements, by siding or otherwise, as required by the Engineer, to prevent stoppage of public traffic.

#### LAND.

20. The Minister for Public Works will, free of all expense, put the Contractor in possession of all land required for the permanent works of the Railway, including land required for side-cutting, ballasting, spoil banks and road approaches, road diversions, and slips, and also from time to time, as occasion may require, but at the cost of the Contractor and so far only as the Parliamentary powers possessed by the Governor or the Minister for Public Works will extend to enable them so to do, of all such land as may be necessary for temporary purposes in connection with the works.

21. The Minister for Public Works shall, within thirty days after the signing of the contract by the Contractor, put the Contractor in possession of such parts of the land for the permanent works as may be necessary for the commencement thereof, and will from time to time, after fifteen days' notice in that behalf shall have been given by the Contractor to the Engineer, put the Contractor in possession of all such other parts of the lands required for the permanent works as may be necessary for the immediate prosecution thereof.

#### DELAY IN GIVING POSSESSION OF LAND.

22. If any delay shall take place in giving to the Contractor the possession of any land required for the permanent works as aforesaid, such delay shall not be deemed to be a breach of the contract, but the Contractor shall be entitled to such reasonable extension of time for the completion of the works as shall be fixed by the Engineer, or in case of dispute, by arbitration, as hereinafter provided.

#### POWER TO REQUIRE DISMISSAL OF ANY WORKMAN.

23. The Engineer may require the dismissal within twenty-four hours by the Contractor of any agent, overseer, foreman, workman, or other person employed by him on the works, for incompetency or misconduct, and any man so dismissed shall not be again employed upon the works.

#### TRUCK SYSTEM NOT ALLOWED.

24. The workmen, tradesmen, and labourers of every class employed on the works to which these Conditions refer, shall be paid their wages in full in money of the current coin of the Colony, and no ticket or other system of payment by provisions, liquors, or goods will on any pretence be allowed, nor shall the Contractor or any person or persons employed by him, or in any way connected with him establish any shop for the supply of liquors, provisions, or goods, nor shall the Contractor oblige his workmen to take provisions, liquors, or goods of any kind from any person in particular. The workmen of every class shall be paid on the works if it be possible, or in some building adjoining, and in no case shall they be paid at a public-house, or other place where liquors or refreshments are sold.

#### PAYMENTS.

25. Payments will be made monthly, for each calendar month, as the works proceed, on the certificate in writing of the Engineer, at a rate not exceeding 90 per cent. on the value of the work actually done, as estimated by the Engineer, having due regard in such estimate to the actual value thereof, and at a rate not exceeding 50 per cent. on the value of such plant and materials on the ground as may be approved by the Engineer as fit and necessary for the work, as estimated by the Engineer, having due regard in such estimate to the actual value thereof, such certificates for work done, and materials and plant supplied, in each calendar

month, to be delivered to the Contractor within fourteen days after the termination of such month, and the balance, less 5 per cent., together with the amount deposited as cash security, if any, in fourteen (14) days, or as nearly as may be, after the Engineer shall have certified under his hand that the works have been finally and satisfactorily completed, and that such balance, together with the cash security, is due to the Contractor. The said 5 per cent. will be retained for three months to insure the fulfilment of clause 19 of these Conditions, and from which sums may be deducted the costs of any repairs or defects, failing the Contractor executing the same : Provided always that no sum or sums of money shall be considered to be due or owing to the Contractor, nor shall the Contractor make any claim for or on account of any work executed or maintained by him, or for or on account of plant or materials supplied by him, unless such certificate as aforesaid shall have been given by the Engineer as aforesaid ; nor shall any sum or sums of money so certified be considered to be made payable to the Contractor until the expiration of fourteen days after such certificate shall have been presented to the Minister for Public Works ; nor shall any omission to pay the amount of such certificate at the time the same shall be held payable be deemed or held to be a breach of or to vitiate the contract, but in case of such omission the Contractor shall be entitled to interest on the amount certified for, at the rate of ten pounds per centum per annum, for such time as such omission shall continue.

#### NEGLECT TO CERTIFY.

26. In case the Engineer shall neglect or refuse to certify the amount due to the Contractor in respect of the work, or plant or materials, in manner and within the times mentioned in the foregoing condition, and shall continue such neglect or refusal for a period of fourteen days succeeding the fourteenth day after the end of the month in which the work was done, or the plant or materials supplied, as the case may be, the Contractor shall be entitled to measure and value the same, having due regard in his estimate to the actual value thereof, and the measure and value so estimated by the Contractor shall be temporarily accepted by the Governor so far as regards the progress payment to be made by the Contractor in respect thereof under the foregoing condition, and the payment provided by that condition shall be made accordingly, with interest thereon, at the rate of Ten pounds per centum per annum, during the period of delay occasioned by the neglect or refusal of the Engineer : Provided always that in all cases in which a certificate shall, within the period or further period hereinbefore provided, as the case may be, have actually been delivered to the Contractor, such certificate shall, for the purpose of the progress payment to be made thereunder, be conclusive ; and in case of any dispute between the Contractor and the Engineer as to the estimate therein made of value, of work done, or plant or materials provided, as the case may be, of which dispute notice shall have been given by the Contractor to the Minister for Public Works within fourteen days after the delivery of the certificate to the Contractor, such dispute shall be referred to arbitration as hereinafter mentioned.

#### PROGRESS PAYMENTS WITHOUT PREJUDICE, &c.

27. No certificate given to the Contractor for the purpose of any progress payments shall prevent the Engineer at any future time before the termination of the contract, from rejecting all unsound materials and improper workmanship, discovered subsequently to the giving of the last previous certificate ; and notwithstanding the giving of any certificate that portions or the whole of the works have been satisfactorily performed, the Engineer may require the Contractor to remove and amend, at any future time previously to the final payment on account of the construction or maintenance of the works, any work that may be found not to be performed in accordance with the contract, and the Contractor must remove and amend, at his own cost, all such work when so required, notwithstanding any approval made or given by the Assistant Engineer or Inspector. The Minister for Public Works shall have power, on the report of the Engineer that the work approved of as aforesaid is not in accordance with the



contract, to deduct from any moneys that may be due or that may become due to the Contractor the whole amount that has been paid on account of such work.

If, in the opinion of the Minister for Public Works, further inquiry is desirable or necessary before any certificate is paid, the Minister for Public Works shall have power to suspend the payment of all or any part of the amount mentioned in any such certificate for a period not exceeding one month from the date at which, in the ordinary course, the money would have been paid; and in such case, on payment of the amount payable, the Contractor shall be entitled to receive interest at the rate of ten pounds per centum per annum during such additional delay.

#### STAMPS, LICENSE FEES, &c.

28. The Contractor shall bear and pay all costs, charges, and expenses of preparing, executing, and completing this contract, and all duty stamps, licenses, Building Surveyor's fees, or other charges or fees whatsoever lawfully demanded by the Municipal or other authorities.

#### CUSTOMS AND WHARF DUTIES, &c.

29. In the event of the Contractors being compelled to pay any Customs duties or wharf dues or fees on any goods imported into New Zealand by them for the purposes of the said works, or transhipped or carried by them from any port or place in New Zealand to any other place in New Zealand, the Queen shall and will repay the same to the Contractors after one month's notice in writing by the Contractor to the Minister demanding payment thereof and giving details of such payment, and the production of vouchers or other proof of such payment.

#### ARBITRATION.

30. Should any dispute arise between the Contractor and the Engineer, or between the Contractor and the Minister for Public Works or the Government, relative to the force and intent and meaning of the specifications, drawings, or conditions, or to the mode of carrying on the works, or the nature or quality of materials used or supplied to be used, or workmanship of work done, or as to the maintenance of the works, or as to the expense of additional works, or of alterations or deviations from the specifications or plans, or as to any other matter connected with the execution of the works, or with the contract, specifications, drawings or conditions, or as to any matter which by this Contract it is expressly provided is to be settled, ascertained, or determined by arbitration, such dispute shall be referred in writing to the sole determination, arbitrament, and award of the Judge of the Supreme Court assigned to that Judicial District of the Supreme Court within which the works relative to which the dispute shall have arisen, have been or are to be executed, whose award shall be final, binding, and conclusive on all parties: Provided, however, that before any such dispute, as aforesaid, shall be so referred, the Contractor shall give to the Minister for Public Works one calendar month's notice in writing of such dispute, and of the matter and cause thereof, and in such notice the Contractor's claim shall be explicitly stated; and if such claim be for pecuniary compensation, the amount thereof shall also be stated.

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The amounts which may from time to time become due and payable by the Contractors upon, and by virtue of, and according to the tenor of any such promissory notes as are mentioned in the contract dated the 27th June, 1872, made, or purporting to be made, between Sir G. F. Bowen, the Governor of New Zealand, by Isaac Earl Featherston, the Agent-General in London for New Zealand, and the Contractors, and a copy of which is hereto annexed, may be deducted from any moneys payable to the Contractors under this contract and these conditions.

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## **AUCKLAND AND MERCER RAILWAY.**

Additional Specification of the manner of constructing the following portions of the Auckland and Mercer Railway.

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- 1.—AUCKLAND STATION.
  - 2.—AUCKLAND STATION TO NEWMARKET.
  - 3.—ONEHUNGA BRANCH.
- 

### **GENERAL DESCRIPTION.**

THE work to be done under this Specification consists of the completion of portions of the Auckland and Mercer Railway which were formerly partially executed by the Contractors under an agreement entered into between the Queen and them on the 18th day of December, 1871, and partly by the Provincial Government of Auckland, and is formed of three parts, viz. :—

1. Auckland Station.
2. Auckland Station to Newmarket.
3. Onehunga Branch.

1. Auckland Station includes the completion of the reclamation of Mechanics' Bay to 1 mile 46 chains 60 links, as shown on drawing No. 2; also the construction of a sea-wall from the Goods Shed Road to Parnell Point, of the description shown on drawing No. 6, and the facing of the reclaimed ground from the beginning of the sea-wall to the breakwater, in manner precisely similar to the sea face of the sea-wall; also the formation and metalling of the roads; laying the permanent way, including transport of materials; furnishing ballast and sleepers; laying points and crossings; all as shown on drawing No. 2. Also completing the refilling of Fort Britomart retaining wall foundations, and constructing a parapet wall of rubble masonry; also the construction of the earthwork only of a road along the beach from Fort Britomart to the Strand; also of other works as specified hereafter or shown on drawing No. 2.

2. "Auckland Station to Newmarket."—A portion of the Auckland and Mercer Railway commences at 1 mile 46 chains 61 links from Newmarket, and terminates at peg 0 at Newmarket, and includes the completion of the earthwork, dry stone filling below double piling, the completion of the Parnell Tunnell, the construction of the double piling to Parnell Slip, the repairs to the Domain Bridge, a first-class crossing, and other works as hereafter specified and shown on the plans and sections.

3. "The Onehunga Branch" of the Auckland and Mercer Railway commences at 3 miles 52 chains on that line, and terminates near the wharf at Onehunga, or at 2 miles 53 chains from Penrose Junction or thereby, as shown on the General Plan and Section, and includes the completion of the earthwork, the construction of a 6-inch glazed tile drain to supply a watering place near Onehunga Station, and other works as hereafter specified.

### **CONTRACTOR TO PROVIDE LABOUR, PLANT, AND MATERIAL.**

The Contractor to provide all labour, tools, implements, plant, and materials, and is well and substantially to construct and complete the works, and to deliver the same complete, and is to maintain and keep them in perfect order and repair for the space of three months from the delivery of the same to the Government.

The said works shall be made in accordance with this Specification, and with the Plans and Sections herein referred to, or with such modifications of the Plans

and Sections as the Engineer shall order, provided such modifications shall not increase the cost of the work; and as the works form part of the Auckland and Mercer Railway, a contract for the construction of which was entered into by the Queen and the Contractor on the 10th day of August, 1872, the Specifications and Drawings for that line shall apply equally to the works herein described.

#### EARTHWORK.

The earthwork required for the reclamation of Mechanics' Bay and of the Beach Road shall be taken, firstly, from that portion of Fort Britomart Hill, which is tinted green on Drawing No. 2, and afterwards from that portion which is coloured with green stripes.

#### SEA PROTECTION.

The sea slope of the reclaimed ground and of the sea-wall, extending together from the breakwater to Parnell Point, shall be protected by 2 feet of puddle, composed of clay well mixed and evenly laid, and then by pitching, consisting of a thickness of 3 feet 6 inches of scoria rock, no stone of which is to be less than 1 foot 3 inches thick, and the outer course of which is to be hand laid, as shown on Drawing No. 6.

The main line embankment across Mechanics' Bay to be protected at the toe of the outer slope by temporary timber work 1,000 feet in length, any additional length required being paid for as an extra work.

The embankment from Onehunga Station to terminus to be constructed of stone or scoria, the slopes to be  $1\frac{1}{2}$  horizontal to 1 vertical, and shingled on the outer slope with the largest of the stone.

#### DRY STONE WORK.

The space between the double piling at Parnell Slip below formation level to be filled with dry stone, well packed together by hand.

#### DOMAIN BRIDGE.

The masonry of this structure to be completed in brickwork laid with Portland cement; the timber work replaced by heart of kauri, properly bolted and spiked as specified.

#### DRAINS.

A 12-inch glazed tile drain to be laid in Auckland Station ground, as shown in drawing No. 2, for a total length of 200 lineal yards.

A 6-inch glazed tile drain to be laid from the spring near Onehunga Station beneath the bank, in order to conduct the water to the watering-place at the end of a street at 5 miles 59 chains from Newmarket or thereby.

#### PARNELL TUNNELL.

The length of the tunnelling to be constructed is 308 lineal yards. Of this, 28 lineal yards from the north end to be inverted, as shown on drawing No. 3. The side walls to be constructed of coarse rubble set in well-ground stone lime mortar of approved quality.

The arch to be of best hard-burnt brick set in Portland cement. The excavation to be accurately taken out to the shape required, and when lined, all spaces to be carefully rammed.

The north face to be of coursed rubble, the quoins to have a chisel draft. The parapet, if necessary, to be bonded with hoop-iron and coped, as shown on drawing No. 3.

#### DOUBLE PILING, PARNELL SLIP.

To be of best seasoned heart of kauri, and to be constructed as specified for timber work in the Auckland and Mercer Railway, and as specified by drawing No. 4.

#### BALLAST.

In Auckland Station ground to be laid out as denoted in drawing No. 2, and otherwise as specified for the Auckland and Mercer Railway.

## PLATE LAYING.

The sidings in Auckland Station, measuring in all cases to the points, is 2,985 lineal yards, and includes twenty sets of points and crossings.

From Auckland Station to Newmarket the length of the permanent way to be laid is 2,800 lineal yards.

On the Onehunga Branch the length of permanent way is 4,686 lineal yards.

The rails and fastenings will be delivered to the Contractor at some point or points of the contract, and may be, at the option of the Government, of the description specified for the Auckland and Mercer Railway or of any other kind.

## ROAD METAL.

In Auckland Station the metal to be laid as shown on drawing No. 2.

## LEVEL CROSSING.

One first-class crossing to be made at 1 mile 46 chains 60 links from Newmarket, in all respects as specified for the Auckland and Mercer Railway.

The above works being portions of the Auckland and Mercer Railway, the Specifications and Drawings for that line shall form part of this Specification.

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 LIST A.

Drawing No. 1.—Plan and Section from Station to Newmarket.

- „ 2.—Auckland Station.
- „ 3.—Parnell Tunnell.
- „ 4.—Piled work, Parnell Slip.
- „ 5.—Onehunga Branch, Plan and Section.
- „ 6.—Cross Section of Outer Bank, Mechanic's Bay.
- „ 7.—Cross Sections, Mechanics' Bay.
- „ 8.—Plan and Section from Newmarket to Penrose Junction.

[For "Articles of Agreement with Messrs. Brogden for the Introduction of Immigrants," dated 27th June, 1872, and attached to the original of this Contract, see Parliamentary Papers D.—No. 19D.]

18th September, 1872.

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PORTION OF AUCKLAND AND MERCER RAILWAY TO BE  
OPENED SEPTEMBER, 1873.

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ARTICLES OF AGREEMENT made and entered into this twentieth day of August, 1873, between the GOVERNOR OF NEW ZEALAND, in the name and on behalf of HER MAJESTY the QUEEN of the one part, and ALEXANDER BROGDEN, HENRY BROGDEN, and JAMES BROGDEN, all of Queen's Square, in the City of Westminster, in England, Railway Contractors (in the annexed Articles of Agreement and hereinafter called "the Contractors"), of the other part :

Whereas by the General Conditions annexed to and forming part of the annexed Articles of Agreement it is provided that the Contractors shall complete the whole of the works therein mentioned on or before the first day of September, 1875 :

And whereas under the provisions of the Acts mentioned in the said annexed Articles of Agreement, or one of them, an Agreement between the parties hereto hath been prepared, and it is intended to be executed immediately prior to the execution hereof, whereby, among other things, it is provided that the Contractors shall, subject to and in accordance with the conditions, specifications, drawings, and plans therein mentioned, construct, complete, and maintain, for the period of three months from the completion thereof, a line of Railway from the line of Railway mentioned in the said annexed Articles of Agreement to Onehunga :

And whereas, in order that the said last in part recited Agreement may be fully carried out, the parties hereto have agreed that that portion of the line of Railway mentioned in the said annexed Articles of Agreement described in and shown on the plans hereto annexed shall be completed on the day hereinafter mentioned :

Now these presents witness that in consideration of the premises, and of the execution of the hereinbefore last in part recited agreement, the Contractors and each of them for themselves and himself, and their respective heirs, executors, administrators, and assigns (all of whom are included hereafter in the expression "the Contractor") hereby agree with the Queen, her heirs and successors (all of whom are hereinafter included in the expression "the Queen"), in manner following, that is to say—

1. Notwithstanding anything contained in the annexed Articles of Agreement, the Contractors will, in accordance therewith, and with the conditions, specifications, drawings, and plans therein mentioned or referred to, construct, make, complete, and finish, all that portion of the said line of Railway which is described in the plan hereto annexed, on or before the fifteenth day of September, 1873, instead of on the first day of September, 1875.

2. In every other respect the said annexed Articles of Agreement, and the conditions, specifications, drawings, and plans therein mentioned or referred to, shall remain in full force, and shall in all respects remain and be applicable to that portion of the said line of Railway set forth in the plan hereto annexed as fully and effectually as if the date for the completion thereof had not been altered.

3. From and after the completion of that portion of the said line of Railway which is described in the said plan hereto annexed, and the delivery of the same to the Minister of Public Works, the Contractors shall be entitled to the carriage free of any charge to them, of all iron and materials required to be carried along the same for the purpose of the remaining portion of the said Railway ; but the cost of loading and discharging any materials so carried shall be borne and paid by the Contractors.

4. The Contractors shall also be entitled from and after the completion of that portion of the said line of Railway which is described on the plan hereto

annexed, and the delivery over of the same to the Minister of Public Works, to use the same free of every charge for the purpose of the carriage to and for the use of the remaining portion of the said Railway, of any iron and materials which may be required for the same: Provided that in using the said portion of the said Railway they shall not obstruct or interfere with the necessary and ordinary traffic upon the same.

In witness whereof the Seal of the Colony has hereunto been affixed, and the said Contractors have hereunto set their hands and seals the day and year first above written.

(L.S.)

JAMES FERGUSON, Governor.

Sealed with the Seal of the Colony, and  
signed by the Governor, in the  
presence of

EDWARD RICHARDSON.

ALEXANDER BROGDEN. (L.S.)

HENRY BROGDEN. (L.S.)

JAMES BROGDEN. (L.S.)

By their Attorney, JOHN HENDERSON.

Signed, sealed, and delivered by the  
above-named Alexander Brogden,  
Henry Brogden, and James Brogden,  
in the presence of

WM. THOS. LOCKE TRAVERS,  
Solicitor, Wellington.

Approved in Council, 20th August, 1873.

FORSTER GORING,  
Clerk of the Executive Council.

NOTE.—For Articles of Agreement referred to, *see* "Articles of Agreement made and entered into 10th of August, 1872," Auckland and Mercer Railway.