

**Survey Office Papers – Specifications for survey contracts Mar 1842 to Jan 1850**  
Archives NZ Wellington Reference AAYZ 16013 NZC 235/1/4 Items 1-3 and 5-6

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[1] Frederick Tuckett, Chief Surveyor, Survey Office, Nelson 13 Mar 1843 - Specification

It is intended wherever practicable to lay out blocks of 120 chains by 102 square these to be subdivided into eight Rural Sections each 30 by 51 chains but the exact proportions will not be determined until the contractor shall have ascertained by measurement the length of his contract and its breadth at either extremity. The direction of these preliminary lines of Survey shall be carefully selected with regard to their eligibility as lines of Roads and should these not be adopted as boundary lines of the Sections – the contractor shall be paid for cutting boundary lines at the rate per chain proposed in the Tender for extra work.

The blocks are to be separated by roads of 70 links in width and on the cut boundary lines of the blocks containing within them the roads of 70 links width the limit of the frontage of each section shall be marked by stakes branded on each face corresponding to the number of the Section contained within any two stakes.

The stakes shall be of scantling not less than 4 inches by 3 and in length 3ft to be driven or sunk in the ground 2ft. The corner Sections of each Block where two Roads intersect shall be distinguished by posts or stakes of greater scantling in length 6ft to be sunk in the ground to the depth of 3ft 6 inches. On these corner Posts shall be branded the number of the Block as well as that of the particular section of such Block. The same applies to the manner of staking on the cut back lines of all Sections.

When the contractor shall have executed the aforementioned preliminary lines, and the proportions of the blocks and Sections shall have been determined by the company's Surveyor, he shall proceed to lay out such blocks and Sections in the manner and order of succession required by the company's surveyor and on the completion in all respects as required and here specified of 24 Sections of 150 acres each he shall be entitled to require the company's surveyor to inspect such portion of the survey then in all respects completed within two weeks of a notice being received by the company's surveyor such notice to be a written one and accompanied by a reduced plan accurately plotted shewing the situation and extent of the survey executed up to the date of such notice. On the Plan the Blocks and Sections are to be distinguished by numbers and the Roads by letters to facilitate in correspondence a reference to any portion of the Survey and such portion of the survey being found on inspection accurately executed, the contractor shall then be entitled to immediate payment on a certificate from the Chief Surveyor of its extent and correctness.

The position range and extent of all hills watercourses and woods within the limits of or bounding the District surveyed shall be accurately delineated on the Planes. Whenever the Company's Surveyor is required or wishes to inspect the progress of the Survey the contractor shall himself attend or furnish a competent attendant acquainted with the survey to accompany him on such inspection also any labourers whom he may require in prosecuting such inspection whether of land already surveyed and subdivided into Sections or of land within the limits of the contract which remains to be surveyed.

As no deposit or security is required of the contractor it is expressly stipulated that unless he completes successively after two weeks from the date of the acceptance of his Tender a quantity of not less than 24 Sections of 150 acres each month, he shall not be entitled to any advance of money on his contract and shall be liable to a deduction of 25 per cent on the whole amount of the several monthly quantities of 3600 acres which may have been previously certified and paid for. And the same liability he shall also incur if he requires the company's surveyor to inspect any portion of the Survey which has not been accurately completed in accordance with this Specification.

But the contractor may redeem such deduction of 25 per cent in case of deficient progress if at any time within the ensuing three months, such being within the total extent of time allowed for its completion, he shall have completed the full quantity required of him from the commencement of his contract. But not so in any case of inaccurate Survey or of any deviation from the appointed mode of executing the Survey unauthorised in writing by the Chief Surveyor. In such cases the deduction shall be final and absolute.

The contractor shall plot on such scale as the chief surveyor may appoint a Plan of the survey in detail as the work proceeds. He shall keep his Field Books in ink and these with a furnished Plan mounted he shall deliver to the chief surveyor, on completion of the whole survey, the original Field books and working Plan he shall produce for the examination of the company's surveyor whenever required during the progress of the Survey.

If any difference arises as to the accuracy or inaccuracy of any portion of the Survey, the matter in dispute shall be investigated by some uninterested party to be nominated by the Company's Agent whose decision shall be final and any expence attending such investigation shall be defrayed by the Contractor if the previous decision of the Chief Surveyor be confirmed.

Any Party disposed to contract is requested to tender a price per acre reckoned on the minimum quantity of Land actually laid out in Sections which will probably be 25 or 30 per cent less than the acreage of the whole Survey... contract excepted on which the difference in quantity is not likely to exceed 10 per cent.

For the boundaries of the respective contracts, the contractors are referred to the advertisement already printed in the Nelson Examiner. In Contract No.1 (vide advertisement) it is anticipated that much of the land covered with bulrushes will be excepted, also it is probable some of the land bordering on the sea shore.

In contract No.2 – it is contemplated to except from subdivision the land bordering on the coast, which for a considerable extent is separated from the rest of the district by a tideway.

In contract No.3 will be found towards the South Western extremity before arriving at the Branch River, some extent of stony land, which will not be subdivided.

In contract No.4 to facilitate the survey, the contractor will be at liberty to run the extreme boundary line of the sections throughout the length of the Contract from the mouth of Ourere inland outside of the wood, but not so as to append to any section more than 50 acres of unwooded land. On the west side of the River the back line of the Sections may be run along the slope of the wooded hills at such an elevation as not to append more than 50 acres of hill land to any section; the frontage of these sections being on the River.

The same instructions as to the quantity of hill land applies to each of the contracts now offered.

That no inconvenience may result from the necessity of applying for special instructions in regard to the laying out of the exterior blocks or sections, the contractor, having completed the preliminary lines, may proceed with the subdivision of the land contained within the extreme lines of Roads in the District in the proportions here proposed.

<b>CONTRACT FOR SURVEYS.</b>
<b>NOTICE</b> is hereby given that <b>TENDERS</b> for the following <b>CONTRACTS</b> will be received at this office up to the 24th of March:
Contract No. 1 comprises land contained within these boundaries. On the north-east, that of the sea shore (high water mark) from the mouth of the river Wairoo (Cloudy Bay) to the first cliff on the coast. North-west, by a continued range of hills. South-east, by the river Wairoo. South-west, it terminates at a point where the river flows at the foot of the hills.
Contract No. 2 extends from the Wairoo mouth south-east along the coast to a cliff known as the White Bluff; and inland, is contained between the river Wairoo on the one side, and a well defined range of hills on the other; terminating on the south-western extremity of a small wood, at a line crossing the plain, in a course due south by compass.
Contract No. 3, commencing at the same line, is contained on either side within the same natural boundaries as No. 2; and extends inland to the first river flowing from the south-east across the plain to the river Wairoo.
Contract No. 4 consists of all the available land on either side of the river Ourere (Massacre Bay).
It is estimated that each contract on the Wairoo will comprise as much as 20,000 acres of land; but it is not probable that more than 75 per cent. of the whole would be eligible for subdivision into sections.
The Specifications may be referred to on and after Monday the 13th instant.
FREDERICK TUCKETT, Chief Surveyor.
Survey office, Nelson, March 9.
Nelson Examiner 11 Mar 1843

[2] Specification and Details of Work to be done in surveying and marking out the New Town at Waitohi in Queen Charlotte Sound, New Zealand.

**Article I**

The Plan in conformity with which the survey is to be executed, showing the Streets, Public Reserves and Quarter-acre Sections in the Town, will be supplied by the New Zealand Company, and is annexed hereto.

**Article II**

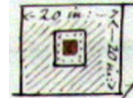
The Contractor having satisfied himself of the general accuracy of the main points delineated on the said Plan, is to proceed to lay out the Streets, Roads, Squares, Reserves, and Quarter Acre Sections, in accordance with the Direction or Bearing of the Lines as well as the several Dimensions laid down in red figures on the Plan or to be otherwise obtained by admeasurement on the Plan according to the scale thereof:- it being understood that he is not to deviate from the General Arrangement or Position of the Streets or Sections unless the doing so be compulsory from the existence of some local obstruction impossible to be surmounted, or unless sanctioned by the Company.

**Article III**

The Frontage lines of all the Streets and Back Boundary Lines of all the Sections are to be made passable and well defined by cutting away and clearing the ground of all fern, flax, trees, Bush, or other vegetation that may be upon it, for the space of four feet in width to the satisfaction of the Company.

**Article IV**

The Corners of the Streets, Squares, Reserves, and separate Sections are to be indicated on the ground by sawn stakes of Red Pine of a Scantling four inches square and branded with the number shown on the Plan. The stakes at the corners of the Streets or of Blocks of Sections are to be four feet in length, to stand one foot and a half in the ground and two and a half feet out of the ground and a small trench is to be cut out of the sod or turf round the stake thus:



The stakes marking Sections within the Blocks are to be Two Feet in length – to stand one foot out of and one foot in the ground, without any trench being cut. The two faces of all stakes dividing sections are to be branded with the numbers corresponding to each section, and the corner stakes are to have the number of the section branded on the two corner faces. The scantling for the stakes will be supplied by the New Zealand Company and delivered on the Company's Wharf at Nelson: but the conveyance thereof to Waitohi and the sawing of the same to the proper lengths as well as the branding, is to be executed at the cost of the contractor on the spot.

**Article V**

The Contractor is to construct a Plan of the Town on Mounted Paper, as the work proceeds; on a scale of four chains to the Inch: which plan to show all the prominent features or objects on site as proved in the new admeasurements, such as the Line of Coast or Sea Boundary at High and Low Water Marks, Streams, Paha or Inclosures, Woods, Gullies, the Bases of Hills, &c &c - and furnish or deliver such Plan when completed, to the New Zealand Company's Resident Agent at Nelson. The Field Books and other data of the Survey to be also delivered at the same time. The existing features of the ground are to be marked on the Plan faintly in Black and the Streets Reserves and Sections in Red Ink lines.

**Article VI**

The Contractor is also to include in his Contract a Survey of the Line of Coast on both sides of the Channel forming the Harbour of Waitohi as far as the points which project into the Main Arm of Queen Charlotte Sound, and also a Survey of the small Island at the entrance of the harbour. If the length of this Survey is too great for it to be laid down conveniently on the Plan of the Town a separate Plan on the same scale to be furnished.

**Article VII**

With the exception of the scantling for the stakes to be supplied by the Company as before mentioned the Contractor is to find all labour, Instruments, Tools or other materials necessary for the Survey, and to be at every other expense or cost in executing and completing the same accurately to the satisfaction of the Company's said Resident Agent or of any surveyor he may appoint to inspect the same.

**Article VIII**

The Company's Resident Agent or Inspecting Surveyor to have access at all times during the progress of the survey to the Plans and Field Books connected with the Survey and to be furnished by the Contractor with such tracings or copies thereof as the said Resident Agent or Surveyor may require.

**Article IX**

No payment, excepting an advance not exceeding thirty pounds, to be made by the Company to the Contractor until the whole work is completed and certified and the Plans and other Documents delivered as provided by the preceding Articles.

**Article X**

The whole of the survey and works to be completed within twelve weeks from the date of signing the Contract. Provided always that if the Natives of Waitohi or other parts of Queen Charlotte's Sound or elsewhere should cause any obstruction or interruption in the survey of a temporary nature then such further time... ~~be allowed to the Contractor as may be awarded by arbitration as hereinafter mentioned but if the such obstruction or interruption be of a nature necessitate the stoppage of the survey altogether~~ [note in margin: ... F. D. Bell] then and in such case the Company shall pay the Contractor such sum by way of compensation for such stoppage as shall be awarded as hereinafter provided by the arbitration in the usual way.

**Article XI**

In case any dispute shall arise between the said Company's Resident Agent and the Contractor relative to the meaning of this Specification or execution of the Contract, or in cases of such stoppage of the survey by obstruction from the natives as mentioned in the preceding article, the dispute or any claim for compensation on account of such stoppage shall be referred to the arbitration of two indifferent persons or their umpire to be appointed as follows, (whose Award shall be final and conclusive) namely: the Company and the Contractor shall each of them appoint an arbitrator and the two arbitrators shall before entering upon the dispute or claim appoint an umpire. The subject of the dispute or claim shall then be reduced to writing and signed by both parties to the reference and submitted to the Arbitrators who shall, or their umpire in case of difference between them, make an award within one month from the date of their appointment which award shall be final and conclusive between the parties and shall also decide the question of costs unless the decision be altogether against one party in which case such party shall pay the costs.

**Article XII**

The Agreement to be entered into in pursuance of the preceding articles shall if required by either party be made a Rule of the Supreme Court of New Zealand.

I hereby agree to execute the Survey and works referred to and enumerated in the preceding Specification in conformity therewith for the sum of two hundred pounds sterling. Nelson 21<sup>st</sup> day of January 1850. Witnesses to the signature of Cyrus Goulter for himself and Joseph Ward – H. C. Daniell, Clerk, Nelson and B. O. Hodgson.

I accept this Tender – F. D. Bell, Resident Agent of the New Zealand Company, Nelson, 21 January 1850.

**Memorandum**

In consequence of the Stakes being only partly ready for the sailing of the vessel chartered by Messrs Ward and Goulter for the conveyance thereof to the Waitohi, the Resident Agent undertakes to be at the expence of conveying the remainder that may not arrive in time for shipment. F. D. Bell.

[3] Specification of a Contract for constructing a bridge over the Maitai to Molesworth St.

The Bridge now proposed to be constructed across the River Maitai in Nile Street will be laid on a centre pier and two abutments beneath in the same manner as the Western portion of the Bridge recently erected in Nile Street East but its timbers will be of other dimension and its floor of different construction as is shown hereafter in the annexed list for the guidance of the sawyers.

The foundations of the centre pier and of the south abutments will require to be formed with great care and laid perfectly level. The first frame in each must be piled within and without the outer piles to be of 6 inches diameter to be driven in contact so as to exclude the water or prevent the egress of the gravel. For the South abutment the earth must be excavated down to the gravel on which the face of the gravel having been previously secured by piles the frames which compose the abutment are to be laid.

These frames are to be laid on the ground 5 feet 9 inches wide and to consist of three parallel logs of which the outer ones must be thirteen feet long in the square and the centre one 17 feet in length bonded by three transverse logs morticed and bolted to the others the outer cross log... the first frame in the excavated ground to be bedded in the ground for 5 feet back from the abutment. Each frame to be contracted in width within either face 1½ inches the upper four feet to be reduced in width 2 feet to consist of 2 logs lengthways and 3 crossways logs and these to be fixed within each face of the lower part of the abutment which bears the truss post one foot. The centre pier being laid lower must be six feet in width in the ground frame.

The distance between the upper face of the abutments will be sixty feet with an approach of 7 feet length on each side opening outwards to a width of 16 feet making in all a length of 74 feet which is to be floored with plank 2½ inches thick laid on sleepers the sleepers on joists to be pierced throughout with post and two rails.

The whole to be executed in a workmanlike manner under my direction and to my satisfaction for the sum of one hundred pounds. The contractors to be found in all iron work and nails necessary for the construction of this bridge.

Of which will be advance weekly to each of the parties to the contract the sum of eighteen shillings or in that proportion as long as they continue daily steadily to proceed with this work. The receipt of such weekly payment by any one of the undersigned.

W. & B. O. Hodgson.

[5] Specification for Surveying by Contract – March 1842

Gentlemen, If you incline to undertake a contract I invite you to inspect the several districts herewith described and send me in, as soon as possible, a tender stating the lowest price per acre at which you would undertake to complete a Survey of them. The Survey that I propose is simply a running Survey unencumbered with any Trigonometrical operation; being the actual setting out, on the ground, the limits of the sections for which a title is claimed.

It will consist of a series of rectangular figures – say 75 by 69 chains – the two side lines of this figure will be staked at every 15 chains – the two other sides will be divided into equal parts by a stake driven at 34½ chains distance – a centre line must be cut from stake to stake; and on this line a stake driven at every 15 chains as on the outer lines.

The square of 75x69 will then be subdivided into 10 sections of 50 acres each – the lines cut and measured amounting to 288 chains. A road of 60 links must be set off without the ... lines of the figure 7 if the district admits of the measurements being again projected. The lines to be cut and measured for the next square would be less by the amount of one side of such square and the same for each successive square.

To ensure accuracy the direction of the lines should invariably be fixed by means of the directed ... of the Theodolite and the angle read in both sides of the line. Each 50 acre section must be staked and numbered by Brands – the stakes to be of scantling not less than 4 inches by 3 – in length 3 feet 6 inches and sunk 2 feet 9 inches into the Ground.

Each rectangle comprising a series of Sections to be further distinguished by a large post, 4 feet above ground and 4 below, at each angle.

In each District contracted for the rate of progress required will be a minimum quantity of 2000 acres per month – the contractor to be paid monthly on certificate from the Company's Chief Surveyor that the same has been completed, in all respects according to the terms of the Contract.

Some irregularity in the Form of the sections must necessarily occur in those bordering on the course of a River – but, by running a line as far as possible in the direction of the River and subdividing the land included into the required sections, this irregularity would not further interfere with the uniform form of the sections.

If the deflection of the River rendered it necessary – the proportions of the sections having water frontage – may be altered, by diminishing the frontage, as far as that of 4 to 1. A road of 60 links to be retained along one side of the River. An allowance must be made, in measuring in the land for all well-defined Water-courses – which may intersect a section – to the amount of their average width – and the points at which such water-courses intersect the cut lines must be shewn on the plan.

A plan of the Survey, accurately plotted, must be sent in with the Field Books – on the completion of the Contract and the working drawing, open at all times, to the Company's Chief Surveyor during the progress of the Contract. The scale on which such plan is to be plotted will be appointed by him.

**First District**

Commences at the SSW extremity of the town of Nelson and extends in the same course – say about 3 miles as far as the Tide, which covers, at high water, an extensive Mud flat. On the West throughout, bounded by the Coast. On the East by a range of elevated hills. There is one valley near the Town which would be included in the Survey.

**Second District**

Commences at the termination of the first and extends about SSW – 5 or 6 miles to the bank of a River flowing out of the mountain which bounds it on the East – to the River Waimea which bounds it in the West. It is a tract of unwooded land – for the most part extremely level and probably equal in extent to a square of 5 miles.



### **Third District**

Is bounded on the East by the River Waimea – on the West by a range of Gravel hills – to the South by the River, which makes a considerable bend to the West until it touches the high land – North to high water mark – somewhat interrupted by various branches of the river – about one quarter of this tract may be wooded in extent the whole may be equal to about 7 miles by 2 – narrowing at either extremity.

[6] Specification and Contract for Survey of the Wairau &c as entered into by W. Budge 10 May 1847

Specification and Details of work to be done in executing a Survey and subdivision of Land in the District of the Wairao Kaipara-ta-hau and parts adjacent in the Middle Island of New Zealand.

Previous to laying out the Land in the sections or Allotments required, the Contractor or Contractors are to make an accurate outline or skeleton survey of the whole district or such portions of it as may be decided on by the Company's Resident Agent – preparatory to subdivision delineating on the plan to be made therefrom only the prominent physical features of the Country, as Rivers, Brooks, Swamps, Woods, &c as well as the foot or slope of the Hills bounding the land available for agriculture. When this is done due notice thereof is to be given to the Company's Resident Agent who will decide on the position and direction of the main lines of Road and give instructions for subdividing the Land into the requisite blocks and sections individually.

The Land is to be divided into Sections of one hundred and fifty (150) acres each nett, but an allowance of not less than two and a half (2½) per cent is to be made on the acreage to provide for any deviations in the course of the Roads that may hereafter be made or otherwise. The sections are to be comprised within Blocks as near as may be of a square form each block being bounded by a roadway and containing within it eight (8) sections whose form will be that of a parallelogram, whose side, will be nearly as two to one. All roadways to be seventy five (75) links of a chain in breadth excepting where they pass along the banks of a river in which case they are to be one chain.

All the Survey lines and boundaries of sections may require for the purpose. The Company's Surveyor is also to be allowed free access to the Plain and Field Books connected with the Survey and be furnished with each tracings or copies therefrom as he may from time to time require.

The Company's Agent or Surveyor is to be at liberty to direct any alterations in the Plan of the Blocks and sections, as also any deviations in the main lines of Road that may appear to him desirable – compensation to be made to the Contractor if the said alterations involve any extra expense in their execution at such a rate as shall be fixed by the Contract.

On the completion of the Survey, the Contractor is to deliver over to the Company's surveyor the Original finished working plan or plans of the whole district as also the Original plan on the reduced scale of one inch to the mile, together with all the Field Books – containing the data of the Survey &c

The Contractor is to find all Instruments, tools, stationery &c necessary for the survey, as well as labourers, and is to be at every expense of whatsoever kind in completing the whole of the survey and works in a workmanlike manner to the satisfaction of the Company's Surveyor.

The whole of the Survey or such portion as may be hereafter specified is to be completed within six months, from the date of the Contract. Provided always that if any obstacle to the execution of the Survey within such time as aforesaid shall arise from excessive badness of weather, from any combination or strike among the labourers employed on such survey, or from any other cause over which the contractor cannot reasonably be expected to have control, and sufficient evidence thereof shall be tendered to the Resident Agent of the New Zealand Company, the contractor shall be entitled to such further time for the completion of his contract beyond the six months before mentioned as shall have been consumed or lost in consequence of such obstruction.

That the Company's Agent shall have power at any time after the commencement of the Survey to relinquish and put an end to the same, on paying the contract price for so much thereof as shall be actually finished and complete; and for so much thereof as shall be in progress but incomplete; such price less than the contract price as shall be agreed upon between the Company's Agent and such contractor, of if they cannot agree then such price less than the contract price as shall be awarded by the two indifferent persons or their umpire appointed in manner hereinafter provided; and also in either of the above cases the Company shall pay to the Contractor such compensation for such relinquishment and termination of the Survey as shall (if any) appear to such two indifferent persons or their umpire as aforesaid to be fair and just.

In case any dispute shall arise between the Company's Agent and the Contractor relative to the meaning of this specification or the execution of the Contract or the relinquishment and termination thereof as mentioned in the last preceding clause the Company's Agent and the Contractor shall each of them appoint an arbitrator within one week from a request in writing made by the party seeking such arbitration and in case the party so requested shall refuse or neglect to appoint an arbitrator and to give notice thereof to the other party – within such week, then the party seeking such reference may appoint two arbitrators *exparte*, and such arbitrators shall before entering on the question referred to them appoint in writing an Umpire to act in case of their differing. The subject intended to be referred shall then be reduced to writing signed by both parties to the reference or if either shall after request in writing for one week refuse or neglect to sign such statement, then the other party may do so – *exparte*, and in either case the same shall be forthwith laid before such Arbitrators who shall take all necessary evidence thereon and they or their umpire shall make an award within one month from the date of their appointment or such longer period not exceeding three months in the whole as the said Arbitrators shall by writing from time to time appoint, which shall be final and conclusive between the parties. The costs of the reference and award to be paid by the party against whom the declaration shall be; or in case of the merits of the question being divided, such party to pay his own costs; the arbitrators or umpire – deciding the question of costs in conformity herewith by their award. And the agreement hereby entered into shall if required by either party be made a Rule of the Supreme Court of New Zealand.

I hereby agree to execute the Survey of the Wairau plain and Valley and such adjacent districts as may be specified by the Company's Agent in conformity with the above specification, at the rate of sixpence per acre nett Four hundred pounds to be paid in the course of six months from the date hereof, and the Balance on completion of the Survey. Any extra work to be at the rate of sixpence per chain. The Company to indemnify me against any loss which may arise from interruptions caused by the natives. Signed W. Budge. Witness to signature H. C. Daniell – 10 May 1847.

22 Jul 1847 Paid in to Mr Budes account at Bank £50; Paid McRae on his account £7  
01 Oct 1847 Paid into Bank £150  
08 Oct 1847 Paid into Bank £100  
22 Oct 1847 Paid into Bank £32 17s 6d  
06 Nov 1847 Paid Neil & Silcock £10; H. Redwood £25  
20 Nov 1847 Paid at Wellington to Doherty £13 11s  
30 Dec 1847 Paid to W. Budge £1000  
08 Feb 1848 Paid to W. Budge £600