

[Public Works Department.]

CONTRACT FOR THE MANUFACTURE AND SUPPLY OF POINTS AND CROSSINGS.

SPECIFICATION.

1. THE work included under this contract is the manufacture and supply of twenty sets of points and crossings for 70 lb. rails, one hundred and three sets for 56 lb. rails, and ten sets for 40 lb. rails, together with all necessary fittings, castings, fastenings, switch-boxes, and other equipments, and executing all work required to be done in the manufacture of the same, as shown upon the drawings attached hereto, and as set forth in this specification.

2. All the sets of the 70 lb. rails shall be made to a crossing-angle of 1 in 9; thirty-five of the sets of the 56 lb. rails shall be made to a crossing-angle of 1 in 9, and the remaining sixty-eight sets to an angle of 1 in $7\frac{1}{2}$; and the ten sets of the 40 lb. rails to an angle of 1 in $7\frac{1}{2}$.

3. The Government will supply the Contractor with the proper number of rails weighing about 70 lb., 56 lb., and 40 lb. respectively to the lineal yard. The rails for the switches, stock-rails, wings and frogs, and guard-rails shall be of steel. They will be delivered to the Contractor at the railway-station at one of the following places, namely: Auckland, Wellington, Christchurch, Timaru, Dunedin, Nelson, Invercargill, Greymouth, or Thames, according as the Contractor may request in writing, and within one month of the acceptance of tender. Should the Government fail to thus deliver the rails within the specified time the Contractor shall have no claim for compensation of any kind, but he will be allowed a corresponding extension of time for the completion of his contract.

4. All wrought-iron used shall be of BB Crown iron, or other approved brand of equal quality, free from all defects, and all welds shall be perfectly sound, and free from burns, scale, or other defects.

5. Steel shall be the best double-shear, of uniform quality, and shall show perfectly sound welds.

6. All castings shall be of the best cold-blast iron, perfectly sound, smooth, and free from all flaws and defects.

7. All steelwork required to be heated during the process of manufacture shall be carefully annealed after being worked to required shape.

8. The ends of the frog-rails, wing-rails, and switches shall be properly drilled where requisite to take the bolts of the fish-plates, a sample of which will be supplied to the Contractor upon application.

9. The switch-rails are to be accurately bent and planed. The rods, bolts, keys, pins, and other wrought-iron work are to be cleanly forged, fitted, and finished. The guard-rails shall be bent to the form shown, and holes drilled in them for the bolts through the distance-blocks. The contract does not include the cutting or boring of the rails to which the guard-rails are shown to be bolted on the drawings.

10. All bolts shall be cut with a full, clean thread, and the nuts similarly tapped a good fit. The cotter-bolts shall have clean true slots, with the cotters accurately fitted to the same. All bolt-holes in rails shall be drilled.

11. All the slide-chairs shall be fitted smooth on the surface in contact with the foot of the rails, and where required the chairs for the 70 lb. rails shall be thickened for a portion of their length to form a raised fillet of the respective thicknesses shown on the drawings for each set.

12. All the switches for the 1-in-9 crossings shall have levers of the pattern lettered "A" on the drawings; all other levers shall be of the pattern lettered "B."

13. Blocks for guard-rails, frogs, and centres of wings, switch-boxes, and weights for switch-handles, and sockets for switch-handles and connecting-rods, to be of cast iron.

Switch-handles, bell-crank, distance-rods, connecting-rods, chairs with their studs and collars and braces, to be of wrought iron.

14. Each set when finished shall be accurately fitted up at the works of the Contractor for the inspection of the Engineer, to whom notice shall be given when the set is ready for inspection. The several parts of each set are to be properly marked by letters or otherwise, and the whole sets are to be numbered consecutively.

15. The whole of the bolts and all other forgings shall be dipped while hot into boiled linseed-oil. After the inspection has taken place all the materials shall receive one coat of good anti-corrosive paint.

16. Each switch is to be delivered bound with stout wire to its stock-rail. Small ironwork and fittings shall be packed in strong wooden cases of convenient size for facility of transport. No package shall contain material belonging to more than one set of points and crossings, and each package must be distinctly marked outside with the number of the set it belongs to. Each crossing to be delivered fixed together complete.

17. The Contractor will be held responsible for all Government material delivered to him, and also for any damage the goods may sustain in transport through defective packing.

18. The whole shall be delivered at the railway-station at Auckland, Onehunga, Wellington, Christchurch, Timaru, Invercargill, or Dunedin, or f.o.b. at Nelson, Greymouth, or Thames, and the Contractor shall state in his tender at which station he will deliver.

19. At each of these stations Contractors may inspect a sample pattern of points and crossings for the 56 lb. rails only.

It is hereby stipulated that the several sets of points and crossings for the 70 lb. and for the 56 lb. rails shall be delivered as specified on next sheet (No. 3) hereof.

P. S. HAY,
Engineer-in-Chief.

Public Works Office,
Wellington, May, 1906.