

been raised where necessary in order to avoid damage by floods. All bridges on this section have been completed. The ballasting of the line is being proceeded with as rapidly as possible.

The contract for Towai Station buildings is well in hand—the goods-shed, station-building, and passenger-platform are finished—fencing, gates, and cattle-stops are all completed. This section should be ready for opening at an early date.

Extension to Grahamtown (2 m. 49 ch.).—The formation on this length is about three parts finished. The work done during the year has consisted principally in clearing slips and fascining banks to protect them from the sea. Some work has also been done in completing some of the cuttings, so that, omitting slips, of which there are some bad ones, there is only one cutting—that adjoining the station-yard—now left to take out; and some further banks in the station-yard at wharf-site to complete, besides the pitching of all the banks with stone, which cannot be done until the rails are laid. A contract for erection of the wharf at Grahamtown for £17,675 was let in February. No work has yet been done by the contractors on the ground, but they have placed orders for materials, and anticipate making an early start.

NORTH AUCKLAND RAILWAY.

Tauhoa to Wayby (62 m. 40 ch. to 66 m.).—This section was completed, and handed over to the Railway Department on the 13th May, 1908.

Wellsford Section (66 m. to 69 m. 18 ch.).—During the year many of the cuttings on this section slipped badly, and the banks subsided to a very considerable extent. This damage, which was caused by exceptionally wet weather and floods, required six months' continuous work to make good, and is not yet quite satisfactory. Cottages, station-buildings, and sheep and cattle yards were all completed at Wellsford by the 28th November, 1908, and the section opened for traffic by the Public Works Department on the 15th February, 1909, and handed over to the Railway Department on the 1st April, 1909. But for the extensive damage already referred to, the line would have been opened for traffic much earlier.

Te Hana Section (69 m. 18 ch. to 72 m. 55 ch.).—Formation, except where the slips have taken place, has been completed and pipes and culverts constructed. The bridge at 71 m. has been finished, and all drains, road and creek diversions made. Erection of fencing, gates, and cattle-stops is in hand. Trimming of formation has been completed, except where slips continue to come in, and rails laid throughout. The line is ballasted, except for the final lift, to Te Hana. The station-yard and branch line to the wharf is also ballasted. The wharf is completed and rails laid thereon. Goods traffic has been carried over this section since the 21st June, 1909. Platelayers' cottages have been erected in the Te Hana Station yard, and a contract has been let for the station-buildings. An overbridge at 70 m. 40 ch. is in hand, and contracts have been let for the timber, ironwork, and erection of the Te Hana, Mainene, and Topuni bridges.

Kaiwaka Section (72 m. 55 ch. to 77 m. 20 ch.).—A commencement was made on this section in June, 1908. Since then earthworks have been pushed on, and are in an advanced state as far as 77 m. 20 ch., and all culverts have been built up to that point. Beyond 77 m. 20 ch. no work has been put in hand owing to the question as to the route the railway was to follow beyond. The bottom heading has been driven through the Mainene tunnel, and arrangements are being made for its enlargement to be taken in hand from both ends—the bridge over the Te Hana River is finished except for the plate girders—the bridge over the Mainene is in progress. Owing to the unsafe nature of the ground at the sites of these two bridges, extra spans had to be added to both. The overbridge at 73 m. 26 ch. is finished and in use. A service road has been made along the line from Te Hana to the Mainene tunnel. Some fencing, where necessary to secure settlers' property, has been erected.

As the ballast for this line has so far had to be railed from Mount Albert, Auckland, now over seventy miles distant, endeavours are being made to find suitable stone or ballast nearer to where the construction-work is in progress. A proposed quarry at Bald Hill, Pukekaroro, has been prospected. Prospecting for stone has also been carried out at the Houtu Mountain, at Maungakarama Mountain, on the Bickerstaffe or western route, at various points, and also at Hukatere, on the Kaipara Harbour.

GISBORNE—ROTORUA.

The Waikohu road and railway bridge, at the Willow Crossing, about 23 m. 18 ch., was in hand in July, 1908, and was completed in January, 1909. So soon as completed rails were laid across the bridge into the Waikohu Station yard, sidings put in, and all necessary station-yard work done, including erection of station-buildings—this short section to Waikohu Station yard, or to 23 m. 50 ch., was opened for traffic by the Railway Department on the 1st April, 1909.

Otoko Section (23 m. 50 ch. to 31 m. 40 ch.).—At the close of last year formation-work was partly in hand on the Otoko Section as far as 27½ m. At this point heavy earthworks began. During July and August parties were advanced to near 29 m. By March last work was in hand up to 31 m., and most of the culverts constructed. In June the greater part of the heavy earthworks were in a well-advanced state, and work was in hand for about a mile beyond Otoko Station. From 26 m. a service road was made along the valley for the convenience of materials and supplies. A considerable portion of this road required rather heavy work, as in parts of the Waihuka Gorge it skirted round high cliffs running abruptly down to the stream.