

*Omahu-Otamakite Road (Thames County).*—Relief workers completed the formation of 3 m. 40 ch. of this road.

*Tamahere-Tauwhare via Matangi (Waikato County).*—During the year 2 m. 51 ch. of this road were sealed.

*OWAIRAKA Valley Road (Waipa County).*—3 m. 67 ch. were metalled 9 ft. wide by 6 in. deep.

*Te Awamutu - Arapuni (Pukeatua End) (Waipa County).*—A length of 2 m. 24 ch. of this road was metalled 12 ft. wide by 8 in. deep.

*Great North Road, Silverdale-Redvale (Waitemata County).*—60 ch. were metalled.

*Orakei Waterfront Road (Eden County).*—This road, which is being constructed at the joint expense of the Tamaki West Road Board, the Auckland City Council, and the Government, is to give improved access to the new suburbs in the locality. The work is being carried out by the Public Works Department, the activities being co-ordinated with those of the construction of the Auckland-Westfield Railway deviation not only in respect to supervision, but also in respect to use of plant and the disposal of earthwork and rockwork. Good progress was made during the year with the construction of the sea-walls and road-formation. From Campbell's Point, the low-level sea-wall of dumped rubble rock was continued to 2 m. 60 ch., and the facing of hand-placed rock and mortar-grouted face-joints was completed from 1 m. 0-04 ch. to 1 m. 30 ch. and from 1 m. 72 ch. to 2 m. 14 ch. The full-width formation now extends as far as 1 m. 41-80 ch. and from 1 m. 55 ch. to 1 m. 70 ch., while from there on to 2 m. 14 ch. it has been completed to approximately three-quarter width. The cuttings at 2 m. 24 ch. and 2 m. 42 ch. were completed, and the spoil was used to fill in the adjacent embankments. A spall foundation for metalling was laid for full width from 1 m. 0-02 ch. to 1 m. 13 ch., and for half-width from 1 m. 13 ch. to 1 m. 18 ch. and from 1 m. 58 ch. to 1 m. 70 ch. The spoil was practically all excavated by four steam shovels, and during the year some 300,000 cub. yd. were tipped into the embankments. Temporary bridges were erected at 1 m. 40 ch. and 2 m. 15 ch., and the road was opened to traffic.

*Mission Bay Extension:* Beyond 3 m. 20 ch. the low-level stone protection wall was continued to 3 m. 45 ch., and a relief party working in the cutting at 3 m. 30 ch. extended a half-width formation for about 13 ch.

*Whakatakataka Bay Road:* This road, which gives access to the Orakei Garden Suburb from opposite 2 m. 22 ch., was constructed to approximately one-third width for its full length of 26 ch. A good surface was maintained, and the constructed portion was thrown open to traffic.

*Purewa Stream Bridge:* This bridge, which is to be erected in reinforced concrete, will consist of four 40 ft. and two 30 ft. spans, with a roadway 30 ft. wide, and two footways each 6 ft. wide. During the year some preliminary stone protection work was placed, the cutting on the south side was opened up, and as far as possible both approach banks were built. The steelwork was ordered, and a party is engaged making the 18 in. square concrete piles.

*Orakei Garden Suburb (Eden County).*—The various works in this block were pushed ahead vigorously during the year, an average of one hundred men having been continuously employed. Some 6 m. of roads are being dealt with, of which 3 m. 15 ch. have been completed and are in readiness for handing over to the local authority. The following is a brief summary of the works completed during the year: Street-formation, 2 m. 7 ch.; kerbing and channelling, 19,729 lin. ft.; kerbing only, 18,763 lin. ft.; foundation course, 313 ch. full width and 38 ch. half width; footpaths (scoria), 478 ch. 22,000 cub. yd. of scoria were used for foundation purposes and footpaths. 412 ch. were metalled, rolled, and blinded with waste, a total quantity of 14,500 cub. yd. of metal and 5,750 cub. yd. of waste being used. Water-mains—349-02 ch. of pipes were laid complete with hydrants, valves, &c. Sewerage—12,917 lin. ft. of pipes laid, 58 manholes and 26 lamp-holes completed, and 164 building allotments were linked up with the city sewerage system. Storm-water drainage—9,300 lin. ft. of field tiles and 5,899 lin. ft. of pipes were laid complete with manholes, &c., and 69 cesspits were completed.

*Opotiki - East Cape Road (Motu River - Te Kaha Section) (Opotiki County).*—One 61 ft. standard truss bridge in hardwood on concrete abutments was erected at Waiorori; 3 m. 8 ch. were formed 14 ft. wide; 16 ft. of pipe culverts and 230 ft. of concrete-pipe culverts were placed in position.

*Opotiki - East Cape Road (Motu River Bridge) (Opotiki County).*—The contractor is making good progress with this bridge of four 110 ft. and one 81 ft. truss spans in timber on concrete abutments and concrete cylinder piers. The whole of the plant is on the site, one abutment is completed, 84 lin. ft. of concrete cylinders have been cast, and the sinking of cylinders to foundation has been commenced.

*Opotiki-Matawai via Waioka Road (Opotiki County).*—2 m. 70 ch. of 16 ft. formation were completed, 62,907 cub. yd. of hard rock, 7,155 cub. yd. rubble rock, 5,163 cub. yd. loose rock, 1,696 cub. yd. loose rubble, 14,321 cub. yd. of clay and boulders, and 3,137 cub. yd. clay having been excavated, and 14,548 cub. yd. of slips removed. In addition, 100 lin. ft. of timber box culverts and 856 lin. ft. of Hume pipes were placed in position.

*Maraeroa Road (Rotorua County).*—2½ m. metalled 12 ft. wide, and 147 ft. of 12 in. and 36 ft. of 9 in. concrete-pipe culverts placed.

*Okere-Hamurana Road (Rotorua County).*—4¾ m. of formation 14 ft. wide and 1½ m. of metalling were completed, and 947 ft. of culverts were placed.

*Tauranga-Rotorua Direct Road (Tauranga County).*—This road was re-formed and graded over a length of 10 m., and 30 ch. were formed 18 ft. wide.

*Williams Mount Road (Tauranga County).*—2½ m. of 16 ft. formation and 75 ch. of metalling were completed, and 21 ft. of concrete-pipe culverts were placed.

*Awaiti Road (Whakatane County).*—2½ m. metalled and two dray-bridges 10 ft. long by 18 ft. wide were erected.

*Waioho Valley Road (Whakatane County).*—80 ch. metalling, 30½ ch. of formation, and 70 ch. of regrading were done, and 100 ft. concrete-pipe culverts were placed.