

EASTERN DISTRICT.

Drainage in this district has been vigorously pushed on during the period, with very satisfactory results. Outfalls were cut on either side of the road from the Tohakawakawa Stream southwards through Section 30 to the southern boundary of Section 38, Rangitaiki Parish, that on the west side being 10 ft. wide and that on the east 16 ft. wide. This lowered the water in this country fully 4 ft., and land which was previously under water is now quite dry. Spoil from these two drains was thrown on centre of road-line, and formation of the road is nearly complete.

The Otarere drain has been widened and deepened from the Te Rahu-Mangaroa outfall southwards to the boundary of Sections 38 and 31, and from it a branch drain has been cut eastwards through Sections 30 and 38. This latter drain is through very soft, peaty country, and the bottom of the drain is continually being pushed up, necessitating fresh excavation to get any depth.

The eastern drain has been deepened considerably from the Kopeopeo outfall southwards, and another drain on the western side of the Eastern Drain Road has been cut from the Kopeopeo outfall to Luxton's Road, spoil being thrown on to road-line for use in formation.

The Western drain has been deepened from the Kopeopeo outfall to Feist's Road, and a contract is now in progress for deepening for another mile and a half southwards.

The Putiki drain, which joins the Kopeopeo outfall where was formerly the big Kuhanui Lagoon, has been widened and deepened to the southern boundary of Section 75.

Reid's central drain has been widened to 16 ft. on top from the Kopeopeo outfall to the southern boundary of Section 81, and from there has been widened to 14 ft. across Section 84. All available fall was taken up through the low country, and if more fall is taken up when the Kopeopeo Canal is deepened there will be no need for a dredge cut up the line of this drain, as formerly proposed.

Starting half-way between the Kopeopeo Canal and the Orini Stream, a drain was cut in a westerly direction from the Kopeopeo deviation to tap a small but fairly deep lagoon in Section 61, and with the emptying of this lagoon all danger of the road across Section 61 being again inundated was removed.

Drainage in the Native Section 28 has been pushed on during the latter portion of the year. The Orini deviation has been considerably widened, and all fall has been taken up in the Kopua drain, besides the width having been doubled. From Section 54 the Orini Stream has been thoroughly cleaned out, straightened as much as possible by cutting off projecting points, and a certain amount of fall taken up, as far as Section 50.

WESTERN DISTRICT.

A hand-drain along the line of the proposed Omcheu outfall from the Tarawera Cross Road southwards to the Omcheu Adjunct drain was constructed during the period, and the Omcheu and the Omcheu Adjunct drains were both deepened from the Cross Road to their junction.

The Tengaroa drain from its junction with the Omcheu drain has been widened to 14 ft., as far as the main Rotorua Road, and several feet of fall are now being taken up.

The Awaiti Road drain has been cleaned for its entire distance, and deepened from the Tarawera Western drain southwards.

Smith's drain was constructed from the Tarawera Western drain to the Cross Road, and has given great relief to Sections 146 and 147, Matata Parish.

The Awakaponga outfall was thoroughly cleaned and some fall taken up in the last 20 chains where the silt from the Awakaponga Stream had accumulated. From the dredge cut the Awakaponga drain was widened to 18 ft. to the junction with Collins's drain, and all available fall taken up. This drain will again have to be deepened when the outfall is redredged, as the surrounding country will sink a good deal yet; however, very material relief has been afforded by the work already done.

All other drains have been cleaned out periodically and are in good condition.

PRIESTMAN DREDGES.

The past year has been one of continual difficulty as far as the dredging is concerned. Supplies of coal for the latter half of the period have been very small, and even then the quality supplied was the poorest. For the last few months of the period the dredges have been running on firewood and slack coal mixed, as long as supplies lasted, but both dredges have been laid up for a time, when repairs to machinery and general overhaul were undertaken. Added to this hard dredging country has been encountered, and consequently the output this year is smaller than that of last year.

Towards the end of 1919, a new pontoon for a Priestman dredger was built on the bank of the Tarawera River close to the Rotorua Road, and this was completed and the machinery erected in March. A trial run was given the plant, and everything worked satisfactorily. As soon as the chutes arrive and can be erected (very shortly now) dredging operations will be started on the Tarawera River, where formerly carried on by the Hammond Pony dredge.

On completion of the pontoon for No. 8 dredge the shipwrights were removed to the Tarawera outlet, where another pontoon was commenced.

During the year Priestman No. 3 branched off from the Kopeopeo deviation at the former lagoon in Section 49, Rangitaiki Parish, and dredged up the line of the Western drain deviation to the junction with the Kopeopeo Canal, thence down the Kopeopeo towards the Eastern drain. The dredge shifted a total of 103,950 cubic yards of spoil, representing a distance of some 142½ chains.