

PATETONGA DISTRICT.

The principal work in this district has been the metalling and reconstruction of the Patetonga Main Road which was commenced in March, 1929. Work was continued up to May, 1929, at which date the base course of metal had been laid to the Patetonga Township, completing the gap in the metalled road between Patetonga and Morrinsville. The road required a certain amount of attention during the winter and in October, 1929, metalling was resumed and steady progress was maintained throughout the summer. The fairly heavy reconstruction work on the hill section of this road was commenced in November and base-course metal had been laid from Patetonga to junction with the existing metal surface at Kaihere by the 11th April, 1930, thus providing an all-weather road-connection between Patetonga and Ngatea. During the year 6,566 cubic yards of metal was received. Base course was laid for a distance of 5 miles 38 chains, and road was completed with surface course for a distance of 1 mile 39 chains. Some 2 miles 23 chains of hill-road reconstruction has been completed; 1 mile 57 chains of swamp-road re-formation; 8,828 cubic yards of clay has been carted for ballasting peat-swamp road and haunching metal. Alterations, repairs, and renewals of several bridges and culverts on roads being metalled and service roads were carried out. These included one new 4-ft.-diameter and a 2 ft.-6-in.-diameter concrete-pipe culvert, extension of several 2 ft.- and 1 ft.-6-in.-diameter pipe culverts, and the laying of 300 ft. of 9 in. storm-water drains. A 2-ft.-diameter pipe culvert was constructed on the Mangawhero Road and 341½ cubic yards of gravel removed from this road drain was supplied to the County Council for road-surfacing.

The tramway service between Patetonga Wharf and Township, which has been maintained by the Department since 1918, will be discontinued early this year. With the improved access to the district by road the tramway has ceased to be a necessity, and the freight offering does not warrant continuance of the service. 37 miles 77 chains of drains in this district were cleaned during the year, 3,403 cubic yards excavated in widening and deepening 2 miles 56 chains of drains, and 30 chains of fencing erected at Tahuna to complete the fencing of the Waitoa Canal.

WAITAKARURU—TOREHAPE DISTRICT.

An unemployed-relief work-camp to accommodate thirty men was established at Torehape, and much useful subsidiary drainage-work carried out which will aid the development of the peat lands in this locality. 7 miles 19 chains of new drain construction involved the excavation of 17,793 cubic yards, and 25,401 cubic yards was excavated in widening and deepening 17 miles 34 chains of existing drains. Also 30 miles 31 chains of drains were cleaned. Two rolled steel-joist access bridges of 30 ft. span with piled abutments were constructed across the Pouarua Canal and a large three-barrel reinforced-concrete flood-gate having a waterway area of 48 square feet, was constructed at the outlet of this canal. A new 4-ft.-diameter culvert and flood-gate was provided on the western side of the Maukoro Canal.

Minor work connected with dredging operations in the Maukoro and Pouarua Canals include the construction of temporary dams for regulating water-level in canals; construction of temporary bridge for traffic-deviation while span of main-highway bridge was being dismantled for passage of dredge; and formation of 10 chains of service road.

AWAITI DISTRICT.

Progress with the Elstow-Awaiti Main Drainage scheme is indicated by the handing-over to the Elstow Drainage Board at the 31st March, 1930, of the control of 17 miles 5 chains of drains constructed and hitherto maintained by the Department in the area lying to the north of the Intercepting Canal. Two dredges have been employed continuously and one intermittently on the Elstow, Awaiti, and Intercepting Canals and embankments. Progress would be more rapid but for the fact that unless built to the required height in two or more operations the embankments sink into their mud foundation.

The upper 2 miles 8 chains of the main outlet drain for the Central Subdivision of the Elstow Drainage District was widened and a 20-ft.-span road-bridge constructed across this drain on the Tirohia-Otway Road. Further widening of drain will be undertaken as the swamp consolidates, but the work already done will provide a much-needed outlet for a large area.

A total of 6,945 cubic yards was excavated in 2 miles 17 chains of new drain-construction, 4,755 cubic yards in widening and deepening 2 miles 32 chains, and 8 miles 41 chains of drains were cleaned. The Awaiti West Road was roughly formed as a service road for a distance of 31 chains, and 94 chains of fencing was erected for protection of drains and embankments.

BUILDINGS, BRIDGES, WHARVES, AND DRAINAGE STRUCTURES.

New structural work was practically confined to bridges, culverts, and outfall structures, particulars of which are contained in summary at the end of the report.

SUMMARY.

The total length of the subsidiary drains constructed in connection with the Hauraki Plains drainage-works is now 710 miles. The principal works carried out during the year under review are summarized in the following schedule :—