

ROADS AND BRIDGES.

Under all votes and accounts, except roads on goldfields, the total expenditure on roads during the last financial year amounted to £434,739. The amount expended during the quarter ended 30th June, 1913, was £102,706.

The *Te Kuiti-Awakino Road*, which is the main road from Te Kuiti to New Plymouth, has now practically been metalled from Te Kuiti to Piopio. Estimates have been made for metalling the remainder of the road; also the road from Piopio to Aria.

The *Ohura Road*, connecting the Main Trunk district with Taranaki, is now almost complete, with the exception of a bridge in the Tangarakau Gorge. At the Main Trunk end a deviation was formed and metalled close to the Stratford—Main Trunk Railway, from Okahukara to the Ohura Valley, thus saving 5 miles into the Ohura.

Gisborne-Opotiki Road.—Considerable survey and construction work has been done on the main road through from Motu to Opotiki.

Wanganui Town Bridge (Dublin Street).—In seven piers, ferro-concrete cylinders were substituted for piles: these have now all been sunk, and the completion of piers is in hand. Two spans of steelwork are erected, and sufficient for four more spans has been prepared.

Wairau River Traffic-bridge (near Renwicktown).—A traffic-bridge of eighty-nine 25 ft. spans on pile piers, and 69 chains of approaches, has been completed by the local body.

Wairau Flood-damage.—Extensive protective works have been carried out near the mouth of the Waihopai River by the local body.

Opawa River Bridge (near Blenheim).—Plans have been prepared for a reinforced-concrete structure 560 ft. in length.

Kahautara River Bridge.—A contract was let for the erection of this bridge of twenty spans of 25 ft., and is now nearing completion. 29 chains of approaches at the north end and 5 chains at the south end are in hand.

Lower Shotover Bridge.—This bridge which was being erected under contract for the Lake County Council was badly damaged by a flood when nearing completion, one pier and a 160 ft. truss having fallen into the river. The Department undertook to complete the bridge, and now have the work in hand.

Clutha River Bridge (at Luggate).—In connection with this work, which is being carried on by the Vincent County Council, the Department is assisting by testing cement and supervising the manufacture of ironwork at Dunedin.

Waikato River Bridge at Tokaanu.—The restoration of this bridge was completed in October last.

Waitara River Bridge (Waitara).—The erection of a bridge of four 60 ft. steel-girder spans on concrete piers and reinforced-concrete piles was carried out by the Waitara Borough Council.

Tokatoka Swamp Tram-line.—On the application of the White-pine Timber Company the Department has extended the tram another 22 chains. There still remains another half-mile to complete to south-west corner of Section 3.

Waipa River Bridge (Pirongia).—This bridge, consisting of steel girders on reinforced-concrete piers, is being constructed under the supervision of the Waipa County Council.

Waiau River Protection-works.—The Coromandel County Council have constructed some groynes and widened the stream.

Waipa River Bridge (Kawa Road).—Plans for this bridge were prepared by the Department, and the local body has called for tenders for the erection.

Taramakau Bridge Restoration.—Several spans of this bridge were washed away during a flood, and re-erection is now in hand.

Big Wanganui Bridge.—In South Westland, on the Ross to Waiho Road, the Big Wanganui Bridge, with approaches, is now complete. This road would be safe for motor-car traffic if the Mikonui, Little Wanganui, and Waitaha Rivers were bridged.

Working drawings of the following bridges have been prepared in the Head Office during the past year: Motueka River Bridge; Mangamahaki River Bridge; Kawarau Falls Bridge; Tangarakau River Bridge; Cobden Bridge; Te Karae Stream Bridge; Mangapeehi Stream Bridge; Wairoa (Tauranga) Road Bridge; Kaupokonui Road Bridge; Otakeho Road Bridge; Mangawhero Road Bridge; Ngaruawahia Road Bridge; Rangiriri Bridge; Balclutha Road Bridge; Mangawhero River Bridge (Burrell's Road); Okere Falls Bridge; Waipawa River Road Bridge; Mangawhero River Bridge (Anderson's Road); Buller River Bridge; Saltwater Creek Road Bridge; Hope Valley Bridges; Seven-mile Creek Bridge; Taramakau Road Bridge; Makakaho Stream Bridge; Rotokautuku Road Bridge; Opawa River Road Bridge.

FLOODS.

Surveys and reports have been made in connection with flood-damage and river-encroachment at Waipounamu, Oreti Valley, Balclutha, Inch-Clutha, Kaitangata, Stirling, Barnego, Otanomomo Settlement, Gore, and Waitaki River.

IRRIGATION.

Otekaike Settlement.—A contract has been let for the construction of 6 miles of race on the eastern side of river, and material for the siphons and other structures is now being obtained.

Central Otago Irrigation: Ida Valley Scheme.—The access road from Ida Valley to the Manorburn dam-site has been improved; a new road was formed from the half-way peg to the right-hand bank of the dam-site, cutting off about 5 miles.