

CONSTRUCTION.

Good progress has been made during the year with the construction programme. The accomplishments, however, were not so spectacular, perhaps, as in previous years. The Board has continued its policy of concentrating on the closing up of unmetalled gaps in the main-highway system, although, as reported last year, several schemes involving work of this nature have been temporarily retarded by the unwillingness of the local authorities to find their proportion of the cost. The additional finance which will be available to the Board during the forthcoming year, however, will assist very largely in completing the gaps which still exist in the system, and the anticipated achievements are likely to be particularly gratifying to the travelling public.

The most important connections made during the past year have been the completion of the surfacing on the Pokeno-Waihi Main Highway between Waikato and Hauraki Plains Districts, the provision of metalled access between Kaitia and the rail-head at Okaihau, and the partial completion of the surfacing of the Marnaku Bush section, between Hamilton and Rotorua. The last work was not quite completed by the end of the financial year, but immediately thereafter vigorous steps were taken to secure all-the-year-round access for the thermal district. This objective, at the time of writing has been accomplished.

During the year a number of large bridges were completed. The most important of these structures was the Waihou River Bridge at Kopu, on the Pokeno-Waihi Junction to Coromandel Main Highway. This bridge consists of plate-girder spans and reinforced-concrete decking with bituminous-concrete top. Its length is 1,520 ft., and an electrically-operated swing span has been provided for navigational purposes. The bridge was completed by the Public Works Department in a comparatively short time. The structure was actually opened on the 11th May, 1928. The swing span functions perfectly, and is a credit to the designing staff of the Public Works Department. The completion of the bridge has given great satisfaction to the inhabitants of the district and to the travelling public generally, as it replaces a ferry service which of late years has often proved inadequate to deal with the traffic offering.

Another very important structure completed and opened during the year was the Mokau River Bridge, on the Auckland-Wellington Main Highway. The erection of this bridge eliminated the last ferry on the primary highway system of the Dominion. It is 660 ft. in length, and is constructed of plate girders with reinforced-concrete decking, on which has been laid a bituminous concrete carpet. The bridge contains a lifting span for navigational purposes. The mechanism of the lifting span may be operated either by oil-engine or by hand, and functions perfectly. Since being opened the bridge has been very highly appreciated by the travelling public.

On the Gisborne-Whakatane via Motu Main Highway the Waioeka River Bridge was completed and opened to traffic. This bridge, which is constructed of reinforced concrete throughout, consists of twenty-five 40 ft. spans, and has a deck 18 ft. in width and a footpath 4 ft. in width.

Another important bridge which was almost completed by the end of the financial year is the Manawatu River Bridge on the Foxton-Shannon Main Highway. This structure consists of twelve 60 ft. plate-girder spans on pile piers.

Two other important bridges in the North Island were completed in reinforced concrete—namely, the Mangatainoka Bridge, consisting of six 40 ft. spans, and the Ngaturi Bridge, consisting of two 60 ft. spans and three 30 ft. spans—the former on the Wellington-Napier Main Highway, and the latter on the Pahiatua-Pongaroa Main Highway.

In the South Island the most important structure erected during the year was the Selwyn River Bridge. This bridge consists of thirty-five 30 ft. spans, and is built of reinforced concrete throughout. It provides a roadway 18 ft. in width.

On the Pukeuri-Kurow Main Highway the Otiake River Bridge was completed. This structure is a light-traffic bridge 640 ft. in length.

During the forthcoming year three important bridges in the South Island will probably be commenced—the Hurunui Bridge, on the Christchurch-Blenheim Main Highway, and the Pareora and Ashburton Bridges, on the Christchurch-Dunedin Main Highway.

As a result of the imposition of the petrol-tax, there will be greatly increased activity during the coming working season on construction work throughout the country, particularly on paving-work on the more heavily trafficked portions of the main-highway system.

Before the end of the financial year a paving scheme for the area immediately surrounding Christchurch City was embarked upon.

Alternative tenders for Portland cement and bituminous concrete surfacing were called for a section of the Christchurch-Blenheim Main Highway, and a tender for the former class of work was accepted.

The Board was in a position to make an early start with the scheme around Christchurch because of the large amount of preliminary investigation which had been carried out by a local voluntary committee organized by the Canterbury Progress League and consisting of representatives of the interested local authorities and the local Automobile Association.

For some considerable time, the necessity for urgent reconstruction and paving-work in the vicinity of the City of Dunedin has been apparent, but serious difficulty has been experienced in obtaining the co-operation of local authorities concerned in the manner intended and anticipated by the original highway legislation. A satisfactory arrangement, however, has at last been arrived at between the Board and the Taieri County Council, which controls the first 16 miles of the Dunedin-Invercargill Main Highway immediately south of Dunedin. As a result of this arrangement the Board will proceed vigorously with the reconstruction of the section during the present year. Similar negotiations have been in train for some considerable time between the Board and the Waikouaiti County Council, which controls the section of the Dunedin-Christchurch Main Highway immediately north of Dunedin, but up to the time of writing this report it is regretted that no satisfactory arrangement has been arrived at.