

## HORAORA POWER DEVELOPMENT.

During the year transmission-lines were erected from Horahora to Cambridge, Hamilton, and Te Awamutu. Material has been ordered and preparations made for erection of substations at Te Awamutu, Waikino, Hamilton, and Waihou. Houses for accommodation of staff have been erected at Hamilton and at Horahora. Plans are in preparation for the extension of this installation by the addition of 50 per cent. more machinery and the completion of a permanent diverting-weir.

## MARINE.

## LIGHTHOUSES.

*Cape Campbell*.—Two new residences are being erected by day labour.

*Chetwode Islands, Ninepin Rock*.—A steel tower has been constructed, and an Aga automatic light installed on this rock.

*East Cape Lighthouse*.—Owing to the dangerous position of this light, due to the fretting-away of the cliffs, arrangements are being made to transfer the lighthouse to the mainland. A new site has been procured, and the construction of tracks, boat-landings, and the erection of cottages is in hand. Plans have been prepared for the new lighthouse, and arrangements are being made for its erection.

*Jackson's Head*.—A new steel tower has been constructed for this light.

*Kaipara Heads*.—Lightkeeper's dwelling has been repaired.

*North Rock Light*.—New davits for handling lighting-cylinders have been completed.

*Gable End Foreland*.—Survey has been made and a suitable site selected for this light. During the year an Aga automatic light was procured, and it is hoped to erect this during the coming year.

*Ohuia Island*.—An Aga automatic light has been procured and crane constructed, but has not yet been erected, as it is required for a temporary light on East Cape while the permanent tower is being shifted from the mainland.

*Cape Maria van Diemen*.—The erection of two new lightkeepers' cottages is in hand.

## WHARVES.

*Bulwer*.—Plans have been prepared for a new wharf.

*Grove*.—Wharf has been repaired.

## GENERAL.

Various works have been inspected, and proposals by local bodies and harbour authorities examined and reported on.

## TRAMWAYS.

*Auckland*.—Proposals for duplication in Lower Symonds Street and general minor matters were examined and approved. Inspections were made from time to time, and inquiries made in respect to several accidents.

*Gisborne*.—Proposals for an extension were examined and approved, and Order in Council has been issued.

*Napier*.—Plans have been approved for Dickens and Shakespeare Streets duplications, and the work has been inspected and passed.

*Wanganui*.—Several new cars have been tested, proposals for extensions examined, and Order in Council issued.

*New Plymouth*.—Proposals for the use of one-man cars have been investigated and approved by Order in Council, subject to certain conditions.

*Wellington*.—Proposals for renewals have been examined, a number of cars have been tested, and inspection made of work being carried out.

*Christchurch*.—A number of proposals have been received from this Board, including the Manchester Street line, Riccarton Road duplication, Papanui balloon loop, Coronation Street extension, junction at Broadway's corner, loop at Metropolitan trolley-track. These were examined, and, as some of the matters were in dispute between the Tramway Board and the City Council, a Commission was appointed to decide the points at issue. A number of inspections have been made, and cars tested.

*Dunedin*.—Proposals were received and examined in respect of the Rattray Street balloon loop, the Anderson's Bay duplication, and Maori Hill line. Inspections have been made and cars tested both on the City Corporation lines and the Mornington Tramway.

*Invercargill*.—Proposals have been submitted for the provision of one-man cars; these have been examined, and Order in Council authorizing their use is in course of preparation.

## WAIHOU AND OHINEMURI RIVERS IMPROVEMENT.

This work has been carried on during the year, and the following are the principal operations:—  
*Rotokohu Drainage*.—The dipper dredge has been employed on this work practically continuously, and continues to give good results. 158 chains of drain have been excavated during the year.

*Ngahina Bridge Extension*.—Timber is on hand for the extension of the bridge on the right bank.

*Tirohia-Ngararahi Stop-bank*.—Left bank: 68 chains of this stop-bank have been built by the Waihou suction dredge during the year. Right bank: 131 chains have been made during the present year.

*Ngahina-Wainarie Bend Stop-banks*.—Stop-banks have been in hand on this section of the Waihou River, and a considerable portion raised to preliminary level. This work was done by Cletrac, by hand and by horse.

*Culverts*.—A two-barrel concrete culvert with flood-gates and sluices has been built on the right bank of lower Waihou River, 45 chains below Ngahina Bridge.

*Ngahina Wharf*.—A loading-bank has been added to this wharf.

*Surveys*.—During the year surveys have been in hand on the upper and lower Waihou River, and also on the Komata Creek and Hikutaia Stream.