

Greymouth—Coal Creek Railway Extension.—A further length some 3 miles up the Seven-mile Creek, in very precipitous country, has been detail-surveyed, and is now being finally located for construction.

Westport—Inangahua Railway.—The land-plan survey is in hand up to 6 m. The first 2 miles are completed and the remainder will be finished in a month.

Picton—Waipara Railway.—A party has been engaged at the south end surveying a deviation from Domett to McKenzie, thence running trial lines to junction with the route surveyed some years ago to enable the townships to be located near the railway stations, and also in making a flying survey to obtain a suitable route northwards from the Waiau River to Kaikoura; a good route has been found going up the Leader Valley, then passing into the Gelt Valley, crossing the Conway, then into the Charwell Valley, and then joining into the old surveyed line over the Green Hills to Kaikoura.

Gore—Waikaka Railway.—A contract for the land-plan survey of the 12 miles 65 chains on this line is now in hand.

Clyde to Cromwell.—Some work was done on a trial survey between these places.

Clutha River Protection at Balclutha.—A survey is being made to compare with previous surveys to observe the changes in the river in order to determine whether further protection is needed.

SLEEPERS.

A complete schedule of the contracts and agreements entered into for the supply of sleepers, and the number of sleepers delivered on each railway up to the end of March last, is given in Appendix D.

ROADS, BRIDGES, &c.

Mangere Road Bridge, Onehunga.—A site for the new bridge has been surveyed, borings taken, and plans and specifications prepared for contract.

Wairoa, Hawke's Bay: Road-bridge at Frasertown.—Plans were prepared and a contract let for this bridge, and the work of construction is just being started.

The Wangaehu Valley Road was formed and metalled for a distance of $1\frac{1}{2}$ miles south of Karioi Railway-station, to its junction with the main Pipiriki—Waiouru Road.

Alexander's Bluff Bridge, over the Motueka River, is going on very slowly; three spans have been erected, and the others are being framed. It should be finished by the end of the year.

Buller River Bridge, at O'Sullivan's Road.—A contract was let in August, 1907, for this bridge; the concrete piers have been built, and the hardwood for the superstructure is now on its way from Australia.

Culverden—Hanmer Motor Road.—The sites for the bridges over the Percival, Chatterton, and Hanmer Rivers have been surveyed, and drawings of the structures prepared. The material is now being obtained, and their erection will follow.

Wataroa Road Bridge.—The contract for this bridge, let in August, 1906, is now progressing better. All the cylinders and concrete are in position for the piers; the superstructure will be put in hand at once.

Larry's Creek Bridge.—This is now nearing completion.

Taramakau Road Bridge.—The approaches were completed last December.

Waiho Bridge Site.—A survey and plans have been made of this bridge-site.

Taramakau Overflow.—A survey and plans of the overflow near Inchbonnie have been made, where it is proposed to construct a stop-bank to prevent the Taramakau River from diverting into the Grey River Valley, as such an occurrence would be a grave catastrophe.

IRRIGATION, CENTRAL OTAGO.

At the head of the Manorburn Creek a dam was constructed by a private company some years ago for the purpose of forming a reservoir to conserve water for mining purposes. Races were constructed where necessary so that the water could be delivered on the ridge at the back of the Raggedy Range opposite Ophir, from which it could be conducted down towards Galloway Station and also down the Poolburn Valley. A few years ago the Government purchased this race: the water is now used for mining purposes, and some surplusage is sold for irrigation. As the dam is a very small affair, and only sufficient to retain a small quantity of water, and as the site for the reservoir is one of the best that could be obtained anywhere, steps were taken last season to make an accurate survey of the area of the reservoir and also of the race, to enable a sufficient dam to be designed to retain the whole of the rainfall, and to also enable some idea to be formed of the cost and practicability of enlarging the race to convey water for irrigation purposes. The survey has been completed and the plans are now in course of preparation. On their completion a full report on the scheme will be submitted, and authority requested to commence construction-work.

Near the summit of the ridge at Ranfurly, where the railway-line crosses, a good site for a storage reservoir exists from which water could be conducted for irrigating Maniototo country, and also westward along the valley of the Manuherikia. For the purpose of ascertaining the extent and capacity of the reservoir, and also to ascertain what water can be obtained to supply it, some survey-work was conducted towards the end of the autumn. Up to the present this has not