Westport–Inangahua Railway.

Cascade Section (5 m. 70 ch. to 8 m. 78 ch.; Length, 3 m. 8 ch.).—This section has been maintained during the year, and the Department took over the running of coal trains from the Westport-Cascade Co.'s mine to avoid dual running during construction operations.

Cascade–Inangahua Junction Section (8 m. 78 ch. to 22 m. 62 ch. (Westport Chainage) and 62 m. to 58 m. 30 ch. (Stillwater Chainage); Length, 18 m. 34 ch.).—This length was originally two sections, but with the resumption of activities it is now worked as one section.

The construction work was resumed on 8th July, 1936. Men were absorbed on construction work until the maximum number that could be economically employed—namely, 368—had been placed by February.

This rapid absorption of men required the provision of a large amount of workmen's accommodation.

Ten camps have been established, each with water-supply, bathhouses, and hot- and cold-water showers.

Two drying-rooms have also been established.

The construction headquarters at Tiroroa have been renovated and enlarged, and the workshop equipped with machinery suitable for the construction and maintenance operations that are necessary on works of this nature.

The Y.M.C.A. hut at Tiroroa has been renovated, and a further hut is being erected at Inangahua Junction.

The railway traverses the northern side of the Buller Gorge, and, owing to the road access being on the south side, the works are served from this road by five suspension bridges, which have been repaired, and in addition six boat ferries have been installed.

Four cableways were also installed to transport material and heavy plant across the river to the construction works.

Concurrent with this preparatory work the completion of the remaining earthwork has been carried out, and is in hand along the whole length, with the exception of 4 m. near the Inangahua Junction end.

This work consisted of trimming formation, clearing second growth, completing cuttings and banks, the construction of several concrete-lined water-drives, and the removal of slips over a section of 14 m.

The major operations in progress are as follows:—

Cascade Bridge: Five 80 ft. steel-girder spans and one 40 ft. steel span. The foundations of the piers were constructed prior to the suspension of the work five years ago, and the steel girders were fabricated. The piers and abutments have now been completed, and the erection of the steel spans is in hand.

Tunnel at 13 m. 41 ch. to 13 m. 54 ch. (12½ ch. long): The bottom heading of this tunnel is completed, except for 2½ ch., and work is now in progress.

Tunnel at 13 m. 26 ch. to 13 m. 28·3 ch.: This short tunnel will be put in hand on completion of the adjacent longer tunnel.

Buller River Bridge (60 m. 16 ch. to 60 m. 27 ch.): This bridge consists of six 100 ft. steel-plate girder spans, one 30 ft. steel-plate girder span, and one 45 ft. steel-plate girder span with concrete abutments and supported on seven concrete piers founded on cylinder foundations. The preparatory work has been completed, including the erection of a cableway, and the sinking of the first set of cylinders is proceeding.

Inangahua River Bridge (57 m. 17 ch. to 57 m. 26 ch.): This bridge is a combined road and railway bridge consisting of nine 60 ft. steel-girder spans supported on concrete piers founded on cylinder foundations. The piers are arranged to accommodate the railway and roadway side by side, and the piers and roadway superstructure were completed in 1936. The girders for the railway portion are now being manufactured, and the long railway embankment approach is now nearing completion.

Eight bridges still require constructing on this railway, and four reinforced-concrete designs have been prepared to date. Preparations are now completed to enable a start to be made with the construction of the first of these bridges at Redmond's Creek at 11 m. 41 ch.

The following major plant items are in operation on this railway:—

Two Diesel excavators, seven concrete-mixers, four petrol locomotives, two cableways, and two crushing and screening plants.

South Island Main Trunk Railway: North End.

Clarence Section (56 m. to 76 m.; length, 20 m.).—Formation had been largely completed over the whole of this section, but the track was heavily overgrown with lupins and other weeds, and cuttings had become filled with sand.

As soon as work was authorized a start was made to clear the section, and rails were uncovered, burnt sleepers replaced, culverts cleared, and washouts repaired. Temporary bridges were reconditioned to carry rolling-stock, ballast-pits were reopened, service-lines laid, and repairs carried out to existing ballast. Trimming had been completed to 71 m., and the first lift ballasting was completed to 69 m. 55 ch., the second to 67 m., and the third to 64 m. 10 ch.

The famous Blue Slip at 61 m., which is a moving hillside of pug over half a mile long, and 10 ch. to 30 ch. wide, has always been considered to be rather a problem, but the excavation here is proceeding steadily, and, although it is anticipated that between one-quarter and a half-million cubic yards will require removal before the slip is stabilized, there appears to be every prospect that the measures now being taken will be successful.