

*Cross Road, Hall Special Settlement.*—Scrubfelling for 44 chains, and 41 chains of 6 ft. formation, in the course of which 2,860 cubic yards were excavated and three 12 in. by 12 in. culverts (42 ft. long) were laid, is the record of work done on this road. It is 6 ft. wide throughout, and has been in a very bad state of repair, owing to the exhaustion of funds. Further authority for expenditure having recently been issued, two contracts for 6 ft. formation have been let.

*Fitzherbert Bridge, Palmerston North.*—Last year I had to report on the serious damage done to this bridge by the Easter floods of 1897, and the repairs—with the approximate cost—which it would be necessary to make. This work has now been completed, at a cost of about £5,510, towards which amount the Government has contributed £2,000 by way of grant. This work is of very great importance, for on the stability of this bridge the Borough of Palmerston North is dependent for its water-supply, as the aqueduct from the reservoir is supported on the joists. I am informed that the bridge was erected upwards of twenty-two years ago, and, as portions are already showing symptoms of decay, the local authorities will undoubtedly have to face the renewal of the older portion in the early future. When this becomes necessary, I would suggest the raising of the bridge some 5 ft. or 6 ft. on cylindrical piers, and the construction of 120 ft. spans in the place of the present 85 ft. By adopting these measures the trusses would be secure from floods, and the extended width of the spans would prevent all chances of timber jamming between the piers. The work, which has been very satisfactorily carried out under the supervision of the engineer to the Palmerston North Borough Council, consists of the sinking of eight cylinders 56 ft. in length and 4 ft. 6 in. in diameter, forming four piers; one ironbark pier has been driven, and the remaining five piers materially strengthened. The approaches have been made good, and secured by sheet piles where necessary; and the decking of the bridge has been renewed throughout.

*Ballance-Manawatu Gorge Road.*—This road passes through both gorgy and flat country, and consists of 1 mile 48 chains of 6 ft. horse-road, the remaining 2 miles 23 chains being felled and cleared. At the Ballance end the road is in very good repair, but the gorge end is bad. The work for the year has been: Bushfelling and clearing, 3 chains; scrubfelling and clearing, 10 chains; formation 6 ft. wide, 15 chains; slips cleared, 98 cubic yards; rock excavated, 408 cubic yards; and three 12 in. by 12 in. culverts, 37 ft. long, have been laid.

*Pahiatua-Palmerston Road.*—This road, passing through both hilly and flat country, for six miles is 8 ft., and the remaining distance 10 ft., in width. The only work done has been the grading of 6 miles 72 chains of the road-line. A sum of £800 has been voted for widening this road for vehicular traffic, which work will be prosecuted as far as that amount will admit. It is at present in bad order, owing chiefly to the large sheep and cattle traffic over it, to which special attention was directed by me in my report of 1895-96. Of the two bridges, it has been necessary to replace one by a new structure. Besides this work, the cost of which was defrayed out of authorised expenditure, the Pahiatua County Council has received a grant of £80, which has been devoted to the erection of a plain beam bridge of two spans 47 ft. in length, with a 14 ft. roadway. This bridge is at present in good condition, and suitable for heavy traffic.

*Makuri Township Roads.*—There are about two miles of dray-roads in this township which are in very good repair, but the river-fords require some attention. A few necessary metalling repairs have been done to the main road, two culverts shifted, and 26 chains of fencing erected to enclose a number of township sections for use as a Government paddock.

*Woodville-Aohanga Road.*—This road passes through hilly country, and consists of four miles of dray-road, five miles and a quarter of horse-road, and 60 chains of bush felled and cleared. The culverts are in good repair, and three traffic bridges and three horse-bridges are also in good order. A contract is in course of preparation for forming the 60 chains cleared, and another contract has been let for supplying timber for the Waitakotora Bridge, the first instalment of which is expected shortly. The following is the annual record of work done: 26 chains of bushfelling and clearing, 146½ chains of logging, 2 miles 27 chains of 6 ft. formation, 22 culverts (326 ft. in length), 1,768 cubic yards of slips cleared, 1,042 cubic yards of rock excavated, 1½ chains of corduroy laid, and 2 chains of embankments formed.

*Ngaturi-Aohanga.*—£350 having been recently authorised for expenditure on this road, the work of formation will be proceeded with as soon as the engineering survey is complete.

*Toritea-Makuri Road.*—Maintenance of 17 miles 50 chains has been the work of the year, and has involved the execution of the following details: 13 timbered culverts have been replaced by 318 ft. of pipes; metalling repairs, at 10 cubic yards to the chain, have been effected for 25 chains; 1,219 cubic yards of slips cleared, 257 cubic yards of rock excavated, and 7 chains of drains have been cleaned out. Before the winter sets in it will be necessary to incur some expenditure for maintenance metal.

*Kaitawa Ridge Road.*—Bushfelling 1 mile 1 chain, formation 1 mile 2½ chains (incurring the insertion of nine culverts, of an aggregate length of 90 ft.), and maintenance of five miles and a half of this road is the recorded work for the year. 1,338 cubic yards of slips have been cleared, and 157 cubic yards of rock excavated. The road passes through hilly country, and is formed 6 ft. wide for 4 miles 20 chains, the remaining 1 mile 20 chains being available for wheel traffic. All culverts and the horse-road are in good repair, but the mile and a quarter of dray-road is at present in a bad state. The department is in no way responsible for this condition of things, as hitherto the road has been under the control of the local body. As fresh expenditure has recently been authorised the road will immediately be repaired and the formation extended.

*Tiraumea Valley Road.*—This road, passing through level and undulating country, has been constructed for vehicular traffic for a distance of ten miles—six miles of which has been grassed this year. Of the seven bridges five are in good repair, one is very doubtful, and one is in a positively bad condition, being unfit to carry more than 1 ton. Instructions have, however, been issued for immediate repairs. No work of construction has been done on the road. In September last some surfacing was done, and 772 cubic yards of slips cleared, but owing to scarcity of funds a thorough state of repair could not be effected. A contract was let to supply timber for the Rotoponga Bridge,