reasons for not adopting the existing levees in the vicinity referred to is that these have not been well constructed in the past. They are of small dimensions, and the material for them was obtained from excavations so close to the levee that it would come within the limits of the new work, the result of which would be that there would practically be no saving by making the new levees enclose the old; and, furthermore, the ground where it is now proposed to construct the levees is more likely to be solid and reliable for a high bank than it would be close to the edge of the water in the lake or channel.

(*g.*) The danger of wave-action is also an argument for keeping back from the lakes, but wave-action can be coped with by growing willows in a belt parallel to the waterside. This is a situation in which willows will not interfere with flood-discharge, and consequently are not objectionable.

(*h.*) The area of land lying in the valley of the Waipori Stream above the Berwick–Outram Road is too small to justify the large expense that would be involved in improving the Waipori channel sufficiently to prevent this land being flooded. Your Commissioners therefore recommend that a levee be constructed on the lines indicated, to a sufficient height to prevent any possibility of the Waipori River escaping on to the main plain across this levee. This will necessitate a bank about 10 ft. high.

(*j.*) As a defence against small and fairly frequent floods a bank of moderate height could be carried up some distance from the present stream, as indicated on plan No. 3, to a point on the north-eastern corner of Section 45, Block II, Maungatua Survey District. This will give a fair amount of protection to a very fertile piece of country at a low cost.

(*k.*) The waterway at the Berwick town bridge must be increased by the excavation of the rock on the hillside sufficiently to give room for another 40 ft. span, and the material under this span ought, under the existing circumstances, to be excavated down to water-level, and the channel enlarged sufficiently to carry 20,000 cubic feet per second, for a distance of at least 5 chains up-stream and down-stream.

(*l.*) From the sharp bend lying to the southward of the township a sufficient channel should be excavated for the river to run into the Waipori Lake to the west, about a quarter of a mile to the west of the Meggatburn. It is not proposed that this channel should be sufficient to carry the largest flood anticipated, but the excavation should be sufficient to build a specially strong levee, which would give a safe carrying-capacity between itself and the neighbouring hills, to carry floods safely to the lake. This levee should follow the shores of the lake and the edge of the old Waipori channel till the same reaches the Henley–Berwick Road, and would there connect with the right-hand levee forming the Maungatua contour channel. The Henley–Berwick Road, raised as set forth in paragraph (*f*), would connect with the left-hand bank of the contour channel.

(*m.*) All the willows and other vegetation at present injuriously affecting the channels of the Taieri from Outram to the Henley Ferry Bridge, and affecting the channel of the Waipori between its point of diversion mentioned in paragraph (*l*) and a point 20 chains above the Berwick Bridge, must be removed after being poisoned so as to prevent their springing up again. A belt of willows to prevent erosion of the levees by current or wave action must be planted on the river-side throughout, including the river-side of the railway embankments wherever they are used as levees. These willows must be kept under control and cut periodically so as to form a thicket, and must not be allowed to grow into large top-heavy trees, as these are only a source of weakness.

(*n.*) In the event of an independent levee being constructed between Otokia and Bull Creek it will be necessary to regrade the Main South Railway where the levee crosses over it near Bull Creek, so that it will pass over the new levee when raised to its final height of 10 ft. above datum with reasonable grades.

As an alternative to the protective measures already described between Allanton and Bull Creek, a suggestion was put forward by Mr. W. E. McLean, Clerk to the Western Taieri Land Drainage Board, which is, shortly, that the railway be diverted so as to cross the river at Allanton and run in a fairly direct route along the general line of the river on the western side, joining in to the existing