

The No. 2 dredge is still engaged on the Waitakaruru Canal, and has completed 1 mile $\frac{1}{2}$ chains for the year, making a total length of canal dredged of 1 mile 61 chains. Fairly good going was encountered, and the dredge should reach its objective by next October. Amount of spoil dredged was 70,165 cubic yards, at a cost of £1,073 2s. 6d.

The No. 6 dredge, which was purchased from the Auckland Harbour Board and altered to suit the Department's requirements, was placed on the Kerepehi-Awaiti Canal. Unfortunately this dredge, owing to considerable breakages, has been out of commission for some time, and it will be necessary to thoroughly overhaul same and renew some parts which are worn or not in good working-order. This work, on account of difficulty experienced in procuring steel, &c., is likely to take some considerable time.

The following table shows the amount of spoil dredged and cost per cubic yard for the past seven years:—

	Cubic Yards.	Cost per Cubic Yard.
1912-13	131,902	3.25d.
1913-14	147,740	3.20d.
1914-15	176,196	2.67d.
1915-16	146,905	3.35d.
1916-17	161,674	3.40d.
1917-18	130,664	2.53d.
1918-19	125,196	4.87d.

The increase in cost is a natural one considering the abnormal conditions prevailing, which have raised price of materials, coal, supplies, freights, wages, and repair works. Every item is charged against the output of dredges.

WORKS PERFORMED DURING YEAR.

The following works were carried out under the piecework-contract system or day labour:—

Drains:—

	M.	ch.
By piecework contract—		
Cleaning drains	65	33
Widening and deepening drains	14	31
Constructing new drains	7	19
By day labour—		
Cleaning drains	95	17
Widening and deepening drains	35	24
Constructing new drains	12	59
Total distance covered	230	23

Roads:—

	M.	ch.
By piecework contract and day labour—		
Carting spoil and forming roads	1	49
Grading and re-forming roads	10	79
Disking roads	6	20
Gravelling roads	1	20
Shelling roads	0	40
Metalling roads	3	20
Repairs to stop-banks	1	48
Fencing	3	20
Total distance covered	28	56

Supply of sleepers, 3,650; fascines, 150 bundles.

Reinforced-concrete Work.—The following concrete culverts and tide-gates were all constructed by day labour:—

	Number.
Tide-gates—	
3-ft.-diameter pipes	4
2-ft.-diameter pipes	2
Total	6
Culverts—	
Diameter.	Number constructed.
4 ft. by 3 ft. 6 in.	1
4 ft. by 3 ft.	1
3 ft.	3
2 ft. 6 in.	2
2 ft.	11
1 ft. 6 in.	3
Totals	21
	Length. Feet.
	45
	40
	116
	60
	494
	90
	845

The total number of concrete tide-gates is now eight, while culverts or outlets number twenty-seven, of a total length of 1,156 ft. In addition to the above many culverts of 1 ft. diameter and under were constructed.

Metalling Roads.—During the year a total length of 5 miles 2 chains of road has been metalled, shelled, or gravelled. This makes a total distance of 35 miles 66 chains since the year