

No. 3.

NELSON CREEK WATER-RACE.

MEMORANDUM for the Hon. the MINISTER FOR MINES.

Questions as to future Maintenance and Extensions.

SIR,—

Public Works Office, Wellington, 6th June, 1882.

In accordance with your instructions when in Dunedin at end of January last, an investigation has been made into the above-mentioned subject, and I have the honor to forward herewith a memorandum from Mr. Martin thereon, covering a report with map prepared by Mr. Gordon.

As evidenced by copy telegrams of 5th instant, attached hereto, I was at first inclined rather to disagree with some of the conclusions arrived at by Messrs. Martin and Gordon, but on getting the further information asked for, it seems to fully bear out their views on the subject, in which I therefore now concur.

One other point, however, it may be desirable to draw attention to—namely, the immense difference between the estimated value of the gold which the race extension might enable the miners to obtain, and the estimated amount which they would pay for the water; the value of probable gold-yield in the case of one of the proposed extensions being estimated to be £956,000, while the total payments for water are estimated at only £125,000. Taking such low rates for water as the Government are usually obliged to adopt, there is very little hope that any more than £125,000 could be realised by sales of water only; but this fact points all the more to the desirability of reserving auriferous lands, to be afterwards leased to miners by auction, so that the rentals thus derived might aid the water rates in recouping the Government for the cost of construction.

C. Y. O'CONNOR,

Inspecting Engineer, Middle Island,
(for Engineer-in-Charge.)

Enclosures.

(Telegram.)

Government Buildings, 5th June, 1882.

Re Nelson Creek Race. Your memorandum 58-31, of 26th ultimo, Gordon's report (page 18). Why 70 men for 35 years? Why not 350 men for seven years? Would not available water supply be sufficient to keep 350 men going? Less quantity of water keeps that number of men going at Kumara and Waimea. If result to be anticipated were 350 men for seven years, or anything like that, it would materially alter the figures as to cost of maintenance and consequent interest, and it might also alter time at which deviation would become most desirable in view of getting the best practical results from expenditure to date and proposed.

F. W. Martin, Greymouth.

C. Y. O'CONNOR.

(Telegram.)

Greymouth, 5th June, 1882.

In reply *re Nelson Creek Race extension to Ahaura.* A different system of working is in use at Waimea and Kumara, and at former place water can be economised more, owing to greater facilities for storing it; while at latter the ratio of men employed to head of water is becoming reduced since system of sluicing in place of paddocking is coming into use. The least remote comparison is with Nelson Creek itself, which was adopted for that reason, and the race employs seventy (70) men there. Perhaps it might employ a few more at Ahaura, but not many. The report was drawn up in view of the tolerably certain probabilities, but the probabilities of the case are immense. I should look rather to a high price for water than to its employing a large number of men for financial success. Of course the number of men mentioned means miners directly employed in claims worked by race.

C. Y. O'Connor, Wellington.

F. W. MARTIN.

MEMORANDUM for C. Y. O'CONNOR, Esq., Wellington.

Public Works Office, Greymouth, 26th May, 1882.

By direction of Mr. Blair, I send you herewith report on the question of what should be done with this work when the bridges decay. This report has been very carefully compiled by Mr. Gordon after making full enquiries, and considering the matter from all the apparent aspects which it presents. I fully concur in the report.

I also enclose a copy of your memorandum No. 14/196, as you may require it in order to see exactly what were the questions asked, and may not have a copy with you in Wellington to refer to.

If the recommendations are approved immediate steps should be taken to reserve the land required for race and by-washes which is at present quite clear of prior rights, but will not likely remain so unless protected.

I have meantime mentioned the matter to the Warden, who will protect the land so far as he can, but cannot protect it against miners pegging out claims under miners' rights.

F. W. MARTIN,

Resident Engineer.

MEMORANDUM for Mr. MARTIN.

Public Works Department, Head Office, Middle Island,
Dunedin, 2nd February, 1882.

Mr. MARTIN,—

Hon. Mr. Rolleston has asked the following questions with regard to the above race:—(1.) How long will bridges last, and what is proposed to be done when they decay? (2.) Would maintenance for long period be costly, and what character of works would it involve?