

TABLED AT HEARING

INTRODUCTION

Application: Road Metals
- joint hearing
Date: 3 April 2018

1 My full name is Victor Mkurutsi Mthamo.

SCOPE OF EVIDENCE

2 In my evidence I have been asked by Road Metals Company Limited (Road Metals) to review the Quarry Rehabilitation Plan required by Standard 17.8.3.14 of the Christchurch District Plan, and whether the rehabilitation proposed in this document would return the land to a 'stable and free-draining landform capable of supporting light pastoral farming or an alternative permitted or consented activity'.

EXECUTIVE SUMMARY

- 3 The proposed 300 mm topsoil depth will be equivalent to a Land Class 3 soil. These soils are widely used for sustainable pasture production in Canterbury.
- 4 There are many species of grass that can thrive when grown in the proposed topsoil depth conditions. To enhance the benefits of the different types of grasses, I recommend the planting of one of the several grass mixes (i.e. a mixture of several grasses planted together) on the market to be grown on the rehabilitated site.
- 5 With this soil depth of soils, it is possible to achieve unirrigated Dry Matter yields of 4,000-9,000 kg DM/ha/year with minimal inputs on a sustained basis. These yields would comfortably support stock grazing of smaller animals, for example sheep and goats. This is a good yield when compared to irrigated Dry Matter Yields of 14,000-15,000 kg DM/ha/Year.
- 6 I have also looked at the rehabilitation carried out for a previous stage of the quarry, referred to as "RM1". The grass is in a healthy state and there is good coverage across the planted areas. This indicates that the rehabilitation strategy (which included a 300 mm topsoil) and the current management of the rehabilitated land are both effective.
- 7 It is my conclusion that the proposed 300 mm topsoil post-quarrying will be able to sustain pasture growth for cut and carry (for hay or silage elsewhere) purposes or for small animal (e.g. sheep) grazing onsite. I understand that this is what these areas have traditionally been used for, and that these uses align with rural residential use.