Before the Hearings Panel

Under

the Resource Management Act 1991

In the matter of

Applications by Cromwell Certified Concrete Limited to the Otago Regional Council and Central Otago District Council for discharge permits, a water permit and a land use consent relating to expansion of an existing quarry at 1248 Luggate-Cromwell Road

Legal Submissions for the Hayden Little Family Trust, Nicola and Bryson Clark, and Amisfield Orchard Limited

16 December 2021

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May it please the Panel

Introduction

- These legal submissions are presented on behalf of the Hayden Little Family Trust (**HLFT**), Nicola Jane Clark and Bryson David Clark (**Clarks**) and Amisfield Orchard Limited (**AOL**) (collectively, the **Submitters**).
- The Submitters lodged submissions on the applications by Cromwell Certified Concrete Limited (**Applicant**) to Otago Regional Council (**ORC**) and Central Otago District Council (**CODC**) for its proposed quarry expansion and intensification (**Proposal**).
- 3 HLFT has an interest in land at 1286 Luggate-Cromwell Road (legally described as Lot 2 DP 508108) (**HLFT Land**). The HLFT Land is located immediately south of the existing quarry site.
- The Clarks own land at 1308 Luggate-Cromwell Road (legally described as Lots 2 and 7 DP 301379) (Clark Land). The Clark Land is located immediately north of the existing quarry site and immediately west of the proposed quarry expansion site (i.e. proposed to be surrounded on three sides with the expansion).
- AOL owns land legally described as Lot 1 DP 508108 (AOL Land). The AOL Land is located immediately east of the proposed quarry expansion site.

Executive Summary

- The Submitters own, occupy, and make their livings off land that is effectively now proposed to be surrounded by this expanded quarry and intensified use. They have reviewed the application, various supporting documents, and evidence provided, however still remain fully opposed to the Proposal (both in terms of quantum over the existing quarry area, plus over the expansion land).
- 7 The Submitters' key concerns, and reasons for remaining in opposition to the proposal are:
 - (a) The Submitters' land is a home and refuge for quiet rural enjoyment. They have already experienced adverse effects on the enjoyment of their properties because of dust and noise emissions from the existing operations.
 - (b) While there is an element of 'buyer beware' in this context, the Submitters understood they bought in the knowledge that an existing

quarry operation is in place in the current location. The legitimate expectation is that the existing quarry would have a finite economic life. There was no expectation that the quarry would propose to expand into their backyard and wrap around their properties in the manner now proposed (including in expert terms, with very 'small' setbacks), and propose an increased rate of production by almost three times.

- (c) In light of the effects already experienced from existing operations, the Submitters have engaged expert noise and air quality evidence at significant cost, which concludes that the Applicant's proposal will have more than minor adverse effects on them, and in the case of air quality, significant adverse effects.
- (d) The proposal also seeks to expand into an area that is prime horticultural land, ideal for growing export quality produce. A loss of these finite productive lands to quarry development, which cannot then support ongoing horticulture in the same way after the activity has finished, is of concern to the Submitters, and should be of concern to the community and Region more generally. Additionally, the effects of the predicted dust emissions will adversely affect existing horticulture operations established on the Submitters' land. This has a corresponding negative economic effect that needs to be weighed in decision-making.
- (e) Adverse visual and amenity effects on the Submitters are significant and unacceptable. The result of this proposal will mean that the Clarks in particular are effectively situated within a quarry, rather than the current setting, which has a rural and picturesque outlook. In Ms Clark's own account, they would never have bought this property if the result were to be what is now put forward in the Applicant's Proposal.
- Overall, the Submitters' evidence shows that there are significant and wellfounded concerns with respect to current operations of the quarry. These effects will be increased by the proposed expansion in terms of spatial extent and intensity.
- The conditions proposed by the Applicant to get this over the line are not only unsatisfactory in terms of mitigating adverse effects, but also unlikely to be able to be stringently implemented and complied with. The basis for this proposition is reasonably founded, given the nature of current operations and exceedances, as well as based upon expert advice that the conditions are above industry best practice:

... the conditions proposed are more onerous than what would generally be seen for a quarry of this scale. This reflects the very close proximity of the proposal to existing sensitive receptors and the high level of dust control required to manage effects within the envelope provided.¹

Background and development of the Site and surrounds

- 10 The existing quarry has been operating since 1995. The horticultural and lifestyle land surrounding the quarry was subsequently subdivided in 2001.
- At the time of this subdivision, resulting covenants were placed on the existing quarry land and subdivided adjacent sites. The covenant identifies the existing quarry site only as "The Quarry Land" and the remaining lots, including the Clark Land and the proposed quarry expansion site, as "The Covenantor's Land". Similarly, the original subdivision plan attached as Appendix A identifies the existing quarry site as "Quarry" and the remaining lots by their lot number only. This indicates the proposed quarry expansion site was originally envisioned as being part of the lifestyle subdivision and not part of the quarry.
- 12 The relevant covenant restriction² is:

SCHEDULE 3

The Covenantor shall ensure that at all times during the term of this covenant, all parts of the Covenantor's Land are used only for the purpose of rural allotments provided that any such use will not interfere with the operation of the quarry on the Quarry Land. In particular but without limiting the generality of the foregoing, the Covenantor shall ensure that no more than one dwelling is erected or placed on any part of the Covenantor's Land. Provided that Lot 9 may be further subdivided into more than 2 lots, and that no more than one dwelling may be erected or placed on any such resulting lot.

There is a legitimate expectation for neighbouring owners that the expansion land (Lot 3) is to be used only for a 'rural allotment' (i.e. that it would remain rural production or lifestyle, but not converted to quarry land). Lot 3 DP 301379 is listed in Schedule 1 of the Covenant as the 'Covenanter's Land'.

¹ Para [156] Mr Stacey Statement of Evidence

² Schedule 3, clause 1, Covenant in Deed 5074990.16

- 14 The case law in respect of s221 consent notice conditions, and the ability for those to be relied on in an enduring way is of assistance in understanding the reliance on covenant expectations:
- 15 Foster v Rodney District Council [2010] NZRMA 159 provides:

[129] ... the existing consent notice is to provide a high level of certainty to public and owners as to the obligations contained within that notice. It is intended to protect the environmental values of the soil reserve and the Act's purposes including s 5(2)(a) and (b) and s 7(b), (d) and (g).

16 Also see Ballantyne Barker Holdings Ltd v Queenstown Lakes District Council [2019] NZHC 2844 citing McKinlay Family Trust v Tauranga City Council EnvC Auckland A119/08, 29 October 2008 at [52]:

[41]... we have concluded that the ability of people and communities to rely on conditions of consent proffered by applicants and imposed by agreement by consent authorities or the Court when making significant investment decisions is central to the enabling purpose of the Act. Such conditions should only be set aside when there are clear benefits to the environment and to the persons who have acted in reliance on them.

- The principals of AOL and HLFT bought their properties in 2016 (and subsequently subdivided into the current sites). The Clarks purchased their properties in February 2014. HLFT was formed in August 2017 to develop the HLFT land into an export cherry orchard.³ While the Submitters were aware of the existing quarry when they purchased their respective properties, they believed it was coming to the end of its economic life as indicated in the finite duration of regional consents, the covenant controls, and logical material source constraints. In making investment decisions on the Submitters' sites, they always considered the quarry would have limited long-term impact.
- The Applicant purchased the proposed quarry expansion site in November 2017 with the intention of expanding the quarry onto that land. However despite four years to prepare for this major expansion, the Applicant has undergone significant cost through the overseas investment process, but has not:

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³ The ownership of the property was transferred to Hayden Sinclair Little (1/2 share) and Tessa Leanne Nyhon (1/2 share) on 24 September 2021.

- (a) Remedied existing non-compliances of consents held;
- (b) Effectively consulted and engaged with neighboring concerns; or
- (c) Undertaken reliable onsite monitoring for the preparation of evidence.

The reliability of enforcing conditions

- As accounted in the evidence of Ms Clark and Mr Little, there have been numerous and serious instances of dust / air quality effects resulting from current quarry operations.
- It is submitted that the history of operations at the quarry, the nature of its operations to date, and accounts of various exceedances and breaches of conditions, paints a picture that questions the reliability and integrity of this operator. There are therefore serious questions over the extent to which the consent conditions as proposed can realistically be enforced and upheld, in particular when such conditions are described (by Mr Stacey's evidence) as being 'higher than best industry practice' and which would represent a significant step change to what is currently operating on the ground:
 - [21] ... fundamentally we have to rely on the proposition that the quarry will implement, what I consider 'above and beyond' industry best practice dust mitigation measures and that these be effectively and rigorously undertaken at all times, something that the existing quarry has clearly not been able to manage, based on recent complaint information, various submissions and the photographs and videos that I have observed of dust being generated by the site. ⁴

[36] the current level of dust control is inadequate and based on the evidence I have observed, has the potential to cause adverse effects. Consequently, the continued operation of the quarry and any expansion into the proposed extraction area will require a large "step change" in terms of the type and application of any additional measures.

The following are pertinent examples of historical and recent exceedances and breaches:

⁴Paras [21], [36] Mr Stacey Statement of Evidence

Encroachment

- The 1994 landscape and quarry development plan (included as conditions of the original consent) is included as Appendix B. when compared alongside the surveyed encroachment area below, it appears clear that the plan was not followed and the area of encroached land goes well beyond the identified quarry area.
- This should have been clear to CCL, given the plan also required an offset from the boundary to be planted in two rows of tree species (poplar and pine, in different locations) along this boundary, and for it to be rabbit fenced. The operations represent clear disregard for this Plan.
- 24 Mr Sutton infers that the earthworks undertaken in the encroachment area may have been permitted under previous plan rules but makes no attempt to identify those to confirm the veracity of that proposition. (para 3.5).
- 25 It is not acceptable for the landowner benefiting commercially from operations to simply rely on existing fencing when undertaking such environmentally intensive activities. The 1994 consent subdivided the site to become quarry, and the Applicant acknowledges it was after fenced. Presumably this fencing was engaged by the operator, and should have been on the basis of its freshly released titles it sought.
- 26 It is clear that a discretionary activity consent is required for removal of the bunds / piles in this location, and in my submission, this is so intrinsically connected to the current proposal, it should be included in the current consent and have associated management conditions incorporated.
 - (i) No effects assessments have been made in terms of remedying this encroachment, its methods, or associated conditions of consent as a result of cumulative effects.
 - (ii) It is clearly part of the proposal in that it is the same operation, the same resource, the same operator, benefiting from extraction and sale of material that is not owned by it.
 - (iii) it is unclear from what ground level point the newly proposed earth bunds will be constructed in this location, and therefore what mitigation effect they will have.
- 27 Therefore it is submitted the Commissioner has the following three options to consider:

(a) Defer proceedings pending the application for additional consents under section 91:

A consent authority may determine not to proceed with the notification or hearing of an application for a resource consent if it considers on reasonable grounds that—

- (a) Other resource consents under this Act will also be required in respect of the proposal to which the application relates; and
- (b) It is appropriate, for the purpose of better understanding the nature of the proposal, that applications for any one or more of those other resource consents be made before proceeding further.
- Section 91 means an application ought not be considered in isolation but with the benefit of fuller understanding of the overall proposal which might be achieved by consideration of any other resource consents required.⁵
- 29 Waitakere City Council v Kitewaho Bush Reserve considered:

In relation to s 91(1)(b), the consent authority is concerned with understanding the essential features of the proposed activity to the extent that those features bear upon the effects of the proposed activity on the environment. A consent authority must be of the view that it is appropriate for the purpose of better understanding the nature of the proposal that applications be made for any one or more of the other resource consents required before it proceeds further...

- ... good resource management practice requires that in general, all resource consents required should be carefully identified from the outset and applications made so they may be considered together or, at least, in 20 circumstances where one application informs the others⁶.
- Applying this authority, the 'proposal' at hand is for the ongoing expansion and operation of the Amisfield Quarry. It provides for the end use of the extraction of this mineral resource and eventual remediation and rehabilitation of the Site. That proposal clearly includes areas already extracted (i.e. the encroachment area), which will need to be remediated in the longer term, as part of the bigger picture.
- There are likely to be combined cumulative effects and a desire to ensure consistency in consent conditions across the retrospective consents still

⁵ Central Plains Water Trust v Ngai Tahu Properties Ltd (2006) 13 ELRNZ 63, at [36].

⁶ Waitakere City Council v Kitewaho Bush Reserve Co Ltd [2005] 1 NZLR 208 at [26] and [27]

- needed, therefore the it is appropriate to better understand the nature of the proposal in the round by invoking section 91.
- There is no suggestion in case law found that narrowly interprets section 91 as just relating to the confines of the proposal as submitted, it clearly anticipates additional and related consents that may contribute to an understanding of the overall environmental effects.
 - (a) Decline the proposal under s104(6) on the grounds it has inadequate information to determine the application
- Despite knowing that remedying this encroachment needed to occur, the Applicant did not include this in the current proposal and chose not to assess those effects in conjunction. The Commission does not have sufficient expert evidence before it to conclude on adverse effects of the entire proposal and must decline under section 104(6) RMA.

Non maintained landscaping

- As detailed in the statements of Ms Clark and Mr Little there are concerns as to the maintained landscaping and control of current bunding in place⁷. Photos presented by Mr Little in particular show very little upkeep of planting and irrigation, coupled with severe pest infestation.
- It was also detailed in the CODC's planning report for RM150052, that existing landscaping mitigation required at that time had not been implemented / up kept. There appears to have been no enforcement action taken in respect of this matter, despite it being a central condition of the existing consents, and the Applicant now proposes significant additional mitigation in a similar form. It is therefore questionable to what extent this will actually be put in place and maintained on an ongoing basis. Although it is acknowledged that case law assumes a consent applicant will comply with conditions proffered, when those conditions are so central to mitigating adverse effects which are proposed to be for such a long duration, and of such potential significance in the instance of any breaches, additional care

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⁷ As indicated in Evidence of Mr Little at [14], [23], and Appendix A. Note also the Planner's report from CODC on RM150052 at page 2 which states 'landscape plantings elsewhere around the bunds have met with limited success despite irrigation due to a combination of the harsh climate and rabbit predation'. Note also correspondence on the historic consent files provided between Mr Cull and CODC regarding non-compliance with shelter belt plantings identified around the site

and caution must be applied in ensuring conditions are realistic, enforceable, and workable.

The proposed conditions themselves are also inadequate in providing assurance as to ongoing and exact mitigations: no detailed species requirements, plant grades, numbers of plants, spacing, ongoing irrigation and maintenance requirements (e.g. required by covenant or consent notice). Although it is planned to liaise with DOC and Aukaha in determining species appropriate, no neighbours are to be involved, though those are the most sensitive receivers relying on this mitigation.⁸

No dust suppression beyond site and exceedance of permitted plan provisions

- As detailed in Mr Little and Ms Clark's evidence, there have been numerous instances of severe dust effects at their adjacent properties from the current operations. These have been disconcerting for general living and enjoyment of those properties, as well as had commercial impacts on their businesses, even forcing workers offsite on occasion. While the enforcement and reporting process exists in theory, the accounts on this from these witnesses show that in reality, such processes can be bureaucratic, take time, and cause significant stress. When adverse dust conditions are real time, and causing damage to property, business, and enjoyment of life, it shows that the theoretical approach to dust management, monitoring and enforcement does not always work on the ground.
- Note the JWS Air Quality at 35.1 and 39 considers the need for short term triggers in monitoring due to the lag time it could take for the quarry to implement control measure, it is possible that acute effects could occur for some time before controls are put in place. When such effects are of a significant consequence on a high value crop, those should be given particular weight.
- The disregard and lack of care for current mitigation conditions is obvious. Although the consents currently held have comparatively 'high level' management conditions, these have been breached on numerous occasions:

⁸ See also appended tracked comments on consent conditions, which further suggest robust certification requirements to ensure that proposed landscaping mitigations re in place, fully maintained and compliant, before expanded quarry operations can commence. This is consistent with good practice subdivision and development proposals relying heavily on mitigation conditions.

[35] Clearly the level of dust seen in these videos would be considered in breach of the following resource consent conditions, depending on the exact source of the dust discharge

Resource Consent 94384, condition 2: "That the consent holder shall undertake dust suppression on all unpaved roads and traffic movement areas to mitigate the effect dust nuisance arising from such areas."

Resource Consent 150052, condition 5: "All material to be crushed shall be thoroughly dampened immediately prior to the crushing process."

Resource Consent 150052, condition 6:" The consent holder shall be responsible for adopting the best practicable means of preventing any dust nuisance to neighbouring occupiers."9

- Ms Clark's evidence in particular traverses her experience and frustrations in trying to deal with the enforcement process during times of significant adverse dust events. In his own words, Mr Allison's comment to the CODC planning officer has been that, during unpredictable weather 'it is very hard to stop everything from leaving the quarry¹⁰. I suggest that this contradicts Mr Allison's evidence, where he considers that changes in operations will ensure off-site dust effects are controlled.
- As stated in Mr Allison's evidence, the area of active mining is currently up to 19ha of the site (i.e. almost all of it). No progressive rehabilitation and backfilling has occurred, because, as stated in that evidence at [15] this is the minimum working space needed for the safe and efficient operation of the Site.
- 42 It is submitted that the combination of:
 - (a) The current methodology of quarrying;
 - (b) The inability to implement the comparatively basic current conditions of consent; and
 - (c) The disregard for reported issues of breaches.

⁹ Para [35], Mr Stacey Statement of Evidence

¹⁰ Apendix A, Ms Clark Statement of Evidence

43 Calls into question the realistic and likely ability for the consent holder to operate under the manner proposed, and therefore the assumed nature of effects resulting from operations, as discussed in its various expert reports.

Receiving environment and cumulative effects

- The proposition that the quarry could continue for infinite duration, and therefore consented effects form an enduring part of the receiving environment, is incorrect.
- The nature of existing permissions to undertake quarrying at the Site must be assessed with realism. That requires looking at the full suite or package of consents and permits held which together allow for quarrying and a certain magnitude of effects.
- It would be a narrow interpretation to consider the landuse consent in isolation from the ORC consents (expiring 2036) and the very clear fact that there is a finite duration of available quarrying material, likely limiting operations to 2026.
- In the *Hawthorne*¹¹ sense, it is therefore unlikely that the landuse consent could be implemented beyond that operational sunset date, and therefore does not form an enduring part of the receiving environment. The Applicant's economic evidence also acknowledges this limited duration, given it places weight on the fact that if consents are declined the current incomes for quarry workers and associated business will be lost.
- The current baseline of development in the existing area cannot also be transposed onto the expansion area, where no quarrying currently exists and no consents are held for extraction and processing activities, for the purposes of an effects assessment. This land must be assessed for its current and permitted uses, overlaid by any consents held and likely to be implemented, per Hawthorne. The Applicant's experts do not appear to have made this distinction, simply transposing current effects / consent conditions to the expansion area, and therefore it is considered that the total effects of the proposal have been understated:
 - (a) Mr Colegrave considers the economic merit in allowing quarries to work through remaining / available resources, to defer the need for new quarries to be brought into production [9.3]. This incorrectly

¹¹ Queenstown Lakes District Council v Hawthorn Estate Ltd [2006] NZRMA 424, at [84]

- assumes the expansion land as if it is existing quarry, whereas it is in fact bare land (new quarry);
- (b) Mr Cudmore's assessment has only provided numeric values associated with dust deposition from the unsealed haul roads and not the cumulative dust deposition associated with the quarry;
- (c) Mr Exeter's noise assessment does not discuss the noise level contribution of the proposed activity, i.e. how much additional noise will be generated compared to the present day noise environment. He also does not describe the residual noise environment when quarrying operations do not take place, i.e. noise in the absence of the quarry.
- The Environment Court in *DR Sampson and Others v Waikato Regional Council* described the rationale for the differing approach to the existing environment in relation to land use consents versus water:
 - [33] We are also conscious of the distinction between land use consents, which are granted in perpetuity, and water consents, which are granted for a defined term and not necessarily renewed. In relation to the latter, the existing environment must be determined as the environment that might exist if the existing activity to which the water consents relate, were discontinued." ¹²
- 50 When looking at the scope of the applications and package of current consent condition limitations, it cannot be suggested logically that the existing extraction operations are for an infinite duration / quantum.
- 51 For the purposes of an effects assessment, this means:
 - (a) The existing consented effects of the quarry must be treated as ending in 2026, not enduring;
 - (b) Effects from the current operations are not necessarily transferable to the expansion area; this requires new assessments in respect of that land, against the Rural Resource Area provisions of the Plan;
 - (c) Cumulative effects of the proposal (the intensification and spatial expansion) in combination with the existing operation must be considered.

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¹² DR Sampson and Others v Waikato Regional Council EnvC Auckland A178/2002, 2 September 2002, at [33].

Highly productive land and the related planning instruments

- As discussed in the evidence of Mr Little and Mr Weaver, the proposed expansion area as well as surrounding properties (including the Submitters) are considered highly suitable for productive cherry orchard operations. Factors attributed to this suitability are:
 - (a) The topography, climate and soils of the expansion site and surrounding area;
 - (b) The proximity of the expansion site and surrounding area to service industries such as packhouse, orchard management and support services and staff accommodation; and
 - (c) The proximity of the expansion site and surrounding area to the lake which enhances the inversion layer and the effectiveness of the frost fans.
- The horticultural evidence of Ms Underwood does not purport to have any specific expertise in cherry orchard growing in this area. Similarly, the Applicant has not produced any compelling evidence to confirm that it is not practicable for the highly productive land on the expansion site and surrounding area to be used for crop production. Mr Colegrave considers that the cost of foregone rural production is only a private investment decision, with no material impact on the rest of the community [9.4]. However this ignores the regional significance of highly productive land, as identified in the various planning instruments discussed below.
- Mr Colegrave's attempted planning analysis, suggesting a weighing of protection of productive land against the functional needs of mineral processing, which is incorrect [at 9.4]. Not only is this a generic statement with no reference to actual relevant planning provisions, it is incorrect given the District Plan and RPS provisions applying are in the nature of 'bottom line' provisions, seeking maintenance of life supporting capacity. These must be achieved and complied with, rather than weighed and balanced against competing options. The Commissioner is therefore left with a direction to promote the retention of primary productive capacity of those soils / land and avoiding uses that remove or undermine their role in that capacity.

The District Plan contemplates and places importance upon ongoing use of the Rural Resource Area for viticulture activities:

4.1 Introduction

Activities that locate within the rural environment do so generally for one of four reasons

- (i) They are reliant upon the resources of the rural area. For example, farming activities need large areas of open land, while horticulture and viticulture activities need particular soil types in combination with a number of other factors, particularly climatic conditions and irrigation.
- (ii) They need to be close to an activity that is reliant upon the resources of the area. For example, a pack house or a juice factory needs to locate near the fruit source and a winery/wine making facility needs to locate near the grape source.
- (iii) They need a large open space where they can generate effects without significantly affecting more sensitive activities. For example, an abattoir which generates discharges (including odour) or a transport yard which generates high levels of traffic.
- (iv) Persons wish to enjoy the lifestyle opportunities offered by its open space, landscape and natural character amenity values.
- (v) They need to locate directly adjacent to the resource. For example, mineral extraction and related activities do not have the ability to locate anywhere other than directly adjacent to where the deposit occurs¹³.
- While this introduction acknowledges mining and its needs to locate where the mineral resource is, more weighting is given to the particular needs of horticultural activities, which are also location dependent. Mr Weaver's and Mr Little's evidence addresses all of the above locational aspects and needs which are present at the site and its surrounds, in order to sustain commercial cherry orchards.

¹³ CODC District Plan, Section 4.1 Introduction to Rural Resource Area

The Introduction then goes on to recognise the special land resources and the key issues and threats that those face. Significance of soils and their susceptibility to adverse effects specifically from mining is addressed:

4.2.4 Development of Mineral Resources

The Central Otago District contains mineral deposits that may be of considerable social and economic importance to the district and the nation generally. Mineral development and associated land restoration can provide an opportunity to enhance the land resource and landscape values and has done so in the past. However, the development of these resources has the potential to have significant adverse effects upon soil, water and air resources of the District...

4.2.6 Special Land Resources

There are some areas of land in the District that because of particular soil characteristics and quality that in combination with the local climate and irrigation are considered to be a special resource. The potential of this resource to meet the reasonably foreseeable needs of future generations should be sustained. This potential is capable of being compromised by activities which have the effect of reducing the life supporting capacity of these soils

4.3.7 Objective - Soil Resource

To maintain the life-supporting capacity of the District's soil resource to ensure that the needs of present and future generations are met.

4.4.6 Policy - Adverse Effects on the Soil Resource

To ensure that the location, construction and/or operation of land use activities and subdivision make adequate provision for the protection of the soil resource by avoiding, remedying or mitigating the adverse effects of practices which may cause:

- (a) Erosion, instability or loss of topsoil
- (b) Loss of nutrient or incidence of soil contamination,
- (c) Loss of soils with special qualities,
- (d) A reduction in vegetation cover and moisture holding capacity, and
- (e) Soil compaction.

Environmental Results Anticipated 4.8.3 A variety of uses utilising the District's soil resource without adversely affecting its life supporting capacity.

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- The above provisions are specific and directive in their intentions to address the potential for irreversible loss of unique land resources through development, including areas of productive soils and high growing degree days.
- Policy 4.4.6 first and foremost seeks to adequately protect the soil resource. As stated in Mr Weaver's evidence, while rehabilitation of the mining site eventually can reinstate topsoil, it will still be a depression within which frost will make it difficult to cultivate productively.
- Although the explanation to policy 4.4.6 considers the possibility of mining remediation as enhancing the soil's productive capacity (as well as the potentially to significant adverse impacts), there is no evidence provided in this case which confirms that this will occur, or is even feasible.
- Overall, this proposal will result in a loss of up over 14ha of prime horticultural land to a short term extraction operation. This is a combined area of that land in the expansion area, which cannot be remedied from future frost bowl effects and therefore support horticultural activities in the same way long term, as well as adverse effects on existing adjacent horticultural properties. This represents:
 - (a) Negative economic effects;
 - (b) Loss of finite resources which are important to the community and region; and
 - (c) Incompatibility issues.

RPS and PRPS and productive land

- The District Plan is incomplete in the *King Salmon*, at least in respect of new matters included through the relevant regional policy statement instruments (proposed and partly operative)¹⁴.
- To this end, the Commissioner will be aware of the well traversed case law in therefore having to look 'up the chain' of planning instruments to fill such gaps.¹⁵

¹⁴ Furthermore the CODC Plan is long overdue for review, being beyond its 10 year time limit under the RMA.

¹⁵ Thumb Point Station Ltd v Auckland City Council [2015] NZHC 1035 at [31].

- The Proposed Regional Policy Statement 2021 (**PRPS**) and the Partially Operative Regional Policy Statement 2019 (**RPS**) both post-date the District Plan and provide for new provisions relevant to mining and productive land which are directly relevant considerations under s104(b)(v), to be had regard to:
- 65 RPS Objective and policy suite 5.3 provides:

Objective 5.3 Sufficient land is managed and protected for economic production

Issue: Providing for economic production can create adverse effects. Existing economic activities are susceptible to reverse sensitivity effects, particularly when adjoining land use changes.

Policy 5.3.1 Rural activities

Manage activities in rural areas, to support the region's economy and communities, by:

- a) Enabling primary production and other rural activities that support that production;
- b) Providing for mineral exploration, extraction and processing;
- c) Minimising the loss of significant soils;
- d) Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects;

Policy 5.3.4 Mineral and petroleum exploration, extraction and processing

Recognise the functional needs of mineral exploration, extraction and processing activities to locate where the resource exists.

These provide specific recognition for the issues of compatible rural land uses. While mining is specifically recognised as a legitimate rural activity, there is a clear direction in minimising loss of significant soils. Under the 'principle reasons for adopting' these provisions, it anticipates a degree of 'spatial separation' of incompatible activities and control over land use change is needed to ensure efficient use of land and continuing economic

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viability. The use of land for productive activity underpins the economy of the region.¹⁶

- The specific reference to spatial separation as a means to managing incompatibility is important. That is the only reliable tool to address potential effects in particular where they are uncertain in nature and duration, where receiving sites are particularly sensitive, and where the duration of proposed activities is for a long period of time.
- There is also a significant change between the RPS and the PRPS in terms of recognising and providing for productive capacity of land. The RPS places importance on a narrow term of 'significant soil' whereas the PRPS broadens this concept to 'highly productive land'. The latter concept, and its attending objectives and policies in the PRPS represent a fundamental step change to recognising an ecosystem approach to protect specific production conditions in the region.
- It is submitted this policy shift should be given significant weight, and the associated provisions should be applied in their intended directive nature. Applying Mr Weaver and Mr Little's evidence, the conditions of the application site and the surrounds are highly productive land, with ideal and finite characteristics for existing (and potential future) cherry growing operations. The availability and productive capacity of that land is to be maintained.

Policy LF-LS-P19 Highly productive land

Maintain the availability and productive capacity of highly productive land by:

- (1) identifying highly productive land based on the following criteria:
 - (a) the capability and versatility of the land to support primary production based on the Land Use Capability classification system,
 - (b) the suitability of the climate for primary production, particularly crop production, and
 - (c) the size and cohesiveness of the area of land for use for primary production, and

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¹⁶ Note that under the RPS mining is not included in the term of primary production

(2) prioritising the use of highly productive land for primary production ahead of other land uses, and

Policy UFD-P7 – Rural Areas

The management of rural areas:

- (1) provides for the maintenance and, wherever possible, enhancement of important features and values identified by this RPS,
- (2) outside areas identified in (1), maintains the productive capacity, amenity and character of rural areas,
- (3) enables primary production particularly on land or soils identified as highly productive in accordance with LF-LS-P19,
- (4) facilitates rural industry and supporting activities
- While rural industry (presumably including mining) is an activity to be 'facilitated' more importance and protection is afforded to land enabling, in particular, crop production and the maintenance of productive capacity, amenity and character of rural areas.
- Mr Curran's planning assessment of these provisions appears to weigh mining on equal footing of crop production, which is not indented by the plain reading of those policies. He also appears to weigh and balance¹⁷ the need for aggregate extraction against the protective soil policies. That is incorrect given they are in the nature a bottom line (i.e. to maintain or enhance) which must be complied with. Mr Curran's assessment of productive capacity of the land is also not based upon any horticultural evidence.

Development on AOL and HFT Land

In terms of assessing effects of the proposal on adjacent properties, in particular sensitive receptors, it is directly relevant to take into account the environment in the *Hawthorne* sense, being that which is overlaid with consented activities likely to establish.

¹⁷ Para 7.31, Mr Curran Statement of Evidence

- The Applicant has suggested through further information responses, and this has been picked up in the planning report for CODC, that consented residential building platforms on the AOL and HLFT land respectively may not be able to be implemented due to existing covenants. (Referring to the relevant restriction already copied above).
- 74 The response to the request for further information provided by the applicant on 9 March 2021 states:¹⁸

The land covenant applying to Lot 1 and Lot 2 DP 508108 allows only one dwelling to be erected on the covenanted land (and that there is already an existing dwelling on Lot 1 DP 508108). The land covenant prevents any further dwellings to be constructed on the covenanted land such that RC200251 cannot be implemented.

- 75 This statement is incorrect. There are no existing buildings, including dwellings, on the AOL Land (Lot 1 DP 508108).
- There are two existing containers and four existing huts on the HFLT Land (Lot 2 DP 508108). The huts and containers are not self-contained and are therefore excluded from the definition of 'dwelling' in the Central Otago District Plan.¹⁹
- Figure 277 Even if there were considered to be dwellings existing on either of these properties such as to call in the covenant restriction relevant to implementing the building platform consents, it is submitted that the relevance of this does not replace the requirement to consider effects on the receiving environment, in the *Hawthorne* sense.
- Plainly put, the AOL and HFTL are legitimately consented residential building platforms, likely to be implemented, and must be considered in the receiving environment. This is the exact same fact situation as the *Hawthorne* building platforms within the Wakatipu Basin.

¹⁸ CODC s42A Report at [3.2.1.]

¹⁹ Central Otago District Plan Definitions at 18:3. 'Dwelling' means one detached self-contained building used or capable of being used solely or principally for residential purposes and occupied or intended to be occupied exclusively as the home or residence of not more than one household unit.

Noise effects

- 79 Mr Humpheson's evidence for the Submitters concludes that:
 - (a) There are a number of deficiencies and assumptions made in the Applicant's evidence which mean that information is insufficient to consider predicted noise effects, particularly given the quarrying operations will be close to neighboring residential dwellings.
 - (b) Without further imposed conditions of consent, in particular averaging standards which are best practice, there will be more than minor noise effects on adjacent properties.
 - (c) Following the conclusion of expert conferencing, it appears that he 15 minute averaging condition is accepted by experts, however there remains disagreement on appropriate monitoring conditions.
- The nature of the effects, evidential uncertainties, and the sensitivity of receivers, supports the need for Mr Humphreson's monitoring proposal.²⁰
 The key issue is not whether CCL will comply with the noise standards in the District Plan. Rather, it is whether proposed CCL noise, when considered together with all noise sources, changes the ambient noise levels, and if it does, what is the effect on amenity of that change.
- As stated in Ms Clark's evidence, there are already existing noise effects from the current limited quarry operations. The proposed expansion plans present significant uncertainty for the Clark's future (and potential future of consented building platforms on the AOL and HLFT land). This is not necessarily just about permitted noise levels per se, but what the actual noise emissions will represent. In particular, that the proposed expansion area will effectively mean the Clark's become surrounded and sandwiched by a major quarry operation on three sides.
- The proposal will introduce new noise sources into the local environment which, while not being unreasonable in themselves, will add to existing noise and detract from existing amenity values. The existing residential properties within only 50m of active quarrying will be affected by noise from most points of the compass. These noise levels could occur at any time for decades.

²⁰ Para 10, Appendix 1, JWS Noise

Dust effects

On people and health

- The Submitters have called expert evidence from Mr Stacey in respect of air quality concerns resulting from the proposal.
- Mr Stacey's evidence firstly raises the concerning and obvious issue that all of the Applicant's meteorological evidence, and therefore effects predictions, relies on modelled assumptions rather than actual on the ground monitoring:

[16] Given the proximity to a number of sensitive receptors1, I consider that it would have been necessary to have collected at least a year of meteorological data at the site, in addition to some form of ambient dust monitoring at the boundary of the site, downwind of the significant dust generating sources. In my view this would have represented best practice for an activity where limited accurate information is available on the existing environment and where the existing activity is already causing an adverse effect.

[17] The dust monitoring could have also been an opportunity to collect information on the effectiveness of the proposed mitigation measures, justify the small setback distances that have been proposed and validate the modelling that Mr Cudmore has undertaken. Furthermore, it would have also helped to address some of the submitters' concerns, regarding exposure to particulate matter with an aerodynamic diameter less than 10 micrometres (PM10) and respirable crystalline silica (RCS), which I also share, particularly if mobile crushing is allowed near locations where people can reside²¹.

- It is surprising, given that with over a year's preparation for this proposal, including putting the application on hold for some months to provide further information, plus a further three years since purchasing the property and undertaking due diligence, the Applicant has not taken the step of undertaking actual meteorological monitoring and analysis.
- This is even more surprising, given the proposal seeks to expand into an area within such close confinement²² to existing sensitive receivers. While modelling can give a picture of estimation of effects, it cannot give a reliable

²¹ Paras 16 -17, Mr Stacey statement of Evidence

²² In Mr Stacey's own expert opinion he considers the proposed setbacks to be 'small' compared to other operations of comparable natures, including at [17], [44], [133]

determination. Where the evidence is so finely balanced and so important to human health and quality of life, a high threshold should be employed to justify any proposed evidential baseline and resulting conditions:

[20] Given this uncertainty, I have limited confidence that the data can be relied on for the purposes of establishing the frequency and duration that off-site receptors could be affected by adverse dust nuisance and health effects from quarry operations, particularly given some of the issues that I have noted in the way the information has been used.²³

- These uncertainties go to the heart of the application, given the potential effects concerned, and there is simply not a reliable evidential basis in the context of section 104(6) RMA. The requisite information needed to assess effects under s104 has not been provided. The Commissioner may, under this section decline the applications for consent.
- To guide such a determination of evidential burden²⁴ the majority decision in *R J Davidson Family Trust* is of assistance.²⁵ This determined that section 104(6) imposes a type of legal burden on an appellant (or applicant) to supply adequate information to satisfy a consent authority that the effects of a proposed activity will be appropriate, in light of prescribed statutory thresholds.

[26] However, in some situations there may be inadequate information to even assess the likelihood of the effects of a stressor, and it is then that section 104 (6) RMA may come into play. Clearly the power to decline on the basis of inadequate information should be exercised reasonably and proportionately in all the circumstances of the case. The power is also discretionary - that is shown by the use of the word "may" - so the consent authority may grant consent even if it lacks sufficient information. An example may be if there is a proposal for adaptive management to respond to uncertainties.

[27] Some assistance as to the purpose of section 104(6) RMA may be gained from Part 2 of the Act. The purpose of Part 2 is, as described in Environmental Defence Society Inc v The New Zealand King Salmon Company ("King Salmon"), principally to guide local authorities, for example when considering a resource consent.

²³ Para 20, Evidence of Mr Stacey

²⁴ Referring to the longstanding principle that the person who wants the Court to take action must provide his case: *Ngati Rangi Trust v Genesis Power Ltd* [2009] NZRMA 312 (CA) at [23] (referring to obiter of the Court of Appeal)

²⁵ R J Davidson Family Trust v Marlborough District Council [2016] NZEnvC 81at [25] – [28]

... This suggests an applicant should put forward adequate information for the consent authority to be able to identify the relevant stressors and their effects.

[28]... It appears to us that section 7(b) reinforces or creates a burden on an appellant to show that its proposed consent would use the resources better than the status quo or some other possible use if that is put forward in the evidence.

- 89 As concluded in Mr Stacey's evidence, there are also a number of omissions or inaccuracies with respect to the evidential analysis from the Applicant:
 - (a) Lack of understanding of receiving environment and sensitive receptors.²⁶
 - (b) Omission of information required to determine if inputs into the modelling of meteorological data was appropriate, and therefore whether the data is site-representative.²⁷
 - (c) Definition and interpretation of wet days vs evaporation rates, and consequently the subsequent dust generation risks.²⁸
 - (d) The application of definitions of 'dry windy days' and consequently the frequencies that sensitive receptors could be at risk from effects of dust emissions.²⁹
 - (e) No updated assessment based upon recent WHO values and guidance, that there is no safe level of exposure to PM_{2.5} and therefore every practicable measure should be undertaken to protect nearby residences from dust emissions of this nature.³⁰
 - (f) The focus on dispersion modelling effects from haulage, as opposed to other cumulative effects such as wind erosion from stockpiles and

²⁶ Para 40, Mr Stacey lists clarifications / additional receptors for consideration, see also [83]

²⁷ Ibid, at [52]

²⁸ Ibid, at [65] including effects from movements of vehicles, moisture content of dust generating material, higher evaporation rates (etc).

²⁹ Ibid, at [78], [81].

³⁰ lbid, at [85] - [87]

material handling, and consequently the potential for critical emission sources to be excluded from the assessment of exposure.³¹

- (g) Limited information on exposure and effects from dust deposition on cherry trees and associated infrastructure.
- These inaccuracies have led to fundamental differences in terms of conclusions on effects. As set out in Mr Stacey's evidence, there are likely to be significant adverse effects from the expansion on neighbouring properties based upon the Applicant's proposal and proposed conditions³². Even including additional conditions set out in Mr Stacey's evidence, he remains unconvinced that effects from the proposed expansion area can be mitigated to avoid more than minor adverse effects on neighbours.³³
- 91 The District Plan specifically addresses adverse dust effects on neighbouring amenity:
 - 4.4.8 Policy Adverse Effects on the Amenity Values of Neighbouring Properties.

• • • •

- (e) The generation of odour, dusts, wastes and hazardous substances,
- ...do not significantly adversely affect the amenity values and privacy of neighbouring properties or the safe and efficient operation of the roading network.
- As above, significant effects are anticipated to occur from the expansion area based upon the Applicant's proposal, and therefore this policy is contravened. However it is also submitted that this policy sets a high threshold in managing adverse effects by addressing only those which are 'significant'. Therefore particular weight and concern should be placed on the evidential finding of significant effects.
- 93 The Environmental Results Anticipated in the District Plan also states:
 - **4.8.7** A continuing reduction in conflict between land uses occurring in the rural environment.

³¹ lbid, at [102]

³² lbid, at [145]

³³ Ibid, at [151] - [152]

- Olearly the Applicant's proposal, in particular into the expansion land will create increased conflict between adjacent uses, where there is already evidence of this existing due to poor management techniques.
- 95 The above environmental result anticipated will not only not occur in this Proposal, but it will be exacerbated further, and for a very long proposed period of time.
- Even though policy 4.4.8 sets a high threshold in terms of dust effects on amenity, the Commissioner should also consider all "other adverse effects", and evaluate the activity in light of the outcomes for the rural environment (as construed through objectives and outcomes anticipated). Where an effect cannot be avoided or remedied in the first instance, then the enquiry is whether the activity as proposed to be mitigated will support and maintain the function, character and amenity values of the Rural Resource Area. If not, the activity will not achieve the relevant objectives of the District Plan (in particular, 4.3.3, 4.3.7, 4.8.7).
- 97 In respect of the Regional Plan: Air for Otago, policy 8.2.8 requires that noxious, dangerous, offensive or objectionable discharges to air are avoided. The likely effects anticipated by Mr Stacey, without setbacks and conditions imposed will clearly not meet this requirement.
- 98 As submitted in Mr Stacey's evidence, while a suite of extra and onerous conditions can be applied to control dust effects, it is ultimately a greater setback which is required to provide any assurance to neighbours that controls will be adequate.
- 99 The RPS provides:

Policy 5.4.1 Offensive or objectionable discharges

Manage offensive or objectionable discharges to land, water and air by:

- a) Avoiding significant adverse effects of those discharges;
- c) Avoiding, remedying or mitigating other adverse effects of those discharges.
- 100 The Commissioner will be well versed in the requirement of an avoidance policy, meaning to not allow it. Mr Stacey's evidence confirms significant adverse effects will eventuate without his additional conditions imposed (including setbacks). Therefore, the proposal must not be allowed, in accordance with this policy.

Policy 5.4.8 Adverse effects from mineral and petroleum exploration, extraction and processing

Manage adverse effects from the exploration, extraction and processing of minerals and petroleum, by:

- c) Avoiding adverse effects on the health and safety of the community;
- d) Avoiding, remedying, or mitigating adverse effects on other values including highly valued natural features, landscapes and seascapes in order to maintain their high values:
- e) Considering biological diversity offsetting or compensating for residual adverse effects on other values;
- f) Reducing unavoidable adverse effects by:
 - i. Staging development for longer term activities; and
 - ii. Progressively rehabilitating the site, where possible;
- g) Applying a precautionary approach (including adaptive management where appropriate) to assessing the effects of the activity, where there is scientific uncertainty, and potentially significant or irreversible adverse effects.
- 101 As discussed above, adverse health effects (from dust emissions) are not avoided. There is not only scientific uncertainty, but evidential uncertainty as to effects (on residential and horticulture activities) given modelled assumptions and inaccuracies in the Applicant's evidence. The only way to apply precaution is to decline consent or to impose setbacks and additional conditions as proffered in the Submitters' case.

Dust effects on adjacent established horticulture activities

- 102 While the Applicant's evidence acknowledges that the site is unique in that it is surrounded by existing horticultural and cropping activities, it fails to adequately assess effects and their consequence on those unique operations.
- 103 For expert evidence to be persuasive in the context where the residents say their amenity has been impacted by quarrying activity, this requires consideration of the actual levels of background dust and the effect on amenity relative to the background levels and the change that would be attributable to dust emissions from the proposal. Regrettably, Mr Cudmore

has not engaged with the residents' views that their amenity and business is adversely impacted by quarrying activity already taking place, and the economic effects of that.

- 104 As clearly stated in Mr Stacey's evidence, the receiving environment of this proposal is characterised by orchard growing activities. These are established activities which are not only iconic, but economically important to this particular region.
- 105 This particularly sensitive receiving environment should be a significant factor in determining appropriate resulting effects.
- 106 As set out in Emerald Residential Limited v North Shore City Council⁶⁴:

[27] What it comes to, in the end, is the acceptance of the logically unavoidable conclusion that what must be considered is the impact of any adverse effects of the proposal on the environment. That environment is to be taken as it exists, with whatever strengths or frailties it may already have, which make it more, or less, able to absorb the effects of the proposal without breach of the environmental 'bottom line' - the principles of sustainable management.

(emphasis added)

- 107 The sensitivity of the distinctive and established orchards adjacent to the Site form part of the 'frailties' of the environment in which the Applicant seeks to establish itself in. The effects on those established activities must therefore be specifically assessed.
- 108 It is established law that:
 - [2] If an industry or activity likely to emit adverse effects seeks to come into a sensitive environment, the problem should be manageable by designing appropriate standards and conditions, or by refusing consent altogether. It is when sensitive activities [usually, but not always, residential activities] seek to establish within range of a lawfully established effect emitting industry or activity that management may become difficult.³⁵
 - [8] There is a greater expectation of internalisation of effects of newly established activities than of older existing activities. That is because new activities are not encumbered by existing plant and processes and have easier access to

³⁴ Emerald Residential Limited v North Shore City Council A31/2004 12 March 2004 at [27].

³⁵ Winstone Aggregates v Matmata –Piako District Council (2004) 11 ELRNZ 48, at [2].

contemporary technology. Also, the older activities may be restricted by their sites which may have little scope for within boundary buffers.

109 While Mr Cudmore considers the air quality effects to be acceptable, this is an assessment in general terms. Section 3(f) RMA states that 'effect' includes one of low probability, which has a high potential impact. In this instance, the particular sensitives of the orchard growing environment, and the adverse consequences of dust breaches on those crops and equipment, are a particular concern, and of a high potential impact:

110 Mr Weaver states:

Both existing cherry blocks on the AOL land will receive dust from either the westerly or northerly quarters being the two most prevailing winds and downwind of the quarry.

As discussed in Mr Little's evidence, dust effects are problematic not just for the fruit and plant growth, but also for chemical spray efficiency, the bird netting and plastic protective covers, which would require additional cleaning and labor costs in order to mitigate dust settling and corrosive effects.³⁶

111 His evidence further goes on to address that:

- (a) The time period within which cherries are most sensitive to dust effects is understated in Ms Underwood's evidence, and that dust would accumulate over a period from late October through to late January.
- (b) It is also difficult to wash cherries at the packing stage, given their sensitivities, therefore this cannot be relied on as a means to relieve dust effects which have already occurred. In some instances, the fruit is rejected under food safety requirements where dust has settled into the stem bowl of the fruit and has not been able to be removed.
- (c) Further losses from dust contamination of the stigma would further reduce the economic performance of the affected trees. Dust effects also restrict the efficiency in uptake of agrichemical applications necessary for fruit production. ³⁷
- 112 Mr Little's, and his contractors' own accounts of current dust effects from the existing quarry site is compelling evidence that dust is a current and

³⁶ Para [65], Evidence of Mr Weaver

³⁷ Ibid, at [66] [74]

critical concern to the orchard's production capacity and operational activities, including in respect of:

- (a) Dust settling onto sprinklers
- (b) Minimised fertilizer absorbing rate
- (c) Decreased disease control and decreased photosynthesis
- (d) Extra labor costs and tree deaths as a result of the above effects
- (e) Concern as to health effects on stock and people
- (f) The site-specific nature of this location also has the potential to exacerbate dust effects due to the size of trees planted and the lower-lying land of the orchards compared to the quarry.
- 113 In light of all the above, it is submitted that Ms Underwood's evidence is high level, is not site specific, and relies heavily on the modelling evidence and predictions of Mr Cudmore's evidence (which, as discussed above is in its own right, flawed).
- 114 Ms Underwood does not take into account existing concerns and recorded examples of adverse effects, which are on a much smaller scale than compared to the Applicant's expansion plans. She relies on mitigation of dust through mechanisms which will not work in reality (for example, potential shelter trees, washing, and real-time dust monitoring, however can make no conclusions as to a resulting potential scale of adverse effects on cherry orchards adjacent to the proposal.
- 115 For these reasons, the Commissioner should give significant weight to Mr Little and Mr Weaver's evidence in respect of adverse effects likely to occur on these orchards, which are regionally important, distinctive, and particularly 'frail' and more susceptible to effects in the 'Emerald' case sense.

Visual and amenity effects

116 Mr Crompton-Moen's evidence considers that visual amenity effects on sites adjacent to the expansion land will be Moderate-Low (minor) based upon the NZILA Best Practice Guide.

117 His evidence defines that level of effect as:

Moderate - Low - effects are discernible and start to adversely affect viewer experience³⁸

- This appears to be largely based upon assimilations of 'Viewpoint 1' (figures 10 and 11) from the LVIA to represent views from residences north / west of the expansion site. These viewpoints are not representative of the Clark outlook, from their current dwelling, or from other areas within their property. They are an assumed representation, and the conclusions that 'very little' of the Bund will be visible from the Clark Dwelling should be treated with caution. The same exists for the AOL submission and consented building platform. No conclusion of adverse effects from this location is made in evidence, other than to state that views into the quarry will be successfully screened.
- 119 I refer to the evidence of Ms Clark in respect of these omitted viewpoints, noting:
 - (a) They bought this property for the very nature of its 360 degree views, and the rural amenity afforded to it.³⁹
 - (b) Current views from their deck and outdoor living area are straight onto the expansion land, and proposed bunding, which will create a sense of enclosure from their property as compared to the currently expansive outlook⁴⁰.
- The Applicant's assessment only relies on assumptions of the Clark views affected, rather than those actual viewpoints. In this respect it is submitted that more weight should be placed on the Submitter's tabled photos and supporting evidence from their property and towards the site, in determining a predicted level of adverse effects.
- 121 Further limitations on the Applicant's simulations provided should also be noted:
 - (a) Photos are static, have a limited field of view, and tend to flatten perspective.

³⁸ Para 6.2c, Mr Crompton-Moen Statement of Evidence

³⁹ Para 8, 22, 23, Ms Clark statement of Evidence

⁴⁰ Ibid, at [25]

- (b) People typically experience landscapes as they move around, and in a range of conditions – somewhat differently from photos that are taken in one set of conditions, from fixed viewpoints, and that do not depict context.
- (c) Photo simulations can also focus attention to visual matters rather than overall landscape values. The 'before and after' format similarly can focus attention on change rather than effects on landscape values.
- 122 The mitigation measures proposed are a completely inadequate mitigation because:
 - (a) There is very limited information on the nature of proposed planting for these mounds, and what is required. No species types or spacing, or sizes are provided
 - (b) No ongoing management plan and replacement conditions, which one would normally expect
 - (c) No irrigation proposed
 - (d) No Council certification requirements are included
- 123 In reliance on the evidence of Mr Little, I submit that in actuality the most likely result is not a screen planting of mixed natives, but weed-infested derelict looking unnatural earth piles.
- 124 Moreover, very limited weight is given to other amenity and experiential effects on adjacent properties. Visual effects are only a subset of landscape effects, and a development that is completely out of place with the values of an important landscape may have a significant adverse effect, even though it may occupy only a relatively small portion of a view.
- 125 Best practice landscape guidance states that residents, for instance, will be the most familiar with the amenity values they enjoy, and are best placed to describe such values (and their interpretation of effects on those values) from an 'insider' perspective.
- 126 Amenity is defined in the RMA as relating to

Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

- 127 Mr Crompton-Moen's conclusions, that there are only moderate-low visual amenity effects (which as defined are discernible and have some 'real' effect), are not considered to equate to the case law standard for maintenance of amenity values:
 - (a) A requirement to maintain in the context of amenity landscapes has been considered to include the concept of 'protect' which in turn requires a standard of keeping safe from harm or injury.
 - (b) The Environment Court in Port Otago Limited v Dunedin City Council considered the meaning of protect and, in doing so, also considered the meaning of maintain. The Court stated:
 - [42] ... the word maintain includes the meaning of protect. In consequence and having concluded that the Proposed Plan should maintain or enhance amenity values the Council may determine that it will protect those rather than preserve or enhance them....⁴¹
 - (c) So while there is no requirement or expectation that things will always stay the same, in this instance there is lay evidence confirming the importance of existing rural amenity and visual values, expert evidence confirming a real adverse effect on those, and a District Plan which places importance on compatibility of activities in the rural area. All those factors should lead to a conclusion that this proposal will not maintain important landscape and amenity values.
- 128 Even if those visual amenity effects were considered to equate to 'maintenance', the Applicant's evidence focuses largely on visual effects rather than broader perceptual effects associated with rural amenity. Limited consideration is given to perceptual effects on amenity, and it is submitted that Ms Clark's evidence, considering that the proposed landscaping will have an effect of dominance and a feeling of enclosure, should be given significant weight.
- The foreclosing of the Clarks' view will reduce the openness of the landscape and reinforce the perception that quarrying is, or is becoming, a predominant activity in their backyard. This will shift rural character of the area towards one that is underpinned by quarrying, not pastoral or horticultural activity.

⁴¹ Port Otago Limited v Dunedin City Council EnvC C004/02 at [42].

130 The District Plan places importance on the retention of rural amenity values (a broader concept than just visual amenity values), and Ms Clark provides an account of her reliance on such matters when choosing to purchase in this location.⁴²

4.1 Introduction:

...It is apparent that the character of the landscape is an important element in making Central Otago an attractive place to live in and to visit. For many people it is the reason they reside and recreate here...

4.3.3 Objective - Landscape and Amenity Values

To maintain and where practicable enhance rural amenity values created by the open space, landscape, natural character and built environment values of the District's rural environment, and to maintain the open natural character of the hills and ranges.

4.4.2 Policy - Landscape and Amenity Values

To manage the effects of land use activities and subdivision to ensure that adverse effects on the open space, landscape, natural character and amenity values of the rural environment are avoided, remedied or mitigated through:

- (a) The design and location of structures and works, particularly in respect of the open natural character of hills and ranges, skylines, prominent places and natural features,
- (b) Development which is compatible with the surrounding environment including the amenity values of adjoining properties
- 131 The above sections of the District Plan create clear and succinct policy direction for the needs of amenity values of the rural area to be maintained, and for adverse effects to be avoided remedied or mitigated by (relevantly) siting development which is compatible with amenity values of adjoining properties.
- 132 So these objectives and policies specifically recognise why people reside in this zone, and that it is the associated rural amenity and open space characteristics, which are central to that. Amenity of existing and adjoining

⁴² Paras 22 -24, and 8, Ms Clark Statement of Evidence

properties is given specific weight when considering appropriateness of new activities.

- As stated in Ms Clark's evidence, the very special characteristics of their property are its views and open rural outlooks, plus quiet rural amenity. What they will be left with in the longer term is being surrounded by intrusive and dominating earth bunds, that result in a loss of enjoyment and quality of life resulting from a 'frost bowl' effect, as showed in Mr Little and Mr Weaver's evidence.
- 134 It is hard to find support for the proposition that an intensive commercial quarry operation commencing on a sliver of bare land between existing residential and orchard development is possibly 'compatible' with those adjoining amenity values.

Economic effects

135 The Applicant's report concludes that:

Products of the quarry are a critical input to construction activity, and that industry accounts for 16% of businesses in 2020 and 11% of employment across the Otago economy.

- 136 While those figures may be relevant industry-wide no indication is given as to what this particular operation provides as a contribution to that, or even what the expansion area would provide on its own.
- 137 As already stated above, converting this land to quarry, when it has particular characteristics of highly productive land, will have a significant irreversible impact on the community and the region. This proposal will result in productive land being lost in perpetuity.
- 138 The Applicant's economic evidence should be given little weight, given:
 - (a) The compelling competing evidence put forward on alternative economic uses of the expansion land, that this represents a greater potential return and therefore the highest and best use is horticulture;
 - (b) The loss of productive land in the long term compared to a finite quarry operation in the short term, being a regional and nationally important matter; and
 - (c) The fact that there will be adverse economic effects on existing orchard operations as well as likely decreases in adjacent property values.

Freshwater effects

- The Submitters have reviewed the conditions proposed by Irrigation & Maintenance (and the submission from the Amisfield Estate Society) and agree with the need for additional conditions of consent suggested.
- 140 Furthermore, the JWS for Water Quality confirms there are a number of evidential uncertainties with the proposal and its effects on water quality and quantity.
- 141 From the Submitters' perspective, they are highly reliant on reliable and ongoing access to adequate freshwater quantities to operate existing and anticipated commercial operations for horticultural activities.
- 142 Proposed conditions, which seek to ensure reliable and ongoing monitoring conditions for bores in the area, are necessary to give adequate assurance that any potential or unintended effects, which subsequently eventuate, are controlled.

ROW access

- Details of the proposed underpass beneath the existing ROW access used by neighbouring properties were provided by the applicant on 10 November 2021, including noting safety fencing would be installed along the right of way and underpass.
- 144 The S42A Report considers the safety implications of the proposal on the ROW at 12.13, but does not address the property law implications of the proposal.
- The Proposal seeks to re-route users of the ROW onto its own land during construction of the underpass for an estimated period of 6 weeks. The ROW Easement (110242012) is a standard easement instrument, created in 2001, which conveys the rights and powers as set out in the ninth Schedule to the Property Law Act 1952, and the seventh Schedule of the Land Transfer Act 1952.
- Those rights implied do not anticipated diversion and the inability to use a specified ROW for a duration of time caused by one party unilaterally. The rights conveyed are to pass and repass the ROW area at all times by day and by night (schedule 9, clause 1).
- 147 Without express permission of the dominant tenement to this ROW, the Applicant is not entitled to undertake the works and disruptions intended.

Inadequacy of conditions

- In addition to the matters already addressed in evidence (particularly noise and dust), Appendix C provides further comments on selected conditions, drawing attention to where there are matters of concern relating to:
 - (a) Uncertainty of conditions as worded;
 - (b) Inability for conditions to adequately manage adverse effects;
 - (c) Omitted matters.

Conclusion

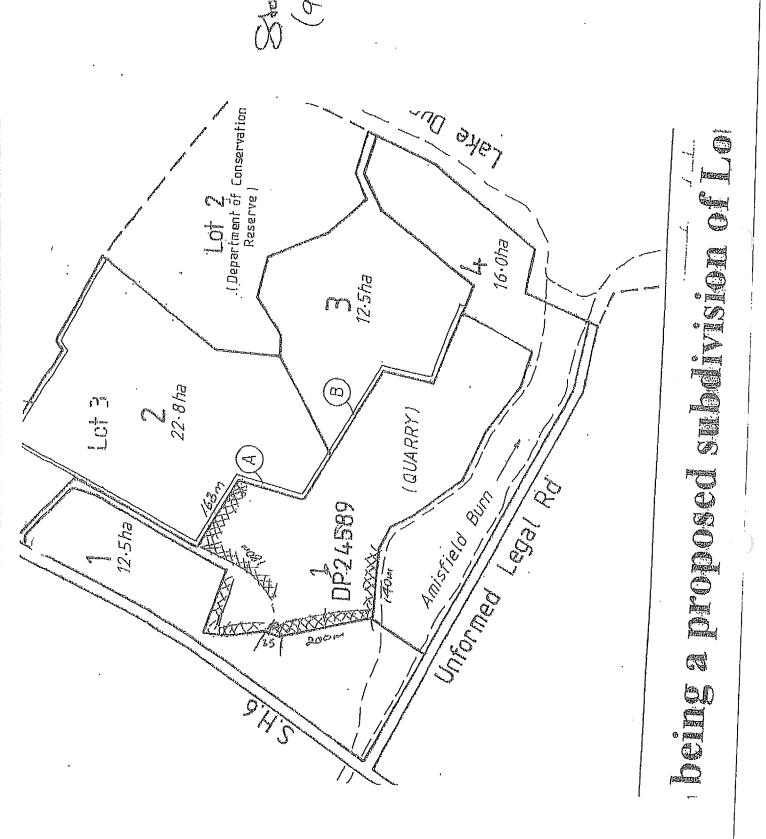
- The Applicant has not discharged its persuasive burden and satisfied the requisite level of evidence required to make conclusions as to environmental effects under s104(6) RMA.
- 150 Given the scale and intensity of the proposal, its extremely close proximity to sensitive receiving sites (residential and horticultural), and the potential for significant adverse effects on dust and rural amenity, this is not a consentable proposal under s104 RMA.
- 151 While the proposed use and development of the land supports an activity that has the potential to contribute positively to the economy and the wellbeing of the District, there is compelling and competing evidence as to higher and better uses of the land, which will not have the same long term adverse effects. The Applicant's economic proposition is not sufficient to conclude the proposal will also support and maintain the function, life supporting capacity, character and amenity values of the Rural Resource Area generally, which is required by the District Plan, the RPS and PRPS. Given this, the proposal does not promote sustainable management of natural and physical resources and should be declined in its entirety.

Dated this 16th day of December 2021

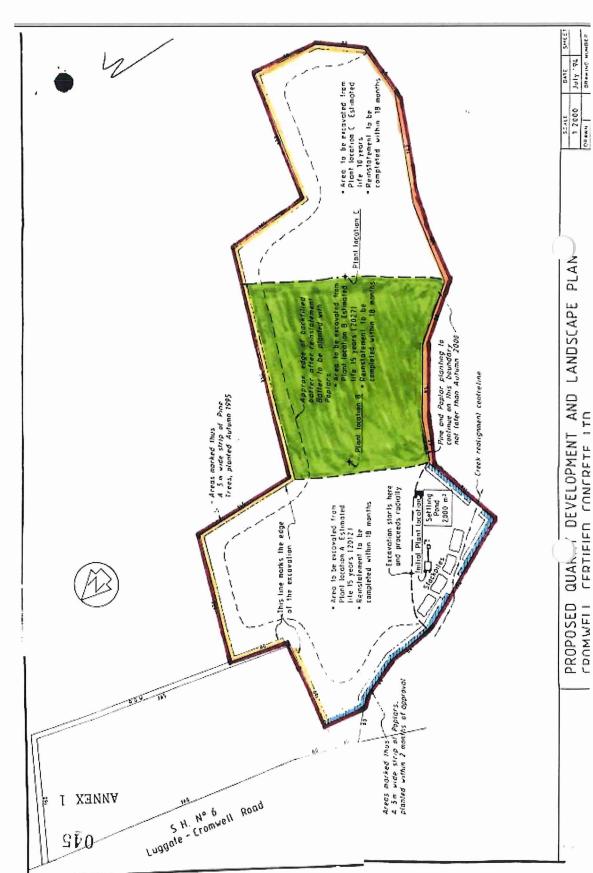
Rosie Hill

Counsel for the Submitters

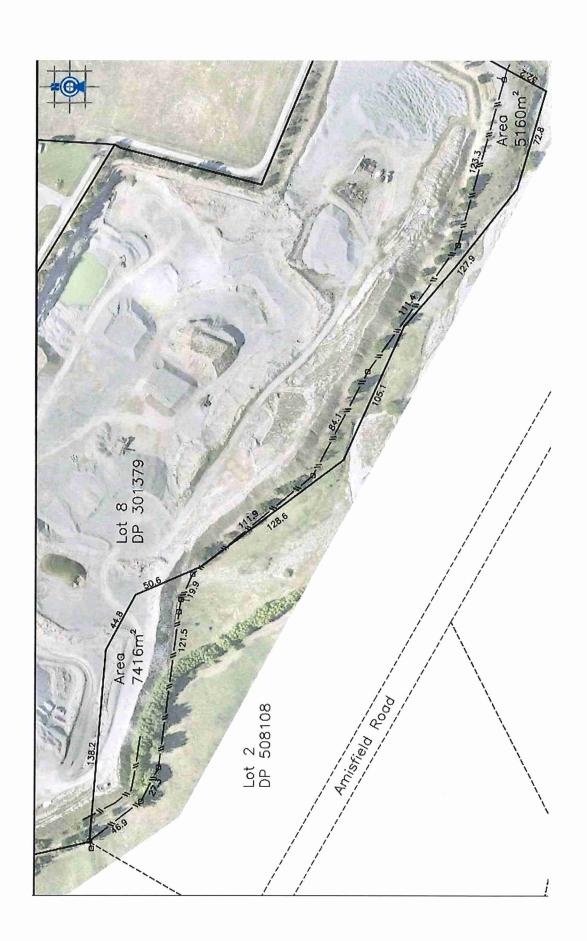
Appendix A – 2001 subdivision plan



Appendix B – encroachment matters



QUAK / DEVELOPMENT AND LANDSCAPE PLAN



Appendix C – conditions of consent

RC200343: Landuse Consent Draft Conditions

General

- The proposed activities shall proceed generally in accordance with the information and plans submitted with the application, except where otherwise stated in the conditions of this consent.
- 2. The lapse date for the purpose of Section 125 shall be 5 years from the date of granting the consent.
- The annual volume of aggregate material extracted from the Quarry shall not exceed 200,000m³.

Enabling Works

- Prior to the commencement of the consented activity, a right turn bay shall be constructed within State Highway 6 at the access to the site.
- Prior to the right turn bay formation works occurring, the consent holder shall submit to Central Otago District Council a copy of Waka Kotahi NZ Transport Agency's approval to undertake works on the State Highway (as detailed in advice notes a - c).

Advice Note:

- a) It is a requirement of the Government Roading Powers Act 1989 that any person wanting to carry out works on a state highway first gain the approval of Waka Kotahi New Zealand Transport Agency for the works and that a Corridor Access Request (CAR) is applied for and subsequently a Work Access Permit issued (WAP) before any works commence. A CAR will be required for the right turn bay formation works within State Highway 6.
- b) Detailed design approval from Waka Kotahi NZ Transport Agency shall be gained by the consent holder prior to applying for a CAR. The detailed design shall be prepared by a suitably qualified professional who has been certified by Waka Kotahi. In developing the detailed design, the consent holder will need to consult with the Waka Kotahi appointed state highway maintenance contractor for Central Otago (Aspiring Highways) and a Waka Kotahi Safety Engineer.
- c) A Corridor Access Request is made online via www.submitica.co.nz. The CAR needs to be submitted at least 21 working days before the planned start of works. A copy should also be sent to the Waka Kotahi NZ Transport Agency System Design and Delivery Planning Team at EnvironmentalPlanning@nzta.govt.nz. The Corridor Access Request will need to include:
 - The detailed final design for the right turn bay, including both layout and pavement design.
 - A Construction Traffic Management Plan that has attained approval from the Waka Kotahi NZ Transport Agency appointed state highway maintenance contractor for Central Otago (Aspiring Highways).
- 6. Prior to the commencement of the consented activity, the consent holder shall provide to Central Otago District Council correspondence from Waka Kotahi NZ Transport Agency confirming that works to the State Highway, including the construction of the right turn bay, have been constructed to Waka Kotahi NZ Transport Agency standards.
- Prior to extraction of Lot 3 DP 301379, perimeter bunding, landscape planting and associated irrigation must be established in accordance with the information and plans submitted with the application.

Commented [AL1]: A sunset date, or final total quantum of material should also be included

The perimeter bunding must include:

- a) Establishment of 3 metre high earth bunds around the site perimeter, with the
 exception of site accessways. The bunds must have a profile with an outside slope
 no steeper than 1V:1H (one metre vertical to one metres horizontal).
- As soon as practicable following construction of the bunds, the bunds are to be planted in accordance with native groundcover plant species specified in Condition 8 and thereafter watered regularly to ensure cover is established and maintained;
- c) Construction of the bunds shall not be undertaken during between 1 September and 1 January in any year (bird nesting season).
- 8. Prior to any physical construction works of the bunds specified in Condition 7, the Consent Holder shall engage both the Department of Conservation and Kāi Tahu regarding the selection of locally sourced native groundcover plant species, ecotyped to the area.

If 30 working days have lapsed and no input has been provided by either the Department of Conservation or Kāi Tahu, the Consent Holder shall choose appropriate native groundcover plants and submit the details of this to the Central Otago District Council.

Management Plans

- A Quarry Management Plan (QMP) shall be submitted to the Central Otago District Council within 1 month of the date of this consent for certification that it documents, as a minimum:
 - A plan showing the areas of extraction, the location of the screening and crushing plant, and the location of the aggregate stockpiles;
 - b) Details of the proposed setbacks in the expansion area;
 - c) The contact details of the quarry manager;
 - A description of the proposed methods of any enabling works including overburden removal operations including stripping and placement of material;
 - e) A description of all relevant site operations and procedures;
 - f) A description of all environmental effects, including (but not limited to) noise, dust and visual effects;
 - g) All operational traffic aspects;
 - All consent conditions and any other mitigation measures to be employed to minimise environmental effects and/or adhere to best practice;
 - i) Relevant monitoring and reporting requirements.
- 10. At least 1 month prior to the commencement of quarry activities, a Dust Management Plan (DMP) shall be submitted to the Central Otago District Council.
- 11. The DMP must include, but not be limited to:
 - a) A description of the purpose of the DMP;
 - b) A description of the dust sources on site;
 - A description of the receiving environment and identification of sensitive receptors within 250 metres of site boundaries;
 - The methods (including dust reduction through design methodologies), which will be employed as necessary to ensure compliance with the conditions of this consent;
 - A description of site rehabilitation methodology and associated dust control measures;
 - f) A description of particulate matter and wind monitoring requirements including:
 - i. The location of the wind monitoring equipment;
 - The location of particulate matter monitors between active work areas within and sensitive off-site activities;

Commented [AL2]: The outer face of the bund should have a gradient of 1:3 – 1:5 with an irregular slope profile

Commented [AL3]: And other affected neighbouring parties

Commented [AL4]: Specific details should be included as to what the intended outcomes of the landscapir e.g.

- will achieve 90% ground cover or more
- all plants will be eco sourced local stock in the range of (particular identified species)
- plants will be established at a minimum grade
- mulched, and irrigated
- maintained and replaced in next available planting season if become dead or diseased

This plan should also be certified by the Council prior to works commencing

Commented [AL5]: A QMP should really be approved in draft before issuing of consents, given that the operation haven in place for years, and these applications for consent have taken almost a year to process, this should have been possible

- Monitoring instrumentation methodology, setup requirements, maintenance and calibration procedures;
- g) A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings;
- A system for training employees and contractors to make them aware of the requirements of the DMP;
- Names and contact details of staff responsible for implementing and reviewing the DMP in order to achieve the requirements of this consent, and procedures, processes and methods for managing dust outside of standard operating hours;
- j) A method for recording and responding to complaints from the public;
- A maintenance and calibration schedule for meteorological and particulate matter monitoring instruments;
- Contingency measures for responding to dust suppression equipment malfunction or failures, including wind and particulate matter monitoring instruments.
- m) Standard Operating Procedures (SOPs) dedicated to the management of potential dust discharges from specific sources, including but not limited to:
 - i. Stockpiles;
 - ii. Site roads sealed and unsealed;
 - iii. Triggers for the use of water for dust suppression;
 - iv. The use of dust suppressants other than water;
 - v. Aggregate excavation and backfilling areas;
 - vi. Topsoil and overburden stripping and stockpiling;
 - vii. Bund construction, maintenance and the recontouring of slopes during rehabilitation;
 - viii. Any automated dust suppression for dust prone areas that can be activated outside of working hours;
 - Location and calibration of particulate matter and meteorological monitoring equipment;
- Environmental information management for recording, archiving and reporting all data required for dust management of the site.
- 12. Works authorised by this consent must not commence until the Consent Holder has received written certification of the QMP and DMP. Notwithstanding this, the works may proceed if the Consent Holder has not received a response from the Central Otago District Council within 10 working days of the date of the submission of the QMP and DMP.

Hours of Operation

13. The hours of operation for quarry activities other than monitoring and dust suppression are limited to:

Monday to Saturday (excluding public holidays):

- a) Arrival of staff and loading of trucks: 06:00 to 07:00
- Site excavation, processing, dump truck, loader and purchasing truck movements: 07:00 to 19:00
- c) Loading trucks and staff leaving: 19:00 to 20:00

Sundays: Dust management activities only.

Commented [AL6]: Additionally, the conditions of Mr Stacey and as set out in the JWS are required

Commented [AL7]: This must be deleted, as the conditions are intrinsic to the grant of consent, and must no proceed without certification from Council

Commented [AL8]: Within this time, activities are limited to (5 trucks max and loading of 22mm aggregate)

Noise

- 14. Processing plant must not be operated on site outside the hours of 07:00 to 19:00, Monday to Saturday.
- 15. The noise from the operation of the quarry must comply with the following noise limits at the notional boundary of any site when measured in accordance with NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise.

Day	Time period	Noise limit
Monday to Saturday	07:00 to 19:00	55 dB L _{Aeq}
	At all other times	45 dB L _{Aeq} and 75 dB L _{Amax}
Sundays and public holidays	At all times	45 dB L _{Aeq} and 75 dB L _{Amax}

- All vehicle reversing alarms on quarry-based equipment or trucks, shall only be broadband noise alarms.
- 17. To confirm that noise emissions from the quarry meet the proposed noise limits, noise emissions from quarry activities must be measured in accordance with NZS 6801:2008 and assessed in accordance with NZS 6802:2008 at the closest dwellings by a suitably qualified and experienced acoustic consultant.

A review of actual noise generation shall be undertaken by a suitably qualified person on behalf of the consent holder once within the first 12 months following the commencement of quarrying within the expansion area and when excavation initially advances to within 200m of the dwelling at 1308 Luggate-Cromwell Road. The completed report shall be provided to the Consent Authority within two weeks of the review being completed. The review shall include:

- a) Daytime noise readings taken at a time when processing machinery is operating simultaneously with extraction in the expansion area. Due to the nature of the proposed activity, no duration adjustment in accordance with NZS 6802:2008 shall be permitted.
- b) A comparison between the consented noise levels and actual noise levels.
- c) If actual noise levels are found to exceed consented noise levels, then the report shall provide recommendations for additional mitigation to ensure that actual noise levels are reduced to ensure compliance with Condition 15
- d) Following the implementation of the recommended additional mitigation, where such implementation is necessary, the consent holder shall notify the Council's Planning Manager.
- 18. Construction activities shall be managed in accordance with the requirements of NZS 6803:1999 Acoustics Construction Noise and any noise generated shall comply with the limits given in Table 2 of that standard.

For the purposes of this consent "construction activities" means activities associated with the establishment, or rehabilitation of the quarry, such as: site establishment; the construction and removal of bunds, topsoil stripping, creation and removal of the underpass to the expansion area, constructing slope batters and contouring the final land. If ongoing backfilling activity associated with the construction of slope batters occurs at the same time as the quarry is operational, this is not considered to be construction noise and shall comply with the operational noise limits for the site.

Traffic

- 19. The activity shall be limited to a maximum of 150 heavy vehicle movements per day.
- 20. Vehicle and heavy machinery speeds within the site shall not exceed 15km/h.

Hazardous Substances

- 21. To minimize the risk posed from Hazard Substance spills:
 - The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminant within the site.
 - Permanent storage of fuel or lubricants shall only occur within the workshop area identified on 'Site Plan Rev E' (dated 4.11.21).
 - c) There shall be no refuelling within 20 metres of standing water.
 - d) A spill kit of suitable capacity shall be kept on site at all times.
- 22. In the event of a spill of fuel or any other contaminants, the consent holder shall clean up the spill as soon as practicable and take measures to prevent a recurrence.
- 23. The consent holder shall inform the Central Otago District Council within 24 hours of any spill event greater than 4 litres and shall provide the following information:
 - a) The date, time, location and estimated volume of the spill;
 - b) The cause of the spill;
 - c) The type of contaminant(s) spilled;
 - d) Clean up procedures undertaken;
 - e) Details of the steps taken to control and remediate the effects of the spill on the receiving environment; and
 - f) An assessment of any potential effects of the spill and measures to be undertaken to prevent a recurrence.

Ecology

- 24. No quarrying shall be undertaken, or heavy machinery be used within 50 metres of the Mahaka Katia Scientific Reserve between 1 September and 1 January in any year (bird nesting season).
- 25. Any planting required as part of mitigation for the proposed works shall be accompanied by a pest management plan identifying the control of pest plant and animal species including rabbits that may impact on the viability of the mitigation proposed.
- 26. Control of weed species identified in the 2019 Otago Regional Pest Management Strategy (RPMS) shall be undertaken within the 25 m buffer between the boundary of the Mahaka Katia Scientific Reserve and proposed expansion area identified on drawing 'Site Plan Rev E' (dated 4.11.21). Weed species of concern are, exotic broom, gorse, Russell lupin, ragwort, nodding thistle, wilding pine sp. (see RPMS for full list of unwanted organisms).
- Water used in the quarry for dust mitigation shall not directly enter Mahaka Katia Scientific Reserve.

Accidental Discovery Protocol

- 28. In the event of any discovery of archaeological material:
 - a) The consent holder shall immediately:
 - i. Cease extraction operations in the affected area and mark off the affected area;
 - ii. Advise the Central Otago District Council of the disturbance; and
 - iii. Advise Heritage New Zealand Pouhere Taonga of the disturbance.

- b) If the archaeological material is determined to be Koiwi Tangata (human bones) or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the office of Kāi Tahu of the discovery.
- c) If the archaeological material is determined to be Koiwi Tangata (human bones) by Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the New Zealand Police of the disturbance.
- d) Work may recommence once Heritage New Zealand Pouhere Taonga (following consultation with Kāi Tahu if the site is of Maori origin) confirms to Central Otago District Council that appropriate action has been undertaken.

Rehabilitation

29. At least five years prior to ceasing the extraction activities, the consent holder shall submit to the Central Otago District Council a Closure and Rehabilitation Plan for the site.

The Closure and Rehabilitation Plan shall provide for:

- a) Removal of all buildings, other structures and plant from the site.
- b) Recontouring of the land to provide a stable profile.
- c) Management of dust to avoid nuisance beyond the site.
- d) Re-establishment of topsoil and grass utilising best practice.
- e) Appropriate drainage of the site, to avoid uncontrolled runoff into any water body.
- f) Leaving the site in a clean and tidy state.

The Closure and Rehabilitation Plan shall be prepared in consultation with adjoining landowners and Kāi Tahu. Feedback received from those persons shall be included for the information of Central Otago District Council.

30. The Closure and Rehabilitation Plan shall be implemented noting that no construction or earthworks be undertaken within 50 metres of the Mahaka Katia Scientific Reserve between 1 September and 1 January in any year (bird nesting season).

Complaints Register

- 31. The consent holder shall maintain and keep a complaint register for complaints regarding all aspects of operations at the site related to the exercise of this consent, received by the consent holder. The register shall record:
 - a) the date, time and duration of the event/incident that has resulted in a complaint;
 - the location of the complainant when the event/incident (if possible, specify nature of incident e.g. dust nuisance) was detected;
 - c) the possible cause of the event/incident;
 - d) the weather conditions and wind direction at the site when the event/incident allegedly occurred;
 - any corrective action is undertaken by the consent holder in response to the complaint:
 - f) any other relevant information.
- 32. The register shall be available to the Central Otago District Council at all reasonable times. Complaints received by the consent holder that may indicate non-compliance with the conditions of this resource consent shall be forwarded to the Central Otago District Council within 5 days of the complaint being received.

Bond

33. Within three months of the commencement of this consent, the consent holder shall enter into an enforceable agreement and bond with the Council for a sum of \$200,000.00. If following the closure of the quarry the consent holder defaults on implementing the Closure and Rehabilitation Plan, this bond is to meet the cost of —

Commented [AL9]: Progressive rehabilitation should occur wherever possible and limit active quarrying areas to minimum

Maximum area to be disturbed by quarrying and not recontoured or restored at any time shall not exceed [xxha]

Rehabilitation is intended to meet the pre-quarrying land u ability to support pasture and / or horticultural activities

Commented [AL10]:

Commented [AL11]: Rehabilitation plan should also require Council certification

a) removal of any plant or buildings.

- recontouring of the quarry area, respreading of subsoils and topsoil, re-establishing grass, and establishment of drainage sufficient to meet the post quarrying land use.
- c) leaving the land in a clean and tidy state.

Review

- 34. In accordance with section 128 of the Resource Management Act 1991, the conditions of this consent may be reviewed on each anniversary of the date of this consent coming into force if:
 - there is or is likely to be an adverse environmental effect that is greater than minor that results from the exercise of this consent, which was unforeseen when the consent was granted,
 - b) monitoring the exercise of this consent has revealed that there is likely to be an adverse effect on the environment that is greater than minor.
 - c) there has been a change of circumstances such that the conditions of the consent are no longer appropriate in terms of the purpose of the Act.

Commented [AL12]: Particular review conditions should be included with respect to adverse dust and air quality effects on neighbouring properties (including residential an orchard activities) given the potential uncertainties arising i evidence

RM20.360.03: Air Discharge Consent (Discretionary activity) Draft Conditions

DISCHARGE PERMIT

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Cromwell Certified Concrete Limited

Address: 810 Great South Road, Penrose, Auckland 1061

Activity: To discharge contaminants to air for the purpose of operating an alluvial quarry

Term: 25 years

Location of consent activity: 1248 Luggate-Cromwell Road (State Highway 6)

Legal Description of consent location: Lots 3, 5 and 8 DP 301379

General Conditions

- If this consent is not given effect to within a period of five years from the date of commencement of this consent, this consent shall lapse under Section 125 of the Resource Management Act 1991. The consent shall attach to the land to which it relates.
- 2 Aggregate extracted from the site must not exceed 200,000 cubic metres in any 12-month period.
- 3 The discharge shall not cause dust or the deposition of particulate matter that causes an objectionable or offensive effect beyond the boundary of the site.
- 4 The Quarry Manager or another nominated person, must be available at all times (including outside quarry operation hours) to respond to dust emission complaints and issues in accordance with measures described in the Dust Management Plan (DMP).
- 5 The maximum area of unconsolidated land comprising of the excavation area, backfilling areas and rehabilitation area shall not exceed two hectares.

Advice Note: The maximum area of unconsolidated land does not include the haul roads, processing area, stockpiles, portacoms or workshop.

Dust Management Plan (DMP)

- 6 At least 5 working days prior to the commencement of quarry activities, the Consent Holder must prepare a Dust Management Plan (DMP) for the certification of the Consent Authority.
- Works must not commence until the Consent Holder has received written certification of the DMP. Notwithstanding this, the works may proceed if the Consent Holder has not received a response from the Consent Authority within 10 working days of the date of the submission of the DMP.
- 8 The DMP must include, but not be limited to:
 - (a) A description of the purpose of the DMP;
 - (b) A description of the dust sources on site;
 - A description of the receiving environment and identification of sensitive receptors within 250 metres of site boundaries;

Commented [AL1]: No condition included that at all time there must be strict compliance with the DMP

- (d) The methods (including dust reduction through design methodologies), which will be employed as necessary to ensure compliance with the conditions of this consent;
- (e) A description of site rehabilitation methodology and associated dust control measures;
- (f) A description of particulate matter and wind monitoring requirements including:
 - (i) The location of the wind monitoring equipment;
 - The location of particulate matter monitors between active work areas within and sensitive off-site activities;
 - (iii) Details of wind speed trigger levels as set out in Condition 9 and associated alarm system. This shall also include the wind direction to be used in fulfilment of Condition 14(b);
 - (iv) Details of the particulate matter trigger levels as set out in Condition 9 and associated alarm system; and
 - Monitoring instrumentation methodology, setup requirements, maintenance and calibration procedures;
- (g) A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings;
- (h) A system for training employees and contractors to make them aware of the requirements of the DMP;
- (i) Names and contact details of staff responsible for implementing and reviewing the DMP in order to achieve the requirements of this consent, and procedures, processes and methods for managing dust outside of standard operating hours;
- (j) A method for recording and responding to complaints from the public;
- (k) A maintenance and calibration schedule for meteorological and particulate matter monitoring instruments;
- Contingency measures for responding to dust suppression equipment malfunction or failures, including wind and particulate matter monitoring instruments.
- (m) Separate Standard Operating Procedures (SOPs) dedicated to the management of potential dust discharges from specific sources, including but not limited to:
 - (i) Stockpiles;
 - (ii) Site roads sealed and unsealed;
 - (iii) Triggers for the use of water for dust suppression;
 - (iv) The use of dust suppressants other than water;
 - (v) Aggregate excavation and backfilling areas;
 - (vi) Topsoil and overburden stripping and stockpiling;
 - (vii) Bund construction, maintenance and the recontouring of slopes during rehabilitation:
 - (viii) Any automated dust suppression for dust prone areas that can be activated outside of working hours;
 - (ix) Location and calibration of particulate matter and meteorological monitoring equipment;
- (n) Environmental information management for recording, quality assurance, archiving and reporting all data required for dust management of the site.

Advice Note: For the purpose of this consent, sensitive receptor means:

- a) Residential dwellings and associated private property, including the area within 20m of the façade of an occupied dwelling;
- b) Public roads;
- Areas of significant indigenous vegetation and significant habitats of indigenous fauna; and

d) Commercially important or sensitive plants, crops or farming systems

Trigger Levels and Dust Mitigation

Trigger Levels

- 9 Quarry activities (except dust suppression measures) within 250 metres of a sensitive receptor location must not be undertaken when:
 - (a) Wind speed reaches or exceeds 7 m/s (1-hour average); and
 - (b) Quarry activities would be directly upwind of a sensitive receptor (10-minute average wind direction).
 - (c) Less than 1 mm of rain has fallen during the preceding 12 hours.
- The trigger concentration which indicates the potential for excessive quarry derived dust at or beyond the site boundary is a real time PM₁₀ concentration of ≥ 150 micrograms per cubic metre, as a rolling 1-hour average, which is updated every ten minutes.
- 11 If at any time, including outside normal operating hours, visible dust is blowing beyond the site boundary or if the particulate matter monitoring trigger in Condition 10 is breached the Consent Holder must:
 - (a) Cease all quarry activities (except dust suppression measures) aside from vehicle movements along the site access road;
 - Continue all dust suppression activities including but not limited to the immediate watering of both active and inactive exposed surfaces;
 - (c) Investigate possible sources of the dust;
 - (d) Only resume quarry activities (other than dust suppression) once there is no longer visible dust blowing beyond the site boundaries and when the monitoring trigger in Condition 9 is no longer being breached; and
 - (e) Notify the Consent Authority as soon as practicable, detailing its cause and the dust suppression actions undertaken.
- 12 If the investigation required under condition 11(c) determines the source of dust is localised to the excavation area only and is only impacting on areas downwind of this source, then activities within the central processing area, including sales of product can continue. This is contingent on all activities within the existing processing and load out area to be not causing visible dust blowing beyond the site boundary and their downwind real time PM₁₀ monitors not reaching or exceeding the trigger in condition 10.

Mitigation Measures

- 13 The Consent Holder must take all reasonably practicable measures to minimise the discharge of dust from quarry activities, including but not limited to:
 - (a) Assessing weather and ground conditions (wind and dryness) at the start of each day and ensure that applicable dust mitigation measures and methods are ready for use prior to commencing quarry activities;
 - (b) Taking wind direction and speed into account in planning quarry activities to minimise the risk of dust dispersion towards any residential dwellings that are within 250 metres of the site boundary;
 - (c) Water suppression such as using water carts or fixed sprinklers will be applied as required to dampen down disturbed areas and stockpiles. This must occur during dry weather, irrespective of wind speed;

- (d) Pre-dampening topsoil and overburden with a water cart or sprinklers prior to its extraction and removal.
- (e) Constructing and maintaining unsealed internal haul roads so that their surfaces consist
 of a crushed clean aggregate layer that is free of potholes;
- (f) Minimising drop heights when loading trucks and when moving material;
- (g) Carrying out land stripping and land rehabilitation during winter months when ground conditions are damp and winds are below 7 m/s;
- (h) Operating fixed and mobile crushing plant in conjunction with water dust suppression (either sprays or high-pressure fogging system) as necessary to avoid the dust trigger level, as specified in Condition 15, being reached or exceeded;
- (i) Undertaking routine onsite and offsite inspections of visible dust emissions and deposited dust throughout each day of quarry activities and electronically logging findings and any dust suppression actions, and to make the results of the inspections available to the Consent Authority when requested;
- Maintaining an adequate supply of water and equipment on site for the purpose of dust suppression at all times;
- (k) Imposing a speed restriction on all internal haul and access roads to 15 kilometres per hour:
- Sealing the first 50m of the access road from the entrance off Luggate-Cromwell Highway to the site;
- (m) Application of water via watercart or fixed irrigation of dust suppression water onto any section of the external access road shall only be used as a contingency/back up measure.

Meteorological monitoring

- 14 Prior to exercising this consent, the Consent Holder shall install a meteorological monitoring station at the location described in the DMP. The meteorological monitoring station shall be capable of continuously monitoring:
 - (a) Wind speed and direction at a height of 6 m above the natural ground level; and
 - (b) Temperature.
- 15 The meteorological monitoring instruments shall:
 - (a) Measure wind speed as 1-minute scalar averages with maximum resolution of 0.1 metres per second (m/s), have an accuracy of at least within +/-0.2 m/s, and a stall speed no greater than 0.5 m/s;
 - (b) Measure wind direction as 1-minute vector averages with maximum resolution of 1.0 degree and accuracy of at least within +/- 1.0 degree, and a stall speed no greater than 0.5 m/s:
 - (c) Measure screened temperature with accuracy of +/- 0.5 degree;
 - (d) Located on the subject property in accordance with AS/NZS 3580:14-2014 (Methods for sampling and analysis of ambient air – Part 14 Meteorological monitoring for ambient air quality monitoring applications). If the monitoring station cannot be located in accordance with AS/NZS 3580:14-2014 an alternative location shall be agreed in writing with the Consent Authority;
 - (e) Maintain a data and time stamped electronic record for at least 36 months of meteorological monitoring results, recorded as rolling 10-minute averages, which are updated every one-minute in real-time.

- (f) An alarm to the Quarry Manager (for example via mobile phone) must be provided if the rolling average wind speed and downwind trigger levels in Condition 9 are reached or exceeded.
- (g) Maintained and calibrated in accordance with the manufacturer's specifications.
- 16 All meteorological monitoring data shall be made available to the Consent Authority on request.

Particulate Matter Monitoring

- 17 Prior to exercising of this consent, the consent holder shall operate and maintain one permanent real-time dust management monitor for continuous monitoring of ambient 10-minute average PM₁₀ concentrations, which is installed and operated at a fixed location at the existing quarry's southwest boundary and in accordance with the DMP.
 - Advice Note: The permanently located real-time dust management monitor shall be an accepted method for general dust management/monitoring purposes, and does not need to be a certified US EPA, or National Environmental Standards for Air Quality (NESAQ) compliant method.
- 18 The permanent monitor shall be installed, operated, maintained and calibrated in accordance with the AS/NZS 3580.12.1:2015 Methods for sampling and analysis of ambient air Determination of light scattering Integrating nephelometer method, or else an equivalent, or superior standard which is approved by the Consent Authority;
- 19 Prior to the exercising of this consent, the consent holder shall operate and maintain two mobile real-time dust management monitors for continuous monitoring of ambient ten-minute average PM₁₀ concentrations, whose location changes for different stages of the quarry development and in accordance with the DMP.
- 20 The mobile real-time dust management monitors can be equivalent to that used for the permanently located dust monitor, or else be a lower cost method, on the basis that this can be effectively calibrated against the permanent dust monitor.
- 21 The two mobile dust monitors shall be positioned at different site boundary locations, such that real-time dust monitoring is undertaken at locations, which are between active excavation and central processing areas and downwind sensitive receptor locations, when the latter are within 250 m of the dust source.
- 22 Other general requirement for all three dust monitors includes the following:
 - (a) Sited in general accordance with AS/NZS 3580.1.1:2016 Methods for sampling and analysis of air - Guide to siting air monitoring equipment;
 - (b) Have a GPS location service (or similar technology) which enables their locations to be remotely monitored and recorded.
 - (c) Able to provide and record the results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minutes;
 - (d) Able to record monitoring results in real-time as rolling 10-minute averages in an appropriate electronic format;
 - (e) Fitted with an alarm system that is able to send warnings and alerts to the Quarry Manager or other nominated person; and
 - (f) Maintained in accordance with the manufacturer's specifications.

Bund formation

23 When constructing the bunds, the following controls apply:

- (a) Wherever possible the bunds shall be constructed during winter months (1st May to 1st September);
- (b) Maintain a buffer distance of 250 m when wind speeds are above 7 m/s in a direction towards the nearest sensitive locations;
- (c) Material to be excavated must be thoroughly wetted using a water cart, if not already damp, ahead of excavation and wetted thoroughly thereafter;
- (d) Wind monitoring must be carried out and dust generating activities shall cease when the wind is blowing towards sensitive locations and the wind speeds exceed 7 m/s (hourly average) in accordance with Condition 9;
- (e) Vegetated cover shall be established as soon as practicable and maintained to ensure healthy cover during dry months.

Complaints Register

- 24 The Consent Holder shall maintain a Complaints Register for any complaints received. The Complaints Register must include:
 - (a) The date and time the complaint was received;
 - (b) The nature and location of where the complaint has originated, if provided;
 - (c) A summary of the complaint;
 - (d) Particulate matter and wind conditions at the time the when the dust was observed by the complainant; and
 - (e) Any corrective action undertaken by the Consent Holder to avoid, remedy or mitigate the issue raised.
- 25 The Complaints Register must be provided to the Consent Authority on request.

Review

- 26 The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent for the purpose of:
 - (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
 - (b) To require the Consent Holder to adopt the best practicable option to reduce any adverse effects on the environment resulting from the activity; and/or
 - (c) Ensuring the conditions of this consent are consistent with any National Environmental Standard or National Planning Standard.

Commented [AL2]: This must be more certain and require formation in winter, and before commencement of the consent occurs

Commented [AL3]: Vegetated cover must be established in accordance with certified approved plans and be in place before commencement of consents

Must also be ensured to be maintained on an ongoing basis

Commented [AL4]: Specific review conditions required with respect to ensuring adverse effects on neighbouring properties are appropriately managed

