



In the matter of

Applications to the Selwyn District Council (RC 215749) and Canterbury Regional Council (CRC213142, CRC213143, CRC213144, CRC213145, and CRC213146 by Winstone Aggregates Limited (a Division of Fletcher Concrete and Infrastructure Limited) for land use and discharge consents associated with an extension to an existing quarry and backfilling operation at 692 and 706 Robinsons Road, Prebbleton.

DECISION OF HEARINGS COMMISSIONER

GRAHAM RUTHERFORD TAYLOR

28 JUNE 2022

Hearing: 31 March 2022 – Online via Teams

Site: Lot 2 DP 478287 LOT 1 DP 25795 LOT 1 DP 467327 - 706 Robinsons Road, Prebbleton

Lot 1 DP 80577 BLK IV Leeston SD - 692 Robinsons Road, Prebbleton

Zoning: Rural Inner Plains in the Operative Selwyn District Plan.

Activity Status: Restricted Discretionary.

Decision: **The consents sought are granted subject to conditions.**

1. APPOINTMENT AND SITE VISIT

- 1.1 I have been appointed and empowered by the Selwyn District Council (SDC) and Canterbury Regional Council (CRC) to determine the joint hearing of land use and discharge consent applications by Winstone Aggregates Limited (a Division of Fletcher Concrete and Infrastructure Limited) for land use and discharge consents associated with an extension to an existing quarry and backfilling operation at 692 and 706 Robinsons Road, Prebbleton.
- 1.2 I visited the site and the surrounding area on 30 March 2022. I was accompanied on the site visit by the quarry manager, Ross Aikman. Mr Aikman did not participate in the hearing. His role on the site visit was only to guide me to areas I requested to view, and was also necessary due to health and safety requirements.
- 1.3 Prior to and during the hearing I received full application documentation and evidence from the applicant, including amended plans, and detailed assessment by the council reporting officers and supporting experts. I also received joint witness statements from air quality, groundwater, acoustic and landscape architect experts following conferencing, which recorded areas of agreement and disagreement. This information is on public record therefore I have not attempted to set out all the information and evidence in this decision; rather have focussed on the central facts and key evidence relating to the aspects of the proposal in contention.

2. PROPOSAL

- 2.1 The proposal is set out in the applications lodged with SCC and CRC, as described in the amended AEE dated 22 September 2021, and further amended by the plans labelled *"Landscape Strategy" - Figures RG1 and RG2*, attached to the landscape evidence of Mr Girvan, which included an amended 80m quarry setback and bunding proposals in relation to the adjoining property at 726 Robinsons Road.
- 2.2 The applicant operates an existing quarry known as "Wheatsheaf Quarry" at 50 Selwyn Road, Broadfield, on approximately 40ha of land fronting Selwyn Road and Robinsons Road. The site has been quarried since the 1940's. It was formerly operated by Selwyn Quarries Limited, and has been owned and operated by Winstone Aggregates Limited since 2016. The existing quarry operates under a suite of resource consents from both SDC and CRC.
- 2.3 The existing resource consents are described in sections 4.1 and 4.2 of the AEE. The consents authorise activities including the removal of soil and overburden, aggregate extraction and crushing, importation, screening and sale of topsoil, stockpiling of aggregate and soil, loading and transport, site rehabilitation, importing and placement of cleanfill, bunding, and discharges, fuel storage, and the take and use of groundwater associated with the quarry activities. The existing consents also include the extension of bunding along the boundaries with 668, 726 and 736 Robinsons Road and on the Robinsons Road frontage under SDC consent RC165687.
- 2.4 The existing consented quarry area is nearly depleted of aggregate, and the applicant seeks SDC and CRC resource consents to expand the quarry activity to include two areas referred to as B and C blocks. The total additional quarried area will be approximately 6.8ha, out of a 10ha overall site. This is a reduction from that originally notified area due to the impact of providing the 80m setback from 726 Robinsons Road.
- 2.5 B Block is approximately 3.8ha in area and is located to the northwest of the existing extraction area, adjoining properties at 726 and 736 Robinsons Road. It contains an existing planted earth bund along the boundary with 736 Robinsons Road. There is a shelter belt at the southwest end of the block, and along the boundary with 726

Robinsons Road. The proposal includes an extension of the bund as approved by SDC consent RC165687 along the boundary with 726 Robinsons Road, and has been amended to include an 80m setback (originally 20m proposed) for extraction activities from the dwelling at 726 Robinsons Road. The application as now amended proposes extraction of approximately 220000 BCM (banked cubic metres) of aggregate, which equates to approximately 17 months of resource.

- 2.6 C Block is approximately 6.4ha in area, bound by B Block to the east, the existing extraction area to the north, primary production land to the south and Robinsons Road to the west. C Block also contains the existing site office and buildings, two tenanted residential dwellings and stables. The road boundary is largely screened in part by hedgerows and trees including a double row of Leyland cypress and part of the southern boundary is also screened by an established shelterbelt. A 3m high bund along the site's Robinson's Road and the northern boundary is authorised by SDC RC165687.
- 2.7 The new areas to be quarried in C Block comprise a small area (C Block–North) adjacent to 726 Robinsons Road, contiguous with Block B, and a larger area (C Block–South) in the rear eastern corner behind the dwelling and stables at 692 Robinsons Road. C Block–North has now been amended to provide the 80m setback from the dwelling at 726 Robinsons Road, which will reduce the area of extraction. The proposal includes bunding on the northwest corner of the Robinsons Road frontage and boundary with 726 Robinsons Road, as provided for under RC165687. The C Block–South area is setback from the Robinsons Road frontage, and the bund has been amended to be setback 85m¹ from the road boundary as recommended by the SDC landscape expert (Mr Smith), instead of being adjacent to the boundary as approved under RC165687. The existing Shelter planting and paddocks adjacent to the road frontage will remain. The bund will also extend along the southeast side boundary with 668 Robinsons Road.
- 2.8 C Block contains 390,000 BCM of aggregate that equates to approximately 28 months of resource based on the current projected demand for aggregate. Total approximate volume of extractable material is estimated to be 610,000 BCM. This is a reduction from the 900,000 BCM originally proposed, as a consequence of the amended setback from 726 Robinsons Road. ²
- 2.9 The proposal includes stripping of overburden and construction of bunds prior to extraction of each area commencing. No more than 5ha of aggregate will be exposed at any one time.
- 2.10 All proposed extractive activities will be located at least 120m from any residential dwelling on the west side of Robinsons Road, and 80m from the house foundations at 726 Robinsons Road to the north/west of B Block.
- 2.11 B Block and C Block–North are proposed to be rehabilitated to existing ground level, and C Block–South will be rehabilitated to ground level consistent with the hole left by the existing extraction activities. Site rehabilitation is proposed to be carried out using cleanfill imported to the site, which will be covered with stockpiled topsoil and sown in pasture.
- 2.12 Several components of the existing consented activities are to remain unchanged, and do not form part of the new application. These include:
 - Total volume of aggregate to be extracted per day and per annum.
 - The hours of operation including controls on vehicle movements within the quarry

¹ Para 14(b) Monique Thomas legal submissions

² Para 3.13 Evidence of Claire Kelly

site.

- The number of people employed on the quarry site.
- The location of any aggregate crushing – consent SDC145099 enables the operation of up to two mobile crushing plant(s) in areas north of a line drawn from the Marshall/Garters (Lot 1 DP 52445/Lot 4 DP 463714) boundary to the Legg/Smith/Garters (Lot 1 DP 463714/Lot 1 DP 76885/Lot 2 DP 467327) boundary.
- The formed vehicle crossing from Selwyn Road.
- The number of vehicle movements generated by the activity.
- The location of staff facilities and car parks at 706 Robinsons Road (Lot 1 DP 25795).
- The location and volume of hazardous substances.
- Location and size of stockpiles.
- Water take and location of the water take bore

- 2.13 In addition to land use consent from the SDC, the proposal requires resource consents from CRC for associated activities including the excavation of land (extraction), the deposition of material into land (filling), the use of water for dust suppression, the discharge of dust to air and the discharge of contaminants onto and into land where they may enter groundwater. All other regional consent matters are authorised by existing resource consents held for the existing quarry.

3. NOTIFICATION AND SUBMISSIONS

- 3.1 The applicant has obtained written approvals from the owners and occupiers of four properties located at 692, 736, 668/660 and 703 Robinsons Road, and as such adverse effects on these parties have been disregarded under s95D(e). The application was limited notified to the owners and occupiers of four properties at 726, 703, 701 and 679 Robinsons Road. One submission was received within the submission period, that of H and N Crocker from 703 Robinsons Road. This submission was subsequently withdrawn, and their affected party approval obtained, as recorded above.
- 3.2 A late submission was received on 24 February 2022 from S & D Miller of 726 Robinsons Road. I was advised at the time that the Millers had lodged a submission on the CRC applications within time and wished to be heard, but they had not realised that they had to also lodge a separate submission to SDC in respect of the land use consent. I raised the late submission as a procedural matter at the commencement of the hearing, and the applicants Counsel, Ms Thomas did not oppose it being accepted. I agree that the late lodgement appears the result of a misunderstanding, and that in lodging a submission on the CRC applications, the Miller's clearly had an interest in the application which was already before me. Accordingly, I do not consider that any party will be prejudiced by accepting the late submission, and agree that it be accepted.
- 3.3 The Millers submission opposed the application and sought that it be declined due to:
- The proximity of the quarrying activities to their property and residential unit
 - Adverse effects on their residential amenity and wellbeing
 - The increase in adverse dirt and dust effects
 - The increased adverse noise effects
 - A 25m setback from the quarry is not acceptable, all other adjacent properties have a setback of at least 120 metres
 - The existing quarry boundary planting and bunding is not maintained
- 3.4 Subsequent to the Miller's submission, the applicant amended the proposal to provide for an 80m setback for quarry activities from the Miller's dwelling, as recorded in the evidence of Mr Girvan. The Miller's subsequently advised that they no longer wished

to be heard at the hearing. I was provided with confirmation in the course of the hearing that the Millers had sighted the amended site plan, and am satisfied that they were able to make an informed decision on this matter. I also note that whilst they did not participate in the hearing, their submission was not withdrawn, and therefore remains live.

- 3.5 The CRC consents were limited notified to Te Tuahuriri Rūnanga and 18 property owners and occupiers due to the potential effects of the discharge to air, and/or the potential effect on groundwater quality being at least minor. 11 submissions were received as follows:

Submitter	Address
SD Miller (owner)	726 Robinsons Road
RS and SJ McIntosh (owners)	90 Selwyn Road
HM Stevenson (owner)	74 Selwyn Road
JR Davidson (owner)	668 Robinsons Road
T Chi-Ying (owner)	679 Robinsons Road
J Taylor Limited (occupier)	660 Robinsons Road
JG Taylor (owner)	660 Robinsons Road
DC Platt (owner)	108 Selwyn Road
LS Platt (owner)	108 Selwyn Road
AP Marshall (owner)	58 Selwyn Road
N&A Kitson (owners)	628 Robinsons Road

- 3.6 Reasons for submissions are summarised in paragraphs 25 – 26 of the CRC s42A report therefore I do not repeat them here.
- 3.7 The submissions included several general points concerning the quarry operation, historical issues, effects on surrounding rural properties, bunding, and dwelling setbacks. More specific matters were raised concerning effects of dust and respirable silica, and effects on groundwater due to contamination from fill material.
- 3.8 I note that the CRC submissions also raised several issues pertaining to noise and traffic safety, which the CRC s42A report identifies as being outside the scope of the CRC consents. With the exception of the Miller's these submitters did not submit on the SDC applications, and I note that only two of these properties (726 & 679 Robinsons Road) were limited notified of the SDC land use consent.
- 3.9 Accordingly, I am unable to consider those parts of the CRC submissions that deal with matters that fall outside the scope of the CRC consents – although I also acknowledge that these issues form part of the overall effects assessment in any case, therefore remain matters to consider.
- 3.10 Written approvals to the CRC applications were obtained from the owners and occupiers of 692, 703 and 736 Robinsons Road, therefore I may not consider any effect on those persons.

- 3.11 I have read and taken into account all submissions.

4. CONSENTS REQUIRED

Selwyn District Council

- 4.1 The application site is zoned Rural (Inner Plains) under the Rural Volume of the Operative District Plan (OSDP). There are no special features or notations shown on the Planning Maps applying to the application site.
- 4.2 An assessment of compliance with relevant rules is set out in the application and was also included in Ms Conlon-Geddes's s42A report. There was no dispute between parties regarding relevant SDC rules.
- 4.3 The proposal requires land use consent as a **discretionary activity** under the OSDP due to:

Part C1 – Rule 1.7.1.2

Earthworks will exceed:

- a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and
- (b) A maximum volume of 5000m³ per project

Part C8 – Rule 8.1.1.1

The activity involves the generation, storage or disposal of solid waste³ generating more than 3m³ of solid waste per week, averaged over any calendar year.

Part C9 – Rule 9.4.1.1

The quarrying activity occupies building(s), loading, storage and waste areas that exceed 100m² and employs more than two full-time equivalent persons. Rule 9.4.2 states any activity which does not comply with Rule 9.4.1 shall be a discretionary activity.

- 4.4 The proposal complies with all other relevant OSDP rules including those relating to roading, signs, hazardous substances, noise and vibration, lighting and stockpiling.
- 4.5 The Proposed Selwyn District Plan (PSDP) was publicly notified on 5 October 2020, and hearings on submissions are presently underway. No decisions have yet been made on the Proposed District Plan that are relevant to this application.
- 4.6 There are no rules with immediate legal effect or that have been deemed operative following the close of submissions that apply to this proposal. I am however still required to have regard to the provisions of the PSDP under s104(1)(b)(vi).
- 4.7 I was advised that a PSI has been undertaken for the land directly adjoining B Block, which was used for the same activities as B and C Blocks. Based on the applicant's review of Council records, and the findings of the PSI, the piece of land to which this application relates is not considered to be a HAIL site, and therefore the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) does not apply. I accept that the proposal is a permitted activity

³ Clean fill material is deemed to be solid waste.

in terms of the NES.

Regional Consents

- 4.8 An assessment of the regional consents required was contained in the application and in the CRC s42A report of Ms Kamali. The applicant's planner Ms Kelly agreed with most of Ms Kamali's assessment except in relation to the use of dust suppressants and the activity status of discharging contaminants to air from dust generating activities. Ms Kamali had questioned whether use of dust suppressant agents may require consent under rule 5.19 of the CLAWP, due to the nature of the suppressant used. However following clarification from the applicant at the hearing, she agreed that this is permitted under rule 5.18.⁴

- 4.9 CRC consents are required as follows:

CRC213142 – use of land for excavation

- **Restricted discretionary activity** under Rule 5.176 of Canterbury Land and Water Regional Plan (CLAWP) and Rule 5.176 as amended by Plan Change 7 (PC7) for excavation within 26m of a surface water body, and within 1m of the highest groundwater level.⁵

CRC213143 – use land for deposition of fill

- **Restricted discretionary activity** under rule 5.178 of CLAWP and rule 5.178 as amended by PC7 for deposition of more than 50m³ of clean fill in a consecutive 12 month period where it may be placed less than 1m above the highest groundwater level at the site, and where a site rehabilitation plan has not been submitted.⁶

CRC213144 – use of water for dust suppression

- **Discretionary activity** under rule 5.6 of CLAWP for use of water authorised under CRC212834 over new quarry area.

CRC213145 – discharge dust and dust containing contaminants to air

- **Discretionary activity** under rule 7.63(2) of Canterbury Air Regional Plan (CARP) for discharge of dust contaminants to air from the handling of bulk solid material from an industrial or trade premise
- **Discretionary activity** under rule 7.63(1) of CARP for storage and disposal of clean fill material exceeding 1000 tonnes and set back less than 200m from sensitive activities (dwellings).

CRC213146 – discharge contaminants to land where they may enter groundwater

⁴ Lisa Kamali Verbal Submission Record – Page 1

⁵ The application proposes 1m from existing groundwater levels, however Ms Kamali advised that based on advice of Mr Thorley, this may not be achieved for highest levels as per the rule wording.

⁶ The application assessed as a controlled activity as the fill would be at least 1m from existing groundwater levels, however rule requires assessment against highest groundwater level.

- **Discretionary activity** under rule 5.100 of CLAWP for deposition of fill⁷ material exceeding 10m³ per day, and which may not comply with conditions 5 and 6 of rule 5.98, in circumstances where a contaminant may enter groundwater.
- 4.10 Overall, it was agreed that the bundle of CRC consents falls to be assessed as a **Discretionary activity**.
- 4.11 I also questioned applicant's counsel as to whether a s.127 RMA variation is necessary to authorise the amendment to the bunds approved under RC165687. In her right of reply, the applicant's Counsel volunteered a condition that would require RC165687 to be surrendered, to avoid any confusion.

5. THE HEARING AND EVIDENCE HEARD

Appearances Recorded

Applicant

- Monique Thomas – Legal Counsel
- Christopher Edmonds – Operations Manager
- Richard Chilton – Air Quality Scientist
- Brydon Hughes – Hydrogeologist
- Rhys Girvan – Landscape Architect
- Gary Walton – Acoustic Consultant
- Claire Kelly – Consultant Planner

CRC s42A Report

- Michael Massey / Hannah Mirabueno – Contaminated Land Team
- Michael Thorley – Hydrologist
- Deborah Ryan – Air Quality Scientist
- Lisa Kamali – Senior Consents Planner

SDC s42A Report

- Gemma Conlon-Geddes – Consultant Planner
- Michael Smith – Acoustic Consultant (did not appear)
- Paul Smith – Landscape Architect (did not appear)

Submitters

- All submitters who had indicated they wished to be heard advised that they no longer sought to do so and did not provide evidence.

Evidence Circulation and Joint Witness Statements

- 5.1 Evidence from the s42A reporting officers and the applicant was provided and pre-circulated prior to the hearing. Further, following the circulation of evidence, I issued a minute directing conferencing of technical expert witnesses, and preparation of joint witness statements. This was because the applicant's evidence contained

⁷ Fill material is defined as a contaminant under the RMA

amendments to the proposal in terms of the increased setback from the 726 Robinsons Road dwelling, and it enabled remaining points of difference and agreement to be identified and refined.

- 5.2 Joint witness statements (JWS) were received in relation to groundwater, air quality, landscape and noise effects. I note that the landscape and noise JWS confirmed that there were no longer any areas of disagreement between experts, and all parties agreed that these matters were either resolved or could be dealt with by conditions. Accordingly, the SDC acoustic and landscape reporting officers did not appear at the hearing.
- 5.3 The groundwater and air quality JWS identified remaining areas of disagreement which were expanded on in the course of the hearing.
- 5.4 All evidence was taken as read, and is held on the Council files, therefore I will not repeat all matters in detail. Witnesses provided verbal or written summaries of their evidence at the hearing and answered questions.

Applicant

- 5.5 **Monique Thomas** provided opening legal submissions for the applicant.
- 5.6 Prior to her proceeding, I sought clarification as to the extent of the proposed amended 80m setback from the Miller's dwelling at 726 Robinsons Road. There was inconsistency in various submissions and evidence statements as to whether this was to be measured from the closest point of the dwelling (ie: an 80m radius), or from the boundary (ie: a parallel setback line). Whilst the amended plan attached to Mr Girvan's evidence showed an 80m radius, other statements including the evidence of Mr Edmonds and the noise JWS referred to an 80m setback from the site boundary. It was also unclear if the Millers were aware of whether an 80m radius or boundary setback was being proposed when they advised they would not attend the hearing.
- 5.7 Ms Thomas sought an adjournment to seek clarification. She provided confirmation that Mr Edmonds and all experts were aware that the proposal was for an 80m radius from the closest point of the dwelling, and that any references to a setback in the JWS and other statements are to be read in that regard. She also provided confirmation that the Millers had been provided a copy of Mr Girvan's plan prior to withdrawing their wish to be heard. I also confirmed this with the individual experts during questions.
- 5.8 Ms Thomas described the activities authorised by existing consents, and noted conditions of CRC145183 which are relevant to excavation depth and clean filling, which do not require groundwater quality monitoring, and allow placement of cured asphalt material. She advised that the proposed consent conditions differed in that they would require the first 1m of fill to be virgin excavated natural material (VENM), a cleanfill management plan was proposed, and groundwater quality monitoring is proposed.
- 5.9 She noted that the scale of noise effect will remain consistent with the existing consented quarry. Block C – North adjacent to 726 Robinsons Road would take approximately 3 months to extract and 6 months to cleanfill, therefore any effects would be very short term. Noise levels would be 7dB below the permitted level for the rural zone.
- 5.10 Ms Thomas submitted that air quality effects would be reduced compared to the existing operation, and cumulative effects would not arise as the areas would not be quarried concurrently.
- 5.11 She noted that the SDC s42A report recommended declining the application due to effects on 726 Robinsons Road, however these were now addressed by the amended

80m setback from the dwelling proposed. The Block C-South bund location was also proposed to be amended to be setback 85 m from the road, as recommended by Mr Smith.

- 5.12 She also submitted that the CRC s42A reports concluded that consent could be granted if further information was provided to show that effects on groundwater will be acceptable, the applicant adopted a best practice approach to fill management on site in accordance with the 2018 WasteMINZ guideline, and all recommended consent conditions were adopted.
- 5.13 She advised an updated set of conditions was attached to the planning evidence of Ms Kelly, which reflected responses to the issues raised in the s42A reports, the proposal amendments, and outcomes of the expert conferencing.
- 5.14 Ms Thomas noted that following expert conferencing, and the JWS statements, there were now no areas of disagreement between landscape, noise and air quality witnesses. The groundwater experts also agreed that cleanfill may result in localised aesthetic effects on groundwater quality and that the greatest potential for groundwater quality change was on bores within 400m downstream of the expansion areas. There was one bore within this distance, which is over 40m depth, and the likelihood of being affected by localised changes was low.
- 5.15 Ms Thomas commented on the existing environment, which includes the effect of permitted and existing consented activities. She submitted that only any difference between effects of the existing consented operation and the proposal are relevant.
- 5.16 She submitted that consideration of a permitted baseline was relevant in terms of noise and of excavation within 1m of the highest groundwater level.
- 5.17 Ms Thomas discussed the differences between the MfE and WasteMINZ guidelines for cleanfill management. She submitted that the WasteMINZ guidelines were intended to manage waste levies, did not have regulatory effect, and had not been accepted by decision makers in respect of other Canterbury Region cleanfill consents. She submitted that the correct usage was to apply the definition of cleanfill as set out in the CLAWP. A condition was offered which would enable a review of this if the WasteMINZ guideline is given regulatory effect in future.
- 5.18 Ms Thomas submitted that a covenant limiting future land use as recommended by Ms Kamali was not necessary, as none has been required in respect of the existing quarry, and the CLAWP manages discharges from activities such as intensive farming.
- 5.19 She submitted that a bond as recommended by Ms Kamali was unnecessary, given the scale of the proposal, proposed rehabilitation, and agreement between groundwater experts that adverse effects on groundwater quality will be unlikely and will be subject to monitoring.
- 5.20 Ms Thomas discussed proposed consent durations, and submitted that a 20 year duration as sought by the applicant is justified, and there was no requirement to align with existing consent durations.
- 5.21 **Christopher Edmonds**, Operations Manager, spoke to his pre-circulated evidence and also provided a power point presentation of the existing and proposed quarry operation.
- 5.22 His evidence provided operational detail of the existing quarry operation and proposed expansion, and elaborated on the demand for the gravel resource. He provided details of how the company would manage compliance with proposed consent conditions, including dust control, and cleanfill selection and management.
- 5.23 He clarified that the previous owners of 726 Robinsons Road had entered into an agreement with the previous quarry owner that would have allowed quarrying within 25m of the boundaries of those properties, however the Millers were not party to that

- agreement, and the applicant now proposed an 80m setback from the Miller's dwelling to address dust, visual amenity and noise concerns.
- 5.24 He clarified that existing consented activities would remain unchanged by the extension.
 - 5.25 Mr Edmonds also attached a draft updated Quarry Management Plan (QMP), which included a Cleanfill Management Plan, which would apply to the new extraction and filling activities. A draft Dust Management Plan (DMP) had also been prepared.
 - 5.26 He described how effects of dust, noise and visual impacts on neighbouring properties would be mitigated by setback from Robinsons Road, 120m setback from residential dwellings opposite Robinsons Road, and 80m setback from the dwelling at 726 Robinsons Road.
 - 5.27 Mr Edmonds described the process of preparatory works including overburden stripping and bund construction. The bund material would ultimately be reused for rehabilitation works.
 - 5.28 Extraction would commence in the northeast corner of B block, and progress in an anti-clockwise direction through the block and into C-Block North. 1 – 2 ha of quarry area would be opened up at any one time.
 - 5.29 Mr Edmonds described dust control measures, including monitoring, managing operations according to wind and weather conditions, minimising exposed areas, water cart and spray and haul road management. Additional controls were proposed in the draft DMP.
 - 5.30 He discussed the clean fill and rehabilitation process. He considered that use of the WasteMINZ 2018 definition of cleanfill would narrow down the range of material that could be accepted, and result in a significantly longer rehabilitation period. The existing quarry rehabilitation is not subject to this limitation.
 - 5.31 Mr Edmonds considered that a 20 year consent period was necessary, as although extraction was likely to be completed relatively quickly, the vagaries of the cleanfill market mean that supply fluctuation can occur.
 - 5.32 **Rhys Girvan** summarised his landscape evidence. His evidence described the key features of the proposal from a landscape and visual amenity perspective, and the potential effects of the proposal on landscape character / values and visual amenity. He made specific comment on the submission by the Millers and commented on the s42A reports. His evidence also included the amended site plan, which provided for an 80m setback of quarry activities from the dwelling at 726 Robinsons Road, and modifications to the bund location, to set the C-Block South bund back 85m from Robinsons Road, to be adjacent to the quarry margin.
 - 5.33 Mr Girvan noted that all visual effects of bunding including construction effects had already been consented under RC145099 and RC165687 and form part of the existing environment. He noted that quarry activity and use of machinery would generally occur below the bund level, limiting potential visual effects.
 - 5.34 Given the existing quarry, relative containment of the site (which includes established screen planting along site boundaries), the proposed bunds and the progressive nature of extraction activity followed by rehabilitation to enable ongoing rural land use, he considered that any landscape and visual effects will be low and less than minor. He noted that the SDC landscape expert, Mr Smith, generally agreed with his conclusions.
 - 5.35 I note that the landscape JWS concluded that there were no material areas of disagreement between landscape experts, and recommended amendments to the draft land use conditions concerning bund construction and planting.
 - 5.36 **Richard Chilton** spoke to his air quality evidence, and the air quality JWS. He noted

that the quarry expansion is principally an extraction activity only, with aggregate processing, storage and site access continuing to occur at the existing consented site. Accordingly, he considered the range of activities forming part of the current proposal (and therefore sources of dust) is limited compared to most quarries.

- 5.37 Mr Chilton described the receiving environment, with dust sensitive activities including residential dwellings within 250m of the quarry, the closest being the Miller residence.
- 5.38 He assessed the potential effects of dust nuisance and potential human health effects from the fine fraction of dust in a manner consistent with Ministry for the Environment (MfE) guidance, including considering the frequency, intensity, duration, offensiveness and location of impacts. This was informed by a review of wind and dust monitoring data and complaints records.
- 5.39 Mr Chilton noted that there was a low frequency of dust related complaints from the existing quarry, and that continuous dust monitoring results show low dust concentrations coming from the quarry and that control measures have largely been effective.
- 5.40 He advised that mitigation measures and monitoring consistent with industry good practice were proposed. Additional measures including increased setbacks were proposed in relation to the four rural dwelling receptors. With the implementation of the mitigation and monitoring proposed, he considered potential dust effects can be controlled to acceptable levels and that the risk of offensive or objectionable effects will be low. He also considered that sufficient water was available for effective dust suppression.
- 5.41 He referred to the air quality JWS, which had been prepared following the amendment to provide increased separation from the dwelling at 726 Robinsons Road. The experts agreed that the increased separation distance of excavation activities to the Miller dwelling reduced the elevated risk of dust to result in adverse effects commensurate with those that already exist. The experts considered that the mitigation and real-time monitoring as proposed are appropriate to ensure that the potential dust effects can be controlled to acceptable levels and that the risk of offensive or objectionable effects will be low.
- 5.42 They also agreed that additional measures set out in Ms Kamali's s42a report are no longer necessary – notably the need for water sprinklers linked to an automated system of operation associated with real time dust and wind monitoring data.
- 5.43 There were no remaining areas of disagreement between air quality experts.
- 5.44 **Gary Walton** spoke to his noise evidence and the noise JWS. He noted that the existing consented activities on site would not change. The processing plant is the most prominent source of noise, and it will remain in the same location. There would also be no change to truck movements.
- 5.45 Mr Walton noted that the expansion would bring quarry activities closer to dwellings along Robinsons Road which are around 100 – 200 m from the existing pit. His noise surveys and calculations indicated that the site has complied with consented noise limits, and the amendment to provide an 80m setback from the nearest dwelling at 726 Robinson Road, means that noise levels will not exceed 50 dB LAeq during any phase. This is less than the presently consented 55dB, and is well within the WHO guidelines, and the OSDP and PSDP limits.
- 5.46 He considered that with the additional mitigation now proposed, noise effects at this property will be less than minor.
- 5.47 Short term effects would be associated with bund construction, however this is assessed as 'construction noise' and will meet the appropriate noise and vibration standards.

- 5.48 Mr Walton noted that the quarry activity would have different audible characteristics compared to permitted rural activities, which may be louder, but would typically be shorter in duration. The quarry differed in that it created a steady noise – however it also formed part of the consented baseline.
- 5.49 The noise JWS confirmed that both Mr Walton and the SDC noise expert Mr Smith had no remaining areas of disagreement, and agreed that the draft noise conditions proposed by the applicant were appropriate subject to minor amendments for clarity, and the deletion of conditions that restricted night-time activities, which have been made redundant by the operating hours at Condition 13.
- 5.50 **Brydon Hughes** provided a statement summarising his groundwater evidence and discussed the groundwater JWS.
- 5.51 His evidence addressed the hydrogeological setting of the site, existing groundwater levels and quality, effects of the proposal in terms of maintaining a >1m separation from the water table and cleanfill effects on water quality, management and monitoring, matters raised in submissions and s42A reports, and proposed conditions.
- 5.52 He noted water levels measurements show the aquifer is permanently saturated, with groundwater from around 14 to 19 m below the natural ground surface. Above this depth, the groundwater table fluctuates over time by several metres reflecting seasonal and inter-annual variations. Groundwater flows in a south easterly direction.
- 5.53 He discussed fortnightly groundwater monitoring at three bores within the quarry site. Since regular monitoring began in August 2016 which showed measured groundwater levels exhibiting a relatively consistent temporal trend, varying by around 4.3 metres. These levels correlated well with nearby Ecan monitoring wells. He considered it possible to establish maximum excavation depth for the proposed quarry expansion areas to maintain an unsaturated zone of at least 1m, using similar methodology to conditions of CRC145183 for the existing quarry.
- 5.54 While extended rainfall events could see groundwater levels rise to less than 1m of the base of the proposed excavation, he considered such instances will be infrequent (> 1 in 40 year return based on available data) and of limited duration. He also considered that potential saturation of cleanfill during such periods would be mitigated by the proposed placement of 1m of VENM under the fill material.
- 5.55 Mr Hughes considered that based on studies of other cleanfill activities in the Miners Road area, any effect on downgradient water quality would be aesthetic only, and dissipate within a few hundred metres. Sampling taken in March 2022 indicated elevated alkalinity in one bore, consistent with the Miners Road example.
- 5.56 He referred to the groundwater JWS, and noted there was agreement that the greatest potential for any change in groundwater quality will be for bores located within 400m downstream of the expansion areas and existing fill areas. A single private bore (M36/7411) is located within this distance down-gradient of the proposed quarry expansion C Block South. This bore is however drawing groundwater from >40m depth, some 25 metres or more below the water table, and therefore at reduced risk of being affected by any localised changes in groundwater quality.
- 5.57 Mr Hughes considered that the potential for adverse effects on well M36/4892 at 726 Robinsons Road would be low, given its up-gradient location, and distance from the amended quarry area in C-Block north.
- 5.58 He noted agreement had been reached on most groundwater matters in the JWS, and considered that overall the following measures will mitigate potential effects on groundwater quality resulting from the proposed quarrying activities including:
- (a) Ensuring composition of cleanfill meets standards specified in the Land and

Water Plan;

- (b) Maintaining a minimum 1 m separation between the base of the excavation and the water table;
 - (c) Placing a 1 m metre thick layer of VENM at the base of the excavation, under any cleanfill materials;
 - (d) Undertaking regular monitoring of groundwater quality and levels; and
 - (e) Ensuring appropriate response measures are in place to manage quarrying activities during periods of rising groundwater levels or if contaminant concentrations in groundwater are detected at specified thresholds (50% of MAV with the exception of Nitrate-Nitrogen) are detected.
- 5.59 **Claire Kelly** summarised her pre-circulated evidence, and discussed the amended draft conditions. She confirmed that a 20-year consent duration was sought and described the amendments made to the application and draft conditions in response to submissions and the s42A reports.
- 5.60 She described the consents sought, and confirmed that they are to be stand-alone and bespoke, meaning that the consents for the existing quarry would continue unchanged.
- 5.61 She noted that the SDC s42A report recommended declining the application as the proposal in its current form (ie: prior to amendment) was not consistent with all the relevant objectives and policies of the SDP and as adverse effects arising from the proposal have not been appropriately avoided, remedied or mitigated.
- 5.62 She agreed with Ms Kamali's advice that the CRC consents were overall a discretionary activity, although disagreed on interpretation of rules relating to dust suppressants, discharging contaminants to air from dust generating activities, and the status of cleanfilling.
- 5.63 She noted that Ms Kamali's report recommended declining the CRC consents based on inadequate information regarding effects for groundwater quality and groundwater users. Alternatively, if an additional robust site-specific assessment was to demonstrate that effects on localised groundwater for groundwater users near the site are acceptable, consent could be granted subject to adopting a best practice approach to fill management, and adoption of recommended conditions. She considered that the evidence now showed this.
- 5.64 Ms Kelly described the permitted baseline, and considered it relevant in terms of the noise limits at the notional boundaries of residential dwellings. She also noted that the consented baseline included the noise effects of the existing quarry and crushing activity, which would exceed that of the proposal.
- 5.65 She summarised the conclusions of the relevant expert witnesses in terms of environmental effects.
- 5.66 She noted that Mr Walton and SDC noise expert both agreed that the expansion (as assessed in the s42A report) will not be a significant change from the existing operation and will result in less than minor effects, except on 726 Robinsons Road. Mr Smith considered noise effects to be minor on this property and recommended including a new condition to restriction operations within 80m of the dwelling at 726 Robinson Road prior to 0730h. Since then, the application has been amended to provide an 80m quarry setback from the dwelling, meaning that Mr Smith's recommended limit on hours is now unnecessary. She discussed proposed hours of operation suggested in the s42A officers and considered that a 6:30am start time and was appropriate, with a 1pm finish

time on Saturdays as per the existing quarry consents.

- 5.67 The geotechnical report prepared for the application confirmed the site suitability for quarrying and that potential adverse effects on stability of adjoining land can be managed appropriately.
- 5.68 There was a high level of overall agreement between Mr Girvan and the SDC landscape expert, Mr Smith, and the proposed mitigation measures (bunding, setback of quarrying activities from Robinsons Road, planting of the bund adjacent to 726 Robinsons Road and the retention of shelterbelts including within the site) will appropriately manage adverse effects on all surrounding properties.
- 5.69 Ms Kelly disagreed with Ms Conlon-Geddes in relation to adverse cumulative effects on 726 Robinsons Road, as noise levels would meet SDC requirements and dust effects could be mitigated. However the applicant had also agreed to a condition imposing restriction on hours within 120m of the dwelling, which although she considered unnecessary, would provide additional reassurance to the neighbour.
- 5.70 She noted that there was general agreement between all planning experts as to positive effects.
- 5.71 Dust effects had been addressed in the evidence of Mr Chilton, and there appeared to be general agreement between Mr Chilton and Ms Ryan, except for reservations about the practicality of some mitigation measures, with the trigger levels being set so low, and therefore subsequent responsiveness (or not) of site staff in relation to the additional measures. Ms Ryan had recommended the adoption of additional dust prevention and control measures including the use of water sprinklers in the vicinity of 726 Robinsons Road, however both experts now agreed through the JWS that this was not required due to the amended setback.
- 5.72 Ms Kelly considered that these concerns were now addressed by the 80m setback proposed from the boundary with 726 Robinsons Road, and the level of mitigation proposed by the applicant, as further refined in Mr Chilton's evidence. She considered that that the proposed approach to mitigating adverse dust effects provides for an appropriate level of caution and adverse dust effects can be mitigated to an acceptable level.
- 5.73 Ms Kelly discussed the concerns raised by Ms Kamali that there is insufficient certainty that adequate water will be available for dust suppression. Whilst a 20-year consent duration was sought, the existing water permit expires in 2035.
- 5.74 Ms Kelly did not consider this to be an issue, as the quarrying would have ceased by that time, and the only remaining activity would be cleanfilling, which required significantly less water. The applicant had also volunteered a condition that the quarrying consents could only be exercised in conjunction with the existing water permit or any consents granted in addition to or in replacement of the existing water permit.
- 5.75 She noted that Mr Chilton had addressed concerns raised by Ms Ryan that there would be insufficient water for dust suppression, as water would only be required to suppress dust over approximately 2.5ha (this being the active, frequently trafficked areas of the existing site including the haul road). The remaining exposed areas will be covered in pea gravel for dust suppression.
- 5.76 She noted that there were no culturally significant sites identified on the site or surrounding land, and that consultation with Tūāhuriri kaitiaki reiterated the importance of maintaining a minimum 1m barrier between excavation and groundwater, due to the potential for adverse effects on groundwater.
- 5.77 She agreed with Ms Kamali's recommended conditions to manage the risk associated with use and storage of hazardous substances, and that associated adverse effects would be low or negligible.

- 5.78 Ms Kelly discussed concerns raised by Ms Kamali and the CRC cleanfil and groundwater experts regarding groundwater. These included lack of data on ground water flow and quality, procedures to manage a rise in groundwater levels, contaminant transport, reference to MfE (2002) cleanfill guidelines instead of WasteMINZ 2018, and potential effects on downstream bores.
- 5.79 Mr Hughes had addressed these matters in his evidence, She also considered that the correct guidelines are the MfE (2002) guidelines as these are the standards used in the CLAWRP, and the WasteMINZ guidelines remain in draft form. To her knowledge, all current operational cleanfills in the Canterbury region were consented on the basis of the MfE guidelines.
- 5.80 She also noted that a stand alone cleanfill application on the site would be a controlled activity and consideration would be limited to the MfE guidelines only. It would be inappropriate to apply the WasteMINZ guidelines on the basis that the bundling of activities made the overall application discretionary.
- 5.81 The applicant did however accept that a condition could be imposed requiring compliance with the 2018 WasteMinz Guidelines should they be adopted by MfE in the future.
- 5.82 She noted that Ms Mirabueno and Mr Massey had advised that potential health effects from cleanfilling can generally be expected to be low and minor exceedances of toxic contaminants might not result in adverse health effects, however cumulative effect were possible. Aesthetic effects were however more likely. The applicant was proposing a cleanfill management plan (CMP) that would be more stringent than the current consented cleanfill activity.
- 5.83 Based on the water quality monitoring results and the evidence of Mr Hughes, she considered groundwater quality effects associated with the proposed excavations and discharge of cleanfill will be less than minor.
- 5.84 Ms Kelly noted that groundwater monitoring could be undertaken on bores within the applicant's land, which would meet concerns raised by Ms Kamali regarding access to test bores.
- 5.85 She disagreed with Ms Kamali's interpretation of the rules relating to excavation close to surface waterbodies, as she did not consider it applied to a water race. However, she agreed with her overall assessment that with the separation distance proposed, and subject to the applicant agreeing to erosion and sediment control conditions, effects on surface water quality can be avoided.
- 5.86 Overall, she concluded that the adverse effects of this proposal on the environment will be acceptable.
- 5.87 She discussed proposed conditions, which had been amended in the s42A reports, and would now require further amendment as a consequence of the proposal amendments and the expert JWS outcomes.
- 5.88 Ms Kelly discussed the relevant statutory documents and considered the proposal consistent with the:
- Resource Management (National Environmental Standard for Air Quality) Regulations 2004
 - National Policy Statement for Freshwater Management 2020
 - National Environmental Standard for Sources of Human Drinking Water
 - National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

- 5.89 She identified areas of agreement and disagreement between herself and the s42A reports in respect of the relevant SDC and CRC plans objectives and policies.
- 5.90 The main areas of disagreement with Ms Kamali related to inconsistency with provisions of the CRPS and CLAWP arising from concerns with groundwater levels and water quality, groundwater monitoring, depth of excavation, cleanfill content and setback from the boundary of 726 Robinsons Road. Ms Kamali considered the proposal could be made more consistent with the CRPS and CLAWP subject to additional information to provide certainty regarding the application and its effects, and provided the Applicant adopts the conditions she has recommended. Ms Kelly that as a result of the amendments and additional assessments provided, these concerns were now met.
- 5.91 There was general agreement with Ms Kamali that the proposal would not contravene the provisions of the CARP, subject to additional measures including an automated sprinkler system, however his was no longer necessary due to the increased setback from 726 Robinsons Road.
- 5.92 Ms Kelly considered that the proposal is consistent with OSDP objectives and policies relating to land and soil, water, quality of the environment, noise and vibration, dust, and reverse sensitivity. She considered that concerns raised by Ms Conlon-Geddes relating to objectives and policies of the OSDP dealing with to adverse effects on a sensitive activity, were now satisfied by the amended setback from 726 Robinsons Road.
- 5.93 She considered the proposal consistent with the relevant objectives and policies of the PSDP, and again considered that concerns raised by Ms Conlon-Geddes regarding mineral extraction policies in relation to effects on 726 Robinsons Road were now met by the amended setback controls.

CRC S42A Reporting Officers

- 5.94 **Hannah Mirabueno and Michael Massey** provided a supplemental report, which summarised their original contaminated land report and responded to the additional information and amendments provided in the applicants evidence.
- 5.95 They discussed that the technical definition of cleanfill which is undergoing change coinciding with the expansion of the waste disposal levy starting in 2021. The waste levy is part of the Waste Minimisation Act 2008. The WasteMINZ guidelines are used to calculate levies, however have not yet been adopted by MfE. However, they had been informed that the adoption of the WasteMINZ guidelines is considered “imminent,” perhaps by June 2022, to support the proper assignment of landfill classes by facility operators and the MfE Waste Minimisation Act compliance team. At that point, the MfE (2002) cleanfill guidelines will reportedly be decommissioned. To put it another way, a consent granted on the basis of the MfE (2002) guidelines could be outdated before it was ever exercised.
- 5.96 They considered that a precautionary approach to waste acceptance criteria is necessary to limit adverse environmental impacts from the proposed activities.
- 5.97 They discussed rule 5.178 of CLAWP. Specifically, the rule states that CRC discretion is restricted to, “The proportion of any material other than cleanfill and its potential to cause contamination.” With the changing technical definition of cleanfill they considered the allowed proportion of material other than cleanfill in a class 5 cleanfill will fall to 5%, from 100% under the MfE (2002) guidelines.
- 5.98 They noted that although the groundwater experts had agreed that water quality effects would likely be limited to aesthetic effects only, this can be just as bad, if not worse, than impacts on contaminants of health significance. For example, hard water that causes scaling on dishes and plugging of water fixtures can cause significant and costly

problems for water users. Staining of laundry or dishes by iron or manganese contamination can be a costly nuisance in a similar fashion.

- 5.99 Whilst the groundwater JWS stated that proposed water quality trigger limits would be adequate, these were based on the CLAWP limits, and Ecan has been moving away from recommending Plan limits water quality trigger limits. They recommend thorough, carefully crafted, and in some cases more stringent water quality monitoring trigger limits, to enable actions in response to trigger limit exceedances before water quality becomes substantially degraded.
- 5.100 **Mike Thorley** provided additional comments to his pre-circulated groundwater evidence, and the groundwater JWS. He commented that the available information had now improved and more robust as a result of the additional work undertaken prior to the hearing, but there were still some information gaps.
- 5.101 In the JWS, he agreed with Mr Hughes as to many issues concerning the hydrogeological setting, although there was uncertainty as to groundwater levels in the case of C Block South, and the location of some downstream bores may differ from that contained in the ecan database.
- 5.102 The JWS agreed that condition of CRC145183 provides a reasonable methodology for establishing a maximum excavation depth for the proposed excavation areas to ensure a minimum 1 metre separation between the base of the excavation and underlying groundwater, subject to some provisos as contained in the JWS. They agreed on the maximum excavation depths as set out in Table 6 of Mr Hughes evidence.
- 5.103 He noted that there was some uncertainty as to the location of the existing bore at 726 Robinsons Road, and that as this is a shallow domestic take, it could be susceptible to reverse gradient flow.
- 5.104 He also agreed that the increased setback from the dwelling at 726 Robinsons Road would reduce potential impacts on the bore.
- 5.105 He commented on the variability in baseline monitoring across bores, and that it was hard to ascertain why this is.
- 5.106 He did not consider the proposal likely to impact on background nitrate levels significantly, due to the use of clean fill that would contain little organic matter.
- 5.107 He considered that the high alkalinity measured at bore BX23/0271 was likely a result of concrete contained in existing fill, which would also continue under the present consents.
- 5.108 Mr Thorley agreed that groundwater monitoring would allow for a response time to rainfall events, however considered that automated monitoring should be carried out rather than fortnightly checks. This could be undertaken at one site, with manual checks at other sites providing confirmation.
- 5.109 **Deborah Ryan** spoke to her air quality evidence and the air quality JWS. She confirmed that as recorded in the JWS there were no significant areas of disagreement between herself and Mr Chilton. She also confirmed that her assessment of water requirements for dust suppression took into account the whole quarry site, and not just the area subject to the application.
- 5.110 She remained concerned with the availability of groundwater for dust suppression. She was concerned that the clean fill operation would still require water post 2035, however also acknowledged that the post extraction period would require less. There were a range of options for dust suppression post 2035, and the need for water beyond then would require addressing in relation to the existing fill anyway.
- 5.111 **Lisa Kamali** provided comments on her original s42A report and recommendations, and responses to the matters raised in the hearing. Following the hearing, she also

provided a written summary of her notes and responses, which I directed be provided to the applicant to assist with their written reply.

- 5.112 She disagreed that the bundling of consents disadvantaged the applicant in respect of clean filling, as she considered that the filling required discharge consent as a full discretionary activity under CLAWP rule 5.100. Legal advice was that rule 5.178 only provided for the use of land for the deposition of cleanfill, and not the discharge. As the activity is fully discretionary, she considered it appropriate to consider the WasteMINZ guidelines, as well as the National Policy Statement for Freshwater Management 2020 which post-dates the CLAWP rules. CLAWP policies 4.13 and 4.19 also specifically state the first priority as being to avoid the production of the contaminant and that activities are sited, designed and managed to avoid the contamination of groundwater. She confirmed that recent consents have been granted by the Council applying the WasteMINZ guidelines.
- 5.113 She agreed with Ms Kelly that the use of dust suppressants is permitted, and that new monitoring bores can be installed as a permitted activity.
- 5.114 Ms Kamali noted the timeframes for extraction and rehabilitation contained in Mr Edmond's evidence, which showed that a 13 year consent duration coinciding with the water permit expiry would be sufficient. She did not consider the applicant had provided technical justification regarding how much water will be needed during backfilling and rehabilitation activities. There were remaining questions as to how water could be sourced for rehabilitation beyond 2035, as the groundwater zone is overallocated.
- 5.115 She considered that the use of covenants was still necessary to ensure that future purchasers of the land are made aware through an appropriate notice on the property title that certain uses will not be appropriate.
- 5.116 Ms Kamali confirmed that bonds had been used for several smaller sized quarry operations, and noted that no rehabilitation plan has been provided with the application. Without clear evidence that the site will be appropriately rehabilitated, she considered it may be appropriate to impose a bond.
- 5.117 She acknowledged that improved information on ground water levels and quality had been provided, however there were gaps remaining, particularly regarding groundwater conditions in C Block, and in relation to cumulative effects.
- 5.118 Ms Kamali agreed that the now proposed 80m setback from the dwelling at 726 Robinsons road was an improvement in reducing dust effects, however the applicant also now proposed removing all requirements for automated dust suppression. Without this she queried the response time to address dust issues at times when the quarry is not open and when wind speeds suddenly increase.
- 5.119 She identified and discussed key issues regarding conditions, including demarcation of existing and proposed fill areas, pre-commencement meetings, use of the WasteMINZ guideline from the consent outset, water metering conditions, and the exposed area requiring dust suppression at any one time.

SDC S42a Reporting Officers

- 5.120 **Ms Conlon-Geddes** provided comments and answered questions in relation to the pre-circulated SDC s42A reports, and evidence submitted at the hearing. The SDC noise and landscape reporting officers did not appear at the hearing, as the respective JWS's identified no remaining areas of disagreement with the applicant over these matters.
- 5.121 She discussed the proposed consent timeframes and considered it would be appropriate to impose timeframes on B Block and C Block North, which would align with the predicted rate of extraction, and minimise the time that 726 Robinsons Road

would be exposed to the effects of nearby quarry activity.

- 5.122 She did not consider that there was a valid permitted baseline applying to the whole of the activity, as it was discretionary overall.
- 5.123 She considered that if consent were granted, there was a need to bring the existing consents in to line, for consistency.
- 5.124 Ms Conlon-Geddes thought that the extension of the quarry activity would have a cumulative effect, due to the extended time period in which the activity would operate. Although the existing consent does not have a timeframe, it is limited by the available resource, therefore would end sooner.
- 5.125 She acknowledged that the proposed bunds formed part of the consented baseline.
- 5.126 She remained concerned that despite the amendments in relation to 726 Robinsons Road, there were still remaining adverse effects on amenity values of that property, due to the proximity and extended duration of quarrying activities. She considered that there were operational matters such as the preparation of a dust management plan (DMP) that were still necessary to provide certainty of mitigation.
- 5.127 She accepted that certification of the DMP by way of the CRC consent conditions was appropriate, as this also covered fugitive dust emissions, which were a consent of concern in relation to the SDC land use consent.

Post Evidence Directions

- 5.128 At the conclusion of the evidence, it directed that further conferencing occur between groundwater experts in respect of groundwater monitoring proposals and remaining issues of disagreement.
- 5.129 I adjourned the hearing and issued directions that:
- the expert groundwater witnesses, Mr Hughes and Mr Thornley conference and provide a joint witness statement relating to groundwater monitoring conditions, to be provided to the CRC Consents Coordinator by 5pm, Friday 1 April 2022.
 - the additional notes presented by Ms Kamali at the hearing be provided to the CRC Consents Coordinator by 5pm, Friday 1 April 2022
 - the applicant file a written reply, including any proposed amendments to the proposal and conditions with the CRC Consents Coordinator by 5pm, Thursday 14 April 2022

Further Groundwater JWS

- 5.130 Following the additional groundwater conferencing, a further Groundwater JWS was provided on 1 April. The statement recorded agreements as to:
- The standard of wellhead protection
 - Decommissioning of non-utilised bores on site
 - Identification of monitoring bores, including 5 new bores
 - Continuous (15 min) monitoring of M36/20450
 - Manual weekly monitoring of other bores

Applicants Closing Submissions

- 5.131 The applicant's written closing submissions in reply were received dated 14 April.
- 5.132 It noted that there were no residual areas of disagreement between air quality, noise, or landscape witnesses. There were also no material areas of disagreement between groundwater experts, and the location of the groundwater quality monitoring bores and groundwater quality trigger values have been agreed by those witnesses.
- 5.133 The reply noted that the processing planners had not changed their recommendations, despite the evidence provided.
- 5.134 Amendments had been made to the proposal prior to the hearing including the increased quarry setback and bund planting. In addition, the applicant now proposed further amendments to the proposal and included an updated set of conditions. These further amendments included:
- a) A new condition was proposed which requires all activities in C Block North to be completed within 14 months.
 - b) The conditions were amended to refer to the setbacks as shown on the plan included in the Landscape Graphic Supplement and in Mr Girvan's evidence (rather than distances from site boundaries), and also refer to existing dwellings.
 - c) A more detailed condition (recommended by Mr Hughes) was proposed which specifies the measures to be taken should groundwater quality sampling results exceed trigger values.
- 5.135 The applicants reply confirmed that no variation was being sought to the existing consents, although it was now proposed that RM165687 be surrendered to avoid confusion as to the required bund location.
- 5.136 A condition was also volunteered on an *augier* basis that a further 45m of the access road in the existing site be sealed.
- 5.137 There were no material differences between air quality experts, and they agreed that an automated dust suppression system is not necessary.
- 5.138 The applicant confirmed that blood and bone type dust suppressant is not used on site, and that any suppressants used will comply with Rule 5.18 of the CARP.
- 5.139 Additional groundwater information had been provided, and the experts agreed that the greatest potential for any change in groundwater quality will be for bores located within 400m downstream of the expansion areas and existing fill areas. A single private bore (M36/7411) is located within this distance however is drawing groundwater from >40m depth, some 25 metres or more below the water table.
- 5.140 Agreement had been met between experts as to groundwater monitoring trigger values which are consistent with the limits contained in Schedule 8 of the Land and Water Regional Plan (LWRP) which are set at less than 50% MAV for other contaminants of health significance as listed in the NZ Drinking Water Standards.
- 5.141 The applicant considered that remaining uncertainties expressed by Ms Kamali and Mr Thorley were not relevant; as:
- A new monitoring bore was now proposed in Block C – North; and
 - Whilst the exact bore location at 726 Robinsons Road was not confirmed, the minimum 80m separation and the low rate of take of that bore means that reverse flow gradient effects will not occur; and

- The Cleanfill Management Plan proposed applies waste acceptance criteria that are more stringent than those that apply to the current area of cleanfill. A new monitoring bore (Bore 5) is proposed downgradient of Bore BX23/0271. The conditions and trigger values proposed will ensure that cumulative groundwater effects will not arise, and that response actions will be taken should an investigation determine that fill placed within B and C Blocks is causing exceedance of the trigger values.
- 5.142 The applicant noted Ms Kamali's concerns regarding highest recorded groundwater levels, however considered that that potential for saturation of cleanfill during periods of elevated groundwater levels will be low due to the infrequent and limited duration, and would be and further mitigated by the placement of a 1 metre layer of virgin excavated natural material (VENM) under the fill materials.
- 5.143 It referred to Ms Kamali's comments on general suitability of the site for landfilling, however the applicant considered that the geology of this site is common to all land on the Canterbury Plains, and the proposal will meet the CLAWP and MfE 2002 guidelines for a cleanfill.
- 5.144 There had been considerable discussion concerning whether the MfE or WasteMINZ guidelines should be applied. The applicant noted that whilst a recent CRC decision had referenced the WasteMINZ guidelines, in that instance, the site was located in the Christchurch Groundwater Protection Zone, the applicant had offered the condition, and the consent was granted at officer level on a non-notified basis. The decision could not be considered a precedent.
- 5.145 Whilst Mr Massey had considered that rule 5.178 *functionally* allows discretion over this matter, the applicant considered that the definition of 'cleanfill' in the CLAWP will continue to apply until such time as the Plan is changed. Further, whilst rule 5.100 covers discharges from the cleanfill, the waste acceptance criteria is contained in rule 5.178.
- 5.146 The applicant had also proposed that soils placed within the fill will not exceed background levels within B Block and C Blocks North and South. To that extent, the fill to be used within the expansion area is intended to be more restrictive than the existing quarry.
- 5.147 The closing submissions discussed the remaining concerns of Ms Conlon-Geddes that there would be adverse effects on 726 Robinsons Road, and commented that these concerns should be given little weight, as:
- a) They ignore the existing environment.
 - b) It was inconsistent with the evidence relevant to amenity effects.
 - c) It is inconsistent with the level of amenity anticipated in that zone by the District Plan.
 - d) It relies on the permitted activity setback standard for a quarry in the PSDP that does not yet have legal effect.
 - e) It does not appear to have any regard to the positive effects of the proposal.
 - f) This proposal will not result in activities being undertaken much closer to the dwelling at 726 Robinsons Road than they currently are. The duration of effects will now be limited by conditions on C Block North.
 - g) Granting a consent to enable effects to occur for longer than otherwise might have occurred does not itself give rise to a cumulative effect.

- 5.148 The applicant submitted that a bond is not necessary, as the draft updated Quarry Management Plan and proposed conditions including a rehabilitation plan will provide certainty, and there are financial incentives for the applicant to ensure that the site will be suitable for future land uses. It was also unclear how a bond would be calculated. Other enforcement mechanisms were available to the Councils under the RMA.
- 5.149 Covenants were not considered necessary, as future land use did not form part of the proposals, and would be subject to the relevant rules in force at such time. LLUR and LIM processes would identify the consented use to future purchasers.
- 5.150 The applicant did not consider there to be any resource management reason to limit the consent duration to correspond with the water take expiry in 2035, and maintained that the 20 years sought was appropriate, out of an abundance of caution, to allow for the vagaries of the cleanfill market. It noted that the existing regional consents were also not aligned to this date. The conditions proposed by the applicant (which require the consents to be exercised with CRC212834 or any replacement) addressed the concern raised by Ms Kamali in relation to the need for water for dust suppression should activities within the expansion land still be occurring in January 2035.
- 5.151 The applicant included amended copies of draft SDC and CRC consent conditions with the closing submissions.

6. PRINCIPAL ISSUES, EVALUATION AND FINDINGS OF FACT

- 6.1 The SDC and the suite of CRC consents are to be considered as discretionary activities. Accordingly, my discretion as to consideration of effects is not limited.
- 6.2 I note that there was agreement between experts on the majority of matters relevant to the application, and am grateful to the experts for the effort provided in expert conferencing and Joint Witness Statements, which significantly narrowed the matters of disagreement.
- 6.3 I also acknowledge that the s42A planning reports and recommendations were prepared based on the applications as notified prior to any amendments and JWS. Whilst both the SDC and CRC reports recommended declining the applications, this was predominantly based on effects on 726 Robinsons Road, and lack of information regarding effects on groundwater quality and users. The reports also raised concerns with dust control measures, however Ms Kamali considered that air quality effects may be acceptable subject to diligent implementation of the proposed dust control measures, along with the adoption of additional measures including the use of an automated sprinkler system.
- 6.4 In most other respects, the s42A reports generally found adverse effects to be acceptable.
- 6.5 Most of these issues were addressed by amendments, further information and evidence presented at the hearing. Several although not all of these issues were resolved to the satisfaction of the respective experts, and reflected in the Joint Witness Statements.
- 6.6 I have identified areas where I consider there is agreement between all parties, and in those cases I have agreed with and adopted the findings of the respective experts.
- 6.7 I then discuss the remaining areas of contention.
- 6.8 My discussion and findings on these are discussed in turn.

Rule Interpretation Issues

- 6.9 There was no dispute between parties as to the interpretation of the relevant Selwyn District Council plan rules.
- 6.10 I note that whilst Ms Kamali questioned whether dust suppressant agents required consent under rule 5.19 of the CLAWP, she advised following information provided by the applicant at the hearing that this was permitted. I accept that advice.
- 6.11 Whilst the application stated that the earthworks would comply with rule 5.175 of the CLAWP, I accept the advice of Ms Kamali that the rule requires a 1m separation from the highest groundwater water level as defined in the CLAWP, which includes historical levels. On this basis the 1m separation may not be met and I agree that rule 5.176 applies.

Areas of Agreement

Existing and Consented Environment

- 6.12 I agree that the existing consented environment includes the existing quarry activities, and note that these are not proposed to be changed by these applications. I note that this includes:
- The existing processing and stockpiling areas including crushing plant are to remain in their present location, and do not form part of the new application.
 - Existing consent conditions relating to extraction volumes and rates.
 - Hours of operation are proposed to be consistent with the existing quarry, and also subject to additional restrictions in relation to 726 Robinsons Road.
 - Vehicle generation as authorised by the existing consents will not change.
 - Noise conditions applying to the existing quarry will not change.
 - Bunding including construction effects is already approved under RC165687.
 - The existing quarry and cleanfill activity is subject to a suite of regional consents that will not change.
 - The existing quarry and cleanfill conditions allow deposition of cleanfill as defined under the MfE 2002 guidelines.
 - Effects of existing consented discharges to groundwater are contained in the present environment.
 - Dust emissions exist and are authorised by the existing consents.

Landscape and Visual Effects

- 6.13 I agree with the conclusions of Mr Smith and Mr Girvan, and the landscape JWS that adverse landscape and visual effects including those on 726 Robinsons Road will be less than minor. In particular:
- The bunding is already approved under RC165687 and I accept that any effects of the bunding including construction related effects form part of the existing consented baseline.
 - The existing shelter planting on the Robinsons Road boundary will be retained.

- The Block C bund and extraction area will be set back 85m from the Robinsons Road boundary and be screened by existing planting.
- The bunds are to be constructed prior to extraction activities and remain until site rehabilitation is complete.
- The experts agree that there may be a short period when machinery is visible over the bunds, however it will be fleeting during the initial extraction and final rehabilitation stages, and will otherwise be screened.

Noise Effects

- 6.14 Both acoustic experts agreed that following to the amendments in relation to the 80m dwelling setback and hours of operation in relation to 726 Robinsons Road, that adverse noise effects would be less than minor. I note the evidence of Mr Walton that in relation to the closest dwelling at 726 Robinsons Road, the proposal will comply with the OSDP and PSDP rules, as well as the WHO guidelines by a margin of up to 5dB, therefore I agree it will operate within levels that are considered appropriate in the rural zone environment. Other rural dwellings are located opposite Robinsons Road, and will be subject to a greater 120m setback, and I agree that any adverse noise effects on those properties will also be less than minor.
- 6.15 I also note that both experts agree that the highest source of noise on site is the crushing plant, which is not subject to this application.
- 6.16 I find that adverse noise effects associated with the proposal will be less than minor.

Traffic Effects

- 6.17 Some submitters raised issues concerning effects of heavy vehicle movements to and from the site. However these were raised in submissions in respect of the CRC consents, including some from persons who were not limited notified of the SDC consent, and were not raised in terms of any SDC land use submissions. The Millers submission on the SDC consent did not raise vehicle generation.
- 6.18 In any case, I note that the consented vehicle movements for the present quarry and processing plant are not proposed to change, and form part of the existing environment. The proposal will not increase vehicle numbers on any day therefore I consider the effects will be consistent with the existing environment.

Dust Effects

- 6.19 I note that as a result of the increased 80m setback from the dwelling at 726 Robinsons Road, the air quality JWS advised there were no significant areas of disagreement between the experts. They agreed that the four existing receptors including the Miller dwelling would have an 'intermediate' risk of dust impact that could be mitigated through conditions.
- 6.20 They agreed that the mitigation and real time monitoring as proposed are appropriate to ensure that the potential dust effects can be controlled to acceptable levels and that the risk of offensive or objectionable effects will be low, and that the mitigation measures and monitoring proposed are consistent with industry good practice.
- 6.21 They agreed that within the constraints of the existing water take there is sufficient water for dust suppression of 4.24 ha of exposed ground and the supply of water for the dust suppression associated with the operation of the processing plant. I also note that they agreed that with the increased separation to the Miller dwelling, additional measures including automated sprinklers were no longer considered necessary.

- 6.22 They recommended several new and amended conditions concerning dust suppression, monitoring and mitigation.
- 6.23 I note that Ms Kamali expressed concern that whilst an increased setback from 726 Robinsons Road was now proposed, the removal of conditions requiring automated dust suppression meant that there was a risk of a longer response time to address dust issues at times when the quarry is not open and when wind speeds suddenly increase.
- 6.24 I note that this is inconsistent with the expert air quality evidence that now agreed that automated sprinklers were no longer required. However a number of conditions were also proposed in relation to weather and dust monitoring that I agree will provide for appropriate responses to changes in weather conditions.
- 6.25 I accept the evidence of the air quality experts that the mitigation and real-time monitoring as proposed are appropriate to ensure that the potential dust effects can be controlled to acceptable levels and that the risk of offensive or objectionable effects will be low.

Positive Effects

- 6.26 All parties agreed that the proposal will provide positive effects in that it will retain employment for a number of people, and provides for locally sourced quarry material intended to meet local development needs. I accept that the proposal will result in positive effects.

Remaining Areas in Contention

Cumulative Effects

- 6.27 Ms Conlon-Geddes raised concerns that despite the expert conclusions as to landscape, noise, dust and traffic effects, the proposal could still result in adverse cumulative effects on rural amenity values in relation to surrounding properties including 726 Robinsons Road. This was due to the extended timeframe in which the expanded quarry may operate, whereby there would otherwise be an expectation that the existing quarry activity which has a finite resource lifespan would finish operation earlier. While the existing quarry does not have a consent duration (under the SDC land use consent) it is limited by the available resource, which is near depleted.
- 6.28 I agree that the expansion of the quarry will have the effect of extending the time period of quarry and cleanfill activity. However I do not necessarily agree that this will result in an adverse cumulative effect. The two operations will not operate simultaneously, therefore there will be no increase in the actual level of effects compared to the existing consented activity.
- 6.29 The evidence presented was that the effects of the proposed activity on rural amenity values would be acceptable in the rural environment, and will be less than minor. The Council will have also reached a similar conclusion in granting the existing land use consent for the present quarry activity.
- 6.30 I also note that the proposed conditions relating to Block C – North closest to 726 Robinsons Road will require it to be completed in a very short 14 month timeframe. In the context of the historic quarry activity on site, I do not consider this to be a significant additional timeframe, and note that cleanfill activities at the existing quarry would be likely to occur well beyond this.

- 6.31 Accordingly, I consider that the proposal will not result in adverse cumulative effects on rural amenity values.

MfE vs WasteMINZ Cleanfill Guidelines

- 6.32 There was considerable discussion in the course of the hearing regarding the use of the 2002 MfE guidelines to define cleanfill, versus the draft 2018 WasteMINZ guidelines preferred by the CRC contaminated site experts Ms Mirabueno and Mr Massey, and Ms Kamali.
- 6.33 The applicant considered the MfE guidelines should be used as they are the current guidelines referenced in the CLAWP, and are also consistent with the existing quarry consent. The applicant also considered the WasteMINZ guidelines are only an unadopted draft at this stage, and are intended to be used as a tool to calculate waste levies. Mr Massey considered that the newer guidelines should be used as they are more stringent than the MfE guidelines, and he understood that adoption by MfE was imminent. He advocated a precautionary approach.
- 6.34 I have considered the arguments for and against adoption of the WasteMINZ guidelines, and consider that at present, the MfE guidelines should prevail. I accept the argument in the applicants closing submissions that whilst rule 5.100 covers discharges from the cleanfill, the waste acceptance criteria is contained in rule 5.178, which uses the present CLAWP definition which references the MfE guideline. This will remain until such time as the Council changes the CLAWP. I must decide the application under the current plan, and cannot speculate whether it may change in future.
- 6.35 I also note that while the existing consent also references the MfE guideline, the proposed conditions of consent will be more restrictive, as soils placed within the fill will not exceed background levels within B Block and C Blocks North and South. Further, the groundwater expert's conclusions as to water quality effects are that any effects will be minor, and groundwater monitoring trigger values will be consistent with the limits contained in Schedule 8 of the Land and Water Regional Plan (LWRP) which are set at less than 50% MAV for other contaminants of health significance as listed in the NZ Drinking Water Standards. On this basis I accept that use of a more stringent standard is not necessary.
- 6.36 I do however also note that the applicant has volunteered a condition that would require compliance with the WasteMINZ guideline definition of cleanfill if that standard is adopted in future.

Groundwater Effects

- 6.37 I note that Ms Kamali's initial concerns regarding groundwater effects were expressed prior to the additional testing and assessment carried out at part of the groundwater JWS. I consider that this has addressed some of the information gaps identified by Ms Kamali. The groundwater experts reached agreement over several issues in the initial JWS, including:
- Agreement as to hydrogeological setting including flow direction and the location of downgradient bores.
 - The greatest potential for any change in groundwater quality will be for bores located within 400m downstream of the expansion areas and existing fill areas. A single private bore (M36/7411) is located within this distance down-gradient of the proposed quarry expansion C Block South however due to its depth there is a reduced risk of being affected by any localised changes in groundwater quality.

- Agreement over maximum excavation depths set out in Table 6 by Mr Hughes.
 - High rainfall events may result in infrequent and limited duration increases in groundwater levels, however the potential for saturation of cleanfill would be mitigate by the placement of a 1m layer of VENM.
 - Any effect on downgradient water quality would be aesthetic only, and dissipate within a few hundred metres.
- 6.38 Ms Kamali expressed remaining concerns concerning groundwater monitoring including uncertainty as to ground water conditions in C block, and other information gaps.
- 6.39 I am satisfied that these issues have now been addressed in the additional groundwater JWS, whereby both experts now agree as to the identification of bores to be used for monitoring purposes, including automated real time monitoring at M36/20450, and manual monitoring elsewhere. This would enable an achievable response time to any level changes arising from rainfall events.
- 6.40 I agree that the Cleanfill Management Plan now proposed applies waste acceptance criteria that are more stringent than those that apply to the current area of cleanfill. A new monitoring bore (Bore 5) is proposed downgradient of Bore BX23/0271. I agree the conditions and trigger values proposed will ensure that cumulative groundwater effects will not arise, and that response actions will be taken should an investigation determine that fill placed within B and C Blocks is causing exceedance of the trigger values.
- 6.41 On the basis of the groundwater evidence, I am satisfied that any adverse effects on groundwater levels and quality will be acceptable.

Consent Duration

- 6.42 Ms Kamali considered that a reduced consent duration matching that of the existing water take should be imposed, due to uncertainty as to availability of water for dust suppression. I have considered this issue and find that there is insufficient basis for requiring this, as:
- The other existing quarry consents including those for excavation and deposition, and for discharges to air have already been granted to September 2045, which is 10 years beyond the water take.
 - An additional water source beyond 2035 will be required for the existing fill anyway.
 - The proposed additional activities subject to this decision would finish earlier than this, in 2042.
 - Ms Ryan has accepted that there is sufficient water available for dust suppression and has recommended limiting the exposed area further, which will require less water for dust suppression.
 - I agree that less water will be required during the rehabilitation stages.

Covenants

- 6.43 I accept the applicant's closing argument that covenants in relation to future land uses are not necessary, as any prospective landowner will be subject to whatever rules are in force at any time, and will be able to readily access necessary information through due diligence including LLUR and LIM processes.

Draft Conditions

- 6.44 The applicant provided an amended set of draft conditions with their closing submissions, that included amendments proposed at the hearing and additional amendments arising from subsequent conferencing and amendments.
- 6.45 I have reviewed and accepted the majority of amendments to conditions, and have also modified some to correct references. There were some requested amendments and deletions that I have not agreed with, and I have modified the conditions accordingly. These include:
- The draft conditions did not include a condition requiring surrendering of the existing consent RM165687 relating to the bunds, which the applicant offered to include. I have included a condition to require this.
 - Draft SDC and CRC conditions as to duration of activities sought terms starting from the commencement of quarrying activities. I have amended this to refer to the commencement date of this consent, which provides more certainty as to the end date, and will be consistent with the 20 year consent duration sought by the applicant.
 - The applicant sought deletion of a condition requiring fencing of the expanded quarry area to prevent deposition of material from the existing quarry into the new areas, as the waste acceptance criteria for clean fill will be different. I agree that a fence would be impracticable and onerous, however consider that a condition requiring demarcation on site is still required. I have included a condition that would enable this to be done using temporary bollards or similar that may be moved as work progresses, and provides a more practicable solution.
 - The applicant sought reduction in response times for CRC staff to respond to and certify various management plans. I have agreed that they be reduced, but by a lesser margin.

Overall Effects Conclusions

- 6.46 Based on the evidence provided at the hearing and in the subsequent JWS's and closing submissions, and subject to conditions, I agree that the adverse environmental effects of the proposed quarry expansion will be acceptable in the rural environment and will not result in adverse effects on rural residents that are more than minor.
- 6.47 I find that the adverse effects of extraction and placement of cleanfill, use of water for dust suppression, and discharges to air and groundwater will be minor.

7. OBJECTIVES AND POLICIES

Operative Selwyn District Plan

- 7.1 Ms Conlon-Geddes identified the relevant OSDP objectives and policies in relation to land and soil, water, and quality of the environment. She was not satisfied that the distance between the proposed quarrying activities and the existing dwelling at 726 Robinsons Road, which is a sensitive activity, had been sufficiently addressed to ensure amenity values are maintained, and raised concerns as to cumulative effects.
- 7.2 I note that this assessment was made prior to the change in quarry setback from the 726 Robinsons Road dwelling, and that I have found the expert evidence to demonstrate that the proposal will not give rise to adverse effects including noise, visual impact and dust nuisance. I have also found that the proposal will not result in

significant adverse cumulative effects.

- 7.3 For these reasons, I do not consider the proposal to be inconsistent with the OSDP objectives and policies relating to rural character and amenity values.

Proposed Selwyn District Plan

- 7.4 I agree with Ms Conlon-Geddes note that the PSDP contains objectives and policies that provide a clear direction of facilitating mineral extraction in the rural area, subject to managing adverse effects. In this case, for the reasons outlined above, I find that adverse land use effects on rural amenity values of sensitive activities will be acceptable, and I consider the proposal to be consistent with the PSDP objectives and policies.

National Policy Statement for Freshwater Management 2020 (NPS-FM 2020)

- 7.5 Ms Kamali and Ms Kelly both addressed the NPS-FM 2020 in their evidence. Ms Kamali was concerned that the lack of a 1m separation between the maximum excavation depth and highest groundwater level, and non-adherence to the WasteMINZ guidelines may result in an adverse impact on the health and wellbeing of the underlying aquifer and be inconsistent with the NPS First Priority – “*The health and well-being of water bodies and freshwater ecosystems.*” She considered that additional information as to excavation depth and compliance with the WasteMINZ guidelines is necessary to avoid this potential.
- 7.6 On the basis of the information now provided and my findings above in relation to effects, including the additional assessment and mitigation agreed in the groundwater JWS, I find that the application now demonstrates consistency with the first priority.
- 7.7 I also find that the agreements in the JWS as to effects on downstream bores means that the second priority “*The Health Needs of People*” is given effect to.
- 7.8 I also that the doubt expressed by Ms Kamali as to the alignment with the third priority – “*The ability of people and communities to provide for their social, economic and cultural well-being, now and in the future-*” is now satisfied by the certainty provided as to groundwater levels and separation.
- 7.9 Ms Kamali provided discussion of relevant policies of the NPS-FM 2020, and considered that uncertainty as to groundwater depths and excavation levels, and information gaps gave rise to potential inconsistency with Policy 3, Policy 5, Policy 13, Policy 14 and Policy 15. She considered that significantly more information and assessment, and potentially also some amendment to the application, was required to demonstrate consistency with the NPS-FM 2020. I consider that the amendments and information now provided, and imposition of conditions including those recommended by Ms Kamali mean that these concerns have been satisfied.
- 7.10 Overall I find the proposal to be consistent with the NPS-FM2020.

Canterbury Regional Policy Statement (CRPS)

- 7.11 Ms Kamali assessed the provisions of *Chapter 5: Land-use and Infrastructure*, and found that “*the activity is not entirely consistent with, but is also not entirely contrary to the relevant objectives and policies of Chapter 5.*” She agreed that the CRPS defines rural activities including quarrying and that quarries are generally appropriate in rural locations. Her reservations related to proximity to sensitive rural residential properties.

- 7.12 Given the now proposed increased separation and mitigation measures in relation to the Miller property, I find that this concern has now been addressed.
- 7.13 I have considered the matters raised by Ms Kamali in relation to *Chapter 7: Freshwater*. Due to uncertainty as to separation of fill from groundwater, she considered that the proposal in its current form was generally not consistent with the relevant objectives and policies, however could be significantly more consistent with the relevant objectives and policies of Chapter 7 of the CRPS if the Applicant provided all of the additional information specified in her report, as well as amendments and conditions.
- 7.14 I am satisfied that the concerns expressed by Ms Kamali have been addressed by the amendments and further information provided by Mr Hughes and in the groundwater JWS's, and that the proposal is now consistent with Chapter 7.
- 7.15 I find that the amended setback from the 726 Robinsons Road dwelling, and proposed monitoring and dust suppression conditions mean that the proposal is now consistent with the relevant air quality policies contained in Chapter 14.
- 7.16 Overall I consider that the concerns expressed by Ms Kamali in relation to the CRPS have been satisfied.

Canterbury Land and Water Regional Plan (CLAWP)

- 7.17 Ms Kamali considered that the proposal is inconsistent with several of the policies and intent of the LWRP. In regard to the policies relating to ensuring groundwater quality is safeguarded and the discharge of contaminants is avoided, minimised and/or mitigated, she considered the consistency with these policies was dependent on further clarity from the applicant regarding excavation depth and monitoring, and on the material being deposited meeting the definition of clean and inert fill.
- 7.18 I have discussed these matters and my findings in my effects evaluation above, and find that the additional amendments and information now provided mean that these concerns are now satisfied.
- 7.19 I find that overall, the proposal is now consistent with the relevant objectives and policies of the CLAWP.
- 7.20 She considered that the proposal is consistent with amended policies in CLAWP Proposed Change 7.

Canterbury Air Regional Plan (CARP)

- 7.21 I note that Ms Kamali considered the proposal currently inconsistent with the objectives and policies of the CARP, however subject to the Applicant implementing all proposed mitigation and subject also to the Applicant adopting the additional mitigation recommended, the proposal had the potential to be generally consistent with the relevant policies and objectives.
- 7.22 I consider that given the amendments to the application and proposed conditions, that the concerns raised by Ms Kamali have been addressed and the proposal is now consistent with the matters which she had identified.

8. STATUTORY ASSESSMENT AND PART 2 OF THE ACT

- 8.1 Consideration of applications under section 104 of the Act is “*subject to*” the purpose

and principles of the Act set out in Part 2, Sections 5 to 8. The Part 2 matters of particular relevance to this case are as follows.

5(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Section 7 requires that particular regard be had to various matters, including:

- The efficient use and development of natural and physical resources;*
- The maintenance and enhancement of amenity values; and*
- Maintenance and enhancement of the quality of the environment.*

8.2 I have had regard to all of these matters and the matters specified in Section 104 of the Act, and consider the proposals to be consistent with Part 2.

8.3 I also agree with Ms Kamali that the relevant plan objective and policies have been appropriately prepared to give effect to Part 2 of the RMA, therefore having regard to the principles established by *RJ Davidson Family Trust v Marlborough District Council (2018)* I do not consider it necessary to resort to Part 2 to provide additional meaning.

9. DECISIONS

Selwyn District Council Consent

For the reasons detailed in this decision resource consent application RC215749 by Winstone Aggregates Limited (a Division of Fletcher Concrete and Infrastructure Limited) for land use consents associated with an extension to an existing quarry and backfilling operation at 692 and 706 Robinsons Road, Prebbleton is **approved** under sections 104, 104B and 108 of the Resource Management Act 1991, subject to the conditions contained in **Appendix One** to this decision.

Canterbury Regional Council Consents

For the reasons detailed in this decision resource consent applications CRC213142, CRC213143, CRC213144, CRC213145, and CRC213146 by Winstone Aggregates Limited (a Division of Fletcher Concrete and Infrastructure Limited) for land use and discharge consents associated with an extension to an existing quarry and backfilling operation at 692 and 706 Robinsons Road, Prebbleton are **approved** under sections 104, 104B and 108 of the Resource Management Act 1991, subject to the conditions contained in **Appendix Two** to this decision.



Graham R Taylor

Hearing Commissioner

27 June 2022

Appendix One – Selwyn District Council Conditions

Appendix One

Wheatsheaf Quarry – Selwyn District Council Conditions

Land Use Consent RC215749 for extension to an existing quarry and backfilling operation at 692 and 706 Robinsons Road, Prebbleton

1. That the proposed activities shall proceed in general accordance with the information and plans submitted with the application, except where otherwise stated in the conditions of this consent, including the following documents and plans:
 - (a) *'Expansion of Wheatsheaf Quarry Application for Land Use Consent and Assessment of Environmental Effects'*, prepared for Winstone Aggregates, dated 22 September 2021, by Boffa Miskell Limited
 - (b) *'Wheatsheaf Quarry Expansion, Environmental Noise Assessment'*, (Rp 001 R02 21090729), prepared by Marshall Day Acoustics, dated 14 November 2019
 - (c) *'Wheatsheaf Quarry Expansion Landscape and Visual Effects Assessment'*, prepared by Boffa Miskell Limited, dated 26 November 2019
 - (d) *'Addendum Landscape and Visual Effects Assessment'*, prepared by Boffa Miskell Limited, dated 21 September 2021
 - (e) *'Wheatsheaf Quarry Expansion Landscape and Visual Amenity Graphic Supplement'*, prepared by Boffa Miskell Limited, dated 22 November 2019 which identifies the required setbacks from existing residential dwellings at 703, 679 and 663 Robinsons Road.
 - (f) *'Wheatsheaf Quarry Site'* Plan, prepared by Boffa Miskell Ltd, dated 11 December 2019
 - (g) *'Landscape Strategy'* Plan, Figure RG1, prepared by Boffa Miskell, dated 15 March 2022 (attached to the evidence of Rhys Girvan dated 16 March 2022) which identifies the required 80m setback from the existing residential dwelling at 726 Robinsons Road.
 - (h) *'Cross Sections A-A and B-B'*, Figure RG2, prepared by Boffa Miskell, dated 15 March 2022 (attached to the evidence of Rhys Girvan dated 16 March 2022)
2. The volume of aggregate material extracted from B Block, C Block- North and C Block-South shall not exceed 700,000 tonnes per annum
3. The daily volume of aggregate material extracted from B Block, C Block-North and C Block-South shall not exceed 4,000 tonnes per day.
4. The construction, formation and stabilisation of the total length of the B Block and C Block - North earth bund as shown on Figure RG1 dated 15 March 2022 (attached to the evidence of Rhys Girvan dated 16 March 2022) shall be undertaken prior to any quarrying activities occurring within these two blocks and shall remain in place until cleanfilling of B-Block and C-Block North is complete.

The outer face of the bund shall be grassed along its length except for the southern section of bund adjacent to the dwelling at 726 Robinsons Road (as shown on Figure RG1) which shall be planted during the first planting season (October-December) following the construction of the bund, with low growing native plants selected from the following list:

- a. *Carmichaelia australis*

- b. *Coprosma acerosa*
 - c. *Olearia odorata*
 - d. *Sophora prostrata*
 - e. *Carex Comans*
 - f. *Poa cita*
 - g. *Poa colensoi*
5. The construction, formation, and stabilisation of the total length of the C Block South earth bund as shown on Figure RG1 attached to the evidence of Rhys Girvan dated 15 March 2022 shall be undertaken prior to any quarrying activities occurring within this block and shall remain in place until cleanfilling of C-Block South is complete. The bund shall be seeded with grass as soon as ground conditions are suitable for grass strike.
 6. The existing shelter planting located on the Robinsons Road frontage of the site extending from the C Block - North bund to the south east corner of the site frontage shall be retained until C Block – South rehabilitation is complete.
 7. The applicant shall surrender resource consent RM165687 on the commencement of the exercise of this resource consent, being when construction of either of the bunds required by conditions 4 or 5 is commenced.
 8. The Consent Holder shall advise the District Planning Manager at least 5 days prior to the commencement of quarrying activities.
 9. The expansion areas shall operate in accordance with a Quarry Management Plan (QMP) certified by Canterbury Regional Council that will include:
 - (a) The Cleanfill Management Plan (prepared in accordance with Canterbury Regional Council resource consent CRC213142).
 - (b) The Site Environmental Management Plan (prepared in accordance with resource consent CRC2142).
 - (c) The Dust Management Plan prepared in accordance with Canterbury Regional Council resource consent CRC213144.
 10. Vehicle and heavy machinery speeds within the site shall not exceed 20 km/h.
 11. The quarry shall be closed to the public prior to 0700 hours and after 1800 hours daily.
 12. The quarrying, extraction and rehabilitation activities shall only occur between 0700 to 1800 hours, Monday to Friday, and 0700 to 1300 hours on Saturdays (excluding Sundays and public holidays) however no activities shall occur before 0730 hours within 120m of the existing dwelling at 726 Robinsons Road.
 13. All extractive activities shall be setback as follows:
 - a. From the existing residential dwellings at 703, 679 and 663 Robinsons Road as shown on Figure 5 of the 'Wheatsheaf Quarry Expansion Landscape and Visual Amenity Graphic Supplement', prepared by Boffa Miskell Limited, dated 22 November 2019, and
 - b. From the existing residential dwelling at 726 Robinsons Road as shown on the 'Landscape Strategy' Plan, Figure RG1, prepared by Boffa Miskell, dated 15 March 2022.

14. Other than construction activities as defined separately under Condition 13, noise from all activities on-site including any mobile machinery and vehicles shall not exceed the following limits, measured at the notional boundary of any other site not owned by the consent holder:

- Daytime (0700 to 2200 hours) hours - 55 dB LAeq and 85 dB LAFmax
- Night-time (2200 hours to 0700 hours) - 45 dB LAeq and 70 dB LAFmax

15. Construction activities shall be managed in accordance with the requirements of NZS6803:1999 Acoustics - Construction Noise and any noise generated shall comply with the limits given in Table 2 of that standard for typical duration activities.

Once the extended quarry area is established overburden removal and construction of earth bunds shall continue to be construction activities but may be undertaken for periods not exceeding 3 weeks at any time.

For the purposes of this condition, "construction activities" means site establishment, the construction, rehabilitation and removal of earth bunds, overburden removal and the creation of any access roads into the extended quarry area.

16. Any equipment permanently based at the quarry site shall not be fitted with tonal reversing beepers.

17. No stockpiling of aggregate and soil stockpiles shall occur within B-Block and C-Block North and South.

18. Quarrying activities and rehabilitation, including cleanfill deposition from natural ground level that occurs within 200 metres of the downwind site boundary shall cease when wind speeds exceed 10m/sec (or 36km/hour). For the purposes of monitoring this condition the Consent Holder shall install an anemometer on-site.

19. Notwithstanding Condition 19 and 20, site activities shall cease when those activities cause visible dust beyond the Consent Holder's property.

20. 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 rolling scalar average); and
- (b) Quarry activities would be upwind of a sensitive receptor (1-hour rolling average wind direction); and
- (c) Less than 1 mm of rain has fallen during the preceding 12 hours.

21. The Consent Holder shall apply the following measures to mitigate potential effects at 703, 700 and 679 Robinsons Road:

- (a) Quarrying and clean-filling activities within 250m of the existing residential dwellings at 703, 700 and 679 Robinsons Road shall cease during strong dry winds that blow from the site towards those receptors. Dust mitigation measures, such as the use of a watercart for dust suppression, shall continue during these events. This shall include winds on dry days from 340°N through to 140°N and when the hourly rolling average wind speed is greater than 7 m/s.
- (b) Continuous PM10 dust monitoring to warn of potential dust trigger events shall be undertaken.
- (c) The location of the existing two monitors, particularly the Wheatsheaf 1 monitor, shall be relocated to the south between quarrying and neighbouring houses (703,

700 and 679 Robinsons Road) when quarrying of B Block is within 250m of any neighbouring dwellings.

(d) The dust monitoring trigger levels and response actions that shall be applied are as follows:

- i. 60 $\mu\text{g}/\text{m}^3$ as a 1-hour average for taking immediate actions to investigate and reduce site dust emissions.
- ii. 70 $\mu\text{g}/\text{m}^3$ as a 1-hour average for ceasing all quarry activities (other than dust suppression activities) and taking immediate actions to investigate and reduce site dust emissions.

Advice note: A third PM_{10} dust monitor may be required for some stages of the quarry development to meet the monitoring requirements of condition 19.

22. The Consent Holder shall apply the following measures to mitigate potential effects at 726 Robinsons Road:

- (a) Quarrying and clean- filling activities within 250m of the existing residential dwelling at 726 Robinsons Road shall cease during strong dry winds that blow from the site towards this receptor. Dust mitigation measures, such as the use of a watercart for dust suppression shall continue during these events. This shall include winds on dry days from 55°N through to 200°N and when the hourly rolling average wind speed is greater than 7 m/s; and
- (b) Continuous PM_{10} dust monitoring to warn of potential dust trigger events shall be undertaken.
- (c) The location of the existing two monitors, particularly the Wheatsheaf 1 monitor, shall be relocated to between the quarry and 726 Robinsons Road when quarrying within 100m of 726 Robinsons Road.
- (d) The dust monitoring trigger levels and response actions that shall be applied are as follows:
 - iii. 60 $\mu\text{g}/\text{m}^3$ as a 1-hour average for taking immediate actions to investigate and reduce site dust emissions.
 - iv. 70 $\mu\text{g}/\text{m}^3$ as a 1-hour average for ceasing all quarry activities (other than dust suppression activities) and taking immediate actions to investigate and reduce site dust emissions.

23. Within 6 months of the completion of quarrying activities in B-Block and C-Block South and on a progressive basis, the consent holder shall commence rehabilitation of quarried land with (as a minimum) topsoil and grass. Such rehabilitation work shall be completed as soon as practicable having regard to ongoing quarrying activities.

24. All extraction, clean-filling and rehabilitation activities must be completed within the timeframes specified below:

- a. B-Block within 10 years from the commencement date of this consent; and
- b. C-Block North within 14 months from the commencement date of this consent; and
- c. C-Block South within 20 years from the commencement date of this consent.

25. The first 1m of backfill above the maximum excavation surfaces shall be material sourced from the application site and shall only consist of virgin soil, aggregate and clays.

26. A record of any complaints relating to quarrying operations shall be maintained, supplied to the Selwyn District Council on request, and shall include:
- (a) Location where the event was detected by the complainant.
 - (b) The location of the complainant when the event / incident was detected (if possible specify the nature of the incident e.g. noise, dust).
 - (c) Date and time when the event was detected.
 - (d) A description of the wind speed and wind direction when the event was detected by the complainant.
 - (e) The most likely cause of the event detected.
 - (f) Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the event detected by the complainant; and
 - (g) Any other relevant information.
27. Within 6 months of the exercise of this consent, the consent holder shall provide to the Selwyn District Council a Rehabilitation Plan for certification. The Plan shall include:
- (a) Backfilling of excavated areas with cleanfill, so that all of B Block and C Block-North are rehabilitated back to existing ground level, and C Block-South is contoured to slope towards the rehabilitated area in the existing quarry, to create a natural topography.
 - (b) Spreading a minimum depth of 300mm of topsoil over the excavated areas. The Consent Holder shall utilise stored overburden and topsoil from within B Block and C Blocks North and South and the bunds around those areas (as shown on Figure RG1) to rehabilitate the site and shall achieve the topography described in Condition 26 (a); and
 - (c) Topsoil is not to be compacted during spreading; rather topsoil is to be tilled or ripped to improve drainage; and
 - (d) A free-draining and stable landform shall be achieved; and
 - (e) All exposed areas shall be re-grassed or re-planted with indigenous vegetation during rehabilitation of the site as soon as practicable to prevent erosion losses; and
 - (f) During the final stages of rehabilitation, all mobile machinery and plant shall be removed from the site; and
 - (g) The site shall be suitable for future uses as detailed in the Quarry Rehabilitation Plan and shall reflect those that are appropriate in a rural zone such as primary production; and
 - (h) A completed grass cover over rehabilitated areas shall be achieved no later than 5 months from completion of cleanfilling activities. Dust mitigation measures (in accordance with CRC213145) must continue to be employed on site until this grass or vegetated cover is achieved; and
 - (i) The growth and condition of the vegetation cover shall be monitored, and reseedling shall occur if the germination rate is not satisfactory. Maintenance activities such as controlling weeds, mowing and/or grazing shall be undertaken for a period of 24 months following planting to ensure that a minimum 80% grass or vegetated cover is achieved within that timeframe.

28. Within ten working days of each anniversary of the date of this decision the Council 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 resource consent for any of the following purposes:

- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent which were not foreseen at the time the application was considered and which it is appropriate to deal with at a later stage.
- (b) To deal with any adverse effects on the environment which may arise from the exercise of the consent and which could not be properly assessed at the time the application was considered.
- (c) To avoid, remedy and mitigate any adverse effects on the environment which may arise from the exercise of the consent and which have been caused by a change in circumstances or which may be more appropriately addressed as a result of a change in circumstances, such that the conditions of this resource consent are no longer appropriate in terms of the purpose of the Resource Management Act 1991.

29. If the consent holder:

- (a) discovers koiwi tangata (human skeletal remains), waahi taoka (resources of importance), waahi tapu (places or features of special significance) or other Maori artefact material, the consent holder shall without delay:
 - i. notify Council, Tangata whenua and Heritage New Zealand Pouhere Taonga and in the case of skeletal remains, the New Zealand Police.
 - ii. stop work within the immediate vicinity of the discovery to allow a site inspection by the Heritage New Zealand Pouhere Taonga and the appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive, if a thorough site investigation is required, and whether an Archaeological Authority is required.
 - iii. Any koiwi tangata discovered shall be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation. Site work shall recommence following consultation with Council, the New Zealand Pouhere Taonga, Tangata whenua, and in the case of skeletal remains, the New Zealand Police, provided that any relevant statutory permissions have been obtained.
- (b) discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder shall without delay:
 - i. stop work within the immediate vicinity of the discovery or disturbance and;
 - ii. advise Council, the Heritage New Zealand Pouhere Taonga and in the case of Maori features or materials, the Tangata whenua and if required, shall make an application for an Archaeological Authority pursuant to the New Zealand Pouhere Taonga Act 2014 and;
 - iii. arrange for a suitably qualified archaeologist to undertake a survey of the site.
- (c) Site work may only recommence following consultation with Council.

Appendix Two – Canterbury Regional Council Conditons

1 Appendix Two

Wheatsheaf Quarry – Canterbury Regional Council Consent Conditions**CRC213142 - To use land for quarrying activities (extraction and cleanfilling); and
CRC213143 – To use land for deposition of fill**

	LIMITS
2	<p>The activity authorised by this resource consent shall be limited to:</p> <ol style="list-style-type: none"> Excavation of material, including topsoil and quarry gravels; and For the purpose of rehabilitation of the Quarry Pit, the deposition of: <ol style="list-style-type: none"> Cleanfill; and Overburden and topsoil stored within the bunds or on-site. <p>at 692 Robinsons Road and 706 Robinsons Road, legally described as LOT 2 DP 478287, LOT 1 DP 25795, LOT 1 DP 467327, and LOT 1 DP 80577 BLK IV LEESTON SD, as shown on Plan CRC213142A, attached to and forming part of this resource consent.</p> <p><i>Advice Notes:</i></p> <ol style="list-style-type: none"> <i>For the avoidance of doubt, no stockpiling or crushing of aggregate is authorised by this resource consent.</i> <i>Cleanfill for the purposes of this consent is defined in Schedule 1 attached to this consent.</i>
3	<p>Prior to the commencement of quarry activities authorised by Condition (1) of this resource consent the Consent Holder must implement the Enabling Works so defined in resource consents CRC213142, and CRC213145.</p>
	ENABLING WORKS
	Quarry Management Plan
4	<ol style="list-style-type: none"> At least 40 working days prior to the commencement of activities authorised in Condition (1), the Consent Holder must prepare and submit a Quarry Management Plan (QMP) to the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring for certification. The QMP must: <ol style="list-style-type: none"> Include a description of the content and purpose of the QMP; and Include the name, experience and qualifications of the person(s) nominated by the Consent Holder to supervise the implementation of, and adherence to, the QMP; and A plan showing the boundaries of the areas of extraction including B and C Blocks. Details of setbacks from the existing residential dwellings at 703, 679 and 663 Robinsons Road and the existing dwelling at 726 Robinsons Road (the setbacks from the residential dwellings on Robinsons Road being shown on Figure 5 of the Wheatsheaf Quarry

	<p>Expansion Landscape and Visual Amenity Graphic Supplement', prepared by Boffa Miskell Limited, dated 22 November 2019, and the setback from the dwelling at 726 Robinsons Road being shown on the 'Landscape Strategy' Plan, Figure RG1, prepared by Boffa Miskell, dated 15 March 2022), shelterbelts to be retained and removed and the location of bunds;</p> <ul style="list-style-type: none"> v. Provide details of the operation of the site, including details of staging of works, area, depth, cleanfilling activities and site rehabilitation; vi. Provide details of the on-site staff training procedures; vii. Provide a description of the proposed methods of any enabling works including overburden removal operations including stripping and placement of material; viii. Provide a description of all relevant site operations and procedures; ix. Address all operational traffic aspects including those relating to the cleaning of Selwyn Road from debris created by the passage of trucks. in and out of the site; x. Set out all consent conditions and any other mitigation measures to be employed to minimise environmental effects and/or adhere to best practice; xi. Contain the following management plans, prepared in accordance with the conditions of this resource consent: <ul style="list-style-type: none"> (a) The Cleanfill Management Plan (Condition 7) of this resource consent; and (b) The Site Environmental Management Plan (Condition 8) of this resource consent; and (c) The Dust Management Plan prepared in accordance with resource consent CRC213145. <ul style="list-style-type: none"> b. If the Consent Holder has not received a response from the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring confirming certification of the QMP, or specifying recommended amendments to the QMP, within 40 working days of the date of submission under Condition (3)(a) the QMP shall be deemed to be certified. c. In considering the QMP for the purpose of certification, Canterbury Regional Council may, due to the scale or complexity of the QMP, extend the time period for certification provided the extended time period does not exceed a further 40 working days. d. If the response from the Canterbury Regional Council is that Council is not able to certify the QMP, the Consent Holder must consider any reasons and recommendations provided by Council, amend the QMP accordingly, and resubmit the QMP to the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring. <p><i>Advice note. The certification process is confined to confirming that the Quarry Management Plan adequately gives effect to the Condition(s) of this consent.</i></p>
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5	<p>a. The QMP, including the Management Plans referred to in Condition (3)(a)(xi), must be reviewed and updated as necessary and at least every two years. Any amendments must be:</p> <ul style="list-style-type: none"> i. For the purpose of applying best practicable measures to mitigate adverse effects resulting from the activities occurring on-site; or ii. For the purpose of improving the efficacy of the QMP; or iii. To ensure consistency with the conditions of this resource consent. <p>b. The updated QMP must be submitted to Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring, for certification in accordance with Condition (3) prior to any amendment being implemented.</p> <p><i>Advice Note: for the avoidance of doubt if any management plan conflicts with this consent, the consent shall take precedence.</i></p>
	Investigation and Remediation
6	<p>Prior to the commencement of quarrying activities on site in accordance with Condition (1), the Consent Holder must:</p> <ul style="list-style-type: none"> a. engage a Suitable Qualified and Experienced Practitioner (SQEP) on contaminated land matters to undertake a Detailed Site Investigation (DSI), including soil sampling of the farm shed to the rear (east) of the dwelling at 692 Robinsons Road, and its immediate surrounds which may contain lead-based paint as described in the Preliminary Site Investigation by Golder dated June 2021 (Ref. 21468860-002-R-Rev0). b. Should the DSI undertaken in accordance with Condition (5)(a) of this resource consent find soils or any other material exceeding the regional background levels at the site, the area shall be remediated and a site validation report (SVR) shall be provided to the CRC Contaminated Sites Team (contaminated.land@ecan.govt.nz) for approval, prior to commencement of quarrying activities.
7	<p>The Consent Holder must:</p> <ul style="list-style-type: none"> a. Dispose of all material removed in accordance with Condition (5)(b) off-site at a suitably licenced facility; and b. Provide the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring with written confirmation of the disposal undertaken in accordance with Condition (6)(a) within ten working days of the disposal taking place; and c. Waste disposal dockets shall also be provided as part of the SVR provided to the CRC Contaminated Sites Team as required by Condition (5)(b) of this resource consent.
	Cleanfill Management Plan
8	<ul style="list-style-type: none"> a. There shall be no cleanfilling undertaken at the site until a site specific Cleanfill Management Plan (CMP) has been prepared, certified by the Canterbury Regional Council in accordance with Condition (3) of this resource consent, and implemented for the site.

	<p>b. The CMP must be retained on site at all times and the Consent Holder must ensure all appropriate personnel working on the site are made aware of and have access to it.</p> <p>c. The CMP shall:</p> <ul style="list-style-type: none"> i. Include a description of the content and purpose of the CMP; ii. Demonstrate how the conditions of this resource consent will be complied with; iii. Detail the operation of the site, including staging of works, area, depth, cleanfilling activities and site rehabilitation; iv. Detail the on-site staff training procedures; v. Include the contact information of the staff member(s) responsible implementing the CMP; vi. Detail the actions to be undertaken to ensure compliance with the conditions of this resource consent and actions to be undertaken in response to any incident that may adversely affect the environment; vii. Detail the steps to be undertaken to correct incidences of non-compliance with the conditions of this consent; viii. Include the specific location of cleanfill placement areas; ix. Describe operational procedures and monitoring that will be used to prevent unauthorised material from entering the site or being deposited as cleanfill in B-Block and C-Block North and South x. Detail the waste acceptance criteria (WAC) in Schedule 1 to this consent; xi. Include a list of acceptable cleanfill materials, being those materials listed in Schedule 1 to this consent; xii. Include a list of unacceptable and prohibited materials; xiii. Detail how rejected cleanfill material will be stored pending its removal to an authorised landfill; xiv. Include procedures for random load inspections and verification sampling procedures; xv. Detail the maximum length of time that rejected material can be stored on site pending its removal; xvi. Include construction procedures to ensure the long-term stability of cleanfill areas; xvii. Include a timetable of works; xviii. Detail procedures for improving and/or reviewing the CMP; and xix. Detail procedures for responding to complaints. <p><i>Advice Notes:</i></p> <ul style="list-style-type: none"> 1. <i>The CMP should be sent to the main CRC email address (ecinfo@ecan) so the report can be properly routed.</i> 2. <i>The certification process is confined to confirming that the Cleanfill Management Plan adequately gives effect to the Conditions of this consent.</i>
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	<p>3. <i>For the avoidance of doubt, the CMP forms a part of the Quarry Management Plan (QMP). Accordingly, "certification" will occur under Condition (3) of this resource consent.</i></p>
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	Site Environmental Management Plan (SEMP)
9	<p>a. The Site Environmental Management Plan (SEMP) forms a section of the Quarry Management Plan (QMP), in accordance with Condition (3) of this consent.</p> <p>b. The SEMP must:</p> <ul style="list-style-type: none"> i. Contain a description of the content and purpose of the SEMP; and ii. Document measures to prevent leaks and avoid spills of fuels or any other hazardous substance; including the following measures: <ul style="list-style-type: none"> a. No refuelling or maintenance of vehicles or machinery can occur on the quarry pit floor; and b. No storage of fuels or lubricants for vehicles and machinery within the quarry pit; and c. Appropriate servicing and maintenance of vehicles and machinery such that they do not result in leaks or spills; and d. Only undertaking refuelling or maintenance on vehicles or machinery on impervious hardstand surfaces or using a drip tray under the refuelling point; and e. Training all staff involved in the refuelling or maintenance activities in the use of spill kits. iii. Set out procedures to be undertaken in the event of a spill of fuel or any hazardous substance, including: <ul style="list-style-type: none"> a. Emergency contact information for the Canterbury Regional Council Pollution Hotline; and b. Emergency contact information for a waste management service provider with appropriate qualifications and equipment for cleaning up spills of oil and petroleum products; and c. Instructions for using the spill kit kept on site; and d. Detail instructions for removing and disposing of contaminated material excavated during the remediation works under Condition (5) in a manner suitable to ensure no contamination of ground water or surface water occurs; and e. Detail contingency measures to be used on site; and f. Include a Spill Response Plan; and g. Detail instructions for removing and disposing of all material potentially contaminated or contaminated by a spill; and h. Detail measures for reporting and recording spills including: <ul style="list-style-type: none"> A. Informing the CRC, Attention: Regional Leader - Compliance Monitoring within 24 hours of a spill event exceeding four litres and providing the following information: <ol style="list-style-type: none"> 1. The date, time, location and estimated volume of the spill; and 2. The cause of the spill; and

	<p>3. The type of hazardous substance(s) spilled; and</p> <p>4. Clean up actions undertaken; and</p> <p>5. Details of the steps taken to control and remediate the effects of the spill on the receiving environment; and</p> <p>6. An assessment of any potential effects on the environment of the spill; and</p> <p>7. Measures to be undertaken to prevent a reoccurrence of the spill and</p> <p>g. Set out staff training requirements for responding to spills.</p> <p>iv. The Consent Holder shall maintain a record of all spills on site and provide this to the Canterbury Regional Council in September of each year or on request.</p> <p><i>Advice notes:</i></p> <p>1. <i>The SEMP should be sent to the main CRC email address (ecinfo@ecan) so the report can be properly routed.</i></p> <p>2. <i>The SEMP will be certified through the certification of the QMP in Condition (3) of this consent.</i></p> <p>3. <i>The storage of hazardous substances should be managed in accordance with Section 9 of the Resource Management Act 1991 and the Hazardous Substances and New Organisms Act 1996 and any related Regulations.</i></p>
	Pre-commencement Site Meeting
10	<p>At least 10 working days prior to commencement of each of the activities authorised in Condition (1), the Consent Holder or their agent must invite the Canterbury Regional Council to a pre-commencement Site Meeting. At a minimum, the following must be covered at the meeting:</p> <p>i. Scheduling and staging of the works, including the proposed start date; and</p> <p>ii. Responsibilities of all relevant parties; and</p> <p>iii. Contact details for all relevant parties; and</p> <p>iv. Expectations regarding communication between all relevant parties; and</p> <p>v. Site inspections; and</p> <p>vi. Confirmation that all relevant parties have copies of the contents of these consent documents and all associated management plans.</p> <p><i>Advice Note: The Pre-commencement Site Meeting referred to above may be held in conjunction with the Pre-commencement Site Meetings required by Consents; CRC213145 and CRC213146.</i></p>
11	<p>At least 10 working days prior to the commencement of quarry activities authorised in Condition (1), the Consent Holder shall inform the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring in writing of the start date of works.</p>
12	<p>Prior to the commencement of the quarrying and cleanfilling activities authorised in Condition (1), all personnel working on the site shall be made aware of and have access to:</p> <p>a. The contents of this resource consent document; and</p>

	<ul style="list-style-type: none"> b. The Quarry Management Plan, prepared in accordance with Condition (3) of this resource consent and retained on site at all times; and c. Resource consents CRC213144, CRC213145 and CRC213146 and all associated documents.
	Operational Parameters
13	<p>The consent holder shall ensure that no more than:</p> <ul style="list-style-type: none"> a. 4,000 tonnes of aggregate are excavated per day; and b. 700,000 tonnes of aggregate are excavated per annum.
14	<ul style="list-style-type: none"> a. The perimeter of the quarry site must be surrounded by secure fencing, with lockable access gates; and b. Physical marking such as shall be provided on site between the existing quarry and the quarry expansion authorised under Condition (1) in order to demarcate the area and avoid the placement of backfill materials from the existing quarry authorised under CRC223410 that would not meet the waste acceptance criteria (WAC) under condition 20 of this consent; and c. The Consent Holder must ensure that warning notices are erected and maintained at all entrances to the site; and d. Warning notices must be able to be read from a distance of five metres; and the warning notices must state: <ul style="list-style-type: none"> i. Name of the site; and ii. Name of the owner of the site; and iii. Name of the Quarry Manager and a contact telephone number; and iv. Groundwater is vulnerable to contamination; and v. Only inert cleanfill materials may be deposited at this site; and vi. General refuse, hazardous waste, contaminated demolition waste, and contaminated soil must not be dumped at this site. <p><i>Advice Note: The marking required by condition 13(b) is not required to be a permanent fence or structure, and may comprise temporary bollards / posts or similar that are able to be moved as works progress. The condition is intended to avoid the deposition of cleanfill material authorised under CRC223410 in the expanded quarry area. This does not prevent deposition of cleanfill material authorised by this consent in the existing consented quarry area, as any cleanfill complying with condition 20 of this consent will comply with the conditions of both consents.</i></p>
15	<ul style="list-style-type: none"> a. The operating hours of the site shall be: <ul style="list-style-type: none"> i. 07:00 am to 18:00 pm on weekdays; and ii. 07:00 am to 1:00 pm on Saturdays. b. No activities other than dust mitigation measures shall be undertaken on Sundays or public holidays.

	QUARRY OPERATIONS																																				
	Excavation and Extraction																																				
16	Prior to undertaking the activities authorised in Condition (1) of this resource consent, the Consent Holder shall establish a surveyed datum point at natural ground level in an area that will not be excavated. This point shall be used to certify the depth of excavation at any point within the site described in Condition (1).																																				
17	<div>a. The Consent Holder shall survey the site prior to site preparation works described in Condition (1) of this resource consent, and annually thereafter to determine the elevations of the site relative to Lyttelton Vertical Datum 1937, including the depth of excavations.</div> <div>b. The survey referred to in Condition (18)(a):<div><div>i. Must be undertaken by a Registered Surveyor; and</div><div>ii. Results shall be to an accuracy of +/- 50 millimetres vertically; and</div><div>iii. Results of each survey shall be provided to the Team Leader Compliance, Canterbury Regional Council by 1 September of each year the quarry and cleanfill is in operation, or at any other time upon request.</div></div></div>																																				
18	<div>Excavation of aggregate and deposition of cleanfill must only occur where the quarry floor maintains at least one metre separation depth to the highest groundwater level. This shall be achieved by ensuring the base of the quarry is no deeper than:</div> <table><tr><th>Expansion Area</th><th>Ref Point</th><th>Distance up-gradient from M36/20450 (m)</th><th>Max historical groundwater level (m RL)</th><th>Max Excavation Depth (m RL)</th><th>Approx Ground Elevation (m RL)</th></tr><tr><td>B-Block</td><td>Western corner</td><td>670</td><td>23.33</td><td>24.33</td><td>33.4</td></tr><tr><td></td><td>Eastern Corner</td><td>520</td><td>22.85</td><td>23.85</td><td>32.8</td></tr><tr><td>C-Block (North)</td><td>Western Corner</td><td>690</td><td>23.40</td><td>24.40</td><td>33.1</td></tr><tr><td>C-Block South</td><td>Northern Boundary</td><td>480</td><td>22.73</td><td>23.73</td><td>32.6</td></tr><tr><td></td><td>Southern Boundary</td><td>260</td><td>22.02</td><td>23.02</td><td>31.7</td></tr></table>	Expansion Area	Ref Point	Distance up-gradient from M36/20450 (m)	Max historical groundwater level (m RL)	Max Excavation Depth (m RL)	Approx Ground Elevation (m RL)	B-Block	Western corner	670	23.33	24.33	33.4		Eastern Corner	520	22.85	23.85	32.8	C-Block (North)	Western Corner	690	23.40	24.40	33.1	C-Block South	Northern Boundary	480	22.73	23.73	32.6		Southern Boundary	260	22.02	23.02	31.7
Expansion Area	Ref Point	Distance up-gradient from M36/20450 (m)	Max historical groundwater level (m RL)	Max Excavation Depth (m RL)	Approx Ground Elevation (m RL)																																
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19	<div>The Consent holder must:</div> <div>a. Produce a contour map showing:<div><div>i. The surveyed maximum quarry depth relative to Lyttelton Vertical Datum 1937; and</div></div></div>																																				

	<ul style="list-style-type: none"> ii. The highest groundwater levels for the site monitored in accordance with Conditions (16) to (18) of this resource consent relative to mean sea level; and b. Provide the contour map to the Team Leader Compliance, Canterbury Regional Council in the Annual Report specified in Condition 38 by 30 September of each year the quarry and cleanfill is in operation, or at any other time upon request.
20	No excavations or extractions shall occur within standing water.
	Cleanfilling
21	<p>Material deposited in the excavated area for the purpose of cleanfilling the excavated quarry must:</p> <ul style="list-style-type: none"> a. Only include material included in Schedule 1 CRC213142 (Waste Acceptance Criteria) attached to and forming part of this resource consent; b. Not contain any liquid waste; c. Only include soil material that has been demonstrated by soil testing undertaken by a suitably qualified and experienced practitioner (SQEP) on contaminated land that meets the Canterbury Regional background levels for this site as described in Condition (1), including: <ul style="list-style-type: none"> i. The Canterbury Regional background levels which are described in Background concentrations of selected trace elements in Canterbury soils. Addendum 1: Additional samples and Timaru specific background levels. Environment Canterbury Report R07/1/2, Trace Elements Level 2: Regional – Recent for Heavy Metals; and ii. Buckland, S. J., Ellis, H. K., Salter, R. T. 1998. Organochlorines in New Zealand: Ambient concentrations of selected organochlorines in soils. Published by Ministry for the Environment; and iii. Tonkin & Taylor. 2007. Background concentrations of polycyclic aromatic hydrocarbons in Christchurch urban soils. Published by Environment Canterbury. Report No. R07/19. d. Only include material that is below detection limits, for contaminants such as asbestos and for organic contaminants such as TPH and BTEX, where no published regional background concentrations exist. e. Not be deposited into groundwater or standing water; and f. Be located at least one metre above the highest groundwater level as determined under the Conditions of this resource consent. <p>Advice Notes:</p> <ol style="list-style-type: none"> 1. <i>The Consent Holder may use Canterbury Maps as a tool to determine whether a source site has the same background levels of contaminants as this quarry. However, matching the background levels of the source site to this quarry does not mean the material is acceptable as cleanfill. Rather, the process to determine acceptability of the material to be deposited is described by Condition (22).</i> 2. <i>In case of other potential contaminants, not explicitly defined by this resource consent (e.g., other trace elements above detection limits), it is</i>

	<i>recommended to seek the advice of CRC regarding potential deposition of the material at this site.</i>
22	<ul style="list-style-type: none"> a. Dilution or mixing of material (and associated test results) to meet the waste acceptance criteria (WAC) specified in Condition (20) is prohibited by this resource consent; and b. The maximum reported concentration of any test results for the accepted material shall be used to determine compliance with the WAC; and c. Averaging and other statistical approaches shall not be used to determine compliance with the WAC; and d. Total analyte concentrations shall be quantified for all material received on-site for deposition.
23	<p>When material is received on-site for deposition, the Consent Holder shall:</p> <ul style="list-style-type: none"> a. Determine the weight or volume of all incoming loads of cleanfill material; b. Deposit loads of cleanfill material in an area set back from the front of the tip face to enable the inspection of loads before filling occurs; c. Inspect the load to ensure it meets the waste acceptance criteria before filling occurs; d. Reject any load that does not meet the waste acceptance criteria ; and e. Update the electronic record in accordance with Condition (23) by recording the weight or volume and inspection information referred to in Condition (22)(a)-(c).
24	<p>An electronic record of all cleanfill material deposited at the site shall be maintained and held on site for the duration of this resource consent.</p> <p>This record shall include:</p> <ul style="list-style-type: none"> a. The unique cleanfill identification number (QC number); b. The name of the Client and the company delivering the material; c. The date of delivery and date of cleanfill deposition; d. The physical address of the land the material was sourced from; e. A description of the material; f. Evidence that the load complies with the waste acceptance criteria including any laboratory reports pertaining to the composition of the material; g. Any authorisation under which the material was removed from the source site (e.g. resource consent); h. The weight or volume of the delivered material; i. The approximate location of the load within the site following deposition; and j. A signed declaration or formal agreement between each person delivering cleanfill to the site and the Consent Holder that the deposited material meets the waste acceptance criteria specified in Condition (20) of this resource consent.

	The Consent Holder shall maintain a back- up copy of the electronic record. The electronic record shall be provided in the Annual Report specified in Condition 38 to the Canterbury Regional Council Attention: Regional Leader – Compliance Monitoring by 30 September of each year the quarry and cleanfill is in operation, or at any other time upon request.															
25	<p>a. If any material other than cleanfill is suspected or confirmed at the deposition area, the Consent Holder must:</p> <p>i. Notify the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring within 24 hours; and</p> <p>ii. Provide an opportunity for the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring, or his/her representative, to attend the Quarry and inspect and/or sample the material; and</p> <p>iii. Ensure the area is marked and closed off immediately; and</p> <p>iv. Remove this material within five (5) working days of identifying that it should not have been deposited; and</p> <p>v. Arrange for its disposal at a suitably licensed or approved facility.</p> <p>b. Any material rejected in accordance with Condition (22)(d), shall be disposed of at a suitably licensed facility.</p> <p>c. The Consent Holder must provide the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring with written confirmation of such disposal within ten working days of the disposal taking place.</p>															
26	The Consent Holder must designate Staff with respect to tasks associated with the cleanfill operations. All designated staff, and any replacement staff, must receive specialist training by a Suitably Qualified and Experienced Professional (SQEP) in cleanfill management prior to commencing work in the Quarry Cleanfill.															
27	The first 1m of backfill above the maximum excavation surfaces as determined by condition 17 is to be material consisting of virgin soil, aggregate and clays.															
	Groundwater Levels Monitoring															
28	<p>a. Prior to the commencement of quarrying activities authorised in Condition (1), the Consent Holder must install groundwater monitoring bores for the purpose of monitoring groundwater levels in accordance with the coordinates specified in Condition (27)(b) and Plan CRC213142B.</p> <p>b. The new bores required in accordance with Condition (27)(a) must comprise five bores constructed within +/- 10 metres of the grid references listed below and shown on Plan CRC213142B: ,:</p> <table><tr><td></td><td>Easting (m)</td><td>Northing (m)</td></tr><tr><td>New Bore 1</td><td>1556350E</td><td>5173560N</td></tr><tr><td>New Bore 2</td><td>1556640E</td><td>5173250N</td></tr><tr><td>New Bore 3</td><td>1556845E</td><td>5147320N</td></tr><tr><td>New Bore 4</td><td>1556575E</td><td>5173810N</td></tr></table>		Easting (m)	Northing (m)	New Bore 1	1556350E	5173560N	New Bore 2	1556640E	5173250N	New Bore 3	1556845E	5147320N	New Bore 4	1556575E	5173810N
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New Bore 4	1556575E	5173810N														

	<p style="text-align: center;">New Bore 5 1556860E 5173655N (New Zealand Transverse Mercator 2000)</p> <p>c. The bores shall be:</p> <ul style="list-style-type: none"> i. constructed utilising threaded PVC casing and screened within 3 metres of the water table. ii. Be a minimum of 50 millimetres in diameter; and iii. Enter the aquifer that is immediately underlying the site; and iv. Be screened over an interval of 0.5 metres above the highest groundwater level that can be reasonably inferred at the site and 0.5 metres below the lowest groundwater level that can be reasonably inferred at the site; and v. The bores shall be accessible to the Canterbury Regional Council for the purpose of groundwater sampling.
29	Information relating to the installation of the bores required under Condition (30) shall be provided to the Team Leader Compliance, Canterbury Regional Council, within 20 working days of their installation to confirm they have been installed in accordance with the conditions of this resource consent.
30	<p>For the duration of this resource consent, the Consent Holder must monitor and record the groundwater levels (measured as above Lyttelton Vertical Datum 1937) in the bores installed in accordance with Condition (30), and in bores M36/20451 as follows:</p> <ul style="list-style-type: none"> a. Continuous (15 minute) monitoring of groundwater levels shall be undertaken in M36/20450. Monitoring data shall be available to quarry operators on a near real-time basis. b. Manual monitoring of groundwater levels shall be undertaken on a weekly basis in: <ul style="list-style-type: none"> • M36/20451 • New Bore 1 • New Bore 2 • New Bore 3 • New Bore 4 • New Bore 5
31	If the monitoring undertaken in accordance with Condition (29) demonstrates that the groundwater levels in M36/20450 increase above 21.20 m RL, the frequency of manual monitoring shall be increased to a minimum of daily, if water levels in M36/20450 increase above 21.20 m RL.
32	At all times and in all circumstances, the Consent Holder shall limit excavations to one metre above both the highest groundwater level for the site as determined by the conditions of this consent.
33	<p>Should the groundwater water level, as identified through monitoring under Condition (31), rise so that there is less than one metre separation between the measured groundwater levels and the current ground level within the quarry site (active quarry floor or ground level of any rehabilitated area), then:</p> <ul style="list-style-type: none"> a. Any machinery, other than used in accordance with Condition (34)(b), shall be moved away from these areas;

	<p>b. The Consent Holder shall backfill the area with virgin excavated natural materials (VENM) sourced from within the site to re- establish a one metre separation distance throughout the quarry site; and</p> <p>c. The Consent Holder shall decrease the maximum allowable depth of extraction in conformance with Condition (33). If the maximum allowable depth of extraction is reduced, the Consent Holder shall notify the Canterbury Regional Council, Attention: Regional Leader Compliance Monitoring within five days.</p> <p><i>Advice Note: For the purpose of this consent, 'virgin excavated natural materials' is aggregate that is of comparable quality and composition to aggregate which was excavated.</i></p>														
34	Should groundwater levels rise into the quarry floor during excavation of aggregate or deposition of cleanfill, the consent holder must notify the Team Leader Compliance, Canterbury Regional Council, within 24 hours and follow the steps outlined under Condition (32)(a) to (c).														
	Groundwater Quality Monitoring and Reporting														
35	<p>Groundwater samples shall be collected quarterly from the following bores as identified on Plan CRC213142B:</p> <ul style="list-style-type: none"> • M36/20451 • M36/20450 • New Bore 1 (1556350E 5173560N) • New Bore 2 (1556640E 5173250N) • New Bore 3 (1556845E 5147320N) • New Bore 4 (1556575E 5173810N) • New Bore 5 (1556860E 5173655N) <p>And be analysed for the parameters listed in Table 1:</p> <p>Table 1: Contaminants and Trigger Concentrations</p> <table border="1"> <thead> <tr> <th>Parameter</th><th>Trigger value</th></tr> </thead> <tbody> <tr> <td>Alkalinity</td><td>100 mg/L</td></tr> <tr> <td>Ammoniacal-Nitrogen</td><td>1.2 mg/L</td></tr> <tr> <td>Electrical Conductivity</td><td>50mS/m</td></tr> <tr> <td>Escherichia coli</td><td>1 per 100millilitres</td></tr> <tr> <td>Hardness = Calcium +Magnesium</td><td>100 mg/L</td></tr> <tr> <td>Total Petroleum Hydrocarbons</td><td>Above laboratory screen levels</td></tr> </tbody> </table> <p>If any of the Table 1 trigger values are exceeded, the sample from these bores will be analysed for the parameters listed in Table 2 –</p> <p>Table 2: Contaminants and Trigger Concentrations</p>	Parameter	Trigger value	Alkalinity	100 mg/L	Ammoniacal-Nitrogen	1.2 mg/L	Electrical Conductivity	50mS/m	Escherichia coli	1 per 100millilitres	Hardness = Calcium +Magnesium	100 mg/L	Total Petroleum Hydrocarbons	Above laboratory screen levels
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36	The results of these analyses will be forwarded to Environment Canterbury within 3 working days of the results being received by Winstone Aggregates.																												
37	<p>If any of the Table 2 trigger values are exceeded in any of the monitoring bores, the consent holder shall:</p> <p>a. Notify Environment Canterbury and owners of existing down gradient private bores within 300m of the boundaries of B Block and C Blocks North and South within 3 working days of receipt of the results;</p> <p>b. Undertake sampling and analysis of groundwater in those downstream private bores as reasonably requested by owners of those private bores;</p> <p>c. Within one week of receipt of the results, begin an investigation into whether the elevated sample results are likely caused by the consent holder’s activities within B Block or C Block. The investigation is to be carried out by a suitably qualified water quality expert and is to include, but is not limited to;</p> <p>(i) results of water quality sampling;</p> <p>(ii) activities at within B Block and C Blocks North and South;</p> <p>(iii) activities at neighbouring properties including the existing Wheatsheaf Quarry,</p> <p>(iv) rainfall in the past 48 hours; and</p>																												

	<p>(v) and any additional water quality monitoring that may be required to assess the potential cause of contamination.</p> <p>If an investigation has previously been undertaken in relation the exceedance for the same parameter in the same monitoring bore and that investigation concluded that the exceedance of the trigger value was not likely caused by the consent holder's activities within B Block or C Blocks, a further investigation shall not be required.</p> <p>d. If an investigation is required by condition 36(c) of this consent, the consent holder shall (within one month of receipt of the elevated sample results) submit a report signed by a suitably qualified water quality expert to the Consent Authority on the investigation undertaken, any potential sources of contamination identified, the likely cause(s) of the contamination and recommendations for any remedial measures to reduce the concentration of the contaminant in groundwater (such as cessation of activities that may have caused the excessive concentrations, removal of contaminant source(s), stabilisation or capping of contaminant source(s), revision of storm water management processes) and any increase to the monitoring frequency required by this consent.</p> <p>Any material removed shall be disposed of at an appropriate facility.</p> <p>e. If an investigation is required by condition 36(c) of this consent and the subsequent report required by condition 36(d) of this consent concludes that it is likely that the exceedance of the trigger value was caused by the consent holder's activities within B and C Blocks, the Consent Holder shall do the following:</p> <ul style="list-style-type: none"> i. Within 1 month of receipt of the investigation report, implement remedial measures within B Block and C Block to reduce the concentration of the contaminant in groundwater; ii. If samples from water quality monitoring in the existing private bores within 300m down gradient of B Block and C Block exceed the values in Table 1 and Table 2, the consent holder shall provide the bore owner with 2,000 litres of potable water per day until such time as monitoring of the affected bore demonstrates compliance with the relevant trigger values in that bore. All costs associated with this shall be borne by the consent holder. iii. If the contamination was in a monitoring bore, sampling frequency at that bore shall increase to monthly until 3 consecutive samples show that results do not exceed the concentrations listed in Tables 1 and 2. iiii. 3 months following the implementation of any remedial measure to reduce the concentration of the contaminant in groundwater, a validation sample shall be taken from the same bore in which there was an exceedance of the trigger values. This validation sample will be analysed for Table 1 and Table 2 contaminants and the consent holder shall provide those results to Environment Canterbury within 2 working days of the results being received by the consent holder. iv. If the results of the validation sample do not exceed the concentrations listed in Tables 1 and 2, further samples shall be taken from that bore and analysed for Tables 1 and 2 contaminants at quarterly intervals as required by condition 34 of this consent. v. If the results of the validation sample exceed Tables 1 and 2 limits, the consent holder shall take further measures to
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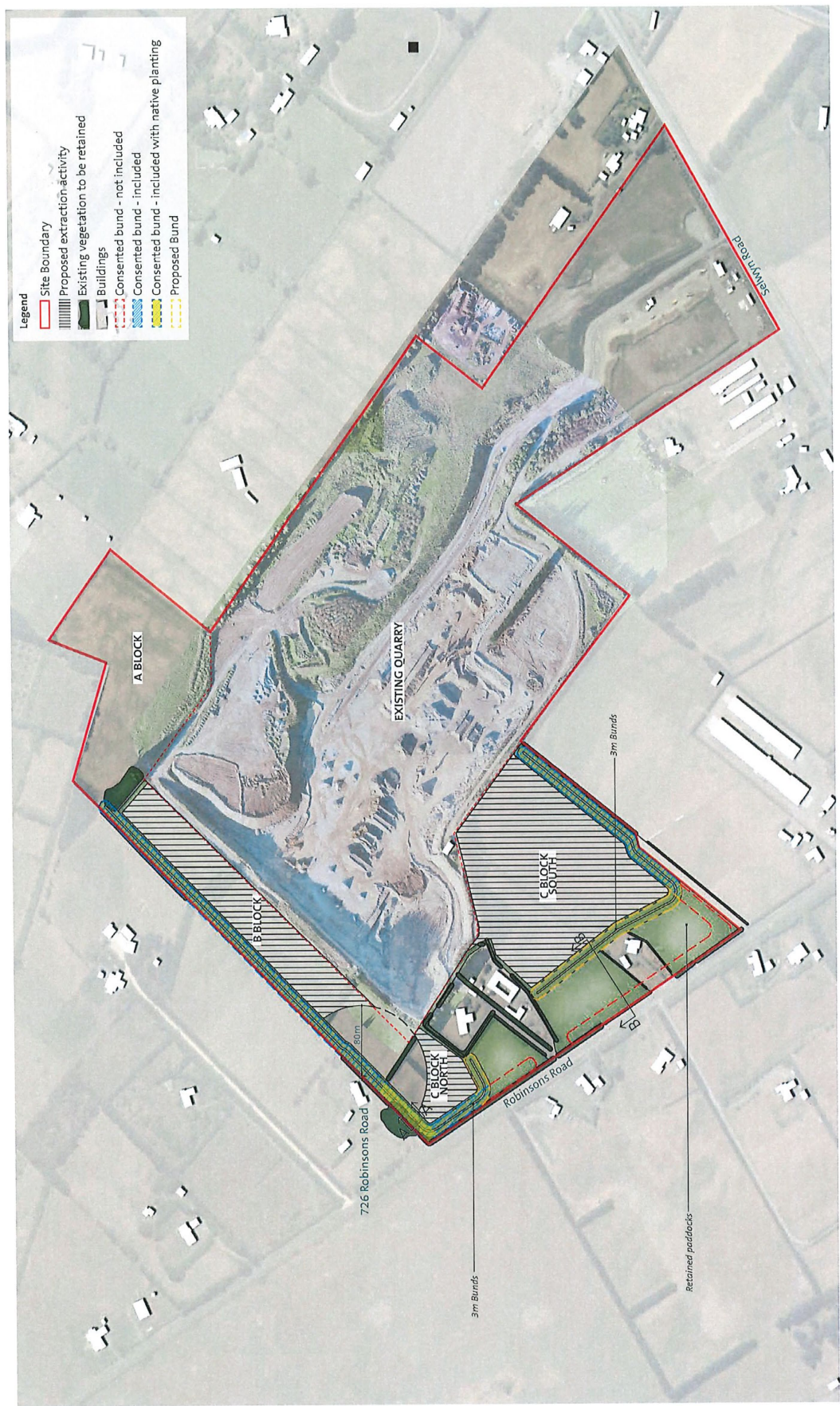
	reduce the contamination in the groundwater and shall continue to sample groundwater quality in the affected monitoring bore on a monthly basis until such time as samples are within the limits in Tables 1 and 2.
	Rehabilitation
38	Rehabilitation shall be undertaken in accordance with a Quarry Rehabilitation Plan certified by Selwyn District Council under Condition 26 of RC215749.
	Annual Report
39	<p>The Consent Holder shall prepare and submit to the Canterbury Regional Council by 30 September each year for the duration of this resource consent an annual monitoring report for the preceding period of 1 July to 30 June. The annual monitoring report shall include but not be limited to:</p> <ul style="list-style-type: none"> a. The survey results as required by Condition (16); b. The annual contour map as required by Condition (18); c. The electronic record of cleanfill accepted at the site as required by Condition (23); d. A record of any material rejected at the site and the location where this waste was taken to and disposed of in accordance with Conditions (22)(d) and 24(a)(v) ; e. Results of the groundwater level monitoring as required by Conditions (27) to (33); f. Results of groundwater quality monitoring as required by Condition (34) to (36). This shall include: <ul style="list-style-type: none"> i. A discussion of the groundwater quality trends; and ii. Any exceedances of the Table 1 contaminant trigger concentrations; and iii. Any mitigation actions taken in response to the exceedances; g. A record of any spills on-site and remedial actions in accordance with Condition (8); h. An update of the progress of the rehabilitation at the site; and i. A record of all complaints received.
	Administration
40	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:</p> <ul style="list-style-type: none"> a. Dealing with an adverse effect on the environment occurring as a result of the exercise of this resource consent; or b. Requiring best practicable options to be adopted by the consent holder to remove or reduce any adverse effect on the environment as a result of the exercise of this resource consent; or

	<p>c. Providing for legislative or regulatory amendments to the management of cleanfill including any amendments to, or replacement of the WasteMINZ Technical Guidelines for Disposal to Land; or</p> <p>d. Achieving consistency with any updates to, or replacement of, the Drinking-water Standards for New Zealand 2005 (Revised 2018); or</p> <p>e. Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the resource consent; or</p> <p>f. Requiring the consent holder to comply with a relevant rule in an operative Regional Plan.</p>
41	<p>If this consent is not exercised within five years of the date of grant of consent, it shall lapse in accordance with Section 125 of the Resource Management Act 1991.</p> <p><i>Advice Note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents</i></p>

CRC213142 - Schedule 1

Waste acceptance criteria comprise:

- a. Unless clause d applies, only includes material defined as cleanfill in accordance with the document – “A Guide to Cleanfill Management”; MfE; 2002; and
- b. Shall not contain more than 3% vegetative matter; and
- c. May only include soils that meets the Canterbury Regional background levels for the site;
- d. Should the WasteMINZ “Technical Guidance for Disposal of Waste to Land” 2018 be adopted by the Ministry for the Environment in future in replacement for the 2002 guide in clause a, then the definition of a class 5 cleanfill in that document shall apply.





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Scale: 1:4,000 @ A3
Data Sources: LINZ Data Service, and Eagle Technology
Projection: NZGD 2000 New Zealand Transverse Mercator

WHEATSHEAF QUARRY EXTENSION
Landscape Strategy
Figure RG1
| Date: 15 March 2022 | Revision: 3 |
Plan prepared for Wheatstone Aggregates by Boffa Miskell Limited
Project Manager: rhy@boffamiskell.co.nz | Drawn: HWI | Checked: RGI

CRC213142B: Location of Groundwater Monitoring Bores



CRC213144 - To use water for dust suppression

1	Water used under this consent may only be that taken under resource consent CRC212834, or any subsequent variations or replacements thereof.
2	The total volume of water taken under CRC212834 and used under that consent and this consent (CRC213144) shall not exceed a total volume of 5,439 cubic metres in any period of 7 consecutive days, and 41,728 cubic metres between 1 July and the following 30 June.
3	<p>Water shall only be used for:</p> <ul style="list-style-type: none"> i. Dust suppression purposes; and ii. For irrigation to establish vegetative cover <p>Within the area of land shown on attached Plan CRC213144A, which forms part of this resource consent.</p>
4	The Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, shall be informed within five days of first exercise of this consent by the consent holder.
	WATER EFFICIENCY
5	The consent holder shall take all practicable steps to avoid leakage from pipes and structures, and ponding of water.
6	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:</p> <ul style="list-style-type: none"> a. Dealing with an adverse effect on the environment occurring as a result of the exercise of this resource consent; or b. Requiring best practicable options to be adopted by the consent holder to remove or reduce any adverse effect on the environment as a result of the exercise of this resource consent; or c. Providing for legislative or regulatory amendments to the management of cleanfill; or d. Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the resource consent; or e. Requiring the consent holder to comply with a relevant rule in an operative Regional Plan.
7	<p>If this consent is not exercised within five years of the date of grant of consent, it shall lapse in accordance with Section 125 of the Resource Management Act 1991.</p> <p><i>Advice Note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents</i></p>





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This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work, and is not to be used for any other purpose without our written consent. Where information has been supplied by the Client, we warrant that it is accurate to the best of our knowledge and belief. Boffa Miskell Limited is not responsible for any errors or omissions in this plan, or for any consequences arising from its use. Information provided by the Client or any external source.



Data Sources:
LINZ Data Service, and Esri Technologies.
Projection: NZGD 2000 New Zealand Transverse Mercator

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1:14,000 @ A3

WHEATSHEAF QUARRY EXTENSION
Landscape Strategy
| Date: 15 March 2022 | Revision: 3 |
Plan prepared for Winstone Aggregates by Boffa Miskell Limited
Project Manager: rhy.greene@boffamiskell.co.nz | Drawn: HWI | Checked: RCI

Figure RC1

CRC213145 - To discharge contaminants to air

	LIMITS
1	<p>The discharge of contaminants to air shall be limited to dust and particulate matter arising from the following activities:</p> <ol style="list-style-type: none"> Site preparation, topsoil stripping, overburden removal and storage; Construction and maintenance of bunds; Excavation of quarry gravels; Deposition of cleanfill; Loading and transportation of aggregate; Rehabilitation activities at the completion of extracting aggregate; and Movement of vehicles associated with the above activities. <p>at 692 Robinsons Road and 706 Robinsons Road, legally described as LOT 2 DP 478287, LOT 1 DP 25795, LOT 1 DP 467327, and LOT 1 DP 80577 BLK IV LEESTON SD.</p> <p><i>Advice Note: For the avoidance of doubt, no stockpiling, screening or crushing of aggregate within the area shown on the site plan (attached to this consent as CRC213145A) as B Block and C Blocks is authorised by this resource consent.</i></p>
2	<p>Prior to the commencement of discharge to air activities authorised by Condition (1) of this resource consent, the Consent Holder must implement the Enabling Works so defined in this resource consent.</p> <ol style="list-style-type: none"> Sealing a further 45 metres of the internal road as required by Condition (14) prior to the commencement of quarrying as shown on Plan CRC213145A attached to and forming part of this resource consent. <p><i>Advice Note: This condition has been volunteered by the Applicant.</i></p>
3	<p>The discharge authorised by Condition (1) of this consent must not result in an offensive, objectionable, noxious or dangerous effect beyond the site boundaries as shown on Plan CRC213145A attached to and forming part of this resource consent.</p>
4	<p>The Quarry Manager, or another nominated person, must be available at all times (including outside quarry operation hours) to respond to dust emissions complaints and issues. The contact details must be displayed on signage at the heavy vehicle entrance, the light vehicle entrance and at the quarry office adjacent to the light vehicle entrance. With the exception of the quarry office signage, the contact details must be able to be read from outside the gates.</p>
5	<p>No activities other than dust mitigation measures shall be undertaken on Sundays, public holidays or outside of quarry operation hours.</p>
6	<p>The Consent Holder must ensure that, in conjunction with CRC223408 and CRC223410, the active quarry area requiring water suppression is no more than 4.24 hectares. All other non-active areas shall be vegetated, covered with 50mm (or more) of washed gravels or stabilised with a dust suppressant.</p> <p>Advice note: The active quarry area (in relation to CRC213145) is taken to be:</p> <ul style="list-style-type: none"> Working extraction face Extraction work area adjacent to the face

	<ul style="list-style-type: none"> • Unsealed haul roads • Working clean fill face
7	<p>Prior to commencing works</p> <p>At least 5 working days prior to commencement of extraction activities authorised in Condition (1), the Consent Holder or their agent must invite Canterbury Regional Council to a Pre-commencement Site Meeting.. At a minimum, the following must be covered at the meeting:</p> <ol style="list-style-type: none"> Scheduling and staging of the works, including the proposed start date; Responsibilities of all relevant parties; Contact details for all relevant parties; Expectations regarding communication between all relevant parties; Site inspections; ; and Confirmation that all relevant parties have copies of the contents of these consent documents and all associated management plans. <p><i>Advice Note: The Pre-commencement Site Meeting referred to above may be held in conjunction with the Pre-construction Site Meetings required by Consents CRC213142; and CRC213146.</i></p>
8	<p>At least 20 working days prior to the commencement of on-site activities, the Consent Holder must inform the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring in writing of the start date of the commencement of the quarry activities.</p>
9	<p>Prior to the commencement of the quarry activities (including Enabling Works) authorised by the conditions of this resource consent, all personnel working on the site must be made aware of, have access to, and operate under the:</p> <ol style="list-style-type: none"> The contents of this resource consent; Resource consents CRC213142; CRC213144 and CRC213146; The Quarry Management Plan prepared in accordance with resource consent CRC213142; The Dust Management Plan prepared in accordance with resource consent CRC213142; and The Cleanfill Management Plan prepared in accordance with resource consent CRC213142.
	<p>Dust Management Plan</p>
10	<ol style="list-style-type: none"> The Consent Holder must prepare a Dust Management Plan (DMP), which also forms a Section of the Quarry Management Plan (QMP) required by Condition (3) of CRC213142. The purpose of the DMP is to provide a framework for managing dust emissions from activities authorised under Condition (1) of this resource consent and to mitigate and minimise effects at or beyond the boundary of the site and to achieve compliance with the conditions of this resource consent.

Advice note. The DMP forms a Section of the Quarry Management Plan and will be certified in accordance with certification of the QMP, under Condition 3 of CRC213142. Certification of the DMP is confined to confirming that the Dust Management Plan adequately gives effect to the relevant Condition(s).

The DMP must include, but not be limited to:

- (a) A description of particulate matter and wind monitoring requirements including:
 - (i) The location of the wind monitoring equipment;
 - (ii) The location of particulate matter monitors between active work areas and sensitive off-site activities;
 - (iii) Details of wind speed trigger levels as set out in Condition 18 and associated alarm system, and details of wind directions under which activities shall cease;
 - (iv) Details of the particulate matter trigger levels as set out in Condition 19 and associated alarm system; and
 - (v) Monitoring instrumentation methodology, setup requirements, maintenance and calibration procedures;
- (b) A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings;
- (c) A system for training employees and contractors to make them aware of the requirements of the DMP;
- (d) 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;
- (e) A method for recording and responding to complaints from the public;
- (f) A maintenance and calibration schedule for meteorological and particulate matter monitoring instruments;
- (g) Contingency measures for responding to dust suppression equipment malfunction or failures;
- (h) Separate Standard Operating Procedures (SOPs) dedicated to managing potential dust discharges from specific sources, including but not limited to:
 - (i) Site roads – sealed and unsealed;
 - (ii) Triggers for the use of water and dust suppressants for dust suppression;
 - (iii) Dust suppression procedures;
 - (iv) Aggregate excavation and backfilling areas;
 - (v) Topsoil and overburden stripping;
 - (vi) Bund construction, maintenance and the recontouring of slopes during rehabilitation;
 - (vii) Location and calibration of particulate matter and meteorological monitoring equipment.
- (i) Environmental information management for recording, quality assurance, archiving and reporting all data required for dust management on the site.

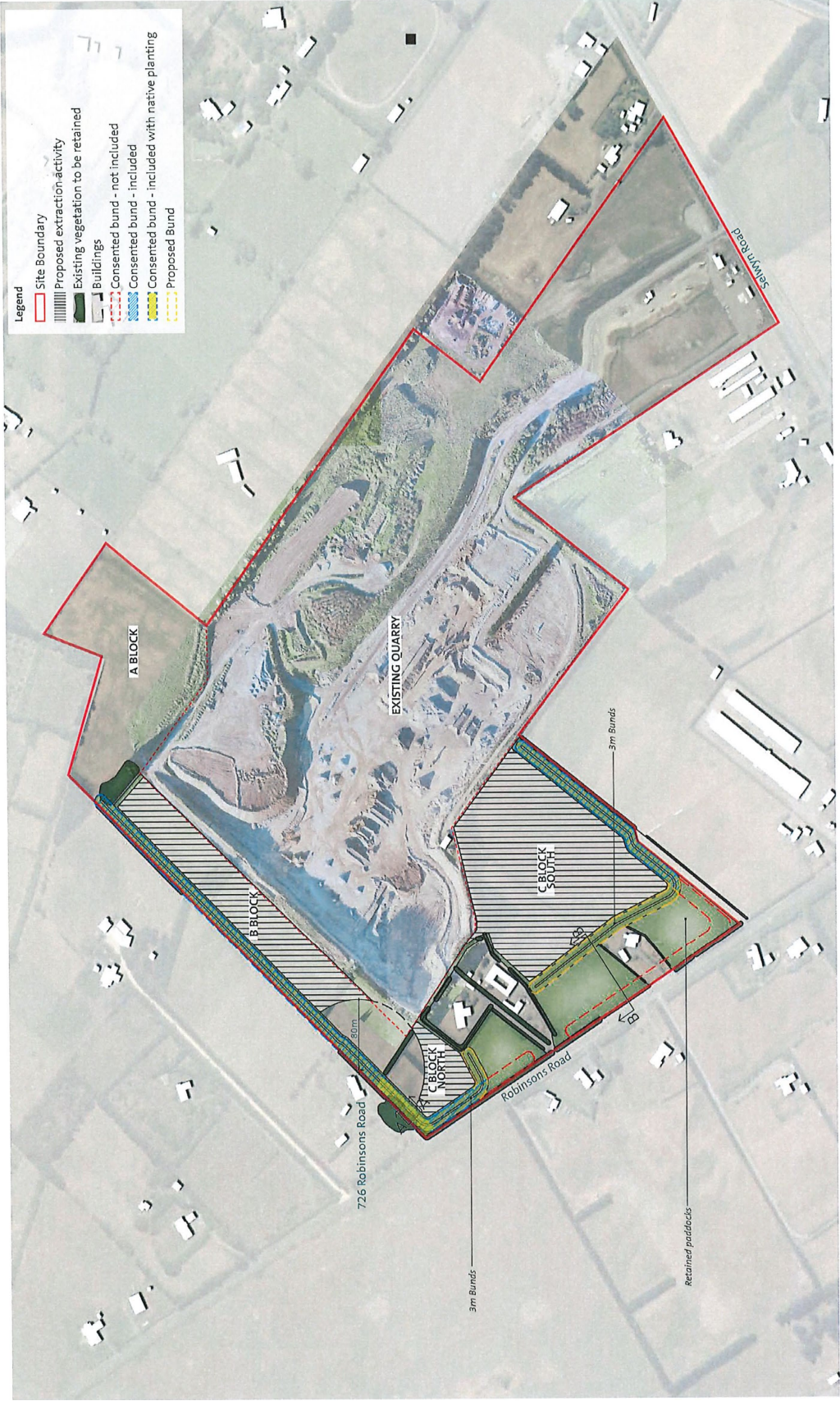
11	The activities authorised under Condition (1) of this resource consent shall be carried out in accordance with the DMP at all times.
12	<p>The DMP must be reviewed and if necessary, updated annually. Any amendments must be:</p> <ul style="list-style-type: none"> i. For the purpose of applying best practicable measures to mitigate adverse effects resulting from the discharge of dust; or ii. For the purpose of improving the efficacy of the mitigation, and shall not result in reduced discharge quality; or iii. Consistent with the conditions of this resource consent; and iv. Submitted in writing to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, for certification prior to any amendment being implemented.
	DUST MITIGATION
	Trigger Levels
13	<p>Quarry activities (except dust suppression measures) within 250 metres of a sensitive receptor location must not be undertaken when:</p> <ul style="list-style-type: none"> a. Wind speed reaches or exceeds 7 m/s (1 hour rolling scalar average); and b. Quarry activities would be upwind of a sensitive receptor (-1 hour rolling average wind direction); and c. Less than 1 mm of rain has fallen during the preceding 12 hours.
14	<p>The Consent Holder shall apply the following measures to mitigate potential effects at 703, 700 and 679 Robinsons Road:</p> <ul style="list-style-type: none"> a. Quarrying and clean-filling activities within 250m of the existing residential dwellings at 703, 700 and 679 Robinsons Road shall cease during strong dry winds that blow from the site towards those receptors. Dust mitigation measures, such as the use of a watercart for dust suppression shall continue during these events. This shall include winds on dry days from 340°N through to 140°N and when the hourly rolling average wind speed is greater than 7 m/s. b. Continuous PM₁₀ dust monitoring to warn of potential dust trigger events shall be undertaken. c. The location of the existing two monitors, particularly the Wheatsheaf 1 monitor, shall be relocated to the south between quarrying and neighbouring houses (703, 700 and 679 Robinsons Road) when quarrying of B Block is within 250 m of any the neighbouring houses. d. Apply the following dust monitoring trigger levels and response actions: <ul style="list-style-type: none"> i. 60 µg/m³ as a 1-hour average for taking immediate actions to investigate and reduce site dust emissions. ii. 70 µg/m³ as a 1-hour average for ceasing all quarry activities (other than dust suppression activities) and taking immediate actions to investigate and reduce site dust emissions. <p><u>Advice note:</u> A third PM₁₀ dust monitor may be required for some stages of the quarry development to meet the monitoring requirements of conditions 16.</p>

15	<p>The Consent Holder shall apply the following measures to mitigate potential effects at 726 Robinsons Road:</p> <ul style="list-style-type: none"> a. Quarrying and clean-filling activities within 250 m of the existing residential dwelling at 726 Robinsons Road shall cease during strong dry winds that blow from the site towards this receptor. Dust mitigation measures, such as the use of a watercart for dust suppression shall continue during these events. This shall include winds on dry days from 55°N through to 200°N and when the hourly rolling average wind speed is greater than 7 m/s. b. Continuous PM₁₀ dust monitoring to warn of potential dust trigger events shall be undertaken. c. The location of the existing two monitors, particularly the Wheatsheaf 1 monitor, shall be relocated to between the quarry and 726 Robinsons Road when quarrying within 100 m of 726 Robinsons Road. d. Apply the following dust monitoring trigger levels and response actions: <ul style="list-style-type: none"> i. 60 µg/m³ as a 1-hour average for taking immediate actions to investigate and reduce site dust emissions. ii. 70 µg/m³ as a 1-hour average for ceasing all quarry activities (other than dust suppression activities) and taking immediate actions to investigate and reduce site dust emissions. <p><i>Advice note: A third PM₁₀ dust monitor may be required for some stages of the quarry development to meet the monitoring requirements of condition 17.</i></p>
	<p>Mitigation Measures</p>
16	<p>The Consent Holder must take all practicable measures to minimise the discharge of dust from quarry activities, including but not limited to:</p> <ul style="list-style-type: none"> a. Placing clean reject/pea gravel over extraction areas if they are not being actively used by the Consent Holder. Areas where clean reject gravel cannot be placed will be stabilised by other means such as the use of polymers; b. 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 c. Taking wind direction and speed into account in planning quarry activities to minimise the risk of dust dispersion towards any existing residential dwellings located within 250m of the site boundary are within 250 metres of the site boundary; d. 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; e. Topsoil and overburden to be damp prior to its extraction and removal. f. Constructing and maintaining unsealed internal haul roads so that their surfaces consist of a crushed clean aggregate layer that is free of potholes; g. Minimising drop heights when loading trucks and when moving material; h. 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 making the results of the inspections available to the Consent Authority when requested; and

	i. Maintaining an adequate supply of water and equipment on site for the purpose of dust suppression at all times.
17	Land stripping and land rehabilitation shall only be carried out during winter months (1st May to 1st September) or when ground conditions are damp (or the ground or material to be used for rehabilitation has been thoroughly wetted with a water cart) and winds are below 7 m/s (10 minute average).
18	<p>Within 6 months of the completion of quarrying activities in B-Block and C-Block South and on a progressive basis, the consent holder shall commence rehabilitation of quarried land with (as a minimum) topsoil and grass. Such rehabilitation work shall be completed as soon as practicable having regard to ongoing quarrying activities and be completed as follows:</p> <p>All extraction, clean-filling and rehabilitation activities must be completed within the timeframes specified below:</p> <ul style="list-style-type: none"> a. B-Block within 10 years from the commencement date of this consent; and b. C-Block North within 14 months from the commencement date of his consent; and c. C-Block South within 20 years from the commencement date of this consent.
	Meteorological Monitoring
19	<p>The Consent Holder shall continue to operate and maintain the existing meteorological monitoring station at the location described in the DMP. The meteorological monitoring station shall continue to be capable of continuously monitoring:</p> <ul style="list-style-type: none"> a. Wind speed and direction at a minimum height of six metres above the natural ground level; b. Relative humidity; and c. Temperature.
20	<p>The meteorological monitoring instruments shall continue to:</p> <ul style="list-style-type: none"> 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 at least 1.0 degree resolution and accuracy of at least within +/- 1.0 degree, and a stall speed no greater than 0.5 m/s; c. Be located on the site 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 accordance with AS/NZS 3580:14-2014 an alternative location shall be agreed in writing with the Consent Authority; d. 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 up-dated every one-minute in real- time. e. Send an alarm to the Quarry Manager (for example via mobile phone) if the wind speed trigger level in Conditions 14 a and b, 15d and 16d is reached or exceeded while the rainfall criteria specified in Condition 14 c are being met. f. Be maintained and calibrated in accordance with the manufacturer's specifications.

21	<p>All meteorological monitoring data shall be made available to the Consent Authority on request.</p> <p><i>Advice note: The Canterbury Regional Council may provide monitoring data to residents upon request.</i></p>
	Particulate Matter Monitoring
22	<p>All dust monitors shall:</p> <ol style="list-style-type: none"> 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 alternatively an equivalent or superior standard which is approved by the Consent Authority Be sited in general accordance with AS/NZS 3580.1.1:2016 Methods for sampling and analysis of air – Guide to siting air monitoring equipment; Have a GPS location service (or similar technology) which enables their locations to be remotely monitored and recorded; Provide and record the results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minute; Record monitoring results in real-time as rolling 10-minute averages in an appropriate electronic format; Be fitted with an alarm system that is able to send warnings and alerts to the Quarry Manager or other nominated person; and Be maintained in accordance with the manufacturer's specifications.
	Bund Formation
23	<p>When constructing the bunds, the following controls apply:</p> <ol style="list-style-type: none"> The bunds shall be constructed during winter months (1st May to 1st September) or when ground conditions are damp (or the ground or material to be used for rehabilitation has been thoroughly wetted with a water cart) and winds are below 7 m/s (10 minute average); Following the construction of the bunds they shall be immediately stabilised using mulch or another suitable product. Grass shall be established on all new bunds and the section of bund adjacent to 726 Robinsons Road shall be planted as shown in Figure RG1 in the landscape evidence of Rhys Girvan dated 16 March 2022 as soon as practicable and maintained to ensure healthy cover during dry months. Bunds existing as at the date this consent is granted shall be planted and maintained, or stabilised by other means.
	Complaints
24	<p>A record of all complaints relating to contaminants discharged to air from the site and associated activities must be maintained and must include:</p> <ol style="list-style-type: none"> The location where the contaminants were detected by the complainant; and The date and time when the contaminants were detected; and A description of the wind speed and wind direction when the contaminants were detected by the complainant; and The most likely cause of the contaminants detected; and

	<p>e. Any corrective actions undertaken by the Consent Holder to avoid, remedy, or mitigate the effects of the contaminants detected by the complainant.</p> <p>The Consent Holder shall maintain a record of any complaints and any responses or investigative actions taken as a result. This record must be provided to the CRC Regional Leader – Compliance Monitoring, in the annual report required by 30 September of each year during the duration of this resource consent.</p>
	Annual Report
25	<p>The Consent Holder must prepare an annual monitoring report for the period of 1 July to 30 June to the CRC, Attention: Regional Leader Compliance Monitoring, by 30 September each year.</p> <p>The annual monitoring report shall include but not be limited to:</p> <ol style="list-style-type: none"> A record of any maintenance of the meteorological or dust monitor undertaken over the proceeding 12-month period in accordance with this resource consent; and A record of all occasions where a trigger level has been reached including any investigations and actions taken; and The complaints record required in accordance with this resource consent; and A record of the amount of water used for dust suppression in the year reported on. The record shall include the daily, monthly, and annual volumes used.
	Administration
26	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:</p> <ol style="list-style-type: none"> Dealing with an adverse effect on the environment occurring as a result of the exercise of this resource consent; or Requiring best practicable options to be adopted by the consent holder to remove or reduce any adverse effect on the environment as a result of the exercise of this resource consent; or Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the resource consent; or Requiring the consent holder to comply with a relevant rule in an operative regional plan.
27	<p>If this consent is not exercised within five years of the date of grant of consent, it shall lapse in accordance with Section 125 of the Resource Management Act 1991.</p>



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CRC213146 - To discharge contaminants (cleanfill) onto and into land where they may enter groundwater

	LIMITS
1	The discharge of contaminants onto and into land where contaminants may enter groundwater shall be only as a result of the deposition of cleanfill material undertaken in accordance with resource consent CRC213142 or any subsequent variations thereof, at 692 Robinsons Road and 706 Robinsons Road, legally described as LOT 2 DP 478287, LOT 1 DP 25795, LOT 1 DP 467327, and LOT 1 DP 80577 BLK IV LEESTON SD as shown on Plan CRC213146A, attached to and forming part of this resource consent.
	Prior to commencing works (Enabling Works)
2	Prior to the commencement of the activities authorised by Condition (1) of this resource consent the Consent Holder must implement the Enabling Works so defined in resource consent CRC213142.
3	<p>The Consent Holder must designate Staff with respect to tasks associated with the cleanfill operations. All designated staff, and any replacement staff, must receive specialist training in cleanfill management by a Suitably Qualified and Experienced Professional (SQEP) prior to commencing work in the Quarry Cleanfill.</p> <p>An electronic record of the training of all staff must be held on site and must be provided to Canterbury Regional Council on request.</p>
4	<p>At least 10 working days prior to commencement of cleanfill activities authorised in Condition (1), the Consent Holder or their agent must invite Canterbury Regional Council to a Pre-commencement Site Meeting. At a minimum, the following must be covered at the meeting:</p> <ol style="list-style-type: none"> Scheduling and staging of the works, including the proposed start date; and Responsibilities of all relevant parties; and Contact details for all relevant parties; and Expectations regarding communication between all relevant parties; and Site inspections; and Confirmation that all relevant parties have copies of the contents of these consent documents and all associated management plans. <p><i>Advice Note: The Pre-commencement Site Meeting referred to above may be held in conjunction with the Pre-commencement Site Meetings required by Consents CRC213142 and CRC213145.</i></p>
5	At least 10 working days prior to the commencement of the activities authorised in Condition (1), the Consent Holder must inform the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring in writing of the start date of works.
6	Prior to the commencement of cleanfill activities authorised in Condition (1) commencing, all personnel working on the site must be made aware of and have access to:

	<ul style="list-style-type: none"> a. The contents of this resource consent document (CRC213146); b. Resource consents CRC213142, CRC213144 and CRC213145; and c. The Quarry Management Plan and Cleanfill Management Plan prepared in accordance with resource consent CRC213142.
	Discharge of Cleanfill
7	<ul style="list-style-type: none"> a. Cleanfilling must be undertaken in accordance with a Cleanfill Management Plan (CMP), required to be prepared, certified by the Canterbury Regional Council, and implemented under resource consent CRC213142. The CMP must be retained on site at all times and the Consent Holder must ensure all appropriate personnel working on the site are made aware of and have access to it. b. Cleanfill discharged in the excavated area under this resource consent must: <ul style="list-style-type: none"> i. Meet the Waste Acceptance Criteria detailed under resource consent CRC213142; and ii. Follow all processes related to the determination of the acceptability of cleanfill any recording and reporting requirements, outlined under resource consent CRC213142.
	Groundwater Quality Monitoring and Reporting
8	<ul style="list-style-type: none"> a. Groundwater quality monitoring shall be undertaken as outlined under resource consent CRC213142. b. If monitoring results exceed the limits in Condition 34 of CRC213142 that are a result of the discharge of contaminants from the cleanfilling activity authorised under Condition (1), then the Responses to Monitoring, detailed under resource consent CRC213142, must be implemented in accordance with the timeframes specified in that consent..
	Administration
9	<p>The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:</p> <ul style="list-style-type: none"> a. Dealing with an adverse effect on the environment occurring as a result of the exercise of this resource consent; or b. Requiring best practicable options to be adopted by the consent holder to remove or reduce any adverse effect on the environment as a result of the exercise of this resource consent; or c. Providing for legislative or regulatory amendments to the management of cleanfill; or d. Achieving consistency with any updates to, or replacement of, the Drinking-water Standards for New Zealand 2005 (Revised 2018); or e. Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the resource consent; or

	f. Requiring the consent holder to comply with a relevant rule in an operative Regional Plan.
10	<p>If this consent is not exercised within five years of the date of grant of consent, it shall lapse in accordance with Section 125 of the Resource Management Act 1991.</p> <p><i>Advice Note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents.</i></p>

CRC213146A: Site Plan



WHEATSHEAF QUARRY EXTENSION
Landscape Strategy
Figure RG1
| Date: 15 March 2022 | Revision: 3 |
Plan prepared for Winstone Aggregates by Boffa Miskell Limited
Project Manager: rhy.given@boffamiskell.co.nz | Drawn: HVI | Checked: RGI