SECTION 42A OFFICERS COMMENTS ON APPLICANT'S DRAFT CONDITIONS – 4 MAY 2021

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	Draft Proposed Conditions - Track changed to show amendments proposed to the conditions recommended in the s42A officer's report	**Applicant's comment**	**Section 42A officer comments and recommended amendments.**	**Ryman Healthcare Limited's comments**
	Conditions applying to all consents			
	Authorised activities			
	Definitions			Given the number of conditions and complexity of the Proposal, suggest adding a definitions section for clarity and consistency.
	The consented development shall be carried out in accordance with the plans and information, detailed below: a) XXXX b) XXXX			Add a "Condition 1". Given the complexity of the Proposal, it is not possible to capture all elements of the application within specific conditions.
1	These consents authorise the following list of activities undertaken at the Rangiora Racecourse, 309 West Belt Rangiora, legally described as Rural Section 10449 and Rural Section 19334, at or about map reference NZTM 2000 1564979mE, 5206833mN as shown on Plan XXXXXXXA attached to and forming part of these resource consents:	*Retain 5m excavation limit.*	*Agree with 5m maximum depth limit.*	Agree with reinstatement of the 5m maximum depth limit.

Commented [CT1]: Ryman's amendments have been incorporated into the proposed conditions using track changes and are highlighted in yellow.

	a) site preparation, topsoil stripping, overburden removal and storage; b) construction and maintenance of bunds and stockpiles; c) extraction of material ~~to~~ no closer than 1 m from monitored groundwater level (at the time of extraction), ~~and no deeper than 5 m below natural ground level~~ and no deeper than 5 m below natural ground level; d) transportation, loading, delivery, unloading, deposition and stockpiling of extracted material and backfill material; e) site rehabilitation; and f) movement of vehicles associated with the above activities.			
2	Backfill shall only be virgin excavated natural material such as clay, gravel, sand, soil or rock fines; that a) has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities; and b) is free from: i. combustible, putrescible, degradable or leachable components; ii. hazardous substances or materials (such as municipal solid waste) likely to create leachate by means of biological breakdown; iii. products or materials derived from hazardous waste treatment, stabilisation or disposal practices; iv. materials such as medical and veterinary waste, asbestos, or radioactive substances that		*Note that the JWS of the contaminated land experts recommends the Schedule associated with this condition.*	We note that Schedule 1 has not been attached to this set of conditions. The JWS of the contaminated land experts sets out the agreed Waste Acceptance Criteria, and Schedule 1 must reflect the JWS.

	may present a risk to human health if excavated; v. contaminated soil and other contaminated materials; and vi. liquid waste; and c) does not contain any sulfidic ores or soils or any other waste; and d) meets the waste acceptance criteria attached as Schedule 1 to this resource consent.			
3	Gravel, sand and other natural material shall not be excavated within 50 metres of Transpower's National Grid transmission lines, including support structures as shown on Plan XXXXXX B, which is attached to, and forms part of this consent.			
	Prior to commencement			
4	At least 5 days prior to commencement of any activities at the site, t~~T~~he Consent Holder must inform the ~~I~~Canterbury Regional Council, Attention Regional Leader – Compliance Monitoring ("the CRC Manager") and the ~~A~~Waimakariri District Council Plan Implementation Manager (the "WDC Manager") of the date on which these resource consents are to be first exercised.			For clarity suggest specifying that the condition needs to be complied with "at least 5 days prior to the commencement of any activities at the site" (or similar).
5	At least one month prior to commencement of ~~quarry~~ onsite activities authorised by these consents, the Consent Holder or their agent must arrange and conduct a site meeting with the CRC Manager and WDC Manager. ~~At a minimum, T~~the following must be covered at the meeting: a) Scheduling and staging of the works, including the proposed start date; b) Responsibilities of all relevant parties;	*Agreed in principle – suggested change to add timeframe.*	*Do not agree with minor amendment. The purpose of providing the information after the meeting was to incorporate any changes that may arise from the discussion with the Council staff.*	Agree with the Council's Officer and propose that the condition is amended to require the Consent Holder to provide an update following the site meeting where necessary. For clarity, suggest referring to "onsite activities" instead of "quarry activities". The pre-commencement meeting should take place before any activities, not simply

	c) Contact details for all relevant parties, including the contact details of the site or project manager and the contact details for 7 days a week, 24 hours a day contact; d) Expectations regarding communication between all relevant parties and the person in charge; e) Site inspections; and e) Measures to be adopted to ensure the health and safety of the general public; and f) Confirmation that all relevant parties have copies of the contents of these consent documents and all associated management plans. The information presented at the site meeting must also be provided in writing to the CRC Manager and WDC Manager within 5 working days prior to of the meeting. If following the site meeting there is any update to the information previously provided, the Consent Holder must also provide an update in writing to the CRC Manager and WDC Manager within 5 working days after the site meeting.			'quarry' specific activities, take place at the site. The contact details of a person that can be contacted at any time should be provided to Council as an issue may arise at any time and given the sensitivity of the site must be promptly addressed. Given the nature of the activities that will take place, measures to be adopted by the Consent Holder to ensure the public's health and safety are protected should also be discussed at the meeting to ensure they are adequate. Suggest clarifying what is meant by "the person in charge" in (d). We assume this refers to the site/project manager. For clarity, suggest including this in the definition section suggested above or replace it to read: "site or project manager". It is also not clear who are the "all relevant parties". Suggest the relevant parties are named by their role.
A	Prior to the commencement of onsite quarry activities and throughout the exercise of this consent, all personnel working on the site shall be provided a copy of, trained on the contents of, and advised of the need to comply with the latest version of: made aware of, and have access to: a) The contents of this resource consent document; b) The Quarry and Backfill Management Plan, prepared in accordance with CRC204106; and c) The Air Quality Management Plan prepared in accordance with CRC204107condition (XX); and			Given the importance of complying with all the management plans, it is submitted that providing training to all the personnel on the contents of these management plans will be more effective than simply making them "aware" of the existence of these plans. All personnel should be trained on the contents of all management plans, we therefore consider that the Traffic Management Plan should also be added to the list.

	d) The Traffic Management Plan prepared in accordance with RC205104. The Consent Holder shall make each management plan available to the Community Liaison Group once a management plan is finalised and if it is amended or updated, and for the duration of the consent.			We consider the Consent Holder should also make all management plans available to the Community Liaison Group.
	Preliminary Works			
6	The following site management works must be undertaken prior to quarry activities commencing: a) Construction of site access off River Road as shown in Plan XXXXXXC; ~~a)~~b) Sealing of the access road in accordance with Condition (XX); ~~b)~~c) Installation of security fencing around the perimeter of the site including lockable gates at the River Road entrance; ~~c)~~d) Installation of warning notices that comply with Rule 31.7 of the Waimakariri District Plan that are able to be read from a distance of five metres at the River Road entrance stating or showing as a minimum: i. The name of the site; ii. The name of the owner of the operation and a contact telephone number; iii. That groundwater is vulnerable to contamination; iv. That access to the site is restricted; v. The spatial extent of the site, showing where access is restricted; and			Given the importance of sealing the access road to appropriately manage dust effects, this should be done before any quarry activities commence.

	vi. That no materials may be discharged, disposed of within the site perimeter without express permission from the Consent Holder.			
7	Site access, fencing and signage in Condition 6 shall be maintained for the duration of this consent.			
	Bund Formation		*Conditions 8-12 should only apply to CRC204107 and RC205104.*	
8	Prior to commencing quarrying operations, the Consent Holder must establish vegetated earth bunds as shown on Plan XXXXXXA.			
9	The bunds must remain in place for the duration of quarrying and backfilling operations, until after final site completion.			
10	The bunds must be compacted to minimise top soil loss and be at least three metres high, with a one metre wide flat top, a base width of between 7 to 15 metres and an outside slope of no more than 1:1 (one metre vertical to one metre horizontal), with an option of bunds being 1.5 metres in height and a 1.5 metre high timber fence. If a timber fence is installed, timber shall be an acoustic grade with a surface mass of at least 10kg/m² that is continuous and maintained with no gaps or cracks.		*Correction of bund slopes for 3m high bund is required:* The bunds must be compacted to minimise top soil loss and be at least three metres high, with a one metre wide flat top, a base width of between 7 to 15 metres and an outside slope of no more than ~~1~~3:1 (one metre vertical to ~~one~~ three metres horizontal), with an option of bunds being 1.5 metres in height with a 1:1 slope and a 1.5 metre high timber fence. If a timber fence is installed, timber shall be an acoustic grade with a surface mass of at least 10kg/m² that is continuous and maintained with no gaps or cracks.	
B	During bund construction, the applicant shall construct an excavated channel on the Lehmans Road side of the western bund. The channel shall be 60 metres in length, 0.5 metres deep and at least ~~xx~~ 5 metres wide as shown on Plan XXXXXX to direct flood waters to the flow path south of the site.		*Agree with addition. This condition only relates to CRC211629.*	

11	As soon as practicable, but within 14 days following their construction, the bunds must be covered, sown or hydro-seeded with grass (or another suitable vegetative cover to minimise dust emissions).		*Based on Air Quality Expert comments this condition should be amended as follows:* As soon as practicable, but within 14 days following their construction, the bunds must be covered, sown or hydro-seeded with grass (or another suitable vegetative cover to minimise dust emissions). Until vegetative cover is established the bunds shall be regularly watered and have a suitable dust suppression agent applied to prevent wind erosion.	Agree with Section 42A officer comments.
12	Prior to grass (or another vegetative cover) being established, bunds must be watered when required to suppress windblown dust. The bunds must be regularly watered ~~using insitu irrigation~~ to ensure grass (or another vegetative cover) is maintained for the duration of consent with at least 80 percent coverage ~~across the full surface area~~.	*Not agreed, deletion of insitu irrigation and "across full surface area".*	*I recommend deleting the first part of this condition as it is now captured in Condition 11.* ~~Prior to grass (or another vegetative cover) being established, bunds must be watered when required to suppress windblown dust.~~ The bunds must be regularly watered to ensure grass (or another vegetative cover) is maintained for the duration of consent with at least 80 percent coverage. *I consider that an amendment is necessary to clarify how the 80% coverage is to be determined. The term "across the full surface area" was an attempt to quantify this.* *An alternative could be qualitatively describe this but it*	Agree with Section 42A officer comments and further consider the condition should require the application of water and a suitable dust suppression agent, as per condition 11, if 80% coverage is ever not achieved.

			should require sufficient coverage so as to avoid potential for windblown dust.	
C	The vegetative cover of the bunds shall be monitored weekly and if vegetation cover is less than 80%, further vegetation shall be established within 14 days of the inspection.		*This condition should also include a requirement to maintain the bunds in good condition.* The vegetative cover of the bunds shall be monitored weekly and if vegetation cover is less than 80%, further vegetation shall be established within 14 days of the inspection. The bunds must be mown regularly or grazed to give a tidy appearance.	Agree with Section 42A officer comments.
13	[Deleted]			
	Management Plan Certification Process			
14	The following Management Plans must be submitted to the CRC Manager and WDC Manager in electronic ~~and hard copy~~ form for certification at least 40 working days prior to the commencement of quarry activities: a) Quarry and Backfill Management Plan (QBMP), that includes spill management, and noise management matters; ~~.~~ b) Air Quality Management Plan (AQMP); and c) Traffic Management Plan. ~~**Advice Note:** The certification process is confined to confirming that a Management Plan adequately gives effect to the relevant Condition(s).~~	*Suggest hard copy is not to be required, in accordance with Electronic Transactions Act 2002.*	*Agree with amendment shown. This condition should be tailored to each consent, for example only the AQMP is required for CRC204107 and RC205104.*	There is unnecessary repetition and inconsistency between this condition and the management plans conditions further below. As an example, this condition provides that the QMBP must be provided to both the CRC and WDC Manager for certification at least "40 working days prior to the commencement of quarry activities". However, Condition 11 of CRC204106 provides that the QMBP has to be provided to the "CRC Manager for certification" "at least one month prior to the commencement of any quarrying activity". These inconsistencies must be rectified to ensure a clear process is in place. The advice note is not required as certification is a standard process in resource consent conditions. Alternatively, delete 'adequately' as it suggests some non-compliance can be certified.

15	Works to which a Management Plan relates must not commence until the Consent Holder has received written certification from the CRC Manager and WDC Manager.			
16	Notwithstanding Condition (15), if the Consent Holder has not received a response from the CRC Manager ~~or~~ and the WDC Manager within ~~20~~ 40 working days of the date of submission of the Management Plan, ~~the works may commence. .~~ the Management Plan must be deemed to be certified.		*Do not agree with amendment. I do not think it is appropriate for a lack of response to deem a management plan certified. I have understood this means by default Council would be agreeing the plan meets the requirements of the consent conditions. My preferred approach would be to allow works to occur if there is a delay in receiving certification so as to not unfairly penalise the consent holder.*	We agree with the Council Officer that the presumption of certification of management plans after a certain timeframe is not appropriate given the matters that could proceed without certification. In addition, given that the draft management plans that have been shared provided by the applicant so far are essentially a 'skeleton', certification is important to ensure they are complete and adequate. We consider this condition should be deleted. The Council's Officer's preferred approach is unclear. It seems to assume that works can start without the management plans having been certified but that certification is still required. Given our comments above, we consider this approach is inadequate.
17	[Deleted]			
~~18~~	[Deleted]			
~~19~~	[Deleted]			
	Complaints ~~Register~~			
	The Consent Holder shall establish and publicise by way of public notice on a website and information boards at the site entrances the contact details for a liaison officer, so that members of the local community have a specified and known point of contact should they wish to raise any issues that may arise during the operation of the activities subject to these consents.			We consider it is key for the community to be provided with a clear contact should they wish to raise a complaint. Otherwise, the community will have no knowledge as to the process of raising concerns.

20	The Consent Holder shall maintain a Complaints Register for any complaints about the activities authorised by these consents. The Complaints Register must include: a) The date and time the complaint was received; a)b) The duration of the incident that has resulted in a complaint; b)c) The nature and location of where the complaint has originated, if provided; d) A summary of the complaint; and e)e) The possible cause of the incident; f) Any corrective action undertaken by the Ceonsent Hholder to avoid, remedy or mitigate the issue raised; and d)g) The date and details of the response given to each complainant from the time the complaint is made to its resolution, including the steps taken by the Consent Holder to investigate the complaint. The Complaints Register must be provided to the CRC Manager, and WDC Manager and the Community Liaison Group annually, and must otherwise be available to the CRC Manager, and WDC Manager and the Community Liaison Group on request. For the avoidance of doubt, this condition applies to all resource consents.	*Agreed in principle.*		For the avoidance of doubt, it should be made clear that this condition applies to all consents. It is also unclear why "the steps taken by the Consent Holder to investigate the complaint" has been removed from the condition. We consider this should be reinstated. In order to keep an accurate and comprehensive record of complaints, we consider it is also important to note the duration of the incident that has resulted in a complaint (proposed sub-clause (b)), the possible cause of the incident (proposed sub-clause (e)) and the date and details of the response given to each complainant (proposed sub-clause (h)). This information is important to assess the work been done in relation to complaints and any improvements that need to be made. For transparency and accountability, and given the public's interest on the Proposal, we consider the complaints register must also be provided to the Community Liaison Group.
21	For dust complaints the Complaints Register must include the information listed in Condition 20 as well as: a) A description of the wind speed and wind direction when the dust was detected by the complainant;		*Agree with amendments shown.*	The information listed in Condition 20 must be provided as a minimum in relation to any type of complaint. It is also important for the Consent Holder to record any air quality monitoring data to

	b) A description of any air quality monitoring data when the dust was detected by the complainant; c) The most likely cause of the dust detected; d) Any corrective action undertaken by the Consent Holder in accordance with the AQMP to avoid, remedy or mitigate the dust detected by the complainant; and e) Any other corrective actions undertaken.			investigate the possible cause and consequences of the dust incident.
	The Consent Holder must acknowledge receipt of any complaint related to the site within 24 hours and shall respond in full to such complaint as soon as practicable and no later than 2 working days after the complaint was received.			We recommend adding this additional condition to ensure complaints are addressed in a timely manner.
	Site Rehabilitation		*These conditions should apply to CRC204106 and RC205104.*	
22	Progressive and final rehabilitation of the site must be undertaken in accordance with the latest certified QBMP.			The QMBP is to be updated prior to rehabilitation works so this amendment clarifies that the latest certified version of the QMBP shall be the one used to undertake the progressive and final rehabilitation of the site.
D	~~Excavation of aggregate shall cease by XXXXXXX to enable and~~ The final rehabilitation of the site shall be completed before the expiry of these consents.	*Not agreed*	*Agree with changes shown.*	As drafted, it is unclear when site rehabilitation shall be completed. We consider a clear date for final rehabilitation of the site needs to be included.
E	Upon completion of site rehabilitation, the site shall be: a. Reinstated back to the original ground level; b. Have a layer of overburden and 300 millimetres of topsoil capping the deposited VENM; and c. Vegetated with a suitable grass cover that achieves 80% or greater vegetation cover or other suitable vegetative cover.			

	Consent Lapse			
23	The lapsing date for the purposes of section 125 of the Resource Management Act 1991 is five years from the date of issue of these consents. ~~N.B. Advisory: The duration of the consents sought is 15 years to complete the quarry, backfilling and rehabilitation of the entire site.~~			The advisory note needs to be made clear in Condition D above (as amended) as this advice note has no status.
	Review Condition			
24	The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice to the Consent Holder, pursuant to section 129 of the RMA of its intention to review the conditions of these consents under section 128 of the RMA for the purposes of: a) Dealing with any adverse effect on the environment which may arise from the exercise of these consents and which it is appropriate to deal with at a later stage; ~~or~~ ~~b) Amending dust suppression requirements;~~ ~~c) Amending suspended particulate (dust) and groundwater monitoring requirements;~~ b) Ensuring compliance with any relevant ~~-~~ planning document or legislation~~National Environmental Standards~~ ; ~~and~~ c) Ensuring that the conditions are effective and appropriate in managing the effects of activities; d) Reviewing the adequacy of any monitoring. ~~e) Avoiding, remedying, mitigating, off-setting or compensating for any adverse effects on human health arising from suspended particulate matter generated by quarry activities.~~	Amended to be consistent with s128. Agree that review conditions need to be placed on all consents granted. *Parts (b) and (c) should be handled through an amendment to AQMP via Condition 6 – delete these from the review condition.* *Relating to (e), effects are to be managed through the AQMP. It is not clear what is meant by compensation for any adverse effect.*	*The review condition was proposed by the applicant. I do agree with the amendments.*	Suggest amendments to refer to sections 128 and 129 of the RMA. We agree that the annual reviews of the management plans will cover the matters in (b), (c) and (e). Given the importance of monitoring, we also suggest this is specifically referred to in (d).

	CRC204107 Discharge Permit to Discharge Contaminants into air from an industrial or trade premise			
			I have noted where the amendments have been agreed between the air quality experts or where they are recommended by Council s42A Officers.	
	General Conditions			
1	The Person in Charge, or another nominated person, must be available at all times (including outside quarry operation hours) to respond to dust emission complaints and issues in accordance with measures described in the AQMP.			As previously noted, suggest defining "Person in Charge".
	Limit			
F	The discharge shall not cause dust or the deposition of particulate matter that gives rise to offensive, objectionable, noxious or dangerous effects beyond the boundary of the site as shown on Plan CRC204107A.		*A plan identifying the site boundaries to measure this from is still required. The plans provided to date are not clear enough.*	
G	The maximum area of unconsolidated land comprising of the excavation area, backfilling areas and rehabilitation area shall not exceed two hectares. Advice Note: This maximum area of ~~disturbed~~ unconsolidated land does not include the racetrack.			
H	No crushing or processing of aggregate shall occur onsite.		*As agreed by the Air Quality Experts, the following addition should be included:* No crushing or processing of aggregate shall occur onsite. Stockpiles shall be located as shown on Plan CRC204107A.	Agree with the Council Officer's amendment, but the new text should be a separate condition.

H1	The hours of operation for quarry activities other than monitoring and for dust suppression are limited to: a) Monday to Friday, excluding public holidays: i. Trucks crossing the racetracks of the Racecourse: 10.00am – 6.00 pm; ii. All other activities: 7.00am – 6.00pm; and b) Saturdays, excluding public holidays: 7.00am – 3.00pm.		*As agreed by Air Quality Experts.*	This condition should be placed above in relation to "all conditions" as it relates to the operation of the Proposal as a whole.
	Air Quality Management Plan (AQMP)			
2	Prior to the commencement of quarry activities, the Consent Holder must prepare an Air Quality Management Plan (AQMP) for ~~the~~ certification ~~of~~ the CRC Manager (in accordance with the process described in consent CRC-XXXX Conditions 11-15). The AQMP shall be prepared by a Suitably Qualified and Experienced Practitioner (SQEP). The purpose of the AQMP is to: a) Identify the best practicable option to prevent or remedy adverse air quality effects, for the duration of the operation of the activity; ~~a)~~b) Identify the actions required to ensure compliance with the conditions of this consent; ~~b)~~c) Identify the persons responsible for carrying out all actions in relation to meeting the requirements of this consent ~~c)~~d) Describe the methods to control dust, including the frequency and triggers for water suppression activities; and ~~d)~~e) Describe the dust and meteorological monitoring methodology; and ~~e)~~f) Identify responses to non-compliance with consent triggers and complaints. When preparing the AQMP the SQEP shall have regard to the draft AQMP dated XXX, as well as the guidance contained in the Good Practice Guide for Assessing and Managing Dust, Ministry for Environment, 2016, or any subsequent version.		*Based on the conditions discussed between the Air Quality Experts amendments have been suggested. I am not clear why they consider the purpose of the AQMP should be removed. The majority of their suggested changes reflect the content of conditions (15) and (16) so I do not think they are necessary.* *I do recommend the addition of the reference to Standard Operating Procedures.* Prior to the commencement of quarry activities, the Consent Holder must prepare an Air Quality Management Plan (AQMP) and associated Standard Operating Procedures (SOPs) for the certification of the CRC Manager (in accordance with the process described in consent CRC-XXXX Conditions 11-15. ……	Given the importance of setting appropriate compliance measures, we consider the AQMP should be prepared by a SQEP. As noted in relation to condition 6 below, given the potential adverse effects on health and the environment related to the discharge of contaminants to air, the Consent Holder should be undertaking the best practicable option. This amendment is also necessary to ensure the AQMP has a qualitative purpose in light of the condition not currently including TSP trigger levels, The Ministry for the Environment's 'Good Practice Guide for Assessing and Managing Dust 2016' provides suggestions based on international best practice for control of dust from construction and demolition activities. We suggest adding this condition to ensure the Guide is considered while preparing the AQMP. We also suggest the SQEP has regard to the draft AQMP submitted during the consent hearing process as it refers to information that needs to be included in the AQMP as a minimum.

				We agree with the Council Officer's amendments referring to Standard Operating Procedures.
3	The exercise of this consent must be undertaken in accordance with the latest certified AQMP.			
4	Prior to submitting the AQMP to the CRC Manager the Consent Holder must have the AQMP peer-reviewed by a ~~Suitably Qualified and Experienced Practitioner (~~SQEP~~)~~ who is a Certified Air Quality Practitioner to confirm that the measures proposed in the AQMP are appropriate to achieve compliance with conditions of this consent and enable the management of discharge of dust beyond the boundary to a level that is not offensive, objectionable, noxious or dangerous.		*Based on agreement between the air quality experts, the following should be inserted:* Prior to submitting the AQMP (including SOPs) to the CRC Manager for certification, the Consent Holder must have the AQMP reviewed by a Suitably Qualified and Experienced Practitioner (SQEP) who is a Certified Air Quality Practitioner to confirm that the measures proposed in the AQMP are appropriate to achieve compliance with conditions of this consent and enable the management of discharge of dust beyond the boundary to a level that is not offensive, objectionable, noxious or dangerous.	We agree with the Council Officer's amendments referring to Standard Operating Procedures, and given the importance of setting appropriate compliance measures, we also recommend the AQMP is both prepared and peer-reviewed by a SQEP.
5	The AQMP must include, but not be limited to: a) A description of the purpose of the AQMP; b) A description of the dust sources on site; c) A description of the receiving environment and identification of sensitive receptors within 250 metres of site boundaries;		*Based on the Air Quality Experts discussion this condition should be revised as follows:* The AQMP must include, but not be limited to:	Agree with Council's Officer's amendments but suggest amendments to require the AQMP to include a description of the quarry methodology.

	d) The methods (including dust reduction through design methodologies) to be used for controlling dust at each source during quarry activities and from wind erosion outside of quarry operation; e) A description of site rehabilitation methodology; f) A description of dust and wind monitoring requirements including location of dust monitors relative to active work areas and wind direction, trigger levels and methodology; g) A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings; h) A system for training employees and contractors to make them aware of the requirements of the AQMP; i) Names and contact details of staff responsible for implementing and reviewing the AQMP; j) Procedures, processes and methods for managing dust when staff are not on site; k) Methods for determining the weather conditions that will trigger a restriction on potentially dusty activities; l) A method for recording and responding to complaints from the public; m) A maintenance schedule for meteorological and particulate (including PM_{10}) monitoring instruments; n) Separate Standard Operating Procedures (SOPs) dedicated to the management of potential dust discharges from specific sources, including but not limited to: i. Stockpiles; ii. Site roads – sealed and unsealed;		a) A description of the purpose of the AQMP; b) A description of the dust sources on site; c) A description of the receiving environment and identification of sensitive receptors within 250 metres of site boundaries; d) The actions required to ensure compliance with the conditions of this consent; e) A description of the quarry methodology and ~~T~~the methods (including dust reduction through design methodologies) to be used for controlling dust at each source during quarry activities and from wind erosion outside of quarry operation; f) A description of site rehabilitation methodology and associated dust control measures; g) A description of ~~dust~~ particulate matter and wind monitoring requirements including:	

	iii. Triggers for the use of water for dust suppression; iv. The use of dust suppressants other than water; v. Aggregate excavation and backfilling areas; vi. Top soil and overburden stripping and stockpiling; vii. Bund construction, maintenance and the recontouring of slopes during rehabilitation; viii. Any automated dust suppression for dust prone areas that can be activated outside of working hours; ix. Location and calibration of PM_{10} and meteorological monitoring equipment; o) Environmental information management for recording, quality assurance, archiving and reporting the quantity and types of data including all ambient environmental data for wind, rainfall-evaporation, PM_{10} concentrations, community feedback, and all data required for dust management of the site; and p) A copy of the SQEP's peer review report and comments on how the AQMP has addressed the review. For the purpose of the consent, sensitive receptor means: • The area within 20m of the façade of an occupied dwelling; or • A residential area or zone as defined in a District Plan; or • A public amenity area, including those parts of any building and associated outdoor areas normally available for use by the general public, excluding any areas used for services or access areas; or		i. The location of the wind monitoring equipment; ii. The location of ~~dust~~ particulate matter monitors relative to active work areas within 250m of sensitive locations; ~~and wind direction, trigger levels and methodology;~~ iii. Details of wind speed trigger levels as set out in Condition (8) and associated alarm system. This should also include the wind direction to be used in fulfilment of Condition (8); iv. Details of particulate matter trigger levels as set out in Condition (13) and associated alarm system; and v. Monitoring instrumentation methodology, set	

	• A place, outside of the Coastal Marine Area, of public assembly for recreation, education, worship, culture or deliberation purposes. • It does not include the Rangiora Racecourse and its associated facilities.		up requirements, maintenance and calibration procedures; h) A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings; i) A system for training employees and contractors to make them aware of the requirements of the AQMP; j) Names and contact details of staff responsible for implementing and reviewing the AQMP in order to achieve the requirements of this consent; k) Procedures, processes and methods for managing dust ~~when staff are not on site~~ outside of operating hours; ~~l) Methods for determining the weather conditions that will trigger a restriction on potentially dusty activities;~~	

			m) A method for recording and responding to complaints from the public; n) A maintenance <u>and calibration</u> schedule for meteorological and particulate ~~(including PM_{10})~~ monitoring instruments; o) <u>Contingency measures for responding to dust suppression equipment malfunction or failures, including wind and particulate matter monitoring instruments;</u> p) Separate Standard Operating Procedures (SOPs) dedicated to the management of potential dust discharges from specific sources, including but not limited to: i. Stockpiles; ii. Site roads – sealed and unsealed; iii. Triggers for the use of water for dust suppression; iv. The use of dust suppressants other than water;	

			v. Aggregate excavation and backfilling areas; vi. Top soil and overburden stripping and stockpiling; vii. Bund construction, maintenance and the recontouring of slopes during rehabilitation; viii. Any automated dust suppression for dust prone areas that can be activated outside of working hours; ix. Location and calibration of ~~PM10~~ particulate matter and meteorological monitoring equipment; q) Environmental information management for recording, quality assurance, archiving and reporting the quantity and types of data including all ambient environmental data for wind, rainfall-evaporation, ~~PM10~~	

			particulate matter concentrations, community feedback, and all data required for dust management of the site; and r) A copy of the SQEP's peer review report and comments on how the AQMP has addressed the review.	
6	The AQMP (including the SOPs) must be reviewed and updated by a SQEP at least once per year, to ~~ensure it remains fit for purpose~~ensure the AQMP continues to meet the purpose identified in condition 2. Any amendments to the AQMP must be subject to certification by the CRC Manager in accordance with conditions 14-19 of resource consent CRC-XXXX.		*When combining the conditions that apply to all consents with those specified for CRC204107, the condition reference here will need to reflect conditions (14) to (16). I note those conditions are not worded in a manner which relates to updates of the AQMP. An alternative could be to set out the processing for certification of any updates as separate conditions.*	A requirement for the AQMP to be "fit for purpose" is not sufficiently clear; the review should ensure the AQMP continues to meet the purpose set out in condition 2 (including the amendments to refer to the best practicable option).
	Bund Formation		*Insert new heading for conditions specifically about bund formation. Conditions 8 -12 should be inserted here.*	
H2	When constructing the acoustic bunds, the following controls apply: a) ~~Wherever~~ Unless not possible, the bunds shall be constructed during winter months (May to September); b) Consider the weather forecast for the day;		*Specific mitigation should be included during the bund construction as this activity is very high risk in terms of potential effects on sensitive receptors.*	Agree with the Council Officer.

	c) Maintaining a buffer distance of 250 m when wind speeds are above 7 m/s in a direction towards the nearest sensitive locations; d) Material to be excavated must be thoroughly wetted using a water cart ahead of excavation and wetted thoroughly thereafter; e) A continuous particulate matter monitor must operate between the bund and nearest neighbour with alarm triggers in accordance with Condition 7; f) Wind monitoring must be carried out and dust generating activities shall cease when the wind is blowing towards sensitive locations and the wind speeds exceed 7 m/s (hourly average) in accordance with Condition 8;			
	Dust Mitigation and Monitoring		*Heading should be:* **Trigger Levels and Dust Mitigation and ~~Monitoring~~**	
	Trigger levels		*Sub heading inserted:* Trigger levels	
7	When the wind is blowing towards a nephelometer from the direction of the site and when continuous PM_{10} monitoring indicates that the following trigger levels have been reached, the consent holder shall adopt the following response: a) 1-hour average at 55µg/m³ or higher shall require immediate actions to investigate and reduce site dust emissions; and b) 1-hour average at 65 µg/m³ or higher shall require immediate cessation of all quarry activities (excluding dust suppression activities) and taking actions to investigate and reduce site emissions.		*Minor amendment necessary to clarify the monitoring is 'boundary monitoring'.* When the wind is blowing towards a nephelometer from the direction of the site and when continuous PM_{10} boundary monitoring indicates that the following trigger levels have been reached, the consent holder shall adopt the following response:	Monitoring PM_{10} alone and not TSP does not reflect the applicant's assertions that the primary particulate emissions will be TSP.TSP monitoring should be reinstated (as originally proposed by the applicant) to ensure the key effect of the Proposal is appropriately managed, and at the very least to confirm that PM_{10} monitoring is an accurate proxy.
8	Quarry activities (except dust suppression measures) within 250 metres of a sensitive receptor location must not be undertaken when:			For clarity, "Dry weather conditions" should be defined.

	a) wind speed reaches or exceeds 7 m/s (1-hour average); and b) quarry activities would be directly upwind of a sensitive receptor (1-hour average wind direction). c) During dry weather conditions.			
9	If at any time, including outside normal operating hours, visible dust is blowing beyond the site boundary or if the PM_{10} monitoring trigger in Condition 7 is breached the Consent Holder must: a) Cease all quarry activities (except dust suppression measures); b) Continue all dust suppression activities including but not limited to the immediate watering of both active and inactive exposed surfaces; c) Investigate possible sources of the dust; d) Only resume quarry activities (other than dust suppression) once there is no longer visible dust blowing beyond the site boundaries and when the monitoring trigger in Condition 7 is no longer being breached; and e) Notify the CRC Manager within one working day of the dust event, including its cause and the dust suppression actions undertaken.		*I recommend a minor change to clarify the hours of operation and change as agreed by Air Quality Experts:* If at any time, including outside <u>the hours of operation in Condition (H1)</u> ~~normal operating hours~~, visible dust is blowing beyond the site boundary or if the ~~PM_{10}~~ <u>particulate matter</u> monitoring trigger in Condition 7 is breached the Consent Holder must: …	Agree with the Council Officer's amendments, but the condition should also refer to the TSP trigger recommended in condition 7.
	<u>Mitigation measures</u>		*Insert sub-heading:* <u>Mitigation measures</u>	
10	The Consent Holder must take all reasonably practicable measures to minimise the discharge of dust from quarry activities, including but not limited to: a) Assessing weather and ground conditions (wind and dryness) at the start of each day and ensure that		*Based on comments from Air Quality Experts, I recommend the following:*	Generally agree with the Council Officer but oppose the Officer's recommended amendments, except the 15km speed limit in sub-clause (o) applies to all internal roads and should therefore be signposted

	applicable dust mitigation measures and methods are ready for use prior to commencing quarry activities; b) Taking wind direction and speed into account in planning quarry activities to minimise the risk of dust dispersion towards any residential dwellings that are within 250 metres of the site boundary; c) Water suppression such as using water carts, fixed sprinklers, or water misting system will be applied as required to dampen down disturbed areas and stockpiles. This must occur during dry weather, irrespective of wind speed. d) During site preparation, limiting the height of topsoil and overburden to no more than three metres above natural ground level; e) Limiting and extracted aggregate and imported VENM stockpiles to no more than 5 m in height above natural ground level; f) During quarrying operations, locating temporary stockpiles of processed aggregate within the quarry floor area below natural ground level; g) Vegetating any long-term stockpiles (Stockpiles A and B) of topsoil, overburden or unprocessed aggregate; h) Regularly vacuum sweeping sealed areas; i) Constructing and maintaining unsealed internal roads so that they are comprised of an aggregate base, with surfaces that are graded and free of potholes; j) Minimising drop heights when loading trucks and when moving material; k) Pre-dampening topsoil and overburden with a water cart or sprinklers prior to its extraction and removal;		*Amend sub-clause e):* Limiting and extracted aggregate and imported ~~VENM~~ Virgin Excavated Natural Material stockpiles to no more than 5 m in height above natural ground level and to the location as shown on Plan CRCXXXXXX *Amend sub-clause f):* During quarrying operations, locating temporary stockpiles of processed aggregate within the quarry floor area below natural ground level and limiting to a height no greater than 5 metres; *In relation not (g), I am unclear about what constitutes a long-term stockpile. There should be a definition or clarification provided such as the duration of time between the stockpile being actively added to or reduced in size such as:* Vegetating any long-term stockpiles (Stockpiles A and B) of topsoil, overburden or unprocessed aggregate if not disturbed for longer than two months.	accordingly, if not it will give the impression it only applies to some roads.

	l) Carrying out land stripping and land rehabilitation during favourable weather conditions when winds are below 7 m/s; m) Undertaking routine onsite and offsite inspections of visible dust emissions and deposited dust throughout each day of quarry activities and electronically logging findings and any dust suppression actions, and to make the results of the inspections available to ECan when requested; n) Maintaining an adequate and "ready to deploy" supply of water and equipment on site for the purposes of dust suppression at all times; o) Imposing a speed restriction on all internal roads of 15 kilometres per hour at all times and clearly signposting this limit on all internal roads; p) Sealing the access road from the River Road entrance to the racetrack crossing location; q) Requiring all loads entering and existing the site to be covered; and r) Using water from bore M35/9270 (Consent CRC160231) on the site together with water stored in tanks or similar vessels for dust suppression purposes.		*Amend sub-clause o):* Imposing a speed restriction on all internal roads of 15 kilometres per hour at all times and clearly signposting this limit on all unpaved internal roads; *Amend sub-clause p)* Sealing the first 50m of the access road from the River Road entrance to the racetrack crossing location and resurfacing the balance of the road length with road millings. The road shall be maintained in good condition so as to minimise any dust emissions from the surface of the road; *Retain sub-clause q).*	
H3	The surface of the site accessess road beyond the 50 m sealed portion and up to the racecourse crossing shall be surfaced with milled asphalt which shall: a) Contain milled asphalt with a size distribution of 2-20 mm; b) The milled asphalt shall be placed on top of a road base constructed of at least 200 mm of compacted AP65 basecourse and then at least 100 mm of compacted AP40 basecourse.		*Insert specifications and maintenance for road millings.*	We support this condition given the importance of sealing the access road appropriately to manage dust effects.

	c) The milled asphalt top layer shall be at least 50 mm deep and compacted with a roller prior to use. d) The surface of the milled asphalt access road shall be inspected daily, where cracks or potholes are identified the road it to be repaired and resurfaced with compacted milled asphalt. e) Where extensive deterioration of the access road occurs the whole length of the access road is to be resurfaced with a new layer of milled asphalt. f) The consent holder is to ensure that sufficient milled asphalt to resurface the entire length of the access road is available at short notice. g) A watercart, k-line sprinklers, and/or a vacuum sweeper are to be used to keep the milled asphalt road free of tracked material from the quarry.			
11	The discharge of dust and/or particulate matter from the gravel extraction and/or wider activities within the site shall not create any dust hazard or nuisance to Transpower's National Grid transmission lines, including support structures as shown on Plan CRC204107B.			
	Meteorological monitoring			
I	Prior to the commencement of any on-site activities as listed in Condition (1), the Consent Holder shall install an anemometer on the site that has a height of 10 metre above natural ground level. The anemometer shall be capable of continuously monitoring: a) Wind direction; b) Wind speed; c) Rainfall; and d) Temperature.		*Based on the agreement between the Air Quality Experts the following amendments are recommended:* Prior to the commencement of any on-site activities as listed in Condition (1), the Consent Holder shall install a meteorological	

			monitoring station at a location described in the AQMP ~~an anemometer on the site that has a height of 10 metre above natural ground level~~. The ~~anemometer~~ meteorological monitoring station shall be capable of continuously monitoring: ~~a)~~ Wind ~~direction;~~ speed and direction at a height of 10m above the natural ground level; b) ~~Wind speed~~; c) Rainfall; and d) Temperature.	
J	The meteorological monitoring instruments shall be: a) Installed at a height of at least ten metres above natural ground level; b) Installed and operated in accordance with AS/NZS 3580.1.1:2016. Methods for Sampling and Analysis of Ambient Air: Part 1.1: Guide to Siting Air Monitoring Equipment; and c) Able to provide and record the meteorological monitoring results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minute. d) Able to provide the meteorological data to the Quarry Manager and CRC in real-time in an appropriate format. e) Fitted with an alarm system that is able to send warnings and alerts to the Quarry Manager or other nominated person; and f) Maintained and calibrated in accordance with the manufacturer's specifications by a Suitably Qualified and Experienced Practitioner. The consent holder shall maintain a record of when maintenance is undertaken and provide this to the CRC Manager in the Annual Report.		*Based on the agreement between the Air Quality Experts the following amendments are recommended:* Delete sub-clause a). *Amend sub-clause b):* Installed ~~and~~ operated and calibrated in accordance with AS/NZS 3580.1.1:2016. Methods for Sampling and Analysis of Ambient Air: Part 1.1: Guide to Siting Air Monitoring Equipment; and *Amend sub-clause f):* Maintained and calibrated in accordance with the manufacturer's specifications by a Suitably Qualified and Experienced Practitioner. The consent holder shall maintain a	

			record of when maintenance is undertaken and provide this to the CRC Manager in the Annual Report required by Condition (N).	
K	All meteorological monitoring data must be retained for the duration of this consent and provided to the CRC Manager, in real-time, at continuous intervals if requested.			
	Dust Monitoring		*Amend sub-heading:* ~~*Dust*~~ *Particulate Matter Monitoring*	
L	Prior to the commencement of the activities in Condition (1), the Consent Holder shall ensure the installation and operation of at least two continuous dust monitors for the purpose of continuous PM_{10} monitoring for the duration of this resource consent. The monitor shall be: a) Located in accordance with the AQMP so that they are situated between the centre of that days quarrying activities and the nearest downwind off-site sensitive receptor; b) Sited in general accordance with AS/NZS 3580.1.1:2016 Methods for sampling and analysis of air - Guide to siting air monitoring equipment; c) Installed, operated, maintained and calibrated in accordance with the AS/NZS 3580.12.1:2015 Guidelines. Methods for sampling and analysis of ambient air – Determination of light scattering – Integrating nephelometer method; d) Able to provide and record the PM_{10} results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minutes; e) Fitted with a heater so that the inlet temperature is maintained at least 10 degrees Celsius above the ambient temperature; f) Able to provide the dust data to the CRC in real-time in an appropriate electronic format;		*Based on the agreement between the Air Quality Experts the following amendments are recommended:* Prior to the commencement of the activities in Condition (1), the Consent Holder shall ensure the installation and operation of at least two continuous ~~dust~~ particulate matter monitors for the purpose of continuous PM_{10} monitoring for the duration of this resource consent. The monitor shall be: a) Located in accordance with the AQMP~~ so that they are situated between the centre of that days quarrying activities and the nearest downwind off-site sensitive receptor~~; b) In operation when any dust generating activity is within 250m of a sensitive receptor;	Agree with Council's Officer's amendments. As previously noted, simply monitoring PM_{10} and not TSP does not reflect the assertions that the primary particulate emissions will be TSP. TSP monitoring should be reinstated (as originally proposed by the applicant) to ensure the key effect of the Proposal is appropriately managed, and at the very least to confirm that PM_{10} monitoring is an accurate proxy.

	g) Fitted with an alarm system that is able to send warnings and alerts to the Quarry Manager or other nominated person; and h) Maintained in accordance with the manufacturer's specifications by a Suitably Qualified and Experienced Practitioner. The consent holder shall maintain a record of when maintenance is undertaken and provide this to the CRC Manager in the Annual Report.		c) Located between the dust generating activity and the sensitive receptor in a position which is likely to provide data representative of impacts would could potentially occur at the sensitive receptor; d) Sited in general accordance with AS/NZS 3580.1.1:2016 Methods for sampling and analysis of air - Guide to siting air monitoring equipment; e) Installed, operated, maintained and calibrated in accordance with the AS/NZS 3580.12.1:2015 Guidelines. Methods for sampling and analysis of ambient air – Determination of light scattering – Integrating nephelometer method; f) Able to provide and record the ~~PM$_{10}$~~ results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minutes; … g)	
M	All PM_{10} monitoring data must be retained for the duration of this consent and provided to the CRC Manager, in real-time, at continuous intervals.		*Based on the agreement between the Air Quality Experts the following amendments are recommended:*	

			All ~~PM_{10}~~ particulate matter monitoring data must be retained for the duration of this consent and provided to the CRC Manager, in real-time, at continuous intervals.	
	Annual Report			
N	The Consent Holder shall provide an annual monitoring report for the period of 1 July to 30 June to the CRC Manager, by 31 August each year. The annual monitoring report shall include but not be limited to: a) A record of any maintenance of the meteorological or dust monitors undertaken over the proceeding 12-month period; b) A record of all occasions where a trigger level has been reached including any investigations and actions taken; ~~and~~ c) The complaints record required in accordance with Condition (XX); and ~~.~~ d) Contact details for the site management and out of hours contact details.		*Based on Air Quality Expert comments:* *Amend sub-clause c) as follows:* The complaints record and investigation required in accordance with Condition (XX).	Agree with Council Officer's amendments.
	CRC204106 Land use consent to excavate material			
	Extraction depth			
	~~Excavation~~		*Agree to delete.*	
1	A surveyed datum point at natural ground level must be: a) Established prior to undertaking quarry activities; b) Maintained for the duration of this consent; and c) Used to determine the depth of excavation at any point within the site.			
2	Prior to the excavation of overburden, the Consent Holder must survey the site to determine elevations of the natural ground level of the site relative to Mean Sea Level. The survey must			

	be undertaken by a registered surveyor to an accuracy of +/-50 millimetres vertically and be provided to the CRC Manager.			
3	Once aggregate extraction has commenced the Consent Holder must undertake, at monthly intervals or otherwise on request from the CRC Manager, a laser level survey of all depths of excavated and filled areas on the site. The survey must be provided to the CRC Manager. The survey is not required if there has been no excavation in the preceding month period. Alternative methods for achieving this condition, such as GPS depth technology on excavation machinery may be used subject to approval in writing from the CRC Manager.			
4	~~In February of each year,~~~~At the end of each month~~ ~~utilising the survey data obtained under Condition 3, the Consent Holder must produce a contour map showing the surveyed maximum quarry depth relative to the highest recorded groundwater level for the site during the month derived from the groundwater level data obtained from Condition 6. The contour maps shall be provided and provide that map to the CRC Manager with the Annual Report~~ The Consent Holder shall record daily the deepest excavation depth and the relative groundwater depth and report these to the CRC manager on request.		Based on the groundwater JWS the following wording is agreed: The Consent Holder shall record daily the deepest excavation depth and the relative groundwater depth and report these to the CRC Manager on request. The location and elevation of the deepest excavation depth must be determined using a differential GPS system providing spatial location within 1m accuracy, and elevation within 0.01m.	
5	Excavation of aggregate and deposition of backfill (excluding emergency backfilling) must be no deeper than: a) one metre above measured groundwater levels; and	Part (a) edits agreed. Part (b) edits not agreed – to discussed by groundwater experts.	*Based on groundwater experts JWS the following wording should apply:* Excavation of aggregate and deposition of backfill (excluding emergency backfill) must be:	We agree with the Council Officer's amendment and further suggest it includes reference to Condition 6.

	~~b) The depths as shown as contours above mean sea level on Plan CRC204106X, which is attached to, and forms part of this consent.~~		a) no deeper than one metre above measured groundwater levels, in compliance with Condition 6; and b) no deeper than five metres below ground level.	
O	~~The area of excavation deeper than one metre above highest groundwater level as shown on Plan CRC204106X, shall not exceed 0.5ha.~~		*I recommend to retain condition O. All groundwater experts agree that a limitation on the area of land excavated below 1m above HGWL is necessary. I consider that 0.5ha could be appropriate but acknowledge Mr Simpson's concerns regarding the practicality of emergency backfilling this area.*	Support retaining condition O.
P	The consent holder shall ensure there is at least ~~10~~34,~~05~~00m³ of extracted aggregate or VENM onsite or available at 1 Cones Road at all times for emergency backfilling in response to rising groundwater levels.	Principle not disputed, volume not agreed. The condition will need to allow for the stockpile and excavation sizes will be dynamic. However, 1 m separation from groundwater must be maintained at all times.	*Based on the JWS and retaining Condition O, this condition should require at least 20,000m³ stockpiled on site. From the applicant's description of stockpiles it is not clear if there will always be at least 34,500m³ available. Preferably this is the case.* The consent holder shall ensure there is at least ~~10,000m³~~ 20,000m³ of extracted aggregate or VENM onsite at all times for emergency backfilling in response to rising groundwater levels.	Support retaining 34,500m³. It is suggested that at least 20,000m³ of that material should be required to be kept on-site (not at 1 Cones Road).
O	No excavation, aggregate extraction or backfilling shall occur within standing water.			
	Groundwater Monitoring			
R	Prior to the commencement of quarrying activities authorised in Condition (xx), the Consent Holder shall either identify existing groundwater monitoring bores or install new groundwater monitoring bores for the purpose of monitoring groundwater			

	levels and groundwater quality in accordance with Condition (6). The consent holder shall provide a plan of the location for any new groundwater wells being installed and details of any existing bores proposed to be used, to the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring for certification that the location of the bores complies with Condition (6). The Consent Holder shall not install the bores until certification is received from the Canterbury Regional Council.			
6	Monitoring bores required in accordance with Condition (S) shall: a) Include: i. At least two up-gradient bores along the north-western extent of the site; ii. At least three down-gradient bores along the south-eastern extent of the site; iii. ~~At least one bore along the northern boundary of the inner race track~~; and a. Be a minimum of 50 millimetres in diameter; b. Enter the aquifer that is immediately underlying the site; c. 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; d. Be surveyed for their location to an accuracy between 1-15m and for their elevation to an accuracy between 0.1-0.5m; and e. Be accessible to the Canterbury Regional Council for the purpose of groundwater sampling.	North boundary bore should not be necessary.	*Reference to Condition (S) should be to Condition (R).* *Based on the groundwater JWS the following changes are required:* *Condition a) iii. should be retained.* *A new sub-clause a) iv. added*: a standing pipe within 50m of the active working stage. *A new sub-clause a) v. added:* At least three bores on the land east of the quarry site *Sub-clause c) shall be amended:* c) Be surveyed for their location to an accuracy of +/- 1m ~~between 1-15m~~ and for their elevation to an accuracy of +/-50mm. ~~between 0.1-0.5m~~	Agree with Council Officer's amendments.
S	~~Information relating to:~~ ~~a) the installation of new bores; and~~	Amended to make wording more clear.	*Accept the wording suggested by the applicant except for d). Amendments as suggested by*	

	~~b) any existing bores, including survey of their location to an accuracy between 1 – 15 m and of their elevation to an accuracy between 0.1-0.5 m;~~ ~~shall be provided to the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring, within twenty working days of the installation of bores to confirm they have been installed in accordance with the conditions of this resource consent.~~ The Consent Holder shall, within 20 working days of the installation of monitoring bores referred to in Condition 6, provide in writing the following information to the Canterbury Regional Council, Attention: Regional Leader - Compliance Monitoring: a) confirmation of the installation of new bores; and b) confirmation of any other bores to be used for monitoring; and c) confirmation their installation and specifications are in accordance with the conditions of this consent; and d) for each bore referred to in parts (a) and (b) of this condition, survey data showing: (i) their location to an accuracy between 1 – 15 m; and (ii) their elevation to an accuracy between 0.1 – 0.5 m.		*groundwater experts in JWS as follows:* d. for each bore referred to in parts (a) and (b) of this condition, survey data showing: i) their location to an accuracy of within 1m ~~between 1 – 15 m; and~~ ii) their elevation to an accuracy of within 0.05m. ~~between 0.1 – 0.5 m.~~	
	Groundwater Level Monitoring			
T	The Consent Holder shall monitor and record the groundwater levels in all bores listed in Conditions (xx and U) for the duration of this consent as follows: a) Water levels shall be measured using a tamper-proof electronic recording device such as a data logger that		*Condition reference should be to Condition 6.*	

	shall time stamp a pulse at least once every 60 minutes, b) The recording device shall be connected to a telemetry system which collects and stores all of the data continuously with an independent network provided who will make that data available in a commonly used format at all times to the Canterbury Regional Council and the Consent Holder. No data in the recording devices shall be deliberately changed or deleted. c) An alarm shall be fitted to the monitoring system that is capable of sending warnings and alerts to the Quarry Manager or other nominated person; d) The recording devices shall be accessible to the Canterbury Regional Council at all times for inspection and/or data retrieval. e) The recording device and telemetry system shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions. f) All practicable measures shall be taken to ensure that the recording devices are fully functional at all times.			
T2	Prior to any excavation occurring on site the consent holder must install the groundwater monitoring bores specified in condition 6 (except for the standpipe in Condition 6 a iv) and~~.~~ g~~G~~roundwater levels must be monitored in all the bores for 12 months using an electronic transducer recording groundwater level pressures at 15 minutes intervals. After 12 months of monitoring and prior to excavations occurring, the consent holder must a. investigate the interaction between groundwater levels, river levels and rainfall b. develop a forecasting model that is capable of estimating rates of groundwater level change due to forecast rainfall and river flows.		*Based on expert JWS, a groundwater forecasting and alarm system is necessary and the consent conditions should set out how this is to be developed. As noted in the s42A Addendum I am concerned about what occurs if the forecast model cannot be developed after consent is granted. The consent conditions should include some alternative.*	Agree with the Council Officer, noting that no draft conditions have been provided to address this issue. The forecasting model and trigger levels must be certified by CRC as opposed to 'agreed'. A clear purpose is required to clarity the role of certification.

	c. propose trigger levels and management actions that will ensure that the 1 m separation between the real-time excavation depth is maintained. d. The forecasting model and trigger levels must be ~~agreed~~ certified by ~~with~~ CRC prior to any excavations commencing [add purpose for certification].			
U	In addition to monitoring groundwater levels in groundwater bores, the consent holder shall install a standing pipe within 50m of the active working stage.		*Condition U can be deleted as incorporated into Condition 6.*	
7	~~At all times and in all circumstances, the Consent Holder must limit excavation to one metre above the highest real-time recorded groundwater level for the site (derived from the groundwater level data obtained within a 12-hour period between 8am and 8pm based on the two nearest groundwater level monitoring bores. under Condition 6.) for the site, referenced to the datum point in Condition 1.~~ At all times and in all circumstances, the Consent Holder must limit excavation to no closer than one metre above groundwater in accordance with: a) groundwater levels obtained during the prior a 12-hour period from the two nearest bores of referred to in Condition 6; and *b)* the real-time groundwater level obtained from the standing pipe referred to in Condition U.	Reference to standing pipe should be added in. Wording should be clearer. Revised wording suggested.	*Condition 7 requires reference to condition U to be amended to condition 6 (to reflect deletion of Condition U).*	This condition overlaps with condition 5. We suggest these conditions are consolidated for clarity.
	Water Quality Monitoring			
8	[Deleted]			
9	The consent holder shall monitor and undertake analysis of groundwater quality in accordance with the timetables in parts (a) and (b) of this conditions, and for the ~~from the samples for the following elements and~~ parameters ~~(to be included after 12~~		*This condition should be inserted before Condition 26.*	Agree with the Council Officer.

	~~months), as determined after the first 12 months of monitoring.~~ identified in part (c) of this condition. (a) Monthly, for a period of 12 months before excavations commence; (b) Once every three months for the period between the commencement of excavations and the completion of rehabilitation activities; ~~The frequency of sampling shall be every quarter of the following~~ (c) ~~p~~Parameters: a) pH b) Conductivity c) TDS d) Alkalinity e) Calcium f) Magnesium g) Hardness h) Sodium i) Potassium j) Nitrate k) Chloride l) Sulphate m) Boron n) Iron o) Manganese p) Copper q) Zinc		*Accept the changes of the applicant to refer to baseline and operational monitoring frequency.* *Based on the JWS from the groundwater experts additional parameters should be monitored. Suggest the following:* The consent holder shall monitor and undertake analysis of groundwater quality in accordance with the timetables in parts (a) and (b) of this condition, and for the elements and parameters in part (c) of this condition: (a) Monthly, for a period of 12 months before excavations commence; (b) Once every three months for the period between the commencement of excavations and the completion of rehabilitation activities; (c) i. pH ii. Conductivity iii. TDS iv. Alkalinity v. Calcium	

	r) E.Coli s) Arsenic t) Lead u) Turbidity		vi. Magnesium vii. Hardness viii. Sodium ix. Potassium x. Nitrate-nitrogen xi. Chloride xii. Sulphate xiii. Boron xiv. Iron xv. Manganese xvi. Copper xvii. Zinc xviii. E.Coli xix. Arsenic xx. Lead xxi. Turbidity; xxii. Acidity xxiii. Ammoniacal Nitrogen xxiv. Dissolved aluminium; xxv. Dissolved chromium; xxvi. Dissolved cadmium	

			xxvii. Total petroleum hydrocarbons; and xxviii. Volatile organic compounds.	
U1	After the first 12 months of monitoring the data obtained must be analysed by the consent holder and used to derive trigger level thresholds for the concentrations of each contaminant. These trigger levels will be based on the range of concentrations observed over 12 months; if subsequent sampling indicates water quality concentrations that breach the trigger levels, the management actions in condition XX will apply.		*A separate condition is required to outline how the baseline trigger values are to be obtained. These trigger levels should be included in the QBMP.* After the first 12 months of monitoring the data obtained in accordance with Condition (9) must be analysed by the consent holder and used to derive trigger level thresholds for the concentrations of each contaminant. These trigger levels shall be based on the range of concentrations observed over 12 months. The trigger levels must be defined based on the 95th percentile concentration for all the samples. The Trigger levels must be included in the QBMP and approved by CRC before any quarry related activities can commence. If subsequent sampling, during the quarry works, indicates water quality concentrations breach the trigger levels, the management actions in conditions 29-32 will apply.	Agree with the Council Officer.
	Discharge of backfill material	Proposed new condition to cover in words the flow chart		

		process identified in Mr Singson's evidence and approved by Ms Iles.		
	1. Externally sourced material may only be discharged as backfill at the site if a. it is VENM; and b. it is recorded as meeting the Stage 1 conditions for acceptance as set out below; and c. it is discharged in accordance with the Stage 2 conditions as set out below. 2. Material used for backfill shall be subject to verification and sampling for the purpose of auditing in accordance with Condition 13. <u>Stage 1 conditions:</u> 3. Potential backfill material may only be accepted to Stage 2 if conditions 4, 5, 6 or 7 are met. 4. The backfill material's source site is listed as HAIL in the LLUR and: a. A certified soil test of the material has been provided by a SQEP; and b. The results of the certified soil test show the material meets the WAC 5. The backfill material's source site not listed as HAIL in the LLUR and:		*Each of the conditions inserted here will need to be sequentially numbered to align with conditions above. Using the numbering in this condition, the following amendments are required:* *Amend Condition (1) as follows:* Externally sourced material may only be discharged as backfill at the site if a. <u>It meets the definition outlined in Condition (2)</u> ~~it is VENM~~; and b. <u>The backfill has a written record produced by a SQEP as meeting the Stage 1 conditions for acceptance as set out below.</u> ~~it is recorded as meeting the Stage 1 conditions for acceptance as set out below~~; and c. <u>It is accept</u>~~edance~~ <u>and</u> it is discharged	Agree with the Council Officer, subject to minor amendments and noting that further information is required from the Applicant to complete the conditions.

	6. The material's source site is a greenfield or undeveloped site; and 7. A SQEP determines that it is less likely than not that the material has potentially been subject to contamination or subject to potentially contaminating activities 8. The backfill material's source site not listed as HAIL in the LLUR and: 9. The material's source site is a not greenfield or undeveloped site; and 10. A certified soil test of the material has been provided by a SQEP; and 11. The results of the certified soil test show the material meets the WAC 12. The backfill material's source site is not listed as HAIL in the LLUR and: 13. The material's source site is a greenfield or undeveloped site; and 14. A SQEP determines that it is more likely than not that the material has potentially been subject to contamination or subject to potentially contaminating activities; and 15. A certified soil test of the material has been provided by a SQEP; and 16. The results of the certified soil test show the material meets the WAC		in accordance with the Stage 2 conditions as set out below. *My preference is for the pre-selection stage or (stage 1 conditions) is for the consent to refer to flow chart which is to be attached as a Schedule.* *Replace Conditions 3 to 8 with the following:* Prior to the acceptance of backfill material for deposition into the excavated pit, the Consent Holder shall ensure material is assessed for its suitability as backfill in accordance with the flow chart attached as CRC204106 Schedule 2. The assessment required by Condition (x) shall be undertaken by the SQEP. *Replace the Stage 2 condition with the following:* Backfill material will only be accepted and discharged following: a. Completion of the Load Inspection Sheet;	

	17. Potential backfill material not meeting Conditions 4, 5, 6 or 7 shall not be used as backfill and shall be rejected. **Stage 2 conditions** 18. Backfill material may only be discharged if the terms of the Declaration Form are met in accordance with the QBMP. 19. Condition referring to inspection checklist. 20. Condition referring to Photographic evidence. 21. Condition referring to Video recording / surveillance. **Stage 3 conditions** 22. Condition referring to random audit – 1 load in every 50. **Placement of accepted backfill** 23. Accepted material shall be deposited in accordance with the procedures contained in the certified QBMP. 24. Stockpiling of accepted backfill shall only be undertaken in accordance with the procedures contained in the certified QBMP. **Removal of backfill where it is found not to meet waste acceptance criteria following placement** 25. If the consent holder becomes aware that material which does not meet the waste acceptance criteria has been deposited, the consent holder shall:		b. Receipt and review of the Backfill Acceptance Declaration Form; and c. Collection of photographic evidence and/or video surveillance recording. *Replace the Stage 3 conditions with the following:* A random audit of 1 load in every 50 truck and trailer loads shall be carried out including the following: a. Detailed, intrusive visual inspection to confirm accuracy of the load inspection sheet and declaration form. *I note that further information from the applicant is required to fully understand what this audit will include.* Random verification sampling shall be carried out at a rate of 1 sample per 500m³ of accepted material. a. All sampling requirements including location of sampling shall be carried out by a SQEP; b. Samples will be analysed for ~~all~~ the suite	

	a. Ensure the area is marked and closed off immediately; b. Engage a Suitably Qualified and Experienced Contaminated Land Practitioner to advise on the appropriate disposal location; c. Remove the material from the site within 5 working days; and **Removal of backfill in response to results from groundwater monitoring** 26. Condition here or in groundwater set. **Keeping of records** 27. Accepted and rejected material shall be recorded in a digital database, with the database record being provided to the CRC Manager upon request, and including as a minimum the following information: a. The date of delivery; b. The physical address of the source; c. A description of the material; d. Any laboratory reports pertaining to the composition of the material; e. The name of the SQEP who approved the material f. Any authorisation under which the material was removed from the source site (e.g. resource consent);		of parameters indicated in CRC204106 Schedule 1 and shall be tested by an IANZ accredited laboratory. *Agree with conditions 14 and 15.* *Insert new conditions for the materials awaiting verification testing:* **Materials awaiting confirmation of acceptance or verification testing** Material awaiting results from auditing and verification sampling shall ~~be~~: a. Stockpiled in a location at least 50m away from the extraction area and Stockpiles A and B; b. Have Clear signage indicating that the material is not to be used as backfill; c. ~~Shall~~ have erosion and sediment controls in place to prevent the loss of material beyond the stockpile area. *Add new sub-clause to condition 16:* d) Provide a report to the CRC Manager and WDC Water Asset Manager (or other water supply	

	g. The weight or volume of the delivered material; h. Whether the material was accepted or rejected; i. The name of the person assessing and determining whether the material was accepted or rejected; j. The reasons the material was accepted or rejected; k. A digital, date and location-stamped photograph of the material on the delivery truck in sufficient detail and clarity to confirm the accuracy of the description of the material in Condition 23.c. l. Digital video footage that is date and location stamped showing accepted material being placed, in sufficient clarity and detail to confirm the accuracy of the description of the material in Condition 23.c; and m. The GPS co-ordinates of the location where the material was deposited on site.		entity) within 10 working days on how the incident occurred, where the material has been disposed of, validation sampling results and procedures to be implemented to prevent recurrence. *I consider a timeframe on this report is necessary but am unsure of this. Perhaps 20 working days.* *Agree to condition 18.*	
	Excavation of aggregate and backfilling			
10	All excavation and backfilling shall occur in accordance with the latest certified QBMP.			
	Quarry and Backfill Management Plan (QBMP)			

11	At least one month prior to the commencement of any quarrying activity, the Consent Holder must prepare a Quarry and Backfill Management Plan (QBMP) in accordance with the resource consent application dated 6 October 2020 and the conditions of this consent, and submit it to the CRC Manager for certification. The QBMP shall be prepared by a SQEP. The Consent Holder shall not commence any works within the site until the QMBP has been certified. ~~**Advice note**:~~ The purpose of the QBMP is to • identify the ~~best management practices (BMP)~~ ~~best practicable options (BPO)~~ best practicable options (BPO) for complying with the conditions of this consent • provide detail on how the chosen ~~BMPs~~ ~~BPO(s)~~ BPO's will ensure the conditions of this consent will be complied with; and • set out how the consent holder will implement those ~~BMPs~~ ~~BPO(s)~~ BPO's.		*I agree with references to BPO. My initial concern was that the RMA definition relates only to discharges of a contaminant and that may not be applicable in this case.* *For the sake of clarity, a modified definition of BPO could be included on the consent:* Best Practicable Option means: the best method for preventing or minimising the adverse effects on the environment having regard, among other things to: a) the nature of the activity, including any discharge or emission, and the sensitivity of the receiving environment to adverse effects; and b) the financial implications, and the effects on the environment, of that option when compared with other options; and c) the current state of technical knowledge and the likelihood that the option can be successfully applied.	The purpose of the QBMP should form part of the condition – as opposed to being an "advice note". Given the importance of setting appropriate measures, we consider the QBMP should be prepared by a SQEP. For the avoidance of doubt, we suggest clarifying that no works shall begin until the QMBP has been certified. We agree that reference to BPO should be retained. Given it is an industry understood term, defining BPO as suggested by the Council's Officer is not necessary.
12	The exercise of this consent must be undertaken in accordance with the latest certified QBMP. In the event of any inconsistency between the conditions of this consent and the provisions of the QBMP, then the conditions of this consent must prevail.			There appears to be unnecessary repetition throughout the conditions (for example, instead of Conditions 10 and 12 it would be sufficient to include one condition stating that all activities must be undertaken in accordance with the latest certified QBMP.
13	The QBMP must include but not be limited to: a) A description of the content and purpose of the QBMP;		*The QBMP should include the conditions required regarding the prevention and management of spills.*	Concerning Condition 13(f): we suggest clarifying that noise management must include methods to reduce noise levels.

	b) Details of quarrying operations relevant to the deposition of backfill material; c) Details of groundwater level and groundwater quality monitoring; d) Details of the groundwater level alarm system to warn of rising groundwater levels and the responses to this alarm; e) A methodology for how increasing groundwater levels will be forecast in the event of extreme climate events, heavy rainfall and flooding in the Ashley River/Rakahuri; f) Details of noise management, including methods to reduce noise levels; g) Details of spill management and response to any spills; h) The actions to be undertaken to ensure compliance with the conditions of this consent and actions to be undertaken in response to any incident that may adversely affect the environment; i) Identifying and providing contact details of the staff member responsible for each action; j) ~~The steps to be undertaken to correct incidences of non-compliance with the conditions of this consent;~~ k) Details of the on-site training procedures; l) A description of operational procedures and monitoring that will be implemented to prevent unauthorised material from entering the site; m) A list of acceptable and unacceptable backfill materials; n) How rejected backfill materials will be stored consistent with condition 22 pending its removal to another site authorised to receive it;		*Amend sub-clause g) as follows:* ~~Details of spill management and response to any spills;~~ A spill management and response procedure that: i. Documents measures to prevent leaks and avoid spills of fuel or any other hazardous substance (including fuel reconciliations); ii. Sets out procedures to be undertaken in the event of a spill of fuel of any hazardous substance, iii. Requires measures to remove contaminated material; and iv. Describes actions to address a spill when it coincides with rapidly rising groundwater levels and backfilling requirements; v. Details the adequacy of groundwater quality monitoring procedures to determine any effects on groundwater quality; and	Concerning Condition 13(g): support consolidation of spill management plan into QBMP. Concerning Condition 13(j): it is submitted that a condition assuming non-compliance with conditions is not appropriate. This clause should be deleted. Conditions 13(n) and (o) require cross-references to ensure consistency with Condition 22. Concerning condition 13(g): there appears to be unnecessary repetition as condition 37 covers the information that must be included as a minimum in the spill management plan. For clarity, suggest one condition covers all the necessary information in relation to the spill management plan.

	o) The maximum length of time that rejected material can be stored on site pending its removal consistent with condition 22; p) A description of erosion and sediment control measures to minimise sediment loss from the site and prevent any run-off into the excavated pit; q) Construction procedures to ensure the long-term stability of backfilled areas; r) The requirements for full site rehabilitation, including topsoil depths and vegetation to be planted; s) Timetable of works and re-vegetation measures; t) Procedures for improving and/~~or~~ reviewing the QBMP.		vi. Sets out staff training requirements for responding to spills.	
14	The certified QBMP must be reviewed and updated to ensure it continues to meet the purpose specified in condition 11, at least once ~~per~~ every year for the duration of this consent.			Changes made to reflect consistency with AQMP condition and noting that the management plan should be updated to achieve the purpose.
15	Any updated version of the QBMP must be forwarded to the CRC Manager for certification within 30 days of its review and updating.			
	Staff Training			
16	Specific staff training specified in the QBMP must be provided in accordance with "Technical Guidelines for Disposal to Land (Updated August 2018)", WasteMINZ, 2018.			
17	Annual refresher training must be provided by a SQEP in backfill management, as part of the training specified in the QBMP.			
	Backfilling			
	Acceptance and rejection of backfill material			

18	~~Backfill material brought to the site shall be:~~ ~~a) accompanied by a description of the material, the source of the material and the name of the company delivering the material;~~ ~~b) assessed by the site manager or nominated person against the backfill acceptance criteria;~~ ~~c) accepted if determined to be acceptable backfill by the site manager or nominated person; or~~ ~~d) rejected if determined by the site manager or nominated person to be~~ ~~i. not acceptable backfill material or~~ ~~ii. contrary to the accompanying description referred to in Condition 18.a.~~ The following activities shall be undertaken in accordance with the procedures described in the approved QBMP: a) Pre-selection of backfill b) Inspection of backfill c) Acceptance of backfill d) Rejection of backfill e) Management of rejected backfill f) Audits of backfill g) Verification of backfill h) Stockpiling of accepted backfill i) Placement of accepted backfill within excavated areas j) Management of placement of backfill in relation to groundwater separation k) Removal of backfill where it is found not to meet waste acceptance criteria following placement		*I think this condition repeats what has been described above and is not necessary.*	

	l) Removal of backfill in response to results from groundwater monitoring m) Keeping of records			
19	The site manager or nominated person's assessment and determination on the material shall be in accordance with the certified QBMP.	*Delete*	*Agree to the deletion.*	
20	For the avoidance of doubt, the assessment and either acceptance or rejection of material must occur before material is deposited into the excavated area or stockpiled.	*Delete*	*Agree to the deletion.*	
	Accepted material			
21	Accepted material shall be a) deposited in accordance with the procedures contained in the certified QBMP; and b) otherwise i. stockpiled in volumes not exceeding 23,000 m^3 (Stockpile A) ~~and 11,500 m^3 (Stockpile B) in total~~ and 11,500 m^3 (Stockpile B) in total~~,~~ for later deposition in accordance with this condition; or ii. disposed of immediately at another site licenced to receive it.		*I understand that only one stockpile is for VENM either from the site or imported. This was described as Stockpile A. Stockpile B is for extracted aggregate. Some further clarification is required to update this condition.*	
	Rejected material			
22	Rejected material shall be retained in the truck and removed from the site for and disposal at another site licenced to receive it within 48 hrs of its arrival.	*Delete*	*I consider that this would still be necessary in the event material is identified in a load inspection or audit.*	Agree with Council officer.

	Unanticipated deposition of unacceptable material			
V	If the consent holder becomes aware that material which does not meet the waste acceptance criteria has been deposited, the consent holder shall: a) Ensure the area is marked and closed off immediately; b) Engage a Suitably Qualified and Experienced Contaminated Land Practitioner to advise on the appropriate disposal location; c) Remove the material from the site within 5 working days; and d) Provide a reporting to the Canterbury Regional Council, Attention: Regional Leader-Monitoring and Compliance and WDC Water Asset Manager (or other water supply entity) on how the incident occurred, where the material has been disposed of, validation sampling results and procedures to be implemented to prevent recurrence.	*Delete*	*This requirement is already above therefore agree to this deletion.*	Agree with Council officer.
	Backfilling to prevent exposure of groundwater			
23	Should the groundwater water level increase so that the separation is less than one metre between the measured groundwater levels and the current (at that time) ground level within the quarry site, then the Consent Holder must immediately cease all excavations and apply backfill to that area within 24-hours of incident, so as to re-establish a one metre separation distance throughout the quarry site.	*Delete*	*Do not agree to this deletion. There must be a requirement for emergency backfilling.*	Agree with Council officer.
24	Should groundwater levels rise into the quarry floor during excavation of aggregate or deposition of Virgin Excavated Natural Material, the Consent Holder must: a) Remove heavy machinery from the pit floor; b) Check VENM and aggregate stockpile volumes for backfilling; and	*Delete*	*Do not agree with this deletion. These matters reduce risks to groundwater quality and assist with the backfilling response.*	Agree with Council officer.

	c) notify the CRC Manager and WDC Water Asset Manager (or other water supply entity) within 24 hours.			
	Keeping of records			
25	Accepted and rejected material shall be recorded in a digital database, with the database record being provided to the CRC Manager upon request, and including as a minimum the following information: a) The date of delivery; b) The physical address of the source; c) A description of the material; d) Any laboratory reports pertaining to the composition of the material; e) Any authorisation under which the material was removed from the source site (e.g. resource consent); f) The weight or volume of the delivered material; g) Whether the material was accepted or rejected; h) The name of the person assessing and determining whether the material was accepted or rejected; i) The reasons the material was accepted or rejected; j) A digital, date and location-stamped photograph of the material on the delivery truck in sufficient detail and clarity to confirm the accuracy of the description of the material in Condition 23.c. k) Digital video footage that is date and location stamped showing accepted material being placed, in sufficient clarity and detail to confirm the accuracy of the description of the material in Condition 23.c; and l) The GPS co-ordinates of the location where the material was deposited on site.	*Delete*	*Agree. This is already required above.*	Agree.

	Groundwater Quality Monitoring Programme and Reporting			
26	Prior to the commencement of quarry activities, representative samples of groundwater must be taken (subject to landowner approval and if practically possible) from all domestic water supply wells in use within 500 metres downgradient of the site, as indicated in attached Plan X [**Figure 1 of Appendix E]** and listed on CRC's wells database, to establish baseline water quality conditions in those wells. Each bore sample must be analysed for the contaminants in Table 1 of Condition 25. A copy of the results of the groundwater samples must be provided to the CRC Manager and the bore owner.		*Based on the JWS from the groundwater experts the following amendments are recommended:* Prior to the commencement of quarry activities, representative samples of groundwater must be taken (subject to landowner approval and if practically possible) from all domestic water supply wells within 500 metres zone downgradient of the site, as indicated in attached Plan X ~~[**Figure 1 of Appendix E]**~~ and listed on CRC's wells database or on properties not serviced by a reticulated water supply, to establish baseline water quality conditions in those wells. Each bore sample must be analysed for the contaminants in Table 1 of Condition 9. A copy of the results of the groundwater samples must be provided to the CRC Manager and the bore owner within 5 working days of obtaining the results~~.~~	Agree with the Council Officer's proposed condition, but suggest amendment to clarify timeframes.
27	The Consent Holder must undertake the following groundwater sampling regime for the bores identified in Condition 24 of this Consent:		*Based on the JWS from the groundwater experts the following condition is recommended:* The Consent Holder must undertake the following groundwater sampling regime for	Agree with the Council Officer's proposed condition, but suggest amendments to provide certainty as to timeframe.

	a) Representative samples of groundwater must be taken at three-monthly intervals for the duration of this consent after quarry activities commence; b) Samples must be taken after adequate purging to remove all stagnant water from the bores or by using an alternative method, such as a low-flow sampling technique, to ensure that fresh groundwater is drawn through the bore screens; c) All samples must be taken by a suitably qualified practitioner and analysed for the contaminants listed in Table 1 by an accredited laboratory; and d) The water quality monitoring results must be supplied to the CRC Manager within one month of them being received in an electronic format, suitable for automatic upload to a water quality database (preferably directly from the analytical laboratory immediately after quality checking). Table 1: Parameters. (a) Parameter (b) pH (c) Conductivity (d) TDS (e) Alkalinity (f) Calcium (g) Magnesium (h) Hardness (i) Sodium (j) Potassium		the bores identified in Condition ~~24~~6 of this Consent: a. Representative samples of groundwater must be taken at three-monthly intervals for the duration of this consent ~~after~~ from the commencement date of any quarry related activities ~~commence~~; b. Samples must be taken after adequate purging to remove all stagnant water from the bores or by using an alternative method, such as a low-flow sampling technique, to ensure that fresh groundwater is drawn through the bore screens; c. All samples must be taken by a suitably qualified practitioner and analysed for the contaminants listed in Condition 9 by an accredited laboratory; and d. The water quality monitoring results must be supplied to the CRC Manager within one month of them being received in an electronic format, suitable for automatic upload to a water quality database (preferably directly from the analytical laboratory immediately after quality checking). *Delete Table 1.*	

		(k) Nitrate (l) Chloride (m) Sulphate (n) Boron (o) Iron (p) Manganese (q) Copper (r) Zinc (s) E.Coli (t) Arsenic (u) Lead (v) Turbidity			
	Responses to Monitoring			Based on the JWS from the groundwater experts the following condition is recommended: The results of the analyses of groundwater samples tested must be compared with the contaminant trigger values in the QBMP~~Table 1~~, ~~that~~ which shall be established ~~on the 12-month baseline monitoring~~in accordance with condition T2. ~~within the first year of monitoring.~~ After the commencement of any quarry related activities, ~~first year of operations~~ any contaminant concentration in the downgradient	Agree with the Council Officer's proposed condition, subject to amendment to cross-reference. The advice note is also material and should be included within the condition itself, in the appropriate location.

			bores will be deemed an exceedance if: a) The tested result is in excess of the trigger values for a contaminant given in the QBMP ~~Table 1~~ and the maximum ~~median~~ concentration of the same contaminant in the upgradient wells for that sampling event is less than the contaminant trigger values in the QBMP; ~~Table 1 trigger values;~~ or b) Where any median concentration in the upgradient wells for a sampling event exceeds the contaminant trigger values in the QBMP, ~~Table 1 trigger,~~ the ~~median~~ concentration of a contaminant in any of the downgradient wells exceeds the upgradient maximum ~~median~~ concentration of the same contaminant by more than ~~25~~ 10 percent of the respective ~~Table 1~~ contaminant trigger value in the QBMP. **Advice note**: The trigger levels are intended to establish if there	

			has been an increase in concentration of any contaminant across the Consent Holder's site. Upgradient wells are to monitor if any contamination is coming from other upgradient properties. Condition ~~26.b~~ 28.b. makes allowance for ~~Table 1~~ contaminant trigger values in the QBMP being exceeded because of an upgradient contamination source, by requiring a further increase of more than ~~25~~ 10 percent of the trigger level across the site before a consent exceedance is triggered. ~~**Advice note**: Median concentrations are intended to combine results spatially from different wells, to account for the potential for narrow plumes of contaminants in groundwater being detected at only one well. Where Condition 26 refers to a median concentration, it is to be calculated from the test results from a set of monitoring wells, (either upgradient or downgradient wells), for one sampling event, not averaged over different events.~~	
28	The results of the analyses of groundwater samples tested must be compared with the contaminant trigger values in Table 1, that shall be established within the first year of monitoring. After the first year of operations any contaminant concentration in the downgradient bores will be deemed an exceedance if:	Suggested wording, subject to discussion by groundwater experts. Condition		Disagree. As noted above, the trigger values will be set in accordance with condition T2.

	a) The tested result is in excess of the trigger values for a contaminant given in Table 1 and the median concentration of the same contaminant in the upgradient wells for that sampling event is less than the Table 1 trigger values; or b) Where any median concentration in the upgradient wells for a sampling event exceeds the Table 1 trigger, the median concentration of a contaminant in the downgradient wells exceeds the upgradient median concentration of the same contaminant by more than 25 percent of the respective Table 1 contaminant trigger value. The results of the analyses of groundwater samples tested must be compared with the range of background concentrations following the first 12 months of monitoring referred to in Condition 9. The trigger value shall be deemed to be 110% of the highest recorded concentration of each parameter recorded in accordance with Condition 9. **Advice note**: The trigger levels are intended to establish if there has been an increase in concentration of any contaminant across the Consent Holder's site. Upgradient wells are to monitor if any contamination is coming from other upgradient properties. Condition 26.b makes allowance for Table 1 trigger values being exceeded because of an upgradient contamination source, by requiring a further increase of more than 25 percent of the trigger level across the site before a consent exceedance is triggered. **Advice note**: Median concentrations are intended to combine results spatially from different wells, to account for the potential for narrow plumes of contaminants in groundwater being detected at only one well. Where Condition 26 refers to a median concentration, it is to be calculated from the test results	may need new location.		

	from a set of monitoring wells, (either upgradient or downgradient wells), for one sampling event, not averaged over different events.			
29	If there is an exceedance in a downgradient bore as determined by Condition 26, the Consent Holder must within ~~one month~~ two weeks of receiving the results: a) Obtain a second sample of groundwater from the bore sampled in accordance with Condition 25; b) Obtain a sample of groundwater from the upgradient bores specified in Condition 24; and c) Analyse these samples in accordance with Condition 25.		*Based on the JWS, the following condition is recommended to replace the applicant's proposed condition:* If there is an exceedance in a downgradient bore as determined by Condition 28, the Consent Holder must within two weeks of receiving the results obtain a second sample of all the bores in Condition 6 and analyse these samples in accordance with Condition 27.	Agree with the Council Officer's proposed condition.
30	If the results of analysis of the second groundwater samples carried out in accordance with Condition 27 show that none of the concentrations of contaminants analysed exceed the trigger concentrations in Condition 25 Table 1 as determined by Condition 26, the Consent Holder must continue to sample groundwater in accordance with Condition 25.		*Revised wording as follows is required to reflect amendments to other conditions:* If the results of analysis of the second groundwater samples carried out in accordance with Condition ~~27~~ 29 show that none of the concentrations of contaminants analysed exceed the contaminant trigger concentrations in the QBMP ~~Condition 25 Table 1~~ as determined by Condition ~~26~~ 28, the Consent Holder must continue to sample groundwater in accordance with Condition ~~25~~ 27.	Agree with the Council Officer's proposed condition.
31	If the results of analysis of the second groundwater samples carried out in accordance with Condition 27 show an exceedance of the trigger concentrations in Condition 25 Table		*Based on the JWS from the groundwater experts I recommend the following:*	Agree with the Council Officer's proposed condition, except that a timeframe should

	1 as determined by Condition 26, the Consent Holder must within 24 hrs of receiving the result: a) Notify the CRC Manager within 24 hrs of receiving the result; b) Notify the residential occupiers with water supply bores ~~for all adjoining properties~~ within 500 metres ~~downgradient~~ of ~~the site boundary~~ affected monitoring bore within 24 hrs of receiving the result; c) Sample all domestic wells within 500 metres downgradient of the affected monitoring bore ~~site boundary~~ and analyse the samples for contaminants listed in Condition 25 Table 1 (subject to well owner approval); d) Conduct an investigation into the potential cause(s) of the exceedance, which may include undertaking additional monitoring beyond the routine sampling.		If the results of analysis of the second groundwater samples carried out in accordance with Condition ~~27~~ 29 show an exceedance of the contaminant trigger values in the QBMP ~~concentrations in Condition 25 Table 1~~ as determined by Condition ~~26~~ 28, the Consent Holder must ~~within 24 hrs of receiving the result~~: a) Notify the CRC Manager within 24 hrs of receiving the result; b) Notify the residential occupiers with water supply bores within the 500 metres downgradient zone as shown on Plan CRC204106X and the reticulated water supplier ~~of affected monitoring bore~~ within 24 hrs of receiving the result; c) Sample all domestic wells within the 500 metres downgradient zone as shown on Plan CRC204106X ~~of the affected monitoring bore~~ and analyse the samples for contaminants listed in	be added to (d) to ensure the investigation and reporting occurs in a timely manner.

			Condition 9 ~~25~~ ~~Table 1~~ (subject to well owner approval) within a period of ~~one month~~two weeks; and d) Conduct an investigation into the potential cause(s) of the exceedance, which may include undertaking additional monitoring beyond the routine sampling within one month.	
32	If any domestic bore sample ~~reveals an adverse effect on drinking water quality which was not present at the time of baseline sampling prior to quarrying operations commencing, including on its taste, clarity or smell,~~ analyses reveals either 110% of the highest recorded concentration of each parameter recorded in accordance with Condition 9 then the Consent Holder must: a) provide the well user with i. an alternative supply of potable water, or ii. an appropriate water treatment system, or iii. a deeper well for the user (subject to the landowner's approval); and b) implement necessary measures to reduce the concentration of the contaminant in groundwater such as: i. cessation of activities that may have caused the exceedance; ii. removal of the contaminant source(s);	Suggested revised wording to align with baseline monitoring and setting of trigger values. Alternative supply may include connection to the reticulated system.	*Based on the JWS amend the condition wording as follows:* If any domestic bore sample (analysed in accordance with Condition 31) reveals an increase of 25% in any of the concentrations compared with the baseline sampling in Condition 26, or exceeds 50% of the Guidance Value (GV) or 50% of the Maximum Acceptable Value (MAV) as defined in the NZDWS, ~~an adverse effect on drinking water quality which was not present at the time of baseline sampling prior to quarrying operations commencing, including on its taste, clarity or smell~~, then the Consent Holder must:	Agree with the Council Officer's proposed condition and comment that amendments to the condition are necessary to address public bores.

	iii. stabilisation or capping of the contaminant source(s); and iv. revision of backfill management procedures.		a) provide the well user with i. an alternative supply of potable water, ii. an appropriate water treatment system, iii. a deeper well for the user (subject to the landowner's approval); and b) implement necessary measures to reduce the concentration of the contaminant in groundwater such as: i. cessation of activities that may have caused the exceedance; ii. removal of the contaminant source(s); iii. stabilisation or capping of the contaminant source(s); and iv. revision of backfill management procedures. *I note that this condition does not include responses for the public supply well or deals with private bores where the proposed limits*	

			are already exceeded. Further amendments would be necessary.	
	Annual Report			
33	The Consent Holder must prepare an annual report containing groundwater level and quality monitoring data and assessments, including contour maps required to be collected under the conditions of this consent and a discussion of groundwater quality trends in the monitoring data, any exceedances of the Table 1 contaminant trigger concentrations and any mitigation actions taken in response to those exceedances.			
34	The annual report must be provided to the CRC Manager and Community Liaison Group by 31 August each year.			The annual report should also be provided to the Community Liaison Group.
	Spill Prevention and Management	Suggest delete SMP as a separate document and adopt elements into QBMP		
35	The Consent Holder must prepare a Spill Management Plan (SMP) for the site and provide the SMP to the CRC Manager for certification.	*Delete*	*This condition should be amended as follows:* ~~The Consent Holder must prepare a Spill Management Plan (SMP) for the site and provide the SMP to the CRC Manager for certification.~~ Prevention and management of spill incidents must be undertaken in accordance with the QBMP.	Proposed condition not required given requirement to implement the QBMP.
36	The exercise of this consent must be in accordance with the certified SMP. In the event of any inconsistency between the	*Delete*	*Agree to deletion.*	

	conditions of this consent and the provisions of the SMP, then the conditions of this consent must prevail.			
37	The SMP must as a minimum: i. Contain a description of the content and purpose of the SMP; ii. Document measures to prevent leaks and avoid spills of fuel or any other hazardous substance (including fuel reconciliations); iii. Set out procedures to be undertaken in the event of a spill of fuel of any hazardous substance, including: i. Measures to remove contaminated material; and ii. Actions to address a spill when it coincides with rapidly rising groundwater levels and backfilling requirements; iii. An assessment of the adequacy of groundwater quality monitoring procedures to determine any effects on groundwater quality; and iv. Set out staff training requirements for responding to spills.	*Delete*	*Agree. These details are required by the QBMP condition.*	
38	The Consent Holder must take all practicable measures to prevent leaks and avoid spills of fuel or any other hazardous substances in accordance with the SMP including but not limited to: a) No refuelling or maintenance of vehicles or machinery can occur on the quarry pit floor; b) Appropriate servicing and maintenance of vehicles and machinery such that they do not result in leaks or spills;		*Amendment is required to refer to the QBMP instead of the SMP:* The Consent Holder must take all practicable measures to prevent leaks and avoid spills of fuel or any other hazardous substances in accordance with the QBMP	We consider these measures should be transferred to the QBMP condition to ensure these minimum requirements are secured in through that document.

	c) Keeping a spill kit capable of absorbing all fuel and oil products on site and available at all times; and d) Training all staff involved in the refuelling or maintenance activities in the use of spill kits.		~~SMP~~ including but not limited to: …	
39	Mobile tankers must not be present on site outside of refuelling areas and for temporary periods for refuelling purposes.			
40	In the event of a spill of fuel or any other hazardous substance, the Consent Holder must ensure that: a) The spill is cleaned up as soon as practicable and all contaminated material is removed from the site; b) Measures are taken to prevent a reoccurrence; c) Within 24 hours of a spill event exceeding four litres occurring, the CRC Manager and the Waimakariri District Council ~~is~~are informed and provided with following information: i. The date, time, location and estimated volume of the spill; ii. The cause of the spill; iii. The type of hazardous substance(s) spilled; iv. Clean up actions undertaken; v. Details of the steps taken to control and remediate the effects of the spill on the environment; vi. An assessment of any potential effects on the environment of the spill; and vii. Measures to be undertaken to prevent a reoccurrence of the spill.		*Amend sub-clause c) as follows:* Within 24 hours of a spill event exceeding four litres occurring, the CRC Manager and the WDC Manager ~~Waimakariri District Council~~ are informed and provided with following information:	

	Unexpected soil contamination			
W	In the event that potentially contaminated soil is detected (by sight or odour) during site works, all works within 10 metres of the potentially contaminated soil or material shall cease immediately. Work must not recommence until a suitably qualified and experienced contaminated land professional has: a) assessed the potentially contaminated soils~~on~~;, ~~and~~ b) advised of the appropriate remediation and/or disposal options for these soils; and . ~~a)~~c) the Consent Holder has completed the recommended remediation and/or disposal options for these soils as recommended by the Suitably Qualified and Experienced Contaminated Land Professional.			We have suggested amendments to clarify that no works can continue until the potentially contaminated soils present no danger.
X	The Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance and Team Leader Contaminated Sites shall be notified within 24 hours of the discovery of potentially contaminated soil as described in Condition (XX). All records and documentation associated with the discovery, remediation, and any material disposal shall be kept and copies shall be provided to the Canterbury Regional Council on request.			
	Bond			
Y	Prior to the first exercise of these consents, the consent holder must enter into an enforceable written agreement acceptable to the Canterbury Regional Council, that provides for a bond in favour of Canterbury Regional Council pursuant to sections 108(2)(b) and 108A of the Resource Management Act 1991. The purpose of the bond is to secure the costs of rehabilitation of the site, to undertake groundwater monitoring, and to respond to any incident of groundwater contamination and undertake remediation of any groundwater contamination	The cost estimate should be of the most likely BPO in terms a response.	*Agree with concept of referring to the remediation requirements of the consent.*	The proposed amendments have replaced 'remediation' of groundwater contamination with 'responding to any incident' of groundwater contamination. The amended condition therefore potentially imposes a lower standard, and the original wording is supported. See comments above regarding the need to address remediation of public bores.

	~~undertake remediation of any groundwater contamination~~ resulting from quarry activities in accordance with conditions XX, XX and XX of this consent, in the event of any default by the consent holder.			
Z	The bond must be a cash bond or bank bond provided by a registered trading bank of New Zealand; acceptable to the Canterbury Regional Council. The guarantor shall bind itself to pay up to the bond quantum for the carrying out and completion of all obligations of the Consent Holder under the bond.			
AA	The bond amount must be sufficient to cover the activities listed in Condition B~~.~~Y and the costs of compliance with the conditions identified in Condition Y.		*Agree to reference to Condition Y*	
AB	The consent holder must engage suitably qualified and experienced persons to assess the estimated ~~maximum~~ costs of the best practicable option for undertaking the activities listed in Condition ~~B~~Y and to subsequently peer review that assessment.		*I think some clarification may be necessary to ensure that all of the remedial options would be covered by these amendments. For example, providing alternative water supply.*	
AC	The bond amount may be adjusted on request by the consent holder to the Regional Council or by the Canterbury Regional Council giving notice to the consent holder on the fifth anniversary of the commencement of these consents and every five years thereafter. The consent holder must provide a report to the Canterbury Regional Council which addresses whether the bond quantum should be revised. The purpose of the adjustment is to reflect changes in the risk profile of the quarry or to the Consumer Price Index. The Canterbury Regional Council must engage a suitably qualified and experienced person to peer review the report and respond within two months of receipt of the report on the appropriateness of any proposed revised bond quantum.		*Agree with additions.*	
AD	If the consent holder and the Canterbury Regional Council cannot agree on the terms of the bond, the dispute must be resolved through an agreed disputes resolution process or referred to arbitration.			
AE	The costs of, and incidental to, the preparation of all bond documentation, including the Canterbury Regional Council's costs, must be met by the consent holder.			

AF	If these consents are transferred in part or whole to another party or person, the bond lodged by the transferor must be retained until a replacement bond is entered into by the transferee to ensure compliance with conditions of these consents.			
AG	For the avoidance of doubt, the enforceable written agreement may provide for the bond to be held after the expiry of these consents.			Given that the bond will continue after the duration of the consent, it is unclear whether monitoring must also continue (including to determine if any such remediation is needed). We suggest this is clarified in the conditions.
AG1	The Canterbury Regional Council shall release the bond upon: a. The Consent Holder providing verification that the Site has been rehabilitated in accordance with conditions XX of this consent, that the groundwater monitoring required by condition XX has been undertaken and that condition XX has been complied with in relation to responding to any groundwater contamination arising from quarrying activities and undertaking remediation of any groundwater contamination; or b. The replacement of the bond with a new bond acceptable to the Canterbury Regional Council, including if the consent is transferred to another party.		*I do not consider this detail is necessary in the consent condition as it requires actions of the CRC. I believe this detail could be captured in the agreement between the consent holder and CRC.*	
AG2	Where a cash bond is paid, the consent authority shall place it in a separate, interest earning call account. The interest on the bond shall accrue to the consent holder and when the deposit is repaid to the consent holder, the consent holder shall be entitled to receive all interest (less resident withholding tax and any bank fees) together with the deposit unless the consent authority has had to use the deposit sum (or part of it), in which case the consent authority shall provide the consent holder with a full breakdown of interest earned and the costs of remedying the non-compliance with conditions [XX].		*As above.*	
	CRC204143 Discharge permit to discharge contaminants to land			

AH	Backfill shall only be virgin natural excavated natural material such as clay, gravel, sand, soil or rock fines; that a) has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities; and b) does not contain any sulfidic ores or soils or any other waste; and c) meets the waste acceptance criteria attached as CRC204143 Schedule 1 to this resource consent.			
AI	The deposition of VENM shall occur in accordance with CRC204106.			
	CRC211629 Water Permit to divert floodwater			
AJ	The diversion of floodwater shall be limited to diversions associated with ~~the construction of~~ acoustic bunds, stockpiles and excavated area of each stage as shown on Plan CRC211629B, which is attached to, and forms part of this consent.	.	*Agree*	These plans should be listed as part of our suggested Condition 1.
AK	Stockpiling of extracted aggregate or VENM shall only occur within the area shown on Plan CRC211629X, which is attached to, and forms part of this consent.			These plans should be listed as part of our suggested Condition 1.
	RC205104 Land use consent to establish, maintain, operate and rehabilitate a quarry			
1	Pursuant to section 125 of the Resource Management Act 1991 this consent will lapse five years after the date ~~of~~ this consent commences unless either the consent is given effect to, or the Council has granted an extension pursuant to section125(1)(b) of the Act.			Amendments to clarify the relevant date.

2	The term of consent is 15 years from the date it commences~~.~~			For certainty, it is important to clarify when the term of the consent starts. It is unclear why this condition has been included here as opposed to above in the section relevant to all consents. Suggest moving this condition up to the general conditions.
AL	Except where necessary to comply with the conditions of this consent, the activity shall be carried out in accordance the information and plans submitted with the application submitted dated 6 October 2020 and held on the Council file RC205104. The Approved Plans are attached and stamped RC205104.			These plans should be listed as part of our suggested Condition 1.
	Quarry operation			
3	The hours of operation for quarry activities other than monitoring and dust suppression are limited to: a) Monday to Friday excluding public holidays: i. Trucks crossing the racetracks of the Racecourse: 10am – 6 pm ii. All other activities: 7am – 6pm b) Saturday excluding public holidays: 7am – ~~6~~3pm		*Agree with amendment.*	The hours of operation should be addressed in the general conditions.
4	No quarrying activities other than monitoring and dust suppression shall occur: a) On public holidays; and b) Days with events at Rangiora Racecourse, unless otherwise agreed in writing between the Consent Holder and the Committee of the Rangiora			

	Racecourse. ~~This approval shall be provided to the WDC Manager before the agreed date~~.			
5	The maximum area of exposed ground shall not exceed 2 hectares at any one time which: a) Includes areas where: i. overburden has been stripped, and ii. gravel has been or is being removed and has not been rehabilitated; and iii. backfill has been placed or is being placed and has not been rehabilitated; and iv. top soil has been placed and ~~grass coverage greater than 80%~~ has not yet been ~~achieved seeded~~ seeded or otherwise rehabilitated; and v. exposed gravel and other loose surfaces on stockpiles; and b) Excludes: i. unsealed road surfaces within the site associated with this resource consent; and ii. unsealed racetrack surfaces; iii. ~~re-seeded topsoil where grass coverage has not yet been established~~; and iv. any other unsealed surfaces existing legally at the site at 1 November 2020 as shown on Plan RC205104X.		*I consider that re-seeded areas which are not fully stabilised should be included as part of the disturbed area subject to the 2ha restriction. I do not agree with the amendments to sub-clause a) iv. as the seeded areas may not be effectively stabilised.* *To enable enforcement with this condition, a plan should be provided which shows the unsealed areas existing at 1 November 2020.*	
AM	The consent holder shall not remove or reduce the height of the trees located along the western boundary of the site as shown on Plan RC205104X			
	Prior to commencement			

AN	A surveyed datum point at natural ground level must be: a) Established prior to undertaking quarry activities; and b) Maintained for the duration of this consent.			
AO	Prior to the excavation of overburden, the Consent Holder must survey the quarry area to determine elevations of the natural ground level of the site relative to Mean Sea Level. The survey must be undertaken by a registered surveyor to an accuracy of +/-50 millimetres vertically and be provided to the WDC Manager .			
AO1	Before construction of the access road can commence, the consent holder shall investigate the potential historic waste area defined on Plan [x] to determine whether that piece of land is contaminated in terms of the Land and Water Regional Plan. If that piece of land is found to be contaminated, that contamination shall be remedied or removed from the site to an appropriate disposal facility. Any consent required under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) shall also be obtained prior to commencing works.		*I consider the requirement to investigate the land outside of the racetracks should occur prior to forming the access track and bunds.*	It is unclear whether this condition is authorising disturbance of contaminated soil under the LWRP or whether consent would still be required under that plan. If the disturbance is being authorised, suggest including further requirements as to the investigation that needs to take place, including specifying that it should be undertaken by a suitably qualified and experienced person. The results should also be submitted to the Regional Council within a specific timeframe.
	Site access – on WDC road reserve			
6	Vehicle access shall only be provided across WDC road reserve from the pavement of River Road, at or about 330 metres west of West Belt/River Road intersection, and used by all vehicles entering and existing the site.			
7	The site a~~A~~ccess must be designed and constructed in general accordance with Plan A.			
8	Prior to the construction of River Road vehicle access enhancements required by condition 7, the Consent Holder			

	shall provide detailed designs of those improvements to Waimakariri District Council's Roading Manager for technical review and certification.			
AP	Prior to upgrading the site access in accordance with Conditions 7 and 8, the Consent Holder shall submit for ~~approval~~ certification a Traffic Management Plan detailing traffic control works (including sketch layout and control signs) and the methods to be used to ensure that trucks (including any owned by third parties) do not queue on River Road outside the site entrance. This plan may be submitted at the time of engineering plan approval required by Condition 8 and shall be submitted prior to work commencing in road reserves. Management shall be to Level 1, as described in the NZTA Code of Practice for Temporary Traffic Management. **Advice Note:** The Consent Holder is advised that Traffic Management Plan forms can be sourced from Council Service Centres, or on-line at: https://www.waimakariri.govt.nz/home		*Agree with amendments.*	The condition needs to be revised to clarify the purpose and content of the traffic management plan to guide the certification process.
9	Access arrangements specified in conditions 6,7 and 8 must be constructed in accordance with the Traffic Management Plan and be fully operational prior to the commencement of any works authorised by this consent.			
	Site access and roading – on site			
10	~~The on-site access road shall between the access from River Road to the racecourse track crossing~~The first 50m of the access road into the site ~~-~~from River Road shall be sealed and include: ~~a) a sealed access road for no less than the first 50m from the site boundary vehicle accessway onto/from River Road;~~ ~~b)~~a)a truck park-up area adjacent to the sealed access road (condition 10(a)) for the purpose of existing drivers		*Agree with amendments. I note the requirements for specification and maintenance of the millings are on CRC204107. It may be useful to include that condition on this permit also.*	

	communicating by RT with any incoming (site bound) traffic from River Road; and b) a rumble strip ~~within that 50m of sealed access road (condition 10(a))~~ within that 50m of sealed access road to assist in removing dusty and loose material from vehicles before vehicles exit the site. The balance of the length of the access road shall be surfaced with road millings and maintained in good condition.			
	Traffic Management			
11	Vehicle movements into and out of the site must be undertaken in accordance with the certified Traffic Management Plan and must not exceed a maximum of 24~~5~~0 per day. For the avoidance of doubt this means no more than 125 trucks or other vehicles entering the site each day and 125 trucks or other vehicles exiting the site each day. The Consent Holder shall maintain records of all vehicle movements and provided this record upon request by the consent authority.		*Agree.*	The condition needs to reflect the assessments undertaken for the application.
12	[Deleted]			
	Noise ~~limits~~		*Agree to deletion*	
13	All quarrying operations on the site shall not exceed the noise levels in Condition 13a and 13b at the notional boundary of any dwelling within the Rural Zone, or at any point within any Residential Zone: a) Daytime: 7am to 7pm Monday to Saturday, and 9am to 7pm Sundays and Public Holidays: 50 dB $L_{Aeq\ (15\ min)}$. b) Other times: 40 dB $L_{Aeq\ (15\ min)}$ and 70 dB L_{AFmax}.		*Agree to addition.*	
14	Noise described in Condition 13 shall be:			

	a) measured in accordance with the provisions of NZS 6801:2008 "Acoustics – Measurement of environmental sound"; and b) assessed in accordance with NZS 6802:2008 "Acoustics – Environmental Noise".			
15	Site preparation activities must be conducted in accordance with NZS 6803: 1999 "Acoustics Construction Noise" and must comply with the "typical duration" noise limits contained within Table 2 of that Standard. For the purposes of this consent "site preparation activities" means site establishment; the construction, rehabilitation and removal of bunds; topsoil stripping and creation of the access road for the quarry area. Once the quarry area is established, top soil stripping and construction of earth mounds shall continue to be construction activities but may be undertaken for periods not exceeding 3 weeks at any time.			Support retaining the clarification of 'site preparation activities'. As noted at the hearing, consider further clarification is needed to ensure that site preparation activities can be distinguished from other activities to ensure effective monitoring and compliance of noise impacts.
16	Should audible vehicle reversing alarms be required on quarry-based equipment or trucks, only broadband noise alarms shall be used.			
AQ	The use of any motor scraper shall be limited to no more than 3.5 hours per day. For the purposes of this condition any motor scraper is in "use" while its engine is running.		*Agree to addition.*	Agree amendments assist to clarify the condition.
	~~Quarry and Backfill Management Plan (Noise Management)~~			
17	~~At least one month prior to the commencement of any quarrying activity, the Consent Holder must prepare a Quarry and Backfill Management Plan (QBMP) in accordance with the resource consent application dated 6 October 2020 and the conditions of this consent, and submit it to the WDC Manager for certification.~~	Addressed in regional consent. Could be a general condition if required.	*I consider the QBMP should address excavation, noise and transportation matters which are relevant to this consent. Therefore these conditions should remain.*	Agree the conditions should only require one QBMP to be prepared, and this condition should sit in the general conditions.

	Advice note: The purpose of the QBMP is to • identify the best management practices (BMP) for complying with the conditions of this consent • provide detail on how the chosen BMP(s) will ensure the conditions of this consent will be complied with; and • implement those BMP(s).			
AR	The exercise of this consent must be undertaken in accordance with the certified QBMP. In the event of any inconsistency between the conditions of this consent and the provisions of the QBMP, then the conditions of this consent must prevail.			
AS	The QBMP must include but not be limited to: a) A description of the content and purpose of the QBMP; b) Details of quarrying operations relevant to the extraction of material and deposition of backfill material; c) Details of noise management, including the proposed measures to control noise generated by quarry activities, monitoring methodology and responses to any noise complaints received; d) Details of spill management and response to any spills; e) Details of traffic management, including the use of radio communications to manage safe entry to and exit from the site; f) The actions to be undertaken to ensure compliance with the conditions of this consent and actions to be undertaken in response to any incident that may adversely affect the environment; g) Identifying and providing contact details of the staff member responsible for each action;			

	~~h) The steps to be undertaken to correct incidences of non-compliance with the conditions of this consent;~~ ~~i) Details of the on-site training procedures;~~ ~~j) A description of operational procedures and monitoring that will be implemented to prevent unauthorised material from entering the site;~~ ~~k) A list of acceptable and unacceptable backfill materials;~~ ~~l) How rejected backfill materials will be stored pending its removal to another site authorised to receive it;~~ ~~m) The maximum length of time that rejected material can be stored on site pending its removal;~~ ~~n) A description of erosion and sediment control measures to minimise sediment loss from the site;~~ ~~o) Construction procedures to ensure the long-term stability of backfilled areas;~~ ~~p) The requirements for full site rehabilitation, including topsoil depths and vegetation to be planted;~~ ~~q) Timetable of works and re-vegetation measures;~~ ~~r) Procedures for improving and/or reviewing the QBMP.~~			
18				
AT	~~The certified QBMP must be reviewed and updated at least once per year for the duration of this consent.~~			
AU	~~Any updated version of the QBMP must be forwarded to the WDC Manager for certification within 30 days of its review and updating.~~			
	Noise Monitoring			

19	Noise emissions from quarry activities must be measured and assessed in accordance with the methods described in the QBMP by a suitably qualified and experienced acoustic consultant at the following times: a) Once within the first 12 months following the commencement of quarrying operations, including when machinery is operating on stockpiles; and b) When excavation initially advances to within 200 m of the dwelling at 373 Lehmans Road; and c) When excavation initially advances to within 350 metres of the dwelling at 321 West Belt. This monitoring should capture both motor scraper activity, and noise generated by vehicles / machinery operating on the internal haul road and, as far as practicable, activity on top of the stockpiles to confirm that cumulative noise from these activities will not exceed the daytime noise criterion; and d) When excavation initially advances to within 350 metres of the dwelling at 55 Huntingdon Drive; and e) When excavation initially advances to within 200 m of the Rangiora Eco Holiday Park.		*Agree to amendments. They are as agreed by Mr Reeve.*	
20	Within 20 working days of measuring noise emissions in accordance with Condition 19 a report describing the measurement results and compliance or otherwise with the limits in condition 19 must be submitted to the WDC Consent Authority and the Community Liaison Group.			Given the community's interest in the potential noise impacts of the Proposal, we suggest a copy of the report is provided to the CLG so they are kept up to date and informed throughout the operation of the Proposal.
	Rehabilitation			

21	Each stage of aggregate extraction, with the exception of any active haul roads, must be rehabilitated within six months of the completion of backfilling. Rehabilitation must include, but is not limited to: a) Reshaping the backfilled areas; and b) Spreading topsoil over the reshaped backfill to a minimum depth of 300 mm; and c) Either i. Sowing the top-soiled areas with a suitable grass species or another suitable vegetative cover; or ii. If rehabilitation occurs outside of spring or autumn, covering the top soiled area with mulch or another form of material to suppress dust from the area until it is appropriate to sow grass or another suitable vegetative cover; and d) Undertaking all reasonably practicable measures to prevent dust emissions from the rehabilitated area, including but not limited to watering of exposed soil. **Advice note**: The Consent Holder may need to monitor the site and water or fertilise the rehabilitated area to ensure compliance with Condition 20.			
22	All rehabilitated surfaces must be designed and constructed to be free draining to avoid ponding.			
23	The final rehabilitated ground level must not be above the ground level that existed prior to quarrying operations commencing. Within two months of completing site rehabilitation, the consent holder shall provide a survey of the finished ground levels relative to Mean Sea Level and the natural ground level surveyed in accordance with Condition AO.			

	The survey must be undertaken by a registered surveyor to an accuracy of +/-50 millimetres vertically and be provided to the WDC Manager.			
24	Prior to the expiry of this consent the perimeter bunds are to be removed as part of the rehabilitation works. The edge treatment plantings must remain until grass cover has established over any disturbed land.			
	Accidental Discovery Protocol			
25	Immediately following the discovery of material suspected to be a taonga, kōiwi or Māori archaeological site, the following steps must be taken: a) All work ~~in the vicinity~~within 20m of the discovery must cease and the WDC Manager advised; b) Immediate steps must be taken to secure the site to ensure the archaeological material is not further disturbed; c) The Consent Holder must notify the Te Ngāi Tūāhuriri Rūnanga and the Area Archaeologist Heritage New Zealand Pouhere Taonga (in the case of kōiwi (human remains) the New Zealand Police must also be notified). **Advice Note**: The Te Ngāi Tūāhuriri Rūnanga and HNZPT will jointly appoint a qualified archaeologist who will confirm the nature of the accidentally discovered material.			Amendment to provide clarity as to the extent of works to cease.
26	If the material is confirmed as being archaeological, the Consent Holder must ensure that an archaeological assessment is carried out by a qualified archaeologist, and if appropriate, an archaeological authority is obtained from			

	HNZPT before work resumes (as per the Heritage New Zealand Pouhere Taonga Act 2014).			
27	The Consent Holder must consult the Te Ngāi Tūāhuriri Rūnanga on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation.			
28	If kōiwi (human remains) are uncovered, in addition to the steps above, the area must be treated with utmost discretion and respect, and the kōiwi dealt with according to both law and tikanga, as guided by the Te Ngāi Tūāhuriri Rūnanga.			
29	Works in the site area must not recommence until authorised by the Te Ngāi Tūāhuriri Rūnanga, the Heritage New Zealand Pouhere Taonga (and the NZ Police in the case of kōiwi) to ensure that all statutory and cultural requirements have been met.			
30	The Consent Holder must notify WDC prior to the recommencement of work, and copies of all relevant authorisations must be provided to the WDC Manager. **Advice Note**: It is expected that all parties will work towards work recommencing in the shortest possible time frame while ensuring that any archaeological sites discovered are protected until as much information as practicable is gained and a decision regarding their appropriate management is made, including obtaining an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 if necessary. Appropriate management may include recording or removal of archaeological material. **Advice Note**: Although bound to uphold the requirements of the Protected Objects Act 1975, the Consent Holder recognises the relationship between Ngāi Tahu whānui, including Te Ngāi			

	Tūāhuriri Rūnanga Kaitiaki Rūnanga, and any taonga (Māori artefacts) that may be discovered.			
	Miscellaneous Operational Conditions			
31	Solid waste resulting from quarrying operations must be disposed of to an approved solid waste facility by an appropriately licenced operator. Solid waste must be held in wheelie bins or similar appropriate containers designed to avoid attracting birds or rodents, to shelter the contents from rainfall, and to secure the waste in the event of windy conditions.			
	Community Liaison Group			
32	~~[Deleted]~~ ~~After~~Prior to commencing any works on the site ~~extraction of aggregate has commenced~~, the consent holder shall, ~~at its own cost,~~ facilitate community liaison meetings. ~~with~~The consent holder shall invite ~~invitations sent~~ by way of letter or email ~~to~~ all current occupiers of properties within the area shown on Plan XXXXX [being those occupiers within Xm of the site] and monitoring staff from the Waimakariri District Council and the Canterbury Regional Council to attend the meetings. Meetings shall be held at not less than 12 monthly intervals ~~unless a longer interval is otherwise agreed by the Waimakariri District Council and the Canterbury Regional Council.~~ The objective of the Community Liaison Group is to facilitate information flow between the Consent Holder and the community and to be an ongoing point of contact between the Consent Holder and the community. The functions of the group may also include acting as a forum for relaying any community concerns about the ongoing operation of the quarry and	This could possibly be a general condition applying to all consents.	*Agree this should be a common condition on all consents.*	Agree this should be a general condition that applies to all consents. The community liaison meetings should commence prior to works in order to facilitate the provision of information on management plans and processes. Ryman requests to be included on the plan of person invited to the community liaison meetings. A clear objective for the Community Liaison Group is required. The meeting shall also schedule time for residents to raise questions and concerns. Meeting notes should be shared with the councils, but also with all participants to ensure they are a correct record.

	reviewing the implementation measures to resolve and manage community concerns. In particular, ~~The~~the Consent Holder shall provide an update ~~purpose of the meetings shall be for the consent holder to report to those invited~~ on the activities undertaken in the past 12 months and the works planned in the next 12 months. The Consent Holder shall also share and discuss with the Community Liaison Group the results of all monitoring and reporting as required by the conditions of these consents. The Consent Holder shall be responsible for convening the meetings of the Community Liaison Group and shall cover the direct costs associated with the establishment and operation of the group. The Consent Holder shall keep minutes of the meetings and shall provide them to the Waimakariri District Council and Canterbury Regional Council as well as to all participants of the group for confirmation of accuracy within two weeks of the meeting.			
	Annual Report			
AV	The Consent Holder shall provide an annual monitoring report for the period of 1 July to 30 June to the WDC Manager, by 31 August each year. The annual monitoring report shall include but not be limited to: a) A summary of the total areas excavated and rehabilitated; ~~and~~ b) The complaints record required in accordance with Condition (XX); and ~~.~~ c) Contact details for the site management and out of hours contact details.			
	Review condition			

33	The Waimakariri District Council may, during the month of May or November each year, review any or all of the conditions of the consent pursuant to section 128 of the Resource Management Act 1991 for all or any of the following purposes: a) To deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or ~~b) To require the Consent Holder to adopt the best practicable option to remove, remediate or reduce any adverse effects on the environment resulting from the activity; and/or~~ ~~c) To review the noise limits and any adverse effects resulting from heavy vehicle traffic associated with quarry activities, including measures to manage heavy vehicle traffic flows not foreseen at the time of granting of the consent; and/or~~ ~~d) To review the methodology of quarry activities should adverse noise, dust or nuisance effects become an issue; and/or~~ ~~e)~~b) To require consistency with any relevant Regional Plan, District Plan, National Environmental Standard, Water Conservation Order or Act of Parliament.	Amended to make consistent with s128 RMA.	*Agree with amendments.*	Suggest a review condition is included in the general conditions.
AW	~~Compliance with the above conditions may be verified by inspection by a Council Officer pursuant to Section 35(2)(d) of the Resource Management Act 1991. Should an inspection be required, the Consent Holder shall pay to the Council charges on an at cost basis pursuant to Section 36(1)(c) of the Resource Management Act 1991 to enable the Council to recover its actual and reasonable costs in carrying out the inspections.~~	Condition is superfluous and should be deleted. There is no need to restate in consent conditions any of the Council's legal powers.	*Agree with deletion.*	Agree with deletion.

	Advice Note: This consent does not constitute consent in terms of the Building Act, any relevant Regional Plan, or any other act or legislative requirement.			

	CRC211629 Discharge Permit to discharge stormwater from the site access road			**Ryman Healthcare Limited's comments**
	The discharge of stormwater from the access road shall be to ground via a swale adjacent to the road. Before construction of the access road can commence, the consent holder shall investigate the potential historic waste area defined on Plan [x] to determine whether that piece of land is contaminated in terms of the Land and Water Regional Plan. If that piece of land is found to be contaminated, that contamination shall be remedied or removed from the site to an appropriate disposal facility. Any consent required under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) shall also be obtained from the Waimakariri District Council prior to commencing works.		*Do not agree with the addition of stormwater conditions. I also note this permit is the Water Permit to divert flood water. This consent should be obtained separately.*	Agree with the Council – it is not appropriate to include this condition here as this consent will need to be obtained separately. A condition should be included to that effect.