

PROPOSED CONDITIONS OF CONSENT ON BEHALF OF THE APPLICANT

Christchurch City Council Consent

General

1. Except as required by subsequent conditions the development shall proceed in accordance with the information and plans submitted with the application, subsequent further information submitted on 10 November 2017 and with the Staging Plan prepared by Golder Associates, dated 27 April 2018. The Approved Consent Documentation has been entered into Council records as RMA/2017/2111 (208 pages) with the Staging Plan entered as page 27 of the Approved Consent Document.
2. The duration of this consent shall be limited to eight years from the date of granting of the consent. The consent holder is to notify the Team Leader, Christchurch City Council Compliance and Investigations Team, Regulatory Compliance Unit via email to rcmon@ccc.govt.nz upon commencement of excavation on site.
3. The lapsing date for the purposes of section 125 shall be five years from the date of granting of the consent.

Site Preparation and Bunds

4. Prior to any other site preparation works or the extraction of aggregate commencing at the site the following shall occur:
 - a. Infill tree planting shall be undertaken in any gaps in the existing planting in the area labelled 'Additional tree planting' on the Staging Plan prepared by Golder Associates dated 27 April 2018 in order to screen views of the quarry activity from the cemetery site. Trees shall be planted on 581 Buchanans Road in the open area to the south of the existing dwelling, in an irregular fashion, and shall be trees which are to be capable of growing to 8.0m at maturity, and shall be a minimum of 2.5m in height at time of planting. There shall be at least 12 new trees, spaced at least 5 m apart.

Advice Note: For the purposes of achieving 'irregular' planting, the trees may be clustered into groups, as long as the 5 m minimum spacing distance is maintained between each individual tree.

5. Prior to the excavation of aggregate commencing on site for each stage, the following shall occur:
 - a. The 3 metre high earth bunds with a 1 metre wide flat top shall be constructed at least 100 m in advance of the extraction stages, occurring progressively in five stages, as shown on the Staging Plan prepared by Golder Associates, dated 27 April 2018.

- b. The bunds shall have a slope of at least 1:3 (one vertical to three horizontal) on the outer side and at least 1:1 on the internal quarry side (one vertical to one horizontal), giving a total bund width of 13m.
- c. The existing tree planting (hedges and shelterbelts) along the road boundaries of 581 and 619 Buchanans Road shall be retained, and the bunds to be constructed along these boundaries shall be located behind these plantings. To ensure the survival of the existing shelter belts, bunds should not be constructed at the base of trees or over root plates.
- d. The bund on the western side of the shelterbelt to be retained on the western boundary of 619 Buchanans Road and the quarry pit face on the eastern side of this same shelterbelt should be set back a minimum of 1m from the closest part of the shelterbelt or at least 4m from the tree trunks, whichever is the furthest, in order to avoid undermining the shelterbelt and/or damaging its roots.

e. Construction of bunds for each stage shall take place over no greater than a ~~one month~~ two week period.

e-f. Immediately following construction, the bunds are to be sown with grass or hydro-seeded to achieve swift grass cover and watered regularly to ensure grass cover is established immediately after construction.

f-g. To assist in achieving swift grass cover, construction of the bunds shall take place between the months of February to May or July to November to enable grassing of the bunds to occur in autumn or spring.

- 6. The grassed bunds shall be mown regularly or grazed to give a tidy appearance.
- 7. The grassed bunds shall be watered (to suppress potential dust) until a grass cover has been established.
- 8. An after-hours contact phone number for a site contact shall be provided to the Team Leader, Christchurch City Council Compliance and Investigations Team, Regulatory Compliance Unit, until grass has been established on the earth bunds.
- 9. All landscaping required for this consent shall be maintained. Any dead, diseased, or damaged landscaping is to be replaced immediately with plants of a similar species.

Operational

- 10. The excavation of aggregate shall only be within the area labelled 'RM4' on the Staging Plan prepared by Golder Associates, dated 27 April 2018. This area contains part or all of the properties at 581, 619 and 635 Buchanans Road, and 350 West Coast Road on the property legally described as Lot 1 DP 25055, Lot 1 DP 23053, Lot 2 DP 319126, and Lot 2 DP 36161 contained within Certificates of Title CB6C/1499, CB3C/931, 75178 and CB15B/282.

Comment [CE1]: Construction noise effects have been assessed on the basis that the bund construction would comply with the limit for 'short term' activities (defined as having a max duration of 14 days). Limits for 'typical duration' (longer than 14 days) activities are lower. Further assessment would be required to ascertain whether these lower levels would be complied with.

One month also seems unnecessarily long for the construction of each section of the bund. The timeframe should be amended to two weeks.

Comment [DC2]: The construction is limited by weather conditions, so a minimum of 4 weeks is the standard time required in the industry; two weeks would not be feasible and would be unworkable. It would not be 4 weeks of continuous construction.

11. The processing, crushing and screening of aggregate extracted from the area described in condition 10 shall only occur on the main Road Metals quarry site at 394 Old West Coast Road on the property legally described as Lot 9 DP 26999 and labelled 'Existing Yaldhurst Quarry' on the Staging Plan prepared by Golder Associates, dated 27 April 2018. No processing, crushing or screening of aggregate shall occur on the RM4 site.
12. The combined open area for excavation and land being rehabilitated in the RM4 area (prior to the establishment of vegetation cover) shall not exceed 4 hectares. For the avoidance of doubt, the proportion of excavated land to rehabilitation land that makes up the 4 hectare limit shall be for the consent holder to determine, given operational decisions to be made around the optimum time of year to rehabilitate.
13. The quarrying activity on the RM4 site shall only operate between the hours of 0700 to 1800 Monday to Friday and 0700 to 1300 Saturday. No activities, other than dust mitigation measures, shall take place on Sundays or public holidays.
14. The aggregate processing activity on the existing Yaldhurst Quarry site shall only operate between the hours of 0600 to 1800 Monday to Saturday.

Advice Note: From 0600 to 0700 the processing plant will be subject to the night time noise limits from the Christchurch District Plan. Crushing of aggregate may not comply with night time noise limits and should therefore be restricted to after 0700.

15. The consent holder shall maintain a distance of not less than 500m from the notional boundary of the closest residential dwelling to the processing plant, marked 'X' on the Staging Plan prepared by Golder Associates, dated 27 April 2018.

Advice note: 'Notional boundary' shall be taken to mean a line 20m from any wall of the residential unit or building occupied by a sensitive activity in existence at the time of the granting of this consent, or the legal boundary where this is closer to the dwelling.

16. Unless written approval is obtained from the owners and occupiers, no excavation shall be undertaken within 100 metres of the notional boundary of the principal dwelling located at 622 Buchanans Road, as it exists at the time of granting this resource consent.
17. Aggregate shall be:
 - a. Extracted using only one loader and one digger with up to two dump trucks at the same time; and
18. Transported to the processing site via the haul road as shown on the Staging Plan prepared by Golder Associates, dated 27 April 2018. All aggregate excavation shall occur with machinery on the pit floor.
19. There shall be no stockpiling of aggregate within the RM4 site.

Comment [DC3]: There is no plan to do crushing before 7 am, but we don't think it's necessary to have this here. The processing plant is allowed to operate between 6 am and 7 am if it complies with night time noise standards.

Comment [CE4]: Yes, switching on the plant and warming it up etc would likely be ok but the advice I have received is that actual crushing of aggregate may not comply (From Jeremy Trevathan – "[AES] calculations showed if the crushing plant was at the noisier end of the range, it wouldn't comply. The 1999 measurements demonstrated that back then, the plant was at the noisier end of the range." There is no evidence in play about actual measured noise levels, so I think it is good to note this point here.

I would reiterate, it is only an advice note, not a condition.

20. The stockpiling of overburden for the purpose of rehabilitation is allowed by this consent. However, any overburden stockpiles must be stabilised and regressed as soon as practicable.

Depth of Excavation

Applicant's Preferred Depth of Excavation Conditions:

21. The maximum depth of excavation shall be no deeper than 1 m above the highest recorded groundwater level referenced to monitoring bore M35/1080. The consent holder shall ensure that in all cases the quarrying is kept to at least 1 metre above the highest recorded groundwater level referenced to the datum point in Condition 22.
22. The consent holder shall establish a surveyed datum point at local ground level in an area that will not be excavated. This point shall be used to certify the depth of excavation at any point within the consent holder's site.
23. Should the highest recorded groundwater level at monitoring bore M35/1080 increase so that the separation is less than 1 metre between the referenced groundwater level and the quarried ground level, the consent holder shall apply aggregate or imported topsoil to re-establish the 1 m separation. This requirement shall not apply to already rehabilitated areas.

Christchurch City Council's Preferred Depth of Excavation Condition:

21. The maximum depth of excavation shall be no deeper than 10.1m below ground level and the consent holder shall ensure that at all times a minimum of one metre of gravel is retained between the floor of the quarry and the actual groundwater level at the site.

Comment [CES]: Area of disagreement – I consider the condition wording should remain as originally proposed.

Access

24. Prior to the commencement of any activities authorised by this resource consent, the existing Road Metals Yaldhurst Quarry vehicle access on to West Coast Road (State Highway 73) shall be upgraded as follows:
- Quadrant kerbs/headwall protection shall be installed on the northeastern side of the access at the culvert to prevent damage to the edge of seal at exit point;
 - On the northeastern shoulder installation of kerb and channelling or similar treatment approved by NZTA to make sweeping/maintenance easier within 50m of the access;
 - The northeast shoulder of the access shall be remarked as an acceleration lane (rather than current shoulder bars); and
 - The south-western unsealed shoulder of the access shall be fully constructed and sealed with an NZTA Diagram E widening to allow an additional shoulder width of at least 2.0 m for west bound right turning trucks exiting the quarry.

25. To avoid material being deposited, dropped or tracked onto State Highway 73 from the application site, the following measures shall be put in place:
- a. The unsealed road connecting to the main access road and labelled 'Unsealed road to be chipped' on the Staging Plan prepared by Golder Associates dated 27 April 2018, is to have clean chip placed on it to minimise dust and movement of larger material to the sealed portion of the access;
 - b. A water cart is to be used regularly on unsealed access roads near the entrance, to minimise dust;
 - c. The sealed access road from the West Coast Road boundary of the site down into the quarry pit is to be swept regularly, as and when required, and shall be swept as soon as practicable should it be identified that there is a build-up of material on the access road;
 - d. The edges of the sealed access road shall be inspected and maintained, particularly where pot holes emerge. Before they are filled, pot holes shall be coned off to avoid further damage and likelihood of material transfer to the road;
 - e. The consent holder shall visually inspect all trucks for overloading and loose gravel on or around the body of the truck before exiting the site, with the purpose of identifying and minimising the risk of material being carried onto the State Highway.
26. The consent holder shall be responsible for ensuring any material from the application site deposited on the State Highway is removed as soon as reasonably practicable, at their cost. Any works on the State Highway shall be carried out in accordance with a Traffic Management Plan (TMP) certified by the Christchurch Transport Operation Centre (CTOC). A traffic management plan shall be forwarded to rcmon@ccc.govt.nz for certification, within one month of the date of granting this consent. The TMP shall identify the nature and extent of temporary traffic management and how all road users will be managed by the use of temporary traffic management measures and shall comply with the NZTA Code of Practice for Temporary Traffic Management (CoPTTM). Activities on the State Highway should be planned so as to cause as little disruption, peak traffic delay or inconvenience to road users as possible without compromising safety.
27. The consent holder shall notify the Team Leader Compliance & Investigations at the Christchurch City Council and NZ Transport Agency within 24 hours of receiving a complaint of material from the application site being on the State Highway, and within 48 hours the consent holder shall advise both parties as to the reason the incident occurred and what measures have been taken to address the issue.

28. Vehicular access to the RM4 site shall be via the internal haul road only, with no access from Buchanans Road.

Noise

29. All construction activities on the subject site shall be designed and conducted to ensure that construction noise from the site is controlled so as to comply with NZS 6803:1999 – Acoustics: Construction Noise.
30. Hours of operation for construction activities shall be limited to 0730 to 1800 Monday to Friday and 0730 to 1300 Saturdays. No construction activities, with the exception of dust mitigation activities, shall be undertaken on Sundays or public holidays.
31. For the purpose of conditions 29 and 30, construction activities shall be defined as being any work required to prepare the site for excavation and rehabilitation works. In particular, activities associated with the construction of earth bunds and stripping/reinstatement of topsoil shall be considered construction activities.
32. Operational noise from the quarrying activity on the RM4 site and the aggregates-processing activity on the existing Yaldhurst Quarry site shall comply with the following noise limits:

Daytime (0700-1800)	
Measured at the notional boundary of any dwelling not located on the application site	50dB L _{Aeq}
Measured at the boundary of the site receiving noise from the activity	55dB L _{Aeq}
Night time (0600 – 0700) – processing site only	
Measured at the notional boundary of any dwelling not located on the application site	40dB L _{Aeq} / 65dB L _{Amax}
Measured at the boundary of the site receiving noise from the activity	45dB L _{Aeq} / 70dB L _{Amax}

33. The loader and any dump trucks working on the RM4 site shall be fitted with broadband directional reversing beepers as opposed to tonal reversing beepers.

Dust

34. The discharge shall not cause suspended or deposited particulate matter, which has a noxious, dangerous, offensive or objectionable effect, beyond the boundary of the proposed quarry site as shown on the Staging Plan prepared by Golder Associates, dated 27 April 2018.
35. The consent holder shall undertake all practicable measures to ensure compliance with Condition 34 of this consent. Such measures shall include but not be limited to:

- a. Applying water to unconsolidated surfaces (including roads) and stockpiles, as necessary, to minimise dust emissions during dry and windy conditions;
- b. Making a water cart available for use on site at all times;
- c. Using a sprinkler system to dampen aggregate during crushing and screening processes at the processing plant;
- d. Minimising the areas of exposed ground within the exposed land area limit of Condition 12. The consent holder shall ensure that the overburden of the next stage is only removed once quarrying of a stage is nearing completion;
- e. Regrassing bare areas such as bunds, overburden stockpiles and rehabilitated areas as soon as practicable;
- f. Carrying out land stripping and land restoration during favourable weather conditions and at times of least vulnerability to neighbours;
- g. Taking current and predicted wind conditions into account in planning and carrying out work to minimise dust discharge;
- h. Maintaining a cover of metal on unsealed haul roads to reduce dust caused by truck movements;
- i. Applying a speed restriction on all internal roads and within the bunded area to not more than 15 km/hr at all times and erecting a sign at the entrance to the site advising of this.
- j. Checking trucks for load security before they leave the site to prevent truck overloading to avoid spillages; and
- k. Minimising drop heights when depositing any material as part of the site preparation, loading of haul trucks, excavation or rehabilitation of the site
- l. Retaining the established shelterbelts along the northern and western edge of the site.
- m. Applying surface treatment (such as pea gravel) to areas of exposed ground in the 'RM4' area that will not be disturbed for the period set out in the Dust Management Plan required under Air Discharge consent CRC181274 from the Canterbury

Regional Council. This treatment need only be undertaken where the undisturbed period falls wholly or partially between the months of November to April.

Hazardous Substances

36. No hazardous substances shall be stored on the RM4 site and all refuelling of vehicles shall take place at the Road Metals Yaldhurst Quarry at 394 West Coast Road.
37. All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery, including:
 - a. There shall be no storage of fuel or lubricants within the site.
 - b. There shall be no re-fuelling of vehicles or machinery within the site.
 - c. A spill kit that is capable of absorbing the quantity of oil and petroleum products that may leak or be spilt shall be kept on the Road Metals Quarry site at all times.
38. In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable and take measures to prevent a recurrence.
39. The consent holder shall inform the Team Leader, Christchurch City Council Compliance and Investigations Team, Regulatory Compliance Unit within 24 hours of any spill event greater than 4 litres and shall provide the following information:
 - The date, time, location and estimated volume of the spill;
 - The cause of the spill;
 - The type of contaminant(s) spilled;
 - Clean up procedures undertaken;
 - Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - As assessment of any potential effects of the spill and measures to be taken to prevent a recurrence.
40. A maximum of one loader shall excavate from the working face at any time.
41. Outside of working hours, the site shall be made secure, to ensure that no member of the public can gain access. Signage shall be erected stating that unauthorised access is prohibited.

Contaminated Material

42. In the event that soils are unexpectedly found that have visible staining, odours and/or other conditions that indicate soil contamination then work must cease and all workers shall vacate the immediate area, notify the site manager and ensure that the local authorities are informed

(via Christchurch City Council at envresourcemonitoring@ccc.govt.nz and the Environment Canterbury pollution hotline on 0800 76 55 88). No excavation of such soil shall occur without advice from a Suitably Qualified and Experienced Practitioner (SQEP) on land contamination and the agreement of local authorities.

Rehabilitation and Cleanfilling

43. Prior to the commencement of any ~~rehabilitation or cleanfilling~~ activities authorised by this resource consent in the RM4 area, the consent holder shall submit a Quarry Rehabilitation Plan (QRP) via email to rcmon@ccc.govt.nz for certification by the Head of Resource Consents (or their nominee).
44. The overarching objective of the QRP shall be to ensure that the RM4 site and the main quarry site are rehabilitated in a way which enables subsequent use of the land for other permitted or consented activities. The QRP shall be based on the draft QRP submitted to the Christchurch City Council on 6 March 2018, shall include those matters listed in Standard 17.8.3.14 in the Christchurch Replacement District Plan and shall incorporate the recommendations made by Victor Mthamo in his evidence for the resource consent hearing dated 15 March 2018.
45. If the Christchurch City Council confirms receipt but then fails to provide any further response to the consent holder within one month then the QRP shall be deemed to be certified.
46. Rehabilitation of the main Road Metals Yaldhurst Quarry site at 394 West Coast Road and the RM4 site shall be undertaken in accordance with the certified Quarry Rehabilitation Plan.
47. The RM4 site shall be rehabilitated within one year of the completion of excavation.
48. Rehabilitation of the main Road Metals Yaldhurst Quarry site at 394 West Coast Road and the RM4 site shall be by means that include, but are not limited to:
- Re-shaping the quarry walls to a maximum gradient no steeper than 1 vertical:3 horizontal;
 - Spreading enough topsoil to allow for a minimum compacted depth of 300mm of topsoil across the base;
 - Scheduling rehabilitation in Autumn or Spring wherever practicable, or by watering, to ensure that grass cover is established quickly.
 - Re-grassing within 60 days of placement of the final topsoil capping to minimise dust generation and erosion losses; and
 - All finished surfaces to be designed and constructed to be free draining.

Comment [CE6]: I consider the QRP should be submitted up front prior to any works commencing as it is a fundamental aspect of the consent which should be in place from the outset.

Comment [DC7]: The applicant would prefer to retain the original wording. RM has shown itself to be a reliable operator, and has successfully rehabilitated parts of the site already.

49. The rehabilitation of the RM4 site, in accordance with conditions 46 to 48 shall be undertaken so that a completed grass cover is achieved no later than 12 months upon completion of all excavation activities in the RM4 site. Dust mitigation measures in accordance with this consent and CRC181274 shall continue to be employed on site until this completed grass cover is achieved.
50. The area labelled 'Retained operational area (16.0 Ha)' on the 'Yaldhurst Quarry Rehabilitation Plan' prepared by Golder Associates and dated 6 March 2018, included as part of the draft Quarry Rehabilitation Plan submitted to the Council on 6 March 2018, shall be fully rehabilitated within 12 months of the cessation of this consent, unless a further resource consent has been obtained for an ongoing aggregates-processing activity or other activity on the site.
51. Where additional fill is required to be brought into the site for rehabilitation purposes, the consent holder shall ensure that all material deposited in the excavated area is:
- Only material defined as 'Cleanfill' as set out in the advice note attached to this condition;
 - Not deposited into groundwater; and is at least one metre above the highest groundwater level expected at the site, subject to Condition 23;
 - Material is deposited in accordance with a management plan which has been prepared in accordance with Section 8.1 and Appendix B of "A Guide to the Management of Cleanfills", Ministry for the Environment, January 2002;
 - Checked by the site manager prior to deposition in the pit. If the material is not classified as Cleanfill, the consent holder shall immediately remove the material and arrange for the disposal of it at an appropriate location; and
 - Recorded in a log book by the site manager. The log book shall include a detailed record of all materials deposited into the Cleanfill site and shall provide to the CCC upon request.

Advice note: 'Cleanfill' is defined as:

Material that when buried will have no adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of:

- *combustible, putrescible, degradable or leachable components*
- *hazardous substances*
- *products or materials derived from hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices*
- *materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances*
- *liquid waste.*

Other

52. The consent holder shall keep a record of any complaints relating to dust and shall provide the record to the Team Leader, Christchurch City Council Compliance and Investigations Team, Regulatory Compliance Unit, upon request. The record shall include:
- a. The location where the dust was detected by the complainant;
 - b. The date and time when the dust was detected;
 - c. A description of the wind speed and wind direction when the dust was detected by the complainant;
 - d. The most likely cause of the dust detected;
 - e. Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the dust detected by the complainant; and
53. In the event of any disturbance of Koiwi Tangata (human bones) or taonga (treasured artefacts), the consent holder shall:
- a. Immediately cease earthmoving operations in the affected area; and
 - i. Mark off the affected area until earthmoving operations recommence;
 - ii. Advise the Team Leader of the Resource Consents Team, Christchurch City Council, of the disturbance; and
 - iii. Advise the Upoko Runanga of Tuahuriri, or their representative (contact information can be obtained from the Christchurch City Council) and the New Zealand Historic Places Trust, of the disturbance; and
 - b. Not recommence earthmoving operations until either:
 - i. The consent holder provides a certificate in writing to the Team Leader, Christchurch City Council Compliance and Investigations Team, Regulatory Compliance Unit, signed by Upoko Runanga of Tuahuriri, or their representative(s), stating that appropriate action has been undertaken in relation to the discovered culturally sensitive material; or
 - ii. After five working days after advising Tuahuriri Runanga, a certificate signed by an archaeologist (i.e., a person with a post graduate degree in archaeology and who is a member of the New Zealand Archaeological Association) is provided to the Team Leader, Christchurch City Council Compliance and Investigations Team, Regulatory Compliance Unit, that states that in the archaeologist's professional opinion appropriate action has been undertaken in relation to the discovered culturally sensitive material. That certificate shall detail the action that has been undertaken by the

consent holder. A copy of the archaeologist's qualifications shall also be provided with any such certificate.

Advice note: This condition is in addition to any agreements that are in place between the consent holder and the Upoko Runanga (Cultural Site Accidental Discovery Protocol) or Heritage New Zealand Pouhere Taonga. This condition does not replace other legal responsibilities, such as those under the Heritage New Zealand Pouhere Taonga Act 2014.

Review

54. The Christchurch City Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purpose of:

- a. Dealing with any adverse effect on the environment which may arise from the exercise of this consent including, but not limited to:
 - i. The measures in Condition 25, which are intended to minimise the risk of material being dropped or tracked on to State Highway 73. The purpose of the review shall be to address any identified issue and can, if necessary, include the need to implement additional measures including physical structures/improvements as agreed by all the parties. Additional measures might include rumble strips/judder bars.
- b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

Further Advice note:

- *Monitoring*

The Council will require payment of its administrative charges in relation to monitoring, as authorised by the provisions of section 36 of the Resource Management Act 1991.

The current monitoring charges are:

- A monitoring fee of \$444 to cover the cost of setting up a monitoring programme and carrying out two site inspections to ensure compliance with the conditions of this consent; and
- Time charged at an hourly rate of \$118.50 incl. GST if additional monitoring is required, including non-compliance with conditions.