Resource consents sought for:

RM200488 Land use consent to disturb land and rehabilitate for the purpose of gravel extraction within the Rural 1 Zone.

RM200489 Land use consent to erect signage and establish access via an unformed legal road.

Recommended conditions

General

1. The consent holder shall ensure that all works are carried out in general accordance with:
   (a) the application documents received by the Council on 15 June 2020;
   (b) the further information received on 8 and 10 June 2021 and 2 September 2022;
   (c) the evidence received on 15 July 2022 and 4 November 2022;
   (d) Plan XX;

   Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.

2. The consent holder shall ensure all persons undertaking activities authorised by this resource consent are made aware of the conditions of the consent and ensure compliance with those conditions. A copy of the consent documents shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

3. Quarrying in the Stage 1 area shall not commence until the Landscape Mitigation Planting required by condition 3 below has been successfully established (at least an 80% survival rate) for a period of at least 6 years. Quarrying activities in the Stage 2 and 3 areas may take place in any order provided that all other conditions of this consent are met.

Review

4. For the purposes of, and pursuant to section 128 of the Resource Management Act 1991 ('the Act'), the Council may review this consent annually commencing 6 months from the commencement of the consented activities , for the purposes of:

Commented [DN1]: Workability issue. Referencing the evidence received could create confusion and potential conflict; lack of transparency re: enforcement. Also the application documents received on 15 June have been updated / superceded by further information so the condition should be worded to reflect that. Also, unclear what the site plan referred to is. The one in the application document has been superceded by the Stage 1 tranche approach. Greater clarity needed on the authorised works to ensure transparency and enforceability

Commented [HT2R1]: These are included as placeholders - Council will determine the appropriate documents to reference here prior to issue of consent.

Commented [DN3]: Not clear what these are. Applicant to circulate final version of plan so it is clear what is being referenced. Also helpful given recent revisions to the proposal (Stage 1 tranche approach)

Commented [HT4R3]: Refer above comment

Commented [DN5]: How do the management plans fit in? What if there is a conflict between these plans and the consent conditions?

Commented [HT6R5]: There should not be any conflicts, but if there were, I would expect the conditions to prevail.

Commented [DN7]: Not clear what this is. All of 1(a) - (d)? Should include the management plans

Commented [HT8R7]: No, this would be the consent itself. Condition amended to refer also to management plans.

Commented [DN9]: Different terms used eg 'prior to works commencement', 'prior to excavation'. Can pre-extraction works occur. Need consistency of terminolog...

Commented [HT10R9]: This is intended to apply to all quarrying activities, including any topsoil and subsoil ...

Commented [DN11]: Should say 'Quarrying in the Stage 1 area as shown on plan XXX'... and 'Quarrying activities ...

Commented [HT12R11]: Additional wording added

Commented [DN13]: Cross reference may be to conditions 44 and 45. Those conditions currently conta...

Commented [DN14R13]: Suggest alternative wording along these lines" "Prior to commencement of quarrying ...

Commented [HT15R13]: Correct re condition referencing, this has been corrected.

Commented [DN16]: Amend here (or elsewhere in conditions) to ensure interim monitoring and third part...

Commented [HT17R16]: SQEP certification now added.

Commented [DN18]: Include a requirement for the management plans to be reviewed at least two-yearly.

Commented [HT19R18]: Added

(a) dealing with any adverse effect on the environment which may arise from the exercise of this consent that were not foreseen at the time of granting of the consent, and which it is therefore more appropriate to deal with at a later stage; and/or

(b) requiring the consent holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the exercise of this consent.

Lapse and expiry

5. Pursuant to section 125 of the Act, this consent shall lapse 5 years after the date it commences unless either the consent is given effect to, or the Council has granted extensions pursuant to section 125(1A)(b) of the Act.

6. This consent shall expire 15 years after the date it commences.

Bond

7. Prior to starting work the consent holder shall enter into a performance bond with the Council. The performance bond shall be for $40,000.

   The sum secured by the bond shall be increased by the annual increase in the consumer price index for each year that the bond required by this condition remains in force, commencing with the first anniversary of the date of issue of the consent and confirmed on each subsequent anniversary. The movements in the relevant consumer price indices shall be taken from the published increases available on 31 December following the issue of the consent and on 31 December in each subsequent year.

8. The performance bond is to be prepared by the consent holder's Bank or Solicitor and submitted to the Council's Team Leader - Monitoring & Enforcement for approval.

9. The purpose of the performance bond required by condition 7 shall be to conduct remedial, repair, or rehabilitation works to the site, stopbank and/or access road, in the event that the consent holder fails to comply with conditions of this consent to the satisfaction of the Council's Team Leader - Monitoring & Enforcement.

Advice notes

The Council will make reasonable attempts (if practicable in the circumstances) to contact the person identified in condition 14(b) (i) who is the Council's principal contact person in regard to this consent, to give the consent holder the opportunity to remedy the matter prior to the Council taking any action.

Commented [DN20]: This should be aligned with the use rate of gravel which is likely to be depleted before 15 years

Commented [HT21R20]: Disagree. Reasons for this have been provided in operations and planning evidence.

Commented [DN22]: This is too low in the event site remediation is required/groundwater remediation. Amend to state how long the bond remains in place following completion of quarrying. Bond also sought in discharge consent conditions

Commented [HT23R22]: No technical basis provided for higher bond. Council will determine how long bond is held.

Commented [DN24]: Too narrow. Should extend to groundwater remediation and any remedial works required on neighbouring land impacted by the works

Commented [DN25R24]: Include separate condition on liability, requirement for applicant to obtain insurance in the event of a flood etc. Eg

1. the consent holder shall carry full public liability insurance to the vale of NZ$5 million or 10% of the total capital value of the project, whichever is the greater amount, for the life of the project, from the commencement of the works and including any rehabilitation and decommissioning period.

2. The value of the full public liability insurance required under 1 shall be reviewed on a two yearly basis and adjusted as required according to an appropriate Construction Cost index. The Consent Holder will notify the Council in writing of the adjusted amount, including providing supporting documentation on the Construction Cost index use, and provide the Council with written evidence that the insurance cover has been adjusted accordingly.

Alternatively, the condition could be expressed more simply along these lines:

Prior to the commencement of any work authorised under this consent, the Consent Holder shall provide written verification that the person responsible for carrying out the works holds public liability insurance to the value of $NZD 5,000,000.00

Commented [HT26R24]: Condition not accepted. This appears to me to be a civil matter, not resource management

The consent holder remains liable under the Act for any breach of the conditions of this consent and for any adverse effect on the environment which becomes apparent during or after the expiry of this consent.

Prior to the work

10. At least one month prior to commencement of the consent, the consent holder shall contact Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka-a-Māui Trust to advise them of the commencement date of the earthworks and to provide an opportunity for a cultural induction to be undertaken by relevant representatives who will be working on the site.

11. The Consent Holder shall engage a representative of Te Rūnanga o Ngāti Rārua, Te Ātiawa o Te Waka a Māui Trust, Ngāti Toa Rangatira, Te Rūnanga o Ngāti Kuia and Ngāti Tama ki Te Waipounamu Trust to be present during any stripping of topsoil and subsoil on site. The purpose of the monitor is to identify any archaeological artefacts (e.g., midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) uncovered during the disturbance of cultural layers, and to monitor the observance of tikanga. The Consent Holder shall notify the above iwi at least 10 working days prior to commencing initial stripping of topsoil and subsoil and advise them of the planned commencement date and likely duration of the works. Where the above notification is given, and an Iwi Monitor is unable to be present for any reason, the Consent Holder may commence works regardless. For the avoidance of doubt, this condition requires only a single monitor to be engaged by the Consent Holder to be on site at any given time.

12. In the event of any archaeological artefacts being uncovered, the consent holder shall:

    (a) cease the works immediately, as required by the Heritage New Zealand Pouhere Taonga Act 2014,

    (b) consult with the Heritage New Zealand's Central Regional Office (email infocentral@heritage.org.nz, PO Box 2629, Wellington 6140, phone (04) 494 8320, and

    (c) shall not recommence works in the area of the discovery until the relevant Heritage New Zealand approvals to damage, destroy or modify such sites have been obtained.

Advice Note:

At the time this consent was granted the contact details for Te Rūnanga o Ngāti Rārua:

56 Vickerman Street, Port Nelson, Nelson 7010, Phone (03) 553-1198, Email taiao@ngatirarua.iwi.nz

Commented [DN27]: Conditions from here to #47 all appear to be 'prior to commencement of quarrying' conditions. Consider amending the hearing and including relevant sub-headings eg 'culture and heritage' etc

Commented [DN28R27]: Include the requirement to complete at least one full year of groundwater chemistry samples and analyses at the existing monitoring bores (24543, 24544, 24545 and 24546) prior to commencement of clean filling activities

Commented [HT29R27]: I don't consider this necessary, however Council can structure how they wish.

Commented [DN30]: Unclear what this is eg is 'prior to commencement of the consent' prior to any physical works commencing on the site, or prior to extraction?

Commented [HT31R30]: Prior to commencement. No change required.

Commented [DN32]: Suggest this moves down to near condition 119, ADP as it is an operational issue. Include requirement to notify iwi

Commented [HT33R32]: Agreed. Change made in amended condition set. This was actually duplicated in the ADP condition, so Condition 12 just deleted.

And, for Te Ātiawa o Te Waka a Māui Trust:

Beach Road, Waikawa Marina, Waikawa, Picton 7220, Phone (03) 573 5170, Email taiao@teatiawatrust.co.nzAdvice note

This condition has been volunteered by the applicant in response to iwi consultation.

13. The Consent Holder shall seek interest from Te Ātiawa o Te Waka a Māui and Te Rūnanga o Ngāti Rārua for a cultural audit of the site to be undertaken prior to the commencement of the consented activities. If advised by Te Runanga o Ngāti Rārua and/or Te Atiawa o Te Waka a Maui Trust that mana whenua iwi desire a cultural audit, this will be funded by the Consent Holder.

Advice note

This condition has been volunteered by the applicant in response to iwi consultation.

14. The Council's Team Leader - Monitoring & Enforcement shall be notified in writing:

    (a) A minimum of 10 working days prior to commencement of work for each Stage; and

    (b) Prior to the recommencement of work where works have been discontinued for more than one month.

    Notification shall include:

    (a) The proposed start date for the period of work; and

    (b) The name and contact details of the following persons:

        (i) A representative nominated by the consent holder who shall be the Council's principal contact person in regard to matters relating to this resource consent; and

        (ii) The Site Manager (if not the consent holder's representative).

    Should either of the above persons change during the term of this resource consent, the consent holder shall provide the new name and contact details, in writing, to the Council's Team Leader - Monitoring & Compliance within five working days.

Submission of plans

15. The consent holder shall, at least 10 working days prior to the commencement of works, prepare and submit the following plans and management plans to the Council's Team Leader - Monitoring & Enforcement for certification. No works shall be undertaken until these plans/ management plans have been certified by the Council's Team Leader - Monitoring & Enforcement, unless condition 15 is invoked.

Commented [DN34]: This could located in a separate section as it is about notification of works commencing. It should also be expressed in the active tense eg 'The consent holder shall notify...'

Commented [DN35R34]: Amend to also include if works on site have ceased for a period of one month. Cross check against conditions in the event anything specific needs to happen if the site is inactive for a certain period (eg for stabilisation)

Commented [HT36R34]: I think this is the appropriate place for this condition. I do not understand why notification of works ceasing for over a month would be of benefit. When works recommence should be sufficient.

Commented [DN37]: 10 working days is too short given the extent of assessment needed. Valley Rage not confident that council has the capacity/all the relevant expertise to undertake this work in this timeframe. Should be increased to at least 20 working days

Commented [HT38R37]: Amended timeframe volunteered, as suggested by Council

Commented [DN39]: Include a requirement to notify council if works are discontinued for more than one month.

Commented [HT40R39]: See above comment

Commented [DN41]: Include requirement for review of management plans eg 'The Consent holder shall pay the actual and reasonable costs of an independent technical reviewer appointed by the Council to assess the XX management plan provided under condition Y of this consent to ensure that ZZZ is appropriately addressed'

Commented [HT42R41]: Not considered necessary. Council have ability to recover monitoring costs.

Commented [DN43]: Include traffic management plan

Commented [HT44R43]: Not required. Refer traffic reply evidence and revised conditions

Commented [DN45]: 10 working days is too short given the extent of assessment needed. Valley Rage not confident that council has the capacity/all the relevant expertise to undertake this work in this timeframe. Should be increased to at least 20 working days .

Incorrect cross reference. Should possibly be to condition 16(1)

Commented [HT46R45]: Refer earlier comments. Cross referenced have now been finalised in attached condition set.

(a) existing and proposed Contour Plans prepared in accordance with condition 16;

(b) a Noise Management Plan (NMP) prepared in accordance with condition 1718;

(c) a Soil Management Plan (SMP) prepared in accordance with condition 18;

(d) a Dust Management and Monitoring Plan (DMMP) prepared in accordance with condition 19;

(e) a Groundwater and Clean Fill Management Plan (GCMP) prepared in accordance with condition 20.

(f) a Landscape Mitigation Plan, a Stage 1 River Terrace Restoration Plan and a Maintenance and Establishment Plan prepared in accordance with Condition 232.

Commented [DN47]: Are these 3 separate plans or 1 plan covering 3 components? Should potentially be a landscape mitigation, maintenance and establishment and then a restoration plan. Is restoration only required for Stage 1 so that other stages are backfilled with no further requirements?

Commented [HT48R47]: This reflects how plans are referenced. Yes, Restoration Plan only applies to Stage 1 area.

Advice note

Certification of the management plans above is in the nature of certifying that adoption of the management plans will result in compliance with the conditions of this consent.

16. The following shall apply in respect of condition 14:

(a) the consent holder may commence the activities in accordance with the submitted plans 15 working days after their submission, unless the Council advises the consent holder in writing that it refuses to certify them on the grounds that it fails to meet the requirements of the condition and gives reasons for its decision; and

(b) should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (a) shall apply to any resubmitted plan.

(c) Any consequential amendments to the plans required by condition 14 must be certified by the Council's Team Leader - Monitoring & Enforcement, prior to being implemented.

Commented [DN49]: If plans provided 20 working days prior, then this timeframe should change to 25 working days

Commented [HT50R49]: Refer above comments

Commented [DN51]: Condition should be amended to say works cannot start unless plans resubmitted and certified

Commented [HT52R51]: I think this intent is clear in the condition.

17. The Contour Plans required by condition 15(a) are required to ensure that finished ground levels across the site are generally consistent with existing ground contours. The plans shall include as a minimum:

(a) A topographic survey to New Zealand Vertical Datum 2016 (NZVD 2016) of the existing site, with contour intervals at 0.2 metres;

(b) A plan, referenced to NZVD 2016, of the proposed finished levels on site after excavation and recontouring has occurred, with intervals at 0.2 metres.

(c) A site plan showing the location of property boundaries, surface water bodies, stopbanks, legal roads, survey benchmarks, and other details as appropriate.

Commented [DN53]: The finished contours should be surveyed upon completion of the consent and certified to comply with proposed finished contour plans

Commented [HT54R53]: This is already required by conditions, however condition relocated to end for clarity.

Advice note: LiDAR survey may be used to prepare this plan.

18. The Noise Management Plan (NMP) required by condition 15(b) shall detail the best practicable option for ensuring the noise standards specified at conditions 578 and 609 of this consent are complied with. The NMP shall be in general accordance with the draft NMP prepared by Hegley Acoustic Consultants dated March 2023, and shall address, as a minimum:

    (a) Mitigation measures proposed

    (b) Training of staff

    (c) Equipment Maintenance

    (d) Neighbour Liaison

    (e) Complaints

    (f) Contingency Plan

    (g) Key Personnel and their Responsibilities

19. The SMP required by condition 15(c) shall demonstrate the best practicable option to ensure that the restored soils achieve the standards specified in condition 55 and that condition 54 is complied with in respect of the control of surface water quality. The SMP shall be in general accordance with the draft SMP prepared by LandSystems Ltd dated 8 March 2023 and shall address, as a minimum:

    (a) Procedures to mitigate the potential effects on soil properties including for:

        (i) soil removal;
        (ii) soil storage;
        (iii) soil placement (including the sequence of soil placement);
        (iv) transport;
        (v) the preparation of the receiving surface;
        (vi) fill (overburden), subsoil and topsoil properties; and
        (vii) post soil placement management.

    (b) Procedures to minimise the risk of soil loss from overland flow including:

        (i) during soil removal;
        (ii) for soil storage; and
        (iii) during vegetation establishment.

    (c) Soil monitoring required including

        (i) Baseline sampling and analysis.
        (ii) Ongoing sampling and analysis of reinstated areas.

Commented [DN55]: Does the more specific process for addressing noise complaints prevail over the other conditions in this condition set regarding complaints? How are the two read together?

Commented [HT56R55]: I don't think that the two conflict. The conditions detail the overall procedure, however there are response requirements detailed in the MP's that are specific to the nature of the effects. I have added some wording to the complaints conditions that reference reporting of what actions are taken in response to any complaints, with reference to any specific procedures detailed in the MP's.

(iii) Sampling and analysis of the following:

- Soil quality properties of the topsoil.
- Trace elements (total recoverable concentrations) of the topsoil and subsoil.
- Soil profile condition soil profile description.
- Visual Soil Assessment of the topsoil.

(d) Requirements for soil management training for staff and for supervision.

20. The DMMP required by condition 15(d) shall demonstrate the best practicable option to ensure that dust is managed on site to minimise the adverse impacts of potential dust discharges on the receiving environment and to achieve the standard specified in condition 48. The DMMP shall be in general accordance with the draft DMMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

(a) Consent Compliance and Key Performance Indicator

(b) Sources of Dust

(c) Management and Mitigation Measures

(d) Roles and Responsibilities

(e) Implementation and Operation of DMMP

(f) Environmental Monitoring Programme

(g) DMMP Review

(h) Complaints

(i) Emergency Contacts

(j) Annual Reporting

21. The GCMP required by condition 14(e) shall demonstrate the best practicable option to ensure that discharge of Clean Fill to land is managed to avoid adverse effects on groundwater, to:

- Ensure that excavations do not expose groundwater in excavations (conditions 99 and 100) with the exception of small scale temporary test pits that are back filled within 30 minutes.
- Ensure that all backfill material is strictly managed to ensure it meets the requirements of Condition 109 or this consent.
- Minimise any change to the physical and chemical properties of groundwater as result of the land use and discharge activities associated with clean fill activities (as defined by the groundwater chemistry monitoring requirements).

Commented [DN57]: Typo - should be "of" this consent

Commented [HT58R57]: Noted and corrected.

Commented [DN59]: Specified in the GCMP

Commented [HT60R59]: Yes, wording added.

- Ensure that under no circumstances will the land use and discharge activities associated with quarry activities result in groundwater quality exceeding the acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 in downgradient water supply bores.

22. The GCMP shall be in general accordance with the draft GCMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

    (a) Consent Compliance and Key Performance Indicators, to be consistent with these conditions of consent

    (b) Clean fill materials

    (c) Proposed clean fill management system

    (d) Groundwater level monitoring and excavation controls

    (e) Response and mitigation to a spill

    (f) Groundwater quality monitoring

    (g) Water quality complaints

    (h) Reporting requirements

23. The Landscape Mitigation Plan, Stage 1 River Terrace Restoration Plan, and Maintenance and Establishment Plan required by condition 15(f) shall be prepared in general accordance with the plans prepared by Canopy, dated November 2022. These plans shall be prepared to ensure that the proposed landscape mitigation and restoration plantings successfully establish and shall include, as a minimum:

    - Species and grade of plantings. The Consent Holder will use eco-sourced native species only, except for the use of poplar and eucalyptus species used in shelter belt planting where required to provide fast-growing visual screening of the site. Where such exotic species are used, they shall be removed from the site within 2 years of the cessation of the quarrying activity.
    - Timing of plantings
    - Preparation
    - Setout and spacings. All plantings shall be set back at least 5m from the toe of stopbanks
    - Mulching
    - Pest management
    - Staking and plant guards. Cardboard plant guards shall be used.

Commented [DN61]: Include the requirement to complete at least one full year of groundwater chemistry samples and analyses at the existing monitoring bores (24543, 24544, 24545 and 24546) prior to commencement of clean filling activities.

Commented [HT62R61]: I think that this is clearly outlined in conditions, and doesn't need to be repeated again here. No ongoing requirements in this regard after commencement of quarrying activities, so doesn't need to be in the GCMP.

Commented [DN63]: Amend to state that the GCMP must demonstrate how conditions x to x will be complied with

Commented [HT64R63]: Covered in Condition 21.

- Maintenance
- Replacement plantings

Confirmation shall be obtained from Council's River Engineer that the Landscape Mitigation Plan and Stage 1 River Terrace Restoration Plan are acceptable from a flood flow perspective prior to being certified under Condition 15.

24. The consent holder shall, prior to work on the vehicle entrance commencing, prepare and submit engineering drawings for the vehicle entrance upgrade to the Council's Team Leader - Monitoring & Enforcement for approval.

Earth bund (acoustic barrier and dust screen)

25. An earth bund of at least 3m height, as shown in the Canopy Landscape Mitigation Plan, shall be constructed prior to the commencement of quarrying activities on site to provide an acoustic barrier and dust screen to 131 Peach Island Road. The earth bund must be maintained for the duration of the consented activities.

Site meeting

26. The consent holder shall arrange for a site meeting between the consent holder's representative and the Council's assigned monitoring officer, which shall be held on site prior to any works commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Signage

27. Signage shall be installed on Motueka River West Bank Road to provide warning to oncoming vehicles of the potential presence of trucks. As a minimum, permanent warning signs (PW-50) "Trucks Crossing" signs shall be installed on West Bank Road either side of the site entrance, at a position to be confirmed with the Council's assigned monitoring officer.

Upgrade of vehicle entrance and site access

28. The consent holder shall remove the willow trees north and south of the entrance to the site and undertake trimming on the bank on the eastern side of Motueka River West Bank Road, as identified in the Traffic Concepts report submitted with the application, to improve site access visibility.

29. The consent holder shall undertake ongoing trimming of vegetation to ensure that visibility is not impaired and shall ensure that the sight distances at the intersection with

Commented [DN65]: Should refer to 'prior to the commencement of physical works on the site ..' (not just quarrying)

Commented [DN66R65]: VR notes that the soil used from stage 2 and 3 to build the bund will be compacted / lose productive qualities

Commented [DN67R65]: VR query what soil will be used for restoration in stage 2 and 3 if this soil is used for the bund.

Commented [HT68R65]: No, should not need to be constructed prior to works such as landscape mitigation planting. Bund will not comprise only topsoil, rather a topsoil layer will be applied to top of bund to enable grass establishment (only a small amount required, likely just that from beneath the bund).

Commented [DN69]: This should be up earlier in pre-commencement. Also should be amended along these lines eg "Prior to the commencement of any work authorised under this consent, the Consent Holder shall hold a pre-start meeting that:
- is located on the subject site,
- is scheduled not less than give (5) days before the anticipated commencement of the activity
- includes a representative of Council's monitoring and Compliance Team
- includes the Consent Holder's agent and engineer responsible for 'signing off' completion of works in accordance with this resource consent
- includes Mana Whenua kaitiaki, and
- includes representation from the contractors who will undertake the works.

The following information shall be made available at the pre-start meeting:
- resource consent conditions
- certified management plans, and
- timeframes for key stages of the works authorised under this consent

Commented [HT70R69]: I don't consider this adds any further value. Council monitoring officer can manage these matters.

Commented [DN71]: Should be the bank on the western side. Not just grass trimming but side of bank needs to be removed to ensure sightlines preserved

Commented [HT72R71]: Yes, this error has been corrected.

Commented [DN73]: Traffic management plan should also be required for the project

Commented [HT74R73]: Refer earlier comment.

Motueka River West Bank Road meet the minimum requirements set out in Table 4-14 of the Nelson Tasman Land Development Manual 2020 (NTLDM).

30. The existing vehicle crossing at 493 Motueka River West Bank Road shall be upgraded/ formed generally to the standard shown in Diagram 2 of Drawing SD409 in the of NTLDM, except where modifications as approved by Council are necessary to ensure vehicle tracking and its connection to the new bridge are fit for purpose.

31. The vehicle access shall be formed to a minimum sealed carriageway width of 6m from the existing seal edge of Motueka Valley Westbank Road up to the western end of the bridge (approximately 35m from the edge of the existing seal) to allow for two trucks to pass by each other.

32. The proposed access, beyond the bridge, shall be formed to a sealed carriage width of generally no less than 3.5 with 0.5m gravel shoulders and side drains to drain to existing drain paths and/or soakpits. Localised widening on corners shall be provided to accommodate vehicle tracking, and a single passing bay shall be provided on the bend in the haul road within the marginal strip. The access shall be maintained for the duration of this consent by the Consent Holder.

Advice note

This consent does not grant access to the excavation area. Site access and management of the tracks should be arranged with the landowner.

33. The proposed access shall not connect to the southern end of Peach Island Road, unless requested to by Council.

Bridge

34. Prior to it being used under this consent, the appropriateness of the existing bridge across the overflow channel (located on Section 1 SO 15112) shall be assessed by a suitably qualified engineer to demonstrate compliance with condition 354.

35. The bridge shall be able to carry Class 1 loads (or higher loads if the applicant proposes to use HPMV trucks for the operation), and any necessary upgrade or replacement to achieve this shall be carried out by the consent holder prior to the bridge being used under this consent.

36. The bridge shall be widened to at least 3.5m to match the proposed 3.5m access width.

Survey

37. The consent holder shall survey the boundaries of the unformed legal road and shall clearly identify the boundaries of the legal road on site. There shall be no extraction of gravel from the unformed legal road.

38. The consent holder shall survey the stopbank crossing point prior to works commencing and upon completion of the works. The consent holder shall repair / reinstate any damage caused to the stopbank crossing at the consent holder's cost.

Stopbank

39. The location of the toe of the stopbank adjacent to the proposed excavation sites shall be clearly identified and marked on site by a suitably qualified and experienced geotechnical professional or river engineer.

40. The 20m setback from the toe of the stopbank on both sides of the stopbank shall be clearly marked and maintained (e.g., by a fence) to ensure that earthworks do not encroach into the setback, except for the stopbank crossing (required by condition 41)

41. The construction of any fence within bermland (i.e., on the outer side of the stopbank), shall be of a post and wire construction only and, if required by the Council, shall be removed on completion of the works.

42. The consent holder shall form and maintain a ramp over the stopbank to provide vehicle access. This shall include a 200mm sacrificial gravel layer on top of the stopbank crest, which shall be maintained for the duration of, and removed upon completion of, the consented activities. The crest of the ramp shall be maintained so as to be no lower than the adjacent stopbank crest immediately up- and downstream of the ramp, to the satisfaction of the Council's Asset Engineer - Rivers.

43. The consent holder shall not block the stopbank, and shall ensure that it is available to the Council's Rivers Engineers at all times for flood monitoring.

Landscape mitigation and restoration planting

44. Within the first planting season following the granting of consent, landscape mitigation planting shall be carried out in accordance with the certified Landscape Mitigation Plan and Maintenance and Establishment Plan required by Condition 22.

45. All plantings shall be set back at least 5 m from the toe of the stopbank to minimise tree roots affecting the stopbank.

46. Within the first planting season following the completion of the Stage 1 quarrying activities (including soil rehabilitation), restoration planting of the Stage 1 area shall be

Commented [DN75]: Include a condition requiring that earthworks do not encroach into 20m setback. This condition just requires setback to be marked

Commented [HT76R75]: This is addressed under 'operational' conditions below

Commented [DN77]: The landscape mitigation planting has to be successfully established (80% survival rate) for a period of 6 years prior to quarrying in Stage 1 commencing. This should therefore have a more stringent monitoring regime attached to it, eg annual reporting to Council (should be reflected inn the condition as well as the restoration plan).
Also, the condition should be extended to require all planting to be maintained for the life of the consent and during that period, any plants that die shall be replaced and weeds and pests controlled and nutrients provided such that an optimum growing environment is provided

Commented [HT78R77]: Refer to comments above. Replacement and maintenance detailed in Maintenance and Establishment Plan.

Commented [DN79]: Not clear whether the size of the pit increased by 5 or there will be 5 pits

Commented [HT80R79]: I don't understand this query

Commented [DN81]: Should sit with post-quarrying restoration / reinstatement conditions (117 etc)

Commented [HT82R81]: Agreed. Have moved this in amended condition set.

undertaken in accordance with the certified Stage 1 River Terrace Restoration Plan and Maintenance and Establishment Plan required by Condition 22.

Baseline soil sampling and analysis

47. Prior to the commencement of quarrying activities on the site, baseline soil sampling and analysis shall be undertaken on the site in accordance with the certified SMP.

Operational conditions

Dust

48. There shall be no noxious, dangerous, objectionable or offensive dust beyond the boundary of the site.

49. Specific dust control measure described in the DMMP shall be implemented. These dust control measures shall reflect best practical option and be undertaken in accordance with the accepted best practice.

50. No material shall be disturbed during periods of high wind (>7.5m/s) and where there are sensitive receptors within 250m in a downwind direction. No excavations shall be undertaken if high wind is forecast in the period before measures can be implemented to secure the excavated area and any stockpiles from the effects of dust generation. This condition does not prevent the consent holder from backfilling excavations with clean fill if groundwater levels are rising.

51. No quarrying activities shall take place within 100m of orcharding activities on neighbouring properties between the months of January and May (inclusive).

52. No soil stockpiles may be placed within 100 m of orcharding activities on neighbouring properties.

53. Only water will be used for dust suppression. The Consent Holder will not use polymer or chemical stabilization methods, including Waste Oil or Reprocessed Oil, to control dust.

54. The consent holder shall undertake meteorological monitoring (i.e., wind direction, wind speed, temperature and relative humidity) on site and store this data electronically and it shall be made available to the Council's Team Leader - Monitoring & Enforcement on request. The meteorological monitoring station shall be located and established so as to be, to the extent practicable on site, consistent with AS/NZS 3580.1.1:2016.

Surface water quality

55. Land disturbance shall not result in runoff of sedimentation that results, after reasonable mixing, in any of the following effects in the receiving waters:

Commented [DN83]: Should be undertaken by a competent, qualified and independent person/SQEP. Should be reported to the council

Commented [DN84R83]: Recommend technical review process be built in / or peer review by third party. Esp soils, noise, gwater

Commented [HT85R83]: Wording amended to include this

Commented [DN86]: BPO should be implemented from the start, rather than once complaints received

Commented [HT87R86]: This is what the condition requires.

Commented [DN88]: Conflict: Stage 1 occurring between March-Oct when g/water lowest.

Commented [HT89R88]: These overlap, but no conflict. Still practicable to give effect to the consent within this relatively small area between October and December.

Commented [DN90]: Amend to require holder to establish meteorological station. This is needed so wind measurements can be taken

Commented [HT91R90]: Addressed in second part of condition.

(a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
(b) any conspicuous change in the colour or visual clarity:
(c) any emission of objectionable odour:
(d) the rendering of fresh water unsuitable for consumption by farm animals:
(e) any significant adverse effects on aquatic life.

Soil

56. Following completion of soil restoration and rehabilitation activities, restored soils shall achieve the following:

(a) A minimum of 800 mm of plant growth medium with little or no limitations to root penetration. As a guide, soil penetration resistance should not exceed approximately 2300 kPa.

(b) Soil profile condition to be such that there is no obvious contrasting compacted layers within the restored soil profile, especially between the subsoil and the topsoil, and no visually obvious compaction within the upper 300–400 mm of topsoil.

(c) Be at least imperfectly drained, preferably moderately well or well drained where the inherent soil drainage characteristics of the land allow.

Noise

57. Vehicles operating on site shall be fitted with broadband, rather than tonal, reversing alarms.

58. Trucks operating on site shall be fitted with plastic deck liners to reduce impact noise as loads are added.

59. Noise associated with construction activities on site (such as construction of the noise bund and haul roads) shall not exceed 70dB LAeq and 85dB LAFmax when measured 1m from the most exposed façade of any dwelling located beyond the subject site. Construction noise shall be measured and assessed in accordance with the provisions of NZS6803:1999 Acoustics – Construction noise.

60. The consent holder shall ensure that all other activities on site (other than construction work) are designed and conducted, and all equipment used on site is maintained, so that noise generated by activities on site does not exceed a noise level of 55 dBA Leq (day) when measured at or within the notional boundary of any dwelling.

Commented [DN92]: This should sit with the reinstatement conditions. Amend to include verification/certification - monitoring

Commented [HT93R92]: Agreed, regarding location in condition set. Verification and certification covered by reporting conditions, which reference SMP requirements.

Commented [DN94]: Condition unworkable and will not ensure like for like replacement. Needs to be removed and stock piled in layers and put back again in that order

Commented [DN95R94]: Refer to soil horizons instead of subsoil and topsoil

Commented [DN96R94]: Iain - conditions imposed by court for Waimea plains reinstatement; staplegrove conditions

Commented [HT97R94]: Condition has been reconsidered and addressed in Dr Hill reply. Amendments reflected in revised condition set.

Commented [DN98]: Should say "of original soil" not "plant growth medium". Ie soil from Peach Island site.

Commented [HT99R98]: As per above

Commented [DN100]: VR does not support this. The soil must be at least moderately well or well drained

Commented [HT101R100]: Condition has been reconsidered and addressed in Dr Hill reply. Amendments reflected in revised condition set.

Commented [DN102]: delete

Commented [DN103R102]: "Be at least moderately well or well drained..". Site is currently 'well drained'. Risk that soil will be poorly drained as a result of compaction. Reference to 'inherent soil drainage characteristics' should be original/pre quarrying characteristics

Commented [HT104R102]: As above

Commented [DN105]: VR supports Daniel Winter's recommendations re monitoring

Commented [HT106R105]: Refer comments below

Commented [DN107]: Should be 51 dBA (as recommended by Daniel Winter and Susi Solly)

Commented [HT108R107]: Disagree, for reasons detailed in planning and noise evidence for Applicant

All noise (other than construction noise) shall be measured and assessed in accordance with the provisions of NZS6801:2008 – Acoustics – Measurement of environmental sound and NZS 6802:2008 - Acoustics - Environmental Noise.

Advice note

Construction work relates to activities defined as construction under NZS6803:1999. This includes the construction of the earth bund and the haul road, but not the gravel extraction operation or truck movements on site.

61. Noise monitoring shall be undertaken:

    (a) At the commencement of any activity that is expected to approach the noise limits identified in Conditions 58 and 59, and;

    (b) When requested to by Council in response to a complaint.

Hours of work

62. Work shall only be carried out between 7:00 am and 5:00 pm Monday to Friday. No heavy machinery shall be operated on site earlier than 7.30am. No operations shall occur on Saturdays, Sundays, public holidays, or between 20 December and 10 January the following year (Christmas holiday period).

Access and vehicle entrance

63. Access to the site by vehicles associated with quarrying activities shall only be via the upgraded vehicle crossing at 493 Motueka River West Bank Road.

Advice note

This consent does not grant access to the excavation area. Site access and management of the tracks should be arranged with the landowner.

Traffic movements

64. There shall be no more than 30 truck movements per day to and from the site (a return trip being two truck movements). A truck may include a trailer.

65. All vehicles shall observe a speed limit of 15 kilometres per hour when travelling within the site (including on haul roads). It is the consent holder's responsibility to inform drivers of this speed limit.

66. All trucks shall observe a speed limit of 60 kilometres per hour when travelling along Motueka River West Bank Road.

67. All trucks shall be fitted with GPS based speed logging and records shall be supplied to the Council's Team Leader - Monitoring & Enforcement on request. The GPS system shall

Commented [DN109]: Valley Rage additional conditions be included here eg 'Within three (3) months of the commencement of quarrying on the site, and again within six (6) months, noise from the site shall be monitored on at least two (2) separate occasions (totalling 4) by a SQEP and the results provided to the Council's Team Leader XX. The monitoring shall be representative of the varying noise levels emanating from the activities undertaken on the site to determine compliance with the noise levels in Condition XX

Additional noise monitoring shall be conducted at any time upon a reasonable request from the Council's Team Leader XX. Where any non-compliance is recorded, the Council's XX is to be advised within one (1) working day and advised on what remedial steps will be undertaken and when they will be completed. Once the remedial work has been completed, noise shall be monitored and the results reported to the Council's XX within ten (10) working days

Commented [HT110R109]: Refer to noise and planning reply evidence. Council wording accepted with small change.

Commented [DN111]: Inclusive of those days

Commented [HT112R111]: Yes, that is the intent. Changed in updated plan set for clarity.

Commented [DN113]: This includes all truck movements (whether cleanfill, aggregate, empty) including those transporting fill from non-CJ quarries/other sites. Wording here is unclear - should be 15 trucks in and 15 out. Delete the words "to and from the site" and state total truck movements. Could include this in an advice note. Trucks includes non-CJs trucks

Commented [HT114R113]: Have amended wording in amended set to ensure this is clear.

Commented [DN115]: VR wishes there to be electronic monitoring / cameras to record number of trucks entering and leaving site

Commented [HT116R115]: This can be monitored by the GPS units proposed.

be set up to provide alerts to the quarry manager if the speed limits specified in the conditions above are exceeded.

Commented [DN117]: And max truck movements

Commented [HT118R117]: Wording added in amended set.

Site management

68. Works shall be undertaken in accordance with the certified NMP, DMMP, GCMP and SMP.

Commented [DN119]: Amend to refer to all 'operations at the site'

Commented [HT120R119]: Wording amended

69. No processing, washing, crushing or screening of gravel shall be carried out on the site.

70. The consent holder shall maintain the site in a clean and tidy manner. Redundant machinery and equipment not required for the operation of the quarry (or for other residential and farming activities on the site) shall be removed from site.

71. The consent holder shall undertake pest plant management across the site for the duration of the consent.

72. No backfill or any other material shall be stored or stockpiled on the river side (outside) of the stopbank, except for topsoil awaiting reinstatement placement on that day. In the event that there is temporarily stockpiled material on the river side of the stopbanks and heavy rain is forecast, the stockpiled material shall be relocated to the landward side of the stopbank.

73. Stockpiled materials (excluding soil and any materials to be used for backfilling on the same day, shall be located in the area identified on the Landscape Mitigation Plan as 'Stockpile and Service Area'. This area shall be excavated to a level 1m below existing ground level. Stockpiles in this area shall be managed so as to be no greater than 4m in height above the lowered ground level (3m above surrounding ground level).

74. No excavations shall be undertaken if heavy rain is forecast in the period before measures can be implemented to secure the excavated area and any stockpiles from the effects of overland flows.

75. If heavy rain is forecast, heavy machinery shall be moved inside the stopbank for overnight storage. This condition is not intended to prevent machinery from backfilling excavations to meet other conditions of this consent or RM220578 under conditions of rising groundwater levels.

76. All practicable measures shall be undertaken to prevent, as a result of the works:

    (a) erosion of the Motueka River berm; and
    (b) the discharge of sediment to the Motueka River.

Advice note

This consent does not authorise the discharge of any sediment to water. Relevant TRMP and / or national environmental standards permitted rules must be met or consent applied for accordingly.

Refuelling and spill management

77. All machinery shall be maintained and operated in such a manner minimising, so far as practicable, any spillage of fuel, oil and similar contaminants to water or land, particularly during machinery refuelling.

78. No refuelling or machinery maintenance shall be undertaken within 20 metres of surface water (including exposed groundwater).

79. No heavy vehicle maintenance apart from servicing (e.g., an oil change by trained personnel) shall occur on site.

Advice note

An example of heavy vehicle maintenance is engineering maintenance, such as work on a digger bucket.

80. All spills shall be immediately contained and controlled by an approved product and shall be removed from the site for appropriate disposal. Any spills greater than 20 litres shall be immediately reported to the Council's Team Leader - Monitoring & Enforcement. Spill kits shall be available on site, and site staff shall be trained in procedures for using them.

81. Fuel shall be stored securely or removed from site overnight.

Groundwater Level Monitoring

82. The Consent Holder shall monitor groundwater levels in two dedicated upgradient monitoring bores located at the southern extent of the site (bores 24544 and 24546) and two dedicated downgradient monitoring bores located at the northern extent of the site (bores 24543 and 24545).

    All groundwater level measurements:

    (a) Shall be measured to a local common relative level to the nearest 10 mm accuracy (i.e., Nelson vertical datum 1955, NZVD 2016 or similar).

    (b) Shall be recorded via a tamper-proof electronic recording device such as a data logger(s) that shall record groundwater levels taken at least once every 60 minutes.

    The groundwater level recording device:

Commented [DN121]: These provisions expressed in a different way in the GCMP.

Commented [HT122R121]: Conditions amended slightly for consistency with GCMP

Commented [DN123]: GCMP is inconsistent. Refers to reporting to TDC Pollution Incident contact number (para 6.0(4))

Commented [HT124R123]: As above, conditions slightly amended for consistency

Commented [DN125]: Include a reference to groundwater level monitoring requirements in GCMP (see para 5.0(2)).

Commented [HT126R125]: I think preferable for conditions to stand on their own, rather than reference GCMP.

Commented [DN127]: Needs to state that monitoring will be in accordance with the GMP which states that monitoring will occur every three months

Commented [HT128R127]: These requirements are reflected in the discharge conditions.

(c) Shall be connected to a telemetry system that collects and stores all of the data continuously with an independent network provider. No data shall be deliberately changed or deleted.

(d) Shall be accessible to Tasman District Council at all times for inspection and/or data retrieval.

83. The Consent Holder shall use all the groundwater level measurement data to generate groundwater level elevation contour maps for the entire clean fill area that can be accessed by the Clean Fill Operator and excavator operator(s). The groundwater elevation contour maps will be used daily to inform the excavator operator(s) of excavation depths (outlined in Condition 86).

Excavation

84. All excavations between 0.3 and 1 m above groundwater level shall occur during stable weather conditions which are defined as:

(a) Decreasing or stable groundwater level trends, based on the measurements described in Condition 882; and

(b) Decreasing or stable flow within the Motueka River as measured at the TDC Woodmans Bend flow recorder site.

85. Excavations between 0.3 and 1 m above groundwater level shall immediately cease and backfilling shall occur if any of the following occur:

(a) Tasman District Council issue any flood warnings for the Motueka River catchment.

(b) Any weather warnings are issued for the Nelson/Tasman region that might be expected to cause groundwater levels at the clean fill to rise.

(c) When groundwater levels measured in Condition 882 display an increasing trend.

86. All onsite excavation machinery used for excavation of pit(s) shall be equipped with onboard GPS and elevation systems that will determine the elevation of the digging implement (i.e., excavator bucket). The onboard GPS and elevation systems shall record elevation measurements to a local common relative level (as per Condition 81((a)) (i.e., Nelson vertical datum 1955, NZVD 2016 or similar).

87. To assess the occurrence of groundwater beneath the excavation, the Consent Holder shall ensure that the excavator operator(s) undertakes a temporary excavation down to a depth of 1 m below the working level of the excavation on each day when excavation is occurring. This check on the occurrence of groundwater will be used to inform the depths to which excavations can occur on that day, as per Table 1 of the GCMP. Only

Commented [DN129]: ... mix of controls...difficult to monitor.. Need to be read with discharge conditions

Commented [HT130R129]: I am unsure what is being suggested as an alternative.

Commented [DN131]: Putting fill back in in wet conditions; reduces soil quality; include new condition that if backfilled due to rising g/water levels, they can't excavate that area again (as stated by TIM CJ at hearing)

Commented [HT132R131]: Only temporary backfill with excavated aggregates (not clean fill or soil) proposed.

Commented [DN133]: Inconsistent wording in para 5 of the GCMP which says "temporary test pits that expose groundwater can be undertaken". Should be expressed in GCMP as mandatory requirement

Commented [HT134R133]: Condition takes precedence

the digging implement of the excavator shall enter the temporary excavation and if groundwater is encountered, the excavation shall be back filled within 30 minutes of the groundwater being observed, to at least 0.3 m above the level at which groundwater was encountered. The backfilling material must be the same material that was excavated to create the temporary excavation.

88. If any of the triggers described in Condition 84 occur, then backfilling of the excavation to maintain at least 1 m above groundwater level at the time of the excavation but no more than the elevation of pre-quarry land surface shall occur, taking into account land surface restoration requirements.

89. If any uncontrolled exposure of groundwater occurs in the excavation pit(s) all excavation activities will cease. Placement of clean fill material must occur as soon as practicable to fill in the exposed groundwater.

90. The Consent Holder will notify their consent compliance monitoring officer at Tasman District Council if groundwater enters the excavation pit area.

91. Topsoil and subsoil shall be stripped and stockpiled separately for the purpose of reuse on site. All soil stockpiles shall be:

    (a) no more than 3 metres in height;
    (a) stored on site for no more than 6 months before use.

92. Machinery movement over stockpiled soil is prohibited, other than in the construction of the proposed noise bund on the northern boundary. This condition is applicable to all excavation, backfilling and soil rehabilitation activities.

93. Topsoil and subsoil shall only be excavated in dry soil condition, as defined in the SMP.

94. Any excavation in berm land shall occur in strips aligned parallel to the general direction of flood flow across the berm land. No individual strip shall be wider than 20 m.

95. The excavation shall be progressively backfilled so that the maximum size of excavation open at any one time shall not exceed 1600m^2 (generally 20 m in width and 80 m in length).

96. Sufficient Clean Fill shall always be available on the site for backfilling of any excavation to 1m below original ground level.

Advice Note:

This condition is volunteered to demonstrate that there will, at all times, be sufficient Clean Fill available to enable backfilling of the excavation pit, in the event of rising groundwater levels.

Commented [DN135]: Stockpiles should be max of 1 metre high, to avoid compaction with machinery

Commented [HT136R135]: Refer earlier comments. Soil stockpiles will not be driven over.

Commented [DN137]: Landscape expert for CJs said visual impacts greater if pits greater than 80m x 20m. Include condition to that effect. Confusing re 'tranches'. Need max size of excavation

Commented [DN138R137]: T+ T modelled 20 x 80 pits. Pits to be backfilled and revegetated

Commented [HT139R137]: This is still correct. The additional controls require that no more than 1/3 of the stage 1 area can be being excavated (ie 1600m2 pit) or being rehabilitated, at any given time. Each tranche needs to be backfilled, reinstated and grassed within the stated summer works period.

Commented [DN140]: Not clear whether this applies to any excavation in any stage. Do the more specific conditions in condition 99 take precedence over condition 95.

Commented [DN141R140]: Needs to be clearer that this applies to Stage 1 if that is the intention. Note different terminology used eg berm land, Stage 1. Stage 1 conditions should sit as a package of conditions as currently not clear which conditions apply to which stage

Commented [HT142R140]: Condition 99 requirement is additional. Has been further clarified in amended set.

97. The number of excavations open at any one time shall not exceed one, except when the excavation of one strip has been completed and the excavation of a new strip is commencing, in which case two open excavations are permitted.

98. For any given Stage, excavation works shall commence at the most upgradient (with respect to groundwater flow) end of the Stage, this being generally the southern end of the Stage.

99. Stage 1 is to be quarried in 3 tranches, with a maximum of one third of the Stage 1 area to be actively quarried or being remediated at any time. Subsequent tranches within Stage 1 shall only commence when the previous tranche has been rehabilitated to the point that a vegetated cover is established.

100. Stage 1 quarrying and placement of Clean Fill, subsoil and soil is only to take place during the months of October to March, in order to ensure a vegetated cover is established before winter.

101. There shall be no excavation, removal of gravel or other disturbance of land within 20m of the toe of the stopbank. For the avoidance of doubt, this applies on both sides of the stopbank.

102. Excavations shall maintain a 10m setback from the southern boundary of the Stage 3 extraction area, shared with the neighbouring title (Lot 3 DP 1650, comprised in RTNL58/75).

103. Excavations adjacent to property boundaries or adjacent to the 20m setback from the toe of stopbanks shall not exceed (be steeper than) the following batter angles:

    (a) Lower Gravels to be battered at 1H:1.3V max;

    (b) Upper mantle to be battered at 1H:1.7V max.

    These batter angles may only be exceeded adjacent to property boundaries where the adjacent landowner agrees to a proposal such that the consent holder is to repair/reinstate any damaged land caused by shallow surficial landslips during the gravel extraction pit works.

104. At the commencement of each Stage of excavation, the initial excavation shall be inspected by a Geo-professional so that they can verify that the above batter angles are appropriate given actual exposed ground conditions. The Geo-professional shall at the same time undertake test-pitting across the remainder of the Stage area and advise on the depths of upper mantle/lower gravel materials. If, during excavations over the remainder of the Stage the Consent Holder identifies any unforeseen ground conditions during the gravel pit extraction works (i.e. deep layer of topsoil than anticipated test-

Commented [DN143]: Seems to be a change in proposal from progressive backfilling originally proposed

Commented [HT144R143]: No, there is no change here.

Commented [DN145]: Not clear if this is using 80 x 20m pits.

Commented [HT146R145]: Yes. Clarified in amended conditions.

Commented [DN147]: At odds with condition 95 re generally 80x 20. Valley Range requests more certainty on the tranched approach including size and location of open pit, visual effects (assessed by expert). T+T analysis based on 1600m2 to calculate volume of erodible material. If pit size is now increasing, this modelling should be carried out again

Commented [DN148R147]: Applicant to confirm whether there will be more than 1600m2 of bare land at a time

Commented [HT149R147]: Confirmed and clarified as per above.

Commented [DN150]: Noted that there are orchard close to stage 1 ie within 100m so no quarrying will occur between Jan-May. Conditions could state this more clearly

Commented [HT151R150]: This is the intent of the condition, condition has been amended to make this clear.

Commented [DN152]: At hearing, Wakatu requested 20 m setback

Commented [HT153R152]: 20m setback is accepted by the Applicant. Amended in final set.

Commented [DN154]: Amend so independent qualified person; in liasion with council

Commented [HT155R154]: This is an independent, qualified professional.

pitting) then a Geo-professional shall inspect and advise what further steps (if any) are required to ensure ongoing land stability for the remaining duration of the Stage.

105. Appropriate stormwater controls shall be put in place to avoid concentrated stormwater flows discharging onto temporary cut slopes (within excavation pits).

106. No excavations shall occur within 20 m of flowing, open waterways.

Backfilling

107. During the course of excavations, backfilling shall be undertaken as soon as practicable. Any excavated area in a particular location shall not remain open for longer than 6 months.

108. Commencement of clean filling within a Stage shall occur at locations at the greatest upgradient distance from any water supply bores, as far as can practicably be achieved.

109. Backfilling shall be to 1m below the finished levels on site as specified in the Contour Plan required by condition 6.

110. Only material that meets the requirements of Table 1 below shall be imported to the site for backfill.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
Materials sourced onsite.	• Uncontaminated natural material such as soil, clay, rock and gravel. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Materials sourced offsite	• Uncontaminated natural material such as soil, clay, rock and gravel. Compliance with this definition will be achieved by testing a representative composite sample of imported fill material to demonstrate that total soil contaminant concentrations do not	• Contaminated soil, clay, rock and gravel. • Any material sourced from any site listed on the Tasman District Council Hazardous Activities and Industries List (HAIL) register (as defined by the Ministry for the Environment) or any site where the Clean fill Operator has

Commented [DN156]: Should refer to controls prescribed in any relevant technical reference doc

Commented [HT157R156]: I don't think this is necessary, but could reference NTLDM if Council consider necessary

Commented [DN158]: Too long especially for Stage 1.

Commented [HT159R158]: Tranche requirements control this for stage 1. I don't see any reason to shorten this elsewhere eon the site.

Commented [DN160]: In addition to backfilling, need reinstallation of topsoil and subsoil.

Commented [HT161R160]: Addressed in later conditions

Commented [DN162]: Requirement for consent holder to provide survey evidence of compliance with this condition is currently down in condition 129. Consider locating that condition higher up or including a cross reference

Commented [HT163R162]: I think it is appropriate where it is.

Table 1: Summary of Clean fill Acceptance Criteria[1]		
Source	**Acceptable Material**	**Unacceptable Material**
	exceed regional soil background concentration limits. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	a reasonable expectation of HAIL activities occurring, even if it is not listed on TDC's HAIL register and for both these categories of sites, the HAIL activity is known to have been occurring before the date the clean fill material is received. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Note: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.		

Furthermore, any material, that is understood to comply with the Table 1 definition, but displays visual or olfactory evidence of contamination, shall be rejected.

111. Any backfill material sourced from offsite shall only be brought to the site by the Consent Holder, and shall be pre-screened for compliance with these clean fill requirements before being brought to site in accordance with the Clean Fill Procurement SOP detailed at Appendix A of the draft GCMP. A record shall be kept of all clean fill used as backfill. The record shall be in accordance with the requirements specified in the Clean Fill Procurement SOP. This record shall be kept available on site, and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

112. Any part of an excavation pit that has been backfilled with clean fill shall not be re-excavated to enable further quarrying. This condition does not preclude re-excavation of virgin excavated material from the site that has been temporarily backfilled into excavation pits in the event of rising groundwater levels.

Reinstatement and rehabilitation

113. Subsoil and topsoil shall be reinstated, and ongoing management shall be undertaken, in accordance with the methodology specified in the certified SMP. Subsoil and topsoil shall be placed to reinstate the land to the finished levels on site as specified in the Contour Plan required by condition 16. Additional topsoil may need to be added following any settlement of the reinstated land surface.

Commented [DN164]: Record should say what the source is. Source should be identified by GPS location ie identifying site ; records should be provided monthly to council.

Commented [DN165R164]: Need to review sampling methodology - difficult for community to trust sampling approach esp as coming from other quarries, external contractors; controlled sites;

Commented [DN166R164]: Now this is a quarry and cleanfill operation' frquency of sampling/mixing..ask for 5 drill samples of pit to confirm it's cleanfill. Need to prove it's a cleanfill operation. Can also check whether compaction. Previously there was a constraint on where cleanfill came from; but now it can come from anywhere

Commented [HT167R164]: Source reporting requirements are in the GCMP/ SOP, don't need to be replicated here. Same for sampling methodology.

Commented [DN168]: Saturation of backfill will cause settlement. The final contour should be measured post-settlement, once additional topsoil added.

Commented [DN169R168]: Original topography is deep see para 22 and below of Mike harvey's evidence

Commented [HT170R168]: Refer earlier comment

114. Topsoil and subsoil shall only be reinstated in dry soil condition, as defined in the SMP.

115. Following the placement of the new soil profile, the consent holder shall engage a suitably qualified agronomist to advise on fertiliser application and other soil treatments to encourage effective revegetation.

116. Fertiliser shall be applied following the recommendations of the agronomist to facilitate pasture establishment, increase fertility and promote and maintain even revegetation.

117. Revegetation of reinstated areas shall occur within a month of reinstatement of the soil and be actively managed following revegetation (as detailed in the SMP) to ensure full vegetative cover is achieved and maintained. This revegetation requirement relates also to areas where additional topsoil is added to the land surface to rectify any settlement of the reinstated land surface.

118. The consent holder's responsibility with regard to revegetation shall not be considered to be met until a complete, healthy, predominantly rye grass/white clover sward has been achieved over the worked areas.

Accidental Discovery Protocol (ADP)

119. In the event of any Māori wāhi tapu/ Māori cultural sites of significance (e.g. midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga) or kōiwi (human remains) being uncovered, activities in the vicinity of the discovery shall cease. The consent holder shall notify a representative of Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka a Māui Trust and Heritage New Zealand Pouhere Taonga Central Regional Office (phone 04 494 8320), and shall not recommence works in the area of the discovery until the relevant approvals to damage, destroy or modify such sites have been obtained.

Advice Note:

At the time this consent was granted the contact details for Te Rūnanga o Ngāti Rārua:

56 Vickerman Street, Port Nelson, Nelson 7010, Phone (03) 553-1198, Email taiao@ngatirarua.iwi.nz

And, for Te Ātiawa o Te Waka a Māui Trust:

Beach Road, Waikawa Marina, Waikawa, Picton 7220, Phone (03) 573 5170, Email taiao@teatiawatrust.co.nz

Advice Note:

In the event that kōiwi (human remains) are uncovered, the New Zealand Police will need to be contacted to assess the site.

Reporting & monitoring

120. Monitoring and reporting of groundwater levels and groundwater quality shall be undertaken in accordance with the approved GCMP, and the conditions of discharge permit RM220578.

121. Monitoring and reporting in relation to dust management be undertaken in accordance with the requirements of the certified DMMP.

122. Monitoring and reporting in relation to soil properties shall be undertaken on the site in accordance with the certified SMP, and results provided to Council.

123. The consent holder shall maintain a complaints register, which shall detail the following as a minimum:

    (a) The person responsible for the complaints register and appointment of a nominee who can be contacted in case of concerns/ complaints arising;
    (b) The location, date and time of the complaint;
    (c) The nature of the complaint (e.g., noise, dust, vehicle speeds etc.);
    (d) A description of weather conditions at the time of complaint (notably wind speed and direction as per the meteorological monitoring required by condition 53);
    (e) Any identified cause of the complaint;
    (f) The action(s) taken to investigate and if appropriate remedy the issue.

124. The consent holder shall inform the Council's Team Leader Monitoring and Enforcement within one working day of any complaint being received.

125. The complaints register shall be forwarded to the Council's Team Leader - Monitoring & Enforcement on request.

126. A contact number of the nominee detailed in the complaint's register shall be provided to all adjoining property owners and occupiers.

127. The consent holder shall, no more than 20 working days following the completion of each Stage of work, notify the Council's Team Leader - Monitoring & Enforcement. Notification shall be in writing and include a visual representation (such as photo or video) of the completed Stage of work.

128. The consent holder shall keep a daily record of the weight of gravel extracted, which shall be submitted on a monthly basis to the Council's Team Leader - Monitoring & Enforcement.

Advice Note:

Returns are to be submitted in "solid measure". A multiplier of 0.80 should be used to convert "truck measure" to "solid measure".

Commented [DN171]: Note that the management plans contain at times more specific requirements regarding the handling of complaints eg 8.0(1) of GCMP. This inconsistency should be addressed

Commented [HT172R171]: Refer to earlier comments.

Commented [DN173]: Include more detail on process at that point

Commented [HT174R173]: Unsure what is being suggested.

Commented [DN175]: Is this a tranche within a stage? Or at the end of stage 2 etc

Commented [HT176R175]: Not as drafted here, but have addressed in amended set.

Commented [DN177]: Council should have more of an active monitoring role rather than waiting to be notified by consent holder

Commented [DN178R177]: Include condition that works stop if monitoring results not provided.

Commented [HT179R177]: Level of Council monitoring is up to them. Compliance response if conditions not met is up to Council to determine.

Commented [DN180]: Include new condition regarding breach eg Unless otherwise stated within this consent, in the event of any breach of the conditions of this consent, the Consent Holder shall notify the Council within 48 hours of the breach being detected. Within seven (7) days, or a longer period agreed to in writing by the Council of any breach, the Consent Holder shall provide written notification to the Council, which explains the cause of the breach, and if the cause was within the control of the Consent Holder, steps which were taken to remedy the breach and steps which will be taken to prevent any further occurrence of the breach.

Commented [HT181R180]: These matters are dealt with through the various management plans.

Commented [DN182]: There should be a broader requirement for a daily log book of:
- weight of gravel extracted
- loads of cleanfill material carted back to site (source, testing undertaken, SQEP involved)
- hours and days worked
- truck movements
and a subsequent condition that the Consent Holder shall provide a copy of the log book to the Council three (3) months after the grant of this consent and then at intervals not greater than monthly. The Consent Holder shall also make the log book available to Council at any time upon request. Such request shall be met in addition to the requirement to provide the log book monthly.

Commented [HT183R182]: I consider the condition as drafted is sufficient

129. Within 3 months of the completion of all recontouring work on site the consent holder shall forward to the Council's Team Leader - Monitoring & Enforcement a topographic survey to NZVD 2016 (or similar datum) of the final levels on site, with intervals at 0.2 metres, as required by Condition 16(a).

130. A programme of Cultural Health Indicator (CHI) monitoring shall be undertaken with the cost covered by the Consent Holder. The consent holder shall assist Te Ātiawa o te Waka a Māui Trust, Te Rūnanga o Ngāti Rārua or their nominated representatives to develop a framework for this monitoring and any necessary responses to this monitoring. Monitoring shall occur prior to works, mid-way through the project, on completion of works, and two years post-works to assess remediation and enhancement measures. The framework for monitoring must be completed prior to any earthworks commencing.

Following completion of works

Unformed legal road

131. Following completion of the works, the consent holder shall confirm with the Council's Transportation Manager whether:

(a) the section of unformed legal road ("paper road") used to access the application site shall either be returned to pasture at the consent holder's cost; or

(b) retained in its current form.

Commented [DN184]: The requirement to develop this framework should be up near condition 11. The framework needs to be developed and in place prior to works commencing so that monitoring can occur. There also needs to be an operational condition as well.

Commented [HT185R184]: Agreed. Amended in revised condition set.

Commented [DN186]: Valley Rage requests an additional condition be included:

Community Liaison Meeting

On two occasions in the first year in which these consents are exercised and thereafter on one occasion per year throughout the duration of the consents, the Consent Holder shall publicly advertise and convene a public community liaison meeting in Motueka (or other suitable local venue) to present the results of monitoring undertaken over the year, compliance with consent conditions, a summary of quarrying operations proposed for the next year, and any proposed changes to the management or operation of the quarry site. Notice of the meeting shall also be sent to representatives of the following parties:
- Tasman District Council
- Valley Residents Against Gravel Extraction Incorporated

Commented [HT187R186]: I do not see the benefit of this in terms of managing effects. If Council consider necessary, the applicant considers that an invitation to adjoining property owners and Council would be more appropriate.

Commented [DN188]: Valley Rage requests an annual work plan monitoring condition along these lines:

Annual Work Plan

1. Before exercising these consents, the Consent Holder shall submit the first Annual Work Plan to the Consent Authority and thereafter submit an Annual Work Plan one-month prior to each anniversary of the date of commencement of the consents.

2. The Annual Work Plan shall include:

- A description of all the mining operations, mitigation measures, rehabilitation, monitoring and reporting carried out in the last 12 months.
- A detailed description of all mining operations, mitigation measures, rehabilitation, monitoring and reporting intended to be carried out in the next 12 months with an approximate timetable of events.
- Long-term projections and intentions for mining operations in relation to the future exercise of these consents.
- An explanation of any intended departure from any previous Annual Work Plan in the next 12 months.

Commented [HT189R188]: This seems onerous, and I do not see the benefit in terms of managing effects

General

1. The consent holder shall ensure that all works are carried out in general accordance with:

   (a) the application documents received by the Council on XX

   (b) further information provided on and 2 September 2022;

   (c) the evidence received on 15 July 2022 and 4 November 2022

   Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.

2. The consent holder shall ensure all persons undertaking activities authorised by this resource consent are made aware of the conditions of the consent and ensure compliance with those conditions. A copy of the consent documents shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

Lapse and expiry

3. Pursuant to section 125 of the Act, this consent shall lapse 5 years after the date of issue of the consent unless either the consent is given effect to, or the Council has granted extensions pursuant to section 125(1A)(b) of the Act.

4. This consent shall expire 17 years after the date it commences.

5. The discharge of clean fill to land shall cease no later than 15 years after the date this consent commences.

Prior to the work

6. The Council's Team Leader - Monitoring & Enforcement shall be notified in writing:

   (a) A minimum of 10 working days prior to commencement of discharge to land; and

   (b) Prior to the recommencement of work where works have been discontinued for more than one month.

   Notification shall include:

   (a) The proposed start date for the period of work; and

   (b) The name and contact details of the following persons:

      (i) A representative nominated by the consent holder who shall be the Council's principal contact person in regard to matters relating to this resource consent; and

      (ii) The Site Manager (if not the consent holder's representative).

Commented [DN1]: Workability issue. Referencing the evidence received could create confusion and potential conflict; lack of transparency re: enforcement. Also the application documents received on 15 June have been updated / superceded by further information so the condition should be worded to reflect that. Greater clarity needed on the authorised works to ensure transparency and enforceability

Commented [HT2R1]: Refer to corresponding comment on land use conditions

Commented [DN3]: How do the management plans fit in? What if there is a conflict between these plans and the consent conditions?

Commented [HT4R3]: Refer to corresponding comment on land use conditions

Commented [DN5]: Not clear what this is. All of 1(a) - (d)? Should include the management plans

Commented [HT6R5]: Refer to corresponding comment on land use conditions

Commented [DN7]: Valley Rage agrees that additional time is required to ensure monitoring activities are carried out

Commented [DN8]: This should be aligned with the use rate of gravel which is likely to be depleted before 15 years; see Valley Rage comments on land use lapse and expiry consent condition

Commented [HT9R8]: Refer to corresponding comment on land use conditions

Commented [DN10]: Valley Rage seeks inclusion of a condition requiring a bond (for remediation/clean up of the aquifer in the event of contamination/costs of providing alternative water supply)

Commented [DN11R10]: Valley Rage seeks separate condition on liability, requirement for applicant to obtain insurance. See wording suggested in land use consent conditions

Commented [HT12R10]: Refer to corresponding comment on land use conditions, with regard to liability condition. Separate bond not considered necessary, and not requested by Council.

Commented [DN13]: Suggest rewording to active tense eg 'The consent holder shall notify...'

Commented [HT14R13]: Agreed, changed in amended set

Commented [DN15]:
Should be increased to at least 20 working days

Commented [HT16R15]: Refer to corresponding comment on land use conditions

Should either of the above persons change during the term of this resource consent, the consent holder shall provide the new name and contact details, in writing, to the Council's Team Leader - Monitoring & Compliance within five working days.

Site meeting

7. The consent holder shall arrange for a site meeting between the consent holder's representative and the Council's assigned monitoring officer, which shall be held on site prior to any works commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Submission of plans

8. The consent holder shall, at least 10 working days prior to the commencement of works, prepare and submit a Groundwater and Clean Fill Management Plan (GCMP) prepared in accordance with condition 10 to the Council's Team Leader - Monitoring & Enforcement for certification. No works shall be undertaken until this management plan has been certified by the Council's Team Leader - Monitoring & Enforcement, unless condition 9 is invoked.

9. The following shall apply in respect of condition 8:

    (a) the consent holder may commence the activities in accordance with the submitted plans 15 working days after their submission, unless the Council advises the consent holder in writing that it refuses to certify them on the grounds that it fails to meet the requirements of the condition and gives reasons for its decision; and

    (b) should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (a) shall apply to any resubmitted plan.

10. The GCMP required by condition 8 shall demonstrate the best practicable option to ensure that discharge of clean fill to land is managed to avoid adverse effects on groundwater, to:

- Ensure that excavations do not expose groundwater in excavations with the exception of small scale temporary test pits that are back filled within 30 minutes.
- Ensure that all backfill material is strictly managed to ensure it meets Condition 14 below).
- Minimise any change to the physical and chemical properties of groundwater as result of the land use and discharge activities associated with clean fill activities (as defined by the groundwater chemistry monitoring requirements).
- Ensure that under no circumstances will the land use and discharge activities associated with quarry activities result in groundwater quality exceeding the

Commented [DN17]: Include requirement for review of management plans eg 'The Consent holder shall pay the actual and reasonable costs of an independent technical reviewer appointed by the Council to assess the XX management plan provided under condition Y of this consent to ensure that ZZZ is appropriately addressed'

Commented [HT18R17]: Refer corresponding comments on LUC

Commented [DN19]: 10 working days is too short given the extent of assessment needed. Valley Rage not confident that council has the capacity/all the relevant expertise to undertake this work in this timeframe. Should be increased to at least 20 working days .

Commented [HT20R19]: Refer to corresponding comment on land use conditions

Commented [DN21]: If plans provided 20 working days prior, then this timeframe should change to 25 working day

Commented [HT22R21]: Refer to corresponding comment on land use conditions

Commented [DN23]: Condition should be amended to say works cannot start unless plans resubmitted and certified

Commented [HT24R23]: Refer to corresponding comment on land use conditions

acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 in downgradient water supply bores.

11. The GCMP shall be in general accordance with the draft GCMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

    (a) Consent Compliance and Key Performance Indicators, to be consistent with these conditions of consent

    (b) Clean fill materials

    (c) Proposed clean fill management system

    (d) Groundwater level monitoring and excavation controls

    (e) Response and mitigation to a spill

    (f) Groundwater quality monitoring

    (g) Water quality complaints

    (h) Reporting requirements

Commented [DN25]: Amend to state that the GCMP must demonstrate how conditions x to x will be complied with

Commented [HT26R25]: I think this is addressed in Condition 10

Commented [DN27]: Include the requirement to complete at least one full year of groundwater chemistry samples and analyses at the existing monitoring bores (24543, 24544, 24545 and 24546) prior to commencement of clean filling activities.

Commented [HT28R27]: Addressed in land use conditions

Operational conditions

Backfilling controls

12. Backfilling on site with clean fill shall be undertaken in accordance with the certified GCMP.

13. Commencement of clean filling within a Stage shall occur at locations at the greatest upgradient distance from any water supply bores, as far as can practicably be achieved.

14. Only material that meets the requirements of Table 1 below shall be imported to the site for backfill.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
Materials sourced onsite.	• Uncontaminated natural material such as soil, clay, rock and gravel. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Materials sourced offsite	• Uncontaminated natural material such as soil, clay, rock and gravel. Compliance with this definition will	• Contaminated soil, clay, rock and gravel.

Table 1: Summary of Clean fill Acceptance Criteria[1]		
Source	**Acceptable Material**	**Unacceptable Material**
	be achieved by testing a representative composite sample of imported fill material to demonstrate that total soil contaminant concentrations do not exceed regional soil background concentration limits. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Any material sourced from any site listed on the Tasman District Council Hazardous Activities and Industries List (HAIL) register (as defined by the Ministry for the Environment) or any site where the Clean fill Operator has a reasonable expectation of HAIL activities occurring, even if it is not listed on TDC's HAIL register and for both these categories of sites, the HAIL activity is known to have been occurring before the date the clean fill material is received. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Note: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.		

Furthermore, any material, that is understood to comply with the Table 1~~Table 1~~ definition, but displays visual or olfactory evidence of contamination, shall be rejected.

15. Any backfill material sourced from offsite shall only be brought to the site by the Consent Holder, and shall be pre-screened for compliance with these clean fill requirements before being brought to site in accordance with the Clean Fill Procurement SOP detailed at Appendix A of the draft GCMP. A record shall be kept of all clean fill used as backfill. The record shall be in accordance with the requirements specified in the Clean Fill Procurement SOP. This record shall be kept available on site, and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

Groundwater quality monitoring

16. The following monitoring of groundwater will be undertaken:

(a) Collection of groundwater samples from at least one dedicated monitoring bore located upgradient at the southern extent of the quarry areas (i.e. Bore 2 (24544 or Bore 4 (24546), representative of background water quality) and at least two dedicated bores located downgradient of the quarry site near the northern extent of the quarry (i.e. Bore 1 (24543) and Bore 3(24545)) as shown in Figure 1 (attached to these conditions).

Commented [DN29]: Ensure that testing satisfies the requirements in the Waste MINZ Guidelines (eg a sample per 500m3 and testing is carried out by an independent SQEP).

Commented [DN30R29]: Ensure that the conditions/SOP require a SQEP to be independent and meet the requirements in the MfE Users' Guide

Commented [HT31R29]: Refer to Mr Nicol reply evidence. Condition adequate as drafted.

Commented [DN32]: Amend along these lines "…and for both these categories of sites, the HAIL activity is known, or could be reasonably expected to be known to have been occurring.."

Commented [HT33R32]: Change agreed.

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Commented [DN34]: Amend to ensure that the Consent Holder is responsible for testing/acceptance of clean fill brought to site by contractors and third parties. In other words, the responsibility for ensuring the waste acceptance criteria are met, lies with the Consent Holder.

Commented [HT35R34]: This is what is already required by this condition and the GCMP.

(b) Groundwater samples from the dedicated monitoring bores listed in Condition 16((a)) will be collected at three monthly intervals. At least four samples (one year of samples) will be collected prior to the commencement of clean filling activities and sampling will continue until two years after clean filling activities cease.

(c) Collection of groundwater samples from a dedicated monitoring bore located at or about coordinates 1595980 mE / 5447316 mN (NZTM2000) (proposed additional monitoring bore – Bore 5 as shown in Figure 1) will be undertaken at monthly intervals. At least two samples will be collected prior to the commencement of clean filling activities and sampling will continue until two years after clean filling activities cease.

17. The five dedicated monitoring bores referred to in Condition 16 shall allow groundwater samples to be collected across the full the range of groundwater level fluctuations.

18. The five dedicated monitoring bores referred to in Condition 16 shall be made accessible to the Tasman District Council at all times for the purpose of groundwater sampling.

19. Groundwater samples shall also be collected annually from all water supply bores located within 500 m downgradient of the clean fill, subject to approval of the bore owner(s) and the landowner(s). This sampling will continue until two years after clean filling activities cease.

Advice note

This condition has been volunteered by the Applicant.

20. Prior to the collection of the initial groundwater samples from the water supply bore(s) in accordance with Condition 19, the Consent Holder shall undertake a bore condition survey to identify any existing potential sources of contamination related to the condition of the bore head or its proximity to localised sources of contamination.

21. The Consent Holder shall ensure that all groundwater samples shall be taken by a suitably qualified and experienced practitioner using methods described in the NEMS document "Water Quality – Part 1 of 4: Sampling. Measuring, Processing and Archiving of discrete Groundwater Quality Data" (2019). All samples for dissolved metal analysis must be filtered through a 0.45-micron filter onsite before being placed into an acid preserved sampling bottle.

All samples must analysed for the contaminants listed in Table 2 by an International Accreditation New Zealand (IANZ) laboratory.

Table 2: Water quality parameters and trigger concentrations		
Parameter	**Trigger concentration**	**Note**
Depth to water level	-	Measured prior to purging (where possible)
pH	<6.5 or >8.5	field and laboratory measurement – trigger value taken from Miners Road Consent example (CRC204349), recognising shallow groundwater naturally has a low pH.
Electrical Conductivity	-	field and laboratory measurement
Water temperature	-	field measurement
Calcium	-	
Magnesium	-	
Hardness	200 g/m³	GV (Calcium + magnesium)
Alkalinity	100 g/m³	As $CaCO_3$ – trigger value taken from Miners Road Consent example (CRC204349).
E. coli	1 MPN/100ml	MAV
Ammoniacal-N	1.2 g/m³	GV
Nitrate-N	5.65 g/m³ (annual average) 11.3 g/m³ (maximum)	5.65 g/m³ - Half MAV
Dissolved Boron	1.2 g/m³	Half MAV
Dissolved Aluminium	0.1 g/m³	GV
Dissolved Arsenic	0.005 g/m³	Half MAV
Dissolved Cadmium	0.002 g/m³	Half MAV
Dissolved Chromium	0.025 g/m³	Half MAV
Dissolved Copper	1 g/m³	Half MAV
Dissolved Lead	0.005 g/m³	Half MAV
Dissolved Nickel	0.04 g/m³	Half MAV
Dissolved Manganese	0.04 g/m³	GV
Dissolved Iron	0.3 g/m³	GV
Sodium	200 g/m³	GV
Sulphate	250 g/m³	GV
Chloride	125 g/m³	Half GV
VOC compounds	Any detectable presence	
Total Petroleum Hydrocarbons	Any detection >0.1 g/m³	

Table 2: Water quality parameters and trigger concentrations		
Parameter	**Trigger concentration**	**Note**
NOTE: Trigger values include the guideline values for aesthetic determinands from the Aesthetic Values for Drinking Water Notice (2022) or 50% of maximum acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 which take effect on 14 November 2022.		

22. The Consent Holder shall provide the water quality monitoring results to the Tasman District Council: Attention – Monitoring and Compliance within one month of them being received.

Assessment of Groundwater Quality Samples

23. An exceedance of the trigger concentrations in 2 will be deemed to have occurred if:

    (a) The concentration of a contaminant in a downgradient bore exceeds the relevant trigger concentration in 2 and the year-to-year median concentration of the same parameter in the upgradient bore is below the respective trigger concentration in 2; or

    (b) The year-to-year median concentration of a contaminant in the downgradient bore exceeds the year-to-year median concentration in the upgradient bore for the same parameter by more than 20%, and the year-to-year median concentration in the upgradient bore for the same parameter exceeds the trigger concentrations in Table 2.

    See Figure 2 (attached to these conditions) for an example diagram of operation of the exceedance criteria.

24. The groundwater quality data from all the sampled bores shall be assessed annually for trends using NIWA TimeTrends or equivalent. A trend in water quality for an individual parameter in a downgradient bore will be deemed to be "significant" if the p-value of the trend is less than 0.05 and the data trend for that parameter is toward the relevant trigger concentration in Table 2.

Response to Issues Arising from Groundwater Quality Monitoring

25. If the trend analysis of the groundwater quality data undertaken in accordance with Condition 24 identifies a "significant" trend in the direction of a breach of trigger level, the Consent Holder shall:

    (a) Notify Tasman District Council – Monitoring and Compliance.

    (b) Commission an investigation and, if appropriate, recommendations for remedial action from a suitably qualified and experienced person (SQEP) into the potential cause(s) of the trend in the water quality data, which may include:

        i. Review of documentation for clean fill accepted at the clean fill site.

        ii. Additional testing of clean fill placed within an excavation.

Commented [DN36]: Valley Rage would prefer this to be 10% (or less); defers to Dr Rutter's expert view on the variation / percentage that is required to manage effects

Commented [HT37R36]: Change has been accepted, refer to Mr Nicol evidence.

Commented [DN38]: Is this the flowchart referred to in Mr Nicol's Third Supplementary Evidence Statement?

Commented [HT39R38]: No

Commented [DN40]: Valley Rage would want to see activities cease at this point; steps put in place to secure alternative water source

Commented [HT41R40]: Not agreed, refer to Council comments on this, and evidence of Mr Nicol.

iii. Undertaking additional groundwater monitoring beyond the routine sampling.

iv. Cessation of activities that may have caused the exceedance.

v. Removal of the contaminant source(s).

vi. Stabilisation or capping of the contaminant source(s).

vii. Provide recommendations for further actions and monitoring to be undertaken.

26. Any material removed in accordance with Condition 25((b))v shall be disposed of at a facility authorised to receive such material, and the Consent Holder shall provide the Council, Attention: Regional Leader – Monitoring and Compliance, with written confirmation of such disposal within 10 working days.

27. If there is an exceedance as determined by Condition 23 in a downgradient dedicated monitoring bore listed in Condition 16, the Consent Holder shall as soon as practicable and within 72 hours of receiving that result:

(a) Obtain a second sample of groundwater from the bore(s) in which the exceedance was identified in accordance with Condition 16.

(b) Obtain a sample of groundwater from the upgradient bore specified in Condition 16.

(c) Analyse these samples in accordance with Condition 21.

28. If the results of analysis of the second groundwater sample(s) carried out in accordance with Condition 27 show that none of the concentrations of contaminants analysed exceed the criteria in 23 23**Error! Reference source not found.**, the consent holder shall continue to sample groundwater in accordance with Condition 16.

29. If the results of analysis of the second groundwater samples carried out in accordance with Condition 2725 show a continued exceedanceTable ~~Table~~ as determined by Condition 23, the Consent Holder shall:

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(a) Notify the Tasman District Council – Monitoring and Compliance within 72 hours of receiving the results of the sampling in Condition 27.

(b) Notify the closest downgradient water supply bore owner/landowner and collect groundwater samples from the water supply bores located within 500 m downgradient of the clean fill (subject to approval of the bore owner and the landowner), within 72 hours of receiving the results of the sampling in Condition 27.

(c) Undertake an investigation to determine the source of the change in concentrations.

(d) Undertake additional monitoring beyond the routine sampling based on the outcome of the investigation in Condition 299((c)).

30. If the monitoring undertaken in accordance with Condition 199 or Condition 29(29**Error! Reference source not found.**) shows that the drinking water quality in the downgradient water supply bore(s) exceeds the trigger concentrations in Table 2, then additional samples shall be collected from that water supply bore within 72 hours of receiving the initial results and the user(s) of that bore notified of the results. If additional samples continue to show an exceedance of the trigger concentrations in Table 2, then the Consent Holder shall provide an alternative drinking water supply to a similar standard as existed prior to commencement of this consent.

Commented [DN42]: Valley Rage would want to see activities cease at this point; steps put in place to secure alternative water source

Commented [HT43R42]: This change is agreed and reflected in revised conditions

Duration of water quality monitoring

31. Water quality monitoring detailed in the conditions of this consent shall continue for no less than two years following completion of quarrying, backfilling and reinstatement and rehabilitation activities on the site. All water quality assessment and responses to issues identified, as detailed in these conditions, shall continue to apply over this period.

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Resource consents sought for:

RM200488 Land use consent to disturb land and rehabilitate for the purpose of gravel extraction within the Rural 1 Zone.

RM200489 Land use consent to erect signage and establish access via an unformed legal road.

Note: These conditions should be read in conjunction with the consent conditions for the associated discharge permit RM220578 Discharge of contaminants being cleanfill to land.

Recommended conditions

General

1. The consent holder shall ensure that all works are carried out in general accordance with:

   (a) the application documents received by the Council on 15 June 2020;

   (b) the further information received on 8 and 10 June 2021 and 2 September 2022;

   (c) the evidence received on 15 July 2022 and 4 November 2022;

   (d) Plan XX;

   Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.

   Unless expressly stated otherwise, the conditions of this consent apply to all stages (Stages 1, 2 and 3).

2. The consent holder shall ensure all persons undertaking activities authorised by this resource consent are made aware of the conditions of the consent and ensure compliance with those conditions. A copy of the consent documents, including the certified plans and management plans required by Condition 18, shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

3. Where conditions of this consent require the involvement of a Suitably Qualified and Experienced Person (SQEP), this person shall not be an employee of the Consent Holder.

~~2.~~

4. Prior to commencement of quarrying in the Stage 1 area (as shown on Plan XX), the consent holder shall provide a report to Council from a suitably qualified and

Commented [HT1]: Approved documents to be updated by Council prior to consent issue.

experienced practitioner to confirm that that landscape mitigation planting required under condition 48 of this consent has been successfully established. In this instance, "established" means 80% canopy cover and an average height of 5m in the exotic mitigation species (i.e. the Eucalyptus and Poplar species). ~~Quarrying in the Stage 1 area shall not commence until the Landscape Mitigation Planting required by condition 3 below has been successfully established (at least an 80% survival rate) for a period of at least 6 years. Quarrying activities in the Stage 2 and 3 areas may take place in any order provided that all other conditions of this consent are met.~~

~~3.~~5. The Consent Holder will provide reasonable assistance to the Tasman Great Taste Trails Trust in its endeavours to establish an off-road cycle track that cyclists can use as an alternative to the section of Motueka River West Bank Road between Alexander Bluff Bridge and the site entry.

Review

~~4.~~6. For the purposes of, and pursuant to section 128 of the Resource Management Act 1991 ('the Act'), the Council may review this consent annually commencing 6 months from the commencement of the consented activities~~.~~, for the purposes of:

(a) dealing with any adverse effect on the environment which may arise from the exercise of this consent that were not foreseen at the time of granting of the consent, and which it is therefore more appropriate to deal with at a later stage; and/or

(b) requiring the consent holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the exercise of this consent.

(c) requiring compliance with operative rules in the Tasman Resource Management Plan or its successor; or

(d) requiring consistency with any relevant regional plan, district plan, national environmental standard or Act of Parliament.

(e) To update 'regional soil background concentration limits', as relevant to Table 1 in Condition 115 below.

~~(b)~~

Lapse and expiry

~~5.~~7. Pursuant to section 125 of the Act, this consent shall lapse 5 years after the date it commences unless either the consent is given effect to, or the Council has granted extensions pursuant to section 125(1A)(b) of the Act.

~~6.~~8. This consent shall expire 15 years after the date ~~it commences~~the consent is given effect to. except that the consent shall not expire in relation to consent monitoring and reporting activities and soil top up following ground settlement as required by conditions of this consent.

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Bond

~~7.~~9. Prior to starting work the consent holder shall enter into a performance bond with the Council. The performance bond shall be for $40,000.

The sum secured by the bond shall be reviewed every 6 years, to take into account movements in relevant indices of the consumer price index.~~The sum secured by the bond shall be increased by the annual increase in the consumer price index for each year that the bond required by this condition remains in force, commencing with the first anniversary of the date of issue of the consent and confirmed on each subsequent anniversary. The movements in the relevant consumer price indices shall be taken from the published increases available on 31 December following the issue of the consent and on 31 December in each subsequent year.~~

~~8.~~10. The performance bond is to be prepared by the consent holder's Bank or Solicitor and submitted to the Council's Team Leader - Compliance & Investigation ~~Monitoring & Enforcement~~ for approval.

~~9.~~11. The purpose of the performance bond required by condition ~~7~~ 9 shall be to conduct remedial, repair, or rehabilitation works to the site, stopbank and/or access road, in the event that the consent holder fails to comply with conditions of this consent to the satisfaction of the Council's Team Leader - Compliance & Investigation~~Monitoring & Enforcement~~.

Advice notes

The Council will make reasonable attempts (if practicable in the circumstances) to contact the ~~person identified in condition 14(b) (i) who is the Council's principal contact person in regard to this consent~~Consent Holder, to give the consent holder the opportunity to remedy the matter prior to the Council taking any action.

The consent holder remains liable under the Act for any breach of the conditions of this consent and for any adverse effect on the environment which becomes apparent during or after the expiry of this consent.

Prior to the work

~~10.~~12. At least one month prior to commencement of the consent, the consent holder shall contact Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka-a-Māui Trust to advise them of the commencement date of the earthworks and to provide an opportunity for a cultural induction to be undertaken by relevant representatives who will be working on the site.

13. The Consent Holder shall engage a representative of Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka a Māui Trust (submitters and mana whenua iwi), to be present during any disturbance of topsoil and subsoil on site. The purpose of the monitor is to identify any cultural material and or taonga (e.g., midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) uncovered during the disturbance of cultural layers, and to monitor the observance of tikanga. The Consent Holder shall notify the above iwi at least 10 working days prior to commencing initial land disturbance works and advise them of the planned commencement date and likely duration of the works. Where the above notification is given, and an Iwi Monitor is unable to be present for any reason, the Consent Holder may commence works regardless. For the avoidance of doubt, this condition requires only a single monitor to be engaged by the Consent Holder to be on site at any given time. The Consent Holder may consider engaging an iwi monitor representative of ngā iwi with Statutory Acknowledgements over Motueka River, Ngāti Toa Rangatira, Te Rūnanga o Ngāti Kuia and Ngāti Tama ki Te Waipounamu.

~~11. The Consent Holder shall engage a representative of Te Rūnanga o Ngāti Rārua, Te Ātiawa o Te Waka a Māui Trust, Ngāti Toa Rangatira, Te Rūnanga o Ngāti Kuia and Ngāti Tama ki Te Waipounamu Trust to be present during any stripping of topsoil and subsoil on site. The purpose of the monitor is to identify any archaeological artefacts (e.g., midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) uncovered during the disturbance of cultural layers, and to monitor the observance of tikanga. The Consent Holder shall notify the above iwi at least 10 working days prior to commencing initial stripping of topsoil and subsoil and advise them of the planned commencement date and likely duration of the works. Where the above notification is given, and an Iwi Monitor is unable to be present for any reason, the Consent Holder may commence works regardless. For the avoidance of doubt, this condition requires only a single monitor to be engaged by the Consent Holder to be on site at any given time.~~

~~12.~~14. In the event of any archaeological artefacts being uncovered, the consent holder shall:

(a) cease the works immediately, as required by the Heritage New Zealand Pouhere Taonga Act 2014,

(b) consult with the Heritage New Zealand's Central Regional Office (email infocentral@heritage.org.nz, PO Box 2629, Wellington 6140, phone (04) 494 8320, and

(c) shall not recommence works in the area of the discovery until the relevant Heritage New Zealand approvals to damage, destroy or modify such sites have been obtained.

Advice Note:

At the time this consent was granted the contact details for Te Rūnanga o Ngāti Rārua:

56 Vickerman Street, Port Nelson, Nelson 7010, Phone (03) 553-1198, Email taiao@ngatirarua.iwi.nz

And, for Te Ātiawa o Te Waka a Māui Trust:

Beach Road, Waikawa Marina, Waikawa, Picton 7220, Phone (03) 573 5170, Email taiao@teatiawatrust.co.nzAdvice note

This condition has been volunteered by the applicant in response to iwi consultation.

~~13.~~15. The Consent Holder shall seek interest from Te Ātiawa o Te Waka a Māui and Te Rūnanga o Ngāti Rārua for a cultural audit of the site to be undertaken prior to the commencement of the consented activities. If advised by Te Runanga o Ngāti Rārua and/or Te Atiawa o Te Waka a Maui Trust that mana whenua iwi desire a cultural audit, this will be funded by the Consent Holder.

Advice note

This condition has been volunteered by the applicant in response to iwi consultation.

16. A programme of Cultural Health Indicator (CHI) monitoring shall be undertaken with the cost covered by the Consent Holder. The consent holder shall assist Te Ātiawa o te Waka a Māui Trust, Te Rūnanga o Ngāti Rārua or their nominated representatives to develop a framework for this monitoring and any necessary responses to this monitoring. Monitoring shall occur prior to works, mid-way through the project, on completion of works, and two years post-works to assess remediation and enhancement measures. The framework for monitoring must be completed prior to any earthworks commencing.

~~14.~~17. The Council's Team Leader - Compliance & Investigation ~~Monitoring & Enforcement~~ shall be notified in writing:

(a) A minimum of ~~10~~ 15 working days prior to commencement of work for each Stage; and

(b) Prior to the recommencement of work where works have been discontinued for more than one month.

Notification shall include:

(a) The proposed start date for the period of work; and

(b) The name and contact details of the following persons:

(i) A representative nominated by the consent holder who shall be the Council's principal contact person in regard to matters relating to this resource consent; and

(ii) The Site Manager (if not the consent holder's representative).

Should either of the above persons change during the term of this resource consent, the consent holder shall provide the new name and contact details, in writing, to the Council's Team Leader - Compliance & Investigation ~~Monitoring & Compliance~~ within five working days.

Submission of plans

~~15.~~18. The consent holder shall, at least ~~10~~ 15 working days prior to the commencement of works, prepare and submit the following plans and management plans to the Council's Team Leader - Compliance & Investigation ~~Monitoring & Enforcement~~ for certification. No works shall be undertaken until these plans/ management plans have been certified by the Council's Team Leader - Compliance & Investigation~~Monitoring & Enforcement~~, unless condition ~~1~~205 is invoked.

(a) existing and proposed Contour Plans prepared in accordance with condition 2116;

(b) a Noise Management Plan (NMP) prepared in accordance with condition 221718;

(c) a Soil Management Plan (SMP) prepared in accordance with condition 2318;

(d) a Dust Management and Monitoring Plan (DMMP) prepared in accordance with condition 2419;

(e) a Groundwater and Clean Fill Management Plan (GCMP) prepared in accordance with condition 250.

(f) a Landscape Mitigation Plan, a Stage 1 River Terrace Restoration Plan and a Maintenance and Establishment Plan prepared in accordance with Condition 27232.

Advice note

Certification of the management plans above is in the nature of certifying that adoption of the management plans will result in compliance with the conditions of this consent.

19. The Management Plans outlined in Condition 18 (b)-(e) shall be reviewed and updated at least once every two years. Any amendments shall be:

    (a) For the purpose of improving the efficacy of management plans;

    (b) Consistent with the conditions of this resource consent; and

    (c) Submitted in writing to the Council's Team Leader - Compliance & Investigation, for certification.

~~16.~~20. The following shall apply in respect of conditions 18 and ~~19~~4:

    (a) the consent holder may commence the activities in accordance with the submitted plans ~~15~~ 20 working days after their submission, unless the Council advises the consent holder in writing that it refuses to certify them on the grounds that it fails to meet the requirements of the condition and gives reasons for its decision; and

    (b) should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (a) shall apply to any resubmitted plan.

    (c) Any ~~consequential~~ subsequent amendments to the management plans required by condition 1~~8~~4 must be certified by the Council's Team Leader - Compliance & Investigation~~Monitoring & Enforcement~~, prior to being implemented. Conditions 20 (a) and (b) shall apply to any submitted amendments.

    ~~(c)~~(d)

~~17.~~21. The Contour Plans required by condition 18(a)~~15(a)~~ are required to ensure that finished ground levels across the site are generally consistent with existing ground contours. The plans shall include as a minimum:

    (a) A topographic survey to New Zealand Vertical Datum 2016 (NZVD 2016) of the existing site, with contour intervals at 0.2 metres;

    (b) A plan, referenced to NZVD 2016, of the proposed finished levels on site after excavation and recontouring has occurred, with intervals at 0.2 metres.

    (c) A site plan showing the location of property boundaries, surface water bodies, stopbanks, legal roads, survey benchmarks, and other details as appropriate.

    Advice note: LiDAR survey may be used to prepare this plan.

~~18.~~22. The Noise Management Plan (NMP) required by condition 18(b)~~15(b)~~ shall detail the best practicable option for ensuring the noise standards specified at conditions ~~57~~8 ~~-~~61 and ~~60~~9 ~~-~~62 of this consent are complied with. The NMP shall be in general accordance with the draft NMP prepared by Hegley Acoustic Consultants dated ~~March -~~20 April 2023, and shall address, as a minimum:

(a) Mitigation measures proposed

(b) Training of staff

(c) Equipment Maintenance

(d) Neighbour Liaison

(e) Complaints

(f) Contingency Plan

(g) Key Personnel and their Responsibilities.

If consent conditions are included in the final NMP, these shall be updated to reflect the noise conditions in this consent decision.

~~19.~~23. The SMP required by condition 18(c)~~15(c)~~ shall demonstrate the best practicable option to ensure that the restored soils achieve the standards specified in condition ~~55 -~~119 and that condition 58~~54~~ is complied with in respect of the control of surface water quality. The SMP shall be in general accordance with the draft SMP prepared by LandSystems Ltd dated ~~8 March -~~24 April 2023 and shall address, as a minimum:

(a) Procedures to mitigate the potential effects on soil properties including for:

(i) soil removal;
(ii) soil storage;
(iii) soil placement (including the sequence of soil placement);
(iv) transport;
(v) the preparation of the receiving surface;
(vi) fill (overburden), subsoil and topsoil properties; and
(vii) post soil placement management.

(b) Procedures to minimise the risk of soil loss from overland flow including:

(i) during soil removal;
(ii) for soil storage; and
(iii) during vegetation establishment.

(c) Soil monitoring required including

(i) Baseline sampling and analysis.

(ii) Ongoing sampling and analysis of reinstated areas.

(iii) Sampling and analysis of the following:

- Soil quality properties of the topsoil.
- ~~Trace elements (total recoverable concentrations) of the topsoil and subsoil.~~
- Soil profile condition soil profile description.
- Visual Soil Assessment of the topsoil.

(d) Requirements for soil management training for staff and for supervision.

~~20.~~24. The DMMP required by condition 18(d)~~15(d)~~ shall demonstrate the best practicable option to ensure that dust is managed on site to minimise the adverse impacts of potential dust discharges on the receiving environment and to achieve the standard specified in condition ~~51~~48. The DMMP shall be in general accordance with the draft DMMP prepared by Pattle Delamore Partners dated 10 March 2023 and shall address, as a minimum:

(a) Consent Compliance and Key Performance Indicator

(b) Sources of Dust

(c) Management and Mitigation Measures

(d) Roles and Responsibilities

(e) Implementation and Operation of DMMP

(f) Environmental Monitoring Programme

(g) DMMP Review

(h) Complaints

(i) Emergency Contacts

(j) Annual Reporting (to be in September)

~~21.~~25. The GCMP required by condition 1~~4~~8(e) shall demonstrate the best practicable option to ensure that discharge of Clean Fill to land is managed to avoid adverse effects on groundwater, to:

- Ensure that excavations do not expose groundwater in excavations ~~(conditions 99 and 100)~~ with the exception of small scale temporary test pits that are back filled within 30 minutes.
- Ensure that all backfill material is strictly managed to ensure it meets the requirements of Condition 1~~5~~09 o~~f~~ this consent and with the conditions of discharge permit RM220578.

- Minimise any change to the physical and chemical properties of groundwater as result of the land use and discharge activities associated with clean fill activities (as defined by the groundwater chemistry monitoring requirements specified in the GCMP).
- Ensure that activities are managed in a manner that seeks to avoid an exceedance of 50% of the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 and so that, under no circumstances the quarrying and clean fill activities cause the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 to be exceeded in any existing water supply bore within a 500 m buffer zone downgradient of the quarry. ~~Ensure that under no circumstances will the land use and discharge activities associated with quarry activities result in groundwater quality exceeding the acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 in downgradient water supply bores.~~

~~22.~~26. The GCMP shall be in general accordance with the draft GCMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

(a) Consent Compliance and Key Performance Indicators, to be consistent with these conditions of this consent and of discharge permit~~consent~~ RM220578

(b) Clean fill materials

(c) Proposed clean fill management system

(d) Groundwater level monitoring and excavation controls

(e) Response and mitigation to a spill

(f) Groundwater quality monitoring

(g) Water quality complaints

(h) Reporting requirements

~~23.~~27. The Landscape Mitigation Plan, Stage 1 River Terrace Restoration Plan, and Maintenance and Establishment Plan required by condition 18(f)~~15(f)~~ shall be prepared in general accordance with the plans prepared by Canopy, dated November 2022. These plans shall be prepared to ensure that the proposed landscape mitigation and restoration plantings successfully establish and shall include, as a minimum:

- Species and grade of plantings. The Consent Holder will use eco-sourced native species only, except for the use of poplar and eucalyptus species used in shelter belt planting where required to provide fast-growing visual screening of the site. Where such exotic species are used, they shall be removed from the site within 2 years of the cessation of the quarrying activity.

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- Timing of plantings
- Preparation
- Setout and spacings. All plantings (other than grass) shall be set back at least 5m from the toe of stopbanks
- Mulching
- Pest management
- Staking and plant guards. Cardboard plant guards shall be used.
- Maintenance
- Replacement plantings

Confirmation shall be obtained from Council's River Engineer that the Landscape Mitigation Plan and Stage 1 River Terrace Restoration Plan are acceptable from a flood flow perspective prior to being certified under Condition 1~~5~~9.

~~24.~~28. The consent holder shall, prior to work on the vehicle entrance commencing, prepare and submit engineering drawings for the vehicle entrance upgrade to the Council's Team Leader - Monitoring & Enforcement for approval.

Earth bund (acoustic barrier and dust screen)

~~25.~~29. An earth bund of at least 3m height, as shown in the Canopy Landscape Mitigation Plan, shall be constructed prior to the commencement of quarrying activities on site to provide an acoustic barrier and dust screen to 131 Peach Island Road. The earth bund shall be grassed and shall be constructed with a layer of topsoil to enable this. The earth bund must be maintained for the duration of the consented activities.

Site meeting

~~26.~~30. The consent holder shall arrange for a site meeting between the consent holder's representative and the Council's assigned monitoring officer, which shall be held on site prior to any works commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Signage

~~27.~~31. Signage shall be installed on Motueka River West Bank Road to provide warning to oncoming vehicles of the potential presence of trucks. As a minimum, permanent warning signs (PW-50) "Trucks Crossing" signs shall be installed on West Bank Road

either side of the site entrance, at a position to be confirmed with the Council's assigned monitoring officer.

Upgrade of vehicle entrance and site access

~~28.~~32. The consent holder shall remove the willow trees north and south of the entrance to the site on the eastern side of Motueka River West Bank Road and undertake trimming on the bank on the wee~~a~~stern side of Motueka River West Bank Road, as identified in the Traffic Concepts report submitted with the application, to improve site access visibility.

~~29.~~33. The consent holder shall undertake ongoing trimming of vegetation to ensure that visibility is not impaired and shall ensure that the sight distances at the intersection with Motueka River West Bank Road meet the minimum requirements set out in Table 4-14 of the Nelson Tasman Land Development Manual 2020 (NTLDM).

~~30.~~34. The existing vehicle crossing at 493 Motueka River West Bank Road shall be upgraded/ formed generally to the standard shown in Diagram 2 of Drawing SD409 in the of NTLDM, except where modifications as approved by Council are necessary to ensure vehicle tracking and its connection to the new bridge are fit for purpose.

~~31.~~35. The vehicle access shall be formed to a minimum sealed carriageway width of 6m from the existing seal edge of Motueka Valley Westbank Road up to the western end of the bridge (approximately 35m from the edge of the existing seal) to allow for two trucks to pass by each other.

~~32.~~36. The proposed access, beyond the bridge, shall be formed to a sealed carriage width of generally no less than 3.5 with 0.5m gravel shoulders and side drains to drain to existing drain paths and/or soakpits. Localised widening on corners shall be provided to accommodate vehicle tracking, and a single passing bay, formed to NTLDM passing bay standards, shall be provided on the bend in the haul road within the marginal strip. The access shall be maintained for the duration of this consent by the Consent Holder.

Advice note

This consent does not grant access to the excavation area. Site access and management of the tracks should be arranged with the landowner.

~~33.~~37. The proposed access shall not connect to the southern end of Peach Island Road, unless requested to by Council.

Bridge

~~34.~~38. Prior to it being used under this consent, the appropriateness of the existing bridge across the overflow channel (located on Section 1 SO 15112) shall be assessed by a suitably qualified engineer to demonstrate compliance with C~~c~~ondition 39~~354~~.

~~35.~~39. The bridge shall be able to carry Class 1 loads (or higher loads if the applicant proposes to use HPMV trucks for the operation), and any necessary upgrade or replacement to achieve this shall be carried out by the consent holder prior to the bridge being used under this consent.

~~36.~~40. The bridge shall be widened to at least 3.5m to match the proposed 3.5m access width.

Survey

~~37.~~41. The consent holder shall survey the boundaries of the unformed legal road and shall clearly identify the boundaries of the legal road on site. There shall be no extraction of gravel from the unformed legal road.

~~38.~~42. The consent holder shall survey the stopbank crossing point prior to works commencing and upon completion of the works. The consent holder shall repair / reinstate any damage caused to the stopbank crossing at the consent holder's cost.

Stopbank

~~39.~~43. The location of the toe of the stopbank adjacent to the proposed excavation sites shall be clearly identified and marked on site by a suitably qualified and experienced geotechnical professional or river engineer.

~~40.~~44. The 20m setback from the toe of the stopbank on both sides of the stopbank shall be clearly marked and maintained (e.g., by a fence) to ensure that earthworks (except for those required for the stopbank crossing required by Condition 46 do not encroach into the setback~~, except for the stopbank crossing (required by condition 41)~~

~~41.~~45. The construction of any fence within bermland (i.e., on the outer side of the stopbank – Stage 1), shall be of a post and wire construction only and, if required by the Council, shall be removed on completion of the works.

~~42.~~46. The consent holder shall form and maintain a ramp over the stopbank to provide vehicle access. This shall include a 200mm sacrificial gravel layer on top of the stopbank crest, which shall be maintained for the duration of, and removed upon completion of, the consented activities. The crest of the ramp shall be maintained so as to be no lower than the adjacent stopbank crest immediately up- and downstream of the ramp, to the satisfaction of the Council's Asset Engineer - Rivers.

~~43.~~47. The consent holder shall not block the stopbank, and shall ensure that it is available to the Council's Rivers Engineers at all times for flood monitoring.

Landscape mitigation and restoration planting

~~44.~~48. Within the first planting season following the granting of consent, landscape mitigation planting shall be carried out in accordance with the certified Landscape Mitigation Plan and Maintenance and Establishment Plan required by Condition 2~~2~~7.

~~45.~~49. All plantings (other than grass) shall be set back at least 5 m from the toe of the stopbank to minimise tree roots affecting the stopbank.

~~46.~~1. ~~Within the first planting season following the completion of the Stage 1 quarrying activities (including soil rehabilitation), restoration planting of the Stage 1 area shall be undertaken in accordance with the certified Stage 1 River Terrace Restoration Plan and Maintenance and Establishment Plan required by Condition 22.~~

Baseline soil sampling and analysis

~~47.~~50. Prior to the commencement of quarrying activities on the site, baseline soil sampling and analysis shall be undertaken on the site by a suitably qualified and experienced practitioner in accordance with the certified SMP. The results of the baseline soil sampling and analysis shall be submitted to the Council's Team Leader - Compliance & Investigation prior to the commencement of quarrying activities on the site.

Operational conditions

Dust

~~48.~~51. There shall be no noxious, dangerous, objectionable or offensive dust beyond the boundary of the site.

~~49.~~52. Specific dust control measures described in the DMMP shall be implemented. These dust control measures shall reflect the best practical option and be undertaken in accordance with the accepted best practice.

~~50.~~53. No material shall be disturbed during periods of high wind (>7.5m/s) and where there are sensitive receptors within 250m in a downwind direction. No excavations shall be undertaken if high wind is forecast in the period before measures can be implemented to secure the excavated area and any stockpiles from the effects of dust generation. This condition does not prevent the consent holder from backfilling excavations with clean fill if groundwater levels are rising.

54. No quarrying activities shall take place within 100m of orcharding activities on neighbouring properties between the months of January and May (inclusive).

For the avoidance of doubt: Condition 104 limits Stage 1 quarrying and placement of clean Fill, subsoil and soil to the months of October to March and thus, Stage 1 quarrying and placement of Clean Fill, subsoil and soil within 100m of orcharding activities can only take place in October, November and December.

For the purpose of this consent, 'orcharding activities' shall include flowering, pollination, fruit set, fruit growth, ripening and harvest of fruit.

~~51.~~55. No soil stockpiles may be placed within 100 m of orcharding activities on neighbouring properties.

~~52.~~56. Only water ~~will~~ shall be used for dust suppression. The Consent Holder will not use polymer or chemical stabilization methods, including Waste Oil or Reprocessed Oil, to control dust.

~~53.~~57. The consent holder shall establish a meteorological station and undertake meteorological monitoring (i.e., wind direction, wind speed, temperature and relative humidity) on site and store this data electronically. The data ~~and it~~ shall be made available to the Council's Team Leader - ~~Monitoring & Enforcement~~Compliance and Investigation on request. The meteorological monitoring station shall be located and established so as to be, to the extent practicable on site, consistent with AS/NZS 3580.1.1:2016.

Surface water quality

~~54.~~58. Land disturbance shall not result in runoff of sedimentation that results, after reasonable mixing, in any of the following effects in the receiving waters:

(a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
(b) any conspicuous change in the colour or visual clarity:
(c) any emission of objectionable odour:
(d) the rendering of fresh water unsuitable for consumption by farm animals:
(e) any significant adverse effects on aquatic life.

Noise

~~55.~~59. Vehicles operating on site shall be fitted with broadband, rather than tonal, reversing alarms.

~~56.~~60. Trucks operating on site shall be fitted with plastic deck liners to reduce impact noise as loads are added. The plastic liners shall be maintained for the duration of the consented activities.

~~57.~~61. Noise associated with construction activities on site (such as construction of the noise bund and haul roads) shall not exceed 70dB L_{Aeq} and 85dB L_{AFmax} when measured 1m from the most exposed façade of any dwelling located beyond the subject site. Construction noise shall be measured and assessed in accordance with the provisions of NZS6803:1999 Acoustics – Construction noise.

~~58.~~62. The consent holder shall ensure that all other activities on site (other than construction work) are designed and conducted, and all equipment used on site is maintained, so that noise generated by activities on site does not exceed a noise level of 55 dBA L_{eq} (day) when measured at or within the notional boundary of any dwelling.

All noise (other than construction noise) shall be measured and assessed in accordance with the provisions of NZS6801:2008 – Acoustics – Measurement of environmental sound and NZS 6802:2008 - Acoustics - Environmental Noise.

Advice note

Construction work relates to activities defined as construction under NZS6803:1999. This includes the construction of the earth bund and the haul road, but not the gravel extraction operation or truck movements on site.

63. Within three (3) months of the quarry activity commencing and when and all relevant noise-generating activities (gravel extraction, loading, truck movements) are occurring on site, the consent holder shall provide a noise monitoring report for the gravel extraction operation to determine compliance with the consented noise limits in Conditions 61 and 62.

A noise monitoring report may also be required on request by council's Team Leader Environmental Health where noise complaints are received.

The noise monitoring locations for the noise monitoring report must be representative of the most affected receivers. The monitoring shall be carried out by a suitably qualified and experienced person and shall be undertaken in accordance with NZS6801:2008 Acoustics - Measurement of environmental sound and NZS6802:2008 Acoustics – Environmental noise. The noise monitoring report shall be provided to the Team leader Environmental Health, Tasman District Council.

If the monitoring report shows that noise rating levels exceed the noise limits set out in Conditions 61 and 62, then the applicant shall cease works until they provide details of how works will be undertaken to ensure compliance with the noise limits set out in Conditions 61 and 62.

~~Noise monitoring shall be undertaken:~~

~~At the commencement of any activity that is expected to approach the noise limits identified in Conditions 58 and 59, and;~~

~~When requested to by Council in response to a complaint.~~

Hours of work

~~59.~~64. Work shall only be carried out between 7:00 am and 5:00 pm Monday to Friday. No heavy machinery shall be operated on site earlier than 7.30am. No operations shall occur on Saturdays, Sundays, public holidays, or between 20 December and 10 January (inclusive) ~~-~~the following year (Christmas holiday period).

Access and vehicle entrance

~~60.~~65. Access to the site by vehicles associated with quarrying activities shall only be via the upgraded vehicle crossing at 493 Motueka River West Bank Road.

Advice note

This consent does not grant access to the excavation area. Site access and management of the tracks should be arranged with the landowner.

Traffic movements

66. ~~There shall be~~The activity shall generate no more than 30 truck movements per day ~~to and from the site~~ (a return trip being two truck movements). A truck may include a trailer.

Advice note

This includes all truck movements, whether cleanfill, aggregate or empty, including those transporting fill from other sites

~~61.~~67. All vehicles shall observe a speed limit of 15 kilometres per hour when travelling within the site (including on haul roads). It is the consent holder's responsibility to inform drivers of this speed limit.

68. All trucks associated with the activity must use Motueka River West Bank Road from 493 Motueka River West Bank Road to Alexander Bridge.

~~62.~~69. All trucks shall observe a speed limit of 60 kilometres per hour when travelling along Motueka River West Bank Road.

70. All trucks shall be fitted with GPS based speed and route logging and records shall be supplied to the Council's Team Leader - ~~Monitoring & Enforcement~~Compliance and Investigation on request. The GPS system shall be set up to provide alerts to the quarry

manager if the speed limits, specified in the conditions above are exceeded and shall keep a record of truck routes and vehicle movements.

Site management

~~63.~~71. ~~Works~~ All operations at the site shall be undertaken in accordance with the certified NMP, DMMP, GCMP and SMP.

~~64.~~72. No processing, washing, crushing or screening of gravel shall be carried out on the site.

~~65.~~73. The consent holder shall maintain the site in a clean and tidy manner. Redundant machinery and equipment not required for the operation of the quarry (or for other residential and farming activities on the site) shall be removed from site.

~~66.~~74. The consent holder shall undertake pest plant management across the site for the duration of the consent.

~~67.~~75. No backfill or any other material shall be stored or stockpiled on the river side (outside) of the stopbank, except for topsoil awaiting reinstatement placement on that day. In the event that there is temporarily stockpiled material on the river side of the stopbanks and heavy rain is forecast, the stockpiled material shall be relocated to the landward side of the stopbank.

76. Stockpiled materials (excluding soil and any materials to be used for backfilling on the same day), shall be located in the area identified on the Landscape Mitigation Plan as 'Stockpile and Service Area'. This area shall be excavated to a level 1m below existing ground level. Stockpiles in this area shall be managed so as to be no greater than 4m in height above the lowered ground level (3m above surrounding ground level).

Advice note

For the avoidance of doubt: this condition does not relate to soil stockpiles, which are subject to Condition 95.

~~68.~~77. No excavations shall be undertaken if heavy rain is forecast in the period before measures can be implemented to secure the excavated area and any stockpiles from the effects of overland flows.

~~69.~~78. If heavy rain is forecast, heavy machinery shall be moved inside the stopbank for overnight storage. This condition is not intended to prevent machinery from backfilling excavations to meet other conditions of this consent or RM220578 under conditions of rising groundwater levels.

~~70.~~79. All practicable measures shall be undertaken to prevent, as a result of the works:

(a) erosion of the Motueka River berm; and
(b) the discharge of sediment to the Motueka River.

Advice note

This consent does not authorise the discharge of any sediment to water. Relevant TRMP and / or national environmental standards permitted rules must be met or consent applied for accordingly.

Refuelling and spill management

~~71.~~80. All machinery shall be maintained and operated in such a manner minimising, so far as practicable, any spillage of fuel, oil and similar contaminants to water or land, particularly during machinery refuelling.

~~72.~~81. No refuelling or machinery maintenance shall be undertaken within 20 metres of surface water (including exposed groundwater).

~~73.~~82. No heavy vehicle maintenance apart from servicing (e.g., an oil change by trained personnel) shall occur on site.

Advice note

An example of heavy vehicle maintenance is engineering maintenance, such as work on a digger bucket.

~~74.~~83. In the event of a spill of machinery oil (including hydraulic oil) or fuel from excavation machinery, all works shall cease and measures must be taken to limit the extent of the spill. Any contaminated strata or spill response material must be excavated and removed from the site and disposed of at an appropriate disposal facility (subject to approval of the disposal facility).~~All spills shall be immediately contained and controlled by an approved product and shall be removed from the site for appropriate disposal.~~ If any spill occurs within an excavation pit, or if any spill greater than 20 litres occurs elsewhere on the site, the site operator must immediately notify the Tasman District Council Pollution Incident contact number and Council's Team Leader – Compliance and Investigation. Based on the magnitude and type of the spill, and in consultation with TDC, the consent holder shall undertake groundwater quality monitoring of downgradient monitoring bores and drinking water supply bores in accordance with the groundwater monitoring, assessment and response requirements of the consent conditions for RM220578~~Any spills greater than 20 litres shall be immediately reported to the Council's Team Leader – Monitoring & Enforcement. Spill kits shall be available on site, and site staff shall be trained in procedures for using them~~.

~~75.~~84. Fuel shall be stored securely or removed from site overnight.

Groundwater Level Monitoring

~~76.~~85. The Consent Holder shall monitor groundwater levels in two dedicated upgradient monitoring bores located at the southern extent of the site (bores 24544 and 24546) and two dedicated downgradient monitoring bores located at the northern extent of the site (bores 24543 and 24545).

All groundwater level measurements:

(a) Shall be measured to a local common relative level to the nearest 10 mm accuracy (i.e., Nelson vertical datum 1955, NZVD ~~2016 or~~2016 or similar).

(b) Shall be recorded via a tamper-proof electronic recording device such as a data logger(s) that shall record groundwater levels taken at least once every 60 minutes.

The groundwater level recording device:

(c) Shall be connected to a telemetry system that collects and stores all of the data continuously with an independent network provider. No data shall be deliberately changed or deleted.

(d) Shall be accessible to Tasman District Council at all times for inspection and/or data retrieval.

~~77.~~86. The Consent Holder shall use all the groundwater level measurement data to generate groundwater level elevation contour maps on a daily basis for the entire clean fill area that can be accessed by the Clean Fill Operator and excavator operator(s). The groundwater elevation contour maps will be used daily to inform the excavator operator(s) of excavation depths (outlined in Conditions 88 and ~~8~~9).

Excavation

87. All excavation shall be undertaken in accordance with the GCMP to ensure that excavations do not occur below a level 0.3m above actual ground water level at the time of excavation, except as provided for under Condition 91.

~~78.~~88. All excavations between 0.3 and 1 m above groundwater level shall only occur during stable weather conditions which are defined as:

(a) Decreasing or stable groundwater level trends, based on the measurements described in Condition ~~8~~825; and

(b) Decreasing or stable flow within the Motueka River as measured at the TDC Woodmans Bend flow recorder site.

~~79.~~89. Excavations between 0.3 and 1 m above groundwater level shall immediately cease and backfilling shall occur if any of the following occur:

(a) Tasman District Council issue any flood warnings for the Motueka River catchment.

(b) Any weather warnings are issued for the Nelson/Tasman region that might be expected to cause groundwater levels at the clean fill to rise.

(c) When groundwater levels measured in Condition 8~~82~~5 display an increasing trend.

~~80.~~90. All onsite excavation machinery used for excavation of pit(s) shall be equipped with onboard GPS and elevation systems that will determine the elevation of the digging implement (i.e., excavator bucket). The onboard GPS and elevation systems shall record elevation measurements to a local common relative level (as per Condition 8~~5~~1~~(~~(a)~~)~~ (i.e., Nelson vertical datum 1955, NZVD 2016 or similar).

~~81.~~91. To assess the occurrence of groundwater beneath the excavation, the Consent Holder shall ensure that the excavator operator(s) undertakes a temporary excavation down to a depth of 1 m below the working level of the excavation on each day when excavation is occurring. This check on the occurrence of groundwater will be used to inform the depths to which excavations can occur on that day, as per Table 1 of the GCMP. Only the digging implement of the excavator shall enter the temporary excavation and if groundwater is encountered, the excavation shall be back filled within 30 minutes of the groundwater being observed, to at least 0.3 m above the level at which groundwater was encountered. The backfilling material must be the same material that was excavated to create the temporary excavation.

~~82.~~92. If any of the triggers described in Condition 8~~9~~4 occur, then backfilling of the excavation to maintain at least 1 m above groundwater level at the time of the excavation but no more than the elevation of pre-quarry land surface shall occur, taking into account land surface restoration requirements.

~~83.~~93. If any uncontrolled exposure of groundwater occurs in the excavation pit(s) all excavation activities ~~will~~ shall cease. Placement of clean fill material must occur as soon as practicable to fill in the exposed groundwater.

~~84.~~94. The Consent Holder ~~w~~shall~~ill~~ notify their consent compliance monitoring officer at Tasman District Council if groundwater enters the excavation pit area. This requirement does not apply to test-pitting provided for under Condition 91.

~~85.~~95. Topsoil (A Horizon) and subsoil (B and C Horizons) shall be stripped and stockpiled separately for the purpose of reuse on site. All soil stockpiles shall be:

(a) no more than 3 metres in height;

(a) stored on site for no more than 6 months before use. Any stockpiled stored for greater than one month shall be covered or vegetated with grass to reduce soil damage and loss caused by rain.

~~86.~~96. Machinery movement over stockpiled soil is prohibited, other than in the construction of the proposed noise bund on the northern boundary. This condition is applicable to all excavation, backfilling and soil rehabilitation activities.

~~87.~~97. Topsoil and subsoil shall only be excavated in dry soil condition, as defined in the SMP.

~~88.~~98. Any excavation in berm land (Stage 1) shall occur in strips aligned parallel to the general direction of flood flow across the berm land. No individual strip shall be wider than 20 m.

~~89.~~99. The excavation shall be progressively backfilled so that the maximum size of excavation open at any one time shall not exceed 1600m^2 (generally 20 m in width and 80 m in length).

~~90.~~100. Sufficient Clean Fill shall always be available on the site for backfilling of any excavation to 1m below original ground level.

Advice Note:

This condition is volunteered to demonstrate that there will, at all times, be sufficient Clean Fill available to enable backfilling of the excavation pit, in the event of rising groundwater levels.

~~91.~~101. The number of excavations open at any one time shall not exceed one, except when the excavation of one strip has been completed and the excavation of a new strip is commencing, in which case two open excavations are permitted.

~~92.~~102. E~~For any given Stage, e~~xcavation works shall commence at the most upgradient (with respect to groundwater flow) end of the Stage, this being generally the southern end of the Stage.

103. Stage 1 is to be quarried in 3 tranches, with a maximum of one third of the Stage 1 area to be actively quarried or being remediated at any time. Subsequent tranches within Stage 1 shall only commence when the previous tranche has been rehabilitated to the point that a vegetated cover is established.

Advice Note:

For the avoidance of doubt: the maximum size of open excavation within a tranche shall not exceed 1600m2 as required by Condition 99.

104. Stage 1 quarrying and placement of Clean Fill, subsoil and soil is only to take place during the months of October to March (inclusive), in order to ensure a vegetated cover is established before winter.

For the avoidance of doubt: Condition 54 also requires that no quarrying activities shall take place within 100m of orcharding activities on neighbouring properties between the months of January and May (inclusive) and thus, Stage 1 quarrying and placement of Clean Fill, subsoil and soil within 100m of orcharding activities can only take place in October, November and December.

For the purpose of this consent, 'orcharding activities' shall include flowering, pollination, fruit set, fruit growth, ripening and harvest of fruit.

~~93.~~105. There shall be no excavation, removal of gravel or other disturbance of land within 20m of the toe of the stopbank. For the avoidance of doubt, this applies on both sides of the stopbank.

~~94.~~106. Excavations shall maintain a 2~~1~~0m setback from the southern boundary of the Stage 3 extraction area, shared with the neighbouring title (Lot 3 DP 1650, comprised in RTNL58/75).

~~95.~~107. Excavations adjacent to property boundaries or adjacent to the 20m setback from the toe of stopbanks shall not exceed (be steeper than) the following batter angles:

(a) Lower Gravels to be battered at 1H:1.3V max;

(b) Upper mantle to be battered at 1H:1.7V max.

These batter angles may only be exceeded adjacent to property boundaries where the adjacent landowner agrees in writing to a proposal such that the consent holder is to repair/reinstate any damaged land caused by shallow surficial landslips during the gravel extraction pit works.

~~96.~~108. At the commencement of each Stage of excavation, the initial excavation shall be inspected by a Geo-professional so that they can verify that the above batter angles are appropriate given actual exposed ground conditions. The Geo-professional shall at the same time undertake test-pitting across the remainder of the Stage area and advise on the depths of upper mantle/lower gravel materials. If, during excavations over the remainder of the Stage the Consent Holder identifies any unforeseen ground conditions during the gravel pit extraction works (i.e. deep layer of topsoil than anticipated test-pitting) then a Geo-professional shall inspect and advise what further steps (if any) are required to ensure ongoing land stability for the remaining duration of the Stage.

~~97.~~109. Appropriate stormwater controls shall be put in place to avoid concentrated stormwater flows discharging onto temporary cut slopes (within excavation pits).

110. No excavations shall occur within 20 m of flowing, open waterways.

~~98.~~111. The consent holder shall check Stage 1 excavations in the vicinity of Shaggery Stream/ the Peach Island overflow channel for seepage inflows. If seepage inflows are observed to enter the excavation area, excavation in this area shall be restricted to times of low or no streamflow to avoid any seepage effects.

Backfilling

~~99.~~112. During the course of excavations, backfilling shall be undertaken as soon as practicable. Any excavated area in a particular location shall not remain open for longer than 6 months.

~~100.~~113. Commencement of clean filling within a Stage shall occur at locations at the greatest upgradient distance from any water supply bores, as far as can practicably be achieved.

~~101.~~114. Backfilling shall be to 0.8m - 1m below the finished levels on site as specified in the Contour Plan required by C~~c~~ondition ~~21~~6.

~~102.~~115. Only material that meets the requirements of Table 1 below shall be imported to the site for backfill.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
Materials sourced onsite.	• Uncontaminated natural material such as soil, clay, rock and gravel. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Materials sourced offsite	• Uncontaminated natural material such as soil, clay, rock and gravel. Compliance with this definition will be achieved by testing a representative composite sample of imported fill material to demonstrate that total soil contaminant concentrations do not exceed regional soil background concentration limits[2].	• Contaminated soil, clay, rock and gravel. • Any material sourced from any site listed on the Tasman District Council Hazardous Activities and Industries List (HAIL) register (as defined by the Ministry for the Environment) or any site where the Clean fill Operator has a reasonable expectation of HAIL

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
	• Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	activities occurring, even if it is not listed on TDC's HAIL register and for both these categories of sites, the HAIL activity is known to have been occurring, or could be reasonably expected to be known to have been ~~before~~occurring, before the date the clean fill material is received. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.

Notes: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.
[2] Relevant regional soil background concentration limits are the 99th percentile values provided in Table 5 of Cavanagh (2015) 'Background concentrations of trace elements and options for managing soil quality in the Tasman and Nelson Districts. Landcare Research. June 2015. For clarity, these are reproduced below:

Element	As	Cd	Cr-hi	Cr-lo	Cu	Pb	Ni-hi	Ni-lo	Zn
99th percentile	11	0.90	183	93.5	41.5	33	274.4	55.4	141.5

Furthermore, any material, that is understood to comply with the Table 1~~Table 1~~ definition, but displays visual or olfactory evidence of contamination, shall be rejected.

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~~103.~~116. Any backfill material sourced from offsite shall only be brought to the site by the Consent ~~Holder, and~~Holder and shall be pre-screened for compliance with these clean fill requirements before being brought to site in accordance with the Clean Fill Procurement SOP detailed at Appendix A of the draft GCMP. A record shall be kept of all clean fill used as backfill. The record shall be in accordance with the requirements specified in ~~the Clean~~the Clean Fill Procurement SOP. This record shall be kept available on ~~site, and~~site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

117. Any part of an excavation pit that has been backfilled with clean fill shall not be re-excavated to enable further quarrying. ~~This condition does not preclude re-excavation of virgin excavated material from the site that has been temporarily backfilled into excavation pits in the event of rising groundwater levels.~~

~~104.~~118. Light-tracked machinery or flotation tyred vehicles must be used for the placement of the clean fill.

Reinstatement and rehabilitation

~~Soil~~

~~105.~~119. Following completion of soil restoration and rehabilitation activities, restored soils shall achieve the following:

(a) The replaced topsoil (A horizon) shall be of a depth that ensures a minimum thickness of 150 mm across the whole Site.

(b) The replaced subsoil (B and C horizons) shall be of a depth that ensures that a minimum total soil profile depth (including topsoil (A horizon) and subsoil (B and C horizons)) of 800 mm is achieved.

~~(a)~~(c) A minimum of 800 mm of ~~plant growth medium~~soil material (excluding clean fill) with little or no limitations to root penetration. As a guide, soil penetration resistance should not exceed approximately 2300 kPa.

~~(b)~~(d) Soil profile condition to be such that there is no obvious contrasting compacted layers within the restored soil profile, especially between the subsoil and the topsoil, and no visually obvious compaction within the upper 300–400 mm of topsoil.

(e) Soil drainage of the reinstated soil in the Stage 2 and Stage 3 areas be at least moderately well or well drained.

~~(c)~~(f) Soil drainage of the reinstated soil in the Stage 1 area be at least imperfectly drained, preferably moderately well or well drained where the inherent soil drainage characteristics of the land allow.~~Be at least imperfectly drained, preferably moderately well or well drained where the inherent soil drainage characteristics of the land allow~~.

~~106.~~120. Subsoil and topsoil shall be reinstated, and ongoing management shall be undertaken, in accordance with the methodology specified in the certified SMP. Subsoil and topsoil shall be placed to reinstate the land to the finished levels on site as specified in the Contour Plan required by C~~c~~ondition 21~~16~~. Additional topsoil may need to be added following any settlement of the reinstated land surface.

121. Topsoil and subsoil shall only be reinstated in dry soil condition, as defined in the SMP.

~~107.~~122. After soil replacement is completed, only machinery used for gravel extraction, and clean fill or soil removal and placement activities shall be allowed to travel over the restored soil surface, to minimise compaction.

~~108.~~123. Following the placement of the new soil profile, the consent holder shall engage a suitably qualified agronomist to advise on fertiliser application and other soil treatments to encourage effective revegetation.

~~109.~~124. Fertiliser shall be applied following the recommendations of the agronomist to facilitate pasture establishment, increase fertility and promote and maintain even revegetation.

~~110.~~125. Revegetation of reinstated areas shall occur within a month of reinstatement of the soil and be actively managed following revegetation (as detailed in the SMP) to ensure full vegetative cover is achieved and maintained. This revegetation requirement relates also to areas where additional topsoil is added to the land surface to rectify any settlement of the reinstated land surface.

126. The consent holder's responsibility with regard to revegetation shall not be considered to be met until a complete, healthy, predominantly rye grass/white clover sward has been achieved over the worked areas.

127. Within the first planting season following the completion of the Stage 1 quarrying activities (including soil rehabilitation), restoration planting of the Stage 1 area shall be undertaken in accordance with the certified Stage 1 River Terrace Restoration Plan and Maintenance and Establishment Plan required by Condition 27~~2~~.

Accidental Discovery Protocol (ADP)

~~111.~~128. In the event of any Māori wāhi tapu/ Māori cultural sites of significance (e.g. midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga) or kōiwi (human remains) being uncovered, activities in the vicinity of the discovery shall cease. The consent holder shall notify a representative of Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka a Māui Trust and Heritage New Zealand Pouhere Taonga Central Regional Office (phone 04 494 8320~~), and~~) and shall not recommence works in the area of the discovery until the relevant approvals to damage, destroy or modify such sites have been obtained.

Advice Note:

At the time this consent was granted the contact details for Te Rūnanga o Ngāti Rārua:

56 Vickerman Street, Port Nelson, Nelson 7010, Phone (03) 553-1198, Email taiao@ngatirarua.iwi.nz

And, for Te Ātiawa o Te Waka a Māui Trust:

Beach Road, Waikawa Marina, Waikawa, Picton 7220, Phone (03) 573 5170, Email taiao@teatiawatrust.co.nz

Advice Note:

In the event that kōiwi (human remains) are uncovered, the New Zealand Police will need to be contacted to assess the site.

Reporting & monitoring

~~112.~~129. Monitoring and reporting of groundwater levels and groundwater quality shall be undertaken in accordance with the approved GCMP, and the conditions of discharge permit RM220578.

~~113.~~130. Monitoring and reporting in relation to dust management shall be undertaken in accordance with the requirements of the certified DMMP.

~~114.~~131. Monitoring and reporting in relation to soil properties shall be undertaken on the site in accordance with the certified SMP, and results provided to Council.

~~115.~~132. The consent holder shall maintain a complaints register, which shall detail the following as a minimum:

(a) The person responsible for the complaints register and appointment of a nominee who can be contacted in case of concerns/ complaints arising;
(b) The location, date and time of the complaint;
(c) The nature of the complaint (e.g., noise, dust, vehicle speeds etc.);
(d) A description of weather conditions at the time of complaint (notably wind speed and direction as per the meteorological monitoring required by condition 5~~3~~7);
(e) Any identified cause of the complaint;
(f) The action(s) taken to investigate and if appropriate remedy the issue, with particular regard to any complaints and response procedures detailed in any management plan that is relevant to the nature of the complaint.

~~116.~~133. The consent holder shall inform the Council's Team Leader ~~Monitoring and Enforcement~~ Compliance and Investigation within one working day of any complaint being received.

~~117.~~134. The complaints register shall be forwarded to the Council's Team Leader - Compliance and Investigation and Te Rūnanga o Ngāti Rārua and Te Ātiawa Manawhenua Ki Te Tau Ihu Trust ~~Monitoring & Enforcement~~ on request.

~~118.~~135. A contact number of the nominee detailed in the complaint's register shall be provided to all ~~adjoining~~ property owners and occupiers within 500m of the quarry site.

~~119.~~136. The consent holder shall, no more than 20 working days following the completion of each Stage of work (this shall apply to the completion of each tranche within Stage 1), notify the Council's Team Leader - Compliance and Investigation~~Monitoring & Enforcement~~. Notification shall be in writing and include a visual representation (such as photo or video) of the completed Stage/ tranche of work.

~~120.~~137. The consent holder shall keep a daily record of the weight of gravel extracted, which shall be submitted on a monthly basis to the Council's Team Leader - Compliance and Investigation~~Monitoring & Enforcement~~.

Advice Note:

Returns are to be submitted in "solid measure". A multiplier of 0.80 should be used to convert "truck measure" to "solid measure".

~~121. Within 3 months of the completion of all recontouring work on site the consent holder shall forward to the Council's Team Leader - Monitoring & Enforcement a topographic survey to NZVD 2016 (or similar datum) of the final levels on site, with intervals at 0.2 metres, as required by Condition 16(a).~~

138. Cultural Health Indicator (CHI) monitoring shall be undertaken in accordance with the framework developed under Condition 16 of this consent. The cost shall be covered by the Consent Holder. Monitoring shall occur prior to works, mid-way through the project, on completion of works, and two years post-works to assess remediation and enhancement measures.

~~A programme of Cultural Health Indicator (CHI) monitoring shall be undertaken with the cost covered by the Consent Holder. The consent holder shall assist Te Ātiawa o te Waka a Māui Trust, Te Rūnanga o Ngāti Rārua or their nominated representatives to develop a framework for this monitoring and any necessary responses to this monitoring. Monitoring shall occur prior to works, mid-way through the project, on completion of works, and two years post-works to assess remediation and enhancement measures. The framework for monitoring must be completed prior to any earthworks commencing.~~

Following completion of works

~~Unformed legal road~~

~~122.~~139. Following completion of the works, the consent holder shall confirm with the Council's Transportation Manager whether:

(a) the section of unformed legal road ("paper road") used to access the application site shall either be returned to pasture at the consent holder's cost; or

(b) retained in its current form.

140. No less than 5 years after the completion of quarrying and backfilling activities are completed for each Stage, the consent holder shall undertake a topographic survey to NZVD 2016 (or similar datum) of the final levels on site, with intervals at 0.2 metres, as required by Condition 18(a). This is to demonstrate that the site has been remediated to achieve pre-quarrying contours. This shall be forwarded to the Council's Team Leader - Compliance and Investigation.

141. Any exotic species used for Landscape Mitigation Planting (Condition 27) shall be removed from the site within 2 years of the cessation of the quarrying activity.

Resource consents sought for:

RM200488 Land use consent to disturb land and rehabilitate for the purpose of gravel extraction within the Rural 1 Zone.

RM200489 Land use consent to erect signage and establish access via an unformed legal road.

Note: These conditions should be read in conjunction with the consent conditions for the associated discharge permit RM220578 Discharge of contaminants being cleanfill to land.

Recommended conditions

General

1. The consent holder shall ensure that all works are carried out in general accordance with:
   (a) the application documents received by the Council on 15 June 2020;
   (b) the further information received on 8 and 10 June 2021 and 2 September 2022;
   (c) the evidence received on 15 July 2022 and 4 November 2022;
   (d) Plan XX;

   Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.

   Unless expressly stated otherwise, the conditions of this consent apply to all stages (Stages 1, 2 and 3).

2. The consent holder shall ensure all persons undertaking activities authorised by this resource consent are made aware of the conditions of the consent and ensure compliance with those conditions. A copy of the consent documents, including the certified plans and management plans required by Condition 18, shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

3. Where conditions of this consent require the involvement of a Suitably Qualified and Experienced Person (SQEP), this person shall not be an employee of the Consent Holder.

4. Prior to commencement of quarrying in the Stage 1 area (as shown on Plan XX), the consent holder shall provide a report to Council from a suitably qualified and experienced practitioner to confirm that that landscape mitigation planting required

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under condition 48 of this consent has been successfully established. In this instance, "established" means 80% canopy cover and an average height of 5m in the exotic mitigation species (i.e. the Eucalyptus and Poplar species).

5. The Consent Holder will provide reasonable assistance to the Tasman Great Taste Trails Trust in its endeavours to establish an off-road cycle track that cyclists can use as an alternative to the section of Motueka River West Bank Road between Alexander Bluff Bridge and the site entry.

Review

6. For the purposes of, and pursuant to section 128 of the Resource Management Act 1991 ('the Act'), the Council may review this consent annually commencing 6 months from the commencement of the consented activities, for the purposes of:

   (a) dealing with any adverse effect on the environment which may arise from the exercise of this consent that were not foreseen at the time of granting of the consent, and which it is therefore more appropriate to deal with at a later stage; and/or

   (b) requiring the consent holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the exercise of this consent.

   (c) requiring compliance with operative rules in the Tasman Resource Management Plan or its successor; or

   (d) requiring consistency with any relevant regional plan, district plan, national environmental standard or Act of Parliament.

   (e) To update 'regional soil background concentration limits', as relevant to Table 1 in Condition 115 below.

Lapse and expiry

7. Pursuant to section 125 of the Act, this consent shall lapse 5 years after the date it commences unless either the consent is given effect to, or the Council has granted extensions pursuant to section 125(1A)(b) of the Act.

8. This consent shall expire 15 years after the date the consent is given effect to, except that the consent shall not expire in relation to consent monitoring and reporting activities and soil top up following ground settlement as required by conditions of this consent.

Bond

9. Prior to starting work the consent holder shall enter into a performance bond with the Council. The performance bond shall be for $40,000.

   The sum secured by the bond shall be reviewed every 6 years, to take into account movements in relevant indices of the consumer price index.

10. The performance bond is to be prepared by the consent holder's Bank or Solicitor and submitted to the Council's Team Leader - Compliance & Investigation for approval.

11. The purpose of the performance bond required by condition 9 shall be to conduct remedial, repair, or rehabilitation works to the site, stopbank and/or access road, in the event that the consent holder fails to comply with conditions of this consent to the satisfaction of the Council's Team Leader - Compliance & Investigation.

Advice notes

The Council will make reasonable attempts (if practicable in the circumstances) to contact the Consent Holder, to give the consent holder the opportunity to remedy the matter prior to the Council taking any action.

The consent holder remains liable under the Act for any breach of the conditions of this consent and for any adverse effect on the environment which becomes apparent during or after the expiry of this consent.

Prior to the work

12. At least one month prior to commencement of the consent, the consent holder shall contact Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka-a-Māui Trust to advise them of the commencement date of the earthworks and to provide an opportunity for a cultural induction to be undertaken by relevant representatives who will be working on the site.

13. The Consent Holder shall engage a representative of Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka a Māui Trust (submitters and mana whenua iwi), to be present during any disturbance of topsoil and subsoil on site. The purpose of the monitor is to identify any cultural material and or taonga (e.g., midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) uncovered during the disturbance of cultural layers, and to monitor the observance of tikanga. The Consent Holder shall notify the above iwi at least 10 working days prior to commencing initial land disturbance works and advise them of the planned commencement date and likely duration of the works. Where the above notification is given, and an Iwi Monitor is unable to be present for any reason, the Consent Holder may commence works regardless. For the avoidance of doubt, this condition requires only a single monitor to

be engaged by the Consent Holder to be on site at any given time. The Consent Holder may consider engaging an iwi monitor representative of ngā iwi with Statutory Acknowledgements over Motueka River, Ngāti Toa Rangatira, Te Rūnanga o Ngāti Kuia and Ngāti Tama ki Te Waipounamu.

14. In the event of any archaeological artefacts being uncovered, the consent holder shall:

(a) cease the works immediately, as required by the Heritage New Zealand Pouhere Taonga Act 2014,

(b) consult with the Heritage New Zealand's Central Regional Office (email infocentral@heritage.org.nz, PO Box 2629, Wellington 6140, phone (04) 494 8320, and

(c) shall not recommence works in the area of the discovery until the relevant Heritage New Zealand approvals to damage, destroy or modify such sites have been obtained.

Advice Note:

At the time this consent was granted the contact details for Te Rūnanga o Ngāti Rārua:

56 Vickerman Street, Port Nelson, Nelson 7010, Phone (03) 553-1198, Email taiao@ngatirarua.iwi.nz

And, for Te Ātiawa o Te Waka a Māui Trust:

Beach Road, Waikawa Marina, Waikawa, Picton 7220, Phone (03) 573 5170, Email taiao@teatiawatrust.co.nzAdvice note

This condition has been volunteered by the applicant in response to iwi consultation.

15. The Consent Holder shall seek interest from Te Ātiawa o Te Waka a Māui and Te Rūnanga o Ngāti Rārua for a cultural audit of the site to be undertaken prior to the commencement of the consented activities. If advised by Te Runanga o Ngāti Rārua and/or Te Atiawa o Te Waka a Maui Trust that mana whenua iwi desire a cultural audit, this will be funded by the Consent Holder.

Advice note

This condition has been volunteered by the applicant in response to iwi consultation.

16. A programme of Cultural Health Indicator (CHI) monitoring shall be undertaken with the cost covered by the Consent Holder. The consent holder shall assist Te Ātiawa o te Waka a Māui Trust, Te Rūnanga o Ngāti Rārua or their nominated representatives to develop a framework for this monitoring and any necessary responses to this monitoring. Monitoring shall occur prior to works, mid-way through the project, on completion of works, and two years post-works to assess remediation and enhancement measures. The framework for monitoring must be completed prior to any earthworks commencing.

17. The Council's Team Leader - Compliance & Investigation shall be notified in writing:

(a) A minimum of 15 working days prior to commencement of work for each Stage; and

(b) Prior to the recommencement of work where works have been discontinued for more than one month.

Notification shall include:

(a) The proposed start date for the period of work; and

(b) The name and contact details of the following persons:

(i) A representative nominated by the consent holder who shall be the Council's principal contact person in regard to matters relating to this resource consent; and

(ii) The Site Manager (if not the consent holder's representative).

Should either of the above persons change during the term of this resource consent, the consent holder shall provide the new name and contact details, in writing, to the Council's Team Leader - Compliance & Investigation within five working days.

Submission of plans

18. The consent holder shall, at least 15 working days prior to the commencement of works, prepare and submit the following plans and management plans to the Council's Team Leader - Compliance & Investigation for certification. No works shall be undertaken until these plans/ management plans have been certified by the Council's Team Leader - Compliance & Investigation, unless condition 20 is invoked.

(a) existing and proposed Contour Plans prepared in accordance with condition 21;

(b) a Noise Management Plan (NMP) prepared in accordance with condition 22;

(c) a Soil Management Plan (SMP) prepared in accordance with condition 23;

(d) a Dust Management and Monitoring Plan (DMMP) prepared in accordance with condition 24;

(e) a Groundwater and Clean Fill Management Plan (GCMP) prepared in accordance with condition 25.

(f) a Landscape Mitigation Plan, a Stage 1 River Terrace Restoration Plan and a Maintenance and Establishment Plan prepared in accordance with Condition 27.

Advice note

Certification of the management plans above is in the nature of certifying that adoption of the management plans will result in compliance with the conditions of this consent.

19. The Management Plans outlined in Condition 18 (b)-(e) shall be reviewed and updated at least once every two years. Any amendments shall be:

    (a) For the purpose of improving the efficacy of management plans;

    (b) Consistent with the conditions of this resource consent; and

    (c) Submitted in writing to the Council's Team Leader - Compliance & Investigation, for certification.

20. The following shall apply in respect of conditions 18 and 19:

    (a) the consent holder may commence the activities in accordance with the submitted plans 20 working days after their submission, unless the Council advises the consent holder in writing that it refuses to certify them on the grounds that it fails to meet the requirements of the condition and gives reasons for its decision; and

    (b) should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (a) shall apply to any resubmitted plan.

    (c) Any subsequent amendments to the management plans required by condition 18 must be certified by the Council's Team Leader - Compliance & Investigation, prior to being implemented. Conditions 20 (a) and (b) shall apply to any submitted amendments.

    (d)

21. The Contour Plans required by condition 18(a) are required to ensure that finished ground levels across the site are generally consistent with existing ground contours. The plans shall include as a minimum:

    (a) A topographic survey to New Zealand Vertical Datum 2016 (NZVD 2016) of the existing site, with contour intervals at 0.2 metres;

    (b) A plan, referenced to NZVD 2016, of the proposed finished levels on site after excavation and recontouring has occurred, with intervals at 0.2 metres.

    (c) A site plan showing the location of property boundaries, surface water bodies, stopbanks, legal roads, survey benchmarks, and other details as appropriate.

    Advice note: LiDAR survey may be used to prepare this plan.

22. The Noise Management Plan (NMP) required by condition 18(b) shall detail the best practicable option for ensuring the noise standards specified at conditions 61 and 62 of this consent are complied with. The NMP shall be in general accordance with the draft

NMP prepared by Hegley Acoustic Consultants dated 20 April 2023, and shall address, as a minimum:

(a) Mitigation measures proposed

(b) Training of staff

(c) Equipment Maintenance

(d) Neighbour Liaison

(e) Complaints

(f) Contingency Plan

(g) Key Personnel and their Responsibilities.

If consent conditions are included in the final NMP, these shall be updated to reflect the noise conditions in this consent decision.

23. The SMP required by condition 18(c) shall demonstrate the best practicable option to ensure that the restored soils achieve the standards specified in condition 119 and that condition 58 is complied with in respect of the control of surface water quality. The SMP shall be in general accordance with the draft SMP prepared by LandSystems Ltd dated 24 April 2023 and shall address, as a minimum:

(a) Procedures to mitigate the potential effects on soil properties including for:

(i) soil removal;
(ii) soil storage;
(iii) soil placement (including the sequence of soil placement);
(iv) transport;
(v) the preparation of the receiving surface;
(vi) fill (overburden), subsoil and topsoil properties; and
(vii) post soil placement management.

(b) Procedures to minimise the risk of soil loss from overland flow including:

(i) during soil removal;
(ii) for soil storage; and
(iii) during vegetation establishment.

(c) Soil monitoring required including

(i) Baseline sampling and analysis.
(ii) Ongoing sampling and analysis of reinstated areas.
(iii) Sampling and analysis of the following:

- Soil quality properties of the topsoil.

- Soil profile condition soil profile description.
- Visual Soil Assessment of the topsoil.

(d) Requirements for soil management training for staff and for supervision.

24. The DMMP required by condition 18(d) shall demonstrate the best practicable option to ensure that dust is managed on site to minimise the adverse impacts of potential dust discharges on the receiving environment and to achieve the standard specified in condition 51. The DMMP shall be in general accordance with the draft DMMP prepared by Pattle Delamore Partners dated 10 March 2023 and shall address, as a minimum:

(a) Consent Compliance and Key Performance Indicator

(b) Sources of Dust

(c) Management and Mitigation Measures

(d) Roles and Responsibilities

(e) Implementation and Operation of DMMP

(f) Environmental Monitoring Programme

(g) DMMP Review

(h) Complaints

(i) Emergency Contacts

(j) Annual Reporting (to be in September)

25. The GCMP required by condition 18(e) shall demonstrate the best practicable option to ensure that discharge of Clean Fill to land is managed to avoid adverse effects on groundwater, to:

- Ensure that excavations do not expose groundwater in excavations with the exception of small scale temporary test pits that are back filled within 30 minutes.
- Ensure that all backfill material is strictly managed to ensure it meets the requirements of Condition 115 of this consent and with the conditions of discharge permit RM220578.
- Minimise any change to the physical and chemical properties of groundwater as result of the land use and discharge activities associated with clean fill activities (as defined by the groundwater chemistry monitoring requirements specified in the GCMP).
- Ensure that activities are managed in a manner that seeks to avoid an exceedance of 50% of the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 and so that, under no circumstances the quarrying and clean fill activities cause the maximum acceptable values of the Water Services

(Drinking Water Services for New Zealand) Regulations 2022 to be exceeded in any existing water supply bore within a 500 m buffer zone downgradient of the quarry.

26. The GCMP shall be in general accordance with the draft GCMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

(a) Consent Compliance and Key Performance Indicators, to be consistent with these conditions of this consent and of discharge permit RM220578

(b) Clean fill materials

(c) Proposed clean fill management system

(d) Groundwater level monitoring and excavation controls

(e) Response and mitigation to a spill

(f) Groundwater quality monitoring

(g) Water quality complaints

(h) Reporting requirements

27. The Landscape Mitigation Plan, Stage 1 River Terrace Restoration Plan, and Maintenance and Establishment Plan required by condition 18(f) shall be prepared in general accordance with the plans prepared by Canopy, dated November 2022. These plans shall be prepared to ensure that the proposed landscape mitigation and restoration plantings successfully establish and shall include, as a minimum:

- Species and grade of plantings. The Consent Holder will use eco-sourced native species only, except for the use of poplar and eucalyptus species used in shelter belt planting where required to provide fast-growing visual screening of the site. Where such exotic species are used, they shall be removed from the site within 2 years of the cessation of the quarrying activity.
- Timing of plantings
- Preparation
- Setout and spacings. All plantings (other than grass) shall be set back at least 5m from the toe of stopbanks
- Mulching
- Pest management
- Staking and plant guards. Cardboard plant guards shall be used.
- Maintenance

- Replacement plantings

Confirmation shall be obtained from Council's River Engineer that the Landscape Mitigation Plan and Stage 1 River Terrace Restoration Plan are acceptable from a flood flow perspective prior to being certified under Condition 19.

28. The consent holder shall, prior to work on the vehicle entrance commencing, prepare and submit engineering drawings for the vehicle entrance upgrade to the Council's Team Leader - Monitoring & Enforcement for approval.

Earth bund (acoustic barrier and dust screen)

29. An earth bund of at least 3m height, as shown in the Canopy Landscape Mitigation Plan, shall be constructed prior to the commencement of quarrying activities on site to provide an acoustic barrier and dust screen to 131 Peach Island Road. The earth bund shall be grassed and shall be constructed with a layer of topsoil to enable this. The earth bund must be maintained for the duration of the consented activities.

Site meeting

30. The consent holder shall arrange for a site meeting between the consent holder's representative and the Council's assigned monitoring officer, which shall be held on site prior to any works commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Signage

31. Signage shall be installed on Motueka River West Bank Road to provide warning to oncoming vehicles of the potential presence of trucks. As a minimum, permanent warning signs (PW-50) "Trucks Crossing" signs shall be installed on West Bank Road either side of the site entrance, at a position to be confirmed with the Council's assigned monitoring officer.

Upgrade of vehicle entrance and site access

32. The consent holder shall remove the willow trees north and south of the entrance to the site on the eastern side of Motueka River West Bank Road and undertake trimming on the bank on the western side of Motueka River West Bank Road, as identified in the Traffic Concepts report submitted with the application, to improve site access visibility.

33. The consent holder shall undertake ongoing trimming of vegetation to ensure that visibility is not impaired and shall ensure that the sight distances at the intersection with

Motueka River West Bank Road meet the minimum requirements set out in Table 4-14 of the Nelson Tasman Land Development Manual 2020 (NTLDM).

34. The existing vehicle crossing at 493 Motueka River West Bank Road shall be upgraded/ formed generally to the standard shown in Diagram 2 of Drawing SD409 in the of NTLDM, except where modifications as approved by Council are necessary to ensure vehicle tracking and its connection to the new bridge are fit for purpose.

35. The vehicle access shall be formed to a minimum sealed carriageway width of 6m from the existing seal edge of Motueka Valley Westbank Road up to the western end of the bridge (approximately 35m from the edge of the existing seal) to allow for two trucks to pass by each other.

36. The proposed access, beyond the bridge, shall be formed to a sealed carriage width of generally no less than 3.5 with 0.5m gravel shoulders and side drains to drain to existing drain paths and/or soakpits. Localised widening on corners shall be provided to accommodate vehicle tracking, and a single passing bay, formed to NTLDM passing bay standards, shall be provided on the bend in the haul road within the marginal strip. The access shall be maintained for the duration of this consent by the Consent Holder.

Advice note

This consent does not grant access to the excavation area. Site access and management of the tracks should be arranged with the landowner.

37. The proposed access shall not connect to the southern end of Peach Island Road, unless requested to by Council.

Bridge

38. Prior to it being used under this consent, the appropriateness of the existing bridge across the overflow channel (located on Section 1 SO 15112) shall be assessed by a suitably qualified engineer to demonstrate compliance with Condition 39.

39. The bridge shall be able to carry Class 1 loads (or higher loads if the applicant proposes to use HPMV trucks for the operation), and any necessary upgrade or replacement to achieve this shall be carried out by the consent holder prior to the bridge being used under this consent.

40. The bridge shall be widened to at least 3.5m to match the proposed 3.5m access width.

Survey

41. The consent holder shall survey the boundaries of the unformed legal road and shall clearly identify the boundaries of the legal road on site. There shall be no extraction of gravel from the unformed legal road.

42. The consent holder shall survey the stopbank crossing point prior to works commencing and upon completion of the works. The consent holder shall repair / reinstate any damage caused to the stopbank crossing at the consent holder's cost.

Stopbank

43. The location of the toe of the stopbank adjacent to the proposed excavation sites shall be clearly identified and marked on site by a suitably qualified and experienced geotechnical professional or river engineer.

44. The 20m setback from the toe of the stopbank on both sides of the stopbank shall be clearly marked and maintained (e.g., by a fence) to ensure that earthworks (except for those required for the stopbank crossing required by Condition 46 do not encroach into the setback.

45. The construction of any fence within bermland (i.e., on the outer side of the stopbank – Stage 1), shall be of a post and wire construction only and, if required by the Council, shall be removed on completion of the works.

46. The consent holder shall form and maintain a ramp over the stopbank to provide vehicle access. This shall include a 200mm sacrificial gravel layer on top of the stopbank crest, which shall be maintained for the duration of, and removed upon completion of, the consented activities. The crest of the ramp shall be maintained so as to be no lower than the adjacent stopbank crest immediately up- and downstream of the ramp, to the satisfaction of the Council's Asset Engineer - Rivers.

47. The consent holder shall not block the stopbank, and shall ensure that it is available to the Council's Rivers Engineers at all times for flood monitoring.

Landscape mitigation and restoration planting

48. Within the first planting season following the granting of consent, landscape mitigation planting shall be carried out in accordance with the certified Landscape Mitigation Plan and Maintenance and Establishment Plan required by Condition 27.

49. All plantings (other than grass) shall be set back at least 5 m from the toe of the stopbank to minimise tree roots affecting the stopbank.

Baseline soil sampling and analysis

50. Prior to the commencement of quarrying activities on the site, baseline soil sampling and analysis shall be undertaken on the site by a suitably qualified and experienced practitioner in accordance with the certified SMP. The results of the baseline soil sampling and analysis shall be submitted to the Council's Team Leader - Compliance & Investigation prior to the commencement of quarrying activities on the site.

Operational conditions

Dust

51. There shall be no noxious, dangerous, objectionable or offensive dust beyond the boundary of the site.

52. Specific dust control measures described in the DMMP shall be implemented. These dust control measures shall reflect the best practical option and be undertaken in accordance with the accepted best practice.

53. No material shall be disturbed during periods of high wind (>7.5m/s) and where there are sensitive receptors within 250m in a downwind direction. No excavations shall be undertaken if high wind is forecast in the period before measures can be implemented to secure the excavated area and any stockpiles from the effects of dust generation. This condition does not prevent the consent holder from backfilling excavations with clean fill if groundwater levels are rising.

54. No quarrying activities shall take place within 100m of orcharding activities on neighbouring properties between the months of January and May (inclusive).

    For the avoidance of doubt: Condition 104 limits Stage 1 quarrying and placement of clean Fill, subsoil and soil to the months of October to March and thus, Stage 1 quarrying and placement of Clean Fill, subsoil and soil within 100m of orcharding activities can only take place in October, November and December.

    For the purpose of this consent, 'orcharding activities' shall include flowering, pollination, fruit set, fruit growth, ripening and harvest of fruit.

55. No soil stockpiles may be placed within 100 m of orcharding activities on neighbouring properties.

56. Only water shall be used for dust suppression. The Consent Holder will not use polymer or chemical stabilization methods, including Waste Oil or Reprocessed Oil, to control dust.

57. The consent holder shall establish a meteorological station and undertake meteorological monitoring (i.e., wind direction, wind speed, temperature and relative humidity) on site and store this data electronically. The data shall be made available to the Council's Team Leader - Compliance and Investigation on request. The meteorological monitoring station shall be located and established so as to be, to the extent practicable on site, consistent with AS/NZS 3580.1.1:2016.

Surface water quality

58. Land disturbance shall not result in runoff of sedimentation that results, after reasonable mixing, in any of the following effects in the receiving waters:

    (a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
    (b) any conspicuous change in the colour or visual clarity:
    (c) any emission of objectionable odour:
    (d) the rendering of fresh water unsuitable for consumption by farm animals:
    (e) any significant adverse effects on aquatic life.

Noise

59. Vehicles operating on site shall be fitted with broadband, rather than tonal, reversing alarms.

60. Trucks operating on site shall be fitted with plastic deck liners to reduce impact noise as loads are added. The plastic liners shall be maintained for the duration of the consented activities.

61. Noise associated with construction activities on site (such as construction of the noise bund and haul roads) shall not exceed 70dB $_{LAeq}$ and 85dB $_{LAFmax}$ when measured 1m from the most exposed façade of any dwelling located beyond the subject site. Construction noise shall be measured and assessed in accordance with the provisions of NZS6803:1999 Acoustics – Construction noise.

62. The consent holder shall ensure that all other activities on site (other than construction work) are designed and conducted, and all equipment used on site is maintained, so that noise generated by activities on site does not exceed a noise level of 55 dBA $_{Leq}$ (day) when measured at or within the notional boundary of any dwelling.

    All noise (other than construction noise) shall be measured and assessed in accordance with the provisions of NZS6801:2008 – Acoustics – Measurement of environmental sound and NZS 6802:2008 - Acoustics - Environmental Noise.

Advice note

Construction work relates to activities defined as construction under NZS6803:1999. This includes the construction of the earth bund and the haul road, but not the gravel extraction operation or truck movements on site.

63. Within three (3) months of the quarry activity commencing and when and all relevant noise-generating activities (gravel extraction, loading, truck movements) are occurring on site, the consent holder shall provide a noise monitoring report for the gravel extraction operation to determine compliance with the consented noise limits in Conditions 61 and 62.

    A noise monitoring report may also be required on request by council's Team Leader Environmental Health where noise complaints are received.

    The noise monitoring locations for the noise monitoring report must be representative of the most affected receivers. The monitoring shall be carried out by a suitably qualified and experienced person and shall be undertaken in accordance with NZS6801:2008 Acoustics - Measurement of environmental sound and NZS6802:2008 Acoustics – Environmental noise. The noise monitoring report shall be provided to the Team leader Environmental Health, Tasman District Council.

    If the monitoring report shows that noise rating levels exceed the noise limits set out in Conditions 61 and 62, then the applicant shall cease works until they provide details of how works will be undertaken to ensure compliance with the noise limits set out in Conditions 61 and 62.

Hours of work

64. Work shall only be carried out between 7:00 am and 5:00 pm Monday to Friday. No heavy machinery shall be operated on site earlier than 7.30am. No operations shall occur on Saturdays, Sundays, public holidays, or between 20 December and 10 January (inclusive) the following year (Christmas holiday period).

Access and vehicle entrance

65. Access to the site by vehicles associated with quarrying activities shall only be via the upgraded vehicle crossing at 493 Motueka River West Bank Road.

Advice note

This consent does not grant access to the excavation area. Site access and management of the tracks should be arranged with the landowner.

Traffic movements

66. The activity shall generate no more than 30 truck movements per day (a return trip being two truck movements). A truck may include a trailer.

    ### Advice note

    This includes all truck movements, whether cleanfill, aggregate or empty, including those transporting fill from other sites

67. All vehicles shall observe a speed limit of 15 kilometres per hour when travelling within the site (including on haul roads). It is the consent holder's responsibility to inform drivers of this speed limit.

68. All trucks associated with the activity must use Motueka River West Bank Road from 493 Motueka River West Bank Road to Alexander Bridge.

69. All trucks shall observe a speed limit of 60 kilometres per hour when travelling along Motueka River West Bank Road.

70. All trucks shall be fitted with GPS based speed and route logging and records shall be supplied to the Council's Team Leader - Compliance and Investigation on request. The GPS system shall be set up to provide alerts to the quarry manager if the speed limits, specified in the conditions above are exceeded and shall keep a record of truck routes and vehicle movements

Site management

71. All operations at the site shall be undertaken in accordance with the certified NMP, DMMP, GCMP and SMP.

72. No processing, washing, crushing or screening of gravel shall be carried out on the site.

73. The consent holder shall maintain the site in a clean and tidy manner. Redundant machinery and equipment not required for the operation of the quarry (or for other residential and farming activities on the site) shall be removed from site.

74. The consent holder shall undertake pest plant management across the site for the duration of the consent.

75. No backfill or any other material shall be stored or stockpiled on the river side (outside) of the stopbank, except for topsoil awaiting reinstatement placement on that day. In the event that there is temporarily stockpiled material on the river side of the stopbanks and heavy rain is forecast, the stockpiled material shall be relocated to the landward side of the stopbank.

76. Stockpiled materials (excluding soil and any materials to be used for backfilling on the same day) shall be located in the area identified on the Landscape Mitigation Plan as 'Stockpile and Service Area'. This area shall be excavated to a level 1m below existing ground level. Stockpiles in this area shall be managed so as to be no greater than 4m in height above the lowered ground level (3m above surrounding ground level).

Advice note

For the avoidance of doubt: this condition does not relate to soil stockpiles, which are subject to Condition 95.

77. No excavations shall be undertaken if heavy rain is forecast in the period before measures can be implemented to secure the excavated area and any stockpiles from the effects of overland flows.

78. If heavy rain is forecast, heavy machinery shall be moved inside the stopbank for overnight storage. This condition is not intended to prevent machinery from backfilling excavations to meet other conditions of this consent or RM220578 under conditions of rising groundwater levels.

79. All practicable measures shall be undertaken to prevent, as a result of the works:

(a) erosion of the Motueka River berm; and
(b) the discharge of sediment to the Motueka River.

Advice note

This consent does not authorise the discharge of any sediment to water. Relevant TRMP and / or national environmental standards permitted rules must be met or consent applied for accordingly.

Refuelling and spill management

80. All machinery shall be maintained and operated in such a manner minimising, so far as practicable, any spillage of fuel, oil and similar contaminants to water or land, particularly during machinery refuelling.

81. No refuelling or machinery maintenance shall be undertaken within 20 metres of surface water (including exposed groundwater).

82. No heavy vehicle maintenance apart from servicing (e.g., an oil change by trained personnel) shall occur on site.

Advice note

An example of heavy vehicle maintenance is engineering maintenance, such as work on a digger bucket.

83. In the event of a spill of machinery oil (including hydraulic oil) or fuel from excavation machinery, all works shall cease and measures must be taken to limit the extent of the spill. Any contaminated strata or spill response material must be excavated and removed from the site and disposed of at an appropriate disposal facility (subject to approval of the disposal facility). If any spill occurs within an excavation pit, or if any spill greater than 20 litres occurs elsewhere on the site, the site operator must immediately notify the Tasman District Council Pollution Incident contact number and Council's Team Leader – Compliance and Investigation. Based on the magnitude and type of the spill, and in consultation with TDC, the consent holder shall undertake groundwater quality monitoring of downgradient monitoring bores and drinking water supply bores in accordance with the groundwater monitoring, assessment and response requirements of the consent conditions for RM220578.

84. Fuel shall be stored securely or removed from site overnight.

Groundwater Level Monitoring

85. The Consent Holder shall monitor groundwater levels in two dedicated upgradient monitoring bores located at the southern extent of the site (bores 24544 and 24546) and two dedicated downgradient monitoring bores located at the northern extent of the site (bores 24543 and 24545).

    All groundwater level measurements:

    (a) Shall be measured to a local common relative level to the nearest 10 mm accuracy (i.e., Nelson vertical datum 1955, NZVD 2016 or similar).

    (b) Shall be recorded via a tamper-proof electronic recording device such as a data logger(s) that shall record groundwater levels taken at least once every 60 minutes.

    The groundwater level recording device:

    (c) Shall be connected to a telemetry system that collects and stores all of the data continuously with an independent network provider. No data shall be deliberately changed or deleted.

    (d) Shall be accessible to Tasman District Council at all times for inspection and/or data retrieval.

86. The Consent Holder shall use all the groundwater level measurement data to generate groundwater level elevation contour maps on a daily basis for the entire clean fill area that can be accessed by the Clean Fill Operator and excavator operator(s). The

groundwater elevation contour maps will be used daily to inform the excavator operator(s) of excavation depths (outlined in Conditions 88 and 89).

Excavation

87. All excavation shall be undertaken in accordance with the GCMP to ensure that excavations do not occur below a level 0.3m above actual ground water level at the time of excavation, except as provided for under Condition 91.

88. All excavations between 0.3 and 1 m above groundwater level shall only occur during stable weather conditions which are defined as:

    (a) Decreasing or stable groundwater level trends, based on the measurements described in Condition 85; and

    (b) Decreasing or stable flow within the Motueka River as measured at the TDC Woodmans Bend flow recorder site.

89. Excavations between 0.3 and 1 m above groundwater level shall immediately cease and backfilling shall occur if any of the following occur:

    (a) Tasman District Council issue any flood warnings for the Motueka River catchment.

    (b) Any weather warnings are issued for the Nelson/Tasman region that might be expected to cause groundwater levels at the clean fill to rise.

    (c) When groundwater levels measured in Condition 85 display an increasing trend.

90. All onsite excavation machinery used for excavation of pit(s) shall be equipped with onboard GPS and elevation systems that will determine the elevation of the digging implement (i.e., excavator bucket). The onboard GPS and elevation systems shall record elevation measurements to a local common relative level (as per Condition 85(a) (i.e., Nelson vertical datum 1955, NZVD 2016 or similar).

91. To assess the occurrence of groundwater beneath the excavation, the Consent Holder shall ensure that the excavator operator(s) undertakes a temporary excavation down to a depth of 1 m below the working level of the excavation on each day when excavation is occurring. This check on the occurrence of groundwater will be used to inform the depths to which excavations can occur on that day, as per Table 1 of the GCMP. Only the digging implement of the excavator shall enter the temporary excavation and if groundwater is encountered, the excavation shall be back filled within 30 minutes of the groundwater being observed, to at least 0.3 m above the level at which groundwater was encountered. The backfilling material must be the same material that was excavated to create the temporary excavation.

92. If any of the triggers described in Condition 89 occur, then backfilling of the excavation to maintain at least 1 m above groundwater level at the time of the excavation but no more than the elevation of pre-quarry land surface shall occur, taking into account land surface restoration requirements.

93. If any uncontrolled exposure of groundwater occurs in the excavation pit(s) all excavation activities shall cease. Placement of clean fill material must occur as soon as practicable to fill in the exposed groundwater.

94. The Consent Holder shall notify their consent compliance monitoring officer at Tasman District Council if groundwater enters the excavation pit area. This requirement does not apply to test-pitting provided for under Condition 91.

95. Topsoil (A Horizon) and subsoil (B and C Horizons) shall be stripped and stockpiled separately for the purpose of reuse on site. All soil stockpiles shall be:

    (a) no more than 3 metres in height;
    (a) stored on site for no more than 6 months before use. Any stockpiled stored for greater than one month shall be covered or vegetated with grass to reduce soil damage and loss caused by rain.

96. Machinery movement over stockpiled soil is prohibited, other than in the construction of the proposed noise bund on the northern boundary. This condition is applicable to all excavation, backfilling and soil rehabilitation activities.

97. Topsoil and subsoil shall only be excavated in dry soil condition, as defined in the SMP.

98. Any excavation in berm land (Stage 1) shall occur in strips aligned parallel to the general direction of flood flow across the berm land. No individual strip shall be wider than 20 m.

99. The excavation shall be progressively backfilled so that the maximum size of excavation open at any one time shall not exceed 1600m^2 (generally 20 m in width and 80 m in length).

100. Sufficient Clean Fill shall always be available on the site for backfilling of any excavation to 1m below original ground level.

Advice Note:

This condition is volunteered to demonstrate that there will, at all times, be sufficient Clean Fill available to enable backfilling of the excavation pit, in the event of rising groundwater levels.

101. The number of excavations open at any one time shall not exceed one, except when the excavation of one strip has been completed and the excavation of a new strip is commencing, in which case two open excavations are permitted.

102. Excavation works shall commence at the most upgradient (with respect to groundwater flow) end of the Stage, this being generally the southern end of the Stage.

103. Stage 1 is to be quarried in 3 tranches, with a maximum of one third of the Stage 1 area to be actively quarried or being remediated at any time. Subsequent tranches within Stage 1 shall only commence when the previous tranche has been rehabilitated to the point that a vegetated cover is established.

Advice Note:

For the avoidance of doubt: the maximum size of open excavation within a tranche shall not exceed 1600m2 as required by Condition 99.

104. Stage 1 quarrying and placement of Clean Fill, subsoil and soil is only to take place during the months of October to March (inclusive), in order to ensure a vegetated cover is established before winter.

For the avoidance of doubt: Condition 54 also requires that no quarrying activities shall take place within 100m of orcharding activities on neighbouring properties between the months of January and May (inclusive) and thus, Stage 1 quarrying and placement of Clean Fill, subsoil and soil within 100m of orcharding activities can only take place in October, November and December.

For the purpose of this consent, 'orcharding activities' shall include flowering, pollination, fruit set, fruit growth, ripening and harvest of fruit.

105. There shall be no excavation, removal of gravel or other disturbance of land within 20m of the toe of the stopbank. For the avoidance of doubt, this applies on both sides of the stopbank.

106. Excavations shall maintain a 20m setback from the southern boundary of the Stage 3 extraction area, shared with the neighbouring title (Lot 3 DP 1650, comprised in RTNL58/75).

107. Excavations adjacent to property boundaries or adjacent to the 20m setback from the toe of stopbanks shall not exceed (be steeper than) the following batter angles:

(a) Lower Gravels to be battered at 1H:1.3V max;

(b) Upper mantle to be battered at 1H:1.7V max.

These batter angles may only be exceeded adjacent to property boundaries where the adjacent landowner agrees in writing to a proposal such that the consent holder is to repair/reinstate any damaged land caused by shallow surficial landslips during the gravel extraction pit works.

108. At the commencement of each Stage of excavation, the initial excavation shall be inspected by a Geo-professional so that they can verify that the above batter angles are appropriate given actual exposed ground conditions. The Geo-professional shall at the same time undertake test-pitting across the remainder of the Stage area and advise on the depths of upper mantle/lower gravel materials. If, during excavations over the remainder of the Stage the Consent Holder identifies any unforeseen ground conditions during the gravel pit extraction works (i.e. deep layer of topsoil than anticipated test-pitting) then a Geo-professional shall inspect and advise what further steps (if any) are required to ensure ongoing land stability for the remaining duration of the Stage.

109. Appropriate stormwater controls shall be put in place to avoid concentrated stormwater flows discharging onto temporary cut slopes (within excavation pits).

110. No excavations shall occur within 20 m of flowing, open waterways.

111. The consent holder shall check Stage 1 excavations in the vicinity of Shaggery Stream/ the Peach Island overflow channel for seepage inflows. If seepage inflows are observed to enter the excavation area, excavation in this area shall be restricted to times of low or no streamflow to avoid any seepage effects.

Backfilling

112. During the course of excavations, backfilling shall be undertaken as soon as practicable. Any excavated area in a particular location shall not remain open for longer than 6 months.

113. Commencement of clean filling within a Stage shall occur at locations at the greatest upgradient distance from any water supply bores, as far as can practicably be achieved.

114. Backfilling shall be to 0.8m - 1m below the finished levels on site as specified in the Contour Plan required by Condition 21.

115. Only material that meets the requirements of Table 1 below shall be imported to the site for backfill.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
Materials sourced onsite.	• Uncontaminated natural material such as soil, clay, rock and gravel. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load	• Contaminated soil, clay, rock and gravel. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
	of incidental and is limited to incidental organic materials.	and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Materials sourced offsite	• Uncontaminated natural material such as soil, clay, rock and gravel. Compliance with this definition will be achieved by testing a representative composite sample of imported fill material to demonstrate that total soil contaminant concentrations do not exceed regional soil background concentration limits[2]. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Any material sourced from any site listed on the Tasman District Council Hazardous Activities and Industries List (HAIL) register (as defined by the Ministry for the Environment) or any site where the Clean fill Operator has a reasonable expectation of HAIL activities occurring, even if it is not listed on TDC's HAIL register and for both these categories of sites, the HAIL activity is known to have been occurring, or could be reasonably expected to be known to have been occurring, before the date the clean fill material is received. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.

Notes: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.
[2] Relevant regional soil background concentration limits are the 99th percentile values provided in Table 5 of Cavanagh (2015) 'Background concentrations of trace elements and options for managing soil quality in the Tasman and Nelson Districts. Landcare Research. June 2015. For clarity, these are reproduced below:

Element	As	Cd	Cr-hi	Cr-lo	Cu	Pb	Ni-hi	Ni-lo	Zn
99th percentile	11	0.90	183	93.5	41.5	33	274.4	55.4	141.5

Furthermore, any material, that is understood to comply with the Table 1 definition, but displays visual or olfactory evidence of contamination, shall be rejected.

116. Any backfill material sourced from offsite shall only be brought to the site by the Consent Holder and shall be pre-screened for compliance with these clean fill requirements before being brought to site in accordance with the Clean Fill Procurement SOP detailed at Appendix A of the draft GCMP. A record shall be kept of all clean fill used as backfill. The record shall be in accordance with the requirements specified in the Clean Fill Procurement SOP. This record shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

117. Any part of an excavation pit that has been backfilled with clean fill shall not be re-excavated to enable further quarrying.

118. Light-tracked machinery or flotation tyred vehicles must be used for the placement of the clean fill.

Reinstatement and rehabilitation

119. Following completion of soil restoration and rehabilitation activities, restored soils shall achieve the following:

    (a) The replaced topsoil (A horizon) shall be of a depth that ensures a minimum thickness of 150 mm across the whole Site.

    (b) The replaced subsoil (B and C horizons) shall be of a depth that ensures that a minimum total soil profile depth (including topsoil (A horizon) and subsoil (B and C horizons)) of 800 mm is achieved.

    (c) A minimum of 800 mm of soil material (excluding clean fill) with little or no limitations to root penetration. As a guide, soil penetration resistance should not exceed approximately 2300 kPa.

    (d) Soil profile condition to be such that there is no obvious contrasting compacted layers within the restored soil profile, especially between the subsoil and the topsoil, and no visually obvious compaction within the upper 300–400 mm of topsoil.

    (e) Soil drainage of the reinstated soil in the Stage 2 and Stage 3 areas be at least moderately well or well drained.

    (f) Soil drainage of the reinstated soil in the Stage 1 area be at least imperfectly drained, preferably moderately well or well drained where the inherent soil drainage characteristics of the land allow..

120. Subsoil and topsoil shall be reinstated, and ongoing management shall be undertaken, in accordance with the methodology specified in the certified SMP. Subsoil and topsoil

shall be placed to reinstate the land to the finished levels on site as specified in the Contour Plan required by Condition 21. Additional topsoil may need to be added following any settlement of the reinstated land surface.

121. Topsoil and subsoil shall only be reinstated in dry soil condition, as defined in the SMP.

122. After soil replacement is completed, only machinery used for gravel extraction, and clean fill or soil removal and placement activities shall be allowed to travel over the restored soil surface, to minimise compaction.

123. Following the placement of the new soil profile, the consent holder shall engage a suitably qualified agronomist to advise on fertiliser application and other soil treatments to encourage effective revegetation.

124. Fertiliser shall be applied following the recommendations of the agronomist to facilitate pasture establishment, increase fertility and promote and maintain even revegetation.

125. Revegetation of reinstated areas shall occur within a month of reinstatement of the soil and be actively managed following revegetation (as detailed in the SMP) to ensure full vegetative cover is achieved and maintained. This revegetation requirement relates also to areas where additional topsoil is added to the land surface to rectify any settlement of the reinstated land surface.

126. The consent holder's responsibility with regard to revegetation shall not be considered to be met until a complete, healthy, predominantly rye grass/white clover sward has been achieved over the worked areas.

127. Within the first planting season following the completion of the Stage 1 quarrying activities (including soil rehabilitation), restoration planting of the Stage 1 area shall be undertaken in accordance with the certified Stage 1 River Terrace Restoration Plan and Maintenance and Establishment Plan required by Condition 27.

Accidental Discovery Protocol (ADP)

128. In the event of any Māori wāhi tapu/ Māori cultural sites of significance (e.g. midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga) or kōiwi (human remains) being uncovered, activities in the vicinity of the discovery shall cease. The consent holder shall notify a representative of Te Rūnanga o Ngāti Rārua and Te Ātiawa o Te Waka a Māui Trust and Heritage New Zealand Pouhere Taonga Central Regional Office (phone 04 494 8320) and shall not recommence works in the area of the discovery until the relevant approvals to damage, destroy or modify such sites have been obtained.

Advice Note:

At the time this consent was granted the contact details for Te Rūnanga o Ngāti Rārua:

56 Vickerman Street, Port Nelson, Nelson 7010, Phone (03) 553-1198, Email taiao@ngatirarua.iwi.nz

And, for Te Ātiawa o Te Waka a Māui Trust:

Beach Road, Waikawa Marina, Waikawa, Picton 7220, Phone (03) 573 5170, Email taiao@teatiawatrust.co.nz

Advice Note:

In the event that kōiwi (human remains) are uncovered, the New Zealand Police will need to be contacted to assess the site.

Reporting & monitoring

129. Monitoring and reporting of groundwater levels and groundwater quality shall be undertaken in accordance with the approved GCMP, and the conditions of discharge permit RM220578.

130. Monitoring and reporting in relation to dust management shall be undertaken in accordance with the requirements of the certified DMMP.

131. Monitoring and reporting in relation to soil properties shall be undertaken on the site in accordance with the certified SMP, and results provided to Council.

132. The consent holder shall maintain a complaints register, which shall detail the following as a minimum:

    (a) The person responsible for the complaints register and appointment of a nominee who can be contacted in case of concerns/ complaints arising;
    (b) The location, date and time of the complaint;
    (c) The nature of the complaint (e.g., noise, dust, vehicle speeds etc.);
    (d) A description of weather conditions at the time of complaint (notably wind speed and direction as per the meteorological monitoring required by condition 57);
    (e) Any identified cause of the complaint;
    (f) The action(s) taken to investigate and if appropriate remedy the issue, with particular regard to any complaints and response procedures detailed in any management plan that is relevant to the nature of the complaint.

133. The consent holder shall inform the Council's Team Leader -Compliance and Investigation within one working day of any complaint being received.

134. The complaints register shall be forwarded to the Council's Team Leader - Compliance and Investigation and Te Rūnanga o Ngāti Rārua and Te Ātiawa Manawhenua Ki Te Tau Ihu Trust on request.

135. A contact number of the nominee detailed in the complaint's register shall be provided to all property owners and occupiers within 500m of the quarry site.

136. The consent holder shall, no more than 20 working days following the completion of each Stage of work (this shall apply to the completion of each tranche within Stage 1), notify the Council's Team Leader - Compliance and Investigation. Notification shall be in writing and include a visual representation (such as photo or video) of the completed Stage/ tranche of work.

137. The consent holder shall keep a daily record of the weight of gravel extracted, which shall be submitted on a monthly basis to the Council's Team Leader - Compliance and Investigation.

Advice Note:

Returns are to be submitted in "solid measure". A multiplier of 0.80 should be used to convert "truck measure" to "solid measure".

138. Cultural Health Indicator (CHI) monitoring shall be undertaken in accordance with the framework developed under Condition 16 of this consent. The cost shall be covered by the Consent Holder. Monitoring shall occur prior to works, mid-way through the project, on completion of works, and two years post-works to assess remediation and enhancement measures.

Following completion of works

139. Following completion of the works, the consent holder shall confirm with the Council's Transportation Manager whether:

(a) the section of unformed legal road ("paper road") used to access the application site shall either be returned to pasture at the consent holder's cost; or
(b) retained in its current form.

140. No less than 5 years after the completion of quarrying and backfilling activities are completed for each Stage, the consent holder shall undertake a topographic survey to NZVD 2016 (or similar datum) of the final levels on site, with intervals at 0.2 metres, as required by Condition 18(a). This is to demonstrate that the site has been remediated to achieve pre-quarrying contours. This shall be forwarded to the Council's Team Leader - Compliance and Investigation.

141. Any exotic species used for Landscape Mitigation Planting (Condition 27) shall be removed from the site within 2 years of the cessation of the quarrying activity.

Resource consents sought for:

RM220578 Discharge of contaminants being cleanfill to land

Note: These conditions should be read in conjunction with the consent conditions for the associated land use consents RM200488 (land use consent to disturb land and rehabilitate for the purpose of gravel extraction within the Rural 1 Zone) and RM200489 (land use consent to erect signage and establish access via an unformed legal road).

General

1. The consent holder shall ensure that all works are carried out in general accordance with:

   (a) the application documents received by the Council on XX

   (b) further information provided on and 2 September 2022;

   (c) the evidence received on 15 July 2022 and 4 November 2022;

   Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.

2. The consent holder shall ensure all persons undertaking activities authorised by this resource consent are made aware of the conditions of the consent and ensure compliance with those conditions. A copy of the consent documents shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

3. Where conditions of this consent require the involvement of a suitably qualified and experienced groundwater scientist, this person shall not be an employee of the Consent Holder.

Review

4. For the purposes of, and pursuant to section 128 of the Resource Management Act 1991 ('the Act'), the Council reserves the right to review this consent annually during the month of XXX, for the purposes of:

   (a) dealing with any adverse effect on the environment which may arise from the exercise of this consent that were not foreseen at the time of granting of the consent, and which it is therefore more appropriate to deal with at a later stage; and/or

   (b) requiring the consent holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the exercise of this consent.

   (c) requiring compliance with operative rules in the Tasman Resource Management Plan or its successor; or

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(d) requiring consistency with any relevant regional plan, district plan, national environmental standard or Act of Parliament.

(e) To update 'regional soil background concentration limits', as relevant to Table 1 in Condition 17 below.

Lapse and expiry

2.5. Pursuant to section 125 of the Act, this consent shall lapse 5 years after the date ~~of issue of the consent~~it commences unless either the consent is given effect to, or the Council has granted extensions pursuant to section 125(1A)(b) of the Act.

3.6. This consent shall expire 17 years after the date it ~~commences~~is given effect to.

4.7. The discharge of clean fill to land shall cease no later than 15 years after the date this consent commences.

Prior to the work

5.8. The Consent Holder shall notify Council's Team Leader - ~~Monitoring & Enforcement~~Compliance and Investigation ~~shall be notified~~ in writing:

(a) A minimum of 15~~0~~ working days prior to commencement of discharge to land; and

(b) Prior to the recommencement of work where works have been discontinued for more than one month.

Notification shall include:

(a) The proposed start date for the period of work; and

(b) The name and contact details of the following persons:

(i) A representative nominated by the consent holder who shall be the Council's principal contact person in regard to matters relating to this resource consent; and

(ii) The Site Manager (if not the consent holder's representative).

Should either of the above persons change during the term of this resource consent, the consent holder shall provide the new name and contact details, in writing, to the Council's Team Leader - Compliance and Investigation ~~Monitoring & Compliance~~ within five working days.

Site meeting

6.9. The consent holder shall arrange for a site meeting between the consent holder's representative and the Council's assigned monitoring officer, which shall be held on site prior

to any works commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Submission of plans

10. The consent holder shall, at least 150 working days prior to the commencement of works, prepare and submit a Groundwater and Clean Fill Management Plan (GCMP) prepared in accordance with Ceondition 120 to the Council's Team Leader - Compliance and Investigation Monitoring & Enforcement for certification. No works shall be undertaken until this management plan has been certified by the Council's Team Leader - Compliance and InvestigationMonitoring & Enforcement, unless Ceondition 119 is invoked.

Advice note

Certification of the management plans above is in the nature of certifying that adoption of the management plans will result in compliance with the conditions of this consent.

7.11. The following shall apply in respect of Ceondition 108:

(a) the consent holder may commence the activities in accordance with the submitted plans 2015 working days after their its submission, unless the Council advises the consent holder in writing that it refuses to certify them it on the grounds that it fails to meet the requirements of the condition and gives reasons for its decision; and

(b) should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (a) shall apply to any resubmitted plan.C

(b)(c) Any subsequent amendments to the plan required by condition 10 must be made in writing and be certified by the Council's Team Leader - Compliance & Investigation, prior to being implemented. Conditions 11 (a) and (b) shall apply to any submitted amendments.

8.12. The GCMP required by Ceondition 108 shall demonstrate the best practicable option to ensure that discharge of clean fill to land is managed to avoid adverse effects on groundwater, to:

- Ensure that excavations do not expose groundwater in excavations with the exception of small scale temporary test pits that are back filled within 30 minutes.
- Ensure that all backfill material is strictly managed to ensure it meets Condition 174 below).
- Minimise any change to the physical and chemical properties of groundwater as a result of the land use and discharge activities associated with clean fill activities (as defined by the groundwater chemistry monitoring requirements specified in the GCMP).

- Ensure that activities are managed in a manner that seeks to avoid an exceedance of 50% of the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 and so that, under no circumstances the quarrying and clean fill activities cause the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 to be exceeded in any existing water supply bore within a 500 m buffer zone downgradient of the quarry~~under no circumstances will the land use and discharge activities associated with quarry activities result in groundwater quality exceeding the acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 in downgradient water supply bores~~.

~~9.~~13. The GCMP shall be in general accordance with the draft GCMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

(a) Consent Compliance and Key Performance Indicators, to be consistent with these conditions of consent

(b) Clean fill materials

(c) Proposed clean fill management system

(d) Groundwater level monitoring and excavation controls

(e) Response and mitigation to a spill

(f) Groundwater quality monitoring

(g) Water quality complaints

(h) Reporting requirements

14. At least four groundwater samples (one year of samples) shall be collected from the dedicated monitoring bores listed in Condition 19((a)) prior to the commencement of clean filling activities.

Operational conditions

Backfilling controls

~~10.~~15. Backfilling on site with clean fill shall be undertaken in accordance with the certified GCMP.

~~11.~~16. Commencement of clean filling within a Stage shall occur at locations at the greatest upgradient distance from any water supply bores, as far as can practicably be achieved.

~~12.~~17. Only material that meets the requirements of Table 1 below shall be imported to the site for backfill. Furthermore, any material, that is understood to comply with the Table 1 definition, but displays visual or olfactory evidence of contamination, shall be rejected.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
Materials sourced onsite.	• Uncontaminated natural material such as soil, clay, rock and gravel. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Materials sourced offsite	• Uncontaminated natural material such as soil, clay, rock and gravel. Compliance with this definition will be achieved by testing a representative composite sample of imported fill material to demonstrate that total soil contaminant concentrations do not exceed regional soil background concentration limits[2]. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Any material sourced from any site listed on the Tasman District Council Hazardous Activities and Industries List (HAIL) register (as defined by the Ministry for the Environment) or any site where the Clean fill Operator has a reasonable expectation of HAIL activities occurring, even if it is not listed on TDC's HAIL register and for both these categories of sites, the HAIL activity is known to have been occurring or could be reasonably expected to be known to have been occurring, -before the date the clean fill material is received. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.

Notes: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.

[2] Relevant regional soil background concentration limits are the 99th percentile values provided in Table 5 of Cavanagh (2015) 'Background concentrations of trace elements and options for managing soil quality in the Tasman and Nelson Districts. Landcare Research. June 2015.. For clarity, these are reproduced below:

Element	As	Cd	Cr-hi	Cr-lo	Cu	Pb	Ni-hi	Ni-lo	Zn
99th percentile	11	0.90	183	93.5	41.5	33	274.4	55.4	141.5

~~Note: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.~~

Furthermore, any material, that is understood to comply with the Table 1~~Table 1~~ definition, but displays visual or olfactory evidence of contamination, shall be rejected.

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~~13.~~18. Any backfill material sourced from offsite shall only be brought to the site by the Consent ~~Holder, and~~Holder and shall be pre-screened for compliance with these clean fill requirements before being brought to site in accordance with the Clean Fill Procurement SOP detailed at Appendix A of the draft GCMP. A record shall be kept of all clean fill used as backfill. The record shall be in accordance with the requirements specified in the Clean Fill Procurement SOP. This record shall be kept available on ~~site, and~~site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

Groundwater quality monitoring

~~14.~~19. The following monitoring of groundwater will be undertaken:

(a) Collection of groundwater samples from at least one dedicated monitoring bore located upgradient at the southern extent of the quarry areas (i.e. Bore 2 (24544 or Bore 4 (24546), representative of background water quality) and at least two dedicated bores located downgradient of the quarry site near the northern extent of the quarry (i.e. Bore 1 (24543) and Bore 3(24545)) as shown in Figure 1 (attached to these conditions).

(b) Groundwater samples from the dedicated monitoring bores listed in Condition ~~16~~19((a)) ~~will~~ shall be collected at three monthly intervals. ~~At least four samples (one year of samples) will be collected prior to the commencement of clean filling activities and~~S ~~s~~ampling ~~will~~ shall continue until two years after clean filling activities cease.

(c) Collection of groundwater samples from a dedicated monitoring bore located at or about coordinates 1595980 mE / 5447316 mN (NZTM2000) (proposed additional monitoring bore – Bore 5 as shown in Figure 1) shall ~~will~~ be undertaken at monthly intervals. At least two samples shall ~~will~~ be collected prior to the commencement of clean filling activities and sampling shall ~~will~~ continue until two years after clean filling activities cease. Prior to establishing this dedicated monitoring bore, the exact location of neighbouring water supply bore 24135 shall be determined (provided that the approval of the land/ bore owner is obtained to do so), to ensure that the dedicated monitoring bore is sited in the most representative upgradient location of bore 24135, as agreed between the Consent Holder and the suitably qualified and experienced groundwater scientist. If access from this land/ bore owner of bore 24135 is not forthcoming, the monitoring bore shall be located at or about the coordinates given above.

20. The five dedicated monitoring bores referred to in Condition ~~16~~ 19 shall allow groundwater samples to be collected across the full the range of groundwater level fluctuations.

If for any reason a groundwater sample cannot be collected, a suitably qualified and experienced groundwater scientist shall recommend, and the consent holder shall undertake, an appropriate alternative for sampling groundwater.

~~15.~~21. The five dedicated monitoring bores referred to in Condition 1~~9~~6 shall be made accessible to the Tasman District Council at all times for the purpose of groundwater sampling.

~~16.~~22. Groundwater samples shall also be collected annually from all water supply bores located within 500 m downgradient of the clean fill, subject to approval of the bore owner(s) and the landowner(s). All bores within 500m downgradient of the fill activities shall be identified (subject to land/ bore owner approval), irrespective of whether or not these are identified on Council's register of bores. This sampling shall ~~will~~ continue until two years after clean filling activities cease.

Advice note

This condition has been volunteered by the Applicant.

~~17.~~23. Prior to the collection of the initial groundwater samples from the water supply bore(s) in accordance with Condition 22~~19~~, the Consent Holder shall undertake a bore condition survey (by a suitably qualified and experienced groundwater scientist) to identify any existing potential sources of contamination related to the condition of the bore head or its proximity to localised sources of contamination.

~~18.~~24. The Consent Holder shall ensure that all groundwater samples shall be taken by a suitably qualified and experienced practitioner using methods described in the NEMS document "Water Quality – Part 1 of 4: Sampling. Measuring, Processing and Archiving of discrete Groundwater Quality Data" (2019). All samples for dissolved metal analysis must be filtered through a 0.45-micron filter onsite before being placed into an acid preserved sampling bottle.

All samples must ~~analysed~~be analysed for the contaminants listed in Table 2 by an International Accreditation New Zealand (IANZ) laboratory.

All testing shall be at the full expense of the consent holder.

Table 2: Water quality parameters and trigger concentrations		
Parameter	**Trigger concentration**	**Note**
Depth to water level	-	Measured prior to purging (where possible)
pH	<6.5 or >8.5	field and laboratory measurement – trigger value taken from Miners Road Consent example (CRC204349), recognising shallow groundwater naturally has a low pH.
Electrical Conductivity	-	field and laboratory measurement
Water temperature	-	field measurement
Calcium	-	
Magnesium	-	
Hardness	200 g/m³	GV (Calcium + magnesium)
Alkalinity	100 g/m³	As $CaCO_3$ – trigger value taken from Miners Road Consent example (CRC204349).
E. coli	1 MPN/100ml	MAV
Ammoniacal-N	1.2 g/m³	GV
Nitrate-N	5.65 g/m³ (annual average) 11.3 g/m³ (maximum)	5.65 g/m³ - Half MAV
Dissolved Boron	1.2 g/m³	Half MAV
Dissolved Aluminium	0.1 g/m³	GV
Dissolved Arsenic	0.005 g/m³	Half MAV
Dissolved Cadmium	0.002 g/m³	Half MAV
Dissolved Chromium	0.025 g/m³	Half MAV
Dissolved Copper	1 g/m³	Half MAV
Dissolved Lead	0.005 g/m³	Half MAV
Dissolved Nickel	0.04 g/m³	Half MAV
Dissolved Manganese	0.04 g/m³	GV
Dissolved Iron	0.3 g/m³	GV
Sodium	200 g/m³	GV
Sulphate	250 g/m³	GV
Chloride	125 g/m³	Half GV
VOC compounds	Any detectable presence	
Total Petroleum Hydrocarbons	Any detection >0.1 g/m³	

Table 2: Water quality parameters and trigger concentrations		
Parameter	**Trigger concentration**	**Note**
NOTE: Trigger values include the guideline values for aesthetic determinands from the Aesthetic Values for Drinking Water Notice (2022) or 50% of maximum acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 which take effect on 14 November 2022.		

25. The Consent Holder shall provide the water quality monitoring results to the Tasman District Council: Attention – ~~Monitoring and Compliance~~Compliance and Investigation within one month of them being received.

~~19.~~26. Quarrying activities, including the discharge of clean fill to land and any accidental spills on the site shall be managed in a manner that seeks to avoid an exceedance of 50% of the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022. Under no circumstances shall the quarrying and clean fill activities cause the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 to be exceeded in any existing water supply bore within a 500 m buffer zone downgradient of the quarry.

Assessment of Groundwater Quality Samples

~~20.~~27. An exceedance of the trigger concentrations in Table 2 will be deemed to have occurred if:

(a) The concentration of a contaminant in a downgradient bore exceeds the relevant trigger concentration in Table 2 and the year-to-year median concentration of the same parameter in the upgradient bore is below the respective trigger concentration in Table 2; or

(b) The year-to-year median concentration of a contaminant in the downgradient bore exceeds the year-to-year median concentration in the upgradient bore for the same parameter by more than 1~~2~~0%, and the year-to-year median concentration in the upgradient bore for the same parameter exceeds the trigger concentrations in Table 2.

See Figure 2 (attached to these conditions) for an example diagram of operation of the exceedance criteria.

~~21.~~28. On an annual basis, trends in concentrations of laboratory-analysed determinants shall be assessed by a suitably qualified and experienced groundwater scientist using an accepted statistical method, with the significance of the trends determined to assess whether they trend is due to random chance or not.~~The groundwater quality data from all the sampled bores shall be assessed annually for trends using NIWA TimeTrends or equivalent~~. A trend in water quality for an individual parameter in a downgradient bore will be deemed to be "significant" if the p-value of the trend is less than 0.05 and the data trend for that parameter is toward the relevant trigger concentration in Table 2.

Response to Issues Arising from Groundwater Quality Monitoring

~~22.~~29. If the trend analysis of the groundwater quality data undertaken in accordance with Condition 2~~8~~4 identifies a "significant" trend in the direction of a breach of trigger level, the Consent Holder shall:

(a) Notify Tasman District Council – Monitoring and Compliance.

(b) Commission an investigation and, if appropriate, recommendations for remedial action from a suitably qualified and experienced person (SQEP) into the potential cause(s) of the trend in the water quality data, which may include:

i. Review of documentation for clean fill accepted at the clean fill site.

ii. Additional testing of clean fill placed within an excavation.

iii. Undertaking additional groundwater monitoring beyond the routine sampling.

iv. Cessation of activities that may have caused the exceedance.

v. Removal of the contaminant source(s).

vi. Stabilisation or capping of the contaminant source(s).

vii. Provide recommendations for further actions and monitoring to be undertaken.

Advice note

The consent holder should discuss further actions and monitoring with Council's Resource Scientist – Water.

~~23.~~30. Any material removed in accordance with Condition 2~~9~~5((b))v shall be disposed of at a facility authorised to receive such material, and the Consent Holder shall provide the Council, Attention: Regional Leader – Monitoring and Compliance, with written confirmation of such disposal within 10 working days.

~~24.~~31. If there is an exceedance as determined by Condition 2~~7~~3 in a downgradient dedicated monitoring bore listed in Condition 1~~9~~6, the Consent Holder shall as soon as practicable and within 72 hours of receiving that result:

(a) Obtain a second sample of groundwater from the bore(s) in which the exceedance was identified in accordance with Condition 19~~1~~6.

(b) Obtain a sample of groundwater from the upgradient bore specified in Condition 1~~9~~6.

(c) Analyse these samples in accordance with Condition ~~21~~24.

~~25.~~32. If the results of analysis of the second groundwater sample(s) carried out in accordance with Condition 31~~27~~ show that none of the concentrations of contaminants analysed exceed the

criteria in Condition ~~23~~27 ~~23~~**~~Error! Reference source not found.~~**, the consent holder shall continue to sample groundwater in accordance with Condition 1~~9~~6.

~~26.~~33. If the results of analysis of the second groundwater samples carried out in accordance with Condition ~~27~~31~~25~~ show a continued exceedance ~~Table~~ as determined by Condition 2~~7~~3, the Consent Holder shall:

(a) Notify the Tasman District Council – Monitoring and Compliance as soon as practicable and within 72 hours of receiving the results of the sampling in Condition 31~~27~~.

(b) Notify the closest downgradient water supply bore owner/landowner and any additional users of the bore and collect groundwater samples from the water supply bores located within 500 m downgradient of the clean fill (subject to approval of the bore owner and the landowner), as soon as practicable and within 72 hours of receiving the results of the sampling in Condition 31~~27~~.

(c) Undertake an investigation to determine the source of the change in concentrations.

(d) Undertake additional monitoring beyond the routine sampling based on the outcome of the investigation in Condition 33~~29~~((c)).

34. If the monitoring undertaken in accordance with Condition 22~~19~~ or Condition 33(b)~~29(29~~**~~Error! Reference source not found.~~**~~)~~ shows that the drinking water quality in the downgradient water supply bore(s) exceeds the trigger concentrations in Table 2, then additional samples shall be collected from that water supply bore as soon as practicable and within 72 hours of receiving the initial results and the user(s) of that bore notified of the results. If additional samples continue to show an exceedance of the trigger concentrations in Table 2, then the Consent Holder shall provide an alternative drinking water supply to a similar standard as existed prior to commencement of this consent.

35. If any monitoring undertaken shows that the drinking water quality in the downgradient water supply bore(s) exceeds the acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, the consent holder shall cease works, notify the respective bore owners and Council as soon as practical, and the consent holder shall supply drinking water to affected residences.

Works shall only recommence once the Consent Holder has provided to Council's Team Leader - Compliance & Investigation a report by a suitably qualified and experienced groundwater scientist which demonstrates that the activity is not causing the changes/decrease in water quality.

~~Duration of water quality monitoring~~Reporting and monitoring

36. Reporting and monitoring of the discharge activities, including complaints procedures, shall be undertaken in accordance with Conditions 132-138 of land use consents RM200488 and RM200489.

~~27.~~37. Water quality monitoring detailed in the conditions of this consent shall continue for no less than two years following completion of quarrying, backfilling and reinstatement and rehabilitation activities on the site. All water quality assessment and responses to issues identified, as detailed in these conditions, shall continue to apply over this period.

Resource consents sought for:

RM220578 Discharge of contaminants being cleanfill to land

Note: These conditions should be read in conjunction with the consent conditions for the associated land use consents RM200488 (land use consent to disturb land and rehabilitate for the purpose of gravel extraction within the Rural 1 Zone) and RM200489 (land use consent to erect signage and establish access via an unformed legal road).

General

1. The consent holder shall ensure that all works are carried out in general accordance with:

   (a) the application documents received by the Council on XX

   (b) further information provided on and 2 September 2022;

   (c) the evidence received on 15 July 2022 and 4 November 2022;

   Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.

Commented [HT1]: Council to update with final approved documents

2. The consent holder shall ensure all persons undertaking activities authorised by this resource consent are made aware of the conditions of the consent and ensure compliance with those conditions. A copy of the consent documents shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

3. Where conditions of this consent require the involvement of a suitably qualified and experienced groundwater scientist, this person shall not be an employee of the Consent Holder.

Review

4. For the purposes of, and pursuant to section 128 of the Resource Management Act 1991 ('the Act'), the Council reserves the right to review this consent annually during the month of XXX, for the purposes of:

   (a) dealing with any adverse effect on the environment which may arise from the exercise of this consent that were not foreseen at the time of granting of the consent, and which it is therefore more appropriate to deal with at a later stage; and/or

   (b) requiring the consent holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the exercise of this consent.

   (c) requiring compliance with operative rules in the Tasman Resource Management Plan or its successor; or

(d) requiring consistency with any relevant regional plan, district plan, national environmental standard or Act of Parliament.

(e) To update 'regional soil background concentration limits', as relevant to Table 1 in Condition 17 below.

Lapse and expiry

5. Pursuant to section 125 of the Act, this consent shall lapse 5 years after the date it commences unless either the consent is given effect to, or the Council has granted extensions pursuant to section 125(1A)(b) of the Act.

6. This consent shall expire 17 years after the date it is given effect to.

7. The discharge of clean fill to land shall cease no later than 15 years after the date this consent commences.

Prior to the work

8. The Consent Holder shall notify Council's Team Leader - Compliance and Investigation in writing:

(a) A minimum of 15 working days prior to commencement of discharge to land; and

(b) Prior to the recommencement of work where works have been discontinued for more than one month.

Notification shall include:

(a) The proposed start date for the period of work; and

(b) The name and contact details of the following persons:

(i) A representative nominated by the consent holder who shall be the Council's principal contact person in regard to matters relating to this resource consent; and

(ii) The Site Manager (if not the consent holder's representative).

Should either of the above persons change during the term of this resource consent, the consent holder shall provide the new name and contact details, in writing, to the Council's Team Leader - Compliance and Investigation within five working days.

Site meeting

9. The consent holder shall arrange for a site meeting between the consent holder's representative and the Council's assigned monitoring officer, which shall be held on site prior

to any works commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Submission of plans

10. The consent holder shall, at least 15 working days prior to the commencement of works, prepare and submit a Groundwater and Clean Fill Management Plan (GCMP) prepared in accordance with Condition 12 to the Council's Team Leader - Compliance and Investigation for certification. No works shall be undertaken until this management plan has been certified by the Council's Team Leader - Compliance and Investigation, unless Condition 11 is invoked.

Advice note

Certification of the management plans above is in the nature of certifying that adoption of the management plans will result in compliance with the conditions of this consent.

11. The following shall apply in respect of Condition 10:

    (a) the consent holder may commence the activities in accordance with the submitted plans 20 working days after its submission, unless the Council advises the consent holder in writing that it refuses to certify it on the grounds that it fails to meet the requirements of the condition and gives reasons for its decision; and

    (b) should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (a) shall apply to any resubmitted plan.

    (c) Any subsequent amendments to the plan required by condition 10 must be made in writing and be certified by the Council's Team Leader - Compliance & Investigation, prior to being implemented. Conditions 11 (a) and (b) shall apply to any submitted amendments.

12. The GCMP required by Condition 10 shall demonstrate the best practicable option to ensure that discharge of clean fill to land is managed to avoid adverse effects on groundwater, to:

- Ensure that excavations do not expose groundwater in excavations with the exception of small scale temporary test pits that are back filled within 30 minutes.
- Ensure that all backfill material is strictly managed to ensure it meets Condition 17 below).
- Minimise any change to the physical and chemical properties of groundwater as a result of the land use and discharge activities associated with clean fill activities (as defined by the groundwater chemistry monitoring requirements specified in the GCMP).

- Ensure that activities are managed in a manner that seeks to avoid an exceedance of 50% of the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 and so that, under no circumstances the quarrying and clean fill activities cause the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 to be exceeded in any existing water supply bore within a 500 m buffer zone downgradient of the quarry.

13. The GCMP shall be in general accordance with the draft GCMP prepared by Pattle Delamore Partners dated March 2023 and shall address, as a minimum:

    (a) Consent Compliance and Key Performance Indicators, to be consistent with these conditions of consent

    (b) Clean fill materials

    (c) Proposed clean fill management system

    (d) Groundwater level monitoring and excavation controls

    (e) Response and mitigation to a spill

    (f) Groundwater quality monitoring

    (g) Water quality complaints

    (h) Reporting requirements

14. At least four groundwater samples (one year of samples) shall be collected from the dedicated monitoring bores listed in Condition 19((a)) prior to the commencement of clean filling activities.

Operational conditions

Backfilling controls

15. Backfilling on site with clean fill shall be undertaken in accordance with the certified GCMP.

16. Commencement of clean filling within a Stage shall occur at locations at the greatest upgradient distance from any water supply bores, as far as can practicably be achieved.

17. Only material that meets the requirements of Table 1 below shall be imported to the site for backfill. Furthermore, any material, that is understood to comply with the Table 1 definition, but displays visual or olfactory evidence of contamination, shall be rejected.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
Materials sourced onsite.	• Uncontaminated natural material such as soil, clay, rock and gravel.	• Contaminated soil, clay, rock and gravel.

Table 1: Summary of Clean fill Acceptance Criteria[1]

Source	Acceptable Material	Unacceptable Material
	• Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.
Materials sourced offsite	• Uncontaminated natural material such as soil, clay, rock and gravel. Compliance with this definition will be achieved by testing a representative composite sample of imported fill material to demonstrate that total soil contaminant concentrations do not exceed regional soil background concentration limits[2]. • Maximum biodegradable materials (i.e., vegetative matter) to be no more than 2% by volume per load of incidental and is limited to incidental organic materials.	• Contaminated soil, clay, rock and gravel. • Any material sourced from any site listed on the Tasman District Council Hazardous Activities and Industries List (HAIL) register (as defined by the Ministry for the Environment) or any site where the Clean fill Operator has a reasonable expectation of HAIL activities occurring, even if it is not listed on TDC's HAIL register and for both these categories of sites, the HAIL activity is known to have been occurring or could be reasonably expected to be known to have been occurring, before the date the clean fill material is received. • Materials containing more than 2% by volume per load of biodegradable organic matter, including peat, loams and topsoils with high organic content. • Manufactured materials including concrete, bricks, tiles, etc.

Notes: [1]The clean fill acceptance criteria provided in this table shall be applied to all material placed at depths greater than 1 m below ground level. The Soil Management Plan applies to topsoil and sub soil.
[2] Relevant regional soil background concentration limits are the 99th percentile values provided in Table 5 of Cavanagh (2015) 'Background concentrations of trace elements and options for managing soil quality in the Tasman and Nelson Districts. Landcare Research. June 2015.. For clarity, these are reproduced below:

Element	As	Cd	Cr-hi	Cr-lo	Cu	Pb	Ni-hi	Ni-lo	Zn
99th percentile	11	0.90	183	93.5	41.5	33	274.4	55.4	141.5

Furthermore, any material, that is understood to comply with the Table 1 definition, but displays visual or olfactory evidence of contamination, shall be rejected.

18. Any backfill material sourced from offsite shall only be brought to the site by the Consent Holder and shall be pre-screened for compliance with these clean fill requirements before being brought to site in accordance with the Clean Fill Procurement SOP detailed at

Appendix A of the draft GCMP. A record shall be kept of all clean fill used as backfill. The record shall be in accordance with the requirements specified in the Clean Fill Procurement SOP. This record shall be kept available on site and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

Groundwater quality monitoring

19. The following monitoring of groundwater will be undertaken:

    (a) Collection of groundwater samples from at least one dedicated monitoring bore located upgradient at the southern extent of the quarry areas (i.e. Bore 2 (24544 or Bore 4 (24546), representative of background water quality) and at least two dedicated bores located downgradient of the quarry site near the northern extent of the quarry (i.e. Bore 1 (24543) and Bore 3(24545)) as shown in Figure 1 (attached to these conditions).

    (b) Groundwater samples from the dedicated monitoring bores listed in Condition 19((a)) shall be collected at three monthly intervals. Sampling shall continue until two years after clean filling activities cease.

    (c) Collection of groundwater samples from a dedicated monitoring bore located at or about coordinates 1595980 mE / 5447316 mN (NZTM2000) (proposed additional monitoring bore – Bore 5 as shown in Figure 1) shall be undertaken at monthly intervals. At least two samples shall be collected prior to the commencement of clean filling activities and sampling shall continue until two years after clean filling activities cease. Prior to establishing this dedicated monitoring bore, the exact location of neighbouring water supply bore 24135 shall be determined (provided that the approval of the land/ bore owner is obtained to do so), to ensure that the dedicated monitoring bore is sited in the most representative upgradient location of bore 24135, as agreed between the Consent Holder and the suitably qualified and experienced groundwater scientist. If access from this land/ bore owner of bore 24135 is not forthcoming, the monitoring bore shall be located at or about the coordinates given above.

20. The five dedicated monitoring bores referred to in Condition 19 shall allow groundwater samples to be collected across the full the range of groundwater level fluctuations.

21. If for any reason a groundwater sample cannot be collected, a suitably qualified and experienced groundwater scientist shall recommend, and the consent holder shall undertake, an appropriate alternative for sampling groundwater. The five dedicated monitoring bores referred to in Condition 19 shall be made accessible to the Tasman District Council at all times for the purpose of groundwater sampling.

22. Groundwater samples shall also be collected annually from all water supply bores located within 500 m downgradient of the clean fill, subject to approval of the bore owner(s) and the landowner(s). All bores within 500m downgradient of the fill activities shall be identified

(subject to land/ bore owner approval), irrespective of whether or not these are identified on Council's register of bores. This sampling shall continue until two years after clean filling activities cease.

Advice note

This condition has been volunteered by the Applicant.

23. Prior to the collection of the initial groundwater samples from the water supply bore(s) in accordance with Condition 22, the Consent Holder shall undertake a bore condition survey (by a suitably qualified and experienced groundwater scientist) to identify any existing potential sources of contamination related to the condition of the bore head or its proximity to localised sources of contamination.

24. The Consent Holder shall ensure that all groundwater samples shall be taken by a suitably qualified and experienced practitioner using methods described in the NEMS document "Water Quality – Part 1 of 4: Sampling. Measuring, Processing and Archiving of discrete Groundwater Quality Data" (2019). All samples for dissolved metal analysis must be filtered through a 0.45-micron filter onsite before being placed into an acid preserved sampling bottle.

    All samples must be analysed for the contaminants listed in Table 2 by an International Accreditation New Zealand (IANZ) laboratory.

    All testing shall be at the full expense of the consent holder.

Table 2: Water quality parameters and trigger concentrations		
Parameter	**Trigger concentration**	**Note**
Depth to water level	-	Measured prior to purging (where possible)
pH	<6.5 or >8.5	field and laboratory measurement – trigger value taken from Miners Road Consent example (CRC204349), recognising shallow groundwater naturally has a low pH.
Electrical Conductivity	-	field and laboratory measurement
Water temperature	-	field measurement
Calcium	-	
Magnesium	-	
Hardness	200 g/m³	GV (Calcium + magnesium)
Alkalinity	100 g/m³	As $CaCO_3$ – trigger value taken from Miners Road Consent example (CRC204349).
E. coli	1 MPN/100ml	MAV
Ammoniacal-N	1.2 g/m³	GV
Nitrate-N	5.65 g/m³ (annual average) 11.3 g/m³ (maximum)	5.65 g/m³ - Half MAV
Dissolved Boron	1.2 g/m³	Half MAV
Dissolved Aluminium	0.1 g/m³	GV
Dissolved Arsenic	0.005 g/m³	Half MAV
Dissolved Cadmium	0.002 g/m³	Half MAV
Dissolved Chromium	0.025 g/m³	Half MAV
Dissolved Copper	1 g/m³	Half MAV
Dissolved Lead	0.005 g/m³	Half MAV
Dissolved Nickel	0.04 g/m³	Half MAV
Dissolved Manganese	0.04 g/m³	GV
Dissolved Iron	0.3 g/m³	GV
Sodium	200 g/m³	GV
Sulphate	250 g/m³	GV
Chloride	125 g/m³	Half GV
VOC compounds	Any detectable presence	
Total Petroleum Hydrocarbons	Any detection >0.1 g/m³	

Table 2: Water quality parameters and trigger concentrations		
Parameter	**Trigger concentration**	**Note**
NOTE: Trigger values include the guideline values for aesthetic determinands from the Aesthetic Values for Drinking Water Notice (2022) or 50% of maximum acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 which take effect on 14 November 2022.		

25. The Consent Holder shall provide the water quality monitoring results to the Tasman District Council: Attention – Compliance and Investigation within one month of them being received.

26. Quarrying activities, including the discharge of clean fill to land and any accidental spills on the site shall be managed in a manner that seeks to avoid an exceedance of 50% of the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022. Under no circumstances shall the quarrying and clean fill activities cause the maximum acceptable values of the Water Services (Drinking Water Services for New Zealand) Regulations 2022 to be exceeded in any existing water supply bore within a 500 m buffer zone downgradient of the quarry.

Assessment of Groundwater Quality Samples

27. An exceedance of the trigger concentrations in Table 2 will be deemed to have occurred if:

    (a) The concentration of a contaminant in a downgradient bore exceeds the relevant trigger concentration in Table 2 and the year-to-year median concentration of the same parameter in the upgradient bore is below the respective trigger concentration in Table 2; or

    (b) The year-to-year median concentration of a contaminant in the downgradient bore exceeds the year-to-year median concentration in the upgradient bore for the same parameter by more than 10%, and the year-to-year median concentration in the upgradient bore for the same parameter exceeds the trigger concentrations in Table 2.

    See Figure 2 (attached to these conditions) for an example diagram of operation of the exceedance criteria.

28. On an annual basis, trends in concentrations of laboratory-analysed determinants shall be assessed by a suitably qualified and experienced groundwater scientist using an accepted statistical method, with the significance of the trends determined to assess whether they trend is due to random chance or not.. A trend in water quality for an individual parameter in a downgradient bore will be deemed to be "significant" if the p-value of the trend is less than 0.05 and the data trend for that parameter is toward the relevant trigger concentration in Table 2.

Response to Issues Arising from Groundwater Quality Monitoring

29. If the trend analysis of the groundwater quality data undertaken in accordance with Condition 28 identifies a "significant" trend in the direction of a breach of trigger level, the Consent Holder shall:

    (a) Notify Tasman District Council – Monitoring and Compliance.

    (b) Commission an investigation and, if appropriate, recommendations for remedial action from a suitably qualified and experienced person (SQEP) into the potential cause(s) of the trend in the water quality data, which may include:

        i. Review of documentation for clean fill accepted at the clean fill site.

        ii. Additional testing of clean fill placed within an excavation.

        iii. Undertaking additional groundwater monitoring beyond the routine sampling.

        iv. Cessation of activities that may have caused the exceedance.

        v. Removal of the contaminant source(s).

        vi. Stabilisation or capping of the contaminant source(s).

        vii. Provide recommendations for further actions and monitoring to be undertaken.

    ### Advice note

    The consent holder should discuss further actions and monitoring with Council's Resource Scientist – Water.

30. Any material removed in accordance with Condition 29((b))v shall be disposed of at a facility authorised to receive such material, and the Consent Holder shall provide the Council, Attention: Regional Leader – Monitoring and Compliance, with written confirmation of such disposal within 10 working days.

31. If there is an exceedance as determined by Condition 27 in a downgradient dedicated monitoring bore listed in Condition 19, the Consent Holder shall as soon as practicable and within 72 hours of receiving that result:

    (a) Obtain a second sample of groundwater from the bore(s) in which the exceedance was identified in accordance with Condition 19.

    (b) Obtain a sample of groundwater from the upgradient bore specified in Condition 19.

    (c) Analyse these samples in accordance with Condition 24.

32. If the results of analysis of the second groundwater sample(s) carried out in accordance with Condition 31 show that none of the concentrations of contaminants analysed exceed the criteria in Condition 27, the consent holder shall continue to sample groundwater in accordance with Condition 19.

33. If the results of analysis of the second groundwater samples carried out in accordance with Condition 31 show a continued exceedance as determined by Condition 27, the Consent Holder shall:

    (a) Notify the Tasman District Council – Monitoring and Compliance as soon as practicable and within 72 hours of receiving the results of the sampling in Condition 31.

    (b) Notify the closest downgradient water supply bore owner/landowner and any additional users of the bore and collect groundwater samples from the water supply bores located within 500 m downgradient of the clean fill (subject to approval of the bore owner and the landowner), as soon as practicable and within 72 hours of receiving the results of the sampling in Condition 31.

    (c) Undertake an investigation to determine the source of the change in concentrations.

    (d) Undertake additional monitoring beyond the routine sampling based on the outcome of the investigation in Condition 33((c)).

34. If the monitoring undertaken in accordance with Condition 22 or Condition 33(b) shows that the drinking water quality in the downgradient water supply bore(s) exceeds the trigger concentrations in Table 2, then additional samples shall be collected from that water supply bore as soon as practicable and within 72 hours of receiving the initial results and the user(s) of that bore notified of the results. If additional samples continue to show an exceedance of the trigger concentrations in Table 2, then the Consent Holder shall provide an alternative drinking water supply to a similar standard as existed prior to commencement of this consent.

35. If any monitoring undertaken shows that the drinking water quality in the downgradient water supply bore(s) exceeds the acceptable values in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, the consent holder shall cease works, notify the respective bore owners and Council as soon as practical, and the consent holder shall supply drinking water to affected residences.

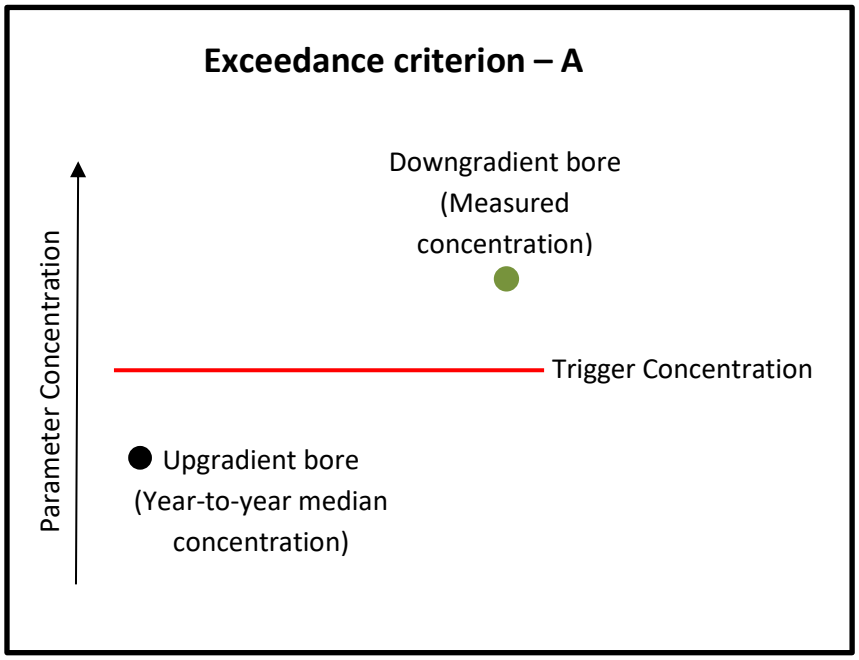
    Works shall only recommence once the Consent Holder has provided to Council's Team Leader - Compliance & Investigation a report by a suitably qualified and experienced groundwater scientist which demonstrates that the activity is not causing the changes/decrease in water quality.

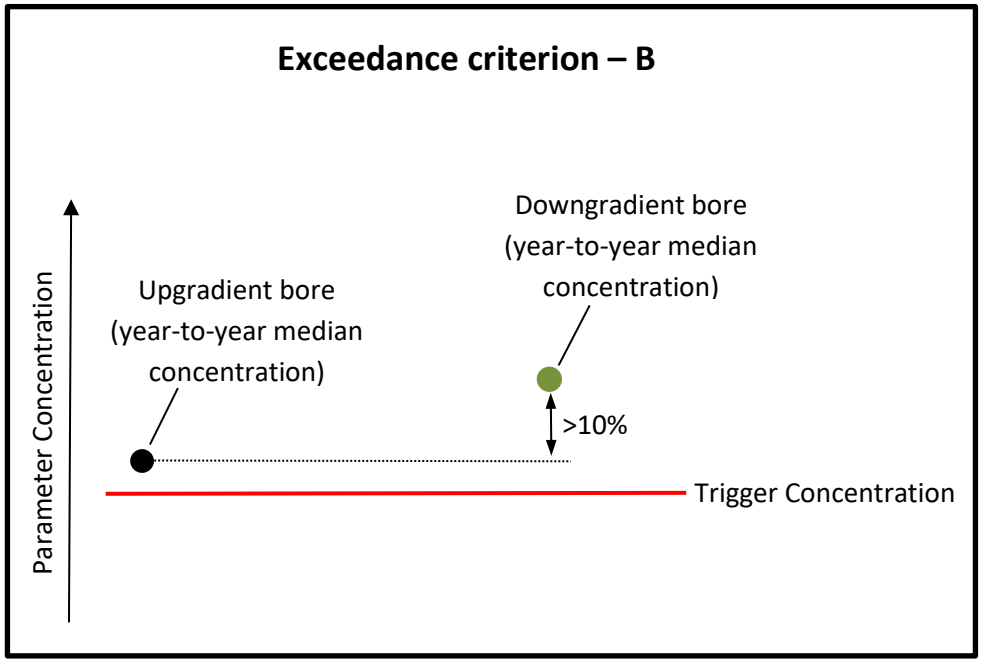
Reporting and monitoring

36. Reporting and monitoring of the discharge activities, including complaints procedures, shall be undertaken in accordance with Conditions 132-138 of land use consents RM200488 and RM200489.

37. Water quality monitoring detailed in the conditions of this consent shall continue for no less than two years following completion of quarrying, backfilling and reinstatement and

rehabilitation activities on the site. All water quality assessment and responses to issues identified, as detailed in these conditions, shall continue to apply over this period.





Exceedance Criterion – A: The concentration in the downgradient bore exceeds the relevant trigger concentration in Table 2 of RM220578 and the year-to-year median concentration of the same parameter in the upgradient monitoring bore is below the respective trigger concentration.

Exceedance Criterion – B: The year-to-year median concentration in the downgradient bore exceeds the year-to-year median concentration in the upgradient bore for the same parameter by more than 10%, where the year-to-year median concentration in the upgradient monitoring bore exceeds the trigger concentrations in Table 2 of RM220578.

FIGURE 2: DIAGRAM ILLUSTRATING CRITERIA FOR DETERMINING WHEN A GROUNDWATER CHEMISTRY EXCEEDANCE HAS OCCURRED