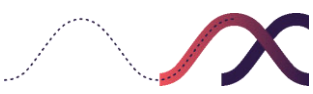
Waitomo District Council

Oparure Quarry South-Western Pit

Section 53 Comments

10 November 2026



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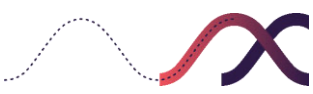

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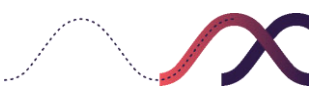

1. Introduction

This report addresses the invitation from the Expert Panel (**EP**) for Waitomo District WDC (**WDC** or **WDC**) to provide comments in relation to the proposal by the Applicant for the Oparure Quarry South-Western Pit (**Project**), under section 53 of the Fast-track Approvals Act 2024 (**FTAA**).

This report focuses on aspects of the Project that are particularly relevant to the EP's decision-making and to WDC's statutory functions and responsibilities.

This report, providing WDC's comments on the Project under section 53 of the FTAA, has been prepared by Quinn Langdon – Intermediate Planner and Chris Dawson – Principal Planner in the Hamilton Office of BBO.

WDC has engaged a range of technical experts to review documents submitted in support of the Project. The reports of each of those experts are presented as appendices to this report.

Where relevant, any changes to conditions recommended by WDC are contained in **Appendix A**.

To provide some context, the substantive application report (**SAR**) for the Project was lodged under the FTAA in July 2026. Prior to lodgement under the FTAA, the Applicant lodged an application for resource consent for the development of the western pit with Waitomo District WDC and Waikato Regional WDC in 2022. The applications were limited notified in 2024. As such, several technical reports relate to information provided as part of the previous resource consent process and prior to lodgement under the FTAA.

2. Terrestrial Ecology

WDC has obtained advice from its terrestrial ecology expert, Gerry Kessels of Bluewattle Ecology, who has reviewed the substantive application (**Appendix B**), the Terrestrial and Subsurface Ecology Assessment (Appendix K of the SAR), the ecological management plans and the proposed consent conditions. The review also cross-checks the application against matters raised during the earlier assessment of the proposal, including the expert conferencing process and the ecologist's February 2025 review. The advice addresses terrestrial and cave ecology, including indigenous vegetation, karst ecosystems, long-tailed bats, indigenous birds and lizards. It does not address freshwater ecology, hydrogeology, sediment transport or cave geomorphology, except where those matters are relevant to terrestrial and cave fauna habitat.

The conclusions from WDC's Terrestrial Ecology Expert are reproduced as follows:

"My overall view of the proposal has not changed since February 2025, and the concerns I raised about the Boffa Miskell subterranean assessment in November 2022 have largely been resolved through the section 92 process, expert conferencing and the reduced footprint, with the exceptions of the additionality of the package and its framing as betterment rather than compensation. The surface ecological values of the pit footprint are comparatively low, the reduced footprint and Camelot Cave buffer address my earlier concerns about the wider karst system, and the betterment package – if fully implemented and maintained – is capable of delivering a net gain for karst ecosystems, lizards, bats and birds in this locality.

The management plan suite now addresses most of the technical matters I raised previously, with the important exceptions of the duration of pest control and maintenance, measurable performance standards, and legal protection of the betterment areas. The principal deficiency in the application as lodged is that the draft conditions do not secure the package: several EcoBP commitments are omitted, the species management plans are not named, or are described as voluntary, no durations or performance standards are specified, and the staged, multi-decade nature of the clearance is not reflected in survey and reporting requirements.

If the condition amendments recommended in this review are adopted, I consider that the risk to terrestrial and cave ecology over the lifetime of the consents would be appropriately minimised and the residual effects adequately compensated."

Mr Kessels' considers that the Applicant's characterisation of the residual ecological effects as less than minor understates the effects of the proposal. In his opinion, the permanent loss of approximately 1 ha of significant karst ecosystem, seven cave entrances and 1.4 ha of indigenous vegetation providing habitat for At Risk and Threatened fauna represents a low to moderate level of effect under the EIANZ (2018) framework, having regard to the heavily cleared and under-protected karst landscape within the Ecological District. He considers the effects to be minor to more than minor at the local scale and less than minor at the regional scale, prior to the implementation of the betterment package.

In addition, WDC's Terrestrial Ecology Expert considers the betterment package should be characterised as compensation for residual adverse effects under the effects management hierarchy, rather than voluntary betterment. He also considers that the application and Ecological Betterment Plan should distinguish between measures that compensate for terrestrial and subterranean ecological losses and measures that primarily address freshwater and sediment-related effects.

2.1 Terrestrial Ecology Review

WDC's ecologist considers that the reduced quarry footprint and the revised management plan suite have addressed many of the earlier concerns regarding terrestrial and cave ecology. However, the ecologist's advice is that the proposal's acceptability relies on the full ecological betterment package being secured through enforceable consent conditions and maintained over the life of the quarry.

On that basis, Mr Kessels made the following recommendations:

- Expressly identify the Bat, Bird, Lizard, Plant and Animal Pest and Karst and Riparian Management Plans as certified sub-plans and require their implementation (**Condition 24A WDC – Appendix A**).
- Secure all ecological betterment commitments, including the 14.4 ha of SNA fencing and pest control, lizard release area, bat reserve, Pōtea Spring restoration and QEII covenants (**Condition 24 WDC– Appendix A**).
- Require plant and animal pest control, fence maintenance and planting maintenance across all betterment areas for the full term of the consents (**Condition 24C WDC– Appendix A**).
- Include measurable performance standards for planting and restoration, with monitoring and remedial action where those standards are not achieved (**Condition 24D WDC– Appendix A**).
- Require legal protection of the SNA linkage, lizard release area, cave entrance enhancement areas and relevant riparian areas (**Condition 24E– Appendix A**)
- Require updated ecological surveys and assessments before each stage of clearance (**Condition 24 F WDC– Appendix A).**
- Clarify the short-tailed bat reference and confirm that the Lizard Management Plan and Wildlife Act Authority apply to the full disturbance footprint (**Section 2.2**)
- Ensure that ecological rehabilitation and betterment obligations are completed and maintained notwithstanding the expiry of the consents (**Section 2.2**)
- Provide for independent ecological review to inform WDC's certification of the ecological management plans (**Condition 24B– Appendix A**).

From a planning and condition enforceability perspective, WDC has relied on the recommendations of Mr Kessels' because they identify specific areas where the ecological outcomes and commitments relied upon in the application are not fully secured through the proposed conditions. The recommended amendments do not seek to introduce a materially different ecological mitigation package. Rather, they are principally

directed at ensuring that the ecological betterment measures proposed by the Applicant are clearly defined, measurable, implemented within appropriate timeframes, maintained for the duration of the consents, and capable of being monitored and enforced.

In particular, the recommended amendments address identified gaps relating to the completeness of the ecological betterment commitments secured by Condition 24, the duration of pest control and maintenance, planting performance standards, enduring protection of betterment areas, the currency of ecological surveys for staged clearance, and independent ecological review.

On this basis, WDC considers it appropriate to adopt the substance of Mr Kessels' recommendations where they are necessary to translate the ecological mitigation and betterment package relied upon by the Applicant into clear and enforceable consent obligations. The recommended condition amendments have, however, been refined from a planning perspective where necessary to avoid unnecessary duplication, maintain appropriate certification responsibilities, and ensure the conditions remain practical and enforceable.

Mr Kessels' specific recommendations in relation to consent conditions are set out in **Appendix A** of this Report.

2.2 Further Information: Terrestrial Ecology

In addition, WDC's Terrestrial Ecology Expert identified the following matters for clarification:

- **Short-tailed bats**: The Bird Management Plan apparently records short-tailed bats as present on the Site, but the Bat Management Plan addresses long-tailed bats only. If short-tailed bats have been detected, the Bat Management Plan, roost-assessment requirements, cave-use assessment, felling protocols and Wildlife Act requirements must be amended accordingly.
- **Lizard authorisation**: The Applicant should confirm that the Lizard Management Plan and Wildlife Act Authority 118705-FAU apply to the full 59.6 ha SW Pit footprint and every clearance stage, rather than only the 26-ha Phase 1 area.
- **Disturbance area:** The discrepancy between the 59.6 ha disturbance area in the application and WDC conditions and the 57.4 ha area in the terrestrial ecology assessment should be reconciled. Retained karst features at the pit margins should be accurately shown on an approved plan and expressly excluded from the authorised disturbance area.
- **Consent duration**: The apparent discrepancy between the 35-year period referred to in the Pit and Haul Road Site Management Plan and the approximately 53-year staged-development horizon should be resolved, as it affects maintenance, survey, rehabilitation, bonding and legacy-management obligations.

2.3 Terrestrial Ecology Summary

Overall, WDC relies on the advice provided by the Terrestrial Ecology Expert. In particular, the proposed five-year duration for pest control and maintenance, the absence of measurable performance standards, and the lack of legal protection for the betterment areas create uncertainty as to whether the ecological benefits relied upon to compensate for the permanent loss of habitat will be achieved and maintained.

Subject to the matters raised by WDC's Terrestrial Ecology Expert being addressed through the requested further information and amendments to the consent conditions, WDC considers that the proposed measures are capable of appropriately managing the risks to terrestrial and cave ecology and compensating for the residual adverse effects.

3. Noise and Vibration

The Project generates noise and vibration associated with the construction and operation of the quarry.

WDC's Noise Expert, Peter Runcie, provided a memorandum to WDC on 27 February 2025, as part of the original resource consent and an updated Noise and Vibration Memorandum on 29 October 2026 (**Appendix C**) as part of the fast-track application.

3.1 Noise and Vibration Review

In their 2026 Noise and Vibration Memorandum, WDC's Noise and Vibration Expert identified the fast-track application related to the Proposed Waitomo District Plan and a review of the updated information indicates there have been no changes to the predicted levels. WDC's expert concluded:

> *"through the adoption of controls, noise and vibration effects could be managed to be reasonable and therefore satisfy the overarching requirements of Section 16 of the RMA, subject to appropriately worded conditions. The broad controls identified in my review included:*
> - *Tight controls of tonal elements associated with equipment (reverse beepers etc) which can be subjectively more annoying at lower noise levels – to minimise effects at receivers;*
> - *Clear requirements regarding night-time operations to avoid adverse night-time noise effects, where sleep impacts could occur; and*
> - *Provision of prior notice to surrounding neighbours ahead of blasting."*

On this basis, WDC's Noise and Vibration Expert reviewed the noise and vibration draft conditions of consent in Appendix T2 of the Application.

3.2 Noise and Vibration Condition Recommendations

WDC's Noise and Vibration Expert identified matters for consideration in relation to proposed Conditions 32, 35, and 39 in Appendix T2 of the Application. In addition, minor cross-referencing issues were identified.

In addition to the matters identified by WDC's Noise and Vibration Expert, WDC has identified a further matter requiring clarification in relation to Condition 33.

Condition 32

WDC's Noise and Vibration Expert identified that the noise limits in Condition 32 do not directly reflect the noise standards of either the Operative or Proposed District Plans. Condition 32 appears to adopt the numerical noise limits from the Operative District Plan but substitutes the LA10 descriptor with LAeq(15min). In contrast, the Styles Group assessment assesses the proposal against the Proposed District Plan noise limits.

This discrepancy is relevant because the SAR states that the proposed conditions are deliberately more stringent than the Proposed District Plan requirements and those recommended by the Applicant's noise expert, on the basis that they carry forward the previous District Plan requirements that applied when consultation with WDC and the marae commenced. However, Condition 32 does not appear to replicate those earlier requirements because the applicable noise descriptor has been changed.

Further, WDC's Noise and Vibration Expert notes that the Styles Group assessment identifies that the proposal would not comply with the noise limits proposed in Condition 32 at a number of receivers. This

raises uncertainty as to both the technical basis for the proposed limits and whether the Applicant can practically comply with the condition as drafted.

As of writing this report, the Applicant has not provided input related to Condition 32.

On this basis, WDC considers that clarification is required as to the basis for Condition 32, including why the LAeq(15min) descriptor has been adopted, how this relates to the previous District Plan controls relied upon in the SAR and earlier consultation with the marae, and whether the Applicant can comply with Condition 32 at all relevant receivers.

Condition 33

In addition, to the cross-referencing issue identified by WDC's Noise and Vibration Expert, WDC has identified a further issue with the exclusion of 966 Oparure Road from the application of the noise limits. WDC acknowledges that written approval has been provided by the owner and/or occupier of 966 Oparure Road. However, that written approval relates to the effects of the activity for which consent has been sought and assessed. The Assessment of Noise Effects submitted with the SAR identifies the anticipated noise levels associated with that activity at surrounding receivers, including 966 Oparure Road.

However, it is unclear why Condition 33 provides that "*no noise limit applies*" at 966 Oparure Road. As currently drafted, the condition could be interpreted as allowing unrestricted noise levels at that property, rather than providing for the noise environment assessed as part of the application and understood when written approval was provided. WDC therefore requests that the Applicant clarify whether any specific noise level has otherwise been agreed with the owners and occupiers of the property. In the absence of such agreement, the Applicant is requested to provide justification for excluding 966 Oparure Road from the proposed noise limits and confirm whether alternative condition wording is required to ensure that noise received at the property remains consistent with the activity and effects assessed in the application.

Condition 35

WDC's Noise and Vibration Expert identified a minor cross-referencing issue (updated) and stated it is not clear how Condition 35 would be enforced.

In their 2026 Noise and Vibration Memorandum, WDC's Noise and Vibration Expert identified clear requirements regarding night-time operations to avoid adverse night-time noise effects, where sleep impacts could occur as being a control to manage noise and vibration effects.

These effects are managed by Condition 32 and 35. Condition 32 identifies day-time and night-time noise limits; Condition 35 identifies further restrictions for night-time noise limits through distance and sight controls. If machinery is within 800 m, it can only operate if there is no direct line of sight to the relevant notional boundary.

In relation to Condition 35, WDC's Noise and Vibration Expert questioned the enforceability of Condition 35. In particular, WDC's Expert questioned "*how equipment operators would know when they are both within 800 m of a notional boundary and with direct line of sight, especially given a notional boundary it is not a physical or visible thing. Furthermore, this management measure is not set out, explored or justified in the assessment of noise effects*".

WDC circulated the 2026 Noise and Vibration Memorandum to the Applicant on 21 October 2026. The Applicant's planner responded to the Noise and Vibration Memorandum on 4 November 2026. The Applicant's planning expert considers no further amendment or clarification of the noise conditions is necessary. The Applicant noted Condition 32(b) establishes the applicable night-time noise limit, while Condition 35 provides an additional and deliberately more restrictive safeguard that was developed with WDC and carried over from the earlier resource consent application and previous district plan. The Applicant

considers compliance with Condition 35 can be achieved through its standard operational management measures, including ensuring operators are aware of the areas where machinery may be used. As such, the Applicant does not consider that any additional conditions or clarification relating to nighttime noise effects and Condition 35 is required.

WDC's Noise and Vibration Expert raised a valid concern regarding the practical implementation and enforceability of Condition 35. The Applicant's planner confirmed compliance with Condition 35 will be managed through standard operating procedures. This does not entirely address the uncertainty identified by WDC's Expert as to how compliance with the 800 m distance and direct line of sight requirements would be established. Given that Condition 35 provides an additional safeguard for night-time operations, it is considered appropriate that the condition be clarified to identify a clear and verifiable mechanism for determining the areas in which machinery may operate at night.

On this basis, WDC requests that the Applicant demonstrate how Condition 35 will operate in practice, including how often it is expected to be relied upon, the technical basis for the 800 m and direct line-of-sight controls, and how operators and WDC will be able to objectively determine and verify compliance with those controls.

Condition 39

Condition 39 relates to the proposed blasting associated with the operation of the quarry. WDC's Noise and Vibration expert identified the condition does not directly align with the blasting condition recommendations in the Styles Group assessment or those of the Proposed Waitomo District Plan. However, they note the controls imposed by Condition 39 are generally more restrictive.

In their 2026 Memorandum, WDC's Noise and Vibration Expert identifies provision of prior notice to surrounding neighbours ahead of blasting as a control to manage the noise and vibration effects, with respect to section 16 of the RMA. WDC's expert notes Condition 39(e) does not expressly require advance notification of blasting activities to surrounding stakeholders. Rather, it appears to require only that stakeholders are provided with an option to receive notification where previously published blasting times are changed. This could be clarified through a minor amendment to Condition 39(e), as shown in the Noise Memorandum.

The Applicant did not make any comments in relation to Condition 39.

WDC considers the amendment recommended by its Noise and Vibration Expert is appropriate to ensure that surrounding stakeholders are able to receive advance notification of blast events, consistent with the mitigation identified in the technical review. As the Applicant has not commented on this matter, WDC recommends that Condition 39(e) be amended accordingly.

3.3 Further Information: Noise and Vibration

In addition to the condition amendments identified above, WDC considers that further clarification is required in relation to Conditions 32, 33 and 35.

- **Condition 32, noise limits:** The Applicant should clarify the technical basis for the proposed limits, including the use of the LAeq(15min) descriptor, the relationship between those limits and the previous District Plan controls relied upon in the SAR, and whether compliance can be achieved at all relevant receivers.

- **Condition 33, 966 Oparure Road:** Condition 33 provides that the applicable noise limits shall not be exceeded at the notional boundary of any adjacent site, except at 966 Oparure Road, "where no noise limit applies". WDC acknowledges that written approval has been provided by the owner and/or occupier of 966 Oparure Road. However, that written approval relates to the effects of the

activity sought and assessed in the application. As drafted, the condition could instead be interpreted as allowing unrestricted noise levels at that property. WDC therefore requests clarification as to whether any specific noise level has been agreed with the owners and occupiers of 966 Oparure Road. In the absence of such agreement, justification should be provided for excluding the property from the proposed noise limits and consideration given to alternative wording that reflects the noise environment assessed in the application.

- **Condition 35, night-time operations:** The Applicant should demonstrate how compliance with the 800 m separation and direct line-of-sight requirements will be determined in practice, including how operators will identify the applicable areas and how compliance can subsequently be verified by WDC.

Minor cross-referencing errors identified within the proposed noise conditions should also be corrected in the final set of conditions; this has been reflected in the WDC Conditions in **Appendix A**.

3.4 Noise and Vibration Summary

Section 3.3 identified the matters for further clarification as recommended by WDC's Noise and Vibration Expert; and **Appendix A** contains the proposed conditions with suggested changes and matters for consideration identified in green highlight, bold underline for additions/changes and strikethrough for deletion.

Overall, WDC's Noise and Vibration Expert considers that noise and vibration effects can be appropriately managed, subject to appropriately worded conditions. However, further clarification and/or amendment is required in relation to Conditions 32, 35 and 39 to ensure that the conditions are technically justified, practically implementable and consistent with the mitigation relied upon in the assessment. WDC has also identified a separate issue regarding the exclusion of 966 Oparure Road from the noise limits in Condition 33, for which further justification is sought from the Applicant.

4. Landscape and Visual

The proposed quarry will modify the existing landscape. The SAR proposes to establish exotic and native shelterbelt planting to the northeast and southeast of the proposed South-Western Pit.

On this basis, WDC has sought specialist comments from a landscape architect. WDC's Landscape Architect, Dave Mansergh, is a Registered Landscape Architect who was involved in the assessment of the previous resource consent application and has prepared a Landscape Memorandum, dated 15 October 2026, in relation to the proposed fast-track application (**Appendix D**).

4.1 Landscape Review

WDC's Landscape Architect raises no major landscape concerns in relation to the amended fast-track project. Their conclusion is included below:

> "*In my opinion, the amended proposal is unlikely to materially change the nature or magnitude of the landscape and visual effects previously assessed. The proposed mitigation is generally appropriate to manage the effects of the quarry expansion of landscape and visual amenity. Amendments to the landscape consent conditions are required for clarity and enforceability, and to ensure the proposed mitigation is established at the appropriate time and remains effective throughout quarry operations and rehabilitation. While some adverse visual effects may remain, these are expected to range between Low and Very Low. No major landscape concerns need to be raised through WDC's section 53 response*"

WDC's Landscape Architect considers that the landscape and visual effects of the Project are acceptable, subject to appropriate mitigation. The matters raised in the Landscape Memorandum primarily relate to amendments to the proposed conditions to improve their clarity and enforceability and to ensure that the required landscape mitigation is established at the appropriate time and remain effective.

Attachment 1 of the landscape memorandum prepared by WDC's Landscape Expert contains their proposed changes in relation to the landscape conditions.

The SAR proposed two conditions to manage landscape effects: Condition 27 and Condition 28. Condition 27 states that the two shelterbelts (northeastern and southeastern shelter belts) must be planted before earthworks for the SW Pit begin, using evergreen species capable of reaching at least 5 m within 10 years, to provide visual screening from the identified surrounding locations; Condition 28 requires that both shelterbelts must be actively maintained throughout quarrying and until rehabilitation is complete, including replacing dead, diseased, damaged or windthrown trees so that the required screening function is maintained. Collectively, the conditions seek to ensure that the intended landscape screening is established and maintained.

WDC's Landscape Expert's proposed changes sought to clearly secure the landscape mitigation identified in the LVA and provide measurable requirements for its implementation and effectiveness detailed in Attachment 1 of the Landscape Memorandum.

Key changes include updates to Condition 27 and 28 and creating a new condition.

- **Condition 27 LE**: was updated to specify minimum heights, exotic specify planting requirements, reporting and maintenance requirements, and removal triggers for the exotic and native shelterbelts.

- **Condition 28 LE:** was added which identifies ridgelines to be retained.

- **Condition 29 LE** (formerly Condition 28): was changed to align the replacement planting with the new requirements in Condition 27 and require that the replacement trees will be planted within the next planting season.

4.2 Applicant's Response to Landscape Review

The Applicant's planning expert provided comments in relation to the updates to Condition 27 and the inclusion of Condition 28(.

- **Condition 27**: The Applicant does not support changing the requirement from planting species "capable of" reaching five metres within 10 years to requiring the planting to "attain" five metres within that period. The Applicant considers plant growth can be influenced by factors outside its control, including drought, wind and soil conditions. It considers the existing maintenance obligations, including replacement of dead, diseased or damaged planting, provide an appropriate mechanism to ensure the shelterbelts continue to achieve their intended screening function.

- **Condition 28**: The Applicant does not consider the proposed condition requiring retention of the identified screening ridges to be necessary. It considers the Project design already retains the relevant ridgelines and slopes that provide screening from Oparure Road, as quarrying would not extend into those parts of the landforms. On that basis, the Applicant considers an additional condition preventing their removal would be unreasonable and unnecessary.

Overall, the Applicant considers the additional amendments proposed by WDC's Landscape Expert are unnecessary in these respects, on the basis that the existing maintenance condition adequately secures the shelterbelt mitigation and the Project design itself provides for retention of the landforms relied upon for screening.

4.3 Landscape and Visual Conditions

From a planning and condition enforceability perspective, WDC agrees with the Landscape Expert (LE) that there are opportunities to strengthen and clarify the proposed conditions. These amendments will help ensure that the identified landscape mitigation can be effectively implemented by the consent holder and monitored and enforced by WDC, consistent with the expert evidence provided in the LVA and Landscape Memorandum.

Appendix A contains WDC's suggested amendments to the proposed conditions. Where relevant, the amendments incorporate the recommendations of the LVA and WDC's Landscape Expert. While the structure and wording of the conditions differ from those recommended by WDC's Landscape Expert, they generally give effect to the substance of those recommendations in a clearer and more implementable form. The exceptions are the requirements relating to minimum planting heights Condition 27 (LE) and Condition 28 (LE), which are addressed separately below.

The amended Condition 27 retains the original requirement for shelterbelt planting to mitigate views of the SW Pit but introduces a more structured mechanism for securing that mitigation. Rather than relying solely on the planting shown on Figure 27 and a general requirement for evergreen species capable of reaching 5 m within 10 years, the amended condition requires a Shelterbelt Planting Plan (SPP) to be prepared and certified by WDC prior to planting. The SPP would confirm the location and extent of the exotic and tōtara planting, species selection, and the spacing, density and arrangement necessary to achieve overlapping foliage and continuous screening. The amended condition provides certainty to WDC that the planting will be designed and established to achieve the screening outcomes relied upon in the LVA, while retaining the Applicant's preferred approach of requiring species to be capable of attaining 5 m within 10 years rather than guaranteeing that growth outcome. This is considered acceptable because the primary screening will arise through the planted totara, with the exotic planting only able to be removed once the totara achieved an average minimum height of 6 m.

In addition, the amended Condition 27 includes the recommendations proposed by WDC's Landscape Expert in Condition 27(c) (LE). This provides WDC with greater certainty that the proposed shelterbelt planting will adequately mitigate the identified landscape effects.

Condition 27A provides implementation for the SPP and specifies it must occur prior to the commencement of earthworks associated with the construction of the SW Plant. This is consistent with what is proposed by the Applicant.

Conditions 27B and 27C reflect Condition 27(d) (LE) recommended by WDC's Landscape Expert. These conditions strengthen the existing condition framework by introducing specific monitoring and reporting requirements to demonstrate that the shelterbelt planting is establishing and continuing to perform its intended screening function. The Applicant's proposed conditions require the shelterbelts to be planted and maintained but do not establish any requirements for monitoring their growth or screening performance, or for reporting that information to WDC.

Condition 27D provides a specific trigger for the removal of the exotic shelterbelt as identified in the LVA and as recommend in Condition 27(e) (LE) by WDC's Landscape Expert. This condition requires the exotic planting to remain until the adjoining tōtara has attained an average height of at least 6 m and provides continuous replacement screening. This ensures that the temporary exotic shelterbelt cannot be removed until the longer-term tōtara planting is sufficiently established to take over its screening function thereby avoiding a temporary reduction or gap in landscape mitigation that would be possible under the Applicant's proposed conditions. Written confirmation to WDC prior to removal also provides a mechanism for demonstrating compliance. In addition, the advice note proposed by WDC's Landscape Expert will be included.

Regarding Condition 28 as proposed by WDC's Landscape Architect, WDC acknowledges the Applicant's position that the identified screening ridgelines are outside the proposed extraction extent and that their lowering or removal is not authorised by the Project. The LVA identifies these landforms as contributing to the screening relied upon in the landscape assessment. As no earthworks are within the ridgeline the Applicant would require a new resource consent / resource consent variation to modify the identified ridgelines, WDC considers that the ridgelines are sufficiently protected by the Applicant undertaking works in accordance with the conditions of consent. As such, Condition 28 (LE) as recommended by WDC's Landscape Expert is not recommended by WDC.

Conditions 28A and 28B refine the existing maintenance requirements relation to the ongoing maintenance and replacement of shelterbelt planting. The amended conditions establish a specific objective and timeframe for replacement planting, requiring replacement during the next appropriate planting season and no later than 12 months after the loss is identified. They also clarify that replacement planting must use the species required by Condition 27 and expressly link the duration of the maintenance obligation to completion of rehabilitation under the certified Pit Closure Plan. This secures the recommendations made by WDC's Landscape Architect, and by providing greater certainty around the ongoing maintenance of the shelterbelts.

4.4 Landscape Effects Summary

Overall, the proposed amendments consolidate and refine the changes recommended by WDC's Landscape Expert to provide a clear, practical and enforceable framework for implementing and monitoring the required landscape mitigation, without extending beyond the scope of the proposed project and the associated expert evidence.

5. Transport

The potential transport effects associated with the proposal have been assessed in the Transport Impact Assessment contained in Appendix N of the application. WDC has previously obtained specialist transport advice on the proposal, including a transport peer review completed in November 2026 (**Appendix E**).

The updated Transport Impact Assessment concludes that the proposal is not expected to result in a significant increase in traffic associated with the quarry and that the surrounding road network has sufficient capacity to accommodate the existing and anticipated quarry traffic. In particular, the assessment identifies substantial spare capacity on Oparure Road and concludes that the existing quarry access remains appropriate for the proposed activity.

5.1 Transport Review

WDC's previous transport peer review generally supported the transport conclusions associated with the proposal, subject to a number of measures being implemented. These included:

- installation of safe-hit delineators on the western side of the Oparure Road/quarry access intersection to prevent parked vehicles from obstructing the available sightline;
- more stringent use of the existing wheel wash to minimise the tracking of quarry material onto Oparure Road and associated dust effects;
- installation of an additional PW-50 truck-crossing warning sign approximately 160 m west of the quarry access; and
- restricting the regular use of Troopers Road by quarry trucks, noting the standard of that road and its suitability for regular heavy vehicle movements.

The updated Transport Impact Assessment generally remains consistent with the conclusions of the earlier transport assessment and peer review. It continues to identify that Oparure Road has sufficient capacity to accommodate quarry traffic and acknowledges that sections of Troopers Road are not ideal for long-term two-way use by truck-and-trailer or semi-trailer combinations.

The draft WDC conditions also incorporate the principal physical mitigation measures recommended through the transport peer review. In particular, Condition 29 requires safe-hit delineators at the quarry access, Condition 30 addresses wheel-wash operation, and Condition 31 requires the additional PW-50 truck-crossing sign approximately 160 m west of the quarry access.

On this basis, WDC consider that the updated Transport Impact Assessment is generally consistent with the conclusions of the previous transport assessment and WDC's transport peer review, and the principal mitigation measures recommended through that review are reflected in Conditions 29 to 31.

5.2 Transport Summary

WDC is generally satisfied that the transport effects associated with the proposal have been appropriately assessed and can be adequately managed through the proposed conditions. Therefore, WDC does not identify any outstanding transport effects that would preclude the proposal from proceeding, and no substantive amendments to the proposed transport conditions are considered necessary.

6. Summary

WDC has assessed the Applicant's substantive application documentation, having regard to the advice provided by WDC's technical experts. WDC is generally satisfied that the effects of the Project can be appropriately managed. However, amendments to the proposed conditions are required to ensure that the mitigation and management measures relied upon in the application are clearly defined, practically implementable, measurable and enforceable.

The principal matters requiring amendments to the proposed conditions relate to:

- **Terrestrial and cave ecology**: securing the full ecological betterment package, identifying and implementing the relevant ecological management plans, establishing appropriate maintenance durations and performance standards, legally protecting specified betterment areas, requiring updated surveys for each stage of clearance, and providing for independent ecological review.

- **Noise and vibration**: advance notification of blasting, correction of identified cross-referencing errors, and ensuring that the conditions governing noise emissions and night-time operations are technically justified, practically implementable and capable of being monitored and enforced.

- **Landscape and visual effects**: including certification and implementation of shelterbelt planting, monitoring and reporting on the establishment and effectiveness of that planting, establishing an appropriate trigger for removal of the temporary exotic shelterbelt, and specifying ongoing maintenance and replacement requirements.

WDC is generally satisfied that the transport effects of the Project have been appropriately assessed and can be adequately managed through the proposed conditions. The principal physical mitigation measures recommended through WDC's earlier transport peer review are reflected in the proposed conditions, and no substantive amendments to the transport conditions are considered necessary.

The matters requiring further clarification are:

- **Terrestrial ecology**: including the recorded presence of short-tailed bats, the extent of the Lizard Management Plan and associated Wildlife Act Authority, the discrepancy in the stated disturbance area, and the relationship between the proposed consent duration and the anticipated staged development period.

- **Noise and vibration**: the technical basis and practical achievability of the noise limits in Condition 32, the exclusion of 966 Oparure Road from those limits under Condition 33, and the practical implementation of the night-time operational controls in Condition 35.

Subject to the above matters being addressed through the requested further information and the amendments set out in **Appendix A**, WDC considers that the Project's terrestrial ecology, noise and vibration, landscape and visual, and transport effects can be appropriately managed.

Appendix A – WDC Changes to Conditions

Draft Conditions of Consent for the South-Western Pit and Haul Road Project

Schedule Two: WDC Conditions of Consent

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Authorised Activities

1) The activities authorised by this resource consent (hereafter referred to as 'the Project') include but are not to be limited to the:
   i. Establishment and ongoing operation of a new haul road ('the Haul Road') and South-Western Pit ('the SW Pit') that do not achieve a number of the permitted activity standards set out in Rule 11.5.4 of the operative Waitomo District Plan ('the oWDP');
   ii. Quarrying activities that extend across the Digme-Camelot cave system as recorded in the oWDP;
   iii. Earthworks and vegetation clearance including those that occur within a 20 metre radius of an entry or opening to any cave or sinkhole located within a Landscape of High Amenity Value or the Karst Overlay of the proposed Waitomo District Plan ('the pWDP');
   iv. Changes and modifications to the environment that cause the loss of cave features and/or changes to cave processes;
   v. Quarrying land uses, including blasting that exceed the applicable noise standards set out in the oWDP and in the pWDP;
   vi. The placement of fill into any cave or sinkhole, or within a 20 metre radius of an entry or opening of any cave or sinkhole as recorded in the pWDP; and
   vii. Establishment of an independent water supply for fire fighting purposes compliant with SNZ PAS 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice.

Location

2) The activities authorised in condition 1 shall be undertaken at 806 Oparure Road, Te Kuiti on the land with the following legal descriptions Lot 1 - DPS 77130, Lot 2 – DPS 33442, Lot 1 – DPS 74022, Lot 1 – DPS 7402 and Lot 2 – DPS 77130 (hereafter referred to as 'the Site').

3) The SW Pit shall be constructed so as to be no closer at any given time than 50 metres from any of the Site's external cadastral boundaries.[1] It shall have a maximum north-south dimension (length) of 1,080 metres and a maximum west-east dimension (width) of 800.00 metres at any given time. The SW Pit shall not exceed 59.6 hectares in area at any given time. Any part of the Site that has been rehabilitated in accordance with the conditions of this resource consent or which forms part of the betterment proposals shall not be calculated as part of the 59.6 hectare limitation set by this condition.

Consent Duration

4) This resource consent is of unlimited duration.

Lapse Date

[1] Advice Note 1: The term 'external cadastral boundary' means any boundary that separates the Site from adjoining / abutting land that is not owned by the consent holder and/or is not lawfully used by the consent holder for quarrying and/or to haul equipment, materials (including limestone and overburden) and personnel to and from the SW Pit. The 50 metre separation distance from the Site's cadastral boundaries does not apply where the abutting property is not owned by the consent holder or used for quarrying purposes but the owner(s) and occupier(s) of the property has given their written approval to the establishment and operation of the haul road and SW Pit.

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5) Pursuant to section 125(1) of the Resource Management Act 1991, this resource consent shall lapse if not given effect to within 10 years of the commencement of this resource consent.

General Conditions

6) The activities authorised by this resource consent shall be undertaken in accordance with the application for this resource consent (including but not limited to the Substantive Application Report prepared for Graymont (NZ) Limited by Enspire Consulting, entitled *"Oparure Quarry South-Western Pit – Substantive application under the Fast-track Approvals Act 2024"* and dated the xxx of June 2026) and any subsequent amendments and further information ('the application documentation'). Where a conflict exists between the application documentation and these conditions of this resource consent, these conditions shall prevail.

7) The consent holder shall ensure that a representative of each contractor engaged to undertake activities authorised by this resource consent are made aware of the conditions of this resource consent and all management plans relevant to their work area and the measures required for compliance with the conditions.

Cultural Monitoring Plan

8) The consent holder shall, not later than three months prior to the quarrying of limestone from the SW Pit, invite Oparure Marae[2] to collaborate with the consent holder in the preparation of a Cultural Monitoring Plan (or 'CMP') for the Site and quarrying activities authorised by this resource consent which are undertaken on land owned by the consent holder. In the event that Oparure Marae do not accept the invitation to prepare the CMP with the consent holder, then conditions 9 to 13 do not apply.

9) Should the Oparure Marae accept the invitation extended by the consent holder in accordance with condition 8, the consent holder shall fund the preparation of the CMP. Once the CMP has been prepared (and agreed to by the consent holder), the consent holder shall submit the CMP to the Chief Executive Officer of the Waitomo District Council ('the WDC') (or delegate).

10) The objective of the CMP shall be to both acknowledge mana whenua as kaitiaki, and to provide the opportunity for cultural monitors to participate in the monitoring (including the application of appropriate tikanga), undertaken by the consent holder of the quarrying activities conducted on land it (the consent holder) owns in accordance with the conditions of this resource consent to avoid, remedy, manage or offset actual and potential adverse effects from the activities authorised by this resource consent.

11) The CMP shall include, but is not limited to:
    a) Identification of culturally appropriate monitoring indicators and methods relating to:
        i. the actual or potential effects of the SW Pit on the Camelot Karst (cave) System;
        ii. the Ecological Betterment Plan required under condition 19;
        iii. culturally important plant and aquatic species (if identified);
    b) Protocols for the presence of cultural monitors on site on land that is owned by the consent holder; and
    c) Procedures for reporting and responding to cultural issues or concerns.

12) The CMP may be amended by the consent holder to respond to new information or changing circumstances. The consent holder shall engage with Oparure Marae prior to submitting the amended CMP to the Chief Executive Officer of the WDC (or delegate).

[2] Advice Note 2: The reference to the 'Oparure Marae' within these resource consent conditions shall include any group or committee that may be established to represent the Oparure Marae.

13) The consent holder shall implement the certified version of the CMP.

Physical Protection of the Camelot Cave System

14) Prior to the commencement of quarrying activities authorised by this resource consent, the consent holder shall confirm the coordinates of the "Camelot Cave Buffer Zone" ('CCBZ'); which shall extend 100 metres either side of the estimated centre line of Camelot Cave defined on the plan entitled "Figure 2", dated 16 June 2026 and attached as Annexure A to this resource consent. The CCBZ shall be surveyed and marked on the site. No quarry excavation or overburden placement shall be undertaken in the CCBZ until
    a) The extents and geometry of the cave system have been confirmed by an independent suitably qualified and/or experienced expert and provided to the Chief Executive Officer of the WRC (or delegate) for certification in accordance with condition 19(a); and
    b) The WRC has certified the extents and geometry as sufficiently accurate to position Camelot Cave with respect to the proposed quarry.

15) Upon certification of the extents and geometry of Camelot Cave under condition 14(b) of this resource consent, the following restrictions shall apply:
    a) No blasting activities shall be undertaken within 25 metres of Camelot Cave "No Blast Zone".
    b) Within 25 to 100 metres of Camelot Cave, a "Blast Vibration Restriction Zone" ('BVRZ') shall apply, where blast design shall limit Peak Particle Acceleration ('PPA') to less than 2.4g at the nearest part of the cave system.
    c) Prior to any blasting occurring within the BVRZ, the consent holder shall install permanent vibration monitors. The monitors shall be positioned to monitor blast vibration at the ground surface above Camelot Cave.
    d) At distances greater than 100 metres from Camelot Cave no restrictions on blasting or excavation activities shall apply (with respect to protection of the cave system).

16) A blasting and vibration management plan shall be developed and submitted to Chief Executive Officer of the WRC (or delegate) for certification in accordance with condition 19(a) that it complies with conditions 17 and 18.

17) The objective of the Blast Management Plan is to ensure that all blasting activities are planned, undertaken, and monitored in a manner that protects people, property, infrastructure, and the environment, while achieving operational requirements and complying with all relevant legal and consent obligations.

18) The Blast Management Plan shall include the following:
    a) Plans illustrating the Camelot Cave Buffer Zone, the Blast Vibration Restriction Zone and the No Blast Zone.
    b) The limitations on PPA (2.4 g) to be applied in the Blast Vibration Restriction Zone.
    c) Proposed controls on the Maximum Instantaneous Charge ('MIC') and delays to limit PPA to below the threshold for protection of the cave system.
    d) The proposed positions of permanent blast monitoring devices.
    e) Procedures for reporting on each blast.
    f) Procedures for notifying Waikato Regional Council of vibration exceedance events.

Certification

19) Where any condition of this resource consent requires the consent holder to submit a document to the WDC for 'certification' the process set out in clauses (a) to (e) shall be followed by the consent holder:
    a) The consent holder shall supply the document to the Chief Executive Officer of the WDC (or delegate), and the WDC will assess the documentation submitted to ensure that it achieves the requirements of the relevant condition(s) of consent;

b) Should the document(s) supplied in accordance with clause (a) of this condition, in the opinion of the Chief Executive Officer of the WDC (or delegate), achieve the requirements of the relevant condition(s), the WDC will issue a written confirmation (which shall constitute 'the certificate') to the consent holder that the requirements of the relevant condition(s) have been satisfied;

c) If the WDC is not satisfied that the document(s) supplied in accordance with clause (a) achieves the requirements of the relevant condition(s), the WDC shall advise the consent holder in writing of the changes, including additional information or measures, it considers necessary to meet the requirements of the relevant condition(s) and ask that the document(s) be modified so as to address the concerns, and then be resubmitted;

d) This process shall be repeated until the Chief Executive Officer of the WDC (or delegate) is able to certify that the requirements of the applicable condition(s) have been satisfied; and

e) Where no written confirmation, pursuant to clauses (b) to (d) of this condition is provided within 40 working days of the document being provided to the Chief Executive Officer of the WDC (or delegate), the other document shall be deemed to be certified for the purpose of the respective condition(s) to which the document pertains.

20) The consent holder shall exercise this resource consent in accordance with:
   a) The conditions of this resource consent; and
   b) A certified version of all documents required by the conditions of this resource consent.

Independent Suitably Qualified Experienced Person / Expert

21) For the purposes of this resource consent, the phrase 'Independent Suitably Qualified and Experienced / Expert' means a person or persons:
   a) That is not an employee of the consent holder;
   b) With a recognised qualification(s) that is relevant to the topic being assessed; and / or
   c) Who has relevant experience in the topic being assessed.

Site Representative

22) The consent holder shall appoint a representative to be the principal contact person with respect to all to matters relating to the exercise of this resource consent. The consent holder shall inform the WDC of the representative's name and how they can be contacted not less than two months prior to this resource consent being exercised. Should that person(s) change during the term of this resource consent, the consent holder shall, within five working days of any change occurring, inform the WDC and shall also give written notice to the Chief Executive Officer of the WDC (or delegate) of the new representative's name and how they can be contacted.

Site Meeting

23) The consent holder shall, not later than two months prior to earthworks commencing in accordance with this resource consent, arrange and conduct a Site meeting to discuss the full suite of the applicable resource consent conditions. The consent holder shall invite, with a minimum of 10 working days' notice, the Chief Executive of the WDC (or delegate), the Site Representative nominated in accordance with condition 22 of this resource consent, a representative of each of the contractors that will assist the consent holder in giving effect to this resource consent, representatives of Oparure Marae and Te Nehenehenui (hereafter referred to as 'TNN').[3]

[3] Advice Note 5: The consent holder will be deemed to have complied with this condition should it have issued an invitation to the parties listed even if none of the parties attend the site meeting that is convened

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Betterment Initiatives

24. The consent holder shall ensure that the following betterment initiatives are identified and implemented within three (3) years of the commencement of this resource consent. The Ecological Betterment Plan that is prepared, reviewed and, as necessary, amended in accordance with conditions 32 and 33 of Resource Consent x [insert the consent number for the corresponding WRC consent] shall set out how each of the following betterment initiatives are implemented and shall maintain those initiatives for the term of this consent:

    a. Not less than 21 cave entrances shall be protected and enhanced by the consent holder. The cave entrances that are protected and enhanced shall be identified by an independent suitably qualified and experienced expert and their cumulative floor area shall sum to not less than 224 square metres in area. All of the cave entrances that are protected and enhanced by the consent holder shall be located a maximum of 10 kilometres from the cadastral boundaries of the Site;

    b. Not less than 6.7 hectares of planting between and around SNAs.

    c. Improved sediment control within pastoral land on not less than 9.4 ha within the Mangawhitikau Stream catchment to reduce sediment loads entering downgradient waterways.;

    d. Not less than 14.4 ha of fencing and plant and animal pest control within and around the existing Significant Natural Area vegetated areas;

    e. Not less than 11.8 hectares of riparian planting or enhancement of existing native vegetation (using appropriate, locally sourced, indigenous / native plant species) shall be undertaken in the catchment of the Camelot Cave Stream. The areas of riparian planting shall be identified by an independent suitably qualified and experienced expert. The 11.8 hectares of riparian planting shall be in addition to the habitat that is to be protected and enhanced in accordance with the other clauses of this condition.

    f. Restore and maintain not less than 314 m² of vegetation restoration at P**ō**tea Spring;

    The cave entrance enhancement and lizard release habitat required by this condition shall be established, and associated plant and animal pest control shall be operating, prior to the first clearance of any karst feature or indigenous lizard habitat authorised by this consent.

    24A. The consent holder shall implement the Ecological Betterment Plan required under Conditions 39 and 40 of the WRC Consent (reference), including the following certified sub-plans:

    a. the Karst and Riparian Management Plan;

    b. the Bat Management Plan;

    c. the Bird Management Plan;

    d. the Lizard Management Plan; and

e. the Plant and Animal Pest Management Plan.

24B. Prior to certification of the Ecological Betterment Plan and its sub-plans, the WDC and WRC shall obtain a review of the relevant plan by an independent suitably qualified and experienced ecologist. The independent review shall assess whether the plan adequately gives effect to the ecological requirements of these conditions and shall inform the Councils' certification decision. The reasonable costs of the independent ecological review shall be met by the consent holder.

24C. The consent holder shall undertake plant and animal pest control and maintain all fencing and planting associated with the ecological betterment areas required by Condition 24 for the term of this consent. Plant and animal pest control shall achieve the following performance targets:

a. rat tracking index of no more than 5%;

b. possum RTC or wax-tag index of no more than 5%; and

c. mustelid tracking index of no more than 5%.

Monitoring shall be undertaken in November and February each year. Where any performance target is not achieved in two consecutive surveys, the consent holder shall implement additional pest control measures until that performance target is achieved.

24D. Planting required by Condition 24 shall achieve the following performance standards:

a. a minimum 80% survival rate two years after planting, with infill planting undertaken where necessary to achieve this standard;

b. a minimum 80% indigenous canopy closure within 10 years of planting within the riparian planting and SNA linkage areas; and

c. a minimum 70% indigenous ground and shrub cover within 10 m of each enhanced cave entrance within five years of planting.

The consent holder shall monitor and report on compliance with these performance standards annually until they are achieved, and at three-yearly intervals thereafter for the term of this consent.

24E. Within five years of commencement of this consent, the consent holder shall secure enduring legal protection, by way of a QEII covenant or equivalent legal mechanism, over:

a. the SNA linkage area;

b. the lizard release area;

c. the cave entrance enhancement areas; and

d. the Camelot catchment riparian enhancement areas.

Where the consent holder is unable to secure legal protection because the relevant

landowner does not agree, the consent holder shall provide evidence of the landowner's refusal and establish an alternative mechanism for the enduring protection of the relevant area to the satisfaction of the WDC.

24F. Prior to vegetation or habitat clearance within each stage of the quarry development, the consent holder shall undertake updated ecological surveys appropriate to that stage, including:

a. an updated bat tree-roost assessment;

b. acoustic bat monitoring sufficient to establish a current baseline;

c. updated lizard salvage planning; and

d. a falcon survey.

The results of these surveys, together with the measures proposed to manage any identified ecological effects, shall be documented in a Stage Clearance Report prepared by suitably qualified and experienced ecologists and submitted to the WDC and WRC for certification prior to commencement of clearance within that stage.

Pest / Weed Control

25) The consent holder shall ensure that all machinery used in the exercising of this resource consent is cleaned prior to being transported to the Site to ensure that all seed and/or plant matter has been removed and documented in accordance with the "*National Pest Control Agencies A series, best practice (Code A16) guidelines*", available to download from http://www.npca.org.nz/index.html.

Overburden Placement

26) All overburden placed into the SW Pit shall be undertaken so as to create engineered landforms (or 'EL') and shall be designed by an independent suitably qualified and/orexperienced expert. The design of the EL and construction methodology shall be reviewed by an independent and suitably qualified and/or experienced geo-professional. To mitigate slope failure post closure of the site, stability analysis of any final slopes that are not buttressed by the quarry pit wall should be undertaken. Design loading criteria shall be determined by the geo-professional in accordance with accepted standards and used in stability analysis. The design shall include drainage, sediment, and erosion controls to be implemented for final designs.

Landscape & Visual Effects Management

~~27) The consent holder shall, prior to the commencement of any earthworks associated with the construction of the SW Pit, plant the shelter belts shown on Figure 27, a copy of which is attached as Annexure B of this resource consent. Both shelterbelts are to be planted using evergreen species that are capable to being at least five metres tall within 10 years of them being planted, and are to:~~

~~a) In terms of the shelterbelt to the north east of the SW Pit, reduce the visibility of the SW Pit and its upper faces when viewed from Boddies Road, 531 Boddies Road and the accessway to the Mangawhitikau Cave System; and~~

~~b) In terms of the shelterbelt to the south east of the SW Pit, to reduce the visibility of the SW Pit and its more elevated south-western reaches from those to the south east of the SW Pit.~~

~~28) The consent holder shall proactively and diligently maintain both of the shelter belts required by this resource consent to ensure that they achieve the purposes set out in conditions 23(a) and 23(b). The maintenance activities shall occur until quarrying has ceased and the pit has been rehabilitated in accordance with the Pit Close Plan that is required by Resource Consent xx [cross reference the WRC consent]. Such maintenance shall include, but not be limited to, the replacement of any dead or diseased trees, or any that have been damaged or blown over by weather events, with seedlings that will grow to five metres tall within 10 years of being planted.~~

27. At least 20 working days prior to the proposed commencement of shelterbelt planting, the consent holder shall submit a Shelterbelt Planting Plan (SPP) to WDC for certification that it achieves the objective of this condition.

The objective of the SPP is to ensure that the shelterbelt planting is established and maintained to progressively screen and reduce the visibility of the SW Pit and associated quarry activities from the identified viewpoints at Boddies Road, 531 Boddies Road, the accessway to the Mangawhitikau Cave System, and Oparure Road within 10 years of planting, consistent with the landscape mitigation identified in the LVA.

The SPP shall include, as a minimum:

a) The location and extent of the exotic and tōtara planting, in accordance with Attachment 3A;

b) The species to be planted, including fast-growing exotic species capable of attaining a height of at least 5 m within 10 years of being planted, and the proposed tōtara planting; and

c) The proposed plant spacing, density and arrangement necessary to achieve overlapping foliage and continuous screening within each planted section.

27B. Until the shelterbelt planting has reached an average height of at least 6 m and provides continuous screening in accordance with the certified SPP. The consent holder shall inspect the planting at least once every 12 months and provide WDC with a report within 20 working days of each inspection. The report shall include:

a. measured planting heights;
b. photographs taken from consistent viewing locations;
c. identification of any gaps, plant losses, disease or damage; and
d. identification of any corrective works required.

Where an inspection identifies any plant loss, disease, damage or other matter requiring corrective action, the required maintenance or replacement planting shall be undertaken in accordance with Condition 28A.

27C. Once the totara shelterbelt and totara strand, have reached an average height of at least 6 m and provides continuous screening in accordance with the certified SPP, the annual inspection and reporting requirement shall cease and inspections and reporting shall thereafter occur at five-yearly intervals until the completion of the rehabilitation works required by the certified Pit Closure Plan.

27D. The exotic shelterbelt shall not be removed until the identified totara shelterbelt has attained an average height of at least 6 m and provides continuous replacement screening along the section proposed for removal. The consent holder shall provide the WDC with written confirmation that these requirements have been achieved prior to removal.

Advice Note: It is intended that these planting become permanent landscape features following rehabilitation of the reinstated farm.

28A. The consent holder shall maintain the shelterbelts required by Condition 27 to ensure that they continue to achieve the objective in Condition 27. Where any plant dies, becomes diseased, is damaged or is blown over, the consent holder shall replace that plant with a plant of the species required by Condition 27. Replacement planting shall occur during the next appropriate planting season and no later than 12 months after the loss is identified.

28B. Maintenance of the shelter belt in accordance with Condition 28A shall continue until quarrying has ceased and the pit has been rehabilitated in accordance with the certified Pit Closure Plan required by Conditions 45 to 48.

Traffic

29) Safe hit delineators shall be installed on the western side of the Oparure Road and quarry access road intersection to prevent parked vehicles from obstructing the sightline looking west. This work is to be undertaken to the satisfaction of the Roading Manager, Waitomo District Council.

30) A wheel wash shall be installed and operated by the consent holder (at the point vehicles exit from the Site to Oparure Road) to reduce the rise of dust nuisance effects and the tracking of sand onto Oparure Road.

31) The consent holder shall install an additional PW-50 (truck crossing) sign approximately 160 metres to the west of the quarry access intersection. This work is to be undertaken to the satisfaction of the Roading Manager, Waitomo District Council.

Noise & Vibration

32) The noise (rating) level from the activities authorised by this consent shall not exceed:
   a) 50 dB $L_{Aeq(15min)}$ between the hours of 7am and 10pm from Monday to Saturday and 8am to 5pm on Sundays and public holidays; and
   b) 40 dB $L_{Aeq(15min)}$ and 70dB L_{AFmax} at all other times.

33) The noise limits set by Condition **32** of this resource consent shall not be exceeded at the notional boundary of any adjacent site except at 966 Oparure Road (~~where no noise limit applies~~). All noise measurements and assessments shall be in accordance with New Zealand Standards NZS 6801:2008 *Acoustics – Measurement of environmental sound* and NZS 6802:2008 *Acoustics – Environmental noise*.

34) Tonal reversing alarms shall not be used on any vehicles or plant that are based on the site. Broadband alarms or non-tonal alternative devices are permitted.

35) The consent holder shall not, when condition **32(b)** of this consent applies, use heavy machinery and plant for quarry development (this shall include, but is not limited to, trucks on haul roads, excavators, bulldozers, drilling, blasting, crusher operation and overburden removal) where there is a direct line of sight from the machinery to any notional boundary and the machinery is located 800 metres or closer to the notional boundary.

36) No work shall be undertaken on the site on the following days (from 12.01 am to 11.59pm) of each calendar year (except as set for ANZAC Day in bullet point e)):
   a) Christmas Day;
   b) Boxing Day;
   c) New Year's Day;

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d) Good Friday; and
e) ANZAC Day (until 12pm noon).

37) The consent holder shall ensure that the noise from construction work does not exceed the noise limits in the following table except at 966 Oparure Road (where no noise limit applies). The noise shall be assessed one (1) metre from the façade of any dwelling that is occupied during the works, and shall be measured and assessed in accordance with NZS 6803:1999: Acoustics – Construction Noise:

Time period	Maximum noise levels	
	L_{Aeq}	L_{AFMax}
7:30am- 6:00pm Monday to Saturday	70 dB	85 dB
6:00pm- 7:30am on all days and at any time on a Sunday	45 dB	70 dB

38) For the purposes of condition 37, 'construction work' shall be defined in accordance with that set out in NZS6803:1999. This generally includes the construction of haul roads, drainage and other infrastructure associated with the development of the quarry, but it does not include noise from the ongoing quarry development, extraction and rehabilitation.

39) The consent holder shall:
a) Ensure that the vibration from all blast events does not exceed a limit of 5mm/s PPV when measured on the foundation of any dwelling (not including 966 Oparure Road);
b) Ensure that all blast event vibration measurements are within 500mm of ground level on the foundations, piles, footings or structural element on the perimeter of buildings not on the Site. All measurements and assessments shall be conducted in accordance with the requirements of DIN4150-3:1999 Structural vibration - Effects of vibration on structures;
c) Ensure that the air over-pressure from all blast events does not exceed 115dB L_{ZPeak} when measured as the incident level at any dwelling on another site (not including 966 Oparure Road);
d) Only fire blasts between the hours of 10am and 5pm on weekdays. No blasting shall occur on weekends or public holidays; and
e) Ensure that advanced notice of blast events are published on Graymont's website. The notice will provide a minimum of three days' notice of blast events, and the five (5) hour time window for blasting. The notice should specify that blast events may be rescheduled due to meteorological conditions or other unforeseen circumstances. The webpage should provide an option for receivers to sign up to receive email updates when blast events are published and of any changes to scheduled blast events.

Tangata Whenua Monitoring & Accidental Discovery Protocol

40) The consent holder shall appoint a representative nominated by the Oparure Marae and TNN to monitor any earthworks undertaken by the consent holder in accordance with this resource consent that are associated with the development of the SW Pit or the establishment of the Haul Road that will disturb any areas of the ground that has yet to be disturbed on the site. Monitoring shall occur while the topsoil layers of all previously undisturbed ground are removed. No monitoring of the disturbance of subsurface substrates (including the quarrying of the limestone in the pit) is required to satisfy this consent condition.

41) In the event of any archaeological site, taonga (Māori artefacts) or koiwi being uncovered during the exercise of this resource consent, all activities / works in a 20 metre diameter of the discovery shall cease and the consent holder shall comply with conditions 82 and 83 of Resource Consent xx [insert WRC consent number].

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Annual Hui

42) The consent holder shall invite the Oparure Marae and TNN to attend a hui on an annual basis in accordance with condition 84 of Resource Consent xx. [insert the WRC consent number]

Complaints

43) The consent holder shall maintain a 'Complaints Register' for the activities that are conducted in accordance with this resource consent. The Complaints Register shall specify:
   a) The date and time of the complaint;41
   b) The name and contact details of the complainant (if they are provided to the consent holder);
   c) A description of the complaint, including the nature of the complaint, the duration of the event giving rise to the complaint, and the location from which the complaint arose (if available);
   d) The cause or likely cause of the event and any factors that influenced its severity;
   e) The nature and timing of any measures implemented by the consent holder to avoid, remedy or mitigate any adverse effects;
   f) The steps to be taken in future to prevent recurrence of similar events; and
   g) Any feedback provided to the complainant.

44) The consent holder shall provide a copy of the complaints register to the Chief Executive Officer of the WDC (or delegate) within five (5) working days of receiving a request to do so from the WDC.

Pit Closure Plan

45) The consent holder shall, not less than 12 months prior to the planned closure of the SW Pit, prepare a Pit Closure Plan (or 'PCP') and submit it to the Chief Executive Officer of the WDC (or delegate) for their certification that it achieves the objective stated in this condition and the matters set out in condition 42. The PCP shall ensure that the long-term physical, chemical and biological/ecological stability of the Site is achieved at closure. The specific closure objectives shall include, but are not limited to:
   a) Returning the land to a form and appearance that is in keeping with the Site's surroundings and the proposed measures set out in the "*Oparure Quarry South-Western Pit – Substantive application under the Fast-track Approvals Act 2024''* and dated the xxx of June 2026 and any subsequent amendments and further information ('the application documentation'); and
   b) Provide for an environmentally sustainable use of the rehabilitated land.

46) The PCP shall include the following information:
   a) A description of intended land use and closure operations;
   b) Designs and plans showing the final landform and drainage pathways;
   c) The methods that are to be implemented to protect the Site's hydrology (surface and sub –surface) and water quality during the site rehabilitation activities;
   d) The methods to stabilise the quarry pit slopes and engineered landforms;
   e) The requirements for the uplift and removal of any buildings, utilities and infrastructure, not required for the future land use;
   f) The specific environmental rehabilitation activities (that is, planting and revegetation) that are to be undertaken;
   g) A cost estimate for closure and rehabilitation operations; and
   h) Post closure monitoring and maintenance requirements.

47) A final draft of the PCP shall be submitted to the Oparure Marae and TNN for its review and

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comment at least 18 calendar months prior to the planned closure of the SW Pit. The consent holder shall review all comments provided by the Oparure Marae and TNN when it completes the PCP (which shall occur prior to the consent holder submitting the PCP for certification). A copy of the comments from the Oparure Marae and TNN, and a separate document that records the consent holder's responses to each comment and highlights the changes made to the PCP as a consequence of the Oparure Marae and TNN's comments shall be attached to the PCP as an appendix.

48) The consent holder shall implement the PCP once it is certified by the Chief Executive Officer of the WDC (or delegate).

Review

49) Pursuant to sections 128 to 131 of the Resource Management Act 1991, the Chief Executive Officer (or delegate) of the WDC may one year after the commencement of this resource consent, and at two yearly intervals thereafter serve notice on the consent holder of its intention to review any or all of the conditions of this resource consent for any of the following purposes:

a) To review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent; and/or

b) To review the adequacy of and the necessity for monitoring programmes or management plans that are part of the conditions of this resource consent undertaken by the consent holder.

Administration

50) The consent holder shall pay the WDC any administrative charge fixed in accordance with section 36 of the RMA, or any charge prescribed in accordance with regulation made under section 360 of the RMA

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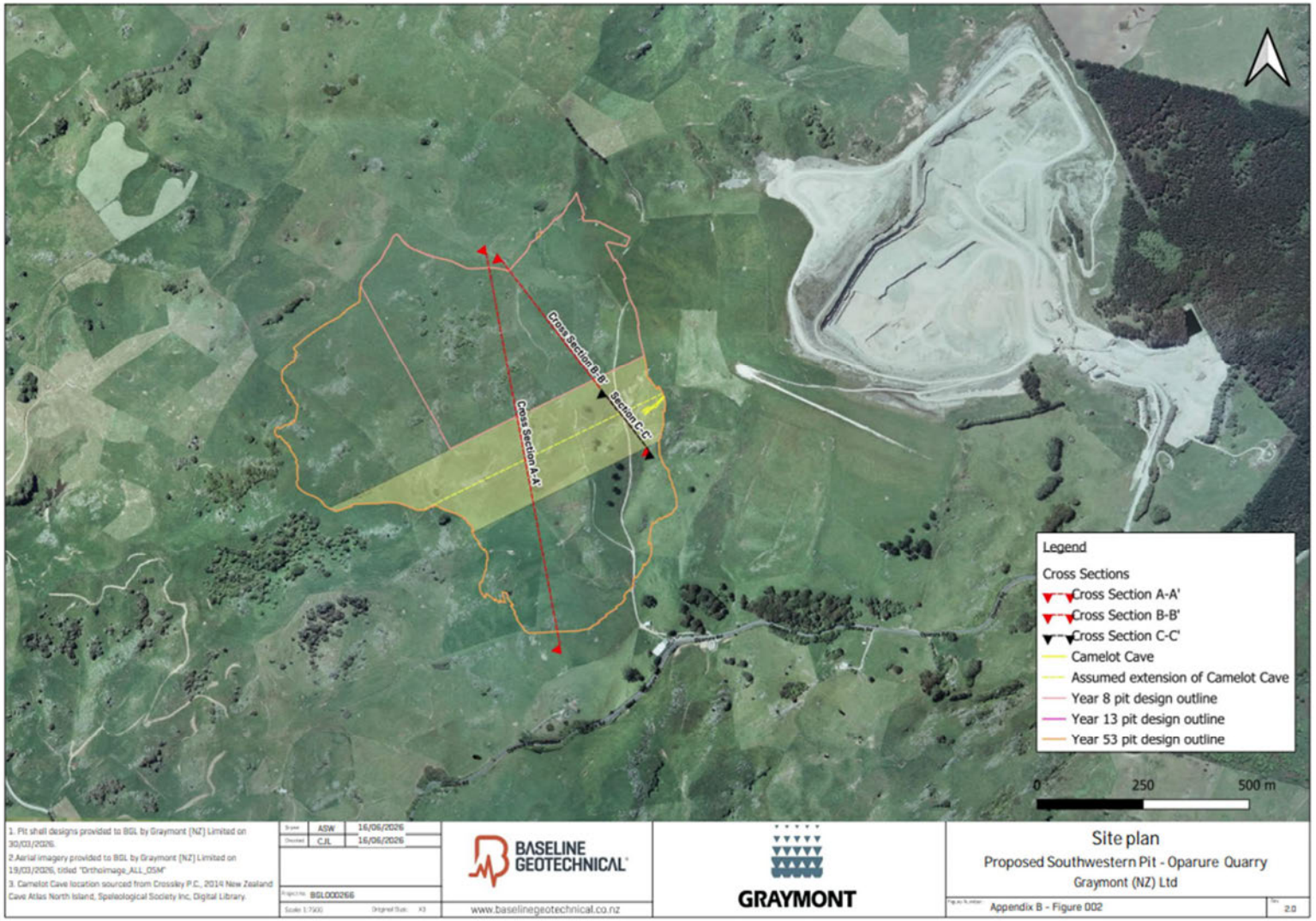
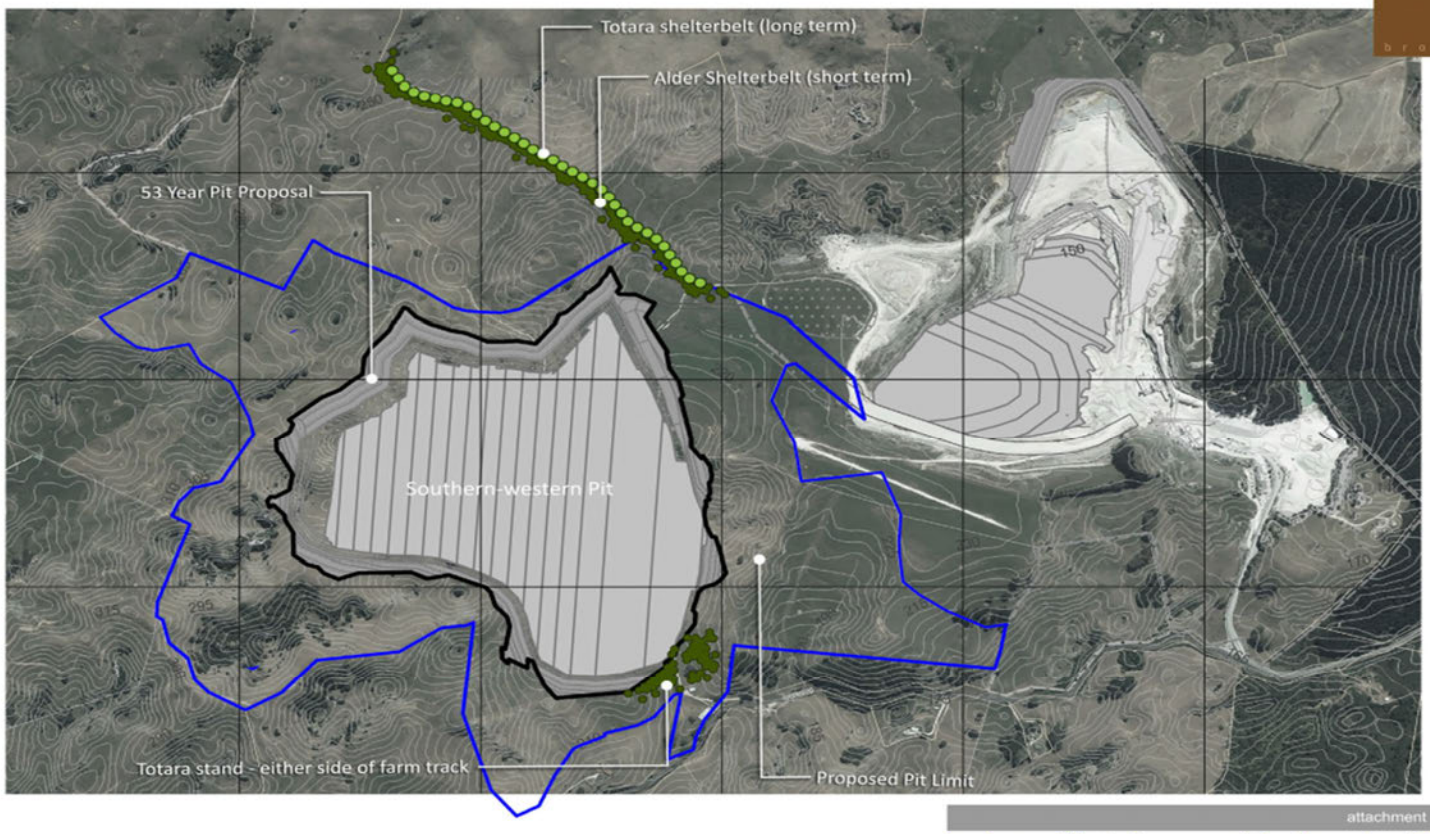
Annexure A


Cross Section B-B'
Section C-C'
Cross Section A-A'
Legend
Cross Sections
Cross Section A-A'
Cross Section B-B'
Cross Section C-C'
Camelot Cave
Assumed extension of Camelot Cave
Year 8 pit design outline
Year 13 pit design outline
Year 53 pit design outline
0
250
500 m
1. Pit shell designs provided to BGL by Graymont (NZ) Limited on 30/03/2026.
2.Aerial imagery provided to BGL by Graymont (NZ) Limited on 19/03/2026, titled "Orthoimage_ALL_OSM"
3. Camelot Cave location sourced from Crossley P.C., 2014 New Zealand Cave Atlas North Island, Speleological Society Inc, Digital Library.
ASW 16/06/2026
CJL 16/06/2026
BGL000266
BASELINE GEOTECHNICAL
www.baselinegeotechnical.co.nz
GRAYMONT
Site plan
Proposed Southwestern Pit - Oparure Quarry
Graymont (NZ) Ltd
Appendix B - Figure 002
2.0

Annexure B


Totara shelterbelt (long term)
Alder Shelterbelt (short term)
53 Year Pit Proposal
Southern-western Pit
Totara stand - either side of farm track
Proposed Pit Limit
attachment 3A.
Landscape Effects Assessment: South-western Pit
Proposed screen & mitigation planting - short & long term
Prepared for Graymont NZ ltd
By Brown NZ LTD
February 2026

Appendix B – Terrestrial Ecology Review

29 October 2026

Waikato Regional Council & Waitomo District Council c/-
Chris Dawson
Principal Planner
PO Box 9041
Hamilton 3240

Our Ref: WRC.00694

Dear Chris

Terrestrial Ecology Cross-check and Review of the Fast-track Substantive Application for the Oparure Quarry South-Western Pit (FTAA 2606-1251) – input to the Waitomo District Council section 53 response

1. SCOPE

1.1 You have asked me (email from your office dated 12 October 2026) to review, from a terrestrial ecology perspective, the substantive application documents lodged with the Environmental Protection Authority under the Fast-track Approvals Act 2024 (FTAA) for Graymont (NZ) Limited's (Graymont) proposed South-Western Pit (SW Pit) at Oparure Quarry, Te Kuiti, and to cross-check those documents against the matters I raised in my earlier reviews, most recently my letter dated 18 February 2025 (the February 2025 Review).

1.2 Specifically, you have asked me to address four questions: (1) whether my view on the validity of the conclusions reached by the applicant's ecologists concerning the possible ecological impacts of the quarry expansion remains appropriate; (2) whether the measures proposed are sufficient to avoid potential adverse effects over the lifetime of the consents; (3) whether the draft consent conditions provide sufficient measures to ensure risk to terrestrial ecology is minimised; and (4) whether there are matters that should be raised in the Waitomo District Council (WDC) section 53 response.

1.3 My scope is confined to terrestrial and cave (subsurface) ecology, including indigenous vegetation, karst ecosystems, long-tailed bats, indigenous birds and lizards. I do not address freshwater ecology, hydrogeology, sediment transport or cave geomorphology

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except where these matters bear directly on terrestrial and cave fauna habitat. I rely on the evidence of other experts (in particular Professor Williams and Dr Rumsby on karst hydrology) where I say so.

1.4 Although this is not a hearing, I have prepared this review in accordance with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. The opinions expressed are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from them.

2. DOCUMENTS REVIEWED

2.1 I have reviewed the following documents.

- SW Pit Substantive Application Report, Enspire Consulting Limited, 17 July 2026 (the Application Report), in particular Sections 2, 7 and 9;
- **Appendix K** – Terrestrial and Subsurface Ecology Assessment, BlueGreen Ecology Limited (Dr V. Keesing), Final v4, 9 July 2026 (Appendix K);
- Appendix T1 – WRC Draft Conditions and Appendix T2 – WDC Draft Conditions (V36, 14 July 2026);
- Appendix U1 – Ecological Betterment Plan, PDP, July 2026 (**EcoBP**);
- Appendix U5 – Draft Bat Management Plan, Phoenix Ecology, Version 3, September 2025 (**BaMP**);
- Appendix U6 – Pit and Haul Road Site Management Plan V2 (updated 27 October 2026) (**P&HMP**);
- Appendix U7 – Karst and Riparian Management Plan, PDP, July 2026 (**KRMP**);
- Appendix U8 – SW Pit Bird Management Plan, PDP, Final 8 July 2026 (**BiMP**);
- Appendix U9 – SW Pit Plant and Animal Pest Management Plan, PDP, July 2026 (**PMP**); and
- Appendix U12 – Wildlife Act Authority 118705-FAU and Lizard Management Plan, Dr M. Tocher (**LMP**).

2.2 I have also had regard to the project history on file, including:

- Ecology New Zealand, Terrestrial Ecological Impact Assessment: Pakeho Pit (22 September 2022) and the 2022 management plan suite;
- Boffa Miskell (Dr V. Keesing), Subterranean Habitat: Troglobite Fauna Impact Assessment, Pakeho Pit (2022) (the Boffa Miskell report);
- My review of the application and further information requests dated 14 November 2022, and the WRC subsequent further information request on cave and karst matters dated 14 February 2023;
- Professor Paul Williams, Pakeho Quarry Site Report: Review of Application Documents (November 2022);
- Dr Keesing's memorandum responding to section 92 questions 4(b)–(g) (24 February 2024);
- Joint Statement of Experts in the Fields of Ecology, Water Quality and Hydrology (15 October 2024) (JWS);
- Hayward, B.W. (2019) TR22-03 Mapping Significant Natural Areas of the Waikato Region: the Physical Basis for the Identification of Karst Ecosystems; and
- My review letter of 18 February 2025.

3. THE PROPOSAL AND WHAT HAS CHANGED

3.1 The SW Pit is an opencast limestone pit immediately west of the existing Oparure pit, with a 1.3 km haul road. The Application Report states that the total area disturbed over the life of the pit will be 59.6 ha by approximately 2080 (Note Appendix K refers to 57.4 ha over 53 years. Quarrying is staged, with progressive rehabilitation using overburden. The P&HMP anticipates a consent duration of 35 years, which is shorter than the 53-year development horizon described in the BaMP and Appendix K.

3.2 Relative to the proposal notified in April 2022, the pit footprint has been reduced (the northern portion removed), a 100 m Camelot Cave Buffer Zone either side of the cave centreline is now proposed in conditions, and the BaMP records that the footprint has

been adjusted to avoid Sites 5 and 6, which contained the better potential bat roost habitat. These are the changes I assessed in my February 2025 Review and I remain of the view that the reduced footprint materially lessens the risk to the Camelot system and the SNA to the west of the pit.

3.3 Appendix K characterises the site as grazed pasture with scattered limestone outcrops, small native bush fragments on karst, scattered native and exotic trees, dolines, and seven short, shallow cave entrances. It identifies the actual effects as: permanent loss of approximately 1.0 ha of high-value, significant karst ecosystem features; permanent loss of approximately 1.4 ha of native vegetation/habitat; removal of seven small caves (111 m² of cave floor); and loss of moderate-value habitat and food resources for native fauna. No troglobitic fauna were recorded. Long-tailed bats (Threatened – Nationally Critical) were confirmed at low activity levels, copper skink (At Risk) and ornate skink (At Risk – Declining) were found, and bush falcon (Threatened – Nationally Increasing) uses the locality.

3.4 Note that Appendix K incorrectly classified copper skink (*Oligosoma aeneum*) as Not Threatened. This is incorrect. It is currently classified as At Risk – Declining under the New Zealand Threat Classification System[1].

3.5 Appendix K concludes that the level of effect of karst and bush remnant loss at the Ecological District scale is less than minor and 'does not technically require any remedial or offset action', but that the betterment package offered by Graymont means those effects are 'more than offset'. The Application Report (Section 9) adopts this conclusion. The betterment package, as summarised in EcoBP Table 1, comprises: 21 cave entrances (224 m² floor area) protected and enhanced; 6.7 ha of planting between and around the two existing SNAs (including a 2.5 ha linking corridor and a 0.5 ha lizard release area); 14.4 ha of fencing and pest control of significant forest in and around the SNAs; 11.8 ha of riparian planting and fencing in the upper Camelot Stream catchment; 9.4 ha of planting/sediment control on steep land in the Mangawhitikau catchment; 314 m² of Pōtea Spring restoration; existing QEII covenants; and a bat reserve with 25–50 roost boxes and 10–20 chainsaw hollows.

[1] Hitchmough, R., Barr, B., Knox, C., Lettink, M., Monks, J. M., Patterson, G. B., Reardon, J. T., van Winkel, D., Makan, T., & Michel, P. (2026). *Conservation status of reptiles in Aotearoa New Zealand, 2025*. New Zealand Threat Classification Series 50. Department of Conservation.

4. QUESTION 1: IS MY VIEW ON THE VALIDITY OF THE APPLICANT'S ECOLOGICAL CONCLUSIONS STILL APPROPRIATE

4.1 My November 2022 review of the Boffa Miskell report raised six principal concerns:

(a) the report underplayed the rarity and threat status of caves, cave entrances and cracks in karst, which Williams et al. (2007) classify as historically rare ecosystems and Holdaway et al. (2012) rank cave entrances as Critically Endangered;

(b) it undertook no assessment of the subterranean values against the WRPS significance criteria, which in my view the cave systems were likely to trigger;

(c) it provided no analysis of the intrinsic values and life-supporting capacity of the karst system at a catchment scale (section 6(d) RMA);

(d) its 3:1 'offset' ratio had no scientific basis and was in substance compensation, not offsetting;

(e) it did not distinguish additional compensation from non-additional 'betterment' (measures required for other purposes, such as landscape or freshwater effects or Overseas Investment Office conditions); and

(f) the mechanics of the compensation package were too light to give surety of success. Professor Williams' November 2022 review reinforced these points, in particular that the epikarst – the principal habitat of subterranean fauna – was neither mentioned nor sampled, that offset ratio models developed for fluvial landscapes are inappropriate for karst, and that the assessment was 'inappropriately conceived for karst terrain'. I also noted that WRC's draft karst SNA layer (SNA326, Pakeho polygonal karst; Hayward 2019) overlapped part of the originally proposed pit. I will not address this matter further, but will leave it to Professor Williams to address.

4.2 A good deal of that ground has since been addressed. Dr Keesing's February 2024 section 92 response assessed the on-site cave features against the RPS criteria and concluded that, singly or collectively, they do not meet the significance criteria, with the exception of the Camelot Cave system which *'may be ecologically significant'* and is to be avoided. The eDNA work and literature review for Camelot Cave indicated low invertebrate diversity. At expert conferencing on 15 October 2024, Dr Keesing and I recorded agreement *'in terms of cave entrance and karst features troglobite fauna values*

and the management of those effects' (JWS, Topic 6, para 31). The subsequent removal of the northern portion of the pit, the 200 m Camelot Stream buffer and the 100 m Camelot Cave Buffer Zone addressed the reservation I shared with Mr Hamer at conferencing (JWS para 16) that the magnitude of underground effects had not been adequately demonstrated, as I recorded in my February 2025 Review..

4.3 Accordingly, my view on the validity of the subterranean conclusions, as now expressed in Appendix K, is that they are appropriate for the caves within the reduced footprint: the seven caves to be lost are short, shallow, in early formation, support trogloxene rather than troglobitic fauna, and are not individually significant.

4.4 Where I continue to differ is in the framing. First, the cave entrances and small vegetated karst fragments remain historically rare ecosystems and approximately 1 ha is acknowledged by Appendix K itself to be SNA-quality karst; their loss is a residual adverse effect that is being compensated, not a less-than-minor effect that is being 'bettered'. Second, the additionality question I raised in 2022 remains relevant: the EcoBP presents riparian and sediment-control planting (11.8 ha and 9.4 ha), which primarily addresses freshwater and sediment effects, alongside the karst and cave entrance measures, and the Application Report should be clear about which measures are compensation for terrestrial and subterranean losses and which are for other purposes. On my reading the genuinely additional terrestrial/karst measures are the 21 cave entrances, the 6.7 ha of SNA planting and linkage (including the lizard release area), the 14.4 ha of SNA fencing and pest control, and the ‘Bat Reserve’ (see s7.5 BaMP).

Terrestrial ecology

4.5 In short, yes, subject to the qualifications below. My February 2025 Review agreed that the surface ecological attributes of the pit area are comparatively low in value, that there are no mapped SNAs within the footprint, but that the known and likely presence of Threatened and At Risk fauna and the karst cave entrances mean that section 6(c) RMA, section 7(d) RMA, the Waikato Regional Policy Statement (Section 11) and the NPS-IB are engaged. Appendix K is, in my view, a more candid and better structured assessment than the 2022 reporting and I agree with its description of the site and the species present.

4.6 I agree with Appendix K that approximately 1 ha of the better-vegetated limestone outcrops meet the criteria for significant karst ecosystems and should be treated as SNA for the purposes of assessment, notwithstanding that they are not mapped. This is

consistent with the approach to karst SNA identification in TR23-29 and with WRC's karst SNA ranking work. It is also consistent with my long-held view that karst significance does not depend on the size of the vegetated fragment but on the integrity of the surface–subsurface system.

4.7 Where I depart from Appendix K is in its characterisation of the level of effect as 'less than minor' and therefore not technically requiring remedy or offset. The permanent loss of 1 ha of significant karst ecosystem, seven cave entrances and 1.4 ha of indigenous vegetation that provides habitat for an At Risk lizard and foraging/commuting habitat for a Nationally Critically Endangered bat is, in my opinion, correctly assessed as a Low to Moderate level of effect under the EIANZ (2018) framework when the Ecological District context (a heavily cleared, under-protected karst landscape) is weighted appropriately. In practical terms the distinction is academic because Graymont has offered, and the conditions will require, a substantial betterment package. However, it is still relevant for two reasons: (a) if the betterment is characterised as voluntary 'betterment' rather than as offset/compensation required to address residual effects, the conditions must still secure it as firmly as if it were required; and (b) under the NPS-IB and the RPS, loss of significant karst is to be avoided in the first instance, and I would prefer the Application Report to acknowledge that the effects management hierarchy has been applied and that residual effects are being compensated, rather than that no residual effect exists.

4.8 I note that the Application Report characterises habitat-related effects as 'less than minor' in Section 9. For the reasons above I consider the correct characterisation, before betterment, is minor to more than minor at the local scale and less than minor at the regional scale, and that the proposal achieves a net gain only if the betterment package is fully implemented and maintained for the life of the quarry and beyond. That is the basis on which I assessed the proposal in February 2025, and I remain of that view.

4.9 Appendix K's conclusion regarding long-tailed bats – that the site is used for commuting and foraging and is less likely to be used for roosting – is reasonable on the data, but I note that the ABM survey effort underpinning it dates from 2021 (29 valid nights across the original footprint and a further seven ABMs deployed by WSP in November 2021), and that 11 of the 121 trees/tree groups assessed were rated as high roost potential. Given the 53-year staged clearance programme, I consider the survey data adequate to characterise the risk now but not adequate to be relied upon at the time of each future stage of clearance (see Section 5).

4.10 I also draw attention to Table 1 of the BiMP, which lists short-tailed bat (At Risk – Declining) as 'On site (addressed in Bat Management Plan)'. The BaMP addresses long-tailed bats only and Appendix K does not report short-tailed bat detections. I assume this is a transcription error in the BiMP or a material omission from the BaMP and Appendix K. The applicant should be asked to clarify. If short-tailed bats have been detected, the roost assessment, felling protocols and Wildlife Act implications require revisiting, since short-tailed bats roost in cavities in large trees and also use caves.

5. QUESTION 2 – ARE THE PROPOSED MEASURES SUFFICIENT TO AVOID ADVERSE EFFECTS OVER THE LIFETIME OF THE CONSENTS?

5.1 The management plan suite has improved considerably since 2022 and most of the recommendations in my February 2025 Review have been picked up in one or more of the plans. The cross-check in Section 7 of this review sets this out item by item. The following matters remain, in my opinion, insufficient to ensure that adverse effects are avoided, remedied, mitigated or compensated over the lifetime of the consents.

Duration of pest animal control and maintenance

5.2 My February 2025 Review stated that I did not agree with a five-year duration for animal pest control, and that control should be conducted for the life of the operational quarry. The PMP (Section 1.1 and Section 4.0) still provides for five years of pest animal control and five years of weed monitoring, after which actions *'will be reviewed*'. The KRMP (Section 8.4) and the BaMP (Section 7.5) adopt the same five-year horizon. This remains the single most significant shortfall in the package. The ecological benefit claimed for the 14.4 ha of SNA fencing and pest control, the lizard release area, the cave entrance plantings and the bat reserve depends on sustained predator suppression; five years of control followed by an open-ended review is, in my experience, of negligible long-term value for lizards and bats and risks creating a predator sink in the very habitat into which salvaged ornate skinks are released. Pest animal control and plant pest control over all betterment areas should be required for the full term of the consents, with the regime (not its existence) reviewable at five-yearly intervals.

Legal protection of betterment areas

5.3 My February 2025 Review recommended that some form of legal protection over the betterment areas is required to ensure they are protected in perpetuity. The EcoBP (Table 1) now lists *'Create QEII covenants*' as a commitment and Figure 1 shows a QEII covenant

area; the LMP proposes that the lizard release site be given SNA status under the District Plan. Neither mechanism appears in the draft conditions (see Section 6). Without a condition, the covenant commitment is unenforceable.

Currency of survey data for staged clearance

5.4 The BaMP relies on roost assessments and ABM surveys undertaken in 2021 and notes that many of the high-rated trees are decaying and 'will likely fall over within the next year or so'. It sates that clearance will occur in stages over approximately 53 years. The BaMP's pre-felling protocol (PRF assessment, two valid ABM nights, roost watches/arborist inspection) is consistent with the current DOC Protocols for Minimising the Risk of Felling Occupied Bat Roosts and I support it. However, the plan should expressly require a fresh tree roost assessment of each stage by the Project Bat Ecologist within 12 months prior to clearance of that stage, and a repeat ABM baseline (minimum 12 valid nights in the October– April period) at the commencement of each new stage, so that the risk characterisation keeps pace with vegetation senescence and any change in bat use of the site. The same applies to lizard and falcon surveys.

Status of the Bat Management Plan

5.5 Section 6.9 of the BaMP states that reporting to WDC and WRC is not required because the BaMP *'is a voluntary plan rather than a consent condition*', and that review is *'on a voluntary basis*'. That is not acceptable for a Nationally Critically Endangered species where the entire footprint will be cleared. The BaMP (and the BiMP and LMP) must be sub-plans of the P&HMP/EcoBP, certified by the councils, with post-clearance reports supplied to WDC, WRC and DOC. I note that the proffered condition in LMP Appendix 1a lists the BaMP, BiMP and LMP as components of the EcoBP, but that list has not carried through to T1 or T2 (see Section 6).

Cave entrance enhancement

5.6 In February 2025 I queried the basis for the 3:1 cave entrance ratio and considered a 10 m planting radius too thin. The package now offers 21 entrances (224 m²) for seven lost (111 m²), i.e. a 3:1 count ratio and 2:1 floor-area ratio, and the KRMP (Section 5) requires a 10 m planted radius extended to 25 m where there is no surrounding native vegetation. This is a reasonable response and I support it, subject to: (a) a requirement that the 21 entrances be selected on ecological criteria (associated native vegetation, cave length,

evidence of cave fauna or bat use, hydrological connection) by an independent expert and reported to the councils; (b) priority being given to the seven neighbouring entrances identified by Appendix K; and (c) fencing and planting being maintained for the term of the consents, not five years.

Lizards

5.7 The LMP is robust and the Wildlife Act Authority (118705-FAU) is in place. I note two matters. First, the LMP describes the 'Phase 1 Western Pit and Haul Road' footprint as 26 ha (24 ha virgin ground), whereas the consented footprint is 59.6 ha; the LMP and the Authority need to be confirmed as covering the full SW Pit footprint and all stages, or updated before clearance beyond Phase 1. Secondly, the LMP's conclusion that no compensation is required rests on the release site being rehabilitated with rodent control and permanently protected; both depend on the matters in paragraphs 5.2 and 5.3 being secured by condition. The LMP's own assessment is that habitat loss is high for ornate skink at the local scale, which supports my view.

Birds

5.8 The BiMP remains robust and in line with best practice, as I found in February 2025. The falcon protocols (acoustic recorders for eight weeks in January/February before clearance, clearance only outside the breeding season or after confirmation of no breeding) are appropriate. The protocols should apply to each stage of clearance and karst feature removal, not only to the initial works, and this should be made explicit in the plan and condition.

Rehabilitation and the 35-year consent term

5.9 Progressive rehabilitation using overburden will, over time, create engineered landforms. Nothing in the documents I have reviewed sets any ecological performance standard for rehabilitated land (e.g. a proportion of indigenous revegetation, re-creation of rock piles for lizards, or planting of cavity-forming tree species for bats). Given that the consents will expire before the pit is complete, the Pit Rehabilitation Plan and the EcoBP should include ecological end-state objectives and the betterment obligations should be structured to survive consent expiry (via covenant and bond).

6. QUESTION 3 – DO THE DRAFT CONSENT CONDITIONS PROVIDE SUFFICIENT MEASURES TO MINIMISE RISK TO TERRESTRIAL ECOLOGY?

6.1 Not yet. The conditions (T1 for WRC and T2 for WDC) secure the betterment quanta in part, and adopt a certification process, five-yearly review of the P&HMP and its sub-plans, and a machinery hygiene requirement (WDC condition 25, which addresses my February 2025 query about plant pest and seed introduction). However, I have identified the following gaps and drafting matters in the table below (Table 1).

Matter	Draft condition position	Recommendation
Management plans for bats, birds and lizards	WRC 27–30 require the P&HMP to include an EcoBP 'including but not limited to' a KRMP. The BaMP, BiMP, LMP and PMP are not named in T1 or T2, although the proffered condition in LMP Appendix 1a listed them. The BaMP itself describes itself as voluntary.	Amend WRC condition 29(b) and WDC condition 19 to expressly require the EcoBP to include the BaMP, BiMP, LMP, PMP and KRMP as certified sub-plans; require the plans to be implemented as certified; require pre-clearance survey and post-clearance reporting to both councils and DOC for every stage of clearance.
Betterment initiatives (WDC 24)	24(a) 21 cave entrances/224 m^2 within 10 km; 24(b) 6.7 ha planting between and around SNAs; 24(c) 9.4 ha sediment control, Mangawhitikau; 24(d) is blank; 24(e) 11.8 ha Camelot catchment. No reference to 14.4 ha SNA fencing and pest control, the 0.5 ha lizard release area, the bat reserve (roost boxes/chainsaw hollows), Pōtea Spring (314 m^2) or QEII covenants, all of which are EcoBP Table 1 commitments.	Complete 24(d) and add sub-clauses securing each of the omitted EcoBP Table 1 commitments with the same specificity (area, number, location, timeframe). Include 'and maintained for the term of this consent' in the chapeau of condition 24.
Duration of pest control and maintenance	No condition specifies duration; plans default to five years.	New condition: plant and animal pest control, fence maintenance and planting maintenance across all betterment areas for the full term of the consents, with monitoring against performance targets (e.g. rat tracking ≤5%, possum RTC/wax-tag ≤5%, mustelid tracking ≤5% in each November and February survey) and a contingency trigger if targets are not met in any two consecutive surveys.
Performance standards for plantings	None in T1/T2 (my February 2025 paragraph 3.12).	New condition: minimum 80% survival at year 2 with infill, ≥80% indigenous canopy closure by year 10 (riparian and SNA link) and ≥70% indigenous ground/shrub cover within 10 m of each enhanced cave entrance by year 5; annual reporting until targets met, then three-yearly.
Legal protection	None.	New condition: register QEII (or equivalent) covenants over the SNA link, lizard release area, cave entrance enhancement areas and Camelot catchment riparian areas within five years of consent commencement (or demonstrate landowner refusal and provide an alternative mechanism to the satisfaction of the councils). Alternatively require an application to WDC for SNA scheduling as proposed in the LMP.

Matter	Draft condition position	Recommendation
Timeframe	WDC 24 requires betterment to be 'identified and implemented' within three years.	Retain, but clarify that planting is to be completed (not merely commenced) within three years, and that the cave entrance enhancement and lizard release habitat must be established and pest control operating before the first clearance of karst features or lizard habitat.
Survey currency for staged clearance	Not addressed.	New condition: before each clearance stage, updated tree roost assessment, ABM baseline, lizard salvage planning and falcon survey, with a stage clearance report certified by the councils.
Short-tailed bat	Not addressed.	Require clarification from the applicant with regard to the BiMP; if confirmed, extend the BaMP to short-tailed bats and confirm Wildlife Act position.
Consent term vs. quarry life	P&HMP refers to a 35-year term; disturbance programme is to ~2080.	Ensure the bond (WRC bond condition) explicitly covers completion and maintenance of betterment and ecological rehabilitation, and that the EcoBP review required on cessation of quarrying includes a legacy management plan.
Disturbance area	Application Report/T2: 59.6 ha; Appendix K: 57.4 ha.	Reconcile; ensure retained karst features at pit margins are shown on a plan and excluded from the disturbance area.
Independent review	Plans are prepared by the consent holder's experts.	Require the councils' certification to be informed by an independent ecologist's review of the EcoBP and sub-plans, at the consent holder's cost, as was envisaged in my February 2025 Review (paragraph 3.6).

7. CROSS-CHECK OF PREVIOUS RECOMMENDATIONS AGAINST THE CURRENT DOCUMENTS

7.1 Table 2 below records the matters raised in my November 2022 review and at the October 2024 conferencing; Table 3 records the recommendations in my February 2025 Review. Each is marked as to whether it has been addressed in the fast-track documents.

Nov 2022 / JWS 2024 matter	Current document response	Status
Rarity/threat status of caves and cave entrances underplayed	Appendix K treats ~1 ha of vegetated karst as SNA; cave entrances still assessed as low value.	Partly addressed
No RPS significance assessment of subterranean values	Provided in Feb 2024 s92 response; carried into Appendix K.	Addressed
No intrinsic values / life-supporting capacity analysis (s6(d))	Addressed at a general level in s92 response; Camelot avoided by buffer.	Addressed
Epikarst habitat not sampled or assessed (Williams)	Not addressed in Appendix K.	Not addressed – to be address by Prof. Willams
3:1 ratio arbitrary; package is compensation not offset	Ratio retained (21:7 entrances; 224 m^2:111 m^2); still described as betterment.	Partly addressed – framing
Distinguish additional compensation from non-additional betterment	EcoBP Table 1 lists all measures together by source report.	Not addressed
Mechanics of compensation too light	EcoBP, KRMP, PMP now provide detailed methods and schedules.	Addressed (subject to duration)
SNA326 Pakeho polygonal karst overlap	Northern portion of pit removed.	Addressed
JWS para 16 – magnitude of underground effects not demonstrated	Reduced footprint, Camelot buffers; accepted in my Feb 2025 Review.	Addressed
JWS para 31 – agreement on cave entrance/troglobite values and management	Reflected in Appendix K and KRMP Section 5.	Addressed
Rehabilitation to restore ecosystem services (Williams)	No ecological end-state objectives for engineered landforms.	Not addressed

7.2 February 2025 recommendations (Table 3):

Feb 2025 recommendation	Current document response	Status
3.9 Acknowledge and provide contingency for new plant pests	PMP includes weed monitoring to twice yearly and qualified contractors; no explicit incursion contingency beyond five years.	Partly addressed
3.10 Monitor and control seed/plant material/disease introduced by vehicles	WDC condition 25 requires machinery cleaning to NPCA A16; not in PMP.	Addressed (condition)
3.11 Pest animal control for life of quarry, not five years	PMP, KRMP and BaMP retain five years then review.	Not addressed
3.12 Performance standards for riparian planting, weed control and fences in conditions	KRMP has maintenance schedules; no measurable standards in T1/T2.	Not addressed
3.13 Karst planting plan supported; confirm fence inspections for life of quarry	KRMP Section 8 fencing inspections; duration tied to five-year programme.	Partly addressed
3.14 Basis for 3:1 ratio; 25 m rather than 10 m planting radius at cave entrances	21 entrances for 7 lost (224 m^2 for 111 m^2); 10 m radius extended to 25 m where no native cover.	Largely addressed
3.15 Bird Management Plan supported	BiMP updated July 2026; protocols retained.	Addressed
3.16 Update bat felling protocols to current DOC protocols and append them	BaMP v3 (Sept 2025) reflects current DOC protocols, DOC competencies appended; status 'voluntary'.	Addressed in content; not secured
3.17 Artificial roosts and cavity-forming species in planting plans	BaMP 7.5: bat reserve, 25–50 roost boxes, 10–20 chainsaw hollows, hollow-forming species; not in conditions.	Addressed in plan; not secured
3.18 Lizard search and pre-works methods supported	LMP certified by DOC; Authority 118705-FAU held.	Addressed
3.19 Accidental find protocols for lizards	LMP contingency retained; confirm accidental discovery section covers all stages.	Largely addressed
3.20 Ongoing pest control at lizard release site	Rodent control proposed; five-year horizon.	Partly addressed
3.6 / 4.1 Expert agreement on EcoBP before certification	EcoBP finalised July 2026 without council ecologist input.	Not addressed
4.2 Conditions with key performance standards for life of quarry	T1/T2 contain quanta but no standards or durations.	Not addressed
4.3 Legal protection of betterment areas in perpetuity	QEII covenant shown in EcoBP Figure 1/Table 1; no condition.	Not secured

8. QUESTION 4 – MATTERS FOR THE WDC SECTION 53 RESPONSE

8.1 I recommend that the section 53 response raise the following terrestrial ecology matters with the Expert Panel:

- That Council's ecological advice is that the pre-betterment level of effect on significant karst ecosystems, indigenous vegetation and Threatened/At Risk fauna habitat is at least minor at the local scale, that the proposal is acceptable only on the basis of the full betterment package being secured by condition, and that the package should be characterised as compensation under the effects management hierarchy rather than voluntary betterment.
- That the Application Report and EcoBP distinguish the measures that compensate for terrestrial and subterranean losses (cave entrances, SNA planting and linkage, SNA fencing and pest control, bat reserve) from the riparian and sediment-control measures that primarily address freshwater effects, so that the Panel can assess additionality.
- That the draft conditions do not currently secure all of the EcoBP Table 1 commitments (14.4 ha SNA fencing and pest control, lizard release area, bat reserve, Pōtea Spring, QEII covenants), that WDC condition 24(d) is blank, and that the amended wording in Section 6 above be adopted.
- That the Bat, Bird, Lizard and Pest Management Plans be expressly required as certified sub-plans, that the 'voluntary' status of the BaMP be removed, and that reporting be to WDC, WRC and DOC.
- That pest animal and plant control, fencing and planting maintenance across all betterment areas be required for the full term of the consents, with measurable performance targets and contingency triggers.
- That legal protection (QEII covenant or SNA scheduling) of the betterment areas be required by condition within five years.
- That the staged nature of clearance over approximately 35 years (or is it 53 years as stated in Appendix K and the BaMP) be recognised through stage-by-stage pre-clearance survey, certification and reporting requirements for bats, lizards and bush falcon.

- That the applicant clarify the BiMP reference to central lesser short-tailed bat being present on site and, if confirmed, amend the BaMP and Appendix K accordingly.
- That the applicant confirm that the Lizard Management Plan and Wildlife Act Authority 118705-FAU cover the full 59.6 ha SW Pit footprint and all stages, not only the 26 ha 'Phase 1' area.
- That the Pit Rehabilitation Plan include ecological end-state objectives for the engineered landforms, and that the bond expressly cover completion and maintenance of ecological betterment and rehabilitation beyond the consent term.
- That an independent ecological peer review (at the consent holder's cost) inform council certification of the EcoBP and sub-plans and each five-yearly review.

9. QUESTION 4 – MATTERS FOR THE WDC SECTION 53 RESPONSE

9.1 My overall view of the proposal has not changed since February 2025, and the concerns I raised about the Boffa Miskell subterranean assessment in November 2022 have largely been resolved through the section 92 process, expert conferencing and the reduced footprint, with the exceptions of the additionality of the package and its framing as betterment rather than compensation. The surface ecological values of the pit footprint are comparatively low, the reduced footprint and Camelot Cave buffer address my earlier concerns about the wider karst system, and the betterment package – if fully implemented and maintained – is capable of delivering a net gain for karst ecosystems, lizards, bats and birds in this locality.

9.2 The management plan suite now addresses most of the technical matters I raised previously, with the important exceptions of the duration of pest control and maintenance, measurable performance standards, and legal protection of the betterment areas. The principal deficiency in the application as lodged is that the draft conditions do not secure the package: several EcoBP commitments are omitted, the species management plans are not named, or are described as voluntary, no durations or performance standards are specified, and the staged, multi-decade nature of the clearance is not reflected in survey and reporting requirements.

9.3 If the condition amendments recommended in this review are adopted, I consider that the risk to terrestrial and cave ecology over the lifetime of the consents would be appropriately minimised and the residual effects adequately compensated.

9.4 I am happy to discuss any of these matters, to assist with drafting of the revised conditions, or to participate in expert conferencing should the Panel direct it.

Yours faithfully



Gerry Kessels
Managing Director & Principal Ecologist
Bluewattle Ecology

Appendix C – Noise and Vibration Review

Technical Memorandum

To:	Chris Dawson (BBO)	**From:**	Peter Runcie
Company:	Waitomo District Council	**SLR Consulting New Zealand**	
cc:		**Date:**	29 October 2026
		Project No.	810.v30354

RE: Pakeho Quarry – South-western Pit Acoustics – Peer Review

Confidentiality
This document is confidential and may contain legally privileged information. If you are not a named or authorised recipient, you must not read, copy, distribute or act in reliance on it. If you have received this document in error, please notify us immediately and delete the document.

1.0 Introduction

A fast track application has been submitted which seeks consent to develop the area of land referred to as the South-western Pit at the Pakeho Limestone Quarry.

2.0 Reference Documents

The following application documents have been reviewed and inform this technical memorandum.

- The Substantive Application Report prepared by Enspire dated July 2026.
- Appendix M – Assessment of Noise Effects prepared by Styles Group dated 14 May 2026.
- Appendix T2 – Waitomo District Council draft conditions (version 36).
- Previous technical review undertaken by SLR dated 27 February 2025.

3.0 Review Comments

The updated noise assessment prepared by Styles Group now refers only to the Proposed Waitomo District Plan rather than the Operative Waitomo District Plan. However, review of the updated information indicates that there have been no changes to the predicted levels on which my previous review was based. Accordingly, I consider the conclusions and recommendations of the February 2025 review remain applicable.

The February 2025 review concluded that, through the adoption of controls, noise and vibration effects could be managed to be reasonable and therefore satisfy the overarching requirements of Section 16 of the RMA, subject to appropriately worded conditions. The broad controls identified in my review included:

- Tight controls of tonal elements associated with equipment (reverse beepers etc) which can be subjectively more annoying at lower noise levels – to minimise effects at receivers;
- Clear requirements regarding night-time operations to avoid adverse night-time noise effects, where sleep impacts could occur; and
- Provision of prior notice to surrounding neighbours ahead of blasting.

I have reviewed the provided noise and vibration related conditions (32 - 38 of Appendix T2) and note the following:

- The noise limits in Condition 32 reflect neither those of the Operative nor Proposed plans. They appear to be the Operative Plan limits but with the latest L_{Aeq} noise descriptor in place of the L_{A10} used in the Operative Plan. The Styles Group assessment is based on applying the Proposed Plan limits. This condition should be reviewed and commented on/updated by the applicant. It is noted that the Styles Group assessment identifies that the proposal would not comply with the proposed Condition 32 limits at a number of receivers.
- Conditions 33 and 35 have incorrect cross-references.
- It is unclear how Condition 35 would be implemented or enforced in practice. For example, how would equipment operators determine when they are both within 800 m, and have direct line of sight to, a notional boundary, particularly given a notional boundary is not a physical or visible feature. Furthermore, this management measure is not described, assessed or justified in the Styles Group assessment.
- Condition 39 does not align with either the blasting condition recommendations in the Styles Group assessment or those of the Proposed Plan. However, the controls are generally more restrictive.
- Condition 39 (e) does not appear to require advance notification of blasting activities to surrounding stakeholders. Rather it only requires provision of an option for stakeholders to receive notification where previously published blasting times are changed. This could be made clearer with a minor editorial change as follows:

  Ensure that advanced notice of blast events are published on Graymont's website. The notice will provide a minimum of three days' notice of blast events, and the five (5) hour time window for blasting. The notice should specify that blast events may be rescheduled due to meteorological conditions or other unforeseen circumstances. The webpage should provide an option for receivers to sign up to receive email updates when blast events are published and of any changes to scheduled blast events.

Regards,

SLR Consulting New Zealand





Peter Runcie, MASNZ, MIOA (UK)
Technical Director – Acoustics & Vibration

Juan Restrepo, MASNZ, MASA (US)
Principal – Acoustics & Vibration

Appendix D – Landscape and Visual Review

PROJECT MEMORANDUM

mansergh graham
LANDSCAPE ARCHITECTS

Project:	**GRAYMONT QUARRY – PAKEHO PIT FAST-TRACK APPLICATION**	**Memo:** 5/R0	**Page:** 1 of 4
Topic:	Fast Track Application – s53 Review		
Date:	15 October 2026		
Attention:	Chris Dawson – Consultant Planner		
From:	Dave Mansergh – Landscape Architect		

INTRODUCTION

Graymont NZ Limited is has applied for fast-track consent to develop a new pit (the Pakeho Pit) as an extension to the company's existing quarry at Oparure, near Te Kuiti. The applicant has engaged Mr S. Brown of Brown NZ Ltd to assess the effects of the proposal on landscape and visual amenity.

PURPOSE

This document comments on the changes to the proposed development and the landscape and visual assessment and considers their implications for the nature and level of effects, the adequacy of mitigation, and the sufficiency of the information provided.

The following documents, lodged as part of the fast-track application, have been reviewed and compared with the earlier versions lodged with the council resource consent application, to determine whether the amendments alter the nature or level of landscape and visual effects, the adequacy of the proposed mitigation, or the conclusions of the earlier assessment.

a. *Landscape Assessment Graymont South-Western Pit*. May 2026. Brown Ltd ("**LAGSWP**")
b. *Appendix T2 Waitomo Council Draft Conditions v36.* Waitomo District Council.

Note: Attachments 1–35 referred to in the LAGSWP have not been lodged with the application and have therefore not been reviewed. These include images of the existing quarry and proposed South-Western Pit, mitigation planting plans, site and karst landscape information, receiving environment maps, existing viewpoint photographs, and simulated views of the quarry at various stages of development. While this information is not expected to affect the outcome of the analysis, it is recommended that this is be verified by the Fast-Track Panel. An amended version of Attachment 3A is however contained in *Appendix T2 Waitomo Council Draft Conditions v36.*

CHANGES TO THE PROPOSAL AND IMPLICATIONS FOR LANDSCAPE AND VISUAL EFFECTS

Review of the LAGSWP confirms that the application remains an extension of the existing Oparure Quarry, involving the progressive removal of overburden, extraction of limestone and rehabilitation of the worked areas.

The fast-track application proposes a revised shape for the extraction area within the southern catchment and a shorter development sequence, extending to Year 53 rather than Year 83. Quarrying progresses into the western and south-western landforms earlier, with exposure of these workings from Mangatea Road

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anticipated from approximately Year 23, compared with Year 33 in the previous assessment. These changes alter the configuration of the pit and the timing of its visibility from surrounding viewpoints.

Although these changes bring forward some visual effects, they do not necessarily increase their magnitude. Quarrying continues to progress generally southwards before extending further west, with the effects remaining influenced by viewing distance, intervening landforms and the effectiveness of the proposed mitigation.

The proposed mitigation remains consistent with the earlier application. It continues to rely on intervening landforms, northern shelterbelt planting and tōtara planting near the access from Oparure Road.

The exotic shelterbelt is to remain until the adjoining tōtara reaches an average height of 6–7 m. The rehabilitation proposals include reinstatement to pasture, native planting on steeper margins, protection of existing native bush and a possible wetland within the completed pit basin. The effectiveness of these measures remains dependent on their implementation in advance of the relevant quarry stages and their maintenance throughout operations and rehabilitation.

The LAGSWP consolidates and updates the earlier landscape assessments. Overall, the amendments do not indicate a fundamental change in the nature of the activity or an increase in the assessed landscape or visual effects.

Based on my review of both application assessment reports, I consider that the revised pit design and staging may alter the site's appearance from some viewpoints but are unlikely to materially change the nature or magnitude of landscape and visual effects. The works remain generally within the same area, are substantially screened by the surrounding topography, and continue to be addressed by the proposed mitigation.

DRAFT LANDSCAPE MITIGATION CONDITIONS

I have reviewed the draft consent conditions and recommend several amendments aimed at clarifying the landscape mitigation requirements and improving their enforceability. The amendments address planting establishment and performance, continuity of screening, maintenance and monitoring. They are intended to ensure that the mitigation relied on in the landscape assessment is implemented at the appropriate time and remains effective throughout quarry operations and rehabilitation.

A track change version of the draft landscape mitigation conditions, containing my recommended amendments, is found in Attachment 1.

MATTERS TO RAISE IN THE S53 RESPONSE

From a landscape perspective, other than my recommended amendments to the consent conditions, I do not consider there are any major landscape issues requiring Council to raise concerns through its section 53 response to the Fast-track panel.

Minor matters the panel may wish to clarify include whether the graphic attachments referred to in the LAGSWP form part of the application documentation. Given the time elapsed since the original assessment, and that the LAGSWP does not confirm whether a further site inspection informed the 2026 report, the panel may also wish to ask the applicant whether any changes to the receiving environment, particularly along Oparure Road, would affect the assessment findings or mitigation recommendations.

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CONCLUSIONS

In my opinion, the amended proposal is unlikely to materially change the nature or magnitude of the landscape and visual effects previously assessed. The proposed mitigation is generally appropriate to manage the effects of the quarry expansion of landscape and visual amenity. Amendments to the landscape consent conditions are required for clarity and enforceability, and to ensure the proposed mitigation is established at the appropriate time and remains effective throughout quarry operations and rehabilitation. While some adverse visual effects may remain, these are expected to range between *Low* and *Very Low*. No major landscape concerns need to be raised through Council's section 53 response.

If you have any questions, please contact me.



Dave Mansergh
DipP&RM(Dist), BLA(Hons), MLA. Registered ANZILA
Director

ATTACHMENT 1: RECOMMENDED CONDITIONS

Original text in *black*, additions in red, deletions in ~~strikeout.~~

Landscape & Visual Effects Management

27) *The consent holder shall, prior to the commencement of any earthworks associated with the construction of the SW Pit plant the shelter belts shown on ~~Figure 27~~ Attachment 3A, dated February 2026, a copy of which is attached as Annexure B of this resource consent. Both shelterbelts are to be planted using evergreen species ~~that are capable to being~~ and shall attain a minimum height of at least five metres ~~tall~~ within 10 years of them being planted, and are to:*

a) *In terms of the shelterbelt to the north east of the SW Pit, reduce the visibility of the SW Pit and its upper faces when viewed from Boddies Road, 531 Boddies Road and the accessway to the Mangawhitikau Cave System; and*

b) *In terms of the shelterbelt to the south east of the SW Pit, to reduce the visibility of the SW Pit and its more elevated south-western reaches from those to the south east of the SW Pit.*

c) *The northern planting shall comprise a fast-growing exotic shelterbelt and a separate tōtara shelterbelt, and the southern planting shall comprise a tōtara stand, as described in section 2.1 of* Landscape Assessment – Graymont South-Western Pit, *prepared by Brown NZ Ltd, dated May 2026 ("the Landscape Assessment"). Planting shall achieve overlapping foliage within each planted section by the ten-year height deadline. The consent holder shall record the date planting is completed.*

d) *Until the screen planting reaches a minimum height of 6m, the consent holder shall inspect the planting every 12 months and provide the WDC with a report within 20 working days of each inspection. The record shall include measured planting heights, photographs from consistent viewing locations, identify any gaps or plant losses, and the corrective work required and its completion date. Thereafter, reporting shall occur every 5 years until the completion of the restoration orks following closure.*

e) *The exotic shelterbelt shall not be removed until the adjoining tōtara has attained an average height of at least six metres and provides continuous replacement screening along the section proposed for removal. The consent holder shall provide the WDC with written confirmation that these requirements have been achieved before removal commences.*

e) *The tōtara shelterbelts and southern tōtara stand shall be retained until all rehabilitation works required by the certified Pit Closure Plan have been undertaken.*

Advice Note: It is intended that these planting become permanent landscape features following rehabilitation of the reinstated farm.

28) *The ridge behind the barn and to the left of the main farm track, when viewed from Oparure Road, together with the screening ridges on either side of that track, described in section 5.2 of the Landscape Assessment, printed pages 38–39, shall not be lowered or removed until extraction and rehabilitation at the southern end of the pit have been completed. The south-eastern ridge separating the SW Pit from the existing Oparure Quarry shall be retained permanently.*

29) *The consent holder shall ~~proactively and diligently~~ maintain both shelter belts required by this resource consent to ensure that they achieve the purposes set out in ~~conditions 23(a) and 23(b)~~ condition 27. The maintenance activities shall occur until quarrying has ceased and the pit has been rehabilitated in accordance with the ~~Pit Close Plan that is required by Resource Consent xx [cross reference the WRC consent]~~ certified Pit Closure Plan required by conditions 45 to 48. Such maintenance shall include, but not be limited to, the replacement of any dead or diseased trees, or any that have been damaged or blown over by weather events, with ~~seedlings that will grow to five metres tall within 10 years of being planted~~ plants of the species required by condition 27, during the next planting season and no later than 12 months after the loss is identified.*

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Appendix E – Transport Review

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Transport Memorandum

To	Chris Dawson
CC	Quinn Langdon
From	Cameron Inder
Date	9 November 2026
Job No.	123391.106.100
Job name	Oparure Quarry Fast Track
Subject	**Oparure Quarry Fast Track Transportation Review**

1. Introduction

Bloxam Burnett and Olliver Ltd (**BBO**) has been commissioned by Waitomo District Council (**WDC**) to peer review the substantive application report (**SAR**) and the Traffic Impact Assessment (**TIA**), prepared by Team, and dated 9 June 2026.

The proposal involves the expansion of the existing quarry to establish and operate the south-western pit (SW Pit) at 806 Oparure Road, Te Kuiti, Waitomo (the **Site**).

Regarding transport matters, BBO provided a transport peer review memorandum dated 3 February 2025. That review considered the final version of TEAM's TIA dated 25 June 2024 and whether the matters identified in BBO's earlier peer review dated 31 October 2022 had been appropriately addressed.

Since the February 2025 peer review, the proposal has been amended and an updated TIA, Appendix N - Traffic, dated June 2026, has been prepared by TEAM in support of the Fast-track application for the Oparure Quarry South-Western Pit. Updated draft WDC conditions are also contained in Appendix T2 Waitomo District Council Draft Conditions V36.

The updated proposal seeks to establish and operate the South-Western Pit and associated internal haul road. The existing quarry and new pit are anticipated to operate concurrently for a period, with material from both areas processed through the existing plant and external vehicle movements continuing to use the existing access to Oparure Road. The TIA states that the proposal is not expected to result in a significant increase in limestone extraction or quarry-generated traffic, although it acknowledges that a modest increase in traffic may occur in response to future demand.

The purpose of this memorandum is to review the updated June 2026 TIA and proposed WDC transport conditions against the matters identified in BBO's February 2025 peer review, and to confirm whether any outstanding transport matters require further consideration.

2. Updated Transport Assessment

The June 2026 TIA provides substantially updated information on the existing transport environment. This includes updated traffic surveys undertaken in February 2026, quarry weighbridge information, speed surveys, observations of non-motorised road users and school-related activity, an updated crash assessment, assessment of Oparure Road's capacity and SIDRA modelling of the Oparure Road/State Highway 3 intersection.

The February 2026 traffic surveys recorded approximately 126 vehicles entering and 126 vehicles exiting the quarry per weekday during the busiest surveyed week. These movements include quarry trucks as well as staff, servicing and visitor vehicles. Peak movements were approximately 10 to 20 vehicles per hour in each direction. The TIA considers these volumes to be low from a traffic engineering perspective and lower than historic peak activity at the quarry.

The updated assessment also considers the theoretical capacity of Oparure Road using the Austroads Guide to Traffic Management Part 3. On conservative assumptions, TEAM estimates a two-way capacity in the order of 1,100 vehicles per hour. Existing peak-hour demand is assessed as being no more than approximately 18% of that capacity. TEAM therefore concludes that Oparure Road has substantial reserve capacity to accommodate existing quarry traffic and the variability in future quarry-generated movements.

The updated TIA also includes SIDRA modelling of the Oparure Road/State Highway 3 intersection. TEAM concludes that the intersection has significant reserve capacity under existing conditions and with a 20% increase in traffic volumes, and that the existing intersection geometry and sight distances remain suitable for quarry traffic.

Overall, the updated information supports the previous conclusion that the surrounding road network has sufficient capacity to accommodate the proposal.

3. Review of Matters Identified in the February 2025 Peer Review

The February 2025 BBO peer review identified a number of transport matters requiring consideration. These matters are reviewed against the updated TIA and draft conditions below.

PW-50 Sign and Safe-hit Delineators

The February 2025 peer review recommended an additional PW-50 truck-crossing sign approximately 160 m west of the quarry access and safe-hit delineators on the western side of the Oparure Road/quarry access intersection.

These recommendations are addressed by proposed Conditions 29 and 31 respectively. Both conditions require the works to be undertaken to the satisfaction of the WDC Roading Manager. BBO therefore considers these matters appropriately addressed.

Wheel Wash

The February 2025 peer review recommended more stringent use of the wheel wash to minimise dust and the tracking of quarry material onto Oparure Road.

The updated TIA confirms that a wheel wash will continue to be available and proposed Condition 30 requires a wheel wash to be installed and operated.

The intent of Condition 30 is consistent with BBO's previous recommendation. However, as the wheel wash already exists, BBO recommends that Condition 30 be amended to require the ongoing maintenance and effective operation of the existing wheel wash, rather than its installation.

Pavement Maintenance

The February 2025 peer review recorded BBO's understanding that Graymont and WDC had reached an agreement regarding the pavement maintenance levy, although BBO had not reviewed the associated calculations or pavement effects.

The updated TIA continues to identify this matter as being addressed separately. BBO recommends that WDC confirm that the existing pavement maintenance arrangement remains applicable to the South-Western Pit proposal.

3.1 Troopers Road

The February 2025 peer review recommended an advice note restricting the regular use of Troopers Road by quarry trucks due to the lower standard of the road.

The updated TIA continues to acknowledge that portions of Troopers Road are not considered suitable for long-term two-way use by truck-and-trailer or semi-trailer combinations and assumes that large quarry trucks will not use the road unless necessary.

No corresponding advice note is included in the proposed conditions. BBO therefore considers that the previously recommended advice note should be retained.

4. Draft Conditions

The current draft conditions respond to the principal physical mitigation measures recommended in BBO's February 2025 peer review:

- **Condition 29** requires installation of safe-hit delineators on the western side of the quarry access intersection;
- **Condition 30** requires operation of a wheel wash to manage dust and material tracking onto Oparure Road; and
- **Condition 31** requires an additional PW-50 truck-crossing sign approximately 160 m west of the quarry access.

BBO supports Conditions 29 and 31 as drafted.

5. Further Information

BBO has identified the following matters for the Applicant to address:

- **Troopers Road**: The updated TIA continues to acknowledge that portions of Troopers Road are not suitable for regular two-way use by truck-and-trailer or semi-trailer combinations and assumes that large quarry trucks associated with the South-Western Pit will not regularly use this route. The Applicant should confirm whether the advice note recommended in BBO's February 2025 peer review can be included.

6. Conclusions and Recommendations

BBO has reviewed the updated June 2026 TIA prepared by TEAM against the matters identified in BBO's previous transport peer review dated 3 February 2025.

The updated TIA contains substantially more recent and detailed information on traffic volumes, quarry activity, vehicle speeds, active modes, crash history, road capacity and the operation of the Oparure Road/State Highway 3 intersection. This information generally reinforces the conclusions reached through the previous transport assessment and peer-review process.

In particular:

- Oparure Road continues to have substantial reserve capacity to accommodate existing and anticipated quarry traffic;
- the Oparure Road/State Highway 3 intersection has sufficient operational capacity;
- the existing quarry access remains appropriate for the anticipated traffic;
- the updated crash information does not identify a transport-safety pattern that alters BBO's previous conclusions;
- proposed Conditions 29 and 31 appropriately secure BBO's previous recommendations regarding safe-hit delineators and the additional PW-50 truck-crossing sign; and

Subject to the above matters, BBO considers that the conclusions of its February 2025 transport peer review remain applicable and that the proposal can be supported from a transportation perspective.

Yours sincerely
Bloxam Burnett & Olliver



Cameron Inder
Transportation Engineer
cinder@bbo.co.nz

Appendix A – 2025 Transport Memorandum

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Memo

To	Chris Dawson
CC	Cameron Inder
From	Thato Mariti
Date	3 February 2025
Job No.	123391.106
Job name	Graymont Oparure Quarry
Subject	**Graymont Quarry Pakeho Expansion TIA Review**

1. Introduction

Bloxam Burnett and Olliver Ltd (BBO) has been commissioned by Waitomo District Council (WDC) to peer review the final version of the Traffic Impact Assessment (TIA) for the proposed expansion of Graymont Quarry Project Pakeho, dated 25 June 2024. The TIA was prepared by Traffic Engineering & Management Ltd (TEAM) on behalf of Graymont (NZ) Ltd, the (Applicant). The proposal involves the expansion of the existing quarry at 806 Oparure Road, Te Kuiti, Waitomo.

Currently Graymont Quarry has a land use consent with no limitation on heavy commercial vehicle (HCV) trips. At present, the quarry generates approximately 200 truck and trailer movements per day (annual daily average). The Applicant has lodged a resource consent with the WDC to establish a new pit area, immediately west of the existing Graymont quarry. The expansion will consist of a new internal haul road that will link the new pit area to the current processing plant. Both the existing and proposed quarries will operate concurrently for a period. The development of the adjacent pit is expected to increase the quarry's lifespan by 80 years, with the same traffic volumes as the current.

In the addendum letter dated 29 November 2024, re: Graymont Quarry Western Expansion – Modified Western Pit, BBO understand that Graymont Quarry is proposing to reduce the scope of the resource consent applications for the Western Pit area to focus on the Southern Catchment of Graymont's Western Pit project only. The modified version of the quarry will not change the operating hours or number of daily and annual truck movements.

The purpose of this memorandum is to confirm if the concerns raised by BBO in the TIA Peer Review dated 31 October 2022 have been addressed in the final version of the June 2024 TIA.

2. Overview of Conclusions and Recommendations outlined in the Previous Peer Review (31 October 2022)

The following section provides a list of concerns / issues that were identified by the previous Peer Review, along with the recommendations made for each issue. It also includes the response (if any) provided by TEAM in the June 2024 TIA:

a) The existing PW-50 signs located west of the quarry access seem to have been installed too far away from the quarry access to be effective.

The TCD manual part 5: Miscellaneous Warning Signs, Table 12-1 recommends that the sign be located at least 160m in advance of the right turn bay into the site. The signs are currently located approximately 460m from the intersection. The peer review recommended that the sign be installed closer to the access.

The final TIA has not addressed this issue. BBO recommends that an additional PW-50 sign (truck crossing) to the west of the quarry access be installed closer to the access (approximately 160m).

b) The wide road shoulder, on the access side, allows parking of logging trucks. The parked trucks reduce the sight distance looking west from the limit line of the Oparure Road / Quarry Access Road Intersection to approximately 60 m.

BBO recommended a condition of consent to install safe hits delineators on the western side of the intersection, to prevent vehicles from obstructing the sightline looking west.

The final TIA has accepted this recommendation to be included as part of the Conditions of Consent.

c) BBO identified that the current wheel wash operation is not effective for the HCV movements exiting the quarry. This causes the tracking of loose material and dust onto Oparure Road which may be a reason for loss of control crashes by other vehicles on a greasy film on the surface following light rain.

BBO recommended a condition of consent that a more stringent use of the wheel wash be implemented to reduce the dust nuisance effects and tracking of sand onto Oparure Road.

The final TIA has accepted this recommendation to be included as part of the Conditions of Consent.

d) The continuation of the loaded trips (200 trips per day off-peak and 260 trips per day during the peak month) will have an impact on the pavement by causing the need for rehabilitation earlier than it otherwise would have as the pavements have varying ability to withstand the proposed HCV loads from the quarry.

BBO recommended a condition of consent that the Applicant review and provide a pavement levy impact calculation to better understand the potential adverse transportation effects of the proposed pit area.

The final TIA has not addressed this issue, stating that it is outside the scope of this report.

BBO understands that Graymont Quarry and WDC has reached an agreement on the pavement maintenance levy associated with the pavement impact caused by the quarry. However, BBO has not reviewed the pavement maintenance levy calculations or pavement effects.

e) It should be noted that Graymont Quarry has a substantially higher trip rate than an average quarry, and due to this, it falls within the non-compliant activity as it exceeds the number of ECM for any 3 given weekdays.

Section 2 of the TIA report indicates that the quarry will generate an annual average of 98 trucks per day and 130 trucks per day during peak months. This is equivalent to an annual average of 980 equivalent car movements per day and 1,300 equivalent car movements during the peak months.

Based on the TIA report, Oparure Road has the Average Daily Traffic (ADT) of 477 vehicles per day (vpd) east of Graymont Quarry Access intersection and 214 vpd to the west. Therefore, the daily truck volumes will not comply with the requirements of Waitomo Operative District Plan Part Four Appendices[1] because the equivalent car movements from the Quarry will be:

- greater than the daily traffic volumes on Opurare Road on any 3 days of a given week and
- double that of any given day near the Quarry access, except the section of Oparure Road near the SH3.

To address the above non-compliance, the TIA has covered the transport assessment on "The matters of discretion associated with any performance standard which cannot be complied with in TRAN - Table 2" of the Waitomo Proposed District Plan (PDP); and the capacity of Oparure Road based on Austroads Guide to Traffic Management Part 3: Traffic Studies and Analysis". BBO acknowledges that there is sufficient spare capacity on the road to accommodate the truck movements from the quarry.

3. Additional issues from the June 2024 TIA

Section 1.3 of the TIA mentions that Troopers Road has been constructed to a lower standard and is not considered to be ideal for long term two-way use by truck & trailer or semi-trailer combinations. However, currently some of the quarry trucks do utilise Troopers Road as a short cut to SH3 if the load is required to be delivered south of Te Kuiti.

The TIA did not include an assessment on the safety and capacity of this road, and it assumed that this road will not be used by these large quarry trucks for the Western Pit unless it is necessary to do. BBO supports this approach and considers that an advice note be added to the conditions of consent noting that Troopers Road is not considered safe and appropriate for regular use by quarry trucks wishing to access SH3 from the Oparure Quarry.

BBO considers that, given the road's lower standard and its potential use by quarry trucks, that WDC restricts the use of Troopers Road by Graymont Quarry trucks by way of an advice note on the consent.

[1] https://www.waitomo.govt.nz/media/4s3da2mt/partfour_appendices.pdf

4. Conclusions and Recommendations

BBO finds that the final version of the Traffic Impact Assessment (TIA) by Traffic Engineering & Management Ltd (TEAM) dated 25 June 2024 has addressed the concerns raised by BBO TIA Peer Review except for the PW-50 signs located west of the access road intersection with Opurare Road. The TIA also mentions that Troopers Road is used by the quarry trucks despite its lower standard.

The proposal can be supported and BBO considers that the following should be included as conditions of consent to mitigate the potential effects of the quarry extension:

- Safe hit delineators shall be installed on the western side of the intersection to prevent parked vehicles from obstructing the sightline looking west.
- A more stringent use of wheel washing shall be implemented to reduce the rise of dust nuisance effects and the tracking of sand onto Oparure Road.
- The consent holder shall install an additional PW-50 sign (truck crossing) approximately 160m to the west of the quarry access intersection.

Yours sincerely
Bloxam Burnett & Olliver



Thato Mariti
Transportation Engineer
[redacted]

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