

## 1 Invited parties: Auckland Council

## Table 1.1: 03 Ecology Specialist comment received 25/09/25 summary and applicant response

Response prepared by Ecology experts Chris Wedding, Treff Barnett and Jennifer Shanks, with input from Counsel and the Applicant.

Response No.	Name	Comment summary	Applicant response
1.1.1.	Andrew Rossaak, Consultant to Auckland Council's Ecological Advice, and Earth, Streams & Trees teams.	Offset and compensation The application material mentions offset and compensation together (e.g., The EMP; the REARTE report discussed these aspects together throughout, however, states at the end that no compensation is required; the REAR-SW report is similar). The effects management proposed have therefore been considered as offset (with no compensation being offered) and is assessed as such.	Yes, no compensation is used in the REAR-TE.  The REAR-SW provides offset for streams and wetlands using the SEV/ECR model (NB the offset model for streams is the Environmental Compensation Ratio) and an offset calculation table, respectively. The Biodiversity Compensation Model is only used to provide surety to the wetland offset calculations in Table 13 in the REAR-SW.
1.1.2.		Proposed terrestrial vegetation and fauna effects management Avoidance is reported for the rock forest at Kaarearea paa (SEA_T_5349) and an area of watercourse and wetland to the northeast of Kaarearea paa. There is no comment on any efforts to avoid the rock forest along the western edge of the pond/dam.	Refer to the response to row 4 of the Applicant's response to the Panel RFI – Ecology dated 1 October.  Also note that large boulders and other forest resources will be salvaged from this area for placement within offset rock forest areas (see NGDP-PP Section 3).
1.1.3.		The adverse effects on fauna are proposed to be managed through species specific management plans. It is noted that a potential bittern call was received in the assessments, and it is considered bittern potentially utilise the site, however, there is no further comment on effects management for bittern.  As bittern are a nationally critically endangered species and have large ranges, the possible presence detected should direct particular effects management. That bittern are not discussed other than in as detection is a concern and I do not consider that they have been adequately considered in the effects management. This concern applies to other at risk species, such as the pipit, where effects management is reliant on mitigating harm, but do not consider the loss of habitat on this site and cumulative losses or fragmentation.	Refer to the response to row 3 of the Applicant's response to the Panel RFI – Ecology dated 1 October.
1.1.4.		For bat effects management, the success of bat boxes in New Zealand has been very limited, and I suggest veteranisation as a better technique (cutting slits with chainsaw to create cavities).	EMP Bat Management Plan follows DOC protocols, with specialist inspections and activity checks. Where a natural roost is identified, multiple artificial roost designs are installed and monitored. Where safe and appropriate, arboricultural roost-creation techniques can be considered under specialist oversight.  Refer to the response to rows 3 and 11 of the Applicant's response to the Panel RFI – Ecology dated 1 October.

Comment summary	Applicant response
The DOC BOAM model is used to determine the required offset for 16.78 ha (and for 130 relict trees). The BOAM model requires the identification of attributes to use for the assessment. The BOAM also requires values for the impact site as well as that of the receiving site prior to and estimated post offset. The BOAM models provided for the Rock Forest have the receiving environment initially at zero, however, aerial images indicate there is already vegetation in the offset locations and the reporting sites that are suitable and already remnant rock forest. There is little by way of detail or assessment on the offset site provided, however, I consider it unlikely that it is zero, which has been used in the BOAM for all four models presented. This results in a likely over-estimate of the ecological gain being reported.	The rock forest receiving environments are set as zero for pasture, so the zero value is appropriate. Alternatively, the zero values are used for the seedlings/saplings measures. The example photo is provided below.  Any low-growing vegetation seen in aerial images within of mature native trees (relict trees) occur across the site and a street they have generally suffered adverse effects from stock im in poor health (see photos below). Their presence within the being reported. In the long term they represent the "living and eventual death. However, stock exclusion and offset punderstorey/groundcover re-establishment, and reversal or within the offset planting by attracting native avian seed ditaraire, tawa, puriri and karaka. As a percentage of the off required to be subtracted from the overall area since they trees there are no areas of native vegetation within the offset planting by a substance of the offset planting by a substa
	The DOC BOAM model is used to determine the required offset for 16.78 ha (and for 130 relict trees). The BOAM model requires the identification of attributes to use for the assessment. The BOAM also requires values for the impact site as well as that of the receiving site prior to and estimated post offset. The BOAM models provided for the Rock Forest have the receiving environment initially at zero, however, aerial images indicate there is already vegetation in the offset locations and the reporting sites that are suitable and already remnant rock forest. There is little by way of detail or assessment on the offset site provided, however, I consider it unlikely that it is zero, which has been used in the BOAM for all four models presented. This results in a

revegetation actions. The proposed area of revegetation is currently grazed he zero values may refer to the enhancement of existing rock forest, where . This is correct, as the understory is non-existent due to stock access. An

offset planting areas is pest plants, particularly gorse. Scattered isolated d some of these will remain within offset planting areas amongst pasture. impacts including soil compaction, root damage and damage to bark, resulting offset planting areas does not result in an overestimate of the ecological gain ng dead" since ongoing stock impacts would result in their continued decline planting around the trees will result in protection from stock impacts, I of the adverse impacts on their health. They are important as "seed islands" dispersers that can be expected to introduce future canopy species such as offset planting areas, their contribution is very minor and should not be ey do not represent intact forest vegetation. Other than these scattered relict offset planting areas.



Rock forest offset enhancement area lacking understorey and groundcover.

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			Relict puriri tree in pasture displaying canopy dieback, damaged roots and trunk.
		The NPS:IB defines adverse effects as including "loss of potential value" in the effects management hierarchy: "adverse effects of an activity on indigenous biodiversity (including cumulative effects and loss of potential value)". This indicates that assessment must consider not just current values but also the potential future values that could be lost. The NPS:IB also repeatedly emphasizes restoration potential: Clause 3.21(2) prioritizes restoration of: "SNAs whose ecological integrity is degraded" and "areas that provide important connectivity or buffering functions". Similar wording is used in AUP(OP) Chapter D9 objectives and policies. This implies assessment of what these areas could become through restoration. The assessment and values used in the BOAM are on the current state of the vegetation to be lost and the potential of these areas is not factored into the offset model, only current degraded value.	All relevant policy direction, including the specific AUP framework should be considered in light of the values to be managed and the effects of the Project in question, particularly where contextual factors may warrant an alternative response. While national policy statements, such as the NPS-IB and NPSFM must be had regard to, they are not required to be "given effect to" (as is the case with a plan change).  In respect of the AUP and the restoration of wetlands, the most relevant policy is E3.3.(4). That Policy states that any restoration or enhancement actions "should" meet certain requirements – self-evidently, "should" is not "must" and a policy is just that – not a rule nor a requirement ( <i>Royal Forest and Bird Protection Society of New Zealand Incorporated v New Zealand Transport Agency</i> [2024] NZSC 26 at [101] (Williams J)). Furthermore, Policy E3.3.(4)(c) says that an offset proposal should "preferably" achieve no net loss or a net gain. Again, this is not a mandatory requirement, but rather a "preferred" outcome. Finally, Policy E3.3.(4)(d) says that a restoration or enhancement action should "consider" the biodiversity offsetting principles in Appendix 8 of the AUP. Given that deliberate, non-mandatory, language, it would be legally inappropriate to rely on national policy statements to impose a more stringent, mandatory, requirement to impose a requirement to offset and to do so in a particular manner. This is particularly so given the, in the Applicant's view deliberate use of the phrase "restoration and enhancement" in the applicable AUP policies rather than "offsetting". This allows a much broader lens to be applied to management of effects on wetlands, rather than being limited just to "offsetting" – as that term might be technically understood by specialists.
1.1.6.			Under the NPS-IB is relevant, then that is addressed below.  Under the NPS-IB, biodiversity offsetting must follow the effects-management hierarchy and demonstrate a net gain in indigenous biodiversity type, amount and condition relative to what is lost, using a like-for-like quantitative loss/gain calculation and addressing Appendix 3 principles, including additionality, long-term outcomes, and landscape context. Our terrestrial offset has been designed and quantified in accordance with these requirements and is delivered locally on SAL land contiguous with SEA_T_5323, with monitoring and adaptive triggers set out in the NGDP:PP and NGDP:PWC. Regarding the reviewer's statement that "potential value must be considered," the NPS-IB does not require a separate "potential value" metric for impact sites (nor does the AUP); however, it does require equivalence to be assessed over time and to manage time-lag and risk through long-term management and monitoring. The "like-for-like" concept explicitly includes equivalence over time, and the net-gain principle requires that offset-site values meet or exceed the loss at the impact site once trajectories are accounted for. Our Biodiversity Offset Accounting Model, local siting, and long-term delivery and monitoring framework address these temporal equivalence and risk considerations. (As noted above, the AUP does not require compliance with these offsetting principles.)  Further, the Applicant queries the potential of these environments where they occur within a special purpose quarry zone, or how such potential values would be expected to be measured and quantified for offset. The Applicant refers to comment 7 below, by Auckland Council reviewer: "It must be quantitatively demonstrated, requires like-for-like comparison, must exceed baseline loss across type, amount, and condition" This is incompatible with measuring a future state under unknown management regimes.

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			Also, note that the NPS:IB clause 3.21(2) is for local authorities to prioritise their objectives, policies, and methods for restoration, and is not related to biodiversity management under the effects management hierarchy. Likewise, AUP(OP) Chapter D9 (specifically D9.1.1) recognises that SEAs within Drury Quarry are part of a Special Purpose – Quarry Zone, so effects should be mitigated or offset, which our application addresses. (As noted above, to the extent that the AUP refers to "offsetting", it is in the context of it being a potential component of "restoration and enhancement".)  Refer to Attachment D – Memorandum addressing the ecology comments (Items 55 and 59: values and extent) dated 17 September
			and provided to the Panel on 17 September by the Applicant.
		I consider a key differences between the NPS:FM and NPS:IB, are that in the NPS:IB net gain is mandatory. It must be quantitatively demonstrated, requires like-for-like comparison, must exceed baseline loss across type, amount, and condition and that "No net loss" is insufficient under NPS:IB.  I do not consider that, with the removal of 4.4 ha of offset area, the zero	We refer to the discussion above, namely the NPSFM and NPS-IB are simply matters to which regard must be had and the provisions of those documents must be assessed in the round, together with the provisions (including objectives and policies) of the AUP. It is inappropriate to isolate and decontextualise individual objectives and policies within any planning document.  The BOAM approach of assigning zero starting values is consistent with national practice and guidance because the Sutton Block offset
1.1.7.		value for the receiving environment and the lack of potential considerations that the current BOAM calculations, there is sufficient information or proposed offset to have assurance that net gain will be achieved.	sites either lack indigenous vegetation cover (grazed pasture) or are currently heavily degraded (grazed understorey). The impact values modelled are based on field measurements, and we note that not all values are zeros (i.e. measure prior to offset).
			Under the NPS-IB, "no net loss" is not sufficient and a quantitative net gain therefore must be demonstrated in type, amount, and condition. The BOAM outputs for Sutton Block show gains consistently exceeding the baseline losses across all affected ecosystems, with net biodiversity gain margins generally >10% once restoration planting and enhancement are implemented and monitored. This aligns with the mandatory "net gain" requirement in Appendix 3 of the NPS-IB.
1.1.8.		I do not support the applicants position that with the removal of the 4.4 ha Hingaia planting, an assessment after 10 years is undertaken and if required, SAL will acquire additional land. It is considered important at this stage to have confidence in the ability to achieve the required net gain.	The Applicant acknowledges the Council reviewer's preference, and refers to the updated Bioresearches Hingaia memorandum dated 14 August 2025 which demonstrates that a net gain is still achieved without the 4.4 ha Hingaia planting, based on the BOAM outputs for the remaining Sutton Block offset package (62 ha restoration and 108.35 ha enhancement on SAL land) based on conservative model inputs and assumptions. That memo details the conservative modelling undertaken and presents revised models without 4.4 ha of Hingaia planting, which show Net Gains would still be delivered with confidence. Further, the Applicant notes that these models do not account for substantial advance planting that would be undertaken. Currently, the models assume that planting would generally be undertaken around the time of removal. Refer to Table 15 of report E4:9 (Bioresearches & JS Ecology 2025), which identifies that all offset planting would be completed by year 16. This is well in advance of indicative stages 4 & 5: 40-50 years into the LOQ. Therefore, modelled net gains will be greater than those predicted.
			Further, the Applicant notes that in response to comments received by invited parties, the Applicant is proposing to undertake the planting on Hingaia as goodwill, subject to obtaining DoC landowner approval within a set timeframe. This will be set out in the revised consent conditions provided to the Panel on 10 October (subject to any further direction from the Panel). If this planting is done, then irrespective of the concern above, the Reviewer's comment would be fully addressed.
1.1.9.	9.	No assessment has been made as to how the quarry may alter the perched water tables and how this will affect the proposed plantings, and if this may reduce offset success, particularly for areas close to the pit edge (planting and enhancement is proposed up to the pit extent). Given that proposed effects management planting is to occur between the paa dome and the quarry wall and on the quarry boundaries, there is potential that the altered perched water table may affect existing vegetation and new plantings.	Refer to response at Row 10 and 13 of the Applicant's response to the Panel RFI – Ecology dated 1 October and our response provided at Row 51 in "AC Queries – Comment Tracker Table 17 September" the Applicant provided to the Panel on 17 September.
44.45		There is potential for under estimation of the required offset at the Tuakau site using Tanes Trees growth estimates as this is a silvicultural calculator and may not represent growth in a more natural landscape with lower density planting and it is not specific for this particular location (Tanes Trees is based	The Tanes Trees tree and shrub data are not merely a silvicultural measure as they include mixed species stands and those containing pioneer species as well as canopy species. The measurements were taken from all of New Zealand from a wide variety of bioclimatic environments. Their measurements provide an average, and they represent the best available estimates for the growth rate of planted native trees and shrubs in New Zealand.
1.1.10.		on averages in high density planted stands).	The density for replacement tree planting at the Tuakau site is 550 trees per hectare which is at the lower end of the range of densities used to develop the Tanes Trees model. At lower densities the trees are likely to grow faster than the Tanes Trees model due to decreased competition between adjacent trees. As such the use of the Tanes Trees calculator will not result in an under estimation of the required offset.

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			Site specific data for growth rates of planted native trees are not available for Tuakau or other offset sites, however it is expected that average growth rates will be at least as high as those used for the offset model given the lower planting density and the generally benign lowland environmental conditions at the offset sites.  Compliance is based on measured field performance at Tuakau with remedial actions if trajectories lag. Therefore, offset sufficiency does not depend on silvicultural growth assumptions; it is secured by site-specific planting design, monitored condition gains, and adaptive management.
1.1.11.	1.	Monitoring is proposed to be undertaken annually for the first five years, followed by long term monitoring thereafter in Years 7, 10, 15, 20 & 30. Attributes and methods are provided for monitoring and adaptive management proposed, however, thresholds or performance targets when the adaptive management is required are not provided, so it is uncertain what would trigger any adaptive management.	<ul> <li>Monitoring targets and triggers are provided- refer document E4:9. In the REAR:TE Monitoring and Maintenance section, the tables set out the attributes, methods, targets, and remedial actions that trigger adaptive management. Please see:         <ul> <li>REAR:TE, Section 3.1. provides the monitoring targets and contingencies (Tables 38, 39, 41, 42, 44, 45, 47, 48). Corresponding remedial actions (e.g., infill planting, maintenance uplift) that are enacted when targets are not met are also provided within this section.</li> <li>REAR:TE, section 3.2 provides further information about adaptive management.</li> </ul> </li> <li>Further, establishment targets are provided in document E6.9 NGDP: Planting Plan (plot-based monitoring; survivorship, canopy closure/cover and structural-tier milestones; remedial planting and maintenance escalation). The plan sets out the schedule (annual for Years 1–5, then Years 7, 10, 15, 20, 30) and the decision points at which under-performance against the REAR:TE target triggers adaptive management. Specifically, section 11.5.2 of the NGDP:PP gives a 10% trigger value for the implementation of adaptive management, which requires additional modelled actions to be presented for certification.</li> <li>Also refer to the response at Row 31 of the Applicant's response to the Panel RFI – Ecology dated 1 October.</li> </ul>
1.1.12.	2.	Terrestrial ecology recommendations  The duration of consent requested, is maximum duration of a consent, 35 years. As some planting (stages 4 and 5) is planned for year 16 or later, this would reduce the monitoring period available within the consent and there is potential that offset will not be monitored for final achievement.  It would be prudent to ensure effects management is undertaken within a sufficient period within the consented period even if the impact stage has not commenced.	The Applicant agrees that effects management should be delivered early enough to allow robust monitoring within the consent term. The planting programme is front-loaded (advance planting) and staged ahead of impact, so monitoring windows remain substantial:  • Delivery timing: The timing of offset planting has been specifically designed to provide maximum time for monitoring and management. All complex forest types are fully planted by Year 13 including future canopy species and all offset planting is completed by Year 16. This provides 19–30 years of scheduled monitoring within a 35-year consent (annual in Years 1–5, then Years 7, 10, 15, 20, 30). This planting schedule means that more complex forest types will have a longer monitoring period. Simpler kanuka forest will be planted last as it will require a shorter monitoring period.  • Ahead of impact: At least 85% of offset planting is implemented before the corresponding vegetation loss occurs, ensuring condition uplift is underway and measurable well in advance.  • Triggers and contingencies: The REAR:TE monitoring tables set explicit targets and remedial actions that trigger adaptive management if results fall below target, and the NGDP: Planting Plan provides plot-based checks and remedial planting and maintenance escalation to stay on trajectory.  • Proceed even if impact is delayed: Through the Staging and Delivery Execution Plan and NGDP programmes, offset planting and enhancement will proceed within the consent period irrespective of the exact timing of later impact stages, preserving the intended monitoring duration.  • Long-term security: Offset areas are legally protected and managed under the NGDP:PWC, which starts in Year 1 and continues long-term to secure the modelled gains.  On this basis, the programme provides sufficient time within the consent for monitoring to confirm achievement of offset targets, with clear triggers to address any under-performance.
1.1.13.		Freshwater stream loss and proposed effects management  The augmentation of flows to stream 4 are important and flow monitoring should be at the point where the proposed streamworks/diversions end, and flows are into the existing natural watercourse. Augmentation based of flows 6 km away from the site, in a separate catchment, is not considered to be an appropriate effects management action, as it will lack the sensitivities required. The to be reclaimed seep and gulley wetlands play an important role in the hydrology of the streams in the catchment proposed to be reclaimed and therefore it is considered that a sound baseline on the flows from this catchment would form a critical part to monitoring and maintaining downstream hydrology.	Under the existing environment, Stream 4 is located upstream of the Upper Dam, with a MALF of 1.79 L/s. It is proposed to maintain this flow via discharges from the necessary sump water. The discharge location for this augmentation is upstream of the existing Upper Dam (Proposed Lowest Sump Discharge Point, NT1-1; PDP 2025, Figure 17, Monitoring Plan).  Flow at NT1-1 is currently monitored under the Drury Quarry consent (Drury Quarry Groundwater take and diversion permit reference 40317) and will continue to be monitored as part of the proposed Sutton Block development.  The Applicant understands the reviewer's reference to augmentation from streams approximately 6 km away to relate to the potential for reduced flows in neighbouring catchments due to the diversion of regional groundwater to the sump. To address this, augmentation of those streams will also be undertaken where required, ensuring downstream hydrology is maintained.

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1.1.14.		Water from the quarry pit base is likely to be contaminated to some extent and there is no detail on the water quality to be achieved for the augmented flows.	Refer to proposed consent conditions 139 -141 and 149. Water quality testing of the sump water proposed to be used for augmentation is proposed.
1.1.15.		There is no assessment as to the potential effects of reduced flows into stream 4 for any duration (which is likely given the proposed works and stream realignments and reclamation).	Refer to the response at Rows 5, 7 and 8 of the Applicant's response to the Panel RFI – Ecology dated 1 October.
1.1.16.		The augmentation requirements and monitoring may be required for the long term as flow augmentation appears to be required for at least the duration of the quarry works (50 years), and potentially in perpetuity. Given that augmentation pumping from the quarry bed (below the invert of the stream) and monitoring will possibly be required for 50, 100 or 200 years, a suitable mechanism is required to ensure this will endure.	Refer to the response to Row 17 of the Applicant's response to the Panel RFI – Ecology dated 1 October and proposed Consent Condition 164- 167.
1.1.17.		Stream 4 diversion and culverting  There is almost no detail on these diversions, and whilst a design, including sinuosity, boulders and other stream enhancements is indicated, there are no long sections or any other detail. There is also no detail on how long these temporary diversions may last for (6 months or 6 years). I would anticipate as a minimum, that a streamworks management plan is provided to outline how this will be undertaken. Insufficient detail in the application material to provide an assessment of the diversions, effects and effects management thereof or the maintenance of ecological value.	Refer to the response to Row 1 of the Applicant's response to the Panel RFI – Ecology dated 1 October. The proposed temporary stream diversion will be placed for approximately 6 months.
1.1.18.		Offset values and location  Aquatic offsets are required to meet the principals in Appendix 6 of the NPS:FM. In particular principle 7, which broadly addresses principles such as like for like and proximity. AUP provides an offsetting framework in Appendix 8.  Davis Road does not meet the like for like principle having a silt bed and being a meandering stream on a low grade with floodplain wetlands, however, it is in a neighbouring catchment south west of Peach Hill and meets the required offset principle of proximity.  I do not consider the proposed - 'offsets' located in the Waikato to meet these principles for the following reasons:  • The planting of only one side of a stream as offset for stream loss does not represent the values lost of the streams to be reclaimed (like for like, or the potential of the impact stream).  • The planting of a highly modified (straightened) or artificial watercourse to offset catchment headwater streams is not a like for like exchange.  • Lowland streams are not considered like for like when the reclaimed	Refer to Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant. We further refer to the discussion above, and in particular that the AUP's Appendix 8 is not a mandatory requirement, but simply a matter that should be "considered" if offsetting is proposed as part of a wider restoration and enhancement proposal (refer Policy E3.3.(4)(d).  The Davies Road stream is quite variable with cobble habitat, soft habitat, runs and riffles, narrow incised sections and wider sections transitioning to wetlands, and is very similar both in form and function to some of the Sutton Block Streams, specifically Stream 2 and Stream 5.
		streams are catchment headwaters, particularly streams 8 to 11 m wide as offsets for streams that rarely exceed 1 m, with most being around 0.5 m. This also results in a skewed outcome in the ratio of stream area (m2) that is offset, and this is not representative of the streams lost.	

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1.1.19.		Planting monitoring is proposed for 5 years, however the SEV outcomes are only likely to be achieved over 15 to 20 years. It is therefore considered appropriate that measures of success, adaptive management and SEV outcomes are set out and monitored over 20 years post planting.  Tuakau offset not supported.	The selection of suitable offset sites, along with the rationale for utilising the Tuakau site after opportunities on the SAL Drury landholdings had been maximised, is outlined in detail in Section 3.5 of the REAR-SW report. This includes a description of the potential sites considered; the assessment process and underlying reasoning for the choices made; an initial focus on sites located in closest proximity; and recognition of the substantial ecological advantages associated with the Tuakau site—particularly its capacity to support both wetland creation and ecological restoration.
1.1.20.		Offset extent There is a net loss of 3.3 km of stream from the proposed development. This has not been accounted for and with the proposed offset, there remains a net loss of stream length. The NPS:FM definition for aquatic offset requires that no net loss, and preferably a net gain, in the extent and values of the wetland or river is achieved.	Refer to Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.
1.1.21.		Additional freshwater stream recommendations  There are existing enhancement offsets already consented to occur on stream 4 (from the northern quarry expansion). These were consented on the basis that there were no plans for expansion of the quarry (2018) and provided in the application material. This offset is on the stream that is fed by the entire catchment that is to be reclaimed by the proposed quarry expansion. It is therefore subject to the potential adverse effects of the activities proposed in this application and has not been considered in this application.	Refer to the response to Row 2 of the Applicant's response to the Panel RFI – Ecology dated 1 October and the Applicant's response to Row 53 of the Applicant's response to Auckland Council Queries Comment Tracker dated 17 September, provided to the Panel on 17 September by the Applicant.
1.1.22.		Wetland values In addition to the wetland loss as part of the quarry, two wetlands will be affected (wetlands 2a and 2b) through the loss of upstream contributing catchment to wetland habitats, reducing the hydrological functioning of the wetlands. The extent of loss is not provided, however if the entire wetland is lost, through reduction in flow, which appears to be likely, the total wetland reclamation would be 2.36 Ha. This means that the wetland loss to be offset is likely to be underrepresented.	Refer to the response to Row 20 of the Applicant's response to the Panel RFI – Ecology dated 1 October.
1.1.23.		I don't concur with all the EIANZ wetland ecological values assigned by the applicant's ecologist as the values have been predominantly associated with vegetation and have disregarded the wetland functions.	Refer to the response to Row 59 of the Applicant's response to Auckland Council Queries Comment Tracker dated 17 September, provided to the Panel on 17 September by the Applicant.
1.1.24.		Wetland loss and proposed effects management It is unclear if the Tuakau wetland is an existing natural inland wetland, and if so, no delineation evidence is provided. The report mentions slight modifications to the levels of the land, again it is unclear what this may entail and if earthworks are required to create a wetland in this location. The wetland planting plan in figure 4 depicts a wetland that has different zones and inlets/outlets. There is no description as to how this is to be achieved.	Refer to the response to Row 23 of Applicant's response to the Panel RFI – Ecology dated 1 October, and Section 5.1 of the REAR-SW report. Selective earthworks in discrete areas will be required to achieve the outcome, similar to that currently occurring in the paddocks immediately north of the proposed offset site, refer Section 5.3 and Photo 16 in the REAR-SW report.
1.1.25.		Like for like and proximity  The Tuakau wetland is not considered a like for like.	Refer to the response to Row 55 of the Applicant's Auckland Council Queries Comment Tracker (17 September), with accompanying Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.

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1.1.26.		Wetland assessment and potential  The wetland assessment does not provide a complete assessment under the NPS:FM (Appendix 1A) existing or potential values.	Refer to the response to Row 59 of the Applicant's Auckland Council Queries Comment Tracker (17 September), with accompanying Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.
1.1.27.		The BCM offset calculation  For various reasons listed, it is considered that the BCM has not been implemented in a correct or an assessable manner.	Refer to the response to Row 59 of the Applicant's Auckland Council Queries Comment Tracker (17 September), with accompanying Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.
1.1.28.		Responses to Legal response and applicant ecologist  1. Legal presumption that consents will be complied with  My questions relate to the limitation of a maximum 35-year consent where effects management may extend well beyond that time. Robust consent conditions are critical for enforceability and compliance is expected (although the applicant has a history of delayed compliance on ecological offsets).	The proposed consent conditions are legally robust and will ensure that all effects are appropriately managed, within the current restrictions of the RMA (i.e. a maximum 35-year consent term). As a matter of law, irrespective of any past (unspecified) instances of delayed compliance on ecological issues, the Panel must assume that the consent conditions will be complied with.
1.1.29.		2. Augmentation obligations within consent conditions beyond 35 years  The legal memo provides two options to address the limited consent period for the stream augmentation. It is unclear which option they propose to utilise. In both cases, they indicate that the augmentation flows would stop once dewatering had ceased. I don't consider that the lasting pit depth will facilitate dewatering and the requirement for augmentation to stop. It is considered that there would need to be specific conditions, following closure or abandonment of the pit, that dewatering and stream augmentation would be able to cease.	Refer to the response to Row 17 of the Applicant's response to the Panel RFI – Ecology dated 1 October and proposed Consent Condition 164- 167.
		3. Does the loss of stream extent and values need to be offset separately  Disagreement over the interpretation of whether both stream value and extent, as separate entities, are required to be addressed.	The issues raised by the Council Reviewer comments under this heading are matters of legal or planning interpretation. If the Council wishes to address these matters by way of legal submission, then it should have done so as part of its response. Notwithstanding, to assist the Panel we have provided further elaboration below.  Refer to Attachment D – Memorandum addressing the ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.
1.1.30.			As outlined in the Applicant's legal memo dated 17 September 2025, as a starting point, the concept that the loss of rivers and values should be considered together as one concept has been supported by Auckland Council on other projects.  While the Applicant accepts that the SEV methodology pre-dates the NPS:FM, it nonetheless represents the current, standard, best-practice methodology for assessing effects on stream extent and values, including in relation to the NPS:FM. There are no factors so unique as to prevent the use of what is otherwise the standard assessment methodology for the Project.  The SEV assessment methodology considers stream length as part of its assessment of stream values, when calculating appropriate
			offsetting. To then re-consider the extent of the stream would double count that aspect of the effects.  More recently, the question of whether stream extent should be assessed separately was considered by an expert consenting panel in its decision on Brookby Quarry Stage 3, under the Covid-19 Recovery (Fast-track Consenting) Act 2020. Following receipt of technical

<sup>&</sup>lt;sup>1</sup> Decision of the Expert Consenting Panel under Clause 37 Schedule 6 of the FTCA re: Brookby Quarry Stage 3, dated 2 October 2024.

Response No.	Name	Comment summary	Applicant response
			and legal advice, the panel found:
			[254(a)] loss of stream values <b>and</b> extent can be offset through restoration/enhancement measures on existing streams derived from the SEV / ECR method. In other words, loss of stream extent does not necessarily have to be addressed through the creation of equivalent new stream extent.
			[254(b)]regarding the interpretation of the relevant AUP and NPS-FM provisions (including AUP E3.3(18) and NPS-FM Policy 7, set out in this Decision below) the "loss of river extent and values" is a single concept and creating an artificial distinction between "loss of river extent" and "loss of river values" is unsupported by the planning framework.
			We note also that Ms Barnett specifically addressed this issue in her Technical Report where she confirms that the SEV offset calculation for the Project specifically includes both stream value and length, as follows:2  "Storey et al. (2011) provides the Stream Ecological Valuation (SEV) methodology combined with the calculation of the Environmental Compensation Ratio (ECR) for stream offset. It is a transparent, well-recognised methodology for calculating the quantum of offset required for stream loss, including both stream length and value. Although the methodology was originally developed in Auckland, it has been reviewed by NIWA for use in Wellington, Hawke's Bay and Southland, and is considered applicable without modification to most stream and river types in those regions. (Storey et al., 2011)."
		4. An assessment of potential wetland values must be proportionate	Again, these are primarily legal and planning matters, but to assist the Panel, we note as follows:
		The response from lawyers Natalie Summerfield and Bal Matheson has not addressed the concern that the assessment of potential of both the impact and offset wetlands should be considered the same. It is unbalanced if the assessment of potential of the offset wetland includes restoration planting, but the impact wetland assessment ignores the potential of restoration planting. In contrast, the assessment of impact stream potential includes planting.	1. The values of an aquatic habitat impact site is assessed as how those values might exist if, in the context of this pastoral land use, good management practices were adopted (in other words, the values are not just those that reflect the existing environment, but rather the values that would exist if good management practices were adopted). This assessment has been detailed in Section 5.3.2 Stream and Wetland Potential in E2:9 EcIA. In a site that is actively farmed, such as the Sutton Block, fencing for stock exclusion and either allowing the riparian area to develop long grasses (which provide effective filtration) or undertaking some degree of riparian planting (as recommended in Auckland by Dairy NZ) represents good land use practice. This is the appropriate baseline against which to assess the potential wetland values.
		I remain of the understanding that the offset calculation for the offset wetlands in the application is misleading, partly due to this aspect.	2. The Council reviewer appears to be suggesting that the impact site should be assessed beyond "good management practices" and instead be assumed to be fully planted (presumably with natives). If that approach were taken to its extreme, then there would be never be any substantive difference between an impact site and an offset site – both could be planted up (at significant cost) and there would be no difference between the two, and therefore no "offset". This is clearly a perverse and nonsensical outcome.
1.1.31.			<ol> <li>The caselaw is clear – any assessment of effects must be undertaken in a "real world" and realistic (ie non-fanciful manner). It is fanciful to suggest that the seep wetlands in pastureland that is zoned Special Purpose Quarry Zone should be assumed to be fully planted in natives (at great cost).</li> </ol>
			4. By assessing the potential at the impact site as being fencing and stock exclusion (noting that there is no legal obligation under the NPSFM, NPS-IB or any document to undertake riparian planting or wetland restoration), the Applicant is starting from an appropriate and "fair" baseline. Against that baseline should be measured the benefits to come from the offset site (Tuakau site).
			5. It is inconceivable that any landowner would voluntarily undertake the planting at restoration at the Tuakau offset site, at a cost of hundreds of thousands of dollars, if they were not going to obtain some "benefit" from doing so. Furthermore, irrespective of what baseline is taken, the proposed restoration planting to at the Tuakau sites will provide a material and long-lasting positive ecological effect. The benefit of that is enhanced by the fact that the planting will all pre-date any adverse effect, thereby removing any lag effect or risk of delay.
			Despite the Council reviewer's various criticisms of the Applicant's ecologists' modelling, and leaving aside the fact that the Applicant and its experts disagree with those criticisms, the Council reviewer has not himself provided any alternative modelling substantiating

<sup>&</sup>lt;sup>2</sup> E5:9 Residual Effects Analysis Report: Stream and Wetland Offset, prepared by Bioresearches, dated 26 March 2025, at [3.3].

Response No.	Name	Comment summary	Applicant response
			the general matters of concern raised. Accordingly, there is no evidential basis for the Panel to conclude that any of the matters raised are so material that they would lead to a decline of the Project.
1.1.32.		7.0 Recommendations Terrestrial offset The assessment must be revised and account for increased uncertainty for edge effects.  Additional offset area is required as well as improved effects management for avifauna and habitat lost.	<ul> <li>The Applicant does not agree that a revision or extra offset area is needed. The current, certified package already manages the risk the reviewer raises:</li> <li>Edge effects are explicitly managed via local, like-for-like offsets contiguous with SEA_T_5323, targeted buffer/revegetation at quarry—bush interfaces, permanent fencing and weed hygiene, and landscape-scale pest and browser control to reduce edge stressors. These measures are mapped, staged ahead of impact, and tied to long-term maintenance.</li> <li>Avifauna effects are addressed through pre-works nest checks by a SQEP, seasonal timing/buffers around active nests, incident reporting, and follow-up actions, while the offset plantings and pest/browser control improve canopy and understorey structure over time. The benefits of offset actions are also explicitly accounted for within the BOAM models.</li> <li>Monitoring and adaptive triggers are in place: performance targets (e.g., survivorship, canopy cover/closure, litter/CWD) are measured on fixed plots; if results fall below target, remedial planting and intensified pest/weed/browser control are required on defined timeframes.</li> <li>Proportionality is maintained: BOAM uses conservative zero baselines for degraded start conditions; delivery is front-loaded, legally protected, and monitored for decades. This provides a robust margin of certainty without inflating offset area as a proxy for risk.</li> <li>On this basis, the assessment already accounts for edge-effect uncertainty and avifauna, and no additional offset area or revision is warranted.</li> </ul>
1.1.33.		Stream offset  The offset calculation must be revised to include extent.  An appropriate offset site that provides like for like and proximity principles is required.	Experts disagree. Refer to the response to Row 55 and 59 of the Applicant's Auckland Council Queries Comment Tracker (17 September), with accompanying Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.
1.1.34.		Wetland offset Calculations must be revised, and an appropriate offset wetland is required to meet the offsetting principles.	Experts disagree. Refer to the response to Row 55 and 59 of the Applicant's Auckland Council Queries Comment Tracker (17 September), with accompanying Attachment D – Memorandum on ecology comments (Items 55 and 59: values and extent) dated 17 September and provided to the Panel on 17 September by the Applicant.
1.1.35.		Overall  Management plans must be updated to include the monitoring proposed in the ecological assessments and that any monitoring includes performance targets or thresholds that would trigger the implementation of a detailed adaptive management plan to meet the required and reported outcomes.	Refer to the response to Rows 31, 34-36 of the Applicant's response to the Panel RFI – Ecology dated 1 October
1.1.36.		8.0 Proposed condition changes Augmentation Condition is required to address he potential for perpetual stream augmentation to be included in a land use consent.	Refer to the response to Row 17 of the Applicant's response to the Panel RFI – Ecology dated 1 October and proposed Consent Condition 164- 167.
1.1.37.		Require certified management plan to be implemented. A recommendation is to have a condition that all Council certified management plans must be implemented.	Refer to proposed Consent Conditions 9-11.
1.1.38.		Changes to condition 15	We do not support the proposed amendment to Condition 15. Condition 15 is located within the section of general consent conditions, and its purpose is to set broad procedural requirements that apply across the consent. The suggested drafting relates specifically to

Response No.	Name	Comment summary	Applicant response
			the management and monitoring of ecological outcomes, which is more appropriately addressed and captured within the ecology-specific consent conditions.
1.1.39.		Changes to condition 47 - EEMP	We agree in principle and will incorporate such amendments in a revised set of conditions to be provided to the Panel on the 10 October (subject to any further direction from the Panel).
1.1.40.		Changes to condition 49 SRPP	
1.1.41.		Changes to condition 51 – NGDP:PWC	
1.1.42.		Changes to condition 54 – NGDP:PP	
1.1.43.		Changes to condition 56 - SDEP	
1.1.44.		Changes to condition 58 – NGDP:RP	
1.1.45.		Changes to condition 60 – NGDP:WP	

## Table 1.2: 04 Transport Specialist comment received 25/09/25 summary and applicant response

Response prepared by Transport experts Daryl Hughes and Don McKenzie, with input from the Applicant.

Response No.	Comment summary	Applicant response
	Effect on public pavement structure (refer to Section 5.0 of AT memo)  The current proposal does not specify a limit on truck trips, making it difficult to predict pavement wear, asset life, and plan future road maintenance effectively.  Heavy vehicle traffic has potential adverse safety effects on existing road and the surrounding transport network.  When considering whether there will be pavement effects from a development Auckland Transport is guided by the "Austroads Guide to Traffic Management part 12", which states a PIA should be undertaken where a proposed increase in heavy vehicle traffic equals or exceeds 5 to 10% of the existing traffic load on roads from fully loaded Heavy Commercial Vehicles (HCVs). A PIA can indicate whether the existing roads can safely accommodate ongoing truck movement associated with an activity. The pavement assessment should include an analysis of the existing condition of the road assets and an assessment of the effect of the additional pavement loading, including potential adverse effects on the anticipated asset life.  In addition, high volumes of heavy commercial vehicles will also impact asset life and future road maintenance issues. The following outlines some of the asset owner's maintenance issues resulting from high trip generation activities.	Auckland Transport has repeatedly requested a pavement impact assessment of the road between Quarry and the Ramarama Interchange (Maketu Road – Bill Stevenson Drive) shown in the map below:  The Applicant's position on this issue is as follows:  1. The use of roads in Auckland is expressly a permitted activity under the Auckland Unitary Plan (refer E26.2.3.2, (A67)) and as confirmed in Norsho Bulc Ltd v Auckland Council [2017] NZEnvC 109, at [95] and the express discussion thereafter on the nature of roads as essential and the oldest form of public infrastructure, and the ability of Auckland Transport to manage
	<ul> <li>Higher maintenance costs</li> <li>Disruption to Road Users</li> <li>Lifecycle reduction</li> </ul>	effects on roads under other legislation (at [96]-[104]). The Applicant expressly relies on this authority and notes that Auckland Transport has not, in its comments in response, provided any contrary legal authority for this proposition insofar as that statement relates to Auckland Unitary Plan.
1.2.1.	Assessment Management Challenges	2. The Applicant was not responsible for designing or constructing the roads, however Fulton Hogan Ltd (a related company) was responsible for constructing one of the sections of road in Drury South (the section closest to the Ramarama Interchange). Through discussions with Fulton Hogan representatives, the Applicant can confirm that the road was designed and constructed in a manner that expressly recognised both the existence of the Quarry and the long term industrial use of the area (certainly there was a clear understanding that heavy vehicles would make up more than 10% of the traffic movements). Maketu Road is an arterial road. That road was vested in Auckland Transport as an asset, and presumably Auckland Transport was therefore comfortable with the design and construction of the road.
		3. As part of this process, after receiving Auckland Transport's comments, the Applicant requested that Auckland Transport provide the relevant engineering drawings for the road and any other information that it holds on its asset (ie Maketu Road/Bill Stevenson Drive). A limited number of drawings have very recently been provided in response, together with a general comment that "AT had identified pavement concerns based on the approved engineering plans". The Applicant notes that some of the plans provided were not the EPA plans. The Applicant has asked for urgent further clarification of those concerns, but as at the date of preparing this response no such clarification had been provided.
		4. In response to that general and unspecified concern, the Applicant sought some initial and urgent advice about the pavement design based on those plans. The response received was (necessarily) subject to numerous qualifications because of a lack of detailed information. However, that response did indicate that there may be one element of some parts of those two roads (surface section) that was not designed to an appropriate level (non-conforming surface specification). This came as a real surprise to the Applicant given that Auckland Transport must have signed and therefore approved the engineering plans prior to construction. However, again because of Fulton Hogan's prior direct involvement in the construction of one section of those roads, the Applicant can confirm that Auckland Transport specifically directed that the roads be designed and constructed in accordance with a thinner AC14 Asphalt Surfacing than the typical NZTA standards provided for. In other

Response No.	Comment summary	Applicant response
		words, Auckland Transport specifically directed that a non-conforming surface specification be adopted. This does not impact the overall pavement depth or capacity.
		5. The Applicant reiterates its position that, legally, it is not seeking resource consent to use the road (as the Court, led by Principal Environment Judge Kirkpatrick stated in <i>Norsho Bulc Ltd</i> has confirmed that the use of a road in Auckland is expressly a permitted activity). Further, while the effects on intersection performance were assessed by the Applicant (as a matter of completeness) that does not confer any jurisdiction on the Panel to impose express conditions on the use of the roads (such as a limit on truck numbers or any requirement to undertake pavement upgrades, either now or in the future).
		6. If the Panel considers that it does have jurisdiction to impose conditions relating to a maximum number of traffic movements or pavement impacts (ie a requirement to upgrade either Maketu Road or Bill Stevenson Drive), then the Applicant seeks the opportunity to provide legal submissions specifically on that point.
		7. The Applicant reiterates that the maintenance of Bill Stevenson Drive and Maketu Road is the legal responsibility of Auckland Transport. It has a number of regulatory tools and funding mechanisms to ensure that the road, leading from a Special Purpose Quarry Zone to State Highway 1 and that is in a specifically zoned Industrial zone, is of a suitable standard to serve those zones. There is no suggestion that any safety concerns exist in respect of that road. In other words, there is ample time for Auckland Transport to take the necessary steps to comply with its statutory obligations. The Applicant understands that, if the non-conforming surface specification does need to be corrected in the future by Auckland Transport, then it is a reasonably straightforward process to do that.
	Effects on the roading network  The Transport Assessment prepared by Beca, dated 12 Nov 2019, to support the Plan Change 46, does	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport had reviewed the Applicant's response when finalising its memo.
1.2.2.	not have contain adequate information regarding whether quarry expansion has been accounted for and, if so, how much traffic was allocated. The land in the PC46 area already had an existing industrial zoning when PC46 was applied for, and PC46 only sought to rezone 10Ha of light industrial to mixed-use business and 20Ha of heavy industrial to light industrial. The Transport Assessment largely assesses the difference in trip generation resulting from the rezoning and associated effects; it does not clearly state how much quarry traffic was allowed for.	The PC46 modelling predated full quarry expansion planning. The current ITA (March 2025) supersedes prior assumptions and provides an updated (permitted) traffic generation and network effects assessment, using a 50% uplift scenario (compared to the development that existed at the time of the 2024 surveys) that broadly aligns with or exceeds PC46 projections. This is based on existing production activities that will remain unchanged by the Sutton Block application. Acknowledging this, the current assessment is based on actual (permitted) quarry production forecasts and conservatively modelled HCV movements, which remain unchanged as a result of this application.
	The current proposal does not specify a limit on truck trips, making it difficult to assess the potential adverse effects on the road network.	The Applicant provided a response dated on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.
1.2.3.	The section 6.1 of the Integrated Transportation Assessment (ITA) report prepared by Don Mckenzie Consulting, dated March 2025, states that quarry related truck trips are projected to reach at least 2000 truck trips per day. However, it is not clear how these figures translate into peak-hour truck movements or other quarry-related vehicle movements (i.e. staff cars and other light vehicles). This information should be provided by the applicant to help us understand the effects of the quarry on congestion during peak periods.	The March 2025 ITA modelled AM and PM peaks based on extrapolated volumes derived from 2,000 daily HCV trips, proportioned using typical daily distribution curves. Staff and light vehicle movements were conservatively included in SIDRA modelling inputs, with trip tables available upon request. To reiterate, the Sutton Block application does not seek to change the intensity of quarrying activity or resulting vehicle volumes - the volumes of aggregate material leaving the Drury Quarry site are dictated by the various processing activities on the site which are subject to other resource consent conditions.
	AT's main concerns around the trips relate to three main areas;	For completeness, SIDRA outputs have been supplied to Auckland Transport. The provided base of 316 vph reflects current observed traffic and limited development. Future uplift was incorporated (50%) and intersection performance remains satisfactory.
	<ul> <li>(1) damage to the road pavement caused by heavy vehicle movements,</li> <li>(2) potential congestion and capacity effects relating to high numbers of vehicles travelling to and from the quarry (both trucks and light vehicles), particularly during peak hours; And</li> <li>(3) road safety matters.</li> </ul>	The projections of future traffic volume scenarios presented in the ITA were not intended to present "expected" volumes associated with the Sutton Block Application (because the application will not be associated with any uplift in hourly or daily volumes not otherwise provided for by the current consents). Rather, these scenarios were intended to show the available capacity of the Bill Stevenson Drive corridor to accommodate significantly greater volumes that were currently observed and counted within the corridor.
1.2.4.	AT anticipates congestion and capacity issues most likely to occur during peak hours and are critical intersections. Both heavy and light vehicle trips have an impact on congestion.  To mitigate this issue, a peak hour cap on the number of trips to and from the site would help reduce the potential adverse effects (which could be modelled as part of the application process). The applicant	As the Sutton Block application does not seek to change the anticipated quarry truck volumes, a cap on vehicle movements is considered unwarranted and unnecessary. AT has not identified any specific adverse effects arising from a certain number of vehicle movements per hour and tellingly has not itself identified what an appropriate cap on vehicle movements might be. The Applicant

Response No.	Comment summary	Applicant response
	would be required to monitor this cap, and if it were exceeded, implement a travel demand management plan. This could involve setting staff shift start and end times to be outside of peak periods or scheduling customer pick-ups for out of peak periods.	does not consider it appropriate to amend the conditions to include any vehicle caps. The imposition of any condition on vehicle movements would be contrary to the direction in s 83 of the FTAA – namely that conditions must be no more onerous than necessary.
		As outlined above, the volumes of aggregate material leaving the Drury Quarry site are dictated by the various processing activities on the site which are subject to other resource consent conditions.
1.2.5.	Truck routes from the quarry to the Ramarama interchange traverse via Maketu Road/John Main Drive intersection. The applicant should provide an intersection analysis including capacity analysis (traffic modelling) at this intersection to ensure no potential adverse roading network operational issues from the additional truck and other quarry related vehicle movements at this intersection.	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 2 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.  This intersection was included in the SIDRA network assessed in the March 2025 ITA. For completeness, intersection capacity was assessed in PC46 and reaffirmed in the 2025 ITA. The forecast 2,000 trucks/day is within the previously anticipated PC46 development scenario. SIDRA modelling confirms acceptable intersection operation.
1.2.6.	The section 6.1 of the Integrated Transportation Assessment (ITA) report prepared by Don Mckenzie Consulting dated March 2025 does not provide information on the number of peak hour truck movements or quarry related vehicle movements (i.e. staff cars and other light vehicles). This information should be provided to have a better understanding of the potential adverse effects of the quarry during peak periods.	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.  The AM and PM peak hour HCV and light vehicle volumes used in SIDRA models are summarised in Appendix A of the ITA.
1.2.7.	AT requested the applicant to provide a detailed assessment of the intersections (Bill Stevenson Drive/Maketu Road & Bill Stevenson Drive/Jack Stevenson Road) to ensure that the existing intersection layouts and signal phasing can accommodate the proposed quarry-related vehicle movements including the anticipated trips from the industrial zone. This information is essential to ensure the road network can operate safely and that the level of service is not compromised.	The Applicant provided a response on this query to Auckland Council and Auckland Council on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.  The SIDRA analysis incorporated future industrial growth with 50% uplift on 2023 counts.
1.2.8.	The Drury South Area is not yet fully developed. The applicant should provide a revised a transport assessment report with a scenario (including transport modelling of the scenario) including the full buildout of the Drury South development which represents future traffic conditions which will exist during the life of the development, not only the current traffic volumes and the traffic conditions for the surrounding area. This information is required to have a better understanding of the existing road network capacity and potential adverse impacts from the Quarry trips. This was previously requested and the applicant responded that they had based their models on a 50% future growth year scenario, meaning that they used traffic survey data (Section 3.2 table 1 of the ITA prepared by Don Mckenzie Consulting dated March 2025) and increased it by 50% for their modelling to account for the undeveloped sites in the industrial area. AT considers the assumptions made in the ITA report are inappropriate based on the existing developments within the PC46 industrial zone. Trip generation for the Drury South Industrial Precinct should be estimated based on the sizes of the lots and expected warehouse/factory coverage consistent with the methods used for the PC46 ITA. Updated traffic modelling should be provided using the updated estimate of traffic from the Drury South Industrial Precinct.	The forecast of 2,000 truck movements per day (one-way) used in the ITA reflects a realistic upper bound, based on quarry production limits, internal logistics, and network capacity (rather than precise extraction location, which is the subject for this application). This figure allows for peak operational demand but is not expected to be exceeded under typical or even busy conditions.  It is considered that the effects of the existing quarry activities (which will not change as a result of the Sutton Block application) have been sufficiency covered in the March 2025 ITA.
	When providing updated modelling the applicant should provide an explanatory note showing how traffic volumes were calculated and distributed. It should clearly show the number of quarry vehicles and vehicles from other sites in the Drury South Industrial Precinct and how each was calculated.	
1.2.9.	Road Safety  Section 3.1 of the Integrated Traffic Assessment (ITA) prepared by Don Mckenzie Consulting dated March 2025 states that proposed quarry operational trucks intend to use two routes for getting access between the quarry and the motorway. The second route is between the site and the SH22/SH1 interchange to the north. AT believes that the existing condition of Quarry Road is not in good condition and pavement and have very narrow road shoulders. The Quarry Road has bends between Maketu Road and Great South Road. The applicant should be asked to provide an assessment of the second route (Quarry Road including intersections of Quarry Road /Great South Road and Great South Road /SH22) to	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.  The SH1 route to the north of Drury Quarry will be the route of preference for movements to the much wider parts of the region lying to the north. The only movements that may find the Maketu/Quarry route of any value would be the local Drury Central and/or Pukekohe.

Response No.	Comment summary	Applicant response
	ensure the existing network has adequate capacity and no potential safety and operational issues from the proposed additional truck movements.  The assessment should include tracking curves at the bends and Safe Intersection Sight Distance in accordance with Austroads Guide to Road Design Part 4A, to ensure no safety concerns along the truck route along Quarry Road.	It is not expected that there would be more than about 10% of quarry-generated HGV movements using the northern route via Quarry Road or SH22. The route is generally disconnected and not part of the overall access strategy. This would represent a much smaller proportion of movements to and from the Quarry and is not expected to generate any concerns from a traffic network capacity perspective.  Any current movements of Drury Quarry traffic are anticipated to continue while the route connection to Drury/SH22 is available. Should the Quarry Road route not be available as the surrounding area is experiencing significant land use change and the road network is being regularly assessed and changed as a result. From this, there will be access options available in the event that the Quarry Road link is affected such as rerouting via Maketu Road and the Ramarama Road interchange will reinforce the role that Maketu Road and the SH1 Ramarama interchange will play in serving the wider customer network of the Drury Quarry.
1.2.10.	AT is concerned about the Quarry tracks using the Fitzgerald Road. If quarry trucks intend to use Fitzgerald Road, the applicant should provide an assessment of the existing road carriageway to confirm that increased quarry truck traffic on Fitzgerald Road will not result in road safety effects. Upzoning is proposed along Fitzgerald Road. The applicant must provide an assessment of the potential adverse impacts on future residential dwellings.  The applicant stated that they do not expect quarry traffic to use Fitzgerald Road. The confirmed most the trucks visiting the site belong to customers. The consent holder should inform their customers to avoid using Fitzgerald Road for quarry-related operations to mitigate the potential adverse safety effects on Fitzgerald Road.	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo. This query is also addressed in section 6.3 of the March 2025 ITA.  Quarry traffic does not regularly use Fitzgerald Road as this does not connect effectively to the regional transport routes (especially SH1). Fitzgerald Road will only be used infrequently, for example if aggregate is being delivered to a site near Fitzgerald Road.  SIDRA modelled movements included in the ITA accompanying the Fast-track application are internal to the Drury South network.  The heavy movements noted in the ITA and previous AT comments (especially the right turn from Bill Stevenson Drive into Jack Stevenson Drive) relate to activity associated with a period of earthworks activity in Waikura Road undertaken by another party. This can be seen by the numbers of trucks turning left out of Waikura Road into Bill Stevenson Drive (northbound).  Stevenson's Drury Quarry does not generate any heavy traffic/quarry-related activity beyond the main quarry access to Bill Stevenson Drive. The Sutton Block application has no influence over what or where other heavy traffic movements occur in the surrounding
		transport network.
1.2.11.	Information gaps (refer to section 6.0 of AT memo)  Please provide a pavement impact assessment along the intended truck routes, ensuring the existing road structure can cater for the additional truck movements/loads and have no detrimental effects on the life of the road structure.	See response to Row 1.2.1 above.
1.2.12.	Please provide an assessment on the second route (Quarry Road including intersections of Quarry Road /Great South Road and Great South Road /SH22) to ensure the existing network has adequate capacity and no potential safety and operational issues from the proposed additional truck movements.	See response to Row 1.2.9 above.
1.2.13.	It is unclear whether the quarry traffic will be using Fitzgerald Road. Please confirm quarry traffic will be using Fitzgerald Road. An assessment of Fitzgerald Road will be required if the quarry traffic intends to use Fitzgerald Road for the quarry operation.	See response to Row 1.2.10 above.
1.2.14.	Truck routes to Ramarama interchange traverse through Maketu Road/John Main Drive. Please provide an intersection analysis including capacity analysis at this intersection to ensure no potential adverse roading network operational issues from the additional truck movements at this intersection.	See response to Row 1.2.5 above.
1.2.15.	The Drury South Area is not yet fully developed. Please provide transport assessments with a scenario (including transport modelling of the scenario) including the full buildout of the Drury South development which represents future traffic conditions which will exist during the life of the development, not only the current traffic volumes and the traffic conditions for the surrounding area. This information is required to have a better understanding of the existing road network capacity and potential adverse impacts.	See response to Row 1.2.8 above.

Response No.	Comment summary	Applicant response
1.2.16.	The ITA document does not clearly include the Drury South fully developed scenario for its modelling. There is reference to the PC46 ITA on page 8, but it is not clear how these values were calculated or applied. The applicant needs to provide a detailed assessment of the likely traffic volumes for the Drury South fully developed scenario as part of the current application. If the applicant relies on earlier traffic modelling from PC46, please provide the modelling details and explain clearly how it was calculated and applied.	See response to Row 1.2.8 above.
1.2.17.	Pages 8 & 9 of ITA states that Level of service (LOS) D is acceptable at the existing two signalised intersections, but according to AT's Network Operating Plan, on arterial roads the minimum LOS during peak periods is C. Please provide an updated assessment on the LOS of the network to ensure that to ensure that no potential adverse impact on the roading operation.	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.  LOS D is generally accepted for high-volume intersections in industrial areas. It is noted that the DoS of 0.888 slightly exceeds general the target optimum level of 0.8 but remains acceptable for peak industrial movements. LOS D is acceptable under NZTA/Austroads guidance, especially for short-duration peaks. There are no material adverse effects arising from this Fast Track Application given the status of current quarry consents that have no capacity or trip generation thresholds or caps.
1.2.18.	Please provide the copies of the Movement Summary Tables and Traffic Signal Phasing and Timing reports from SIDRA so that AT can confirm the traffic volumes on each leg of the intersections are reasonable and assess the potential average delay, queue lengths, and LOS for individual movements.	The Applicant provided a response on this query to Auckland Council and Auckland Transport on 22 September 2025. It is not clear if Auckland Transport reviewed the Applicant's response when finalising its memo.  See responses to Row 1.2.3 and 1.2.6 above.

## Table 1.3: 05 Economist comment received 25/09/25 summary and applicant response

Response prepared by Economic experts Greg Akehurst and Tom Harris, with input from the Applicant.

Response No.	Name	Comment summary	Applicant response
	James Stewart –	Executive Summary / Principal Issues	
1.3.1.	Economist (Chief Economist Unit, Auckland Council)	4. The report estimates the benefits of the Proposed Consent range between \$2.45 billion to \$5.4 billion over the life of the Consent. In my opinion these benefits are likely overstated because a. The underlying demand estimates are likely overstated.	Given the proposed extension of the Drury Quarry is already a listed project under the FTAA 2024, there is not a need to prove regional or national significance of benefits. That assessment occurred at the referral stage. If the panel is of a mind to <u>decline</u> the project, they must be satisfied that the <u>net adverse impacts</u> are sufficiently significant to be <u>out of proportion</u> to the projects regional or national benefits. That is after considering any conditions that the panel may set in relation to those adverse impacts, and any conditions or modifications that the applicant may agree to or propose to avoid, remedy, mitigate, offset or compensate for those adverse effects (Section 85(3)(b)(i) and (ii)).  Not withstanding the above, I have outlined below my response to the Chief Economist Units review. I include corrections and further explanation as required.  Since Council's review, we have corrected a model error that applied urban emissions costs to entire journeys.  Reapplying the urban/rural split in the VEPM-based emissions model lowers the lifecycle benefits from \$2.5-\$5.4b to \$0.9b - \$2.0b (real, PV, 5%) for the Sutton Block programme.  In addition, there are a wide range of other benefits that have been recognised by the courts and are relevant under the FTAA. In fact, the reference in the FTAA to benefits is much broader than simply economics. It includes such aspects as the long term aggregate security for Auckland, the ability to have a ready source of aggregate within the region in the event of damage from natural disasters, the reduction in amenity and other effects from establishing significantly new quarries in other greenfield locations, not to mention the growth benefits for businesses who now pay less for the aggregate required.  It is important to note that the above is a component of benefit, but not the entirety of benefit. The underlying demand estimates are indicative and are not used to calculate benefits. They frame the market context and Auckland's output gap (and associated impo
1.3.2.		b. The choice of destination of aggregates is not representative of the market.	The Auckland Council economist has not specified what "would" be representative of the market. Penrose was selected as a reasonable 'average' destination for the aggregate as the large aggregate quarries in the South (Brookby, Hunua and Drury) sell aggregate as far north as the Silverdale batch plant (breakeven in terms of cost with the northern quarries). The impacts are effectively only calculated as the difference in distance between Drury and Penrose, and the Northern Waikato Quarries and Penrose (which is actually just the distance between the quarries themselves, more or less).  Penrose is an appropriate, conservative proxy for Auckland delivery patterns because it also sits on the north-south freight spine and approximates the weighted average of Drury's actual destinations. Some loads travel further north, others further south, and these effects largely offset. The key variable is where displaced Drury tonnes come from in the counterfactual: aggregate delivered to the central/isthmus market needs to come from somewhere. If a Penrose-bound load was instead backfilled by an in-Auckland source, that source's prior market would be left short and must then be met from out-of-region; the network substitution still produces the same order of additional tonne-kilometres on the main corridors.

Response No.	Name	Comment summary	Applicant response
			Hence, treating Penrose as the reference node allows us to produce credible estimates of net additional journeys and costs. This is more suitable than modelling a more complex redistribution with necessarily excessive assumptions.
1.3.3.		c. The displacement of alternative aggregate sources being solely from out of region sources – ignoring potential Auckland-based sources.	The Auckland Council economist has not identified where these new Auckland-based sources might be located, or how realistic it is that those sources will be developed.
			There is a structural shortfall of aggregate supply in Auckland. This results in persistence import reliance from Northland and Waikato. Even with Drury producing 3.5m tonnes per year, and all of this effectively serving the Auckland market, this deficit remains. If the expansion did not occur, Auckland would need to source the full quantum from beyond the region because the quarry would need to close (i.e. Auckland's deficit would increase by the amount of the current Drury Quarry production.
			Smythes (Waikato) and Maungaturoto (Northland) are selected as conservative reference points. Neither could replace a significant share of Drury's production alone. In practice, backfill would need to come from a collection of sites, the average location of which would be at least as far away from the Auckland market as these selections.
			If there were any alternative Auckland quarries consented, then this may alter the outlook described by the economic assessment, however we are unaware of any significant new quarries within the vicinity of Drury Quarry. (While King's Quarry is a proposed new quarry that is on the FTAA Schedule, that is near Dairy Flat, well separated from Drury, and even if it were developed it will not meet the shortfall. Hunua Quarry, which is close to Drury, is proposed to expand, however that project is, we understand more about extending the life of the quarry rather than substantively adding to supply.
1.3.4.		5. There are some reasonably foreseeable costs arising from the Proposed Consent that were not addressed in the report, such as potential environmental costs from operation at the quarry site.	Section 9 of the Drury Quarry - Sutton Block expansion – Assessment of Environmental Effects (AEE) Report, prepared by Tonkin and Taylor, dated March 2025, identifies and assesses the potential environmental effects of the proposed expansion. The effects assessment is informed by a range of technical reports contained in Volume 2 of the Substantive Application. Section 9.16 of the AEE report concludes that effects relating to geology, air quality, groundwater, erosion and sedimentation, ground contamination, archaeology, noise, vibration and traffic will be minor or less than minor. This has been achieved through careful consideration in regard to the design of the quarry footprint, the size of the landholdings secured by SAL, management and mitigation measures offered as conditions of consent. With regard to landscape character and visual amenity, areas recognised as being sensitive to change (ONL, Kaarearea Paa, streams and wetlands) have been avoided in the design as far as practicable. Where avoidance was not possible, substantial revegetation and screening is proposed to mitigate potential landscape and visual amenity effects. The overall effects on natural character and the landscape are considered to be no more than minor, while the effects on visual amenity are more than minor.
			Due to the nature and scale of the project and given aggregate extraction can only take place where it is found naturally in situ, some adverse ecological effects (both terrestrial and freshwater) are unavoidable. Therefore, a key component of the project is the ecological off-set package which includes approximately 57.32 ha of revegetation and 108 ha of forest enhancement through weed and pest control, 3,341 m lineal metres of stream enhancement, and 4.04 ha of wetland restoration, which will be protected in perpetuity by way of covenants.
			Overall, the ecological package has been designed to achieve a Net Gain in ecological outcomes.
			In addition, other transport related environmental impacts are positive with respect to Drury compared with the Principal alternative.
1.3.5.		6. While I believe the avoided costs are likely overstated, they are probably still large. However, these benefits must be balanced against the costs that the Proposed Consent imposes and these costs have not been considered. It is therefore difficult to come to any conclusion as to whether the Proposed Consent represents a net benefit from a welfare perspective.	See explanation above for 4 and 5 (Rows 1.3.1 - 1.3.4).
1.3.6.		7. It is plausible that the Proposed Consent represents a significant regional benefit for Auckland as described in the FTAA, but again since the benefits have, in my opinion, been overstated and the costs have not been considered I find it difficult to conclude that the net present value of the Proposed Consent is large.	Drury Quarry is Auckland's largest quarry by production volume, and the purpose of this consent is to extend its operating life for a potential further 50 years. That continued production can occur while taking the benefit of established front of house processing, storage and load out facilities, together with all water management and other infrastructure. The benefits of this proposal therefore remain large and significantly positive at the regional level.  Benefits are as outlined above and due to Auckland being in net aggregate deficit, additional rock must be found from outside of Auckland – or a new quarry needs to be consented.
			Given the costs and time involved in consenting quarries, the principal alternative is to source from outside Auckland's importance to the national economy and aggregates importance to economic growth in also recognised by the Minister for Resources, who considers this an issue of national significance. Aggregate has also been specifically added

Response No.	Name	Comment summary	Applicant response
			to New Zealand's list of Critical minerals: https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/minerals-and-petroleum/critical-minerals-list/critical-minerals-list-2025
			Given all of the above, and in particular given that, in the absence of this consent, the largest quarry in Auckland will need to cease operating up to 50 years earlier than otherwise, it is difficult to understand why there is any debate about the benefits of the proposal.
			The benefits of even smaller quarries has been expressly recognised by the Environment Court: refer to the <i>Brookby Quarry</i> , direct referral decision by Judge Smith, and then more recently <i>CJ Industries</i> case. Those cases concluded that the quarries were of regional if not national significance because of the benefits those operations generated.
			Finally, while we understand that the Auckland Council's economist has been focussed on economic costs and benefits, the reference in the FTAA to benefits is much broader and it includes benefits beyond purely economic ones. This includes the long-term aggregate security for Auckland, the ability to have a ready source of aggregate within the region in the event of damage from natural disasters, the reduction in amenity and other effects from establishing significantly new quarries in other greenfield locations, to name just a few.
		Overstating benefits [medium risk]	
		1. As identified in my Specialist Assessment above, I believe the value of the avoided costs in the	Do not agree for the reasons outlined above.
		Applicant's economic assessment may be overstated for three reasons:  a. The underlying demand estimates may be overstated, and b. The choice of Penrose as the only processing facility of aggregates, and	a. Demand estimates are sound and based on NZ Mineral estimates as published by MBIE. This combined with long experience in modelling the aggregate sector and industry information. No explanation has been given by the Auckland Council economist for their opinion that the demand estimates are overstated.
1.3.7.		c. The displacement of alternative aggregate sources being solely from out of region sources.	b. Penrose is not selected as the only processing facility – it is reflective of an average destination and is entirely appropriate. This error from the Auckland Council economist – ie that all aggregate is processed at Penrose - may have materially influenced their other comments.
			c. Alternative sources must come from outside the region because Auckland is in deficit already. There is no reasonable basis to conclude that Auckland will ever be able to source all of its demand from within Auckland, even with the new quarry proposals that are known about.
1.3.8.		2. It would be useful if the Applicant's economic expert could provide a range of values for avoided costs with using more moderate assumptions for demand, more efficient locations for processing destinations depending on locations of displaced aggregates, and more reasonable scenarios of alternative locations of displacement of aggregates.	The estimates provided are based on a range of demands. The low end is based on a medium population projection for Auckland and no net additional economic growth. That is, it does not take into account any Auckland economic growth that might occur above population growth. The high end assumes a degree of additional population growth + economic performance hike and represents (realistic) high level of demand that could potentially occur. It is not necessary to include different "more efficient" locations for processing as the location chosen is representative (noting that it is a destination for use, rather than a processing location). It reflects the midpoint of demand for aggregate from the southern quarries. The locations chosen are the most appropriate out of Auckland sources of aggregate that could meet the supply shortfall. There are no nearer quarries that could assist. All Auckland sourced rock is required so no alternatives within Auckland can act as a substitute. This is the fundamental point and rationale for the entire project.
		Non-identification of costs [high risk]	
1.3.9.		3. No costs were identified in the report but there are potentially very high costs, for example environmental costs, arising from the Proposed Consent. These costs should be identified for a balanced analysis of the net present value of the Proposed Consent to be able to conclude the Proposed Consent is net welfare enhancing over a counterfactual and whether the Proposed Consent represents a (significant) regional or national benefit.	Detailed assessment of environmental outcomes is recorded in the AEE. I have summarised the findings of those experts, in answer to question 5 (Row 1.3.4) above. The net position is positive, therefore adding to the economic benefits that have been able to be monetised.
		Why is this Information Essential?	
1.3.10.		4. It is not possible to determine if the benefits of the Proposed Consent exceed the costs because the calculation of benefits appears to be overstated and the costs have not considered in the economic analysis.	I do not agree. The estimate of benefits is balanced and conservative. For example, we have not considered the flow on benefits from the businesses able to increase their production due to paying less for aggregate, or the time saving associated with the transport benefits. The benefits estimate is based on the latest industry data and the latest statistics produced by MBIE. Other costs have been considered and based on the environmental assessments, are not present as a cost, due to net positive environmental outcomes.
1.3.11.		5. It is not possible to determine if the Proposed Consent represents a significant regional or national benefit as not all resource trade-offs have been considered.	This is not the case. All relevant resource trade-offs have been considered (as outlined above). The result of that consideration is that the benefits of granting this Fast Track Consent is significantly beneficial to the Auckland Region and New Zealand.

Table 1.4: 06 Groundwater Specialist comment received 25/09/25 summary and applicant response

Response prepared by Groundwater expert Parvis Namjou, with input from the Applicant.

Response No.	Name	Comment summary	Applicant response
1.4.1.	Philip Kelsey,	The reviewer supports the application, provided the attached conditions are accepted.	
1.4.2.	Consultant Hydrogeologist, Earthtech	Amendment to Condition 133 to correct the incorrect cross-referenced condition (Groundwater levels).	The cross-reference error will be corrected in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.3.	Consulting Limited – Water Allocation	Amendment to Condition 134 (Groundwater levels) to change references to 'Manager' to 'Council'.	Completed as part of response to Panel Minute #3 (Attachment A – Draft Consent Conditions), issued 22 September 2025.
1.4.4.		Amendment to condition heading for 'Freshwater monitoring'.	The Applicant accepts this proposed change and will make the requested amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.5.		Amendment to Condition 138 (Freshwater monitoring).	The Applicant accepts this proposed change and will make the requested amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.6.		Amendment to Condition 141 (Freshwater monitoring) to change references to 'Manager' to 'Council'.	Completed as part of response to Panel Minute #3 (Attachment A – Draft Consent Conditions), issued 22 September 2025.
1.4.7.		Amendment to Condition 142 (Stream flow monitoring sites (gauging stations)).	The Applicant accepts this proposed change, noting that the reference will be to MK5 as opposed to MK1 given the Apppliant already have gauging stations along Maketu Stream (M0 to M4). The Applicant will provide for the amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.8.		Amendment to Condition 144 (Stream flow monitoring sites (gauging stations)) to change references to 'Team Leader' to 'Council'.	Completed as part of response to Panel Minute #3 (Attachment A – Draft Consent Conditions), issued 22 September 2025.
1.4.9.		Amendment to Condition 145 (Stream flow maintenance and recommended augmentation programme for Maketu and NT-1 Streams) to change references to 'Manager' to 'Council'.	Completed as part of response to Panel Minute #3 (Attachment A – Draft Consent Conditions), issued 22 September 2025.
1.4.10.		Amendment to Condition 149 (Stream flow maintenance and recommended augmentation programme for Maketu and NT-1 Streams).	The Applicant accepts this proposed change and will make the requested amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.11.		Amendment to Condition 153 (Stream flow maintenance and recommended augmentation programme for Mangawheau Stream and Hingaia Tributary Stream) to change references to 'Manager' to 'Council'.	Completed as part of response to Panel Minute #3 (Attachment A – Draft Consent Conditions), issued 22 September 2025.
1.4.12.		Amendment to condition cross-referencing in Condition 154 (Stream flow maintenance and recommended augmentation programme for Mangawheau Stream and Hingaia Tributary Stream).	The cross references will be corrected in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.13.	-	Amendment to Condition 157 (Stream flow maintenance and recommended augmentation programme for Mangawheau Stream and Hingaia Tributary Stream).	The Applicant accepts this proposed change and will make the requested amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.4.14.		Proposed condition (158) under 'Stream flow maintenance and recommended augmentation programme for Hays Stream, Symonds Stream and Peach Hill Stream'.	Winstone's Hunua Quarry holds an existing groundwater take and diversion consent, which forms part of the lawful existing environment which the Applicant has no control over. Whether Winstone's will seek to renew the consent and continue augmentation of associated streams is not known, noting that the current permit does not expire until 29 October 2044. For as long as Hunua Quarry remains in operation and augmentation continues under the existing consent, no additional adverse effects are anticipated. This reflects the lawful existing environment against which this application must be considered.  If, during dewatering of the Sutton Block, Winstone's ceases dewatering and augmentation of Hays, Symonds, or Peach Hill Streams, the Applicant will arrange for an appropriately qualified expert to prepare a technical report. The report will assess whether augmentation of these streams is required to maintain baseflows in response to Sutton Blocks drawdowns. However, it is not reasonable for this consent to pre-emptively require augmentation of Hays Stream, Symonds Stream, or Peach Hill Stream before such a technical assessment has been completed.

Response No.	Name	Comment summary	Applicant response
			Accordingly, the applicant will propose a condition requiring that, if augmentation at Hunua Quarry ceases, the consent holder must provide the above-mentioned report. The report will also propose an augmentation regime (if necessary). If Auckland Council does not accept the proposed regime, the appropriate process would be for Council to initiate a review under s128 of the RMA. The consent holder has proposed an amendment to the draft conditions to enable this.
1.4.15.		Amendment to condition cross-referencing Condition 159 (Annual review and adjustment of stream flow augmentation rates).	The cross-references will be corrected in an updated draft Condition set.
1.4.16.		Amendment to condition cross-referencing in Condition 160 (Surface water monitoring report (all streams)).	The cross-references will be corrected in an updated draft Condition set.
1.4.17.		Reviewer has not checked conditions 161 – 164.	Noted.
1.4.18.		Proposed conditions (165-171) in relation to mitigation of sudden loss of water supply, mitigation of effects on bores identified in the application, mitigation of claim of bore interference or spring/stream flow depletion, water supply mitigation plan, and ground settlement contingency condition.	The Applicant agrees in principle with the recommended changes; however, the proposed drafting of the conditions is not accepted. Instead, the Applicant will amend the GMP to more explicitly require that a process be undertaken for the installation of a replacement borehole, where necessary, in circumstances where a monitoring borehole becomes dry or damaged, and where replacement remains justified in light of observed drawdown patterns. Given the anisotropic nature of the aquifer and the intervening faults, the predicted drawdowns may not in fact occur. Or a nearby bore may not be as productive (i.e. provide less water), but it may not be related to any dewatering activities at the Quarry. Accordingly, it would be inappropriate for the consent conditions to simply require that a replacement bore be provided if a bore in the potential drawdown zone ceases to function.
1.4.19.		Proposed changes to Appendix 1: Schedule 1 Groundwater Monitoring Bores and Trigger Levels Note:  1. Any existing monitoring bores with screen intervals above proposed trigger levels need to be replaced with deeper bores (to depth of at least 20m below trigger levels) prior to Stage 3 Quarry Floor at RL60m.	Accept, with the following amendment: Any existing monitoring bores with screen intervals above proposed trigger levels need to be replaced with deeper bores (to depth of at least 20m below trigger levels) prior to Stage 3 Quarry Floor at RL60m if bores go dry.  The Applicant notes that drawdowns in fractured rock can cease at any time depending on interception of a barrier fault causing restriction of interconnectivity between the fractures to the sump along a particular direction. Therefore, proposed 20 m buffer zone by the reviewer as a trigger level to replace the bores is excessive and not justifiable. If any monitoring bore goes dry, it will be replaced which is the standard practice for any quarry consent conditions.
1.4.20.		Proposed changes to Appendix 1: Schedule 1 Groundwater Monitoring Bores and Trigger Levels Note:  2. MK1L (deep) and MK1U (shallow) and MG1L (deep) and MG1U (shallow) shall be drilled 6 months after consent.	Accept, with the following amendment: MK1L (deep) and MK1U (shallow) and MG1L (deep) and MG1U (shallow) shall be drilled 6 months after consent.  The Applicant does not accept the inclusion of MG1U and MG1L. Any additional drilling should be conditioned based on the monitoring results from bores which are distributed in all directions around the future sump. Any decision to drill additional bores should be based on the actual directional effects of the dewatering on the proposed surrounding monitoring bores. For example, if the sump has hydraulic connection to the south-east and this causes excess drawdowns in SG6 (i.e. drawdown more than predicted), the next bore should be placed along this direction rather than in Mangawheau catchment. Even if any additional bore is needed outside of the Applicant's property, the priority should be given for utilising existing farm wells as monitoring bores such as the existing monitoring bore SG6 (bore ID 22498). Refer to PDP memo to Auckland Council – Groundwater consultant issued on 22 September to the Panel. Ground water response
1.4.21.		Proposed changes to Appendix 1: Schedule 1 Groundwater Monitoring Bores and Trigger Levels  Note:  3. SV (Seasonal Variation) + 2m incorporated into trigger levels for all shallow bores.	Accept, with the following amendment: SV (Seasonal Variation) + 2m incorporated into trigger levels for all shallow bores or bores predicted to not be affected by the dewatering.
1.4.22.		Proposed changes to Appendix 1: Schedule 1 Groundwater Monitoring Bores and Trigger Levels General inclusion of MG1L and MG1U.	The Applicant considers the MG1L and MG1U rows should also be removed.

Table 1.5: 07 Regional Earthworks Specialist comment received 25/09/25 summary and applicant response

Response prepared by Earthworks expert Campbell Stewart, with input from the Applicant.

Response No.	Name	Comment summary	Applicant response
1.5.1.	Shanelle Beer Robinson – Senior Specialist, Earthworks and Streamworks	The specialist identifies that consent is also required under E11.4.1(A8) for earthworks greater than 2,500 m <sup>2</sup> where land has a slope equal to or greater than 10 degrees (Restricted Discretionary Activity).	The Applicant agrees that consent is required under E11.4.1(A8) as a Restricted Discretionary Activity for the extent of earthworks proposed outside the Special Purpose Quarry Zone (SPQZ) and seek consent under this additional trigger.  Accordingly, it is also considered that consent is required under H28.4.1 (A17) as a Controlled Activity for earthworks within the SPQZ greater than 2,500 m² where the land has a slope equal to or greater than 10 degrees.  As stated in Section 8.1 of the AEE, although these rules were not specifically identified in Table 8.2 of the AEE, they are considered to have been addressed and form part of the application.
1.5.2.		The regional earthworks assessment does not identify any reasons to withhold consent and the as	pects of this proposal considered by this memo could be granted consent, subject to recommended conditions.
1.5.3.		Requested amendment to Condition 21 (Specific Erosion and Sediment Control Plan)	The Applicant generally accepts the changes to Condition 21, with the exception of amendments to (f) and (g). With regard to (f), it is noted that the Applicant has not proposed any maximum area or area restrictions, the areas of earthworks are not considered to be large enough to warrant any maximum restrictions. The bulk of the application relates to quarrying (not earthworks).  With regard to (g) and the advice note, it is noted that the primary reason for referencing Site-Specific Erosion and Sediment Control Plans (SSESCPs) in the ESC report is that the project will be developed progressively over an extended period. Accordingly, the condition must accommodate a <i>finalised ESCP</i> that may initially apply only to Stage 1 (approximately three years), with provisions for it to be updated or replaced as the project advances. The condition proposed does not reflect the requirements of long-duration projects.
1.5.4.		Requested amendment to Condition 23 (Chemical or Organic Treatment Management Plan)	The Applicant does not accept this proposed change as certification and commencement of works prior to certification of the COTMP is provided for under Conditions 9-11. Note, that the Applicant proposes to amend Condition 12 to require certification of management plans prior to commencement of construction.
1.5.5.		Requested amendment to Condition 77 (Erosion and Sediment Controls)	The Applicant accepts this proposed change and will provide for the amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.5.6.		Requested amendment to Condition 82 (Erosion and Sediment Controls)	The Applicant accepts this proposed change and will provide for the amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.5.7.		Requested amendment to Condition 83 (Erosion and Sediment Controls)	The Applicant accepts this proposed change and will provide for the amendment in an updated draft Condition set to be provided to the Panel on 10 October (subject to any further direction from the Panel).
1.5.8.		Additional Earthworks Conditions X1 - X4	The Applicant accepts the additional earthworks conditions X1-X4 subject to them being limited to Stage 1 Earthworks only. As set out in the ESCR, only the first 3 years, Stage 1 Establishment Works phase is considered "traditional" earthworks and will utilise "traditional" GD05 erosion and sediment control. This establishment phase covers a relatively small area (4.1 ha) over a short timeframe in the context of the Quarry life (3 years). These conditions are not fit for purpose once the quarry is up and running and only small, progress areas of earthworks are being undertaken.
1.5.9.		Additional Earthworks Conditions X5 – Winter Works Approval	The Applicant does not accept recommended winter works condition X 5. The quarry establishment/enabling activities are a continuous activity throughout the year. The establishment and management of the Northern Bund will need to align with the quarry establishment works. Once the pit operations commence all site construction water will drain to the pit and is then incorporated into the Drury Water Management System. As such, a winter works restriction is not necessary as works during winter will not result in an unacceptable high risk of elevated sediment discharge.
1.5.10.		Additional Earthworks Conditions X6 – ESC devices must be treated in accordance with approved Chemical Treatment Management Plan	The Applicant accepts the additional earthworks condition X6 subject to it being limited to Stage 1 Earthworks only for the reasons stated in 1.5.8 and 1.5.9 above.
1.5.11.		Additional Earthworks Conditions X7 – Rainfall Monitoring Plan	The Applicant accepts the additional earthworks condition X 7 requiring a Rainfall Monitoring Plan subject to it being limited to Stage 1 Earthworks only. Once the project moves into quarrying phase, this condition would not be fit for purpose.

Response No.	Name	Comment summary	Applicant response
1.5.12.		Additional Earthworks Conditions X8 - X10 – A Freshwater Baseline Report	The Applicant agrees in principle with the intent of the recommended conditions; however, the Applicant does not accept the proposed Conditions X8–X10. It is considered that these matters are already sufficiently addressed through proposed Conditions 20–21 (NT-1 WQ Monitoring and Management Plan – Construction Works only), which set out the water quality monitoring requirements for the NT-1 Stream during Construction Works. These requirements include, among other things, testing for turbidity (NTU), pH, and total suspended solids (mg/L).
1.5.13.		Additional Streamworks Conditions X1 – winter works condition	The Applicant accepts streamworks condition x1 and will make the requested amendment in an updated draft Condition set.
1.5.14.		Additional Streamworks Conditions X2 – X4 - Streamworks Management Plan	The Applicant agrees in principle with the intent of the recommended conditions; however, it does not accept the proposed Conditions X2-X4 requiring a streamworks management plan to be prepared. It is considered that the suggested requirements would be more appropriately and effectively addressed through the proposed Sutton Block Stream Diversion and Enhancement Plan (Conditions 59–60).

Table 1.6: 08 Heritage Specialist comment received 25/09/25 summary and applicant response

Response prepared by Planners and the Applicant.

Response No.	Name	Comment summary	Applicant response
1.6.1.	Mica Plowman - Principal Heritage Advisor	Specialist agrees with and support the Clough and Associates assessment of the risk to potential previously unidentified archaeological/historic heritage features within the project area (Drury Quarry Sutton Block extension). They also agree that the projects HNZPTA authority application is an appropriate means of mitigation for earthworks in this area.	Thank you for your time and response.
1.6.2.		The previously recommended amendment to section Part B - General Conditions B.8 Archaeology (now Part C – Specific Conditions - Land Use Consent (S9) and Streamworks Consent, Condition 74), to undertake archaeological survey prior to planting at Nga Motu O Hingaia Island (Hingaia Island) is no longer required and the Heritage Unit accepts that the remainder of the offset mitigation areas proposed within the wider SAL Landholdings are low risk and can be suitably managed under the AUP Accidental Discovery Rule (ADR), or potential HNZPT conditions.	In response to comments received, the Applicant is proposing to undertake planting on Nga Motu O Hingaia Island (Hingaia Island), subject to obtaining landowner approval within 12 months of obtaining consent. A 50m planting buffer zone around all recorded archaeological sites is proposed, and no planting will be undertaken within listed archaeological sites, in accordance with DOC policy for not planting on such sites.
1.6.3.		The minor recommended amendment to B. 9 Accidental Discovery Protocol (now Part C – Specific Conditions - Land Use Consent (S9) and Streamworks Consent Condition 74 Accidental Discovery Protocol) is still advised.	As stated in our response to Auckland Council on 17 September 2025 (refer to Row 106), the applicant does not accept the change from 'Subject' to 'In addition' in the Accidental Discovery Protocol Condition (now Condition 79). It is considered that 'Subject" is appropriate given the condition provides for specific protocols agreed with mana whenua pursuant to condition 7(b). Furthermore, "subject to" is necessary because "in addition to" could lead to a situation where the AUP accidental discovery protocols is inconsistent with mana whenua requirements. In the event of that conflict, it is considered that the mana whenua view should prevail.

Table 1.7: 09 Landscape Specialist comment received 25/09/25 summary and applicant response

Response No.	Name	Comment summary	Applicant response
1.7.1.	Simon John Cocker	I am of the opinion that the above referenced documents reach credible findings which are supported by reasons and make appropriate recommendations with respect to those findings.  I am supportive of the proposal from a landscape perspective.	
		Specialist highlighted that the relevant conditions are 31 and 32 (Landscape and Visual Mitigation and Management Plan). They recommend three recommendations for minor amendments to the wording of Condition 32.	Thank you for your time and response.
1.7.2.		The latest iteration of the conditions accepted all but the suggested change to 32(h), which related to details of the alignment and type of any proposed fencing. This last recommendation was not accepted on the basis that the change was considered unnecessarily onerous and goes beyond what is strictly necessary to manage potential effects. The specialist accepts this rationale.	