

Memorandum

To: Kings Quarry Expansion – Stage 2 Expert Panel

From: Alex Parr / Pamela Santos – Barker & Associates Limited

Date: 25 November 2025

Re: Response to Minute 14 of the Expert Panel

This memorandum responds to the requests for information in Minute 14 of the Expert Panel for the Kings Quarry – Stage 2 Expansion project (“the Project”), issued on 24 November 2025. The Panel requested that Kings Quarry Limited (“KQL”) provide comment on the landslide susceptibility rules of Chapter E36 proposed under Plan Change 120: Housing Intensification and Resilience (“PC 120”), including any provisions that may be applicable to the Project, and any related assessment of the Project against those provisions from KQL’s technical specialists.

Auckland Council notified PC 120 on 3 November 2025, which introduces new provisions for the management of significant risks from natural hazards as a matter of importance under the Resource Management Act 1991 (“RMA”). The proposed natural hazard rules have immediate legal effect under section 86B(3)(f) of the RMA.

In this case, the site is subject to flood hazard areas and the high landslide susceptibility assessment area. A risk assessment in accordance with Appendix 24 Landslide Hazard Risk Assessment Methodology has not been undertaken. The following assessment sets out the reasons for consent required under PC 120, an assessment against the relevant objectives and policies, and a weighting assessment between the operative and proposed plan.

1.0 Plan Change 120 Reasons for Consent

E12 Land Disturbance – District

- Earthworks within medium and high landslide susceptibility areas are required by Standard E12.6.2(18) to be undertaken in general accordance with a landslide hazard risk assessment report prepared in accordance with Appendix 24 – Landslide Hazard Risk Assessment Methodology. A landslide hazard risk assessment prepared in accordance with Appendix 24 has not been provided with the application for the Project. This is a **restricted discretionary** activity under Rule C.1.9(2).

E15 Vegetation Management and Biodiversity

- Vegetation alteration and removal within medium and high landslide susceptibility areas are required by Standard E15.6.8A to be undertaken in general accordance with a landslide hazard risk assessment report prepared in accordance with Appendix 24 – Landslide Hazard Risk Assessment Methodology. As above, this has not been provided with the application and is therefore a **restricted discretionary** activity under Rule C.1.9(2).

E36 Natural Hazards and Flooding

- A landslide hazard risk assessment prepared in accordance with Appendix 24 has not been provided for the application as required by E36.6.A1. Development and associated use accessways and private

roads in landslide hazard risk areas that do not comply with Standard E36.6.A1 are a **discretionary** activity under Rule Table E36.4.1B(A113).

2.0 Objectives and Policies Assessment

An assessment against the relevant amended and additional objectives and policies introduced under PC 120 is provided in **Table 1** below. It is noted that the assessment criteria, objectives, and policies of chapters E12 Land Disturbance – District and E15 Vegetation Management and Biodiversity have not been altered under PC 120 and therefore it is considered that the assessment provided within the lodged application remains relevant.

Table 1. PC 120 Objectives and Policies Assessment.

Relevant Policy	Assessment
E36.2. Objectives	
(3A) <i>The risk from natural hazards to people, property, infrastructure and the environment resulting from existing use and development across the region is reduced over time to a tolerable or acceptable level.</i>	It is considered that the Project has an acceptable level of risk as it is for an activity less sensitive to natural hazards. Based on the geotechnical investigations carried out and provided that the geotechnical design recommendations within the Project's Geotechnical Assessment are adhered to, CMW Geosciences considers that the Site is unlikely to be affected by slope instability.
(3B) <i>New subdivision, use and development avoids significant risk and only occurs when the risk from natural hazards to people, property, infrastructure and the environment is assessed as being tolerable or acceptable.</i>	
(3C) <i>Subdivision, use and development is managed in a way that avoids creating or exacerbating natural hazard risks on other properties, infrastructure and the environment.</i>	The Geotechnical Assessment prepared for the Project concluded that the quarrying of the land is unlikely to accelerate, worsen or result in material damage to the land and surrounding land (including buildings and structures) provided that the geotechnical recommendations and proper engineering practices are followed during land disturbance associated with the quarry activity.
(3D) <i>Risks from natural hazards on Māori Land, Treaty Settlement Land, marae, urupā, mana whenua cultural heritage and values are reduced over time, and not created or exacerbated by subdivision, use and development.</i>	The site is not adjacent to Māori Land, Treaty Settlement Land, marae, or urupā. Additionally, consultation with mana whenua has been undertaken.
(4) <i>Where infrastructure has a functional or operational need to locate in a natural hazard area, avoid the creation or exacerbation of risks from natural hazards to people, property, and the environment or, if avoidance is not able to be achieved, the residual effects are otherwise mitigated to the extent practicable.</i>	N/A – Quarries are not defined as infrastructure under the Auckland Unitary Plan (Operative in Part) (“AUP(OP)”).
(5) <i>The flood storage and the conveyance functions of floodplains and overland flow paths are maintained, and enhanced where practicable, and the creation of new flood prone areas are avoided.</i>	N/A – Consent has not been identified for flood hazard activities.

<p>(6) Natural features and buffers are used where practicable and nature-based solutions are used in preference to hard protection structures to manage risk from natural hazards.</p>	<p>It is considered that the proposed remediation planting assists in managing potential landslides within the site.</p>
<p>(7) All natural hazard risk assessments and management measures take into account the potential long term effects of climate change.</p>	<p>Climate change has been taken into account to the extent relevant while preparing this assessment.</p>
<p>(8) A precautionary approach is adopted where information is uncertain or incomplete.</p>	<p>It is considered that the approach taken to the application is proportionate to the level of information when taking into account the proposal is for an activity less sensitive to natural hazards and a geotechnical assessment has been prepared for the Project.</p>

E36.3. Policies

Risk classifications

<p>(1A) Identify risk from natural hazards associated with subdivision, use and development by differentiating risk into the following three classifications:</p> <ul style="list-style-type: none"> • significant • potentially tolerable • acceptable 	<p>While the risk has not been identified in accordance with Appendix 24, it is considered acceptable given that the activity is less sensitive to natural hazards and the Project will be undertaken in accordance with the recommendation made within the Geotechnical Assessment and conditions of consent.</p>
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Risk settings and management methodology

<p>(1C) Manage risk from landslides associated with subdivision, use and development by:</p> <ul style="list-style-type: none"> • identifying land that may be susceptible to landslides; and • requiring a landslide risk assessment to be undertaken in accordance with Appendix 24 Landslide hazard risk assessment methodology, using the level of susceptibility, the underlying zone, the location and type of the activity and the sensitivity of the activity to natural hazards as determinants for the type of assessment and the level of risk; and • applying management approaches proportionate to the level of risk. 	<p>As per above, while the risk has not been identified in accordance with Appendix 24, given the Geotechnical Assessment undertaken for the Project it is considered acceptable. Additionally, it is considered that the proposed management approaches for the Project are proportionate to the risk.</p>
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Risk assessment requirements

<p>(3) Where a resource consent is necessary, require proposals to subdivide, use or develop land that is subject to natural hazards to prepare a risk assessment that considers all of the following, taking into account the potential effects of climate change and adopting a precautionary approach where information is uncertain or incomplete:</p>	<p>See below assessment.</p>
<p>(aa) The type, frequency, range and scale of the natural hazard(s), including:</p>	<p>The Geotechnical Assessment that has been prepared by CMW broadly addresses these</p>

<ul style="list-style-type: none"> • where there may be coinciding, compounding and/or cascading hazards; • whether the hazard risks will be temporary or permanent; • whether natural hazard events of lower intensity and higher frequency than the 1 per cent AEP event will impact the property and proposed activity 	<p>matters. As such, the proposal is considered to be generally consistent with this policy.</p>
<p><i>(c) the consequences of a natural hazard event in relation to the proposed activity</i></p>	<p>Mineral extraction is defined as an activity that is less sensitive to natural hazards. The consequences of a landslide on the proposed earthworks, vegetation clearance, and aggregate haulage are considered to be able to be appropriately managed in accordance with the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016 and the WorkSafe guidelines applicable to quarry operations.</p> <p>With respect to the final quarry landform, no ongoing land use is proposed. The Geotechnical Assessment confirms that, provided the recommended geotechnical design measures are implemented, the site is unlikely to be subject to slope instability.</p>
<p><i>(l) existing and proposed mitigation measures</i></p>	<p>Section 9 of the Geotechnical Assessment for the Project proposed a range of recommended mitigation measures that will be implemented and managed through the conditions of consent. Additionally, it is considered that the proposed remediation planting will help progressively stabilise the site.</p>
<p><i>(m) residual risk</i></p>	<p>Residual risk is not considered relevant to the Project.</p>
<p><i>(n) any relevant management plan, strategy or hazard risk assessment relating to the area</i></p>	<p>No relevant management plan, strategy or hazard risk assessment has been identified for the site.</p>
<p><i>(4A) Require all of the following matters to be considered when assessing consequences of natural hazards as part of a risk assessment:</i></p>	<p><i>See below assessment.</i></p>
<p><i>(a) accelerating or exacerbating the natural hazard and/or its potential impacts</i></p>	<p>The proposed landslide risk is not considered to be accelerated or exacerbated by the Project as the recommended geotechnical design measures ensure the site is unlikely to be subject to slope instability. Further, it is considered that any potential impacts are internal to the quarry operations which is an activity less sensitive to natural hazards and managed by alternative legislation.</p>
<p><i>(b) creating natural hazard risks that previously were not present at the location</i></p>	<p>The proposal is not considered to create a natural hazard as the Geotechnical Assessment confirmed</p>

	that the site is unlikely to be subject to slope instability.
<i>(c) the type of activity being undertaken and its sensitivity to natural hazard events</i>	Mineral extraction is defined as an activity less sensitive to natural hazards. As set out above, the operational activities are considered to be able to be appropriately managed in accordance with the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016 and the WorkSafe guidelines applicable to quarry operations.
<i>(d) creating or increasing the natural hazard risk(s) to people and communities, including long-term impacts from more frequent hazard events</i>	As set out above, the Geotechnical Assessment prepared for the Project concluded that the quarrying of the land is unlikely to accelerate, worsen or result in material damage to the land and surrounding land (including buildings and structures) provided that the geotechnical recommendations and proper engineering practices are followed during land disturbance associated with the quarry activity.
<i>(e) creating or increasing the natural hazard risk(s) to other properties, infrastructure and the environment</i>	
<i>(f) cultural impacts, including consequences for Māori land, Treaty Settlement Land, marae, urupā, mana whenua cultural heritage and values</i>	The site is not adjacent to Māori Land, Treaty Settlement Land, marae, or urupā. Additionally, consultation with mana whenua has been undertaken.
<i>(4B) Require all of the following matters to be considered as part of a risk assessment of existing and future mitigation measures and residual risk</i>	<i>See below assessment.</i>
<i>(a) whether any building, structure or activity located on land subject to natural hazards can be relocated within the site or removed</i>	The entire site is located within the landslide susceptibility assessment area. Structures proposed as part of the Project are limited to the plant and sediment ponds. These structures are considered to have a functional requirement to be located on the site.
<i>(b) whether the use, design and construction of buildings and structures can mitigate risks associated with natural hazards</i>	This is not considered relevant to the proposed activities with the landslide susceptibility assessment area.
<i>(c) the extent to which methods for long term maintenance of areas affected by natural hazards, such as easements, are provided</i>	The site will be maintained in accordance with the proposed remediation planting conditions of consent.
<i>(d) the ability for site layout and management to limit exposure of people and property to natural hazards, including safe egress during a natural hazard event</i>	As set out above, the Geotechnical Assessment prepared for the Project concluded that the quarrying of the land is unlikely to accelerate, worsen or result in material damage to the land and surrounding land (including buildings and structures) provided that the geotechnical recommendations and proper engineering practices are followed during land disturbance associated with the quarry activity. Additionally, it is considered that if a landslide occurs on the haul road this can be remediated using the machinery on site to provide egress and be managed in

	accordance with the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016 and the WorkSafe guidelines.
(e) the effect of structures to mitigate hazards on landscape values and public access	N/A – This is not considered relevant to the proposal as the proposal does not include mitigation structures.
(f) the robustness of the mitigation measures, their enforceability and the ability to carry out repairs and maintenance	
(g) the potential consequences of events that exceed the design parameters of mitigation measures	
(h) the potential effects resulting from failure of structural and nature-based mitigation measures over a 100-year timeframe	
(i) the impacts of the mitigation on other people, properties, infrastructure and the environment	
(j) whether natural hazard risks can be reduced for Māori Land, Treaty Settlement Land, marae, urupā, mana whenua cultural heritage and values	The site is not adjacent to Māori Land, Treaty Settlement Land, marae, or urupā. Additionally, consultation with mana whenua has been undertaken.
(k) the use of conditions of consent, including the duration of consent, to monitor changes in risk and to limit the exposure of people and property to natural hazards	A comprehensive suite of conditions of consent has been provided with the application, including conditions that seek to manage risk of land instability.
(l) the extent to which it is practicable to mitigate residual risk where infrastructure has a functional or operational need to locate in a natural hazard area	N/A – Quarries are not defined as infrastructure under the AUP(OP).
Landslide hazards – general	
(33A) Manage activities sensitive to natural hazards and activities potentially sensitive to natural hazards associated with proposals to subdivide, use or develop land in medium (tolerable) landslide hazard risk areas so the risk is not increased and where practicable, is reduced to an acceptable level in accordance with Appendix 24 Landslide hazard risk assessment methodology.	N/A – The proposal is for an activity less sensitive to natural hazards.
(33B) Enable subdivision, use and development in low (acceptable) landslide hazard risk areas where these activities do not involve buildings or structures that exacerbate landslide hazard risk beyond the site in accordance with Appendix 24 Landslide hazard risk assessment methodology.	While the risk has not been identified in accordance with Appendix 24, based on the above assessment and conclusions made within the lodged Geotechnical Assessment, it is considered that the proposed activities do not involve buildings or structures that exacerbate landslide hazard risk.
(33C) Minimise earthworks and vegetation alteration or removal in high landslide susceptibility assessment areas and high (significant) landslide hazard risk areas to ensure that the resulting risk associated with the proposal is reduced to as low as reasonably practicable in accordance with	While the risk has not been identified in accordance with Appendix 24, based on the above assessment and conclusions made within the lodged Geotechnical Assessment, it is considered that the amount of proposed earthworks and vegetation

<p><i>Appendix 24 Landslide hazard risk assessment methodology, including only allowing earthworks in these landslide hazard areas where:</i></p> <ul style="list-style-type: none"> • the soil type and properties are appropriate; and • measures to maintain slope stability are practicably achievable and their ongoing management, maintenance and monitoring is provided for; and • adverse effects on stream health and stability are avoided; and • adverse effects on adjoining properties and infrastructure are avoided in the first instance, or otherwise minimised where avoidance is not reasonably practicable. 	<p>alteration and removal has been reduced to as low as practicable.</p>
<p><i>(33D) Manage earthworks and vegetation alteration or removal in medium landslide susceptibility assessment areas and medium (tolerable) landslide hazard risk areas so the resulting risk associated with the proposal is not increased and where practicable, is reduced to an acceptable level in accordance with Appendix 24 Landslide hazard risk assessment methodology, including managing earthworks in these landslide hazard areas to ensure:</i></p> <ul style="list-style-type: none"> • the soil type and properties are appropriate; and • measures to maintain slope stability are practicably achievable and their ongoing management, maintenance and monitoring is provided for; and • adverse effects on stream health and stability are avoided; and • adverse effects on adjoining properties and infrastructure are avoided in the first instance, or otherwise minimised where avoidance is not reasonably practicable. 	
<p><i>(33E) Avoid the discharge of stormwater and wastewater directly to ground in high landslide susceptibility assessment areas and high (significant) landslide hazard risk areas, and, if avoidance is not reasonably practicable in existing urbanised areas, ensure that:</i></p> <ul style="list-style-type: none"> • the resulting risk associated with the proposal is reduced to as low as reasonably practicable in accordance with Appendix 24 Landslide hazard risk assessment methodology; and • any adverse effects on the site and receiving environment are avoided in the first instance, or otherwise remedied or mitigated where 	<p>N/A – Not relevant to the Project.</p>

<p>avoidance is not practicable in existing urbanised areas.</p>	
<p>(33F) Manage the discharge of stormwater and wastewater directly to ground in medium landslide susceptibility assessment areas and medium (tolerable) landslide hazard risk areas to ensure:</p> <ul style="list-style-type: none"> the resulting risk associated with the proposal is reduced to as low as reasonably practicable in accordance with Appendix 24 Landslide hazard risk assessment methodology; and any adverse effects on the site and receiving environment are avoided in the first instance, or otherwise remedied or mitigated where avoidance is not practicable in existing urbanised areas. 	<p>N/A – Not relevant to the Project.</p>
<p>(33G) Manage the storage and containment of hazardous substances in high (significant) and medium (tolerable) landslide hazard risk areas so that the integrity of the storage method will not be compromised in a landslide event.</p>	<p>N/A – Not relevant to the Project.</p>
<p>(33H) Manage accessways, including private roads and roads intended to be vested, in high (significant) and medium (tolerable) landslide hazard risk areas so that safe egress is provided where practicable, and landslide risks are reduced to as low as reasonably practicable in accordance with Appendix 24 Landslide hazard risk assessment methodology.</p>	<p>While the risk has not been assessed in accordance with Appendix 24, it is considered that landslide risk associated with the haul roads will be reduced to as low as reasonably practicable, as the mineral extraction activity will be undertaken in accordance with the recommendations of the Project's Geotechnical Assessment and relevant WorkSafe requirements. In the event that a landslide affects a haul road, emergency egress can be achieved either by remediating the slip using machinery available onsite or by evacuating via the existing tracks located along the ridgelines and to the northwest of the site.</p>
<p>Landslide hazards – outside existing urbanised areas</p>	
<p>(33J) Avoid activities sensitive to natural hazards and activities potentially sensitive to natural hazards associated with proposals to subdivide, use or develop land outside existing urbanised areas that give rise to high (significant) landslide hazard risk in accordance with Appendix 24 Landslide hazard risk assessment methodology.</p>	<p>N/A – The proposal is for an activity less sensitive to natural hazards.</p>

3.0 Weighting Assessment

The Fast Track Approvals Act 2024 requires substantive consent applications to provide an assessment of the activity against the plan or proposed plan. In this case, PC 120 is the proposed plan and the Auckland Unitary Plan (Operative in Part) is the operative plan. Caselaw under the RMA has established that where there is an applicable operative and proposed plan, a resource consent application will need to be considered against the provisions of both plans and it is common to consider a weighting of the plans. Under

the RMA, the weighting given to a proposed plan will generally depend on (among other things) how far the plan has progressed through the public submission and hearings process. The weight to be accorded to the provisions of a proposed plan depends on its context and is considered on a case-by-case basis. Where the proposed plan is a significant shift in Council Policy, this may justify greater weight to be given to the proposed plan.

In relation to assessment for the purposes of a resource consent application, weighting only becomes relevant where different outcomes would arise from assessments of objectives and policies under the operative and proposed plan provisions (ie if the decision would be to decline an application under one plan and grant under the other).

In terms of PC 120, it is considered that the relevant objectives and policies under both the operative plan and PC 120 seek similar outcomes with respect to the Project. As both plans seek similar outcomes, and the objectives and policies assessment above against the plan provisions in PC120 does not result in a different planning assessment in terms of appropriateness of the activity or level of effects, it is considered that no weighting is required with respect to the provisions under PC 120.