

3 September 2026

Onur Oktem

[REDACTED]
[REDACTED]
[REDACTED]

Via email: [REDACTED]

Dear Onur,

RE: Remarkables Ski Area Upgrades and Doolans Expansion - Response to Natural Hazards and Transportation Feedback

NZ Ski Limited ("**NZSki**") would like to thank Queenstown Lakes District Council ("**QLDC**") for their ongoing engagement in relation to the Remarkables Ski Area Upgrades and Doolans Expansion Fast Track project ("**the Project**").

On 13th August 2026, QLDC wrote to NZSki and provided an overview of the key areas where QLDC considered there to be outstanding information gaps with respect to the Project. A copy of that letter is attached (Attachment 1). With respect to each topic:

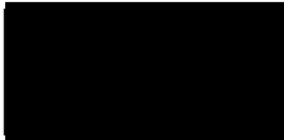
- > **Landscape:** The landscape matters have been addressed in the letter dated 27 August 2026.
- > **Transportation:** The transportation matters were broadly discussed at a transportation workshop attended by NZSki, QLDC and NZ Transport Agency representatives on 27th August 2026. A number of updates have been made to the application documents and conditions to provide further background and clarification regarding a number of the matters raised. NZSki would welcome further discussion with you to understand if this information adequately addresses your concerns.

- > **Natural Hazards:** The natural hazard matters were discussed at workshop attended by NZSki and QLDC representatives on 19th August 2026. NZSki's geotechnical engineer has prepared a short memorandum regarding the potential alluvial fan risk of the Lower Remarkables Transit Hub – a copy of that memorandum is attached for completeness (Attachment 2).

Following the workshop, QLDC provided formal written feedback regarding the outstanding natural hazard matters. A copy of that correspondence is attached. Due to the timing of receipt (2nd September 2026), NZSki has not been able to respond to these matters prior to the requisite 3rd September 2026 reporting date. Notwithstanding, the matters raised are likely to be resolvable through conditions which it can provide in response to QLDC's section 53 comments or earlier if that would be of assistance to QLDC.

Please let us know if you have any questions in relation to the above.

Yours sincerely,



Kirsty O'Sullivan

Mitchell Daysh Limited



cc Louise Taylor, CODC Planning Consultant, 
Jenny Clafferty, DOC Planning Consultant, 
Fiona Garrett, CODC Planning Manager, 
Angela Fenemore, ORC Planning Consultant, 

Attachment 1: QLDC letter identifying outstanding matters relating to landscape, natural hazards and transportation (13 August 2026)

13 August 2026

File: FTSA 2603

Your ref: FTAA-2605-1236

NZSki Limited

Attention: Kirsty O'Sullivan

Dear Kirsty,

REMARKABLES SKI AREA UPGRADE AND DOOLANS EXPANSION PROJECT

Landscape and Natural Hazards Matters, and information gaps relating to Transport

We refer to QLDC's Response to Minute 3 of the Panel Convener, dated 3 August 2026 (**Response**), and to the Convener Conference held on 6 August 2026. Further to the Response and following Queenstown Lakes District Council's (**QLDC**) review of the Substantive Application filed by NZSki Limited (**NZSki**) and the peer reviews undertaken on its behalf, this letter sets out the matters that QLDC considers remain outstanding in relation to landscape and natural hazards matters, and would if possible, invite trying to resolve them prior to a Panel being established.

While there are outstanding matters relating to transport (merits) that are not addressed in this letter, we have set out areas where we consider there are information gaps relating to transport, and invite NZSki to full them, prior to a Panel being established.

Landscapes

The following landscape matters were agreed at the landscape experts' workshop held on 3 August 2026 as requiring further input from NZSKI prior to expert panel appointment:

- A short note clarifying the location of the District Boundaries.
- Exports from the 3D model with comparative photos of the mid station from the Doolans and Rastus Burn catchments. Should this not be considered sufficient by the peer reviewers to visualise effects, it will assist in defining viewpoints for any additional visual simulations. 3D exports of the mid station in relation to landform will also help to provide an understanding of localised landscape character effects.
- Clarification of what material will be used to create the retaining structure.
- A review the lighting conditions and whether the operational hours (set out in OP.8) can be further refined or reframed to focus on core operational hours, with maintenance allowed outside of those hours.
- A review of the bus hub / lower car park conditions and provide further clarity of outcomes, in particular in relation to the proposed mitigation planting.

Transport

QLDC engaged Abley Limited (Abley) to provide independent transport planning advice in relation to the FTAA application for the Remarkables Ski Area Expansion Project. As you know, Abley's review (attached to this letter) identified the following principal areas of concern:

- SH6 Access Performance
- SH6 Mitigation Package
- Wider Network Assessment
- Travel Demand Management
- Detailed Parking Design

In response, the applicant provided a Transport Addendum prepared by Stantec dated 25 June 2026. While the addendum provides additional discussion regarding wider network effects, regional growth projections, planned transport infrastructure upgrades, and proposed travel demand management measures, it does not fully address several of the key information gaps identified by Abley.

In particular, the addendum does not provide Stage 1 and Stage 2 intersection performance modelling, confirmation of the design and delivery of any SH6 access upgrades, a detailed assessment of Coneburn Roundabout and wider network effects, a draft Travel Demand and Parking Management Plan, or detailed parking layout and operational information. Accordingly, a number of Abley's concerns remain only partially addressed or unresolved, with the current position summarised as:

Adequately responded to:

- Need for a broader network discussion
- Contextual relationship between ski field traffic and Southern Corridor growth
- Discussion of regional transport planning framework

Partially responded to:

- Coneburn effects
- Travel demand management strategy
- Wider network significance

Not responded / information gaps remain:

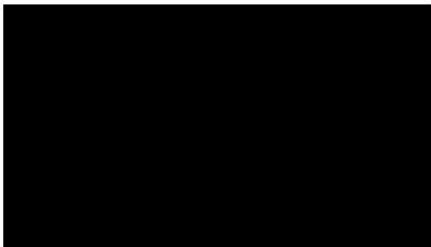
- Stage 1 and Stage 2 intersection modelling.
- Operational assessment of Coneburn roundabout.
- SH6/Kawarau Bridge/Peninsula Road performance assessment.
- Confirmed SH6 access upgrade design.
- Upgrade funding and delivery programme.
- NZTA confirmation regarding TTMP legality/acceptability.
- Draft Travel Demand and Parking Management Plan (TDPMP)
- Monitoring triggers and corrective actions.
- Detailed lower car park operational design.
- Access safety and swept path assessments.

Natural Hazards

We just record that there is separate correspondence occurring in respect of Natural Hazards, with the three issues being:

- Line 4 – flood risk at the Gondola Base Station and Base Building. A qualitative (rather than quantitative) assessment has been provided, although flood risk likelihood is deemed by Stantec to be “low”. We are considering your email of 11 August and will engage with Mr Cruden on this.
- Line 14 – rockfall hazard above Swan Lake. It is recommended that a quantitative temporal assessment be undertaken at resource consent stage to confirm whether the proposed access route can be adequately mitigated to be viable. We are considering your email of 11 August and will engage with Mr Cruden on this.
- Alluvial Fan risk – QLDC has now received a memorandum dated 11 August 2026 prepared by Stantec’s Mr Derek Chinn addressing the alluvial fan risk associated with the Lower Remarkables Transit Hub. The memorandum evaluates the risk using the National Policy Statement for Natural Hazards (NPS-NH) risk matrix and concludes that the risk is within the medium to low range. QLDC will engage with Mr Cruden on this.
- As offered in your correspondence, QLDC is supportive of a meeting between Mr Cruden and Mr Chinn to discuss the matters outlined above.

Council remains available to discuss any of these matters further prior to the appointment of the Expert Panel, including facilitating a transport workshop between the respective experts, as requested in your email dated 12 August.



Programme Manager, QLDC Fast Track Approvals Act

Attachment 2: NZSki Alluvial Fan Assessment

To: NZSki. Ross
Lawrence

From: Derek Chinn

NEW ZEALAND

Mail to: PO Box 13052, Christchurch 8140

Project/File: 310103514

Date:

10 August 2026

Reference: Evaluation of Alluvial Fan Hazard within the Lower Remarkables Transit Hub

The proposed Lower Remarkables Transit Hub is identified within an "active debris-dominated" alluvial fan area on the ORC hazards mapping. The purpose of this memorandum is to evaluate the resulting level of risk using the framework provided by the National Policy Statement for Natural Hazards 2025.

Executive Summary

The risk to the proposed Lower Remarkables Transit Hub from the adjacent creek is believed to be Moderate or Low if assessed in accordance with the National Policy Statement for Natural Hazards 2025 and is thus acceptable.

Alluvial Fan Risk

The relevant section of the Otago Regional Council natural hazards map is reproduced below. This map identifies the area as 'active debris-dominated'.

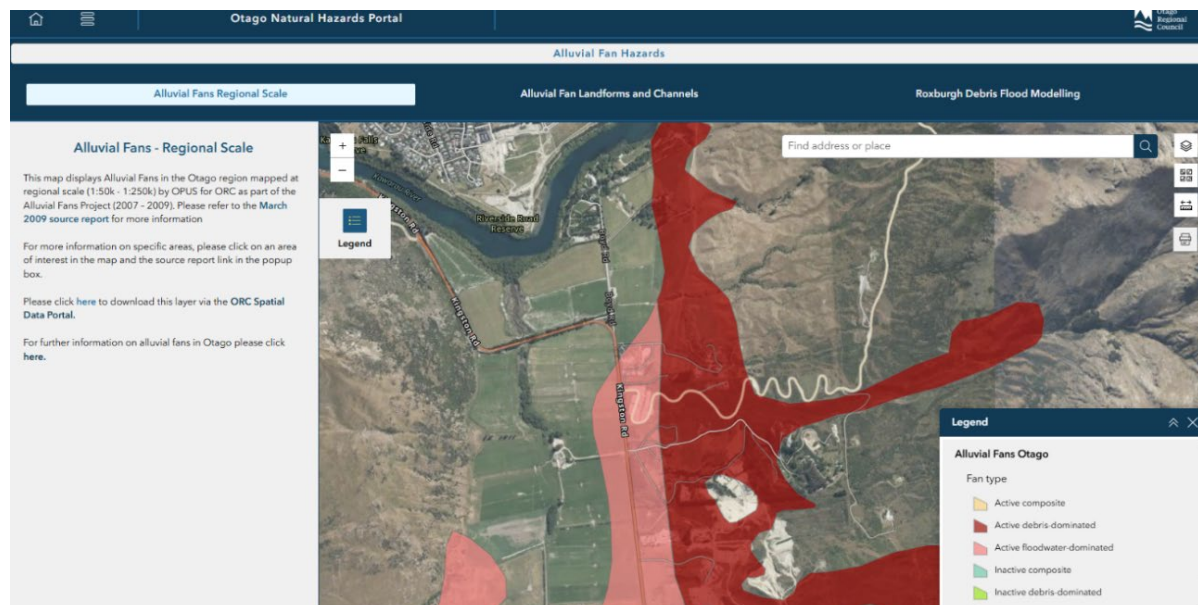


Figure 1. Relevant section of the Otago Regional Council Natural Hazard Map

Reference: Response re flood risk to lower car park

The National Policy Statement for Natural Hazards 2025

This response has been prepared in accordance with the National Policy Statement for Natural Hazards 2025. This risk assessment has been undertaken in accordance with this Policy document as per the table below.

Table 1. Risk likelihood table

Likelihood level	Annual exceedance probability (AEP)	Average recurrence interval (ARI) or 'return period'
Almost certain	10% or more	Up to and including 10 years
Very likely	10% to 5%	Over 10 and up to and including 20 years
Likely	5% to 2%	Over 20 and up to and including 50 years
Possible	2% to 1%	Over 50 and up to and including 100 years
Unlikely	1% to 0.2%	Over 100 and up to and including 500 years
Rare	0.2% to 0.02%	Over 500 and up to and including 5,000 years
Very rare	less than 0.02%	More than 5,000 years

Risk consequences are assessed as per the National Policy Statement for Natural Hazards as shown in the table below.

Table 2. Risk consequence table

Consequence level	Damage to property	Potential for injury or fatalities
Catastrophic	Severe damage to land and building(s), potential for collapse or total destruction of structures. Building(s) need to be demolished, rebuilt or relocated.	High threat to life safety, with probable fatalities and/or critical injuries.
Major	Major damage to land and building(s), including structural damage. Loss of use and substantial repair required.	Unsafe for people, with potential for many injuries, or critical injuries and/or fatalities.
Moderate	Some damage to land and non-structural damage to building(s). Limited loss of use, repairs required.	Unsafe for people, with potential for injuries, although expected to be minor.
Minor	Minor damage to land and building(s). No loss of use, minimal repairs required.	Isolated minor injuries possible.
Negligible	No loss of use, no building repairs required.	No injuries.

Reference: Response re flood risk to lower car park

Lower Remarkables Transit Hub Layout and Location

The layout and location of the Lower Remarkables Transit Hub are as shown in the two figures below.

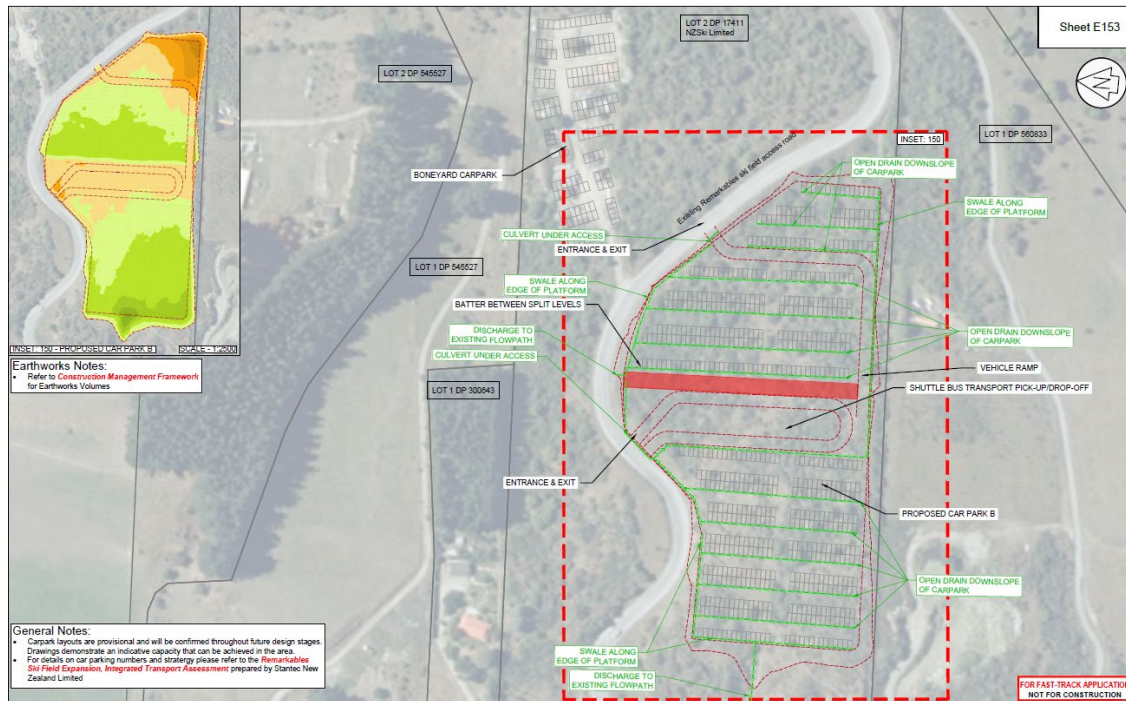


Figure 2. Conceptual layout of the Lower Remarkables Transit Hub



Figure 3. Approximate site as shown in Google Earth

Reference: Response re flood risk to lower car park

Inundation Likelihood and Consequence

Available evidence indicates that significant fan activity affecting the site is infrequent. On this basis the likelihood is assessed as "Unlikely" for the purposes of the National Policy Statement for Natural Hazards.

The Remarkables has been operating since 1985 without experiencing flooding in the area of the Lower Transport Hub and nor do 'Retrolens' aerial images from 1976 and 1956 show evidence of recent flood inundation of the area of the Lower Remarkables Transit Hub;



Figure 4. 1976 aerial photograph with the site location marked



Figure 5. 1956 Aerial photograph of the site

Reference: Response re flood risk to lower car park

We correspondingly assess the likelihood is 'Unlikely' in accordance with the National Policy Statement on Natural Hazards.

The risk is mitigated by the following factors;

- site is for vehicle parking only;
- people only intermittently present;
- outside ski season the transit Hub will be largely vacant or used for temporary storage;
- Prior to a 100-year ARI event we anticipate that there would be sufficient warning from weather forecasting services local government of significant impending storm to alert most motorists and allow the Transport Hub to be vacated.

The Risk level for an 'Unlikely' event, involving 'Moderate' or 'Minor' consequences, is 'Medium' or 'Low' in accordance with the NPS NH risk matrix:

Table 3. Risk matrix from the National Policy Statement on Natural Hazards

Likelihood ARI (years)	Almost Certain <1/10	Very Likely 1/10-1/20	Likely 1/20-1/50	Possible 1/50-1/100	Unlikely 1/100-1/500	Rare 1/500-1/5,000	Very Rare >1/5,000
Catastrophic	Very High	Very High	Very High	High	Medium	Medium	Medium
Major	Very High	Very High	High	High	Medium	Medium	Medium
Moderate	High	High	High	Medium	Medium	Low	Low
Minor	Medium	Medium	Medium	Medium	Low	Low	Low
Negligible	Low	Low	Low	Low	Low	Low	Low

Should the car park become inundated from the adjacent stream we anticipate little remedial work will be necessary other than regrading of the surface.

Yours sincerely

Stantec New Zealand

[Redacted signature block]

Derek Chinn

[Redacted signature block]

Cc:

Attachment 3: QLDC Natural Hazard Feedback

Friday 28th August 2026

Queenstown Lakes District Council

Attn Onur Oktem



Ref: L_2026120.01

Onur,

Re: Natural Hazards Assessment Peer Review, Remarkables Ski Area Expansion

My name is Mark Cruden. I have been engaged by the Queenstown Lakes District Council to undertake a pre application peer review of a Natural Hazards Assessment Report relating to the proposed Remarkables Ski Area expansion into Doolans Basin.

I am the Director and Senior Engineer at Meyer Cruden Engineering Ltd. I hold a Bachelor of Civil Engineering (Honors). I am a Chartered Professional Engineer (Civil and Geotechnical) and a Professional Member of Engineering New Zealand. I have 25 years of experience and have worked as an engineer in the Central Otago region since 2003. My experience in ski area development began as a graduate engineer in Scotland, where I worked on ski area infrastructure and development projects for Cairngorm Mountain resort, Aviemore.

I have undertaken numerous natural hazard assessments and subsequent mitigation designs. Recent examples of my work in this area include: -

- landslide assessment and mitigation design for a proposed restaurant in Soho Basin at Cardrona Alpine Resort,
- landslide assessment and design for the Snowsports New Zealand Olympic Dryslope,
- Rockfall risk assessment for the Mt Iron public walking trails on behalf of Queenstown Lakes District Council,
- landslide assessment and mitigation design for several locations on Central Otago District Council's roading network,
- Numerous alluvial fan, flooding and liquefaction hazard assessments to facilitate residential development in the region.

This list is not exhaustive but provides a sample of the range and scale of projects I have been involved in.

I have read and agree to comply with the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023.

Review Scope

The scope of my review is as per the email instruction from Onur Oktem of QLDC, dated 13th August 2026. My review considers the following specific matters:

- The alluvial fan risk potentially affecting the Lower Remarkables Transit Hub
- The flood risk affecting the Gondola Base Station and Base Building located within the current base area
- The rockfall hazard present above Swan Lake

In addition to this hazard assessment for QLDC I have undertaken similar work for Central Otago District Council (CODC) in relation to the proposed development where it extends into the CODC territorial area.

Initial review and comments

In undertaking this review I have viewed the following information provided by the applicant:

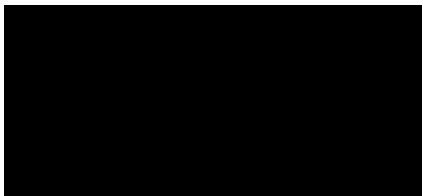
- Remarkables Ski Area Expansion Project, Natural Hazards Assessment, Stantec New Zealand, dated 29 April 2026.
- Memo, Reference Responses to Questions on Doolans Natural Hazards Assessment, Stantec New Zealand, dated 10 June 2026
- Memo, Reference: Evaluation of Alluvial Fan Hazard within the Lower Remarkables Transit Hub, Stantec New Zealand, dated 10 August 2026.

In addition to reviewing these documents I attended a Teams meeting on the 19th August 2026 to discuss the contents of the Stantec reports and my initial findings. [REDACTED]

For simplicity I have provided my comments and recommendations in the table appended with this letter.

Should you require further information please do not hesitate to contact the undersigned.

Regards



Mark Cruden, Director

Table 1 –review comments

Item	MCE comments and recommendations
<p>1 Alluvial Fan Hazard at Lower Transit Hub</p>	<p>Stantec’s report references the Alluvial Fans – Regional Scale Mapping. This map displays Alluvial Fans in the Otago region mapped at regional scale (1:50k - 1:250k). The Transit Hub site is within a mapped Alluvial Fan Hazard (<i>Active debris-dominated</i>)</p> <p>In addition to the Alluvial Fans – Regional Scale Mapping I have also reviewed the higher resolution ORC 'Fan Landform - Otago' and 'Fan Landform Channels - Otago' mapped features (1:10k to 1:50k scale), refer figure 1 below. This mapping provides more granularity in relation to the hazard. The Transit Hub site is to the north of the <i>active bed</i>, and within an area of “<i>Fan less recently active</i>”. This is defined as “<i>area of less recent (e.g. >300 yrs) stream activity. Mature native forest (if present) and immature to mature soils. Includes terrace-riser slopes up to adjacent higher fan surfaces.</i>”</p> <p>I have compared the mapping with historical aerial imagery. This indicates that the current <i>active bed</i> location (in purple on the 1:10k to 1:50k map) has remained relatively consistent since the earliest available imagery in 1956. Although the imagery in 1956 (attached) indicates activity in a minor channel to the north this is still outside the proposed Transit Hub site.</p> <p>Based on the above and with reference to the risk assessment process included in the National Policy Statement for Natural Hazards I consider:</p> <ul style="list-style-type: none"> the likelihood of this fan affecting the Transit Hub site to be “Unlikely” (ARI 100-500 years) and the consequence level to be “Minor to Moderate”, giving an overall risk rating for this hazard of “Low to Medium”. <p>Recommendation This assessment is consistent with the Stantec’s assessment, and no further action is recommended.</p>

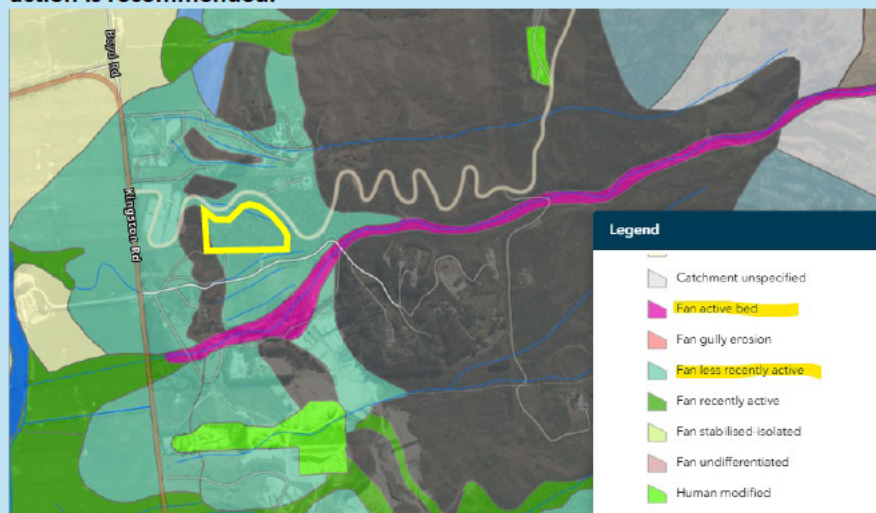


Figure 1 - extract from ORC hazard map with transit hub shown in yellow

		 <p>Figure 2 - 1956 historic aerial with transit hub site shown</p>
2	Flood risk - Gondola Base Station and Base Building Flood risk	<p>Stantec's Memo, <i>Reference Responses to Questions on Doolans Natural Hazards Assessment</i> provides information in relation to their assessment of overland flowpaths in the area of the proposed base station. A key mitigating factor raised by Stantec is that a loop road will be formed 1.5m lower than surrounding ground, and that this road will form a secondary flowpath that will protect the proposed buildings from inundation. This is a qualitative assessment. I consider this sufficient to determine that the flood hazard can be mitigated but a more detailed analysis is required to confirm the appropriate mitigation measures required.</p> <p>Recommendation I recommend that hydrological and hydraulic modelling be completed to determine the flood flow extent, depth and velocity where it passes the proposed development area. This assessment should be used to confirm minimum floor levels for buildings and to check that the flow depths and velocities across areas to be used for egress are appropriate.</p> <p>This work should be completed as part of the detailed design for the development and reviewed by QLDC at engineering acceptance stage. This work should be undertaken by a suitably qualified stormwater engineering professional.</p>
3	Rockfall Risk from Ridge above Swan Lake	<p>I agree with Stantec that the rock fall risk is significant and, in all probability, represents the highest risk associated with the development. The Swan Lake area is included in the Otago Regional Rockfall Screening Study (Oct 2022). This study mapped rockfall hazard awareness areas derived from simulated rockfall trajectories obtained from modelling.</p> <p>I understand that a temporary access track is proposed in this area along with the potential for this to remain in place as a ski run at completion.</p> <p>The site investigation included in the Stantec report provides a more detailed assessment of this risk present at the Swan Lake area. As the Stantec report identifies, the risk is somewhat mitigated by the temporal nature of the activity in the area - but the residual risk rating remains "high" and I would concur with this finding.</p> <p>Given the high consequences associated with the hazard and the temporal nature of the exposure I consider that a more detailed quantitative risk assessment be</p>

	<p>completed which includes a specific temporal consideration. The NPSNH Explanatory note clarifies that the policy provides a baseline only and permits more detailed alternatives. The NZGS Slope Stability Geotechnical Guidance Series Unit 1 (2024) represents best practice in this area. It provides detailed semi quantitative and qualitative approaches to estimating landslide, and specifically rock fall hazard. This is covered in sections 6 and 12 of the NZGS guidance. Recommended methods included in the NZGS guidance include the "AGS Guideline for Landslide Susceptibility, Hazard and Risk Zoning 2007" approach and the "Department of Conservation Guidelines for Natural Hazard Risk Analysis (2020)" approach.</p> <p>During the Teams meeting Stantec advised that they believe the main trigger for rockfall would be seismic activity. Stantec/NZSki also indicated that the use of the track during the construction period would only be in summer, not during thaw and not during significant rain events thus mitigating the risk. Furthermore it could be closed in winter to prevent skier use.</p> <p>Recommendation Stantec/NZSki confirm in writing that they believe the "high" risk rating they have identified for the rock fall hazard can be adequately mitigated in the context of the temporary construction access. This should be provided to support the resource consent application.</p> <p>A temporal hazard assessment should be completed in relation to the Swan Lake rockfall hazard that considers both the construction access track scenario and the permanent ski run scenario. These assessments should also detail and assess the effectiveness of any proposed mitigation measures. These assessments should be provided at the detailed design stage and reviewed by QLDC during the engineering acceptance process.</p> <p>This assessment and the design of mitigation measures should be undertaken by a suitably qualified geotechnical engineering professional. The outcome of these assessments could include realigning any ski trails away from the hazard area if that is deemed the most appropriate mitigation measure.</p>
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