

APPLICATION AS NOTIFIED

Little Morven Trust

(RM241112)

TechnologyOne ECM Document Summary

Printed On 27-Nov-2025

Class	Description	Doc Set Id / Note Id	Version	Date
PUB_ACC	Form 9	8428364	2	10-Jan-2025
PUB_ACC	Assessment of Environmental Effects - Updated November 2025	9111472	1	03-Nov-2025
PUB_ACC	Appendix 1 - Record of Title 964836	8428381	1	24-Dec-2024
PUB_ACC	Appendix 2 - Consent Notice 11186521_5	8428380	1	24-Dec-2024
PUB_ACC	Appendix 2 - Covenant 11186521_3	8428379	1	24-Dec-2024
PUB_ACC	Appendix 2 - Covenant 11985538_6	8428378	1	24-Dec-2024
PUB_ACC	Appendix 2 - Record of Survey DP 609704	8943640	1	06-Aug-2025
PUB_ACC	Appendix 3 - Little Morven Trust Applicant Statement	8428377	1	24-Dec-2024
PUB_ACC	Appendix 4 - Proposed Conditions 15 Aug 2025	8967292	1	19-Aug-2025
PUB_ACC	Appendix 5 - Survey and Earthworks Plans - Updated 06.08.2025	8943635	1	06-Aug-2025
PUB_ACC	Appendix 6 - Architectural Plans - Updated 06.08.2025	8943634	1	06-Aug-2025
PUB_ACC	Appendix 7 - Shed Plans - Updated 06.08.2025	8943633	1	06-Aug-2025
PUB_ACC	Appendix 8 - Geotechnical Report	8428372	1	24-Dec-2024
PUB_ACC	Appendix 9 - Environmental Management Plan	8428371	1	24-Dec-2024

PUB_ACC	Appendix 10 - Landscape and Visual Effects Assessment - updated 30.10.25	9111482	1	03-Nov-2025
PUB_ACC	Appendix 10 - Landscape Further Information Reply Aug 2025	8943642	1	06-Aug-2025
PUB_ACC	Appendix 10 - LVA - Addendum 06.08.2025	8943639	1	06-Aug-2025
PUB_ACC	Appendix 11 - Email from P&I	9111481	1	03-Nov-2025
PUB_ACC	Appendix 11 - Infrastructure Report	8428369	1	24-Dec-2024
PUB_ACC	Appendix 12 - PDP Rules Assessment	9111480	1	03-Nov-2025
PUB_ACC	Appendix 13 - HAIL Statement	8428367	1	24-Dec-2024
PUB_ACC	Appendix 14 - Virtual View Photo Simulations	8428366	1	24-Dec-2024
PUB_ACC	Appendix 15 - Virtual View Methodology	8428365	1	24-Dec-2024
PUB_ACC	Appendix 16 - Photo Simulations including RM250496 shed	8943638	1	06-Aug-2025
PUB_ACC	Appendix 17 - Driveway Plans	9111479	1	03-Nov-2025
PUB_ACC	Appendix 18 - Driveway Assessment	9111478	1	03-Nov-2025
PUB_ACC	Appendix 19 - LTO for Service Connections	9111477	1	03-Nov-2025
PUB_ACC	Appendix 20 - Easement Instrument 13202298_2	9111476	1	03-Nov-2025
PUB_ACC	Appendix 21 - PROFILE POLES DIAGRAM	9111475	1	03-Nov-2025

PUB_ACC	Appendix 22 - Transpower response	4	9111484	1	03-Nov-2025
PUB_ACC	Appendix 23 - Aukaha reply letter		9111483	1	03-Nov-2025
PUB_ACC	Appendix 24 - Affected Party Approval - McClintock & Topp		9111474	1	03-Nov-2025
PUB_ACC	Appendix 24 - Affected Party Approval - Robins		9190158	1	26-Nov-2025
PUB_ACC	Appendix 24 - Affected Party Approval - Topp		9111473	1	03-Nov-2025



APPLICATION FOR RESOURCE CONSENT OR
FAST TRACK RESOURCE CONSENT

FORM 9: GENERAL APPLICATION



Under Section 87AAC, 88 & 145 of the Resource Management Act 1991 (Form 9)
PLEASE COMPLETE ALL MANDATORY FIELDS* OF THIS FORM.

This form provides contact information and details of your application. If your form does not provide the required information it will be returned to you to complete. Until we receive a completed form and payment of the initial fee, your application may not be accepted for processing.



APPLICANT //

- Must be a person or legal entity (limited liability company or trust).
- Full names of all trustees required.
- The applicant name(s) will be the consent holder(s) responsible for the consent and any associated costs.

*Applicant's Full Name / Company / Trust: **Little Morven Trust**
(Name Decision is to be issued in)

All trustee names (if applicable): **Gemma and Michael Smith**

*Contact name for company or trust: **Gemma Smith**

*Postal Address: **64 Alec Robins Road, Queenstown**

*Post code:
9371

*Contact details supplied must be for the applicant and not for an agent acting on their behalf and must include a valid postal address

*Email Address: **gemma@kcangus.co.nz**

*Phone Numbers: Day **0211840608**

Mobile:

*The Applicant is:



Owner



Prospective Purchaser (of the site to which the application relates)



Occupier



Lessee

Other - Please Specify:



Our preferred methods of corresponding with you are by **email** and **phone**.

The decision will be sent to the Correspondence Details by **email** unless requested otherwise.



CORRESPONDENCE DETAILS //

If you are acting on behalf of the applicant e.g. agent, consultant or architect please fill in your details in this section.

*Name & Company: **Annemarie Townsley, John Edmonds & Associates**

*Phone Numbers: Day **021 1876575**

Mobile:

*Email Address: **annemarie.townsley@jea.co.nz**

*Postal Address: **PO Box 95, Queenstown**

*Postcode:
9348



INVOICING DETAILS //

Invoices will be made out to the applicant but can be sent to another party if paying on the applicant's behalf.
For more information regarding payment please refer to the Fees Information section of this form.

*Please select a preference for who should receive any invoices and how they would like to receive them.

Applicant:



Agent:



Other - Please specify:

Email:



Post:



*Attention: **Gemma Smith**

*Postal Address: **64 Alec Robins Road, Queenstown**

*Post code:
9371

*Please provide an email AND full postal address.

*Email: **gemma@kcangus.co.nz**



OWNER DETAILS // Please supply owner details for the subject site/property if not already indicated above

Owner Name:

Owner Address:

Owner Email:

If the property has recently changed ownership please indicate on what date (approximately) AND the names of the previous owners:

Date:

Names:



DEVELOPMENT CONTRIBUTIONS INVOICING DETAILS //

If it is assessed that your consent requires development contributions any invoices and correspondence relating to these will be sent via email. Invoices will be sent to the email address provided above unless an alternative address is provided below. Invoices will be made out to the applicant/owner but can be sent to another party if paying on the applicant's behalf.

*Please select a preference for who should receive any invoices.

Details are the same as for invoicing ☒

Applicant: ☐

Landowner: ☐

Other, please specify:

*Attention:

*Email:

[Click here for further information and our estimate request form](#)



DETAILS OF SITE // Legal description field must list legal descriptions for all sites pertaining to the application. Any fields stating 'refer AEE' will result in return of the form to be fully completed.

*Address / Location to which this application relates:

121 Alec Robins Road

*Legal Description: Can be found on the Computer Freehold Register or Rates Notice – e.g Lot x DPxxx (or valuation number)

Lot 4 DP 554727 and Lot 1 DP 26926 and Part Section 17 Block IX Shotover Survey District and Section 63 Block IX Shotover Survey District, held in Record of Title 964836

District Plan Zone(s): Rural



SITE VISIT REQUIREMENTS // Should a Council officer need to undertake a site visit please answer the questions below

Is there a gate or security system restricting access by council?

YES ☐ NO ☒

Is there a dog on the property?

YES ☐ NO ☒

Are there any other hazards or entry restrictions that council staff need to be aware of?

YES ☒ NO ☐

If 'yes' please provide information below

This is a working farm and cattle may be present. Please contact Gemma Smith (applicant) or Annemarie Townsley (JEA) to arrange a site visit.



PRE-APPLICATION MEETING OR URBAN DESIGN PANEL

Have you had a pre-application meeting with QLDC or attended the urban design panel regarding this proposal?

☐

Yes

☒

No

☐

Copy of minutes attached

If 'yes', provide the reference number and/or name of staff member involved:



CONSENT(S) APPLIED FOR // * Identify all consents sought // ALSO FILL IN OTHER CONSENTS SECTION BELOW

☒

Land use consent

☐

Subdivision consent

☐

Change/cancellation of consent or consent notice conditions

☐

Certificate of compliance

☐

Extension of lapse period of consent (time extension) s125

☐

Existing use certificate

☒

Land use consent includes Earthworks



QUALIFIED FAST-TRACK APPLICATION UNDER SECTION 87AAC

☐

Controlled Activity

☐

Deemed Permitted Boundary Activity

If your consent qualifies as a fast-track application under section 87AAC, tick here to opt out of the fast track process

☐

BRIEF DESCRIPTION OF THE PROPOSAL // * Please complete this section, any form stating 'refer AEE' will be returned to be completed with a description of the proposal

*Consent is sought to:

establish a residential building platform, construct a farm building, construct a residential dwelling, and to undertake earthworks and landscaping



APPLICATION NOTIFICATION

Are you requesting public notification for the application?

☒

Yes

☐

No

Please note there is an additional fee payable for notification. Please refer to Fees schedule



OTHER CONSENTS

Is consent required under a National Environmental Standard (NES)?

- NES for Assessing and Managing Contaminants in Soil to Protect Human Health 2012

An applicant is required to address the NES in regard to past use of the land which could contaminate soil to a level that poses a risk to human health. Information regarding the NES is available on the website

<https://environment.govt.nz/publications/national-environmental-standard-for-assessing-and-managing-contaminants-in-soil-to-protect-human-health-information-for-landowners-and-developers/>

You can address the NES in your application AEE OR by selecting ONE of the following:

☐

This application does not involve subdivision (excluding production land), change of use or removal of (part of) a fuel storage system. Any earthworks will meet section 8(3) of the NES (including volume not exceeding 25m³ per 500m²). Therefore the NES does not apply.

☒

I have undertaken a comprehensive review of District and Regional Council records and I have found no record suggesting an activity on the HAIL has taken place on the piece of land which is subject to this application.

NOTE: depending on the scale and nature of your proposal you may be required to provide details of the records reviewed and the details found.



OTHER CONSENTS // CONTINUED

8

☐

I have included a Preliminary Site Investigation undertaken by a suitably qualified person.

☐

An activity listed on the HAIL has more likely than not taken place on the piece of land which is subject to this application. I have addressed the NES requirements in the Assessment of Environmental Effects.

☒ Any other National Environmental Standard

☐

Yes

☒

N/A

Do you need any consent(s) from Otago Regional Council?

☒

Yes

☐

N/A

If Yes have you applied for it?

☐

Yes

☒

No

If Yes supply ORC Consent Reference(s)

If ORC Earthworks Consent is required would you like a joint site visit ?

☐

Yes

☒

No



INFORMATION REQUIRED TO BE SUBMITTED //

Attach to this form any information required (see below & appendices 1-2).

To be accepted for processing, your application should include the following:

☒

Record of Title for the property (no more than 3 months old) and copies of any consent notices and covenants (Can be obtained from Land Information NZ at <https://www.linz.govt.nz/>).

☒

A plan or map showing the locality of the site, topographical features, buildings etc.

☒

A site plan at a convenient scale.

☐

Written approval of every person who may be adversely affected by the granting of consent (s95E).

☒

An Assessment of Effects (AEE).

An AEE is a written document outlining how the potential effects of the activity have been considered along with any other relevant matters, for example if a consent notice is proposed to be changed. Address the relevant provisions of the District Plan and affected parties including who has or has not provided written approval. See [Appendix 1](#) for more detail.



We prefer to receive applications [electronically](#) – please see Appendix 5 – [Naming of Documents Guide](#) for how documents should be named. Please ensure documents are scanned at a minimum [resolution](#) of 300 dpi. Each document should be no greater than 10mb



PRIVACY INFORMATION

The information you have provided on this form is required so that your application can be processed under the Resource Management Act 1991 and may also be used in statistics collected and provided to the Ministry for the Environment and Queenstown Lakes District Council. The information will be stored on a public register and may be made available to the public on request or on the company's or the Council's websites.



FEES INFORMATION

Section 36 of the Resource Management Act 1991 deals with administrative charges and allows a local authority to levy charges that relate to, but are not limited to, carrying out its functions in relation to receiving, processing and granting of resource consents (including certificates of compliance and existing use certificates).

Invoiced sums are payable by the 20th of the month after the work was undertaken. If unpaid, the processing of an application, provision of a service, or performance of a function will be suspended until the sum is paid. You may also be required to make an additional payment, or bring the account up to date, prior to milestones such as notification, setting a hearing date or releasing the decision. In particular, all charges related to processing of a resource consent application are payable [prior to issuing of the decision](#). Payment is due on the 20th of the month or [prior to the issue date](#) – [whichever is earlier](#).



FEES INFORMATION // CONTINUED

9

If your application is notified or requires a hearing you will be requested to pay a notification deposit and/or a hearing deposit. An applicant may not offset any invoiced processing charges against such payments.

Section 357B of the Resource Management Act provides a right of objection in respect of additional charges. An objection must be in writing and must be lodged within 15 working days of notification of the decision.

LIABILITY FOR PAYMENT – Please note that by signing and lodging this application form you are acknowledging that the details in the invoicing section are responsible for payment of invoices and in addition will be liable to pay all costs and expenses of debt recovery and/or legal costs incurred by QLDC related to the enforcement of any debt.

MONITORING FEES – Please also note that the fee paid at lodgement includes an initial monitoring fee of \$287 for land use resource consent applications and designation related applications, as once Resource Consent is approved you will be required to meet the costs of monitoring any conditions applying to the consent, pursuant to Section 35 of the Resource Management Act 1991.

DEVELOPMENT CONTRIBUTIONS – Your development, if granted, may also incur development contributions under the Local Government Act 2002. You will be liable for payment of any such contributions.

A list of Consent Charges is available on the on the Resource Consent Application Forms section of the QLDC website. If you are unsure of the amount to pay, [please call 03 441 0499](#) and ask to speak to our duty planner.

Please ensure to [reference any banking payments correctly](#). Incorrectly referenced payments may cause delays to the processing of your application whilst payment is identified.

If the initial fee charged is insufficient to cover the actual and reasonable costs of work undertaken on the application you will be required to pay any additional amounts and will be invoiced monthly as work on the application continues. Please note that if the Applicant has outstanding fees owing to Council in respect of other applications, Council may choose to apply the initial fee to any outstanding balances in which case the initial fee for processing this application may be deemed not to have been paid.



PAYMENT // An initial fee must be paid prior to or at the time of the application and proof of payment submitted. Unless you have requested an invoice.

Please reference your payments as follows:

Applications yet to be submitted: RM followed by first 5 letters of applicant name e.g RMJONES

Applications already submitted: Please use the RM# reference that has been assigned to your application, this will have been emailed to yourself or your agent and included on the invoice.

Please note processing will not begin until payment is received (or identified if incorrectly referenced).

I confirm payment by:

☐

Bank transfer to account 02 0948 0002000 00(If paying from overseas swiftcode is – BKNZNZ22)

☒

Invoice for initial fee requested and payment to follow

☐

Manual Payment (can only be accepted once application has been lodged and acknowledgement email received with your unique RM reference number)

Reference

Amount Paid: Land Use and Subdivision Resource Consent fees - please select from drop down list below

Please select

(For required initial fees refer to website for Resource Consent Charges or speak to the Duty Planner by phoning 03 441 0499)

Date of Payment

APPLICATION & DECLARATION

The Council relies on the information contained in this application being complete and accurate. The Applicant must take all reasonable steps to ensure that it is complete and accurate and accepts responsibility for information in this application being so.



If lodging this application as **the Applicant:**

I/we hereby represent and warrant that I am/we are aware of all of my/our obligations arising under this application including, in particular but without limitation, my/our obligation to pay all fees and administrative charges (including debt recovery and legal expenses) payable under this application as referred to within the Fees Information section.

OR:



If lodging this application as **agent of the Applicant:**

I/we hereby represent and warrant that I am/we are authorised to act as agent of the Applicant in respect of the completion and lodging of this application and that the Applicant / Agent whose details are in the invoicing section is aware of all of his/her/its obligations arising under this application including, in particular but without limitation, his/her/its obligation to pay all fees and administrative charges (including debt recovery and legal expenses) payable under this application as referred to within the Fees Information section.



PLEASE TICK

I hereby apply for the resource consent(s) for the Proposal described above and I certify that, to the best of my knowledge and belief, the information given in this application is complete and accurate.

Signed (by or as authorised agent of the Applicant) **

Full name of person lodging this form **Annemarie Townsley**

Firm/Company **John Edmonds & Associates**

Dated **23 December 2024**

**If this form is being completed on-line you will not be able, or required, to sign this form and the on-line lodgement will be treated as confirmation of your acknowledgement and acceptance of the above responsibilities and liabilities and that you have made the above representations, warranties and certification.



Section 2 of the District Plan provides additional information on the information that should be submitted with a land use or subdivision consent.

The RMA (Fourth Schedule to the Act) requires the following:

1 INFORMATION MUST BE SPECIFIED IN SUFFICIENT DETAIL

- Any information required by this schedule, including an assessment under clause 2(1)(f) or (g), must be specified in sufficient detail to satisfy the purpose for which it is required.

2 INFORMATION REQUIRED IN ALL APPLICATIONS

- (1) An application for a resource consent for an activity (the activity) must include the following:

- (a) a description of the activity;
- (b) a description of the site at which the activity is to occur;
- (c) the full name and address of each owner or occupier of the site;
- (d) a description of any other activities that are part of the proposal to which the application relates;
- (e) a description of any other resource consents required for the proposal to which the application relates;

Information provided within the Form above

- (f) an assessment of the activity against the matters set out in Part 2;
- (g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b).

- (2) The assessment under subclause (1)(g) must include an assessment of the activity against—

- (a) any relevant objectives, policies, or rules in a document; and
- (b) any relevant requirements, conditions, or permissions in any rules in a document; and
- (c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).

Include in an attached Assessment of Effects (see Clauses 6 & 7 below)

- (3) An application must also include an assessment of the activity's effects on the environment that—

- (a) includes the information required by clause 6; and
- (b) addresses the matters specified in clause 7; and
- (c) includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

ADDITIONAL INFORMATION REQUIRED IN SOME APPLICATIONS

- An application must also include any of the following that apply:
 - (a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1));
 - (b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A));



Clause 6: Information required in assessment of environmental effects

- (1) An assessment of the activity's effects on the environment must include the following information:
 - (a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity;
 - (b) an assessment of the actual or potential effect on the environment of the activity;
 - (c) if the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use;
 - (d) if the activity includes the discharge of any contaminant, a description of—
 - (i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
 - (ii) any possible alternative methods of discharge, including discharge into any other receiving environment;
 - (e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect;
 - (f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted;
 - (g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved;
 - (h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).
- (2) A requirement to include information in the assessment of environmental effects is subject to the provisions of any policy statement or plan.
- (3) To avoid doubt, subclause (1)(f) obliges an applicant to report as to the persons identified as being affected by the proposal, but does not—
 - (a) oblige the applicant to consult any person; or
 - (b) create any ground for expecting that the applicant will consult any person.

CLAUSE 7: MATTERS THAT MUST BE ADDRESSED BY ASSESSMENT OF ENVIRONMENTAL EFFECTS

- (1) An assessment of the activity's effects on the environment must address the following matters:
 - (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects;
 - (b) any physical effect on the locality, including any landscape and visual effects;
 - (c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity;
 - (d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations;
 - (e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants;
 - (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.
- (2) The requirement to address a matter in the assessment of environmental effects is subject to the provisions of any policy statement or plan.



UNDER THE FOURTH SCHEDULE TO THE ACT:

- An application for a subdivision consent must also include information that adequately defines the following:
 - (a) the position of all new boundaries:
 - (b) the areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan:
 - (c) the locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips:
 - (d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips:
 - (e) the locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A:
 - (f) the locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A):
 - (g) the locations and areas of land to be set aside as new roads.

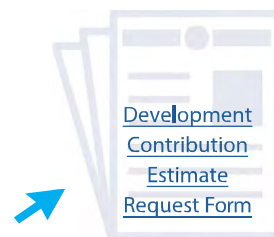
APPENDIX 3 // Development Contributions

Will your resource consent result in a Development Contribution and what is it?

- A Development Contribution can be triggered by the granting of a resource consent and is a financial charge levied on new developments. It is assessed and collected under the Local Government Act 2002. It is intended to ensure that any party, who creates additional demand on Council infrastructure, contributes to the extra cost that they impose on the community. These contributions are related to the provision of the following council services:
 - Water supply
 - Wastewater supply
 - Stormwater supply
 - Reserves, Reserve Improvements and Community Facilities
 - Transportation (also known as Roading)

[Click here for more information on development contributions and their charges](#)

OR Submit an Estimate request *please note administration charges will apply



APPENDIX 4 // Fast - Track Application

Please note that some land use consents can be dealt with as fast track land use consent. This term applies to resource consents where they require a controlled activity and no other activity. A 10 day processing time applies to a fast track consent.

If the consent authority determines that the activity is a deemed permitted boundary activity under section 87BA of the Act, written approval cannot be withdrawn if this process is followed instead.

A fast-track application may cease to be a fast-track application under section 87AAC(2) of the Act.

APPENDIX 5 // Naming of documents guide

While it is not essential that your documents are named the following, it would be helpful if you could title your documents for us. You may have documents that do not fit these names; therefore below is a guide of some of the documents we receive for resource consents. Please use a generic name indicating the type of document.

Application Form 9	Engineering Report
Assessment of Environmental Effects (AEE)	Geotechnical Report
Record of Title	Wastewater Assessment
Covenants & Consent Notice	Traffic Report
Affected Party Approval/s	Waste Event Form
Landscape Report	Urban Design Report
Ecological Report	

ASSESSMENT OF EFFECTS ON THE ENVIRONMENT
Building Platform, Earthworks and Construction
of a Dwelling and Farm Building

For Little Morven Trust

November 2025

1.0 EXECUTIVE SUMMARY OF PROPOSAL

- [1] **Little Morven Trust** (the Applicant) seeks resource consent to establish a residential building platform, to construct a farm building, to construct a residential dwelling, and to undertake earthworks and landscaping at 121 Alec Robins Road, Little Morven Hill.
- [2] The Applicant requests public notification of the application.

Location:	Little Morven Hill, Alec Robins Road
Legal Description:	Lot 4 DP 554727 and Lot 1 DP 26926 and Part Section 17 Block IX Shotover Survey District and Section 63 Block IX Shotover Survey District, held in Record of Title 964836
Territorial Authority:	Queenstown Lakes District Council (QLDC)
Plan:	Proposed District Plan
Zoning:	Rural Zone
Natural Hazards:	No hazards identified on the District Hazards maps
Other:	Outstanding Natural Feature and Priority Landscape Area (Morven Hill) The site is not identified as a HAIL site Southern edge of the site is located within wāhi tūpuna (Kawarau River)
Activity Status:	Discretionary

2.0 APPENDICES

Appendix 1 –	Record of Title
Appendix 2 –	Registered Instruments and DP 609704
Appendix 3 –	Applicant's Statement
Appendix 4 –	Proposed Conditions
Appendix 5 –	Survey and Earthworks Plans by Aurum Survey Consultants
Appendix 6 –	Architectural Plans by Team Green Architects
Appendix 7 –	Shed Plans
Appendix 8 –	Geotechnical Report by Geosolve
Appendix 9 –	Environmental Management Plan by Enviroscope
Appendix 10 –	Landscape and Visual Effects Assessment and Addendum Report by Vivian + Espie
Appendix 11 –	Infrastructure Assessment Report by Patersons and Email from P&I
Appendix 12 –	Proposed District Plan Rules Assessment
Appendix 13 –	HAIL Statement
Appendix 14 –	Photo Simulations by Virtual View
Appendix 15 –	Virtual View Methodology
Appendix 16 –	Updated Photo Simulations Including RM250496 Shed
Appendix 17 –	Driveway Plans
Appendix 18 –	Driveway Assessment
Appendix 19 –	Licence to Occupy for Service Connections

Appendix 20 –	Easement Instrument 13202298.2
Appendix 21 –	Profile Poles Diagram
Appendix 22 –	Response from Transpower
Appendix 23 –	Response from Aukaha
Appendix 24 –	Affected Party Approvals

3.0 INTRODUCTION

[3] This Assessment of Effects on the Environment (AEE), inclusive of appendices, has been prepared in accordance with Schedule 4 of the Resource Management Act (RMA). Together these documents provide:

- a description of the application site and surrounding environment;
- a description of the proposal;
- a description of the consents sought;
- an assessment of environmental effects;
- identification and assessment of relevant objectives and policies of the District Plan; and
- a conclusion.

3.1 Overview

[4] Resource consent is sought for the following at 121 Alec Robins Road, Morven Hill:

- to establish a residential building platform;
- to construct a dwelling of specific design;
- to construct a farm shed; and
- to undertake earthworks and landscaping associated with construction of the proposed buildings.

[5] The intention is for the dwelling to be for the Applicant's own use, to allow them to live on the property while continuing the existing farming operation.

[6] The location of the subject site is shown outlined in yellow on the following page (Figure 1).

[7] The Applicant requests public notification of the application.

3.2 Record of Title

[8] The site is legally described as Lot 4 DP 554727 and Lot 1 DP 26926 and Part Section 17 Block IX Shotover Survey District and Section 63 Block IX Shotover Survey District, held in Record of Title 964836 (a copy of which is attached as **Appendix 1**).

[9] The Applicant is the owner of the site (Gemma and Michael Smith, as trustees of the Little Morven Trust).

[10] The site comprises four parcels of land held in a single title, with a total area of 52.5875ha more or less. Refer to Figure 1. All of the proposed works will be contained within Part Section 17 and the section of unformed legal road which separates Part Section 17 and the parcel to the south (Section 63).



Figure 1: Site Location (subject site identified in yellow)

- [11] The following instruments are registered on the title, but are noted as only applicable to Lot 4 DP 554727, so they do not affect the application:

- Covenant 6992903.20 and variation 10418827.1
- Consent Notice 6992903.24
- Consent Notice 9723451.3
- Covenant 10320308.1
- Covenant 10417675.3

- [12] Other instruments registered on the title are described below.

Covenants 11186521.3, 11985538.6 and 12621622.3

- [13] Copies of private covenants 11186521.3 and 11985538.6 are attached as **Appendix 2**. Covenant 12621622.3 is in favour of Alexander Kenneth Robins. None of these private covenants are relevant to the current proposal.

Consent Notice 11186521.5

- [14] This consent notice was registered under RM160869 and applies to Lots 1 and 8 DP 526559. A copy is attached as **Appendix 2**. The consent notice states that there shall be no further subdivision and development of Lot 8 DP 526559, except for development associated with farming activities and farm buildings. Lot 8 DP 526559 is now Lot 4 DP 554727 – no development is proposed on this lot as part of the current proposal, so the conditions of the consent notice are met.

3.3 Site Description

- [15] The site is located at the end of Alec Robins Road.
- [16] An aerial view of Part Section 17 is shown in Figure 2 below. As noted above, the proposed development will be contained within Part Section 17 and the unformed legal road which adjoins it to the south.



Figure 2: Aerial View of Part Section 17 (boundaries in yellow, approximate only)

- [17] Morven Hill is a prominent roche moutonnée landform located between the Kowarau River and Lake Hayes. It has two distinct parts with separate high points; the site comprises the majority of the lower southern part, known as 'Little Morven Hill'.
- [18] The proposed building platform will be located centrally within Part Section 17, and is accessed by an existing farm track which extends from the end of the formed section of Alec Robins Road. The track runs through the road reserve for approximately 420m, before turning north up a small gully, the sides of which have been planted in native vegetation.
- [19] To the north of the unformed road, the sloping paddocks are currently used for grazing cattle. As well as the main access track described above, there are some less well formed tracks. The property is mainly grass – covered with scattered indigenous shrubs, exotic trees, and fenced areas of native planting. There are no wetlands or permanent watercourses, although overland flow paths are evident which are wet during heavy rainfall events.
- [20] The site does not contain any existing buildings. There are cattle yards within the unformed road; the Applicant holds a Licence to Occupy from Council for these. Temporary storage of farming materials is currently occurring on land to the north of the unformed road, at the base of the slope.
- [21] A public trail (the Twin Rivers Trail) has been constructed partly within the wider site to the south of the unformed road (Section 63) and within unformed road to the east of where the existing farm track turns up the gully. A new section of trail linking from the Bridesdale Farm development to the west has recently been constructed to the unformed road just west of the existing cattle yards.

- [22] The Applicant has prepared a statement, attached as **Appendix 3**, which sets out the background to, and purpose of, this application. The Applicant has farmed the site since 2008. It is part of a wider farming operation involving a number of other blocks in the Wakatipu area. The Applicant originally leased the site along with a smaller block on the flats to the west of Alec Robins Road containing a cottage (the family home), farm sheds and stock handling facilities. In 2022, the Applicant purchased the 53ha site. They have continued to occupy the remaining lease area, but the lease is not being continued as consent has been granted to subdivide the land into 20 rural living lots (RM220821). The Applicant wishes to construct a dwelling on the site so they can live there while continuing to run the farming operation. The proposed shed is required for operational reasons.

3.4 Consent History

RM160869

- [23] RM160869 was granted on 29 May 2017 for a two lot subdivision of Lot 8 498355 to create a lot with a residential building platform accessed from Jean Robins Drive (Lot 1 DP 536559). Refer to Figure 3 below.

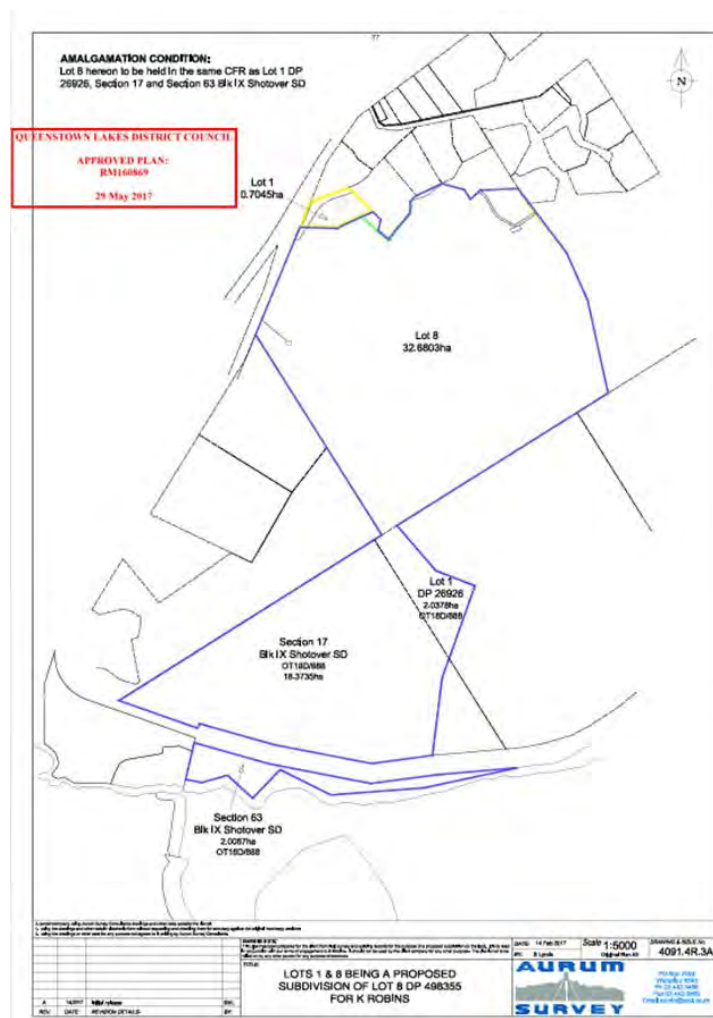


Figure 3: Approved subdivision plan for RM160869

- [24] As outlined under 3.2 above, a consent notice (1186521.5) was imposed restricting further subdivision and development of Lot 8 DP 526559.

Road Stopping and Amalgamation

- [25] In 2019, Lot 8 DP 526559 became Section 4 SO 534188 as the result of a road stopping and amalgamation process to change the legal boundaries of the section of Alec Robins Road adjoining the northwestern boundary to reflect the actual formation of the road.

RM200672

- [26] Resource consent was granted on 25 September 2020 for a boundary adjustment subdivision between Section 4 SO 534188 and Lot 1 DP 536559 to create Lots 1 and 4 DP554727. The boundary adjustment increased the size of Lot 1 (which was the rural living lot created under RM160869).

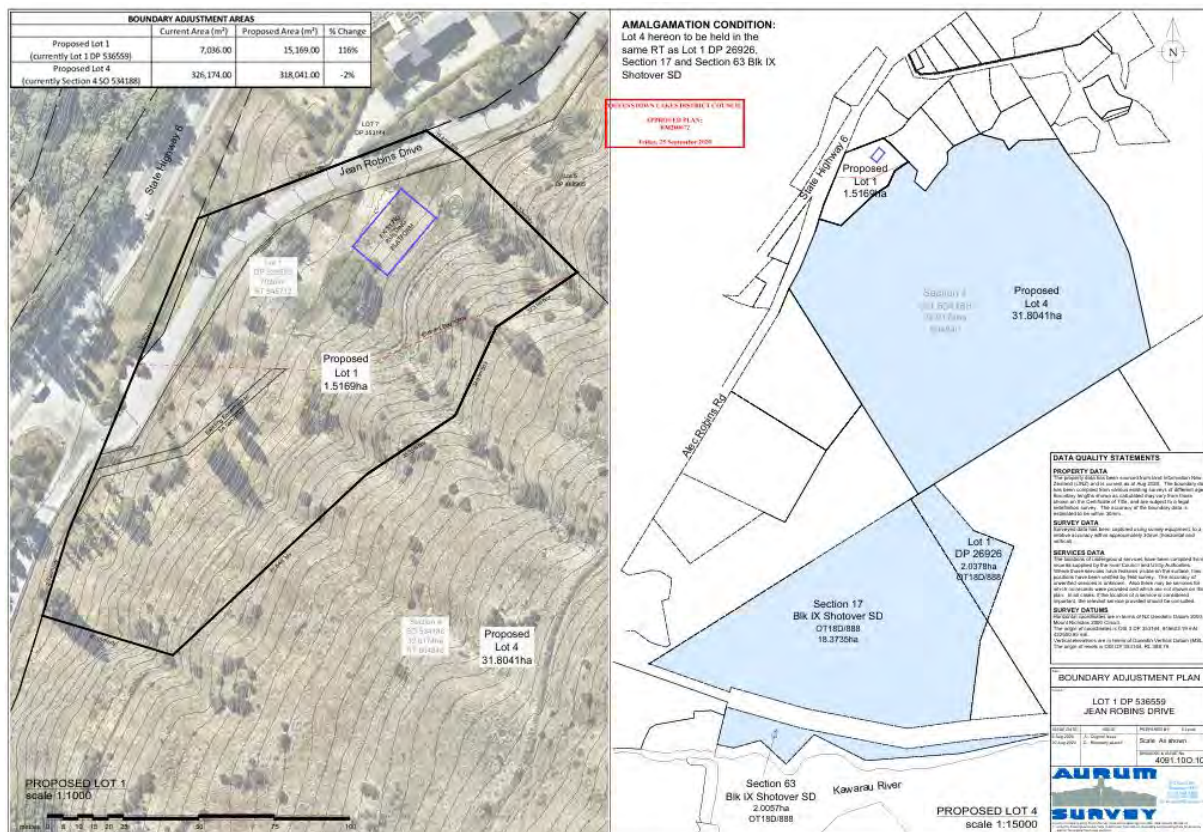


Figure 4: Approved plan for RM200672

- [27] An amalgamation condition required that Lot 4 DP 554727 continue to be held in the same title as Lot 1 DP 26926, Section 17 and Section 63 Blk IX Shotover SD – this forms the overall site for the current application.

RM230439

- [28] RM230439 was granted to Bridesdale Farm Developments Ltd on 31 May 2024 (re-issued 21 June 2024) to de-amalgamate two lots and create a residential building platform. This consent does not relate to the subject site but is relevant to the application as it created easements that benefit the subject site. The easements provide for right of way, right to convey water, and the right to drain water and sewage over the part of Alec Robins Road that has been formed outside of the legal road boundaries within the Bridesdale Farm Developments Ltd land, and which provides physical access to the subject site. Refer to Figure 5 below and DP 609704, a copy of which is attached in **Appendix 2**. A copy of the easement instrument is also attached as **Appendix 20**.

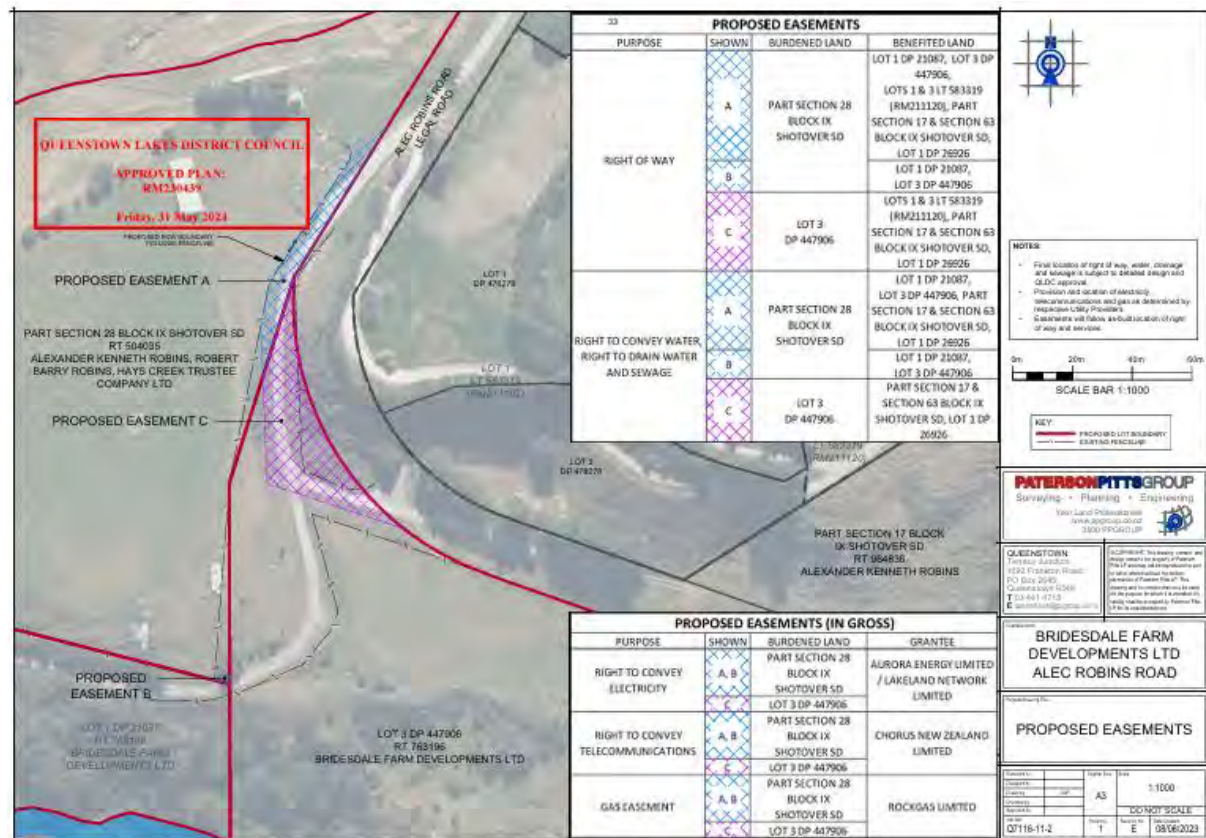


Figure 5: Easements created by RM230439

RM250496

- [29] Since this application was originally lodged, a separate resource consent application has been made by the Applicant in July 2025 to construct a four-bay farm shed, install a water tank and undertake associated earthworks in the southwestern part of Part Section 17, in the same location where farming materials are currently being stored next to the unformed legal road. Refer to Figure 6 on the following page.
- [30] Earthworks are proposed to excavate the shed platform and water tank into the base of the existing slope and to create a mound to the west using the excess cut material. Some of the earthworks have already been completed.
- [31] RM250496 was granted on a non-notified basis on 8 October 2025.

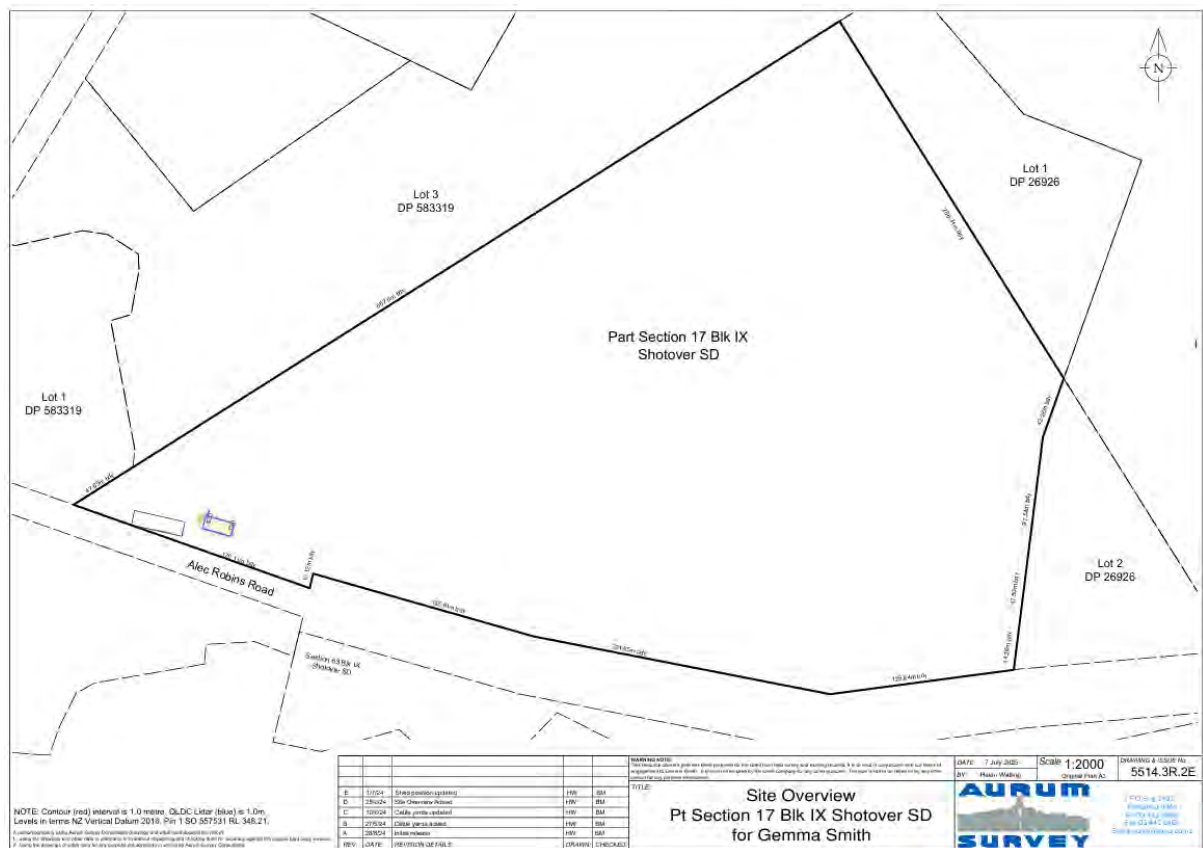


Figure 6: Location of Shed Approved by RM250496 (outlined in blue with relocated cattle yards to the west)

4.0 DESCRIPTION OF PROPOSAL

4.1 Proposed Conditions of Consent

- [32] A full list of the proposed conditions referred to in the following description of the proposal is attached as **Appendix 4**.
- [33] It is proposed that the shed, dwelling and building platform registration could all occur independently of each other in any sequence. The proposed conditions set out the timing of works that would be required to be completed for each stage. There is some overlap, for example with regard to the provision of services and formation of access.
- [34] A lapse date of 10 years is sought to give the Applicant time to complete all parts of the proposal.

4.2 Location of Development within the Site

- [35] The locations of the proposed building platform, dwelling and shed within Part Section 17 are shown in Figure 7 on the following page, which is taken from the plans prepared by Aurum Survey Consultants (Aurum) attached as **Appendix 5**.

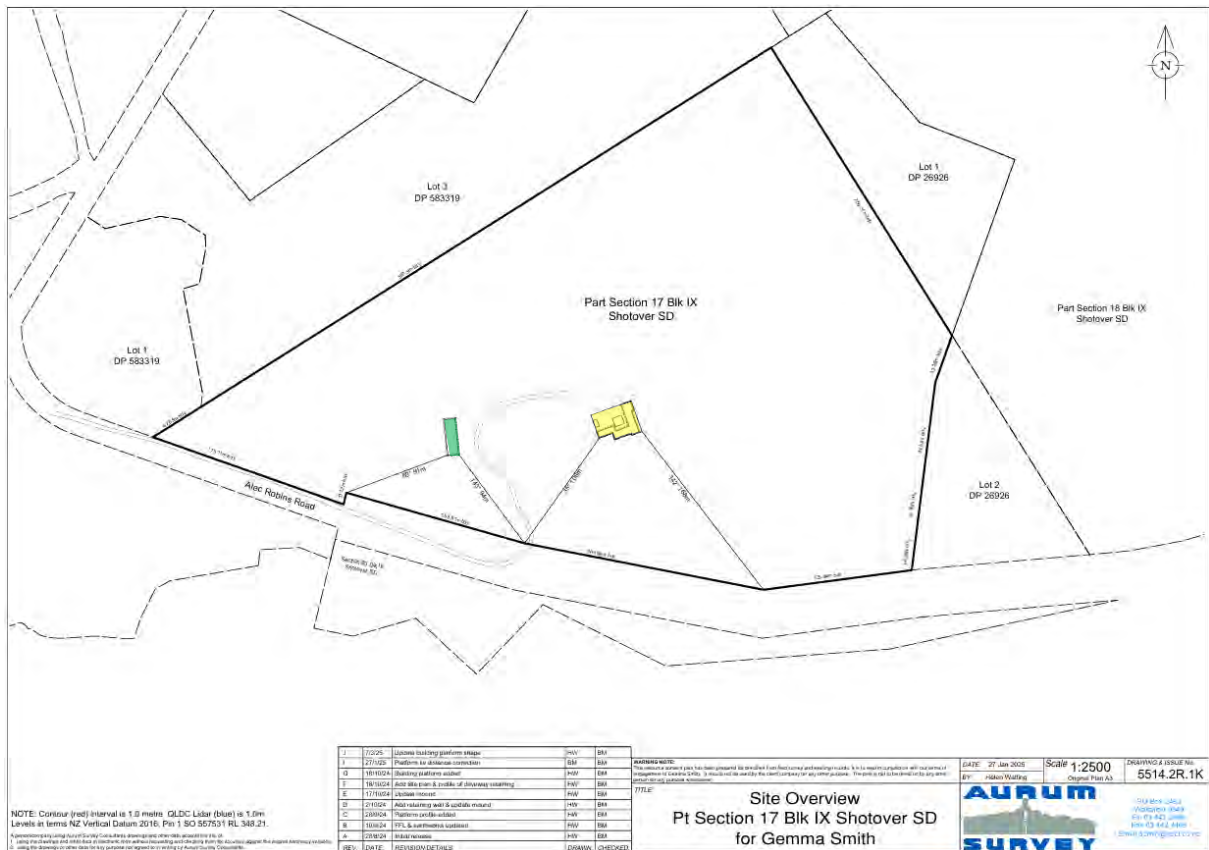


Figure 7: Location of Buildings (building platform shaded yellow; shed shaded green)

4.3 Residential Dwelling

- [36] Consent is sought to construct a residential dwelling of specific design on the site.
- [37] Architectural plans have been prepared by Team Green Architects and are attached as **Appendix 6**.
- [38] The dwelling will be single level, and comprise simple gabled forms arranged in an 'L' shape around a central outdoor living space open to the northwest. The total floor area will be 383.5m².
- [39] The dwelling will have a finished floor level of RL 383.725m, which is up to 2.5m below existing ground level.
- [40] The maximum height of the dwelling will be 5.997m above finished floor level, or RL 389.702.
- [41] The roof and walls will have a dark grey metal cladding, with aluminium window joinery to match. The proposed colour is 'Thunder Grey', which has a Light Reflectance Value (LRV) of 12%. Part of the northeastern wall facing the courtyard will be clad in schist. An outdoor fireplace with a schist and concrete surround is proposed within the courtyard.



Figure 8: Proposed Elevations

4.4 Residential Building Platform

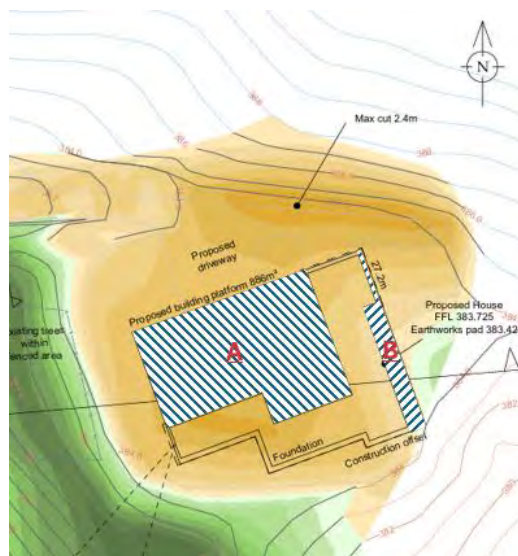
- [42] It is proposed to establish a residential building platform that will be registered as a covenant area on the Record of Title.
- [43] The building platform will be located centrally within Part Section 17. It has been designed around the footprint of the specific house design proposed in this application, and has a roughly rectangular shape with an irregular boundary on the southern side. The building platform will have a total area of 886m². (The originally application proposed a rectangular platform with an area of 974m². It has been reconfigured in response to feedback from Council to more accurately reflect the proposed buildable area.)

- [44] A condition is proposed under section 108(2)(d) of the RMA, requiring a covenant to be registered on the title at the same time as the building platform, relating to design controls for future development. While it is intended to construct the dwelling proposed in this application, in the event that this does not occur, the covenant condition will allow for an amended house design. Any new design shall not extend outside the 3D envelope of the design proposed in this application, except as set out in the condition wording below and provided that the overall footprint area does not increase. The covenant will also require that the earth mounding and structural landscaping proposed in this application is completed. The proposed wording is as follows (note that this condition has been revised since the application was originally lodged):

At the time the residential building platform is registered on the title, a covenant shall be registered pursuant to section 108 of the Act, in favour of Council as the consent authority, in respect of the ongoing performance of the following conditions. Pursuant to section 108(7), the final covenant wording shall provide for it to be varied or cancelled by agreement between the consent holder and Council.

Conditions:

- a) Any dwelling constructed on the site shall be located within the residential building platform shown as covenant area X on DPXXXXX.*
- b) Prior to commencing construction of the dwelling, the earthworks approved under RMxxxxx shall be completed in accordance with the conditions of that resource consent.*
- c) Within the first planting season following the start of construction of the dwelling, all planting associated with the driveway and dwelling as shown on the Structural Landscape Plan approved under RMxxxxx shall be completed. The different species specified on the plan shall be spread throughout each planting area to achieve a mix of plant heights at maturity.*
- d) The dwelling constructed on the site shall be in accordance with the plans approved under RMxxxxx; OR the dwelling may have an alternative or amended design provided that it meets all of the following:*
 - (i) The building shall not extend outside the 3D envelope of the design approved under RMxxxxx except in the part of the platform highlighted by diagonal shading in the image below:*



- (ii) *The maximum height of any part of the building outside of the footprint approved under RMxxxxx within hatched area 'A' shall be RL 389.2m.*
- (iii) *The maximum height of any part of the building outside of the footprint approved under RMxxxxx within hatched area 'B' shall be RL387.213m.*
- (iv) *The total floor area (including garage) of any revised design shall not exceed 383.5m².*
- (v) *Any changes to exterior materials or colours shall comply with Condition 17 of RMxxxxx.*

4.5 Farm Shed

- [45] It is proposed to construct a 30m x 9m farm shed approximately 130m to the west of the residential building platform (refer to Figure 7).
- [46] Shed plans are attached as **Appendix 7**. The shed will have five roller doors and an open bay at the northern end, and an access door on the southern elevation.
- [47] The roof and walls will be clad in profiled metal coloured 'Karaka Green' (LRV 8%).
- [48] The shed will have a maximum height of 4.89m above finished floor level (RL 368m) on its front (eastern) elevation. The maximum height above original ground level will be approximately 3m.



Figure 9: 3D Perspective of farm shed (viewed from south east)

4.6 Earthworks

- [49] Earthworks are proposed to reduce the visibility of the buildings in views of the site, by lowering the floor levels of the dwelling and shed relative to the existing landform, and by creating rolling earth mounding around the western and southwestern sides of the dwelling to create an amphitheatre-like setting with aspect and views to the west and northwest.
- [50] An Earthworks Plan has been prepared by Aurum. This is attached in **Appendix 5** and reproduced in Figure 10.
- [51] A total earthworks volume of approximately 14,230m³ is proposed, comprising 6,880m³ of cut and 7,350m³ of fill, over an area of 8,740m². The maximum height of cut will be approximately 3.8m, at the northwestern corner of the shed. The maximum depth of fill will be approximately 6.5m, to form the earth bund to the southwest of the dwelling.



[55] An Environmental Management Plan (EMP) has been prepared by Enviroscope and is attached as **Appendix 9**.

[56] The EMP includes a preliminary staging methodology for completion of the earthworks and installation of site mitigation measures in accordance with the Erosion and Sediment Control Plan (ESCP). It also includes a monitoring and reporting regime.

[57] The ESCP proposed to use bunds to divert clean run-off around the outside of the earthworks area, and to divert run-off from the earthworks area to decanting earth bunds where sediment will settle out. A super silt fence is proposed along the base of the fill mound. All exposed areas will be progressively stabilised to prevent erosion using aggregate (for the building areas and driveway) or by covering with topsoil and re-grassing as soon as practicable.

[58] Any long-standing stockpiles will be constructed in accordance with the diagram included in the EMP and stabilised (for example by applying grass seed) to prevent erosion.

4.7 Landscaping

- [59] A Structural Landscape Plan has been prepared by Vivian + Espie. This is included in the Landscape and Visual Effects Assessment attached as **Appendix 10** and reproduced in Figure 11.
- [60] The proposed structural planting comprises swathes of native grey shrubland planting and also higher planting of native trees with a mature height of 6 – 12m to assist in screening the dwelling. The total area of proposed planting is 1,945m².
- [61] All planting shown on the Structural Landscape Plan along the northern side of the driveway and across the mounding to the southwest of the dwelling will be required to be undertaken within the first planting season following completion of the earthworks associated with the dwelling.
- [62] All planting around the shed will be undertaken within the first planting season following the completion of earthworks for the shed.
- [63] A curtilage area is proposed around the building platform, within which all domestic outdoor activities and landscaping will be contained. The total curtilage area measures 1,843m² including the 886m² building platform.
- [64] All existing native vegetation will be retained (except where disturbed by the proposed earthworks). All exotic weed species will be removed from Part Section 17 within one year of consent being granted, and it shall be maintained weed-free on an on-going basis.



Figure 11: Structural Landscape Plan

4.8 Natural Hazards

- [65] Geosolve has prepared a Geotechnical Report (attached as **Appendix 8**) which confirms that residential development of the site is feasible from a geotechnical perspective.

- [66] No natural hazards have been identified at the site.
- [67] A condition is proposed to ensure that the earthworks are undertaken in accordance with Geosolve's recommendations regarding drainage and batter slopes.

4.9 Services Infrastructure and Access

- [68] The site is not within the service area for QLDC's reticulated water supply, wastewater or stormwater networks.
- [69] An Infrastructure Assessment Report has been prepared by Patersons (attached as **Appendix 11**) outlining the servicing and access requirements for the proposed dwelling, which are summarised below.

Water Supply

- [70] Water supply to the dwelling will be via a new 25mm private lateral connection to the Council water main in Alec Robins Road. This will be a restricted supply providing a maximum 2,100 litres per day via an Acuflo GFC900 flow controller set at 1.5 litres per minute or 0.025 litres per second. An on-site tank will be needed to provide 10,000 litres of buffer storage, along with a localised pressure booster pump. Council's Senior Infrastructure Development Engineer, Richard Powell, has agreed to a connection on this basis.

Firefighting Water Supply

- [71] At the time the dwelling is constructed, static firefighting storage will be installed in accordance with SNZ PAS 4509:2008. This will be combined with the domestic storage outlined above. Water will be stored in two 30,000 litre tanks. These will be located outside the proposed building platform at the base of the slope on the northern side of the vehicle access and turnaround area, and in accordance with the location and off-set requirements of SNZ PAS 4509:2008.

Wastewater Disposal

- [72] There are two feasible options for wastewater disposal from the dwelling: connection to Council infrastructure in Alec Robins Road, or an on-site wastewater treatment and disposal system.
- [73] Connection to the Council network would involve the installation of a private package pump station and low pressure pipe connecting to the new Council gravity main being constructed under RM220821 at the head of the formed part of Alec Robins Road. Council's Senior Infrastructure Development Engineer, Richard Powell, has agreed to a connection on this basis, provided that the works proposed under RM220821 are completed. A Licence to Occupy has been granted by Council (attached as **Appendix 19**) for the private water and wastewater laterals to be located within the unformed part of Alec Robins Road.
- [74] Patersons has undertaken a site and soils assessment which confirms the suitability of the site for on-site treatment and disposal of domestic wastewater. The detailed design of an on-site system would be subject to Council approval prior to installation.
- [75] Conditions are proposed which would provide for either option outlined above.

Stormwater Disposal

- [76] Stormwater run-off from the buildings and associated impervious areas will be to ground via soak pits. A site and soils assessment has confirmed that the ground conditions (gravelly sand layer) are suitable for this method of disposal. Detailed design will be undertaken for building consent.

- [77] Secondary runoff will be south via the existing overland flow paths to the Kawarau River. Patersons note that any increase in secondary flows will be minor when compared with flows from the greater uphill catchment and will not affect any property or other assets downstream.

Electricity and Telecommunications

- [78] Aurora Energy has confirmed that a power connection can be made to the dwelling.
- [79] Chorus has also confirmed that a new telecommunications and data connection can be made to the Chorus network. However, given the remote nature of the building platform and the significant cost associated with such a connection, the Applicant wishes to retain the option of servicing the new dwelling with wireless communications only. The site has good mobile coverage.

Access

- [80] The proposal makes use of an existing farm track which is formed from the end of Alec Robins Road to the proposed building platform location. The track will be upgraded so that it is suitable to access a residential dwelling. This will include forming a minimum 3m wide gravel carriageway in minimum 150mm depth of compacted AP40 gravel, with three areas of widening to provide for vehicles to pass. Refer to the Driveway Plans attached as **Appendix 17**. Provision will be made for stormwater disposal.

5.0 DISTRICT PLAN PROVISIONS

5.1 Proposed District Plan (PDP)

- [81] All of the rules of the PDP that are relevant to this proposal have been finalised and made operative. The ODP rules have therefore not been considered.
- [82] The site is located entirely within the Rural Zone as shown in Figure 12. An unformed legal road bisects the site.
- [83] Section 63 and the lower part of Lot 1 DP 26926 are identified as being part of a wāhi tūpuna area associated with the Kawarau River. The wāhi tūpuna area also includes the eastern part of the unformed road. No works are proposed within the wāhi tūpuna.
- [84] The description of the purpose of the Rural Zone in the PDP includes the following:

'...to enable farming activities and provide for appropriate other activities that rely on rural resources while protecting, maintaining and enhancing landscape values, ecosystem services, nature conservation values, the soil and water resource and rural amenity.

A wide range of productive activities occur in the Rural Zone and because the majority of the District's distinctive landscapes comprising open spaces, lakes and rivers with high visual quality and cultural value are located in the Rural Zone, there also exists a wide range of living, recreation, conservation commercial and tourism activities and the desire for further opportunities for these activities...

... A substantial proportion of the Outstanding Natural Landscapes of the district comprises private land managed in traditional pastoral farming systems. Rural land values tend to be driven by the high landscape and amenity values in the district. The long term sustainability of pastoral farming will depend upon farmers being able to achieve economic returns from utilising the natural and physical resources of their properties. For this reason, it is important to acknowledge the potential for a range of alternative uses of rural properties that utilise the qualities that make them so valuable.'

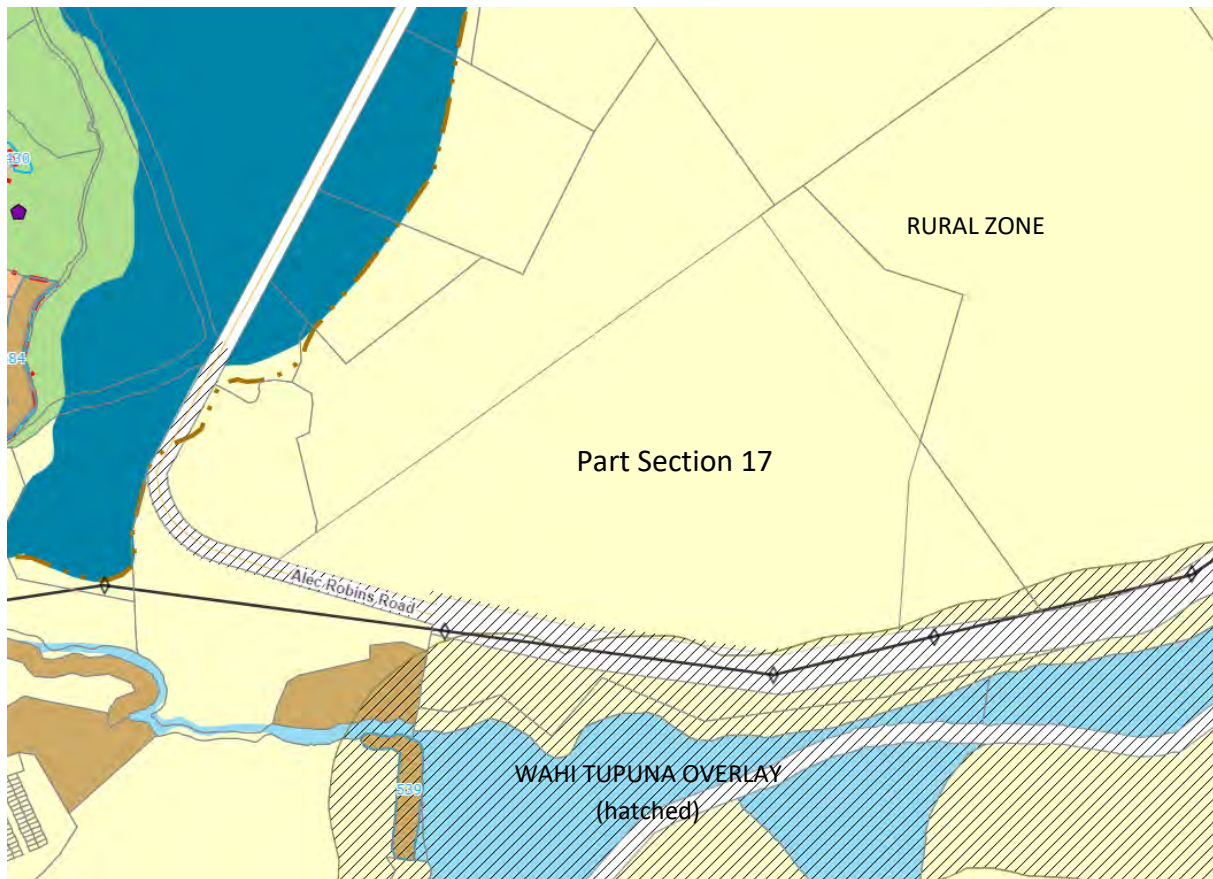


Figure 12: Zoning of the Site

- [85] Council's decision on the Priority Area Landscape Schedules Variation to the PDP was notified on 21 June 2024. The effect of this decision is to include Schedules 21.22 and 21.23 into Chapter 21 – Rural Zone and to incorporate by reference into the PDP the Priority Area maps.
- [86] The site is located within an identified Priority Area (PA), being the Morven Hill Outstanding Natural Feature. Refer to Figure 12. The purpose of the PA schedules, with regard to Outstanding Natural Landscapes (ONLs) and Outstanding Natural Features (ONFs), is to identify and describe the landscape attributes and landscape values and the related landscape capacity, to assist in the assessment of land use and subdivision consent proposals.
- [87] Under 3.1B.5 b. i. in Chapter 3 – Strategic Direction, 'landscape capacity' is defined in relation to an ONF or ONL as being the capacity of a landscape or feature to accommodate subdivision and development without compromising its identified landscape values.
- [88] The Morven Hill PA Schedule of Landscape Values is set out in 21.22.4 of the PDP. The landscape capacity for activities relevant to this application is summarised in the Schedule as follows:

Earthworks – very limited landscape capacity for earthworks associated with additional tracks and trails for recreational use or access tracks that protect naturalness and expressiveness attributes and values and are sympathetically designed to integrate with existing natural landform patterns.

Farm buildings – very limited landscape capacity for modestly scaled buildings that are integrated by landform and/or existing vegetation and are reasonably difficult to see from external viewpoints.

Rural living – extremely limited or no landscape capacity, except within existing approved residential building platforms or where adjacent to SH6 on the extreme lower slopes of the Morven Hill PA and where reasonably difficult to see.

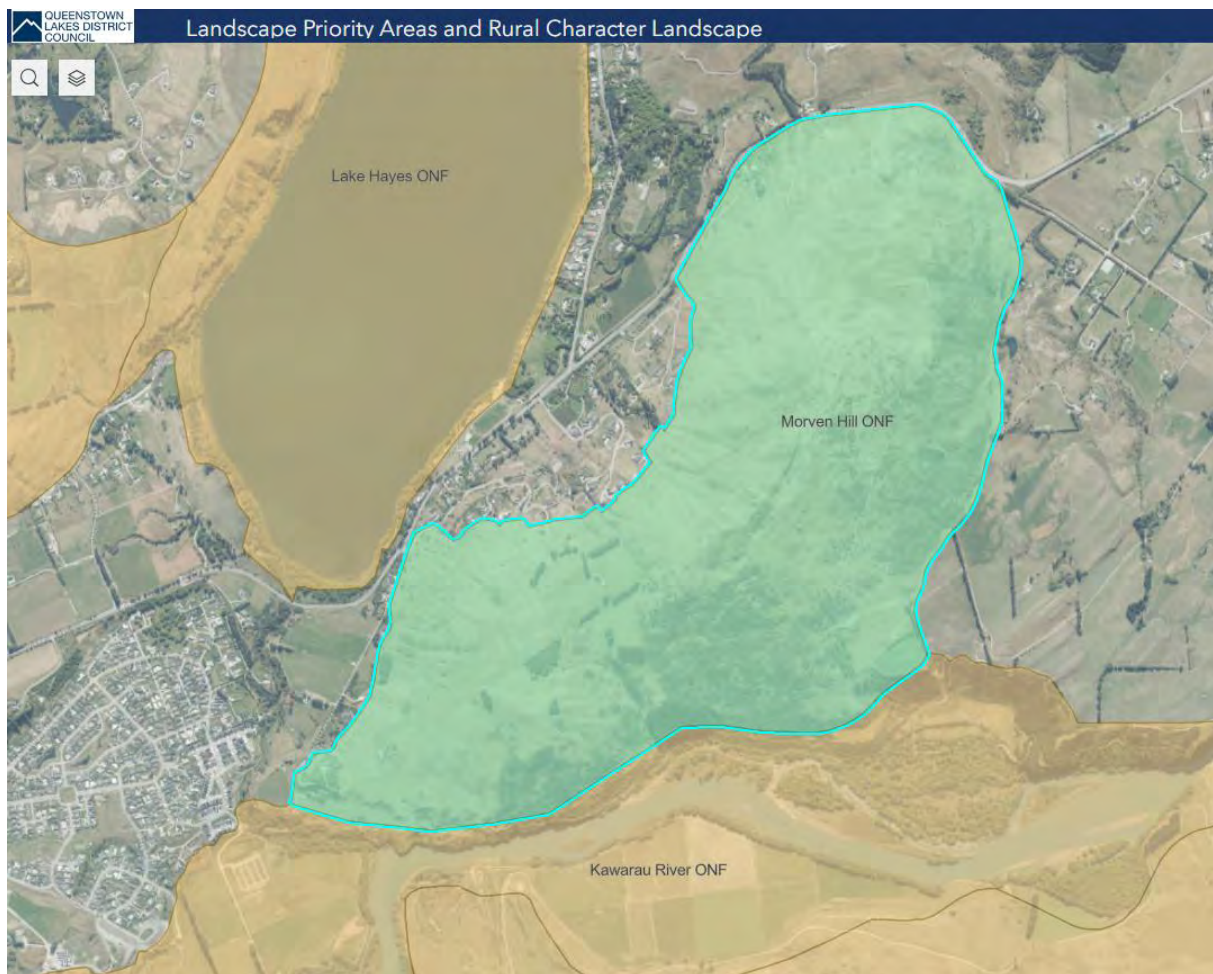


Figure 13: Landscape Priority Areas (Source: arcgis.com) – Morven Hill ONF shaded blue

5.2 Consents Required

[89] A full assessment of the proposal against the relevant rules in the PDP is attached as **Appendix 12**.

[90] The consents required under the rules in each chapter of the PDP are listed below.

Chapter 21 – Rural Zone

[91] Resource consent is sought for the following:

- A **discretionary** activity pursuant to Rule 21.4.9 to use land or buildings for residential activity, as consent to construct a dwelling is being sought at the same time as consent to establish a building platform.
- A **discretionary** activity pursuant to Rule 21.4.10 to establish a residential building platform not less than 70m² and not greater than 1000m² in area. The proposed building platform is 886m² in area.
- A **discretionary** activity pursuant to Rule 21.4.11 for the construction of any building not provided for by any other rule, as consent to construct a dwelling and install associated water tanks is being sought at the same time as consent to establish a residential building platform.

- A **restricted discretionary** activity to construct a farm building that does not meet Rule 21.8.1.1, as the landholding is less than 100ha (it is 53ha), or Rule 21.8.1.3, as the building will be located on the Morven Hill ONF. As the farm building proposed in RM250496 has been consented, then this proposal will also breach 21.8.1.2, as the density of farm buildings will exceed one per 50ha.

Discretion is restricted to:

- a. the extent to which the scale and location of the Farm Building is appropriate in terms of:*
- i. rural amenity values;*
 - ii. landscape character;*
 - iii. privacy, outlook and rural amenity from adjoining properties;*
 - iv. visibility, including lighting.*
 - v. n/a*

Chapter 25 - Earthworks

[92] Resource consent is sought for the following:

- A **restricted discretionary** activity under Rule 25.4.2 to breach the maximum volume of 10m³ on an ONF as specified under 25.5.2 and the maximum volume of 10m³ within roads on an ONF (25.5.7.2). The total volume of earthworks is approximately 14,230m³. The placement of approximately 200m³ of gravel to upgrade the existing access track within unformed road meets the PDP definition of 'earthworks'.
- A **restricted discretionary** activity to breach Rule 25.5.11.1 which specifies that earthworks over a contiguous area of land shall not exceed 2,500m² where the slope is 10 degrees or greater. The total area of earthworks is approximately 8,740m³.
- A **restricted discretionary** activity to breach Rule 25.5.15 which specifies that the maximum height of cut shall be 2.4m. A maximum cut of 3.8m is proposed.
- A **restricted discretionary** activity to breach Rule 25.5.16 which specifies that the maximum depth of fill shall be 2m. A maximum fill depth of 6.5m is proposed.
- A **restricted discretionary** activity to breach Rule 25.5.21 which states that a maximum of 300m³ of cleanfill shall be transported by road to or from an area subject to earthworks. Approximately 470m³ of additional fill is estimated to be required to be brought to the site.

[93] The matters of discretion relating to the above earthworks rules are listed under 25.7.1:

- *Soil erosion, generation and run-off of sediment*
- *Landscape and visual amenity values*
- *Effects on infrastructure, adjacent sites and public roads*
- *Land stability*
- *Effects on water bodies, ecosystem services and biodiversity*
- *Cultural, heritage and archaeological sites*
- *Nuisance effects*
- *Natural Hazards*
- *Functional aspects and positive effects*

Chapter 29 – Transport

[94] Resource consent is sought for the following:

- A **restricted discretionary** activity under Rule 29.5.13 a. for a vehicle access that does not strictly comply with the QLDC Land Development and Subdivision Code of Practice 2018 in regard to width and spacing between passing bays.

Discretion is limited to:

- Effects, including positive effects on the safety, efficiency, and amenity of the site and of the transport network, including the pedestrian and cycling environment.*
- The design of the access, including the width of the formed and legal width.*
- The on-going management and maintenance of the access.*
- Urban design outcomes, including any positive effects on urban design quality.*
- The vesting of the access in Council.*
- Any positive effects on achieving planned intensification and compact urban form.*

5.3 Other Consenting Matters

Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011

- [95] The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (the NES) apply to activities which disturb soil and/or change the use of a piece of land if the land is covered by the NES, i.e. if any activity or industry on the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken, or is more likely than not to have been undertaken on the piece of land.
- [96] The method under clause 6(2) has been chosen to establish whether any HAIL activities are being undertaken, or are likely to have been undertaken in the past, in the areas where earthworks are proposed to be undertaken and the building platform is proposed to be located.
- [97] Part Section 17 has historically been, and continues to be, used for pastoral activities. There are no existing farm buildings or other structures. Council's property records do not include any building consents or resource consents relating to Part Section 17, and Council's District Hazards maps do not identify any potentially contaminated sites.
- [98] The Applicant has also prepared a statement attached as **Appendix 13** regarding prior activities on the site and their current farming practices. This further confirms that no HAIL activities have occurred, or are occurring, in the vicinity of the proposed earthworks and residential building platform.
- [99] In summary, the NES does not apply.

Resource Management (National Environmental Standards for Freshwater) Regulations 2020

- [100] The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (the NES-FW) came into force on 3 September 2020.
- [101] The site does not contain any natural inland wetlands that would be affected by the proposed activities. The proposal does not trigger any other consents under the NES-FW.
- [102] In summary, consent is not required under the NES-FW.

Regional Plan: Water

- [103] Consent will be required under the Regional Plan: Water for earthworks associated with residential development exceeding 2,500m² in area. This consent has not yet been applied for.
- [104] The site is not located within the Lake Hayes catchment area, so consent is not required for the on-site disposal of wastewater.

National Policy Statement for Highly Productive Land 2022

- [105] The National Policy Statement for Highly Productive Land (NPS-HPL) came into force on 17 October 2022, with most provisions having immediate effect, placing restrictions on re-zoning, subdivision and land-use proposals on land that meets the transitional definition of Highly Productive Land (Land Use Capability (LUC) classes 1–3, with some exceptions).
- [106] Clause 3.5(7) of the NPS-HPL sets out what is to be treated as highly productive land before the required maps are included in an operative regional policy statement:

3.5 Identifying highly productive land in regional policy statements and district plans

(7) *Until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:*

- (a) *is*
 - (i) *zoned general rural or rural production; and*
 - (ii) *LUC 1, 2, or 3 land; but*
- (b) *is not:*
 - (i) *identified for future urban development; or*
 - (ii) *subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle.*

- [107] The site is identified as LUC 6ⁱ, so the NPS-HPL does not apply. Refer to Figure 14 on the following page, which is a snip from the 'Our Environment' website: Manaaki Whenua – Land Care Research's online mapping system.

ⁱ New Zealand Land Resource Inventory Mapping on the Manaaki Whenua Landcare Research website

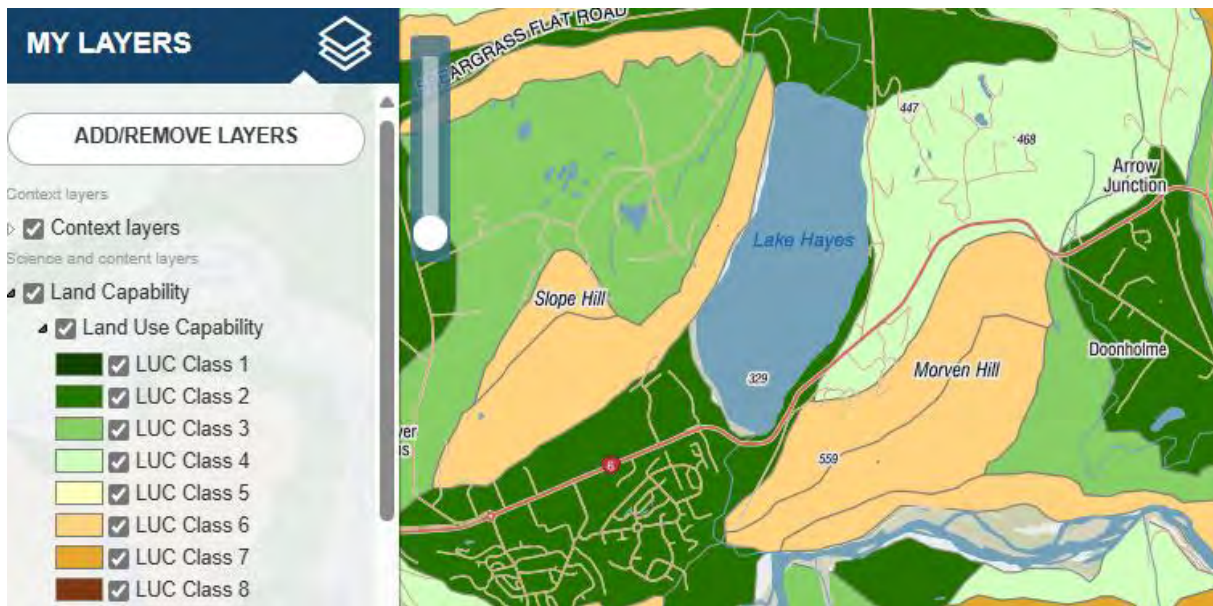


Figure 14: Land Use Capability Map (Source: Our Environment website)

5.4 Overall Activity Status

[108] The overall activity status of the application is **discretionary**.

6.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

6.1 Permitted Baseline

[109] Under section 104(2) of the RMA, Council may disregard an adverse effect of a proposed activity on the environment if a plan permits an activity with that effect. In this case, there is no relevant 'permitted baseline' as all establishment of residential building platforms and construction of residential buildings requires resource consent in the Rural Zone. Due to the size of the landholding and its location within an ONF, construction of a farm building also requires resource consent. The permitted maximum volume of earthworks is only 10m³ on an ONF, so the permitted baseline is not relevant to an assessment of the effects of the proposed earthworks.

6.2 Receiving Environment

[110] The receiving environment is the environment on which the proposal might have effects. This includes the existing environment, and the reasonably foreseeable future environment, which includes modifications to the existing environment due to permitted activities and approved but as yet unimplemented consents.

[111] The existing environment comprises the surrounding rural land on the Morven Hill ONF and on the southern side of the Kawarau River, the Kawarau River and its users, the Twin Rivers Trail (where this is formed in public land, including paper road), rural living sites on the northwestern side of Morven Hill, established residential development within Lake Hayes Estate and Bridesdale Farm, and public reserve between these residential areas and the river.

[112] The reasonably foreseeable future environment includes development within the recently constructed Kawarau Heights subdivision (Kawarau Heights Boulevard) located to the southwest of Lake Hayes Estate and the approved building platform on Lot 1 DP 21087 (RM230439), and the proposed trail connection to

the Twin Rivers Trail along the unformed road bisecting the site. It also includes the shed recently approved on the subject site under RM250496.

6.3 Positive Effects

- [113] The proposal will have positive benefits to the Applicant by allowing them to live on the land while farming and providing a farm building necessary for the farming operation. The proposal will allow the land to continue to be used for productive purposes, and provide for more active management of weeds and pests within Part Section 17.

6.4 Natural Hazards

- [114] The proposed development will have no adverse effects with regard to natural hazards, as the Geotechnical Report has not identified any particular natural hazard risks at the site.

6.5 Landscape and Visual Effects

- [115] Vivian + Espie has prepared a Landscape and Visual Effects Assessment (LVA) report, which is attached as **Appendix 10**. An Addendum Report (also attached as **Appendix 10**) has been prepared since the original application was lodged to address cumulative effects of both this application and the shed in RM250496. I have relied on these reports for the purposes of this Assessment of Environmental Effects (AEE).
- [116] To assist the assessment of effects on landscape character and amenity values, Virtual View has prepared photo simulations comparing the existing view of the site from ten key viewpoints to the view after completion of the proposed development and five years of vegetation growth. The simulations are attached as **Appendix 14**. Information explaining the methodology used to create the simulations is attached as **Appendix 15**.
- [117] Since this application was first lodged, the simulations have been updated to also include the shed approved under RM250496. These latest simulations are attached as **Appendix 16**.

Capacity for Future Development

- [118] As set out in section 5.1 above, the capacity for additional rural living is described in Schedule 21.22.4 as being 'extremely limited or no landscape capacity' except on the lower slopes of the PA adjoining State Highway 6 (SH6) and where reasonably difficult to see. Rural living is defined in Chapter 3 of the PDP as residential-type development in the Wakatipu Basin Rural Amenity Zone, a Rural Character Landscape or on an ONF or in an ONL, including of the nature anticipated in a Rural Residential or Rural Lifestyle Zone but excluding residential development for farming or other rural production activities (3.1B.5 b.).
- [119] The PDP does not define, or provide separate rules relating to, 'residential development for farming'. While it is reasonable to conclude (as Vivian + Espie do at paragraph 13 of their LVA report) that the capacity for a farmhouse is higher than that for 'rural living', the specific location and nature of development within the site still need to be carefully considered to ensure that the values of the ONF are not degraded.
- [120] In this case, the buildings have been designed and located to make use of the existing access track and shallow saddle landform, to minimise the visibility of development in views towards the site.

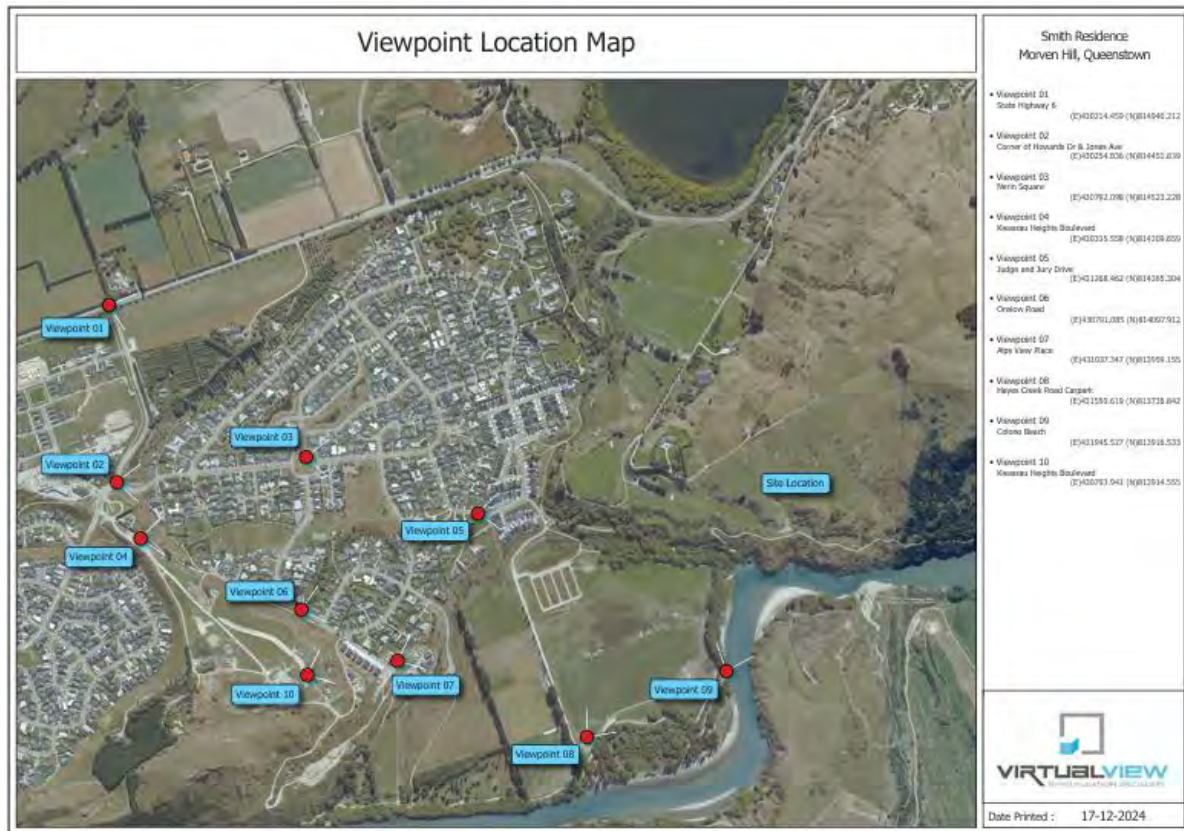


Figure 15: Viewpoint Location Map for Visual Simulations (from Appendix 14)

Visibility of Development

[121] Vivian + Espie identifies that the location of the proposed buildings is potentially visible from the south, west and northwest at the following locations:

- parts of the Remarkables access road, including the pull-over area at approximately 8km;
- private land on the south side of the Kawarau River (Queenstown Park Station);
- parts of the Kawarau River;
- parts of the Twin Rivers Trail and adjoining public land; and
- a number of locations (public and private) within approximately the southern half of the Lake Hayes Estate suburban area (topography screens the dwelling location from the northern half).ⁱⁱ

Visual Amenity Effects

[122] From the Remarkables access road, the site is seen as part of an expansive and complex view over the Wakatipu Basin. Vivian + Espie conclude that the degree to which the proposed buildings would detract from the qualities of these views would be very low at most.ⁱⁱⁱ

[123] The site is visible from Queenstown Park Station (Lot 4 DP 349682), on the southern side of the Kawarau River. The effects on views from this location have not been assessed. Consultation is being undertaken with this landowner.

ⁱⁱ Landscape and Visual Effects Assessment, para 32

ⁱⁱⁱ Ibid, para 39

- [124] No specific viewpoints from the surface of the Kowarau River have been assessed. However, Vivian + Espie note that Viewpoints 8 and 9 are adjacent to the part of the river that allows most visibility and therefore give a good impression of what will be experienced. River users will be at a much lower elevation than the proposed buildings and it is anticipated that only very small slivers of roof will be visible, even without vegetation growth. Vivian + Espie conclude that there will be no visual amenity effects on river users.^{iv}
- [125] The Twin Rivers Trail follows the true left bank of the Kowarau River from Shotover Country and Lake Hayes Estate in the east, crossing Hayes Creek at Billie's Bridge and then ascending within Section 63 (part of the wider site), before continuing east along the unformed road on the southern side of Morven Hill. Recreation Reserve land (Widgeon Park) sits on the river flats between the trail and the Lake Hayes Estate and Bridesdale residential areas. Viewpoints 8 and 9 illustrate the views available from the trail and these public places. Viewpoint 7 (Alps View Place) is from a higher elevation (allowing more visibility) but at a similar viewing angle to parts of Widgeon Park.
- [126] The proposed earthworks have been designed to screen the dwelling in views from the trail, including from the proposed new trail connection within the unformed road that bisects the site, and also in views from Widgeon Park (public reserve). The earthworks will be noticeable until the exposed areas are vegetated, when they will become integrated with the surrounding landform and indiscernible. From the trail, part of the proposed shed may be visible up the existing gully that the access track follows, but visibility will reduce as the existing indigenous planting along the sides of the gully continues to grow. The shed will be recognisable as a farm building on a working farm, and will not affect the amenity of trail users. Overall, Vivian + Espie conclude that the proposal will not change the current visual amenity experience of trail and reserve users.^v
- [127] Views from Lake Hayes Estate and Bridesdale are represented by Viewpoints 2, 3, 5, 6 and 7 in **Appendix 14**. These locations have been chosen since they allow a line-of-sight to the relevant part of the subject site. Vivian + Espie state at paragraph 54 of their LVA report:

When observers do get a line-of-sight to the location of the proposed buildings, it is the more elevated viewpoints, such as Viewpoint 2, that allow the best visibility, however these are also the more distant viewpoints, Viewpoint 2 being 1.9km from the dwelling location. In views such as this, the roofs of the shed and the dwelling are within a line-of-sight above the proposed earth mounding, before planting gains any maturity. The roofs are to be of Karaka and Thunder Grey Coloursteel respectively. Almost all of the access road to the buildings is hidden from view. We consider that, even in the absence of the proposed planting, built form will be reasonably difficult to see from locations such as Viewpoint 2.

...

We consider that there may be an adverse visual amenity effect for some viewers of a low degree in the short term, with a small interruption being noticeable on the lowest part of Morven Hill. This effect will decrease in degree as vegetation grows, becoming fully remedied after approximately 4 or 5 years.

- [128] From the less elevated viewpoints such as 3, 5, 6 and 7, the viewing angles mean that the proposed earthworks and mounding will provide more screening of built form, with only very small horizontal slivers

^{iv} Ibid, para 44

^v Ibid, para 48

of the roofs of the shed and dwelling being visible until vegetation grows. Vivian + Espie consider that the buildings will be very difficult to see in these views as soon as disturbed ground is vegetated, and the adverse effect on visual amenity will range up to being of a very low degree at most.^{vi}

- [129] In summary, Vivian + Espie considers that the overall design of the proposal will mean that the proposed built form is invisible or very difficult to see from most potential viewing locations.^{vii} There will be a very low degree of effect on visual amenity experienced from the Remarkables access road. From some locations within Lake Hayes Estate and Bridesdale, there may be a short-term effect of low degree at most until the proposed planting grows.

Landscape Character and Values

- [130] Paragraphs 16 to 30 of the LVA report set out the landscape values and attributes for the Morven Hill PA as described in Schedule 21.22.4 of the PDP. Physical attributes include the distinctive large roche moutonnée landform, and ground cover which is largely rough pasture with denser weed growth on parts of the southern faces. Associative attributes include the feature being a recognised and prominent landmark in the area, and the location of the Twin Rivers Trail along its southern toe which allows users to view and experience the ONF. Perceptual attributes stem from the prominent geomorphological form of the feature and its elevation, and the low level of modification and domestication with the PA. Vivian + Espie summarise the landscape values as follows:

To be more specific, the values of the landscape stem from its attributes as described above; the legible, rounded and isolated form of Morven Hill sitting as a memorable landmark of the Wakatipu. Its landcover is generally open pasture (with some remnant natives in gullies and areas of weed infestation), allowing formative processes and natural landform to be recognised.^{viii}

- [131] The ONF is described as having moderate-high naturalness in Schedule 21.22.4. Vivian + Espie assess that, given this description of existing naturalness, the existence of other dwellings within the ONF, and the dominant vegetation cover of grazed pasture, the presence of a farmhouse and shed on a farming property are 'not necessarily at odds with the landscape character and values of the Morven Hill ONF'.^{ix}
- [132] The proposal has been designed to minimise effects on landscape character by containing buildings within the existing topography, designing low building forms with dark and visually recessive cladding materials, and planting that will enhance natural character as well as providing additional screening.
- [133] While a significant volume of earthworks is proposed to cut the buildings into the landform and create mounding around the southwest of the dwelling, these works have been designed to tie into the existing rolling landform in this part of the site. Vivian + Espie consider that once re-grassing and planting of earthworks areas are completed, the finished landform 'will appear entirely natural and will not detract from the form of Little Morven Hill'.^x
- [134] Schedule 21.22.4 describes the entire area as being ancestral land to Kāi Tahu, who have a kaitiaki duty to uphold the mauri of all important landscape areas. Mana whenua values associated with the ONF

^{vi} Ibid, para 55

^{vii} Ibid, para 59

^{viii} Ibid, para 64

^{ix} Ibid, para 73

^x Ibid, para 75

include ara tawhito, mahika kai and nohoaka. The Kowarau was a traditional travel route and place for gathering mahika kai.

- [135] With regard to mana whenua values, as described in the LVA report, the buildings will be difficult to see from the Kowarau River due to the difference in elevation. The proposal is not considered to detract from the natural and distinctive landform of Morven Hill. Earthworks will be carried out in accordance with the EMP and the design of any on-site wastewater system will be undertaken in accordance with the relevant standard to avoid adverse effects on water quality.
- [136] Overall, Vivian + Espie assess that, while the proposal will introduce human modification to an area of the ONF, due to the specific location and nature of proposed activities, the landscape values of the ONF will continue to be protected. The reasons that the feature of Morven Hill is valued will not be reduced or altered.^{xi}

6.6 Cumulative Effects

- [137] The Addendum Report by Vivian + Espie assesses the cumulative effects of the proposal in conjunction with the RM250496 shed (referred to in the Addendum Report as the 'western shed').
- [138] The western shed (and water tank) will be plainly visible from some locations within the Lake Hayes Estate/Bridesdale area. However, due to the specific nature of the building, being a shed on a working farm, and its location on the terrace below the distinctive landform of Morven Hill itself, Vivian + Espie assess that that any effects of the western shed on visual amenity will be of a very low degree and the values of the ONF will continue to be protected.^{xii}
- [139] The dwelling and 'eastern' shed proposed in this application are only seen in the same view as the western shed from Viewpoints 2, 4 and 6. Vivian + Espie consider that any built form associated with this application will be difficult to discern in these views; it is only small parts of the darkly-covered roof of the eastern shed that are visible, and at considerable distances. The western shed will be the more noticeable element.^{xiii}
- [140] Vivian + Espie assess that any cumulative effects associated with the visibility of the roof of the shed proposed in this application, together with the western shed in RM250496 will be very low in degree. Once the proposed vegetation around the eastern shed matures (in 4 – 5 years), the roof will no longer be visible and there will be no cumulative visual effect.^{xiv}
- [141] Vivian + Espie acknowledge that the two applications, if both granted, will add more human modification to the site than either application alone. However, they assess that overall, the landscape values of the ONF will be protected due to the ongoing and improved management of the farming property that the applications provide for.

6.7 Built Form

- [142] The proposed dwelling will share access with the proposed farm shed and, where visible, will be seen as residential activity associated with a productive farming unit.

^{xi} Ibid, para 78

^{xii} Landscape and Visual Effects Assessment – Addendum, para 11

^{xiii} Ibid, para 14

^{xiv} Ibid, para 16

- [143] While the footprint of the proposed shed is relatively large at 270m², the size of the shed will be difficult to discern in most views from beyond the site. The shed is required for the continued operation of productive rural activities.
- [144] The finished floor levels of the proposed buildings will be lower than existing ground level. The low building heights, combined with the mounding (around the dwelling), planting and visually recessive exterior cladding materials ensure the buildings will generally be difficult to see and will not have adverse effects on the environment which are more than minor. Where the buildings are visible, such as from the Remarkables access road, they will be seen at a distance in an expansive view and appear as farm buildings within a rural area.

6.8 Earthworks

- [145] Earthworks are assessed with regard to the matters of discretion listed under 25.7.1 and the assessment matters under 25.8 in the PDP.

Soil Erosion and Sediment Run-off

- [146] An EMP, including an Erosion and Sediment Control Plan (ESCP), has been prepared by Enviroscope, a specialist environmental consultancy with significant experience in preparing such plans.
- [147] The earthworks methodology set out in the EMP, and the site mitigation measures proposed for the ESCP, will ensure that any potential adverse effects on water quality as a result of the earthworks are minimised.
- [148] The EMP also includes a monitoring and inspection regime to ensure that the mitigation measures continue to operate effectively throughout the duration of the project.
- [149] For these reasons, provided that the earthworks are carried out in accordance with the EMP and ESCP, I consider that any adverse effects with regard to soil erosion or sediment run-off will be less than minor.

Landscape and Visual Amenity Values

- [150] The proposed volume of earthworks is significantly greater than the permitted maximum of 10m³ on an ONF. However, the design approach, using excavation to set buildings into the existing landform and rolling earth mounds to provide permanent screening of the dwelling, is supported by the Applicant's landscape architect (Vivian + Espie). The proposed earthworks are intended to enhance the existing natural saddle-like features and replicate and tie into the rolling landform where the buildings will be located. Vivian + Espie consider that, once completed and re-grassed, the earthworks will appear entirely natural and will not detract from the form of the ONF.^{xv} There will be short-term adverse effects on visual amenity values while the earthworks are being undertaken and prior to revegetation of bare areas.
- [151] Overall, based on Vivian + Espie's assessment, I consider that any adverse effects of the earthworks on landscape and visual amenity values will be, at most, minor.

Effects on Infrastructure, Adjacent Sites and Roads

- [152] The proposed earthworks will not affect stormwater flows on, or onto, neighbouring sites. The earthworks will not be undertaken in close proximity to any site boundaries, and so will not affect the stability of any neighbouring land.

^{xv} Landscape and Visual Effects Assessment, para 75

[153] The earthworks will not affect any existing infrastructure.

[154] Earthworks, comprising the placement of compacted gravel, will be undertaken within existing unformed legal road to upgrade the existing access track. This will not prevent the road from being formed at some point in future, if required by Council. The existing formed part of Alec Robins Road is capable of handling traffic movements associated with the proposed earthworks. Overall, any effects on roads will be less than minor.

Land Stability

[155] The earthworks, including formation of permanent batter slopes, will be undertaken in accordance with the recommendations of the Geotechnical Report to avoid any adverse effects in terms of land stability.

Effects on Waterbodies, Ecosystems and Biodiversity

[156] The proposed sediment control measures have been designed to ensure that sediment run-off does not leave the site or enter any waterbodies.

[157] Given the location of the excavation and depth of cut proposed, it is not anticipated that there will be any effects on groundwater.

[158] The proposed earthworks will not adversely affect ecosystem services or the biodiversity of the site.

[159] Overall, provided that site mitigation measures are implemented, I assess that adverse effects with regard to waterbodies, ecosystem services and biodiversity will be less than minor.

Cultural, Heritage and Archaeological Values

[160] The site does not contain any known cultural, heritage or archaeological sites or features. As set out in the EMP, the Applicant will follow the Accidental Discovery Protocol in Schedule 25.10 of the PDP if any kōiwi or archaeological materials are encountered during earthworks.

[161] The southern part of the site includes the wāhi tūpuna area associated with the Kawarau River. No works are proposed within wāhi tūpuna.

[162] The EMP and ESCP include mitigation measures to ensure that potential effects of the earthworks on water quality are minimised.

[163] In summary, provided that the EMP and ESCP are properly implemented, any adverse effects of the earthworks on cultural, heritage or archaeological values are considered likely to be less than minor.

Nuisance Effects

[164] Earthworks can potentially generate nuisance effects associated with dust, noise and vibration. Given the location of the proposed works within the site, and the generous setback to neighbouring dwellings and the existing public trail, it is not anticipated that nuisance effects will be an issue.

[165] Earthworks and construction activities will be undertaken in accordance with the relevant construction noise standards.

[166] For these reasons, I consider that any nuisance effects are likely to be less than minor.

Natural Hazards

[167] The Geotechnical Report has not identified any particular natural hazard risks at the site that could be exacerbated by the proposed earthworks. The proposed earthworks will not have any adverse effects with regard to natural hazards.

6.9 Access and Infrastructure

- [168] Patersons has prepared an Infrastructure Assessment (attached as **Appendix 11**) which confirms that the proposed dwelling can be serviced in accordance with the relevant Council standards.
- [169] It is proposed to connect to Council's water supply network via a restricted supply. Wastewater disposal will either be via a connection to Council's network, or an on-site treatment system with disposal to ground. Stormwater will be disposed of to ground via soak pits. Soakage tests have been undertaken to confirm that the ground conditions are suitable for this method of disposal.
- [170] Network service providers have confirmed that reticulated power and telecommunications connections can be made to the site. Any new connections will be made underground. Given the high cost of installing a wired telecommunications connection, and the availability and reliability of wireless networks, the Applicant wishes to retain the option of using a wireless service, as set out in the proposed consent conditions.
- [171] The site is accessed from the end of the existing formation of Alec Robins Road. The existing access track to the shed and dwelling location will be upgraded to a suitable standard for a residential accessway. While the proposed 3m carriageway width and spacing of passing bays do not strictly comply with Council's standards, Patersons has assessed that the design will have limited adverse effects (refer to the email attached as **Appendix 18**). The width is considered appropriate given the slow vehicle speeds and limited vehicle numbers anticipated. Widening on key corners will ensure the access is suitable for fire appliances. The number and location of passing bays is deemed to be sufficient given the good line of sight, limited traffic and potential for informal passing on the flat grassed shoulder.
- [172] In summary, the proposed dwelling can be serviced in accordance with relevant standards, without resulting in adverse effects on the environment.

6.10 Affected Persons and Consultation

- [173] The applicant has undertaken consultation with potentially affected parties, including individual landowners in the vicinity of the site, Aukaha, Transpower and the Queenstown Trails Trust. Public notification of the application is requested, and this process will allow all interested parties to make a submission on the proposal.
- [174] A copy of Transpower's response to the application is attached as **Appendix 22**. Transpower has confirmed that there are no concerns regarding the clearance between the proposed buildings and its transmission lines. Conditions requested by Transpower have been included in the list of volunteered conditions attached as **Appendix 4** to this AEE.
- [175] The response from Aukaha is attached as **Appendix 23**. Kā Rūnaka (Te Rūnanga o Moeraki, Kati Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou, and Hokonui Rūnanga) have declined to provide written approval to the proposal as they would prefer that the new dwelling is connected to Council's wastewater network. Kā Rūnaka are concerned about the cumulative impacts of discharges from on-site wastewater systems on the Kawarau River.
- [176] Written approvals have been obtained from the following neighbours:

Name	Address	Legal Description
TPI 1 Ltd (Lindsey Topp)	117 Alec Robins Road	Lot 3 DP 583319
Lindsey and Carlyn Topp	111 Alec Robins Road	Lot 1 DP 583319

[177] Copies of these approvals are attached as **Appendix 24**.

[178] Given that the location of the proposed dwelling is well set back from any adjoining properties, there are unlikely to be any effects on rural amenity values in terms of increased noise or loss of privacy. The buildings will not be visible from dwellings on properties immediately adjoining the site due to the topography. As described above, the development will initially be visible at a distance from private properties further afield, including parts of Lake Hayes Estate and Bridesdale, and it will be seen from Queenstown Park Station across the Kawarau River.

6.11 Summary of Effects

[179] The key issue for this proposal relates to effects on the landscape values of the Morven Hill ONF.

[180] The proposal will introduce human modification to a part of the ONF. However, the capacity for additional residential development that is associated with farming activities is considered to be higher than for 'rural living' as defined in the PDP.

[181] The proposal has been carefully designed to ensure that the buildings are either completely screened or difficult to see in views of the site. In some views, part of the proposed shed will be seen in the same view as the more visible shed recently approved under RM250496. However, it is assessed that this will not result in adverse cumulative effects that are more than minor.

[182] While a large volume of earthworks is proposed, this approach is considered by Vivian + Espie as the most effective means of integrating development with the existing landform in this particular location, and will not degrade the natural form of the ONF.

[183] Overall, I assess that the proposal will have minor adverse effects on landscape values, and all other effects on the environment will be less than minor.

7.0 OBJECTIVES AND POLICY ASSESSMENT

[184] All appeals on the relevant objectives and policies of the PDP have been resolved and are beyond contention. Therefore, the ODP objectives and policies are not considered particularly relevant to this application.

7.1 Proposed District Plan

[185] The most relevant provisions are contained within Chapter 3 – Strategic Direction; Chapter 6 – Landscapes and Rural Character, Chapter 21 – Rural Zone, Chapter 25 – Earthworks, and Chapter 27 – Subdivision and Development. These provisions are assessed in the table on the following pages.

Chapter 3 – Strategic Direction	
Strategic Objective 3.2.4	The distinctive natural environments and ecosystems of the District are protected.
Strategic Objective 3.2.4.1	Development and land uses that sustain or enhance the life-supporting capacity of air, water, soil and ecosystems, and maintain indigenous biodiversity.
The proposal is intended to ensure the continued viability of the existing farming operation, which makes use of the productive pastoral nature of the site. The proposed planting will enhance the indigenous biodiversity of the site to some degree.	
Strategic Objective 3.2.4.2	The spread of wilding exotic vegetation is avoided.
No exotic vegetation with undesirable wilding potential is proposed. Exotic pest species with wilding potential will be removed within Part Section 17.	
Strategic Objective 3.2.4.3	The natural character of the beds and margins of the District's lakes, rivers and wetlands is preserved, or enhanced where possible, and protected from inappropriate subdivision, use and development.
The proposal will not affect the natural character of the beds or margins of any water bodies.	
Strategic Objective 3.2.4.4	The water quality and functions of the District's lakes, rivers and wetlands are maintained or enhanced.
The proposal will not affect the function of any water bodies. Site mitigation measures are proposed in accordance with the EMP and ESCP to ensure that the earthworks do not adversely affect water quality.	
Strategic Objective 3.2.4.5	Public access to the natural environment is maintained or enhanced.
The existing Twin Rivers Trail is constructed partly within the site (Section 63). Further to the east, the trail runs along the base of Morven Hill, providing views of the ONF and the Kawarau River. The Applicant has consulted with the Queenstown Trails Trust regarding the location of a future trail connection along the unformed part of Alec Robins Road to ensure that this will not conflict with the use of the existing access track to the proposed shed and dwelling. The proposal will maintain public access and is therefore considered to be consistent with this policy.	
Strategic Objective 3.2.4.7	The survival chances of rare, endangered, or vulnerable species of indigenous plant or animal communities are maintained or enhanced.
There are no known rare, endangered, or vulnerable species within the site.	

Strategic Objective 3.2.5	The retention of the District's distinctive landscapes.
Strategic Objective 3.2.5.1	The District's Outstanding Natural Features and Outstanding Natural Landscapes and their landscape values and related landscape capacity are identified.
Morven Hill has been identified in the PDP as an ONF. It is also listed in Schedule 21.22 as a Priority Area. Schedule 21.22.4 describes the landscape values and landscape capacity of the Morven Hill ONF.	
Strategic Objective 3.2.5.2	<p>Within the Rural Zone, new subdivision, use and development is inappropriate on Outstanding Natural Features or in Outstanding Natural Landscapes unless:</p> <ul style="list-style-type: none"> a. where the landscape values of Priority Areas of Outstanding Natural Features and Outstanding Natural Landscapes are specified in Schedule 21.22, those values are protected; or b. where the landscape values of Outstanding Natural Features and Outstanding Natural Landscapes are not specified in Schedule 21.22, the values identified according to SP 3.3.45 are protected.
Vivian + Espie has undertaken a Landscape and Visual Effects Assessment which concludes that the proposed development will protect the values of the Morven Hill PA as set out in Schedule 21.22. The proposal is therefore considered to be appropriate in terms of this strategic objective.	
Strategic Objective 3.2.5.4	<p>In each Exception Zone located within or part within Outstanding Natural Features and Outstanding Natural Landscapes, any application for subdivision, use and development is provided for:</p> <ul style="list-style-type: none"> a. to the extent anticipated by that Exception Zone; and b. on the basis that any additional subdivision, use and development not provided for by that Exception Zone protects the landscape values of the relevant Outstanding Natural Feature or Outstanding Natural Landscape.
The proposed development is not located in an Exception Zone.	
Strategic Policies 3.3	
Strategic Policy 3.3.21	<p>Enable continuation of existing farming activities and evolving forms of agricultural land use in rural areas except where those activities conflict with:</p> <ul style="list-style-type: none"> a. protection of the landscape values of Outstanding Natural Features or Outstanding Natural Landscapes; or b. maintenance of the landscape character and maintenance or enhancement of the visual amenity values of Rural Character Landscapes.
The proposal is consistent with this policy as it provides for the continuation of existing farming activities on the site, while protecting the landscape values of the ONF through the location and design of buildings, earthworks and landscaping.	

Strategic Policy 3.3.23	<p>Ensure that the effect of cumulative subdivision and development for the purposes of Rural Living does not compromise:</p> <ul style="list-style-type: none"> a. the protection of the landscape values of Outstanding Natural Features and Outstanding Natural Landscapes; and b. the maintenance of the landscape character and maintenance or enhancement of the visual amenity values of Rural Character Landscapes.
<p>The proposed dwelling does not meet the definition of 'Rural Living' as it is a residential activity associated with a farming activity.</p>	
Strategic Policy 3.3.27	<p>Seek opportunities to provide public access to the natural environment at the time of plan change, subdivision or development.</p>
<p>As noted above, the Applicant has consulted with the Trails Trust regarding the potential for a future connection along the unformed part of Alec Robins Road to the existing Twin Rivers Trail. However, the proposal is not entirely consistent with this policy as formation of the trail connection is not included as part of the application.</p>	
Strategic Policy 3.3.29	<p>For Outstanding Natural Features and Outstanding Natural Landscapes, identify landscape values and landscape capacity:</p> <ul style="list-style-type: none"> a. for Priority Areas identified in Schedule 21.22, in accordance with the values identification framework in SP 3.3.36 - 3.3.38 and otherwise through the landscape assessment methodology in SP 3.3.45 and through best practice landscape assessment methodology; and b. outside of identified Priority Areas, in accordance with the landscape assessment methodology in SP 3.3.45 and through best practice landscape assessment methodology.
<p>The application includes a Landscape and Visual Effects Assessment by Vivian + Espie, a suitably qualified and experienced landscape expert, that is understood to be undertaken in accordance with the specified framework and best practice methodology.</p>	
Strategic Policy 3.3.30	<p>Protect the landscape values of Outstanding Natural Features and Outstanding Natural Landscapes.</p>
<p>While the proposal will introduce additional elements of human modification to the Morven Hill ONF, its existing landscape values will be protected due to the specific design of the buildings, earthworks and landscaping.</p>	
Strategic Policy 3.3.31	<p>Avoid adverse effects on the landscape values of the District's Outstanding Natural Features and Outstanding Natural Landscapes from residential subdivision, use and development where there is little capacity to absorb change.</p>
<p>As discussed in section 6.5 of this AEE, the capacity of the ONF to absorb a residential dwelling that is associated with viable farming operations on the site is considered to be higher than that for rural living (as defined in the PDP). However, the specific location and nature of development within the site still needs to be carefully designed to ensure that the values of the ONF are not degraded. In this case, the buildings will</p>	

make use of the existing access track and shallow saddle landform, to minimise the visibility and impact of additional development. The proposal is considered to be consistent with this strategic policy.	
Strategic Policy 3.3.43	<p>In applying the Strategic Objectives and Strategic Policies for Outstanding Natural Features, Outstanding Natural Landscapes and Rural Character Landscapes, including the values identification frameworks in SP 3.3.37, 3.3.38, 3.3.40 and 3.3.41 and the landscape assessment methodology in SP 3.3.45, have regard to the following attributes:</p> <ul style="list-style-type: none"> a. Physical attributes: <ul style="list-style-type: none"> i. geology, geomorphology and topography; ii. ecology; iii. vegetation cover (exotic and indigenous); iv. the presence of waterbodies including lakes, rivers, streams, wetlands and their hydrology; v. land use (including settlements, buildings and structures); and b. Sensory (or experiential) attributes: <ul style="list-style-type: none"> i. legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes; ii. aesthetic values including memorability and naturalness; iii. wild or scenic values; iv. transient values including values at certain times of the day or year; v. experiential attributes, including the sounds and smells associated with the landscape; and c. Associative attributes: <ul style="list-style-type: none"> i. whether the attributes identified in (a) and (b) are shared and recognised; ii. cultural and spiritual values for Tangata Whenua; iii. historical and heritage associations; and iv. recreational values.
The Landscape and Visual Effects Assessment by Vivian + Espie sets out and has regard to the physical, sensory and associative attributes described in Schedule 21.22.4 for the Morven Hill PA.	
Strategic Policy 3.3.45	<p>Landscape assessments shall:</p> <ul style="list-style-type: none"> a. for Outstanding Natural Features and Outstanding Natural Landscapes: <ul style="list-style-type: none"> i. identify landscape attributes and values; and ii. assess effects on those values and on related landscape capacity; b. for Rural Character Landscapes: <ul style="list-style-type: none"> i. define a relevant landscape character area and its wider landscape context; ii. identify the landscape character and visual amenity values of that landscape character area and within its wider landscape context; and

	<ul style="list-style-type: none"> iii. assess effects on that character and those values and on related landscape capacity; c. in each case apply a consistent rating scale for attributes, values and effects.
<p>The Landscape and Visual Effects Assessment by Vivian + Espie identifies the landscape attributes and values of the Morven Hill ONF and assesses the effects on these values and related landscape capacity. The report concludes that the site can absorb the proposed development without degrading the landscape values of the ONF.</p>	
Strategic Policy 3.3.46	<p>The Landscape Assessment Methodology required by SP 3.3.45 is to be implemented when assessing:</p> <ul style="list-style-type: none"> a. a proposed plan change affecting the rural environment; b. a resource consent application for the subdivision, use or development of land where: <ul style="list-style-type: none"> i. land within an Outstanding Natural Feature or the application is for a restricted discretionary, discretionary or non-complying activity; and ii. the proposal is in relation to Outstanding Natural Landscape or gives rise to landscape effects and is on land with Rural zoning; or c. n/a d. n/a
<p>The Landscape and Visual Effects Assessment by Vivian + Espie is undertaken in accordance with Strategic Policy 3.3.45.</p>	
Strategic Policy 3.3.49	Avoid significant adverse effects on wāhi tūpuna within the District.
Strategic Policy 3.3.50	Avoid remedy or mitigate other adverse effects on wāhi tūpuna within the District.
<p>With regard to Strategic Policies 3.3.49 and 3.3.50 above, no works are proposed within the wāhi tūpuna associated with the Kowarau River.</p>	

Chapter 6 – Landscapes and Rural Character	
Objective 6.3.1	Rural Landscape Categorisation
Policy 6.3.1.1	<p>Categorise the Rural Zoned landscapes in the District as:</p> <ul style="list-style-type: none"> a. Outstanding Natural Feature (ONF); b. Outstanding Natural Landscape (ONL); c. Rural Character Landscape (RCL).
<p>The part of the Rural Zone within which the site is located has been categorised as an ONF.</p>	

Objective 6.3.2	Managing Activities in the Rural Zone, the Gibbston Character Zone, the Rural Residential Zone and the Rural Lifestyle Zone
Policy 6.3.2.2	Ensure that the location and direction of lights does not cause excessive glare and avoids unnecessary degradation of views of the night sky and of landscape character, including of the sense of remoteness where it is an important part of that character.
To achieve this policy, a condition is proposed to minimise effects of lighting associated with the proposed buildings.	
Policy 6.3.2.4	Enable continuation of the contribution low-intensity pastoral farming in the Rural Zone and viticulture in the Gibbston Character Zone on large landholdings makes to the District's landscape character.
The proposed site is a 53ha landholding, which is farmed together with other blocks of land leased by the Applicant. The proposed buildings are considered necessary by the Applicant to ensure the ongoing viability of the pastoral farming operation.	
Policy 6.3.2.6	Encourage subdivision and development proposals to promote indigenous biodiversity protection and regeneration where the landscape values and nature conservation values would be maintained or enhanced, particularly where the subdivision or development constitutes a change in the intensity in the land use or the retirement of productive farm land.
The proposal will maintain existing landscape values. It will result in a small area of the site being changed from pastoral to residential use, although the residential use is associated with the continuation of the existing farming operation. Planting of indigenous vegetation is proposed to assist with the screening of buildings and to integrate the development with the surrounding landform.	
Policy 6.3.2.8	Encourage any landscaping to be ecologically viable and consistent with the established character of the area.
The proposed structural landscaping comprises indigenous vegetation which is ecologically viable and consistent with the established natural character of the area.	
Objective 6.3.3	Managing Activities on Outstanding Natural Features and in Outstanding Natural Landscapes
Policy 6.3.3.1	Recognise that subdivision and development is inappropriate on Outstanding Natural Features or in Outstanding Natural Landscapes unless: <ul style="list-style-type: none"> a. landscape values are protected; and b. in the case of any subdivision or development, all buildings and other structures and all changes to landform or other physical changes to the appearance of land will be reasonably difficult to see from beyond the boundary of the site in question.
This first part of this policy is similar in wording to Strategic Objective 3.2.5.2 discussed above, although it is less specific in regard to the values that are to be protected. Vivian + Espie has undertaken a Landscape and Visual Effects Assessment which concludes that the proposed development will protect the values of the Morven Hill PA as set out in Schedule 21.22. The Vivian + Espie report also concludes that the buildings and	

changes to the landform as a result of the proposed earthworks and landscaping will be reasonably difficult to see from beyond the site. It is considered that both parts of Policy 6.3.3.1 are met, and the proposal is therefore not inappropriate on the Morven Hill ONF.	
Policy 6.3.3.2	Ensure that the protection of Outstanding Natural Features and Outstanding Natural Landscapes includes recognition of any values relating to cultural and historic elements, geological features and matters of cultural and spiritual value to Tangata Whenua, including tōpuni and wāhi tūpuna.
Schedule 21.22.4 identifies the values associated with the distinctive roche moutonnée landform of Morven Hill, as well as the mana whenua associations with the area, including the adjoining Kawarau River wāhi tūpuna. These have been taken into account in the assessment of effects for this proposal.	
Policy 6.3.3.3	For farming activities within Outstanding Natural Features and Outstanding Natural Landscapes: <ul style="list-style-type: none"> a. Recognise that farming activities may modify the landscape; b. Enable those activities in a way that is consistent with protecting the values of Outstanding Natural Features and Outstanding Natural Landscapes.
The purpose of the proposed buildings within the ONF is to assist the ongoing viability of the current farming operation. The location and design of the buildings, including earthworks and landscaping to integrate the buildings into the landform, and the use of the existing access track, ensure that activities are consistent with protecting the values of the ONF.	
Policy 6.3.3.5	Maintain the open landscape character of Outstanding Natural Features and Outstanding Natural Landscapes where it is open at present.
The proposal is not consistent with this policy, as it will reduce the existing open character of the part of the site where the proposed buildings are located. However, the effect on open character will not be discernible in most views of the site, and so I do not consider that the application is contrary to the policy.	

Chapter 21 – Rural Zone	
Objective 21.2.1	Objective - A range of land uses, including farming are enabled while: <ul style="list-style-type: none"> a. Protecting the landscape values of Outstanding Natural Features and Outstanding Natural Landscapes; b. Maintaining the landscape character of Rural Character Landscapes and maintaining or enhancing their visual amenity values; c. Maintaining or enhancing amenity values within the rural environment; and d. Maintaining or enhancing nature conservation values.
The proposal will enable the site to continue to be used for pastoral farming activities. The proposed shed is needed for farming operations. The proposed dwelling will allow the Applicant to live on the land while farming it. As outlined previously, the proposal will protect the existing landscape values of the Morven Hill	

ONF. It will also maintain the existing rural amenity values and nature conservation values of the surrounding environment. The application is consistent with Objective 21.2.1.	
Policy 21.2.1.1	Enable farming activities while protecting, maintaining or enhancing the values of indigenous biodiversity, ecosystem services, recreational values, and the natural character and nature conservation values of the District's lakes and rivers and their margins.
The proposal will enable farming activities. The proposed planting and weed control will enhance the indigenous biodiversity values of the site to some degree. The existing recreational values of the Twin Rivers Trail and the natural character and conservation values of the nearby Kawarau River will not be adversely affected. The proposal is consistent with this policy.	
Policy 21.2.1.2	Allow Farm Buildings associated with landholdings of 100 hectares or more in area while managing effects of the location, scale and colour of the buildings on landscape values.
The proposed shed is not a permitted farm building as the landholding is less than 100ha in area. A second shed has also recently been approved on the site, under a separate resource consent application (RM250496). The cumulative effect of the two sheds has been considered by Vivian + Espie in their Addendum Report, and it is concluded that landscape values will be maintained.	
Policy 21.2.1.3	Require buildings to be set back a minimum distance from internal boundaries and road boundaries in order to mitigate potential adverse effects on landscape character, visual amenity, outlook from neighbouring properties and to avoid adverse effects on established and anticipated activities.
The proposed buildings will be located centrally within Part Section 17 where they will be well set back from internal boundaries and road boundaries.	
Policy 21.2.1.4	Minimise the dust, visual, noise and odour effects of activities by requiring them to locate a greater distance from formed roads, neighbouring properties, waterbodies and zones that are likely to contain residential and commercial activity.
The proposed farm shed is not located in close proximity to any formed roads, neighbouring properties, waterbodies, or zones that are likely to contain residential and commercial activities.	
Policy 21.2.1.5	Have regard to the location and direction of lights so they do not cause glare to other properties, waterbodies, roads, public places or views of the night sky.
A condition is proposed regarding the location and direction of lights associated with the proposed buildings, in accordance with the relevant District Plan rule relating to lighting and glare.	
Policy 21.2.1.6	Avoid adverse cumulative impacts on ecosystem services and nature conservation values.
The proposal will not have any known effects on ecosystem services or nature conservation values.	

Policy 21.2.1.7	Have regard to the spiritual beliefs, cultural traditions and practices of Tangata whenua.
<p>The southern part of the site is wāhi tūpuna associated with the Kowarau River. No works are proposed within the wāhi tūpuna area. The spiritual beliefs, cultural traditions and practices associated with the Kowarau River include (as set out in Schedule 39.4) its role as a traditional travel route and place for gathering mahika kai.</p> <p>As described in the Landscape and Visual Effects Assessment, from the Kowarau River, the buildings will be difficult to see due to the difference in elevation. The proposal is not considered to detract from the natural and distinctive landform of Morven Hill, or the natural character of the Kowarau River and its margins, and it will not adversely affect the water quality of the Kowarau, provided that earthworks are carried out in accordance with the EMP. Consultation with Aukaha has identified that Tangata whenua are concerned about the potential cumulative effects of on-site wastewater discharges to the Kowarau River. If an on-site system is installed it will be designed in accordance with the relevant standards to ensure wastewater is treated to a high standard prior to land application. Any discharge area will have a horizontal separation distance of at least 150m from the river.</p>	
Policy 21.2.1.8	Have regard to fire risk from vegetation and the potential risk to people and buildings, when assessing subdivision and development in the Rural Zone.
The proposed locations of the buildings are not close to any large areas of existing vegetation that might cause a fire risk.	
Policy 21.2.1.9	Provide adequate firefighting water and fire service vehicle access to ensure an efficient and effective emergency response.
Fire fighting water storage and access to the dwelling will be provided in accordance with the relevant Council standard.	
Objective 21.2.2	Objective - The life supporting capacity of soils is sustained.
Policy 21.2.2.1	Allow for the establishment of a range of activities that utilise the soil resource in a sustainable manner.
Policy 21.2.2.2	Maintain the productive potential and soil resource of Rural Zoned land and encourage land management practices and activities that benefit soil and vegetation cover.
Policy 21.2.2.3	Protect the soil resource by controlling activities including earthworks, indigenous vegetation clearance and prohibit the planting and establishment of identified wilding exotic trees with the potential to spread and naturalise.
<p>With regard to Objective 21.2.2 and the associated policies, the continued pastoral use of the majority of the site is considered to be a sustainable use of the soil resource. The part of the site in the immediate vicinity of the dwelling and curtilage area will no longer be able to be used for productive rural activities. The proposed weed control, and the retention and further planting of indigenous vegetation will have positive effects in terms of protecting the soil resource. Overall, the proposal is considered to be consistent with this objective and policies.</p>	

Objective 21.2.3	Objective - The life supporting capacity of water is safeguarded through the integrated management of the effects of activities.
Policy 21.2.3.1	<p>In conjunction with the Otago Regional Council, regional plans and strategies:</p> <ul style="list-style-type: none"> a. encourage activities that use water efficiently, thereby conserving water quality and quantity; b. discourage activities that adversely affect the potable quality and life supporting capacity of water and associated ecosystems.
<p>The proposal will not adversely affect the potable quality and life supporting capacity of water and associated ecosystems. There are no permanent watercourses in the vicinity of the proposed development.</p>	
Objective 21.2.4	Objective - Situations where sensitive activities conflict with existing and anticipated activities are managed to minimise conflict between incompatible land uses.
Policy 21.2.4.1	New activities must recognise that permitted and established activities in the Rural Zone may result in effects such as odour, noise, dust and traffic generation that are reasonably expected to occur and will be noticeable to residents and visitors in rural areas.
Policy 21.2.4.2	Control the nature, scale and location of activities seeking to establish in the Rural Zone, so as to minimise conflict with permitted and established activities, that may be incompatible with those activities.
<p>In regard to Objective 21.2.4 and associated policies, the proposal is for a dwelling associated with an existing farming operation, so reverse sensitivity issues are not a concern.</p>	

Chapter 25 – Earthworks	
Objective 25.2.1	Objective – Earthworks are undertaken in a manner that minimises adverse effects on the environment, including through mitigation or remediation, and protects people and communities.
Policy 25.2.1.1	Ensure earthworks minimise erosion, land instability, and sediment generation and offsite discharge during construction activities associated with subdivision and development.
<p>The proposal is consistent with Policy 25.2.1.1, as earthworks will be undertaken in accordance with the EMP and ESCP to minimise erosion, instability, sediment generation and any offsite discharge.</p>	
Policy 25.2.1.2	<p>Manage the adverse effects of earthworks to avoid inappropriate adverse effects and minimise other adverse effects, in a way that:</p> <ul style="list-style-type: none"> a. Protects the values of Outstanding Natural Features and Landscapes; b. Maintains the amenity values of Rural Character Landscapes;

	<ul style="list-style-type: none"> c. Protects the values of Significant Natural Areas and the margins of lakes, rivers and wetlands; d. Minimises the exposure of aquifers, in particular the Wakatipu Basin, Hāwea Basin, Wānaka Basin and Cardrona alluvial ribbon aquifers; Note: These aquifers are identified in the Otago Regional Plan: Water for Otago 2004. e. Protects Māori cultural values, including wāhi tapu and wāhi tūpuna and other sites of significance to Māori; f. Protects the values of heritage sites, precincts and landscape overlays from inappropriate subdivision, use and development; and g. Maintains public access to and along lakes and rivers
<p>While a large volume of earthworks is proposed within an ONF, the earthworks have been designed to be sympathetic to, and tie in with, the natural landform of the site. The earthworks will be grassed and then planted in accordance with the Structural Landscape Plan on completion. There will be short-term adverse effects on visual amenity until revegetation occurs, however Vivian + Espie has assessed that the earthworks will not adversely affect the values of the Morven Hill ONF.</p> <p>The earthworks will not affect the margins of any water bodies.</p> <p>The depth and location of the excavation will not expose any aquifers.</p> <p>The earthworks will not be undertaken within wāhi tūpuna. Earthworks and other construction activities will be managed so that any adverse impacts on water quality are avoided or minimised.</p> <p>There are no heritage sites, precincts or landscape overlays relating to the site.</p> <p>The earthworks will not affect public access along the Kawarau River via the Twin Rivers Trail.</p> <p>In summary, the proposal is consistent with Policy 25.2.1.2 above.</p>	
Policy 25.2.1.3	Avoid, where practicable, or remedy or mitigate adverse visual effects of earthworks on visually prominent slopes, natural landforms and ridgelines.
<p>The proposed earthworks will have temporary visual effects until such time as the exposed earth is re-grassed. Planting will further integrate the earthworked areas with the existing landform. A condition of consent is proposed to ensure that re-grassing occurs as soon as practicable on completion of the earthworks.</p>	
Policy 25.2.1.4	Manage the scale and extent of earthworks to maintain the amenity values and quality of rural and urban areas.
<p>The proposed earthworks volume is significantly greater than the permitted volume within an ONF. However, effects on amenity values will be temporary, and limited to visual effects of the earthworks until such time as they are grassed or planted.</p>	
Policy 25.2.1.5	Design earthworks to recognise the constraints and opportunities of the site and environment.
<p>The earthworks have been designed to enhance the ability of the existing landform to contain the proposed buildings, to minimise the visibility of development in views of the site.</p>	

Policy 25.2.1.6	Ensure that earthworks are designed and undertaken in a manner that does not adversely affect infrastructure, buildings and the stability of adjoining sites.
The earthworks will be undertaken centrally within the site, away from property boundaries, and so will not adversely affect existing infrastructure, buildings or the stability of adjoining sites.	
Policy 25.2.1.7	Encourage limiting the area and volume of earthworks being undertaken on a site at any one time to minimise adverse effects on water bodies and nuisance effects of adverse construction noise, vibration, odour, dust and traffic effects.
The earthworks will be managed in accordance with the EMP to minimise adverse effects on waterbodies and nuisance effects.	
Policy 25.2.1.8	Undertake processes to avoid adverse effects on cultural heritage, including wāhi tapu, wāhi tūpuna and other taonga, and archaeological sites, or where these cannot be avoided, effects are remedied or mitigated.
Policy 25.2.1.9	Manage the potential adverse effects arising from exposing or disturbing accidentally discovered material by following the Accidental Discovery Protocol in Schedule 25.10.
In regard to Policies 25.2.1.8 and 25.2.1.9 above, as set out in the EMP, the Applicant will follow the Accidental Discovery Protocol if any archaeological materials are encountered during earthworks.	
Policy 25.2.1.10	Ensure that earthworks that generate traffic movements maintain the safety of roads and accesses, and do not degrade the amenity and quality of surrounding land.
<p>The site is accessed directly from Alec Robins Road, which has the capacity to accommodate heavy traffic movements associated with the proposed earthworks without degrading the amenity and quality of surrounding land.</p> <p>Traffic movements will be managed to ensure the safety of other road users, and trail users, in accordance with the relevant QLDC requirements.</p>	
Policy 25.2.1.11	Ensure that earthworks minimise natural hazard risk to people, communities and property, in particular earthworks undertaken to facilitate land development or natural hazard mitigation.
The earthworks will not exacerbate any natural hazard risk to the site and its occupants, or to any other people or property.	

Chapter 27 – Subdivision and Development

Objective 27.2.5	Infrastructure and services are provided to new subdivisions and developments.
-------------------------	---

Policy 27.2.5.2	Ensure safe and efficient pedestrian, cycle and vehicular access is provided to all lots created by subdivision and to all developments.
The proposal utilises an existing farm track, which will be upgraded to a suitable standard for access to a residential dwelling. The access is considered to be safe and efficient.	
Policy 27.2.5.4	Ensure the physical and visual effects of subdivision and roading are minimised by utilising existing topographical features.
The access track to the proposed buildings follows an existing gully which minimises the visibility of the access in views from beyond the site.	
Policy 27.2.5.7	Ensure water supplies are of a sufficient capacity, including fire fighting requirements, and of a potable standard, for the anticipated land uses on each lot or development.
The proposed dwelling will be connected to Council's water supply network via a restricted supply. This arrangement has been accepted by Council. At the time the dwelling is constructed, static firefighting storage will be installed in accordance with SNZ PAS 4509:2008.	
Policy 27.2.5.9	Encourage initiatives to reduce water demand and water use, such as roof rain water capture and use and greywater recycling.
At this stage, the Applicant has not given consideration to initiatives to reduce water demand and water use, however there is no reason why such initiatives could not be incorporated into the final dwelling design.	
Policy 27.2.5.10	<p>Ensure appropriate water supply, design and installation by having regard to:</p> <ul style="list-style-type: none"> a. the availability, quantity, quality and security of the supply of water to the lots being created; b. water supplies for fire fighting purposes; c. the standard of water supply systems installed in subdivisions, and the adequacy of existing supply systems outside the subdivision; d. any initiatives proposed to reduce water demand and water use.
The proposed connection to Council's network will provide a reliable and secure water supply to the dwelling.	
Policy 27.2.5.11	<p>Ensure appropriate stormwater design and management by having regard to:</p> <ul style="list-style-type: none"> a. any viable alternative designs for stormwater management that minimise run-off and recognises stormwater as a resource through re-use in open space and landscape areas; b. the capacity of existing and proposed stormwater systems; c. the method, design and construction of the stormwater collection, reticulation and disposal systems, including connections to public reticulated stormwater systems; d. the location, scale and construction of stormwater infrastructure; e. the effectiveness of any methods proposed for the collection, reticulation and disposal of stormwater run-off, including

	opportunities to maintain and enhance water quality through the control of water-borne contaminants, litter and sediments, and the control of peak flow.
Stormwater from impervious areas associated with the development will be disposed of to ground via soak pits. In extreme events, run-off will follow established flow paths down the hill towards the Kawarau River.	
Policy 27.2.5.13	<p>Treat and dispose of sewage in a manner that:</p> <ul style="list-style-type: none"> a. maintains public health; b. avoids adverse effects on the environment in the first instance; and c. where adverse effects on the environment cannot be reasonably avoided, mitigates those effects to the extent practicable.
Policy 27.2.5.14	<p>Ensure appropriate sewage treatment and disposal by having regard to:</p> <ul style="list-style-type: none"> a. the method of sewage treatment and disposal; b. the capacity of, and impacts on, the existing reticulated sewage treatment and disposal system; c. the location, capacity, construction and environmental effects of the proposed sewage treatment and disposal system.
<p>Sewage disposal from the dwelling will either be via a connection to Council's infrastructure in Alec Robins Road, or via an on-site wastewater treatment and disposal system.</p> <p>Patersons has undertaken a site and soils assessment which confirms the suitability of the site for on-site treatment and disposal of domestic wastewater. Detailed design of such a system would be subject to Council approval prior to installation.</p> <p>Both options are consistent with Policies 27.2.5.13 and 27.2.5.14 above.</p>	
Policy 27.2.5.16	<p>Ensure adequate provision is made for the supply and installation of reticulated energy, including street lighting, and communication facilities for the anticipated land uses while:</p> <ul style="list-style-type: none"> a. providing flexibility to cater for advances in telecommunication and computer media technology, particularly in remote locations; b. ensure the method of reticulation is appropriate for the visual amenity and landscape values of the area by generally requiring services are underground, and in the context of rural environments where this may not be practicable, infrastructure is sited in a manner that minimises visual effects on the receiving environment; c. generally require connections to electricity supply and telecommunications systems to the boundary of the net area of the lot, other than lots for access, roads, utilities and reserves.
<p>A connection to the electricity network will be made to service the new dwelling.</p> <p>Given the significant cost associated with connecting Lot 1 to the fibre network, the applicant wishes to retain the option of providing a wireless telecommunications service to the new dwelling, instead of a physical connection. Policy 27.2.5.16 a. above provides for such solutions.</p>	

- [186] The key objectives and policies relate to the protection of the landscape values of the Morven Hill ONF and ensuring that the landscape capacity of the ONF is not exceeded. It is assessed that the site has the capacity to absorb a development of this nature, being a shed and dwelling associated with the existing farming activity, due to the specific design and location of the proposed buildings and associated earthworks and landscaping.
- [187] In summary, the proposal is consistent with almost all of, and not contrary to any of, the relevant objectives and policies in the PDP.

8.0 THE MATTERS IN PART 2 OF THE RESOURCE MANAGEMENT ACT 1991

- [188] The PDP has been prepared in accordance with Part 2 of the RMA and all of the relevant provisions are now operative. As the proposal is consistent with, or not contrary to, the objectives and policies of the PDP, it is considered to also be consistent with Part 2.

9.0 CONCLUSION

- [189] The Applicant seeks resource consent to establish a residential building platform, and to construct a specific dwelling and farm shed, within the Morven Hill ONF. The application includes earthworks and landscaping to integrate the buildings with the surrounding landform.
- [190] The Applicant requests public notification of the application.
- [191] The proposal will result in minor adverse effects on the landscape values of the Morven Hill ONF.
- [192] Overall, the proposal is consistent with the relevant objectives and policies of the PDP, as well as with Part 2 of the RMA.



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy



R.W. Muir
 Registrar-General
 of Land

Identifier **964836**
Land Registration District **Otago**
Date Issued 05 July 2021

Prior References
 904840

Estate Fee Simple
Area 52.5875 hectares more or less
Legal Description Lot 4 Deposited Plan 554727 and Lot 1
 Deposited Plan 26926 and Part Section 17
 Block IX Shotover Survey District and
 Section 63 Block IX Shotover Survey
 District

Registered Owners
 Gemma Louise Smith and Michael David Smith

Interests

Subject to Section 241 (2) Resource Management Act 1991(affects DP 26926)

Subject to Section 8 Mining Act 1971 (affects Section 63 and part Section 17 Block IX Shotover Survey District)

Subject to Section 5 Coal Mines Act 1979 (affects Section 63 and part Section 17 Block IX Shotover Survey District)

5002654.1 Gazette Notice declaring adjoining road (S.H.No 6) to be limited access road - 26.5.2000 at 2:26 pm (affects Lot 4 DP 554727)

5027694.4 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 6.3.2001 at 12:13 pm (affects Lot 4 DP 554727 part formerly Section 4 SO 534188 formerly Part Section 33 Block IX Shotover Survey District contained in CT OT18D/67)

5028208.3 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 8.3.2001 at 12:48 pm (affects Lot 4 DP 554727 part formerly Section 4 SO 534188 formerly Part Section 36 Block IX Shotover Survey District contained in CT OT18D/67)

Subject to a right to store water over part Lot 4 DP 554727 marked JJ and a right to convey water over part Lot 4 DP 554727 marked II, JJ and KK all on DP 554727 created by Easement Instrument 6992903.8 - 17.8.2006 at 9:00 am

The easements created by Easement Instrument 6992903.8 are subject to Section 243 (a) Resource Management Act 1991

Appurtenant to Lot 4 DP 554727 is a right of way and a right to drain stormwater and foulsewer and a right to convey water created by Easement Instrument 6992903.9 - 17.8.2006 at 9:00 am

The easements created by Easement Instrument 6992903.9 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right of way over part Lot 4 DP 554727 marked MA, a right to store water over part Lot 4 DP 554727 marked JJ and a right to convey water over part Lot 4 DP 554727 marked MA, II and JJ all on DP 554727 created by Easement Instrument 6992903.10 - 17.8.2006 at 9:00 am

Appurtenant to Lot 4 DP 554727 is a right of way and a right to drain stormwater and foulsewer and a right to convey water created by Easement Instrument 6992903.10 - 17.8.2006 at 9:00 am

The easements created by Easement Instrument 6992903.10 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right to store water over part Lot 4 DP 554727 marked JJ on DP 554727 created by Easement Instrument 6992903.11 - 17.8.2006 at 9:00 am

The easements created by Easement Instrument 6992903.11 are subject to Section 243 (a) Resource Management Act 1991
Appurtenant to Lot 4 DP 554727 is a right of way created by Easement Instrument 6992903.12 - 17.8.2006 at 9:00 am

The easements created by Easement Instrument 6992903.12 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to convey electricity over part Lot 4 DP 554727 marked MA on DP 554727 in favour of Aurora Energy Limited created by Easement Instrument 6992903.13 - 17.8.2006 at 9:00 am

The easements created by Easement Instrument 6992903.13 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to convey telecommunications and computer media over part Lot 4 DP 554727 marked MA on DP 554727 in favour of Telecom New Zealand Limited created by Easement Instrument 6992903.19 - 17.8.2006 at 9:00 am

Some of the easements created by Easement Instrument 6992903.19 are subject to Section 243 (a) Resource Management Act 1991 (see DP 353144)

Land Covenant in Easement Instrument 6992903.20 - 17.8.2006 at 9:00 am (affects Lot 4 DP 554727)

6992903.22 Encumbrance to Morven Residents Society Incorporated - 17.8.2006 at 9:00 am (affects Lot 4 DP 554727)

6992903.24 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 17.8.2006 at 9:00 am (affects Lot 4 DP 554727)

Subject to a right of way (Pedestrian and Cycle Way) (in gross) over part section 63 Block IX Shotover Survey District marked K and L on DP 454102 in favour of the Queenstown Lakes District Council created by Easement Instrument 9271861.5 - 25.2.2013 at 10:27 am

Appurtenant to Lot 4 DP 554727 is a right to convey water created by Easement Instrument 9414449.4 - 21.6.2013 at 12:19 pm

The easements created by Easement Instrument 9414449.4 are subject to Section 243 (a) Resource Management Act 1991
9723451.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 3.7.2014 at 11:27 am (affects Lot 4 DP 554727)

10320308.1 Covenant pursuant to Section 108(2)(d) Resource Management Act 1991 - 10.3.2016 at 4:47 pm (affects Lot 4 DP 554727)

Subject to a right to drain water over part Lot 4 DP 554727 marked CC on DP 554727 created by Easement Instrument 10320308.2 - 10.3.2016 at 4:47 pm

10418827.1 Variation of Land Covenant 6992903.20 - 5.5.2016 at 1:58 pm

Land Covenant in Easement Instrument 10417675.3 - 15.6.2016 at 1:27 pm (affects Lot 4 DP 554727)

Appurtenant to Lot 4 DP 554727 is a right to drain sewage created by Easement Instrument 11166589.2 - 5.7.2018 at 2:05 pm

Land Covenant in Easement Instrument 11186521.3 - 11.10.2018 at 1:34 pm


11186521.5 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 11.10.2018 at 1:34 pm

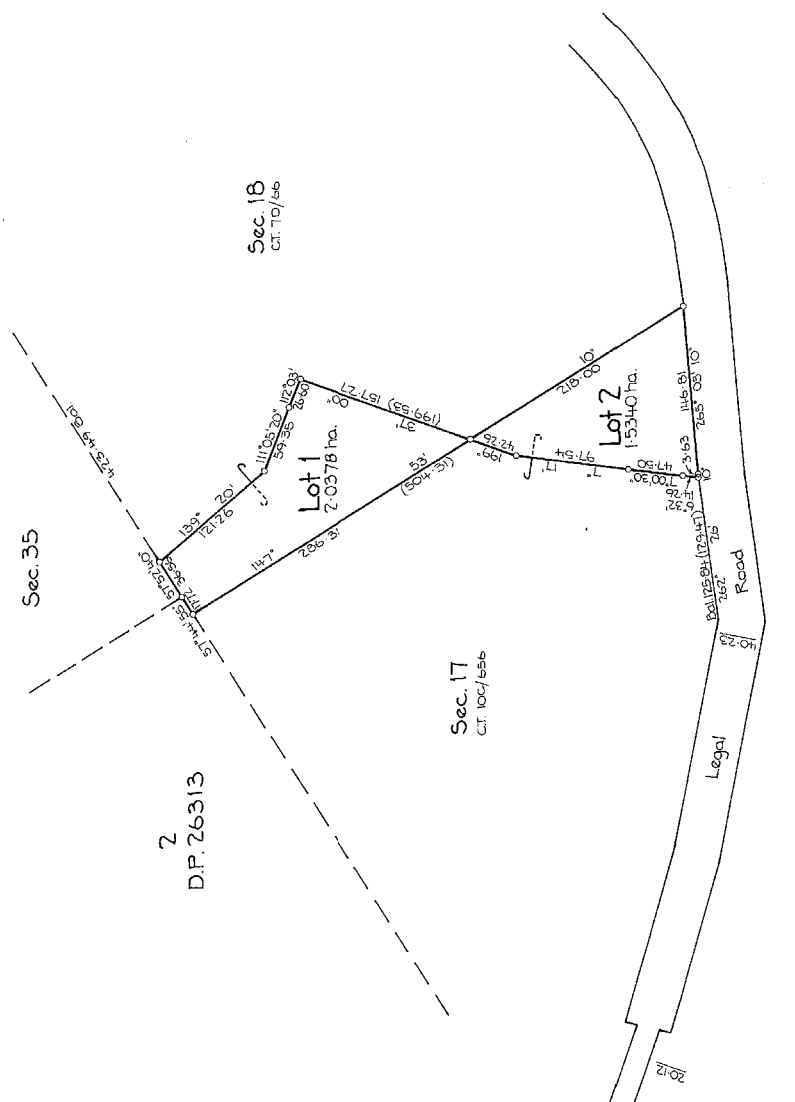
Subject to Section 241(2) Resource Management Act 1991 (affects DP DP 554727)

Land Covenant in Covenant Instrument 11985538.6 - 5.7.2021 at 5:10 pm

12621622.2 Mortgage to Alexander Kenneth Robins - 20.12.2022 at 3:41 pm

Land Covenant (in gross) in favour of Alexander Kenneth Robins created by Covenant Instrument 12621622.3 - 20.12.2022 at 3:41 pm

		<p>APPROVALS, REGISTERED OWNERS</p> <p><i>[Signature]</i> Alexander Nathan Robins</p> <p><i>[Signature]</i> Deborah Marie MacColl</p>	
<p>Approval Pursuant to Section 223 of the Resource Management Act 1991 on the application of Clark Fortune McDonald & Associates Ltd. subject to the Amalgamation Condition stated herein</p>		<p>The Common Seal of the Queenstown Lakes District Council is affixed hereto in the presence of:</p> <p><i>[Signature]</i> Mayor</p> <p><i>[Signature]</i> Chief Executive Officer</p>	
<p>That Lot 1 hereon be transferred to the owner of Section 17 (Bal. CT. 100/656) and that one Certificate of Title be issued to include both parcels. See LRR 94/228</p>		<p>and</p> <p>That Lot 2 hereon be transferred to the owner of Section 18 (Bal. CT. 100/656) and that one Certificate of Title be issued to include both parcels. See LRR 94/228</p>	
<p>Pursuant to Section 224(6) of the Resource Management Act 1991, I hereby certify that all of the conditions of the subdivision consent have been complied with to the satisfaction of the Queenstown Lakes District Council.</p>		<p>Dated this 28th day of March 1998.</p>	
<p>The Common Seal of the Queenstown Lakes District Council is hereto affixed in the presence of:</p> <p><i>[Signature]</i> Chief Executive Officer</p>		<p>Total Area 3.5718 ha</p>	
<p>Comprising in CT 100/656 (PT) CT 100/656 (PT)</p>		<p>I, PETER ROBERT RITCHIE of QUEENSTOWN, Registered Surveyor and holder of an annual practising certificate for who may and who is duly registered pursuant to section 28 of the Survey Act 1980, do hereby certify that the plan and the survey are correct and have been made in accordance with the Survey Regulations 1992 or any regulations made in substitution thereof.</p>	
<p>Dated at Queenstown this 19th day of March 1998</p>		<p>Field Book <i>[Signature]</i> p. 1</p>	
<p>Reference Plans, D.P. 1964/4, 2104/5, 262/3</p>		<p>Examined <i>[Signature]</i> Correct</p>	
<p>Approved as to Survey <i>[Signature]</i></p>		<p>Approved as to Survey <i>[Signature]</i> Chief Surveyor</p>	
<p>Deposited this 17th day of May 1998</p>		<p>For Registrar-General of Land District Land Registrar</p>	
<p>DP 26926</p>		<p>Retained 18/7/98</p>	
<p>Instructions</p>		<p>6674</p>	



Sec. 18
CT 100/656

Lot 1
2.0378 ha

Lot 2
1.5340 ha

Sec. 17
CT 100/656

Sec. 35

2
D.P. 26313

Legal Road

Scale 1:2500

DATE 17 DECEMBER 1997

Surveyed by CLARK FORTUNE McDONALD & ASSOCIATES

TERRITORIAL AUTHORITY QUEENSTOWN LAKES DIST.

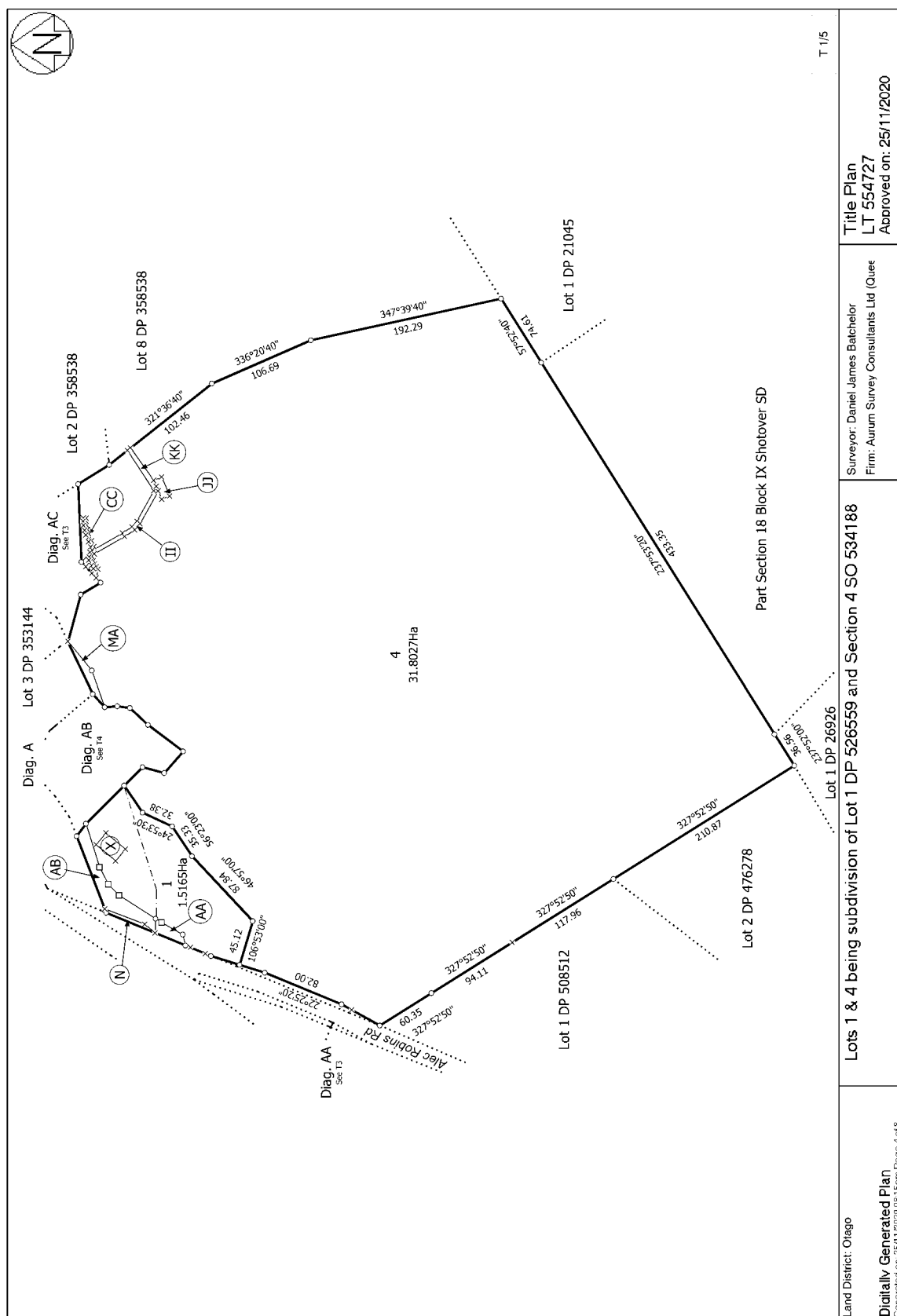
LOTS 1 & 2 BEING A SUBDIVISION OF SECTIONS 17 AND 18

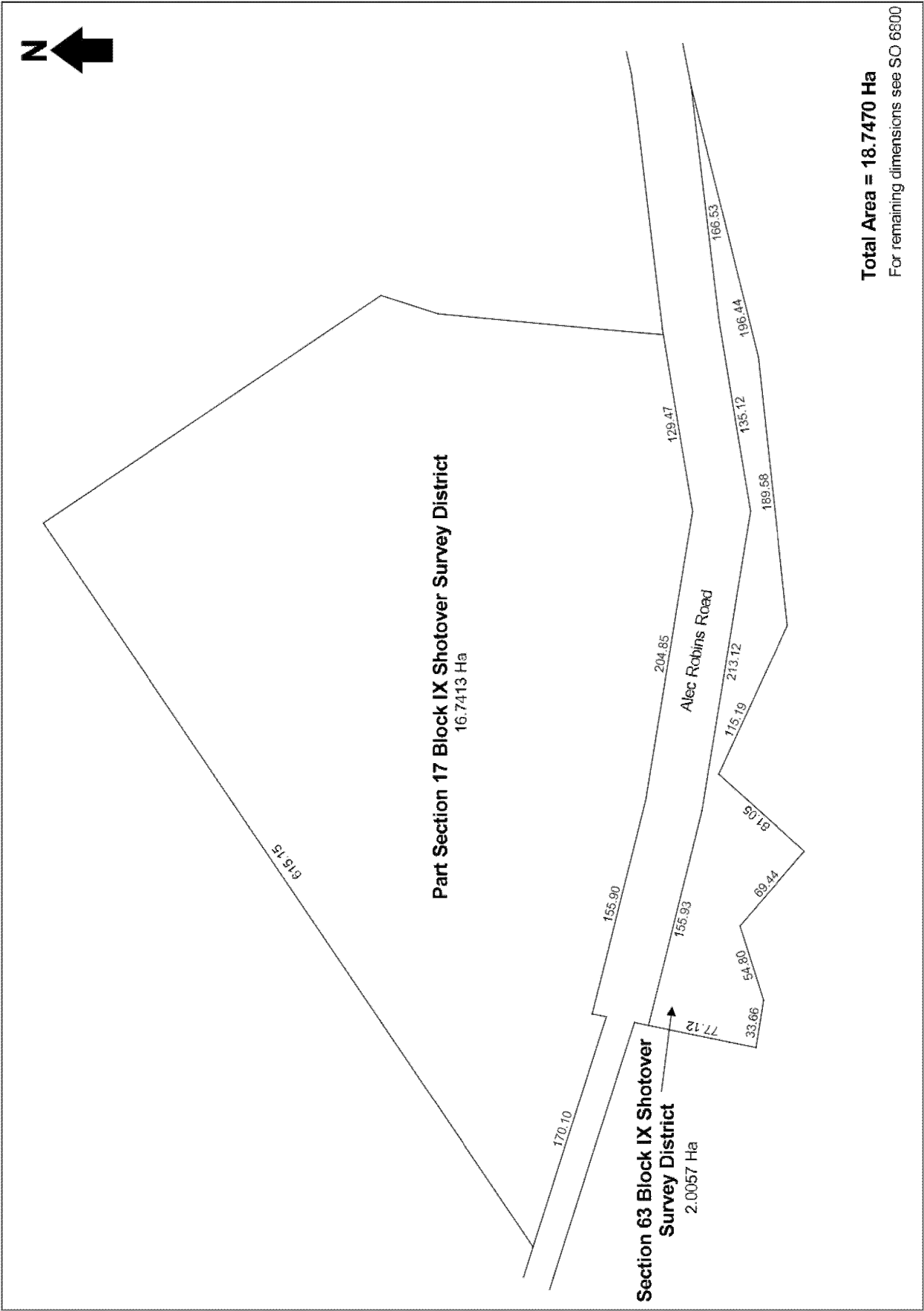
LAND DISTRICT OTAGO

SURVEY BLK. & DIST. IX, SHOTOVER

NZMS 261 SHIT FL41 RECORD MAP No. 886

ID F41/2-3





View Instrument Details



Instrument No	11186521.5
Status	Registered
Date & Time Lodged	11 October 2018 13:34
Lodged By	Roe, Eva Christine
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991



Affected Computer Registers	Land District
845712	Otago
845713	Otago

Annexure Schedule: Contains 6 Pages.

Signature

Signed by Robert Henry Huse as Territorial Authority Representative on 11/10/2018 11:53 AM

*** End of Report ***

IN THE MATTER of Lots 1 & 8 being a
Subdivision of Lot 8 DP 498355

AND

IN THE MATTER of Resource Consent
RM160869 Queenstown Lakes District
Council

**CONSENT NOTICE PURSUANT TO
SECTION 221 OF THE RESOURCE
MANAGEMENT ACT 1991**

- A. Alexander K Robins has applied to the Queenstown Lakes District Council (**Council**) pursuant to provisions of the Resource Management Act 1991 for its consent to subdivide land comprised and described in Computer Freehold Register 738021 (Otago Registry).
- B. Council has granted subdivision consent (RM160869) to the proposed subdivision subject to certain conditions which are required to be complied with on a continuing basis by the owner of the land from time to time being those conditions set out in this Consent Notice.

QLD00282 6963949.1 1901228 | 3549090

OPERATIVE PART

1.1 The following conditions pertaining to this Consent Notice are to be registered against the titles of the following allotments:

Lot 8 Deposited Plan 526559 comprised in Computer Freehold Register 845713 (**Lot 8**):

Conditions

- (a) No further subdivision and development of Lot 8 is permitted except for any development associated with Farming Activities and Farm Buildings.
- (b) For the purposes of this clause 1.1:
 - (i) Farming Activities mean the use of land and buildings for the primary purpose of the production of vegetative matters and/or commercial livestock and excludes residential activity, home occupations, factory farming and forestry activity; and
 - (ii) Farm Buildings means a building necessary for the exercise of Farming Activities and excludes:
 - (A) buildings for the purposes of residential activities, home occupations, factory farming and forestry activities; and
 - (B) visitor accommodation and temporary accommodation.

1.2 The following conditions pertaining to this Consent Notice are to be registered against the titles of the following allotments:

Lot 1 Deposited Plan 526559 comprised in Computer Freehold Register 845712 (**Lot 1**):

Conditions

- (a) All future buildings for Lot 1 shall be contained within the Building Platform approved by RM160869 as shown as Covenant Area X on Deposited Plan 526559.

Geotechnical investigations

- (b) Prior to any construction work (other than work associated with geotechnical investigations), the owner of Lot 1 for the time being shall submit to Council for certification, plans prepared by a suitably qualified engineer detailing the proposed mitigation and/or remedial works in accordance with the Schedule 2A certificate. The

QLD00282 6963949.1 3649090

page 2

owner shall be required to implement all such measures prior to occupation of any building. Any Schedule 2A certificate recommendations for ongoing works, monitoring or maintenance requirements to be completed by the landowner on an ongoing basis shall be adhered to at all times.

- (c) The original ground not affected by filling is suitable for the erection of buildings designed according to NZS 3604 provided that the recommendations of GeoSolve Report 150625 dated August 2018 are followed.
- (d) The completed works shall take in to account land slope and foundation stability considerations subject to foundation recommendations and earthworks restrictions contained in the Schedule 2A certificate and Geosolve Report 150526 (to be read in conjunction with the final site contour plan).

Firefighting Requirements

- (e) At the time a dwelling/building is erected on Lot 1, domestic water and firefighting storage is to be provided. A minimum of 20,000 litres shall be maintained at all times as a static firefighting reserve within a 30,000 litre tank. Alternatively, a 7,000 litre firefighting reserve is to be provided for each dwelling in association with a domestic sprinkler system installed to an approved standard. A firefighting connection in accordance with Appendix B - SNZ PAS 4509:2008 (or superseding standard) is to be located no further than 90 metres, but no closer than 6 metres, from any proposed building on the site. Where pressure at the connection point/coupling is less than 100kPa (a suction source – see Appendix B, SNZ PAS 4509:2008 section B2), a 100mm Suction Coupling (Female) complying with NZS 4505, is to be provided. Where pressure at the connection point/coupling is greater than 100kPa (a flooded source - see Appendix B, SNZ PAS 4509:2008 section B3), a 70mm Instantaneous Coupling (Female) complying with NZS 4505, is to be provided. Flooded and suction sources must be capable of providing a flow rate of 25 litres/sec at the connection point/coupling. The reserve capacities and flow rates stipulated above are relevant only for single family dwellings. In the event that the proposed dwellings provide for more than single family occupation then the consent holder should consult with the NZFS as larger capacities and flow rates may be required.

The Fire Service connection point/coupling must be located so that it is not compromised in the event of a fire.

The connection point/coupling shall have a hardstand area adjacent to it (within 5m) that is suitable for parking a fire service appliance. The hardstand area shall be located in the centre of a clear working space with a minimum width of 4.5 metres. Pavements or roadways providing access to the hardstand area must have a minimum formed width as required by QLDC's standards for rural roads (as per QLDC's Land Development and Subdivision Code of Practice). The roadway shall be trafficable in all weathers and be capable of withstanding an axle load of 8.2 tonnes or have a load bearing capacity of no less than the public roadway serving the property, whichever is the lower. Access shall be maintained at all times to the hardstand area.

Underground tanks or tanks that are partially buried (provided the top of the tank is no more than 1 metre above ground) may be accessed by an opening in the top of the tank

QLD00262 6963949.1 3649090

page 3

whereby couplings are not required. A hardstand area adjacent to the tank is required in order to allow a fire service appliance to park on it and access to the hardstand area must be provided as above.

The Fire Service connection point/coupling/fire hydrant/tank must be located so that it is clearly visible and/or provided with appropriate signage to enable connection of a fire appliance.

Firefighting water supply may be provided by means other than the above if the written approval of the New Zealand Fire Service Central North Otago Area Manager is obtained for the proposed method.

The firefighting water supply tank and/or the sprinkler system shall be installed prior to the occupation of the building.

Please note: The New Zealand Fire Service considers that often the best method to achieve compliance with SNZ PAS 4509:2008 is through the installation of a home sprinkler system in accordance with Fire Systems for Houses SNZ 4517:2010, in each new dwelling. Given that the proposed dwelling is approximately 12km from the nearest New Zealand Fire Service Fire Station the response times of the New Zealand Volunteer Fire Service in an emergency situation may be constrained. It is strongly encouraged that a home sprinkler system be installed in the new dwelling.

Landscaping Controls

- (f) All trees and shrub planting identified on the certified landscape plan (RM160869) shall be maintained as per that plan. If any tree or plant shall die, become damaged or is no longer of healthy condition it shall be replaced within 12 months. All replacement trees shall be of the species identified on the certified landscape plan and planted at the grade noted. Replacement for existing trees shall be at a grade of no less than 1.5m in height. Existing wilding species (Lodgepole Pine - *Pinus contorta*, Black Pine - *P. nigra*, Scots Pine - *P. sylvestris*, Maritime Pine - *P. pinaster*, Monterey Pine - *P. radiata*, European Larch - *Larix decidua*, Douglas Fir - *Psuedotsuga menziesii*, Sycamore – *Acer pseudoplatanus*, Common Hawthorn - *Crataegus monogyna*) and problematic species such as birch (*Betula* species) may be removed at any time but shall be replaced with evergreen non-wilding species of a mature height of no less than 6m and consistent with traditional rural tree species or indigenous species of the local rural area.
- (g) All domestic landscaping and structures including, but not limited to, clotheslines; sheds; outdoor seating and dining areas; external lighting; swimming pools; tennis courts; play structures; vehicle parking; pergolas; and ornamental gardens and lawns shall be confined to the curtilage area as shown on the certified Landscape Plan (RM160869).
- (h) Planting within the property shall exclude wilding species (Lodgepole Pine - *Pinus contorta*, Black Pine - *P. nigra*, Scots Pine - *P. sylvestris*, Maritime Pine - *P. pinaster*, Monterey Pine - *P. radiata*, European Larch - *Larix decidua*, Douglas Fir – *suedotsuga menziesii*, Sycamore - *Acer pseudoplatanus*, Common Hawthorn - *Crataegus monogyna*) and problematic species such as birch, and highly ornamental or brightly coloured

QLD00282 6963949.1 3549090

page 4

domestic species, cultivars or varieties such as yellow species of conifers, bright red forms of oak and maples.

- (i) Exterior lighting attached to any building within the approved building platform shall be no higher than 3m above ground level and all other exterior lighting shall be no higher than 1m above ground level and shall only be located within the domestic curtilage identified on the certified landscape (resource consent RM160869), and shall not extend beyond the contour of the ground level of the highest point of the building platform. All exterior lighting shall be down-lighting only and shall not be directed to create light spill beyond the property boundary. Lighting shall not be used to highlight or accentuate any buildings or vertical landscape elements including but not limited to trees, retaining walls or landform features.
- (j) There shall be no lineal planting along the property boundary within Lot 1 including any shelterbelts, hedges or mass planting up to the boundary to avoid prominence of lot boundaries.
- (k) Any entranceway structures from the property boundary shall be to a height of no more than 1.2m, and shall be constructed of natural materials such as unpainted timber, steel or schist stone to not be visually obtrusive (monumental) and to be consistent with traditional rural elements and farm gateways.
- (l) Vehicle crossings onto Jean Robins Drive shall not exceed 4.5m in width.
- (m) All water tanks are to be partially buried, of dark recessive colouring and/or visually screened by planting to not be visible from beyond the property boundary.
- (n) All fencing shall be standard post and wire (including rabbit proof fencing), or deer fencing consistent with traditional farm fencing.
- (o) The access drive for Lot 1 shall be gravel of a local stone or chip seal, and shall exclude the use of concrete pavement, and concrete kerb and channels.

Building Design Controls

- (p) All buildings within the building platform shall not exceed the following height restrictions:
 - (A) a maximum height limit of 4.5m as measured from an R.L level of 364.0masl in Area A of the building platform; and
 - (B) a maximum height limit of 4.5m as measured from an R.L level of 367.0masl in Area B of the building platform.

Please note: Area A and Area B are shown on 4091.4R.1C Geotech Report Appendix A.

- (q) Roofs for all buildings shall be coloured in the natural range of greys, greens or browns with a light reflectivity value of between 7% and 20% with a matt finish or be a living (green) roof with vegetation or a schist chip to blend into the colours and textures of the surrounding landscape. All other external elements of buildings including walls, joinery,

QLD00282 6963949.1 3649090


page 5

spouting, and doors shall coloured within the natural range of greys, greens or browns with a light reflectivity value of between 7% and 35%.

- (r) Claddings shall be timber (painted or unpainted), stacked local stone, iron, solid plaster or a similar material approved by Council.
- (s) All built elements upon the roof or upper portion of the building including but not limited to chimney flues, satellite dishes and solar panels shall not extend beyond the building platform height controls and shall be of a colour to match the roof.
- (t) Any structures attached to the roof of any building such as satellite dishes or chimney structures shall match the colour of the roof. Polycarbonate panels or similar shall not be installed on the roof where they would be visible from beyond the property boundaries to avoid highlighting the presence of built form through contrasting roofing colours and glare.
- (u) Above all areas of glazing within any building within the approved building platform there shall be eaves or overhangs no less than 0.8m in depth, or glazing recessed to no less than 0.8m on the eastern, northern and western sides of the building to reduce the potential of glare.
- (v) Solar panels or solar hot water panels shall be of a dark recessive colour of a light reflectivity value of 10% or less and be of a matt finish to reduce the potential for excessive glare.

Dated this 18th day September 2018

SIGNED for and on behalf of
QUEENSTOWN LAKES DISTRICT COUNCIL
 under delegated authority by its Team Leader
 – Subdivision & Property


 Elizabeth Jane Simpson

QLD00282 6963949.1 3649090

page 6

View Instrument Details



Instrument No 11186521.3
Status Registered
Date & Time Lodged 11 October 2018 13:34
Lodged By Roe, Eva Christine
Instrument Type Easement Instrument



Affected Computer Registers Land District

845712	Otago
845713	Otago

Annexure Schedule: Contains 7 Pages.

Grantor Certifications

- I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒
- I certify that the Encumbrancee under Encumbrance 6992903.22 has consented to this transaction and I hold that consent ☒

Signature

Signed by Robert Henry Huse as Grantor Representative on 11/10/2018 11:52 AM

Grantee Certifications

- I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Robert Henry Huse as Grantee Representative on 11/10/2018 11:52 AM

***** End of Report *****

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant**

(Sections 90A and 90F Land Transfer Act 1952)

Grantor

Alexander Kenneth Robins

Grantee

Alexander Kenneth Robins

Grant of Easement or *Profit à prendre* or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, **or creates** the covenant(s) **set out** in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A*Continue in additional Annexure Schedule, if required*

Purpose (Nature and extent) of easement; <i>profit</i> or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
Land Covenant	All the land contained in the Servient Tenement	Lot 1 DP 526559 (CFR 845712)	Lot 8 DP 526559 (CFR 845713)

Covenant provisions

Delete phrases in [] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number _____, registered under section 155A of the Land Transfer Act 1952]

the Annexure Schedule

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant****ANNEXURE SCHEDULE****CONTINUATION OF COVENANT PROVISIONS****Background**

- A. The Grantor is registered as proprietor of the Servient Tenement.
- B. The Grantee is registered as proprietor of the Dominant Tenement.
- C. The Grantor and the Grantee have agreed that the Servient Tenement shall be subject to the Covenants.

Operative Part**1. Interpretation**

- 1.1. For the purposes of this Instrument:

"Building" means any structure other than:

- (a) a fence or wall less than 1 metre in height above Ground Level; or
- (b) any other structure less than 5 square metres in area and less than 1 metre in height above Ground Level.

"Covenants" means the covenants set out in this Instrument.

"Dominant Tenement" means all or any part of the land contained or formerly contained in the dominant tenement set out in schedule A of this Instrument.

"Dwelling" means a building or group of buildings designed and occupied as a single self-contained household unit and includes normal accessory structures such as a garage, garden shed, glasshouse etc.

"Grantee" means the registered proprietor of the Dominant Tenement from time to time together with its tenants, occupiers or invitees on the Dominant Tenement.

"Grantor" means the means the registered proprietor of the Servient Tenement from time to time together with its tenants, occupiers or invitees on the Servient Tenement.

"Ground Level" means the finished ground level of the Servient Tenement as at the date of deposit of the plan of the subdivision creating the Servient Tenement.

"Instrument" means this easement instrument including the front page of this instrument, Schedule A and this Annexure Schedule.

"Road" means all parts of the Servient Tenement that are part of the Road as defined by the Rules of the Morven Residents Society Incorporated.

"Servient Tenement" means all or any part of the land contained or formerly contained in the servient tenement set out in schedule A of this Instrument.

3802111

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant**

"Subdivide" has the meaning set out in Section 218(1) of the RMA and includes the creation of cross leases or units with the meaning of the Unit Titles Act 2010, and "Subdivision" has the corresponding meaning.

1.2. In this Instrument:

- (a) A covenant to do something is also a covenant to permit or cause that thing to be done, and a covenant not to do something is also a covenant not to permit or cause that thing to be done.
- (b) A reference to any statute, regulation or by-law, or other statutory instrument, includes all statutes, regulations or by-laws, or other statutory instruments, varying, consolidating or replacing them, and a reference to a statute includes all regulations or by-laws issued under that statute.

2. **Building Controls**

2.1. The Grantor must not:

- (c) Erect, construct or place any pre-used or second-hand Building on the Servient Tenement.
- (d) Erect, construct or place any relocatable Building on the Servient Tenement.
- (e) Use any of the following wall claddings for a Building:
 - (i) Brick;
 - (ii) Fibrolite;
 - (iii) Galvanised steel;
 - (iv) Metal weatherboards;
 - (v) Fibre cement weatherboards; or
 - (vi) Reflective materials.
- (f) Use any of the following roofing materials for a Building:
 - (i) Zinalume;
 - (ii) Galfan;
 - (iii) Reflective materials;
 - (iv) Buytnol (except in flat roof areas);
 - (v) Pressed metal tiles; or
 - (vi) Unpainted or non-colour treated materials.
- (g) Use the Servient Tenement or a building on the Servient Tenement for any use other than residential, bed & breakfast, or homestay purposes.

3802111

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant**

- (h) Use any caravan, hut or shed as a Dwelling or as any other form of temporary or permanent residential accommodation other than as temporary workers' sheds during construction of a new Dwelling which must be removed upon practical completion of that new Dwelling.
 - (i) Allow un-maintained vehicles to be stored on the Servient Tenement.
 - (j) Park any caravan anywhere on the Servient Tenement other than in a garage provided for that purpose.
 - (k) Use any A-frame design for any Building.
 - (l) Use a roof pitch angle greater than 35 degrees for any Building.
 - (m) Use a roof pitch for any Building less than 15 degrees except that a roof pitch of 0-15 degrees may be allowed where such roof area is less than 25% of the total roof area.
- 2.2. If the Grantor commences the erection or construction of any Building on the Servient Tenement, the Grantor must ensure that Building is completed within 18 months from the date of commencement of erection or construction. Completion is deemed to include affixing all exterior cladding and completing all exterior painting. This clause does not prevent the Grantor from constructing a Dwelling in separate stages over a long period of time provided that each stage is completed within a one year period.
- 2.3. The Grantor must ensure that all construction activities and construction materials are contained within the boundaries of the Servient Tenement.
3. **Vegetation Controls**
- The Grantor shall not allow the growth on the Servient Tenement of any gorse, broom or other noxious plants as the same are defined by the Noxious Plants Act 1978 (immediately prior to the repeal of that Act).
4. **External Area Controls**
- The Grantor must not use the Servient Tenement for storing or accumulating any rubbish or materials other than building materials when constructing a new Building (and for that purpose the Grantor shall ensure any excess material including excess building materials and/or rubbish are stored in a sightly manner and is removed from the Servient Tenement without delay and in any event at least every two weeks).
5. **Animal Controls**
- The Grantor must not keep on the Servient Tenement a dog which is a danger, nuisance or annoyance to the Grantee.
6. **Controls on Subdivision and Dwellings**
- The Grantor must not:
- (a) erect more than one Dwelling on the Servient Tenement; or
 - (b) further subdivide the Servient Tenement.

3802111

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant****7. Damage to Common Property**

7.1. The Grantor must not:

- (a) Cause any damage to any part of the Road adjoining or adjacent to the Servient Tenement during or as a consequence of construction of any improvements on the Servient Tenement or otherwise.
- (b) Interfere with or cause any damage to any trees or landscaping located on any part of any Road adjoining or adjacent to the Servient Tenement, including by removing, cutting down or trimming any tree or plant.

7.2. Any damage caused by the Grantor or their representatives, contractors or invitees shall be repaired solely at the Grantor's cost.

7.3. Any damage caused by an employee, contractor or other person carrying out any works or activities on the Servient Tenement or by a vehicle driven by any person carrying out such works is deemed to be caused by the Grantor.

8. Farming Operations

8.1. The Grantor must not object to any farming operation carried out on the Dominant Tenement.

9. Restoration

9.1. In the event of fire or other destruction the Grantor shall promptly repair, restore or remove any damaged or destroyed structures.

10. Drainage

10.1. The Grantor acknowledges that:

- (a) as at the date of registration of this Instrument, there is an overland water flow path and drainage channel contained in the Servient Tenement that provides an overland flow path for stormwater from other land during rainfall events (**Channel**);
- (b) it will not modify the Channel;
- (c) it must, at all times, maintain the Channel in clean condition and free from any obstruction; and
- (d) it releases any party from liability relating to the Channel (and the flow of water through the Channel).

11. Severability

11.1. If any of the provisions of this Instrument are judged invalid, unlawful or unenforceable for any reason whatsoever by a Court of competent jurisdiction, such invalidity, unenforceability or illegality will not affect the operation, construction or interpretation of any other provision of this Instrument to the intent that the invalid, unenforceable or illegal provisions will be treated for all purposes as severed from this Instrument. In the event of any such severance the parties will use reasonable endeavours to negotiate with the intent that the Instrument shall achieve the economic, legal and commercial objectives of the unenforceable term, covenant or obligation.

3802111

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant****12. Servient Tenement - Roads and Reserves**

- 12.1. The Grantee consents to all or any part of the Servient Tenement being vested or dedicated as any road or reserve (**Road and/or Reserve**) including (without limitation) any local purpose reserve for public utilities or esplanade reserve or strip, in the local authority, territorial authority, NZ Transport Agency (or any such replacement entity), or the Crown (such entities together referred to as a **Governing Body**). The Grantee agrees that the rights and obligations under this Instrument shall cease to apply in respect of those Roads and/or Reserves upon Land Information New Zealand's approval of the survey plan which provides for the vesting or dedication (**Survey Plan**). This clause will be deemed to be the Grantee's consent required to allow the Roads and/or Reserves to be vested or dedicated as road (as applicable)(including under section 224(b)(i) of the Resource Management Act 1991 and section 114(2) of the Public Works Act 1981). If required to do so by the Grantor, the Grantee will execute and return to the Grantor in a timely manner any required consent to the vesting or dedication (as applicable) or easement surrender document in respect of this Instrument and that part of the Servient Tenement which is subject to the vesting or dedication (as applicable).
- 12.2. Any registered proprietor (**Dominant Encumbrancees**) of an encumbrance or mortgage instrument registered against the Dominant Tenement after the date of registration of this Instrument will take their interest/s in the Dominant Tenement subject to the terms of this Instrument and, in particular (without limitation to this clause) will be deemed to have given its consent to the vesting or dedication of any Road or Reserve (including under section 224(b)(i) of the Resource Management Act 1991 and section 114(2) of the Public Works Act 1981).
- 12.3. The Grantee consents to all or any part of the Servient Tenement being declared to be road pursuant to Part 8 of the Public Works Act 1981 (as amended from time to time). The provisions of this clause shall constitute the written consent of the Grantee for the purposes of section 114(2) of the Public Works Act 1981. If required to do so by the Grantor, the Grantee will execute and return to the Grantor in a timely manner any required consent or easement surrender document in respect of that part of the Servient Tenement which is subject to the declaration.
- 12.4. The Grantee covenants and agrees with the Grantor that the Grantee will not at any time:
- (a) lodge any objection personally or through any agent or servant (including by being a member of any group or society, whether incorporated or not); or
 - (b) support in any way (financial or otherwise) any objection;
- to any proposal to stop roads or create new roads, passing through all or any part of the Servient Tenement, pursuant to the Local Government Act 1974 (as amended from time to time).
- 12.5. Nothing contained in this Instrument shall apply to any Grantee that is a Governing Body and this Instrument is deemed to be temporarily surrendered against any Dominant Tenement while the registered proprietor of that Dominant Tenement is a Governing Body.

3802111

Form B**Easement instrument to grant easement or *profit à prendre*, or create land covenant****13. Dominant Tenement – Road and Reserve and surrender on request**

- 13.1. The Grantor consents to all or any part of the Dominant Tenement being vested or dedicated as any road or reserve (**Road and/or Reserve 1**) including (without limitation) any local purpose reserve for public utilities or esplanade reserve or strip, in any Governing Body. The Grantor agrees that the rights and obligations under this Instrument shall cease to apply in respect of those Roads and/or Reserves 1 upon Land Information New Zealand's approval of the survey plan which provides for the vesting or dedication (**Survey Plan 1**). This clause will be deemed to be the Grantor's consent required to allow the Roads and/or Reserves 1 to be vested or dedicated as road (as applicable)(including under section 224(b)(i) of the Resource Management Act 1991 and section 114(2) of the Public Works Act 1981). If required to do so by the Grantee, the Grantor will execute and return to the Grantee in a timely manner any required consent to the vesting or dedication (as applicable) or easement surrender document in respect of this Instrument and that part of the Dominant Tenement which is subject to the vesting or dedication (as applicable).
- 13.2. Any registered proprietor (**Servient Encumbrancees**) of an encumbrance or mortgage interest registered against the Servient Tenement after the date of this instrument will take their interest/s in the Servient Tenement subject to the terms of this Instrument and, in particular (without limitation to this clause) will be deemed to have given its consent to the vesting or dedication of any road or reserve (including under section 224(b)(i) of the Resource Management Act 1991 and section 114(2) of the Public Works Act 1981).
- 13.3. The Grantor consents to all or any part of the Dominant Tenement being declared to be road pursuant to Part 8 of the Public Works Act 1981 (as amended from time to time). The provisions of this clause shall constitute the written consent of the Grantor for the purposes of section 114(2) of the Public Works Act 1981. If required to do so by the Grantee, the Grantor will execute and return to the Grantee in a timely manner any required consent or easement surrender document in respect of that part of the Dominant Tenement which is subject to the declaration.
- 13.4. The Grantor covenants and agrees with the Grantee that the Grantor will not at any time:
- (a) lodge any objection personally or through any agent or servant (including by being a member of any group or society, whether incorporated or not); or
 - (b) support in any way (financial or otherwise) any objection;
- to any proposal to stop roads or create new roads, passing through all or any part of the Dominant Tenement, pursuant to the Local Government Act 1974 (as amended from time to time).
- 13.5. Without limiting clauses 13.1 to 13.4 (inclusive), the Grantor will, at its cost, on a Grantee's request (from time to time), in a timely manner:
- (a) sign all documents (including Authority and Instruction Forms) and do all things reasonably required to register a surrender of this Instrument as against all or any part of the certificate of title for that Grantor's Servient Tenement or the Grantee's Dominance Tenement (**Easement Surrender Instrument**) for any reason whatsoever.
 - (b) use reasonable endeavours to obtain any consents from any Servient Encumbrancee to deposit or register any Survey Plan 1 or to register the Easement Surrender Instrument.
- 13.6. Nothing contained in this Instrument shall apply to any Grantor that is a Governing Body and this Instrument is deemed to be temporarily surrendered against any Servient Tenement while the registered proprietor of that Servient Tenement is a Governing Body.

3802111

View Instrument Details



Instrument No 11985538.6
Status Registered
Date & Time Lodged 05 July 2021 17:10
Lodged By Wilson, Catherine Virginia
Instrument Type Land Covenant under s116(1)(a) or (b) Land Transfer Act 2017



Affected Records of Title	Land District
217639	Otago
964835	Otago
964836	Otago

Annexure Schedule Contains 6 Pages.

Covenantor Certifications

- I certify that I have the authority to act for the Covenantor and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Robert Henry Huse as Covenantor Representative on 02/07/2021 10:39 AM

Covenantee Certifications

- I certify that I have the authority to act for the Covenantee and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Catherine Virginia Wilson as Covenantee Representative on 05/07/2021 02:24 PM

*** End of Report ***

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

Form 26

Covenant Instrument to note land covenant

(Section 116(1)(a) & (b) Land Transfer Act 2017)

Covenantor

Alexander Kenneth Robins and Robins Farm Limited

Covenantee

Hugh James Mark Callaghan, Adele Joy Robins and Andrew Craig Robins

Grant of Covenant

The Covenantor, being the registered owner of the burdened land(s) set out in Schedule A, **grants to the Covenantee** (and, if so stated, in gross) the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s).

Schedule A

Continue in additional Annexure Schedule, if required

Purpose of covenant	Shown (plan reference)	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Land covenants (as set out in Schedule B)	All that land contained within the Burdened Land	964836 217639	964835

Covenant rights and powers (including terms, covenants and conditions)

The provisions applying to the specified covenants are those set out in:

~~[Memorandum number _____, registered under section 209 of the Land Transfer Act 2017].~~

Annexure Schedule B

2000178 | 6008819v4

page 1

Annexure Schedule B

Background

- (A) The Covenantor is the registered owner of the Burdened Land.
- (B) The Covenantor and Covenantee have agreed that the Burdened Land will be subject to the Covenants.

1. Interpretation

1.1 For the purposes of this Instrument:

- (a) **"Application"** means any planning or approval process under the RMA or other legislation which enables or facilitates subdivision, use or development of land and includes:
 - (i) any resource consent application (including variation), designation procedure, change or variation to a District Plan (whether initiated by a Relevant Authority or requested by any other person or body);
 - (ii) any change, review or cancellation of any condition(s) of any consent or other approval which enables any subdivision, use or development of land;
 - (iii) any planning or approval process under any legislation which facilitates the subdivision, use or development of the Benefited Land such as, by way of example, any process relating to the provision of infrastructure to the Benefited Land and any process to create, stop or relocate a legal road under the Public Works Act 1981 or the Local Government Act 1974,

but excludes any enforcement proceedings taken to ensure compliance with a District Plan or the RMA or any other legislation or any consent or approval granted or issued under any such legislation.
- (b) **"Approved Activity"** means the subdivision, use or development of the Benefited Land for any purpose.
- (c) **"Benefited Land"** means all or any part of the land contained or formerly contained in the Burdened Land set out in Schedule A of this Instrument.
- (d) **"Burdened Land"** means all or any part of the land contained or formerly contained in the Burdened Land set out in Schedule A of this Instrument.
- (e) **"Covenants"** means the covenants set out in this Instrument.
- (f) **"Covenantee"** means the registered owners of the Benefited Land from time to time.
- (g) **"Covenantor"** means the registered owner of the Burdened Land from time to time together with its tenants, occupiers or invitees on the Burdened Land.
- (h) **"District Plan"** means any operative or proposed plan, statement or similar concept that controls or restricts any subdivision, use or development of the Benefited Land.
- (i) **"Instrument"** means the front pages of this Instrument together with all Schedules attached to it.

2200176 | 8008819v4

page 2

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

- (j) **"Lodge any Submission"** means (without limitation) personally or through any agent or servant (including by being a member of any group or society, whether incorporated or not), directly or indirectly lodge a submission or objection or support in any way (financial or otherwise) any submission or objection to any Planning Proposal or take any steps whatsoever in relation to any Planning Proposal and includes (without limitation) taking part in any hearing, mediation, caucusing or appeal arising in respect of any Planning Proposal whether as a party, surrogate or otherwise.
- (k) **"Planning Proposal"** means any Application for, or in relation to, any Approved Activity.
- (l) **"Relevant Authority"** means any court, tribunal, government, local, statutory or non-statutory body including the Queenstown-Lakes District Council and Otago Regional Council having jurisdiction over the land referred to in this Instrument.
- (m) **"RMA"** means the Resource Management Act 1991.

1.2 For the avoidance of doubt:

- (a) words importing the singular number include the plural and vice versa.
- (b) references to the parties are references to the Covenantor and the Covenantee.
- (c) a covenant to do something is also a covenant to permit or cause that thing to be done and a covenant not to do something is also a covenant not to permit or cause that thing to be done.
- (d) this Instrument binds the Covenantor and their heirs, executors, successors and assigns in perpetuity and also any lessee, occupier or invitee of or on the Burdened Land.
- (e) this Instrument benefits the Covenantee and their heirs, executors, successors and assigns in perpetuity.
- (f) a reference to a statute, regulation or by-law includes all statutes, regulations, or by-laws varying, consolidating or replacing them, and a reference to a statute includes all regulations or by-laws issued under that statute.

2. General Covenants

2.1 The Covenantor covenants and agrees:

- (a) to observe and perform all the Covenants at all times.
- (b) that the Covenants shall run with and bind the Burdened Land for the benefit of the Benefited Land.
- (c) to pay the Covenantee's legal costs (as between solicitor and client) of and incidental to the enforcement or attempted enforcement of the Covenantee's rights, remedies and powers under this Instrument.

2200178 | 6003519v4

page 3

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

3. Covenants in Relation to Approved Activities

- 3.1 The Covenantor covenants and agrees with the Covenantee that the Covenantor:
- (a) will not at any time Lodge any Submission to any Planning Proposal lodged by the Covenantee (or its nominee nominated as such in writing (**Nominee**)). and further, if called upon to do so by the Covenantee or Nominee, will provide written approval (including affected person's approval under the RMA and as owner of the Burdened Land under the Building Act 2004) in respect of any such Planning Proposal (referred to as **Covenantor's Written Approval**).
 - (b) hereby gives Covenantor's Written Approval for any Planning Proposal referred to in clause 3.1(a). The Covenantee and Nominee shall be entitled to provide a copy of this Instrument to the Relevant Authority as evidence that the Covenantor's Written Approval is given. The Covenantor shall provide any necessary further written approval to any such Planning Proposal if requested by the Covenantee or Nominee.
 - (c) irrevocably nominates, constitutes and appoints the Covenantee or Nominee to be the true and lawful attorney of the Covenantor for the purposes of executing all documents and plans and performing all acts, matters and things as may be necessary (without limitation) to provide any Covenantor's Written Approval.
 - (d) will, if called upon to do so, enter into and execute a deed of appointment of power of attorney in favour of the Covenantee or Nominee on the terms and for the purposes set out in clause 3.1(c).
- 3.2 The parties acknowledge and agree that:
- (a) the covenants contained within this Instrument will attach to and run with the Burdened Land as a burden on that land to the extent that they restrict the Covenantor from acting in relation to the Burdened Land by exercising rights under the RMA or other legislation which arise from ownership of the Burdened Land and which the Covenantor would otherwise have been able to exercise for the benefit of the Burdened Land.
 - (b) the burden placed upon the Burdened Land by this Instrument is for the benefit of the Covenantee.
- 3.3 The Covenantor and Covenantee agree that the Covenantor's obligations and covenants under clause 3.1 are for the benefit of the Covenantee.

4. Surrender on request

- 4.1 The Covenantor will, at its cost, on a Covenantee's request (from time to time), immediately:
- (a) sign all documents (including Authority and Instruction Forms) and do all things reasonably required to register a surrender of this Instrument as against all or any part of the record of title for that Covenantor's Burdened Land (**Easement Surrender Instrument**) for any reason whatsoever.
 - (b) use reasonable endeavours to obtain any consents from any encumbrancee of the Burdened Land to deposit or register any Survey Plan or to register the Easement Surrender Instrument reasonably required by the Covenantee.

2200178 | 6003510v4

page 4

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

5. Road Vesting

- 5.1 The Covenantee consents to any part of the Burdened Land being vested or dedicated as any road or reserve (**Road and/or Reserve**) including (without limitation) any local purpose reserve for public utilities or esplanade reserve or strip, in the local authority, territorial authority, NZ Transport Agency (or any such replacement entity), or the Crown (each a **Governing Body**). The Covenantee further consents to all or any part of the Burdened Land being declared to be road pursuant to Part 8 of the Public Works Act 1981 (as amended from time to time).
- 5.2 This clause will be deemed to be the Covenantee's consent required to allow the Road and/or Reserves to be vested, dedicated or declared as road or reserve (as applicable) (including under section 224(b)(i) of the Resource Management Act 1991 and section 114(2) of the Public Works Act 1981).
- 5.3 The Covenantor and Covenantee agree that the rights and obligations under this instrument shall cease to apply and this instrument is deemed terminated in respect of any Road and/or Reserve:
- (a) in the case of vesting of Road and/or Reserve, immediately upon Land Information New Zealand's (**LINZ**) survey approval of the survey plan which provides for such vesting (**Survey Plan**);
 - (b) in the case of dedication of Road, upon registration of a transfer of the proposed road to the Governing Body
- 5.4 If LINZ or a Governing Body determine that further written consent is required pursuant to this instrument to vest or dedicate Road and/or Reserve (as applicable), the Covenantee will (upon request by the Covenantor and notwithstanding clause 5.3.) execute and return to the Covenantor in a timely manner any required consent, covenant surrender document or any other document required in respect of this instrument to allow for any part of the Burdened Land to vest as Road and/or Reserve (as applicable). This clause 5.4 shall not apply to any Covenantee that is a Governing Body to the intent that a Governing Body is not required to provide a written consent or surrender document.

6. General

- 6.1 Any notice required to be served on any party shall be in writing and served in accordance with the Property Law Act 2007.
- 6.2 Any failure by a party to enforce any clause of this Instrument, or any forbearance, delay or indulgence granted by that party to any other party, will not be construed as a waiver of the first party's rights under this Instrument.

7. Liability

- 7.1 Without prejudice to the Covenantor's and Covenantee's other rights, this Instrument binds the Covenantor's successors in title so that contemporaneously with the acquisition of any interest in the Burdened Land all such successors in title become bound to comply with this Instrument. However, the liability of any Covenantor under this Instrument is limited to obligations and liabilities that accrue during that Covenantor's time as registered owner of the Burdened Land and only in respect of that part of the Burdened Land owned by that Covenantor. A Covenantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered owner of the Burdened Land (however, for the avoidance of doubt, any Covenantor shall remain liable for any such antecedent breach following the transfer of the Burdened Land).

2200178 | 6003519v4

page 5

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

8. Severability

- 8.1 If any of the provisions of this Instrument are judged invalid, unlawful or unenforceable for any reason whatsoever by a Court of competent jurisdiction, such invalidity, unenforceability or illegality will not affect the operation, construction or interpretation of any other provision of this Instrument to the intent that the invalid, unenforceable or illegal provisions will be treated for all purposes as severed from this Instrument. In the event of any such severance the parties will use reasonable endeavours to negotiate with the intent that the Instrument shall achieve the economic, legal and commercial objectives of the unenforceable term, covenant or obligation.

2200178 | 6003519v4

page 6



Record of Survey - DP 609704

Survey Number	DP 609704
Surveyor Reference	16667 BFDL
Surveyor	Hayden Arthur Knight
Survey Firm	Clark Fortune McDonald & Associates
Surveyor Declaration	I Hayden Arthur Knight, being a licensed cadastral surveyor, certify that-- (a) this dataset provided by me and its related survey are accurate, correct and in accordance with the Cadastral Survey Act 2002 and Cadastral Survey Rules 2021; and (b) the survey was undertaken by me or under my personal direction. Declared on 19 Feb 2025 03:00 PM

Survey Details

Dataset Description	Lot 1 being Lot 1 DP 21087 and Lot 3 DP 447906 and easements over Part Section 28 Block IX Shotover SD		
Purpose	LT Subdivision		
Status	Deposited	Type	Parcels without Survey Information
Land District	Otago	Survey Class	Class B
Meridional Circuit	Mount Nicholas 2000	Vertical Datum	None

Survey Dates

Surveyed Date	20/09/2024	Certified Date	19/02/2025
Submitted Date	19/02/2025 15:00:52	Survey Approval Date	20/02/2025
Deposit Date	13/02/2025		

Referenced Surveys

Survey Number	Land District	Bearing Correction
DP 376233	Otago	0°00'00"
DP 21087	Otago	0°00'00"
SO 6800	Otago	0°00'00"
DP 11444	Otago	0°00'00"
DP 304263	Otago	0°00'00"
DP 447906	Otago	0°00'00"
SO 6439	Otago	0°00'00"
SO 6400	Otago	0°00'00"

Territorial Authorities

Queenstown-Lakes District

Comprised In

RT 763196
RT 763194
RT 1094840
RT 504035
RT 1094842
RT 964836



Record of Survey - DP 609704

Created Parcels

Parcels	Parcel Intent	Area	RT Reference
Lot 1 Deposited Plan 609704	Hydro		
Area A Deposited Plan 609704	Hydro		
Area B Deposited Plan 609704	Fee Simple Title	5.5358 Ha	1205976
Area C Deposited Plan 609704	Easement		
Area D Deposited Plan 609704	Easement		
Area F Deposited Plan 609704	Easement		
Area G Deposited Plan 609704	Easement		
Area BP Deposited Plan 609704	Easement		
Area E Deposited Plan 609704	Covenant - Land		
	Easement		
Total Area		<u>5.5358 Ha</u>	



Mark and Vector

Survey Number DP 609704
Meridional Circuit Mount Nicholas 2000

From	To	Code	Bearing	Adpt Surv	Bearing Correction	Distance	Adpt Surv	Class
POST DP 21087	POST DP 21087	ob0	164°27'00"	A DP 21087	0°00'00"	43.87 A	DP 21087	Class B
POST DP 21087	POST DP 21087	ob5	210°32'00"	A DP 21087	0°00'00"	58.99 A	DP 21087	Class B
POST DP 21087	POST DP 21087	ob6	158°34'30"	A DP 21087	0°00'00"	46.68 A	DP 21087	Class B
POST DP 21087	UNMK 5 DP 609704	ob8	104°20'40"	A DP 21087	0°00'00"	117.99 C		Class B
UNMK 5 DP 609704	PEG DP 21087	ob33	104°20'40"	A DP 21087	0°00'00"	5.69 C		Class B
PEG DP 21087	UNMK 6 DP 609704	ob9	359°52'15"	A DP 447906	0°00'00"	3.32 C		Class B
UNMK 6 DP 609704	UNMK 49 DP 609704	ob35	359°52'15"	A DP 447906	0°00'00"	62.04 C		Class B
UNMK 50 DP 609704	UNMK 2 DP 609704	ob43	17°24'45"	A DP 447906	0°00'00"	33.14 C		Class B
UNMK 2 DP 609704	PEG DP 21087	ob27	17°24'45"	A DP 447906	0°00'00"	35.93 C		Class B
UNMK DP 11444	PEG DP 11444	ob13	109°27'00"	A DP 447906	0°00'00"	13.36 A	DP 11444	Class B
PEG DP 11444	PEG SO 6800	ob14	109°27'00"	A DP 447906	0°00'00"	34.14 A	DP 11444	Class B
PEG SO 6800	PEG DP 21087	ob15	109°27'00"	A DP 447906	0°00'00"	188.09 A	DP 11444	Class B
PEG DP 21087	PEG III SO 6800	ob16	193°28'15"	A DP 447906	0°00'00"	10.12 A	SO 6800	Class B
PEG III SO 6800	PEG 15 DP 447906	ob17	193°28'15"	A DP 447906	0°00'00"	17.50 A	DP 447906	Class B
PEG 15 DP 447906	POST 18 DP 447906	ob18	291°19'00"	A DP 447906	0°00'00"	28.07 A	DP 447906	Class B
POST 18 DP 447906	POST 19 DP 447906	ob19	266°46'00"	A DP 447906	0°00'00"	33.28 A	DP 447906	Class B
POST 19 DP 447906	POST 20 DP 447906	ob20	184°50'00"	A DP 447906	0°00'00"	13.39 A	DP 447906	Class B
POST 20 DP 447906	POST 16 DP 447906	ob21	260°12'00"	A DP 447906	0°00'00"	75.83 A	DP 447906	Class B
POST 16 DP 447906	POST 17 DP 447906	ob22	240°43'00"	A DP 447906	0°00'00"	14.06 A	DP 447906	Class B
POST 17 DP 447906	PEG 6 DP 447906	ob23	206°30'00"	A DP 447906	0°00'00"	26.55 A	DP 447906	Class B
PEG 6 DP 447906	PEG 12 DP 447906	ob24	199°20'00"	A DP 447906	0°00'00"	15.95 A	DP 447906	Class B
PEG 12 DP 447906	UNMK c DP 447906	ob25	199°20'00"	A DP 447906	0°00'00"	3.30 A	DP 447906	Class BD
PEG DP 21087	UNMK 4 DP 609704	ob12	31°28'50"	A DP 304263	0°00'00"	57.81 C		Class B
UNMK 4 DP 609704	PEG 2 DP 304263	ob32	31°28'50"	A DP 304263	0°00'00"	551.76 C		
UNMK 1 DP 609704	UNMK 10 DP 609704	ob26	287°21'00"	C		42.82 C		Class B
UNMK 3 DP 609704	UNMK 2 DP 609704	ob29	357°23'00"	C		35.26 C		Class B



Mark and Vector

Survey Number DP 609704

Meridional Circuit Mount Nicholas 2000

From	To	Code	Bearing	Adpt Surv	Bearing Distance Correction	Adpt Surv	Class
UNMK 2 DP 609704	UNMK 7 DP 609704	ob28	357°23'00" C		17.15 C		Class B
UNMK 7 DP 609704	POST 53 DP 376233	ob36	11°53'00" C		15.88 C		Class B
POST 53 DP 376233	UNMK 8 DP 609704	ob37	33°19'00" C		49.16 C		Class B
UNMK 8 DP 609704	UNMK 4 DP 609704	ob38	49°21'00" C		15.10 C		Class B
UNMK 5 DP 609704	UNMK 6 DP 609704	ob34	70°52'00" C		5.83 C		Class B
POST DP 21087	UNMK 15 DP 609704	ob1	259°20'00" C		3.20 C		Class B
UNMK 15 DP 609704	UNMK 16 DP 609704	ob40	267°20'00" C		8.23 C		Class BD
UNMK 49 DP 609704	PEG DP 21087	ob41	359°52'15" A DP 447906	0°00'00"	2.08 C		Class B
PEG DP 21087	UNMK 50 DP 609704	ob11	17°24'45" A DP 447906	0°00'00"	3.75 C		Class B
PEG DP 21087	UNMARKED DP 11444	ob10	179°52'15" A DP 21087	0°00'00"	53.66 A DP 11444		
UNMARKED DP 11444	UNMK c DP 447906	ob39	120°55'20" C		158.07 C		
UNMK c DP 447906	UNMK 16 DP 609704	ob4	318°34'00" C		401.59 C		
UNMK c DP 447906	UNMK 46 DP 609704	ob2	294°03'40" C		130.83 C		
UNMK 46 DP 609704	UNMK 16 DP 609704	ob44	329°26'10" C		287.70 C		
UNMK c DP 447906	UNMK 48 DP 609704	ob3	282°21'00" C		127.41 C		
UNMK 48 DP 609704	UNMK 16 DP 609704	ob45	332°42'20" C		308.13 C		
UNMK 52 DP 609704	UNMK 53 DP 609704	ob53	177°23'00" C		1.95 C		Class B
UNMK 53 DP 609704	UNMK 54 DP 609704	ob46	87°23'00" C		3.00 C		Class B
UNMK 54 DP 609704	UNMK 51 DP 609704	ob47	357°23'00" C		2.33 C		Class B
UNMK 10 DP 609704	UNMK 3 DP 609704	ob49	287°21'00" C		3.19 C		Class B
UNMK 3 DP 609704	UNMK 50 DP 609704	ob30	287°21'00" C		12.08 C		Class B
UNMK 49 DP 609704	UNMK 20 DP 609704	ob42	97°46'00" C		2.72 C		Class B
UNMK 20 DP 609704	UNMK 19 DP 609704	ob51	132°11'00" C		12.65 C		Class B
UNMK 19 DP 609704	UNMK 52 DP 609704	ob50	80°12'00" C		1.09 C		Class B



Mark and Vector

Survey Number DP 609704

Meridional Circuit Mount Nicholas 2000

From	To	Code	Bearing	Adpt Surv	Bearing Distance Correction	Adpt Surv	Class
UNMK 52 DP 609704	UNMK 51 DP 609704	ob52	80°12'00" C		3.02 C		Class B
UNMK 51 DP 609704	UNMK 18 DP 609704	ob54	80°12'00" C		10.36 C		Class B
UNMK 18 DP 609704	UNMK 17 DP 609704	ob55	107°21'00" C		42.46 C		Class B
UNMK 3 DP 609704	UNMK 52 DP 609704	ob31	177°23'00" C		10.75 C		Class B
UNMK 10 DP 609704	UNMK 51 DP 609704	ob48	177°23'00" C		9.28 C		Class B
POST DP 21087	UNMK 9 DP 609704	ob7	326°16'00" C		11.10 C		
UNMK 9 DP 609704	UNMK 55 DP 609704	ob56	30°32'00" C		49.65 C		Class B
UNMK 55 DP 609704	POST DP 21087	ob58	96°15'00" C		11.00 C		
UNMK 9 DP 609704	UNMK 13 DP 609704	ob57	300°32'00" C		12.00 C		Class B
UNMK 13 DP 609704	UNMK 14 DP 609704	ob59	2°18'00" C		21.17 C		Class B
UNMK 14 DP 609704	UNMK 11 DP 609704	ob60	30°32'00" C		31.00 C		Class B
UNMK 11 DP 609704	UNMK 55 DP 609704	ob61	120°32'00" C		22.00 C		Class B



Mark and Vector

Survey Number DP 609704

Meridional Circuit Mount Nicholas 2000

From	To	Code	Chord Bearing	Arc Length	Radius	Adpt Surv
PEG DP 21087	UNMK 1 DP 609704	ob62	157°19'05"	93.87	96.68 A	DP 11444
UNMK 17 DP 609704	UNMK DP 11444	ob64	115°43'00"	21.17	96.68 A	DP 11444
UNMK 1 DP 609704	UNMK 17 DP 609704	ob63	125°44'40"	12.68	96.68 A	DP 11444

Mark Name	Mark Condition	Description
POST 16 DP 447906		Boundary disk in post
POST 17 DP 447906		Boundary disk in post
POST 18 DP 447906		Boundary disk in post
POST 19 DP 447906		Boundary disk in post
POST 20 DP 447906		Boundary disk in post

*** End of Report ***

Schedule / Memorandum

LT 609704 Schedule/Memorandum

Land registration district

Otago

Territorial authority

Queenstown-Lakes District

Memorandum of Easements

Parcels shown with a prefix of *HL*- include height-limited boundaries

PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of way	A	Part Section 28 Block IX Shotover SD	Lot 1, Lot 3 DP 583319, Part Section 17 Block IX Shotover SD, Section 63 Block IX Shotover SD, Lot 1 DP 26926, Lot 1 DP 583319
" "	B	Part Section 28 Block IX Shotover SD	Lot 1
" "	C	Lot 1	Lot 3 DP 583319, Part Section 17 Block IX Shotover SD, Section 63 Block IX Shotover SD, Lot 1 DP 26926, Lot 1 DP 583319
Right to drain sewage, water Right to convey water	A	Part Section 28 Block IX Shotover SD	Lot 1, Part Section 17 Block IX Shotover SD, Section 63 Block IX Shotover SD, Lot 1 DP 26926
" "	B	Part Section 28 Block IX Shotover SD	Lot 1
" "	C	Lot 1	Part Section 17 Block IX Shotover SD, Section 63 Block IX Shotover SD, Lot 1 DP 26926

Memorandum of Easements in Gross

PURPOSE	SHOWN	BURDENED LAND	GRANTEE
Right to convey electricity	A	Part Section 28 Block IX Shotover SD	Aurora Energy Limited
" "	C	Lot 1	Aurora Energy Limited

LT 609704 - Schedule/Memorandum

Updated on 13/01/2025 9:42am

Page 1 of 2

Schedule / Memorandum

For split tables refer to previous page

Memorandum of Easements in Gross

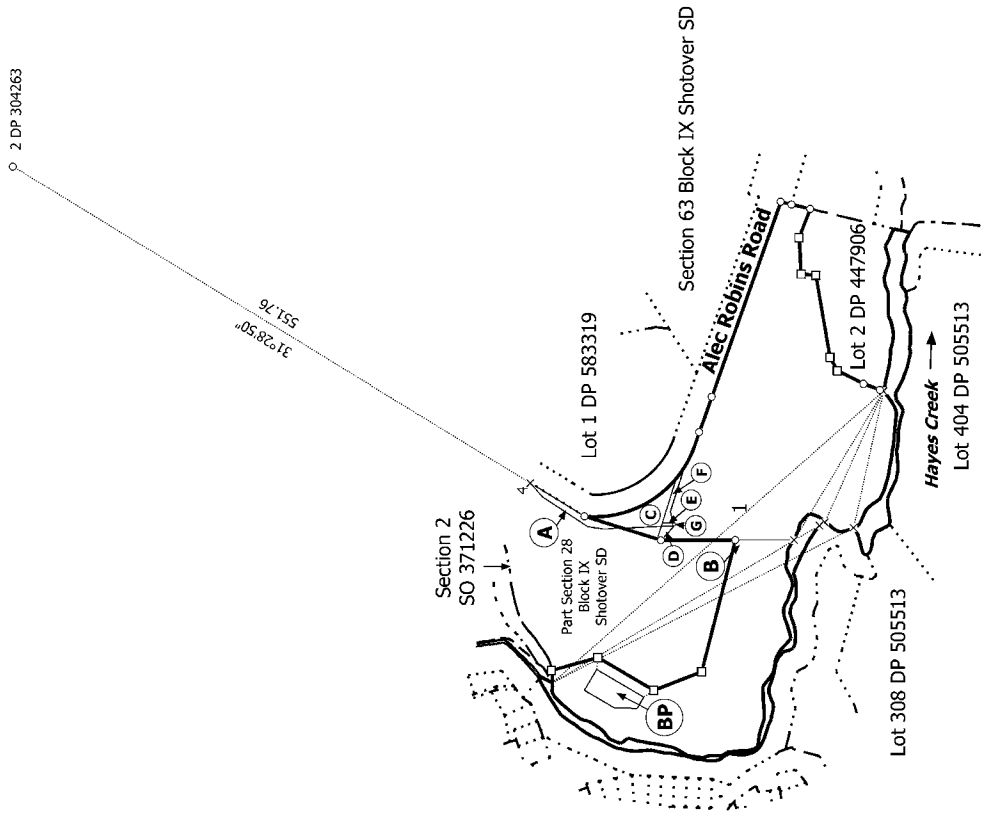
PURPOSE	SHOWN	BURDENED LAND	GRANTEE
" "	E	Lot 1	Aurora Energy Limited
" "	G	Lot 1	Aurora Energy Limited
Right of Way (Pedestrian and Cycle)	E, D, F	Lot 1	Queenstown Lakes District Council

Amalgamation Conditions

Lot 404 DP 505513, Lot 405 DP 505513 & Lot 406 DP 505513 shall be held in the same record of title (See CSN 1935458)

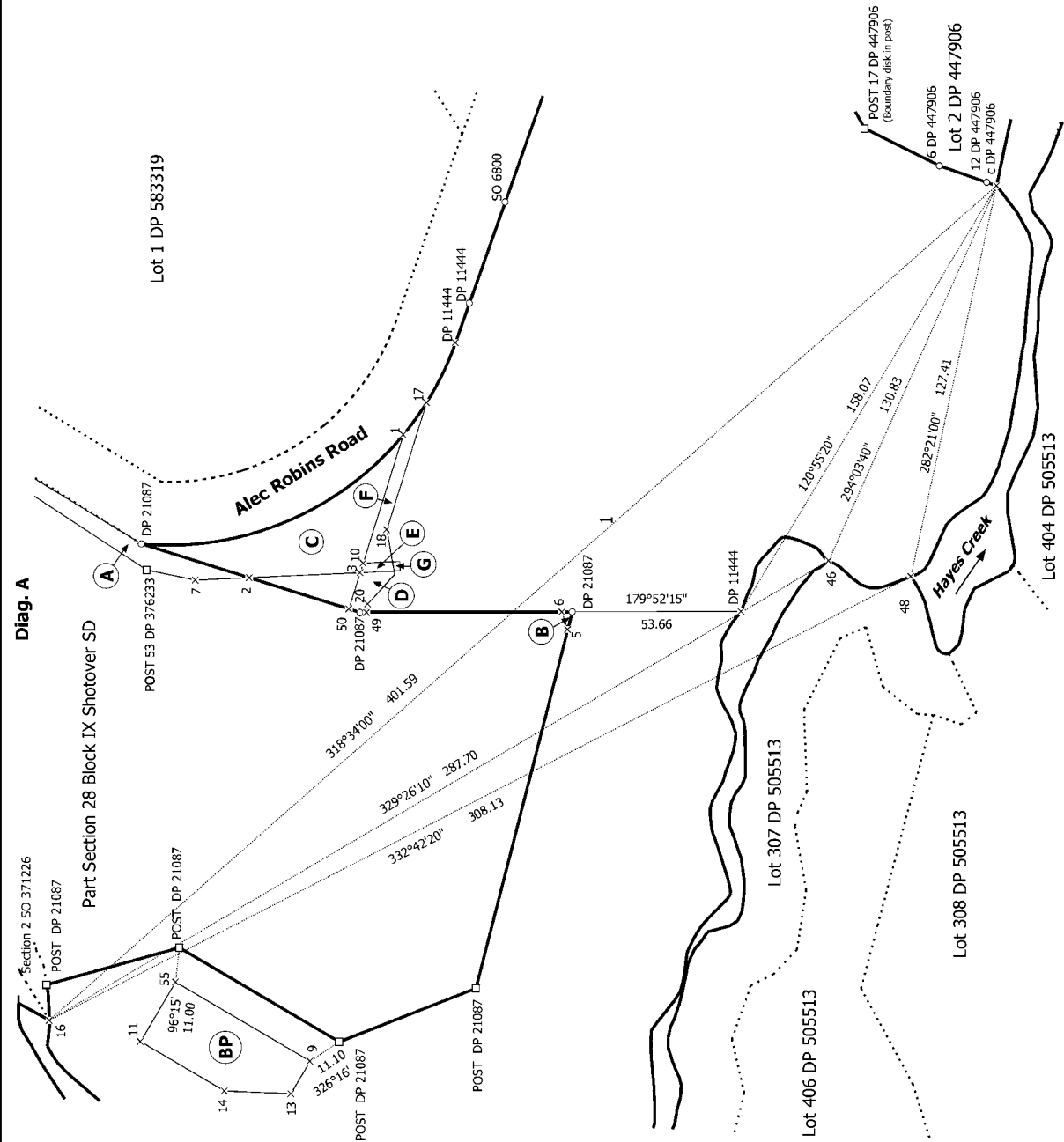
Notes

Area marked BP is to be subject to a Land Covenant (Building Platform)



S 1/2

<p>Land District: Otago Dataset Type: Parcels without Survey Information Digitally Generated Plan Generated on: 27/02/2025 10:13am Page 9 of 13</p>	<p>Lot 1 being Lot 1 DP 21087 and Lot 3 DP 447906 and easements over Part Section 28 Block IX Shotover SD</p>	<p>Surveyor: Hayden Arthur Knight Firm: Clark Fortune McDonald & Associate Date of Survey: 20/09/2024</p>	<p>Record of Survey DP 609704 Deposited on: 13/02/2025</p>
--	---	---	--

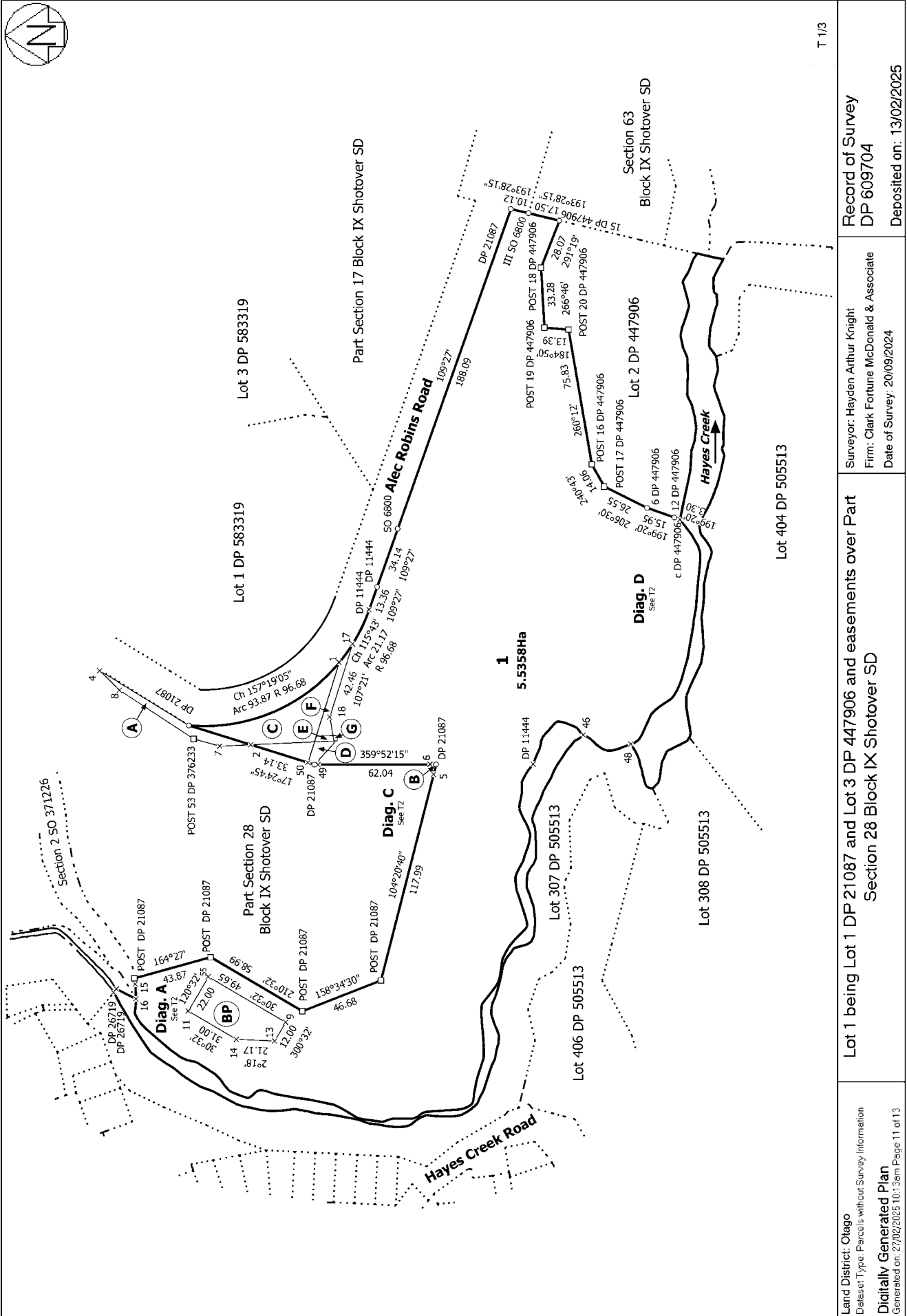


S 2/2

Lot 1 being Lot 1 DP 21087 and Lot 3 DP 447906 and easements over Part
Section 28 Block IX Shotover SD

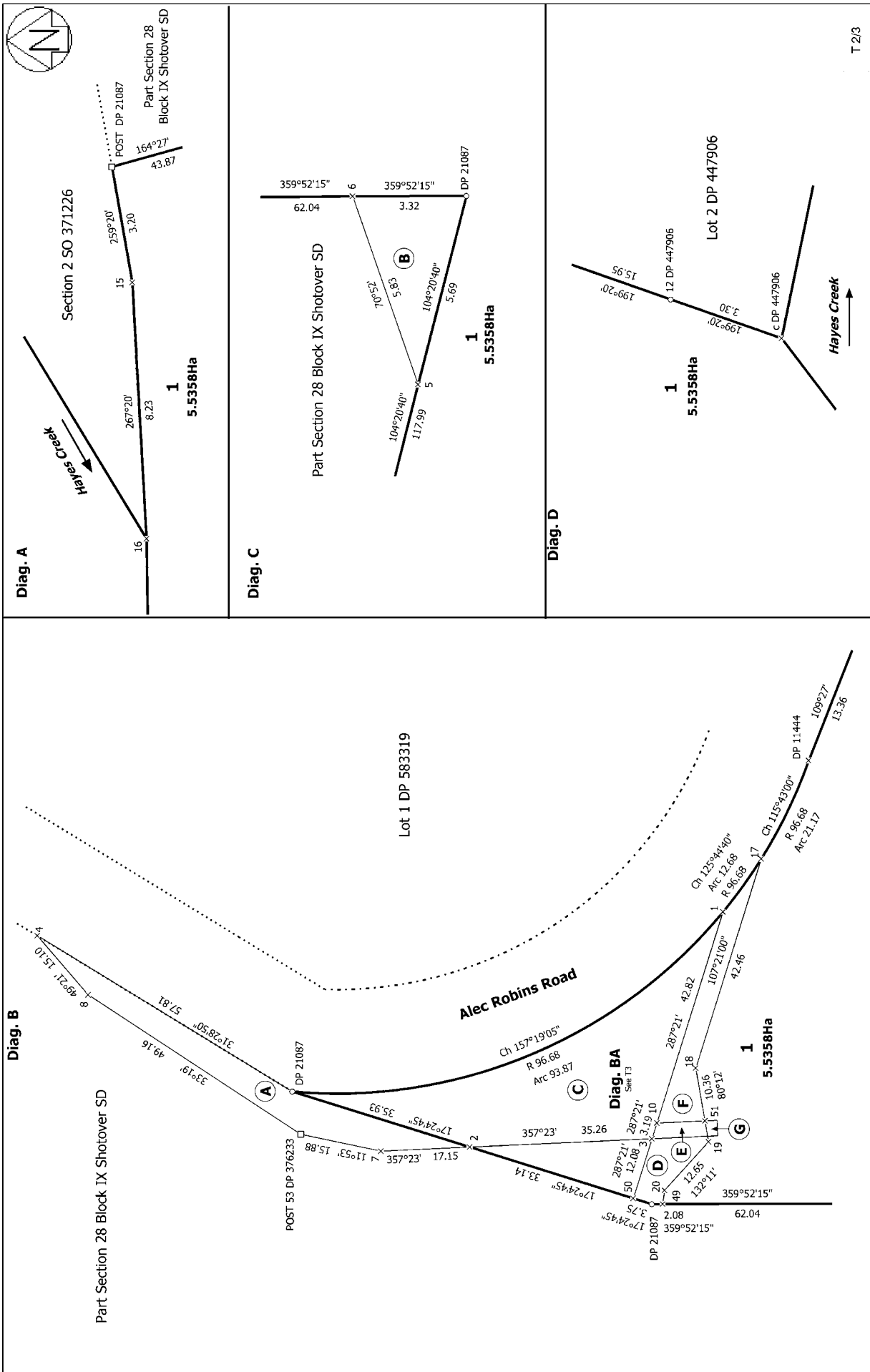
Surveyor: Hayden Arthur Knight
Firm: Clark Fortune McDonald & Associate
Date of Survey: 20/09/2024

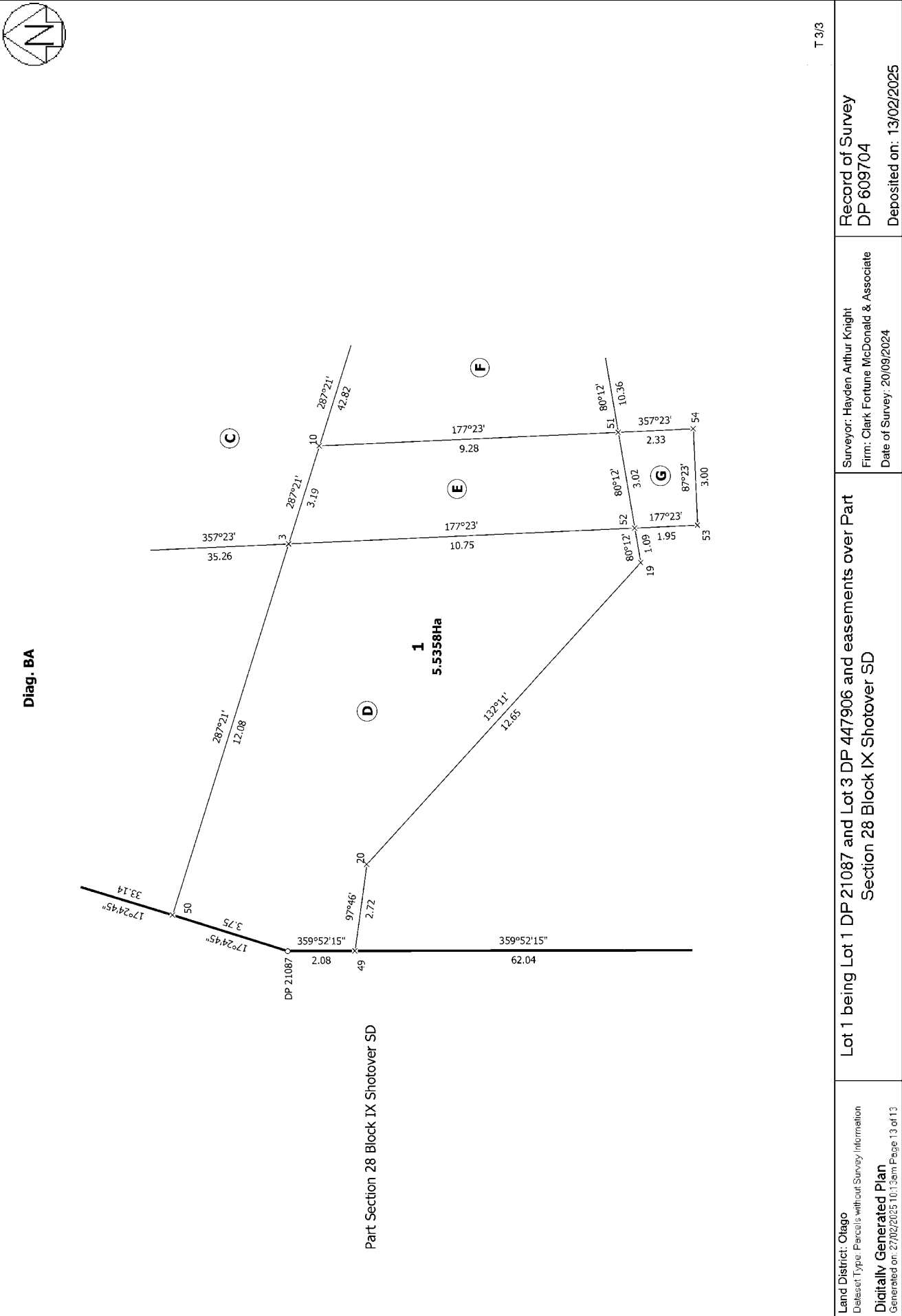
Record of Survey
DP 609704
Deposited on: 13/02/2025



T 1/3

Land District: Otago Dataset Type: Parcels without Survey Information Digitally Generated Plan Generated on: 27/02/2023 10:13am Page 11 of 13	Lot 1 being Lot 1 DP 21087 and Lot 3 DP 447906 and easements over Part Section 28 Block IX Shotover SD	Surveyor: Hayden Arthur Knight Firm: Clark Fortune McDonald & Associate Date of Survey: 20/09/2024	Record of Survey DP 609704 Deposited on: 13/02/2025
--	--	--	---





Applicant Statement

We, Mike and Gemma Smith (née Pemberton) of Kincardine Angus Ltd and Trustees of Little Morven Trust, respectfully submit this application for a dwelling and shed on our property within the Morven Hill Priority Area (PA). Our aim is to sustain the land's purpose as a viable component of our farming unit maintaining the rural landscape values upholding the objectives and policies of the District Plan.

Introduction

Gemma Smith (nee Pemberton) was a Resource Management Planner for a decade, with eight years of experience working in the Queenstown Lakes District as a consultant town planner. Mike Smith is currently the President of Angus New Zealand. Together, we bring a unique combination of professional planning expertise and agricultural experience to the stewardship of our land. We own and operate Kincardine Angus Cattle Stud. Until recently, we also operated three locally based childcare centres (Gems Educational Childcare). Our two teenage daughters benefit from this blend of rural and urban opportunities, growing up on a working farm while accessing world-class educational and cultural amenities in the Wakatipu Basin.

Background

Since 2008, we have leased and farmed the 93-hectare property including the subject site, which became our family home in 2012. This land contained a cottage, farm sheds and stock handling facilities. These facilities were not contained on the subject site, but on the flats that have recently been subdivided.

In 2022, we purchased 53 hectares of the hill block, which forms part of the Kincardine Angus Cattle Stud, established by Mike's family in 1969 in Canterbury. The balance of the land (approximately 30 hectares), which we originally leased, has recently been subdivided into 20 house sites on the flats to the west along Alec Robins Road by Hayes Creek Trust (Robins Family).

Alongside farming Angus cattle, we graze between 180-250 sheep and manage other grazing arrangements across approx. 200 hectares in the area, and Remarkables Station. However, the property currently lacks essential infrastructure such as a dwelling, stock handling facilities, and sheds, which are crucial for the continuation of our farming operations.

We acknowledge that the size of our land parcel (53 hectares) does not meet the District Plan's identified minimum area of 100 hectares to define a farming unit. While we may not represent a traditional farming unit, we have successfully farmed in this manner for over a decade, growing our Angus Stud. Land prices in the Wakatipu Basin make purchasing larger parcels for farming financially unviable. Our model of leasing and grazing larger parcels of land in the basin is working (and does for other similar operators) and provides a practical solution for landowners of 50–100-hectare properties who may lack the interest or expertise to farm. This approach ensures that rural amenity values are upheld, fire risks are mitigated, and pest and weed species are managed effectively through grazing.

Commitment to District Plan Objectives

We fully support the Rural Zone purpose outlined in the Queenstown Lakes District Plan, which seeks to enable farming activities while protecting landscape values, ecosystems, and rural amenity. Farming on Morven Hill sustains the openness and perceptual value of this Outstanding Natural Feature (ONF), contributing to its ecological and cultural heritage.

After years of farming and managing this land, we have identified specific locations for the proposed dwelling and shed that best meet both our needs as custodians and the objectives of the District Plan. These locations have been chosen with care to ensure minimal visual and environmental impact, maintaining the integrity of the landscape, and utilise the existing track system on the farm.

Our operations have actively mitigated land degradation. Persistent rabbit infestations have required significant pest management efforts, including fencing, poisoning, and shooting programs. Weed control, including helicopter and manual spraying, addresses invasive species like gorse and broom. We are the primary drivers and facilitators of weed and pest management programmes in our local community, coordinating with our rural lifestyle neighbours, ORC and QLDC, ensuring that everyone is onboard and involved in the plan for our local area. We've also commenced native planting, investing \$20,000 this year alone between pest management and planting to maintain and improve ecological balance. Without active management, the land risks succumbing to erosion and invasive species, increasing fire risk, and degrading its rural and ecological values.

Need for a Dwelling and Ancillary Facilities

To sustain this investment in the land's productivity which upholds the amenity values desired and identified in the District Plan, we require a dwelling and farm infrastructure. These facilities will enable efficient farm management, support our livelihood, and maintain the land's purpose as a working farm. Unlike traditional large-scale operations, our small-scale, family-run farm offers community benefits, previously facilitating early educational programs where local children experienced farm life, and friends and family are involved in seasonal on-farm activities such as tailing, pest control, and horse riding.

Farming on the periphery of an urban area certainly provides its challenges – it does however also provide opportunity for greater urban and rural connection and education around food production - which is fast disappearing in our social construct. This engagement fosters a deeper connection with the rural landscape and its heritage.

Challenges and Equity

The District Plan already imposes stringent protections on the land. We seek to ensure that provisions are applied consistently and pragmatically, avoiding overregulation that could inadvertently push rural land into disuse. Land stewardship requires a viable economic purpose, as demonstrated by our farming model.

Conclusion

We respect the District Plan's intent and seek to balance landscape protection with sustainable land use. Approval of our application will allow us to maintain the land's farming purpose, ensure its ecological health while maintaining the coveted amenity values of this area, and support our family's social, economic, and cultural wellbeing. By developing essential infrastructure, we can continue to uphold the objectives and policies of the District Plan while providing meaningful contributions to the community and environment.

We appreciate your consideration and welcome any questions.

Gemma and Mike Smith

PROPOSED CONDITIONS OF CONSENT – 15 August 2025

The proposed shed, dwelling and registration of a residential building platform may be undertaken independently and in any order, provided that the relevant conditions of consent as set out below are met.

General Conditions

1. The development shall be undertaken/carried out in accordance with the plans:

Aurum Survey Consultants:

- Site Overview
- Proposed Earthworks
- Shed Profile Plan
- Site Line Profile Plan
- House Platform Profile Plan
- Driveway Retaining Profile Plan
- Driveway Profile Plan

Team Green Architects:

- Topographic Site Plan Overview
- Site Plan
- GL Floor Plan
- Roof Plan
- Elevations

Ultraspan:

- Floor Plan
- Elevations

Vivian + Espie

- Structural Landscape Plan

and the application as submitted, with the exception of the amendments required by the following conditions of consent.

2. This consent shall lapse 10 years from the date of approval.
3. All existing native vegetation with Part Section 17 shall be retained (except where disturbed by the proposed earthworks). All exotic weed species listed below will be removed from Part Section 17 by the consent holder within one year of consent being granted, and it shall be maintained free of these species on an on-going basis:

Contorta or lodgepole pine (*Pinus contorta*)
 Scots pine (*Pinus sylvestris sylvestris*)
 Douglas fir (*Pseudotsuga menziesii*)
 European larch (*Larix decidua*)
 Corsican pine (*Pinus nigra*)
 Bishops pine (*Pinus muricata*)
 Ponderosa pine (*Pinus Ponderosa*)
 Mountain pine (*Pinus mugo uncinata*)
 Dwarf Mountain pine (*Pinus mugo*)
 Maritime pine (*Pinus pinaster*)
 Sycamore (*Acer pseudoplatanus*)
 Hawthorn (*Crataegus monogyna*)

Boxthorn (*Lycium ferocissimum*)
 Buddleia (*Buddleja davidii*)
 Grey willow (*Salix cinerea*)
 Crack willow (*Salix fragilis*)
 Cotoneaster (*Simonsii*)
 Rowan (*Sorbus aucuparia*)
 Spanish heath (*Erica lusitanica*)

4. All engineering works shall be carried out in accordance with the Queenstown Lakes District Council's policies and standards, being QLDC's Land Development and Subdivision Code of Practice adopted on 8 October 2020 and subsequent amendments to that document up to the date of issue of any resource consent.
5. Prior to commencing works associated with residential development on the site (i.e. excluding construction of the shed), the consent holder shall obtain 'Engineering Review and Acceptance' from the Queenstown Lakes District Council for development works to be undertaken and information requirements specified below. The application shall include all development items listed below unless a 'partial' review approach has been approved in writing by the Manager of Development Engineering and Subdivision at Council. The 'Engineering Review and Acceptance' application(s) shall be submitted to the Manager of Development Engineering and Subdivision at Council for review, prior to acceptance being issued. At Council's discretion, specific designs may be subject to a Peer Review, organised by the Council at the applicant's cost. The 'Engineering Review and Acceptance' application(s) shall include copies of all specifications, calculations, design plans and Schedule 1A design certificates as is considered by Council to be both necessary and adequate, in accordance with **Condition 4**, to detail the following requirements:
 - a) Formation of a driveway to access the building platform/dwelling, in accordance with Council's standards for rural accessways. This shall include a minimum 3m wide gravel carriageway in minimum 150mm depth of compacted AP40 gravel with provision for passing as shown on the Driveway Profile Plan dated 13 August 2025 (Drawing 5514.11R.1D by Aurum Survey Consultants). Provision for stormwater disposal shall be via grass swales and/or rock-lined channels where necessary to prevent erosion. There shall be no concrete kerb and channel.
 - b) The provision of a water supply to the building platform/dwelling. The preferred solution shall be via a new 25mm private lateral connection to the Council water main in Alec Robins Road. This will be a restricted supply providing a maximum 2,100 litres per day via an Acuflo GFC900 flow controller set at 1.5 litres per minute or 0.025 litres per second. At the time a dwelling is constructed, an on-site tank will be needed to provide 10,000 litres of buffer storage, along with a localised pressure booster pump. Any alternative means of connecting to Council's water supply shall be subject to the approval of Council's Senior Development Engineer.
 - c) The provision of a connection to Council's wastewater network if a connection is feasible (new gravity main in Alec Robins Road has been completed). Connection to the Council network shall involve the installation of a private package pump station and low pressure pipe connecting to the Council gravity main. OR, if an on-site wastewater treatment and disposal system is to be installed at the time a dwelling is constructed on the site, then **Conditions 9h) and 18** below shall apply instead.
 - d) The provision of Design Certificates for all engineering works associated with this development submitted by a suitably qualified design professional. The certificates shall be in the format of the QLDC's Land Development and Subdivision Code of Practice Schedule 1A Certificate.

Earthworks within 20m of the CML-FKN-A National Grid Transmission Line

6. Prior to the commencement of any earthworks within 20m of the National Grid transmission line, the consent holder shall prepare an Earthworks Management Plan (EMP). The EMP shall be submitted to the Council for information 10 working days prior to the commencement of earthworks.

The EMP shall be provided to Transpower NZ Ltd for comment at least 10 working days prior to being submitted to Council. The EMP shall be provided to Transpower via Patai Form 5 'Submit a Management Plan' - <https://transpower.patai.co.nz/>

The purpose of the EMP is to outline the earthworks, and management procedures to be implemented on site, so that earthworks near the National Grid are undertaken safely and potential adverse effects on the National Grid assets are appropriately managed.

The EMP must include the following (but is not limited to):

- a) The name, experience and qualifications of the person/s nominated by the consent holder to supervise the implementation of, and adherence to, the EMP.
 - b) Drawings, plans, procedures, methods and measures to demonstrate that all earthworks undertaken on the site will meet the safe distances within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34: 2001) or any subsequent revision of the code; including (but not limited to) those relating to:
 - i. Excavations near support structures (Section 2);
 - ii. Ground to Conductor clearances (Section 4);
 - iii. Mobile Plant to conductor clearances (Section 5); and
 - c) Details of any areas that are "out of bounds" during earthworks and within which additional management measures are required, such as fencing off, entry and exit hurdles and the minimum height for any hurdles. Where a safety observer is required, it shall be at the consent holder's cost.
 - d) Demonstrate how the existing transmission lines and support structures will remain accessible during and after earthworks.
 - e) Demonstrate how the effects of dust (including any other material potentially resulting from earthworks able to cause material damage beyond normal wear and tear) on the transmission lines will be managed.
 - f) Demonstrate how changes to the drainage patterns, runoff characteristics and stormwater will avoid adverse effects on the foundations of any support structure.
 - g) Demonstrate how construction activities that could result in ground vibrations and/or ground instability will be managed to avoid causing damage to the transmission lines, including support structures.
 - h) Details of contractor training for those working near the National Grid transmission lines.
7. All works near the National Grid shall be undertaken in accordance with the EMP referred to in **Condition 6** above.

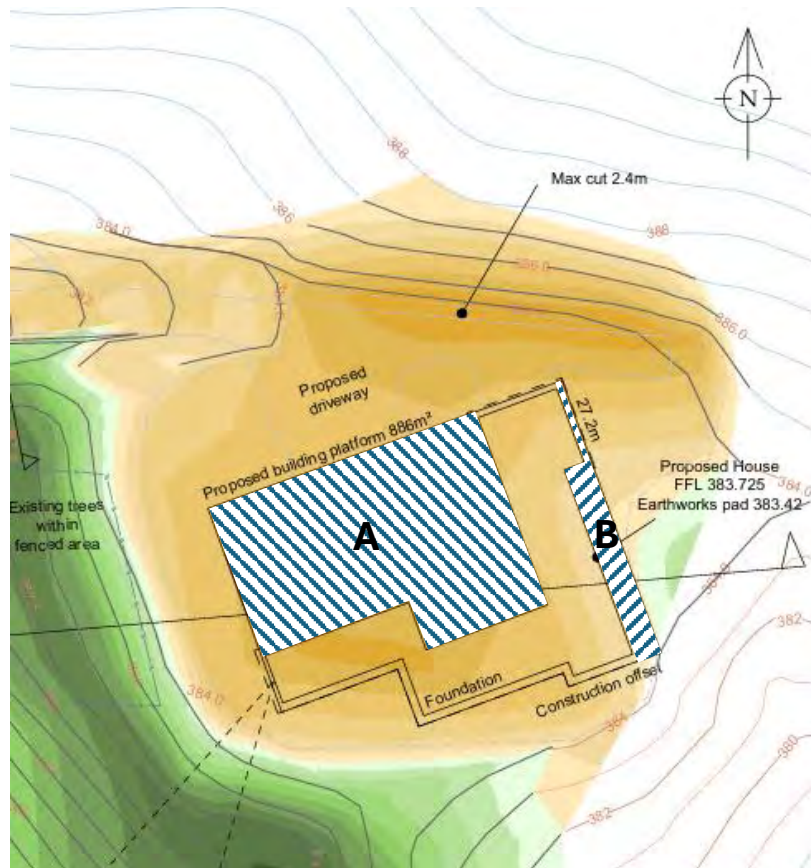
Registration of Residential Building Platform

8. Prior to the building platform being registered on the Record of Title, the consent holder shall complete the following:

- a) A digital plan showing the location of the building platform as shown on the survey plan / Land Transfer Plan shall be submitted to the Subdivision Officer at Council. This plan shall be in terms of New Zealand Transverse Mercator 2000 coordinate system (NZTM2000), NZGDM 2000 datum.
 - b) The completion of all works outlined in **Condition 5** above.
 - c) The provision of an electricity connection to the building platform, in accordance with the network supplier's requirements.
 - d) The provision of a telecommunications connection to the building platform, in accordance with the network supplier's requirements OR the registration of a covenant as per **Condition 9e)** below.
 - e) The consent holder shall provide 'as-built' plans and information required to detail all engineering works completed in relation to or in association with this development to the Subdivision Officer at Council. This information shall be formatted in accordance with Council's 'as-built' standards and shall include all access and water infrastructure (including private laterals and toby positions).
9. At the time the residential building platform is registered on the title, a covenant shall also be registered pursuant to section 108(2)(d) of the Act, in favour of Council as the consent authority, in respect of the ongoing performance of the following conditions. Pursuant to section 108(7), the final covenant wording shall provide for it to be varied or cancelled by agreement between the consent holder and Council.

Conditions:

- a) Any dwelling constructed on the site shall be located within the residential building platform shown as covenant area X on DPXXXXX.
- b) Prior to commencing construction of the dwelling, the earthworks approved under RMxxxxx shall be completed in accordance with the conditions of that resource consent.
- c) Within the first planting season following the start of construction of the dwelling, all planting associated with the driveway and dwelling as shown on the Structural Landscape Plan approved under RMxxxxx shall be completed. The different species specified on the plan shall be spread throughout each planting area to achieve a mix of plant heights at maturity.
- d) The dwelling constructed on the site shall be in accordance with the plans approved under RMxxxxx; OR the dwelling may have an alternative or amended design provided that it meets all of the following:
 - (i) The building shall not extend outside the 3D envelope of the design approved under RMxxxxx except in the parts of the platform highlighted by diagonal shading in the image below:



- (ii) The maximum height of any part of the building outside of the footprint approved under RMxxxxx within hatched area 'A' shall be RL 389.2m.
 - (iii) The maximum height of any part of the building outside of the footprint approved under RMxxxxx within hatched area 'B' shall be RL 387.213m.
 - (iv) The total floor area (including garage) of any revised design shall not exceed 383.5m².
 - (v) Any changes to exterior materials or colours shall comply with Condition 17 of RMxxxxx.
- e) All external elements of the residential dwelling including walls, joinery, spouting, trims, doors, external water tanks etc. shall be of natural tones of grey, brown or green with a colour light reflectivity value (LRV) of between 6% and 20%, and shall have a matt or dull finish to avoid any potential for glare. All natural materials such as timber, steel, stone and concrete shall be coloured, tinted, stained or treated to comply with the above colour requirements.
 - f) All structures attached to the residential unit such as chimneys, satellite dishes, weather vanes etc., shall have a flat or matt paint finish to avoid glare and shall be coloured to achieve the external materials and colours condition under **e)** above.
 - g) At the time a dwelling is proposed, the owner for the time being shall be responsible for providing a wireless telecommunications service. The property does not have a connection to the fibre network.
 - h) At the time a residential unit is erected on Lot 1, the owner for the time being shall engage a suitably experienced person as defined in sections 3.3 & 3.4 of AS/NZS 1547:2012 to design an onsite effluent disposal system in compliance with AS/NZS 1547:2012. This shall include on-site soakage testing to confirm permeability rates at the proposed disposal field location. The proposed wastewater system shall be subject to Council review prior to implementation.

Note: This condition is only required if a connection to Council's wastewater network has not been made.

- i) Prior to occupation of the residential dwelling, on-site water storage shall be installed to provide 10,000 litres of buffer storage for domestic purposes, along with a localised pressure booster pump.
- j) At the time a residential unit is erected, domestic water and firefighting storage is to be provided. A minimum of 45,000 litres shall be maintained at all times as a static firefighting reserve within a 55,000-litre combination of tanks (or equivalent). Alternatively, a 7,000-litre firefighting reserve is to be provided for each residential unit in association with a domestic sprinkler system installed to an approved standard. A firefighting connection in accordance with Appendix B - SNZ PAS 4509:2008 (or superseding standard) is to be located no further than 90 metres, but no closer than 6 metres, from any proposed building on the site. Where pressure at the connection point/coupling is less than 100kPa (a suction source - see Appendix B, SNZ PAS 4509:2008 section B2), a 100mm Suction Coupling (Female) complying with NZS 4505, is to be provided. Where pressure at the connection point/coupling is greater than 100kPa (a flooded source - see Appendix B, SNZ PAS 4509:2008 section B3), a 70mm Instantaneous Coupling (Female) complying with NZS 4505, is to be provided. Flooded and suction sources must be capable of providing a flow rate of 25 litres/sec at the connection point/coupling. The reserve capacities and flow rates stipulated above are relevant only for single family residential units. In the event that the proposed residential units provide for more than single family occupation then the consent holder should consult with Fire and Emergency New Zealand (FENZ) as larger capacities and flow rates may be required.

The FENZ connection point/coupling, tank and hardstand area must be located so that it is not compromised in the event of a fire (more than 6m from a building).

The connection point/coupling shall have a hardstand area adjacent to it (within 5m) that is suitable for parking a fire service appliance. The hardstand area shall be located in the centre of a clear working space with a minimum width of 4.5 metres. Pavements or roadways providing access to the hardstand area must have a minimum formed width as required by Council's standards for rural roads (as per Council's Land Development and Subdivision Code of Practice). The roadway shall be trafficable in all weathers and be capable of withstanding an axle load of 8.2 tonnes or have a load bearing capacity of no less than the public roadway serving the property, whichever is the lower. Access shall be maintained at all times to the hardstand area.

Underground tanks or tanks that are partially buried (provided the top of the tank is no more than 1 metre above ground) may be accessed by an opening in the top of the tank whereby couplings are not required. A hardstand area adjacent to the tank is required in order to allow a FENZ appliance to park on it and access to the hardstand area must be provided as above.

The FENZ connection point/coupling/fire hydrant/tank must be located so that it is clearly visible and/or provided with appropriate signage to enable connection of a fire appliance.

Firefighting water supply may be provided by means other than the above if the written approval of the Fire and Emergency New Zealand Fire Risk Management Officer is obtained for the proposed method. The firefighting water supply tank and/or the sprinkler system shall be installed prior to the occupation of the building.

- k) Water tanks shall be black, grey, olive green or brown in medium to dark hues and buried or screened so they are not visible from outside the site.
- l) All domestic elements and activity shall be contained within the curtilage area identified on the Structural Landscape Plan approved under RMXXXX. This shall include manicured lawn areas, although pasture grass may be seasonally mown beyond the curtilage area.
- m) Planting shall be maintained in accordance with the Structural Landscape Plan approved under RMXXXX. Any plant that dies, is damaged or fails to thrive shall be replaced in the next planting season.

- n) Lighting shall comply with the following to avoid light spill and glare:
 - (i) All fixed exterior lighting shall be directed away from adjacent sites and roads.
 - (ii) The activity shall not result in more than a 3 lux spill (horizontal and vertical) of light to any other site, measured at any point within the boundary of the other site.
 - (iii) There shall be no upward light spill.
 - (iv) There shall be no driveway lighting outside the curtilage.

Earthworks Conditions

The following conditions shall apply to all earthworks associated with this consent.

10. Earthworks shall be carried out in accordance with the Environmental Management Plan (EMP) prepared by Enviroscope and submitted with the RMXXXX application. If any changes are to be made to the EMP, then at least 15 working days prior to any works commencing on site, the consent holder shall submit these revisions to Council's Monitoring and Enforcement Team for review and acceptance. Any revisions to the EMP shall be in accordance with the principles and requirements of the Queenstown Lakes District Council's *Guidelines for Environmental Management Plans*, including that it is prepared by a Suitably Qualified and Experienced Person.
11. Prior to ground-disturbing activities on the initial stage of works or any subsequent new stage of works, the consent holder shall implement the Erosion and Sediment Control Plan (ESCP) in the EMP. Any changes to the ESCP shall be submitted to Council's Monitoring and Enforcement Team for review and acceptance.
12. The earthworks including stormwater management shall be undertaken in accordance with the recommendations of the Geotechnical Report by Geosolve, dated November 2024, submitted with the consent application.
13. The consent holder shall implement suitable measures to prevent deposition of any debris on surrounding roads by vehicles moving to and from the site. In the event that any material is deposited on any roads, the consent holder shall take immediate action, at his/her expense, to clean the roads. The loading and stockpiling of earth and other materials shall be confined to the subject site.
14. Any long-standing stockpiles (greater than 6 months) shall be constructed in accordance with the diagram included in the EMP and stabilised (for example by applying grass seed) to prevent erosion.
15. All earth worked areas shall be top-soiled and grassed or planted in accordance with the Structural Landscape Plan, or otherwise permanently stabilised, as soon as practicable on completion of each stage of the earthworks.

Shed

16. Within the first planting season following the start of construction of the shed, planting around the shed shall be completed in accordance with the approved Structural Landscaping Plan. The different species specified on the plan shall be spread throughout each planting area to achieve a mix of plant heights at maturity. The planting shall be maintained by the consent holder, and any plant that dies, is damaged or fails to thrive shall be replaced in the next planting season.

Dwelling

17. All planting shown on the Structural Landscaping Plan along the northern side of the driveway and across the mounding to the south west of the dwelling shall be completed within the first planting season following completion of the earthworks associated with the dwelling. The different species specified on the plan shall be spread throughout each planting area to achieve a mix of plant heights at maturity. The planting shall be

maintained by the consent holder, and any plant that dies, is damaged or fails to thrive shall be replaced in the next planting season.

18. Prior to commencing construction of the dwelling, the consent holder shall engage a suitably experienced person as defined in sections 3.3 & 3.4 of AS/NZS 1547:2012 to design an onsite effluent disposal system in compliance with AS/NZS 1547:2012. This shall include on-site soakage testing to confirm permeability rates at the proposed disposal field location. The proposed wastewater system shall be subject to Council review prior to implementation.

Note: This condition is only required if a connection to Council's wastewater network has not been made.

19. Prior to occupation of the residential dwelling, the consent holder shall complete the following:

- a) The completion of all works outlined in **Condition 5** above.
- b) The provision of an electricity connection to the dwelling, in accordance with the network supplier's requirements.
- c) The consent holder shall provide 'as-built' plans and information required to detail all engineering works completed in relation to or in association with this development to the Subdivision Officer at Council. This information shall be formatted in accordance with Council's 'as-built' standards and shall include all access and water infrastructure (including private laterals and toby positions).

Note: This condition is deemed to have been met if the building platform has already been registered.

20. The external appearance of the dwelling shall comply with the following:

- a) All external elements of the residential unit including walls, joinery, spouting, trims, doors, external water tanks etc. shall be of natural tones of grey, brown or green with a colour light reflectivity value (LRV) of between 6% and 20%, and shall have a matt or dull finish to avoid any potential for glare. All natural materials such as timber, steel, stone and concrete shall be coloured, tinted, stained or treated to comply with the above colour requirements. All joinery and spouting shall match, or be of similar colours to, the walls and roof.
- b) All structures attached to the residential unit such as chimneys, satellite dishes, weather vanes etc., shall have a flat or matt paint finish to avoid glare and shall be coloured to achieve the external materials and colours condition of this consent.

21. Prior to occupation of the residential dwelling, the consent holder shall complete the following:

- a) On-site water storage shall be installed to provide 10,000 litres of buffer storage for domestic purposes, along with a localised pressure booster pump.
- b) Firefighting water storage is to be provided. A minimum of 45,000 litres shall be maintained at all times as a static firefighting reserve within a 55,000-litre combination of tanks (or equivalent). Alternatively, a 7,000-litre firefighting reserve is to be provided for each residential unit in association with a domestic sprinkler system installed to an approved standard. A firefighting connection in accordance with Appendix B - SNZ PAS 4509:2008 (or superseding standard) is to be located no further than 90 metres, but no closer than 6 metres, from any proposed building on the site. Where pressure at the connection point/coupling is less than 100kPa (a suction source - see Appendix B, SNZ PAS 4509:2008 section B2), a 100mm Suction Coupling (Female) complying with NZS 4505, is to be provided. Where pressure at the connection point/coupling is greater than 100kPa (a flooded source - see Appendix B, SNZ PAS 4509:2008 section B3), a 70mm Instantaneous Coupling (Female) complying with NZS 4505, is to be provided. Flooded and suction sources must be capable of providing a flow rate of 25 litres/sec at the connection point/coupling. The reserve capacities and flow rates stipulated above are relevant only for

single family residential units. In the event that the proposed residential units provide for more than single family occupation then the consent holder should consult with Fire and Emergency New Zealand (FENZ) as larger capacities and flow rates may be required.

The FENZ connection point/coupling, tank and hardstand area must be located so that it is not compromised in the event of a fire (more than 6m from a building).

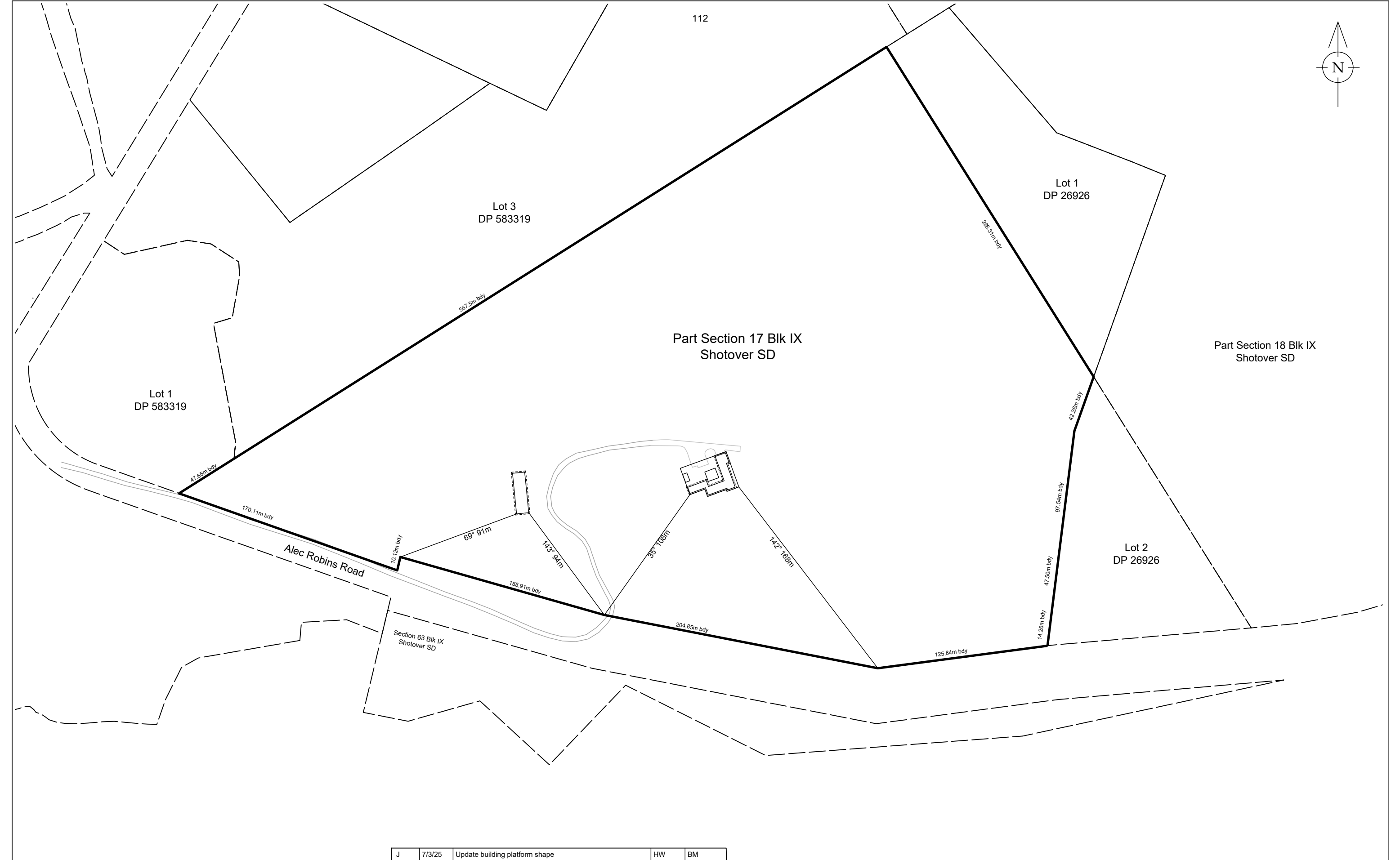
The connection point/coupling shall have a hardstand area adjacent to it (within 5m) that is suitable for parking a fire service appliance. The hardstand area shall be located in the centre of a clear working space with a minimum width of 4.5 metres. Pavements or roadways providing access to the hardstand area must have a minimum formed width as required by Council's standards for rural roads (as per Council's Land Development and Subdivision Code of Practice). The roadway shall be trafficable in all weathers and be capable of withstanding an axle load of 8.2 tonnes or have a load bearing capacity of no less than the public roadway serving the property, whichever is the lower. Access shall be maintained at all times to the hardstand area.

Underground tanks or tanks that are partially buried (provided the top of the tank is no more than 1 metre above ground) may be accessed by an opening in the top of the tank whereby couplings are not required. A hardstand area adjacent to the tank is required in order to allow a FENZ appliance to park on it and access to the hardstand area must be provided as above.

The FENZ connection point/coupling/fire hydrant/tank must be located so that it is clearly visible and/or provided with appropriate signage to enable connection of a fire appliance.

Firefighting water supply may be provided by means other than the above if the written approval of the Fire and Emergency New Zealand Fire Risk Management Officer is obtained for the proposed method. The firefighting water supply tank and/or the sprinkler system shall be installed prior to the occupation of the building.

22. Water tanks shall be black, grey, olive green or brown in medium to dark hues and buried or screened so they are not visible from outside the site.
23. All domestic elements and activity shall be contained within the curtilage area identified on the Structural Landscape Plan. This shall include manicured lawn areas, although pasture grass may be seasonally mown beyond the curtilage area.
24. Lighting shall comply with the following to avoid light spill and glare:
 - (i) All fixed exterior lighting shall be directed away from adjacent sites and roads.
 - (ii) The activity shall not result in more than a 3 lux spill (horizontal and vertical) of light to any other site, measured at any point within the boundary of the other site.
 - (iii) There shall be no upward light spill.
 - (iv) There shall be no driveway lighting outside the curtilage.



NOTE: Contour (red) interval is 1.0 metre. QLDC Lidar (blue) is 1.0m
Levels in terms NZ Vertical Datum 2016, Pin 1 SO 557531 RL 348.21.

A person/company using Aurum Survey Consultants drawings and other data accepts the risk of:
1. using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. using the drawings or other data for any purpose not agreed to in writing by Aurum Survey Consultants.

Document Set ID: 6943635

Version: 1, Version Date: 06/08/2025


J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

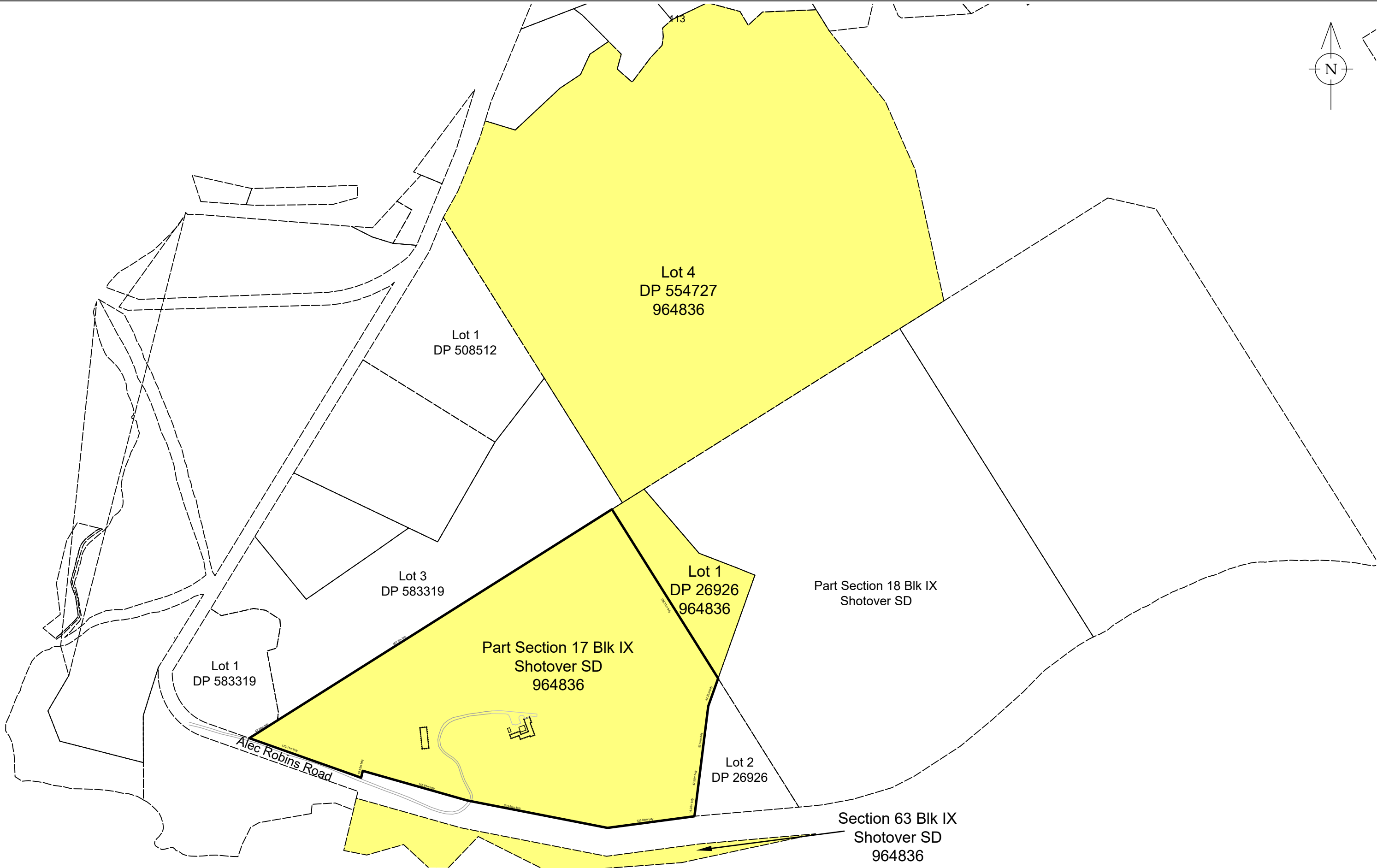
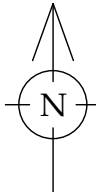
TITLE:

Site Overview Pt Section 17 Blk IX Shotover SD for Gemma Smith

DATE: 27 Jan 2025	Scale 1:2500	DRAWING & ISSUE No.
BY: Helen Watling	Original Plan A3	5514.2R.1K



PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz



NOTE: Contour (red) interval is 1.0 metre. QLDC Lidar (blue) is 1.0m
Levels in terms NZ Vertical Datum 2016, Pin 1 SO 557531 RL 348.21.

A person/company using Aurum Survey Consultants drawings and other data accepts the risk of:
1. using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. using the drawings or other data for any purpose not agreed to in writing by Aurum Survey Consultants.

J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

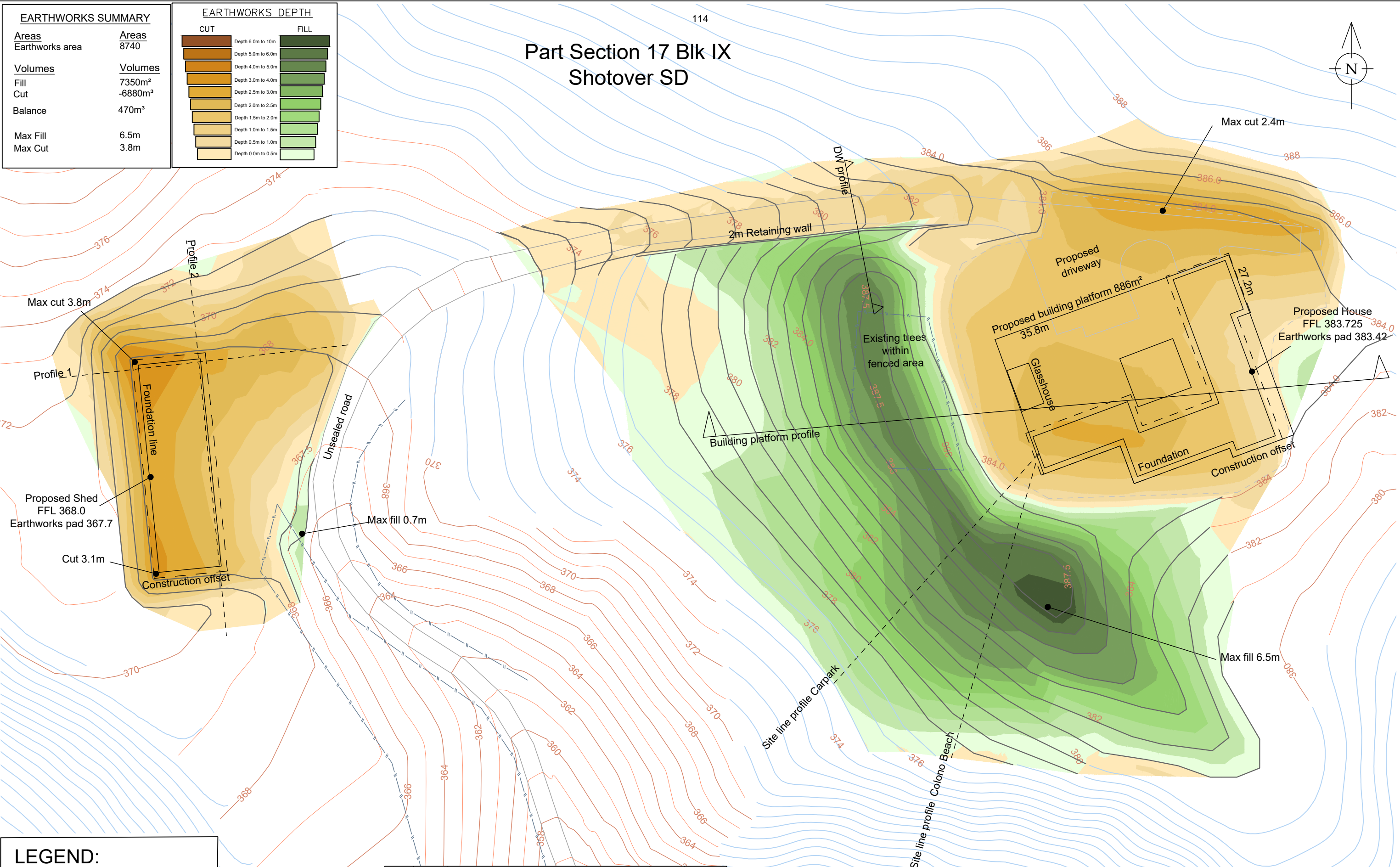
TITLE:

Title 964836 Overview
Pt Section 17 Blk IX Shotover SD
for Gemma Smith

DATE: 28 Aug 2024	Scale 1:5000	DRAWING & ISSUE No.
BY: Helen Watling	Original Plan A3	5514.2R.2K



PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz



EARTHWORKS SUMMARY	
Areas	Areas
Earthworks area	8740
Volumes	Volumes
Fill	7350m³
Cut	-6880m³
Balance	470m³
Max Fill	6.5m
Max Cut	3.8m

EARTHWORKS DEPTH	
CUT	FILL
Depth 6.0m to 10m	
Depth 5.0m to 6.0m	
Depth 4.0m to 5.0m	
Depth 3.0m to 4.0m	
Depth 2.5m to 3.0m	
Depth 2.0m to 2.5m	
Depth 1.5m to 2.0m	
Depth 1.0m to 1.5m	
Depth 0.5m to 1.0m	
Depth 0.0m to 0.5m	

LEGEND:

- QLDC LIDAR
- CONTOURS
- PROPOSED CONTOURS

NOTE: Contour & Lidar interval is 1.0 metre.
Levels in terms NZ Vertical Datum 2016, Pin 1 SO 557531 RL 348.21.

A person/company using Aurum Survey Consultants drawings and other data accepts the risk of:
1. using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. using the drawings and other data for any purpose not agreed to in writing by Aurum Survey Consultants.

J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to be read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

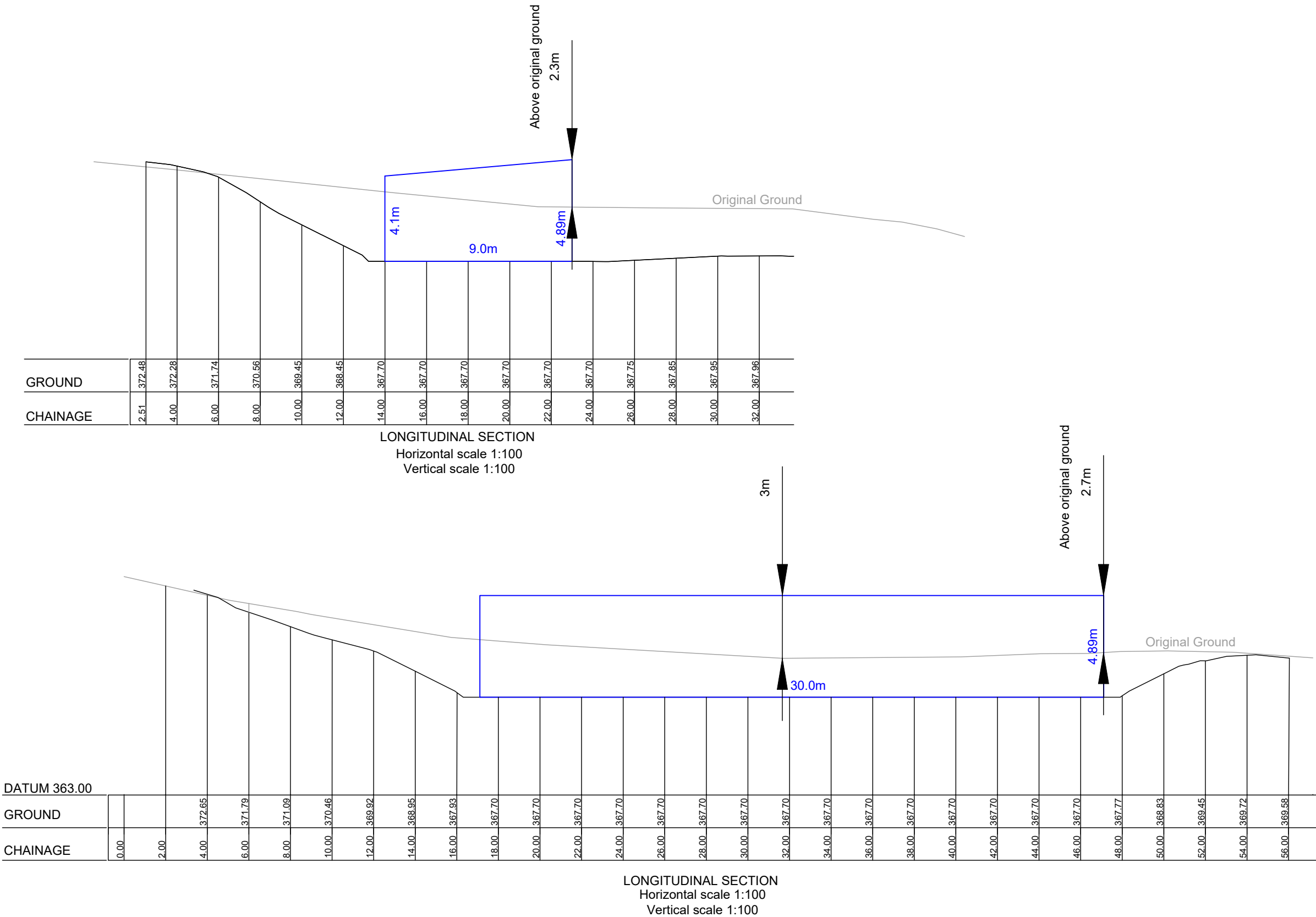
TITLE:

Proposed Earthworks
Pt Section 17 Blk IX Shotover SD
for Gemma Smith

DATE: 28 Aug 2024	Scale 1:500	DRAWING & ISSUE No.
BY: Helen Watling	Original Plan A3	5514.2R.3K



PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz



J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

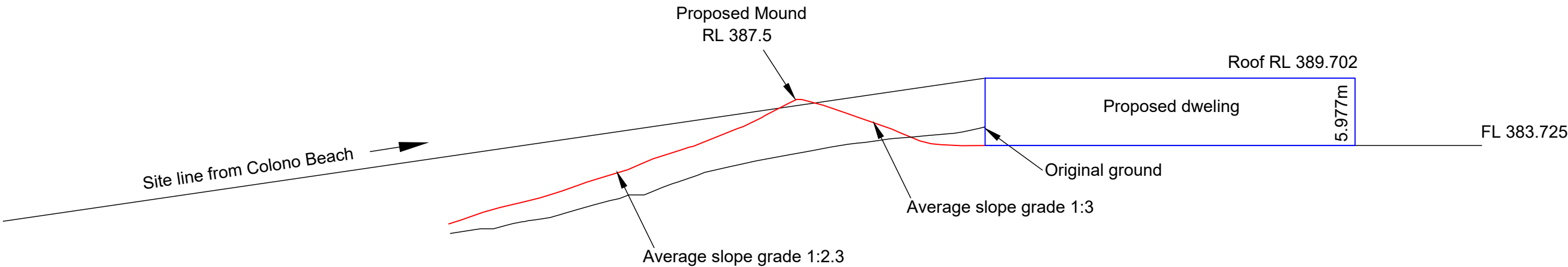
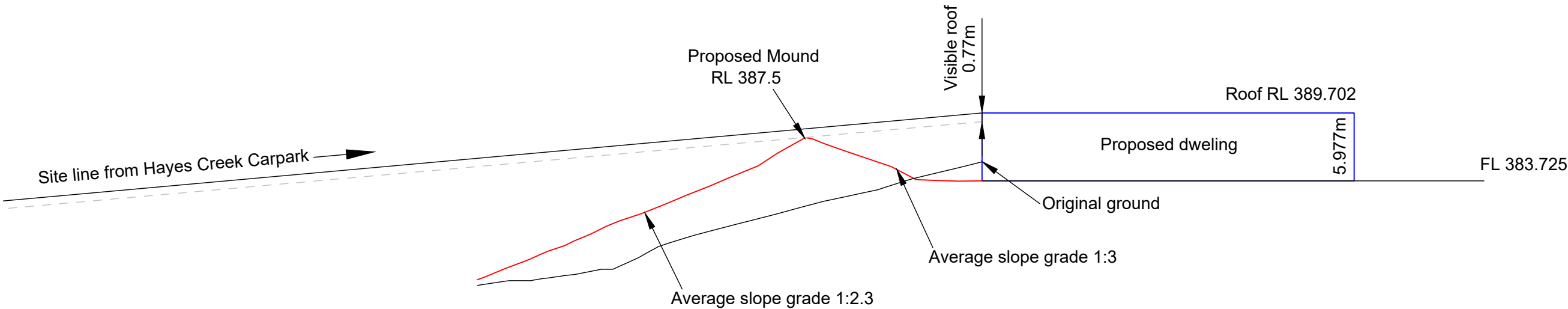
TITLE:

Shed Profile Plan
Pt Section 17 Blk IX Shotover SD
for Gemma Smith

DATE: 28 Aug 2024	Scale 1:200	DRAWING & ISSUE No.
BY: Helen Watling	Original Plan A3	5514.2R.4K



PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz



NOTE: Levels in terms NZ Vertical Datum 2016, Pin 1 SO 557531 RL 348.21.

A person/company using Aurum Survey Consultants drawings and other data accepts the risk of:
1. using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. using the drawings or other data for any purpose not agreed to in writing by Aurum Survey Consultants.

J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

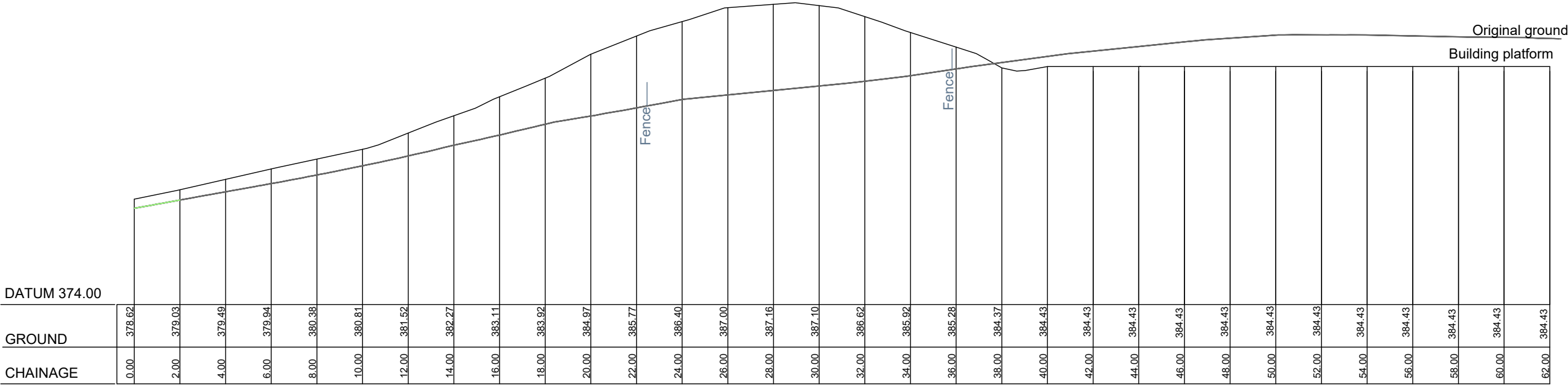
TITLE:

Site Line Profile Plan
Pt Section 17 Blk IX Shotover SD
for Gemma Smith

DATE: 28 Aug 2024	Scale 1:400	DRAWING & ISSUE No.
BY: Helen Watling	Original Plan A3	5514.2R.5K



PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz



LONGITUDINAL SECTION
Horizontal scale 1:100
Vertical scale 1:100

NOTE: Levels in terms NZ Vertical Datum 2016, Pin 1 SO 557531 RL 348.21.

A person/company using Aurum Survey Consultants drawings and other data accepts the risk of:
1. using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. using the drawings or other data for any purpose not agreed to in writing by Aurum Survey Consultants.

J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

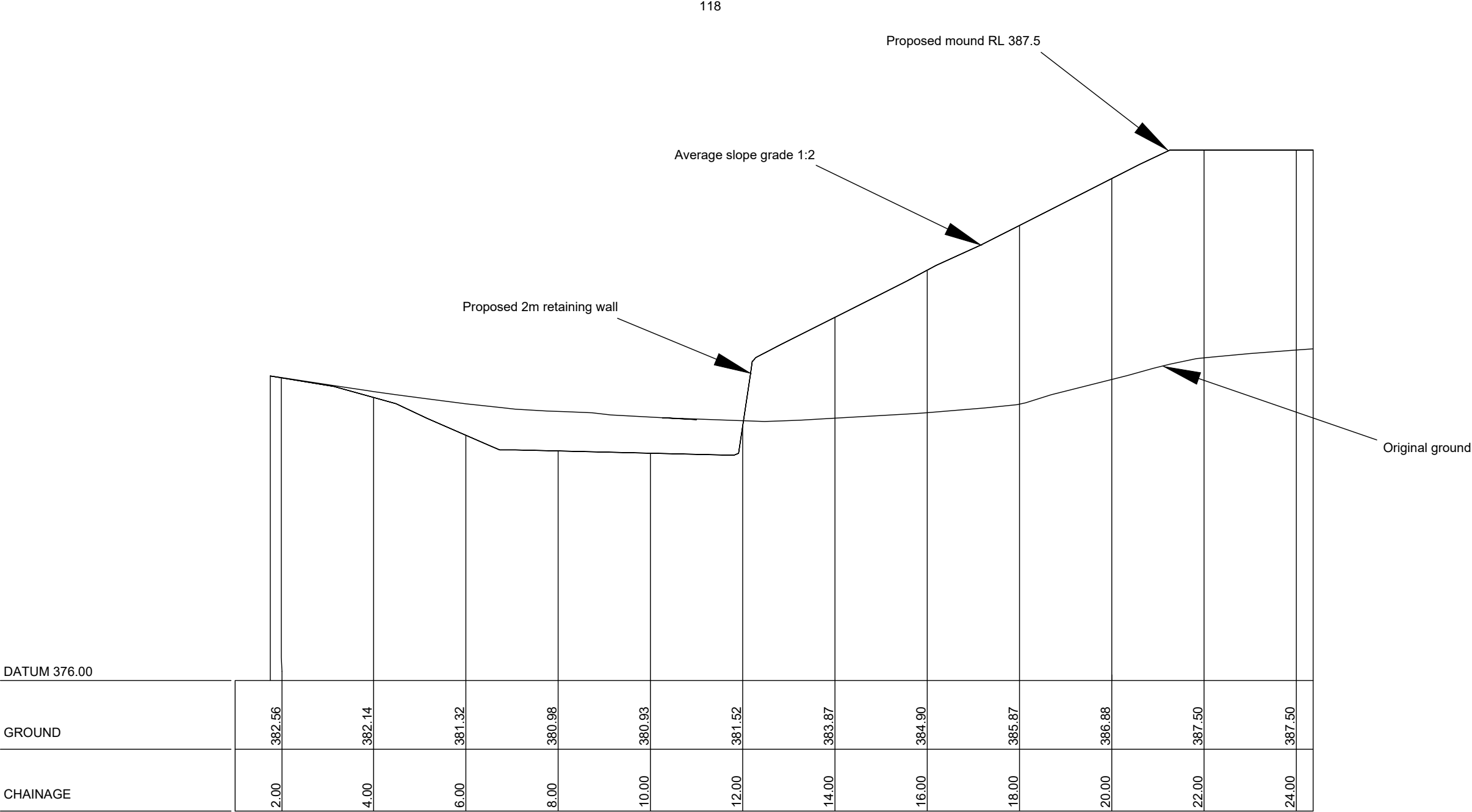
TITLE:
**House Platform Profile Plan
Pt Section 17 Blk IX Shotover SD
for Gemma Smith**

DATE: 28 Aug 2024
BY: Helen Watling

Scale 1:200
Original Plan A3

DRAWING & ISSUE No.
5514.2R.6K

PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz



LONGITUDINAL SECTION
Horizontal scale 1:100
Vertical scale 1:100

NOTE: Levels in terms NZ Vertical Datum 2016, Pin 1 SO 557531 RL 348.21.

A person/company using Aurum Survey Consultants drawings and other data accepts the risk of:
1. using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. using the drawings or other data for any purpose not agreed to in writing by Aurum Survey Consultants.

J	7/3/25	Update building platform shape	HW	BM
I	27/1/25	Platform tie distance correction	BM	BM
G	18/10/24	Building platform added	HW	BM
F	18/10/24	Add title plan & profile of driveway retaining	HW	BM
E	17/10/24	Update mound	HW	BM
D	2/10/24	Add retaining wall & update mound	HW	BM
C	26/9/24	Platform profile added	HW	BM
B	10/9/24	FFL & earthworks updated	HW	BM
A	28/8/24	Initial release	HW	BM
REV.	DATE:	REVISION DETAILS:	DRAWN:	CHECKED:

WARNING NOTE:
This resource consent plan has been prepared for the client from field survey and existing records. It is to read in conjunction with our terms of engagement to Gemma Smith. It should not be used by the client company for any other purpose. The plan is not to be relied on by any other person for any purpose whatsoever.

TITLE:

Driveway Retaining Profile Plan
Pt Section 17 Blk IX Shotover SD
for Gemma Smith

DATE: 28 Aug 2024	Scale 1:100	DRAWING & ISSUE No.
BY: Helen Watling	Original Plan A3	5514.2R.7K



PO Box 2493
Wakatipu 9349
Ph 03 442 3466
Fax 03 442 3469
Email admin@ascl.co.nz

DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND
PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES
ARE FOUND.

ISSUE

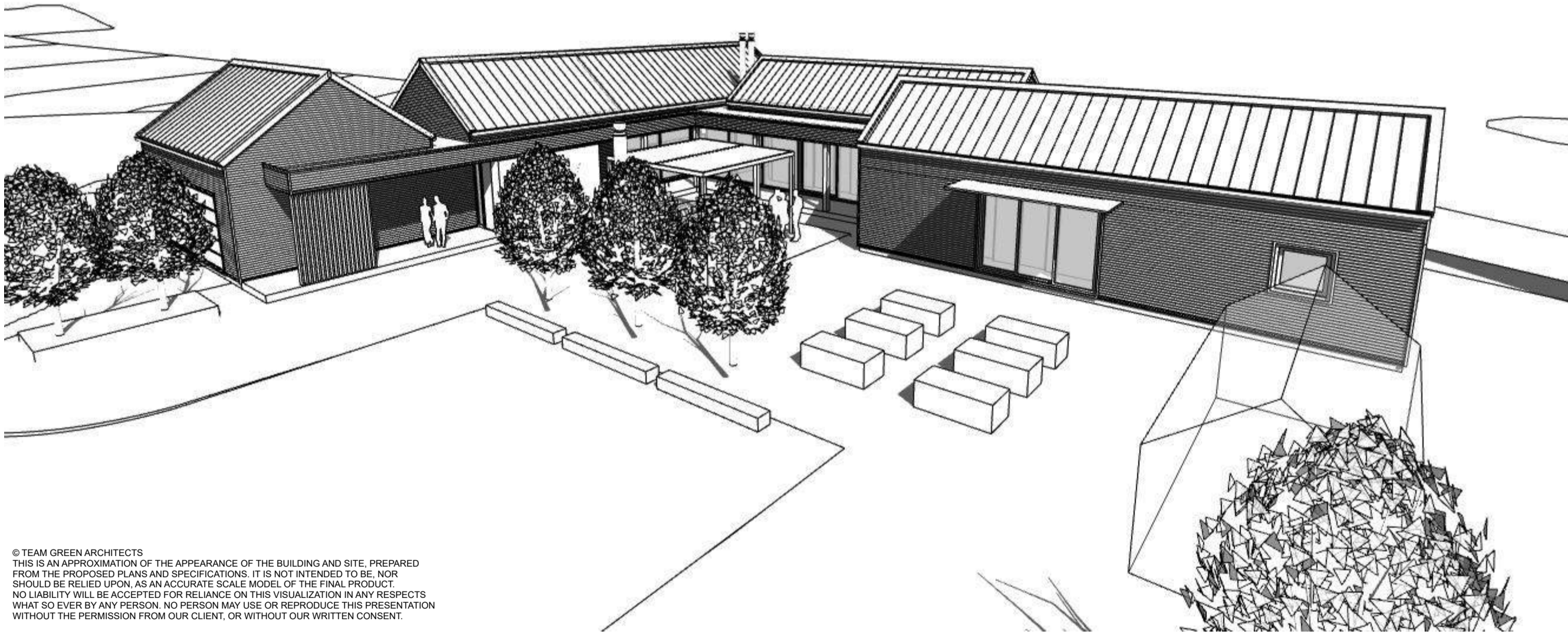
RESOURCE CONSENT

13/08/24

REVISION

01

A1 SHEET INDEX - RC			
LAYOUT ID	LAYOUT NAME	ISSUED	ISSUE ID
1.01	TOPOGRAPHIC SITE PLAN OVERVIEW	☒	01
1.02	CONTEXT PLAN	☒	01
1.03	SITE PLAN	☒	01
1.04	EARTHWORKS SITE SECTIONS	☒	01
2.01	GL FLOOR PLAN	☒	01
2.01	ROOF PLAN	☒	01
3.01	ELEVATIONS	☒	01
3.02	3D VIEWS	☒	01
3.03	3D VIEWS	☒	01
3.04	3D VIEWS	☒	01
3.05	3D VIEWS	☒	01
3.06	3D VIEWS	☒	01
3.07	3D VIEWS	☒	01
4.01	SITE SECTIONS	☒	01
CS.1	COVER SHEET	☒	01



© TEAM GREEN ARCHITECTS
THIS IS AN APPROXIMATION OF THE APPEARANCE OF THE BUILDING AND SITE, PREPARED FROM THE PROPOSED PLANS AND SPECIFICATIONS. IT IS NOT INTENDED TO BE, NOR SHOULD BE RELIED UPON, AS AN ACCURATE SCALE MODEL OF THE FINAL PRODUCT.
NO LIABILITY WILL BE ACCEPTED FOR RELIANCE ON THIS VISUALIZATION IN ANY RESPECTS.
WHAT SO EVER BY ANY PERSON, NO PERSON MAY USE OR REPRODUCE THIS PRESENTATION WITHOUT THE PERMISSION FROM OUR CLIENT, OR WITHOUT OUR WRITTEN CONSENT.

SMITH RESIDENCE

for
GEMMA & MIKE SMITH

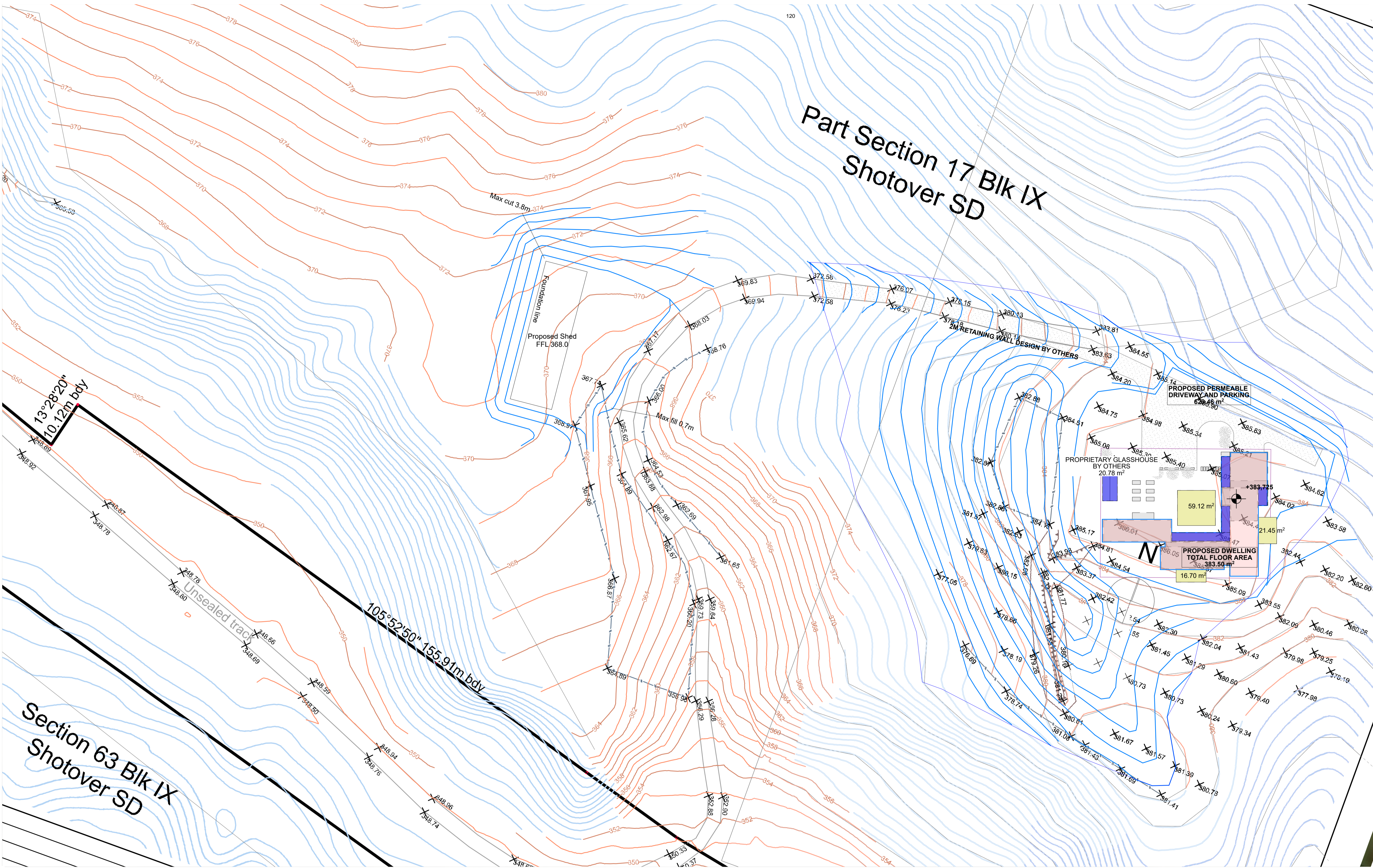
© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

SMITH RESIDENCE

22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0560
www.teamgreenarchitects.co.nz





DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND
PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES
ARE FOUND.

REVISIONS				
REV ID	CH ID	ISSUE		DATE

NOTES

CONSULTANTS	
SURVEYOR	T.B.C.
PLANNER	T.B.C.
STRUCTURAL ENGINEER:	McCONAUGHY CONSULTING
SERVICES CONSULTANT:	doug@mcconaughy.co.nz
	T.B.C.

CLIENT
Mike & Gemma Smith

RESOURCE CONSENT

SMITH RESIDENCE

22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

TOPOGRAPHIC SITE PLAN OVERVIEW

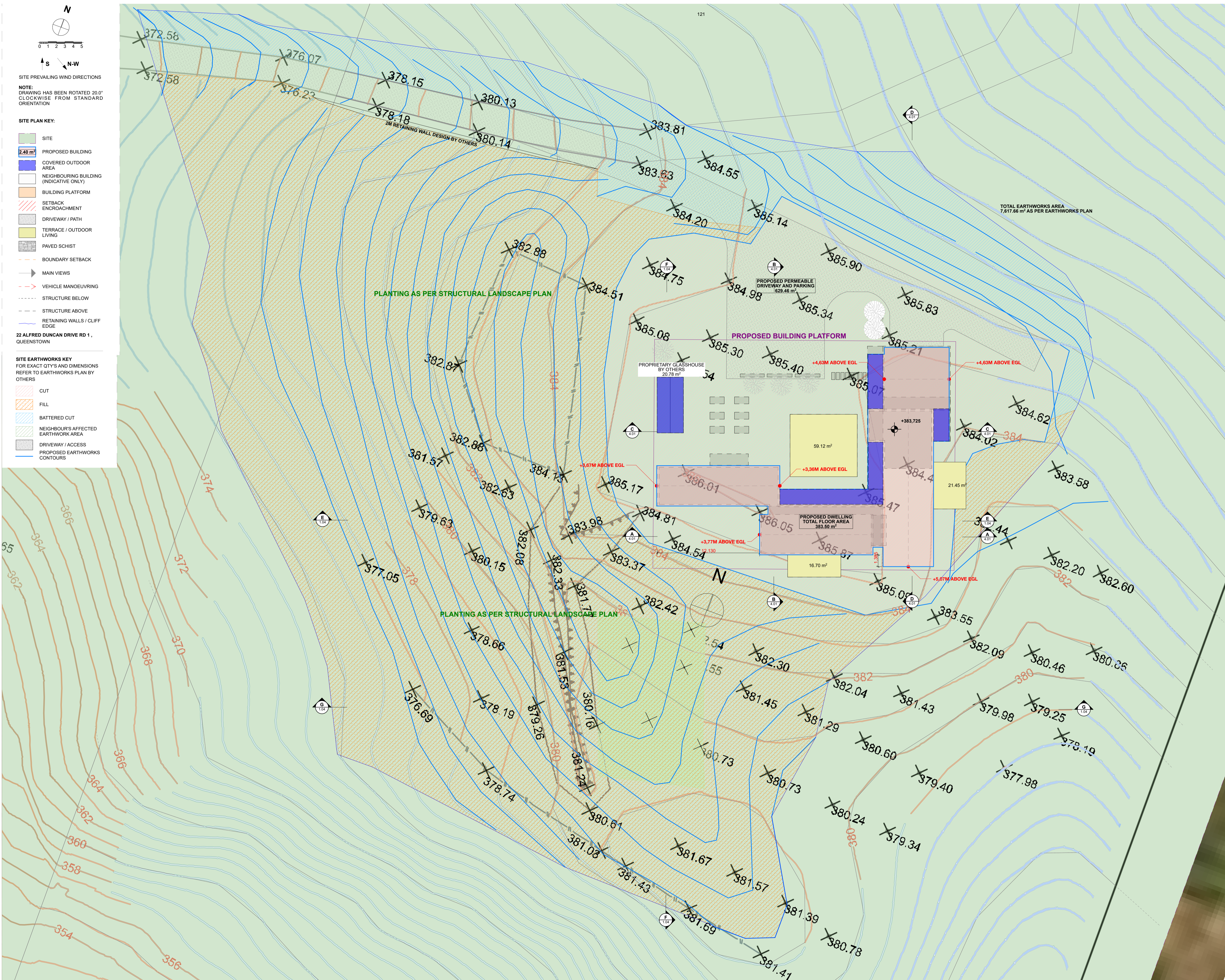
© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT
BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN
APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS
THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

ORIGINAL SCALE	A1	1:200, 1:400
REDUCED SCALE	A3	REDUCED (200%)
DATE	13/08/24	
JOB No	NA	
DRAWN	***	
CHECKED	***	

DRAWING NO.	REVISION
1.01	01

PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0560
www.teamgreenarchitects.co.nz





DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND
PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES
ARE FOUND.

REVISIONS				DATE
REV ID	CH ID	ISSUE		

NOTES

CONSULTANTS	
SURVEYOR	T.B.C.
PLANNER	T.B.C.
STRUCTURAL ENGINEER:	McCONAUGHY CONSULTING
SERVICES CONSULTANT:	doug@mcconaughy.co.nz
	T.B.C.

CLIENT
Mike & Gemma Smith

RESOURCE CONSENT

SMITH RESIDENCE

22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

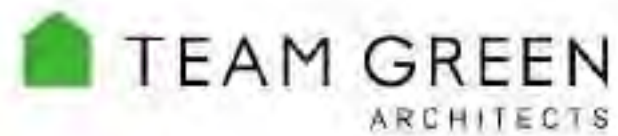
SITE PLAN

© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT
BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN
APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS
THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

ORIGINAL SCALE	A1	1:200
REDUCED SCALE	A3	REDUCED (200%)
DATE	13/08/24	
JOB No	NA	
DRAWN	***	
CHECKED	***	

DRAWING NO.	REVISION
1.03	01

PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0560
www.teamgreenarchitects.co.nz

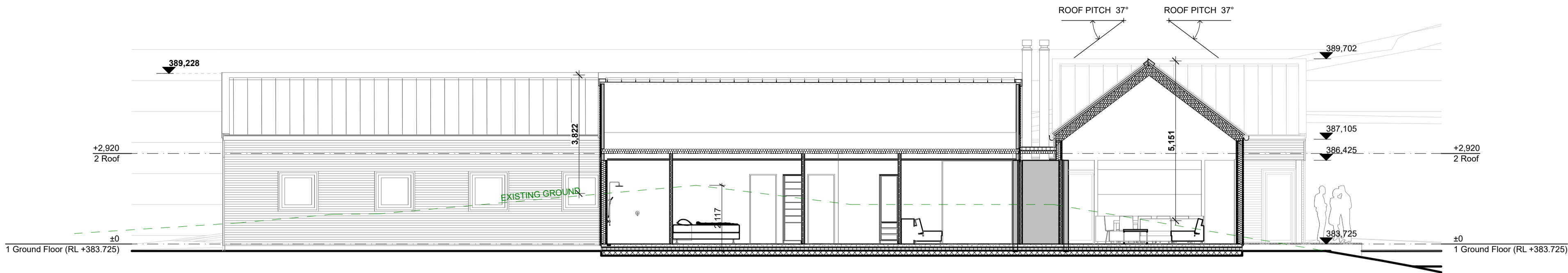


DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND
PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES
ARE FOUND.

REVISIONS

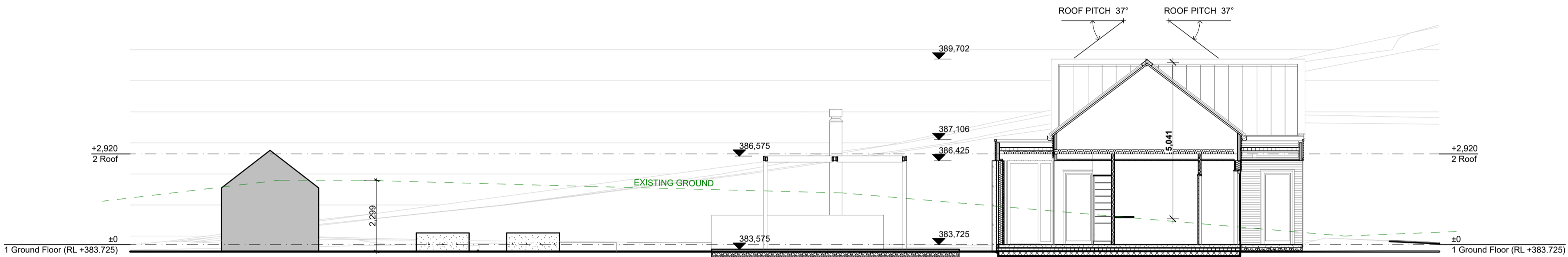
REV ID	CH ID	ISSUE	DATE

NOTES



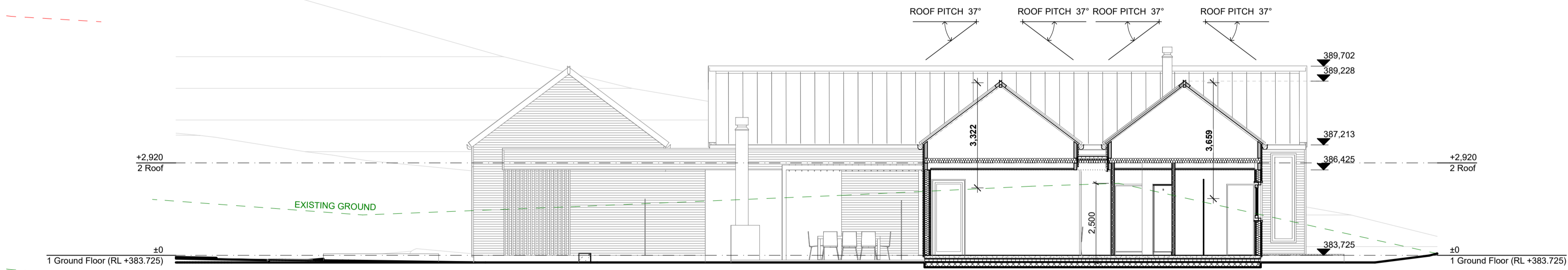
SECTION A-A

1:100
1.03, 2.01, C.1, 2.72



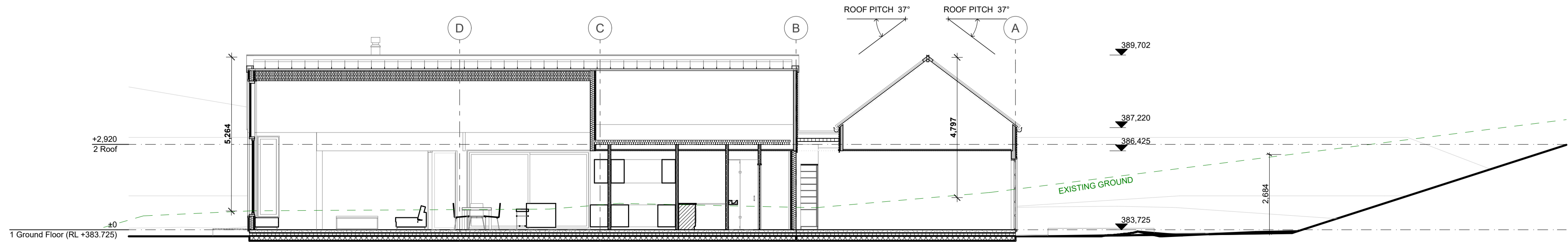
SECTION B-B

1:100
1.03, 2.01, C.1, 2.72



SECTION C-C

1:100
1.03, 2.01, C.1, 1.12, 2.72



SECTION D-D

1:100
1.03, 2.01, C.1, 1.12, 2.72

CONSULTANTS

SURVEYOR	T.B.C.
PLANNER	T.B.C.
STRUCTURAL ENGINEER:	McCONAUGHY CONSULTING
SERVICES CONSULTANT:	doug@mcconaughey.co.nz
	T.B.C.

CLIENT

Mike & Gemma Smith

RESOURCE CONSENT

SMITH RESIDENCE

22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

SITE SECTIONS

© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT
BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN
APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS
THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

ORIGINAL SCALE	A1	1:100
REDUCED SCALE	A3	REDUCED (200%)
DATE	13/08/24	
JOB No	NA	
DRAWN	***	
CHECKED	***	

DRAWING NO.

4.01

REVISION

01

PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0550
www.teamgreenarchitects.co.nz



DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND
PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES
ARE FOUND.

REVISIONS				DATE
REV ID	CH ID	ISSUE		

NOTES

GENERAL NOTES:
ALL WORK SHALL COMPLY FULLY WITH THE
NEW ZEALAND BUILDING CODE AND ALL
ASSOCIATED DOCUMENTS.

USE FIGURED DIMENSIONS. DO NOT SCALE
OF DRAWINGS.

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE
DRAWINGS AND SPECIFICATION.

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH NEW
ZEALAND STANDARDS UNLESS NOTED OTHERWISE.

CIVIL / STRUCTURAL:
CIVIL / STRUCTURAL DRAWINGS TO BE READ IN
CONJUNCTION WITH CIVIL / STRUCTURAL SPECIFICATION.
REFER TO ENGINEERS DOCS FOR ALL STRUCTURAL DETAILS
AND SPECIFICATION

ANTI-SLIP ACCESS ROUTES:
ON ALL ACCESS ROUTS BOTH INTERNAL & EXTERNAL,
PROVIDE ANTI-SLIP SURFACE COMPLYING WITH NZBC D1AS
TABLE 2 (EXCEPT SURFACES IN SIDE ENTRY DOORS OF
HOUSING MAYBE CONSIDERED DRY AREAS)

CONSULTANTS	
SURVEYOR	T.B.C.
PLANNER	T.B.C.
STRUCTURAL ENGINEER:	McCONAUGHY CONSULTING doug@mcconaughey.co.nz
SERVICES CONSULTANT:	T.B.C.

CLIENT
Mike & Gemma Smith

RESOURCE CONSENT

SMITH RESIDENCE
22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

GL FLOOR PLAN

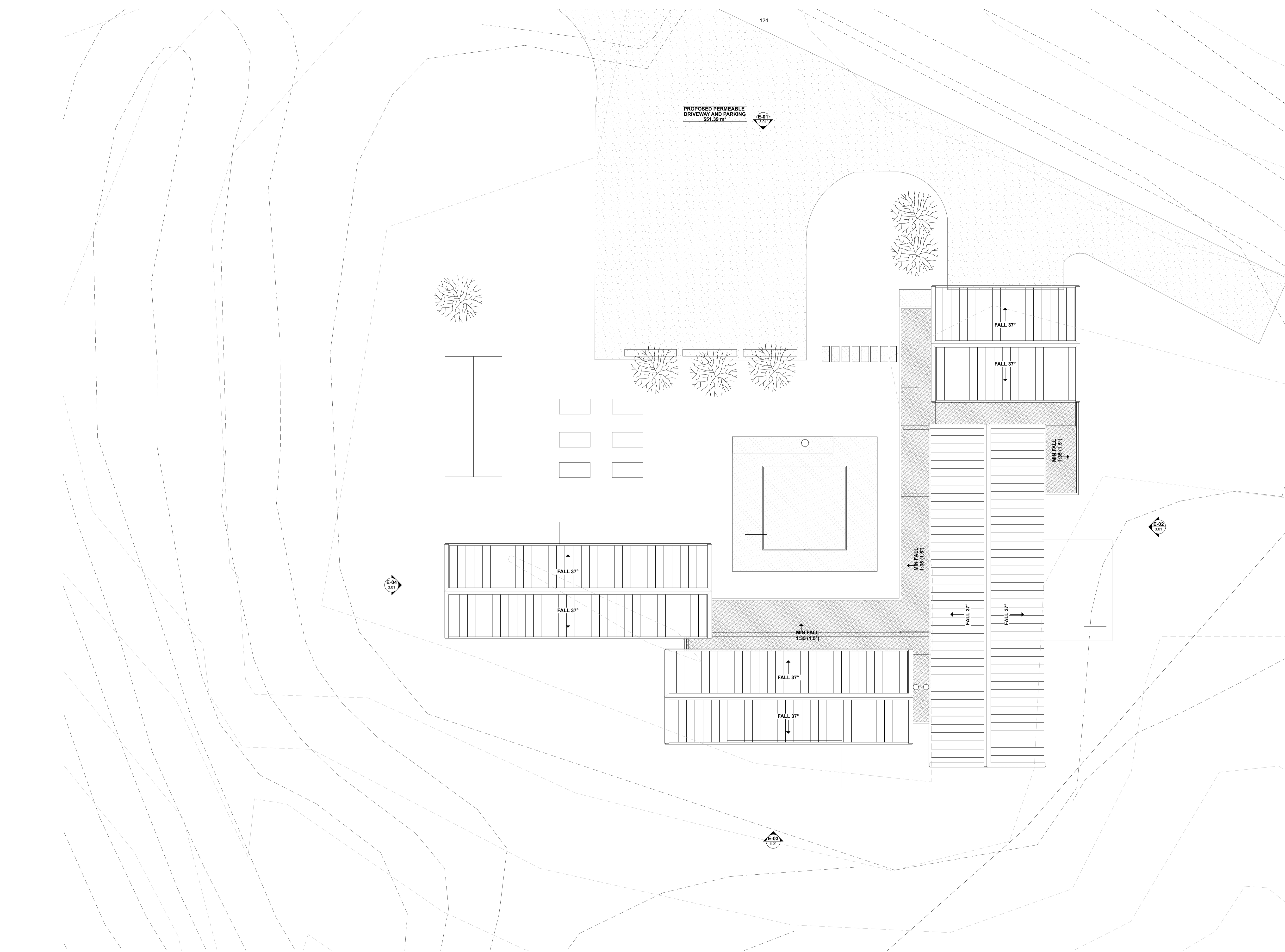
© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT
BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN
APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS
THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

ORIGINAL SCALE	A1	1:100
REDUCED SCALE	A3	REDUCED (200%)
DATE	13/08/24	
JOB No	NA	
DRAWN	***	
CHECKED	***	

DRAWING NO.	REVISION
2.01	01

PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0550
www.teamgreenarchitects.co.nz





Drawing Published: 03/02/2025

DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.

REVISIONS			
REV ID	CH ID	ISSUE	DATE

NOTES

GENERAL NOTES:
ALL WORK SHALL COMPLY FULLY WITH THE NEW ZEALAND BUILDING CODE AND ALL ASSOCIATED DOCUMENTS.

USE FIGURED DIMENSIONS. DO NOT SCALE OF DRAWINGS.

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATION.

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH NEW ZEALAND STANDARDS UNLESS NOTED OTHERWISE.

CIVIL / STRUCTURAL:
CIVIL / STRUCTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH CIVIL / STRUCTURAL SPECIFICATION. REFER TO ENGINEERS DOCS FOR ALL STRUCTURAL DETAILS AND SPECIFICATION

ANTI-SLIP ACCESS ROUTES:
ON ALL ACCESS ROUTS BOTH INTERNAL & EXTERNAL, PROVIDE ANTI-SLIP SURFACE COMPLYING WITH NZBC D1AS TABLE 2 (EXCEPT SURFACES IN SIDE ENTRY DOORS OF HOUSING MAYBE CONSIDERED DRY AREAS)

CONSULTANTS	
SURVEYOR	T.B.C.
PLANNER	T.B.C.
STRUCTURAL ENGINEER:	McCONAUGHY CONSULTING doug@mcconaugthy.co.nz
SERVICES CONSULTANT:	T.B.C.

CLIENT
Mike & Gemma Smith

RESOURCE CONSENT

SMITH RESIDENCE
22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

ROOF PLAN

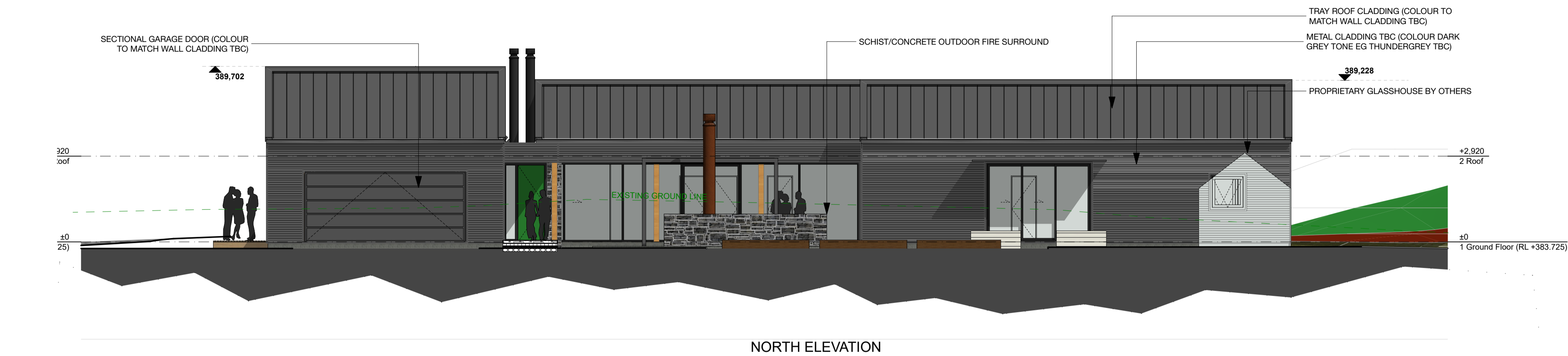
© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

ORIGINAL SCALE	A1	1:100
REDUCED SCALE	A3	REDUCED (200%)
DATE	13/08/24	
JOB No	NA	
DRAWN	***	
CHECKED	***	

DRAWING NO.	REVISION
2.01	01

PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0550
www.teamgreenarchitects.co.nz





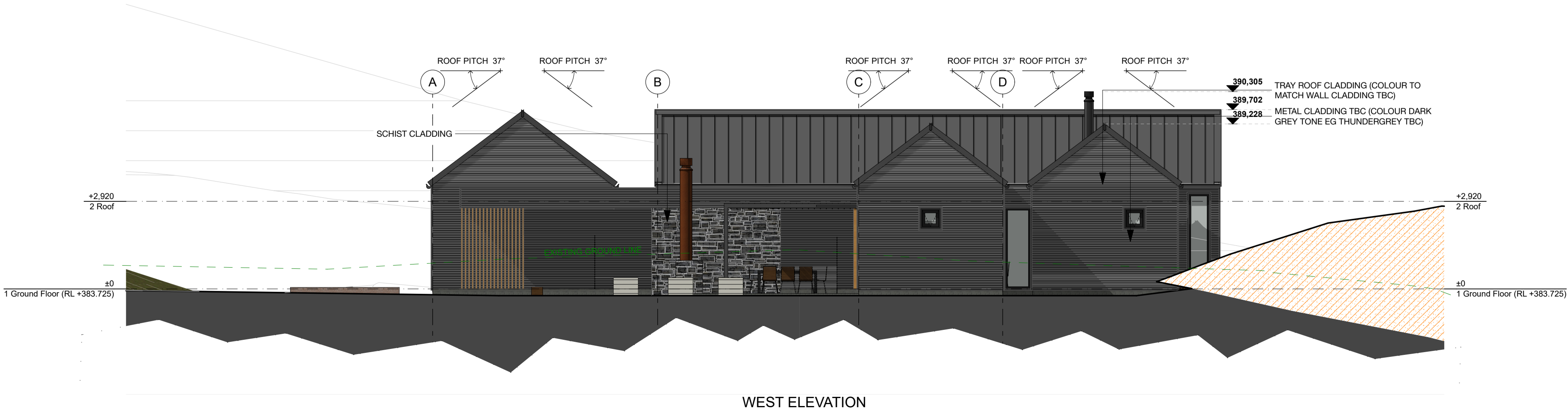
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

DO NOT SCALE OF PRINT - REFER TO FIGURED DIMENSIONS.
REFER TO LARGER DETAILS WHERE POSSIBLE.
CONTRACTOR MUST VERIFY AND CONFIRM ALL DIMENSIONS AND
PROFILES ON SITE PRIOR COMMENCING WORK / CONSTRUCTION.
CONSULT WITH ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES
ARE FOUND.

REVISIONS			
REV ID	CH ID	ISSUE	DATE

NOTES
ALIGNMENT OF WINDOW HEAD FLASHINGS, CHANGE IN CLADDING
JUNCTIONS, AND SOFFIT FLASHING TO BE CONFIRMED WITH
ARCHITECT

CONSULTANTS	
SURVEYOR	T.B.C.
PLANNER	T.B.C.
STRUCTURAL ENGINEER:	McCONAUGHY CONSULTING
SERVICES CONSULTANT:	doug@mcconaughey.co.nz
	T.B.C.

CLIENT
Mike & Gemma Smith

RESOURCE CONSENT

SMITH RESIDENCE

22 ALFRED DUNCAN DRIVE RD 1
QUEENSTOWN 9371
NEW ZEALAND

ELEVATIONS

© COPYRIGHT. THIS DRAWING IS UNDER COPYRIGHT AND SHALL NOT
BE USED OR REPRODUCED IN ANY FORM WITHOUT WRITTEN
APPROVAL. THE COPYRIGHT OF THIS DRAWING AND ALL PARTS
THEREOF REMAINS WITH TEAM GREEN ARCHITECTS LTD.

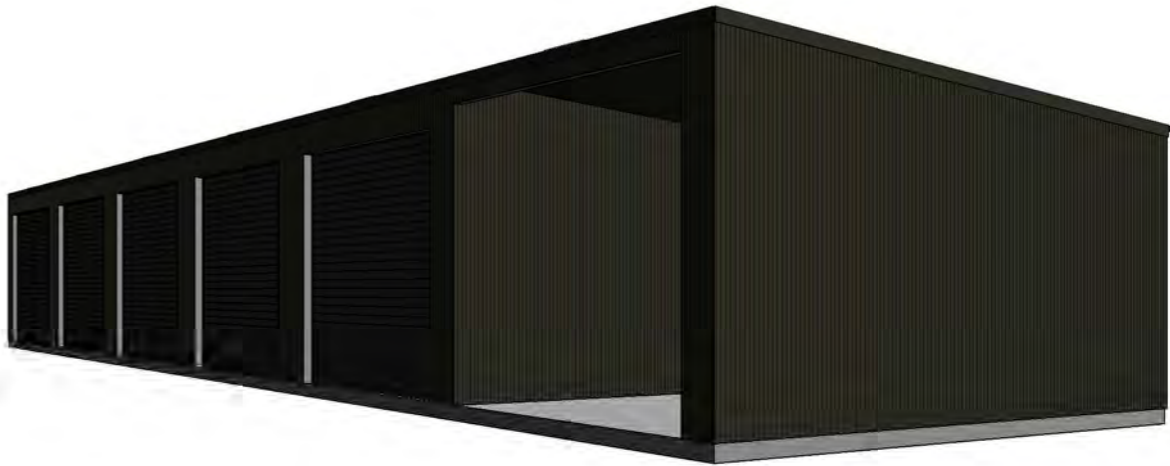
ORIGINAL SCALE	A1	1:100
REDUCED SCALE	A3	REDUCED (200%)
DATE	13/08/24	
JOB No	NA	
DRAWN	***	
CHECKED	***	

DRAWING NO.	REVISION
3.01	01

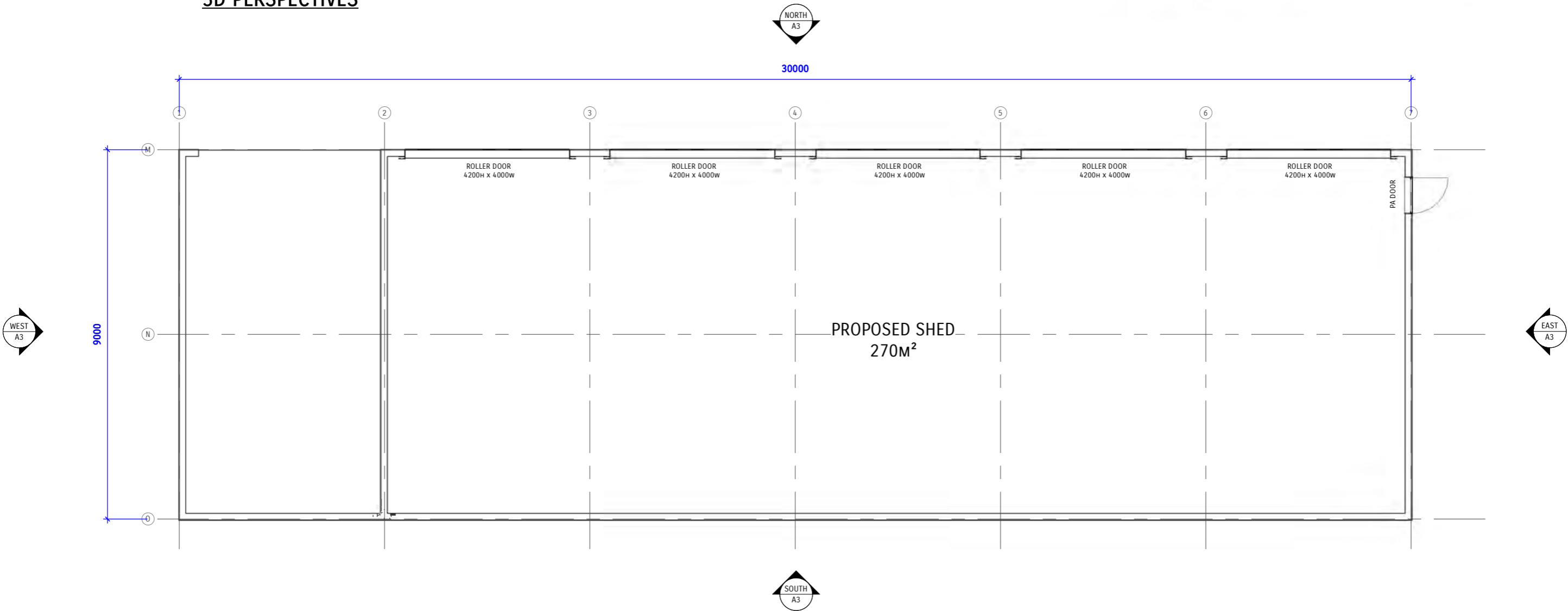
PO BOX 1298, QUEENSTOWN, 9300, NEW ZEALAND +64 (3) 409 0550
www.teamgreenarchitects.co.nz



THE ORIGINAL OF THIS DOCUMENT IS TO THE SCALE NOTED. REPRODUCTION CAN DISTORT SIZE & SHAPE. USE ONLY THE DIMENSIONS ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. DO NOT SCALE. ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE BEFORE COMMENCING CONSTRUCTION.



3D PERSPECTIVES



ULTRASPAN OTAGO LTD
7 HUGHES CRESCENT
CROMWELL
0800 489 940
WWW.ULTRASPAN.NET.NZ
DESIGN@ULTRASPAN.NET.NZ

2402 - SMITH
64 Alec Robins Road,
Queenstown

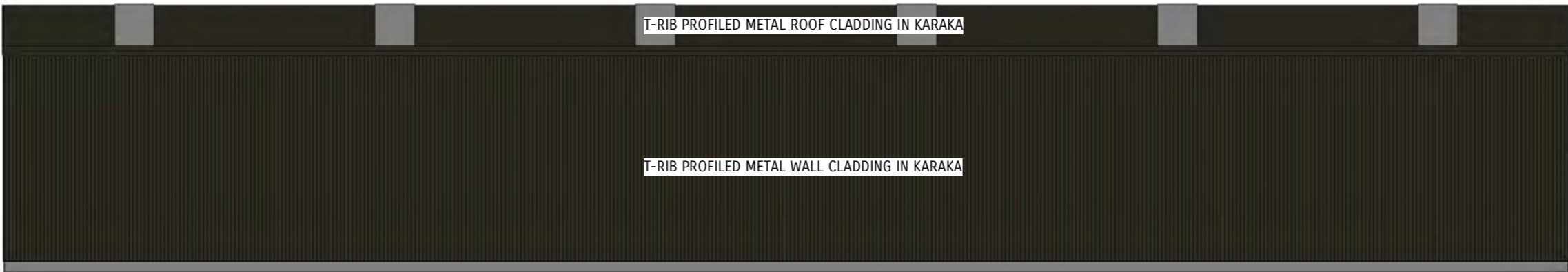
REVISION:	DESCRIPTION:	ISSUED ON:
A	RESOURCE CONSENT	05/02/2024
B	CLIENT REVISION	03/03/2025

DRAWING NAME: FLOOR PLAN		
DRAWING SET: RESOURCE CONSENT		
SCALE @ A3:	REVISION:	DRAWING NUMBER:
1 : 100	B	A2

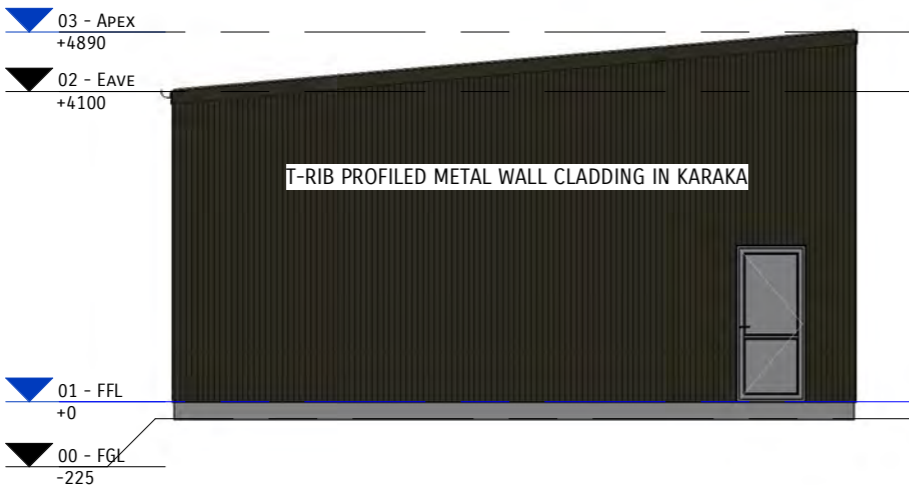
THE ORIGINAL OF THIS DOCUMENT IS TO THE SCALE NOTED. REPRODUCTION CAN DISTORT SIZE & SHAPE. USE ONLY THE DIMENSIONS ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. DO NOT SCALE. ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE BEFORE COMMENCING CONSTRUCTION.



NORTH



SOUTH

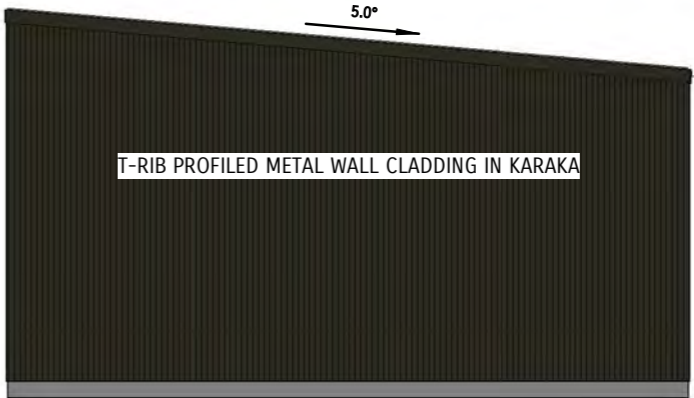


EAST

ROOF CLADDING
5° 0.40MM T-RIB PROFILED COLORSTEEL IN KARAKA
TRANSLUCENT POLYCARBONATE SHEETS TO ROOF
WHERE SHOWN
GUTTERS TO MATCH ROOF COLOUR

WALL CLADDING
0.40MM T-RIB PROFILED COLORSTEEL IN KARAKA
DOWNPIPES TO MATCH WALL COLOUR

ROLLER DOORS
WINDSOR RDN STEEL SHUTTERS IN SELECTED COLOUR



WEST

REVISION:	DESCRIPTION:	ISSUED ON:
A	RESOURCE CONSENT	05/02/2024
B	CLIENT REVISION	03/03/2025

DRAWING NAME: ELEVATIONS		
DRAWING SET: RESOURCE CONSENT		
SCALE @ A3: 1 : 100	REVISION: B	DRAWING NUMBER: A3



Geotechnical Report for Resource Consent

Smith Hill Block
Alec Robins Road
Queenstown

Report prepared for:
Gemma and Mike Smith

Report prepared by:
GeoSolve Limited

Distribution:
Gemma and Mike Smith
GeoSolve Limited (File)

November 2024
GeoSolve Ref: 210246

Revision	Issue Date	Purpose	Author	Reviewed
0	1/11/2024	Client issue	ME/PGF	PGF
1	13/11/2024	Re-issue following review	ME/PGF	PGF



GEOTECHNICAL



**WATER
RESOURCES**



PAVEMENTS



i

Table of Contents

1	Introduction	1
1.1	General	1
1.2	Development	1
2	Site Description	2
2.1	General	2
2.2	Topography and Surface Drainage	2
3	Geotechnical Investigations	4
4	Subsurface Conditions	5
4.1	Geological Setting	5
4.1.1	Active Faulting	5
4.2	Stratigraphy	5
4.3	Groundwater	6
4.4	Natural Hazards	6
4.5	Seismic	6
4.6	Slope Stability	6
4.7	Liquefaction	6
4.8	Alluvial Fan	7
4.9	Rock Fall	7
5	Engineering Considerations	8
5.1	General	8
5.2	Geotechnical Design Parameters	8
5.3	Site Preparation	9
5.4	Excavations	9
5.4.1	Fill Slopes	9
5.5	Ground Retention	10
5.6	Groundwater Issues	11
5.7	Access Road	11
5.8	Foundations	11
5.8.1	General	11
5.8.2	Shallow Foundations on Glacial Soils or Rock	12
5.9	Site Subsoil Category	12



ii

6	Neighbouring Structures/Other Hazards/QLDC EMP.....	13
7	Conclusions and Recommendations	14
8	Applicability.....	15



1 Introduction

1.1 General

This report presents the results of a geotechnical assessment undertaken by GeoSolve Ltd at Alec Robins Road to determine the subsoil conditions and confirm the suitability of the subject site in support of a resource consent application for a proposed residential development.

The geotechnical assessment has been completed for Mike and Gemma Smith in accordance with GeoSolve Ltd proposal and short form agreement (ref: 210246) dated 12th April 2021, which outlines the scope of work and conditions of engagement.

1.2 Development

The proposed development comprises a residential dwelling with associated access road infrastructure and a separate shed.

Access to the dwelling and shed areas will be from the southern end of Alec Robins Road via an existing access road. The access road follows a natural bench on the hillside before climbing up to the proposed building platform through a natural low point and shallow gully adjacent to the proposed shed area.

Retaining will be required on south side of the access Road close to the proposed house location. The retaining wall will support a proposed fill mound to be constructed on the western and southern sides of the proposed house.

A cut and fill plan has been provided by Aurum Survey Consultants Limited (ASCL), see Figure 1, Appendix A. The plan shows:

- Excavation up to approximately 2.4 m depth will be required form a level building platform for the house, which will be located in cut.
- Excavation up to approximately 3.8 m depth will be required form a level building platform for the shed, which will be located in cut.
- The landscape mound will have a maximum depth of 6.5 m. Batter slopes are shown to be approximately 1V:2.3H (23°).

A site plan with the proposed building layout and showing the investigation locations is attached in Figure 1, Appendix A.



2 Site Description

2.1 General

The site is located at the Southern end of Alec Robins Road, approximate 1 km south of Lake Hayes, 1 km east of the Lake Hayes Estate, and approximately 12 km east of central Queenstown, as shown in Figure 2.1 below. The site is legally described as Part Section 17 Block IX Shotover SD, DP526559. The NZTM2000 coordinates for the site are 1269415E, 5008250N m. The elevation across the site ranges from 480 to 349 m RL (NZVD2016).



Figure 2.1: Site location plan

The property is accessed from the southern extent of Alec Robins Road and lies on the southern facing slopes of a low hill to the south west of Morven Ferry Hill.

The site is currently undeveloped and is largely surrounded by farmland. A Queenstown trail is present downslope, 100 m to the south. The nearest existing residential building is approximately 400 m to the west.

2.2 Topography and Surface Drainage

The building site has been surveyed by ASCL and the site topography is shown in Figure 1, Appendix A.



The proposed building platforms are located on a natural bench present on a south facing hillside, which falls at an overall angle of approximately 15-20°. The Kwarau River is present at the toe of the hill slope and is approximately 200 m distant and topographically 80 m lower. Locally, around the platforms steeper slope up to approximately 40° are present.

Figure 2.2 below shows a general view of the slope and development location.



Figure 2.2: View of the hillside and development location from the Kwarau River

Overall, overland flow will be towards the south- south west and the Kwarau River. The hillside above the platform has several well established shallow and discontinuous channels. The flow paths will locally direct overland flow during periods of heavy fall, however will predominantly be dry.

A groundwater seepage reaches the surface in a localised area of marshy ground close to the north western corner of the platform. Current run-off from the immediate building platforms is to the south via well-established existing channels that fall down to the Kwarau River. Due to the elevated location of the platforms they are relatively free draining.



3 Geotechnical Investigations

An engineering geological site inspection has been undertaken with confirmatory subsurface investigations. Geotechnical investigations that were conducted on the 13th of May 2022 and the 23rd of February 2024 include:

- 8 test pits (TP1-TP8), extending to a maximum depth of 3.4 m below ground level (bgl) to produce geotechnical logs of the subsoils;
- Scala penetrometer tests within the test pit excavations and across the proposed building footprint to assess the relative density of the subsoils.

Investigation locations are presented on the appended Site Location Plan Figure 1, Appendix A. The test pit logs with associated Scala penetrometer tests are presented in Appendix B.



4 Subsurface Conditions

4.1 Geological Setting

The site is located within the Wakatipu basin, a landscape formed predominantly by successive glaciations throughout the late Quaternary. Published references indicate that the last glacial recession occurred in the region between 10,000 and 20,000 years ago. The retreating glaciers have left deposits of till, outwash gravels and lake sediment over the ice-scoured schist bedrock. Post-glacial times have been dominated by the mechanical weathering and erosion of the bedrock and overlying quaternary sediments.

4.1.1 Active Faulting

No active fault traces are known to exist in the immediate vicinity of the site. However, the nearest known active fault, the Cardrona / Nevis Fault, is located 9.5 km east of the site. The recurrence intervals for this fault is approximately 5,500¹, therefore the risk posed can be assumed as relatively low.

Significant seismic risk exists in the Queenstown Lakes District from a rupture of the Alpine Fault² which is located approximately 88 km NW of the site. Strong ground shaking throughout the South Island is likely to be associated with a rupture of the Alpine Fault. Recent research³ suggests there is a 75% probability of an Alpine Fault earthquake occurring within the next 50 years and an 82% probability that the next earthquake on the Alpine Fault will be of M_w 8 or greater. An earthquake of this magnitude is expected to result in strong and prolonged ground shaking in the vicinity of Queenstown.

4.2 Stratigraphy

The subsurface soil materials observed during the site assessment generally comprises a veneer of shallow soil over rock, and the observed stratigraphy comprises:

- 0.2 m of Topsoil, overlying;
- 0.1 to 0.6 m of Loess, overlying;
- 0.8 m of Fan Gravel (TP1 only); overlying
- 0.6 m of Outwash Gravel (TP1 only), overlying
- 0.3 to 0.9 m of Glacial Till, overlying;
- Schist Bedrock.

For full description of the above stratigraphy see the attached test pits logs in Appendix B. The location of the test pits is shown on Figure 1, Appendix A.

¹ Barrell, D.J., (2019). General distribution and characteristics of active faults and folds in the Queenstown Lakes and Central Otago districts, Otago. GNS Science Consultancy Report 2018/207. Published: March 2019

² Orchiston, C., Davies, T., et al. (2016) Alpine Fault Magnitude 8 Hazard Scenario. <https://af8.org.nz/>

³ Howarth, J.D., et al. (2021). Spatiotemporal clustering of great earthquakes on a transform fault controlled by geometry. Nature Geoscience; doi: 10.1038/s41561-021-00721-4



4.3 Groundwater

Groundwater was not intercepted in the test pits, however perched seepages may develop at shallow depths, e.g. on the rock head, during period of heavy rainfall.

Given the location of the proposed building platform, in an elevated hillside position, it is expected the regional water table will be many metres below any future building, foundation or excavation level.

4.4 Natural Hazards

No specific risk to the site from natural hazards has been identified. A review of the natural hazards is provided in the Sections below.

4.5 Seismic

As discussed in Section 4.1.1 above, there is a regional seismic risk that is not specific to the property. The seismic considerations for the proposed buildings and associated earthworks will be covered by the requirements of the New Zealand building code.

4.6 Slope Stability

There are no mapped slope stability issues present in the area. Geomorphology observations did not identify any features that suggest deep seated or shallow instability at the proposed platform locations. Schist exposures across the hillside, on the riverbank at the slope toe, and in the test pits, are consistent and show foliation dips to the south west. The foliation orientation indicates there are no underlying stability issues in the schist bedrock across the proposed development areas.

There was no instability observed in the channels directly above the platform location. Some historic shallow instability (mostly topsoil) was noted in channel to the east which will not affect the platform areas.

Local slopes immediately around the building platforms are relatively gentle, 5-20°. The platforms are set-back sufficiently from the steeper areas of hillside to reduce the likelihood of instability at the crest effecting the buildings to acceptable levels, particularly with rock present at shallow depths. No instability issues are present directly upslope of the platforms.

4.7 Liquefaction

The site is unclassified on the QLDC hazard maps with respect to liquefaction. The GeoSolve assessment concludes that there is no risk of liquefaction at the site. The site is elevated significantly above the regional ground water table and non-liquefiable schist bedrock was encountered at shallow depths.



4.8 Alluvial Fan

No alluvial fan hazards are shown on the QLDC Hazard Map⁴ within the site. Additionally, no alluvial fan hazards were observed on the site.

4.9 Rock Fall

Shallow rock outcrops are observed upslope from the proposed building areas. Inspection of the outcrops indicates that rockfall is unlikely to originate from the upslope source area and the rockfall risk to the site is assessed to be insignificant.

⁴ QLDC (2024) District Hazards GIS Webmap. Accessed 5th March 2024



5 Engineering Considerations

5.1 General

The recommendations and opinions contained in this report are based upon ground investigation data obtained at discrete locations and historical information held on the GeoSolve database. The nature and continuity of subsoil conditions away from the investigation locations is inferred and cannot be guaranteed.

The actual subsurface conditions may show some variation from those described and all design recommendations contained in this report are subject to confirmation by inspection during construction phases.

5.2 Geotechnical Design Parameters

Table 5.1 provides a summary of the recommended geotechnical design parameters for the soil materials expected to be encountered during construction of the proposed dwelling.

Table 5.1– Recommended geotechnical design parameters.

Unit	Thickness (m)	Bulk Density γ (kN/m ³)	Effective Cohesion c' (kPa)	Effective Friction ϕ' (deg)	Elastic Modulus E (kPa)	Poissons Ratio ν
Topsoil (firm organic SILT)	0.05-0.3	16	0	25	5,000	0.3
Loess (stiff SILT)		17	0	32	10,000	0.3
Fan Gravel (18	0	32	20,000	0.3
Glacial Outwash (stiff becoming very stiff – hard, SILT with rare sand)	0.8-0.95	19	2	36	20,000-30,000	0.3
Glacial Till (dense Silty Sandy GRAVEL, trace to minor cobbles and boulders)	2.4	19	2	36	20,000-30,000	0.3
Schist Bedrock (strength primarily controlled by defects)	>100 m	26	0 (along defect)	25 (along defect)	50,000	0.2



5.3 Site Preparation

During the earthworks operations all topsoil, organic matter, water-softened soils and other unsuitable materials should be removed from the construction areas in accordance with the recommendations of NZS 3604.

The QLDC Environmental Management Plan Guidelines should be consulted with respect to silt management onsite.

Water should not be allowed to pond or collect near or under a shallow foundation or pile holes. Positive grading of the subgrade should be undertaken to prevent water ingress or ponding.

All fill that is utilised as bearing for foundations should be placed and compacted in accordance with the recommendations of NZS 4431 and certification provided to that effect. An earth fill specification can be provided by GeoSolve upon request.

5.4 Excavations

Excavations will be primarily in soil, some rock excavation is likely to be required for deeper areas of cut.

Soil Materials

Earthwork plans provided generally show excavation batters in soil will vary up to approximately 30°. This is acceptable provided the batters are dry. Inspection should be undertaken during construction to confirm the ground model and any additional requirements. Locally reducing the slope angle, or targeted installation of drainage, may be required to ensure long term stability is maintained.

Rock Materials

Cut slopes in rock are also shown to be 30°, which is considered acceptable for long term stability. If required, steepening batters to a maximum of 0.25H:1.0V (76°) is expected to be appropriate following review during construction.

5.4.1 Fill Slopes

Engineered Fill and Engineered Fill Slopes Engineered fill may be required to form level foundation areas. Where required engineered fill should be placed and compacted in accordance with the recommendations of NZS 4431 and Queenstown Lakes District Council standards. All fill earthworks should be inspected and tested as appropriate during construction and certified by an appropriate Professional.

The earth mound proposed on the western and southern sides of the building has a proposed maximum batter of approximately 1V:2.3H (23°). This is expected to be suitable to provide long term stability provided an appropriate methodology is applied during construction. Recommendations for the mound construction are provided below and are shown on Figure 5.1.

- The materials used to construct the mound should be free from organics, or other unsuitable materials, e.g. wet silt. This will need to be confirmed during



construction. The site cut material is expected to be appropriate, provide granular well graded materials are preferentially selected.

- The fill will need to be placed and compacted in horizontal layers benched into the existing hillside.
- Geogrid may be required to stiffen up the fill, and its use can be determined once the natural ground beneath the mound is stripped of topsoil and inspected.
- Underfill drainage may be required, and can be confirmed during construction.
- The fill will need to be compacted and tested to ensure the density achieved will provide adequate long-term slope stability. Achieving a 'dense' state is e.g. scala penetrometer blow counts of 7+/100 mm advancement of the rod, will be acceptable.
- The mound surface should be topsoiled and planted to prevent surface scour.

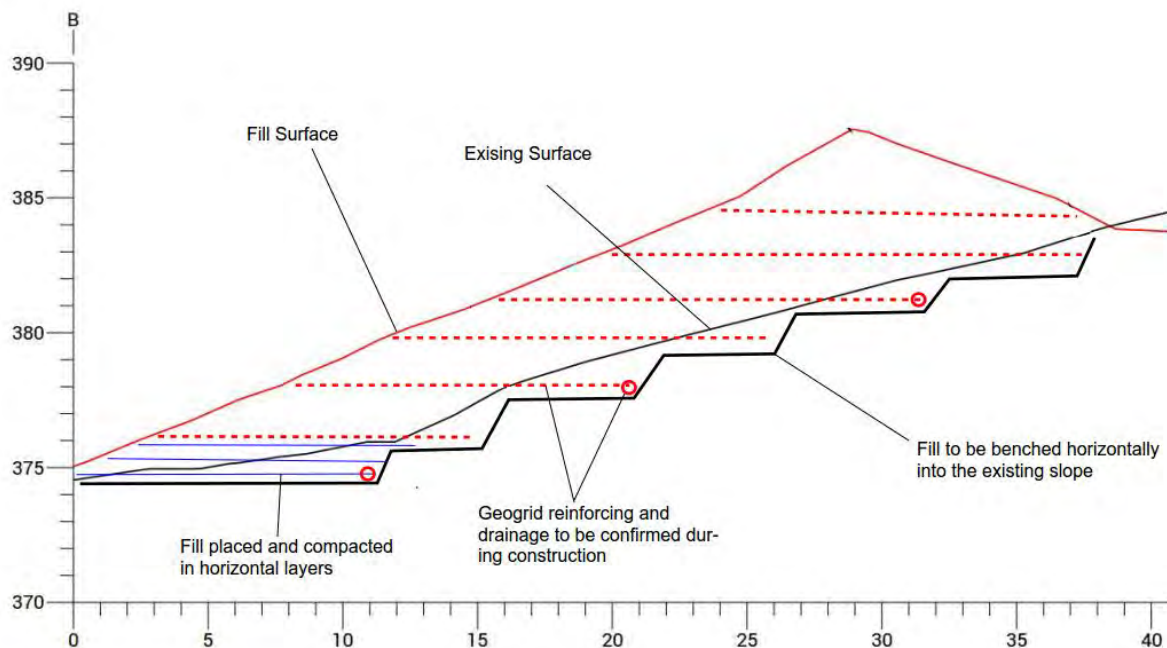


Figure 5.1: Mound Construction

5.5 Ground Retention

All retaining walls should be designed by a Chartered Professional Engineer using the geotechnical parameters recommended in Table 5.1 of this report. Due allowance should be made during the detailed design of all retaining walls or embankments for forces such as surcharge due to buildings, sloping ground surfaces, groundwater, seismic loads and traffic loads.

All temporary slopes for retaining wall construction should be battered in accordance with the recommendations presented in Section 5.4 of this report.



To ensure potential groundwater seeps and overland flows are properly controlled behind retaining structures, the following recommendations are provided:

- A minimum 0.3 m width of durable free draining granular material should be placed behind all retaining structures;
- A heavy duty non-woven geotextile cloth, such as Bidim A14, should be installed between the natural ground surface and the free draining granular material to prevent siltation and blockage of the drainage media;
- A heavy-duty (TNZ F/2 Class 500) perforated pipe should be installed within the drainage material at the base of all retaining structures to minimise the risk of excessive groundwater pressures developing. This drainage pipe should be connected to the permanent piped storm water system.

5.6 Groundwater Issues

Due to the elevated position of the lot no significant groundwater issues are expected, however, a wet area is present close the proposed platform, and excavation into the slope is proposed. Perched seepages at shallow depths may be encountered during future earthworks, particularly at the soil-rock contact. Drainage may be required on the upslope side of the property to ensure the building platform and earthworks area remains dry.

5.7 Access Road

No significant geotechnical issues were noted along the access corridor that would preclude construction of a road to access a residential property.

The access road will cross a range of soil types and moisture contents, and CBR values will vary along the corridor. Confirmation of CBR values for design, if required, can be provided at the detailed design stage if needed.

5.8 Foundations

5.8.1 General

Topsoil, colluvium or loess, will not provide adequate support for building foundations and will need to be undercut and replaced with engineered fill. All building foundations should bear on glacial soils, bedrock or engineered fill overlying these materials. Typical shallow foundations, strip, pad or raft systems, are expected to be appropriate at the site.

If site levels are required to be re-established, fill that is utilised as bearing for foundations should be placed and compacted in accordance with NZS 4431 and certification provided to that effect.

To minimise the effects of freeze-thaw cycles in footings founded on soil, all shallow foundations should be founded a minimum of 0.4 m below the adjacent finished ground surface.



It is recommended the foundation subgrade be inspected by a suitably qualified and experienced geotechnical practitioner to confirm the conditions are in accordance with the assumptions and recommendations provided in this report.

5.8.2 Shallow Foundations on Glacial Soils or Rock

Materials at foundation depths are expected to comprise glacial soils or schist bedrock. Foundation bearing on these soils will comply with Good Ground as per NZS3604 and it is recommended that foundations are designed in accordance with this standard.

If other soil types are locally present beneath foundation areas, e.g. colluvium or Loess, they should be under cut and replaced with engineered fill. Engineered fill constructed over the glacial soils or bedrock will also comply with Good ground with respect to bearing capacity.

5.9 Site Subsoil Category

For detailed design purposes it is recommended the magnitude of seismic acceleration be estimated in accordance with the recommendations provided in NZS 1170.5⁵.

Rock was intercepted in testpit investigations and can be assumed at shallow depths across the building platform areas. A site subsoil of Class B (Rock) should be applied in accordance with the NZS 1170.5 seismic provisions.

The soil parameters for static conditions given in Table 5.1 require no downgrading for seismic bearing. The materials are not subject to liquefaction or strength loss from cyclic loading.

⁵Standards New Zealand (2004) "NZS1170.5 Earthquake actions - New Zealand", Wellington, New Zealand.



6 Neighbouring Structures/Other Hazards/QLDC EMP

Distances to adjoining structures: The building platform is situated in an area of farmland with no nearby structures. The risk to adjoining structures is therefore considered very low to nil from a residential development at the site.

Aquifers: The site is located above the Wakatipu Basin Aquifer, however is not expected to adversely affect this resource. If drilling for ground source heating, exploration for water abstraction, or other activity, consent will be required.

Erosion and Sediment Control: The site presents some potential to generate silt runoff and this would naturally drain downslope. Effective systems for erosion control are runoff diversion drains and contour drains, while for sediment control, options are earth bunds, silt fences, hay bales, vegetation buffer strips and sediment ponds. Only the least amount of subsoil should be exposed at any stage and surfacing established as soon as practical. QLDC Guidelines for Environmental Management Plans should be consulted for site management.

Noise: It is expected that conventional earthmoving equipment, such as excavators, trucks, rollers and plate compactors will be required during earthworks construction. Rock breakers may be needed, however the rock is relatively weak and the use rock rippers and toothed buckets may be sufficient. The construction contractor should take appropriate measures to control the construction noise and ensure QLDC requirements are met in regard to this issue.

Dust: The soil materials at this site have potential to generate dust. The earthworks contractor should take appropriate measures to control dust in accordance with QLDC requirements. Regular damping with sprinklers is expected to be an effective measure to control airborne dust during earthworks construction.

Vibration: No vibration induced settlement is expected in these soil types.



7 Conclusions and Recommendations

Geotechnical assessment for the proposed building platforms indicates that the proposed residential development of the site will be feasible from a geotechnical perspective. No geotechnical issues have been identified which cannot be addressed by standard engineering assessment and construction techniques.

- With the exception of the regional seismic risk no significant natural hazards have been identified at the site, and no hazards are present the preclude development;
- Ground conditions are typical of the wider Morven Hill area with a relatively thin soil cover overlying weak pelitic schist rock at shallow depths;
- Shallow foundations, suitably designed for the soil conditions and surrounding slopes, will be appropriate. Foundations are likely to bear on glacial soils, rock or engineered fill overlying either. Good ground is recommended for foundation design and bearing capacity.
- All unsuitable materials identified in foundation excavations, particularly those softened by exposure to water, should be undercut and replaced with engineered fill during construction. Any fill that is utilised as bearing for foundations should be placed and compacted in accordance with NZS 4431:1989 and certification provided to that effect.
- Consideration of drainage around the platform will be required to ensure shallow seepages and local run-off are addressed;
- The proposed cut and fill batters are considered acceptable. Specific recommendations for the construction of the mound are provided in Section 5.4.1
- A geotechnical practitioner should inspect all excavations and additionally any seepage, spring flow or under-runners that may be encountered during construction.
- Any retaining walls should be designed by a chartered professional engineer, adopting the geotechnical parameters outlined above. Further specific subsurface investigations for wall design may be required depending on final development requirements.



8 Applicability

This report has been prepared for the benefit of Gemma and Mike Smith with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

The recommendations and opinions contained in this report are based upon ground investigation data obtained at discrete locations and historical information held on the GeoSolve database. The nature and continuity of subsoil conditions away from the investigation locations is inferred and cannot be guaranteed.

It is important that we be contacted if there is any variation in subsoil conditions from those described in this report.

Report prepared by:

.....
Michael Eatson

Engineering Geologist

GeoSolve Ltd

Reviewed for GeoSolve Ltd by:

.....
Paul Faulkner

Principal Engineering Geologist

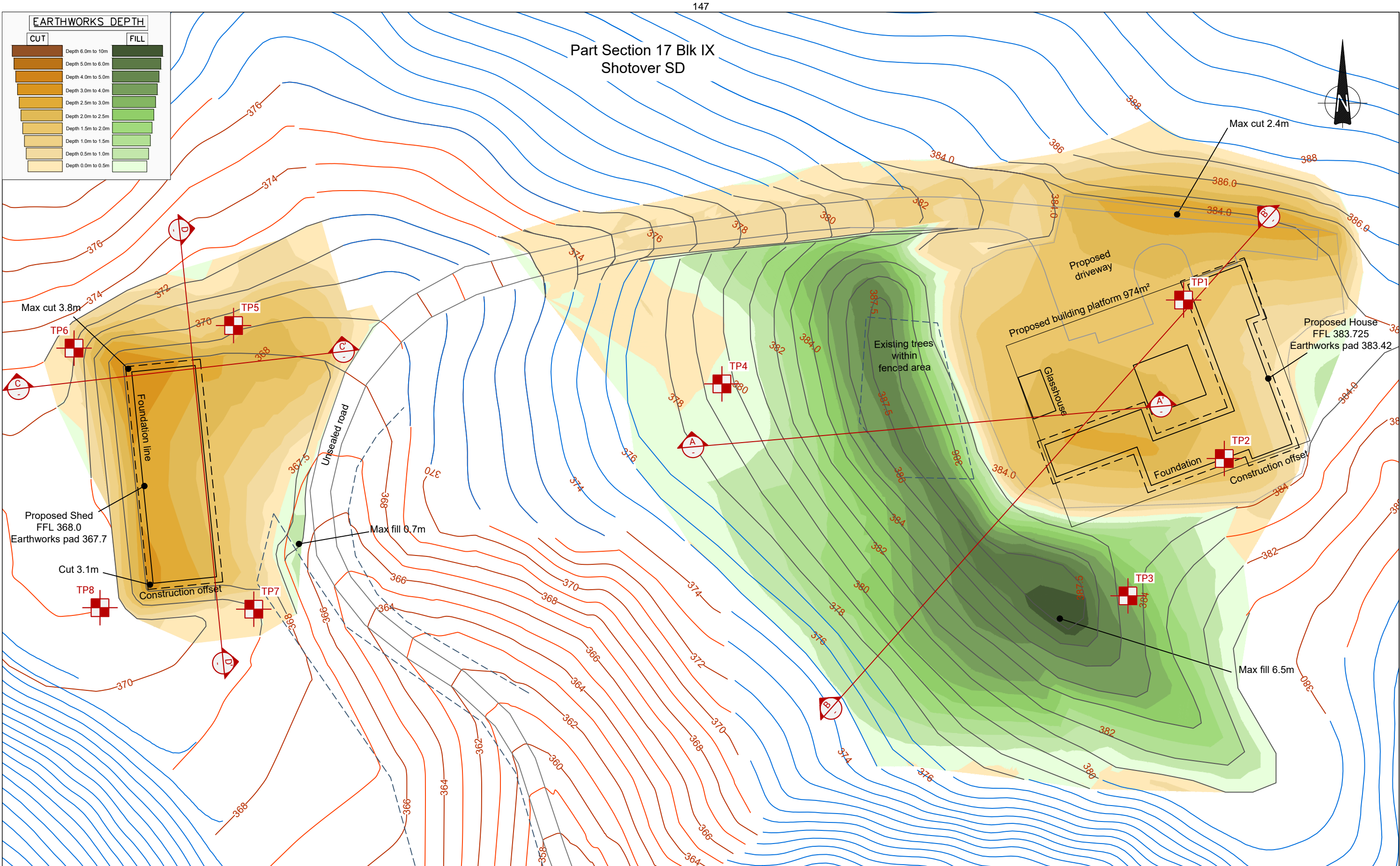
GeoSolve Ltd

Appendices:

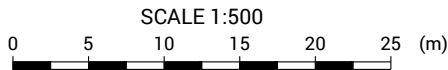
Appendix A – Site Plan & Cross-sections

Appendix B – Investigation Data

Appendix A: Site Plan



Notes:
1. These drawings have been prepared for the benefit of Little Morven Trust with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.



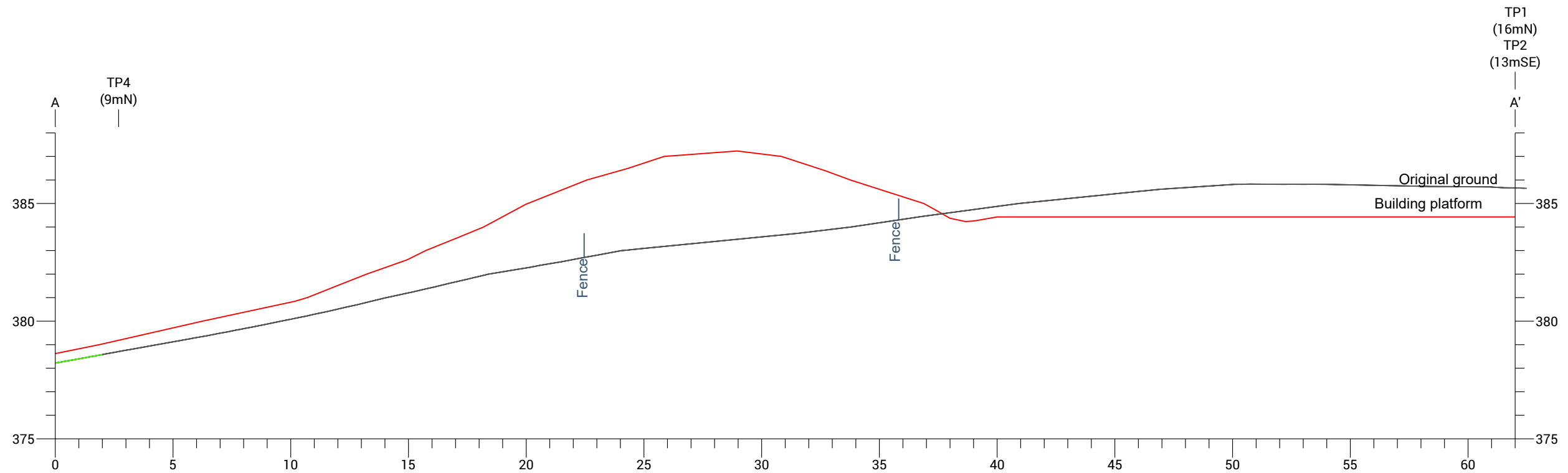
Level 1, 70 MacAndrew Road, South Dunedin
www.geosolve.co.nz

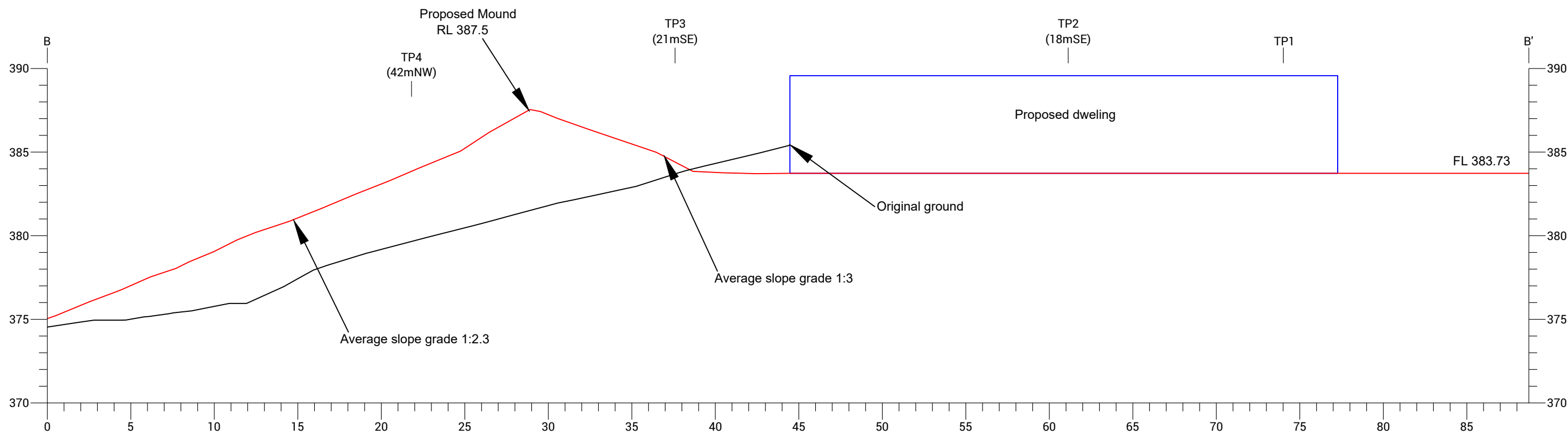
DRAWN	WCG	Nov.24
DRAFTING CHECKED		
APPROVED		
CADFILE:		
210246.dwg		
SCALES (AT A3 SIZE):		
1:500		
PROJECT No:		
210246		

FIG No:	Appendix A, Figure 1
---------	----------------------

Little Morven Trust
Alec Robins Road, Queenstown
Geotechnical Investigations
Site Plan

REV.	0
------	---





Notes:

1. These drawings have been prepared for the benefit of Little Morven Trust with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

SCALE 1:250

0 2.5 5.0 7.5 10.0 12.5 (m)

Level 1, 70 MacAndrew Road, South Dunedin
www.geosolve.co.nz

DRAWN	WCG	Nov.24
DRAFTING CHECKED		
APPROVED		
CADFILE: 210246.dwg		
SCALES (AT A3 SIZE): 1:250		
PROJECT No: 210246		FIG No: Appendix A, Figure 2b

Little Morven Trust

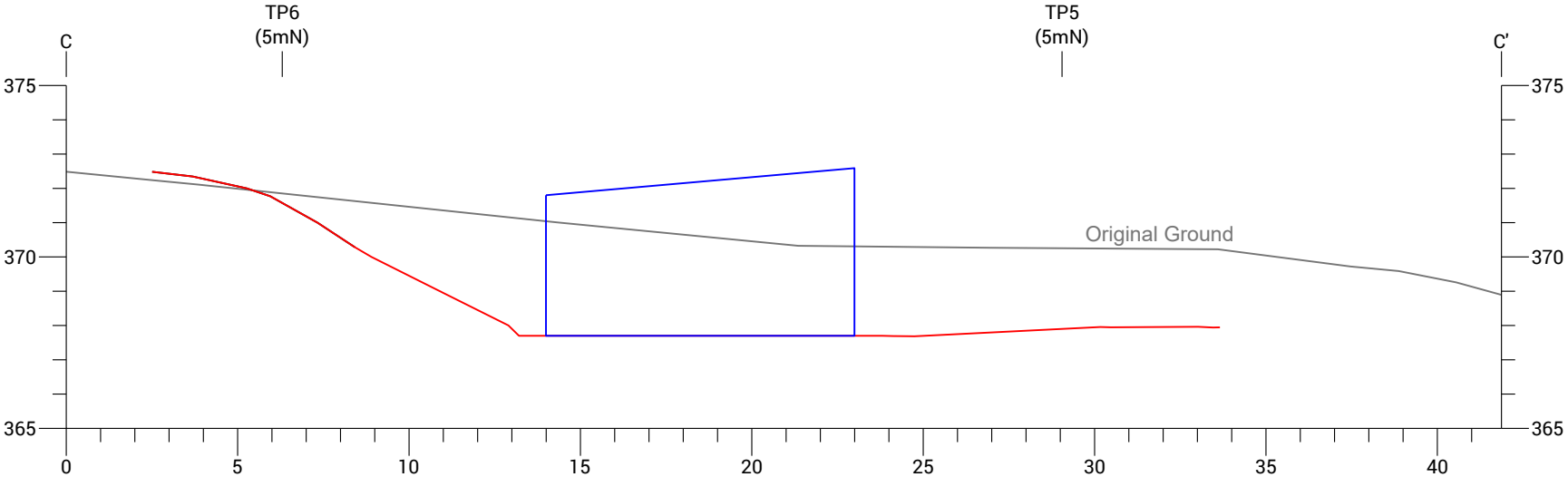
Alec Robins Road, Queenstown

Geotechnical Investigations

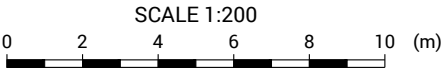
Cross Section B

REV.

0



Notes:
1. These drawings have been prepared for the benefit of Little Morven Trust with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.



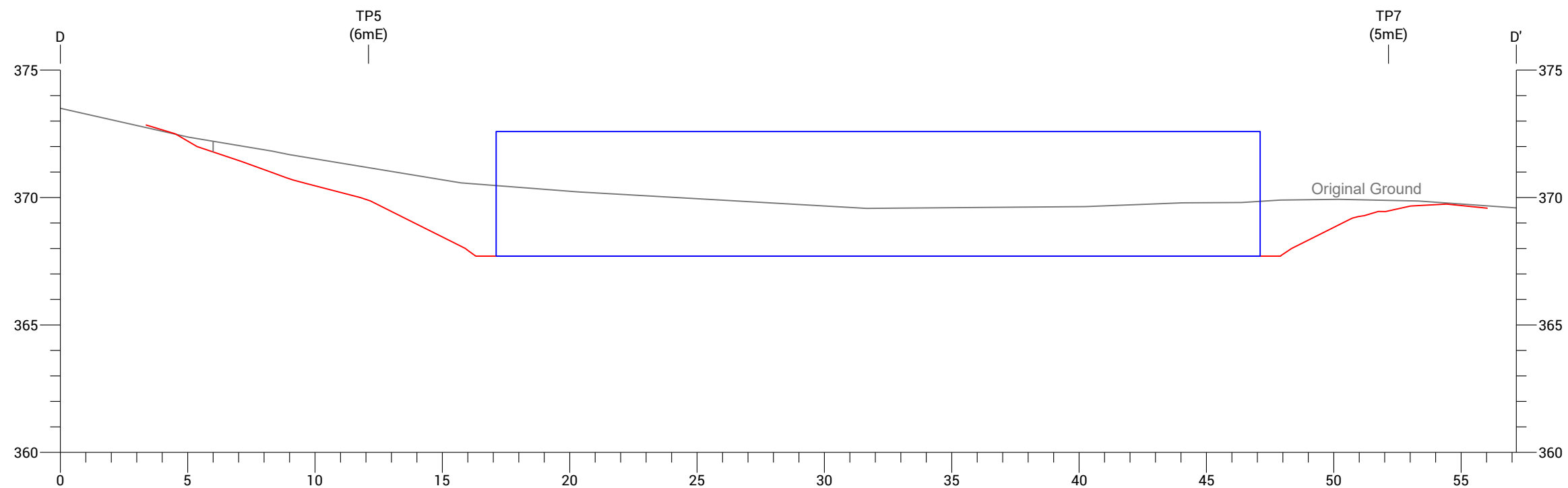


GEOSOLVE
Level 1, 70 MacAndrew Road, South Dunedin
www.geosolve.co.nz

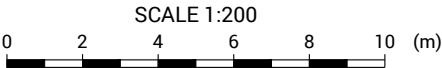
DRAWN	WCG	Nov.24
DRAFTING CHECKED		
APPROVED		
CADFILE: 210246.dwg		
SCALES (AT A3 SIZE): 1:200		
PROJECT No: 210246		FIG No: Appendix A, Figure 2c

Little Morven Trust
Alec Robins Road, Queenstown
Geotechnical Investigations
Cross Section C

REV.
0



Notes:
1. These drawings have been prepared for the benefit of Little Morven Trust with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.









DRAWN	WCG	Nov.24
DRAFTING CHECKED		
APPROVED		
CADFILE: 210246.dwg		
SCALES (AT A3 SIZE): 1:200		
PROJECT No: 210246		FIG No: Appendix A, Figure 2d

Little Morven Trust
Alec Robins Road, Queenstown
Geotechnical Investigations
Cross Section D

REV.
0

Appendix B: Investigation Data

<div></div>		153										HOLE NO.:										
		TEST PIT LOG										TP01										
CLIENT:												JOB NO.:										
PROJECT: Alec Robins Road												210246										
SITE LOCATION: Alec Robins Road, Queenstown				CONTRACTOR: Monk Earthworks				START DATE: 18/05/2021														
COORDINATES: 1269527 mE, 5008266 mN (NZTM2000)				EQUIPMENT: 12T				END DATE: 18/05/2021														
LOCATION METHOD: Map or aerial photograph				ACCURACY: ± 5				LOGGED BY: PGF														
ELEVATION: 385 m (NZVD2016)				OPERATOR: Brandon				CHECKED DATE:														
SOIL / ROCK TYPE	MATERIAL DESCRIPTION <small>(See Classification & Symbology sheet for details)</small>	SAMPLES	DEPTH / RL	LEGEND	SCALA PENETROMETER <small>(Blows / 0 mm)</small>														SHEAR STRENGTH <small>(kPa)</small>			WATER
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	50	100	150	
TOPSOIL	Organic SILT, trace fine sand, dark brown. Soft, moist, non-plastic, Organics: rootlets, amorphous..																					
	0.20 m																					
LOESS	Sandy SILT, yellow grey, massive. Firm to stiff, moist, non-plastic, sand, fine.		0.5																			
	0.80 m																					
FAN GRAVEL	Sandy silty fine to coarse GRAVEL, grey brown, bedded. Medium dense, moist, sand and silt lenses, gravel, subangular to subrounded.		1.0																			
	1.40 m																					
OUTWASH GRAVEL	Sandy fine to coarse GRAVEL with cobbles and boulders, grey brown, bedded. Medium dense, moist, non-plastic, gravel, subrounded to rounded. Boulders to 200 mm diameter.		1.5																			
	2.00 m																					
GLACIAL TILL	Sandy silty fine to coarse GRAVEL with some cobbles and boulders, dark brownish grey, massive. Dense, moist, gravel, angular to rounded. Boulders to 200 mm diameter.		2.0																			
	2.30 m																					
	End Of Hole: 2.30 m		2.5																			
PHOTO(S)		REMARKS																				
		Testpit terminated at target depth, groundwater not encountered, pit walls stable, backfilled with testpit arisings upon completion																				
		WATER																				
		▼ Standing Water Level																				
		▷ Out flow																				
		◁ In flow																				

HOLE NO.:
TP02




JOB NO.:
210246









START DATE: 18/05/2021
END DATE: 18/05/2021
LOGGED BY: PGF
CHECKED DATE:

Groundwater Not Encountered

REMARKS

WATER

-  Standing Water Level
 Out flow
 In flow

<div></div>		155										HOLE NO.: TP03									
TEST PIT LOG												JOB NO.: 210246									
CLIENT: PROJECT: Alec Robins Road												START DATE: 18/05/2021									
SITE LOCATION: Alec Robins Road, Queenstown												CONTRACTOR: Monk Earthworks		END DATE: 18/05/2021							
COORDINATES: 1269536 mE, 5008213 mN (NZTM2000)												EQUIPMENT: 12T		LOGGED BY: PGF							
LOCATION METHOD: Map or aerial photograph												ACCURACY: ± 5		CHECKED DATE:							
ELEVATION: 380.5 m (NZVD2016)												OPERATOR: Brandon									
SOIL / ROCK TYPE	MATERIAL DESCRIPTION <small>(See Classification & Symbology sheet for details)</small>	SAMPLES	DEPTH / RL	LEGEND	SCALA PENETROMETER <small>(Blows / 0 mm)</small>														SHEAR STRENGTH <small>(kPa)</small>		WATER
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	50	100	
TOPSOIL	Organic SILT, trace fine sand, dark brown. Soft, moist, non-plastic, Organics: rootlets, amorphous.. <div>0.20 m</div>																				
LOESS	Sandy SILT, yellow grey, massive. Firm to stiff, moist, non-plastic, sand, fine. <div>0.60 m</div>		380.0																		
GLACIAL TILL	Sandy silty fine to coarse GRAVEL with cobbles and boulders, brown grey, massive. Dense, moist, non-plastic, gravel, angular to rounded. Boulders to 200 mm diameter. <div>0.90 m</div>																				
BEDROCK	Slightly weathered, grey, psammitic SCHIST. Moderately strong, foliated, dips steeply to the southwest. <div>1.20 m</div>		379.5																		
	End Of Hole: 1.20 m																				
			1.5	379.0																	
			2.0	378.5																	
			2.5	378.0																	
PHOTO(S)				REMARKS																	
				Testpit terminated at target depth, groundwater not encountered, pit walls stable, backfilled with testpit arisings upon completion																	
				<div>WATER</div> <div> Standing Water Level</div> <div> Out flow</div> <div> In flow</div>																	

<div><div></div><div>156</div><div>TEST PIT LOG</div></div>		HOLE NO.: TP04																						
CLIENT: PROJECT: Alec Robins Road		JOB NO.: 210246																						
SITE LOCATION: Alec Robins Road, Queenstown		CONTRACTOR: Monk Earthworks																						
COORDINATES: 1269477 mE, 5008254 mN (NZTM2000)		EQUIPMENT: 12T																						
LOCATION METHOD: Map or aerial photograph		ACCURACY: ± 5																						
ELEVATION: 382 m (NZVD2016)		OPERATOR: Brandon																						
		START DATE: 18/05/2021																						
		END DATE: 18/05/2021																						
		LOGGED BY: PGF																						
		CHECKED DATE:																						
SOIL / ROCK TYPE	MATERIAL DESCRIPTION (See Classification & Symbolology sheet for details)	SAMPLES	DEPTH / RL	LEGEND	SCALA PENETROMETER (Blows / 0 mm)														SHEAR STRENGTH (kPa) Vane: Values				WATER	
TOPSOIL	Organic SILT, trace fine sand, dark brown. Soft, moist, non-plastic, Organics: rootlets, amorphous.. <div>0.20 m</div>				1	2	3	4	5	6	7	8	9	10	11	12	13	14	50	100	150	200		
LOESS	Sandy SILT, yellow grey, massive. Firm to stiff, moist, non-plastic, sand, fine. <div>0.80 m</div>		0.5																					
GLACIAL TILL	Sandy silty fine to coarse GRAVEL with cobbles and boulders, brown grey, massive. Dense, moist, non-plastic, gravel, angular to rounded. Boulders to 200 mm diameter. <div>1.30 m</div>		1.0																					
BEDROCK	Moderately to highly weathered, dark grey, pelitic SCHIST. Weak to very weak, foliated, dips steeply to the southwest. <div>2.30 m</div>		1.5																					
	End Of Hole: 2.30 m		2.0																					
			2.5																					
PHOTO(S)		REMARKS																						
		Testpit terminated at target depth, groundwater not encountered, pit walls stable, backfilled with testpit arisings upon completion																						
		WATER																						
		<div><div>▼</div> Standing Water Level</div> <div><div>▷</div> Out flow</div> <div><div>◁</div> In flow</div>																						

<div><div></div><div>157</div><div>TEST PIT LOG</div></div>		HOLE NO.: TP05					
CLIENT: PROJECT: Alec Robins Road		JOB NO.: 210246					
SITE LOCATION: Alec Robins Road, Queenstown		CONTRACTOR: Forbes					
COORDINATES: 1269384 mE, 5008224 mN (NZTM2000)		EQUIPMENT: 5T					
LOCATION METHOD: Map or aerial photograph		ACCURACY: ± 5					
ELEVATION: 370.98 m (NZVD2016)		OPERATOR: Pete					
		START DATE: 23/02/2024					
		END DATE: 23/02/2024					
		LOGGED BY: ME					
		CHECKED DATE:					
SOIL / ROCK TYPE	MATERIAL DESCRIPTION <small>(See Classification & Symbology sheet for details)</small>	SAMPLES	DEPTH / RL	LEGEND	SCALA PENETROMETER <small>(Blows / 100 mm)</small>	SHEAR STRENGTH <small>(kPa)</small> Vane: Values	WATER
TOPSOIL	Organic SILT, dark brown. Soft, moist, non-plastic, a trace of rootlets. <div>0.20 m</div>						Groundwater Not Encountered
LOESS	Sandy SILT, yellow grey, massive. Stiff, moist, non-plastic, sand, fine. <div>0.90 m</div>						
GLACIAL TILL	Sandy silty fine to coarse GRAVEL with cobbles and boulders, brown grey, massive. Dense, moist, non-plastic, gravel, angular to rounded. Boulders to 200 mm diameter. <div>1.80 m</div>						
BEDROCK	Moderately to highly weathered, dark grey, pelitic SCHIST. Weak to very weak, foliated, dips to the southwest. <div>1.90 m</div> <div>End Of Hole: 1.90 m</div>						
PHOTO(S)		REMARKS					
		Testpit terminated at target depth, groundwater not encountered, pit walls stable, backfilled with testpit arisings upon completion					
		WATER					
		<div><div>▼</div> Standing Water Level</div> <div><div>▷</div> Out flow</div> <div><div>◁</div> In flow</div>					

HOLE NO.:
TP06




JOB NO.:
210246







START DATE: 23/02/2024
END DATE: 23/02/2024
LOGGED BY: ME
CHECKED DATE:






Groundwater Not Encountered

REMARKS

WATER

-  Standing Water Level
 Out flow
 In flow

<div><div></div><div>159</div><div>TEST PIT LOG</div></div>		HOLE NO.: TP07					
CLIENT: PROJECT: Alec Robins Road		JOB NO.: 210246					
SITE LOCATION: Alec Robins Road, Queenstown		CONTRACTOR: Forbes					
COORDINATES: 1269393 mE, 5008280 mN (NZTM2000)		EQUIPMENT: 5T					
LOCATION METHOD: Map or aerial photograph		ACCURACY: ± 5					
ELEVATION: 372.17 m (NZVD2016)		OPERATOR: Pete					
		START DATE: 23/02/2024					
		END DATE: 23/02/2024					
		LOGGED BY: ME					
		CHECKED DATE:					
SOIL / ROCK TYPE	MATERIAL DESCRIPTION (See Classification & Symbolology sheet for details)	SAMPLES	DEPTH / RL	LEGEND	SCALA PENETROMETER (Blows / 100 mm)	SHEAR STRENGTH (kPa) Vane: Values	WATER
TOPSOIL	Organic SILT, dark brown. Soft, moist, non-plastic, a trace of rootlets. <div>0.20 m</div>		372.0		2 3		
LOESS	Sandy SILT, yellow grey, massive. Stiff, moist, non-plastic, sand, fine. <div>1.30 m</div>		371.5		5 4 5 7 8 6 5 5 6		
OUTWASH GRAVEL	Silty sandy fine to coarse GRAVEL with cobbles , grey brown, bedded. Medium dense, moist, non-plastic, gravel, subrounded to rounded. . <div>2.40 m</div>		371.0		12 15		
BEDROCK	Moderately to highly weathered, dark grey, pelitic SCHIST. Weak to very weak, foliated, dips to the southwest. <div>2.80 m</div>		370.5				
	End Of Hole: 2.80 m		369.5				
PHOTO(S)		REMARKS					
		Testpit terminated at target depth, groundwater not encountered, pit walls stable, backfilled with testpit arisings upon completion					
		WATER					
		<div><div>▼</div> Standing Water Level</div> <div><div>▷</div> Out flow</div> <div><div>◁</div> In flow</div>					

<div></div>		160										HOLE NO.: TP08												
TEST PIT LOG												JOB NO.: 210246												
CLIENT: PROJECT: Alec Robins Road												START DATE: 23/02/2024												
SITE LOCATION: Alec Robins Road, Queenstown												CONTRACTOR: Forbes		END DATE: 23/02/2024										
COORDINATES: 1269401 mE, 5008231 mN (NZTM2000)												EQUIPMENT: 5T		LOGGED BY: ME										
LOCATION METHOD: Map or aerial photograph												ACCURACY: ± 5		CHECKED DATE:										
ELEVATION: 368.54 m (NZVD2016)												OPERATOR: Pete												
SOIL / ROCK TYPE	MATERIAL DESCRIPTION <small>(See Classification & Symbolology sheet for details)</small>	SAMPLES	DEPTH / RL	LEGEND	SCALA PENETROMETER <small>(Blows / 100 mm)</small>														SHEAR STRENGTH <small>(kPa)</small> Vane: Values		WATER			
TOPSOIL	Organic SILT, dark brown. Soft, moist, non-plastic, a trace of rootlets. <div>0.15 m</div>		368.5		1	2	3	4	5	6	7	8	9	10	11	12	13	14	50	100	150	200		
LOESS	Sandy SILT, yellow grey, massive. Stiff, moist, non-plastic, sand, fine. <div>1.20 m</div>									6														
OUTWASH GRAVEL	Silty sandy fine to coarse GRAVEL with cobbles, grey brown, bedded. Medium dense, moist, non-plastic, gravel, subrounded to rounded. <div>1.70 m</div>		367.5																					
BEDROCK	Moderately to highly weathered, dark grey, pelitic SCHIST. Weak to very weak, foliated, dips to the southwest. <div>2.10 m</div>		366.5																					
	End Of Hole: 2.10 m		366.0																					
PHOTO(S)		REMARKS																						
		Testpit terminated at target depth, groundwater not encountered, pit walls stable, backfilled with testpit arisings upon completion																						
		WATER																						
		<div><div>▼</div> Standing Water Level</div> <div><div>▷</div> Out flow</div> <div><div>◁</div> In flow</div>																						

A large landscape photograph occupies the left and center of the page. It shows a deep blue fjord or bay, flanked by steep, rugged mountains. In the foreground, a green, grassy hillside slopes down towards the water. In the distance, snow-capped mountain peaks are visible under a clear sky. The right side of the image is partially obscured by a white diagonal design element.

Environmental Management Plan

Smith Hill Block

December 2024

Document Control	
Report title	Smith Hill Block – Environmental Management Plan
Address	Part Section 17 Block IX Shotover SD, DP526559.
Client	Gemma and Mike Smith
Project number	24106

Revision	Revision date	Revision details	Prepared by	Reviewed by
A	12/12/2024	Prepared for client	WT	TG

Appendices	
Appendix 1	Erosion and Sediment Control Plan Drawings
Appendix 2	Calculations for Erosion and Sediment Controls
Appendix 3	Environmental Induction Handout
Appendix 4	Environmental Induction Register
Appendix 5	Weekly Environmental Inspection Form
Appendix 6	Environmental Incident Report
Appendix 7	Complaints Register
Appendix 8	Environmental Non-Conformance Register
Appendix 9	Water Quality Monitoring Results Form
Appendix 10	Archaeological Discovery Protocol

Disclaimer

Copyright in all drawings, software, specifications and other documents relating to the Services shall remain the property of the Enviroscope. Enviroscope has exercised due skill, care, and attention in preparing this EMP on the basis of their understanding of the subject site through their own site visits as well as information provided by the client and its consultants. Enviroscope has no control over the physical actions, detailed design, equipment, services, and methodologies undertaken by the client or other third parties tasked with implementing Enviroscope's instructions or recommendations. Enviroscope does not accept any responsibility for any environmental incidents or other defects of control measures if there is any departure or variance from the measures detailed in this EMP and any supporting documentation.

Contents

1.0	INTRODUCTION	6
1.1	Purpose and Scope	6
1.2	Site Overview	6
1.3	Associated Resource Consents	8
1.4	Suitably Qualified and Experienced Professional.....	8
2.0	CONSTRUCTION METHODOLOGY	9
2.1	Sequencing of Works.....	9
2.2	Hours of Operation.....	10
3.0	EMP IMPLEMENTATION	11
3.1	Environmental Roles and Responsibilities	11
3.2	Site Environmental Induction	12
3.3	Environmental Inspections	12
3.4	Monthly Environmental Inspection and Reporting by SQEP	13
3.5	Environmental Incident Management	13
3.6	Complaints Procedure.....	13
3.7	EMP Non-Conformance and Corrective Actions	14
3.8	Records and Registers	14
3.9	EMP Updates	14
4.0	EROSION AND SEDIMENT CONTROL MEASURES.....	15
4.1	Performance Criteria	15
4.2	Erosion and Sediment Control Principles.....	15
4.3	Guidance on Erosion and Sediment Control Devices	15
4.4	Erosion Control Practices	16
4.5	Sediment Control Practices	18

4.6	As-Built Verification.....	20
4.7	Maintenance of Erosion and Sediment Control Devices.....	20
4.8	Rapid Response Procedure for Significant Rain Events	20
4.9	Decommissioning and Removal	20
4.10	Inspections and Monitoring	21
4.11	Contingency Measures.....	21
4.12	Erosion and Sediment Control Incident	21
5.0	WATER QUALITY MANAGEMENT	22
5.1	Receiving Waterbodies	22
5.2	Legislative Considerations	23
5.3	Performance Criteria	24
5.4	Management Measures	25
5.5	Monitoring	25
5.6	Contingency Measures	26
5.7	Water Quality Incidents	26
6.0	DUST MANAGEMENT	27
6.1	Sensitive Receptors.....	27
6.2	Performance Criteria	27
6.3	Management Measures	27
6.4	Monitoring	28
6.5	Contingency Measures	28
6.6	Dust Incident	28
7.0	NOISE AND VIBRATION MANAGEMENT	29
7.1	Sensitive Receptors.....	29
7.2	Performance Criteria	29

7.3	Management Measures	30
7.4	Monitoring	30
7.5	Contingency Measures	31
7.6	Noise and Vibration Incident	31
8.0	CULTURAL HERITAGE MANAGEMENT.....	32
8.1	Location of Known Cultural Heritage Significance	32
8.2	Performance Criteria	32
8.3	Management Measures	32
8.4	Monitoring	32
8.5	Accidental Finds	32
9.0	VEGETATION MANAGEMENT.....	33
9.1	Sensitive Receptors.....	33
9.2	Performance Criteria	33
9.3	Management Measures	33
9.4	Monitoring	33
9.5	Vegetation Incident	33
10.0	CHEMICALS AND FUELS MANAGEMENT	34
10.1	Sensitive Receptors	34
10.2	Performance Criteria	34
10.3	Management Measures.....	34
10.4	Monitoring.....	34
10.5	Contingency Measures.....	35
10.6	Chemicals and Fuels Incident	35
11.0	WASTE MANAGEMENT	36
11.1	Sensitive Receptors	36

11.2	Performance Criteria	36
11.3	Management Measures.....	36
11.4	Monitoring.....	37
11.5	Contingency Measures.....	37
11.6	Waste Incident	37
12.0	CONTAMINATED SITE MANAGEMENT	38
12.1	Sensitive Receptors	38
12.2	Performance Criteria	38
12.3	Management Measures.....	38
12.4	Monitoring.....	38
12.5	Contingency Measures.....	39
12.6	Contamination Incident	39

Emergency Contacts

Contact made with any of the following shall be undertaken with due consultation of the Environmental Representative or Project Manager.

Table 1: Emergency Contacts

Element	Emergency Contact	Details
Pollution incident	Otago Regional Council (ORC) Spill Hotline	0800 800 033 pollution@orc.govt.nz compliance@orc.govt.nz
Environmental complaint	Environmental Representative	TBC upon appointment of the contractor.
Discovery of contaminated land	Environmental Representative	
Unexpected heritage finds	Environmental Representative	
Human remains	New Zealand Police	111
Fire including bushfire	Fire and Emergency New Zealand (FENZ)	111
Public utilities	Queenstown Lakes District Council (QLDC)	(03) 441 0499 rcmonitoring@qldc.govt.nz
Internal contacts	Project Manager	TBC
Internal contacts	Environmental Consultant	Tom Grandiek Enviroscope 027 2633 113

1.0 INTRODUCTION

1.1 Purpose and Scope

On behalf of Gemma and Mike Smith, Enviroscope has prepared this Environmental Management Plan (EMP) for the earthworks relating to the construction of an access, shed and residential dwelling. This EMP aims to reduce the effects of the project's construction activities on the environment and sensitive receptors.

This EMP is prepared according to the Queenstown Lakes District Council (QLDC) QLDC Guidelines for Environmental Management Plans, June 2019 (EMP Guidelines). It is considered to have a 'High' environmental risk level as per the risk categories outlined in the EMP Guidelines.

This document will also ensure that the project aligns with the objectives and policies of the Otago Regional Council's (ORC) Plan Change 8, specifically Topic 7: Part G: Sediment from earthworks for residential development. Otago Regional Council: Guide – Residential Earthworks in Otago.

The purpose of this EMP is to be an effective and practical reference manual for construction personnel that applies to all project activities during the construction phase and includes the following:

- Strategies to manage environmental aspects and risks, based on associated best practice.
- Provides for contingency planning.
- Provides a framework for monitoring, reporting, review and continual improvement.
- Defines roles and responsibilities.
- Procedures to investigate and resolve environmental non-conformances and initiate corrective and preventative actions.

An overview of the project and sequencing can be found in the construction methodology at [Section 2.0](#).

1.2 Site Overview

The site is located at 121 Alec Robins Road, Queenstown defined as Part Section 17 Block IX Shotover SD, DP526559. The total land area of this property spans 16.7 ha. The site is accessed via an existing farm track off Alec Robins Road.

The site is situated on the lower south-west face of Morven Hill overlooking the Kawarau River approximately 150 metres to the south. Hayes Creek serves as the only outflow of Lake Hayes, flowing through a densely vegetated gully which runs to the west and south of the subject site and discharging into the Kawarau River. There are no waterways identified within the site. The site is currently vegetated with grass associated with agricultural grazing and with pockets of grey shrubland across the wider site.

The site is located within the Rural Zone, with some residential dwellings located in relative proximity to the site to the west and north-west. This is shown in [Figure 1](#) below.



Figure 1: Location of the site (Source: QGIS)

1.2.1 Soils and Geotechnical Summary

A geotechnical report has been prepared by Geosolve dated November 2024 which details site investigations and reports on the geotechnical ground conditions. The report notes that “the subsurface soil materials observed during the site assessment generally comprises a veneer of shallow soil over rock, and the observed stratigraphy comprises:”

- 0.2 m of Topsoil, overlying;
- 0.1 to 0.6 m of Loess, overlying;
- 0.8 m of Fan Gravel (TP1 only); overlying
- 0.6 m of Outwash Gravel (TP1 only), overlying
- 0.3 to 0.9 m of Glacial Till, overlying;
- Schist Bedrock.

“Groundwater was not intercepted in the test pits, however, perched seepages may develop at shallow depths, e.g. on the rock head, during periods of heavy rainfall. Given the location of the proposed building platform, in an elevated hillside position, it is expected the regional water table will be many metres below any future building, foundation or excavation level.”

1.2.2 Summary of Earthworks

A total of approximately 14,230 m³ of material will be excavated as 7,350 m³ of fill and 6,880 m³ of cut. The max fill height to form landscape mounding is 6.5 m and a maximum cut depth of 3.8 m is proposed. The total extent of earthworks will be undertaken over 8,740 m². The extent of earthworks is depicted on the Erosion and Sediment Control (ESCP) drawing in **Appendix 1**.

1.3 Associated Resource Consents

This EMP has been prepared in accordance with industry best practice to accompany the resource consent application. The resource consents associated with this project are given in **Table 2**.

Table 2: Associated resource consents

Resource Consent Number	Related Council	Activity Description	Date of Decision Issue
TBC			

1.4 Suitably Qualified and Experienced Professional

This EMP has been prepared by Tom Grandiek of Enviroscope Limited. Tom is a certified Environmental Professional (CEnvP) and holds a Bachelor of Applied Sciences degree, majoring in Environmental Management. He spent five years working in RMA compliance with local government. Tom has extensive experience in the preparation and monitoring of EMPs and ESCPs.

Tom meets the criteria of a Suitably Qualified and Experienced Professional (SQEP) for the purposes of preparing this EMP and overseeing the environmental aspects of this project.

2.0 CONSTRUCTION METHODOLOGY

2.1 Sequencing of Works

The following sequencing will ensure the earthworks are undertaken efficiently while ensuring good environmental outcomes. This is a preliminary staging methodology and may be subject to change based on site conditions encountered during construction. This methodology shall be read in conjunction with the Erosion and Sediment Control Plan (ESCP) attached as **Appendix 1**.

Preliminary works and site establishment (prior to as-built confirmation)

- Ensure the current EMP is available onsite and complete site induction with Environmental Consultant.
- Establish site laydown.
- Install the decanting earth bunds (DEB) as depicted in ESCP-001, **Appendix 1**.

Bulk earthworks – Building Platforms

- Install super silt fencing below proposed extent of landscape mounding as depicted in ESCP-001, **Appendix 1**.
- Strip the new driveway access alignment leading towards the dwelling building platform. Progressively form the dirty water diversion channel (DWDC) along the driveway which shall be tied into DEB 1. Check dams shall be installed within the 'dirty' roadside swale at 10-metre intervals. Rock rip-rap shall be placed at the channel outlet to prevent erosion of the DEB inlet.
- Strip topsoil from batters above the shed and dwelling building platforms and use this material to form clean water diversion bunds (CWDBs) in accordance with the schematic diagram in ESCP-002, **Appendix 1**. As a contingency measure, rock riprap shall be placed at the outlet points of CWDBs to prevent erosion of the slope below.
- Undertake cut-to-fill to form the building platform surface, associated batters and access driveway. It is recommended that the building platform and driveway access be capped with aggregate progressively to reduce the erosive potential of the surface. Progressively form the DWDC around the dwelling building platform which shall be tied into DEB 2. Rock rip-rap shall be placed at the channel outlet to prevent erosion of the DEB inlet.
- Fill batters and landscape mounding below the building platform shall be immediately top soiled, seeded and/or planted to promote stabilisation. This is a key component of the progressive rehabilitation approach required to reduce pressure on sediment controls including the super silt fences and decanting earth bund (DEB). It is recommended that hay mulch/coconut fibre matting is applied to batter slopes and landscape mounding to promote rapid stabilisation and reduce erosive potential of exposed surfaces.

Landscaping and revegetation

- Undertake final landscaping and revegetation of any remaining exposed areas.

Decommissioning

- Remove erosion and sediment control devices once stabilisation has occurred across the entire site. This is generally defined as 80% vegetative cover.

2.2 Hours of Operation

Construction activities and the associated hours of operation shall comply with *NZS 6803:1999 Acoustics - Construction Noise Guidelines*. Site works may be undertaken between 0730 and 1800 hours, Monday to Saturday. No works are to be undertaken on Sundays or Public Holidays. However, this does not preclude any emergency works or works required for incident investigation or response. Additional detail relating to noise-producing activities are to be undertaken in accordance with **Section 7.0** of this EMP.

3.0 EMP IMPLEMENTATION

3.1 Environmental Roles and Responsibilities

3.1.1 Project Manager

The Project Manager is responsible for the effective implementation of the EMP and has overall responsibility for the environmental performance of the project. Duties include:

- Ensuring adequate resources are in place to implement the EMP.
- Ensuring all staff and sub-contractors operate within the guidelines of the EMP.
- Ensuring that an EMP is prepared and that environmental standards, processes and procedures meet relevant resource consent conditions.
- Overseeing the successful implementation, monitoring and review of the EMP.
- Ensuring that inspections are carried out in accordance with the relevant EMP.
- Restricting or stopping any activity that has the potential to or has caused adverse environmental effects.
- Providing notification and reporting of Environmental Incidents to Council and other environmental reports as required by The Guidelines.
- Delegating authority of the above responsibilities.

3.1.2 Environmental Representative

The Environmental Representative supports the Project Manager in the day-to-day implementation of the EMP. Duties include:

- Ensuring the installation of environmental controls as per the EMP.
- Undertaking environmental site inspections.
- Undertake water quality sampling during rainfall events.
- Overseeing the maintenance and improvement of defective environmental controls.
- Providing environmental inductions to all staff and sub-contractors.
- Assisting the project leadership in attending to Environmental Incidents and Complaints.

The Environmental Representative shall be familiar with environmental risks associated with the project, the EMP and best practice erosion and sediment control principles and practices.

3.1.3 Environmental Consultant

The Environmental Consultant (SQEP) will provide technical environmental management advice as required.

3.1.4 All Staff and Sub-Contractors

All staff and sub-contractors have a responsibility to undertake all activities in accordance with the requirements of this EMP. This includes reporting any activity that has the potential to or has resulted in an Environmental Incident to the Project Manager or Environmental Representative.

3.2 Site Environmental Induction

All staff and subcontractors shall attend an Environmental Induction to ensure they are aware of the project's environmental risks as well as their responsibilities to help manage these risks. Prior to ground-disturbing activities, the Environmental Consultant will deliver the induction to core staff. During the project, the Environmental Representative will induct sub-contractors and new staff.

The site induction handout is attached as **Appendix 3** and all persons inducted will be recorded on the Induction Register attached as **Appendix 4**.

3.3 Environmental Inspections

Table 3 outlines the regular environmental inspections to be undertaken.

Table 3: *Environmental inspections*

Environmental Inspection	Timing	Purpose
Weekly Inspection	Every seven days	<p>A comprehensive environmental inspection will:</p> <ul style="list-style-type: none"> • Confirm that all environmental controls are present, functional, and adequate. • Identify any activities that may cause an environmental incident or actual or potential environmental effects. • Identify maintenance requirements for implemented management measures. <p>All weekly inspections shall be recorded on the Weekly Site Inspection form attached as Appendix 5.</p>
Pre-Event Inspection	Prior to a significant rain event ¹	<p>To ensure that erosion and sediment controls are present, functional, and adequate for forecast rain event.</p> <p>This inspection will inform any preventative work required and may result in the Rapid Response Procedure being implemented (see Section 4.8).</p>
Rain Event Monitoring	During a significant rain event	<p>To ensure that:</p> <ul style="list-style-type: none"> • Erosion and sediment control devices continue to function correctly and inform any necessary emergency responses. • Sediment retention devices are functioning effectively and have capacity available. • No dirty² water is crossing the boundary of the site. <p>Observations and remediation measures taken will be recorded in a daily job diary.</p>

¹ A significant rain event is defined as any forecast/actual rain event of 20 mm within a 12-hour period or a rain event that can generate overland flow, noting that this varies seasonally.

² 'Dirty water' is defined as water that exceeds the maximum allowable water quality value outlined in the Discharge Criteria at **Section 5.2**.

Environmental Inspection	Timing	Purpose
Post-Event Inspection	Immediately following a significant rain event	Any observations and corrective actions should be recorded in a daily job diary.

3.4 Monthly Environmental Inspection and Reporting by SQEP

As the proposed earthworks trigger the 'High Risk' EMP environmental risk rating as per the QLDC EMP Guidelines, the Environmental Consultant (SQEP) will monitor the site monthly to ensure that the EMP is correctly implemented, identify any unforeseen issues arising and advise on alternative environmental solutions.

The Environmental Consultant (SQEP) will also submit a Monthly Environmental Report to QLDC within five working days of the end of each month. The report will include the following information:

- Updates to the EMP and the Erosion and Sediment Control Plan (ESCP) during the month.
- Number of weekly and pre and post-rain event site inspections completed.
- Summary of corrective actions undertaken.
- Positive environmental outcomes achieved and opportunities.

3.5 Environmental Incident Management

Environmental incidents shall be responded to as soon as the project team becomes aware of them occurring. The response will generally involve oversight by the Environmental Consultant and will involve:

- Immediate cessation of the activity that caused the incident.
- Investigation into the cause of the incident.
- Initial response to bring the incident under control.
- Implement any remediation works.

The Project Manager shall notify QLDC and ORC of the details of any Environmental Incident within 12 hours of becoming aware of the incident. Notification will be through a phone call to Council monitoring staff (see Emergency Contacts in [Table 1](#)). The Project Team shall provide an Environmental Incident Report within ten working days of the incident occurring. The Incident Report form is attached as [Appendix 6](#).

3.6 Complaints Procedure

Any complaint received will be recorded and an investigation will be carried out. The complainant will be provided with a response acknowledging receipt of the complaint and outlining corrective actions to be implemented. After the investigation, any necessary corrective actions will be carried out and a follow-up of the original complaint is to be conducted to ensure the actions implemented have been effective. All complaints will be recorded on the Complaints Register attached as [Appendix 7](#).

3.7 EMP Non-Conformance and Corrective Actions

EMP non-conformances found during site inspections, monitoring or as a result of environmental incidents or complaints shall be recorded in the EMP Non-Conformance Register. The non-conformance register attached as **Appendix 8** will detail when corrective actions are due, how they are to be carried out and the close out date. The non-conformance register ensures that issues do not escalate or are missed, as well as, providing a clear record of evidence that can be used to defend any potential complaint or formal enforcement action.

3.8 Records and Registers

The records listed below will be collated onsite. If a request is made by a QLDC and ORC official, the records shall be made available to the official within 24 hours of the request being made.

- Environmental Induction Register - **Appendix 4.**
- Weekly Environmental Inspection Form - **Appendix 5.**
- Environmental Incident Reports - **Appendix 6.**
- Complaints Register - **Appendix 7.**
- EMP Non-Conformance Register - **Appendix 8.**
- Water Quality Monitoring Results - **Appendix 9.**

3.9 EMP Updates

The EMP will be regularly reviewed throughout the project to ensure the document remains fit for purpose and to drive continual improvement. This may be initiated by:

- Significant changes to the construction methodology.
- Improvements identified as a result of an Environmental Incident or Corrective Action.
- Where directed by QLDC and/or ORC's Monitoring and Enforcement team.

All EMP updates will be managed through the document control table on page one and shall be submitted to QLDC and ORC for acceptance.

4.0 EROSION AND SEDIMENT CONTROL MEASURES

4.1 Performance Criteria

Design, install and maintain erosion and sediment controls in accordance with industry best practices. Generally, this is:

- Queenstown Lakes District Council's (QLDC) QLDC Guidelines for Environmental Management Plans, June 2019 (The Guidelines).
- Otago Regional Council's (ORC) Residential Earthworks in Otago Guidelines 2023.

4.2 Erosion and Sediment Control Principles

Erosion and sediment control ('ESC') devices shall be installed, maintained and decommissioned in accordance with the following principles:

- Erosion and sediment controls are integrated with construction planning.
- A 'treatment train' approach so that the sediment retention devices operate as efficiently and effectively as possible.
- Separation of 'clean' and 'dirty' water with clean water to be diverted around the site to minimise the volume of dirty water needing management onsite.
- The extent and duration of soil exposure is minimised.
- Controls are always maintained in proper working order.
- Progressively stabilise and revegetate disturbed or completed areas.
- The site is monitored, and erosion and sediment control practices are adjusted to maintain the required performance standard.
- Soil erosion is minimised as far as reasonable and practical.
- Avoidance of sediment discharge off-site and protection of receiving environments.

4.3 Guidance on Erosion and Sediment Control Devices

The effective control of surface water shall be achieved through the utilisation of carefully selected erosion and sediment control devices to achieve a specific purpose. These guidelines for the devices employed on this project shall be read in conjunction with the ESCP attached as [Appendix 1](#) of this document.

4.3.1 Site Definition

At the commencement of the project, the following components onsite will be clearly defined as detailed in [Table 4](#).

Table 4: Site definition specifications

Site component	Method of Demarcation
Site boundaries	Existing fencing isolates the site from surrounding receptors.

4.4 Erosion Control Practices

4.4.2 Non-Structural Controls

Staging

Only by exposing those areas that are required for active earthworks, the duration of exposure and risk of erosion/sediment discharge can be minimised. 'Earthworks staging', where the site has earthworks undertaken in smaller units over time, limits erosion. This includes isolating work areas and completing them in manageable sections. Staging is demonstrated in the Erosion and Sediment Control plan attached as [Appendix 1](#).

Timing of works

It is recommended that works are undertaken when periods of fine weather are more common and growing conditions for stabilisation are favourable. Works are to be undertaken during an extended period of fine weather where possible to reduce erosive potential and susceptibility to further dislodgement of material. Ensure that all disturbed areas are stabilised (temporarily or long term) and loose materials are secured prior to forecast rain events to prevent further movement of material.

Progressive rehabilitation

Disturbed areas will be progressively stabilised. It is important that when completed, exposed or disturbed areas are stabilised prior to moving on to the next area. Stabilisation methods will vary around the site due to differing gradients and growing mediums. Stabilisation and rehabilitation measures are outlined below:

4.4.3 Stabilisation Measures

Hydroseeding

- Hydroseed is to be applied to all completed work surfaces where practicable.
- It is recommended that a diverse seed mix that provides both short and long-term stabilising properties is utilised. A seed mix consisting of rapidly establishing perennial ryegrass, with longer establishing fescues and Browntop would be suitable. Duraveg Berm Mix supplied by PGG is an example of a seed mix with properties that will enable both rapid establishment and deep root base, which is beneficial to providing rapid stabilisation and long-term stability.

Erosion matting

- Erosion matting can be installed on steep batters to prevent erosion and to provide a growing medium for vegetation. Where and when erosion matting is utilised needs to be undertaken per the direction of the Geotechnical Engineer and Environmental Consultant. Coconut fibre matting is to be utilised on the lower grade slopes, in direct proximity to the flow path that contains material that may be prone to mobilisation. Coconut fibre matting is to be installed in accordance with the reference image on ESCP-006, [Appendix 1](#).
- A more robust geotextile erosion matting may be required on high-grade batters with higher susceptibility to further mobilisation of material, or areas subject to fluvial undermining. Geofabric lining is to be installed as per Geotechnical recommendations. Efforts should be made to source erosion matting with neutral colour tones that will blend with the existing catchment tones to reduce visual effects.

4.4.4 Stabilised Entranceway

There is an existing aggregate-based access to the proposed platforms, that stems off Alec Robins Road. Minimal truck movements are anticipated to and from the site, due to the close to balanced cut to fill being undertaken. No additional formalised stabilised access points are considered necessary, as the existing access will avoid potential sediment tracking from the site.

4.4.5 “Clean Water” Diversion Channels and Bunds

Clean water diversion bunds will be used to capture and divert clean water from the undisturbed surfaces above the exposed works extents. The purpose of these devices is to separate clean and dirty water and minimise the size of the contributing catchment. Bunds have been selected over formalised channels due to the contributing catchment being under the maximum limit of 5 ha in accordance with GD05.

Clean water diversion bunds (CWDB) are proposed above the dwelling platform, shed platform and access driveway. These are to be formed by lifting the existing grass sward and topsoil, on the contour of the slope, to convey potential surface flows from above beyond earthworks' extents. As a contingency measure, rock riprap shall be placed at the outlet points of CWDBs to prevent erosion of the slope below. These devices shall be constructed in accordance with the specifications noted in the schematic diagram in ESCP-002, **Appendix 1** (complete guidelines on pages 38-42 of GD05). Full calculations are included in **Appendix 2**.

4.4.6 “Dirty Water” Diversion Channels and Bunds

Dirty water diversion channels (DWDC) will be installed to capture and carry sediment-laden stormwater to the decanting earth bund DEB 2 below the dwelling platform, as well as the DEB 1 at the base of the driveway access road as depicted in ESCP-001, **Appendix 1**.

DWDCs shall be constructed along driveway corridors during construction. These shall capture ‘dirty’ flows from the road corridors, building platforms, and landscape mounding and convey ‘dirty’ water run-off to the respective retention devices. Check dams shall be installed at 10-metre intervals within the sloping sections of the channel to reduce flow velocity and capture some coarse sediment prior to reaching the retention devices. This forms part of the ‘treatment train’ approach. As a contingency measure, DWDCs may be lined with geofabric if notable in-channel erosion is observed throughout the project.

DWDCs will be constructed in accordance with the schematic diagram in ESCP-002, **Appendix 1** (complete guidelines on pages 43-46 of GD05). Full calculations are included in **Appendix 2**.

4.4.7 Check Dams

Rock check dams will be deployed primarily to reduce the velocity of concentrated flows in the DWDCs. They will also act to capture some coarse sediment. These shall be placed at 10-metre intervals. The check dams will be constructed in accordance with the schematic diagram in ESCP-003, **Appendix 1** (complete guidelines on pages 50-54 of GD05).

4.4.8 Drop-Out Pits

Drop-out pits will be used within the DWDCs:

- To allow the heavier coarse sediments to drop out, preventing them from entering the sediment retention devices, and reducing loads on these devices.
- To act as a sump joining two intersection channels.

Drop-out pits will be constructed in accordance with the image reference in ESCP-002, **Appendix 1** (complete guidelines on page 45 of GD05).

4.5 Sediment Control Practices

4.5.1 Decanting Earth Bund

Decanting earth bunds (DEB) are proposed to capture flows from the DWDCs and allow sediment to settle out of the water column. A DEB decants off the cleaner water at the top of the water column i.e. the live storage range.

DEB 1: will be installed at the base of the driveway access road as depicted on ESCP-001, **Appendix 1**. This device services a contributing catchment of 0.75 ha. It is acknowledged that this exceeds the maximum catchment size in accordance with GD05 specifications (0.30 ha). An SRP has been considered for this area. However, due to presence of established trees and the subsequent imposed space constraints, a decanting earth bund (DEB) is considered more suitable. The following mitigation measures are considered to alleviate pressure on this device and justify the selection of a DEB despite deviation from GD05 in this case:

- Based on the soil profile observed in the Geotech report, subsoils within the site may present opportunities for soakage. Fan gravel and outwash gravels have been identified in proximity to the dwelling building platform. Test pits were not undertaken in proximity to DEB 1. However, based on previous site experience at similar elevations in this area, river gravels may be present which would be expected to provide soakage capacity.
- The contributing catchment is modest in size and a large proportion of the surface area will remain vegetated. Of the total 0.75 ha contributing catchment, only approximately 0.25 ha of this consists of earthworks surface area.
- A 'treatment train' approach shall be utilised to reduce pressure on the DEB. This involves the addition of check dams within DWDCs to reduce the presence of coarse sediment, as well as the utilisation of chemical treatment via a RADS unit as part of a contingency measure, as discussed in **Section 4.5.2** below.
- Progressive rehabilitation forms a fundamental component of the erosion and sediment control (ESC) management approach for this project. This includes progressive application of aggregate to road corridors and building platforms, as well as revegetation of adjoining batters and berms to reduce the overall erosive potential of the site. This minimises sediment generation and subsequent pressure on the DEB.
- The moderately-sized profile of this DEB ensures minimal disturbance of existing vegetation in the proposed location, which features a scattering of established shrubs.

DEB 2: will be installed below the dwelling building platform as depicted on ESCP-001, **Appendix 1**. This device services a contributing catchment of 0.25 ha. Application of an aggregate base to the building platform surface, as well as progressive rehabilitation of landscape mounding and batters, is expected to reduce the potential for the generation of sediment run-off. Check dams shall also be installed within inlet DWDCs to assist in capturing coarse sediment.

Full design specifications based on GD05 including depth, width and length are given in **Appendix 2**. The DEB will be constructed in accordance with the schematic diagram in ESCP-004, **Appendix 1** (complete guidelines on pages 106-112 of GD05). The emphasis on progressive rehabilitation to alleviate potential sediment load on these devices negates the requirement for chemical treatment. This may be reconsidered if sediment retention efficiency needs to be improved in practice.

4.5.2 Chemical Treatment

Chemical treatment is to be adopted as part of a contingency measure if the sediment retention efficiency of the DEB(s) needs to be improved. If chemical treatment is deemed necessary based on site observations, a Chemical Treatment Management Plan (CTMP) shall be prepared. Bench testing will be undertaken to confirm chemical treatment requirements. This will ensure that the chemical, likely polyaluminium chloride (PAC) is dosed at appropriate rates to cause efficient coagulation whilst avoiding potential contaminants in receiving waterways due to high levels of alum and low pH. Water quality criteria and management processes are prescribed in **Section 5**.

4.5.3 Super Silt Fence

Super silt fences will be used to capture potential sheet flows from the fill areas of landscape mounding. A super silt fence has been selected over a standard silt fence due to the modest catchment sizes and relatively steep slope grade of final design levels which prescribes use of a super silt fence in accordance with GD05 specifications.

Super silt fence will be installed in accordance with the schematic diagram in ESCP-005, **Appendix 1** (complete guidelines on pages 120-125 of GD05). Silt fence returns shall be placed at 10-metre intervals to segment the catchment and reduce pressure on one point of the silt fence.

4.5.4 Silt Socks

Silt socks will be utilised to intercept runoff. These devices are essentially mesh or fabric tubes filled with sand. Silt socks shall be used as an adaptive management approach, whereby these devices shall be placed as identifiable low points on the building platforms to intercept sediment runoff. These may also be placed at the outlet of sediment retention devices to reduce potential for erosion at the outlets and capture any residual sediment. Silt socks will be installed in accordance with the reference images in ESCP-006, **Appendix 1** (complete guidelines on pages 126-130 of GD05).

4.5.5 Temporary Stockpiles

Stockpiles may be formed as part of earthworks. It is recognised that the location of stockpiles will change with the progress of the earthworks. Long-standing stockpiles shall be shaped and stabilised by applying grass seed, geofabric or polymer to prevent erosion. Stockpiles shall be constructed in accordance with the schematic diagram in ESCP-006, **Appendix 1**.

4.5.6 Progressive Rehabilitation

Progressive stabilisation of earthworks is to occur promptly as areas are finished to minimise the area of exposed soil and thus the generation of sediment-laden water. Prior to final landscaping, this can comprise temporary grassing,

turfing or clean aggregate. It is important that the driveway corridors, building platforms, and associated landscape mounding and batters/berms are re-stabilised progressively to minimise pressure on tertiary sediment control devices.

4.6 As-Built Verification

The Environmental Consultant will provide the Council with as-built confirmation to verify that the erosion and sediment controls have been installed in accordance with the approved ESCP.

4.7 Maintenance of Erosion and Sediment Control Devices

Ongoing maintenance of the site shall be undertaken as follows:

- Clean out sediment of erosion and sediment control as soon as 20% capacity has been reached.
- Any mucked-out sediment shall be stockpiled, dried and reused as planting media for revegetation.
- Brush down sediment stains on silt fencing material.

4.8 Rapid Response Procedure for Significant Rain Events

The Environmental Representative will stay vigilant of weather forecasts. If a significant rain event is imminent, all works will cease in sufficient time for staff to inspect and maintain erosion and sediment control devices and undertake any stabilisation required. Observations will continue through the rain event to ensure the functioning of erosion and sediment control devices.

4.9 Decommissioning and Removal

Erosion and sediment control devices will remain in place until 'stabilisation' of the site has been achieved. This is generally defined as 80% vegetative cover as depicted in **Figure 2**.

It is noted that the removal of controls may result in minor soil exposure. Any soils exposed during decommissioning will be stabilised with either grass, mulch or other appropriate erosion control.



0%



40%



Figure 2: Visual cover estimation

4.10 Inspections and Monitoring

Details of inspections and monitoring are stated in **Section 3.3**.

4.11 Contingency Measures

The following contingency measures in **Table 5** shall be deployed as required.

Table 5: Erosion and sediment control contingency measures

Issue	Contingency Measure
Sediment-laden stormwater flowing across the site boundary	Undertake measures to stop the flow immediately. Ensure controls are installed according to the ESCP. Contact the Environmental Consultant (SQEP) who will initiate the incident response.
Controls do not appear to be working as intended	Contact Environmental Consultant (SQEP) to inspect, advise and revise ESCP as required.
The site is inappropriately exposed prior to imminent rain event	Cease works and shift effort to checking erosion and sediment controls and stabilisation via the Rapid Response Procedure outlined in Section 4.8 .
Sediment retention devices are near capacity and more rain is forecast	Contact the Environmental Consultant (SQEP) immediately for advice.
Abatement notice issued by Council	Contact the Environmental Consultant (SQEP) immediately to advise on methods to meeting abatement notice requirements within the time stated by the abatement notice.

4.12 Erosion and Sediment Control Incident

An erosion or sediment control incident is considered to have occurred where performance criteria outlined in **Section 4.1** is not met. The incident procedures outlined in **Section 3.5** shall commence.

5.0 WATER QUALITY MANAGEMENT

Surface water bodies (rivers, streams, lakes and wetlands) provide important habitats for many species of plants, fish, birds and animals, some of which are endemic and/or threatened. To protect these values, water quality must be safeguarded, and the natural flow of the watercourse maintained to the greatest possible extent. Where flow must be reduced or diverted, mitigation is required to ensure the values of the watercourse are not degraded.

5.1 Receiving Waterbodies

There are no waterbodies within the subject site boundaries, or within the proposed earthworks footprint. The Kawarau River at its closest point is located 150 m downslope, to the south of the site. The Kawarau River can receive surface flow from the subject site via minor depressions/overland flow paths acting as a vector. The river drains Lake Wakatipu and its catchment predominantly consists of grassed farmland, and urban environment across, lowlands to high country.

The subject site is located approximately 3.0 km downstream of the confluence between the Kawarau and Shotover Rivers, on an elevated terrace on the true right of the Kawarau River. The Shotover River is a waterway that conveys significant volumes of water and sediment from its large watershed. The Shotover River has a relatively high suspended sediment load, due to the extensive physical weathering of schist rock within the contributing watershed, as well as glacial and snow melt. Often following rainfall, and/or sustained glacial/snow melt, the true right of the Kawarau River beyond the confluence of the two rivers is visibly discoloured for sustained periods of time.

The actual and potential adverse effects on these waterbodies are expected to be mitigated through the adoption of best-practice erosion and sediment controls, and environmental management measures that avoid the generation and discharge of contaminants associated with earthworks and general construction activities. The discharge limits proposed in the Performance Criteria in [Section 5.3](#) are consistent with the respective QLDC and ORC District and Regional Plan Policies and Objectives, to ensure the potential adverse effects on the receiving environment are mitigated.

Refer to nearby waterbodies in [Figure 3](#).

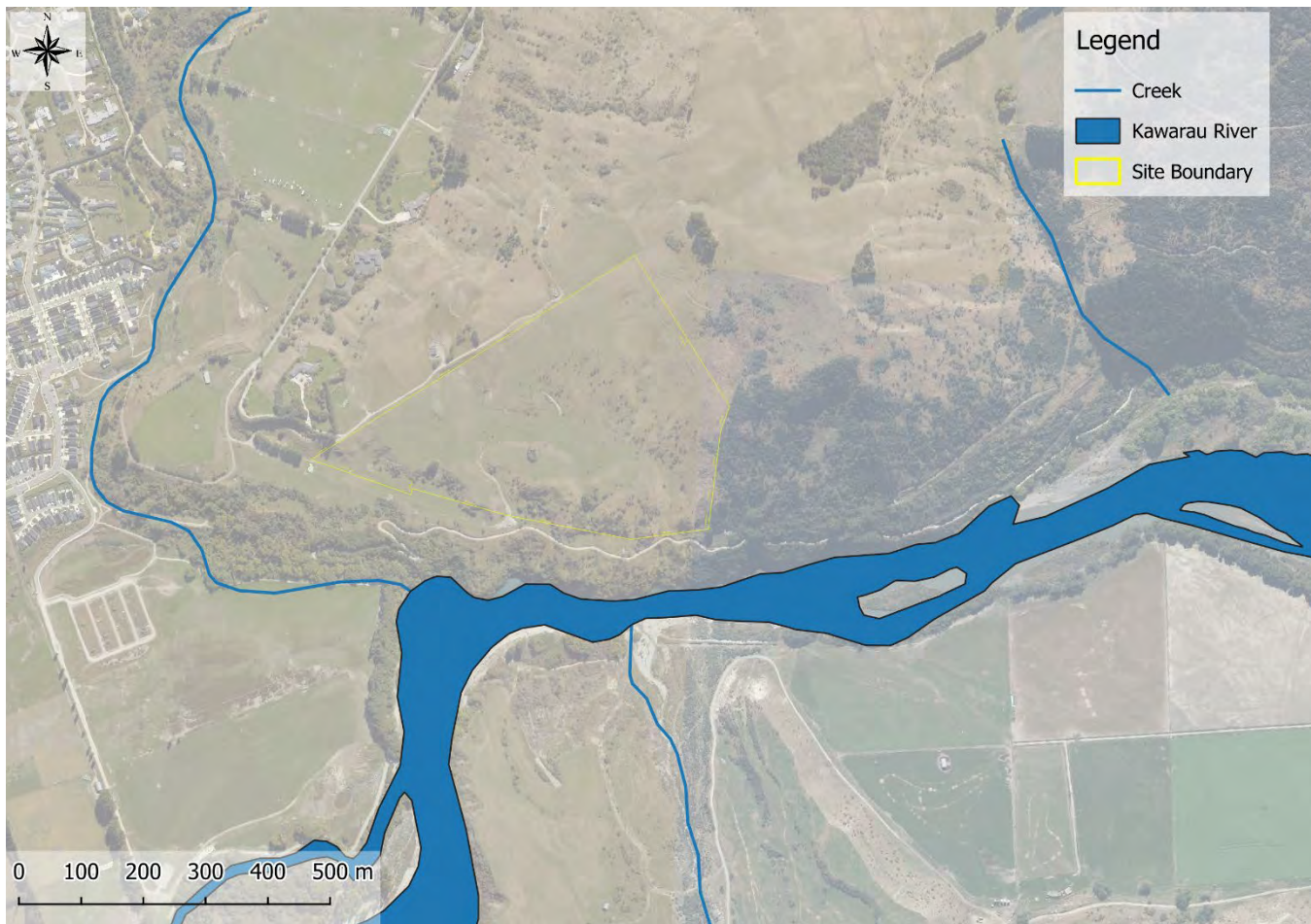


Figure 3: Waterways within and in proximity to the site

5.2 Legislative Considerations

5.2.1 NPS-FM

The Otago Regional Council has proposed a progressive implementation plan for meeting the NPS-FM 2017 and this includes developing a new land and water plan that will be notified by 2023 that includes objective and targets for FMUs in accordance with the requirements of the NPS-FM.

Given the industry best practice erosion and sediment control measures proposed, potential adverse effects on surface water bodies are considered to be appropriately managed and mitigated. The proposal is therefore generally consistent with the NPS-FM. Overall, the proposal is consistent with the objectives and policies of the NPS-FM.

5.2.2 Regional Plan: Water for Otago

The Kawarau River is considered an Outstanding Water Body under the Otago Regional Council Draft Land and Water Regional Plan. It should be noted that the Kawarau River maintains a Water Conservation (Kawarau) Order 1997.

- **Regional Plan: Water for Otago - Schedule 1A – Natural Values.** Kawarau River between Lake Wakatipu and Lake Dunstan regarded natural characteristics, in particular the return flow in the upper section when the

Shotover River is in flood; for scientific values, in particular the return flow in the upper section when the Shotover is in flood; for its wild, scenic characteristics; for recreational purposes, in particular rafting, jet boating and kayaking. Spectacular and rugged river gorge, schistose landscape, fast flowing white water and rapids, old gold sluicing landscape, from confluence with Arrow River to Lake Dunstan.

- **Regional Plan: Water for Otago - Schedule 1D – Kai Tahu Values.** Mana whenua interests identified as being associated with the Kawarau River include kaitiakitanga, mauri, and waahi taoka. Access and customary use interests associated with the Kawarau River include: trails (part of traditional routes, including landing places for canoes); cultural materials (source of traditional weaving materials or medicines) and Waipuna – sources of water highly regarded for their purity, healing and health-giving powers.

5.2.3 Cumulative Effects

The proposal to construct a residential dwelling and shed is a temporary activity and will not result in any increased pressure or change in the water quality or quantity on the Kawaru River. Erosion and sediment controls are to be maintained at all times before site stabilisation, to ensure that the best practice approach in accordance with GD05 is adopted. Overall, the EMP and ESCP measures will ensure that actual and potential effects on water quality, including cumulative effects, will be less than minor.

As the disturbed areas will be rapidly stabilised and stormwater attenuation for the buildings installed to mimic pre-development flow rates, the proposal is not considered to result in any cumulative effect on the surrounding environment, over time.

5.3 Performance Criteria

Any discharge from the sites' works areas, or erosion and sediment control devices will meet the criteria in **Table 6**.

Table 6: Water quality discharge criteria – High Water Quality Risk

Parameter	Discharge Criteria
Visual Clarity	≤ 100 mm (As per GD05)
Total Suspended Sediment (TSS)	≤ 50 mg/L
pH ³	5.5 – 8.5
Hydrocarbons or tannins	No visible trace
Waste	No waste or litter is visible

³ pH to be tested only when chemical treatment is undertaken.

5.4 Management Measures

The following measures will be deployed to ensure the protection of water quality:

- Erosion and sediment controls will be implemented and maintained in accordance with the Erosion and Sediment Control Measures in **Section 4.0**.
- Refuelling, servicing and storage of hydrocarbons will be in accordance with the relevant procedures in the Chemicals and Fuels Management in **Section 10.0**.
- All concrete washing is to be undertaken in the designated concrete wash-out pit as per the design specifications in **Appendix 1**.
- All plant and equipment onsite will be inspected regularly to ensure they are of an acceptable standard.
- Stockpiling of any organic, erodible or hazardous material onsite is not to be placed within close proximity of a watercourse/major drainage line, unless appropriate controls are in place.
- All chemical treatment of sediment-laden water will be undertaken in accordance with an approved Chemical Treatment Management Plan.

5.5 Monitoring

Water quality will be monitored in accordance with **Table 7**.

Table 7: Water quality monitoring measures

Sampling Scope	
Objective	To assess whether controlled and uncontrolled discharge, meets the Discharge Criteria referred to in Section 5.2 .
Responsibility	On site water quality sampling is to be completed by the nominated Environmental Representative. Note: SQEP is available to provide training and guidance regarding on site sampling and can provide sampling services as required.
Spatial boundaries	Discharges from within the sites' work areas and/or erosion and sediment control devices.
Frequency	A significant rain event is defined as any forecast/actual rain event of 20 mm within a 12-hour period or a rain event that can generate overland flow, noting that this varies seasonally. Where a Significant Rain Event occurs through the night, monitoring shall be undertaken the following morning.
Sampling Design	
Water Quality Criteria	As outlined in the Discharge Criteria referred to in Section 5.2 .
Sampling Locations	At boundaries of the site where any water is flowing, specifically the following point discharges: <ul style="list-style-type: none"> • DEB 1 outlet – 45°00'10" S: 168°48'22" E • DEB 2 outlet – 45°00'07" S: 168°48'26" E

Sampling Method	<ul style="list-style-type: none"> • TSS – Registered laboratory • Turbidity (NTU) – Nephelometer • pH – pH meter – only if utilising chemical treatment • Gross pollutants – visual observations • Tannins – visual observations (any unusual darkening of waters?) • Hydrocarbons – visual observations (is there any oily film⁴ on surface or smell?)
Quality Control	Any water quality meter will be calibrated according to manufacturer instructions. All observations will be recorded and analysed.
Recording	
Recording Results	All results will be entered into a spreadsheet and kept onsite (form attached as Appendix 9).
Actions	
Non-conformances	Any exceedances observed will be reported to the Project Manager/ Environmental Consultant who will investigate and ensure appropriate corrective actions are implemented immediately.

5.6 Contingency Measures

The following contingency measures in **Table 8** shall be adopted if required.

Table 8: Water quality contingency measures

Issue	Contingency Measure
Exceedance of water quality criteria	<ul style="list-style-type: none"> • Contact the Project Manager and Environmental Consultant (SQEP) immediately. • Works will cease or be modified to remove further risk of contamination. • QLDC and ORC will be verbally notified. • The Environmental Incident procedure will commence. • Remedial measures will be implemented and the Environmental Incident will be closed out by the Environmental Consultant (SQEP), with a copy of an Environmental Incident report to the Project Manager, QLDC and ORC.

5.7 Water Quality Incidents

A water quality incident is considered to have occurred where the water quality performance criteria outlined in **Section 5.2** is breached. The incident procedures outlined at **Section 3.5** shall commence.

⁴ Some bacteria produce a naturally occurring film on the water surface. Bacteria films breaks apart in angular shapes when disturbed whereas hydrocarbon film separates as globules.

6.0 DUST MANAGEMENT

Dust from construction activities, vehicle movements and stockpiles can contribute to sediment runoff and create a nuisance to the public, neighbouring properties, adjoining roads and service infrastructure. The key risks associated with dust occur during the bulk earthworks phase of the project.

There are a range of activities that may produce dust onsite including:

- General disturbance of soil (particularly during drier months).
- Inappropriate staging that does not seek to minimise the extent of exposed soil.
- Stockpiling of topsoil or subsoil.
- Slow or ineffective revegetation procedures.

6.1 Sensitive Receptors

Key sensitive receptors to protect from the effects of dust include workers onsite and nearby recreational trail to the south. The prevailing wind in the closest monitoring point (Queenstown Aero) is a south-westerly⁵. The site is located within the Lower Shotover Basin however, and due to the surrounding topography and alpine environment, wind direction and speed can be changeable.

Due to the relatively isolated and sheltered position of the site, potential effects related to dust generation are anticipated to be less than minor. Construction-related dust effects can be suitably mitigated, if the management measures prescribed in **Section 6.3** are adopted during construction.

6.2 Performance Criteria

The project must ensure that reasonable and practical measures are taken to avoid dust moving across the boundaries of the site at all times.

6.3 Management Measures

The following measures will be deployed to ensure dust generation onsite is minimised:

- Stage works where possible to minimise soil exposure extents and timeframes.
- Revegetate disturbed areas progressively throughout construction.
- Dust suppression of exposed areas and stockpiles by water trucks or other methods (e.g., k-lines) approved by the Environmental Representative.⁶
- If dust activities cannot be controlled during high winds, works will cease until favourable conditions return.
- To avoid spillage risks, trucks will not be overloaded.

⁵ Macara, G.R. 2015. The climate and weather of Otago. NIWA Science and Technology Series 67, 44 pp.

⁶ Ensure a consented water take permit is approved by the local authority. If taking water from lakes and or rivers, ensure that the permitted volume of water is taken.

- All trucks must have tail gates up and swept or cleaned prior to exiting to external roads.
- Stockpile heights are to be minimised where possible (< three metres) unless they are covered (e.g. an erosion blanket, chemical sealant, temporary cover crop or mulched).
- Long-standing stockpiles (greater than six weeks) shall be appropriately stabilised.
- Within two weeks of completion, all earth worked areas will be sown out with grass, landscaped or otherwise stabilised by an appropriate erosion control.

6.4 Monitoring

Site staff will maintain continual vigilance for any increases in wind to ensure measures are deployed prior to dust crossing site boundaries. Weekly Environmental Inspections and the Monthly SQEP Environmental Inspections will also ensure that the management measures described above are sufficient and performing effectively.

6.5 Contingency Measures

The contingency measures in **Table 9** shall be adopted if required.

Table 9: Dust contingency measures

Issue	Contingency Measure
Excessive dust creation from soil disturbance	<ul style="list-style-type: none"> • Increase frequency of water truck spraying or increase irrigation. • Spray down excavation areas and activities where excavator bucket is operating. • Cease excavation during high winds, particularly if wind direction is likely to impact sensitive receivers.
Excessive dust creation from hauling operations	<ul style="list-style-type: none"> • Reduce truck speeds. Cover or spray down loads causing dust impacts. • Apply skim of aggregate over the haul road surface. • Install shakedown devices at entry and exit points.
Excessive dust creation from stockpiles	<ul style="list-style-type: none"> • Spray stockpiles with water or apply a temporary polymer. • Hydro-mulch, seed or stabilise stockpiles, cover stockpiles with geofabric.
Abatement notice issued by Council	Contact the Environmental Consultant (SQEP) immediately to advise on methods to meeting abatement notice requirements within the time stated by the abatement notice.

6.6 Dust Incident

A dust incident is considered to have occurred where:

- Dust is observed crossing the boundary into sensitive receptors or,
- A justified complaint is received regarding dust emissions across the boundary of the site.

The incident procedures outlined at **Section 3.5** shall commence.

7.0 NOISE AND VIBRATION MANAGEMENT

Many construction and demolition activities can incur noise and vibration effects. However, noise generated during construction, maintenance, and demolition work is generally of a temporary nature. Provided ongoing noise does not occur at inconvenient times, the adverse effects can generally be avoided or mitigated.

NZS 6803:1999 Acoustics - Construction Noise, recommends higher noise criteria for construction activities during daytime hours (Monday to Saturday) for residential areas and rural dwellings, while for Sundays and public holidays lower noise criteria are set to provide days of rest from construction noise. Similarly, night—time criteria are low to avoid sleep disturbance.

The following assessment and management measures are intended for standard construction equipment that is not expected to induce noise or vibration beyond the maximum limits in the QLDC District Plan. Where upper noise and vibration levels of district plans will be breached, an Acoustic Specialist may need to be engaged to assist with the management of these nuisance effects.

Potential noise and/or vibration effects may be generated by the following:

- Excavation and earth moving plant
- Light vehicles near sensitive receptors
- Ancillary plant and equipment
- Compaction equipment
- Rock breaking
- Reversing alarms

7.1 Sensitive Receptors

Due to the relatively isolated and sheltered position of the site, potential effects related to construction noise and vibration are anticipated to be less than minor. Construction-related noise and vibration effects can be suitably mitigated, if the management measures prescribed in **Section 7.3** are adopted during construction.

7.2 Performance Criteria

1. Construction activities shall meet relevant noise limits specified under Rule 36.5.13 of the Queenstown Lakes Proposed District Plan. This rule requires Construction sound at any point within the site must comply with the limits specified in Tables 2 and 3 of *NZS 6803:1999 Acoustics - Construction Noise*, when measured and assessed in accordance with that standard (see **Table 10** below).
2. Construction activities shall meet relevant vibration limits specified under Rule 36.5.10 of the Queenstown Lakes Proposed District Plan. This rule requires vibration from any activity must not exceed the guideline values given in *DIN 4150-3:1999 Effects of vibration on structures* on any structures or buildings on any other site.
3. Construction activities shall be undertaken in accordance with the permitted hours of operation outlined at **Section 2.2** of this EMP.

Table 10: Upper limits in dB(A) for construction work noise in residential areas for more than 20 weeks

Time of Week	Time Period	$L_{Aeq(t)}$	$L_{A_{fmax}}$
Weekdays	0630 – 0730	55 dB	75 dB
	0730 – 1800	70 dB	85 dB
	1800 – 2000	65 dB	80 dB
Saturdays	0630 – 0730	45 dB	75 dB
	0730 – 1800	70 dB	85 dB

Table 11: Vibration Thresholds for Structural Damage (PPV mm/s)

	Short Term			Long-Term	
	At Foundation			Uppermost Floor	Uppermost Floor
Types of Structures	0 to 10 HZ	10 to 50 Hz	50 to 100 HZ	All Frequencies	All Frequencies
Commercial/Industrial	20	20 to 40	40 to 50	40	10
Residential	5	5 to 15	15 to 20	15	5
Sensitive/Historic	3	3 to 8	8 to 10	8	2.5

Note: When a range of velocities is given, the limit increases linearly over the frequency range.

7.3 Management Measures

The following measures will be deployed to ensure noise and/or vibration associated with the project are appropriately mitigated:

- Where practicable, select lower noise producing equipment or use lower noise generating alternatives.
- Regularly service equipment to ensure plant is running optimally.
- Plant and equipment to be fitted with noise control/attenuation devices as appropriate and maintained and operated in accordance with manufacturer's specifications.
- Revving of engines will be limited. All plant and vehicles will be turned off when not in use and if safe to do so.
- The use of audible alarms on mobile equipment will be limited, and two-way communication will be used.
- Undertake activities that may lead to noise or vibration effects, during reasonable and practical hours.

7.4 Monitoring

All earthworks activity will be closely monitored by the operator to ensure that noise and vibration remains within the required limits. If monitoring finds the activity cannot comply with performance criteria, an Acoustic Specialist may need to be engaged to assess the project and provide appropriate mitigation measures and monitoring. Weekly

Environmental Inspections and Monthly SQEP Environmental Inspections shall include an assessment of the site to determine the effectiveness of noise and vibration management controls.

7.5 Contingency Measures

The following contingency measures in **Table 12** shall be adopted if required.

Table 12: Noise and vibration contingency measures

Issue	Contingency Measure
Noise and/or vibration complaint received	Manage the complaint in accordance with the Environmental Complaints procedure in Section 3.6 .
Exceedance of performance requirement criteria	The Environmental Consultant (SQEP), in consultation with the Environmental Representative, will investigate and implement actions to reduce noise and/or vibration levels to below criteria levels.
Ongoing noise and/or vibration issues	Where noise or vibration emissions consistently exceed the performance criteria despite the site staff's best efforts, an Acoustic Specialist will be engaged to assist.
Abatement notice issued by Council	Contact the Environmental Consultant (SQEP) immediately to advise on methods to meeting abatement notice requirements within the time stated by the abatement notice.

7.6 Noise and Vibration Incident

A noise or vibration incident is considered to have occurred when a justified complaint is received and on investigation is found to exceed the performance criteria. The environmental incident procedures outlined in **Section 3.4** shall commence.

8.0 CULTURAL HERITAGE MANAGEMENT

The loss or damage of cultural heritage items could be caused by construction activities. The damage or loss of artefacts can lead to the loss of culturally or historically significant items and information.

Examples of cultural heritage items include:

- Koiwi tangata (human skeletal remains).
- Waahi taoka (resources of importance).
- Waahi tapu (places or features of special significance).
- Māori artefact material.
- A feature or archaeological material predating 1900.
- Unidentified archaeological or heritage site.

8.1 Location of Known Cultural Heritage Significance

A search of QLDC's database indicates there are no known items of cultural or heritage significance on the site. It should be noted that the site is situated adjacent to the Kawareau River Wāhi Tūpuna area. Wāhi Tūpuna are landscapes that embody the relationship of mana whenua and their culture and traditions with their ancestral lands, water, sites, wāhi tapu (sacred places), and other taoka (treasure). The proposed activity does not encroach within the Wāhi Tūpuna and any effect of the Kawareau River Wāhi Tūpuna, is anticipated to be negligible.

8.2 Performance Criteria

- The protection of cultural heritage artefacts and places in accordance with the *Heritage New Zealand Pouhere Taonga Act, 2014*.
- Strict adherence to Heritage New Zealand's *Archaeological Discovery Protocol* (attached as **Appendix 10**) in the case of unexpected finds.

8.3 Management Measures

All works on this project will be undertaken in accordance with the obligations of the *Heritage New Zealand Pouhere Taonga Act, 2014*.

8.4 Monitoring

Weekly inspections shall include a visual assessment of the site to ensure that no new significant artefacts have been encountered. However, operators must remain vigilant for such encounters as they occur.

8.5 Accidental Finds

If any unknown artefacts are uncovered, the project will work to Heritage New Zealand's *Archaeological Discovery Protocol* (attached as **Appendix 10**).

9.0 VEGETATION MANAGEMENT

9.1 Sensitive Receptors

There is no protected or indigenous vegetation present on site. The proposed earthworks extents are dominated by grass associated with agricultural grazing. Additional indigenous planting has been undertaken by the property owner, surrounding the access and building platform. Some grey shrubland species like matagouri is scattered across the wider site. However, these are located outside of the extent of works.

9.2 Performance Criteria

- Undertake disturbance within the consented earthworks extent.
- Avoid the clearance of indigenous or protected vegetation where possible during excavation works.
- Avoid the spread of noxious weeds onsite or to other sites.

9.3 Management Measures

The following measures will be deployed to manage vegetation:

- Demarcate protected vegetation areas as no go zones.
- Treating weeds prior to disturbance of the natural surface.
- Maintain existing indigenous and or any protected vegetation.
- Weed free topsoil will be retained for reuse in site rehabilitation.

9.4 Monitoring

Weekly Environmental Inspections and Monthly SQEP Environmental Inspections shall include a visual assessment of the site to determine the effectiveness of vegetation management controls.

9.5 Vegetation Incident

A vegetation incident is considered to have occurred where:

- Protected vegetation is damaged or removed.
- A no-go zone is breached.

The environmental incident procedures outlined at [Section 3.5](#) shall commence.

10.0 CHEMICALS AND FUELS MANAGEMENT

10.1 Sensitive Receptors

Key sensitive environmental receptors include staff members working on the site and the Kawarau River.

10.2 Performance Criteria

- Chemicals and fuels are stored and used in a manner that avoids contamination of site and surrounding environment.
- All spills are cleaned up immediately and the contaminated soils/waters disposed of appropriately.

10.3 Management Measures

The following measures will be deployed to ensure chemicals and fuels associated with the project are appropriately managed.

- All hazardous substances to be stored, transported and used according to the safety data sheet requirements.
- Storage of chemicals and fuels shall be located as far as practicably possible from waterways and concentrated flows.
- Refuelling of vehicles and plant onsite will occur in the designated refuelling bay as shown in [Appendix 1](#).
- All concrete washing is to be undertaken in the designated concrete wash-out pit as per the design specifications in [Appendix 1](#).
- One 240 L Oil and Hydrocarbon spill kit will be located in close proximity to the location of liquid hazardous materials storage and refuelling areas.
- The volumes of the hazardous substances listed in [Table 13](#) will not be exceeded.

Table 13: Maximum volumes of chemicals and fuels

Chemicals and Fuels	Maximum Volume	Storage Location
Diesel	1,000 L	Portable fuel trailer
Unleaded Fuel	100 L	Jerry cans in lockable container
Oil	10 L	Packaging in lockable container
Lubricant (WD40 or similar)	Six Cans	Packaging in lockable container
Grease	5 L	Packaging in lockable container
Spot marking paint	2 L	Packaging in lockable container

10.4 Monitoring

Weekly Environmental Inspections and Monthly SQEP Environmental Inspections shall include a visual assessment of the site to determine the effectiveness of chemicals and fuels management.

10.5 Contingency Measures

The following contingency measures in **Table 14** shall be adopted if required.

Table 14: Chemicals and fuels contingency measures

Issue	Contingency Measure
Spills response	<ul style="list-style-type: none"> • Stop works in proximity to the spill and assess the safety of all personnel. • Take immediate action to contain the spill to prevent discharge into stormwater drains or natural waterways. • Use spill kits to contain and treat the spill. • Notify Environmental Consultant to advise on next steps. • If necessary, notify the Regional Council spill response unit. • Remove contaminated material to a suitable contained location for remediation/disposal (require any necessary approvals/permits from ORC). • The spill kits shall be replaced by an approved supplier.
Inappropriate storage	<ul style="list-style-type: none"> • Upgrade facility. • Clean-up of storage area. • Notify and train staff.
Inappropriate handling/transport	<ul style="list-style-type: none"> • Notify and train staff through toolbox meetings on the appropriate handling and transport methods.
Inadequate spill kit materials	<ul style="list-style-type: none"> • Order more materials. • Investigate types of chemicals onsite and consult a supplier for advice on appropriate equipment. • Develop or revise spill material monitoring and ordering system.
Inappropriate disposal of chemicals or fuels	<ul style="list-style-type: none"> • Provide appropriate disposal facilities or service providers. • Notify and train staff.
Inaccurate or insufficient records	<ul style="list-style-type: none"> • Advise staff and update records. • Monitor through inspections.

10.6 Chemicals and Fuels Incident

A chemicals and fuels incident are considered to have occurred where:

- A spill more than five litres has occurred.
- A situation is discovered where a spill of more than five litres would likely have occurred before it happens where the management measures listed above have not been followed.

The environmental incident procedures outlined at **Section 3.5** shall commence.

11.0 WASTE MANAGEMENT

11.1 Sensitive Receptors

Key sensitive environmental receptors include staff members working on the site and the Kowarau River.

11.2 Performance Criteria

- Non-recyclable waste generation is minimised, and the site and surrounds are kept free from waste at all times.
- Wastes shall be stored safely and in an organised manner until recycling, reuse, or disposal.

11.3 Management Measures

The following measures will be deployed to ensure waste management associated with the project is appropriately mitigated:

- The Waste Management Hierarchy philosophy will be implemented, as illustrated in **Figure 4**.

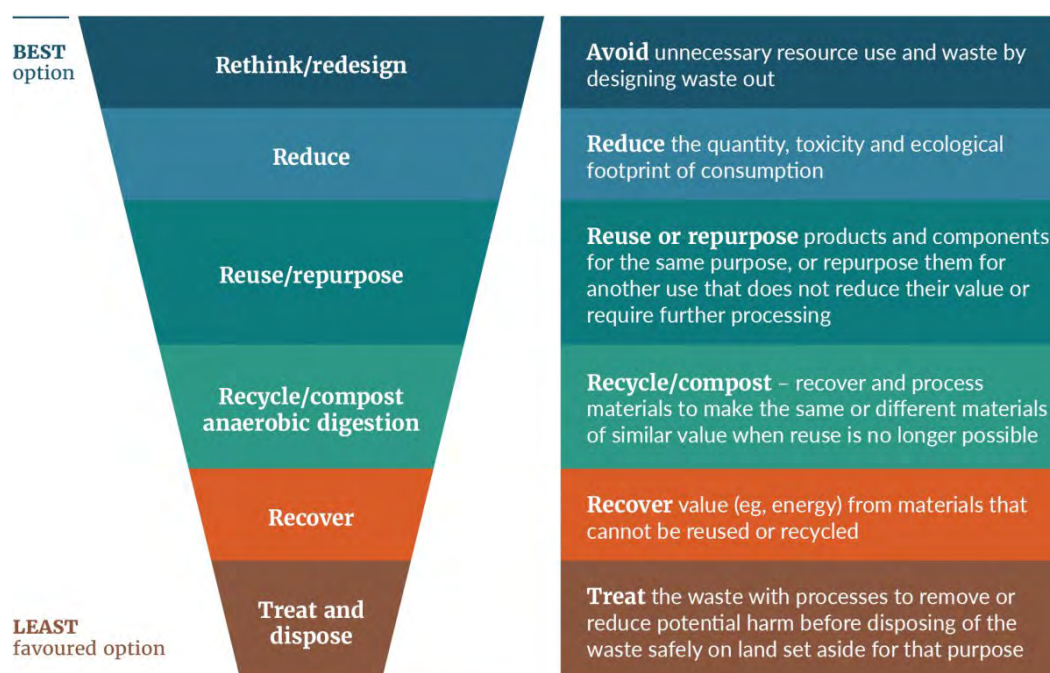


Figure 4: The Waste Hierarchy (Source: Ministry for the Environment).

- Measures will be implemented to ensure the site is maintained in a safe, clean and tidy state.
- Where possible, waste shall be segregated into labelled bins with lids: General, Hazardous and Recyclables.
- Wastes onsite shall be suitably contained and prevented from migrating offsite.
- The waste is to be contained so it doesn't contaminate soil, surface or ground water, create unpleasant odours or attract vermin.

- Any material dropped in or adjacent to open drains shall be recovered immediately after it occurs.
- Waste storage is not permitted in or near drainage paths.
- The burning of waste is strictly prohibited.
- No wastes shall be disposed of onsite.
- Wastes shall be removed from site regularly and at completion of works.

11.4 Monitoring

Site staff will be briefed on waste processes prior to works commencing and shall maintain continual vigilance for excess waste around the site and following appropriate disposal procedures. Weekly Environmental Inspections and Monthly SQEP Environmental Inspections shall include a visual assessment of the site to determine the effectiveness of waste management controls.

11.5 Contingency Measures

If waste items are accumulating or are stockpiled, the following contingency measures will be adopted:

- Arrange for collection by approved licensed contractor.
- Provide additional bins with lids if available.
- Remove waste offsite as soon as possible.

11.6 Waste Incident

A waste incident is considered to have occurred where:

- Waste from the site is found within a sensitive environment or where it may reasonably migrate to a sensitive environment,
- A complaint is received regarding inappropriate management of waste and on investigation is warranted.

The environmental incident procedures outlined at **Section 3.5** shall commence.

12.0 CONTAMINATED SITE MANAGEMENT

12.1 Sensitive Receptors

A search of Council records has not provided any indication of the site being used in the past for a HAIL activity. If contaminated material is encountered during earthworks, key sensitive environmental receptors include staff members working on the site, members of the public and overland flow paths.

12.2 Performance Criteria

- Effectively identify and manage any sites where contaminants are found and ensure they do not contaminate beyond the location they are found (including offsite) or present a risk to human health.

12.3 Management Measures

The following measures will be deployed to ensure contaminated soil associated with the project is appropriately mitigated:

- If any evidence of contamination be noticed in the field, the personnel noting the contamination shall immediately notify the Environmental Representative.
- Any known contaminated soil to be removed must be undertaken wearing appropriate PPE.
- All imported fill material from off-site sources will be procured from a project approved quarry/source. Records of quantity and location shall be managed by the Project Engineer.
- Many of the controls required to manage potential for effects associated with low level contaminated soil is based on best practice erosion and sediment control and dust management techniques. These are outlined in [Section 4.3](#) (erosion and sediment controls) and [Section 6.4](#) (dust controls). Both sections cover management of stockpiles.
- All surplus fill material requiring removal shall meet the Ministry for Environment definition of clean fill, as specified in Section 2.2 of the report “A Guide to the Management of Cleanfills”, prepared by *Beca Carter Hollings & Ferner Ltd for the Ministry for the Environment and dated January 2002*.
- If materials have been approved to be removed from site, materials will be transported to the approved disposal location.
- Trucks removing or transporting any soil from the site will be covered or sealed to prevent dust, leakage or loss of materials during transport.

12.4 Monitoring

Unless any higher-level contamination is accidentally found during earthworks, no specific monitoring of soil, groundwater or water quality will occur (other than what is detailed in the water quality criteria outlined at [Section 5](#)). If material is found it is expected that monitoring may be required but this shall be at the direction of the soil contamination expert.

12.5 Contingency Measures

It is not expected that contaminated material will be encountered, however this cannot be ruled out. If a potential contaminated site is identified (e.g., by landfilled waste, odour) during construction works, the following contingency measures will be undertaken:

- Immediately notify the Project Manager.
- Prevent spread of contamination by installation of silt fencing, covering material with plastic or geofabric material. This will be done wearing appropriate PPE as outlined in the Health and Safety Management Plan.
- Engage the Environmental Consultant who will advise on the engagement of a Contaminated Soil expert.
- EMP to be amended to manage any new contaminated soil encountered in coordination with the contaminated soil expert (if engaged).

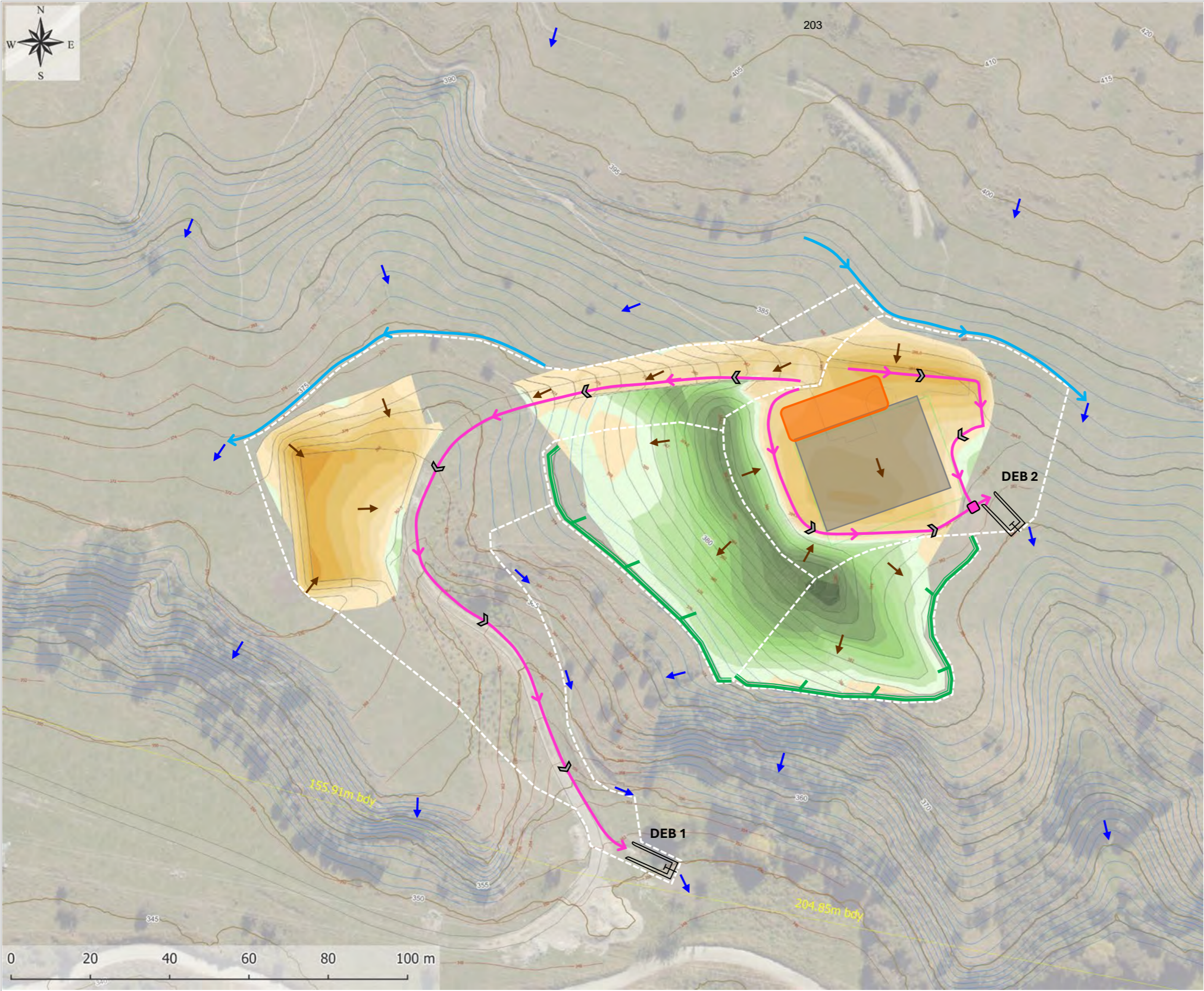
12.6 Contamination Incident





An environmental incident is considered to have occurred where inspection finds that excavation or other work continues within contaminated soil without report or remedial action.

The environmental incident procedures outlined in [Section 3.5](#) shall be followed.



APPENDIX 1 **Erosion and Sediment Control Plan Drawing**



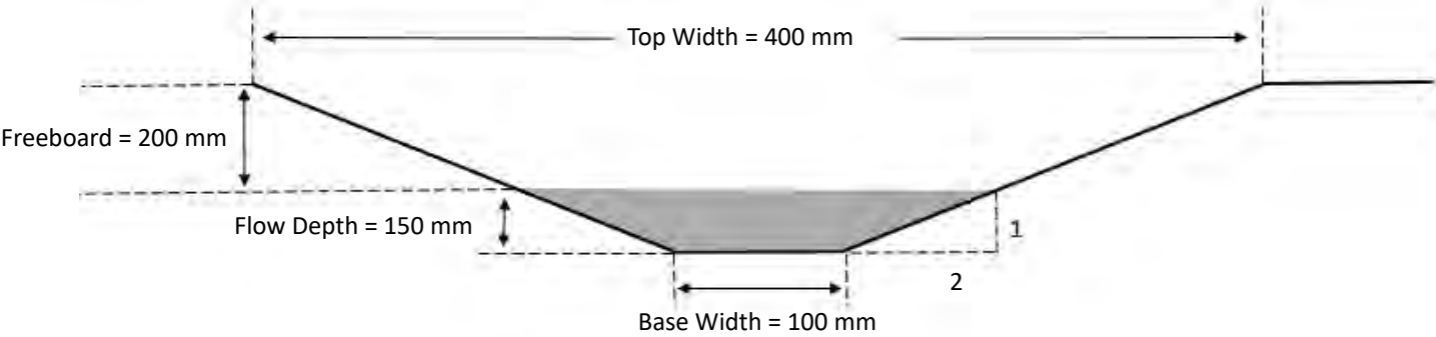
Legend	
	Clean water overland flow
	Dirty water overland flow
	Clean water diversion bund (CWDB)
	Dirty water diversion channel (DWDC)
	Laydown area
	Super silt fence
	Stockpile
	Decanting earth bund (DEB)
	Drop-out pit
	Check dams
	Aggregate surface

- Notes**
1. This plan is to be read in conjunction with the Environmental Management Plan document prepared by Enviroscope.
 2. All locations of erosion and sediment control (ESC) devices are indicative and exact placement to be confirmed onsite.
 3. ESC devices to be installed and maintained in accordance with Auckland Council's 'Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05) and manufacturer's instructions where relevant.
 4. All devices are to be inspected daily and pre and post-rain event to ensure they are fully functional.
 5. QGIS – Scale 1:1000

	Project: Smith Hill Block				
	Description: Erosion and Sediment Control Plan Drawing				
	Drawn	Approved	Date	Drawing No.	Revision
WT	TG	12/12/2024	ESCP - 001	A	

DIRTY WATER DIVERSION CHANNEL

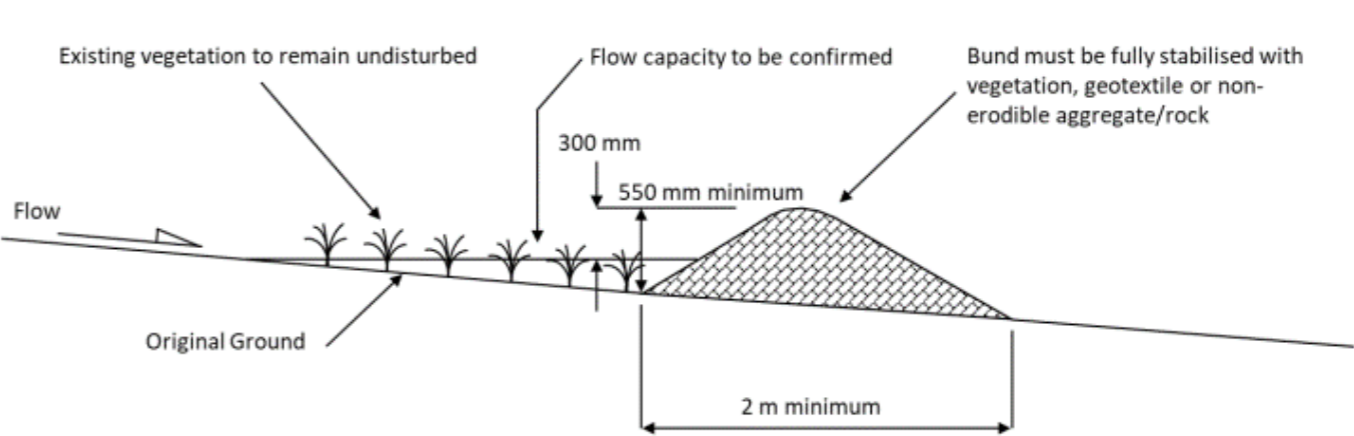
(Pages 43-46 from GD05)



- This has been designed to convey up to a 5% AEP design event.
- Check dams required.
- Trapezoidal shape
- Full calculations are included in [Appendix 2](#).

‘CLEAN WATER’ DIVERSION BUND

(Page 38-43 from GD05)



- Ensure bund is well compacted and stabilised.
- Monitor the inlet and outlet for scour.
- Ensure there are no areas of ponding or blockages along the length of the bund.

DROP-OUT PIT

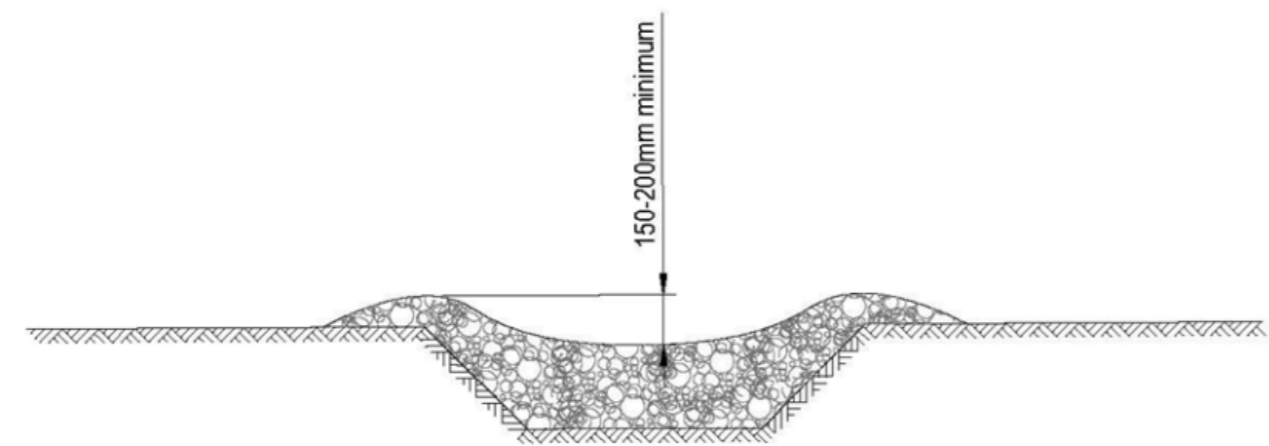
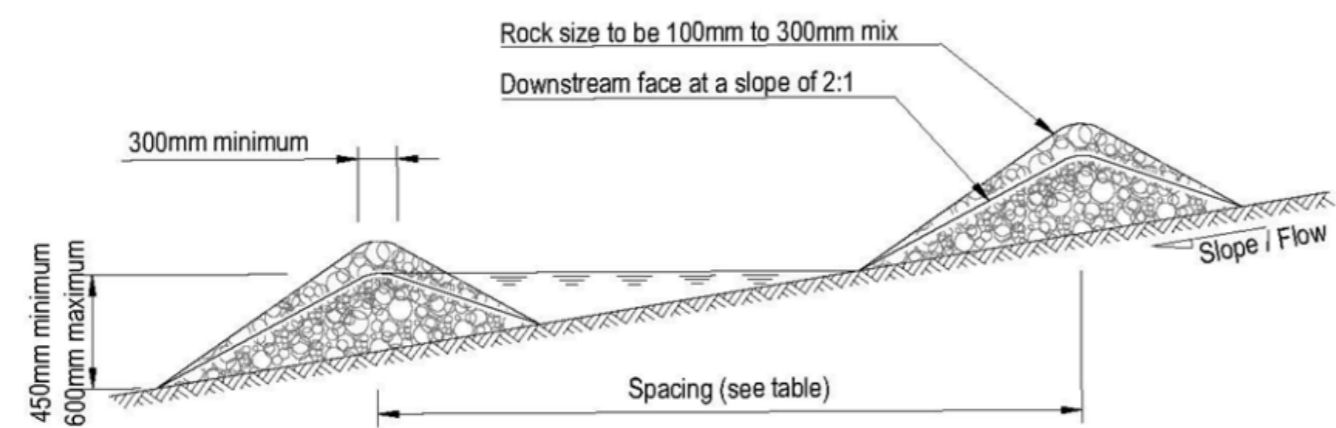
Page 45 from GD05



- Drop out pits should be one metre deep by one-metre-wide cube.
- As a contingency measure, drop out pits can be increased in size and lined to prevent any scour of the pit.

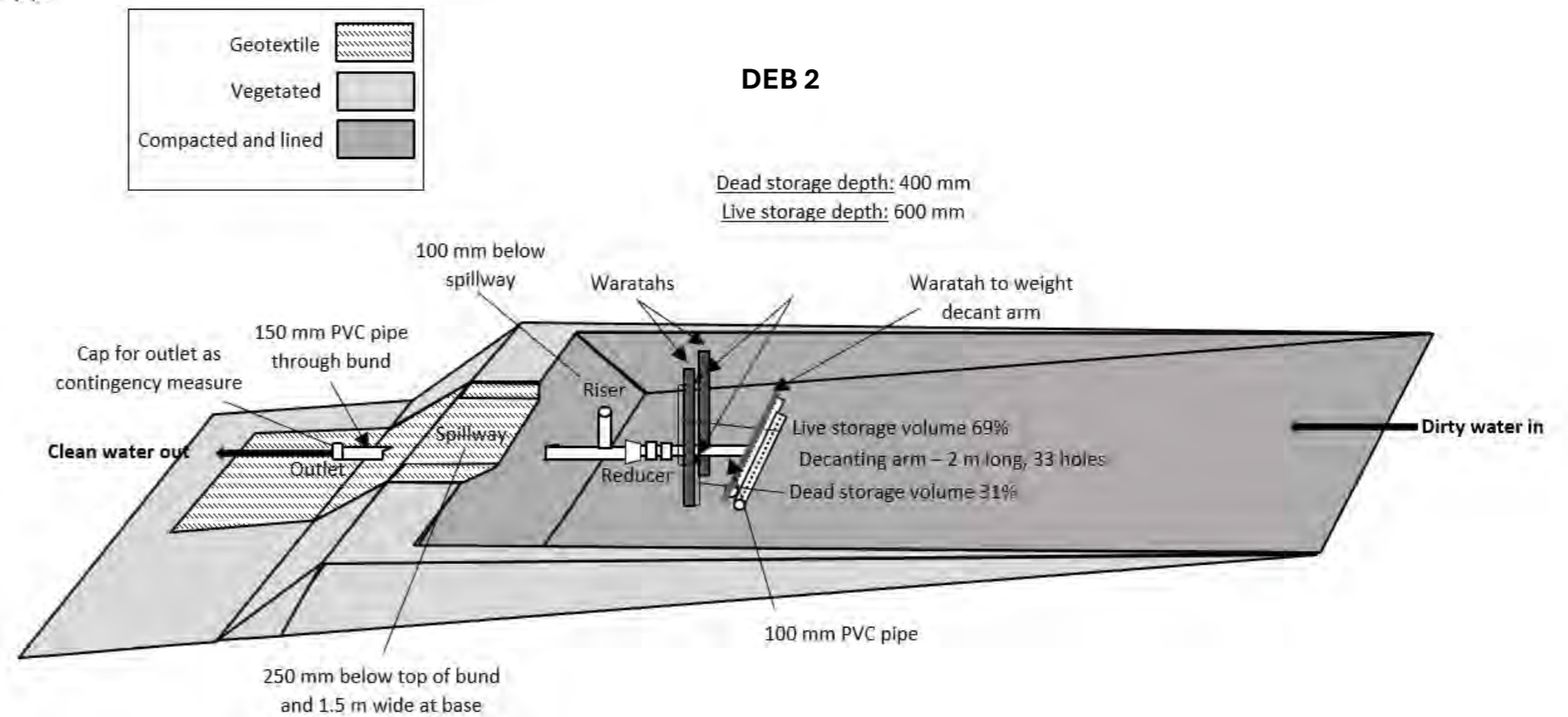
Drawn	Approved	Date	Drawing Number	Revision
WT	TG	12/12/2024	ESCP - 002	A

205
CHECK DAMS
(Page 50-54 from GD05)

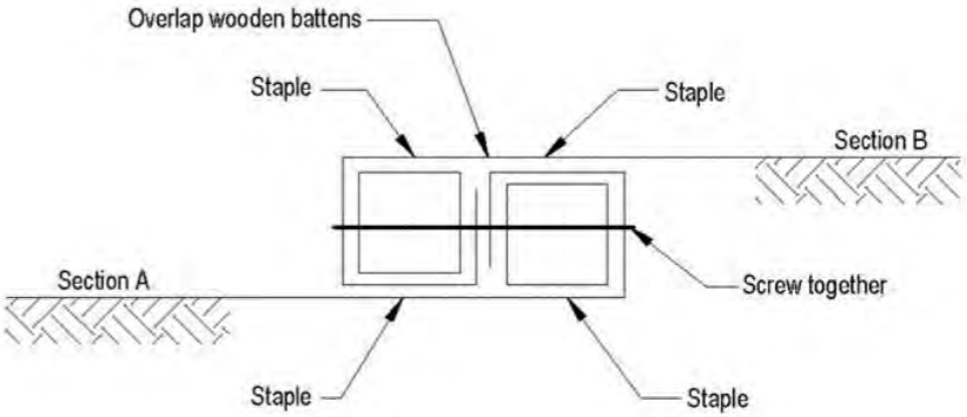
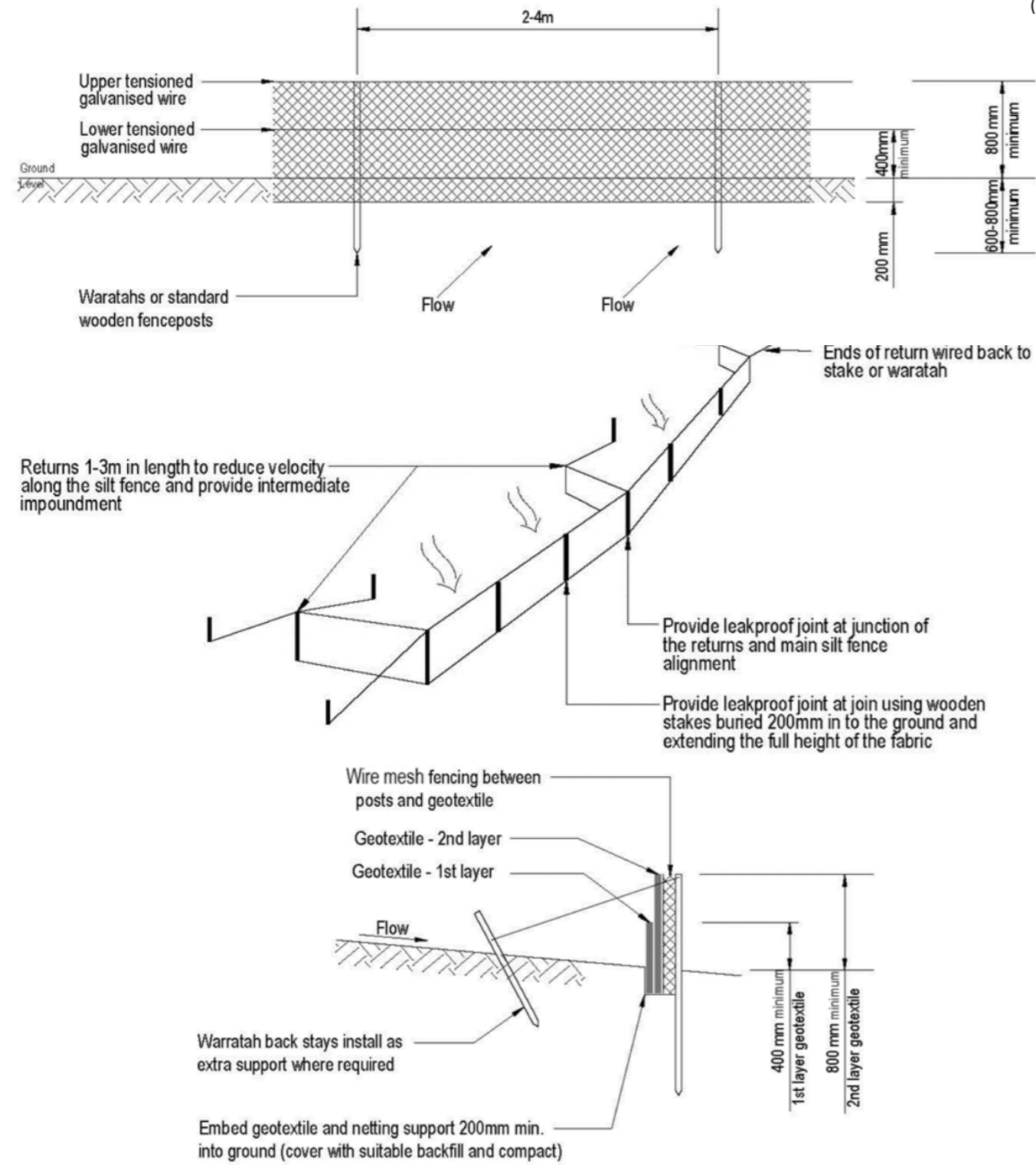


- Check dams will be constructed out of 100 – 300 mm mix rock or sandbags.
- As the DWDC has a depth of 150 mm, check dams should be 150 mm high with the centre being 50-100 mm lower than the outside edges to form a spillway.
- Check dams should be placed at 5-metre intervals.

Drawn	Approved	Date	Drawing Number	Revision
WT	TG	12/12/2024	ESCP - 003	A



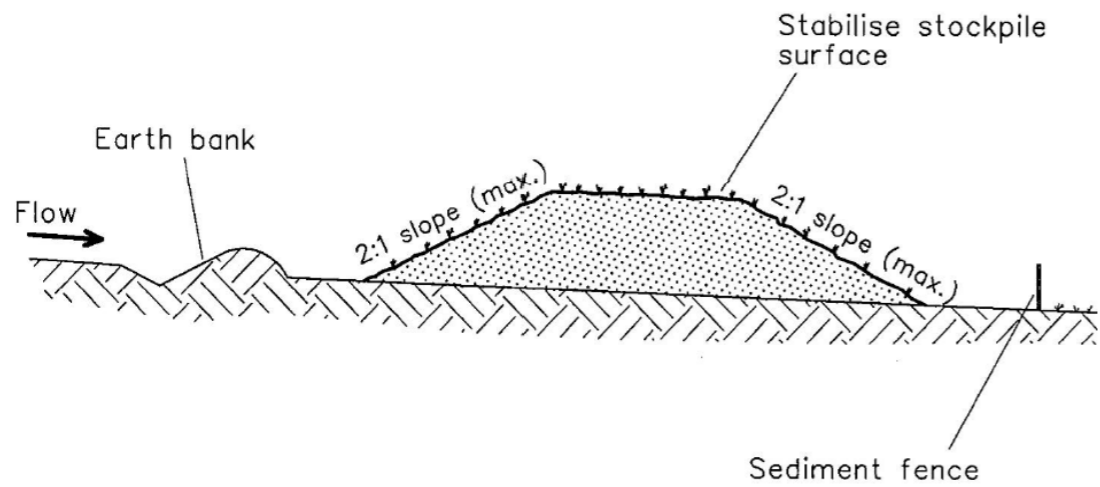
SUPER SILT FENCE
(Page 120-125 from GD05)



Slope steepness (%)	Slope length (m) (maximum)	Spacing of returns (m)	Silt fence length (m) (maximum)
0- 10%	Unlimited	60	Unlimited
10- 20%	60	50	450
20- 33%	30	40	300
33- 50%	30	30	150
Greater than 50%	15	20	75

- The super silt fence should be 800 mm above ground level and a minimum of 200 mm below ground level.
- The anchoring of the silt fence should ensure stability and the double layered geotextile should provide for drop-out prior to any water filtering through the upper portions of the fabric.
- It is imperative that the front face of the fence follows the contour as close as possible to ensure the designed holding capacity is achieved and to avoid creating pressure points on the fence.
- Supporting waratahs should be placed at 2-4 m intervals.
- Returns will be installed very ten metres along the silt fence.
- Stays to be installed with silt fence to provide additional structural support.

TEMPORARY STOCKPILES



- Temporary stockpiles should be a maximum height of two metres to mitigate wind effects and to preserve the quality of the topsoil as future planting media for revegetation.
- If the stockpile is to be left insitu for a period of 12 weeks or more it shall be seeded with grass or erosion control matting to provide erosion and dust protection.
- A silt fence should be installed on the downslope of the stockpile.

SILT SOCK

Page 126-130 from GD05



- It is important that the silt socks are secured flush with the ground to prevent sediment from undercutting the sock.
- Ensure silt socks are placed along the contour of a site.

COCONUT EROSION MATTING

Image from Enviroscope



- Coconut coir erosion matting is to be applied to exposed slopes where directed by the environmental consultant.
- Hydroseed is to be applied to the surface prior to laying the coconut matting to provide long term stabilisation.



Project: Smith Hill Block
Description: Erosion and Sediment Control Plan - Schematics

Drawn	Approved	Date	Drawing Number	Revision
WT	TG	12/12/2024	ESCP - 006	A

REFUELING BAY



- Locate the hardstand as far as practicably possible from waterways and concentrated flows.
- Ensure spill kit is located nearby.

SPILL KITS



- Spill kits should be located in the laydown area.

CONCRETE WASHOUT PIT



- The concrete wash out pit consists of a plastic-lined bunded pit constructed with fill or straw bales.
- After concrete washout any water shall be left to evaporate.
- Cured concrete is to be disposed of within the plastic sheet to a licensed facility.

WASTE



- Where possible, waste shall be segregated into labelled bins.
- Wastes on site will be suitably contained and prevented from escaping off site. This may include covering skip bins during high winds.
- Waste storage is not permitted in or near drainage paths.
- Wastes will be removed from site when bin is full.

Project: Smith Hill Block
Description: Erosion and Sediment Control Plan - Schematics

Drawn	Approved	Date	Drawing Number	Revision
WT	TG	12/12/2024	ESCP - 007	A



APPENDIX 2 **Calculations for Erosion and Sediment Controls**

DECANTING EARTH BUND DEB1 CALCULATIONS - SMITH HILL BLOCK - REVISION A



Specification	Value	Value 2	Value 3	Units	Source / Notes / Reference
Site Details					
Contributing catchment				0.75 ha	Survey Plan
Percentage volume factor				2.00 %	
GD05 theoretical DEB volume			150.00	m3	
DEB Specifications	Total Storage	Dead Storage (30%)	Live Storage (70%)		
Top length (A)	20.00	15.60	20.00	m	
Top width (B)	7.00	4.80	7.00	m	
Base length (a)	12.00	12.00	15.60	m	
Base width (b)	3.00	3.00	4.80	m	
Depth (h)	2.00	0.90	1.10	m	Measured from primary spillway down
Internal batter ratio= 1 to	1	1	1	ratio	Inlet batter is 1:3
Actual volume (v)	165.33	48.92	116.41	m3	
Width to length ratio	2.9:1	3.3:1	2.9:1	ratio	
Buffer	10.22%			%	
Percentage of total DEB	100.00%	29.59%	70.41%	%	
External batter ratio= 1 to	2	2	2	ratio	
Decant Details	Reduced Level (RL)				
RL at base of bund		348.40		m	
Bottom of decanting arm range		349.30		0.90 m	
Top of decanting arm range		350.40		2.00 m	
T-bar diameter				0.15 m	
Decant arm length				2.00 m	
Decant rate				2.25 L/sec	0.3 L/sec/1,000 m2
Number of holes on T-bar				100 Holes	10 mm diameter holes to be evenly distributed on the decant
Primary Spillway Details	Reduced Level (RL)				
RL at primary spillway		350.40		m	0.1 m lower than emergency spillway invert
Outlet pipe diameter			150.00	mm	
Emergency Spillway	Reduced Level (RL)				
RL at emergency spillway invert		350.50		m	
RL at emergency spillway crest		350.75		m	0.25 m higher than emergency spillway invert
Spillway width at invert				1.50 m	
Treatment Train Additions					
Drop out pit				No	
RADS unit				No	May be considered as a contingency measure if sediment settling efficiency needs to be improved
Check dams				Yes	

DECANTING EARTH BUND DEB 2 CALCULATIONS - SMITH HILL BLOCK - REVISION A



Specification	Value	Value 2	Value 3	Units	Source / Notes / Reference
Site Details					
Contributing catchment				0.25 ha	Survey Plan
Percentage volume factor				2.00 %	
GD05 theoretical DEB volume				50.00 m3	
DEB Specifications	Total Storage	Dead Storage (30%)	Live Storage (70%)		
Top length (A)	15.00	12.60		15.00 m	
Top width (B)	5.00	3.80		5.00 m	
Base length (a)	11.00	11.00		12.60 m	
Base width (b)	3.00	3.00		3.80 m	
Depth (h)	1.00	0.40		0.60 m	Measured from primary spillway down
Internal batter ratio= 1 to	1	1		1 ratio	Inlet batter is 1:3
Actual volume (v)	52.67	16.09		36.58 m3	
Width to length ratio	3:1	3.3:1		3:1 ratio	
Buffer	5.33%			%	
Percentage of total DEB	100.00%	30.55%		69.45%	%
External batter ratio= 1 to	2	2		2 ratio	
Decant Details	Reduced Level (RL)				
RL at base of bund		379.90		m	
Bottom of decanting arm range		380.30		0.40 m	
Top of decanting arm range		380.90		1.00 m	
T-bar diameter				0.15 m	
Decant arm length				2.00 m	
Decant rate				0.75 L/sec	0.3 L/sec/1,000 m2
Number of holes on T-bar				33 Holes	10 mm diameter holes to be evenly distributed on the decant
Primary Spillway Details	Reduced Level (RL)				
RL at primary spillway		380.90		m	0.1 m lower than emergency spillway invert
Outlet pipe diameter				150.00 mm	
Emergency Spillway	Reduced Level (RL)				
RL at emergency spillway invert		381.00		m	
RL at emergency spillway crest		381.25		m	0.25 m higher than emergency spillway invert
Spillway width at invert				1.50 m	
Treatment Train Additions					
Drop out pit				Yes	
RADS unit				No	May be considered as a contingency measure if sediment settling efficiency needs to be improved
Check dams				Yes	

DIRTY WATER DIVERSION CHANNEL CALCULATIONS - SMITH HILL BLOCK - REVISION A



Specifications	Value 1	Value 2	Value 3	Value 4	Value 5	Units	Reference/Notes
Site Details							
Contributing catchment					0.75	ha	
Design rainfall event					0.05	AEP	5% AEP as required by GD05
Time of Concentration							
Overland sheet flow path length (L)					235	m	
Hortons roughness value (n)					0.2		
Slope of surface (S)					13.5	%	
Time of Concentration (Tc)					9.7	minutes	
Rounded Tc to align with HIRDS					10	minutes	
Rational Method: $Q = (C \cdot I \cdot A) / 360$							
Area ground cover	Grass	Aggregate	Forest	Shrubs	Bare soil		
Proportion of catchment	0.5	0.15	0	0.05	0.3		
Runoff coefficient (C)	0.4	0.25	0.25	0.5	0.8		Manning's Roughness Coefficient (n)
Rainfall intensity (I)	42.3	42.3	42.3	42.3	42.3	mm	
Catchment Area (A)	0.38	0.11	0.00	0.04	0.23	ha	
Qp (Peak runoff flow)	0.0176	0.0033	0.0000	0.0022	0.0212	m ³ /s	Rational Method: Q = CIA
Total Qp (Peak runoff flow)					0.0443		
Channel Design							
Manning's Formula Uniform Trapezoidal Channel Flow							
Bottom Width					150	mm	
Batter ratio= 1 to					2	ratio	
Manning's roughness coefficient of channel (n)					0.025		Gravelly earth channel
Channel slope					13.5	%	
Flow depth					150	mm	
Channel depth					350	mm	200 mm freeboard provided
Flow (Q)					0.1876	m ³ /s	
Buffer					324	%	
Top width					1550	mm	
Additional Controls							
Drop out pit					No		
Check dams					Yes		Placed at 10-metre intervals
Geofabric lining					No		May be lined as a contingency measure



APPENDIX 3 Environmental Site Induction Handout

ENVIRONMENTAL SITE INDUCTION HANDOUT

Key Roles and Responsibilities

Role	Responsibilities
Project Manager	<p>The Project Manager is responsible for the effective implementation of the EMP and has overall responsibility for the environmental performance of the project. Duties include:</p> <ul style="list-style-type: none"> • Ensuring adequate resources are in place to implement the EMP. • Ensuring all staff and sub-contractors operate within the guidelines of the EMP. • Ensuring that an EMP is prepared and that environmental standards, processes and procedures meet relevant resource consent conditions. • Overseeing the successful implementation, monitoring and review of the EMP. • Ensuring that inspections are carried out in accordance with the relevant EMP. • Restricting or stopping any activity that has the potential to or has caused adverse environmental effects. • Providing notification and reporting of Environmental Incidents to Council and other environmental reports as required by The Guidelines. • Delegating authority of the above responsibilities.
Environmental Representative	<p>The Environmental Representative supports the Project Manager in the day-to-day implementation of the EMP. Duties include:</p> <ul style="list-style-type: none"> • Ensuring the installation of environmental controls as per the EMP. • Undertaking environmental site inspections. • Overseeing the maintenance and improvement of defective environmental controls. • Providing environmental inductions to all staff and sub-contractors. • Assisting the project leadership in attending to Environmental Incidents and Complaints. <p>The Environmental Representative shall be familiar with environmental risks associated with the project, the EMP and best practice erosion and sediment control principles and practices.</p>
All staff and sub-contractors	<p>All staff and sub-contractors have a responsibility to undertake all activities in accordance with the requirements of this EMP. This includes reporting any activity that has the potential to or has resulted in an Environmental Incident to the Project Manager or Environmental Representative.</p>

Key Environmental Locations

Environmentally sensitive receptors: Kawarau River.

Key Resource Consent Conditions

All resource consent conditions important to comply with in order to avoid or mitigate adverse environmental effects.

The site EMP has been prepared in response to all environmental-related conditions of consent and therefore provides direction for how compliance with these conditions will be achieved. Provided that the EMP is followed, the project will at the same time comply with all conditions of consent.

Limits of Clearing and Importance of Staging

The staging and sequencing of works is a key component to ensure that environmental effects of construction are appropriately managed. It is imperative that the sequencing outlined in Section 2.1 of the EMP is followed so that the site is stabilised in the most efficient manner.

All staff should be familiar with this sequence. Any potential changes to that sequence need to be approved by the Project Manager which will be discussed first with the Environmental Consultant.

Key Environmental Management Measures in EMP

Erosion and Sediment Control (Section 4 of EMP)

- Direction provided in Erosion and Sediment Control Plan (ESCP) in Appendix 1 of EMP.
- Separation of clean and dirty water is the most important principle to ensure that the contributing catchment of dirty water that needs to be treated is as small as possible.
- Progressive stabilisation (revegetation) of disturbed areas will ensure that the extent and duration of exposed soil is minimised. Keep it covered!
- All controls to be checked immediately before storm events to ensure they are in good-working order.
- Erosion and sediment control devices to remain in place until site is stabilised (defined as 80% vegetative cover).

Any works that disturb the controls outlined on the ESCP must be reinstated before moving to the next task.

Water Quality Management (Section 5 of EMP)

- Any water caught in the sediment devices to be re-used in dust suppression where possible and if required.
- Any observations of dirty water running offsite to be reported directly to the Project Manager.

Dust Management (Section 6 of EMP)

- Dust suppression should occur on any exposed soil on unsealed roads, this can be done using the water caught in the retention basin.
- Avoid all unnecessary vegetation clearing that exposes soil and work should be conducted in stages as this can increase the impact from dust in the event of strong winds.
- During high wind events and dust suppression is becoming difficult works must cease until more favourable weather conditions.
- Constant vigilance should be maintained onsite to ensure that dust is appropriately managed and weekly monitoring should be completed to ensure that management measures are effective.

Noise and Vibration Management (Section 7 of EMP)

- Noise producing works only be undertaken during the hours of 0730-1800 from Monday-Saturday and no works to be completed on Sundays or public holidays.
- Particularly noisy work should be completed during the middle of the day during business hours.
- Noise dampening should occur when possible.
- Weekly site inspections should be undertaken by the Environmental Representative to ensure the strategies in place are effective.

Cultural Heritage Management (Section 8 of EMP)

- If any artefacts are found works must stop within 20 meters of the discovery and the site manager notified immediately.
- The site manager must then secure the area and notify the Heritage New Zealand Regional Archaeologist, who will advise when works can begin again.

Vegetation Management (Section 9 of EMP)

- Maintain vegetated surfaces as far as reasonably possible.
- Maintain protected or indigenous vegetation.
- Complete all landscaping and or ecological restoration in accordance with approved plans.

Chemicals and Fuel Management (Section 10 of EMP)

- Chemicals and fuels are stored and used so not to cause contamination of works areas and surrounding environment.

Waste Management (Section 11 of EMP)

- Waste management on site will ensure wastes are stored safely and in an organised manner until recycling, reuse or disposal.

Contaminated Land Management (Section 12 of EMP)

- Prevent spread of contamination.
- Engage the Environmental Consultant (SQEP) to ensure that the site can be managed in accordance with statutory requirements (i.e., National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health).

Environmental Incidents

The procedure for managing environmental incidents is outlined in Section 3.5 of the EMP, however these can be summarised as follows:

- Environmental incidents must be reported as soon as they occur, and the Project team must respond immediately to mitigate further environmental impacts.
- Investigation into the cause of the incident should be completed and a solution should be constructed to remediate the Environmental damage.

- The Project Manager must then notify the QLDC and/or the ORC of the details of the incident within 12 hours of being made aware of the incident.

Rapid Response for Storm Events

The procedure for rapid response to storm events is outlined in Section 4.6 of the EMP, however these can be summarised as follows:

- The Project Manager will observe and understand the **weather forecast** throughout the project to ensure appropriate preparation onsite.
- If a **significant storm** event is forecast all works should stop within an appropriate amount of time to inspect ESC devices and undertake any maintenance or site stabilisation required.
- The sediment controls should be in operating condition and fully functional.
- During the storm event the site should be monitored to ensure the functioning of the ESC devices and maintained if required.

When storms are forecast it is crucial that tools are downed in time for the rapid response procedure to be implemented. This will help avoid environmental incidents, potential enforcement action and site shutdown.



APPENDIX 4 **Environmental Site Induction Register**

ENVIRONMENTAL SITE INDUCTION REGISTER

Name	Organisation	Date Inducted	Induction Delivered by	Signature

**APPENDIX 5****Weekly Environmental Site Inspection Form**

Little Morven



Item	Yes	No	Comment
Cultural Heritage			
Have any finds of cultural significance been found?	<input type="checkbox"/>	<input type="checkbox"/>	
Noise and Vibration			
Have any complaints been received during the week?	<input type="checkbox"/>	<input type="checkbox"/>	*If yes, complete Complaints Register
Are nearby sensitive receptors being notified before significant noise and/or vibration causing activities?	<input type="checkbox"/>	<input type="checkbox"/>	
Are works only occurring within the hours of operation?	<input type="checkbox"/>	<input type="checkbox"/>	
Dust			
Have any complaints been received during the week?	<input type="checkbox"/>	<input type="checkbox"/>	*If yes, complete Complaints Register
Are works being staged to minimise soil exposure?	<input type="checkbox"/>	<input type="checkbox"/>	
Have completed areas been revegetated or stabilised?	<input type="checkbox"/>	<input type="checkbox"/>	
Is dust suppression of disturbed work areas and stockpiles occurring?	<input type="checkbox"/>	<input type="checkbox"/>	
Are works ceasing during high winds?	<input type="checkbox"/>	<input type="checkbox"/>	
Are only designated access points and haul routes being used?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the site access and surrounding roads swept clean of sediment?	<input type="checkbox"/>	<input type="checkbox"/>	
Vegetation			
Are vegetated surfaces being maintained as far as reasonably possible?	<input type="checkbox"/>	<input type="checkbox"/>	
Contaminated Soils			
Have any contaminants been uncovered during excavations?	<input type="checkbox"/>	<input type="checkbox"/>	
Chemicals and Fuels			
Are all hazardous substances on site stored, transported and used according to the safety data sheet requirements?	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and plant being refuelled in the refuelling bay?	<input type="checkbox"/>	<input type="checkbox"/>	
Is concrete washing being undertaken in the concrete wash-out pit?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there an adequate supply of spill kits onsite? Have any used materials been replaced?	<input type="checkbox"/>	<input type="checkbox"/>	
Waste			

Little Morven



Item	Yes	No	Comment
Is the site in a safe, clean and tidy state?	<input type="checkbox"/>	<input type="checkbox"/>	
Are wastes segregated into labelled bins with lids?	<input type="checkbox"/>	<input type="checkbox"/>	
Are skip bins not overfilled?	<input type="checkbox"/>	<input type="checkbox"/>	
Is waste removed from open drains and drainage paths?	<input type="checkbox"/>	<input type="checkbox"/>	

Actions resulting from this inspection must be forwarded to the Project Manager any actions should be recorded in the Non-Conformance Register – Appendix 8.

Additional Comments:

Names and Signatures of inspection attendees:



APPENDIX 6 **Environmental Incident Report Form**

ENVIRONMENTAL INCIDENT REPORT FORM

Project Address:	Consent Number:
Brief Project Description:	

Instructions- Complete this form for all environmental incident that cause contaminants (including sediment) or environmental nuisance to leave the site. Be succinct, stick to known facts and do not make assumptions. Once completed submit to Queenstown Lakes District Council at RCMonitoring@qldc.govt.nz and Otago Regional Council at pollution@orc.govt.nz and compliance@orc.govt.nz. Call the QLDC Regulatory team immediately on 03 441 0499 and ORC's Pollution Hotline on 0800 800 033 for any serious or ongoing incidents that cannot be brought under immediate control.

Date and Time	Date: <input type="text"/> / <input type="text"/> / <input type="text"/> Time: <input type="text"/> : <input type="text"/> hours
Description? Provide a brief and factual description of what happened during the incident, include relevant details such as: <ul style="list-style-type: none"> - The activity being undertaken when the incident occurred - The estimated distance to nearest waterway (include stormwater and dry courses) - The estimated distance to the nearest sensitive receiver Sketches/diagrams/photos may be referenced and appended to this report to aid in the description of the incident.	
Exact Location of the incident? Include address, landmarks, features, nearest tree, etc. Maps and plans can be attached.	
Quantity or volume of material escaped or causing incident? (provide and estimate quantity)	
Who identified the incident?	Contractor <input type="checkbox"/> Council <input type="checkbox"/> Community <input type="checkbox"/> Other <input type="checkbox"/>

What immediate actions/control measures were taken to rectify or contain the incident?

What initial corrective action will be taken to prevent similar incidents recurring in the near future?

Has the Queenstown Lakes District Council been notified? Yes ☐ No ☐ Will be notified ☐

Has the Otago Regional Council been notified? Yes ☐ No ☐ Will be notified ☐

Role of person making report: Project Manager / Site Supervisor / Environmental Representative / SQEP

Name..... Signature.....

Organisation..... Date.....

Mobile phone number.....



APPENDIX 7 **Environmental Complaints Register**

Little Morven**ENVIRONMENTAL COMPLAINTS REGISTER**

Complaint #	Date and Time Received	Complainant details (name, address, phone number)	Details of Complaint	Investigation and Findings	Outcome	Close out Date



APPENDIX 8 **Environmental Non-Conformance Register**

Little Morven**ENVIRONMENTAL NON-CONFORMANCE REGISTER**

Ref Number	Date Observed	Found via (e.g., inspection, monitoring, complaint?)	Details of Non-conformance	Corrective Actions	Updated by	Close out Date



APPENDIX 9 **Water Quality Monitoring Results Form**

WATER QUALITY MONITORING RESULTS FORM

Date		Monitoring Trigger		Location Description	
		Yes	No	Measurement	
Is the clarity of the water more than 100 mm?		<input type="checkbox"/>	<input type="checkbox"/>	____ mm	
Is the pH of the water between 5.5-8.5?*		<input type="checkbox"/>	<input type="checkbox"/>	pH ____	
Are total suspended solids less than 50 mg/L?*		<input type="checkbox"/>	<input type="checkbox"/>	____ mg/L	
Are hydrocarbons visible?		<input type="checkbox"/>	<input type="checkbox"/>		
Are tannins visible in the water?		<input type="checkbox"/>	<input type="checkbox"/>		
Is there any waste in the water?		<input type="checkbox"/>	<input type="checkbox"/>		
Description of any non-conformance and actions required:					
•					
Include images of sampling location:					