



Land Information Memorandum

Application

Vicky Coulter 63 Stratford Drive RD 3 Cromwell 9383	Number: L260545 Application Date: 07/07/2026
Vicky Coulter	0274794840 Email: vicky.c@arizto.co.nz

Property

Valuation Number:	2842184832
Location:	63 Stratford Drive, Pisa Moorings 9383
Legal Description:	LOT 24 DP 520912
Owner:	Coulter Vicky Anne & Coulter James Peter
Area (hectares):	0.0979

Rates

Government Valuation

Land:	\$	430,000
Capital Value:	\$	630,000
Improvements:	\$	200,000
Current Rates Year 2026 to 2027		

Rating Amount

Annual Rates:	\$	0.00
Current Instalment:	\$	0.00
Next Instalment Due:		20/08/26
Current Balance:	\$	0.00
Water Balance (if any):	\$	8.00-

Note:

1. Rates are charged in four equal instalments for the period commencing 1 July and ending 30 June each year.
2. If you require further financial information regarding this property for settlement purposes, then the owner or their agent will need to contact the Council separately for this information.

Planning/Resource Management

Resource Area: LOW DENSITY RESIDENTIAL

Plan Change 19 - Residential Zoning

This property is subject to decisions on Plan Change 19 that are subject to appeal. As appeals are settled, the provisions in Plan Change 19 will replace the operative District Plan provisions.

Plan Change 19 proposes to make a suite of changes to the way the District's residential areas are zoned and managed. For further information about the decisions and appeals please see [Plan Change 19 - Residential Zoning | Let's Talk Central Otago \(codc.govt.nz\)](#)

The Central Otago District Plan contains the relevant rules for the Resource Area this land is zoned. There may be other matters of relevance to nearby land, which can be found on the District Plan maps.

Designation: Neighbourhood D146, D147, D148. Planning Maps and Data **attached**.

Consents:

- 14/03/16 RESOURCE CONSENT 160069: Subdivision consent to create 83 allotments in the Rural Resource Area and Residential Resource Area 13. Granted by Committee 11/05/16. Copy of Decision, Stage 2 Survey Plans, Stage 2 Consent Notice, Stage 2 As Built Drainage, Stage 2 s224c, Stage 1 Survey Plans, Stage 1 s243 and Stage 1 s224c **attached**.
- 07/11/07 RESOURCE CONSENT 070423: Subdivision creating (41) residential allotments in Rural and RRA (11) resource areas varying from 629m² to 975m². Granted by Committee 29/02/08. Copy of Decision, Survey Plans, Flood Hazard Analysis & Mitigation Option Report and s224c **attached**.

Outstanding Requisitions: No outstanding requisitions located at Central Otago District Council.

Building

Consents/Permits/Pool/Compliance Schedules:

- 22/07/24 BUILDING CONSENT 240476: Sitings and Foundations for a Transportable home. Code Compliance Certificate issued 31/03/25. Copy of CODC CCC, Waikato CCC, Gas Certificate, Electrical Certificate, Geotech Report, As Built Drainage and Plans and Specifications **attached**.
- Carpentry – *Maxim Construction Ltd BP115543*

No swimming pool or spa pool registered to this property.

Outstanding Requisitions: No outstanding requisitions located at Central Otago District Council.

Sewer and Water

Sewer: Sewer Service is available and the property is rated for a connection.

Water: Water Service is available and the property is rated for a connection. Water is metered at \$1.60 per 1,000 litres.

Copy of Drainage Plan **attached**.

Stormwater: Stormwater is usually discharged to property soak pits or to kerb and channelling where available. Direct connection of stormwater to sewer is not permitted.

Public sewerage water or stormwater drains on property: Refer to Utilities Map **attached**.

Natural Hazards and Potential Natural Hazards

Otago Regional Council Hazard Information

Information on natural hazards and potential natural hazards can be found on the Otago Regional Council's website: Natural Hazards Portal: [ORC AGOL Natural Hazards Portal](https://orc.govt.nz/natural-hazards-portal) or email: naturalhazards.enquiries@orc.govt.nz

The Otago Regional Council Natural Hazards Portal is an interactive online map that shows where different natural hazards exist across Otago, such as flooding, alluvial fans, landslides, coastal erosion, and earthquakes. You can search by address, zoom in on areas, and click on map layers to see more details. It also includes links to supporting reports, documents, and photos that provide further context about the hazards in each area.

District Plan Hazard Information

Refer to District Plan for Natural Hazards Information: [Home - Central Otago District Plan](#)

The Central Otago District Plan (e-Plan) is an interactive online system that provides detail about a property in terms of zoning and any special features such as hazards. You can search by address, and the e-Plan will show the property, identify any hazards on a particular property and provide links to the relevant sections in the District Plan that apply.

Note: *The hazard information currently held in the Central Otago District Plan reflects the most accurate information held by the Central Otago District Council at the time the District Plan became operative. It may differ from information held by the Otago Regional Council on the Natural Hazard Portal, where more recent investigation has been done.*

Other Hazard Information

Flood Hazards:

There is no information on the property file related to flood hazards.

Land Stability Hazards:

There is no information on the property file related to land stability hazards.

Seismic Hazards:

There is no information on the property file related to seismic hazards.

Other Natural Hazards:

There is no information on the property file related to any other natural hazards.

Climate Change:

The below links to climate change documents held by the Otago Regional Council reflect the information made available to the Central Otago District Council as at 17 October 2025.

https://www.orc.govt.nz/media/7591/niwa_climatechangereport_2019_final.pdf

<https://www.orc.govt.nz/media/9653/tt-otago-climate-change-risk-assessment-2021.pdf>

HAIL Sites and Special Land Features

Otago Regional Council provides an online mapping resource showing sites that fall under the Hazardous Activities and Industries List (HAIL), along with bore locations, to identify land that may be affected by past or present activities involving hazardous substances.

Listed Land Use Registered (HAIL Sites): [Otago Selected Land Use Sites](#)

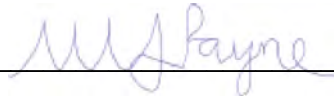
No information located at Central Otago District Council.

Network Utility Operators

Information relating to the availability of supply, authorisations etc (e.g. electricity or gas) can be obtained from the relevant Network Utility Operator.

Notes

1. Code Compliance Certificates were not issued until the Building Act came into force on 1 January 1993. Should an evaluation of the building be required an independent qualified person should be consulted.
2. No title search has been done on this property.
3. Any future development on this property may be liable for a development contribution under the Local Government Act 2002.
4. Every care has been taken to ensure that the information supplied by the Council on this form is accurate. The Council relies on information available to it, and will not be held responsible for incomplete or inaccurate information provided, or for any errors or omissions made in good faith.

WENDY PAYNE - LIM OFFICER

Date: 14/07/2026

	Planning Data The information displayed is schematic only and serves as a guide. It has been compiled from Central Otago District Council's records and is made available in good faith but its accuracy or completeness is not guaranteed. Cadastral Information has been derived from Land Information New Zealand's (LINZ) Core Record System Database (CRS). CROWN COPYRIGHT RESERVED. © Copyright Central Otago District Council.	Tuesday, July 14, 2026
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Designations within 200m

Designations data sourced from CODC.

No.	Description	Authority	Status	Location	Legal Description	RA
D146	Accessway Purposes - Local Purpose Reserve (Accessway)	Central Otago District Council	New	Shine Lane, Quartz Lane, Ferry Lane and Rivival Lane, Pisa Moorings	Lots 19, 25, 30, 39 & 50 DP 24318	R [RRA(3)]
D147	Esplanade Purposes - Local Purpose Reserve (Esplanade)	Central Otago District Council	New	Brittany Cove, Pisa Moorings	Lot 81 DP 24318	W
D148	Recreation Purposes - Local Purpose Reserve (Recreation)	Central Otago District Council	New	Ferry Lane and Wakefield Lane, Pisa Moorings	Lots 60, 64 & 70 DP 24318	R [RRA(3)]

Scheduled Activities within 200m

None found.

Heritage Buildings within 200m

None found.

Notable Trees within 200m

None found.

Active Faults within 200m

None found.

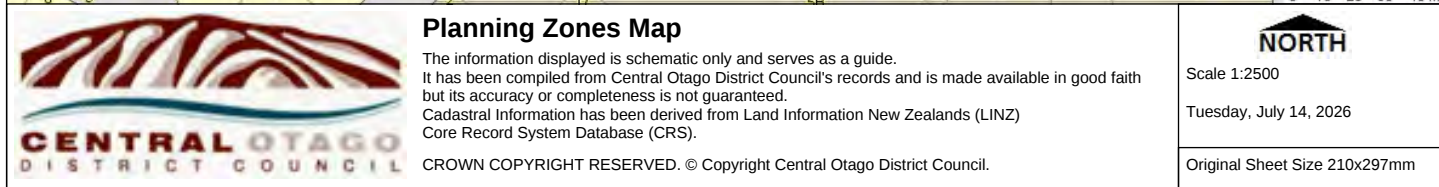
ORC Hazardous Land (Selected Land Use Sites) within 100m

None found.

Subsidence and Slip Areas within 200m

None found.







Utilities Map

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Original Sheet Size 297x210mm

Water Services Legend

Water point

-  Air Valve
-  Back Flow Preventer
-  Blank Cap
-  Bore
-  Control Box
-  Dall Tube
-  Dummy Node
-  Fire Hydrant
-  Fountain
-  Inline Meter
-  Intake Chamber
-  Manifold
-  Meter
-  Pressure Reducing Valve
-  Pump Station
-  Reservoir
-  Restrictor
-  Sprinkler
-  Tank
-  Tap
-  Treatment Plant
-  Valve

Sewer point

-  Air Valve
-  Blank Cap
-  Boundary Isolation
-  Cleaning Eye
-  Dummy Node
-  Flow Meter
-  Grease Trap
-  Inspection Chamber
-  Manhole
-  Outlet
-  Pond
-  Pump Station
-  Septic Tank
-  Tank
-  Treatment Station
-  Valve

Stormwater point

-  Blank Cap
-  Cleaning Eye
-  Double Mud Tank
-  Dummy Node
-  Headwall
-  Inlet
-  Manhole
-  Mud Tank
-  Outlet
-  Pump Station
-  Soakpit
-  Tank

Water pipe

-  Irrigation
-  Principle Main
-  Private Irrigation
-  Private Water
-  Pump Rising Main
-  Raw Water Main
-  Rider Main
-  Scour Drain / Overflow
-  Service Connection
-  Trunk Main

Sewer pipe

-  Emergency Overflow
-  Gravity Main
-  Pressurised Main
-  Private Sewer
-  Pump Rising Main
-  Service Connection
-  Trunk Sewer Main

Stormwater pipe

-  Catchpit Lead
-  Culvert
-  Gravity Main
-  Open Channel
-  Private Stormwater
-  Service Connection
-  Soakage
-  Swale



Property Dimensions Map

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Aerial Photography Map

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CENTRAL OTAGO DISTRICT COUNCIL

PISA MOORINGS VINEYARD LIMITED, PISA MOORINGS - RC 160069

Pisa Moorings Vineyard Limited has made application for subdivision consent to create 86 allotments, 82 for the purposes of residential activity, 2 allotments to vest in the Council as Reserve, 1 allotment to vest as Road and 1 allotment for rural purposes. The site subject to the application has frontage to Pisa Moorings Road, Ferry Lane, Missy Crescent and State Highway 6 at Pisa Moorings and is described as Lot 1 DP 409539, as contained in Identifier [Certificate of Title] 434926, at the Otago Land Registry.

The Council has given consideration to the information submitted in support of the application and to the additional information provided in correspondence dated 5 May 2016 from Mr Dymock in support of the application. The proposal has not been notified and accordingly no submissions have been received.

The site is located within the Residential Resource Area (13) and the Rural Resource Area and is in part subject to the Scheduled Activity 127 (SA 127) notation which provides for "Commercial facilities and Shop as defined in Section 18" as shown on Map 29 of the Operative Central Otago District Plan.

Rule 7.3.3(i)(c) provides for subdivision in the Residential Resource Area (13) as a discretionary (restricted) activity subject to a minimum allotment area of 600m² provided that the average allotment size is no less than 800m², the minimum allotment size for allotments with frontage to Ferry Lane is 1000m² and the minimum allotment size for allotments that abut land in the Residential Resource Area (3) is 800m²; and provided that any subdivision shall be in general accordance with the Concept Plan attached as Schedule 19:22 of the Operative District Plan. These requirements are met in this instance.

Rule 7.3.4(ii) confirms that any subdivision that involves land that is or is likely to be subject to material damage by inundation from any source is a discretionary activity. In this instance part of Lot 1 of the proposed subdivision is potentially subject to material damage by inundation from Five Mile Creek.

Rule 4.7.4(iii)(b) provides for subdivision in the Rural Resource Area which creates allotments with an average allotment area of no less than 8 hectares and a minimum allotment area of no less than 2 hectares as a discretionary activity. A breach of Rule 4.7.4(iii)(b) is a non-complying activity in terms of Rule 4.7.5(iii).

Rule 4.7.4(iii)(d) confirms that any subdivision in the Rural Resource Area which involves land that is or is likely to be subject to material damage by inundation from any source is a discretionary activity in the Rural Resource Area.

Having regard to the above the proposal has been considered as an application for subdivision consent to a non-complying activity pursuant to sections 104, 104B and 104D of the Resource Management Act 1991.

Information submitted in support of the application confirms that the applicant intends to subdivide land which has an area of 16.1203 hectares more or less and is located generally to the north of Pisa Moorings Road and west of Ferry Lane to create a total of 86 lots as follows:

- Lots 1 – 82: Residential allotments (with Lots 1 and 2 permitted to be used for the activities authorised by SA 127). Lot areas vary between 600m² and 1377m² except for Lot 1 which has an area of 2394m²
- Lot 101 (825m²) and Lot 102 (2735m²) to vest in the Council as Reserve.
- Lot 103 (1.84ha) to vest in the Council as Road.
- Lot 100 (7.04 hectares) to be retained by the applicant for rural purposes being a vineyard.

It is noted that part of Lot 1 and all of Lot 100 are located within the Rural Resource Area.

As a preliminary matter it is noted that Plan Change 7 became operative on 20 November 2012. Plan Change 7 has applied the Residential Resource Area (13) to most of the subject site and has inserted various provisions into the Operative District Plan, including the Concept Plan presented at Schedule 19.22. The subdivision layout and roading layout now proposed is essentially the same as that shown on the Concept Plan at Schedule 19.22.

Access to the subdivision is to be achieved via a through road (in Lot 103) which connects Pisa Moorings Road to Missy Crescent. This through road will have an 8.5 metre wide carriageway within a 20 metre wide road reserve and will have footpaths on both sides of the road. Two link roads are proposed in Lot 103 from the through road to Ferry Lane. These have a legal width of 17 metres and will accommodate an 8.5 metre wide carriageway with footpaths on both sides. A cul-de-sac is also proposed in Lot 103 which will have a 12 metre wide road reserve, a 6 metre wide carriageway and a footpath on one side.

Access to rear allotments is to be achieved via right of ways or access strips as shown on the plan of subdivision. Pavements will either be segmented concrete block pavers or asphaltic concrete or two coat chip seal or some combination of the above for road carriageways. Footpaths will be either concrete or concrete block pavers or asphaltic concrete.

The applicant proposes conditions, to be subject to a consent notice, to restrict access to Lot 1 from Lot 103 (the through road) only and not Pisa Moorings Road; and to restrict access to Lot 100 from Lot 103 only and not from State Highway 6. The restriction on access to Lot 1 which is subject to SA 127 is consistent with Rule 7.3.1(ii)(b) of the Operative District Plan.

The applicant proposes that the subdivision be connected to the Council's pump pressured water scheme installed for the adjoining "Pisa North" subdivision. The applicant confirms that it has contributed to the cost of this scheme which was designed to supply the applicant with sufficient water for 60 lots; four of these lots having been previously created (Lots 34-37 DP 409539 at Missy Crescent). On this basis 56 lots of the proposed subdivision are to be supplied from the scheme which the applicant advises has sufficient to supply at least the first 2-3 stages of the subdivision. The applicant proposes to liaise with the Council regarding the provision of a link through the subdivision from the Lowburn Water Supply extension to "Perriam Cove" through to the "Pisa North" localised Council scheme. Any upsizing of pipework additional to the requirements of the subdivision are proposed to be at the Council's cost. The applicant has also noted that some of the private water reticulation owned by the Pisa Moorings Utility Society Inc. (PMUS) will need to be relocated; and the applicant considers this to be a private matter to be negotiated between the parties.

All allotments are to be connected via reticulation to the Lowburn Sewer. The applicant anticipates that an upgrade of the overflow storage capacity of the existing sewer pump station will probably be required and possibly an upgrade of the pumps at some point in the development. The applicant advises that detailed investigations into these matters will be

done at the time of application for engineering approval under NZS 4404:2004; and that any upgrade required to the sewer pump station will be done at the applicant's cost.

The applicant has noted that there is no reticulated stormwater at Pisa Moorings. Stormwater runoff from roads will be disposed of to ground by way of Caudwell type soakpits, one per mudtank.

All allotments will be connected by underground reticulation to the electricity and telecommunications networks of Aurora and Chorus.

The applicant proposes that right of way easements V-Z as shown on the plan of subdivision be subject to a condition of consent. The applicant notes that other utility services, drainage and water supply easements will be required and a generic condition with respect to such easements is sought. The applicant also acknowledges that easement cancellations and replacement easements in favour of PMUS and a deed of grant for private services in the legal road reserve for PMUS will be required. It is anticipated that these matters will be pursued by the applicant outside of the subdivision consent process.

As the subdivision is to be staged a generic condition authorising staging has been requested by the applicant. The extent of Stage 1 is identified on the plan of subdivision and the applicant advises that the configuration of further stages will depend on market demand.

The applicant has proposed conditions, to be subject to a consent notice, with respect to the mitigation of flood hazard and to address the potential reverse sensitivity effects associated with vineyard activity on Lot 100 (such condition to apply to Lots 1-30) and with respect to the operation of State Highway 6 (with respect to Lots 1-10 and 100 that are within 80 metres of State Highway 6). The applicant has promoted alternate conditions with respect to reverse sensitivity effects associated with State Highway 6. The alternatives provide for either a legal encumbrance to be registered on titles or for dwellings to be constructed to achieve noise performance standards.

Intensive subdivision and development in the Rural Resource Area can detract from amenity values. The Operative District Plan therefore controls the size of allotments in rural subdivision to control the density and intensity of development. In this instance the proposed subdivision will result in a title for Lot 1 of 2394m² (part only of which is in the Rural Resource Area) and for Lot 100 which has an area of 7.04 hectares. The subdivision therefore breaches the average lot area of 8 hectares and the minimum lot area of 2 hectares required in the Rural Resource Area.

The subdivision is, in essence, a technical breach of the rural subdivision rules only. The Council comes to this view having regard to the split zoning of the subject site and the consequences of this with respect to subdivision. In essence it would not be possible to subdivide the rural portion of the subject site to achieve an 8 hectare average area.

Lot 100 contains an operational vineyard and this land use activity will continue. The applicant has explained that part of Lot 1 is in the Rural Resource Area to ensure that all future land use activity on this area is controlled via Rule 4.7.5(i) – which provides for any building on land that is likely to be subject to material damage by inundation as a non-complying activity. The Council's conclusion is that any effects associated with the subdivision of land in the Rural Resource Area will be no more than minor in this instance.

Residential subdivision and future residential land use activity can be anticipated on land in the Residential Resource Area (13) which has been included in the Operative District Plan via Plan Change 7 which became operative on 20 November 2012. Given that the subdivision of land in the Residential Resource Area (13) complies with Rule 7.3.3(i)(c) any effects of such

subdivision and development are clearly anticipated by the provisions of the Operative District Plan which have resulted from the plan change process.

The proposal has been considered by the Council's engineering consultants MWH New Zealand Limited. Any potential adverse effects in terms of roading, access and the provision of services can be avoided or mitigated by adherence to appropriate conditions of consent, consistent with the engineers recommendations.

Any effects in terms of the flood hazard can be mitigated by adherence to the condition proposed by the applicant which is based on a recommendation contained in a report by David Hamilton & Associates dated 19 October 2007 which was provided in the context of RC 070243 (being a previous subdivision application relating to the subject site). That condition required that any building erected on land that is now Lot 1 have a minimum floor area of 203.2 metres above sea level (Dunedin Datum).

Any effects in terms of reverse sensitivity associated with the operation of the vineyard and State Highway 6 can be mitigated by adherence to the conditions promoted by the applicant.

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES) came into force on 1 January 2012. As agrichemicals have been applied to the land (in the context of previous and existing vineyards) the site has been subject to HAIL activity A1 in terms of the NES. The applicant has obtained a Preliminary Site Investigation Report (PSI) from Opus International Consultants Limited dated January 2016. The Opus PSI has concluded that the site is considered suitable for the proposed subdivision in accordance with the NES; and that no further detailed site investigations are deemed necessary. Having regard to the Opus PSI the Council is satisfied that any potential effects in terms of potential soil contamination are minor.

The Council's conclusion is that any adverse effects associated with the proposed subdivision can be mitigated by adherence to appropriate conditions of consent and will be no greater than minor.

The relevant objectives and policies of the Operative District Plan which apply in the Rural Resource Area include Objectives 4.3.1 and 4.3.3 and Policies 4.4.2, 4.4.8, 4.4.9 and 4.4.10.

In terms of Objective 4.3.3 and Policy 4.4.2 any effects of the subdivision can be managed to ensure that adverse effects on the open space, landscape, natural character and amenity values of the rural environment will be avoided, remedied or mitigated in this instance. Lot 100 contains the existing vineyard on the terrace tread adjacent to State Highway 6 which is above the level of the residential subdivision. It is noted that Rule 7.3.6(iii)(f)(4) of the Operative District Plan confirms that any building located within the Residential Resource Area (13) on the terrace riser depicted as Lots 13-30 on the concept plan in Schedule 19:22 (being Lots 13-30 on the plan of subdivision) shall not exceed a height of 3 metres above the terrace edge above the terrace riser. This will serve to mitigate effects of future residential development on the outlook from State Highway 6. It also acknowledged that the condition with respect to reverse sensitivity (in the context of rural activities) is consistent with Policy 4.4.9.

The objectives place emphasise on maintaining the open natural character of the hills and ranges without compromising the landscape and amenity values of prominent hillsides and terraces. In this instance the subdivision is to occur on land at or below the level of State Highway 6. Accordingly the subdivision is not to occur on hills and ranges; and will not compromise the landscape and amenity values of prominent hillsides and terraces.

Objectives and policies which apply to the Residential Resource Area (13) include Objectives 7.1.1 and 7.1.2 and Policies 7.2.1, 7.2.2, 7.2.3 and 7.2.7. The proposed subdivision will serve to maintain and enhance amenity values and promote a pleasant living environment. As previously noted the proposed subdivision is consistent with the Concept Plan presented at Schedule 19:22 of the Operative District Plan which is intended to guide subdivision in the Residential Resource Area (13).

The relevant objective and policies of the Operative Plan that apply in the context of Hazards include Objective 17.3.1 and Policies 17.4.2 and 17.4.3. The potential hazard associated with Five Mile Creek has been assessed and the applicant proposes a condition, to be subject to a consent notice, which will serve to mitigate any effects associated with the potential inundation hazard.

The Council's conclusion is that the proposed subdivision is not contrary to the relevant objectives and policies of the Operative District Plan.

Precedent is a matter for consideration in terms of section 104(1)(c) of the Act as the subdivision has status as a non-complying activity. In this instance any effects on open space, landscape, natural character and amenity values will be no greater than minor and the proposal is not contrary to the objectives and policies of the Operative District Plan. It is also considered that the planning history of the site is relevant, particularly that Plan Change 7 provides for part of the subject site to be in the Residential Resource Area (13) and for residual parts of the site (being part of Lot 1 and Lot 100) to be in the Rural Resource Area. As a consequence an average lot area of 8 hectares cannot be achieved within that part of the site that is subject to the Rural Resource Area. In all the circumstances the Council concludes that the proposal will not establish a significant precedent for subdivision elsewhere on land in the Rural Resource Area.

The application does not conflict with any national or regional planning document nor with the purpose of the Act which is to promote the sustainable management of natural and physical resources of the District nor to any other matter referred to in Part 2 of the Act.

Having regard to the reasons detailed above, the Council has resolved pursuant to sections 104, 104B and 104D of the Resource Management Act 1991 to grant subdivision consent, subject to the following conditions:

Plan of Subdivision

1. The subdivision shall be undertaken in accordance with the plan of subdivision being plan C1140_SCM 10A dated 12 January 2016 that is attached at Appendix 1.

Code of Practice

2. All subdivisional designs and approvals are to be in accordance with NZS 4404:2004 and the Council's July 2008 Addendum thereto, which is the Council's current Code of Practice for Urban Subdivision as modified by these conditions of consent.

Staging

3. The subdivision may be staged, and all conditions relevant to a stage shall be complied with prior to section 224(c) certification.

Design of Engineering Works

4. The consent holder shall provide a letter to the Chief Executive advising who its representative is for the design and execution of the engineering works required in association with the subdivision and shall confirm that this representative will be responsible for all aspects of the works covered under Sections 1.4 and 1.5 of NZS 4404:2004 in relation to this development.

5. Prior to the commencement of any works on the subdivision, the consent holder shall provide to the Chief Executive for review and approval, copies of specifications, calculations and design drawings as are considered to be both necessary and adequate to meet the conditions of this consent.

Roading and Access

6. Prior to section 224(c) certification the portion of Pisa Moorings Road between State Highway 6 and the subdivision through road (in Lot 103) shall be upgraded to the standard of a Collector Road in accordance with Table 3.1 of the Council's July 2008 Addendum to NZS 4404:2004 to the following standard:
 - a) Carriageway widened to 10 metres except for the existing crossing over Five Mile Creek.
 - b) Pavement design to be in accordance with NZS 4404:2004 and CODC Addendum.
 - c) Subgrade CBR>7.
 - d) Two coat Grade 3/5 chip seal on widening.
 - e) A standard 1.5 metre wide concrete, paving block or asphaltic concrete footpath shall be constructed over the full length of the subdivision on the north side of the road and extended as required to provide continuity with the adjacent footpath/cycleway to the satisfaction of the Chief Executive.
 - f) 100mm depth clean topsoil between footpath and road boundary formed at 4% crossfall, trimmed and grassed to a mowable standard.
 - g) Cut/fill batters outside road boundaries with maximum 4:1 gradient to match existing ground.
 - h) LED street lighting to be in accordance with NZS 4404:2004 and accepted urban standards.
7. Prior to section 224(c) certification the carriageway of the subdivision through road (in Lot 103) shall be constructed in accordance with NZS 4404:2004 and the Council's July 2008 Addendum thereto for a Residential Local Road subject to the following:
 - (a) Carriageway to have an 8.5 metre width located in a 20 metre wide road reserve.
 - (b) Pavement design in accordance with NZS 4404:2004 and the Council's July 2008 Addendum.
 - (c) Subgrade CBR>7.
 - (d) 30mm compacted depth asphaltic concrete, two coat chip seal Grade 3 and Grade 5 or concrete paver surfacing.
 - (e) 4% normal camber.
 - (f) Mountable or barrier type kerb and channel on both sides of the carriageway over 75mm compacted depth AP40 metal.
 - (g) 100mm depth clean topsoil between kerb/footpath and road boundary formed at 4% crossfall trimmed and grassed to a mowable standard.
 - (h) Cut/fill batters with maximum 4:1 gradient to match existing ground within allotments.
 - (i) All necessary traffic signs and road markings shall be provided.
 - (j) A 1.5 metre wide concrete, paving block or asphaltic concrete footpath shall be constructed on both sides of the road.
 - (k) LED street lighting to be in accordance with NZS 4404:2004 and accepted urban standards.
 - (l) The carriageway shall tie into the sealed carriageways at Pisa Moorings Road and Missy Crescent.
8. Prior to section 224(c) certification the carriageway of the subdivision link roads (in Lot 103) shall be constructed in accordance with NZS 4404:2004 and the Council's July 2008 Addendum thereto for a Residential Local Road subject to the following:

- (a) Carriageway to have an 8.5 metre width located in a 17 metre wide road reserve.
 - (b) Pavement design in accordance with NZS 4404:2004 and the Council's July 2008 Addendum.
 - (c) Subgrade CBR>7.
 - (d) 30mm compacted depth asphaltic concrete, two coat chip seal Grade 3 and Grade 5 or concrete paver surfacing.
 - (e) 4% normal camber.
 - (f) Mountable or barrier type kerb and channel on both sides of the carriageway over 75mm compacted depth AP40 metal.
 - (g) 100mm depth clean topsoil between kerb/footpath and road boundary formed at 4% crossfall trimmed and grassed to a mowable standard.
 - (h) Cut/fill batters with maximum 4:1 gradient to match existing ground within allotments.
 - (i) All necessary traffic signs and road markings shall be provided.
 - (j) A 1.5 metre wide concrete, paving block or asphaltic concrete footpath shall be constructed on both sides of the road.
 - (k) LED street lighting to be in accordance with NZS 4404:2004 and accepted urban standards.
 - (l) The carriageway shall tie into the sealed carriageways of the subdivision through road (in Lot 103) and Ferry Lane.
9. Prior to section 224(c) certification the carriageway of the subdivision cul-de-sac road (in Lot 103) shall be constructed in accordance with NZS 4404:2004 and the Council's July 2008 Addendum thereto for a Local Cul de Sac subject to the following:
- (a) Carriageway to have an 6.0 metre width located in a 12 metre wide road reserve.
 - (b) Pavement design in accordance with NZS 4404:2004 and the Council's July 2008 Addendum.
 - (c) Subgrade CBR>7.
 - (d) 30mm compacted depth asphaltic concrete, two coat chip seal Grade 3 and Grade 5 or concrete paver surfacing.
 - (e) 4% normal camber.
 - (f) Mountable or barrier type kerb and channel on both sides of the carriageway over 75mm compacted depth AP40 metal.
 - (g) 100mm depth clean topsoil between kerb/footpath and road boundary formed at 4% crossfall trimmed and grassed to a mowable standard.
 - (h) Cut/fill batters with maximum 4:1 gradient to match existing ground within allotments.
 - (i) All necessary traffic signs and road markings shall be provided.
 - (j) A 1.5 metre wide concrete, paving block or asphaltic concrete footpath shall be constructed on one side of the road that shall extend around the cul-de-sac head.
 - (k) LED street lighting to be in accordance with NZS 4404:2004 and accepted urban standards.
 - (l) 9.0m radius turning circle with 30mm asphaltic concrete surfacing.
 - (m) The carriageway shall tie into the subdivision through road (in Lot 103).
10. The carriageways within rights of way V, W, X, Y and Z, shall be constructed in accordance with NZS 4404:2004 and the Council's July 2008 Addendum subject to the following:
- a) A minimum 4.0 metre sealed width located within a minimum 6.0 metre wide corridor.
 - b) Pavement design to be in accordance with NZS 4404:2004 and Council's July 2008 Addendum.
 - c) 30mm compacted depth asphaltic concrete surfacing.
 - d) 4% camber to channel on lower side of carriageway.
 - e) Concrete nib kerb on high side of carriageway

- f) Mountable or barrier type kerb and channel on lower side of carriageway.
 - g) Subgrade CBR>7.
 - h) 100mm depth topsoil between carriageway and boundary, trimmed and grassed to mowable standard
 - i) Stormwater to discharge to mud tank and soakpit located within the private property.
 - j) Cut/fill batters with maximum 4:1 gradient to match existing ground within allotments.
11. Stormwater from the road reserve shall be discharged to ground by standard mudtanks and soak pits.
 12. The consent holder shall provide for the Council's consent proposed names for the subdivisional roads (in Lot 103) and when approved, it shall be the consent holder's responsibility to supply and erect appropriate signs of a design consistent with the road sign design used in the Cromwell Ward.
 13. Upon deposit of the survey plan, Lot 103 (or any portion of Lot 103 that is part of a stage shown on the survey plan) shall vest in the name of the Central Otago District Council as Road.
 14. Prior to section 224(c) certification the consent holder shall be responsible for providing crossing places and vehicle entrances between the boundaries of Lots 2, 7, 35, 37, 58, 65, 70, 73 and 82 and the carriageway in Lot 103 in accordance with the Council's Vehicle Crossing Policy, a copy of which can be obtained from the Council's Assets and Contracts department.
 15. The consent holder or successor shall be responsible for providing crossing places and vehicle entrances between the boundaries of Lots 1, 3-6, 8, 10-36, 38-56, 60, 61, 63, 64, 66, 68, 69, 71, 72, 74-78, 80 and 81 and the carriageway in Lot 103 or Ferry Lane in accordance with the Council's Vehicle Crossing Policy, a copy of which can be obtained from the Council's Assets and Contracts department.
 16. Vehicular access to Lot 1 shall be from Lot 103 (subdivision through road) and Lot 1 shall not gain any direct vehicular access from Pisa Moorings Road.
 17. All access to Lot 100 shall be obtained from Lot 103 (subdivision through road) and direct access from State Highway 6 is prohibited.

Note: Conditions 15-17 shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991.

Easements

18. The easements V-Z listed in the Schedule of Proposed Easements on the plan of subdivision shall be duly granted or reserved.
19. Any other easements necessary to protect access or access to services shall be duly granted or reserved.

Water

20. Prior to section 224(c) certification the consent holder shall liaise with the Chief Executive regarding hydraulic water modelling and the provision of a link with the Lowburn Water Supply Extension to Perriam Cove through to the Pisa Village Water Supply and shall arrange for any such work as required by the Chief Executive. Any oversizing of pipework additional to the requirements of the subdivision as required by

the Chief Executive shall be competitively priced and approved by the Chief Executive prior to commencement of works and such provision of oversizing or additional pipework shall not be at the consent holders expense.

21. Prior to section 224(c) certification the existing rising and falling main from the Pisa Moorings Water Supply reservoir shall be relocated through the subdivision and easements established to the Chief Executive's satisfaction and at the consent holder's cost, to avoid conflict with the subdivision works.
22. Prior to section 224(c) certification the consent holder shall be responsible for providing appropriate water supply reticulation (including rider mains, fire hydrants and necessary incidental equipment) from either an extension from the Lowburn Water Supply Extension of the Cromwell Water Supply or from the Pisa Village Water Supply to the satisfaction of the Chief Executive.
23. Prior to section 224(c) certification standard 20mm diameter water connections shall be provided to the boundary of Lots 1-82 with separate approved metered toby valves and boxes; with connections to be extended to the buildable areas of all rear allotments.

Wastewater

24. Prior to section 224(c) certification the consent holder shall arrange at its cost for modelling of the wastewater scheme to demonstrate that the discharge of wastewater from the subdivision will not adversely affect the downstream wastewater system.
25. Prior to section 224(c) certification the recipient pump station(s) including emergency storage shall be upgraded by the consent holder as required by the modelling and detailed engineering design to accommodate the discharge from the subdivision in accordance with NZS 4404:2004 and Council's July 2008 Addendum.
26. Prior to section 224(c) certification the consent holder shall design and install wastewater reticulation that is adequate to serve the subdivision and that shall meet the requirements of NZS 4404:2004 and the Council's July 2008 Addendum; and any land in the existing reserve being Lot 64 DP 24318 that is disturbed by installation of the sewer that serves the subdivision shall be reinstated by levelling and seeding, to the satisfaction of the Chief Executive.
27. Prior to section 224(c) certification the consent holder shall provide individual 100mm diameter sewer connections with cleaning eyes to the boundary of Lots 1-82 from the wastewater reticulation system; with connections to be extended to the buildable areas of rear allotments.

Electricity and Telecommunications

28. It shall be the consent holder's responsibility to obtain the consent of network utility providers as to the position of electricity and telecommunication services to serve Lots 1-82. The consent holder shall be responsible for installing operational connections to electricity and telecommunication services underground to the buildable area of rear allotments and otherwise to the boundaries of Lots 1-82 prior to section 224(c) certification.
29. The consent holder shall supply evidence of the consents referred to in Condition 28 to the Chief Executive.

30. It shall be the responsibility of the consent holder to meet the costs associated with the installation of new electricity and telecommunication reticulation provided in accordance with Condition 28 to serve Lots 1-82.

Reserves

31. Prior to section 224(c) certification a fence shall be installed along the boundaries of the proposed reserve Lot 101 that are shared with adjoining residential allotments. The fence shall be in accordance with Figure 8.1 of NZS 4404:2004, post and four rail fencing, coloursteel or as otherwise agreed with the Chief Executive.
32. Prior to section 224(c) certification amenity turf only shall be established on Lot 101 and a 1.5 metre wide asphaltic concrete footpath shall be provided to connect the cul-de-sac head (in Lot 103) to Ferry Lane; and a row of bollards shall be installed to the Council's design along the road frontages of Lot 101 to the satisfaction of the Chief Executive.

Note: No further planting, irrigation, lighting or furniture (seats, tables or litter bins) are required in Lot 101.

33. Prior to section 224(c) certification a fence shall be installed along the boundaries of the proposed reserve Lot 102 that are shared with adjoining residential allotments. The fence shall be in accordance with Figure 8.1 of NZS 4404:2004, post and four rail fencing, coloursteel or as otherwise agreed with the Chief Executive.
34. Prior to section 224(c) certification amenity turf only shall be established on Lot 102 and a 1.5 metre wide asphaltic concrete footpath shall be provided to connect from the through road (in Lot 103) to Ferry Lane (that part of the footpath in the existing reserve Lot 64 DP 24318 to be installed in conjunction with the proposed sewer in Lot 64); and a row of bollards shall be installed to the Council's design along the road frontage of Lot 102 to the satisfaction of the Chief Executive.

Note: No further planting, irrigation, lighting or furniture (seats, tables or litter bins) are required in Lot 102.

35. Upon deposit of the survey plan Lot 101 and Lot 102 shall vest in the name of the Central Otago District Council as Local Purpose Reserve (Recreation).
36. Payment of a reserves contribution of \$83,996.00 (exclusive of goods and services tax) calculated in terms of Rule 15.6.1(1) of the Operative District Plan on the basis of 82 new residential allotments with a credit for 36 reserve contributions (rounded) in land based on the aggregate area of Lots 101 and 102 (3560m²).

Flood Hazard

37. The minimum floor level of any building on Lot 1 shall be 203.2m above mean sea level (Dunedin Datum).

Note: Condition 37 shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991.

Reverse Sensitivity

38. The owners of Lots 1 - 30 are aware of and will take all reasonable and appropriate steps to advise all purchasers, lessees, licensees or tenants, or any other user coming to use having an interest in Lots 1 – 30 or any part thereof of:
- (a) The proximity of adjoining viticultural and horticultural properties.

- (b) The usual incidences of viticulture and horticulture including (but without limitation) noise, dust, harvesting and associated traffic movement, spraying; frost protection including windmills, helicopters, heat pots and sprinklers, and bird scaring including audible devices, gas guns and nets.
39. (a) Prior to the erection of a dwelling on Lots 1-10 and 100, the owner shall register on the title a suitable encumbrance in favour of the NZ Transport Agency that provides that the lot owner acknowledges and accepts that the land is capable of being adversely affected by effects (including without limitation noise, vibration, dust, emissions and visual, landscape and amenity effects) arising from the operation, upgrading and maintenance of State Highway 6. Evidence of such registration shall be provided to the Chief Executive of the Central Otago District Council, prior to the issue of a building consent for a dwelling on Lots 1-10 and 100.

OR:

(b) Any dwelling on Lots 1-10 and 100 shall be designed and constructed to meet noise performance standards for noise from traffic on State Highway 6 that shall not exceed 35dBA L_{eq} (24hr) in bedrooms, and 40dBA L_{eq} (24hr) for other habitable rooms in accordance with the satisfactory sound levels recommended by Australian and New Zealand AS/NZ 2107:2000 Acoustics – Recommended design sound levels and reverberation times for building interiors.

Note: Conditions 38 and 39 shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991.

General

40. Prior to the issue of a certificate in terms of section 224(c) the consent holder shall provide the Chief Executive with RAMM inventory data and asset information with associated costings (in the form of a schedule) of all infrastructure works to vest in the Council.
41. The consent holder shall provide Producer Statements in an approved format from a suitably qualified professional certifying the engineering adequacy and compliance with Council consent conditions relating to engineering design, construction and construction review (supervision) of subdivision works.
42. The name and qualifications of the person referred to in Condition 41 shall be forwarded in writing to the Chief Executive prior to the submission of any design documentation. This person shall be acceptable to the Chief Executive.
43. As built drawings are to be lodged with the Chief Executive in accordance with Clause 1.5.10(b) of NZS 4404:2004. The as built drawings are to be drafted on computer and are to be compatible with a CAD system nominated by the Chief Executive. As built plans shall be lodged on computer disc and in a hard copy A3 format and shall show the location and individual meter reference number against the relevant toby box location.

Lapse Date

44. Pursuant to section 125 of the Resource Management Act 1991 this subdivision consent shall lapse on 1 June 2026.

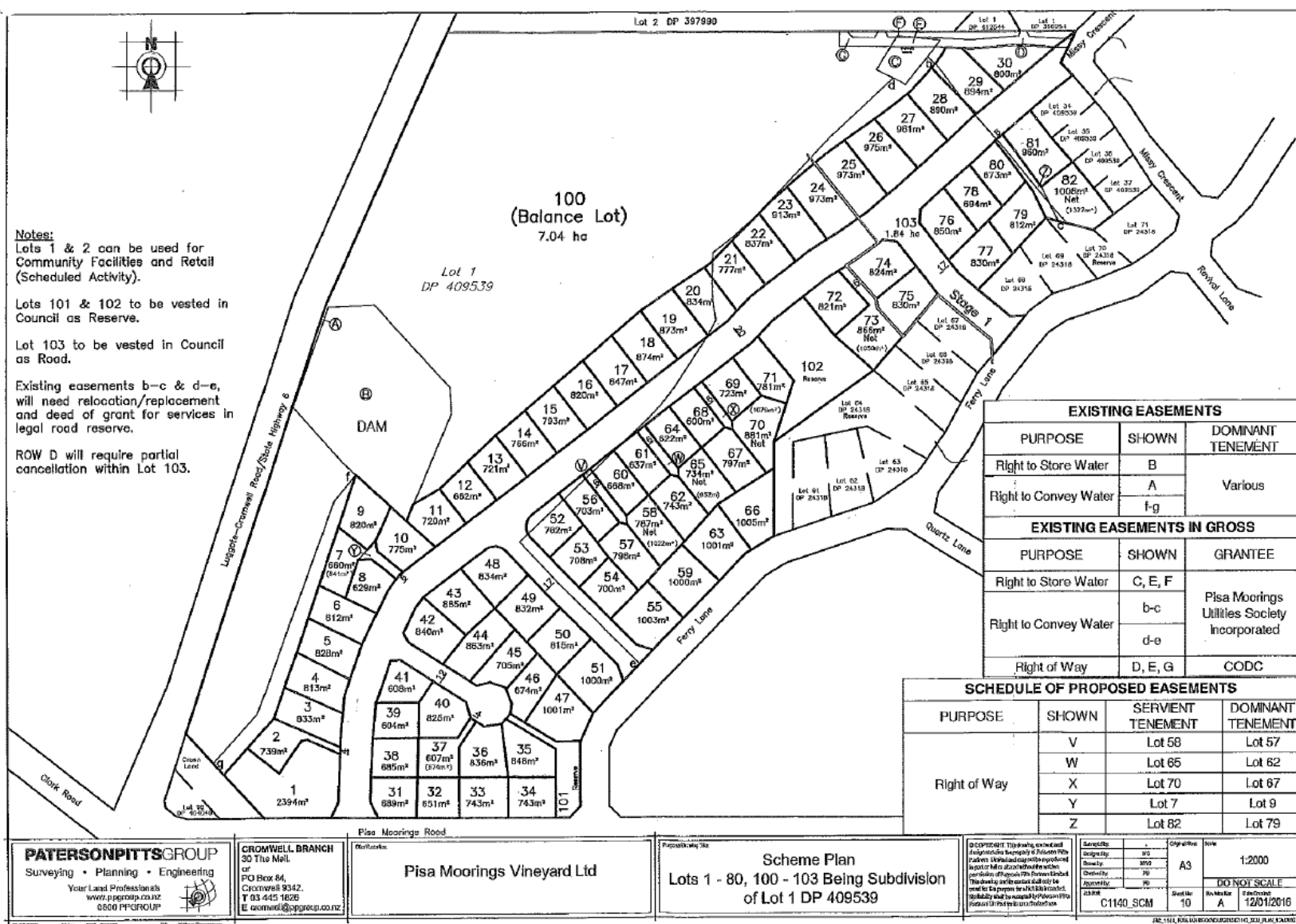
Notes: 1. All charges incurred by the Council relating to the administration, inspection and supervision of conditions of subdivision consent shall be paid prior to section 224(c) certification.

2. Development contributions of \$111,775.00, \$329,265.00 and \$127,737.00 (exclusive of Goods and Services Tax) are payable for water, wastewater and roading pursuant to the Council's Policy on Development and Financial Contributions contained in the Long Term Community Plan. Payment is due upon application under the Resource Management Act 1991 for certification pursuant to section 224(c). The Council may withhold a certificate under section 224(c) of the Resource Management Act 1991 if the required Development and Financial Contributions have not been paid, pursuant to section 208 of the Local Government Act 2002 and Section 15.5.1 of the Operative District Plan.

Certified to be a correct copy of the decision of the Central Otago District Council.

.....
L A VAN DER VOORT
MANAGER, PLANNING AND ENVIRONMENT

11 May 2016





Title Plan - LT 520912

Survey Number LT 520912
Surveyor Reference C1140 STG 2 RC 160069
Surveyor Myles Eliot Garmonsway
Survey Firm Paterson Pitts Partners Ltd (Cromwell)
Surveyor Declaration I Myles Eliot Garmonsway, 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 the Rules for Cadastral Survey 2010, and
(b) the survey was undertaken by me or under my personal direction.
Declared on 08 May 2018 03:39 PM

Survey Details

Dataset Description LOTS 14 TO 24, 56 TO 58, 60 TO 62, 64, 65, 67 TO 73, 99, 100 & 102 BEING A SUBDIVISION OF LOT 10 DP 511091 AND EASEMENT OVER LOT 64 DP 24318

Status Approved as to Survey

Land District Otago **Survey Class** Class A

Submitted Date 08/05/2018 **Survey Approval Date** 08/05/2018

Deposit Date

Territorial Authorities

Central Otago District

Comprised In

CT 784003
CT OT16B/609

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Lot 14 Deposited Plan 520912	Fee Simple Title	0.0765 Ha	822727
Lot 15 Deposited Plan 520912	Fee Simple Title	0.0793 Ha	822728
Lot 16 Deposited Plan 520912	Fee Simple Title	0.0819 Ha	822729
Lot 17 Deposited Plan 520912	Fee Simple Title	0.0846 Ha	822730
Lot 18 Deposited Plan 520912	Fee Simple Title	0.0874 Ha	822731
Lot 19 Deposited Plan 520912	Fee Simple Title	0.0872 Ha	822732
Lot 20 Deposited Plan 520912	Fee Simple Title	0.0833 Ha	822733
Lot 21 Deposited Plan 520912	Fee Simple Title	0.0785 Ha	822734
Lot 22 Deposited Plan 520912	Fee Simple Title	0.0837 Ha	822735
Lot 23 Deposited Plan 520912	Fee Simple Title	0.0907 Ha	822736
Lot 24 Deposited Plan 520912	Fee Simple Title	0.0979 Ha	822737
Lot 56 Deposited Plan 520912	Fee Simple Title	0.0705 Ha	822738
Lot 57 Deposited Plan 520912	Fee Simple Title	0.0796 Ha	822739
Lot 58 Deposited Plan 520912	Fee Simple Title	0.1021 Ha	822740
Lot 60 Deposited Plan 520912	Fee Simple Title	0.0668 Ha	822741
Lot 61 Deposited Plan 520912	Fee Simple Title	0.0639 Ha	822742
Lot 62 Deposited Plan 520912	Fee Simple Title	0.0743 Ha	822743
Lot 64 Deposited Plan 520912	Fee Simple Title	0.0619 Ha	822744
Lot 65 Deposited Plan 520912	Fee Simple Title	0.0947 Ha	822745

Title Plan - LT 520912

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Lot 67 Deposited Plan 520912	Fee Simple Title	0.0797 Ha	822746
Lot 68 Deposited Plan 520912	Fee Simple Title	0.0597 Ha	822747
Lot 69 Deposited Plan 520912	Fee Simple Title	0.0718 Ha	822748
Lot 70 Deposited Plan 520912	Fee Simple Title	0.1077 Ha	822749
Lot 71 Deposited Plan 520912	Fee Simple Title	0.0780 Ha	822750
Lot 72 Deposited Plan 520912	Fee Simple Title	0.0821 Ha	822751
Lot 73 Deposited Plan 520912	Fee Simple Title	0.1081 Ha	822752
Lot 102 Deposited Plan 520912	Vesting on Deposit for Local Purpose Reserve	0.2740 Ha	822753
Lot 100 Deposited Plan 520912	Vesting on Deposit for Road	0.5086 Ha	
Lot 99 Deposited Plan 520912	Fee Simple Title	11.3660 Ha	822754
Area A Deposited Plan 520912	Easement		
Area B Deposited Plan 520912	Easement		
Area C Deposited Plan 520912	Easement		
Area D Deposited Plan 520912	Easement		
Area E Deposited Plan 520912	Easement		
Area F Deposited Plan 520912	Easement		
Area G Deposited Plan 520912	Easement		
Area H Deposited Plan 520912	Easement		
Area I Deposited Plan 520912	Easement		
Area J Deposited Plan 520912	Easement		
Area K Deposited Plan 520912	Easement		
Area L Deposited Plan 520912	Easement		
Area M Deposited Plan 520912	Easement		
Area N Deposited Plan 520912	Easement		
Area O Deposited Plan 520912	Easement		
Area P Deposited Plan 520912	Easement		
Area Q Deposited Plan 520912	Easement		
Area R Deposited Plan 520912	Easement		
Area S Deposited Plan 520912	Easement		
Area T Deposited Plan 520912	Easement		
Area U Deposited Plan 520912	Easement		
Total Area		14.2805 Ha	

PATERSONPITTSGROUP

Land Registration District

Otago

Plan Number

DP 520912

Territorial Authority

Central Otago District Council

Job Number

C1140_Stg 2

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
Right of Way, Right to convey water and sewage	A	Lot 58	Lot 57
Right of Way, Right to convey water and sewage	B	Lot 65	Lot 62
Right of Way, Right to convey sewage	C	Lot 70	Lot 67

SCHEDULE OF EASEMENTS

Right to convey water and electricity	I	Lot 102	Lot 99
	J	Lot 21	Lot 99
Right to occupy for bore	H	Lot 102	Lot 99

MEMORANDUM OF EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	GRANTEE
Right to Convey Water	C & D	Lot 70	Central Otago District Council
	E	Lot 99	
	G & I	Lot 102	Pisa Moorings Utilities Society Incorporated
	J	Lot 21	
	K	Lot 99	
	F	Lot 64 DP 24318	
Right to Convey Electricity	A	Lot 58	Aurora Energy Limited
	B	Lot 62	
	C	Lot 70	
Right to convey telecommunications and computer media	A	Lot 58	Chorus New Zealand Limited
	B	Lot 62	
	C	Lot 70	

PATERSONPITTSGROUP

Land Registration District

Otago

Plan Number

DP 520912

Territorial Authority

Central Otago District Council

Job Number

C1140_Stg 2

SCHEDULE OF EXISTING EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOCUMENT
Right to Store Water	T	Lot 99	Tr 5301026.2
Right to Convey Water	S	Lot 99	
Right to Convey Water	U	Lot 99	Tr 757658.3

SCHEDULE OF EXISTING EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOCUMENT	GRANTEE
Right to Store Water	L, O & P	Lot 99	Tr 871359.89	Pisa Moorings Utilities Society Incorporated
Right to convey Water	M	Lot 99	EI 10868907.9	
Right of Way	N, P & Q	Lot 99	EI 10868907.11	Central Otago District Council
Right to convey electricity and to occupy for transformer	R	Lot 99	EI 10868907.12	Aurora Energy Limited

SCHEDULE OF EASEMENT TO BE EXTINGUISHED

PURPOSE	SHOWN	PLAN	DOCUMENT	GRANTEE
Right to Convey Water (in Gross)	L	DP 511091	Tr 908317	Pisa Moorings Utilities Society Incorporated



Lot 2 DP 397990

Diag. A
Non Primary

Diag. J
See T2

Diag. I
See T2

Diag. E
See T2

Diag. H
See T4

Diag. D
See T4

Diag. B
See T3

Diag. C
See T3

Diag. F
See T4

Diag. G
See T1

Diag. G

99
11.3660Ha

Lot 64 DP 24318
CFR OT16B/609

Lot 61 DP 24318

Lot 100 to vest as road in the Central
Otago District Council upon Deposit.

Lot 102 to vest as Local Purpose
Reserve (Recreation) in Central Otago
District Council upon Deposit

Crown Land (Sludge Channel) Block IV Wakefield Survey District

T 1/4

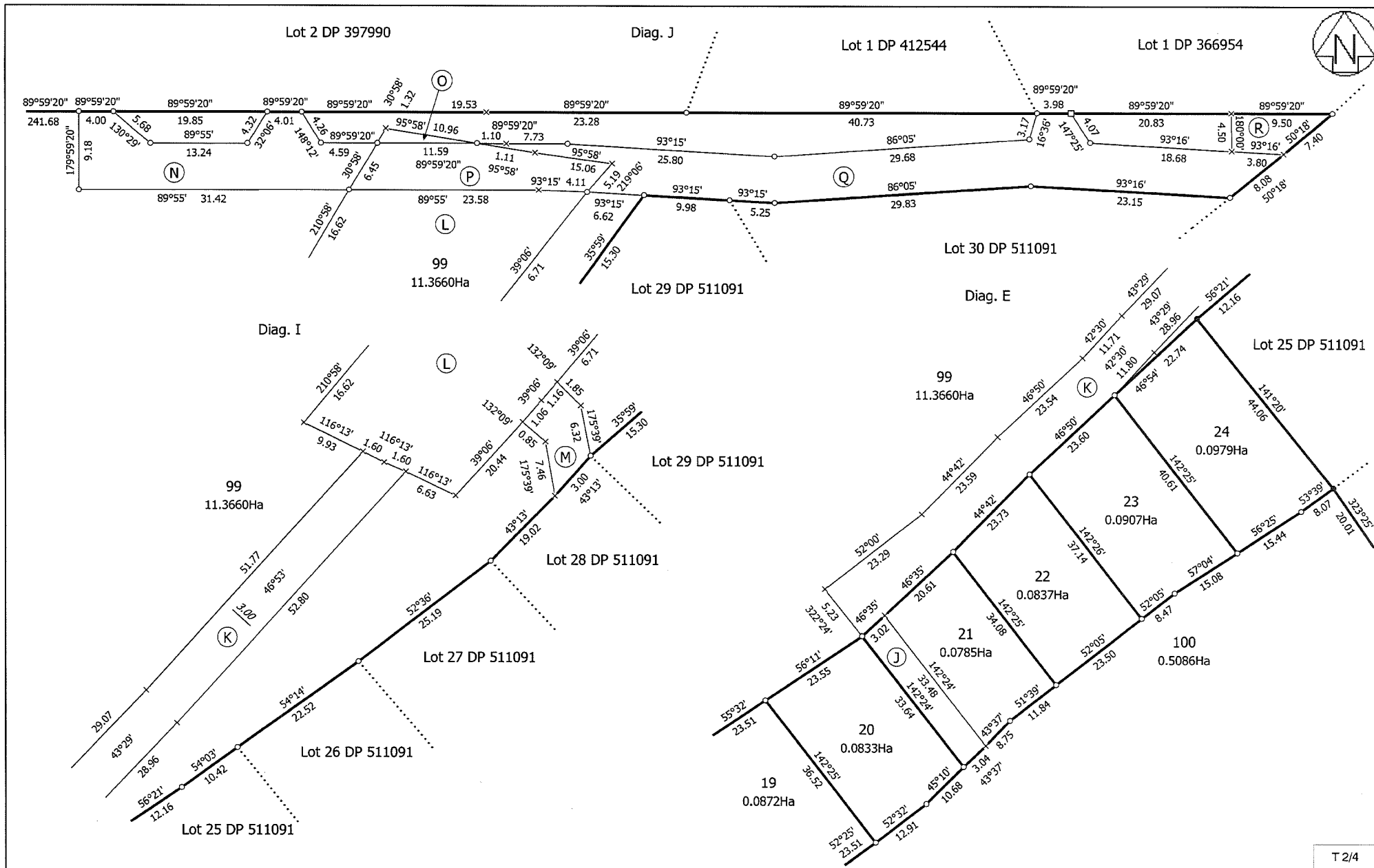
Land District: Otago

LOTS 14 TO 24, 56 TO 58, 60 TO 62, 64, 65, 67 TO 73, 99, 100 & 102 BEING A
SUBDIVISION OF LOT 10 DP 511091 AND EASEMENT OVER LOT 64 DP
24318

Surveyor: Myles Eliot Garmonsway
Firm: Paterson Pitts Partners Ltd (Cromwell)

Title Plan
LT 520912
Approved on: 8/05/2018

Digitally Generated Plan
Generated on: 08/05/2018 3:53pm Page 5 of 8



Land District: Otago

Digitally Generated Plan
Generated on: 08/05/2018 3:53pm Page 6 of 8

LOTS 14 TO 24, 56 TO 58, 60 TO 62, 64, 65, 67 TO 73, 99, 100 & 102 BEING A
SUBDIVISION OF LOT 10 DP 511091 AND EASEMENT OVER LOT 64 DP
24318

Surveyor: Myles Eliot Garmonsway
Firm: Paterson Pitts Partners Ltd (Cromwel

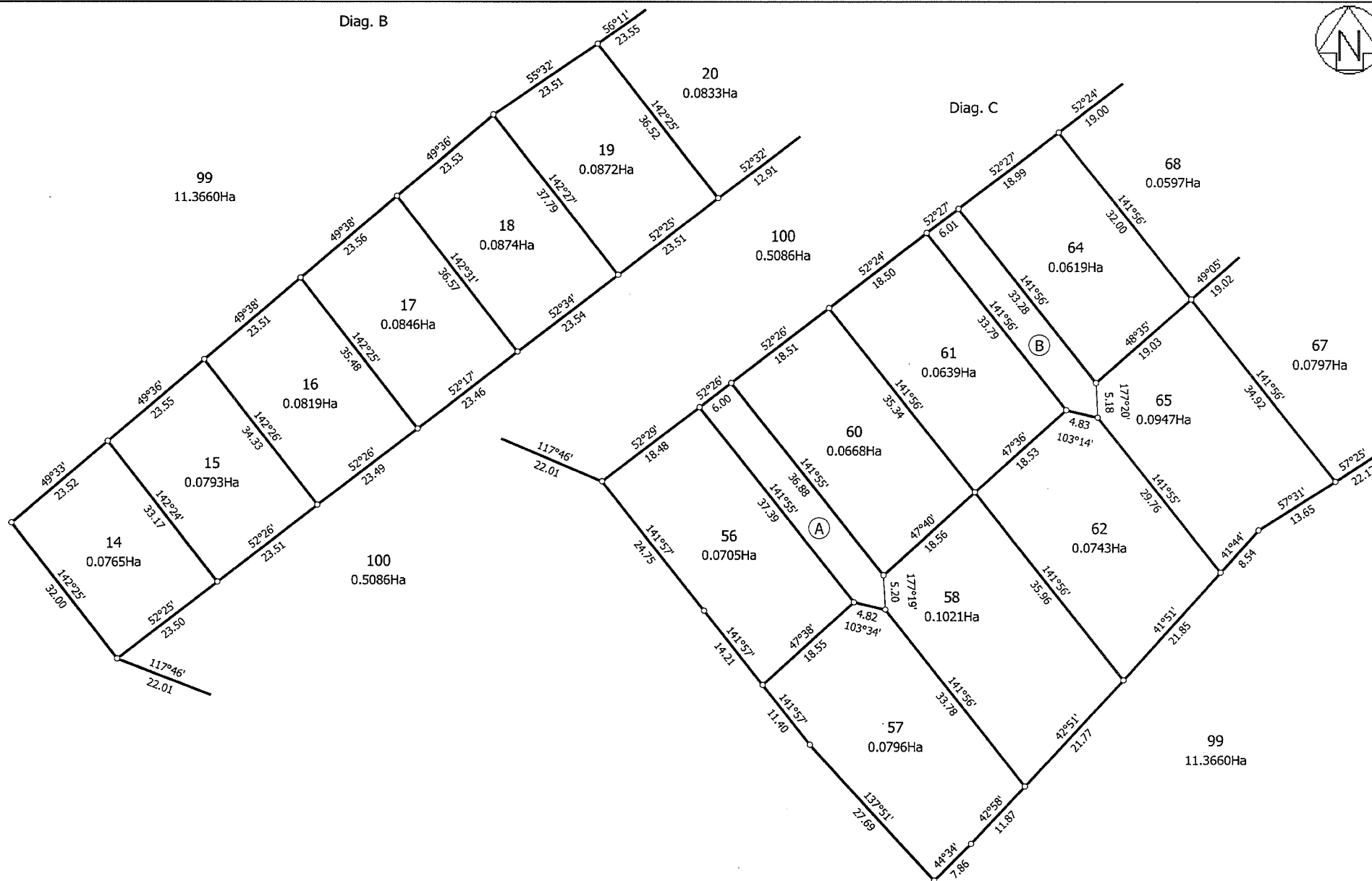
Title Plan
LT 520912
Approved on: 8/05/2018

T 2/4



Diag. B

Diag. C



T 3/4

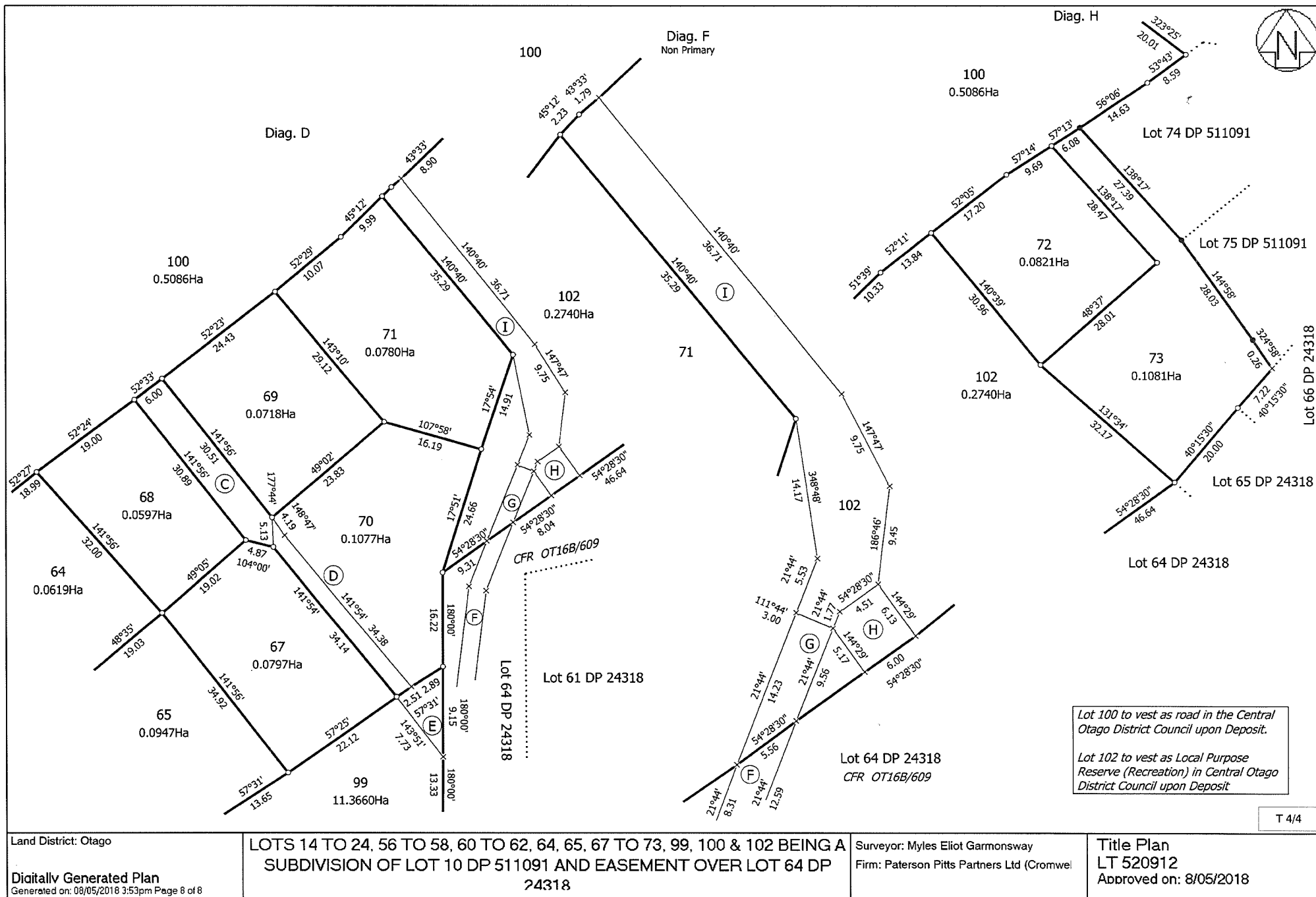
Land District: Otago

LOTS 14 TO 24, 56 TO 58, 60 TO 62, 64, 65, 67 TO 73, 99, 100 & 102 BEING A
SUBDIVISION OF LOT 10 DP 511091 AND EASEMENT OVER LOT 64 DP
24318

Surveyor: Myles Eliot Garmonsway
Firm: Paterson Pitts Partners Ltd (Cromwell)

Title Plan
LT 520912
Approved on: 8/05/2018

Digitally Generated Plan
Generated on: 08/05/2018 3:53pm Page 7 of 8



IN THE MATTER of Lots 14 to 24, 56 to 58, 60 to 62, 64 to 65, 67 to 73 and
100 to 102 DP 520912 Being a Subdivision of Lot 10 DP 511091, CFR
784003

AND

IN THE MATTER of resource consent RC 160069 from the Central Otago
District Council to subdivide the above land.

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

PATERSON PITTS LIMITED PARTNERSHIP
P O Box 84
CROMWELL

In accordance with conditions of resource consent RC 160069 of the Central Otago District Council granted pursuant to Section 104, 104B and 104D of the Resource Management Act 1991 dated 11 May 2016, the following conditions are to be imposed on an ongoing basis by a consent notice to be registered against the certificate of title for Lots 14 to 24, 56 to 58, 60 to 62, 64 to 65 and 67 to 73.

15. *The consent holder or successor shall be responsible for providing crossing places and vehicle entrances between the boundaries of Lots 14 – 24, 56, 60, 61, 64, 68, 69, 71 and 72 and the carriageway in Lot 101 in accordance with the Council's Vehicle Crossing Policy, a copy of which can be obtained from the Council's Assets and Contracts department.*
38. *The owner(s) of Lots 14 to 24 is/are aware of and will take all reasonable and appropriate steps to advise all purchasers, lessees, licensees or tenants or any other user coming to use having an interest in Lots 14 to 24 or any part thereof of:*
- a) The proximity of adjoining viticulture and horticulture properties.*
 - b) The usual incidences of viticulture and horticulture including (but without limitation), noise, dust, harvesting and associated traffic movement, spraying; frost protection including windmills, helicopters, heat pots and sprinklers, and bird scaring including audible devices, gas guns and nets.*

DATED this.....^{8th}.....day of.....June.....2018

SIGNED for and on behalf of the

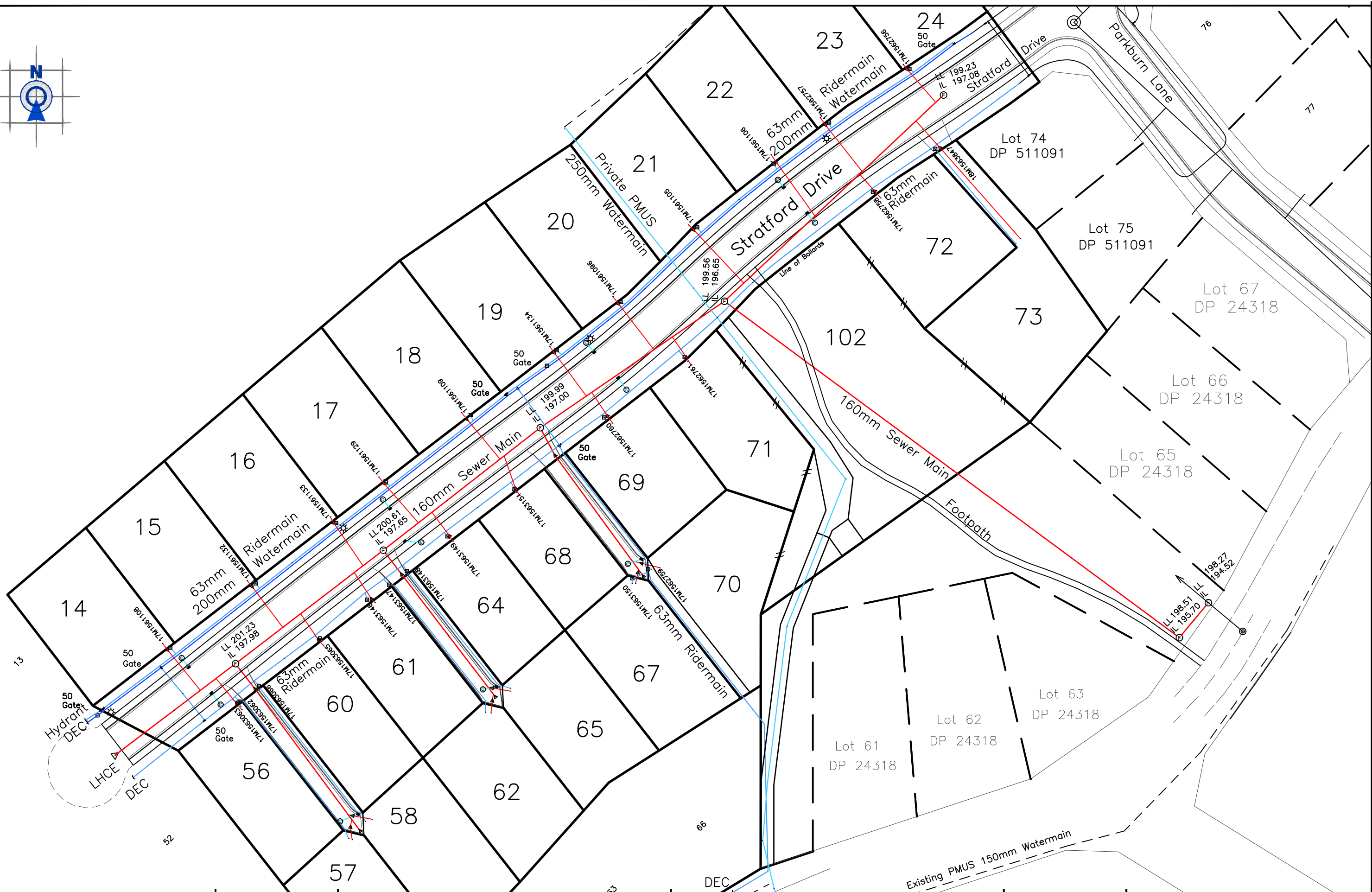
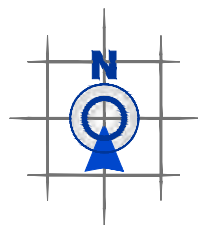
CENTRAL OTAGO DISTRICT COUNCIL

BY ITS Manager Planning and Environment



.....
(Louise van der Voort)

Pursuant to delegated authority



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Your Land Professionals
www.ppgroup.co.nz
0800 PPGROUP

CROMWELL BRANCH
30 The Mall.
or
PO Box 84,
Cromwell 9342.
T 03 445 1826
E cromwell@ppgroup.co.nz

Client/Location:
**Pisa Mooring Vineyard
Stage 2**

Purpose/Drawing Title:
**Asbuilt Overall
RC160069**

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Surveyed by:	GP	Original Size:	Scale:
Designed by:	MG	A3	1:800
Drawn by:	KWG		
Checked by:	PD		
Approved by:	PD	Sheet 1 of 4	DO NOT SCALE
Job Ref:	C1140_AB	2	Revision No: A Date Created: 04/04/2018

1 Dunorling Street
PO Box 122, Alexandra 9340
New Zealand

+64 3 440 0056
info@codc.govt.nz
www.codc.govt.nz

Certificate issued pursuant to the Resource Management Act 1991

2842184800

RC160069: LOTS 14 TO 24, 56 TO 58, 60 TO 62, 64, 65, 67 TO 73, 99, 100 & 102
DP 520912 BEING A SUBDIVISION OF LOT 10 DP 511091 AND EASEMENT
OVER LOT 64 DP 24318

In the matter of Lots 14 to 24, 56 to 58, 60 to 62, 64, 65, 67 to 73, 99, 100 & 102 DP
520912 being a subdivision of Lot 10 DP 511091 and easement over Lot 64 DP
24318, and pursuant to section 224(c) of the Resource Management Act 1991, I
hereby certify that some of the conditions of subdivision consent have been complied
with and a consent notice prepared for the remaining conditions.

Dated at Alexandra this 8th day of June 2018



LOUISE van der VOORT
EXECUTIVE MANAGER, PLANNING AND ENVIRONMENT
(pursuant to delegated authority)



Title Plan - LT 511091

Survey Number	LT 511091
Surveyor Reference	C1140 STG 1 RC 160069
Surveyor	Myles Eliot Garmonsway
Survey Firm	Paterson Pitts Partners Ltd (Cromwell)
Surveyor Declaration	

Survey Details

Dataset Description	LOTS 25 TO 30, 74 TO 82, 10 AND 11 BEING A SUBDIVISION OF LOT 1 DP 409539 AND EASEMENT OVER LOT 70 DP 24318		
Status	Initiated		
Land District	Otago	Survey Class	Class A
Submitted Date		Survey Approval Date	
		Deposit Date	

Territorial Authorities

Central Otago District

Comprised In

CT OT16B/615
CT 434926

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Lot 25 Deposited Plan 511091	Fee Simple Title	0.0976 Ha	783988
Lot 26 Deposited Plan 511091	Fee Simple Title	0.0978 Ha	783989
Lot 27 Deposited Plan 511091	Fee Simple Title	0.0987 Ha	783990
Lot 28 Deposited Plan 511091	Fee Simple Title	0.0900 Ha	783991
Lot 29 Deposited Plan 511091	Fee Simple Title	0.0903 Ha	783992
Lot 30 Deposited Plan 511091	Fee Simple Title	0.0796 Ha	783993
Lot 74 Deposited Plan 511091	Fee Simple Title	0.0830 Ha	783994
Lot 75 Deposited Plan 511091	Fee Simple Title	0.0809 Ha	783995
Lot 76 Deposited Plan 511091	Fee Simple Title	0.0860 Ha	783996
Lot 77 Deposited Plan 511091	Fee Simple Title	0.0844 Ha	783997
Lot 78 Deposited Plan 511091	Fee Simple Title	0.0691 Ha	783998
Lot 79 Deposited Plan 511091	Fee Simple Title	0.0818 Ha	783999
Lot 80 Deposited Plan 511091	Fee Simple Title	0.0672 Ha	784000
Lot 81 Deposited Plan 511091	Fee Simple Title	0.0959 Ha	784001
Lot 82 Deposited Plan 511091	Fee Simple Title	0.1375 Ha	784002
Area A Deposited Plan 511091	Easement		
Area B Deposited Plan 511091	Easement		
Area C Deposited Plan 511091	Easement		
Area D Deposited Plan 511091	Easement		
Area E Deposited Plan 511091	Easement		
Area F Deposited Plan 511091	Easement		
Area G Deposited Plan 511091	Easement		



Title Plan - LT 511091

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Area H Deposited Plan 511091	Easement		
Area I Deposited Plan 511091	Easement		
Area J Deposited Plan 511091	Easement		
Area K Deposited Plan 511091	Easement		
Area L Deposited Plan 511091	Easement		
Area M Deposited Plan 511091	Easement		
Lot 10 Deposited Plan 511091	Fee Simple Title	14.2805 Ha	784003
Lot 11 Deposited Plan 511091	Vesting on Deposit for Road	0.5000 Ha	
Area Z Deposited Plan 511091	Easement		
Total Area		16.1203 Ha	

PATERSONPITTSGROUP

Land Registration District

Otago

Plan Number

DP 511091

Territorial Authority

Central Otago District Council

Job Number

C1140_Stg 1

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
Right of Way	A	Lot 82	Lot 79

MEMORANDUM OF EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	GRANTEE
Right to Convey Water	A	Lot 82	Pisa Moorings Utilities Society Incorporated
	B	Lot 28	
	C	Lot 10	
	D	Lot 70 DP 24318	
Right to Convey Water & Right to Convey Sewage	A	Lot 82	Central Otago District Council
Right of Way	K, I & G	Lot 10	
Right to Convey Electricity	A	Lot 82	Aurora Energy Limited
Right to convey telecommunications and computer media	A	Lot 82	Chorus New Zealand Limited
Right to occupy for transformer	Z	Lot 10	Aurora Energy Limited

SCHEDULE OF EXISTING EASEMENTS

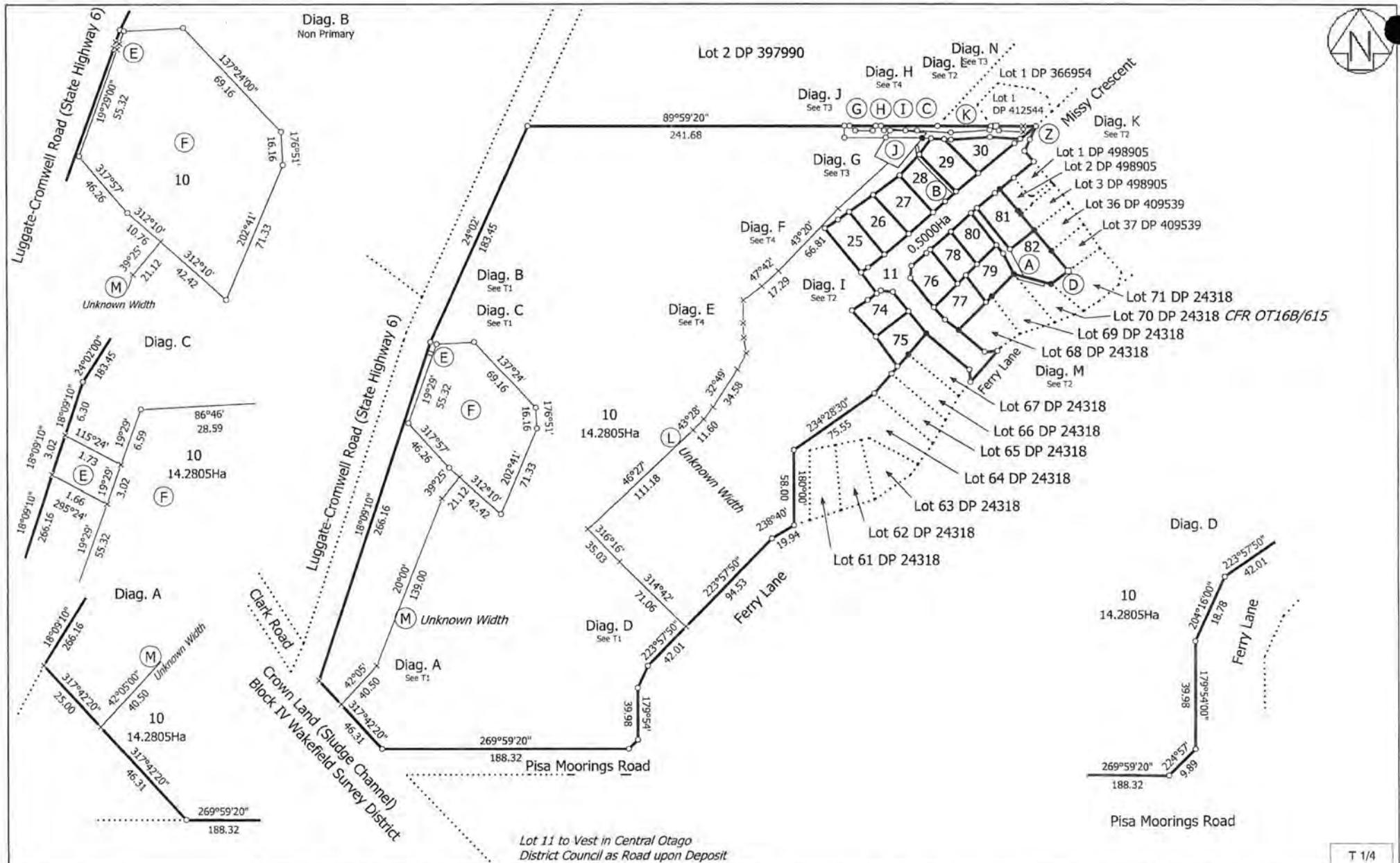
PURPOSE	SHOWN	SERVIENT TENEMENT	DOCUMENT
Right to Store Water	F	Lot 10	Tr 5301026.2
Right to Convey Water	E	Lot 10	
Right to Convey Water	M	Lot 10	Tr 757658.3

SCHEDULE OF EXISTING EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOCUMENT	GRANTEE
Right to Convey Water	L	Lot 10	Tr 908317	Pisa Moorings Utilities Society Incorporated
Right to Store Water	J, I & H	Lot 10	Tr 871359.89	

SCHEDULE OF EASEMENTS TO BE EXTINGUISHED

PURPOSE	SHOWN	PLAN	DOCUMENT	GRANTEE
Right to Convey Water (in Gross)	b - c	DP 409539	Tr 871359.89	Pisa Moorings Utilities Society Incorporated
Right of Way (in Gross)	D, E & G	DP 409539	EI 7857730.7	Central Otago District Council



Land District: Otago

Digital Generated Plan

Generated on: 26/06/2017 2:02pm Page 4 of 7

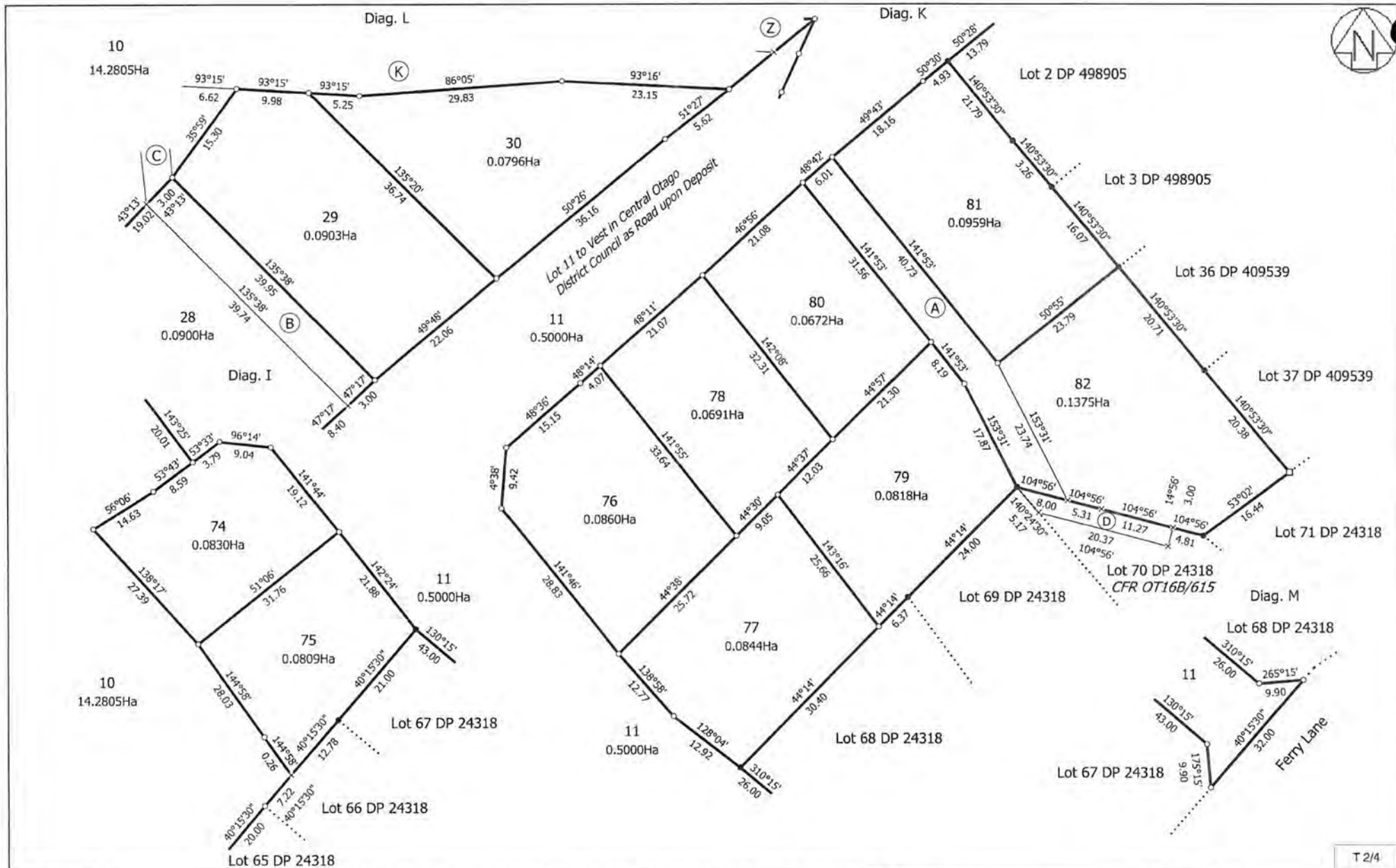
LOTS 25 TO 30, 74 TO 82, 10 AND 11 BEING A SUBDIVISION OF LOT 1 DP 409539 AND EASEMENT OVER LOT 70 DP 24318

Surveyor: Myles Eliot Garmonsway

Firm: Paterson Pitts Partners Ltd (Cromwell)

Title Plan
LT 511091
DRAFT

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Land District: Otago

Digitally Generated Plan

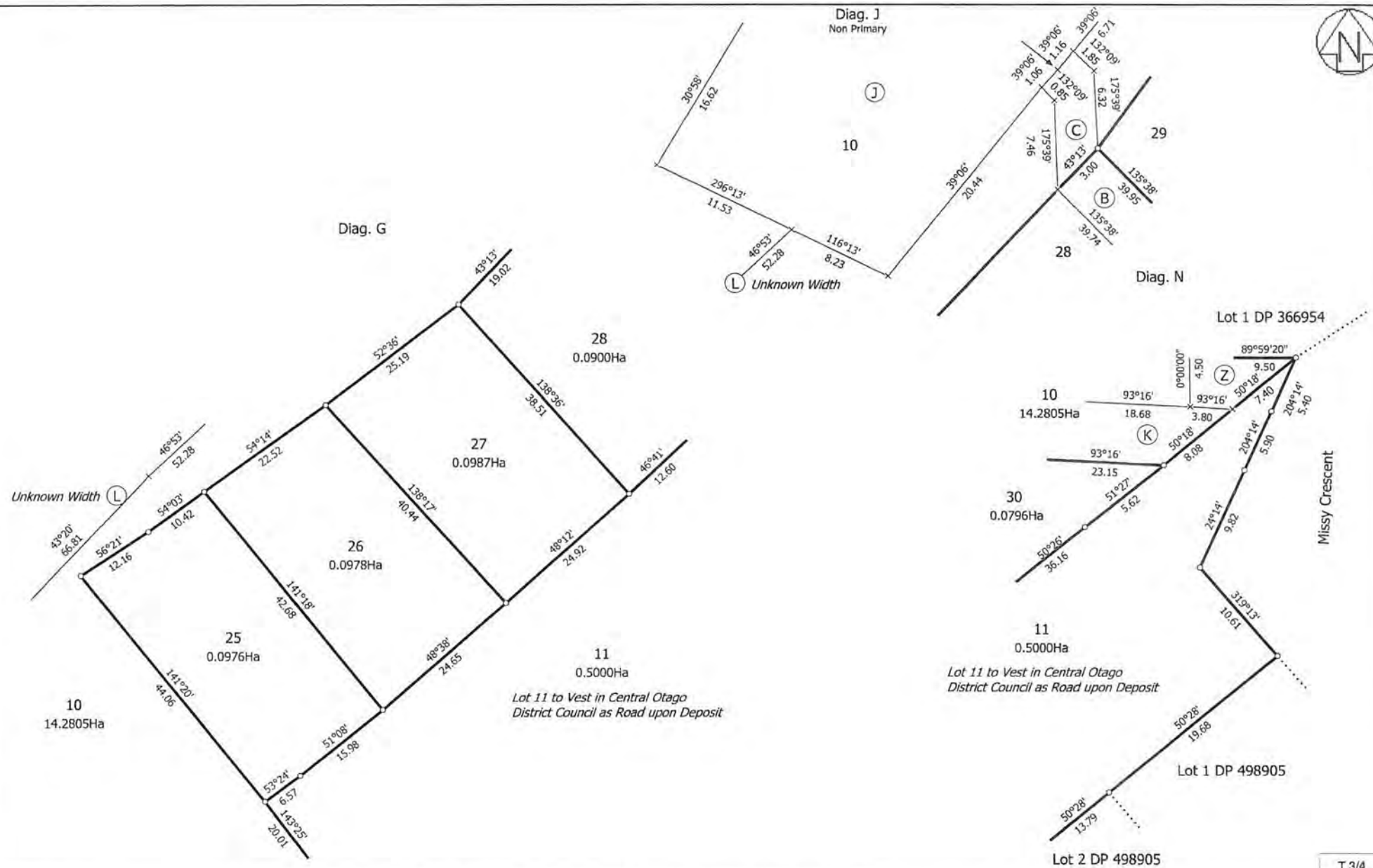
Generated on: 26/06/2017 2:02pm Page 5 of 7

LOTS 25 TO 30, 74 TO 82, 10 AND 11 BEING A SUBDIVISION OF LOT 1 DP 409539 AND EASEMENT OVER LOT 70 DP 24318

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Title Plan
LT 511091
DRAFT



Land District: Otago

Digitally Generated Plan

Generated on: 26/06/2017 2:02pm Page 6 of 7

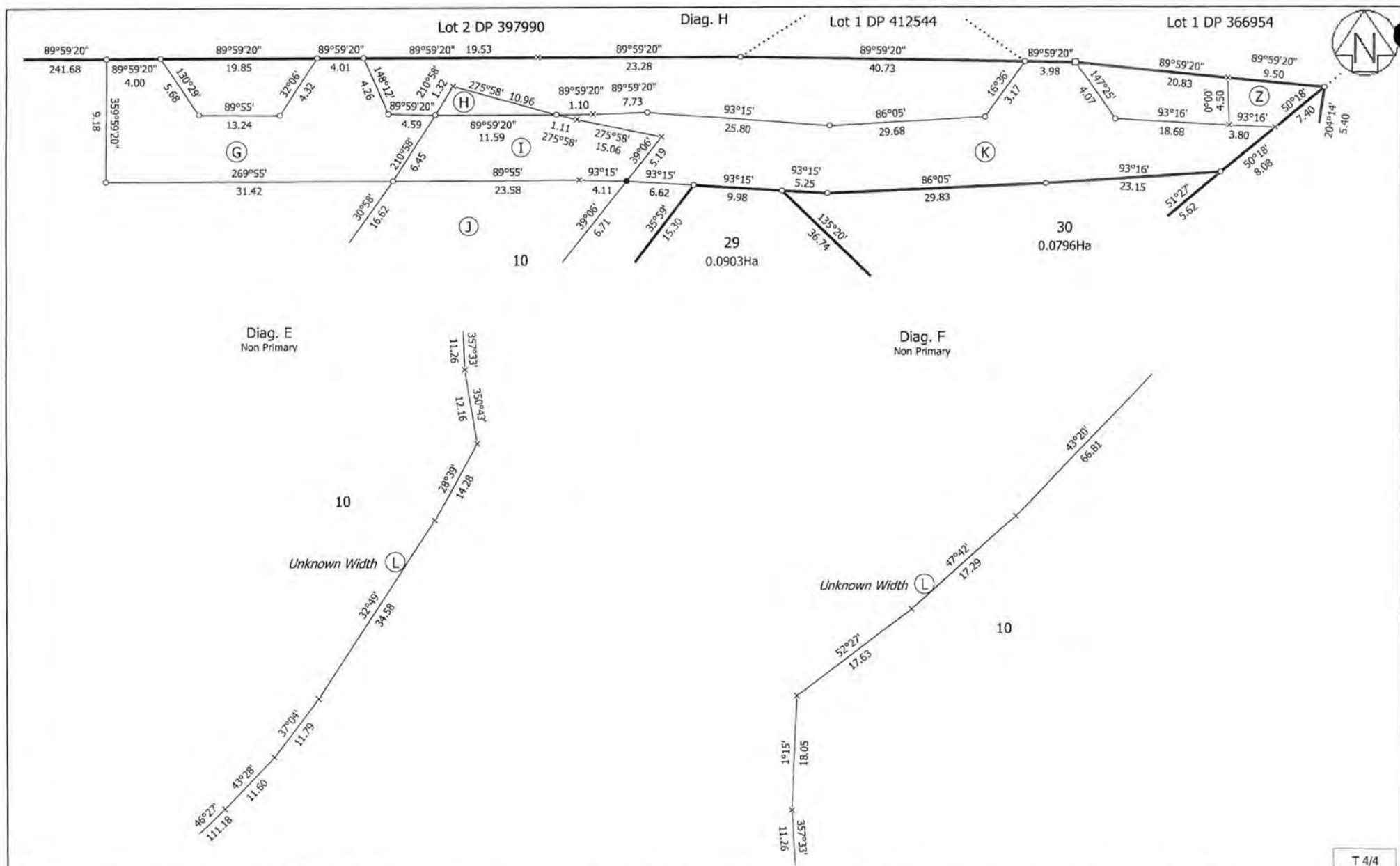
LOTS 25 TO 30, 74 TO 82, 10 AND 11 BEING A SUBDIVISION OF LOT 1 DP 409539 AND EASEMENT OVER LOT 70 DP 24318

Surveyor: Myles Eliot Garmonsway

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Title Plan
LT 511091
DRAFT

T 3/4



Land District: Otago

Digitally Generated Plan

Generated on: 26/06/2017 2:02pm Page 7 of 7

LOTS 25 TO 30, 74 TO 82, 10 AND 11 BEING A SUBDIVISION OF LOT 1 DP 409539 AND EASEMENT OVER LOT 70 DP 24318

Surveyor: Myles Eliot Garmonsway
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Title Plan
LT 511091
DRAFT

T 4/4

Registrar General of Lands
Land Information New Zealand

Surrender of Easements – DP 409539

Resolved that pursuant to Sec 243 (f) (ii) of the Resource Management Act 1991, the Central Otago District Council consents to the cancellation of easements D, E & G shown on DP 409539 being a right of way in favour of Central Otago District Council.

Dated at Alexandra this 4 day of July 2017



.....
Manager Planning and Environment
(pursuant to delegated authority)

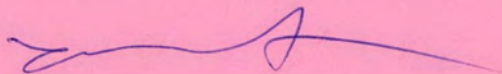
Certificate issued pursuant to the Resource Management Act 1991

2842184800

RC160069: LOTS 25 TO 30, 74 TO 82, 10 AND 11 BEING A SUBDIVISION OF LOT 1 DP 409539 AND EASEMENT OVER LOT 70 DP 24318

In the matter of Lots 25 to 30, 74 to 82, 10 and 11 being a subdivision of Lot 1 DP 409539 and easement over Lot 70 DP 24318, and pursuant to Section 224(c) of the Resource Management Act 1991, I hereby certify that some of the conditions of subdivision consent have been complied with and a consent notice has been prepared for the remaining conditions.

Dated at Alexandra this 20th day of July 2017.



Louise van der Voort
Executive Manager, Planning and Environment
(pursuant to delegated authority)

28421 / 84800

CENTRAL OTAGO DISTRICT COUNCIL

PISA MOORINGS VINEYARD LIMITED, PISA MOORINGS: RC 070423

Pisa Moorings Vineyard Limited has made application for subdivision consent to create 44 allotments, 41 for the purposes of residential activity, two rural allotments and one allotment to vest as Road. The application was amended at the hearing as described below. Land use consent is sought to breach the bulk and location and colour palette requirements of the Rural Resource Area and to erect dwellings on land subject to a hazard. The site subject to the application is described as Lot 4 DP 326731, as contained in Certificate of Title 108495, at the Otago Land Registry.

The Council has given consideration to the information submitted in support of the application and to the additional submissions and information presented by Messrs Dymock and McKay who appeared in support of the application at the hearing. Consideration has also been given to the additional information provided by I Paterson, A Phillips for Transit New Zealand, H & S Kidd, R A Christian for R A & H B Christian, D J & A L Lyon, and B & A Perry who appeared in support of their submissions at the hearing. Further evidence in support of the submission by R S Perriam that was emailed to the Council on 11 February 2008 was also tabled at the hearing. The Council confirms that consideration has been given to the contents of all submissions lodged in response to the application that are summarised at Annex 1 to this decision.

The site is zoned Residential Marina and Rural 1 Zone in the Vincent Section of the Central Otago Transitional District Plan. Provision is made in the Rural 1 Zone for the creation of allotments that are capable of use as independent farming properties. Provision is made in the Residential Marina Zone for subdivision creating allotments with a minimum allotment area of 1000m² under Rule 4.5.7.4 provided certain requirements are met. The proposal is non-complying in terms of the Transitional District Plan as allotments having an area of less than 1000m² are proposed in the Residential Marina Zone. The site is located within the Rural Resource Area and the Residential Resource Area (11) in the Proposed Central Otago District Plan (as amended by Council decisions). The proposal to subdivide land in the Rural Resource Area is a non-complying activity in terms of Rule 4.7.5(iii) (incorporating Variation 1) as an average allotment area less than 8 hectares and an allotment area less than 2 hectares is to be created in the subdivision. The subdivision of land that is likely to be subject to material damage from inundation is a discretionary activity in the Rural Resource Area in terms of Rule 4.7.4(iii)(d); and is a discretionary activity in the Residential Resource Area (11) in terms of Rule 7.3.4(ii). Rule 7.3.3(i)(c) provides for the creation of allotments with a minimum area of 400m² where there is a reticulated sewerage system as a discretionary (restricted) activity in the Residential Resource Area (11). Rule 4.7.5(i) confirms that any building to be erected on land in the Rural Resource Area likely to be subject to material damage from inundation is a non-complying activity; and building on such land in the Residential Resource Area (11) is a non-complying activity in terms of Rule 7.3.5(ii). The applicant advises that Lots 1 – 3 are subject to flooding from Five Mile Creek. The proposal breaches Rule 4.7.6A(a) as a 10 metre yard is not to be adhered to. A breach of Rule 4.7.6A(a) is a discretionary (restricted) activity in terms of Rule 4.7.3(i). The proposal also breaches Rule 4.7.6D(a) which confirms that new and relocated buildings shall be finished in tones and colours in the range of browns, greens, grey blue, greys, creams, terracotta, tussock and dark reds. A breach of Rule 4.7.6D(a) is a discretionary (restricted) activity in terms of Rule 4.7.3(iii). The proposal has been considered as an application for subdivision and land use consent to a non-complying activity pursuant to sections 104, 104B and 104D of the Resource Management Act 1991.

OK

Information submitted in support of the application confirms that the applicant intends to subdivide the subject site in accordance with the plan of subdivision being C1140_SCM_3A prepared by Paterson Pitts Partners Limited and dated 6 November 2007 which is attached to the application. The site of the proposed subdivision has an approximate area of 16.393 hectares and the plan of subdivision provides for land adjacent to Pisa Moorings Road and Missy Crescent and for an intervening strip of land between the two roads to be subdivided for residential purposes, with vineyards to be retained on two large allotments adjacent to State Highway 6 and Ferry Lane at Pisa Moorings.

As a preliminary matter it is noted that in 1997 the site subject to the application was granted resource consent to create 54 allotments of 400m² or greater in area and that land use consent was granted to construct duplex apartments on most of these allotments to a common design theme, in conjunction with a vineyard development. The applicant advises that this consent that was granted on 26 November 1997 (RC 970076) has lapsed, but was translated into the amended Proposed District Plan as Residential Resource Area RRA(11) as shown on Map 29. Since 1997 the applicant has established the vineyard component of the development, but advises that it is now apparent that there is no market demand for the duplex apartment concept. The applicant advises that it has now been decided to proceed with a conventional fee simple subdivision of the site, and that subsequent owners will erect individual dwellings on the allotments, to their own designs.

The site to be subdivided (CT 108495) has legal road frontage onto State Highway 6, Pisa Moorings Road, Ferry Lane and Missy Crescent. The site is bound by State Highway 6 to the west, Pisa Moorings Road to the south, Ferry Lane to the east, and Missy Crescent to the north.

The site is described in the application as comprising three landscape elements. The first landscape element is described as a flat top terrace beside State Highway 6. This terrace has been planted out in a vineyard and is screened from State Highway 6 by a shelter belt and by the permanent cherry nets on the adjoining property to the north. The top terrace also has an irrigation dam and the water storage tanks for the Pisa Moorings subdivision. The second landscape element is a terrace riser falling from 205m asl to 197.5-200m asl. The third landscape element is a bottom terrace between Ferry Lane and the foot of the terrace riser, which also backs onto existing houses on Ferry Lane. This lower terrace has been planted out in a vineyard.

Subdivision

The subdivision is shown on the plan of subdivision C1140_SCM_3A prepared by Paterson Pitts Partners Limited and dated 6 November 2007. Mr Dymock amended the plan at the hearing to have Lots 1 – 3 shown as one allotment, with any dwelling on the resultant allotment to be located within the former Lot 3. The subdivision is now to comprise of the following.

- Lots 1/3, 4 – 32, 34 – 37, 39 – 43 (39 lots in total) are to be residential building allotments which vary in size from 629m² to 2393m².
- Lot 33 is to have an area of 1.33 hectares and is to vest in Council as Road.
- Lot 38 is to have an area of 4.79 hectares and is to be retained by the applicant as a vineyard.
- Lot 44 is to have an area of 7.04 hectares and is to be retained by the applicant as a vineyard.

The applicant advises that the residential allotments that are to be built on are generally located on the terrace riser in accordance with the original concept for the Residential Resource Area (11). No dwellings are intended to be erected on Lot 38 and Lot 44.

Access to the subdivision is to be achieved from Pisa Moorings Road via the proposed subdivisional road (Lot 33) as shown on the plan of subdivision. The applicant advises that the proposed subdivisional road is now located at the foot of the terrace riser, instead of on the top of the terrace as shown on Planning Map 29. The applicant considers that this has several advantages as follows:

- *"The road and associated effects (traffic lights at night and street lighting) will not be visible from State Highway 6.*
- *Much better access to the type of houses likely to be built on the allotments will be provided. It is expected that most dwellings will have basement level garages, with the houses built up the slope for the lake views. The old concept proved to be a major marketing disincentive, as garages would have to be cantilevered out from an upper road over living areas that would not have lake views.*
- *There will be a high standard link route provided from Missy Crescent to Pisa Moorings Road, bypassing Ferry Lane. The Ferry Lane carriageway is narrow and winding with no kerb and channel or footpaths and was not really designed for the amount of through traffic now being generated by the Pisa Village and Pisa North developments.*
- *Current urban design practice is to optimise linkages to encourage movement between neighbourhoods and pedestrian/cycle usage and to reduce usage of cul-de-sacs as much as practicable. The long cul-de-sac servicing many allotments, as originally provided for, are no longer considered to be good urban design."*

The applicant advises that the proposed subdivisional road (Lot 33) is to be constructed to the standard of the typical cross section standard as shown on the plan of subdivision. The proposed road is to have a 20 metre wide legal road reserve, a 8.5 metre wide carriageway with mountable kerb and channel, and a 1.5 metre wide footpath on the north-west side of the road. The applicant advises that the proposed construction standards comply with Table 3.1 'Residential Local Road' of Council's Addendum to NZS 4404:2004.

The applicant advises that the pavement design is to be in accordance with Austroads and NZS 4404:2004. Pavements are to be either segmented concrete block pavers or asphaltic concrete or two coat chip seal or some combination of the above, for road carriageways. Footpaths are to be either concrete or concrete block pavers or asphalt concrete. The applicant advises that the depth of the proposed pavement layers are to be determined from insitu CBR's and Austroads Pavement Design Figure 8.4. The applicant advises that an additional subgrade improvement layer is likely to be required, due to the presence of deep silts underlying the road alignment.

Access to Lots 39 - 43 is to be from Pisa Moorings Road. Access to Lots 1/3 - 8, 10, 12 - 32 is to be from the subdivisional road (Lot 33). Access to Lots 34-37 is to be from Missy Crescent. Mr Dymock confirmed at the hearing that there will be no direct access for Lot 44 to State highway 6, and that access to Lot 44 is to be achieved from Missy Crescent.

Access to Lots 9 and 11 is to be via rights of way A and B from the subdivisional road as shown on the plan of subdivision. Right of way A and B is to be constructed to the standard of Table 3.1 Private Way 2-4 lots of Council's Addendum to NZS 4404:2004 to include a 6 metre legal width, and a 4.0 metre carriageway with mountable kerb one side and nib kerb on the other.

The applicant proposes that accesses to serve Lots 1/3- 8, Lot 10 and Lots 12 - 43 are to be constructed by the new owner(s) of each allotment at the time a dwelling is erected on any

allotment. Accesses to serve Lots 9 and 11 and Lot 44 are to be constructed to Council's standard requirements off Missy Lane and the subdivisional road.

Domestic water is to be supplied to the subdivision via a connection to the water scheme installed in the context of the adjoining Pisa Village subdivision. Correspondence from Duffill Watts & King Limited dated 1 October 2003 confirms that there is sufficient capacity within the scheme for the proposed subdivision. Duffill Watts & King Limited state as follows:

"We confirm that the water supply design has taken into account Pisa Moorings Vineyard Limited water requirements. Our design assumes that Pisa Moorings Vineyard Subdivisions is supplied by a 150mm dia. water main from Pisa Village Subdivision. This will provide water at a pressure and flow in accordance with the requirements of NZS 4404:1981 and New Zealand Fire Service. Code of Practice for Fire Fighting Water Supplies. The water demand is as required by CODC in their resource consent conditions.

Water treatment will meet the requirements of the New Zealand Drinking Water Standards through disinfection. We cannot comment on Ministry of Health compliance for water grading as this is reliant on monitoring, supervision and quality control, which we have no control of. However, given that the system will be taken over by CODC who have suitable quality control and qualified personnel, then the system should be capable of obtaining a 'A' grade."

The applicant advises that an existing 225mm diameter watermain, owned by Pisa Moorings Utility Society Incorporated, will need to be relocated through Lot 23 as shown on the plan of subdivision. A new 175mm water main is proposed to be constructed for the full length of the subdivision road in Lot 33.

Wastewater is to be disposed of from the subdivision via the Lowburn sewer. The applicant advises that an upgrade of the overflow storage capacity of the existing sewer pump station will almost certainly be required and possibly an upgrade of the pumps. It is proposed that detailed investigations into these matters will be done at the time of application for engineering approval under NZS 4404:2004. Any upgrade required to the sewer pump station is to be done at the applicant's expense.

Stormwater is to be disposed of from the subdivisional road carriageway to ground by way of Caudwell type soakpits, one per catch pit.

Telecommunications and electricity services are to be provided to the subdivision. Email correspondence from Telecom New Zealand Limited dated 29 October 2007 and correspondence from Delta Utility Services Limited dated 30 October 2007 confirms that telecommunications and electricity services can be provided to the subdivision.

The applicant advises that proposed Lots 1, 2 and 3 are subject to a flood risk from Five Mile Creek, principally due to the reported inadequacy of the existing culverts under State Highway 6 and Pisa Moorings Road. The applicant has commissioned David Hamilton & Associates Limited to undertake a flood hazard assessment relating to Five Mile Creek and the impact on the proposed subdivision. In a report dated October 2007 Mr Hamilton for David Hamilton & Associates Limited states as follows:

"There is a potential risk of flooding from Five Mile Creek to Lots 1 and 2 on the proposed Pisa Moorings Vineyard Limited subdivision. This risk arises from under sized culverts on both the State Highway and the Pisa Moorings Road. In a significant flood event these culverts will have insufficient capacity and flood waters will overtop the roads. The State Highway flows will either get back into the channel

or head south down the State Highway and away from the subdivision. This is aided by the water race embankment that crosses below the State Highway."

Mr Hamilton promoted mitigation measures for Lots 1, 2 and 3. As noted above Lots 1 – 3 are now to be held in one parcel, with any dwelling to be located on Lot 3.

The applicant originally advised that the water race adjacent to Lots 1 - 9 and Lot 11 was to be decommissioned as the Perriam Cove development to the south has made this water race obsolete. Mr Perriam has advised that he holds a water right and that the water race is subject to an easement. Mr Dymock confirmed at the hearing that the decommissioning proposal has been withdrawn, pending further negotiation between parties.

The pond and mound within Lot 43 and adjacent to the Ferry Lane and Pisa Moorings Road intersection is proposed to be removed. The applicant advises that the original developer of these features made no provision for their ongoing ownership and maintenance or for water supply thereto and that the pond and mound are currently in a derelict state. Several submitters have expressed concern at the aspect of the proposal, and it is noted that the pond and mound were to be subject to an easement in the context of RC 970076. Mr Dymock emphasised that the applicant does not wish to keep the entrance/water feature on its land for a variety of reasons which he traversed at the hearing.

Due to the proximity of vineyards to the subdivision the applicant proposes to impose the Council's standard condition (subject to consent notice) with respect to reverse sensitivity on the titles to Lots 1/3 - 32 and Lots 34 – 43. Mr Dymock advised that conditions of land use consent relating to vineyard operations within the subdivision have lapsed, and that this land is now subject to a Rural Resource Area status. Mr Dymock submitted that the existing vineyard is not subject to the conditions of consent in RC 970076.

The applicant has advised that the subdivision may be staged and seeks a generic condition with respect to easements for services.

Land Use

The plan of subdivision confirms that Lot 1 is contained entirely within the Rural Resource Area and that Lots 2/3 – 32 and Lots 34 – 37 are partly within the Rural Resource Area and partly within the Residential Resource Area (11). The applicant considers that it is impossible to erect a dwelling on these allotments in compliance with the bulk and location requirements of the Rural Resource Area. The applicant also considers that the rural colour palette in terms of Rule 4.7.6D(a) is overly restrictive for what are essentially residential allotments. Mr Dymock confirmed at the hearing that the applicant would be agreeable to a colour palette applying to Lots 13 – 32, being the allotments on the terrace riser. Consent is sought to breach Rule 4.7.6D(a) for dwellings on Lots 1/3 – 12 and 34 – 37.

In essence the applicant seeks a generic land use consent to erect dwellings on Lots 1/3 – 32, 34 – 37 that breach Rule 4.7.6A of the amended Proposed District Plan. It is requested that a condition of land use consent be such that dwellings on Lot 1 and on those parts of Lots 2 – 32, 34 – 37 within the Rural Resource Area comply with Rule 7.3.6 being the bulk and location requirements of the Residential Resource Area. In essence these standards apply in the context of the Residential Resource Area (11); and in the Residential Resource Area (3) that applies to land elsewhere at Pisa Moorings (and at Pisa Village and Pisa North).

The applicant advises that the reasons why the proposed residential allotments do not coincide exactly with the Residential Resource Area (11) boundary are as follows:-

“- *The changed roading alignment.*

- *The RRA (11) zone is not deep enough for normal fee simple allotments that are large enough to enable modern – stand alone dwellings to be erected on them. The RRA (11) zone was designed to accommodate small 400m² allotments with duplex two storey apartments on them. It is also noted that the proposed allotments are also significantly wider than the originally designed duplex apartment lots. This means that there are now 41 residential allotments, instead of the originally planned 58 duplex apartment lots."*

The applicant requests that a land use consent condition be applied to Lots 1/3 consistent with the proposed conditions of subdivision consent (to be subject to a consent notice) to deal with the flood risk.

An extension to the normal five year time limit for a land use consent is requested. The applicant advises that it may be 3 – 8 years before all stages of the subdivision are completed and that experience shows that it will take up to a further 10 years for the building of dwellings to be completed on all lots. At the hearing Mr Dymock advised that a land use consent period of 15 years is considered to be reasonable by the applicant in these circumstances.

Mr Paterson expressed concern at the adequacy of the State Highway 6 intersection and Ferry Lane, but confirmed that he supported construction of the proposed new road on Lot 33. Mr Paterson questioned what measures are to be taken with respect to upgrading the State Highway 6 intersection. Mr Paterson also considered that the original conditions of consent relating to vineyard operations should be adhered to.

Mr Phillips of Transit New Zealand confirmed that Transit is comfortable with conditions which have been agreed to by the applicant. He emphasised that fencing should be established along the State Highway 6 frontage of Lot 44 to prevent direct access from the highway. Mr Phillips tabled a draft plan which showed the intersection upgrading proposed for State Highway 6 and Pisa Moorings Road, including the entrance to the Perriam Cove subdivision.

Mr and Mrs Kidd supported the proposed road at the base of the terrace (in Lot 33) as they considered that Ferry Lane is not suited to carrying additional traffic. Mr and Mrs Kidd were also concerned at vineyard operations and also noted that the proposed subdivision will result in the roading and some allotments encroaching onto the existing vineyard, and headlands.

Mr and Mrs Kidd also expressed concern at development which would project above the terrace, as this would affect skyline views. They also supported the retention of Lots 1 and or 2 as part of the rural allotment (Lot 44). They emphasised that the pond and mound features provide an attractive amenity area which had been a feature of the marketing of the Pisa Moorings subdivision. Mr and Mrs Kidd also expressed concern at potential dust effects associated with the construction of the subdivision.

Mr Christian supported cul-de-sacs rather than a through road in Lot 33. He noted that road humps had not proven successful as traffic calming features in Christchurch. Mr Christian noted that a plan tabled by Mr Dymock (which purported to show existing reserves) did not distinguish between Council reserves and LINZ owned land. Mr Christian also noted the potential to require a reserves contribution in land rather than money in the context of the proposed subdivision.

Mr Lyon referred to the contents of his written submission. Mr Lyon emphasised that the submitters valued the pond and mounding at the entrance to the Pisa Moorings subdivision, and he considered that it would be easy to reactivate the pond and make it fully operational. Mr and Mrs Lyon also noted that the pond encroaches into the road reserve of Ferry Lane.

Mr and Mrs Lyon emphasised that the pond and mound area (and other reserve areas at Pisa Moorings) have previously been maintained by the Pisa Moorings Amenities Society, and he disputed the applicant's description of the mound and pond area as derelict.

Mr and Mrs Lyon promoted that Lots 1 – 4 be retained as a reserve, and referred to the history of flooding in this locality. They also supported the use of a colour palette and expressed concern at the potential effects of activity at the vineyard and the 20 year consent that had originally been sought by the applicant.

Mr Perry expressed concern at the size of the proposed allotments, which he considered were narrow, and he also expressed concern at the obstruction which may occur through the parking of boats in the subdivision. Mr Perry expressed concern at the effects of the subdivision on the profitability of the vineyard, and he emphasised that residents at Pisa Moorings enjoy a semi rural lifestyle. Mr Perry considered that high density development will lower property values considerably in the area.

Mr Perry also expressed concern at the intersection of Pisa Moorings Road and State Highway 6, and considered that another exit to State Highway 6 is needed to the north of Pisa Village.

Mrs Perry referred to a brochure "we can make a difference" and considered that processing of the application should be delayed to enable further consideration to occur. She emphasised the value of the terrace which provides a view towards Sugarloaf.

In his reply Mr Dymock confirmed that the applicant now accepted a colour palette with respect to Lots 13 -32 and he proposed a condition to the effect that any building not project more than 3 metres above the top of the terrace riser on Lots 13 – 31. He considered that Lots 1 and 2 would be better maintained as part of a residential allotment including Lot 3, rather than being in the residual Lot 44. Mr Dymock also emphasised that upgrading of the Pisa Moorings Road/State Highway 6 intersection is imminent and that the applicant is agreeable to removing an informal access to Lot 38 which exists from Ferry Lane over Lot 64 DP 24318 (a reserve).

Discussion

Intensive subdivision and development in the Rural Resource Area can detract from amenity values. The amended Proposed District Plan therefore controls the size of allotments in rural subdivision to control the density and intensity of development. The effect of the subdivision will be to produce a denser form of subdivision than is envisaged in the Rural Resource Area in terms of Variation 1. Variation 1 was publicly notified on 2 July 2005. As the average area of allotments to be created is less than 8 hectares and as allotments (that are located in the same title as land in the Rural Resource Area) of less than 2 hectares are to be created, the subdivision is a non-complying activity in terms of Rule 4.7.5(iii) as amended by Variation 1. This status applied prior to the variation (in terms of the 2 hectare minimum lot area breach).

In essence the subdivision will result in a technical breach of Rule 4.7.5(iii) as the property is part located in the Rural Resource Area. Most allotments are located primarily in the Residential Resource Area (11) where a minimum lot size of 400m² is provided for. In some instances allotments are created that are entirely or are in large part located in the Rural Resource Area. The Council considers that the benefit of creating such additional allotments as residential allotments is relevant when considering alterations to the subdivision design, particularly the avoidance of development on Lot 1 and 2 and its environs in particular and the retention of the mounding and pond that encroach onto Lot 43. The Council's general conclusion is that any adverse effects associated with the breach of the subdivisional rules that apply in the context of the Rural Resource Area are no more than minor.



Rule 7.3.3(i)(c) provides for the subdivision of land to create allotments having an area of 400m² or greater in the Residential Resource Area (11) where there is a reticulated sewerage system. The Council acknowledges that the proposed subdivision creates allotments that satisfy Rule 7.3.3(i)(c) as this relates to land in the Residential Resource Area (11).

Subdivision of this land will facilitate residential development by creating 38 residential allotments (as provided for in the conditions) and the use of this land for residential purposes will be in keeping with the Residential Resource Area (11) status of this locality. The Council therefore considers that any effects associated with the proposed subdivision are likely to be no more than minor and can be mitigated by adherence to appropriate conditions of consent.

Several submitters have suggested that Lot 33 not be constructed as a through road between Pisa Moorings Road and Missy Crescent. Submitters who appeared at the hearing expressed conflicting views on whether a through road or cul-de-sacs were appropriate. The Council has concluded that a through road (as proposed by the applicant) is appropriate. In this context Mr Dymock advised that speed control could be achieved by narrowing the vehicle pavement width at intervals with contrasting pavement treatment (eg cobblestones) and placement of landscaping. Mr Dymock also considered that provision could be made in roading design to facilitate walking and cycling.

The Council has concluded that it is appropriate for Lots 1 – 3 to be held in one allotment, with any dwelling or accessory building to be located on Lot 3. This will serve to maintain an attractive entrance to Pisa Moorings Road, and will also serve to avoid and mitigate the flood hazard which has been discussed in Mr Hamilton's report.

The Council acknowledges that several submitters have expressed support for the retention of the pond and mounding that are located on Lots 38 and 43, and the road reserve of Ferry Lane. This can be achieved by requiring that Lot 43 and a portion of Lot 38 be vested in the Council as reserve, that would be managed in conjunction with other reserves at Pisa Moorings. Reserve status avoids issues with respect to the fencing of the pond, and will also facilitate any future upgrading that may be required at the entrance to Ferry Lane in future. It is anticipated that such reserve will have an area of approximately 1500m², and it is anticipated that there may be some adjustment to the boundary between Lot 42 and 43 to allow for the creation of a reserve having such an area.

Following consideration of the information provided by the applicant, including the correspondence from Duffill Watts and King Limited, the Council's conclusion is that any adverse effects in terms of the provision of services can be avoided or mitigated through adherence to appropriate conditions of consent, including conditions based on recommendations from the Council's consultant engineers MWH New Zealand Limited which require, amongst other matters, the upgrading of Pisa Moorings Road adjacent to the subdivision.

Consent to the application for land use consent with respect to yard requirements is reasonable, having regard to the Residential Resource Area (11) which applies to much of the land to be subdivided into residential allotments. The applicant anticipates that dwellings will be built on the terrace riser in Lots 13-32, and has advised that the terrace riser falls from 205m asl to 197.5-200m asl. Several submitters have expressed concern at the prospect of dwellings projecting above the terrace riser, and have referred to views of the Sugar Loaf landform (terrace riser) that is visible to residents in this direction.

The Council considers that it is appropriate for a height limit to be placed on dwellings on the terrace riser. Mr Dymock advised that it would not be practical to limit the height of dwellings to the line of the terrace riser, and promoted a condition to the effect that any building be no higher than 3 metres above the terrace riser as measured at the north-west

boundary of the allotment concerned. The Council considers that such an approach is reasonable, and notes that the terrace riser is predominantly in the Residential Resource Area (11) which would otherwise enable more substantial dwellings to be built on this land. Such an approach will enable residents of Lots 13-31 to enjoy views towards the lake, while mitigating the effects of a breach of the line of the terrace for those viewing Lots 13-31 and the landform beyond from within the nearby Pisa Moorings and Pisa Village subdivisions, or from the direction of State Highway 6. Other allotments will be subject to the normal rule governing height in the Residential Resource Area (11).

Colour is a relevant consideration given the elevated nature of the terrace. The Council considers that it is reasonable to require that dwellings be finished in natural tones to avoid visual detracting on Lots 13-32. Again the Council considers this to be a reasonable requirement, given that land in the Rural Resource Area is to be used to create a viable urban subdivision.

The Council's conclusion is that any adverse effects of the proposed land use activity can be mitigated by adherence to appropriate conditions of land use consent.

The relevant objectives and policies of the amended Proposed District Plan have passed the stage where they can be affected by submission and appeal. The relevant objectives and policies in the Residential Resource Area include Objectives 7.1.1 and 7.1.2 and Policies 7.2.1, 7.2.6 and 7.2.7. In terms of Objectives 7.1.1 and 7.1.2 and Policies 7.2.1, 7.2.6 and 7.2.7 the proposed subdivision creates allotments for future residential activity. The area of these allotments exceeds that required in the Residential Resource Area (11) and the Council considers that conditions of consent can be applied to ensure that adverse effects on the character and amenity values of the Pisa Moorings and Pisa Village residential area are avoided or mitigated. The Council considers that the proposal is consistent with these objectives and policies.

The relevant policies and objectives in the Rural Resource Area include Objectives 4.3.1 and 4.3.2 and Policies 4.4.1 and 4.4.10. In terms of Objectives 4.3.1 and 4.3.2 and Policy 4.4.1 and Policy 4.4.10 the effects of subdivision can be managed in this instance to ensure that any adverse effects on landscape and amenity values are avoided, remedied or mitigated. Adverse effects on the open space, landscape, natural character and amenity values of the rural environment will be avoided as land subject to application is contained in two resource areas with residential subdivision and development anticipated in the Residential Resource Area (11); and as the status quo is to be maintained to the extent that much of the land in the Rural Resource Area will remain in large certificates of title (in Lot 44 and Lot 38) following subdivision. The Council therefore does not consider that the proposal is contrary to these objectives and policies.

Precedent is a matter for consideration in terms of section 104(1)(c) of the Act. In this instance the proposed subdivision is essentially a technical breach of the subdivisional rules that apply in the Rural Resource Area. The Council also notes that non-compliance occurs because of the fact that the land subject to application is subject to two resource areas of the site and due to the flooding hazard which will be mitigated by the amendments that have now been proposed with respect to Lots 1 – 3, and by the conditions promoted based on the advice of Mr Hamilton. In all the circumstances the Council considers that the subdivision will not establish a significant precedent particularly as the site is unique having regard to the presence of land in the Residential Resource Area (11).

The application does not conflict with any national or regional planning document nor with the purpose of the Act which is to promote the sustainable management of natural and physical resources of the District nor to any other matter referred to in Part II of the Act.

Having regard to the reasons detailed above, the Council has resolved pursuant to sections 104, 104B and 104D of the Resource Management Act 1991 to grant consent to the applications, subject to the following conditions:

Subdivision

1. The plan of subdivision shall be amended as follows:
 - a) Lots 1 – 3 shall be shown as one allotment.
 - b) Any dwelling or accessory building on the one allotment comprising Lots 1 - 3 shall be located on what is currently shown as Lot 3.

Note: Condition 1(b) shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991 and the area to which dwellings and accessory buildings shall not be located shall be identified on the survey plan submitted for section 223 certification.
 - c) Lot 43 shall be enlarged to include the mound and pond. Lot 38, and the boundary between Lots 42 and 43 is permitted to be adjusted, so that the enlarged Lot 43 has an area of approximately 1500m².
2. The subdivision may be staged, and all conditions relevant to a stage shall be complied with prior to section 224(c) certification.
3. All subdivisional designs and approvals are to be in accordance with NZS 4404:2004 and the CODC Addendum, which is the Council's Code of Practice for Urban Subdivision as modified by these conditions of consent.
4. All easements shown on the amended plan of subdivision shall be duly granted or reserved.
5. Any other easements required to protect access to services shall be duly granted or reserved.
6. Any earthworks within the subdivision shall be certified by a suitably experienced engineer in accordance with NZS 4404:2004 (Clause 2.7 and Schedule 2A) and NZS 4431:1989. The consent holder shall take the best practicable option to avoid or mitigate dust effects during earthworks.
7. The portion of Pisa Moorings Road between the entrance to the Pisa Cove development and Lot 33 shall be upgraded in accordance with Table 3.1 of the Council's Addendum to NZS 4404:2004 to the following standard:
 - a) Carriageway widened to 10 metres
 - b) Pavement design to be in accordance with NZS 4404:2004 and CODC Addendum
 - c) Subgrade CBR>7
 - d) Two coat Grade 3/5 chip seal or widening
 - e) A standard 1.5 metre wide concrete, paving block or asphaltic concrete footpath shall be constructed over the full length of the subdivision on the north side of the road and extended as required to provide continuity with the footpath/cycleway installed under the adjacent RC 060319 development
 - f) 100mm depth clean topsoil between footpath and road boundary formed at 4% crossfall, trimmed and grassed to a mowable standard.
 - g) Cut/fill batters outside road boundaries with maximum 4:1 gradient to match existing ground.

- h) Street lighting to be in accordance with NZS 4404:2004 and accepted urban standards.
8. The carriageway of the subdivisional road (Lot 33) shall be constructed in accordance with NZS 4404: 2004 and the CODC Addendum subject to the following:-
- a) Comply with the Residential Local Road classification under NZS 4404:2004 Addendum Table 3.1
 - b) Clear visibility to be provided along Pisa Moorings Road and Missy Crescent in both directions from the subdivisional road (Lot 33) intersections in accordance with Table 12.1 in Rule 12.7.1(ii) of the District Plan
 - c) Connect with existing sealed carriageway at Pisa Moorings Road and Missy Crescent.
 - d) 8.5 metre seal width located centrally in 20 metre wide road reserve
 - e) Pavement design in accordance with NZS 4404:2004 and Addendum
 - f) Subgrade CBR>7
 - g) 30mm compacted depth asphaltic concrete, two coat Grade 3/5 chip seal or concrete paver surfacing
 - h) Mountable kerb and channel on both sides of carriageway over 75mm compacted depth AP40 metal
 - i) Cut/fill batters outside road boundaries with maximum 4:1 gradient to match existing ground
 - j) Street lighting in accordance with NZS 4404 and accepted urban standards
 - k) All necessary traffic signs and road marking to be provided
 - l) A standard 1.5 metre wide concrete, paving block or asphaltic concrete footpath shall be constructed on the north side of the road
 - m) 100mm depth clean topsoil between kerb/footpath and road boundary formed at 4% crossfall, trimmed and grassed to a mowable standard
9. Provision shall be made in the construction of the carriageway of the subdivisional road (Lot 33) for traffic calming and street plantings, and to facilitate walking and cycling access.
10. The carriageway within rights of way A and B serving Lots 9 and 11, shall be constructed in accordance with NZS 4404:2004 and the CODC Addendum subject to the following:
- a) A minimum 4.0 metre seal width located within a minimum 6.0 metre wide corridor.
 - b) Pavement design to be in accordance with NZS 4404:2004 and CODC Addendum.
 - c) Either
 - (i) Two coat chip seal. Grade 3 and Grade 5; or
 - (ii) 30mm compact depth asphaltic concrete.
 - d) 4% camber to channel.
 - e) Concrete nib kerb on high side of carriageway
 - f) Mountable kerb and channel on lower side of carriageway.
 - g) Subgrade CBR>7.
 - h) 100mm depth topsoil between carriageway and boundary, trimmed and grassed to mowable standard
 - i) Stormwater to discharge to mud tank and soakpit located within the private property.
 - j) Cut/fill batters with maximum 4:1 gradient to match existing ground within allotments.
11. The consent holder or successor shall be responsible for providing sealed vehicle entrances between the sealed carriageways of Pisa Moorings Road and/or Ferry Lane and/or Missy and/or the subdivisional road (Lot 33) and boundaries of Lots

1/2/3 – 8, 10, 12 – 32, 34 – 37, and 39 - 42. The sealed vehicle entrances shall be constructed in accordance with the Council's Vehicle Crossing Policy, a copy of which can be obtained from the Council's Assets and Contracts Department.

Notes: 1. *This condition is subject to condition 27 re access to Lot 1/2/3.*

2. *Condition 11 shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991.*

12. The consent holder shall be responsible for providing sealed heavy duty vehicle entrances between the sealed carriageway of the subdivisional road (Lot 33) and the boundaries of Lots 9 and 11 and Lot 44. The sealed vehicle entrances shall be constructed in accordance with the Council's Vehicle Crossing Policy, a copy of which can be obtained from the Council's Assets and Contracts Department.
13. The consent holder shall provide for the Council's consent a proposed name for the subdivisional road (Lot 33) and when approved it shall be the consent holders responsibility to supply and erect appropriate signs of a design consistent with the road sign designed used elsewhere in the Pisa Moorings area.
14. Upon deposit of the survey plan Lot 33 shall vest in the Central Otago District Council as Road.
15. The consent holder shall construct water reticulation capable of servicing all allotments in the proposed subdivision via an extension to the Pisa Village water supply.
16. Standard 20mm water supply connections with Acuflo water meters, toby valves and approved boxes are to be provided at the boundary of Lots 1/2/3 - 32, 34 – 37 and 39 - 42.
17. The water system shall meet the requirements of The Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2003 and in accordance with NZS 4404:2004 and the CODC Addendum.
18. The consent holder shall liaise with the Chief Executive regarding the possibility of providing a link with the Lowburn Water Supply Extension to Pisa Cove through to the Pisa Village Water Supply and shall arrange for any such work as required by the Chief Executive. Any oversizing or pipework additional to the requirements of the subdivision as required by the Chief Executive shall be competitively priced and approved by the Chief Executive prior to commencement of works and such provision of oversizing or additional pipework will not be at the consent holders expense.
19. The existing rising and falling main from the Pisa Moorings Water Supply reservoir shall be relocated through the subdivision and easements established to the Chief Executive's satisfaction and at the consent holder's cost, to avoid conflict with the subdivision works.
20. The consent holder shall be responsible for providing wastewater reticulation to the subdivision and standard 100mm diameter sewer connections with cleaning eyes from the sewer reticulation to the boundaries of Lots 1/2/3 - 32, 34 – 37 and 39 - 42.
21. The recipient pump station(s) including emergency storage shall be upgraded as required by detailed engineering design to accommodate the discharge from the subdivision in accordance with NZS 4404:2004 and CODC Addendum Clause 5.3.10.

22. It shall be the consent holders responsibility to obtain the consent of the relevant utility service providers for the provision of electricity and telecommunication services to serve Lots 1/2/3 - 32, 34 – 37 and 39 - 42. The consent holder shall install all such new services underground to the boundary of each of Lots 1/2/3 - 32, 34 – 37 and 39 – 42 prior to section 224(c) certification for the relevant stage.
23. The consent holder shall supply evidence of the provision of services referred to in Condition 22 to the Chief Executive prior to section 224(c) certification for the relevant stage.
24. It shall be the responsibility of the consent holder to meet the costs associated with the installation of electricity and telecommunication services necessary to meet the needs of the subdivision.
25. The minimum floor level of any building on Lot 1/2/3 shall be 203.2m above mean sea level Dunedin Datum.

Note: Condition 25 shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991.

26. The owners of Lots 1/2/3 - 32 and 34 – 37, 39 - 42 are aware of and will take all reasonable and appropriate steps to advise all purchasers, lessees, licensees or tenants, or any other user coming to use having an interest in Lots 1/2/3 - 32 and 34 – 37, 39 - 42 or any part thereof of:
 - (a) The proximity of adjoining viticultural and horticultural properties.
 - (b) The usual incidences of viticulture and horticulture including (but without limitation) noise, dust, harvesting and associated traffic movement, spraying; frost protection including windmills, helicopters, heat pots and sprinklers, and bird scaring including audible devices, gas guns and nets.
27. Vehicular access to the composite allotment (Lots 1/2/3) shall be from Lot 33 (subdivisional road) and shall not be from Pisa Moorings Road.
28. All access to Lot 44 shall be obtained from Lot 33 (subdivisional road) and direct access from State Highway 6 is prohibited.
29. Lots 1/2/3 – 11 and Lot 44 shall be subject to the following:

"New residential buildings located within 80m of the State Highway edge line shall be designed and constructed so meet noise performance standards for noise from traffic on State Highway 6 that will not exceed 35dBA L_{eq} (24hr) in bedrooms, and 40dBA L_{eq} (24hr) for other habitable rooms in accordance with the satisfactory sound levels recommended by Australian and New Zealand AS/NZ 2107:2000 Acoustics – Recommended design sound levels and reverberation times for building interiors."

Note: Conditions 26-29 shall be subject to a consent notice that shall be registered pursuant to section 221 of the Resource Management Act 1991.

30. Prior to section 224(c) certification the three physical accesses to Lot 44 shall be permanently and physically closed. Establishing the fence line and reinstating water channel and removing the culvert shall be undertaken to achieve this.

Notes: 1. Any application to carry out work on the State Highway is to be completed and submitted to Transit New Zealand's network management consultant at least seven working days prior to work commencing on the State Highway road reserve.
2. A Traffic Management Plan is to be submitted to Transit New Zealand's network management consultant at least seven working days prior to work commencing on the State Highway road reserve.

31. Prior to section 224(c) certification, the consent holder shall supply the consent authority with written confirmation from Transit New Zealand's network management consultant that the above works on the illegal crossing places (that serve Lot 44) have been completed to meet Transit New Zealand's requirements.
32. Prior to section 224(c) certification, the consent holder shall supply the consent authority with a section 93 Transit New Zealand Act 1989 notice signed by the Minister of Transport or his delegate confirming that the State Highway is road for the purposes of this subdivision.
33. Upon deposit of the survey plan Lot 43 (as amended in terms of Condition 1(c)) shall vest in the Central Otago District Council as Local Purpose Reserve (Recreation).
34. Payment of a reserves contribution of \$32,780.00 (exclusive of Goods and Services Tax) calculated in terms of Rule 15.6.1(1)(a)(i) of the amended Proposed District Plan on the basis of 37 new residential allotments with credit for the existing title and 1500m² to be vested as Local Purpose Reserve (Recreation)
35. Prior to section 224(c) certification the consent holder shall remove the informal access which exists across Lot 64 DP 24318 (Local Purpose Reserve) and shall reinstate the land surface to the satisfaction of the Chief Executive.
36. Prior to the issue of a certificate in terms of section 224(c) the consent holder shall provide the Chief Executive with the costs (in the form of a schedule) of all infrastructure works to vest in the Council.
37. The consent holder shall provide Producer Statements in an approved format from a suitably qualified professional certifying the engineering adequacy and compliance with Council consent conditions relating to engineering design, construction and construction review (supervision) of the subdivision works.
38. The name and qualifications of the person referred to in Condition 37 shall be forwarded in writing to the Chief Executive prior to the submission of any design documentation. This person shall be acceptable to the Chief Executive.
39. As built drawings are to be lodged with the Chief Executive in accordance with Clause 1.5.10 of NZS 4404:2004. The as built drawings are to be drafted on computer and are to be compatible with a CAD system nominated by the Chief Executive. As built plans shall be lodged on computer disc and in a hard copy A3 format and shall show the location and individual meter reference numbers against the relevant toby box locations.

Notes: 1. All charges incurred by the Council relating the administration, inspection and supervision of conditions of subdivision consent shall be paid prior to section 224(c) certification.
2. Development contributions of \$122,211.00 and \$98,202.00 (exclusive of Goods and Services Tax) are payable for wastewater and roading respectively pursuant to the Council's Policy on Development and Financial Contributions contained in the Long Term Council Community Plan. Payment is due upon application under the Resource

Management Act 1991 for certification pursuant to section 224(c). The Council may withhold a certificate under section 224(c) of the Resource Management Act 1991 if the required development and financial contributions have not been paid, pursuant to section 208 of the Local Government Act 2002 and Section 15.5.1 of the amended Proposed District Plan.

Land Use

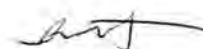
1. Any building erected on Lots 13-31 shall not exceed a height of 3 metres above the terrace edge above the terrace riser, as measured from the north-west boundary of the allotment concerned, and any building on Lots 13 – 31 shall comply with Rule 7.3.6(iii)(f) relating to building height in all other respects.
2. Any building on Lots 1/2/3 – 12, 32, 34-37 and 39-42 shall comply with Rule 7.3.6(iii)(f) relating to building height.
3. In all other respects any building erected on Lots 1/2/3 – 32, 34 – 37, and 39 – 42 shall comply fully with Rule 7.3.6(iii), (iv), (v) and (x) of the amended Proposed District Plan being the bulk and location, coverage, parking and excavation rules of the Residential Resource Area (11).
4. Any building erected on Lot 1/2/3 shall have a minimum floor level of 203.2 metres above mean sea level (Dunedin datum).
5. The roofs and exterior walls of any building erected on Lots 13-32 shall be finished in tones and colours in the range of browns, greens, grey-blue, greys and creams and thereafter shall be maintained accordingly.
6. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent shall be at the consent holder's expense.
7. The consent holder shall pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:
 - a) Administration, monitoring and inspection relating to this consent; and
 - b) Charges authorised by regulations.
8. Upon completion of any dwelling, the consent holder shall advise the Chief Executive in writing (quoting RC 070423) that all conditions of this consent have been adhered to.
9. Pursuant to section 125 this land use consent shall lapse 15 years following the commencement of this consent or on 1 March 2023, whichever date is the later.

Certified to be a correct copy of the decision of the Central Otago District Council.



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L A VAN DER VOORT
MANAGER, PLANNING AND ENVIRONMENT

29 February 2008



Annex 1

SUBMITTER/S	SUMMARY OF SUBMISSION	DECISION REQUEST
K & A Barrett	<u>Oppose</u> The specific parts of the application that the submission relates to are: • Putting a new road in would create a racing track for cars from Missy Crescent right around to Ferry Lane. • Pisa Moorings is not equipped for more housing, as the infrastructure is not up to standard eg no footpaths; roads are too narrow for the amount of extra traffic this would cause. The submitters oppose this application in full because of the above roading extra traffic as well as the proposed section sizes are too small. Pisa subdivision requires a minimum of 1000 m²	Refuse consent
J Christensen & A Bennington	<u>Oppose</u> The specific parts of the application that the submission relates to are: • Size and number of allotments. • Lots 1 and 43. The submission: • <i>Opposes the establishment of residential activity as proposed by the applicant in this publicly notified application for resource consent.</i> It is submitted that the original subdivision of land at Pisa Moorings, shown on Map 29 of the Central Otago District Plan has developed into a community within the context of the Council's concept of Central Otago as a "world of difference". There is quality housing and plenty of green space in a semi rural setting. The development at Perriam Cove continues the theme. The submitters were attracted to the area by the mountain vistas, proximity to the lake and the attractive nature of the adjacent vineyards, cherry orchards, and farms. The submitters are aware of the RRA (11) designation of Lot 4 DP 326731 as shown on Map 29 when they purchased the property and expected this land to be developed in the manner illustrated on signage in Ferry Lane. The submitters do not oppose the concept of subdivision for this lot but believe it deserves a more imaginative concept. The submitters note that the area of land covered by Lots 23 – 37 were placed on the market a year or so ago with little or no interest shown in purchasing. The submitters question the need for further subdivision when land is available for sale in Perriam Cove and in	The submitters promote: • A reduction in the number of lots. • An increase in the size of the lots. • No residential status to Lots 1 – 3 or Lot 43. • Reconsideration of the style of development in order to avoid a wall of elevated dwellings. Two other points are offered for consideration: 1) Should resource consent be sought for alternative land use for the adjacent rural land, the 4.79 ha and 7.04 ha currently planted in vines, a buffer zone should be maintained between State highway 6 and the 7.04 ha block. The 4.79 ha block should be retained as a vineyard planting or as a comparable green space. 2) If a proposal for land development contravenes the District Plan then why does the Council bother making plans? The existence of a District Plan should give the public certainty as to future land.



Pisa Village.

- ***Opposes the proposed breach of the Central Otago District Plan regarding the bulk and location of Lot 1, Lots 2 – 32 and Lots 34 – 37.***

The submitters object to the number and size of the lots. The submitters would prefer fewer and larger lots. The concept of quality not quantity should be the driving force if the special character of the area is to be retained. The submitters would prefer to see cluster development rather than ribbon development.

The submitters object to the location of the lots. It costs considerably more to build on a slope compared to flat land. Building on slopes leads to loss of privacy and to straight line development if the size of the lots is less than generous. Given the slope of the land the submitters think that dwellings built on the sloped sites are likely to be either two storied or have garaging set into the slope with living space above. The submitters are concerned that the fully developed subdivision will present as a row of apartment like buildings or tenement buildings dominating edge of the terrace and detracting the eye from being drawn to the mountains. The submitters are certain that some lateral thinking would come up with a creative solution with more attractive outcomes. Perhaps consideration could be given to cluster development on lots of a minimum of 1000m². A restriction on the height of buildings should also be considered.

The submitters object to the location of Lot 1. The submitters believe permitting this piece of land to be given residential status would destroy the entry to Pisa Moorings. The entrance sets the scene and reflects the special semi rural character of the original settlement.

The submitters are also concerned about future traffic flow in this area since the proposed road servicing the proposed subdivision and Pisa Village to the north exits onto Pisa Moorings Road almost opposite the entry to Perriam Cove. The point where Pisa Moorings Road exits onto the State highway 6 needs replanning. Traffic travelling south along the highway cannot see the exit until it begins to descend. Currently traffic exiting from Pisa Moorings Road is only required to give way. Part or all of Lot 1 might be required in order to facilitate traffic flow.

The submitters oppose the establishment of Lot 43 on the grounds that any developments on that site will create a worse traffic hazard through reduced visibility for traffic emerging from Ferry Lane onto Pisa Moorings Road. At present this block of land is planted in native shrubs and is part of a landscape feature that adds to the ambience of the Pisa Moorings suburb by helping to create a sense of spaciousness and a natural foreground for the mountain vistas. Granting residential status to Lot 43 will contribute to the destruction of the special character of Pisa Moorings.

	<i>Oppose the establishment of residential activity on Lots 1 – 3 which are subject to a hazard notation (flooding).</i> Mrs Delcie McKenzie of Quartz Lane recalls that during the period of heavy rain responsible for flooding in Queenstown and Wanaka Pisa Moorings become isolated as the volume of water flowing down the Five Mile Creek was too large for the culvert under Pisa Moorings Road to cope with. This blocked and the water backed up and eventually flowed over the road. The submitters state that since they are requesting fewer lots and larger lots than proposed they suggest that residential status should not be given to Lots 1 – 3.	
RA & HB Christian	<u>Oppose</u> The specific parts of the application that my submission relates to are: - 3.1, 3.2, 3.4, 3.7, 3.14, 4.0 <u>3.1 Lot Layout; 3.2 Roding and Access</u> The proposed new road (extension to Missy Crescent) will not improve traffic flows as indicated by the applicant. Instead, the creation of a second entry/exit point will complete a loop circuit of the entire subdivision that will become a significant focal point for boy-racer activity with its attendant noise and safety issues. Missy Crescent in particular would become a high-speed straight! The Cromwell Police acknowledge there have been numerous callouts in recent months for such activity in the Pisa Moorings area. The proposed road would only exacerbate the problem. although the installation of road bumps would mitigate to some extent the problem presented by boy-racers, these would be of more nuisance value to locals and are not justified in the present context to overcome what are critical flaws in the design of the proposed subdivision. With the proposed design, the positioning of the new intersection in close proximity to the Perriam Cove entrance will cause traffic congestion with a consequent negative impact on overall traffic flow. The surreptitious proposal to include traffic lights further illustrates the absence of forethought in the subdivision design, and creates an absurdity in what is meant to be a rural subdivision. In fact, the use of traffic lights would set a precedent for the entire Ward! Contrary to the applicant's contention that Ferry Lane is not a suitable link route from Pisa Moorings Road into the northern subdivisions, Ferry Lane is an example of good road design since its winding carriageway not only complements the character of the area, but lowers vehicle speed. Moreover, it is important to acknowledge that most of the through traffic is currently being generated by tradespeople and prospective	Refuse consent The applicant needs to redesign their concept and re-submit for public consultation.

property buyers, and not residents of these northern subdivisions.

Similarly, the applicant shows limited understanding of the concept of cul-de-sac versus grid road design. The latter is preferred in urban areas to reduce reliance on vehicle use to get to commercial areas, schools and related amenities: there are no shops, schools or related amenities on the Pisa Moorings area! In contrast, the cul-de-sac design has a number of benefits that are appropriate for the rural nature of this subdivision. Specifically, cul-de-sac road designs encourage interaction between neighbours, reduce crime, reduce vehicle speeds, and limit vehicle movements. Furthermore, with the inclusion of pedestrian access ways to enhance connectivity, people who live in cul-de-sacs are not dependent on their vehicles to get to the lakeside. The submitters are sure the developer would be pleased to learn that cul-de-sac designs remain highly sought after by landowners.

Given that the applicant already has access to Lot 44 via its current entrance off State highway 6, the submitters see no need to construct a new road off the proposed extension to Missy Crescent. This would unnecessarily create a 4-way intersection that would likely involve unsighted vehicle movements with attendant risks.

I consent is granted for the proposed subdivision, the submitters believe it should be conditions on a mandatory re-design of the roading/access and consequently the lot layout based on the following principles (see figure):

- Lot layout should be based on two cul-de-sac access roads, joined by a greenway/pedestrian/cycle access way as a link route between the two roads.
- The access road at the northern end would be a continuation of Missy Crescent and would extend no further to the south than the existing proposed Lot 25 (short cul-de-sac in recognition of the existing length of Missy Crescent).
- The proposed new entrance to Lot 44 should not be granted consent.
- Proposed Lots 22, 23 and 24 should be vested as Council reserve land and planted in trees/shrubs with suitable irrigation.
- In this design, consideration could be given to subdividing Lot 38, currently zoned rural, with the intention of creating 2 smaller rural lots separated by a continuous area of Council reserve land that is bounded on one side by the existing reserve land along Ferry Lane and on the other by the proposed Lots 22, 23 and 24.

- In addition, the applicant should be required to plant trees and provide suitable irrigation along the entire length of the new road and the extension to Missy Crescent, and make a financial contribution to Council in respect of similar tree plantings for the existing length of Missy Crescent in keeping with the beautification that has already occurred on Ferry Lane.

3.4 Water Supply

The applicant provides no warranty that connection to the existing water scheme of the adjoining Pisa Village subdivision will not cause interruptions in supply during or at any time after connection, or reduce water quality or pressure during or at any time after connection.

A condition of any consent should therefore be that the applicant provides suitable warranty in this regard.

3.7 Earthworks

A condition of any consent should be that the applicant undertakes appropriate dust suppression measures during construction of roading, including the regular spraying of water.

In addition, a consent notice should be registered on all titles to the extent that all section owners shall undertake dust suppression measures during construction works on their sections.

3.14 Reverse Sensitivity

Council should be made aware of a previous consent notice issued to Pisa Moorings Vineyards:

"Vineyard operations shall be subject to the following requirements:

- (a) No wind machines shall be used for frost fighting;*
- (b) No toxic insecticides or toxic fungicides are to be used;*
- (c) Glyphosphate weedicides only are to be used;*
- (d) No gas guns, shooting or electronic noise or other audible bird scaring devices are to be used."*

In the submitters view, the inclusion of a reverse sensitivity consent notice on the titles to Lots 1 – 32 and 34 – 43 would be redundant given that the earlier consent notice would appear to prohibit such activities. The submitters would strongly oppose any subsequent application for consent in respect of these activities on the grounds that owners are aware of reverse sensitivity.

4.0 Land Use Consent/5.0 District Plan Matters

A condition of consent should be that land use consent is limited to five years, as is standard.

Colour palette and visual amenity are important considerations, since under the Revised District Plan

	the Sugar Loaf would be classified at least as a significant landscape feature. The terrace on which the proposed subdivision is intended is in line with the Sugar Loaf when viewed both from nearby and distant locations. Therefore, a condition of consent should be that the applicant consults with a local architect's organization or similar on choice of colour palette, roofline and pitch, etc that would complement this feature. The new colour palette and design features would be included in a consent notice registered on the titles of all lots. Other standards that are important for preserving the local amenity value are a minimum dwelling size of 150 square metres, no detached garaging, and non-relocatable homes. Critically, the applicant makes no reference to the potential for further subdivision and particularly multiunit development. The Pisa Moorings area under the old Transitional District Plan and the current Amended Proposed District Plan was never intended for high density development of this nature. Therefore, a condition of consent should be that a consent notice is registered on all titles to the effect that no subdivision or multiunit development is allowed. Finally, given the dynamic nature of land use consents in the District of late and the high degree of social experimentation the Council has tacitly been endorsing with its record specifically in the Pisa Moorings area, it is important that Council acknowledges at this time there is significant potential for further residential development of Lots 38 and 44, currently zoned as rural resource areas. It is critical therefore that the Council considers the likely long-term impacts of the current land use consent against the design of potential future subdivisions and the overriding principle identified in the Draft Cromwell Community Plan of "the retention of green space and naturalised open space values to enhance and maintain community wellbeing within a carefully planned residential ... development." It is the submitters' view that the bulk of Lot 38 should be set aside in any future subdivision application as Council reserve land, specifically for use as a sports ground. <u>Other Matters</u> A condition of consent should be that consent notices are registered on all titles to the effect that section owners are required to maintain their vacant and developed sections such that they are free of brush and other weed vegetation, as well as junk and rubbish. Unkempt sections are a fire hazard as was demonstrated by a brush fire at 30 Missy Crescent on December 27 2007.	
M Fields & S Henderson	<u>Oppose</u> The submitters oppose the application as a whole. The submitters as owners of a property on Ferry Lane in Pisa Moorings have a vested interest in this	Refuse consent

development. It is not appropriate to place high density residential accommodation in the middle of a vineyard. The current access onto State highway 6 is becoming busier and with Perriam Cove development also planning to use the same access it will become a greater issue. Any proposal that increases the traffic further is of concern.

The applicants state that the previous development plan is no longer appropriate as there is no demand for the type of accommodation envisaged for the area (duplex apartments). This application should therefore be considered as a completely new application and does not comply with the zoning for the area.

If the development is to proceed, the issues discussed below relate to factors that the submitters feel should be considered.

1) The section sizes should be a minimum of 1000m². This is in keeping with the majority of the surrounding developments that have a 1000 m² minimum section size. This suits the area and prevents a feeling of crowding as well as maintaining a standard and value of housing. A 600 m² section size means that providing sufficient off street parking / garaging allowing for a reasonable house size would be difficult. Many households now have 2 or more cars (and a boat). This would mean more vehicles parked on the road increasing the hazards for children and other road users.

2) The access road which has been proposed as the main road to service the Pisa Village and Pisa North developments has the potential to be quite busy. Speeding is already a problem in the area and incorporation of speed bumps in the new road at the time it is built would be appropriate. Speed bumps on Ferry Lane at the same time would also help reduce the speeding problem.

3) Lack of provision of a public amenity area. The only development in the area that has provided any significant public area is Pisa Moorings with Dustin Park. It is of concern to see that Pisa North, Pisa Village and Perriam Cove have all been allowed to proceed with minimal or no public spaces. The residents of these other areas are already enjoying the use of Dustin Park and the boat ramp which is becoming very busy at times, without contributing to the upkeep. Proposed Lots 1,2,3 & 4 would make an ideal open space / public amenities area. It is a flood risk area anyway and leaving it as open land would solve this concern. It would help keep an "open feeling" on entering the area from SH6. Once Perriam Cove has been developed it would be a central area and could have a fenced off play ground area included if felt it was required.

4) Section 3.14 (a & b) Reverse Sensitivity. We understand that the original application did not have

	this section in place. The vineyard has managed to function without this provision previously. Inclusion of this section now implies a planned change in practice. The effect of helicopter noise, bird scaring (gas guns, shooting etc) will effect all of the Pisa developments, not just those properties in or adjacent to the vineyard. Current noise restrictions should remain in place as any increase in noise pollution will adversely affect all residents. It is the vineyard owners who are wanting to increase the number of residents who will be affected. 5) Section 3.1 (Lot layout) Lot 38 (4.79ha) The application states that this area will remain as vineyard. From it's position and being surrounded by housing, it would appear likely that there will be an application at some future date to subdivide this area for more residential sections. The excuse that it is cut off from the main vineyard or that neighbours are complaining about the noise etc. being used to justify a change of use. Looking to the future of the area, perhaps the applicants could be asked to agree that if at some future date, using it as a vineyard / orchard becomes uneconomic, that the land be made available to the CODC to become public reserve / open amenity space.	
L Grau & M Mohr	<u>Oppose</u> <u>3.1 Lot Layout</u> The submitters are pleased with the developers' comment "there is no intention to build a dwelling on Lots 38 and 44". The submitters strongly urge the Council to work with the developer to vest Lot 38 as Council reserve land if the vineyard is determined not to be financially viable. Lot 38 would be suitable as a sports ground and park since currently there is a significant shortage of decent Council reserve land in Pisa Moorings for community recreation. <u>3.2 Roading and Access</u> The submitters strongly object to the road layout and access due to traffic safety concerns arising from the new entry/exit point and the potential public nuisance from boy-racers using the new road as a street racing circuit. The new entry/exit is an accident waiting to happen due to its proximity to the Ferry Lane intersection, and the new entry into the Perriam Cove subdivision. Traffic lights are a ridiculous solution and would only highlight the poor road design of this subdivision plan. The submitters believe that the new road extension to Missy Crescent, which already connects at the northern end to Ferry Lane, creates a street racing circuit for boy racers. Over the last few months the submitters have noticed an increase in boy racers (Cromwell Police will confirm this) at the northern end of Pisa Moorings. If this road design proceeds, the boy racers will have an additional entry/exit point and the long straight road created by the extension to Missy Crescent would allow for high speed drag racing. In contrast, the winding	Refuse consent subject to conditions of consent promoted in submission



carriageway of Ferry Lane at the southern end does not have boy racer problems due to good road design. This is in direct conflict to what the developer has noted in the assessment of environmental effects.

The submitters have an alternative suggestion for the road design and layout and believe that people need to put into perspective that the increased traffic along Ferry Lane is temporary as it is associated with construction and service vehicles for building in Pisa Village and Pisa North. In relation to vehicle access for the proposed development the submitters believe that the entry should either be above the terrace or the proposed road should be replaced by two long cul-de-sacs joined by a greenway cycle and pedestrian access in front of Lots 23 and 24, which would no longer be available for development. The advantage is that pedestrians and cyclists have safer access to Perriam Cove, Dustin Park, and the lake via Lot 64 reserve land. This is important for a community, which now has a good proportion of families with children.

To conclude with road design and layout, the Council are urged to consider traffic, cyclist and pedestrian safety through the entire Pisa Moorings area, and to minimise any impact of boy racers. The submitters also believe that tree plantings should occur along the entire length of Missy Crescent to make it similar to the tree plantings that have already occurred on Ferry Lane.

3.14 Reverse Sensitivity

The submitters strongly disagree with the inclusion of reverse sensitivity clauses in the titles, a condition of consent should be the same as an earlier condition imposed on Pisa Moorings Vineyard:

- a) No wind machines shall be used for frost fighting
- b) No toxic insecticides or toxic fungicides are to be used.
- c) Glyphosphate weedicides only are to be used.
- d) No gas guns, shooting or electronic noise or other audible bird scaring devices are to be used.

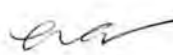
4.0 Landscape consent for dwellings in breach of Rural Resource Area rules

Firstly, an extension of the normal five-year limit on land use consents should not be given.

Secondly, since Lots 1 – 32 are on a terrace that intercepts the view to the Sugar Loaf hills, we believe that the rural colour palette should apply. The Sugar Loaf Hills are to be denoted as a significant landscape feature. If this cannot be done, the developer needs to put restrictive covenants into place to prevent visual pollution and uphold standards with a view to preserving the local amenity value.

The submitters would like to see included in such covenants the following:

- Earth toned colour palette for external cladding and roof



	• Minimum dwelling size of 150 m² • Non-relocatable homes • No subdivision or multiunit development • No significant alteration to the terrace	
L & S Hay	<u>Oppose</u> The specific parts of the application that the submission relates to are: 1. Size and number of lots. 2. Residential status on Lots 1 – 3 and 43. 3. Breach of rural colour code. 4. Limitation of method of frost protection and bird scaring. 5. Consent permit of 20 years. This submission • Opposes the establishment of residential activity as proposed by the applicant in this publicly notified application for resource consent The original subdivision of land at Pisa Moorings, shown on Map 29 of the Central Otago District Plan allowed for quality housing and plenty of green space in a semi rural environment. The submitters do not believe the Pisa Moorings Vineyard Ltd's application follows this theme. The submitters along with other Pisa Moorings residents were attracted to the area by the mountain and lake vistas, the adjacent vineyards, orchards and farms and the general spaciousness and quietness of the area. • Strongly oppose the use of Lots 1 – 3 for residential activity due to a history of flooding in this area, and Lot 43 due to traffic visibility. The submitters feel the loss of Lots 1 – 3 as a green area will destroy the attractive entrance to both Pisa Moorings and Perriam Cove. This entrance sets the scene for a peaceful , spacious semi rural development. The entrance off State Highway 6 will need replanning and Lot 1 in particular may be required in the future to facilitate traffic flow. If Lot 43 is developed as proposed it would create a major traffic hazard due to reduced visibility for traffic on the Ferry Lane–Pisa Moorings road intersection. This intersection is used by the school bus as a pick-up and drop-off area as well as a turning place and any obstructions in this area would endanger the safety of children. It also would obscure the attractive landscaping planted in native shrubs existing on the West side of the Ferry Lane bridge bordering Lot 43. • Strongly oppose the proposed size of the residential sections in this application. The submitters object to the number and size of the lots. The submitters would prefer to see lots of a minimum of 1000 m² as this will give owners the	The following decision is sought from the consent authority: • No residential status to Lots 1-3 and Lot 43 • An increase in the size of the lots and thus reducing the number of lots. • A height restriction. • No breach of the rural colour code • No limitation of the method of frost protection and bird scaring. • No consent for a period of twenty years.

	opportunity to build more environmentally pleasing homes with space for gardens and lawns. The submitters feel there should be a restriction on the height of buildings so the vista from surrounding properties is not interfered with. If homes are built on the high part of the proposed subdivision, which would be the case if lots were to remain small and there were no height restrictions in place, the appearance of these would spoil the overall view from a distance including the far side of Lake Dunstan. The semi rural appearance the area now has would be spoilt. • Oppose the breach of the rural colour code The submitters oppose the breach to the rural colour code as this will impact further on the environment in a negative way. • Oppose the variation to the existing limitation of frost protection and bird control on the vineyard. The submitters oppose the use of windmills, helicopters, heat pots and bird scaring devices that will interfere with the peaceful nature of the area. • Oppose the consent permit of twenty years The submitters feel for a development of this size a consent permit of ten years would be more acceptable. <u>General Concerns</u> The submitters note there is no specific green space allowed for. Should further consent be sought for Lots 33, 38 and 44 we feel provision would need to be made for a green area. If consent is given for sections to be as small as 629 m² (Lot 10) will this not be a precedent for present land owners in the neighbouring areas to subdivide their larger lots and further destroy the semi rural attractiveness of the area? If developers are allowed to contravene the District Plan, then how can present landowners protect their investment and chosen environment? The existence of a District Plan should provide certainty as to future land use. The submitters feel that the Central Otago District Council must be aware that whatever is accepted in this application will constitute a precedent for other applicants in the Rural Resource Area.	
H & S Kidd	<u>Support Conditionally</u> The specific parts of the application that the submission relates to are: 1. Roading and access 2. Reverse sensitivity issues	The submitters seek the following decision from the consent authority: 1. That some controls be put on the operation of the top terrace vineyard

	3. Rural zone being subdivided into residential lots 4. Residential lots proposed in flood-prone area 1. <u>3.2 Roading and Access</u> The submitters support the relocation of the proposed access road along the foot of the terrace, but suggest that it should be placed immediately adjacent to the foot of the terrace to minimize the encroachment into the Rural Zone by residential lots, and to minimise the effect on the vineyard. The submitters submit that the twin access proposed to Lot 44 should not be able to be used as a "through road" between Missy Crescent and State highway 6 as is the case at present. This is in effect providing a de facto access to State highway 6 from the wider Pisa Moorings area. 2. <u>3.14 Reverse sensitivity</u> The submitters submit that the reverse sensitivity notice suggested for inclusion contradicts the conditions of the original resource consent for the vineyard and adjacent attached dwellings issued on 26 November 1997. In Paragraph 36 of that consent the vineyard operation was made subject to the following requirements: (a) No wind machines shall be used for frost fighting (b) No toxic insecticides or toxic fungicides are to be used (c) Glyphosphosphate weedicides only are to be used. (d) No gas guns, shooting or electronic noise or other audible bird scaring devices are to be used These conditions must not be overridden by a new reverse sensitivity clause. The submitters suggest that the activities of the vineyard be restricted in their potential effects on adjacent residential areas by imposition of some controls on spraying, frost protection methods and bird scaring methods that apply to the whole vineyard. 3. <u>Subdivision in Rural Zone to provide residential size allotments</u> The submitters oppose in principle the expansion of residential lots into the Rural Zone, as it adversely affects the general amenity of the Pisa Moorings area. They also encroach on the vineyard area on the bottom terrace, which is already eroded by the new location of the road. In particular, the submitters submit that Lots 1 and 2 should not be permitted to be subdivided, Lot 1 being wholly in the Rural Zone and Lot 2 at least 50% in the Rural Zone. These two lots are also in a flood hazard area. 4. <u>Subdivision of areas subject to flood hazard</u> Lot 1, 2 and 3 are wholly or partially in an area subject	similar to those in place for the bottom terrace to avoid adverse effects on the residential sites being created. 2. That direct access through the top terrace vineyard from Missy Crescent to State highway 6 be prevented. 3. That subdivision of Lots 1, 2 and 3 for residential purposes not be allowed to proceed because of zoning and flooding issues. 4. The encroachment into the Rural Resource Area be kept to a minimum especially along the foot of the terrace.
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	to flood hazard. The flood hazard analysis does not give sufficient reason to allow these sites to be subdivided, and the mitigation options are unsatisfactory. <u>Flood Hazard Analysis Report</u> The catchment area of Five Mile Creek to State highway 6 is estimated at 8.47 km². In the report two methods of estimating design flood flows are used: the <i>Rational Method</i> and the <i>Regional Flood Estimation</i> method. The authors of the report say that the Regional Flood Estimation method is better for catchments over 10 km² while the Rational Method is better for catchments smaller than Five Mile Creek. The estimated 100 year flood for the catchment using the two methods is considerably different Rational method: 26 m³/s (Par 4.1) Regional Flood Estimation method: 7.96 m³/s (Par 4.2) Par 4.5 of the report adopts a 100 year design figure of 10.2 m³/s, being the Regional Flood Estimation figure of 7.96 m³/s plus allowances for standard error and climate change. The results of the Rational method of 26 m³/s has been rejected out of hand without explanation. This figure is twice that of the one used in the balance of the flood report and could significantly affect the findings. Why was it rejected? <u>Mitigation options are unsatisfactory</u> The only mitigation option offered is the provision of minimum floor levels. In the case of Lots 1 and 2 the ground level of the total site is below the proposed floor level, while for Lot 3 approximately half of the site is lower. The sites themselves are still at high risk of flooding even if the dwellings are raised. We suggest that Lots 1 and 2 and possibly Lot 3 be excluded from the establishment of residential activity because of flooding risk.	
DJ & AL Lyon	<u>Oppose</u> Specific parts of the application that the submission relates to are: 1. Non complying subdivision consent for 41 residential allotments with areas varying from 629 m² to 975 m² 2. Non-complying land use consent to building dwellings on three allotments in an area subject to a flood hazard. 3. To breach the rural colour palette. 4. The pond and mound within Lot 43 and adjacent to the Ferry Lane/Pisa Moorings Road will be	The submitters seek the following decision from the consent authority. 1. Oppose subdivision of allotments to less than 1000 m². 2. Not to grant allotments on Lots 1, 2, 3 and 43. 3. Not to allow the removal of the pond. 4. Not to grant approval for the use of windmills, helicopters and heat pots,

	removed. The original developer of these features made no provision for their ongoing ownership maintenance or water supply thereto they are currently in a derelict state. 5. The usual incidences of viticulture and horticulture including (but without limitation) noise, dust, harvesting and associated traffic movement, spraying, frost protection including windmills, helicopters, heat pots and sprinklers, and bird scaring including audible devices, gas guns and nets. 6. The RRA (11) zone is not deep enough for normal fee simple allotments that are large enough to enable modern stand along dwellings to be erected on them. 7. A land use consent permit of twenty years is considered to be reasonable in these circumstances. 8. It is not considered that reverse sensitivity will be an issue. 9. It is considered that the environmental impact of this application are no more than would have arisen from a fully complying subdivision of the site. 10. It is considered that the circumstances of this particular application are so unique so as not to constitute a precedent for other applicants in the Rural Resource Area. The submission is: 1. Non complying subdivision consent for 41 residential allotments with areas varying from 629 m² to 975 m² The submitters oppose the subdivision of allotments to less than 1000 m² The original developers of Wakefield Bay and Pisa Moorings envisaged houses placed on sections with sufficient area for open green spaces and trees. This area is Rural/Residential, less than 1000 m² does not fit in this area. When the original consent was granted, changing the area to Vineyard/Duplex development was a completely new concept and passed through the system because it was considered to be making better use of the land as the demand for residential lots had diminished. A recent marketing proposal for the same land was tested recently and as far as we are aware – no sales were made. Does this not speak for itself that the demand is not there? As the intention to build the duplex concept no longer exists the land should be returned to the 1000 m² minimum as originally planned.	and bird scaring including audible devices and gas guns. 5. To grant a consent permit of 5 years. <u>Not 20.</u>
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2. **To build three allotments in an area subject to a flood hazard.**

The submitters oppose the use of this area for habitation.

During the flood of November 1999 while removing sticks and debris from the Pisa Moorings Road culvert we observed the flow of water over the proposed Lot 1 and 4 and along the southern edge of Lot 2. If the building platform is raised as suggested, the excess of water flowing down the culvert or across the road will be diverted. Perhaps then to flow straight down Pisa Moorings Road. During this flood the culvert on Pisa Moorings Road was washed out, removing the bridge including about 8 metres of road. Maybe a very rare occurrence, but still a risk.

3. **To breach the rural colour palette**

The submitters oppose the breaching of the rural colour palette

Why does Council establish a rural colour code, and then allow people to breach it? The colour code is there for a reason to allow natural and neutral colours to be used, and create a pleasant environment for us to live. Not to have a dwelling with a non complying colour which stands out and does not blend with the surroundings. Plus the elevated sites would add to any unsightly breaches of the colour code.

4. **The pond and mound within Lot 43 and adjacent to the Ferry Lane/Pisa Moorings Road will be removed. The original developer of these features made no provision for their ongoing ownership maintenance or water supply thereto they are currently in a derelict state.**

The submitters oppose the removal of the pond.

These ponds have a long history and have at times been overgrown and untidy. However, this is no longer the case, the pond area has been planted out with tussocks and is maintained on both sides of the bridge by the Pisa Moorings Utilities Society Caretaker. All at the cost of the Society. In the past the submitters were advised the area on the west side of the bridge belonged to Pisa Moorings Vineyard and not to touch it, but no attempt was made by them to maintain this area. There is a 4.5 metre berm around our subdivision which includes most of the pond area. This area is part of our subdivision and should remain this way. The efforts of the Society have enhanced this area for the benefit of all residents and could hardly be described as being in a derelict state. The water supply to the ponds is still there and fully functional. We as residents are quite happy to restore this area to its original beauty.



The submitters also oppose the establishing of Lot 43 on this corner.

A dwelling on this site so close to the corner will totally obscure vision to traffic approaching Pisa Moorings Road from Ferry Lane, and also traffic coming in Pisa Moorings Road. A potential traffic hazard in the making.

5. **The usual incidences of viticulture and horticulture including (but without limitation) noise, dust, harvesting and associated traffic movement, spraying; frost protection including windmills, helicopters, heat pots and sprinklers, and bird scaring including audible devices, gas guns and nets.**

The submitters oppose the use of windmills, helicopters and heat pots, and bird scaring including audible devices including gas guns.

When the original resource consent for the vineyard and Duplex development was granted these factors were all banned due to it being a residential area – what has changed? This is still a residential area with many more dwellings and the same rules apply. They couldn't do it then, why do they think it's OK now? Refer to Robin Dicey's comments in the original consent, dated 9/7/1997. Frost fighting limited to sprinklers, and bird protection limited to nets.

6. **The RRA (11) zone is not deep enough for normal fee simple allotments that are large enough to enable modern – stand along dwellings to be erected on them.**

We oppose the building on the terrace within the RRA (11) zone.

We now believe that if this goes ahead this may create a precedent to other developers who have already tried to establish building platforms on the Sugar Loaf. Why do the developers not apply for resource consent to extend the RRA zone? Use a 'little more' of the flat below the terrace to gain the depth to allow these allotments on the flat?

7. **A land use consent permit of twenty years is considered to be reasonable in these circumstances.**

The submitters oppose the granting of the consent permit of twenty years.

For the past nine and a half years we have lived here the amount of dust and rubbish associated with site development and building new dwellings has slowly decreased. The dust is still bad. Ten years has passed since the original consent for this area. There have been various attempts to market the land without success. A firm plan needs to be adopted by the developers within an acceptable time frame, which we consider is 5



	years. Not 20 years, within which time their plan may change again resulting in more delays. The submitters cite Perriam Cove as an example of a well planned and smoothly progressing development. 8. It is not considered that reverse sensitivity will be an issue. The submitters feel that reverse sensitivity will be an issue. If the submitters understand this correctly, any person buying a section in this development would not be able to object to the use of windmills, helicopters, heat pots, and bird scaring, including audible devices and gas guns. These were not allowed in the original consent. Why are they being applied for now? The submitters oppose the use of these devices. 9. It is considered that the environmental impact of this application are no more than would have arisen from a fully complying subdivision of the site. The submitters feel there will be more impact because there are more lots than there would be in a fully complying subdivision. There would be more earthworks more dwellings, more people, and more impact. 10. It is considered that the circumstances of this particular application are so unique so as not to constitute a precedent for other applicants in the Rural Resource Area. The submitters do not agree. Here is a situation where developers are trying to use conventional viticulture methods in a residential area. Also trying to place allotments in a flood hazard area. These two points alone create a precedent.	
V & C MacAskill	<u>Oppose</u> The applicant, Pisa Moorings Vineyard Limited, seeks land use consent to • Establish residential activity • Breach the CODC's rural colour palette • Breach the CODC's requirements regarding bulk and location of Lot 1, Lots 2-32 & Lots 34-37 • Establish residential activity on Lots 1-3 which are subject to a hazard notation (flooding) The submission is: • Opposes the establishment of residential activity as proposed by the applicant When the submitters purchased their property, they were drawn to Pisa Moorings because of its location	The submitters seek the following decision from the consent authority • An increase in the size of the lots to a minimum of 1000 m² per lot. • Residential status not be given to Lots 1-4, 39, 43, 12032. • The Rural Colour code not be breached. • The reverse sensitivity notice not be applied. • No extension be granted

	near the lake, its proximity to town, its large sections, the nearby reserves, the trees along the roadsides, the quality of existing houses being built in the area and the semi-rural surroundings including mountain views and rural activities such as farms, vineyards and cherry orchards. The submitters do not in principle object to the concept of nearby land being subdivided for housing. They believe, however, that the concept of this subdivision does not fit in well with the existing developments due to the section sizes and locations. The submitters would prefer to see the proposed Lot 38 have a band of reserve land adjacent to existing sections/housing on Ferry Lane, and the remaining land be subdivided into lots. The submitters strongly oppose the proposed plan to have Lots 1 – 4 near the entrance way of the existing subdivisions and Lots 12 – 32 built on a high gradient slope which would not fit in with existing housing. • Opposes the proposed breach of the Central Otago District Plan regarding the bulk and location of Lot 1, Lots 2-32 and Lots 34-37 The submitters object to the size of the lots. The submitters would prefer to see sections no smaller than 1000 m². This is in keeping with many of the sections in the nearby subdivisions. The focus of development should be on quality, not quantity. The submitters would prefer to see cluster development and not ribbon development. The submitters object to the location of Lots 1-4, Lot 39 & 43, and Lots 12-32: • Lots 1-4 – will ruin the existing main entranceway into the area off State highway 6. This entranceway sets the theme and reflects the semi-rural character of the existing developments. Lots 1-3 are situated on flood prone land. Lot 2 is on a proposed road corner which could become a traffic hazard. The submitters would prefer to see this land turned into reserve land and possibly used to allow up to 4 lanes to enter and exit State highway 6 as traffic flow requires. • Lot 39 – is on a proposed road corner which could become a traffic hazard. The submitters would prefer to see this land turned into reserve land, or the proposed road moved to allow for better section sizes. • Lot 43 – is on an existing road corner which could become a worse traffic hazard than it already is. Vehicles turning from Ferry Lane will have reduced visibility to turn onto Pisa Moorings Road. There is a mound and pond on this lot which should not be removed as it is an important landscaping feature that is not in a derelict state but reflects the semi-rural character of the area and the submitters believe this land should also be turned into reserve land.	to the normal five year time limit for land use consent. The submitters seek the consent authority to also consider the following: • To allow Lot 38 to be developed instead of Lots 12-32. The RRA(11) Zone is not deep enough for normal fee simple allotments that are large enough to enable modern stand-alone dwellings to be erected on them. • To consider landscaping along the road, such as the trees and tussock plantings in Pisa Moorings and continuation of this theme in the area. • All sections with road frontages should have their dwellings built no closer than 5 metres from the road frontages. • The applicant has not set aside any reserve land. If they are intending for the vineyard to be classified as the green areas, in the event that they then decide to develop the vineyard at a later stage, there must be plenty of green space allocated to make up for the lack of green space/reserve land in this application and development. • The new apartments at Perriam Cove currently being built were not envisaged during the precious planning of this land. Now that they have been built, the submitters do not want another row of apartment or 2 storied type buildings to further detract from this beautiful environment. This could set a precedent that these types of buildings are going to become
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	• Lot 12-32 – Building on slopes leads to loss of privacy and to straight line development. Dwellings built on these sites are likely to be either two storied or to have garaging set into the slope with living space above. The submitters are concerned that this will present as a row of apartment-like buildings or wall of elevated buildings dominating the edge of the terrace detracting the eye being drawn to the mountains and could detract from the view of the subdivision from the Tarras-Cromwell Road from across Lake Dunstan. Consideration should be given to cluster developments on lots of a minimum of 1000 m². A height restriction for these buildings should also be considered if they are to be given consent. All sections with road frontages should have their dwellings built no closer than 5 metres from the road frontages. • Opposes the establishment of residential activity on Lots 1-3 which are subject to a hazard notation (flooding) In the past, following heavy rain the volume of water flowing down Five Mile Creek has been too large for the culvert under Pisa Moorings Road to cope with. This blocked and eventually flowed over the road and flooded the surrounding land. • Opposes the breach or the rural colour code The submitters believe because of the semi-rural environment of the area, the existing rural colour code should remain in place. • Opposes the use of the Council's reverse sensitivity consent notice in relation to Lots 1-32 and 34-43 Due to the proximity of existing housing in the area, it is not appropriate for this reverse sensitivity consent notice to apply. Existing residents should not be subjected to noises and environmental factors created by the existing vineyard and neither should any new residences. Windmills, helicopters, heat pots, and bird scaring (audible devices & gas guns) are not appropriate so close to residential land. • Opposes an extension to the normal five year time limit for land use consent. New developments create dust, noise, increased traffic flows and will bring large machinery to the area. It is not fair on existing residents to allow disruption to occur for 20 years. Perriam Cove has demonstrated how quickly a development can take to complete if it is managed properly, and there is no reason why the applicant may need up to 20 years to complete this type of development.	more common in semi-rural areas.
I & S Paterson	<u>Neither support nor oppose</u> The specific parts of the application that the submission relates to are:	3.1 – Lot Layout – Council to protect rural land. 3.2 – Roading and Access –

	3.1 Lot Layout 3.2 Roading Access 3.14 Reverse Sensitivity The submitters neither support nor oppose the application but wish clauses 3.1, 3.2 and 3.14 to be amended. <u>3.1 Lot Layout</u> No provision has been made for reserve land. The submitters would like a covenant placed on Lot 38 Rural Land so that it can only ever be rezoned to Public Reserve Land to protect the original concept of the rural nature of the Pisa Moorings area. <u>3.2 Roading and Access</u> The submitters support the proposed new road, but would the Council ensure that traffic congestion would not be created between the State highway 6 turn-off and the intersection of Wakefield Bay, Perriam Cove, Pisa Moorings, Pisa Village North and the new subdivision. Should another entranceway be considered for the whole area considering the long term population of the area. <u>3.14 Reverse Sensitivity</u> The submitters are opposed to audible bird scarers, gas guns and the use of wind machines and helicopters for frost fighting. These methods for frost fighting and bird scaring are unacceptable so close to residential housing.	Council to rule on entranceway. 3.14 – Reverse Sensitivity – Council to rule against certain frost fighting methods and bird scaring.
RS Perriam	<u>Oppose</u> The specific parts of this application that the submitter opposes and the associated reasoning are: 1. There is a total disregard to the submitter's current Water Right which he holds with its attached easements to store water in the dam noted on the plan and to convey irrigation water to his property along the easemented Water Race with notation "to be removed". 2. The submitter totally opposes any residential activity downstream of this Dam and Water Race as this will potentially put him in a liable situation should a blockage occur or banks burst causing damage to property. 3. The submitter is not affected as much from Lots 17-37 although he is left unsure of any visual effects the roofline heights from buildings on these lots will have. 4. Lot 13 appears to cross into his Dam easement	Refuse consent

	area. 5. Lots 39-43 should never be allowed to a lot size under 1000 m². This area adjoins the major access entrance into Pisa Mooring Village. Any building sites should be allowed to provide a greater feeling of open space along here. 6. Lots 1-4 should never be allowed for residential activity and instead put into one lot for vesting as Reserve Contribution to CODC. 7. The CODC should encourage and support this option wherever possible. Should this happen, then the submitter suggests a further \$5,000 from Reserve Funds be attached for the purpose of promptly proceeding with the design of an appropriate landscape plan. This area is the sole entrance point to all the new subdivisions and adjoins other non-residential land to create a large Open Green Belt buffer before entering the residential intensity. The submitter is happy to assist in any way in future with this concept. 8. With reference to the Flooding Mitigation Options for Lots 1-3, the submitter feels that it becomes unfair to draw reference to structures on his adjoining property. The submitter reserves the right to alter or remove any improvements in future without being attached to this consent. 9. The submitter has always maintained that Pisa Mooring Road should have been located north of the Five Mile Creek where upon there was no need to cross this flood channel and create a barrier inside it. The shortcomings of its current alignment were truly exposed during the November 1999 flood where the road was washed out resulting in damage to the submitter's property. The submitter can give further evidence on this matter at any hearing.	
B & A Perry	<u>Oppose</u> Specific parts that the submission relates to: 3.1 Lot Layout 3.2 Roading and Access 3.3 Sewerage 3.4 Water Supply 3.5 Storm Water 4.0 Land use Consent for Dwellings in Breach of Rural Resource Areas Rules. 5.2 Residential Allotment Assessment Submission <u>3.1 Lot Layout</u> 1. It is submitted that the size and number of allotments that are being proposed for this subdivision are inconsistent with the neighbouring subdivision. The original resource consent, that has	Refuse consent

	since lapsed, provided for duplex apartments of a common design theme. What is being proposed now are individual houses, on lot sizes that are significantly smaller than the lot sizes in the neighbouring subdivision and in respect of which a wider design palette is being sought, both in respect to bulk, location and colour. 2. The neighbouring subdivision has been created with sensitivity for the rural and lake environment within which it has been established. This has been achieved by landscaping and provision for reserves. The layout that is proposed in the resource consent application provides for no appreciation of the environment within which the subdivision is being created and absolutely no mitigation of the adverse effects of such a bulk location of residential dwellings. 3. The proposal that is now being submitted for resource consent is significantly different to that which has been provided for, and it gives rise to greater adverse effects than the earlier proposal. Despite this the developer has failed to acknowledge that there are any adverse effects from the subdivision and furthermore failed to take any steps to ensure that any development that occurs is consistent with the surrounding environment. 4. The size of the allotments mimic section sizes in a development that you would find in Christchurch city, not a development in the rural environs of Lake Dunstan. It is totally insensitive to and inconsistent with the environment and existing development. 5. For this reason we oppose the number, size and layout of those allotments. Without significant modification to the development we are opposed to entirely. 6. The submitters have particular concern in regard to the location of proposed Lot 43 and suggested removal of the pond and tussocked hillock. This is a significant landscape feature to the entrance of Ferry Lane and its removal and location of a house in its stead will have significant adverse effect. The developer in its proposal does not provide for any possible mitigation of the effects of the removal of this significant and attractive landscape feature. The siting of an allotment in the area of Lot 43 that requires the removal of the landscaping feature is opposed. 3.2 <u>Roading and Access</u> 7. As the resource consent application indicates the vineyard portion of the site has been completed. At present the occupiers of the vineyard operation use the reserve area that fronts onto Ferry Lane, Lot 64 as shown on the plan of subdivision, C1140_SCM_3A attached to the application.	
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8. This use of the reserve is not a permitted use, but nonetheless the current occupiers of the vineyard have put the reserve to this use.
9. The submitters are opposed to the subdivision proceeding as it is anticipated that despite the content of the resource consent application, the reserve contained on Lot 64 will continue to be used as an access way by the inhabitants of the proposed 41 residential allotments, as it is perceived to be a short cut to other areas of the neighbouring subdivision and to the lake.
10. The adverse effects of this use of the reserve as an accessway would be significant and it is submitted that they could not properly be remedied short of preventing the possibility of vehicle access to the reserve or not permitting the subdivision.
11. With regard to the proposed road way, there is no provision for any landscaping of the subdivision. The neighbouring subdivision has landscaping on the roadway.

3.3 – 3.5 Sewerage, Water Supply and Storm Water

12. It is submitted that the information that has been supplied in regard to the capacity of the current infrastructure and ability to properly manage the waste from the allotments is outdated and insufficient for a proper assessment to be made. In particular there has been significant development of the surrounding area and a proper assessment, with reference to that development, should be completed before it can be properly determined whether or not in fact the infrastructure can properly provide for what is proposed.
13. This is particularly important to the submitters as we will suffer the adverse effects and consequences of an inadequate system and water shortages.

4.0 Land use consent for residential dwellings in breach of Rural Resource Areas.

14. The proposed land use is opposed in its entirety as detailed under the "Lot Layout" submission above.

5.2 Development Assessment

15. It is submitted that the development has not properly assessed the effects of the proposed development. The developer instead of assessing the effects has continued to refer to the fact that the proposed duplex development is not going to proceed. This is a complete failure to analyse the differences between those two developments, the difference in the surrounding environment of the development site since the time of the duplex development proposal and the difference in the proposed subdivision development and the type of subdivision development that surrounds that development.



	16. These matters must be properly assessed and taken into account when being able to properly consider the effects of the development. The fact that the development is different from the duplex development is, with respect, irrelevant to measuring what the effects of the subdivision are in today's environment. 17. For this reason the development in its entirety is opposed as there has been an insufficient assessment of the effects of the development, there has been an inadequate consideration of the adverse effects of the development and there has been no consideration whatsoever of any possible mitigating steps that could be taken.	
Pisa Moorings Utilities Society	<u>Oppose</u> The specific parts of the application that our submission relates to are: 1. The proposed size of the allotments. 2. The location of some allotments. 3. The proposed breach of the rural colour code. 4. The lack of provision for reserve land and commercial zoned land for residential services. 5. The proposal to create new rural allotments with the inclusion of 'normal' viticultural and horticultural practices in a residential zoning. 6. The proposal for a 20 year land use consent 7. The comments by the applicant that ' ... Environmental impacts of this application are no more than would have arisen from a fully complying subdivision of the site and '... it is considered that the circumstances of this particular application are so unique so as not to constitute a precedent for other applicants in the Rural Resource Area This Submission 1. Opposes the size of the lots being less than 1000 m², especially but not specifically the 636 m² lots along Pisa Mooring Road. The RRA zoning is for more open space residential housing. This application if approved will result in intensive ('Nappy Avenue') housing along the entrance road into the greater Pisa Moorings residential area (in complete contrast to what's here now). Similarly the creation of small allotments along the terrace is of considerable concern. As Lots 13 to 32 are part of the terrace not on top, it is envisaged that small sections will necessitate houses on top of garaging. This has the potential to create a 'Coronation Street' on what is Pisa Moorings residents 'Sugar Loaf' vista. 2. Opposes the location of some lots namely Lots 1-3 on a water hazard and lots that 'clutter up'	The submitter seeks the following decisions from the consent authority: (a) Lot size no less than 1000 m² (b) Lot 43 be vested as a reserve and Lots 1-3 not be allowed. (c) The rural colour code be upheld given the profile and location of this development. (d) Allow provision for retail commercial/ entrance some mini town centre or focal point. (e) Exclusion of 'intrusive' horticultural/viticultural activities (noises) (f) A 10 year rural resource consent

	the Pisa Moorings entrance way and road corners. The society would like to see Lot 43 vested as a reserve to maintain the attractive landscaped theme on both sides of Ferry Lane (at intersection with Pisa Mooring Road). This will also enhance traffic safety via better visibility.	
	3. Opposes the proposal breach of the rural colour code on all the proposed allotments but in particular lots along Pisa Moorings Road and the terrace (Lots 13-32). The residents currently look up to the Pisa Range and understandably will not be happy looking at a 'multicoloured' Coronation Street. We note the Draft Cromwell Community Plan is strongly indicating protecting vistas and open spaces. This application is in conflict with these values.	
	4. Opposes the lack of provisions for reserves and retail zoned land. It is fair to say Pisa Moorings/Village/North will never be a model for urban development. This subdivision proposal is possibly the last opportunity to correct some major shortfalls namely: (a) Lack of reserve (b) Lack of residential retail services via an appropriately zoned area. The recent approval of Perriam Coves commercial lots are hardly adequate or well located to service what could be up to 1500 – 2000 people in this area. The increasing cost of petrol is going to inhibit regular trips to Cromwell. (c) Lack of an appealing entrance/town centre ('boutique' meeting place, café, shop etc). As mentioned earlier the Society would like to see Lot 43 vested as a reserve and retail commercial lots allowed for (the Society would welcome discussion).	
	5. Opposes the inclusion of normal viticultural/horticultural activities on the newly formed rural allotments. It is our understanding that restrictions currently exist on the Rural Zoned Viticultural land in Pisa Mooring (no wind machines, helicopters, bird guns etc). While outside the scope of this application the Society questions the continuation of a vineyard in the middle of a residential area in particular: (a) Basic economics (b) Reported rotting into the water table (poor grapes?) (c) Difficulty in carrying out normal viticultural practices (frost protection, bird/rabbit control, spraying). What would be wrong with inclusion of the lower vineyard in this development to facilitate:	

	(a) Larger sections (and larger number) (b) A modest retail commercial area (c) Flat sections on both sides of the proposed new road (terrace sections will be expensive to develop) (d) Reserve strips particularly to the rear of existing housing along Ferry Lane. Once again the Society would welcome discussion. 6. Opposes a 20 year land use consent. This could stall the development particularly given the growth projections for the region. A drawn out development is not considered appropriate. 7. The Society disagrees that the impact of a fully complying subdivision would be the same as this proposal. How can this be given fully complying will mean larger sections, rural colour code compliance etc? The Society sees nothing unique about this proposal to make exceptions to the District Plan. (The integrity of the District Plan should be upheld sadly it seems it is an exception to comply!)	
Transit New Zealand	<u>Support Conditionally</u> The specific parts of the application that this submission relates to are • Proposed access arrangements for proposed Lots 1 and 2; • Illegal accesses to the vineyard on proposed Lot 44; and • Potential reverse sensitivity effects Transit new Zealand's submission is: <u>Access</u> Lots 1 and 2 appear to have direct access to Pisa Moorings Road. Given the proximity of Lots 1 and 2 to the Perriam Cove entrance, Transit new Zealand would prefer that access is obtained to these lots from the proposed new road instead of directly off Pisa Moorings Road. The addition of more access points to and from Pisa Moorings Road could potentially add to delays for traffic entering Pisa Moorings, which may in turn affect the functionality of the State highway intersection. Transit New Zealand considers that there is scope to reconfigure the layout of Lots 1-4 to ensure access is obtained to all lots via the new access road and that this would not be an onerous alteration to the proposal. The application states that the existing access to the vineyard on Lot 44 from State highway 6 will be retained. However, there should be no existing access to the vineyard from State highway 6. Transit New Zealand has previously required the only authorised	Transit New Zealand seeks the following decision from the consent authority That if the consent authority is of a mind to grant consent, the following conditions are attached: 1. Access to proposed Lots 1 and 2 shall be via the proposed access road (Lot 33) and not directly from Pisa Moorings Road. 2. the following consent notice shall be registered on the new certificate of title for Lot 44. <i>"All access shall be obtained from the proposed access (Lot 33). Direct access from SH6 is prohibited."</i> 3. The three illegal accesses to Lot 44 shall be permanently and physically closed. Where required, reinstating the fence line and water channel, and removing the

	crossing place (CP 356) be closed as part of a previous subdivision. No other crossing places have been authorised for the State highway frontage. Transit New Zealand notes that there are now three illegal crossing places to proposed Lot 44. All three should be permanently and physically closed. Transit New Zealand further considers that a consent notice should be registered on the certificate of title of Lot 44 requiring all access to this allotment to be obtained off the new access road, and access from State highway 6 to be prohibited. <u>Reverse Sensitivity</u> Transit New Zealand notes that Lot 44 and Lots 1-11 are located within 80 metres of the State highway carriageway edge line. Transit New Zealand is concerned about the potential for reverse sensitivity effects arising where noise sensitive activities such as residential dwellings are either adjacent to, or in close proximity to, State highways. Transit New Zealand therefore requests that consent notices be registered on the certificates of title of Lot 44 and Lots 1-11 requiring any new residential buildings constructed on these lots to be designed and constructed to meet the internal sounds levels set out in the Australian New Zealand Standard AS/NZ2107:2000. The reasons for this submission are: The objective of Transit New Zealand is to operate the State highway system in a way that contributes to an integrated, safe and sustainable land transport system. Transit New Zealand's role under the Land Transport Management Act 2003 is to not only build roads in response to traffic pressures, but to actively manage and protect the sustainability of the present State highway resource as a key component of the land transport system.	culvert shall achieve this. 4. The following consent notice shall be registered on the new certificates of title for Lots 1-11 and Lot 44 to address noise arising from the normal operation of the State highway: <i>"New residential buildings located within 80 m of the State highway edge line shall be designed and constructed so to meet noise performance standards for noise from traffic on State Highway 6 that will not exceed 35dBA $L_{eq}(24hr)$ in bedrooms, and 40dBA $L_{eq}(24hr)$ for other habitable rooms in accordance with the satisfactory sound levels recommended by Australian and New Zealand AS/NZ2107:2000 Acoustics – Recommended design sound levels and reverberation times for building interiors."</i> 5. Any application to carry out work on the State highway is to be completed and submitted to Transit New Zealand's network management consultant at least seven working days prior to work commencing on the State highway road reserve. 6. A Traffic Management Plan is to be submitted to Transit New Zealand's network management consultant at least seven working days prior to work commencing on the State highway road
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		reserve. 7. Prior to section 224(c) certification, the consent holder shall supply the consent authority with written confirmation from Transit New Zealand's network management consultant that the above works on the illegal crossing places have been completed to meet Transit New Zealand's requirements. 8. Prior to section 224(c) certification, the consent holder shall supply the consent authority with a Section 93 Transit New Zealand Act 1989 notice signed by the Minister of Transport confirming that the State highway is road for the purposes of this subdivision.
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Digital Title Plan - LT 409539

Survey Number	LT 409539
Surveyor Reference	C1140
Surveyor	Myles Eliot Garmonsway
Survey Firm	Paterson Pitts Partners Ltd (Cromwell)
Surveyor Declaration	I Myles Eliot Garmonsway, being a person entitled to practise as a licensed cadastral surveyor, certify that - (a) The surveys to which this dataset relates are accurate, and were undertaken by me or under my direction in accordance with the Cadastral Survey Act 2002 and the Surveyor-General's Rules for Cadastral Survey 2002/2; (b) This dataset is accurate, and has been created in accordance with that Act and those Rules. Declared on 16/09/2008.

Survey Details

Dataset Description	Lots 1, 34 to 37 Being a Subdivision of Lot 4 DP 326731		
Status	Submitted		
Land District	Otago	Survey Class	Class I Cadastral Survey
Submitted Date	16/09/2008	Survey Approval Date	
		Deposit Date	

Territorial Authorities

Central Otago District

Comprised In

CT 108495

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Lot 34 Deposited Plan 409539	Fee Simple Title	0.0732 Ha	434922
Lot 35 Deposited Plan 409539	Fee Simple Title	0.0673 Ha	434923
Lot 36 Deposited Plan 409539	Fee Simple Title	0.0668 Ha	434924
Lot 37 Deposited Plan 409539	Fee Simple Title	0.0654 Ha	434925
Lot 1 Deposited Plan 409539	Fee Simple Title	16.1203 Ha	434926
Area A Deposited Plan 409539	Easement		
Area B Deposited Plan 409539	Easement		
Area D Deposited Plan 409539	Easement		
Area C Deposited Plan 409539	Easement		
Area E Deposited Plan 409539	Easement		
Area F Deposited Plan 409539	Easement		
Area G Deposited Plan 409539	Easement		
Area b-c Deposited Plan 409539	Easement		
Area d-e Deposited Plan 409539	Easement		



Digital Title Plan - LT 409539

Created Parcels

Parcels	Parcel Intent	Area	CT Reference
Area f-g Deposited Plan 409539	Easement		
Total Area		<u>16.3930 Ha</u>	

Schedule 7 Memorandum

PLAN TITLE:

**LOTS 1, 34 – 37 BEING A SUBDIVISION
OF LOT 4 DP 326731**

LT 409539

C1140 Pisa Village

Paterson Pitts Partners Ltd.

Consultants in
Surveying, Land Planning & Development
Dunedin Alexandra Cromwell Wanaka Queenstown

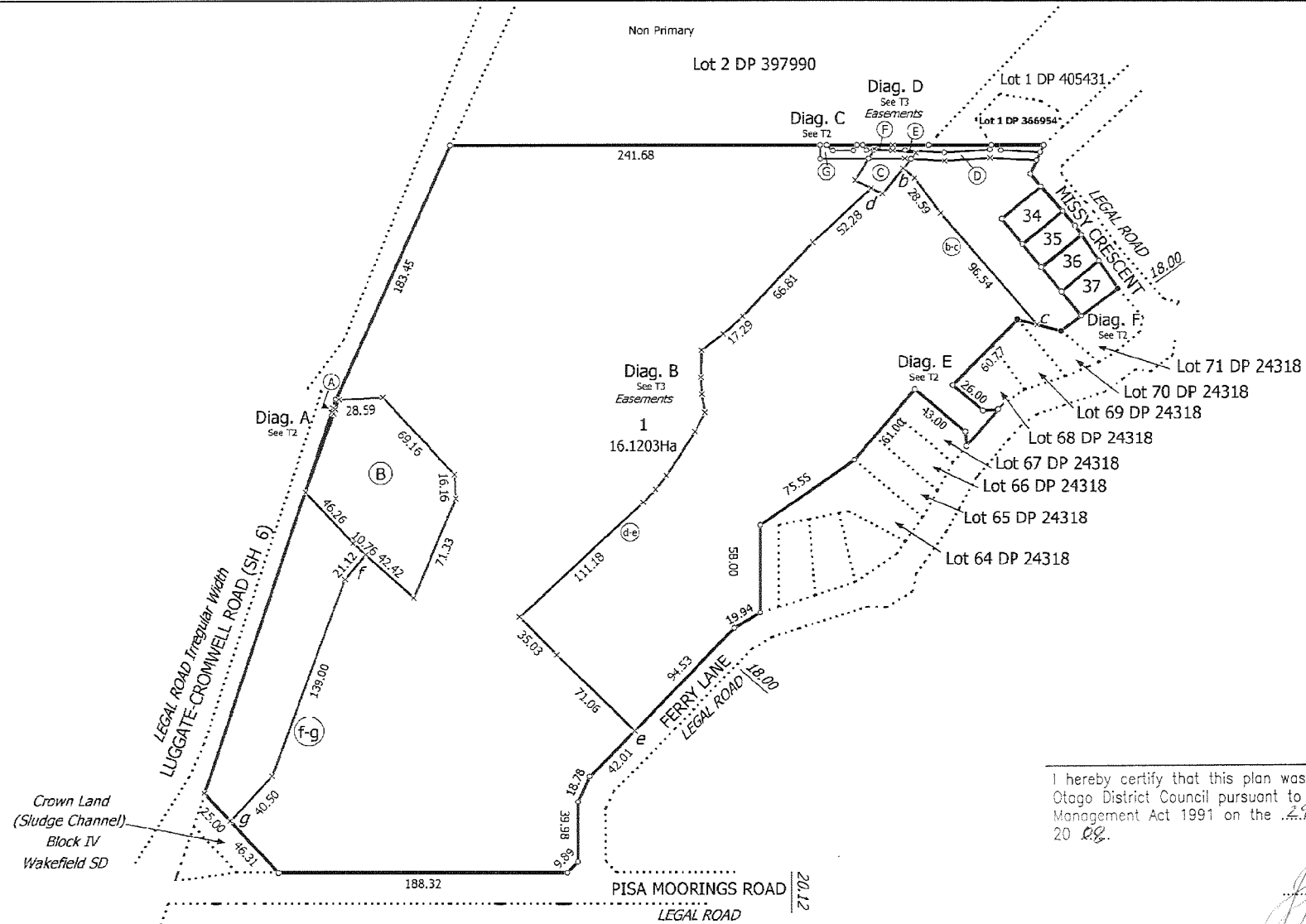
Sheet Purpose: *Easements*

Schedule of Existing Easements

Purpose	Shown	Servient Tenement	Creating Document
Right to store water	B	Lot 1	T.5301026.2
Right to convey water	f-g	Lot 1	T.757658.3
	A	Lot 1	T.5301026.2

Schedule of Existing Easements in Gross

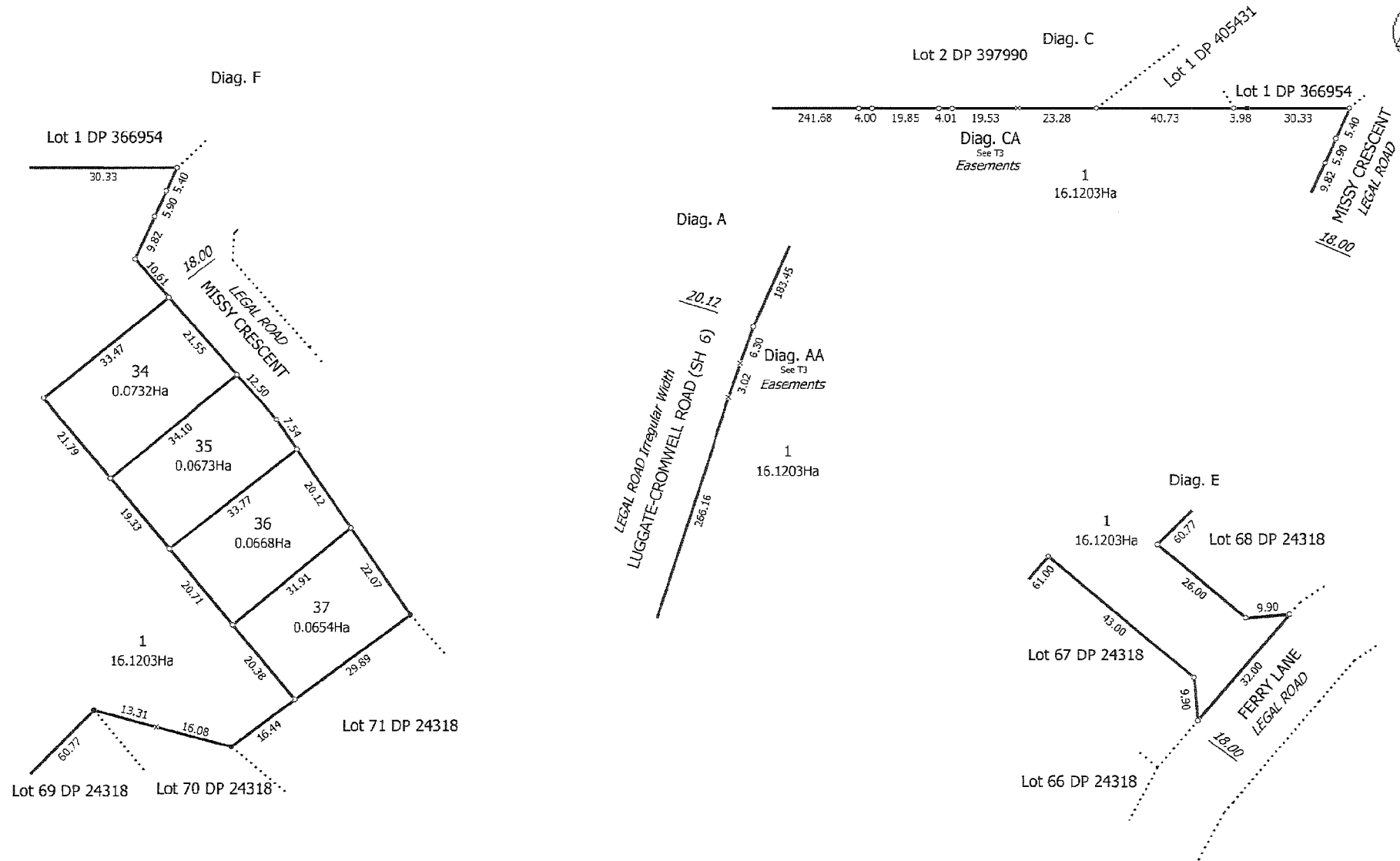
Purpose	Shown	Servient Tenement	Creating Document
Right to store water	C, E, F	Lot 1	T.871359.89
Right to convey water	b-c	Lot 1	T.871359.89
	d-e	Lot 1	T.908317
Right of Way	D, E, G	Lot 1	EI 7857730.7

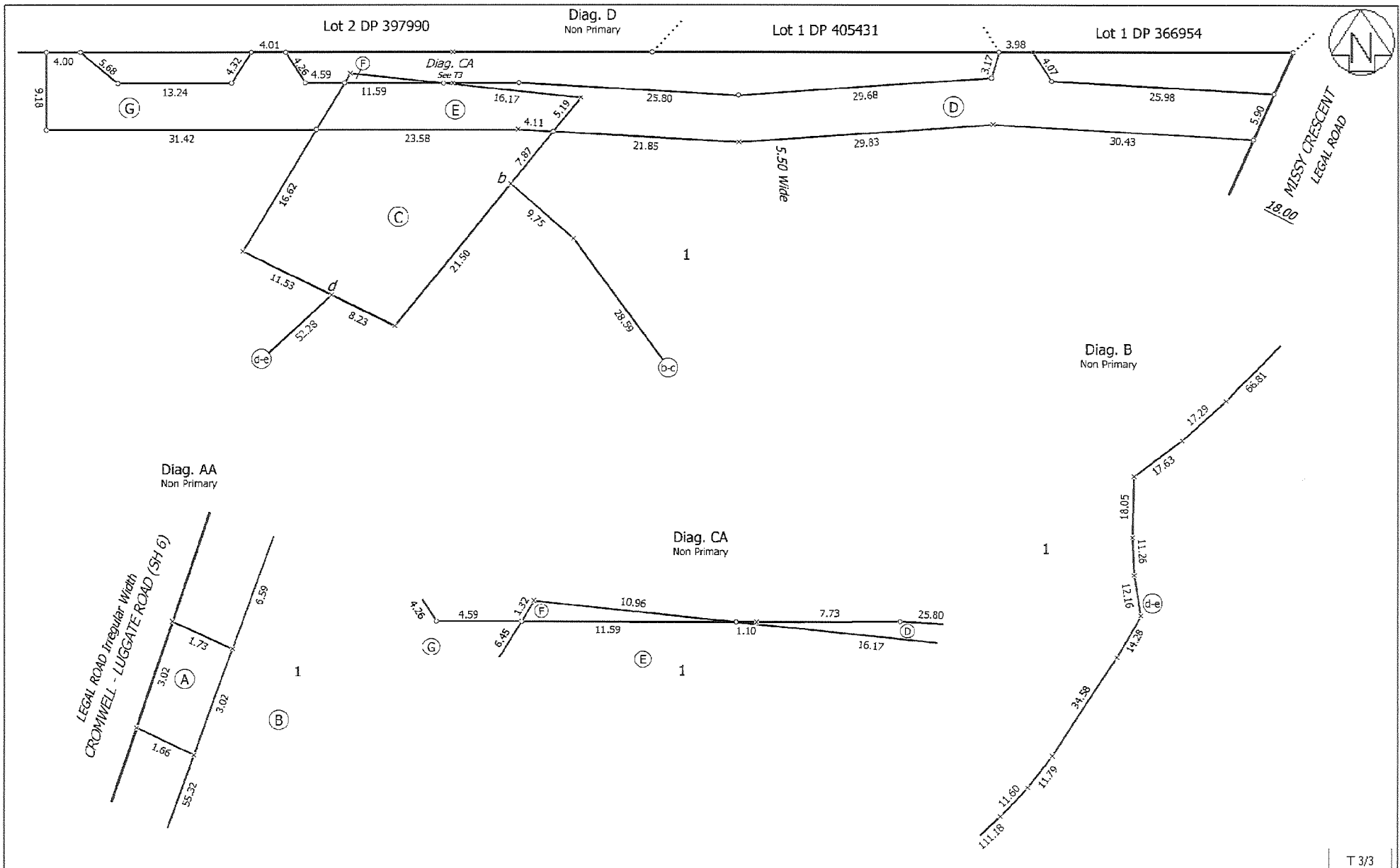


I hereby certify that this plan was approved by the Central Otago District Council pursuant to Sec. 223 of the Resource Management Act 1991 on the 20th day of September 2008.

[Signature]
Authorised Officer

Land District: Otago	Lots 1, 34 to 37 Being a Subdivision of Lot 4 DP 326731	Surveyor: Myles Eliot Garmonsway Firm: Paterson Pitts Partners Ltd (Cromwell)	Digital Title Plan LT 409539
Digitally Generated Plan Generated on: 16/09/2008 1:57pm Page 4 of 6			





Land District: Otago	Lots 1, 34 to 37 Being a Subdivision of Lot 4 DP 326731	Surveyor: Myles Elliot Garmonsway Firm: Paterson Pitts Partners Ltd (Cromwell)	Digital Title Plan LT 409539
Digitally Generated Plan Generated on: 16/09/2008 1:57pm Page 6 of 6			

Pisa Moorings Vineyard Limited
Flood Hazard Analysis & Mitigation Options



October 2007

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Pisa Moorings Vineyard Limited

Flood Hazard Analysis & Mitigation Options

1. Introduction

Pisa Moorings Vineyard Ltd are proposing to subdivide for residential purposes. A flood hazard assessment relating to Five Mile Creek has been sought. This report provides the relevant information and recommends mitigation options.

2. Site location

The site is at Pisa Moorings about 7.5km north of Cromwell adjacent to State Highway 6 (the Cromwell-Wanaka Road) and opposite Clarks Road that runs up the floor of Five Mile Creek valley. Map reference for the State Highway culvert on Five Mile Creek is NZMS 260: G41: 118714.

Figure 1 is a location plan and also shows the catchment area.

Legal description is Lot 4 DP 326731, Blk IV Wakefield Survey District. Total land area is 16.393 ha which is to be made into 44 allotments including a large rural lot. See PPP plan of subdivision as Figure 2. More detail of the southern part of the subdivision is shown as Figure 3.

3. Catchment Description

The catchment drains part of the lower slopes of the Pisa Range between Stratford Creek, a tributary of the Low Burn, and the Park Burn. The top elevation of the catchment is 1100m asl and it flows into Lake Dunstan that has a normal water level of RL 194.0m asl.

The catchment area to the State Highway is 847 hectares (8.47 km²).

The top end of the catchment is into schist but most of the catchment is old moraine terraces, till and outwash gravels and recent sedimentary material. Cover is improved grasses and viticulture in the lower reaches and tussock and native grasses further up the catchment.

Average annual rainfall is estimated to be about 400-450mm at the subdivision site and increasing with altitude to be about 700mm at the top of the Five Mile Creek catchment.

4. Design Flood Flows

Design flood flows will be estimated in two ways: one using Regional Flood Estimation techniques that are considered better for catchments over 10 km², and the other using high intensity rainfall information and the Rational Method that is generally considered better for catchments smaller than Five Mile Creek. Comparison with estimates prepared on nearby catchments will also be used as a check.

4.1 Rational Method

The time of concentration for the catchment is calculated as 38 minutes and 40 minutes has been used for the rainfall duration that ensures the whole catchment is contributing to the

runoff. Figure 4 is a graph of the rainfall depth duration information for the centre of the Five Mile Creek catchment derived from NIWA's High Intensity Rainfall Design System. The 100 year 40 minute rainfall is 29.5mm that equates to a rainfall intensity of 44 mm/hr. The average catchment slope is 13% and coefficient of runoff is estimated as $0.20 + 0.05 = 0.25$. The estimated 100 year flood by the rational Method is $26 \text{ m}^3/\text{s}$.

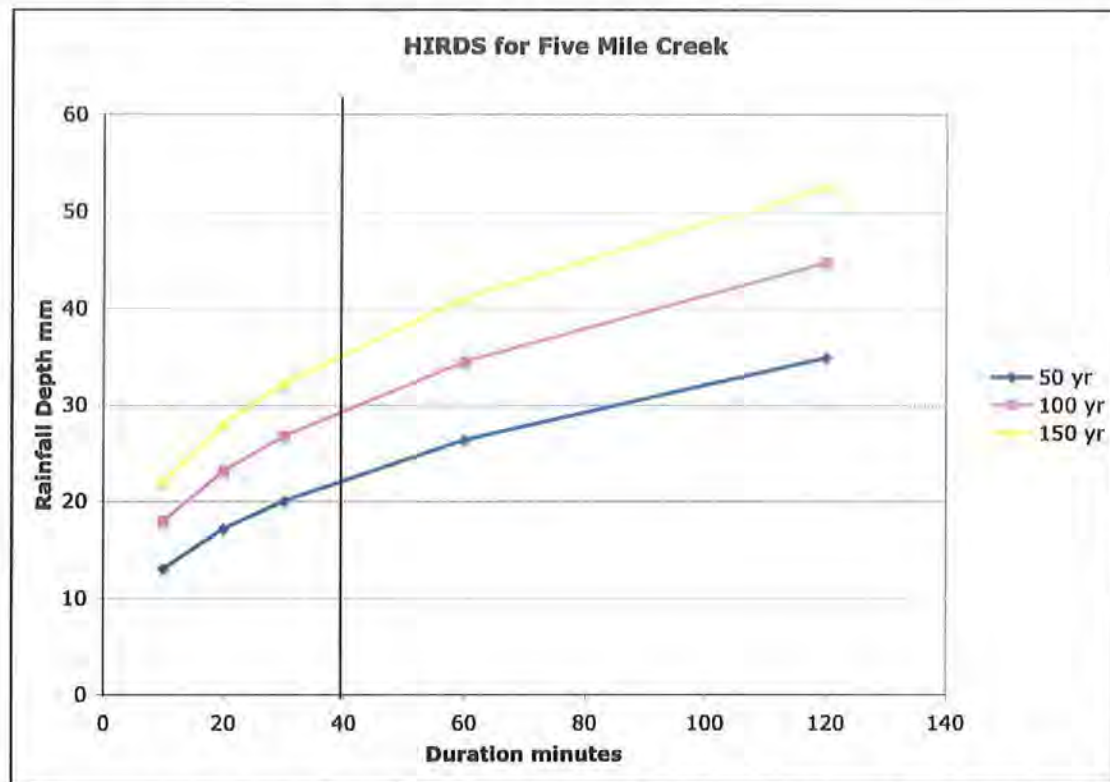


Figure 4: Graph of rainfall depth vs duration for Five Mile Creek catchment

4.2 Regional Flood Estimation (McKerchar and Pearson 1989)

The contour from their Figure 3.5 for $Q_m/A^{0.8}$ is estimated as 0.48. This gives a mean annual flood Q_m of $2.65 \text{ m}^3/\text{s}$. The contour from their Figure 4.9 for q_{100} is 3.0 and yields an estimated 100 year flood $Q_{100} = 7.96 \text{ m}^3/\text{s}$.

4.3 Comparison with other catchments

Catchment Name	Catchment Area km^2	Flood date	Flood Flow m^3/s	Specific Flood Discharge $\text{m}^3/\text{s}/\text{km}^2$
Manuherikia at Falls Dam	360	1995	360	1.0
Dunstan Creek at Gorge	157	1995	130	0.83
Lindis River at Lindis Peak	542	1995	273	0.50
Lower Manorburn Dam	398	1995	114	0.29
Fraser at Laing Rd	245	1995	75	0.31
Arrow River at Beetham	245	1995	130	0.53
Cardrona R at Albert Town	346	1999	124	0.36
Nevis at Wentworth	689	1999	954	1.38

Table 1: Flood flow comparisons

A design for the Lowburn gave the 1:100 AEP flood as about $34 \text{ m}^3/\text{s} \pm 10 \text{ m}^3/\text{s}$ or a specific flood discharge $0.74 \text{ m}^3/\text{s}/\text{km}^2$ of for the 46 km^2 catchment.

A design for a culvert on the Parkburn with a 9.54 km^2 catchment gave a 100 year flood discharge of $9.1 \text{ m}^3/\text{s}$ and a specific discharge of $0.95 \text{ m}^3/\text{s}/\text{km}^2$.

Both the Lowburn and Parkburn catchments include land to the top of the Pisa Range in higher rainfall zone so the Five Mile Creek catchment derived from lower slopes would be expected to be a slightly lesser specific discharge than the bounding catchments.

4.4 Climate change

The Ministry for the Environment have provided guidelines for incorporating provisions for climate change for increases in rainfall expected with higher air temperatures enabling the air mass to hold more moisture. The indicative figures given are that for every degree Celsius rise in average air temperature there will be a 6% rise in high intensity rainfall.

Climate change over the next 100 years is expected to increase rainfall intensities and hence runoff. The Ministry for the Environment have provided some guidance on the approximate numbers to assist in checking the potential increase in rainfall. This information is included in the ORC's Hydrologic and Hydraulic Guidelines. Summer precipitation is estimated to increase by about 10% and the winter precipitation by about 25-30% for the Five Mile Creek area.

For this analysis it is proposed to take the upper bounds of the range of design flow for the 1% AEP event as the design flow as incorporating an allowance for climate change.

4.5 Adopted design flood

The following table summarises the results from methods and adopts the upper bound of the Regional Flood Estimation as the appropriate figure that incorporates an allowance for climate change. The 100 year design figure adopted is $10.2 \text{ m}^3/\text{s}$.

Design Flows Five Mile Creek at SH6				
ARI	Rational Method Flow m^3/s	Regional Flood Estimation Flow m^3/s	Regl Flood Std Error m^3/s	Adopted Design Flow including allowance for climate change m^3/s
Mean annual		2.65		
50	19.4	7.03	1.83	8.9
100	26	7.96	2.23	10.2
200		8.88	2.58	11.5

Table 2: Adopted design flow

5. Capacity of Existing Culverts

The existing State Highway culverting is twin 600mm diameter concrete culvert with the inverts at about RL 202.5 or 1.3m below road level. Overflow levels will thus be about RL 203.8 to 204.0m. There is fine gravel in the base of these culverts. The maximum combined

capacity of the SH6 culverts is estimated to be about $1.5 \text{ m}^3/\text{s}$. It can therefore be expected that this will overtop every few years.



Figure 5: State Highway 6 culverts from downstream

Paterson Pitts Partners advise that the SH6 culvert was overtopped during three major flood events in the 1990s. They also state that the culvert under the Pisa Moorings Road blew out in 1998.

The Pisa Moorings Road has a 900mm diameter culvert with the invert at RL 199.7m or about 2.6m below the humped road level at that location. There is a hump over the culvert and lower road levels on both right and left banks of the culvert. In extreme events floodwaters can pass over the road and back into the channel. The maximum capacity of the 900mm culvert is estimated to be about $1.9 \text{ m}^3/\text{s}$. It can also be expected to overtop or have bypass flow from time to time

The channel between the culverts has approximately a 2m bottom width and 2:1 or flatter batters. At a water race crossing the 600mm diameter steel pipe has a clearance of 1.6m and a span of 7m. Downstream of this crossing the channel base width is about 5m with a small lower flow channel about 1m wide by 0.5m deep. This channel is quite competent to pass the design flood flows until affected by culvert restrictions.

The PPP survey shows that there is more than 65 m of overflow with a level at or below RL 202.0m. Based on a level of 202.0 the overflow capacity as a spill should the culvert capacity be exceeded is shown in Figure 7. The full design flow could pass with a depth over the road of 200mm (0.2m).



Figure 6: Entrance to Pisa Moorings Road 900mm diameter culvert. Note road higher over culvert than left and right

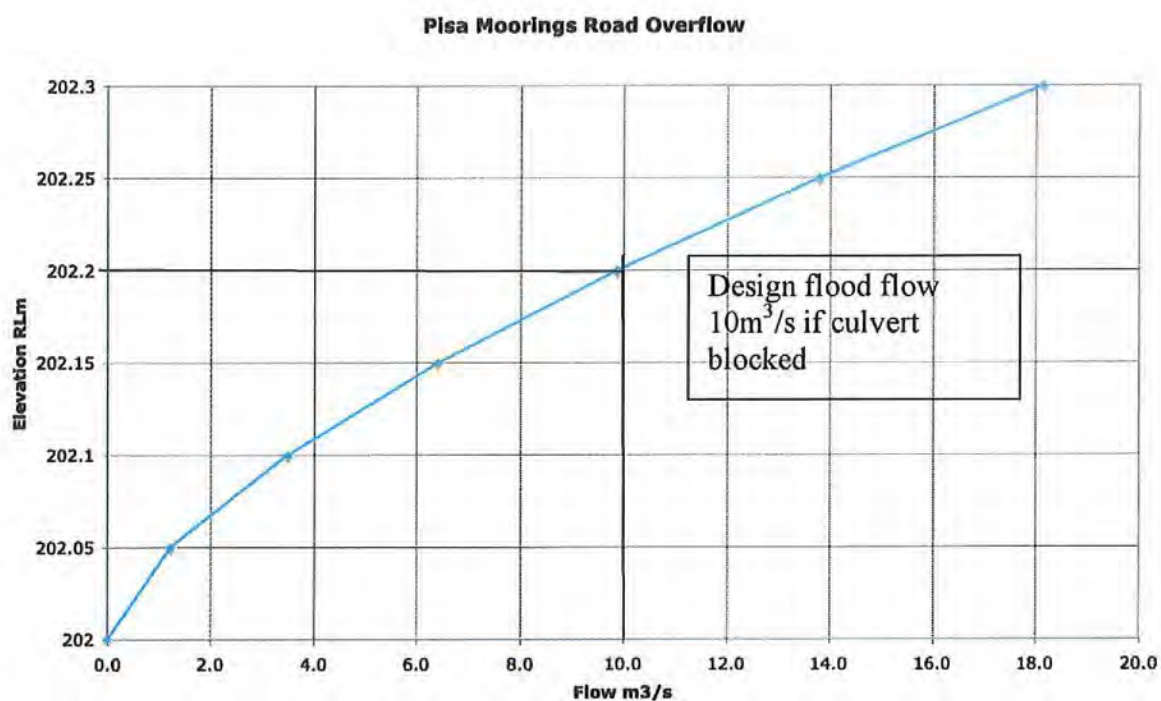


Figure 7: Approximate overflow capacity using low spots to right and left of culvert

6. Recommended Mitigation Options

6.1 Lake Dunstan Levels

The level of Lake Dunstan in the 1999 flood is known to have been about 195.5m. The future design flood level of Lake Dunstan in approximately 90 years time for an inflow of 3200 m³/s has been estimated by Opus as 196.8m. A draft report by MacMurray 2002 on the sedimentation and predicted flood levels gives an ultimate equilibrium flood water level in Lake Dunstan at the confluence of the two arms as 199.28m around 2180 (189 years from the filling of the lake). This level could translate to a similar level in the Clutha Arm of the lake at Lowburn Inlet. For this report a level of 197.0m is used. This is well below the ground levels of Lots 1 & 2. No mitigation is required for Lake Dunstan flood levels.

6.2 Effects of culverts

It is assumed that the existing water race embankments will remain in place between the State Highway 6 and Lot 1.

The existing culverts are small and the design flood flows are expected to overtop the roads. Overtopping of the State Highway will either have flows get back into the downstream channel or head south down the State Highway. The water race embankment some 25m downstream of the State Highway helps in the rechannelling of the overflow.

Based on the level information obtained from Paterson Pitts Partners survey it is estimated that a design flood could approach RL 202.2m (see Figure 7) just upstream of the Pisa Moorings Road.

6.3 Mitigation Options

Allowing for a freeboard of 0.5m it is recommended that the minimum floor level on Lots 2 and 3 be RL 202.7 m.

In addition to the Lots 2 & 3 recommended level Lot 1 should allow for a slight gradient up the channel. There are two ways to allow for this:

- (a) to construct a short embankment on the true left bank of the stream within Lot 1 with a crest level of RL 203.3m, commencing at the water race and extending 23m in a south easterly direction; combined with the minimum floor level of RL 202.7m, OR
- (b) a minimum floor level on Lot 1 of RL 203.2m

An embankment should have a nominal top width of 1m and batters no steeper than 2:1. Flatter batters for landscaping purposes are acceptable.

7. Conclusion

There is a potential risk of flooding from Five Mile Creek to Lots 1 and 2 on the proposed Pisa Moorings Vineyard Limited subdivision. This risk arises from undersized culverts on both the State Highway and the Pisa Moorings Road. In a significant flood event these culverts will have insufficient capacity and floodwaters will overtop the roads. The State Highway flows will either get back into the channel or head south down the State Highway and away from the subdivision. This is aided by the water race embankment that crosses below the State Highway.

Practical mitigation options have been recommended for Lots 1, 2 and 3.

David Hamilton & Associates Ltd
Consulting Engineers
3 McMillan St
Maori Hill
Dunedin 9010
New Zealand

Phone: 64 3 466 7225
Fax: 64 3 466 7227
Mobile: 021 338 555
Email: david@davidhamilton.co.nz

Attachments

Figure 1: Location and catchment map

Figure 2: Subdivision plan

Figure 3: Details at southern end of subdivision

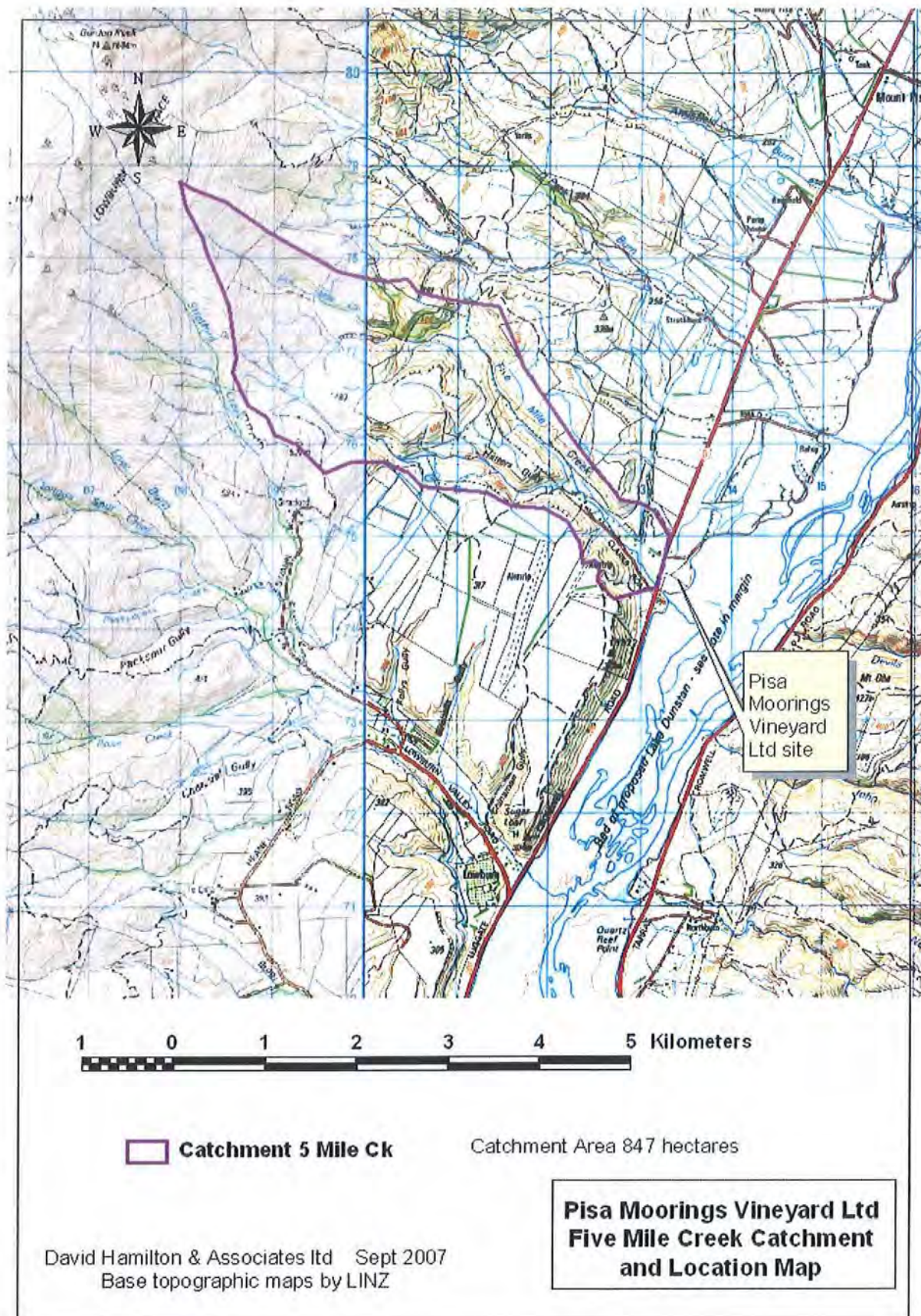


Figure 1

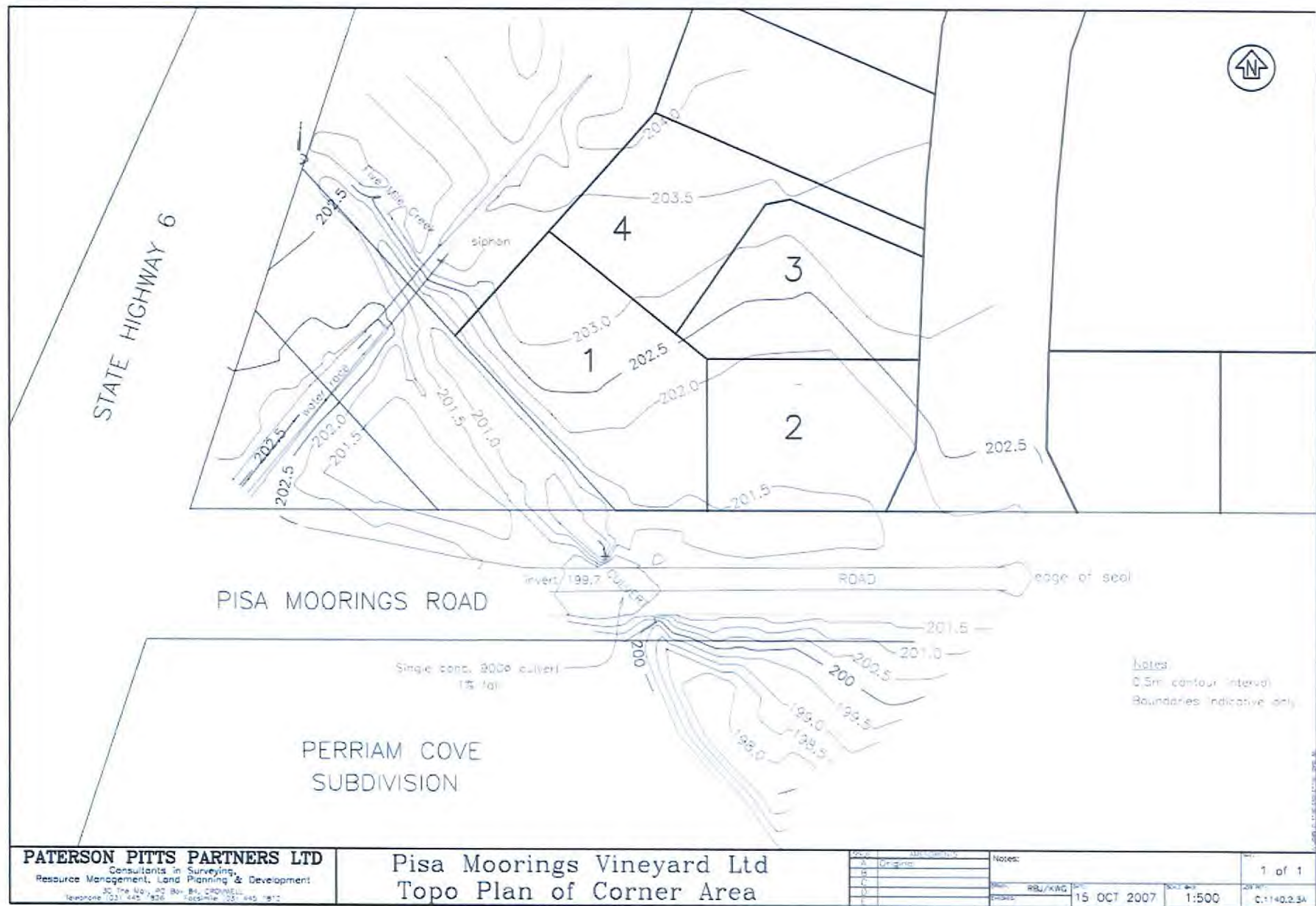


Figure 3

**Certificate issued pursuant to the Resource Management Act
1991**

2842184800

RC070423: LOTS 1, 34 TO 37 DP 409539 BEING A SUBDIVISION OF LOT 4
DP 326731

In the matter of Lots 1, 34 to 37 DP 409539 being a subdivision of Lot 4 DP
326731, and pursuant to section 224(c) of the Resource Management Act
1991, I hereby certify that some of the conditions of subdivision consent have
been complied with and a consent notice prepared for the remainder.

Dated at Alexandra this 1st day of March 2010



LOUISE van der VOORT
MANAGER, PLANNING AND ENVIRONMENT
(pursuant to delegated authority)

Form 7 CODE COMPLIANCE CERTIFICATE Section 95, Building Act 2004

William Fraser Building
1 Dunorling Street, Alexandra 9320
PO Box 122, Alexandra 9340
New Zealand

TEL +64 3 440 0056
FAX +64 3 448 9196
EML info@codc.govt.nz
WEB www.codc.govt.nz

THE BUILDING

Street address of building:	63 Stratford Drive, Pisa Moorings
Legal description of land where building is located:	LOT 24 DP 520912
Valuation number:	2842184832
Building name:	
Location of building within site/block number:	
Level/Unit number:	
Current, lawfully established, use: (include number of occupants per level and per use if more than one)	Housing - detached
Year first constructed:	2024

OWNER

Name of owner:	Vicky A & James M Coulter
Contact person:	
Mailing address:	63 Stratford Drive RD 3 Cromwell 9383
Street address/registered office:	
Phone number:	
Mobile:	0274794840
Email address:	vicky.c@arizto.co.nz
Website:	
First point of contact for communications with the building consent authority:	Full Name: Stable Homes Ltd Mailing Address: 35A Blyth Street, Cromwell 9310 Phones: 027 359 0681 Email: design@stablehomes.co.nz

BUILDING WORK

Building consent number:	BC 240476
Issued by:	Central Otago District Council

CODE COMPLIANCE

The building consent authority named below is satisfied, on reasonable grounds, that:
a) The building work complies with the building consent.

Signature:	
Position:	Regulatory Support - Building
On behalf of:	Central Otago District Council

Date:

31 March 2025

Form 7
CODE COMPLIANCE CERTIFICATE
Section 95 Building Act 2004

The Building

Street address of building: 2532 River Road NGARUAWAHIA
Legal description of land where building is located: LOT 3 DP 436811
Valuation number: 04421/016.05
Property number: 2014634
Building name: N/A
Location of building within site/block number: N/A
Level/unit number: N/A
Current, lawfully established, use: Detached Dwellings
Number of occupants per level and per use if more than 1: N/A
Year first constructed: 2024

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The Owner

Name of owner: G K Gibson, P C Gibson
Mailing address: 280 Lees Road, RD 1, Whitianga 3591

Street address/registered office: N/A

Phone numbers:

Landline: 07-8498929 Mobile: 021-760280
Daytime: 07-08299961 After hours: N/A
Facsimile number: N/A Email address: richelle@fraemohswaikato.co.nz
Website: N/A

First point of contact for communications with the building consent authority

Name: Fraemohs Homes Limited
Mailing address: 1200 Main North Road, Kainga, Christchurch 8083

Phone numbers:

Landline: N/A Mobile: 021-519460
Facsimile number: N/A Email address: jenny.foley@fraemohs.co.nz

Building Work:

Project: Transportable dwelling
Building consent number: BLD0202/23
Issued by: Waikato District Council

Code Compliance

The building consent authority named below is satisfied, on reasonable grounds, that —

- (a) the building work complies with the building consent

Signature:



Name: Nicholas Koning
Position: Building Inspector
On behalf of: Waikato District Council

Date: 24 July 2024

GASFITTING CERTIFICATE OF COMPLIANCE – GAS SAFETY CERTIFICATE



Client Name: Fraemors Waikato – Richelle Marsh

Reference / Job #: **ICP (if known):**

Address of work: Transportable Home – Original address: 2532 River Road, RD1, 3281

Suburb: Horsham Downs **Town / City:** Waikato

Description of gasfitting work: (If different gasfitting work was done by different people, state who did what gasfitting.)

- New Gas Piping from LPG Bottle Valve to Water Heater
- New Rheem 26 Infinity external
- Installed on Transportable House built by Fraemors Waikato

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Gas supply pressure 2.75 kPa **Risk classification** (tick one) ☐ Low-Risk ☒ General ☐ High-risk

Gas type (tick one) ☐ Natural gas ☒ LPG ☐ Biogas ☐ Other (specify)

The work has been done in accordance with a certified design: ☐ Yes ☐ No

☐ Copy of certified design attached (or provide reference)

The work relies on manufacturer's instructions: ☐ Yes ☐ No

☐ Copy of manufacturer's instructions attached (or provide reference)

The work has been done in accordance with means of compliance (specify):

☐ Yes – AS/NZS 5601.1 sections 3 to 6 ☒ Yes – AS/NZS 5601.2 sections 3 to 9 ☐ No

Were any other standards required for compliance?

☐ Yes (specify) ☒ No

Parts of the gas installation that are safe to connect to a gas supply?

☒ All ☐ Parts (specify)

Date(s) on which the work was done (if different from date of certifying gasfitting): November 2022

Name and registration number of anyone who carried out work under supervision: Greg Edge 22523

☒ I confirm that I am satisfied that the work described in this certificate of compliance has been done lawfully and safely, and that the information on this certificate is correct.

Certifier name: Baden Coleman **Registration number:** 18619

Certifier Signature:  **Date:** 13.02.2023

☒ I confirm that the work described in this Gas Safety Certificate, and the installation or part installation, is connected to a gas supply and is safe to use.

Name of person authorised to certify the connection: Baden Coleman

Registration number: 18619 **Date of completion or connection** (if different from date of issuing GSC):

Certifier Signature:  **Date:** 13.02.2023

This certificate confirms that the gasfitting work complies with the building code for the purposes of Section 19(1)(e) of the Building Act 2004.



ELECTRICAL CERTIFICATE OF COMPLIANCE & ELECTRICAL SAFETY CERTIFICATE



15081

REFERENCE/CERTIFICATE ID No.:

This form has been designed to be used by licensed electrical workers to certify compliance with Part 2 of AS/NZS 3000 or Part 2 of AS/NZS 3000 are able to be connected to the specified system of premises supply.

Location Details:

2532 River Road

Contact Details:
(Name and address)

Richelle Marsh 0211414435

Name of Electrical Worker:

Jesse Bradley

Registration/Practising licence number:

E265574

Phone and Email:

0800 4 LEADING -

Name and registration number of person(s) supervised:

Info@leadingedgeelectrical.co.nz
Chloe, Thomas

Certificate of Compliance

Type of work:

☐

Addition

☐

Alteration

☒

New work

The prescribed electrical work is:

☐

Low risk

☒

General

☐

High-risk (Specify):

Means of compliance:

☐

Part 1 of AS/NZS 3000

☒

Part 2 of AS/NZS 3000

Additional Standards or electrical code of practice were required:

☐

No

☒ Yes (specify):

3001

Date or range of dates that prescribed electrical work undertaken:

09/11/2022

Contains fittings that are safe to connect to a power supply?

☒

Yes

☐

No

Specify type of supply system:

MEN

The installation has an earthing system that is correctly rated (where applicable)

☒

Yes

☐

No

Parts of the installation to which this certificate relates that are safe to connect to a power supply?

☒ All ☐ Parts (specify)

The work relies on manufacturers instructions:

☐

Yes

☒

No

If yes - identify the instruction manual including name, date and version. Also attach a copy of manufacturer's instructions to this certificate. (Or provide reference to readily accessible electronic format, eg Internet link.)

Identify:

Link:

The work has been done in accordance with a certified design:

☐

Yes

☒

No

If yes - identify the certified design including name, date and version. Also attach a copy of the certified design to this certificate. (Or provide reference to readily accessible electronic format, eg Internet link.)

Identify:

Link:

The work relies on a Supplier Declaration of Conformity (SDoC):

☐

Yes

☒

No

If yes - identify the SDoC including name, date and version OR EESS registration. Also attach a copy of the SDoC to this certificate. (Or provide reference to readily accessible electronic format, eg Internet link.)

Identify:

Link:

The installation has been satisfactorily tested in accordance with the Electricity (Safety) Regulations 2010

☐ No

☒ Yes

Description of Work:

Wired new relocatable structure according to plans, see photos on job 15081

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Test Results (provide values)

Polarity (Independent earth):	
Insulation resistance:	Ohms
Earth Continuity:	Ohms
Bonding:	Ohms
Fault Loop impedance	Ohms
Other (specify):	

By signing this document I certify that the completed prescribed electrical work to which this Certificate of Compliance applies has been done lawfully and safely, and the information in the certificate is correct.

Certifier's signature:

Date: 12/06/2023

Electrical Safety Certificate

By signing this document I certify that the installation, or part of the installation, to which this Electrical Safety Certificate applies is connected to a power supply and is safe to use.

Certifier's name:

Jesse

Registration/Practising licence number:

E265574

Certifier's signature:

Certificate Issue Date:

12/06/2023

Connection Date:

10/11/2022

CUSTOMER COPY - THIS IS AN IMPORTANT DOCUMENT AND SHOULD BE RETAINED FOR A MINIMUM OF 7 YEARS

2

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week 44

All Souls' Day

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6.30	P1	240	1.35	7500m	7500m	7500m	23mA
7.00	P2	240	1.41	"	"	"	23mA
7.30	L1	240	1.75	"	"	"	23mA
8.00							
8.30	Kitchen	240	0.61	"	"	"	19mA
9.00							
9.30	Water	240	0.88	"	"	"	19mA
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Geotechnical Report

63 Stratford Drive,
Pisa Moorings

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Report prepared for:
Annette Anderson

Report prepared by:
GeoSolve Ltd

Distribution:
Annette Anderson
Industri Architectural
GeoSolve Limited (File)

March 2019
GeoSolve Ref: 190081



GEOTECHNICAL



**WATER
RESOURCES**



PAVEMENTS



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1 Introduction

1.1 General

This report presents the results of a geotechnical investigation carried out by GeoSolve Ltd in order to determine subsoil conditions for a proposed dwelling at 63 Stratford Drive, Pisa Moorings. Geotechnical design parameters and foundation bearing parameters are provided to assist structural engineering foundation, retaining and earthworks design.



Photo 1. Looking north towards the proposed building platform, 63 Stratford Drive.

The investigation was carried out for Annette Anderson, in accordance with GeoSolve Ltd.'s proposal dated 14 February 2019, which outlines the scope of works and conditions of engagement.

1.2 Development

We understand the proposed development consists of a two-storey residential dwelling over split levels. Finalised earthworks plans have not been provided to GeoSolve at this time, however it is expected that cut and fill earthworks will be required to establish a level building platform onsite.

The outline of the proposed dwelling is shown on Appendix A, Figure 1.

2 Site Description

2.1 General

The subject property, legally described as LOT 24 DP 520912, is located at 63 Stratford Drive, Pisa Moorings, as shown in Figure 1 below.



Figure 1. Site location in relation to Pisa Moorings Subdivision indicated by blue arrow (Source: <https://maps.codc.govt.nz/intramaps80>).

The site is currently undeveloped with ground cover comprising grass (Photo 1).

The subject property is bounded by Stratford Drive to the southeast, 65 Stratford Drive to the northeast, 61 Stratford Drive to the southwest and Lot 99 DP 520912 to the northwest which is covered in vines (Appendix A, Figure 1). The neighbouring Lots on 61 and 65 Stratford Drive are currently undeveloped.

2.2 Topography and Surface Drainage

The proposed building platform is situated on a gently to moderately inclined (6-20°) southeast facing terrace riser above Stratford Drive. The site topography gradually climbs from the edge of Stratford Drive to the crest of the terrace riser on the north-western edge of the property.

No spring flows or groundwater seepages were observed on the ground surface within the boundaries of the property during site investigations. Slope runoff is expected to flow southeast from the upper part of the property towards Stratford Drive during periods of heavy rainfall.

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3 Geotechnical Investigations

An engineering geological site inspection has been undertaken with confirmatory subsurface investigations. The following geotechnical investigations were carried out onsite on the 26th February 2019:

- 6 test pits (TP1-6), extending to a maximum depth of 3.8 m below ground level (bgl) to produce geological logs of the subsoils, and;
- 12 Scala penetrometer tests (Sc1-12) adjacent to and within test pit excavations 1-6 to assess the relative density of the subsoils.

Investigation locations and logs are presented in Appendices A and B respectively.

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4 Subsurface Conditions

4.1 Geological Setting

The site is located in the Upper Clutha Valley within the Haast Schist belt, which is regionally extensive across the province of Otago. Eroded remnants of Manuhirikia Group sediments overlie schist bedrock and are exposed at the edges of the valley and on the high schist slopes. During the Pleistocene glacial advances, till and outwash gravels were deposited in the valley floor, and are topped by later alluvial fan deposits. Extensive landslides developed on the steep schist mountain slopes on either side of the valley. In post-glacial times the Clutha River entrenched into the valley floor. Higher river terraces above the valley floor are occupied by older outwash gravels from former glacial periods. Surficial deposits of post glacial windblown sand (loess) commonly blanket the ground surface in the Upper Clutha Valley.

The active Pisa Fault is located at the foot of the Pisa Range within 3.0 km northwest of the property. However, due to the estimated 10,000-20,000 years average return period for earthquakes on this fault, the seismic risk posed by this geological structure is considered low. The Alpine Fault, located approximately 120 km to the northwest, runs along the western foothills of the Southern Alps, and is likely to present a more significant seismic risk. There is a high probability that a major earthquake of Magnitude 8 or more will occur along the Alpine Fault within the next 50 years and such a rupture is likely to result in strong and prolonged ground shaking within the Upper Clutha Valley.

4.2 Stratigraphy

The subsurface soils observed during site investigations typically comprise:

- 0.1-0.6 m of **colluvium/topsoil** or 0.6 m of **uncontrolled fill**, overlying;
- 0.05 m of **buried topsoil**, overlying;
- 0.3-1.25 m of **loess**, overlying;
- 1.2-3.4 m+ of **outwash gravel** and **outwash sand**.

Colluvium/topsoil was observed at the surface of TP3 to TP6 to a maximum depth of 0.6 m bgl and comprises light brown, firm/loose, organic sandy SILT to silty SAND with some gravel and rootlets.

A wedge of **uncontrolled fill** was observed at the surface of TP1 and 2 to a maximum depth of 0.6 m bgl and comprises light brown, loose silty SAND with some gravel and organic content.

A 50 mm thick layer of isolated **buried topsoil** was observed beneath uncontrolled fill in TP1 and 2 and comprises brown, soft to firm organic sandy SILT with a trace of gravel and rootlets.

Loess was observed in all of the test pit excavations except TP4 to a maximum depth of 1.6 m bgl. The loess typically comprises light brown, loose to medium dense silty SAND with a trace of gravel.

Outwash gravel was observed at the base of all test pit excavations to a maximum depth of 3.8 m bgl. The Outwash Gravel comprises brownish grey, loose to medium dense, sandy GRAVEL with trace to minor cobbles. In TP2 and 3 thin lenses of outwash sand were observed overlying and within the outwash gravel and comprises loose gravelly SAND.



Full details of the observed subsurface stratigraphy can be found within the test pit logs contained in Appendix B.

4.3 Groundwater

The regional groundwater table was not intercepted during test pit investigations and is expected to lie at moderate depths below the building platform and future excavation levels. ORC borehole data west of the site indicates that the water table lies more than 10 m bgl, on the upper terrace surface. The water table beneath this site is expected to be coincident with the level of Lake Dunstan.

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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 sub-surface conditions may show some variation from those described and all design recommendations contained in this report are subject to confirmation by inspection during construction.

5.2 Geotechnical Parameters

Table 1 provides a summary of the recommended geotechnical design parameters for the soil and rock materials expected to be encountered during construction of the proposed dwelling.

Table 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
Colluvium/Topsoil (firm/loose organic sandy SILT to silty SAND with some gravel and rootlets)	0.1-0.6	16	To be removed from the building footprint and crest of cut slopes.			
Uncontrolled Fill (loose silty SAND with some gravel and organic content)	0.6	18				
Buried Topsoil (soft to firm organic sandy SILT with a trace of gravel and rootlets)	0.05	16				
Loess (loose-medium dense silty SAND with a trace of gravel)	0.3-1.25	18	0	33	5000	0.3
Outwash Gravel (loose-medium dense, sandy GRAVEL with trace to minor cobbles)	1.2-3.4+	18	0	34-35	10,000-20,000	0.3

5.3 Site Preparation

During the earthworks operations all topsoil, colluvium, uncontrolled fill, organic matter and other unsuitable materials should be removed from the construction areas in accordance with the recommendations of NZS 4431:1989.

Robust, shallow graded sediment control measures should be instigated during construction where rainwater and drainage run-off over exposed soils is anticipated. If slope gradients in



excess of 4% are proposed in soils then the construction and lining of drainage channels is recommended, e.g. with geotextile and suitable graded rock, or similarly effective armouring.

Exposure to the elements should be limited for all soils and covering the soils with polythene sheeting or site concrete will reduce degradation due to wind, rain and surface run-off.

Water should not be allowed to pond or collect near or under a foundation slab. 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 4431:1989 and certification provided to that effect.

Excavated outwash gravel soils can be reused as an engineered fill source onsite; however it is likely that the amount of engineered fill required for this project will not be covered by site won material alone. All cobbles over 100 mm in diameter will also need to be removed from the engineered fill source materials. For consistency it is recommended that a granular fill is imported from a local source or quarry for use as engineered fill.

Topsoil, loess and uncontrolled fill soils are not suitable for reuse as engineered fill and will need to be removed from all fill source materials. An earthfill specification can be provided by GeoSolve upon request.

The soils present at the site are prone to erosion, both by wind and water, and should be protected by hardfill capping or re-top soiled/mulched and re-vegetated as soon as the finished batters or subgrade levels are achieved.

5.4 Earthworks

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5.4.1 General

Finalised earthworks plans have not been provided to GeoSolve at this time, although it is expected that some cut, and fill will be required to create the stepped building platforms.

Recommendations for temporary and permanent slope batters are described in the following sections. Slopes that are required to be steeper than those described below should be structurally retained or subject to specific geotechnical design.

All slopes should be periodically monitored during construction for signs of instability and excessive erosion, and, where necessary, corrective measures should be implemented to the satisfaction of a Geotechnical Engineer or Engineering Geologist.

5.4.2 Cut Slopes in Soil and Rock Materials

Table 2 below summarises the recommended batter angles for temporary and permanent soil slopes expected to be encountered during construction.

Table 2 - Recommended Maximum Batter Angles for Cut Slopes in Soil Less than 3.0 m in Height.

Material Type	Recommended Maximum Batter Angles for Temporary Cut Slopes Formed in Site Soils (horizontal to vertical)		Recommended Maximum Batter Angles for Permanent Cut Slopes Formed in dry Soil (horizontal to vertical)
	Dry Ground	Wet Ground	



Topsoil, Loess and Uncontrolled Fill	2.0H: 1.0V	3.0H: 1.0V	3.0H: 1.0V
Outwash Gravel	1.0H: 1.0V	1.5H: 1.0V	2.0H: 1.0V
Engineered Fill	NA		2.0H: 1.0V

If wet slopes are encountered they should be inspected on a case by case basis by a geotechnical engineer/engineering geologist to confirm the above recommendations are appropriate. However, this is unlikely to occur.

5.4.3 Engineered Fill Slopes

All fill should be placed and compacted in accordance with the recommendations of NZS4431: 1989 and Central Otago District Council Standards. All cut and fill earthworks should be inspected and tested as appropriate during construction and certified by a Chartered Professional Engineer.

All un-retained fill slopes which are less than 2.0 m high should be constructed with a batter slope angle of 2.0H: 1.0V (horizontal to vertical) or flatter and be benched into sloping ground.

Geogrid reinforced slopes could be considered if batters need to be steeper.

5.5 Slope Stability

No current slope instability was observed within the property boundary, or in the immediate vicinity.

5.6 Ground Retention

All retaining walls should be designed by a Chartered Professional Engineer using the geotechnical parameters recommended in Table 1 of this report. Due allowance should be made during the detailed design of all retaining walls for forces such as surcharge due to the sloping ground surface behind the retaining walls, 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.

Groundwater was not identified in test pit excavations but has the potential to develop following completion of the earthworks, in particular as a result of heavy or prolonged rainfall. To ensure potential groundwater seeps and flows are properly controlled behind the retaining walls, 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, and;



- Comprehensive waterproofing measures should be provided to the back face of all basement retaining walls to minimise groundwater seepage into the finished building.

5.7 Groundwater Issues

The regional groundwater table is expected to lie at moderate depths below the proposed foundation formation level and is not expected to be encountered during construction of the proposed dwelling.

5.8 Shallow Foundations

5.8.1 General

The topsoil/colluvium, uncontrolled fill and buried topsoil will not provide adequate support for the proposed building foundations and should be removed from the building footprint. It is recommended that all building foundations are constructed to bear upon outwash gravel, loess or granular engineered fill overlying the same.

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 4431:1989 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.

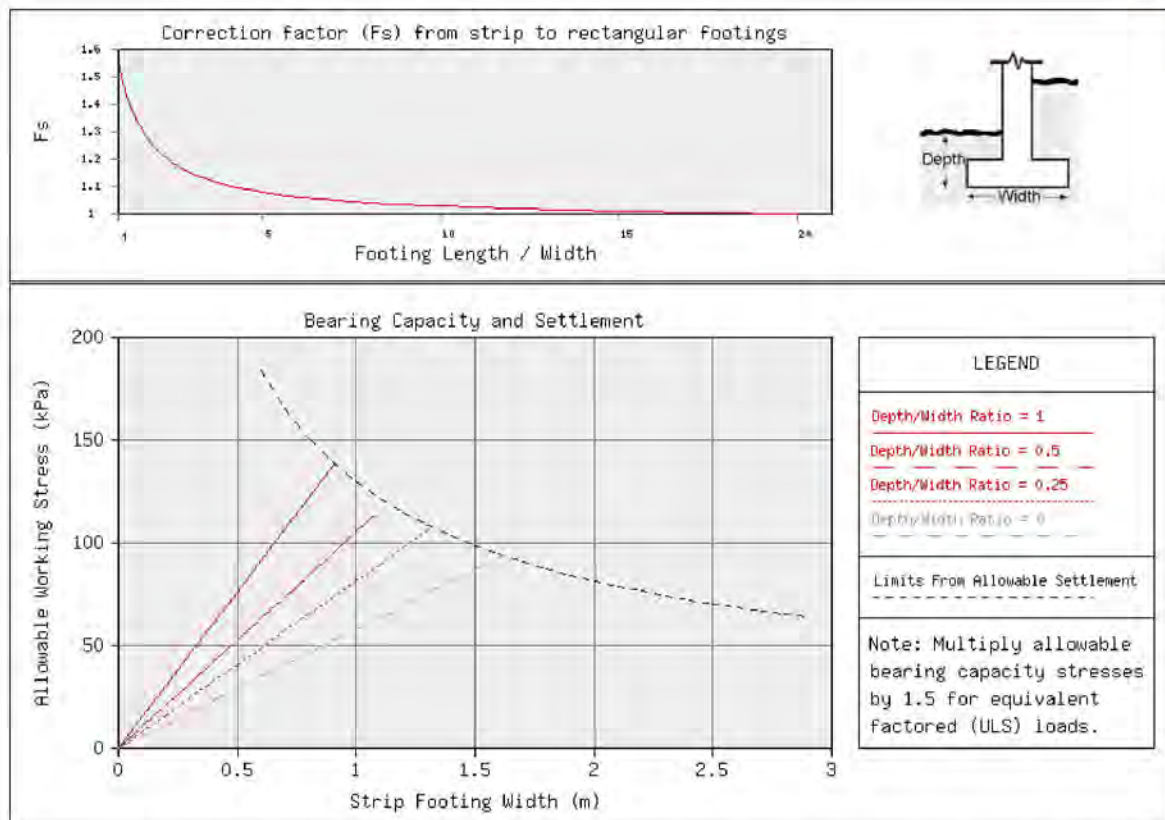
It is recommended the foundation subgrade be inspected by a suitably qualified and experienced geotechnical practitioner to confirm the conditions are in accordance with the assumptions and recommendations provided in this report.

5.8.2 Foundations on Loess

Figure 2 below summarises the recommended working stresses for shallow footings, which bear upon loess silty SAND. It should be noted that foundation working stresses presented on Figure 2 are governed by bearing capacity in the case of narrow footings and settlement in the case of wide footings.

Figure 2. Recommended Bearing for Shallow Footings on Loess silty SAND.

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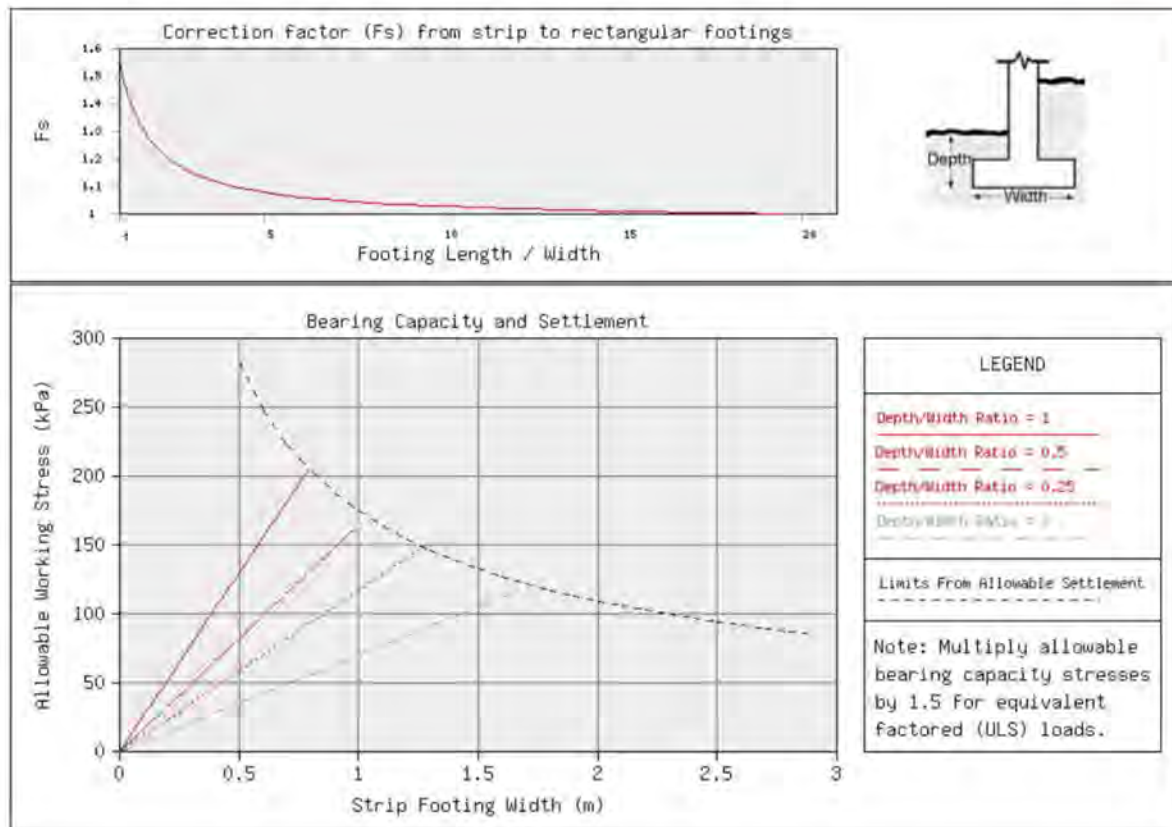
From Figure 2 it can be seen an allowable working stress of approximately 60 kPa is recommended for a 0.4 m wide by 0.4 m deep footing that is founded on loess silty SAND. This corresponds to a factored (ULS) bearing capacity of approximately 90 kPa and an ultimate geotechnical bearing capacity of 180 kPa.

5.8.3 Foundations on Outwash Gravel and Engineered Fill

Figure 3 below summarises the recommended working stresses for shallow footings, which bear upon outwash gravel or engineered fill soils. It should be noted that foundation working stresses presented on Figure 3 are governed by bearing capacity in the case of narrow footings and settlement in the case of wide footings.

Figure 3. Recommended Bearing for Shallow Footings on Outwash Gravel and Engineered Fill.

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From Figure 3 it can be seen an allowable working stress of approximately 100 kPa is recommended for a 0.4 m wide by 0.4 m deep footing founded on outwash gravel or engineered fill soils. This corresponds to a factored (ULS) bearing capacity of approximately 150 kPa and ultimate geotechnical bearing capacity of 300 kPa.

Inspection and testing (Scala penetrometers) should be completed along the footing alignments during construction to confirm the above values are applicable and that the soils have not been softened by weather or excavation.

Footing excavations should also be boxed, and plate compacted prior to the placement of reinforcing steel to stiffen up soils loosened by excavation.

5.8.4 Settlement

Settlement and differential settlement of shallow foundations are expected to be within structurally acceptable limits providing the recommendations of Section 5.8 are followed and all unsuitable materials, particularly those softened by water, are undercut and replaced with engineered fill during construction.

Achieving appropriate compaction and certification of engineered fill soils beneath building foundations forming changes in floor levels (split levels) is also particularly important to prevent long term differential foundation settlement.



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 1170.5:2004.

The site is either Class C (Shallow soil site) or Class D (Deep soil site) based on limited borehole data nearby. For design purposes a conservative approach should be taken and designed to Class D in accordance with NZS 1170.5:2004 seismic provisions. The soil parameters for static conditions given above require no downgrading for seismic bearing. (The materials are not subject to liquefaction or other strength loss on cyclic loading).

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6 Neighbouring Structures/Hazards

Natural Hazards: A risk of seismic activity has been identified for the region as a whole and appropriate allowance should be made for seismic loading during detailed design of the proposed building, foundations and retaining walls.

The ORC Natural Hazards Database indicates that the property is “possibly susceptible” to seismic liquefaction, however due to the estimated depth to groundwater and the granular nature of the site sub-soils there is no liquefaction risk on this site and any dry soil settlement during seismic shaking is expected to be minimal..

The property is also located near to an active floodwater dominated alluvial fan approximately 65 m to the southwest, as mapped on the ORC Natural Hazards Database. However, GeoSolve can confirm that the property is situated on an outwash terrace riser and no evidence of alluvial fan activity was observed in test pits. Therefore, there is no risk of alluvial fan hazard at this site.

Distances to adjoining structures: The site is located within a residential area with an adjacent dwelling located over 20 m to the northeast. The sections immediately adjacent to 63 Stratford Drive have not yet been developed. No adverse effects on neighbouring dwellings are considered likely as long as dust and noise control measures are instigated during construction by the earthworks contractor.

Aquifers: The regional groundwater table is expected to lie at moderate depths beneath the proposed foundation level and no aquifer resource is expected to be adversely affected by the proposed development.

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. Details for implementation are given in the following link: <http://escscanterbury.co.nz/>

Noise: It is expected that conventional earthmoving equipment, such as excavators, trucks, rollers and plate compactors will be required during earthworks construction. Considering that the immediate area includes residential dwellings the construction contractor should take appropriate measures to control the construction noise, and ensure CODC 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 CODC 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. The effects of vibrations from heavy vibrating rollers on adjacent structures will need to be considered if engineered fill is to be placed and compacted within 10 m of an existing structure.



7 Conclusions and Recommendations

- The stratigraphy beneath the proposed building footprint typically comprises surficial deposits of topsoil/colluvium, loess or uncontrolled fill overlying outwash gravel;
- No evidence of current slope instability has been identified at the site;
- All cut excavations will require careful execution as per the recommendations in Section 5.4 of this report;
- For detailed design purposes, it is recommended the magnitude of seismic acceleration be estimated in accordance with the recommendations of NZS 1170.5:2004 using "Class D" subsoil conditions;
- The regional groundwater table was not encountered during the site investigation and is not expected to be encountered during construction of the proposed dwelling;
- Reduced bearing is available on loess, which will provide 60 kPa allowable bearing for 400 mm wide by 400 mm deep shallow footings. Figure 2 provides the recommended allowable bearing stresses for foundations that bear on loess silty SAND;
- Alternatively, if the loess was removed from beneath foundation footings and replaced with engineered fill to the underside of the footing formation level good ground bearing conditions could be achieved;
- Good bearing is available on outwash gravel and engineered fill overlying the same, which will provide 100 kPa allowable bearing for 400 mm wide by 400 mm deep footings. Figure 3 provides recommended allowable bearing stresses for foundations that bear on outwash gravel or engineered fill soils;
- Footing excavations should also be boxed, and plate compacted prior to the placement of reinforcing steel to stiffen up soils loosened by excavation;
- After stripping all unsuitable material, the subgrade should be proof rolled with a heavy roller and inspected prior to placing engineered fill;
- All retaining walls should be designed by a Chartered Professional Engineer using the geotechnical design parameters recommended in Table 1 of this report;
- 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;
- Outwash gravel can be reused as an engineered fill source onsite, however this is not expected to cover the quantity required so an imported fill is recommended for consistency;
- Inspections of the earthworks, foundation subgrade and cut excavations should be completed during construction by a suitably qualified Geotechnical Engineer or Engineering Geologist to confirm geotechnical conditions are in accordance with the recommendations provided in this report;
- A geotechnical practitioner should also inspect in the unlikely event that any excessive seepage, spring flow or under-runners are encountered during construction.

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8 Applicability

This report has been prepared for the benefit of Annette Anderson 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.

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

Report prepared by:

.....
Emma Hutchinson
Engineering Geologist
GeoSolve Ltd

Reviewed for GeoSolve Ltd by:

.....
James Stewart
Engineering Geologist
GeoSolve Ltd

Report Approved by:

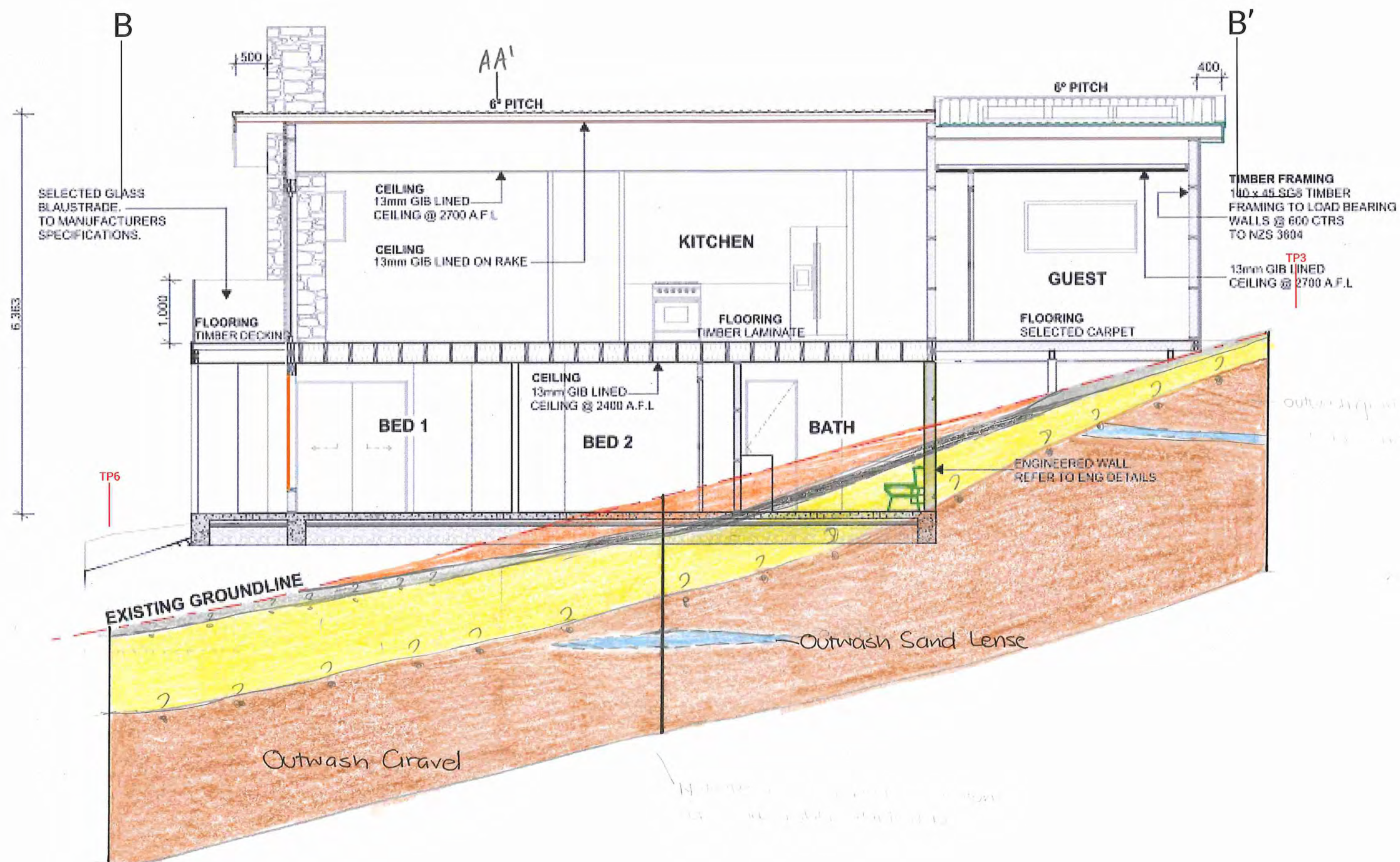
.....
Graham Salt
Technical Director
GeoSolve Ltd

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Appendix A: Investigation Site Plan and Cross-Sections

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Scale 1:75
0 0.8 1.6 2.4 3.2 4 (m)

Key

- Outwash Gravel
 - Loess
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- Outwash Sand
- Buried Topsoil
- Colluvium/Topsoil
- Uncontrolled Fill

CADFILE:	Site Plan.xar	DRAWN	ELH	04/2019
SCALE: (AT A3 SIZE)	AS SHOWN	DRAFTING CHECKED	JXS	04/2019
PROJECT No.:	190081	APPROVED	FAW	04/2019

GEOSOLVE
ENGINEERING CONSULTANTS

WATER RESOURCES
PAVEMENTS

Annette Anderson
Geotechnical Investigation
63 Stratford Drive, Pisa Moorings
Cross Section BB'

FIG No:
APPENDIX A - FIGURE 2

REV.



Appendix B: Investigation Data

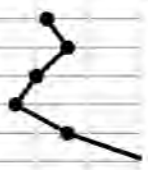
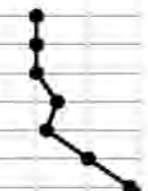
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EXCAVATION LOG

EXCAVATION NUMBER:

TP 1

PROJECT:	63 Stratford Drive				JOB NUMBER:	190081
LOCATION:	See Site Plan		INCLINATION: Vertical			
EASTING:		mE	EQUIPMENT:	8t digger	OPERATOR:	Simon
NORTHING:		mN	INFOMAP NO.		COMPANY:	Parcell Contracting
ELEVATION:		m	DIMENSIONS:		HOLE STARTED:	26-Feb-19
METHOD:			EXCAV. DATUM:		HOLE FINISHED:	26-Feb-19

DEPTH (m)	SOIL / ROCK TYPE	GRAPHIC LOG	DESCRIPTION	USCS GROUP	GROUNDWATER / SEEPAGE	SCALA PENETROMETER Blows per 100mm 0 5 10 15
0.6	UNCONTROLLED FILL		Light Brown, silty SAND with some gravel, trace of cobbles & rootlets. Sand is fine. Gravel is fine to fine to coarse. Gravel is sub-rounded to rounded. Organics, fence wire & plastic. Loose. Massive. Dry.			
0.65	BURIED TOPSOIL		Brown, organic sandy SILT with rootlets. Sand is fine. Fencing wire observed 0.7m bgl. Loose. Massive. Dry.			
1.6	LOESS		Light Brown, silty SAND with trace of gravel. Sand is fine. Gravel is fine. Gravel is rounded. Rootlet voids. Medium dense. Massive. Dry.			
3.5	OUTWASH GRAVEL		Light Brown, sandy GRAVEL with minor trace cobbles. No silt. Sand is fine to medium. Gravel is fine to coarse. Gravel is sub-rounded. Medium dense. Bedded. Dry.		NO SEEPAGE	

Total Depth = 3.5 m

COMMENT: Test pit dry. Walls stood well. Some caving at delt in gravels at contact with loess.

Logged By: ELH

Checked Date:

Sheet: 1 of 1

EXCAVATION LOG

EXCAVATION NUMBER:

TP 2

PROJECT:	63 Stratford Drive	INCLINATION: Vertical	JOB NUMBER:	190081
LOCATION:	See Site Plan			
EASTING:		mE	EQUIPMENT:	8t digger
NORTHING:		mN	INFOMAP NO.	
ELEVATION:		m	DIMENSIONS:	
METHOD:		EXCAV. DATUM:	HOLE STARTED:	26-Feb-19
			HOLE FINISHED:	26-Feb-19

DEPTH (m)	SOIL / ROCK TYPE	GRAPHIC LOG	DESCRIPTION	USCS GROUP	GROUNDWATER / SEEPAGE	SCALA PENETROMETER Blows per 100mm 0 5 10 15
0.6	FILL		Light Brown, silty SAND with some gravel & trace of cobbles. Sand is fine. Gravel is fine to coarse. Gravel is sub-rounded. Loose. Massive. Dry.		NO SEEPAGE	
0.65	BURIED TOPSOIL		Brown, organic sandy SILT with trace of gravel & rootlets. Sand is fine. Gravel is fine. Gravel is sub-rounded. Loose. Massive. Dry.			
2.2	LOESS with Gravel Channel		Light Brown, silty SAND with trace of gravel with lens of sandy GRAVEL with some silt. Sand is fine. Gravel is fine to coarse. Gravel is sub-rounded. Loose to Medium dense. Bedded. Dry.			
2.5	OUTWASH SAND		Light Greyish Brown, gravelly SAND with trace of cobbles. Gravel is medium to coarse. Gravel is sub-rounded. Sand is fine to medium. Uniformly graded. Loose. Massive. Dry.			
3.8	OUTWASH GRAVEL		Light Greyish Brown, sandy GRAVEL with minor to trace cobbles. Cobble content increasing with depth. Sand is fine to medium. Gravel is medium to coarse. Gravel is sub-rounded to rounded. Medium dense. Bedded. Dry.			

Total Depth = 3.8 m

COMMENT: Test pit dry. Walls stood well. Some slumping on contact.

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Checked Date:

Sheet: 1 of 1

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EXCAVATION LOG

EXCAVATION NUMBER:

TP 3

PROJECT:	63 Stratford Drive				JOB NUMBER:	190081
LOCATION:	See Site Plan		INCLINATION: Vertical			
EASTING:		mE	EQUIPMENT:	8t digger	OPERATOR:	Simon
NORTHING:		mN	INFOMAP NO.		COMPANY:	Parcell Contracting
ELEVATION:		m	DIMENSIONS:		HOLE STARTED:	26-Feb-19
METHOD:			EXCAV. DATUM:		HOLE FINISHED:	26-Feb-19

DEPTH (m)	SOIL / ROCK TYPE	GRAPHIC LOG	DESCRIPTION	USCS GROUP	GROUNDWATER / SEEPAGE	SCALA PENETROMETER Blows per 100mm 0 5 10 15
0.1	COLLUVIUM / TOPSOIL		Light Brown, organic silty SAND with some gravel. Sand is fine. Gravel is fine. Loose. Dry.			
0.4	LOESS		Light Yellow Brown, silty SAND with trace of gravel. Sand is fine. Gravel is fine to medium. Gravel is sub-rounded. Loose. Massive. Dry.			
1.6	OUTWASH GRAVEL		Light Brown, sandy GRAVEL with rootlets & trace of cobbles. Sand is fine to coarse. Gravel is fine. Gravel is sub-rounded to rounded. Loose. Bedded. Dry.			
1.8	OUTWASH SAND LENS		Brownish Grey, gravelly SAND (Lens). Sand is fine to coarse. Gravel is fine. Gravel is sub-rounded. Loose. Massive. Dry.			
3.8	OUTWASH GRAVEL		Greyish Brown, sandy GRAVEL with minor to trace of cobbles. Sand is fine to coarse. Gravel is fine to coarse. Gravel is sub-rounded to rounded. Medium dense. Bedded. Dry.			

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Total Depth = 3.8 m

COMMENT: Test pit walls slumping in gravels at 0.4m bgl.

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Checked Date:

Sheet: 1 of 1

EXCAVATION LOG

EXCAVATION NUMBER:

TP 4

PROJECT:	63 Stratford Drive				JOB NUMBER:	190081
LOCATION:	See Site Plan		INCLINATION: Vertical			
EASTING:		mE	EQUIPMENT:	8t digger	OPERATOR:	Simon
NORTHING:		mN	INFOMAP NO.		COMPANY:	Parcell Contracting
ELEVATION:		m	DIMENSIONS:		HOLE STARTED:	26-Feb-19
METHOD:			EXCAV. DATUM:		HOLE FINISHED:	26-Feb-19

DEPTH (m)	SOIL / ROCK TYPE	GRAPHIC LOG	DESCRIPTION	USCS GROUP	GROUNDWATER / SEEPAGE	SCALA PENETROMETER Blows per 100mm 0 5 10 15
0.1	COLLUVIUM / TOPSOIL		Brown, organic sandy SILT with some gravels and trace of boulders. Sand is fine. Gravel is fine to coarse. Gravel is sub-rounded. Loose. Massive. Dry.			
3.5	OUTWASH GRAVEL		Brownish Grey/Greyish Brown, sandy GRAVEL with trace of cobbles & rootlets. Sand is fine to coarse. Gravel is fine to coarse. Gravel is sub-rounded. Loose. Bedded. Dry.		NO SEEPAGE	

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Total Depth = 3.5 m

COMMENT: Slumping on test pit walls from ground level.

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Sheet: 1 of 1

EXCAVATION LOG

EXCAVATION NUMBER:

TP 5

PROJECT:	63 Stratford Drive				JOB NUMBER:	190081
LOCATION:	See Site Plan					
INCLINATION: Vertical						
EASTING:		mE	EQUIPMENT:	8t digger	OPERATOR:	Simon
NORTHING:		mN	INFOMAP NO.		COMPANY:	Parcell Contracting
ELEVATION:		m	DIMENSIONS:		HOLE STARTED:	26-Feb-19
METHOD:			EXCAV. DATUM:		HOLE FINISHED:	26-Feb-19

DEPTH (m)	SOIL / ROCK TYPE	GRAPHIC LOG	DESCRIPTION	USCS GROUP	GROUNDWATER / SEEPAGE	SCALA PENETROMETER Blows per 100mm 0 5 10 15
0.6	COLLUVIUM / TOPSOIL		Light Brown, organic sandy SILT to silty SAND with rootlets & trace of gravel. Sand is fine. Gravel is fine to coarse. Gravel is sub-rounded. Organics. Loose. Massive. Dry.			
1.1	LOESS		Light Yellowish Brown, silty SAND with trace of gravel. Sand is fine. Gravel is medium to coarse. Gravel is sub-rounded. Medium dense. Massive. Dry.			
3.8	OUTWASH GRAVEL		Light Brownish Grey, sandy GRAVEL with trace of cobbles. Sand is fine to coarse. Gravel is fine to coarse. Gravel is sub-rounded to rounded. Medium dense. Bedded. Dry.		NO SEEPAGE	

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Total Depth = 3.8 m

COMMENT: Test pit dry. Walls stood well, minor slumping in gravels.

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Checked Date:

Sheet: 1 of 1

EXCAVATION LOG

EXCAVATION NUMBER:

TP 6

PROJECT:	63 Stratford Drive				JOB NUMBER:	190081
LOCATION:	See Site Plan					
INCLINATION: Vertical						
EASTING:		mE	EQUIPMENT:	8t digger	OPERATOR:	Simon
NORTHING:		mN	INFOMAP NO.		COMPANY:	Parcell Contracting
ELEVATION:		m	DIMENSIONS:		HOLE STARTED:	26-Feb-19
METHOD:			EXCAV. DATUM:		HOLE FINISHED:	26-Feb-19

DEPTH (m)	SOIL / ROCK TYPE	GRAPHIC LOG	DESCRIPTION	USCS GROUP	GROUNDWATER / SEEPAGE	SCALA PENETROMETER Blows per 100mm 0 5 10 15
0.15	TOPSOIL / COLLUVIUM		Light Brown, organic silty SAND with trace of gravel & rootlets. Sand is fine. Gravel is fine to medium. Gravel is sub-rounded to rounded. Loose. Massive. Dry.			
1.4	LOESS		Light Yellowish Brown, silty SAND with trace of gravel. Sand is fine. Gravel is fine to coarse. Gravel is sub-rounded to rounded. Medium dense. Massive. Dry.			
3.8	OUTWASH GRAVEL		Brownish Grey, sandy GRAVEL with minor to trace of cobbles. Sand is fine to coarse. Gravel is fine to coarse. Gravel is sub-rounded to rounded. Medium dense. Bedded. Dry.		NO SEEPAGE	

Total Depth = 3.8 m

COMMENT:

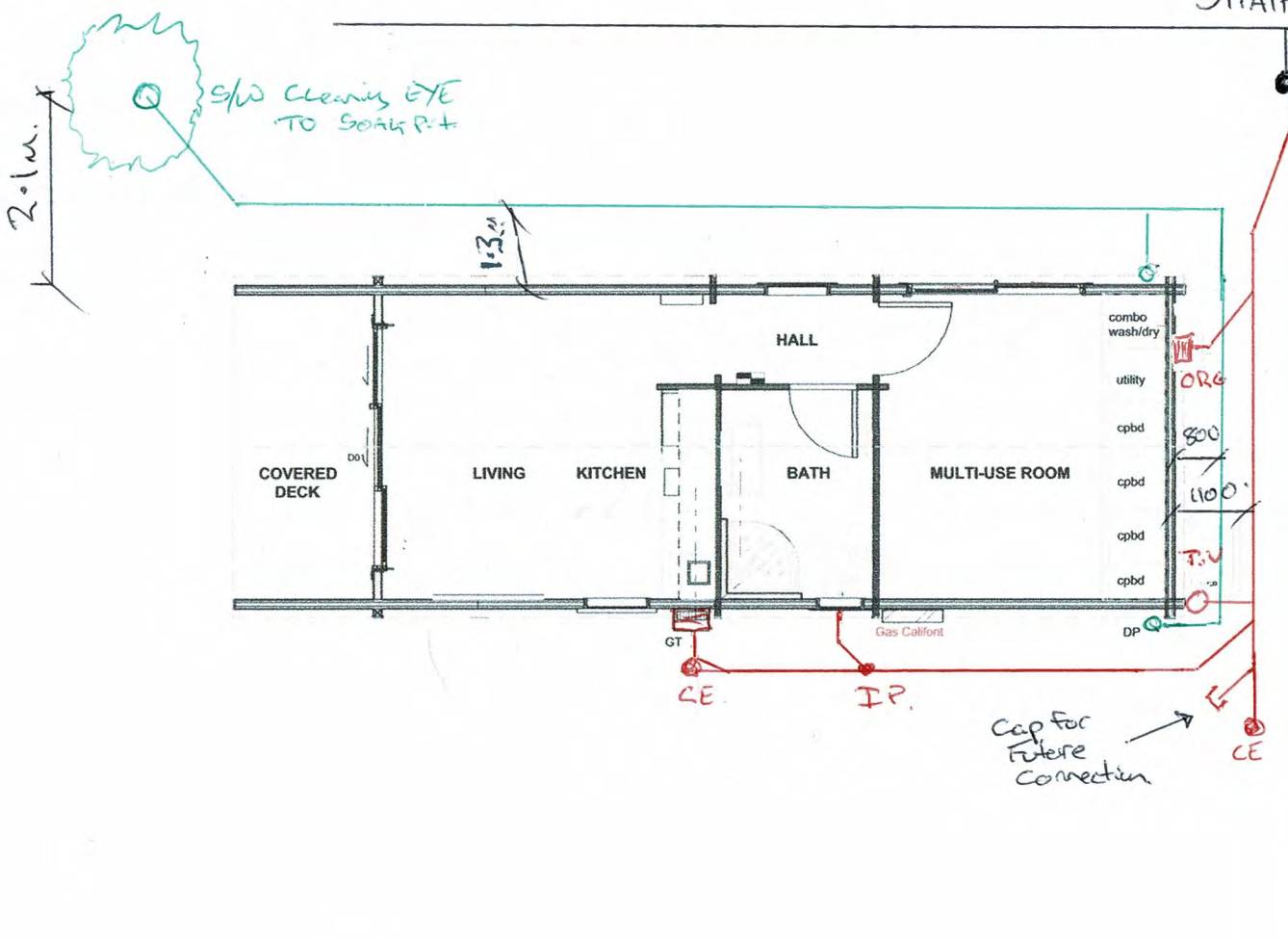
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Sheet: 1 of 1

AS Builts. 63 Stratford Drive

STRATFORD Drive



DRAINAGE NOTES

THIS SYSTEM IS INDICATIVE ONLY, THE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE NZBC - E1 (STORMWATER) & NZBC - G13 (SEWER)

FINAL LOCATION OF STORMWATER SYSTEM SHALL BE DETERMINED BY THE DRAINLAYER ON SITE. ACCURATE AS BUILT DRAWINGS SHALL BE PROVIDED TO THE TERRITORIAL AUTHORITY ONCE ALL DRAINAGE IS COMPLETE.

DOWNPIPE - REF. ROOF PLAN FOR SIZE AND CATCHMENT AREAS

LEGEND

- NEW 100mm dia UPVC SEWER, 1 in 60 FALL MIN
- NEW 100mm dia UPVC STORMWATER, 1 in 120 FALL MIN
- TV 80mm TERMINAL VENT TO ROOF LINE - EXTEND 600mm ABOVE ROOF LINE
- IP INSPECTION POINT / CLEANING EYE
- GT GULLY TRAP
- DP DOWN PIPE

Plumbing Schedule NZBC G13	
Kitchen	
Kitchen Sink	Ø65mm @1:40 (3 discharge units)
Bathroom	
Vanity	Ø40mm @ 1:40 (1 discharge units per basin)
Shower	Ø40mm @1:40 (2 discharge units)
WC	Ø100mm @1:40 (4 discharge units)
Laundry	
Laundry Appliance	Ø65mm @1:40 (5 discharge units)
Drainage Schedule NZBC G13	
Main Foul water Vented Drain	Ø100mm @1:60
Stormwater Drain	Ø100mm @1:60 (1:120max)
Terminal Vent	Ø80mm

SOAKPIT CALCULATION:
 Soakpit Size: ~~1.0m x 1.0m x 2.4m~~ 1.3 x 1.3 x 2.4m
 Roof Area Captured: 44.5 m²
 Soakpit Size: 1.74m³ minimum

SHEET LAYOUT DRAWING:

A1.02

DRAINAGE PLAN

SCALE: 1:100 @ A3

JOB DETAILS

COULTER PLAN

James & Vicky Coulter

63 Stratford Drive, Pisa Moorings
 LOT 24 DP 520912

DATE: 17-9-24

REVISION #: AS Builts

DRAWN BY: Nigel McKinlay 17647 Cert Drainlayer
 Central Drainlaying LTD

BC 240476. NOT TO SCALE



SHEET INDEX

LAYOUT ID	TITLE	ISSUED
A1 PLANS		
A1.01	SITE PLAN	○
A1.02	PLUMBING/DRAINAGE PLAN	○

CENTRAL OTAGO DISTRICT COUNCIL
Plans and Specifications Approved in
accordance with The New Zealand Building
Code and Approved Documents. To be retained
on the building site and produced on request
mac 22/07/2024

Central Otago District Council
240476 processed by solutions 22/07/2024
Approved Building Consent

SHEET LAYOUT

DRAWING:

INDEX PAGE

SCALE:

BUILDING CONSENT

JOB DETAILS

COULTER PLAN

James & Vicky Coulter

63 Stratford Drive, Pisa Moorings
LOT 24 DP 520912

DATE: 06/11/2023

REVISION #: 02

DRAWN BY: GABRIELLE STABLES

CHECKED BY: CODI SINGER

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PROJECT #: SHDB19

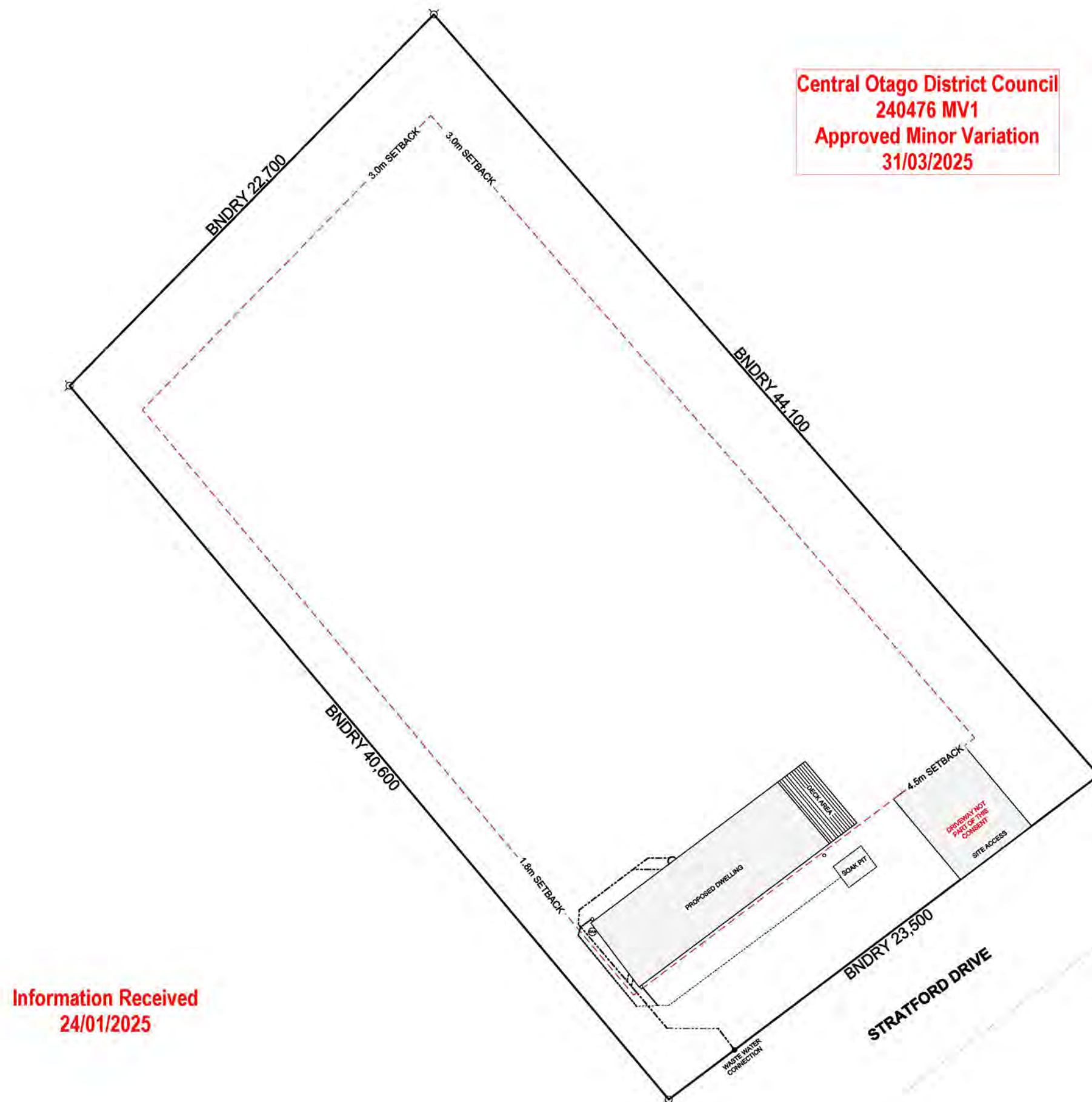


STABLE HOMES
Design & Build

120 Gladsmuir road, Queensberry, Cromwell

027-359-06-81

design@stablehomes.co.nz



Central Otago District Council
240476 MV1
Approved Minor Variation
31/03/2025



SITE PLAN NOTES

Parcel ID: 7870871
Appellation: Lot 24 DP 520912
Location: 63 Stratford Drive, Mount Pisa, Cromwell

Climate Zone: 6
Earthquake Zone: Zone 2
Exposure Zone: Zone B
Lee Zone: No
Rainfall Range: 30 - 40
Wind Region: A
Wind Zone: High

Water Supply: Council
Sewer: Council
Stormwater: Soak Pit

Net Site Area: 0.0980 ha
Building Footprint (over foundation): 32.11 m²
Deck Area (covered): 5.37 m²
Site Coverage: 3.27%

Territorial Authority: Central Otago (codc)
Planning Zone: Residential - Resource Area 3
Resource Issued Known: N/A

Site Levels:
Proposed F.F.L= +200.57
(Finished Floor Level to be 600mm min
above ground level)

Proposed F.F.G= +199.97

GENERAL
ALL WORK SHALL COMPLY WITH ALL RELEVANT
CLAUSES OF NZBC 2001 AMMENDMENTS. METRA
PANEL CONSTRUCTION TO COMPLY WITH METRA
PANEL MANUAL (BRANZ APPRAISAL 364). ANY
CONVENTIONAL TIMBER CONSTRUCTION TO
COMPLY WITH NZS 3604 : 2011 UTILITIES AND
SERVICES BASED ON EXISTING DRAWING THE
CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON
SITE, BEFORE COMMENCING ANY WORK. ALL
DIMENSIONS ARE IN MILLIMETERS UNLESS
OTHERWISE STATE
LOCATION TBC ON SITE PRIOR TO SET OUT

SHEET LAYOUT

DRAWING:

SITE PLAN

SCALE: 1:200 @ A3

BUILDING CONSENT

JOB DETAILS

COULTER PLAN

James & Vicky Coulter

63 Stratford Drive, Pisa Moorings
LOT 24 DP 520912

DATE: 06/11/2023

REVISION #: 02

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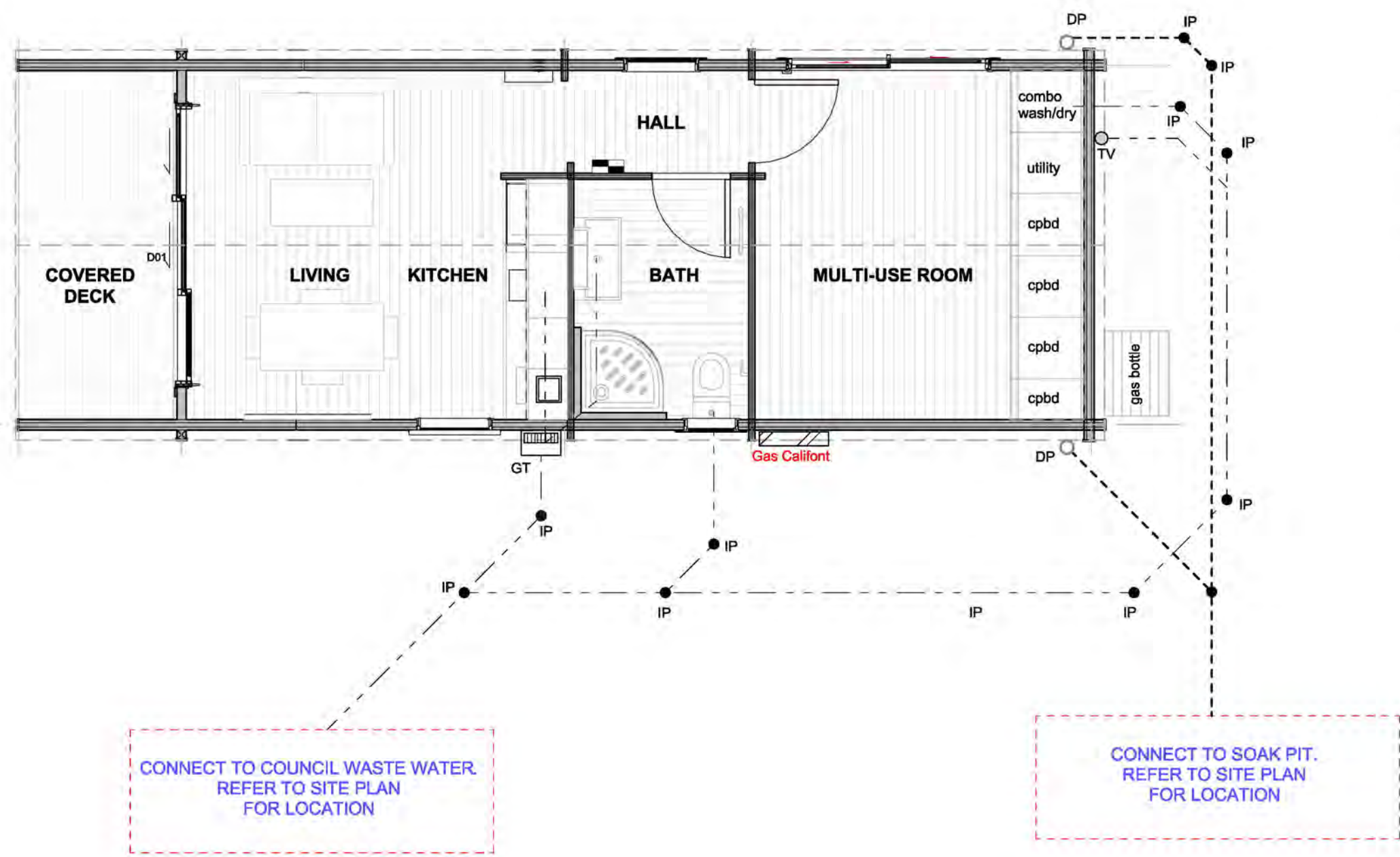
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DRAINAGE NOTES

THIS SYSTEM IS INDICATIVE ONLY, THE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE NZBC - E1 (STORMWATER) & NZBC - G13 (SEWER)

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DOWNPIPE - REF. ROOF PLAN FOR SIZE AND CATCHMENT AREAS

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Plumbing Schedule	NZBC G13
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Drainage Schedule	
NZBC G13	
Main Foul water Vented Drain	Ø100mm @1:60
Stormwater Drain	Ø100mm @1:60 (1:120max)
Terminal Vent	Ø80mm

SOAKPIT CALCULATION:
Soakpit Size: 0.89 x 0.89 x 2.17
Roof Area Captured: 44.5 mm²
Soakpit Size: 1.74m³ minimum

CONNECT TO COUNCIL WASTE WATER
REFER TO SITE PLAN
FOR LOCATION

CONNECT TO SOAK PIT.
REFER TO SITE PLAN
FOR LOCATION

SHEET LAYOUT

DRAWING:

A1.02

DRAINAGE PLAN

SCALE: 1:100 @ A3

BUILDING CONSENT

JOB DETAILS

COULTER PLAN

James & Vicky Coulter

63 Stratford Drive, Pisa Moorings
LOT 24 DP 520912

DATE: 06/11/2023

REVISION #: 02

DRAWN BY: GABRIELLE STABLES

CHECKED BY: CODI SINGER

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PROJECT #: SHDB19

 **STABLE HOMES**
Design & Build

120 Gladsmuir road, Queensberry, Cromwell

027-359-06-81

design@stablehomes.co.nz

FOUNDATION DESIGN

63 STRATFORD DR

MOUNT PISA, OTAGO

STRUCTURAL DRAWINGS

STRUCTURAL DRAWINGS INDEX

S97	TIMBER - GENERAL NOTES
S100	SITE PLAN
S101	FOUNDATION PLAN
S201	FOUNDATION DETAILS 1
S202	FOUNDATION DETAILS 2
S203	FOUNDATION DETAILS 3

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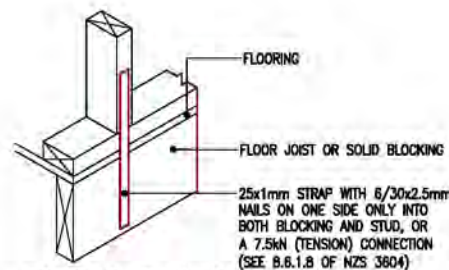
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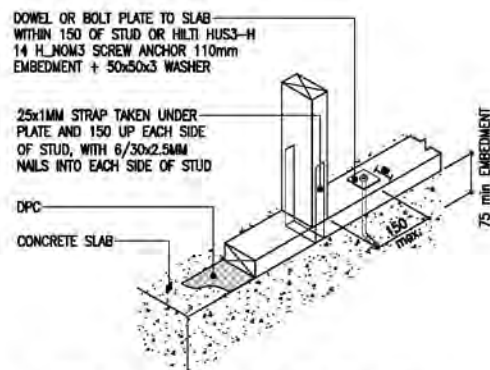
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HFC
STRUCTURES LTD

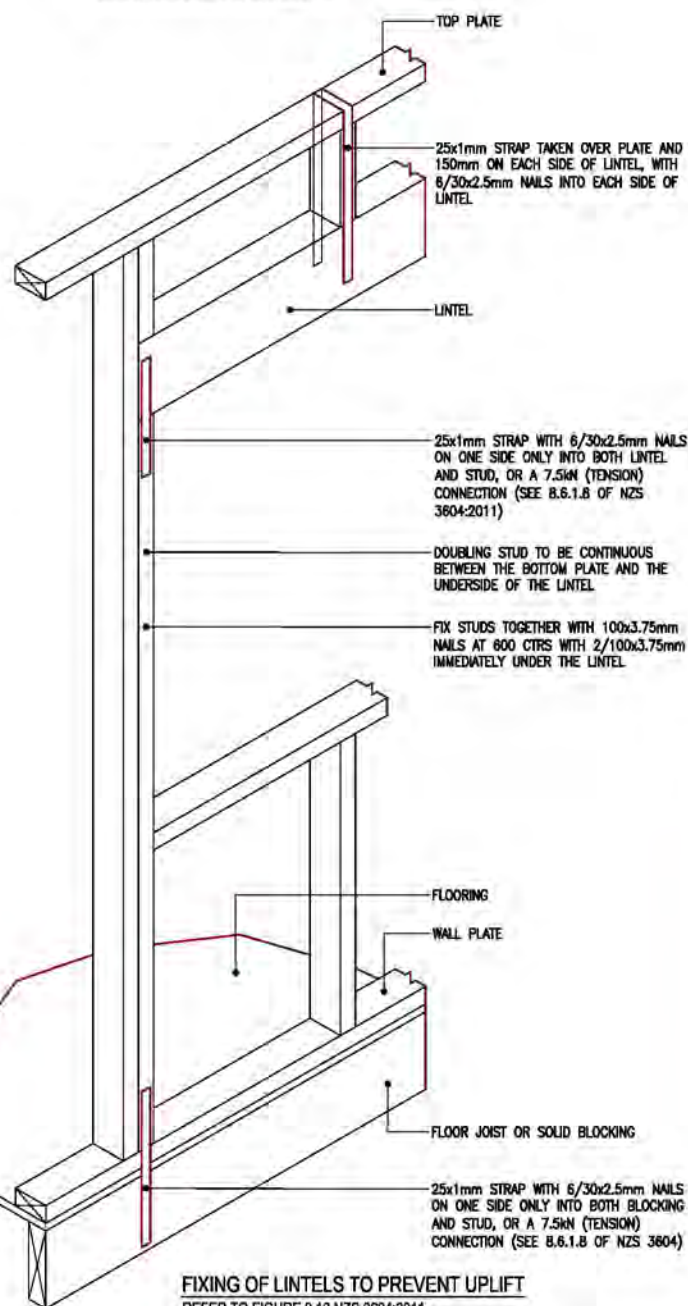
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WARKWORTH
T: +649 367 1070
E: WARK@HFC.CO.NZ



BOTTOM PLATE FIXING



BOTTOM PLATE FIXING TO PREVENT UPLIFT
REFER TO FIGURE 8.12 NZS 3604:2011



FIXING OF LINTELS TO PREVENT UPLIFT
REFER TO FIGURE 8.12 NZS 3604:2011

TIMBER TREATMENT TABLE (ACCEPTABLE SOLUTION B2/AS1)

Requirements for radiata pine and Douglas fir solid timber to achieve a (minimum) 50 year durability performance

WOOD-BASED BUILDING COMPONENTS	SPECIES OR TYPES	LEVEL OF TREATMENT(2) TO NZS 3604
A – Members exposed to the weather and in contact with the ground (see section 108 of NZS 3602)		
Building piles, plywood and timber framing foundations, crib walling, sown poles, house poles and retaining walls (uprights)	Pinus species	H5
Fence posts, landscape timbers and retaining walls (horizontal members)	Pinus species	H4
C – Members protected from the weather but exposed to ground atmosphere (see section 108 of NZS 3602)		
Joiststuds, subfloor braces, bearers, wall plates, floor joists to the subfloor, blocking, subfloor wall studs, wallings and battens, wall studs and nogas, diagonal boards	Radiata pine Douglas fir	H1.2
Interior flooring, suspended ground floors	Radiata pine Douglas fir	H1.2
D – Members protected from the weather but with a risk of moisture penetration conducive to decay (see section 109 of NZS 3602)		
Roof members (in or associated with)		
Sorting and framing not protected from solar drive moisture through absorbent cladding materials (8)	Radiata pine Douglas fir	H1.2
Enclosed flat roof framing and associated roof members	Radiata pine Douglas fir	H1.2
Enclosed skillion roof framing and associated roof members	Radiata pine Douglas fir	H1.2
Valley boards and boards supporting flashings or box gutters and flashings to roof penetrations and upstands to roof decks (10)	Radiata pine Douglas fir	H1.2
Wall members (in or associated with)		
Framing and other members within or beneath a parapet	Radiata pine Douglas fir	H1.2
Framing and other members within enclosed decks or balconies	Radiata pine Douglas fir	H1.2
Cantilevered enclosed deck joists and associated framing including joist trimmers, nogas and blocking (5)	Radiata pine Douglas fir	H3.2
Framing and other members supporting enclosed decks (including enclosed cantilevered decks) or balconies	Radiata pine Douglas fir	H1.2
Battens used behind cladding to form a cavity	Radiata pine Douglas fir	H3.1
All other exterior wall framing and other members including exterior and boundary joists (9) (11)	Radiata pine Douglas fir (14)	H1.2
E – Members not exposed to weather or ground atmosphere and in dry conditions (see section 110 of NZS 3602)		
All roof trusses, including gable end trusses, roof framing, ceiling and eaves framing, purlins and battens	Radiata pine Douglas fir (14)	H1.2
All midfloor framing including boundary joists, ceiling framing, ceiling battens, and double top plates	Radiata pine Douglas fir (14)	H1.2
Wall framing and roof framing (including trusses) protected from the weather, in unlined and unoccupied farm building and outbuildings except those not allowed in 110.2(f) or NZS 3602	Radiata pine Douglas fir	None
Internal walls	Radiata pine Douglas fir (14)	H1.2
Interior flooring	Radiata pine Douglas fir (14)	H1.2

NOTE:

- Timber treated to a higher level than the minimum satisfies the minimum requirements.
- H3.2 refers to preservative treatment outlined in NZS 3604.
- Timber shakes and shingles, and similar absorbent claddings, absorb moisture that can be driven in frame cavities by evaporation. Unless the cavities are adequately drained and ventilated, continuing condensation caused by solar driven transfer increases the moisture content in the cavities and timber framing requiring a high level of timber treatment to resist decay.
- Such as joists, lintels, wall plate and double top plates, studs, together with parapets, enclosed balustrades, boxed columns and chimneys.
- Any metal flashing shall be separated from the treated timber with building paper.
- Exposed ends of joists shall be protected by a boundary joist.
- Exceptions to the levels of treatment for Douglas fir are provided in Paragraph 3.2.2.2 of the Acceptable Solution B2/AS1.

TYPICAL NOTES FOR BRACING WALL TOP PLATE CONNECTION NZS3604

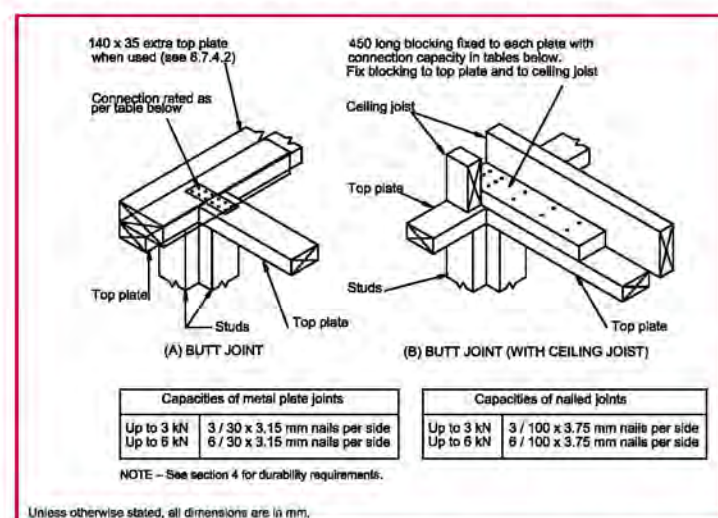


Figure 8.16 – Connecting top plates to external walls at right angles – Walls containing bracing (see 8.7.3.4)

NZS 3604:2011 - TABLE 8.18 - FIXING OF TOP PLATE OF WALL TO SUPPORTING MEMBERS SUCH AS STUDS AND LINTELS AT 600mm CRS (SEE 8.7.6 AND FIGURE 8.12)

LOADED DIMENSION OF WALL (m)	LIGHT ROOFS										HEAVY ROOFS									
	ROOF MEMBER SPACING (mm)										ROOF MEMBER SPACING (mm)									
	900					1200					900					1200				
	WIND ZONE					WIND ZONE					WIND ZONE					WIND ZONE				
	L	M	H	VH	EH	L	M	H	VH	EH	L	M	H	VH	EH	L	M	H	VH	EH
FIXING TYPE (SEE BELOW)																				
2.0	A	A	B	B	B	A	A	B	B	B	A	A	A	B	B	A	A	A	B	B
3.0	A	B	B	B	B	A	B	B	B	B	A	A	B	B	B	A	A	B	B	B
4.0	A	B	B	B	B	A	B	B	B	B	A	A	B	B	B	A	A	B	B	B
5.0	B	B	B	B	B	B	B	B	B	B	A	A	B	B	B	A	A	B	B	B
6.0	B	B	B	B	B	B	B	B	B	B	A	A	B	B	B	A	A	B	B	B
FIXING TYPE		FIXING TO RESIST UPLIFT										CAPACITY OF ALTERNATIVE FIXING (kN)								
A		2/90x3.75 END NAILS										0.7								
B		2/90x3.75 END NAILS + 2 WIRE DOGS										2.7								

B – CRITICAL VALUE

NZS 3604:2011 - TABLE 10.10 - PURLINS ON FLAT IN ALL WIND ZONES - SG 8 (SEE 10.2.1.16.1)

PURLIN SIZE	MAX SPAN	ROOF MEMBER SPACING (mm)									
		LOW		MEDIUM		HIGH		VERY HIGH		EXTRA HIGH	
		SPACING	FIXING	SPACING	FIXING	SPACING	FIXING	SPACING	FIXING	SPACING	FIXING
(mm)	(mm)	(mm)	(TYPE)	(mm)	(TYPE)	(mm)	(TYPE)	(mm)	(TYPE)	(mm)	(TYPE)
70x45	900	900	S	900	T	900	T	900	T	900	U
70x45	900	1200	T	1200	T	1200	T	1050	U	900	U
70x45	900	1800	T	1800	U	1400	U	1050	U	900	U
70x45	1200	1200	T	1150	T	800	T	600	T	500	T
70x45	1200	1300	T	1150	T	800	T	600	T	500	T
90x45	1200	1700	T	1450	U	1000	U	750	U	650	U
FIXING TYPE		DESCRIPTION							ALTERNATIVE FIXING CAPACITY (kN)		
S		2/90x3.15 GUN NAILS							0.8		
T		1/10g SELF DRILLING SCREW, 80mm LONG							2.4		
U		1/14g SELF DRILLING TYPE 17 SCREW, 100mm LONG							5.5		

NOTE: ALL FIXING TYPES ARE DETERMINED AS REQUIRED FOR THE HIGHER UPLIFT LOADS AT THE PERIPHERY OF THE ROOF (BASED ON LOCAL PRESSURE FACTORS IN AS/NZS 1170.2).

FIXING TYPES AND CAPACITY FOR RAFTERS

FIXING TYPE	FIXING TO RESIST UPLIFT	ALTERNATIVE FIXING CAPACITY (kN)
E	2/90x3.15 SKEW NAILS + 2 WIRE DOGS	4.7

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8.7.3.3

For single-storey buildings the connection in line of the top plate of a wall that contains one or more wall bracing elements shall be joined according to the bracing capacity of the highest-rated individual wall bracing elements as follows:

- Bracing capacity not exceeding 100 bracing units: A 3kN connection as shown in figure 8.15 or by an alternative fixing of 3kN capacity tension and compression along the plates.
- Bracing capacity exceeding 100 bracing units: A 6kN connection as shown in figure 8.15 or by an alternative fixing of 6kN capacity tension and compression along the plates.
- Wall top plates to which ceiling diaphragms are attached: A 6kN connection as shown in figure 8.15 or by alternative fixings if 6kN capacity in tension and compression along the plate.

Top plate in line connection Capacity – Lumberlok connector

3kN – Lumberlok plate-Lok or Tylok 6T5 or strap nails
6kN – Lumberlok plate-Lok or Tylok 6T10 or 2 x strap nails

Top plates at right angles connection capacity – Lumberlok connector

6kN – Lumberlok plate-Lok or Tylok 6T10 or 2 x Strap nails
12kN – 2 x sheet brace straps fixed with 6 x lumberlok product nails 300mm x 3.15Dk, per end per strap (24 nails total)

8.7.3.4

Each wall that contains one or more wall bracing elements shall be connected at the top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows.

- For each wall connection wall bracing elements with a total bracing capacity of not more than 125 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 of 6kN capacity.
- For each wall connection wall bracing elements with a total bracing capacity of not more than 250 bracing units: to at least 2 external walls by a fixings as shown in figure 8.16 of 6kN capacity.
- For each wall connection wall bracing elements with a total bracing capacity of more than 250 bracing units: to at least 2 external walls by a fixings as shown in figure 8.16 each having a rating of not less than 2.4kN per 100 bracing units.

NOTES:

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STRUCTURES LTD.
SHOP 5
4 KAPANUI STREET
WARKWORTH
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63 STRATFORD DR
MOUNT PISA
OTAGO

TIMBER
GENERAL NOTES

DRAWING STATUS			
ISSUED FOR CONSENT			
SCALE	CLIENT REF No:	JOB No:	
N.T.S		HFC 23588	
DRAWN	TZ	SHEET No:	
DESIGNED	TZ	REVISION:	
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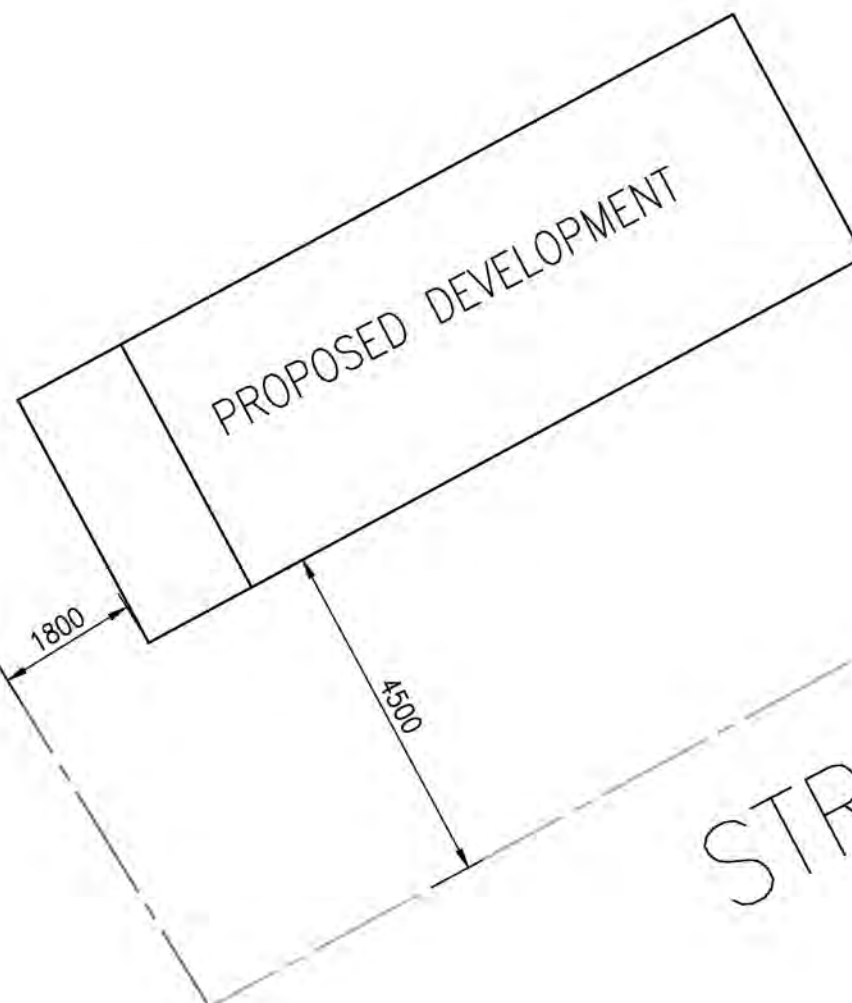
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LOT 25
DP 511091

LOT 24
DP 520912

LOT 23
DP 520912



STRATFORD DRIVE

Site plan

NOTES:

4		
3		
2		
1	ISSUED FOR CONSENT	20/06/2024 TZ
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JOB TITLE
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MOUNT PISA
OTAGO**

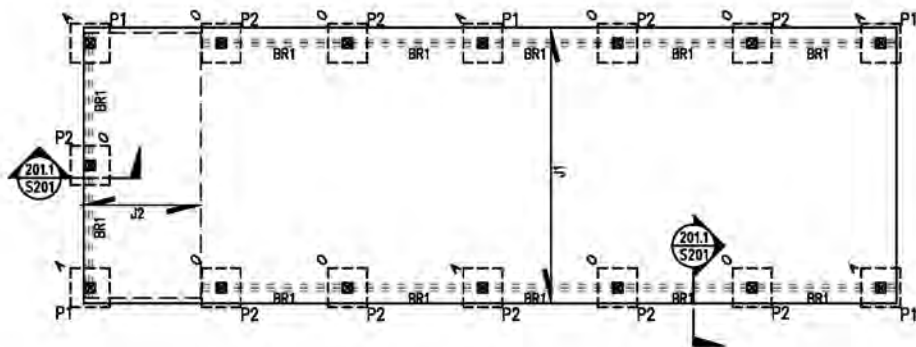
DRAWING TITLE
FOUNDATION PLAN

DRAWING STATUS
ISSUED FOR CONSENT

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CHECKED	TE		

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Refer to Architectural drawings for dimensional setout, internal walls, windows & doors, linings, RL's, falls, rebates & finishes.



Foundation plan

Assumed Site Soil Conditions:

Allowable Bearing = 60 kPa
Dependable Bearing = 90 kPa
Geotechnical Ultimate Bearing Capacity = 180 kPa

A Chartered Geotechnical Engineer shall confirm these conditions during construction. If the conditions vary from the above, HFC shall be contracted for a redesign.

Refer to the GEOSOLVE Geotechnical Report REF: 190081

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ALL OTHER ITEMS NOT SHOWN ON THESE DRAWINGS ARE OUTSIDE HFC STRUCTURES LTD SCOPE OF WORK. REFER TO ARCHITECTURAL DRAWINGS.

MINIMUM SPECIFIED 28 DAY CONCRETE STRENGTH	
Pile Footing	20Mpa

Joist Schedule:

J1 – Floor Joist by others
J2 – Deck Joist by others

Bearer Schedule:

BR1 – Bearer by others

Pile Schedule:	
	P1 – Use 500SQ (20MPa) concrete pile footing, 900mm embedment + 125x125 SG8 H5 timber pile
	P2 – Use 500SQ (20MPa) concrete pile footing, 450mm embedment + 125x125 SG8 H5 timber pile

- Use 12kN pile fixing as per S202 or S203.
- Ordinary pile fixing as per S201

ANCHOR PILE NOTE:

Anchor piles are different from standard or braced timber house piles. Anchor piles are graded in a different manner from other timber piles and are distinguished with the addition of an A to the brand. You may not substitute a standard timber house piles for use as an anchor piles.

NOTES:

4		
3		
2		
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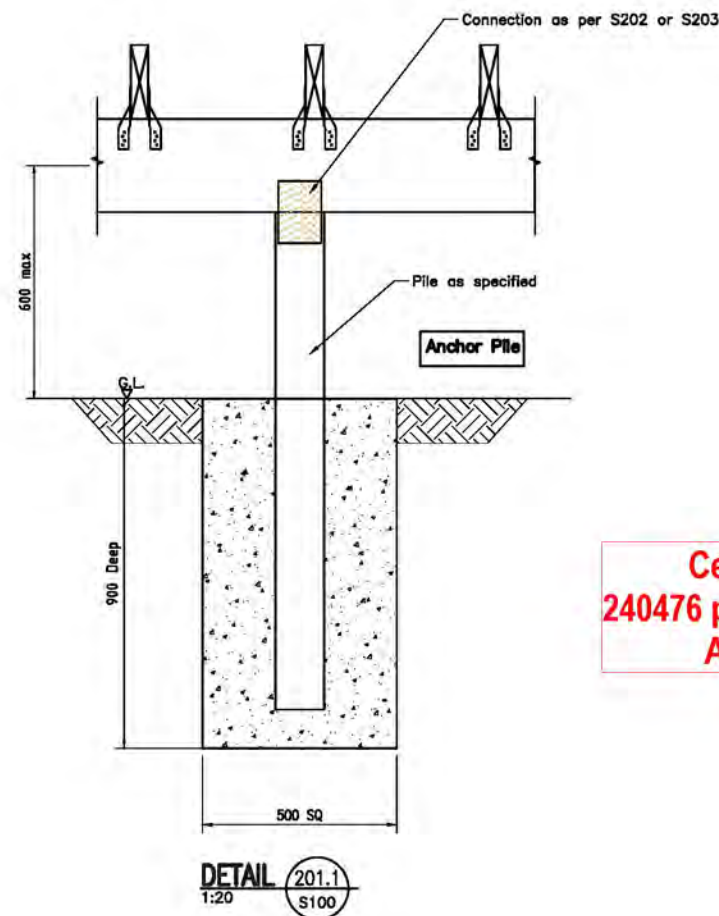
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JOB TITLE
**63 STRATFORD DR
MOUNT PISA
OTAGO**

DRAWING TITLE
FOUNDATION PLAN

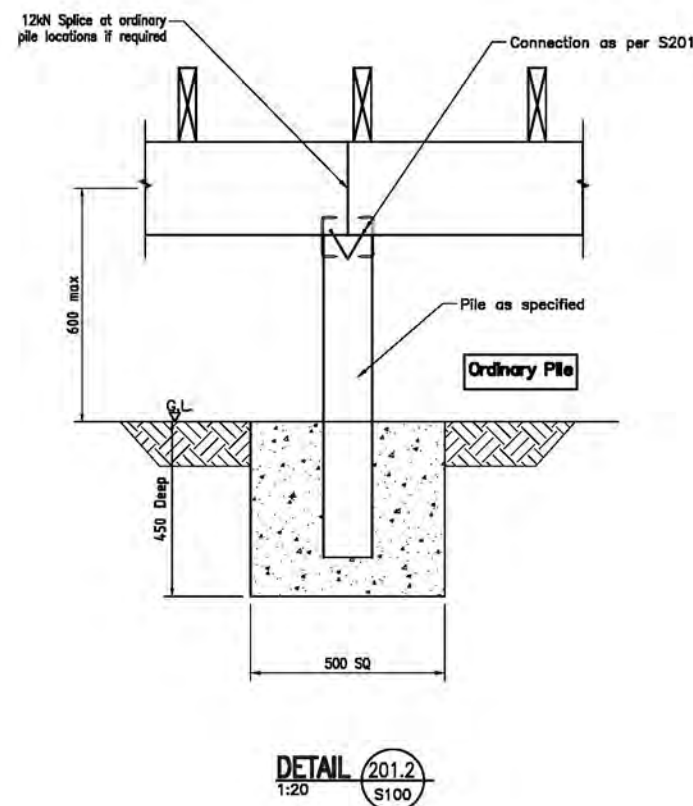
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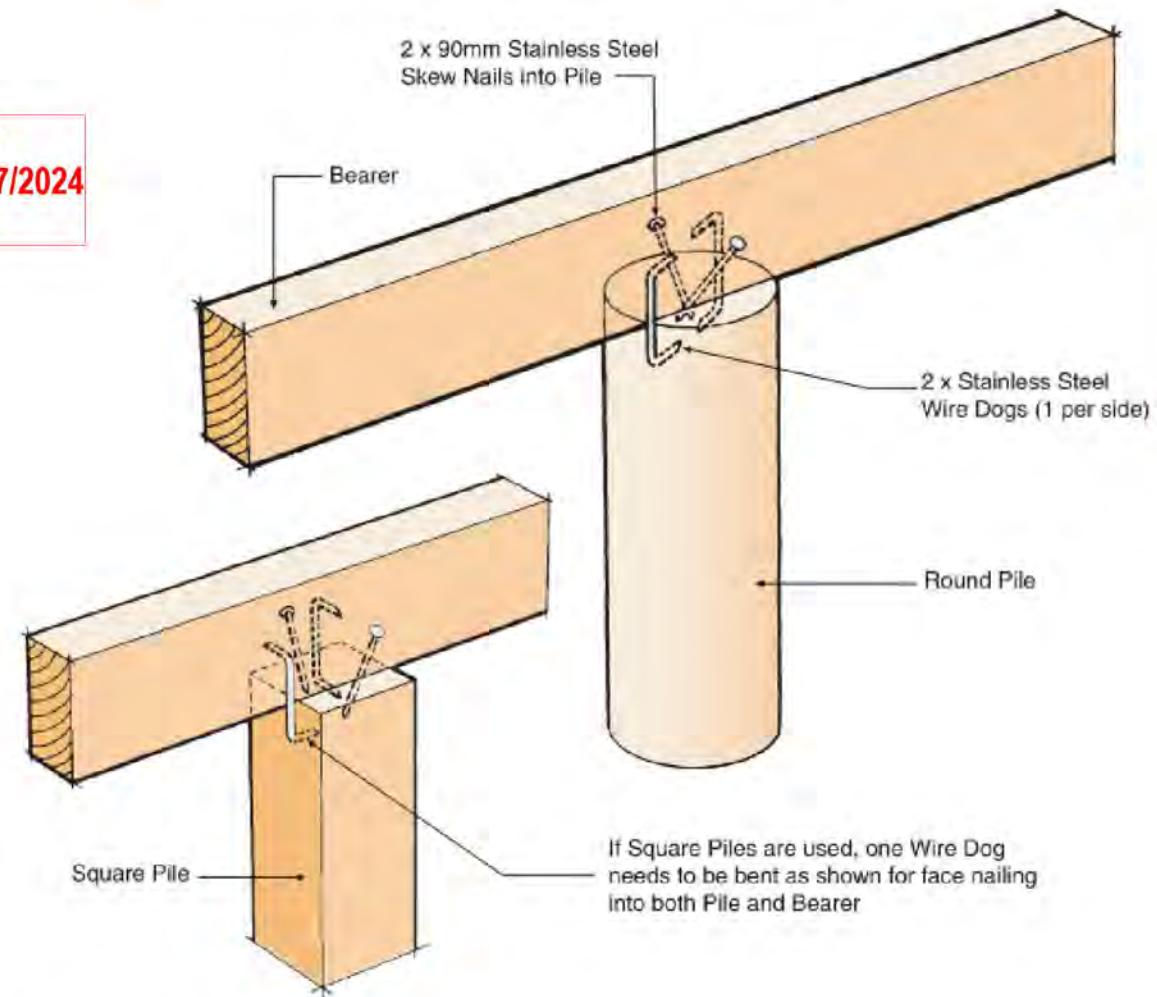


LUMBERLOK®

ORDINARY PILE FIXING

- ★ Complies with NZS 3604:2011
- ★ All Fixings Stainless Steel
- ★ For all Ordinary Piles (Refer Figure 6.3 NZS 3604:2011)

10/2011



Code: OPF
Packed: 20 x Stainless Steel Wire Dog Staples
20 x Stainless Steel Nails 90mm x 4 dia.

Available from leading Builders Supply Merchants
throughout New Zealand



39

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NOTES:

6. FOUNDATIONS/SUBFLOOR

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3		
2		
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JOB TITLE
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MOUNT PISA
OTAGO**

DRAWING TITLE
FOUNDATION DETAIL 1

DRAWING STATUS
ISSUED FOR CONSENT

SCALE 1:20 @ A3	CLIENT REF No: HFC	JOB No: 23588
DRAWN TZ	SHEET No: S201	REVISION: 0
DESIGNED TZ		
CHECKED TE		

DATE PLOTTED: 20.06.2024
PLOTTED BY: DC
SAVE PATH: B:\23588 - 63 STRATFORD DRIVE, MOUNT PISA\05 CAD FILES\01 AUTOCAD\23588 DRG 24.06.19.dwg

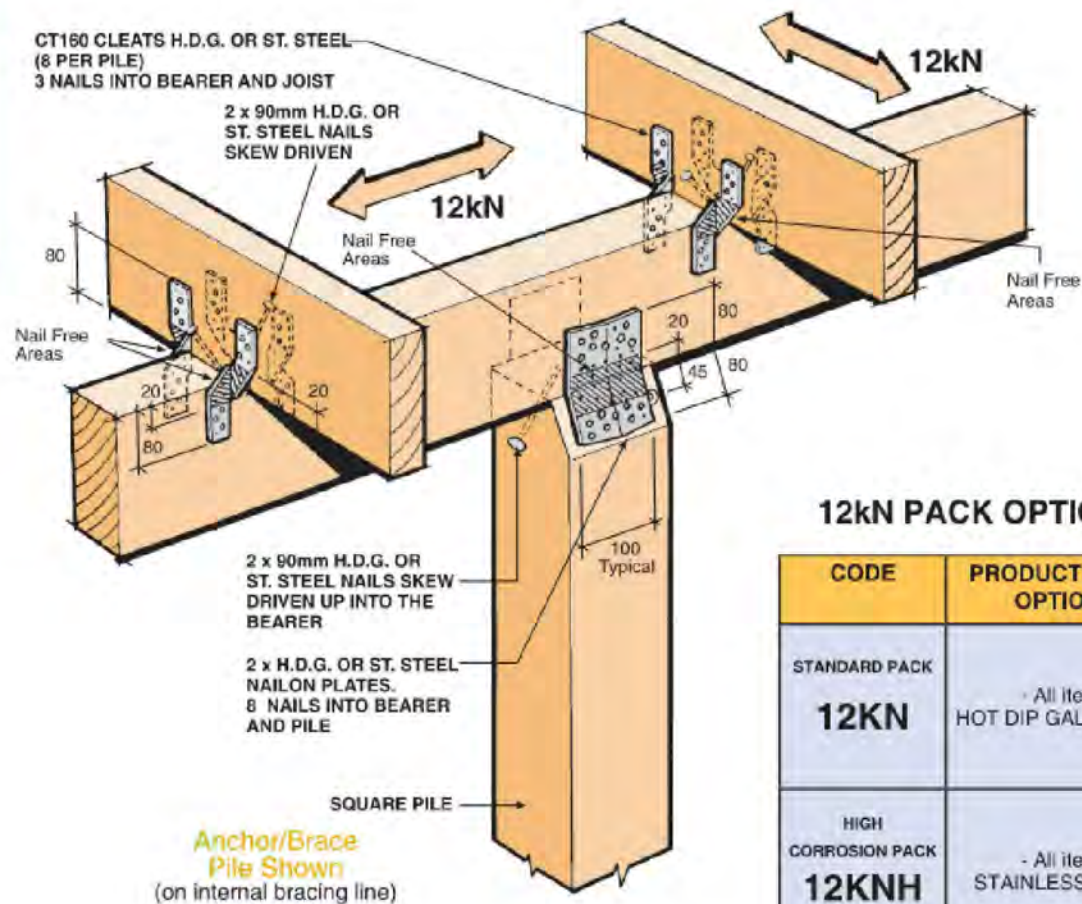
01/2017



12kN PILE FIXING FOR BRACED PILES OR ANCHOR PILES

- ★ The 12kN Pile Fixing must be installed in accordance with this brochure
- ★ Auckland University Tested. Test Ref. 4613
- ★ All subfloor construction must be in accordance with NZS 3604:2011
- ★ NZS 3604 requires lines of lateral support to floor joists within 300mm of bearer or bracing lines, refer to Clause 7.1.2
- ★ Joists deeper than 150mm require solid nogging over braced or anchor pile

6. FOUNDATIONS/SUBFLOOR



12kN PACK OPTIONS

CODE	PRODUCT FINISH OPTIONS
STANDARD PACK 12KN	- All Items HOT DIP GALVANISED
HIGH CORROSION PACK 12KNH	- All Items STAINLESS STEEL

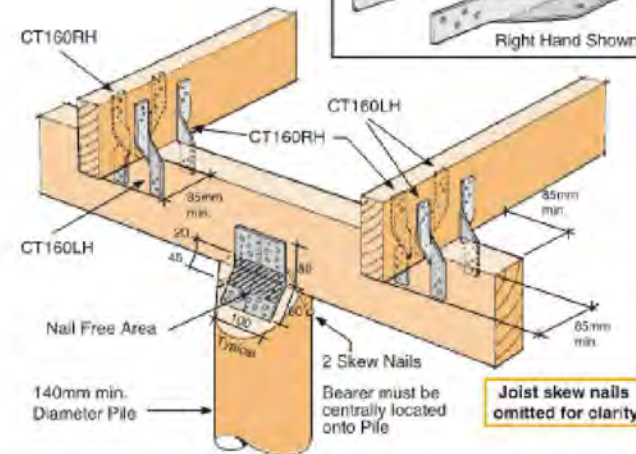
★ See Over For Corrosion Table.



SCAN FOR
INSTALLATION
VIDEO

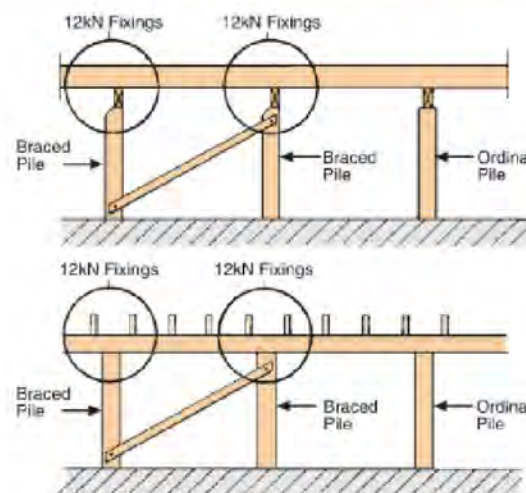
<https://vimeo.com/117350344>

External Bracing Line



CORROSION HAZARD USE TABLE

Standard Pack (12KN) - Zones B & C - All Fixings ABOVE 600mm from Ground level	All Items Hot Dip Galvanised.
High Corrosion Pack (12KNH) - Zone D - All Fixings BELOW 600mm from Ground level	All Items Stainless Steel (304).



Sample Subfloor Elevations
12kN Fixing - Pile to Bearer
- Joists to Bearer

12kN Joint Fixing Schedule

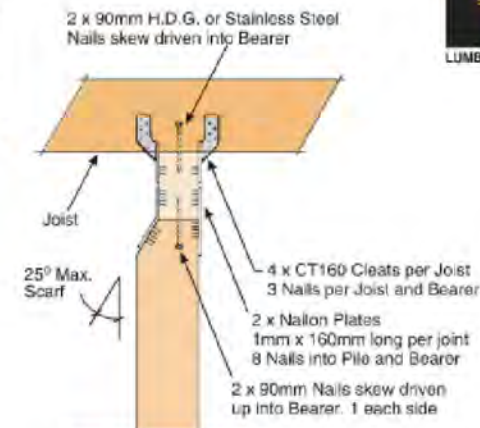
PILE TO BEARER	- Nailon Plate (2 per joint) 1mm x 100mm (Typical) x 160mm long - 8 Nails per Plate into Pile - 8 Nails per Plate into Bearer - 2 Skew Nails 90mm (1 per face)
JOIST TO BEARER	- CT160 Cleats (4 per Joist) 160mm long - 3 Nails per Cleat into Joist - 3 Nails per Cleat into Bearer - 2 Skew Nails 90mm (1 per side)
NAILS	- 80 x 45mm x 3.55 dia. Spiral Nails - 6 x 90mm x 4 dia. St. Steel Nails (12KNH Pack only)

12kN Pile Set Contents

Each set represents 1 x 12kN Pile Fixing (packed 4 sets per carton)
2 x Nailon Plates 160mm long
8 x CT160 Cleats
80 x 45mm x 3.55 dia. Spiral Nails
90mm x 4 dia. St. Steel Angular Groove 6 - 12KNH Pack

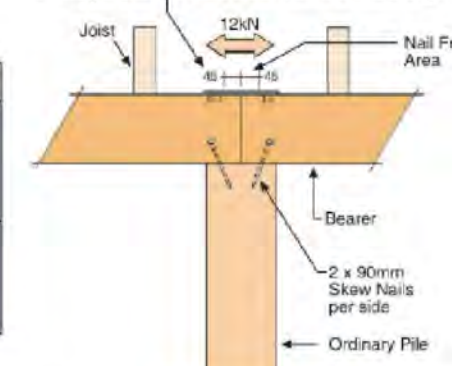
Refer front page for Product Finish Options

90mm H.D.G. Nails not included.



Square Pile

Nailon Plate 1mm x 160mm long (ex 12kN Pack)
8 Nails per end. No Nails within 18mm of timber edge



12kN Bearer Splice

Clause 6.12.7.2
NZS 3604:2011

6. FOUNDATIONS/SUBFLOOR

NOTES:

4		
3		
2		
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REV	AMENDMENT	BY

HFC
STRUCTURES LTD.
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4 KAPANUI STREET
WARKWORTH
T: +64 93671070
E: WARK@HFC.CO.NZ

JOB TITLE
**63 STRATFORD DR
MOUNT PISA
OTAGO**

DRAWING TITLE
FOUNDATION DETAIL 2

DRAWING STATUS
ISSUED FOR CONSENT

SCALE 1:20 @ A3	CLIENT REF No: HFC	JOB No: 23588
DRAWN TZ	SHEET No: S202	REVISION: 0
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43

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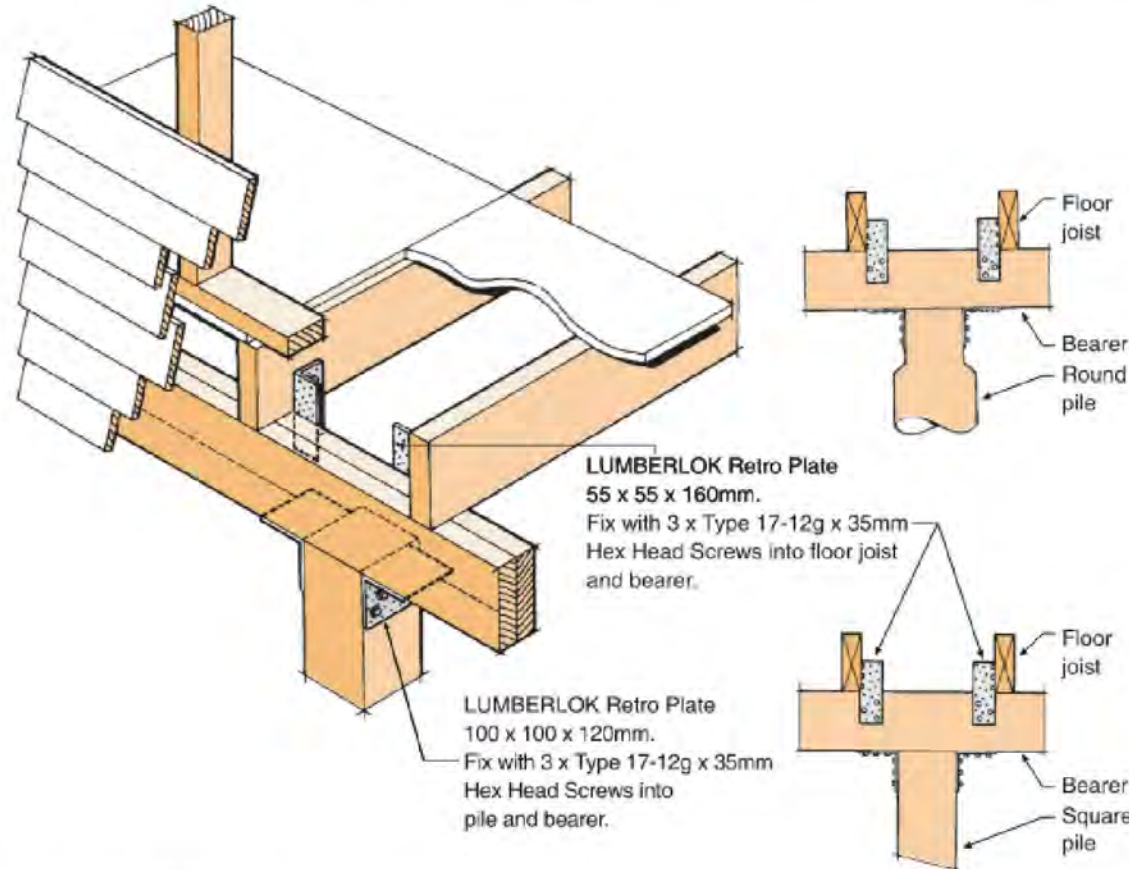
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SAVE PATH: B:\23588 - 63 STRATFORD DR, MOUNT PISA\05 CAD FILES\01 AUTOCAD\23588.DWG 24.06.19.dwg



10/2011

12kN RETRO SUBFLOOR FIXING

- ★ Fixing to be used when the outside face of the bearer is not accessible e.g. fixing relocatable houses to piles.
- ★ Hot Dip Galvanised or Stainless Steel options available for required corrosive zone.



Code: 12KNRF
Material: 0.91mm G300 Z275 (Hot Dip Galvanised Steel)

Code: 12KNRFH
Material: 0.9mm Stainless Steel 304-2B

Packed: 8 x Retro Plate 55 x 55 x 160mm
8 x Retro Plate 100 x 100 x 120mm
100 x Type 17-12g x 35mm Hex Head Screws



SCAN FOR
INSTALLATION
VIDEO

<https://vimeo.com/117351501>



44

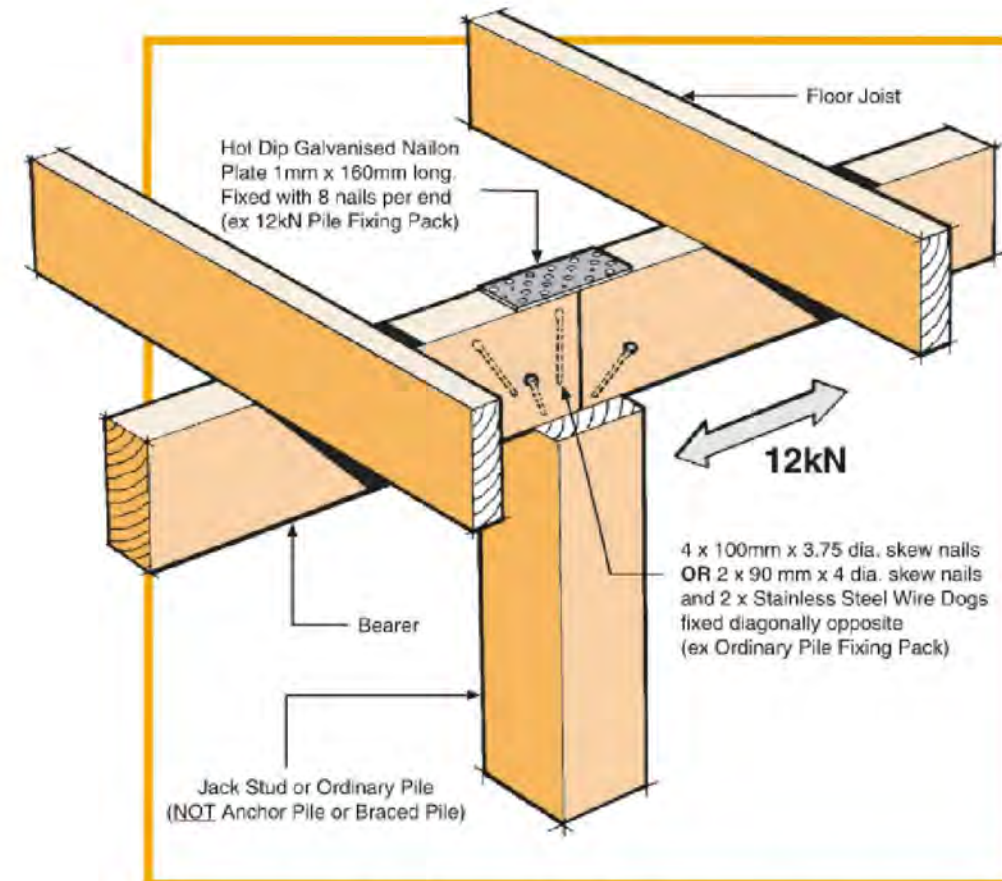
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12kN BEARER SPLICE OVER PILE AS PER CLAUSE 6.12.7 NZS 3604:2011



Stainless Steel Nailon Plate and Nails to be used
in high corrosion environments



47

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Available from leading Builders Supply Merchants
throughout New Zealand

NOTES:

6. FOUNDATIONS/SUBFLOOR

4		
3		
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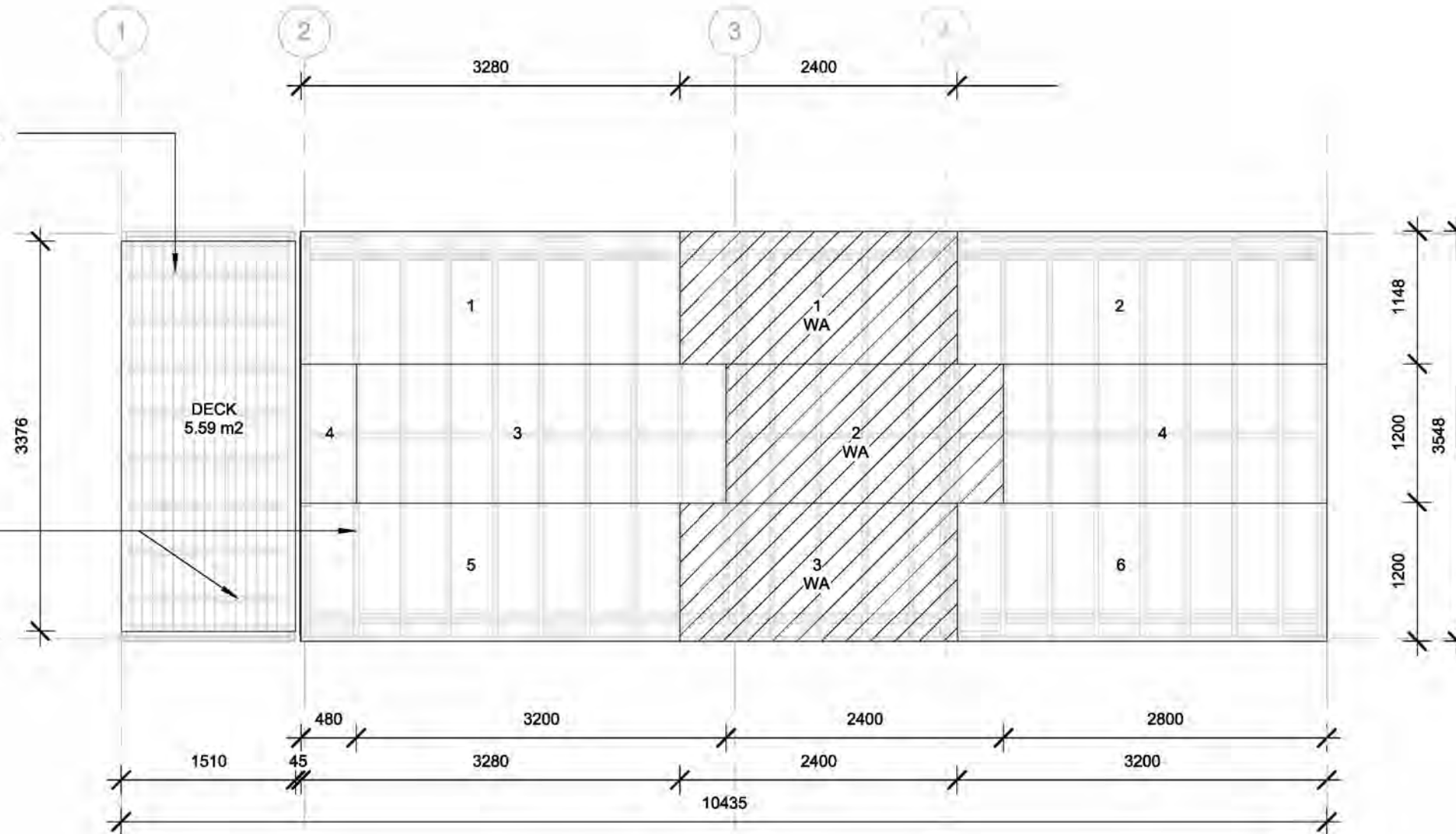
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DRAWING TITLE
FOUNDATION DETAIL 3

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SCALE 1:20 @ A3	CLIENT REF No: HFC	JOB No: 23588	
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Deck to have 90x19mm
H3.2 premium grade Pine
decking grip side up (ensure
12mm gap is maintained
between deck and wall)

Joists underneath
shown for clarity



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1 Board Layout Plan
A09 1 : 50

FLOOR BOARD NOTES

Flooring: 20mm Strandfloor untreated T&G
edge (H3.1 below wet areas)

*Strandfloor subject to availability, alternative
products may be used:
IBS Eurofloor - Codemark certificate no.
CM70089 Rev 1, Date of issue: 22 July 2021
or Carter Holt Harvey Ecoply flooring -
compliant with **AS/NZS 2269 Plywood
Structural**. Refer to project specification.

Note:

H3.2 - Outside of building
H3.1 - Inside of building

LEGEND:

Strandfloor untreated
T&G edge
3600x1200 (Internal)

Strandfloor H3.1 T&G
edge 2400x1200 for
wet areas (Internal)

Deck boards
90x19mm Premium
grade H3.2 (External)

Total boards:

Strandfloor untreated
T&G edge 3600x1200 6

Strandfloor H3.1 T&G
edge 2400x1200 3

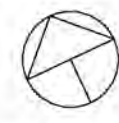


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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings	Board Layout
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	
	Hamilton 3210	Drawn:	FDT	9 of 44



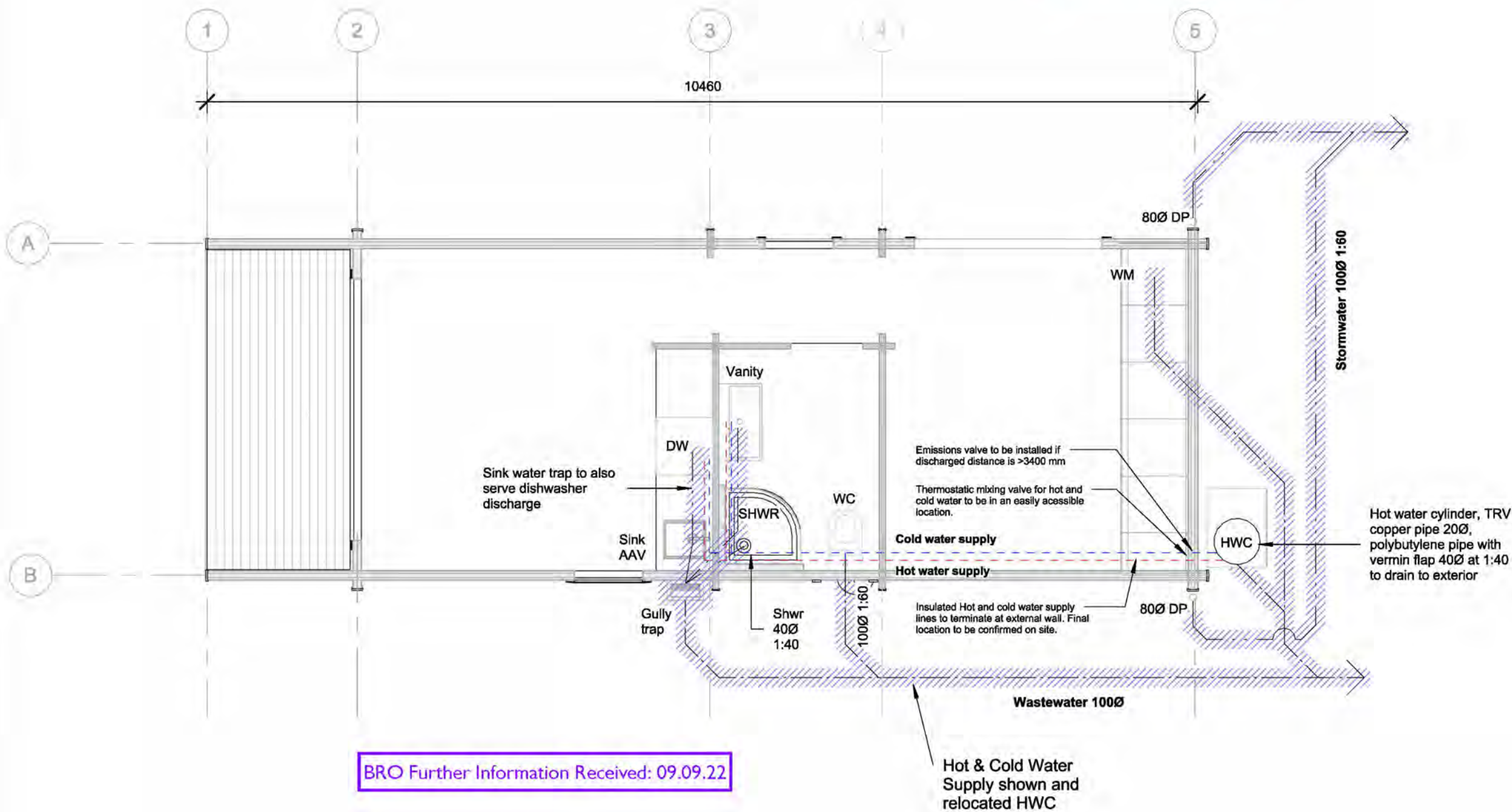
N

A07

Transportable building. Site drainage are not part of this consent package. Indicative only.
Note: Client Specification for Gas Califor or HWC (shown) will be part of the building consent approved by local Council at site destination

Waikato District Council
Building Consent Number
BLD0202/23

APPROVED



BRO Further Information Received: 09.09.22

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Legend:

Not part of consent

PLUMBING & DRAINAGE
NOTES

All drainage shall comply with NZBC G12 and G13.

Confirm all dimensions and levels on site.
Provide 400mm cover to invert at heads of all drains.

Confirm with owner for location of outside taps.

Install AAV at all sanitary fixtures with over 3.5m developed wastes length, or at combined wastes. Ensure hot and cold water is pressure tested to 1500 Kpa. Sewer and Stormwater to be water tested

Foulwater Pipes:
Fix foulwater pipework to sub-floor with plastic clips at 500mm ctrs for pipes up to 50mm Ø and 1.0m ctrs for all other pipes

Water Supply Pipes:
Polyethylene and polybutylene pipework to sub-floor with plastic clips at 750 ctrs for pipes 15 - 20mm
Cold water supply pipework to sub-floor with plastic strapping at 900 ctrs for pipes 25mm
Hot water supply polybutylene pipework to sub-floor with plastic clips at 600 ctrs for pipes 15 - 18mm and at 700mm ctrs for pipes 20 - 22mm

NOTE:
Water supply pipes are to be securely supported in place to ensure that movement (Aside from thermal movement) is not imposed on the joint fittings

FIXTURES
All hot water lines to personal hygiene fixtures are to be fitted with anti-scald devices such as tempering valves complying with NZBC G12 section 6.14.2a and figure 16. Set to a max. temperature of 55C as stated in NZBC G12 section 6.14.
Hot water cylinder to be fitted with a Pressure-relief valve.

Fixture Unit Calculations

Fixture	Unit Value	Qty	Total Units
Dishwasher (DW)	FU: 3	1	FU: 3
Shower	FU: 2	1	FU: 2
Sink	FU: 3	1	FU: 3
Vanity	FU: 1	1	FU: 1
Washing machine	FU: 5	1	FU: 5
WC	FU: 4	1	FU: 4

Total Fixture Units: FU: 18

Plumbing & Drainage Plan

1 : 50

Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings	Plumbing & Drainage Plan
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22 01/09/22	Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission Rev 1 A04, S06, 12, 13, 14, 15	
	Hamilton 3210	Drawn:	FDT FDT	5 of 44



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N

A04

Transportable building. Subfloor framing is not part of this consent.

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Building Consent Number
BLD0202/23

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SUBFLOOR NOTES

Verify all dimensions and levels on site before commencing construction. Do not scale from drawings. All subfloor construction not covered by producer statement to comply with **NZS3604:2011** and the NZ Building Regulations.

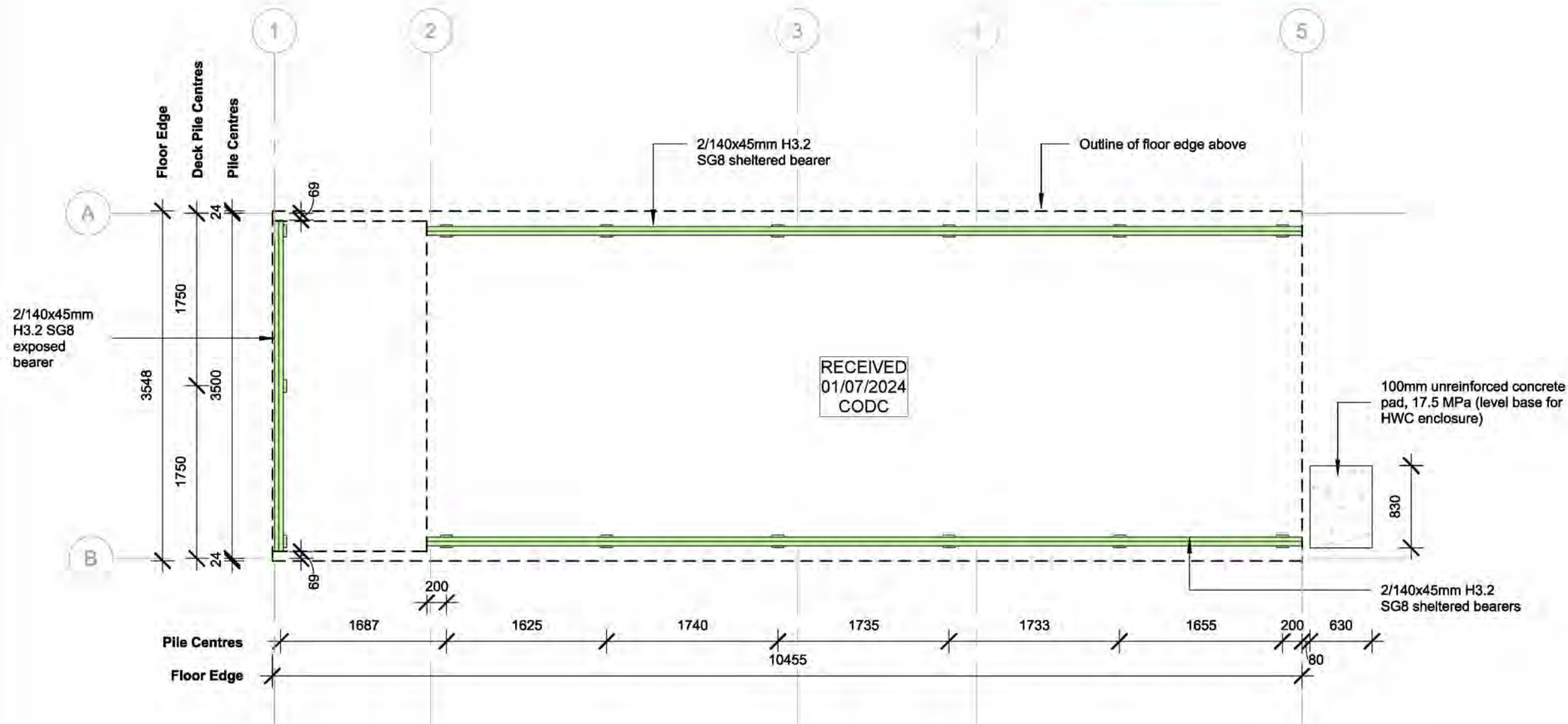
Floor Level: 680mm above finished ground level. Ensure 450mm crawl space below joists is achieved, excavate if required.

Sheltered Bearers: 2/140x45mm H3.2 SG8 nail laminated with 2 rows of 90x3.15mm stainless steel nails driven alternatively from either face at 270mm ctrs.

Exposed Bearers: 2/140x45mm H3.2 SG8 nail laminated with 2 rows of 90x3.15mm stainless steel nails driven alternatively from either face at 270mm ctrs.

Legend:

Concrete Pad



BRO Further Information Received: 09.09.22

1
A09 Subfloor Framing Plan
1 : 50

2
Subfloor Framing 3D



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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings				Subfloor Plan	
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	01/09/22			Scale: 1 : 50	@A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	Rev 1 A04, 5e, 6, 12, 13, 14, 15				
	Hamilton 3210	Drawn:	FDT	FDT			7 of 44	



A05A

Verify all dimensions and levels on site before commencing construction. Do not scale from drawings. All subfloor construction not covered by producer statement to comply with **NZS3604:2011** and the NZ Building Regulations.

External stairs and patio are the responsibility of the owner and to be supplied at each egress point, stairs to be non-slip as per D1/AS1 with a maximum rise of 190mm and minimum tread of 280mm

Floor Level: 680mm above finished ground level. Ensure 450mm crawl space below joists is achieved, excavate if required.

Floor Joists: 190x45mm H1.2 SG8 joists at 400mm ctrs fixed to bearers with 3/90x 3.15mm skew nails

Deck Joists: 140x45mm H3.2 SG8 joists at 400mm ctrs fixed to bearers with 3/90x3.15mm SS skew nails

Floor Insulation: Expol White R1.4 60mm



1 Floor Framing Plan
A09
1 : 50



2 Floor Framing 3D

BRO Further Information Received: 09.09.22

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Building Consent Number
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Not part of consent

S - Safety Glazing
FXD - Fixed Glazing



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Transportable building. Subfloor framing is not part of this consent. Piles and Foundations are not of a part of this consent

Waikato District Council
Building Consent Number
BLD0202/23

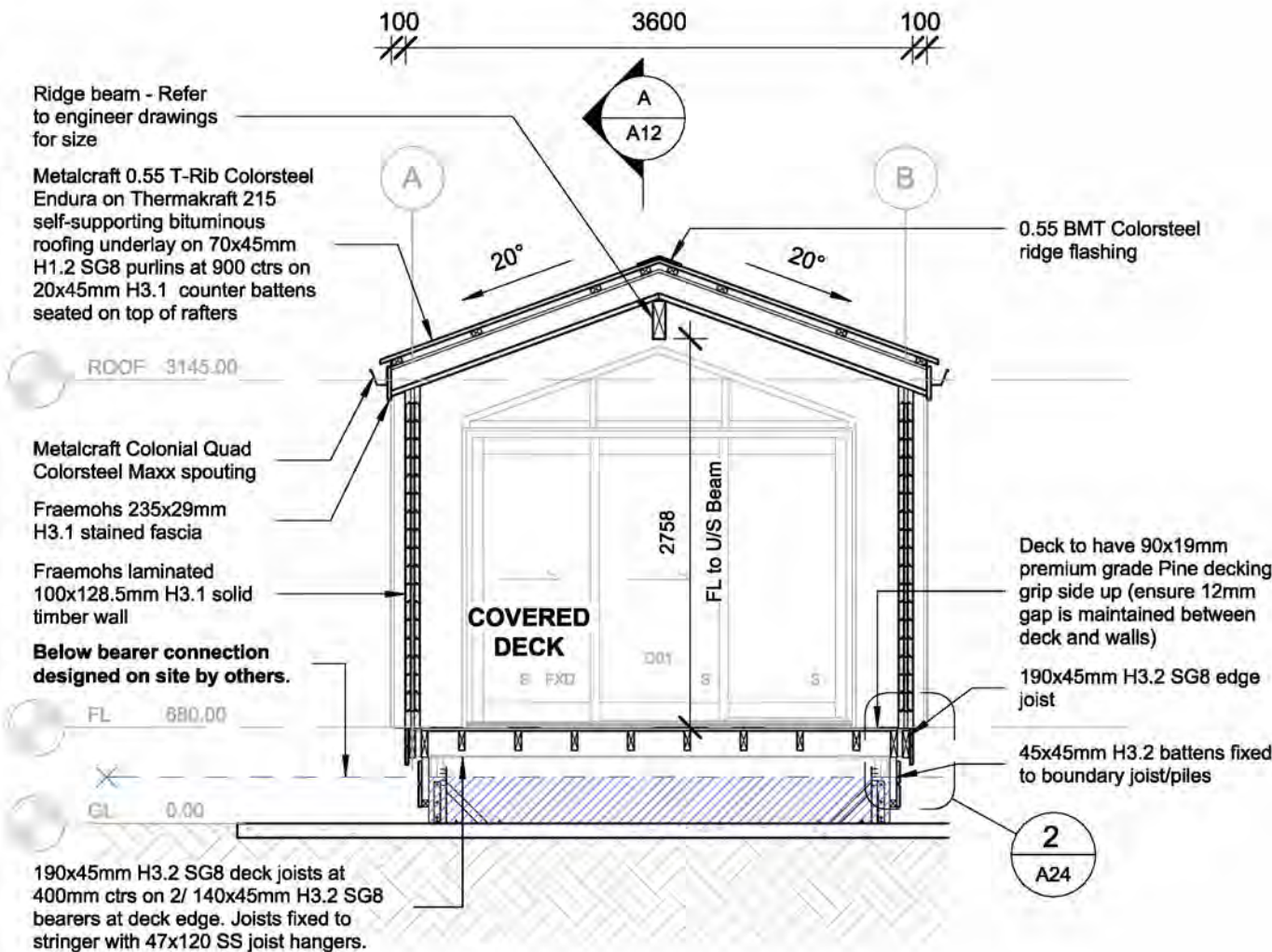
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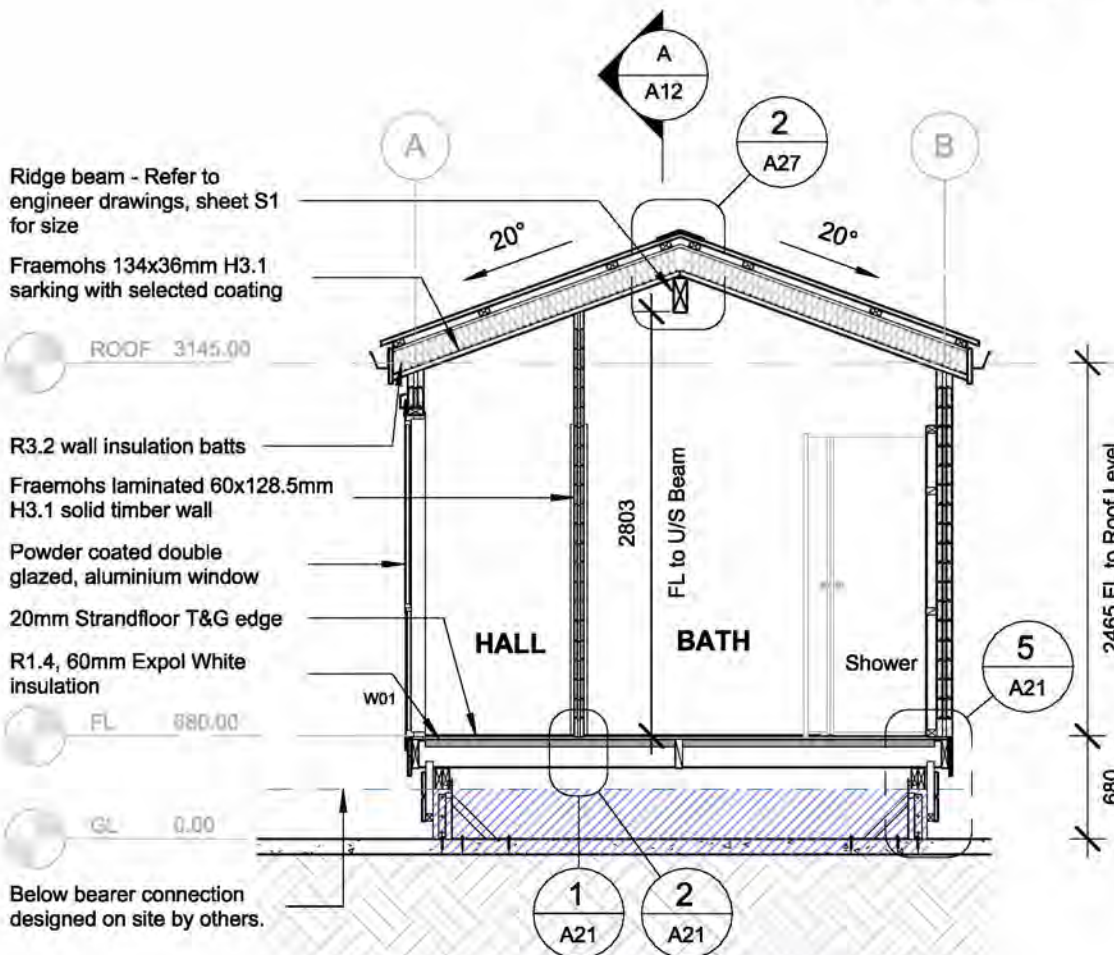
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Door & Window Legend:

S - Safety Glazing
FXD - Fixed Glazing



Cross Section 1
1 : 50



Cross Section 2
1 : 50

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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings				Sections
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	01/09/22			Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	Rvw 1 A04,5a,6,12,13,14,15			
	Hamilton 3210	Drawn:	FDT	FDT			15 of 44

N

A13

Waikato District Council
Building Consent Number
BLD0202/23

APPROVED

Not part of consent



Cross Section 3

1 : 50

ROOF 3145.00

Powder coated double glazed, aluminium double slider door

2/140x45mm H3.2 SG8 bearers

190x45mm H1.2 SG8 boundary joist

FL 650.00

GL 0.00

Below bearer connection designed on site by others. Stringer fixed to H5 timber pile with 2/ M12 bolts

MULTI-USE ROOM

2803

FL to U/S Beam

190x45mm H1.2 SG8 solid blocking at joist mid-span

2465 FL to Roof Level

680

2 A15

A A12

B

3 A15

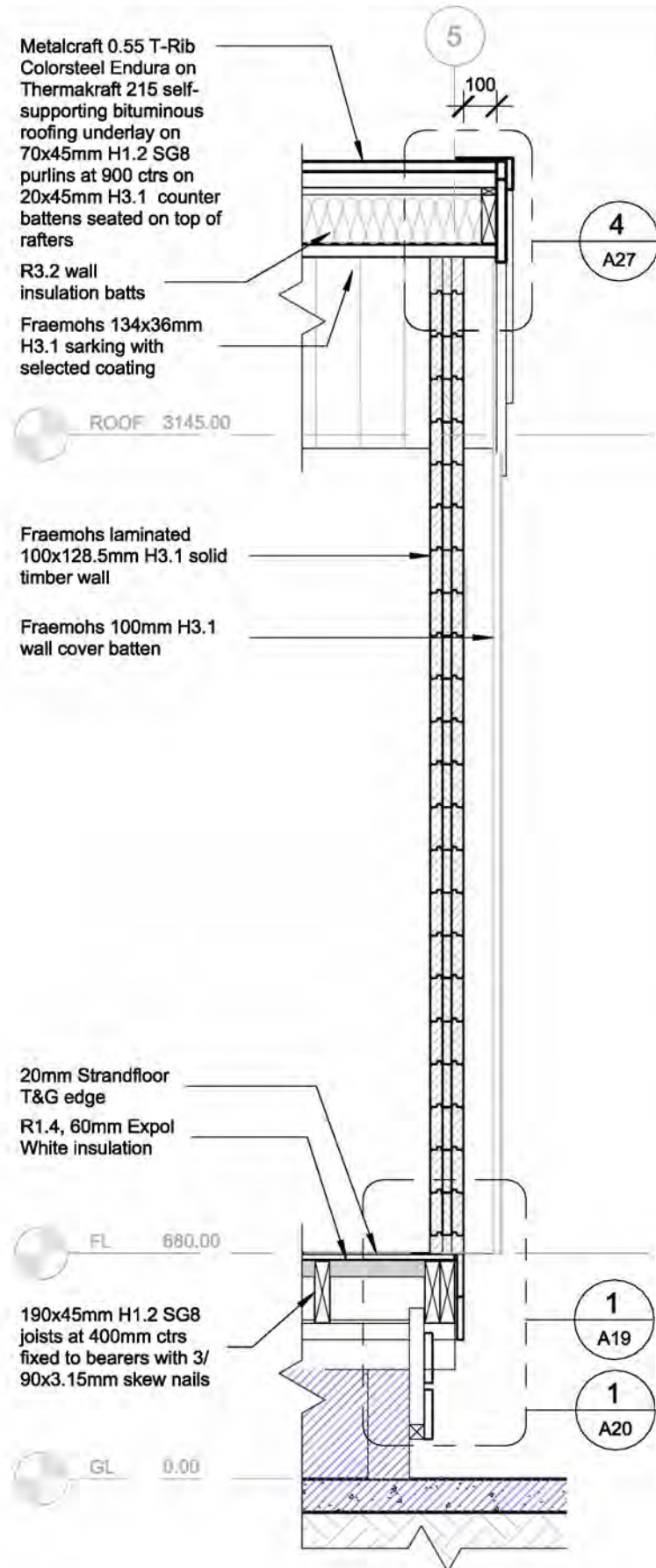
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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings					Sections	
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	01/09/22					Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	Rev 1 A04,5a,6,12,13,14,16					
	Hamilton 3210	Drawn:	FDT	FDT					16 of 44

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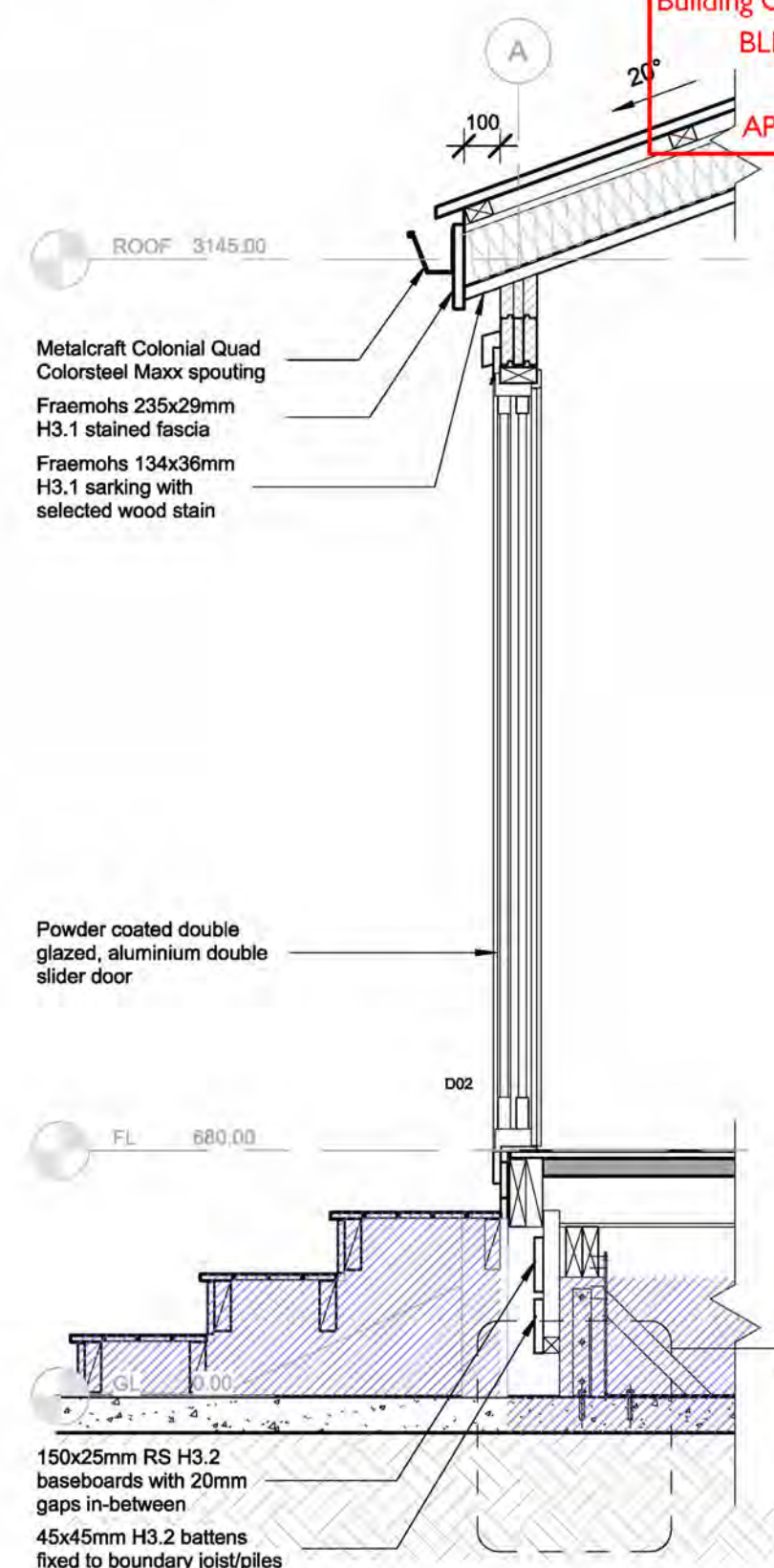
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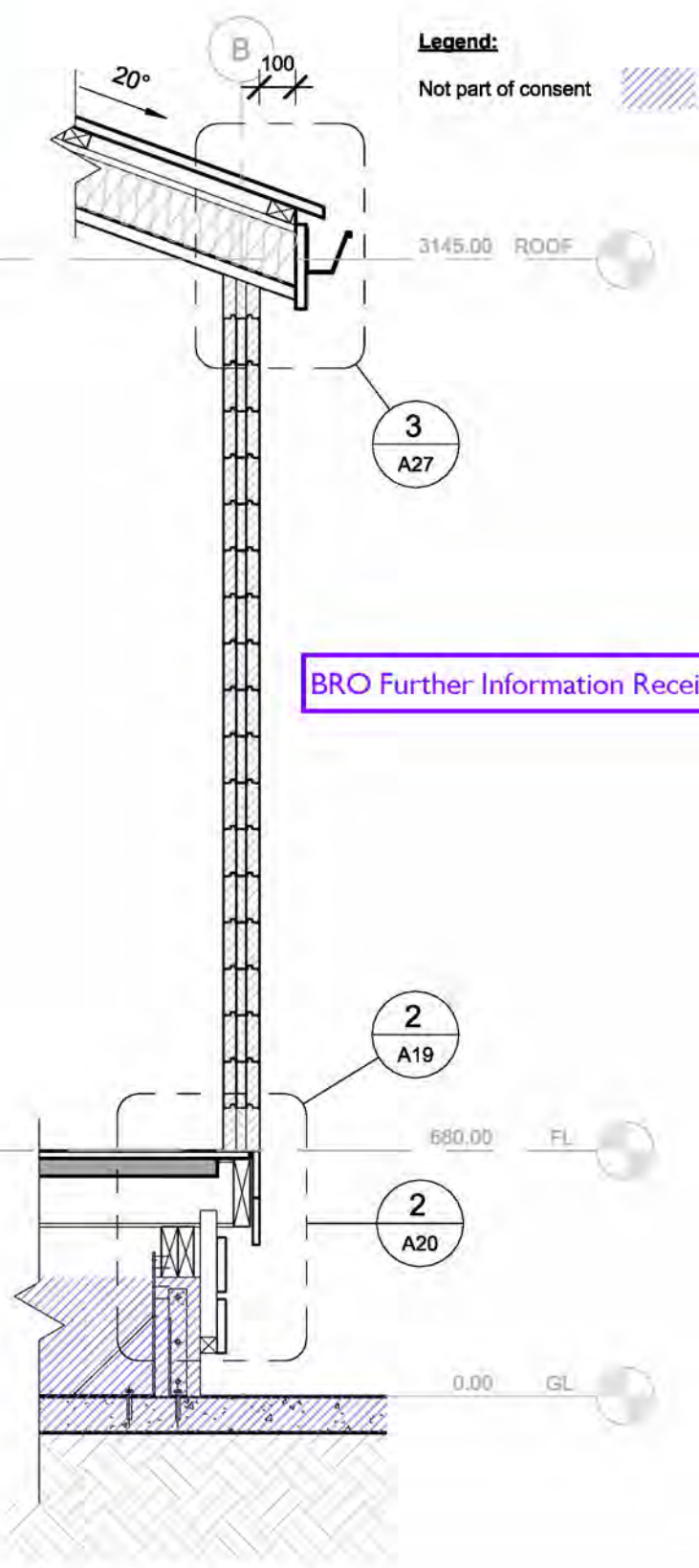
1 Gable Wall Section 1
1 : 20

Transportable building. Subfloor framing is not a part of this consent. Piles & footings are not part of this consent package.

Waikato District Council
Building Consent Number
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2 Longitudinal Wall Section 2
1 : 20



3 Longitudinal Wall Section 3
1 : 20

Legend:
Not part of consent

BRO Further Information Received: 09.09.22

Legend:

Not part of consent

FLOOR PLAN NOTES

Verify all dimensions and levels on site before commencing construction. Do not scale from drawings, all construction to comply with NZ Building Regulations.

Note: Confirm on site for measurement prior to installing windows.

Engineering: Engineering by Lignum Structural Ltd

Floor level: 680mm above finished ground level. Ensure 450mm crawl space below joists is achieved, excavate if required.

Timber Floor Setback: Timber floor is set back 26mm from solid timber exterior wall edge

External walls: Fraemohs Laminated 100x128.5mm H3.1 coated with selected wood stain to exterior.

Internal walls: Fraemohs Laminated 60x128.5mm H3.1 coated with selected coating

Portal frame: Refer to engineer drawings, sheet S1, for sizes and fixings

Joinery: Aluminium 35mm suite powder coated frame, Double glazed, 19mm pine reveals, Internal doors viewed from the room they open into, External joinery viewed externally, Internal doors to be flush panel hollow core

Pitched Ceilings: Fraemohs 134x36mm H3.1 sarking with selected coating

Insulation Pitched Ceilings: R3.2 wall insulation batts

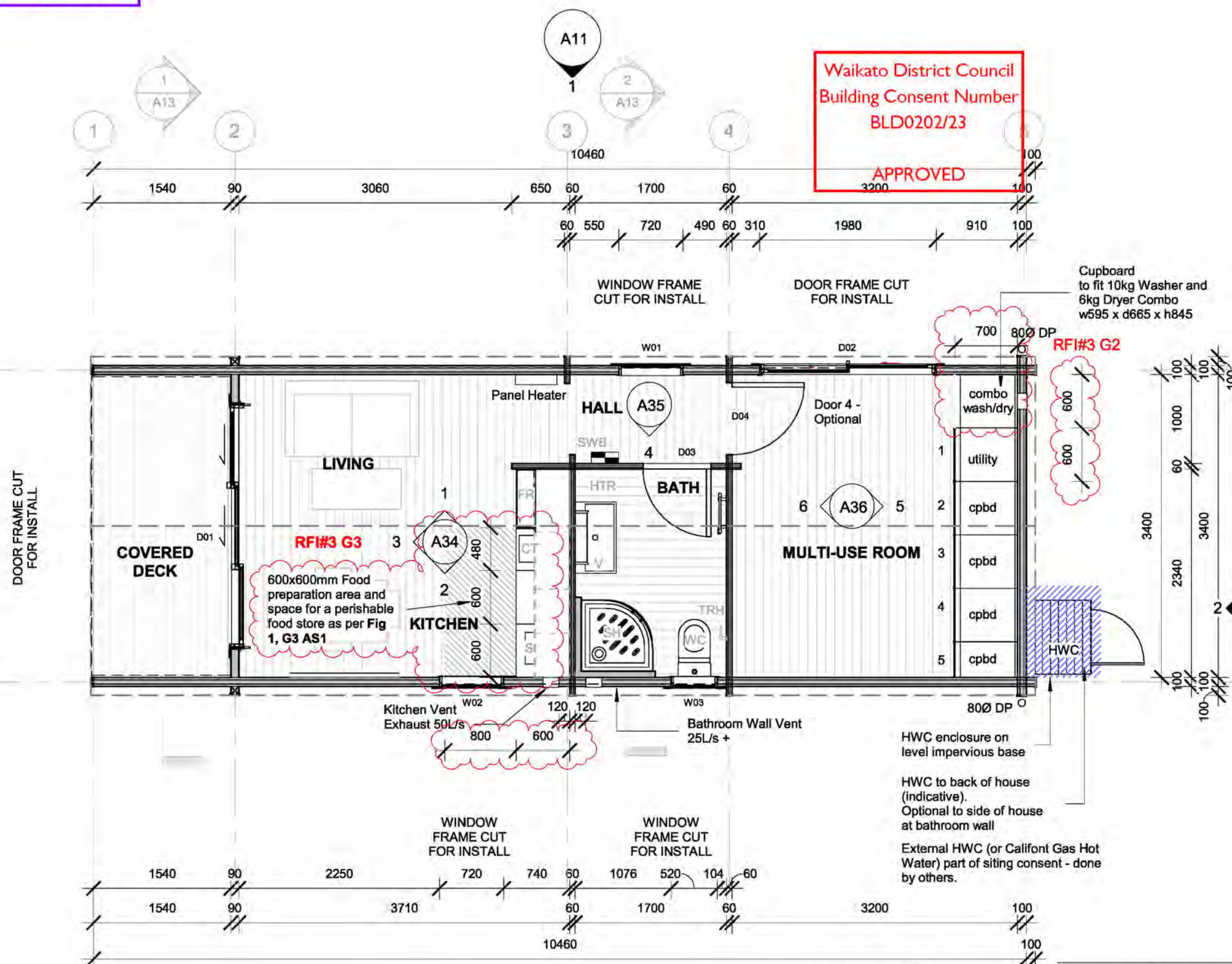
Lining to False Shower Walls: 10mm GIB Aqualine behind acrylic shower liner, fixed to 70x45mm H1.2 SG8 slotted timber studs at 600 ctrs

Insulation Sub-floor: R1.4, 60mm Expol White to sub-floor areas

Showers: Acrylic shower with safety glass screen and door

Hot Water: 160L Electric Hot water cylinder
Note: External HWC part of siting consent - done by others.

Floor Coverings: Vinyl floor coverings to Living, Kitchen, Hall, Bathroom and Multi-Use Room.



MULTI-USE ROOM
Studio / Utility / Bedroom
Cupboard allocation determined by client at point of sale.

Cpbd 1 - if Studio. Tub or laundry facility plus vent provision.

Cpbd 2 - if Utility. Storage cupboard.

Cpbd 1 - 6 - if Bedroom. Robes and storage.

Room Schedule

Name	Area
BATH	4 m ²
HALL	2 m ²
KITCHEN	3 m ²
LIVING	10 m ²
MULTI-USE ROOM	11 m ²
Total Floor Area	29 m ²

Floor Plan

1 : 50

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Project: 15481 Mackenzie Gable #6

House: Transportable Home on a Temporary Site

Site Address: 2532 River Road, Horsham Downs

Hamilton 3210

Stage: Construction Drawings

Issue Date: 02/08/22 01/09/22 10/10/22

Revision No: BC Submission Rev 1 A04, Aa, S, 12, 13, 14, 15 RFW3 A08

Drawn: FDT FDT FDT

Floor Plan

Scale: 1 : 50 @A3

10 of 44



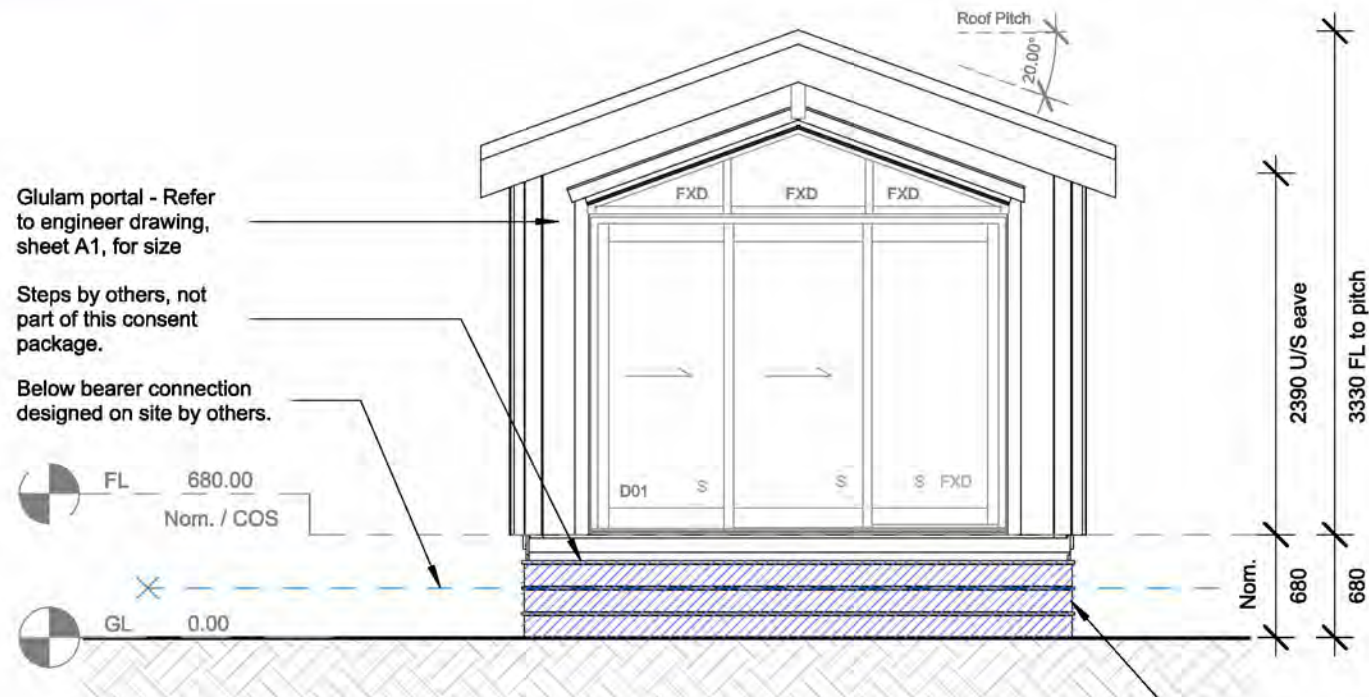
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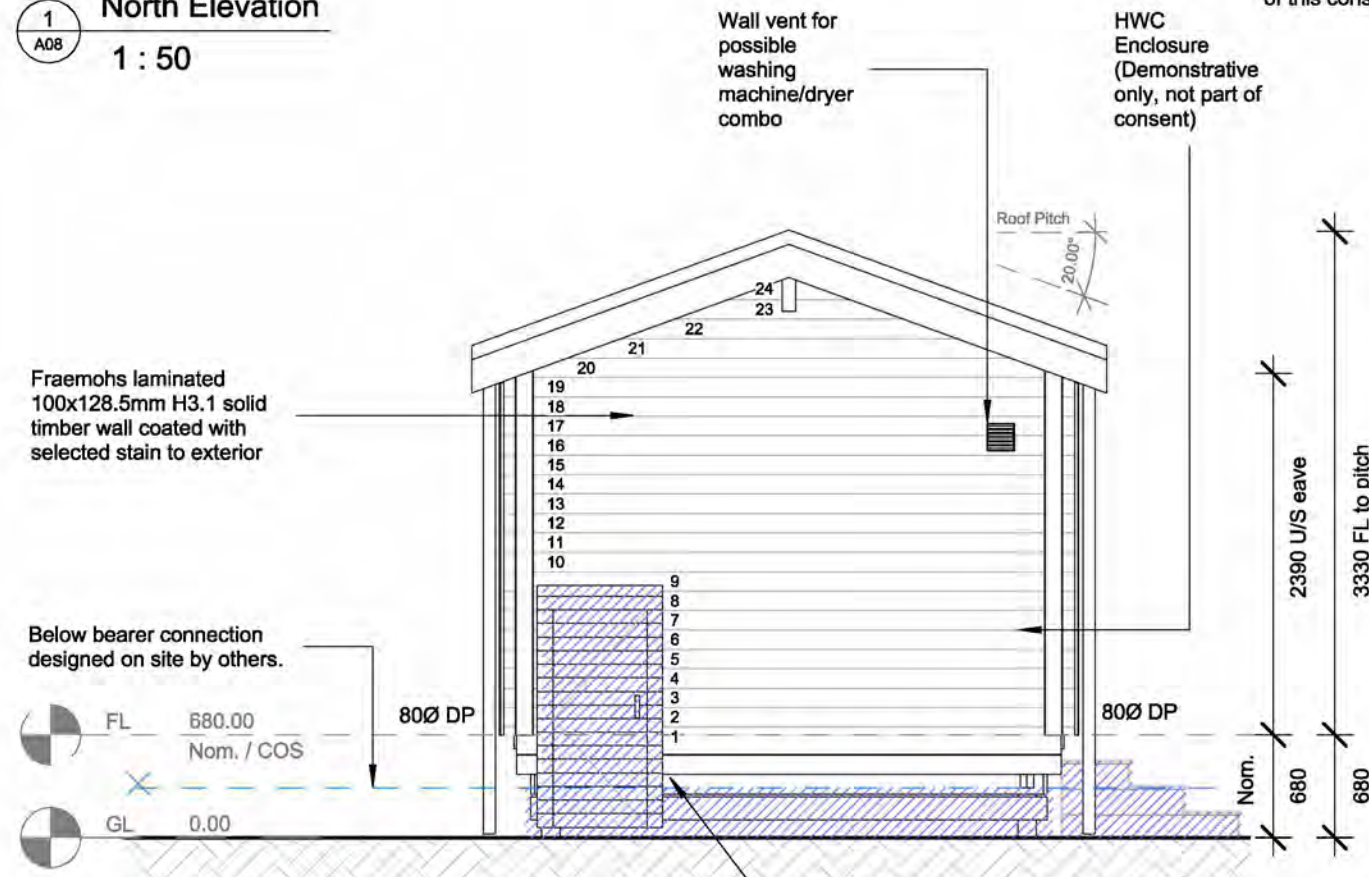
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741584

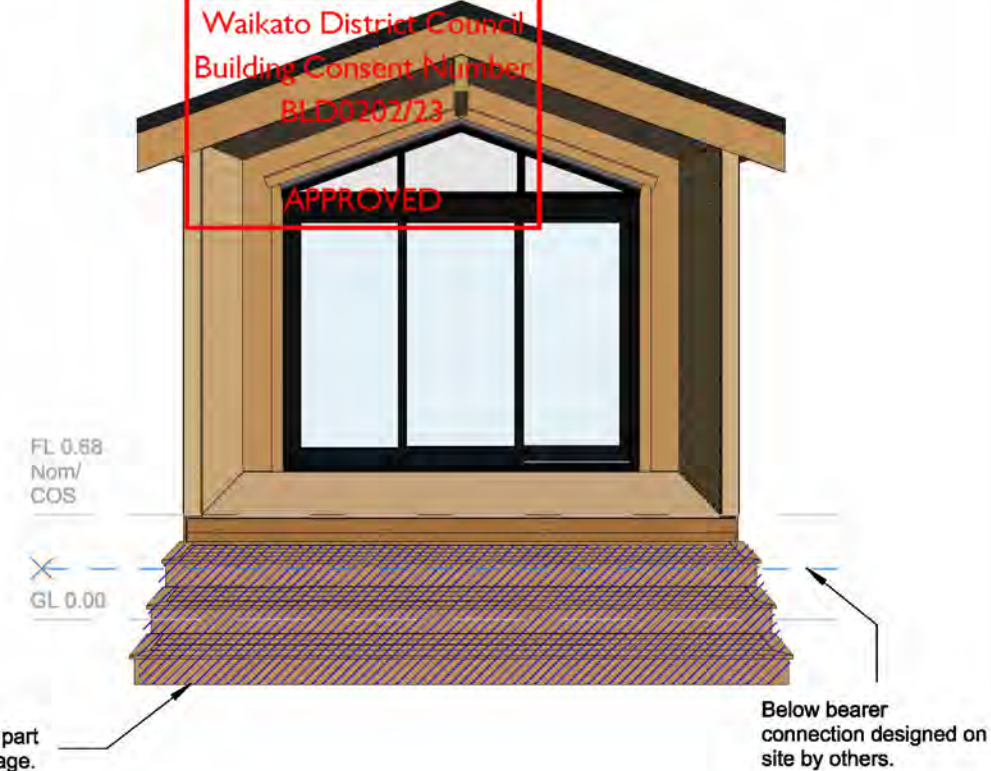
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1
A08
North Elevation
1 : 50



2
A08
South Elevation
1 : 50



3
North Wall Elevation



4
South Wall Elevation

Legend:

Not part of consent

ELEVATION NOTES

External walls: Fraemohs Laminated 100x128.5mm H3.1 coated with selected stain

Joinery: Aluminium 35mm suite powder coated frame, Double glazed, 19mm reveals, Internal doors viewed from the room they open into, External joinery viewed externally, Internal doors to be flush panel hollow core

Roof pitch: 20°

Eave: Fraemohs 134x36mm H3.1 sarking with selected wood stain

Eave width: 100mm

Barge width: 100mm

Roofing: Metalcraft 0.55 T-Rib Colorsteel Endura

Fascia: Fraemohs 235x29mm H3.1 stained fascia, see fixing schedule

Gutter: Metalcraft Colonial Quad Colorsteel Maxx

Downpipes: Metalcraft 80mm Ø Colorsteel Maxx

Deck: Deck to have 90x19mm premium grade Pine decking grip side up (ensure 12mm gap is maintained between deck and wall)

Door & Window Legend:

S - Safety Glazing
FXD - Fixed Glazing

Building Envelope Risk Matrix

North Elevation

Risk Factor	Risk Severity	Risk Score
Wind zone	Extra high risk	2
Number of storeys	Low risk	0
Roof/wall junctions	Low risk	0
Eaves width	High risk	0
Envelope complexity	Low risk	0
Deck design	Low risk	0

Total risk score: 2

South Elevation

Risk Factor	Risk Severity	Risk Score
Wind zone	Extra high risk	2
Number of storeys	Low risk	0
Roof/wall junctions	Low risk	0
Eaves width	High risk	2
Envelope complexity	Low risk	0
Deck design	Low risk	0

Total risk score: 4



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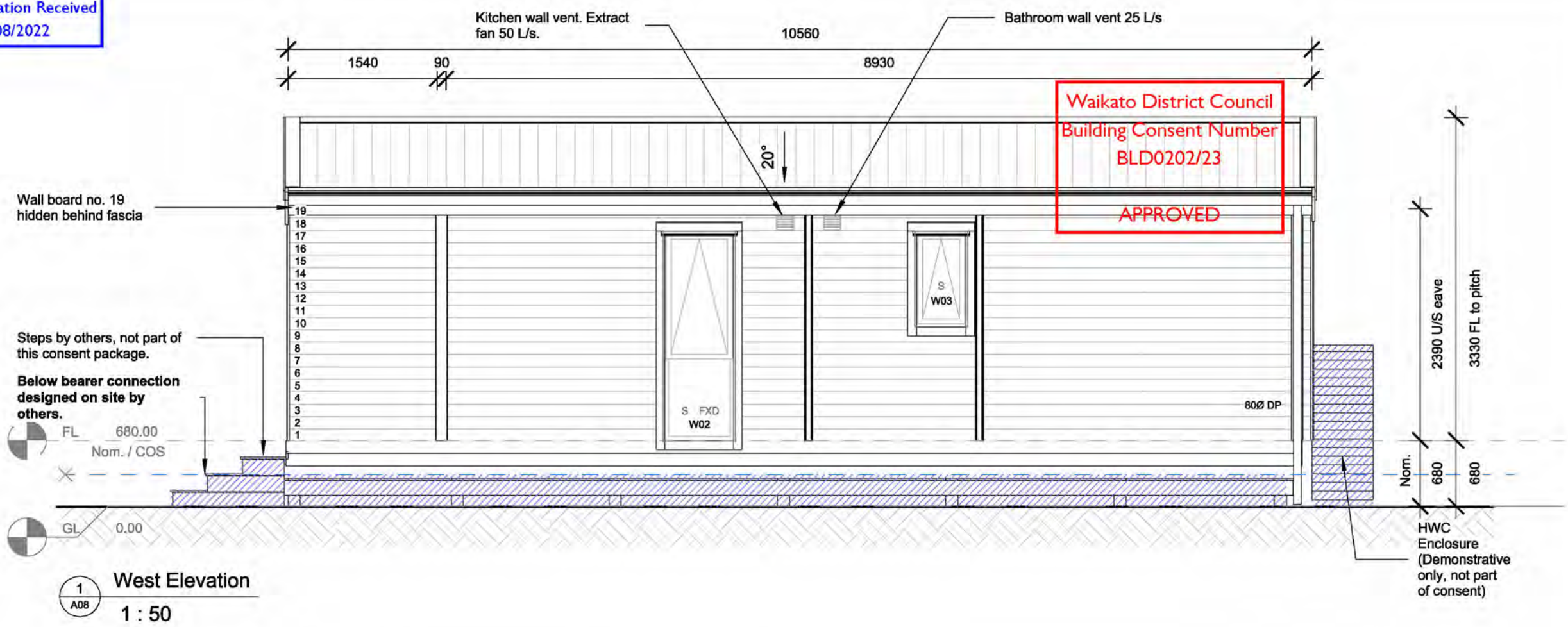
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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings	Elevations
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	
	Hamilton 3210	Drawn:	FDT	11 of 44

N

A09



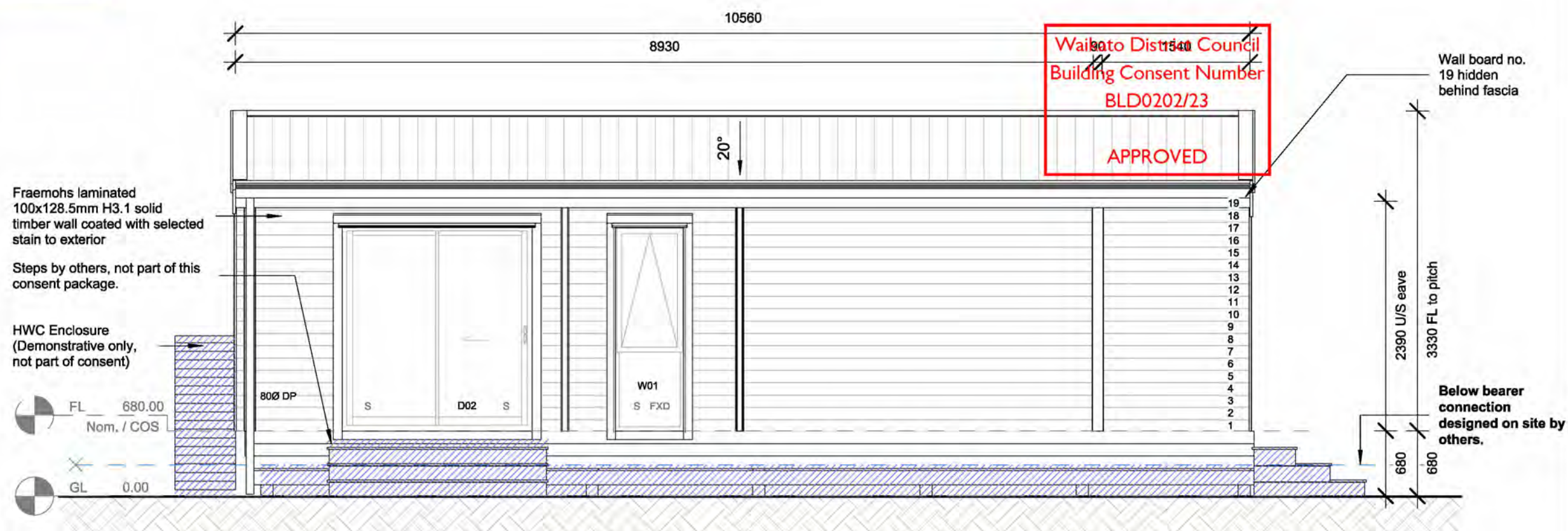
- Legend:**
- Not part of consent
- ELEVATION NOTES**
- External walls:** Fraemohs Laminated 100x128.5mm H3.1 coated with selected stain
- Joinery:** Aluminium 35mm suite powder coated frame, Double glazed, 19mm reveals, Internal doors viewed from the room they open into, External joinery viewed externally, Internal doors to be flush panel hollow core
- Roof pitch:** 20°
- Eave:** Fraemohs 134x36mm H3.1 sarking with selected wood stain
- Eave width:** 100mm
- Barge width:** 100mm
- Roofing:** Metalcraft 0.55 T-Rib Colorsteel Endura
- Fascia:** Fraemohs 235x29mm H3.1 stained fascia, see fixing schedule
- Gutter:** Metalcraft Colonial Quad Colorsteel Maxx
- Downpipes:** Metalcraft 80mm Ø Colorsteel Maxx
- Deck:** Deck to have 90x19mm premium grade Pine decking grip side up (ensure 12mm gap is maintained between deck and wall)
- Door & Window Legend:**
- S - Safety Glazing
FXD - Fixed Glazing

Building Envelope Risk Matrix		
West Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone	Extra high risk	2
Number of storeys	Low risk	0
Roof/wall junctions	Low risk	0
Eaves width	High risk	2
Envelope complexity	Low risk	0
Deck design	Low risk	0
Total risk score:		4



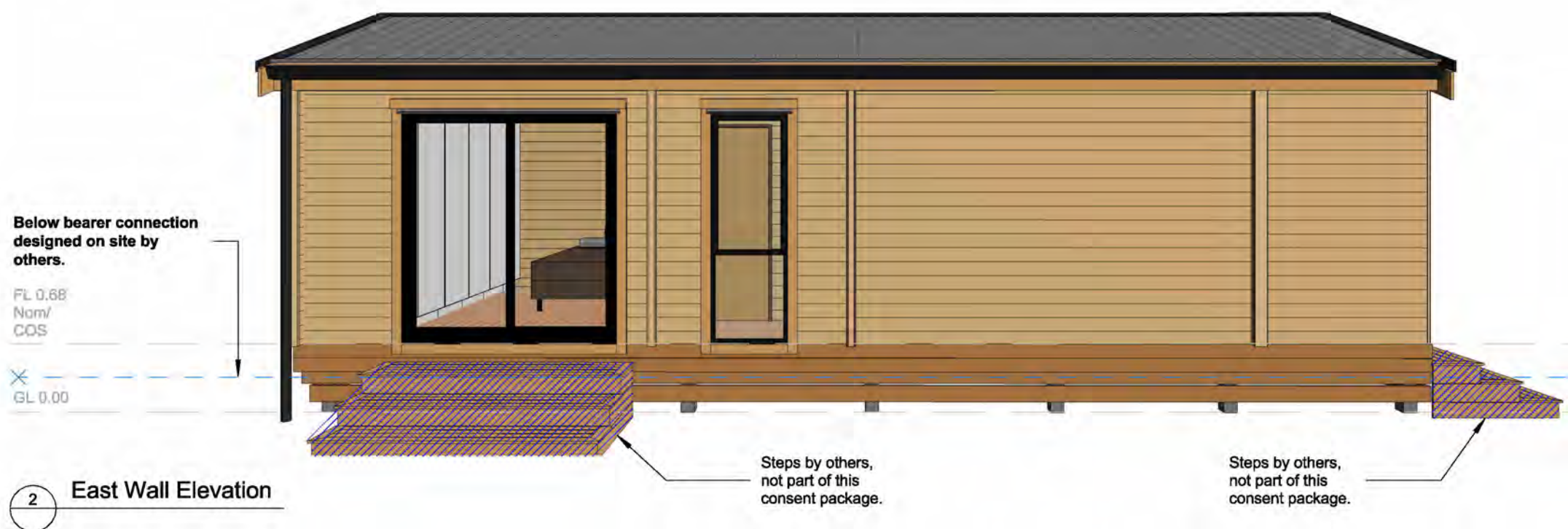
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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings				Elevations	
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22				Scale: 1 : 50	@A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission					
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1 East Elevation
A08 1 : 50

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2 East Wall Elevation

Legend:

Not part of consent

ELEVATION NOTES

External walls: Fraemohs Laminated
100x128.5mm H3.1 coated with selected stain

Joinery: Aluminium 35mm suite powder coated frame, Double glazed, 19mm reveals, Internal doors viewed from the room they open into, External joinery viewed externally, Internal doors to be flush panel hollow core

Roof pitch: 20°

Eave: Fraemohs 134x36mm H3.1 sarking with selected wood stain

Eave width: 100mm

Barge width: 100mm

Roofing: Metalcraft 0.55 T-Rib
Colorsteel Endura

Fascia: Fraemohs 235x29mm H3.1 stained fascia. see fixing schedule

Gutter: Metalcraft Colonial Quad
Colorsteel Maxx

Downpipes: Metalcraft 80mm Ø
Colorsteel Maxx

Deck: Deck to have 90x19mm premium grade Pine decking grip side up (ensure 12mm gap is maintained between deck and wall)

Door & Window Legend:

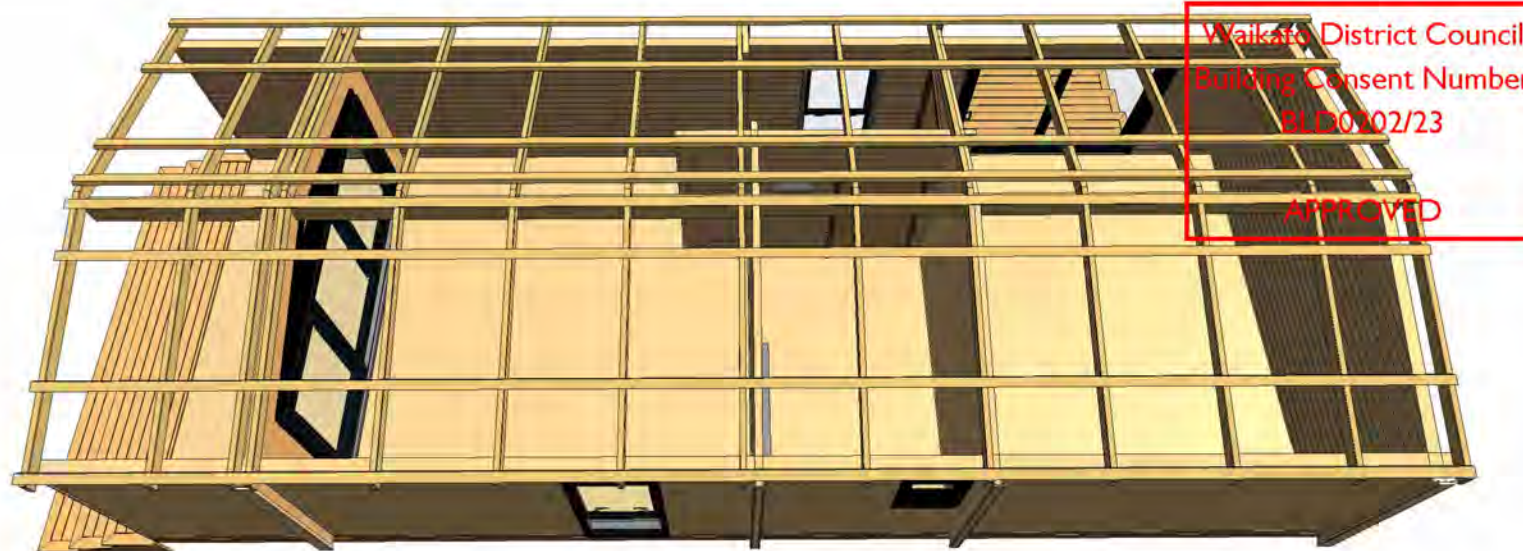
S - Safety Glazing
FXD - Fixed Glazing

Building Envelope Risk Matrix

East Elevation

Risk Factor	Risk Severity	Risk Score
Wind zone	Extra high risk	2
Number of storeys	Low risk	0
Roof/wall junctions	Low risk	0
Eaves width	High risk	2
Envelope complexity	Low risk	0
Deck design	Low risk	0

Total risk score:	4
--------------------------	----------



ROOF FRAMING NOTES

Roof pitch: 20°

Fascia: Fraemohs 235x29mm H3.1 fascia

Barge: Fraemohs 235x29mm H3.1 barge

Roofing Underlay: Thermakraft 215 self-supporting bituminous roofing underlay

Purlins: 70x45mm H1.2 SG8 purlins at 900 ctrs, first and last purlins at 600 ctrs

Counter Battens: 20x45mm H3.1 counter battens

Vapour Open Membrane: Traspir EVO 160

Dummy Rafters: 140x45mm H1.2 SG8 dummy rafters at 900 ctrs

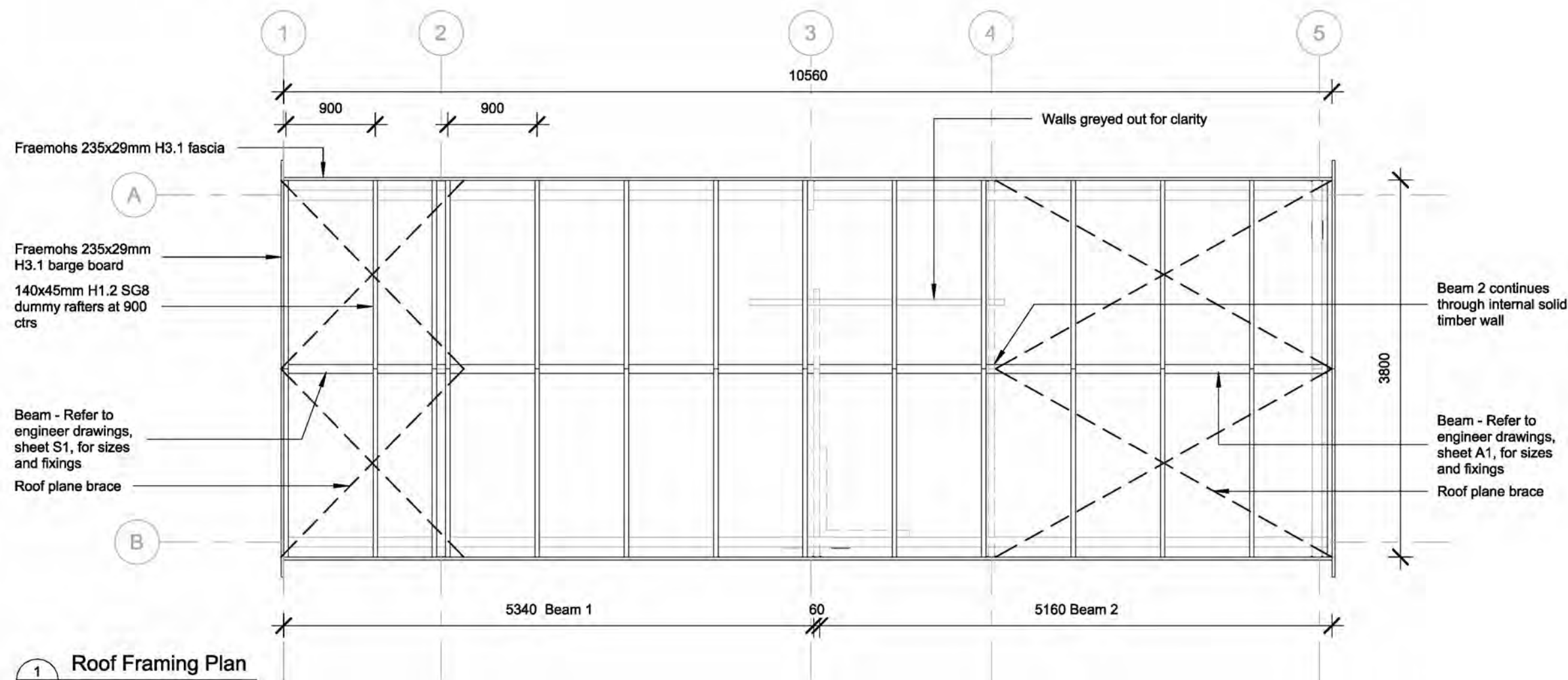
Sarking: Fraemohs 134x36mm H3.1 sarking

Bracing: Roof plane braces are to comply with NZS 3604:2011. Bracing shall consist of a pair of diagonally opposing stainless steel stripbrace straps run at 45 deg to the ridge line and fixed to the top chord intersection and to the top plate.

Ridge beams: Refer to consulting engineer Lignum Structural Ltd drawing, sheet S1 for sizes and sheet S2 for fixing details.

Note:
Wind zone - Extra High

2 Roof Framing 3D



1 Roof Framing Plan
A12 1 : 50



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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings	Roof Framing
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	
	Hamilton 3210	Drawn:	FDT	18 of 44



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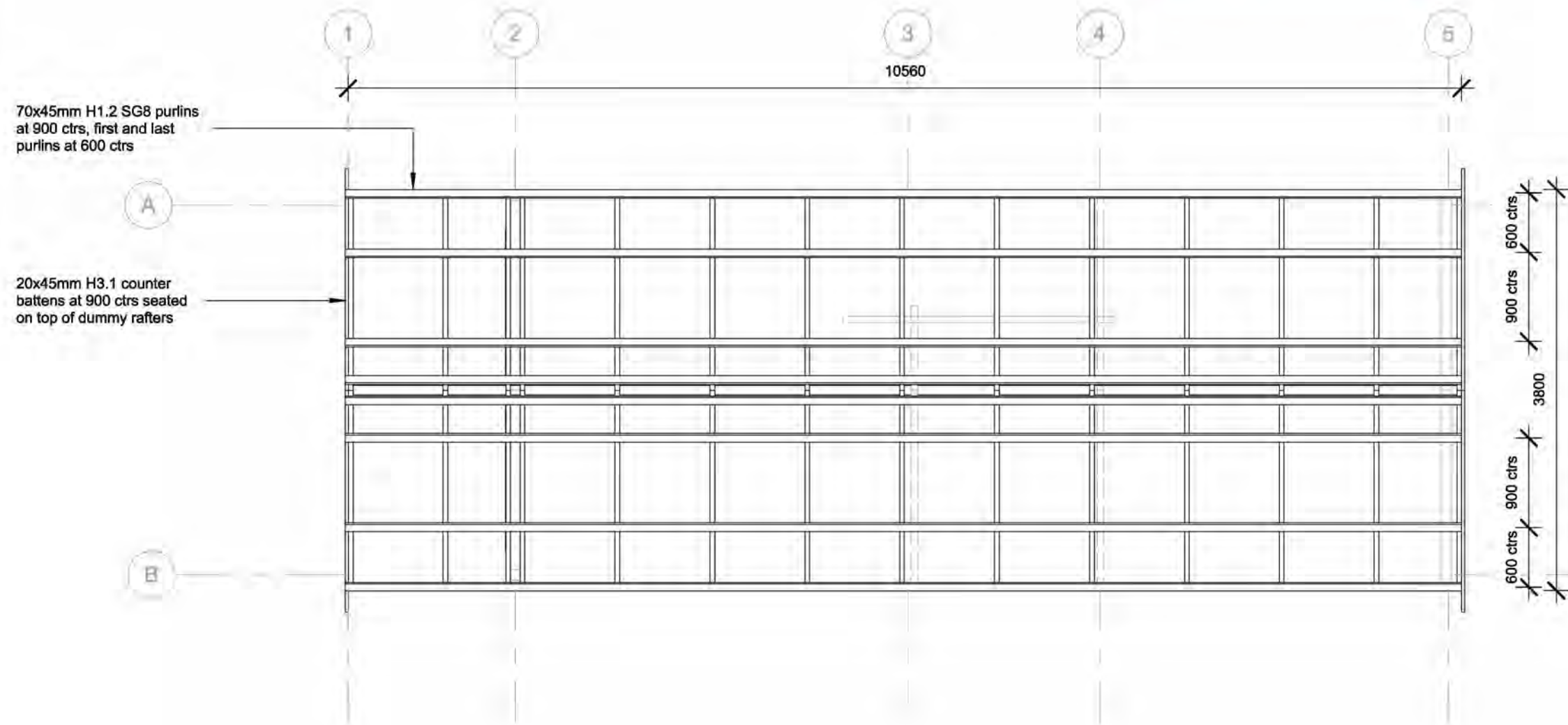
A16

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ROOF PURLIN NOTES

- Roof pitch:** 20°
- Fascia:** Fraemohs 235x29mm H3.1 fascia
- Dummy Rafters:** 140x45mm H1.2 SG8 dummy rafters at 900 ctrs
- Purlins:** 70x45mm H1.2 SG8 purlins at 900 ctrs, first and last purlins at 600 ctrs
- Counter battens:** 20x45mm H3.1 (fixed to dummy rafters)

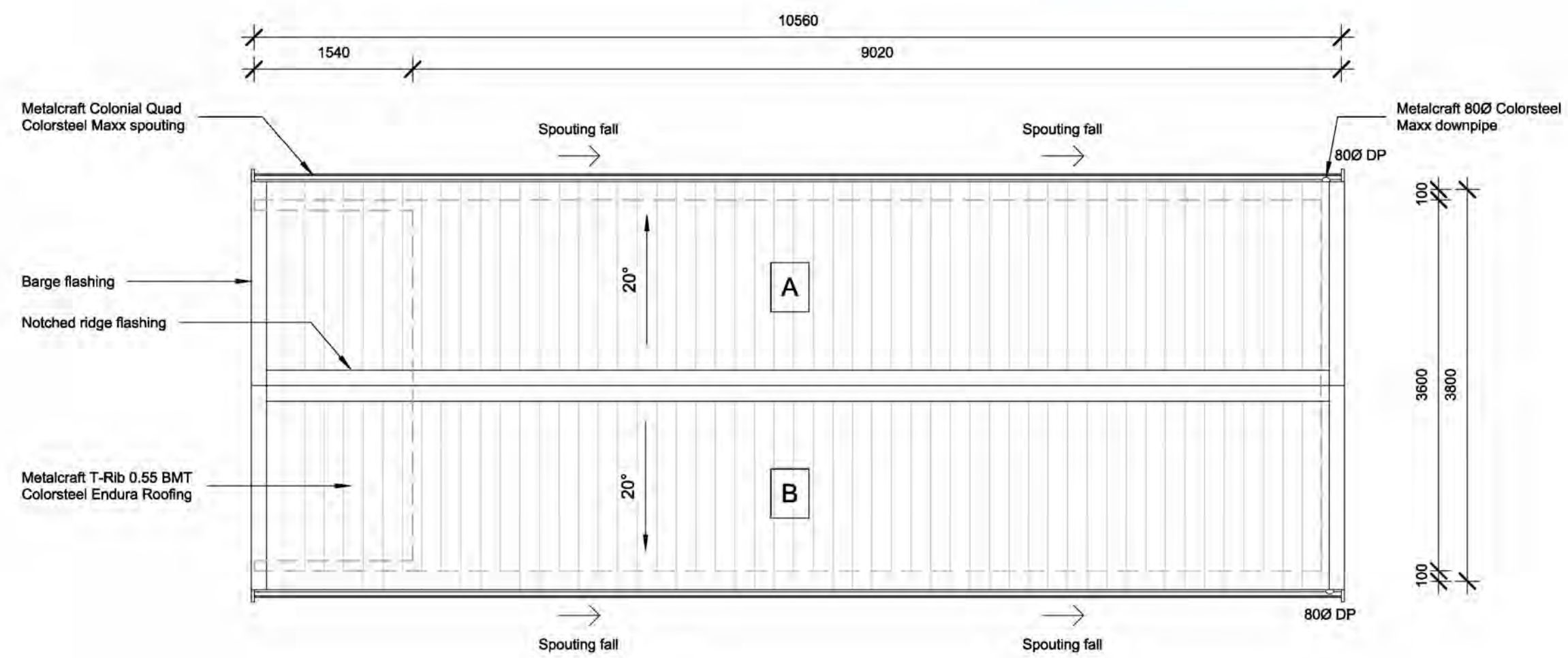


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1
A12
Roof Purlin Layout
1 : 50

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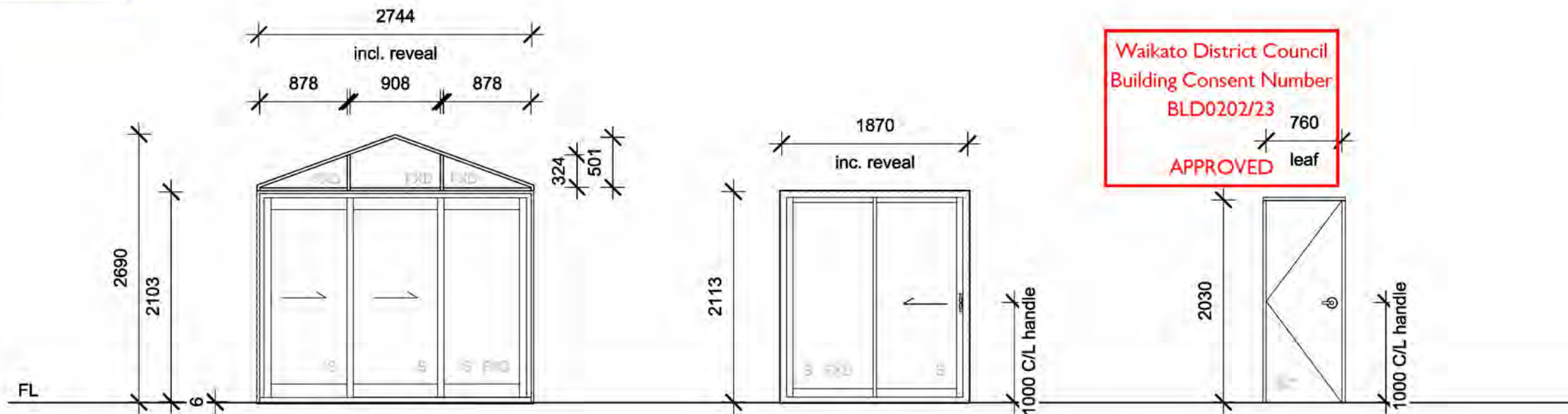
ROOF FRAMING NOTES

- Roof pitch:** 20°
- Roof cladding:** Metalcraft T-Rib 0.55 BMT Colorsteel Endura Roofing
- Fascia:** Fraemohs 235x29mm H3.1 fascia board
- Barge:** Fraemohs 235x29mm H3.1 barge board
- Soffit:** Fraemohs 134x36mm H3.1 sarking with selected wood stain
- Spouting:** Metalcraft Colonial Quad Colorsteel Maxx
- Downpipes:** Metalcraft 80Ø Colorsteel Maxx
- Flashings:** 0.55 BMT Colorsteel
- Note:**
Wind zone - Extra high

Roof Schedule			
Element	Area	Pitch	Description
Basic Roof:	44.5 m²	20°	Roof A - 22.25 m2 Roof B - 22.25 m2
T-Rib Colorsteel Roofing			

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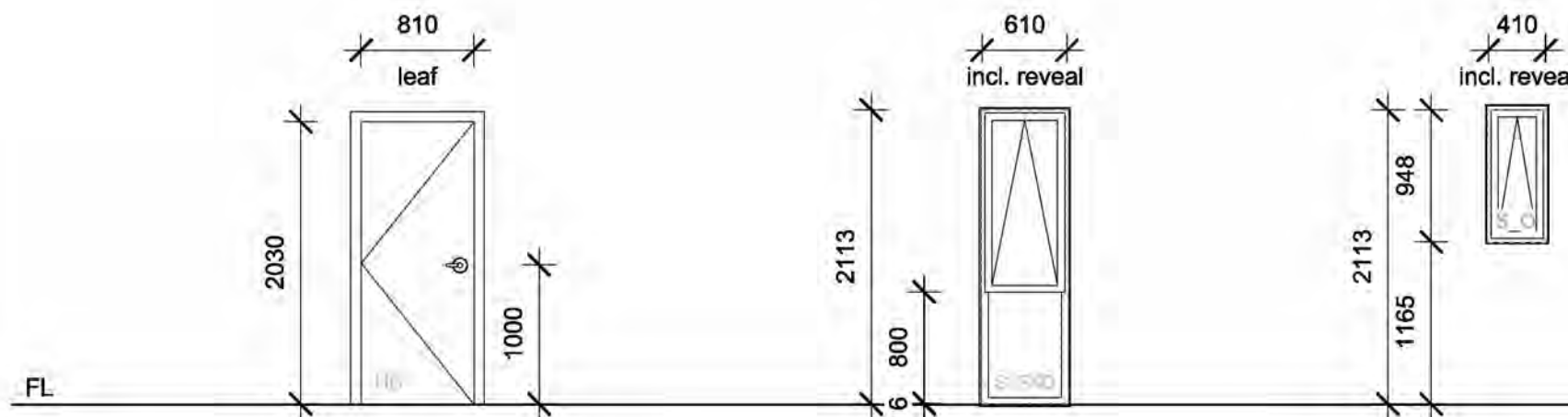
1 Roof Plan
A12 1 : 50



D01 - Living - Sheet A08
APL Residential Series,
Double Sliding Door

D02 - Multi-use room - Sheet A08
APL Residential Series, Single
Sliding door

D03 - Bath - Sheet A08
Solid core door



D04 - Multi-use room - Sheet A08
Hollow core door

W01 - Hall - Sheet A08
W02 - Kitchen - Sheet A08
APL Residential Series,
Awning window

W03 - Bath - Sheet A08
APL Residential Series,
Awning window

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Door Schedule			
Mark	Height	Width	Description
D01	2103	2744	Double sliding door
D02	2113	1965	Single sliding door
D03	2030	760	Solid core door
D04	2030	810	Hollow core door

Window Schedule			
Mark	Height	Width	Description
W01	2113	610	Awning window
W02	2113	610	Awning window
W03	948	410	Awning window

DOOR AND WINDOW NOTES

Legend:

- S Safety Glazing
- HC Hollow core
- O Obscured Glazing
- FXD Fixed Glazing

Interior Joinery: Fraemohs Solid Timber Interior Doors: Clear Solid Pine jamb.

Exterior Aluminium Joinery: Joinery viewed from the exterior. 19mm H3.1 Clear Solid Timber Reveals. All dimensions are box size.

Door Handle Locations: External and internal door handles to be 1m above floor level.

Note: External doors and windows to be viewed from exterior.

Glass:

- Double glazed units to a maximum of 24mm. Minimum single glazed glass thickness 4mm.
- Safety glazing as per **4223:3:2016 Glazing in Buildings**.

Hardware:

- Window fasteners and friction stays to vary according to sash size and weight, awning or casement. Hardware to match joinery colour.

Framed Shower screen and Bath enclosures Grade A glazing material as per Table 3.1.
Panels and doors with one unframed edge 5mm min. thick Toughened Safety Glass
Frameless pivot or hinge doors 6mm min thick Toughened Safety Glass
Glazing within 2,000mm above abutting FFL, or standing area of a bath or shower Grade A safety Glazing material in accordance with Table 3.1
Glazing greater than 1500mm above the abutting FFL, or standing level of a bath or shower Annealed glass to NZS 4223: Part 4

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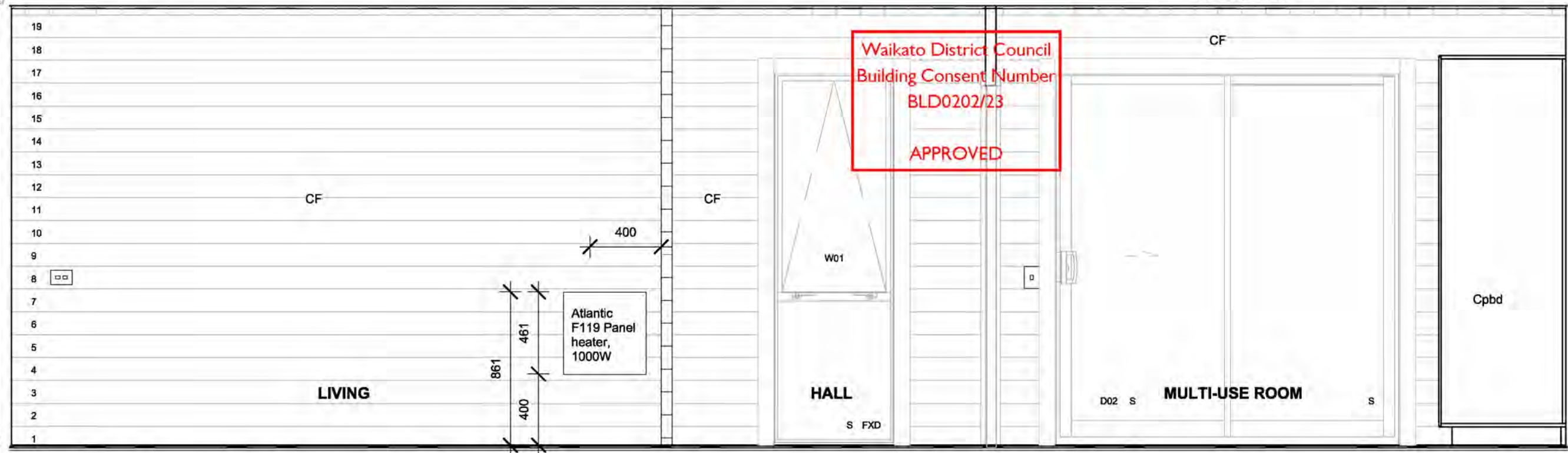
Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings				Door & Window Schedule	
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22				Scale: 1 : 50	@A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission					
	Hamilton 3210	Drawn:	FDT				35 of 44	

N

A33

Note: Centre all light switches and power outlets to the mid point of Fraemohs logs.

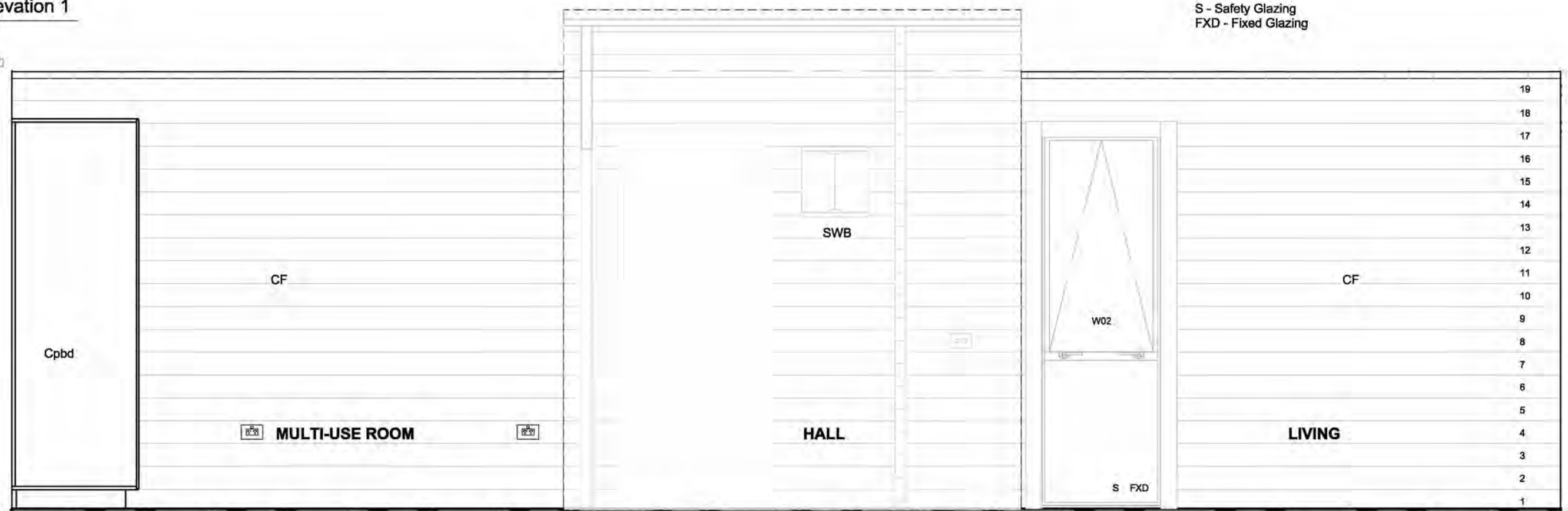
Refer to specifications for finishes.
Key:
CF - Clear finish



1
A08
Internal Elevation 1
1 : 25

Door & Window Legend:

S - Safety Glazing
FXD - Fixed Glazing



2
A08
Internal Elevation 2
1 : 25

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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings	Internal Elevations 1 & 2
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	Scale: As indicated @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	
	Hamilton 3210	Drawn:	FDT	36 of 44

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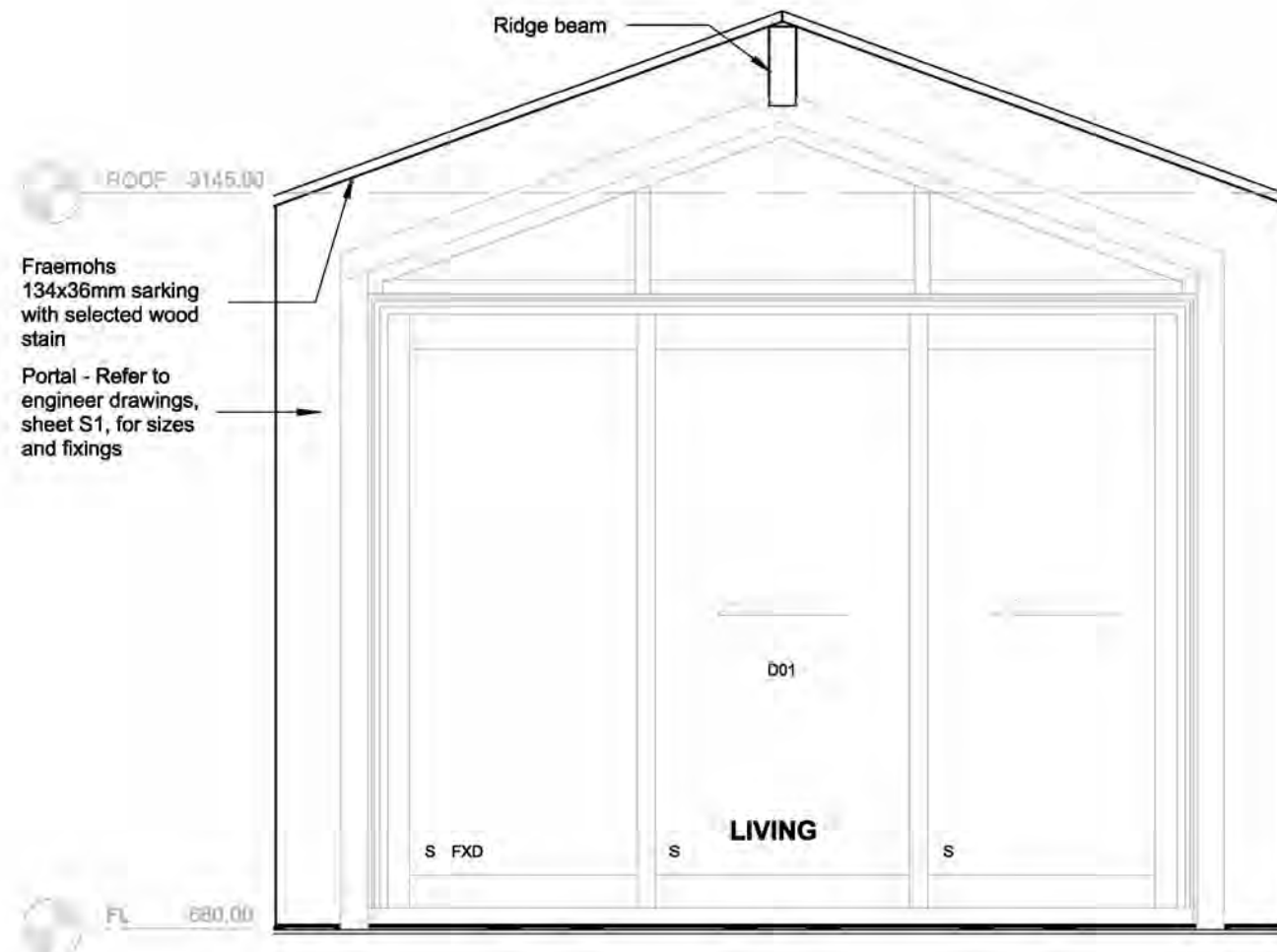
Note: Centre all light switches and power outlets to the mid point of Fraemohs logs.

Refer to specifications for finishes.

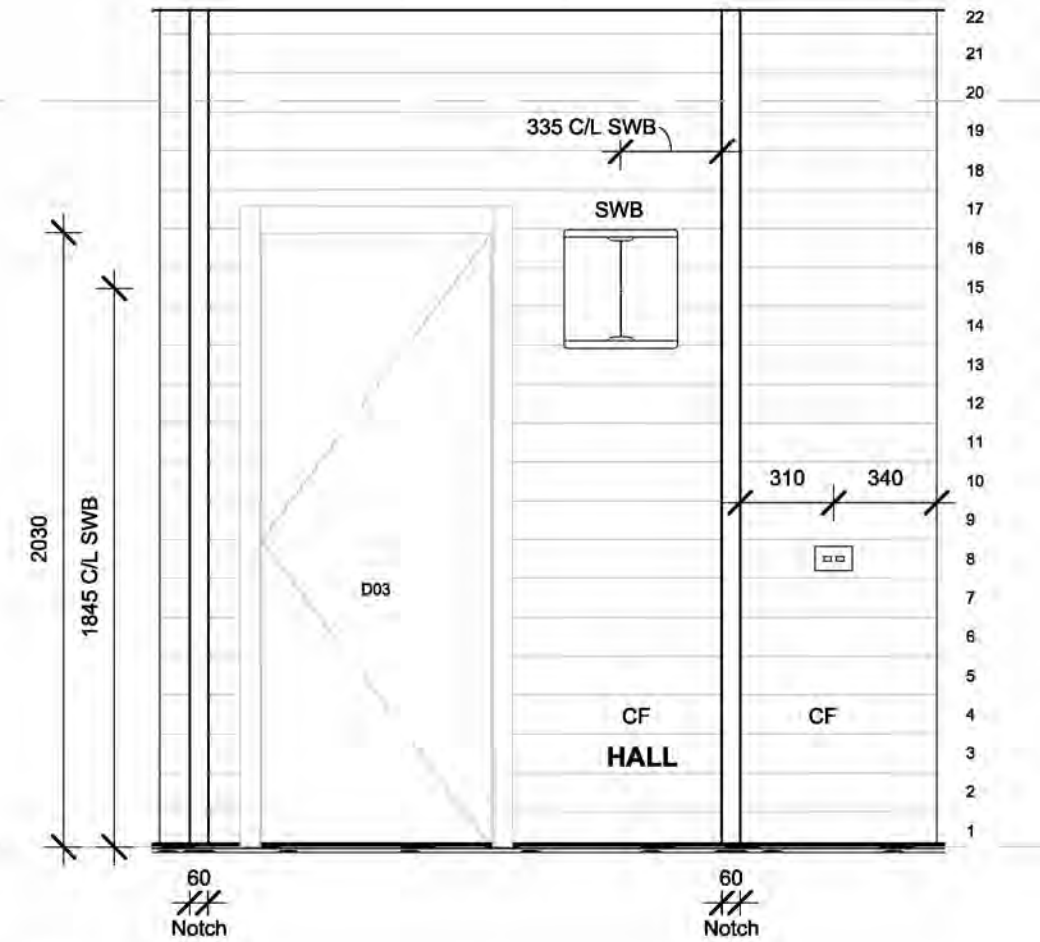
Key:
CF - Clear finish

Door & Window Legend:

S - Safety Glazing
FXD - Fixed Glazing



3
A08
Internal Elevation 3
1 : 25



4
A08
Internal Elevation 4
1 : 25

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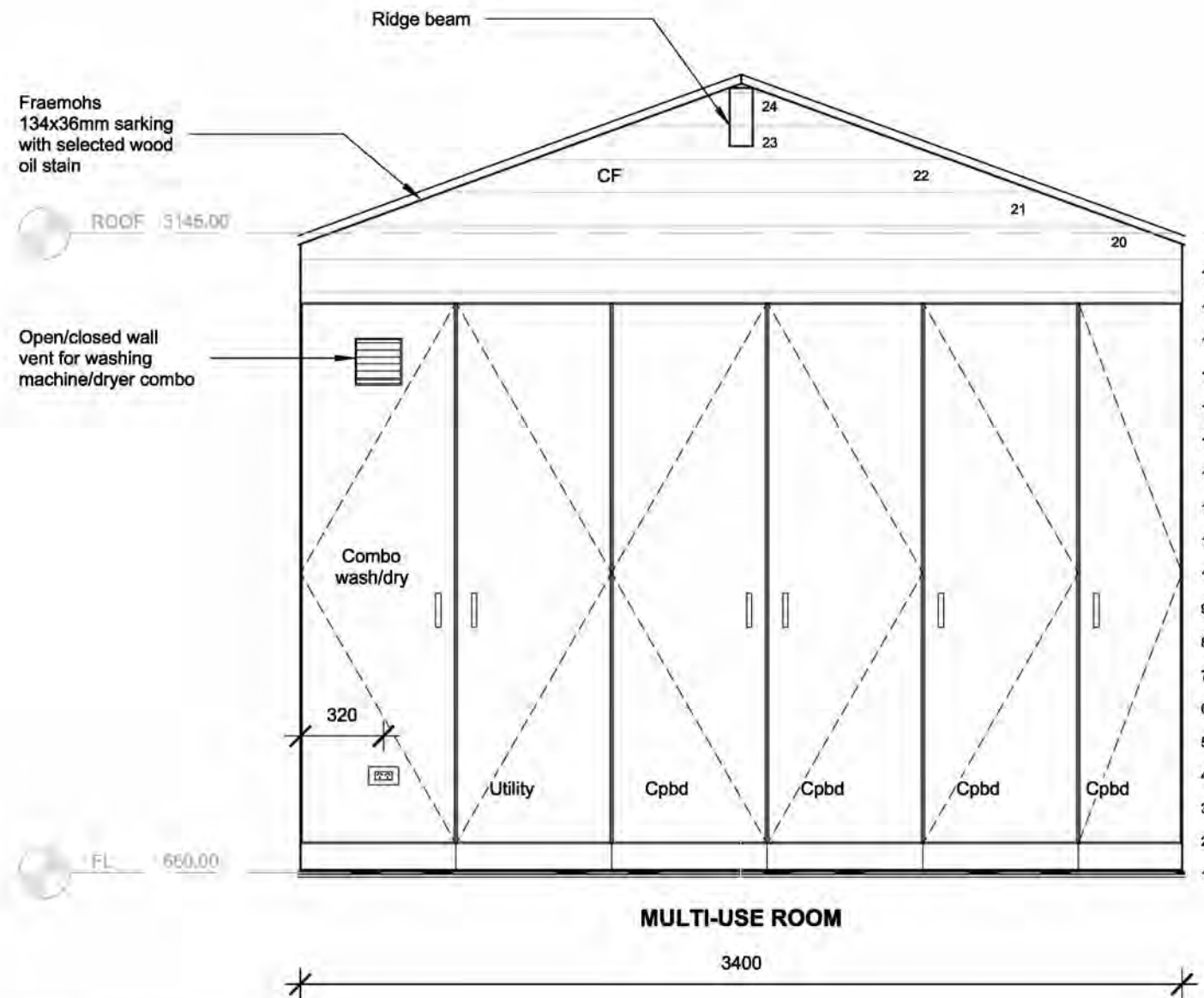
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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings				Internal Elevations 3 & 4	
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22				Scale: As indicated	@A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission					
	Hamilton 3210	Drawn:	FDT				37 of 44	N

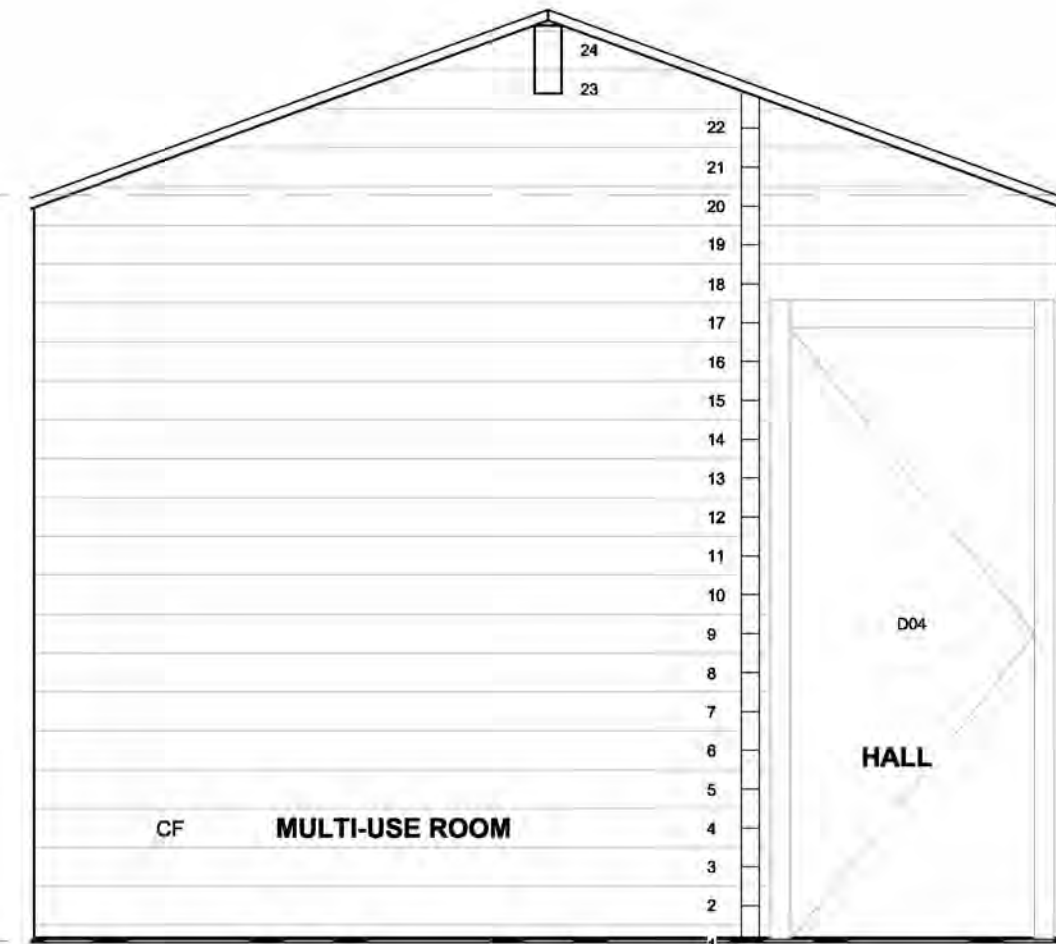
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5 Internal Elevation 5
A08 1 : 25



6 Internal Elevation 6
A08 1 : 25

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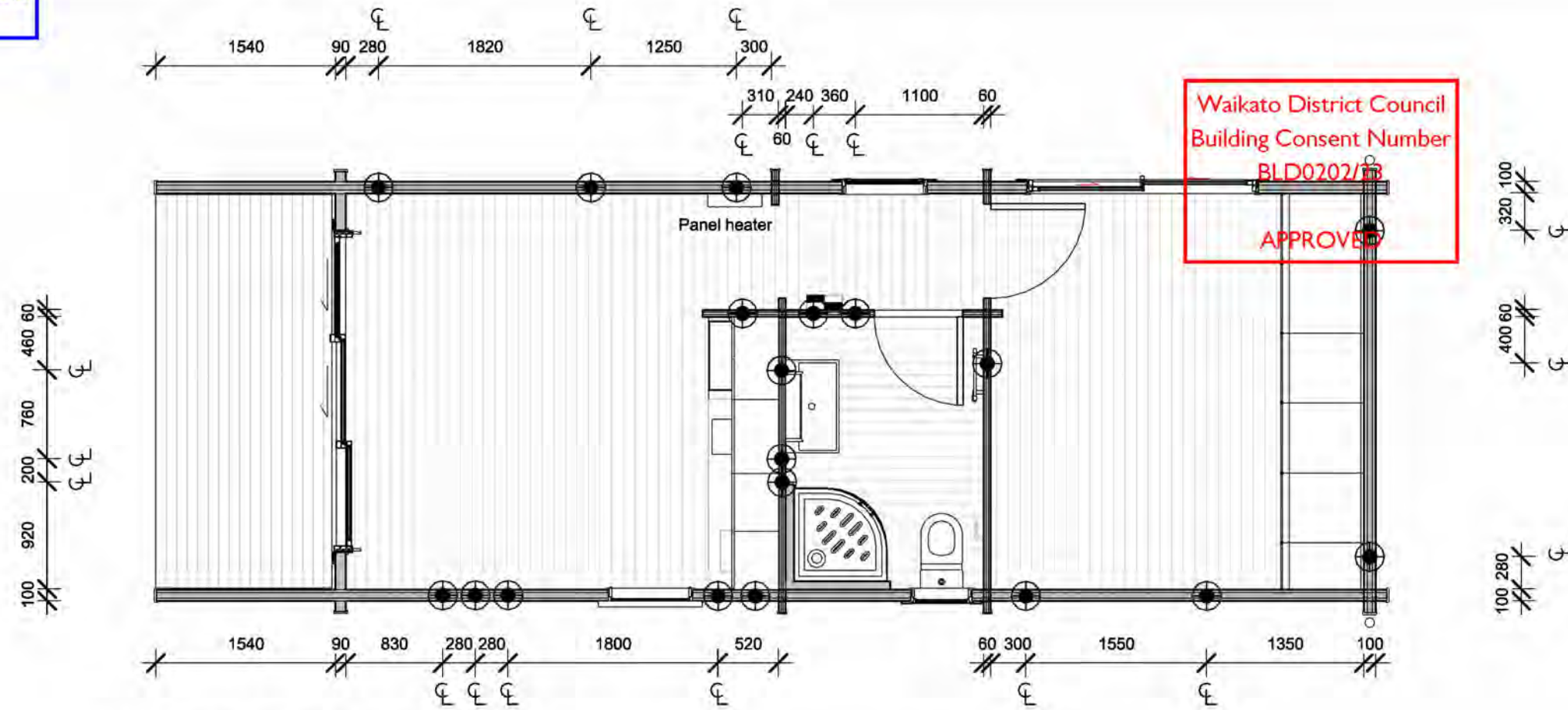
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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings				Internal Elevations 5 & 6	
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22				Scale: 1 : 25	@A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission					
	Hamilton 3210	Drawn:	FDT				38 of 44	

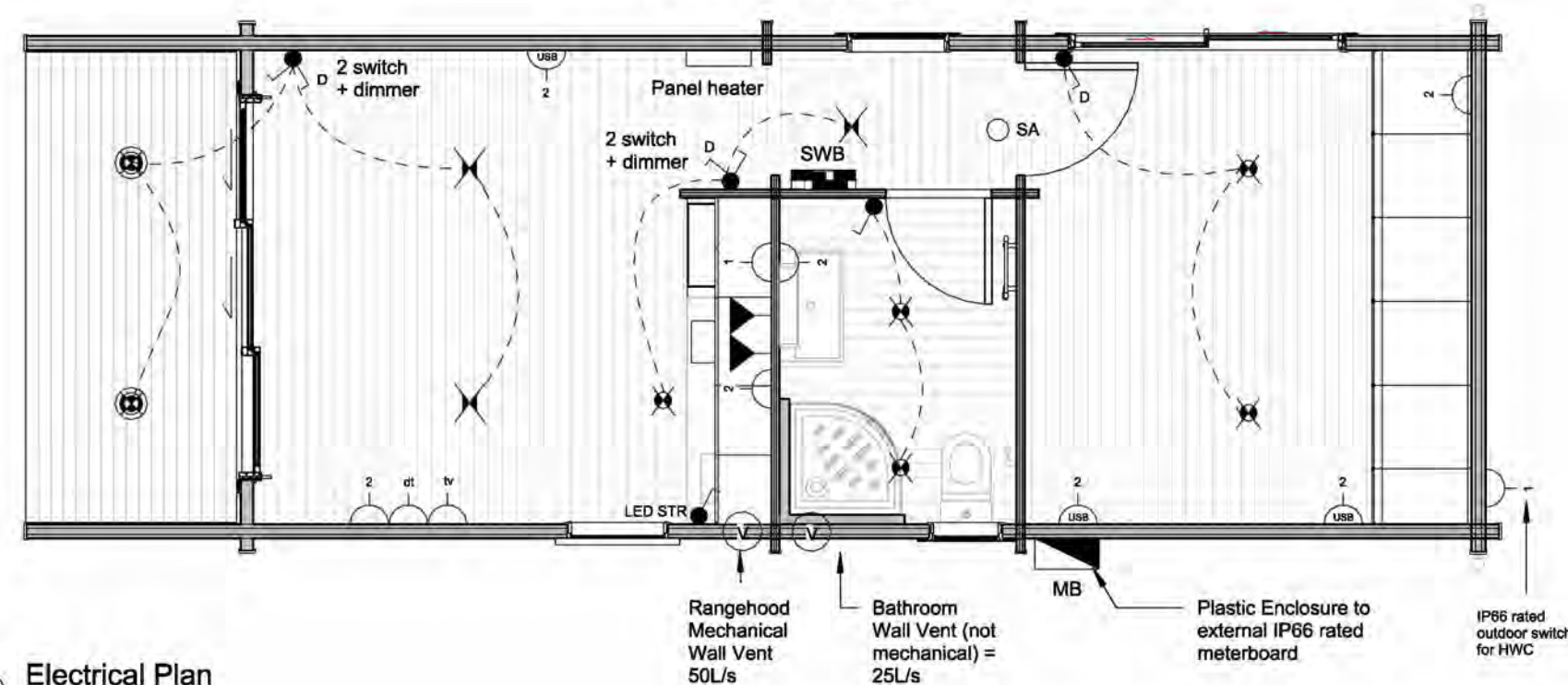
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A36



1
A09
Electrical Plan - Ducts
1 : 50

Refer to lights specification
for fixtures and fittings



2
A09
Electrical Plan
1 : 50

ELECTRICAL NOTES

Recessed luminaires shall be one of the following types, as specified in **AS/NZS 60598.2.2**: a) IC-F, or b) IC, or c) CA-80 or d) CA-135.
Installation of the luminaire is to in accordance with **AS/NZS 60598.2.2**.
Refer to Electrical section of the specification for items relating to **NZBC G2, G3, G8 & G9**.

Notes:
HWC to have an independent, fused, AC-230v, 50 HZ power supply with an isolating switch installed at the switch board.
Fixings and fittings not included. Indicative ONLY.

Electrical Schedule		
2D Plan Preview	Name	Quantity
	Electrical, Single Power Point	1
	Electrical, Double Power Point	3
	Electrical, USB Power Point	3
	Electrical, Single Switch	1
	Electrical, Double Switch with dimmer	2
	Electrical, Hot Water Cylinder	1
	Electrical, Smoke Alarm	1
	Electrical, Switchboard	1
	Electrical, Meterbox	1
	Hardwire connection	2
	Wall Vent	0
	Lighting Exterior	2
	Lighting - LED downlights	5
	Lighting Pendent Light	3
	Lighting - Security Light	0

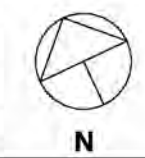
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Project:	15481 Mackenzie Gable #6	Stage:	Construction Drawings	Electrical Plan
House:	Transportable Home on a Temporary Site	Issue Date:	02/08/22	Scale: 1 : 50 @A3
Site Address:	2532 River Road, Horsham Downs	Revision No:	BC Submission	
	Hamilton 3210	Drawn:	FDT	42 of 44



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Building Consent Number
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- Notes:
1. Structural design of new dwelling including sarking, ridgebeam, lintels, brace portal, wall bracing and roof bracing.
 2. All other details by others.

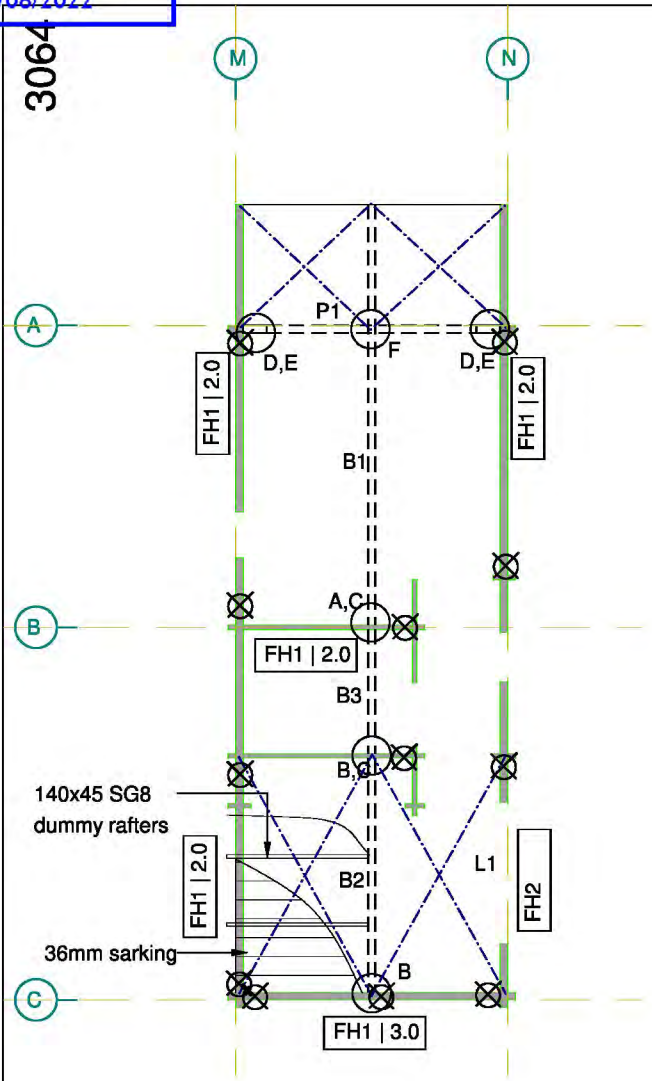
Beam and lintel sizes
B1: 270x90 GL8
B2: 225x90 GL8
B3: 180x90 GL8
L1 and all lintels:
standard Fraemohs
wallboards
P1: 315x90 GL8 portal

FH1 | 2.4
Brace type Brace length

⊗ 12 dia tierod

⋈ Lumberlok Stripbrace roof
plane brace fixed in accordance
with manufacturers details

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				Date: 2/12/21 Scale: 1:100
				Designed: DVR Revision:
				Drawn: DVR Page: S1