

Application for resource consent

Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of [Form 9](#)). Prior to, and during, completion of this application form, please refer to [Resource Consent Guidance Notes](#) and [Schedule of Fees and Charges](#) — both available on the Council's web page.

1. Pre-Lodgement discussion

Have you met with a council Resource Consent representative to discuss this application prior to lodgement?

☐ Yes ☐ No ☐ N/A

Have you consulted Council's Infrastructure Officer regarding infrastructure capacity to service the development?

☐ Yes ☐ No ☐ N/A

Have you consulted the Roding Officer regarding any road to vest or departure from District Plan / Engineering standards?

☐ Yes ☐ No ☐ N/A

**Contact details of who and how to engage in pre lodgement discussions can be found on the Resource Consent pages of the FNDC website.*

2. Type of consent being applied for

(more than one circle can be ticked):

☐ Land Use

☐ Fast Track (Land Use - Controlled Activity)

☐ Change of Consent Notice (s.221(3))

☐ Certificate of Compliance (s.139)

☐ Extension of time (s.125)

☐ Other (please specify)

☐ Discharge: Total volume = m³

Note; volumes >3m³ requires NRC Consent 3m³

☐ Subdivision

☐ Existing Use Certificate (s.139A)

☐ Consent under National Environmental Standard
(e.g. Assessing and Managing Contaminants in Soil)

3. Would you like to opt out of the fast track process?

☐ Yes ☐ No

4. Consultation

Have you consulted with Iwi/Hapū? ☐ Yes ☒ No

If yes, which groups have you consulted with?

Who else have you consulted with?

For any questions or information regarding iwi/hapū consultation, please contact:
The Resource Consents Planning Technicians, planning.technicians@fndc.govt.nz

5. Applicant details

Name/s:

McCaughan Trustee Limited

Email:**Phone number:**

Postal address:
(or alternative method
of service under section
352 of the act)

Have you been the subject of abatement notices, enforcement orders, infringement notices and/or convictions under the Resource Management Act 1991?

☐ Yes ☒ No

If yes, please provide details:

6. Address for correspondence

Name and address for service and correspondence (if using an Agent write their details here)

Name/s:

Williams & King, Attention: Natalie Watson

Email:**Phone number:**

Postal address:
(or alternative method of
service under section 352
of the act)

All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.

7. Details of property owner/s and occupier/s

Name and Address of the owner/occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s:

Property address/
location:

 Postcode

8. Application site details

Location and/or property street address of the proposed activity:

Name/s:

Site address/
location:

 Postcode

Legal description:

Val Number:

Certificate of title:

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ☐ Yes ☐ No

Is there a dog on the property? ☐ Yes ☐ No

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details. This is important to avoid a wasted trip and having to re-arrange a second visit.

9. Description of the proposal

Please enter a brief description of the proposal here. Please refer to Chapter 4 of the *District Plan, and Guidance Notes*, for further details of information requirements.

If this is an application for a Change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s), with reasons for requesting them.

The proposal has been prepared in accordance with the following version of the FNDC Engineering Standards:

☐ 2009 ☐ 2023

10. Would you like to request public notification?

☐ Yes ☐ No

11. Other consent required/being applied for under different legislation

(more than one circle can be ticked):

☐ Building Consent

☐ Regional Council Consent (ref # if known)

☐ National Environmental Standard Consent

☐ Other (please specify)

12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL)? ☐ Yes ☐ No ☐ Don't know

Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result? ☐ Yes ☐ No ☐ Don't know

☐ Subdividing land

☐ Disturbing, removing or sampling soil

☐ Changing the use of a piece of land

☐ Removing or replacing a fuel storage system

13. Natural hazards (National Policy Statement for Natural Hazards 2025)

Is the site subject to known or potential natural hazards (for example, flooding, coastal inundation, erosion, or unstable land), as contemplated by the National Policy Statement for Natural Hazards 2025? ☐ Yes ☐ No

If yes, please identify the relevant natural hazard(s) by ticking the applicable box(es) below:

☐ Flooding

☐ Active Faults

☐ Landslips

☐ Liquefaction

☐ Coastal Erosion

☐ Tsunami

☐ Coastal Inundation

Please ensure all relevant technical reports are submitted with the application.

14. Assessment of environmental effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as written approvals from adjoining property owners, or affected parties.

Your AEE is attached to this application ☐ Yes

15. Draft conditions:

Do you wish to see the draft conditions prior to the release of the resource consent decision? ☐ Yes ☐ No

If yes, please be advised that the timeframe will be suspended as per s107G of the RMA to enable consideration for the draft conditions.

16. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write in full)

McCaughan Trustee Limited

Email:

Phone number:

Postal address:

(or alternative method of service under section 352 of the act)

Fees Information

An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: (please write in full)

Sean McCaughan

Signature:

(signature of bill payer)

Date 23-Sep-2026

17. Important Information:

Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application

Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement.

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

Privacy Information:

Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

18. Declaration

The information I have supplied with this application is true and complete to the best of my knowledge.

Name (please write in full)

Natalie Watson

Signature

Date 24 September 2026

A signature is not required if the application is made by electronic means

See overleaf for a checklist of your information...

Checklist of your information

Please tick if information is provided

- ☐ Payment (cheques payable to Far North District Council)
- ☐ A current Certificate of Title (Search Copy not more than 6 months old)
- ☐ Details of your consultation with Iwi and hapū
- ☐ Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- ☐ Applicant / agent / property owner / bill payer details provided
- ☐ Location of property and description of proposal
- ☐ Assessment of Environmental Effects
- ☐ Written approvals / correspondence from consulted parties
- ☐ Reports from technical experts (if required)
- ☐ Copies of other relevant consents associated with this application
- ☐ Location and site plans (land use) AND/OR
- ☐ Location and scheme plan (subdivision)
- ☐ Elevations / floor plans
- ☐ Topographical / contour plans

*Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application.
Please also refer to the RC Checklist available on the Council's website. This contains more
helpful hints as to what information needs to be shown on plans*

SURVEY & PLANNING SOLUTIONS (2010) LTD

Trading as **Von Sturmers** in Kaitaia and **Williams & King** in the Bay of Islands
LAND SURVEYORS - RESOURCE PLANNERS
www.saps.co.nz

24 September 2026

Far North District Council
Sent via email to: planning.support@fndc.govt.nz
Attention: Resource Consents Team Leader

Dear Madam,

Re: McCaughan Trustee Limited – Application for Change of Use Under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

A building consent application has been lodged for a new dwelling and onsite wastewater system on Lot 1 DP 537893 held in Record of Title 895827. The set of proposed plans is provided in **Appendix 1** and the record of Title is in **Appendix 2**.

A PIM Assessment for this building work has been completed, and a Form 4 Resource Consent Requirement has been issued, as attached in **Appendix 3**. It is our understanding that all matters have been dealt with by way of the provision of further or revised information to achieve a permitted activity status, with the exception of the fifth matter, which is copied below. Further correspondence between Edward Collings of Geologix and FNDC's PIM Officer confirmed that the proposal is a change of use. Proposed soil disturbance (cut volume of 23m³) remains within the permitted activity limit of 1,534m³ and allowable off-site disposal is 307m³ per year.

Regulation:	Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. National Environment standard Section 8(4): <i>Subdividing or changing use:</i> (4) Subdividing land or changing the use of the piece of land is a permitted activity while the following requirements are met: (a) a preliminary site investigation of the land or piece of land must exist: (b) the report on the preliminary site investigation must state that it is highly unlikely that there will be a risk to human health if the activity is done to the piece of land: (c) the report must be accompanied by a relevant site plan to which the report is referenced: (d) the consent authority must have the report and the plan.
Reason:	A Preliminary Site Investigation report prepared by a suitably qualified and experienced person to demonstrate that this project will comply with the subdivision or Change of Use permitted activity standard has not been provided. (NB: As also required by consent notice condition (iv) above.)

Figure 1: Extract of Form 4 Resource Consent Requirement – EBC-2027-190/0

A Combined Preliminary and Detailed Site Investigation prepared by Geologix Consulting Engineers is attached in **Appendix 4**. This states that:

- In summary, the site may have been used for farming purposes prior to 1950 until circa early 1980s (refer to Section 3.3), where the site was then used for horticultural land use with the establishment of an orchard (i.e. Macadamia Nuts) and more recently market gardens. Noting that, no horticulture was observed during the site investigation works.*

Von Sturmers
131 Commerce St
PO Box 128, Kaitaia 0441, NZ
Telephone: 09 408 6000

Email: kaitaia@saps.co.nz

Williams & King
27 Hobson Ave
PO Box 937, Kerikeri 0245, NZ
Telephone: 09 407 6030

Email: kerikeri@saps.co.nz

- *Based on the HAIL activity above, the NES:CS applies.*
- *HAIL category A10 was identified (as indicated in Section 3.3), however, soil results confirm that:*
 - *No heavy metals and OCPs were detected over human health criteria guidelines.*
 - *No OCPs were detected above the laboratory level of reporting in any of the samples analysed for OCPs.*
- *Based on the findings of the investigation, Geologix considers that there is very low risk to long-term human health exposure in the proposed subdivision and soil disturbance activities (if undertaken) if these soils are to remain on site. Site soils, while suitable for onsite use (subject to geotechnical suitability), any soils proposed for removal from site (if any) shall be disposed of to an appropriate managed fill facility.*
- *For change of use and soil disturbance activities (if undertaken) under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7. Therefore, change of use and/ or soil disturbance activities associated with the proposed development regarding contaminated land will be required as a controlled activity under the NES:CS and in addition permitted activity under the proposed Northland Regional Plan.*

Section 104 RMA Assessment

Assessment of Actual and Potential Environmental Effects

Regulation 9 of the NES:CS lists the matter over which control is reserved as being:

...the adequacy of the detailed site investigation, including—

(a) site sampling:

(b) laboratory analysis:

(c) risk assessment.

The Combined Preliminary and Detailed Site Investigation in **Appendix 4** is an adequate investigation. It includes sampling in the location of the proposed dwelling and access to it, and laboratory analysis, the results of which showed that no heavy metals were detected above human health criteria and no OCPs (organochlorine pesticides) were detected above the laboratory level of reporting.

Despite the positive laboratory results, the Combined Preliminary and Detailed Site Investigation includes a quantitative risk assessment of contamination potential to cause an effect upon human and/ or ecological receptors. For an exposure pathway to be complete and subsequently cause a risk, there must be a contamination source, a contaminant transport mechanism (pathway) and a receptor, typically human or ecological. The Combined Preliminary and Detailed Site Investigation assesses a low to very low risk score for the identified potential source, pathway and receptor combinations.

In summary, the effects on human health are assessed as being low to very low.

National Environmental Standards

Besides the NES:CS, there are no other applicable National Environmental Standards.

National Policy Statements

The matters of control do not relate to any matter covered by a national policy statement.

Regional Policy Statement

Not applicable – Northland Regional Council is not responsible for specifying objectives, policies and methods related to hazardous substances on land other than land in the coastal marine area and the beds or rivers, lakes and other water bodies.

Far North Operative District Plan & Proposed District Plan – Appeals Version

The proposal is a permitted activity under the above District Plans.

Notification Assessment

Regulation 9(5) specifies that the consent authority must not give public notification of an application for a resource consent to do any of the activities.

There will be no offsite effects and no person is considered to be adversely affected.

It is therefore requested that the application be processed on a non-notified basis.

Conclusion

Please contact me as soon as possible if you require any further information.

Yours faithfully,
Williams & King

Natalie Watson
Planner

Appendix 1: Architectural Plans

Appendix 2: Record of Title

Appendix 3: FNDC Form 4 EBC-2027-190/0

Appendix 4: Combined Preliminary and Detailed Site Investigation

Proposed Dwelling

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

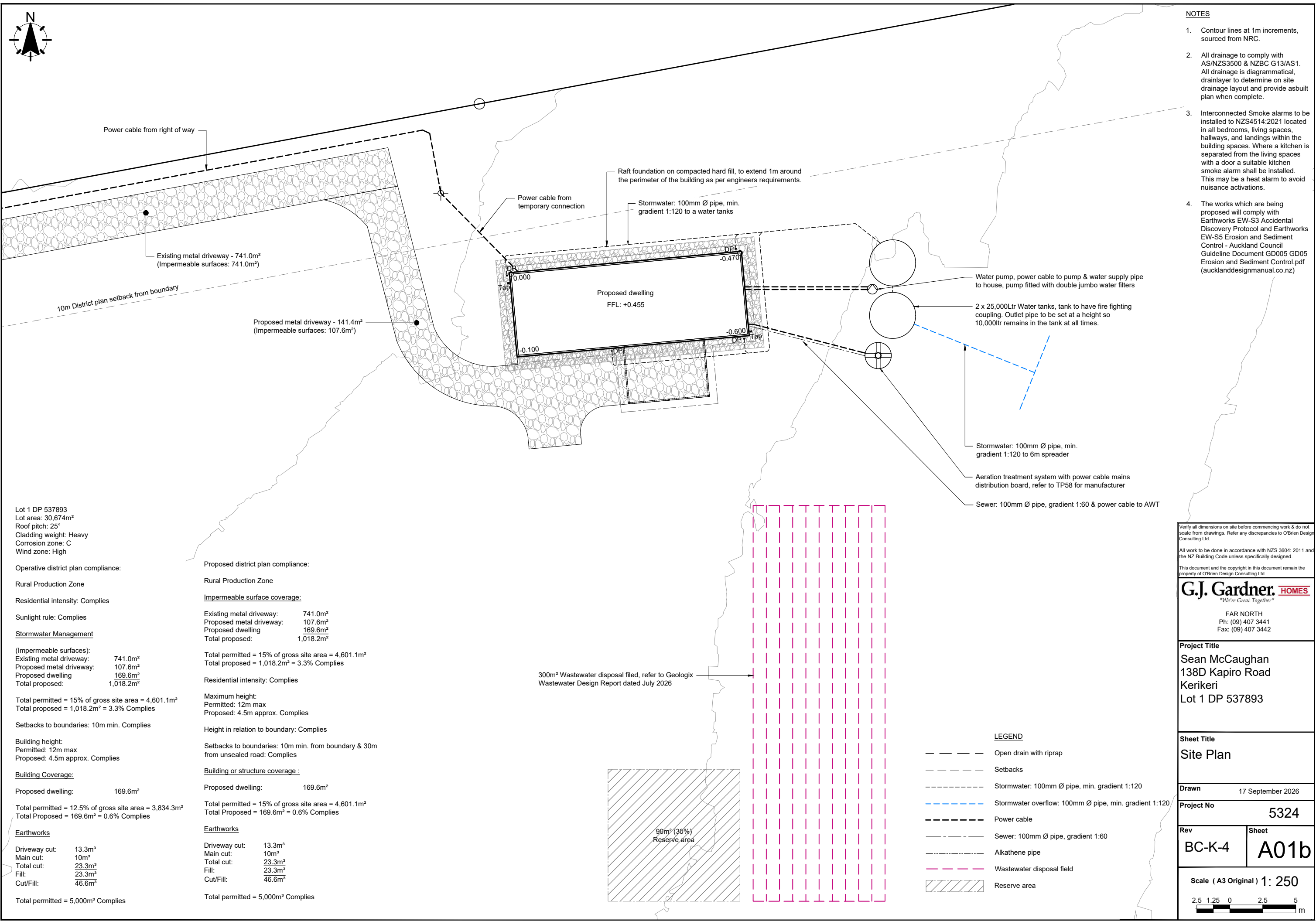
Construction Plans
Date: 17 September 2026

G.J. Gardner. **HOMES**
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FAR NORTH
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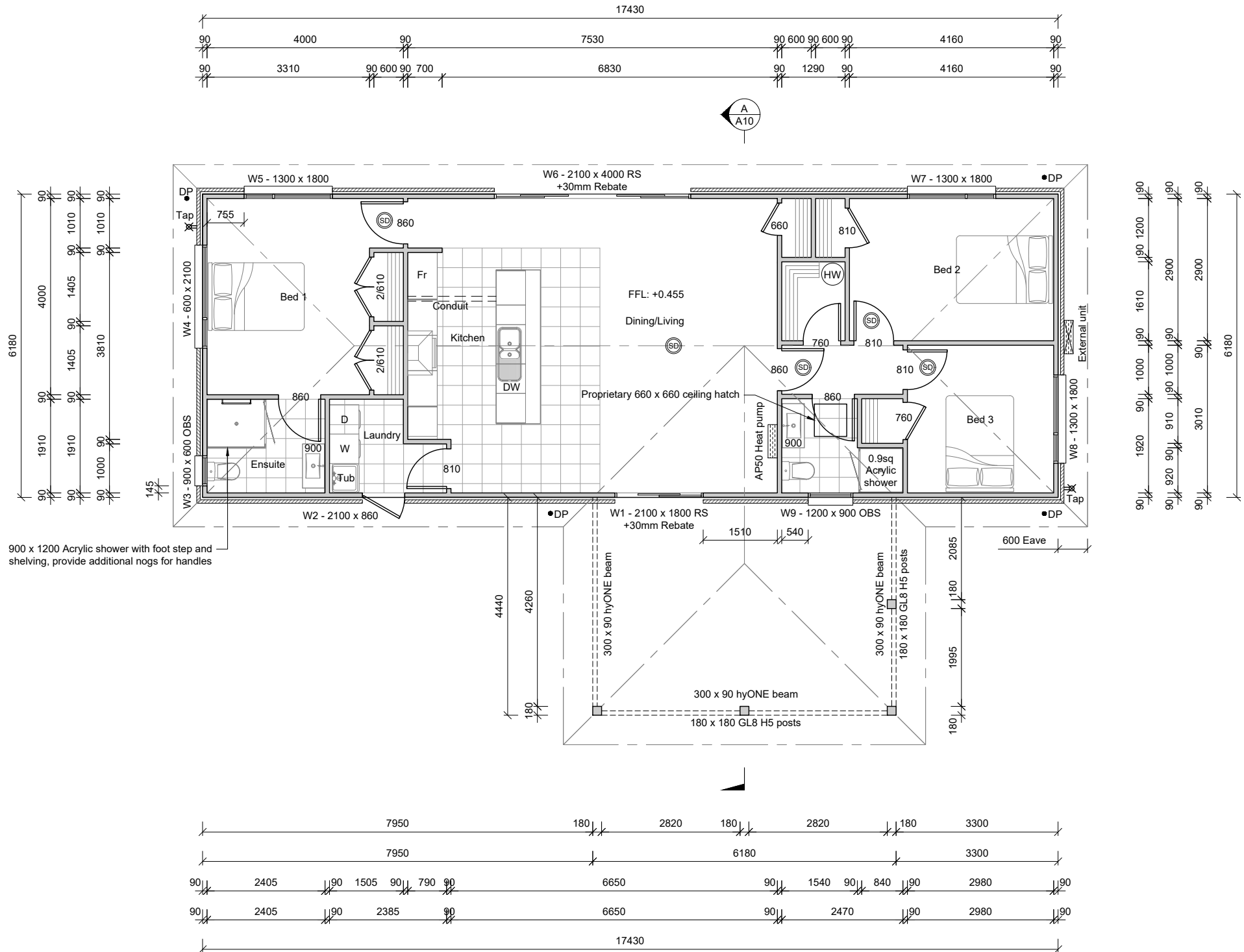
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A02	Structural Mark Ups	-
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SPECIFICATION:

- Stud height - 2440 (2400 Nominal)
- 70 Series brick veneer
- Gerard metal tile roofing



LEGEND

- Smoke Detector
- Roof Line
- 90 x 45 SG8 H1.2 Timber framing walls
- Brick Veneer
- Selected tiles on selected tile underlay to all wet areas installed to manufacturers specifications & Branz tiling good practice guide
- 180L Mains pressure hot water cylinder

NOTE:

1. All dimensions taken from the outside of pre-cut, please check all dimensions before construction commences.
2. Refer to Framing & Lintel Plan for lintel dimensions, stud spacing & external door offsets.
2. Refer to eave detail for stud, lintel and soffit framing heights.
3. Additional nogs to be installed at framing stage to allow for towel rails, wardrobe & fixed shelves, WC cistern, toilet roll holders, wall mounted extractors, heat pump, A/C units & garage door components where required.
4. Refer to attached sheet for cladding & roofing notes & details.
5. All wet areas to be provided with impervious linings as per NZBC E3/AS1.
6. Grade A safety glazing in shower screens inline with NZS 4223
7. Where studs exceed 450mm c/c install polypropylene tape horizontally at 300mm c/c over building wrap.
8. All wall framing typically H1.2 treated unless specifically stated.
9. All external linings to be installed to manufacturers instructions, refer to separate detail sheet for cladding details & notes.

BUILDING AREA:

Floor Area (Framing):	107.7m ²
Floor Area (Brickline):	113.7m ²
Roof Area:	169.6m ²

FIXINGS:

Exposure Zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Floor Plan

Drawn

17 September 2026

Project No

5324

Rev

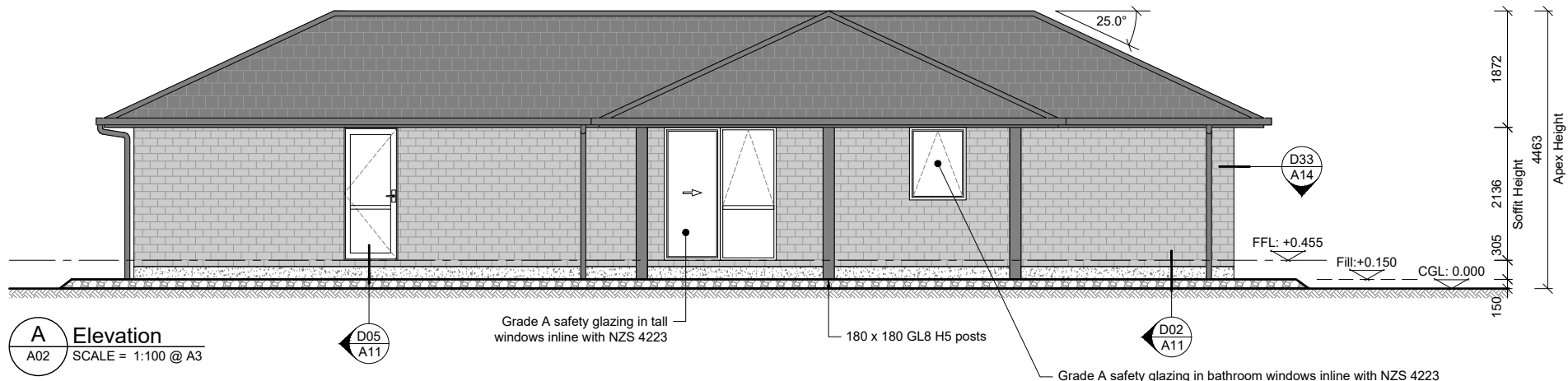
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Sheet

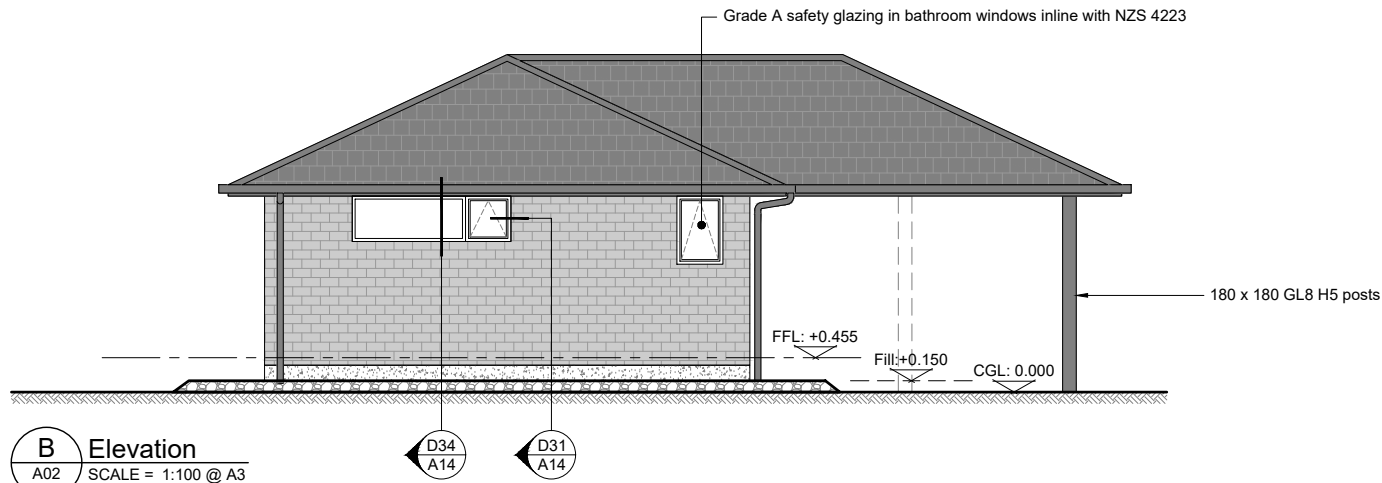
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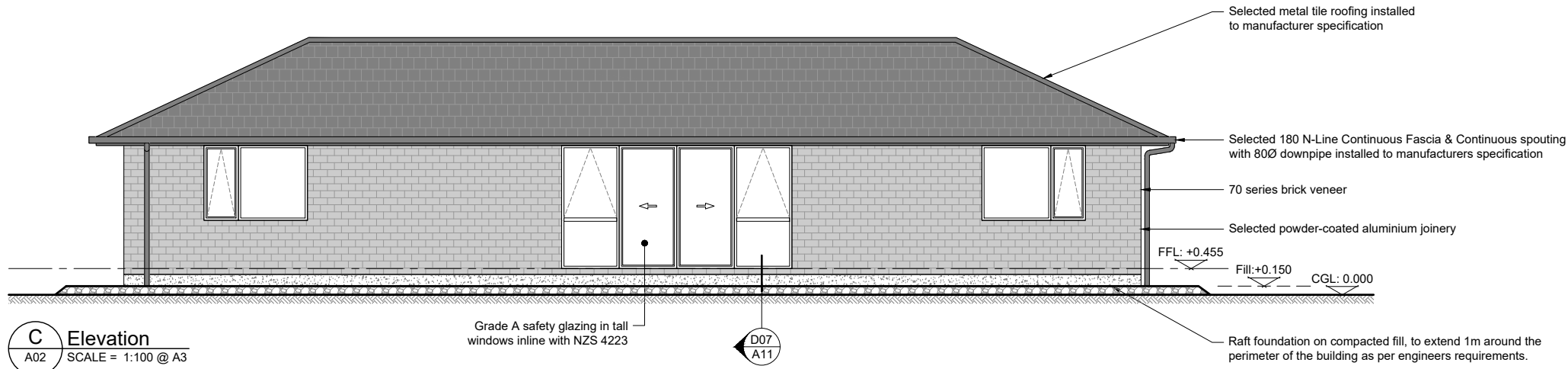




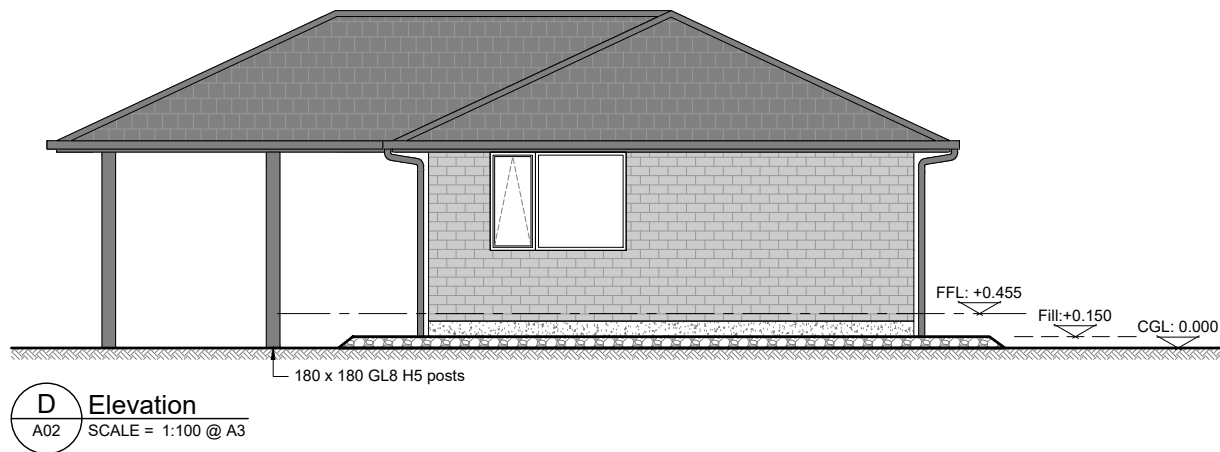
A Elevation
A02 SCALE = 1:100 @ A3



B Elevation
A02 SCALE = 1:100 @ A3



C Elevation
A02 SCALE = 1:100 @ A3



D Elevation
A02 SCALE = 1:100 @ A3

H1 SPECIFICATION:

- Foundation: Raft R1.5
- Walls: Pink batts R2.2
- Ceiling: Pink batts R4.5
- Double glazing Solux-E R0.37
- On all windows unless specified

H1 Note:

H1 calculations included in BC information.

NOTE:

1. All heights shown are existing ground heights.
2. All external linings to be installed to manufacturers instructions, refer to separate detail sheet for cladding details & notes.
3. Grade A safety glazing in bathrooms & tall windows and sliders inline with NZS 4223.

FIXINGS:

Exposure Zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Elevations

Drawn

17 September 2026

Project No

5324

Rev

BC-K-4

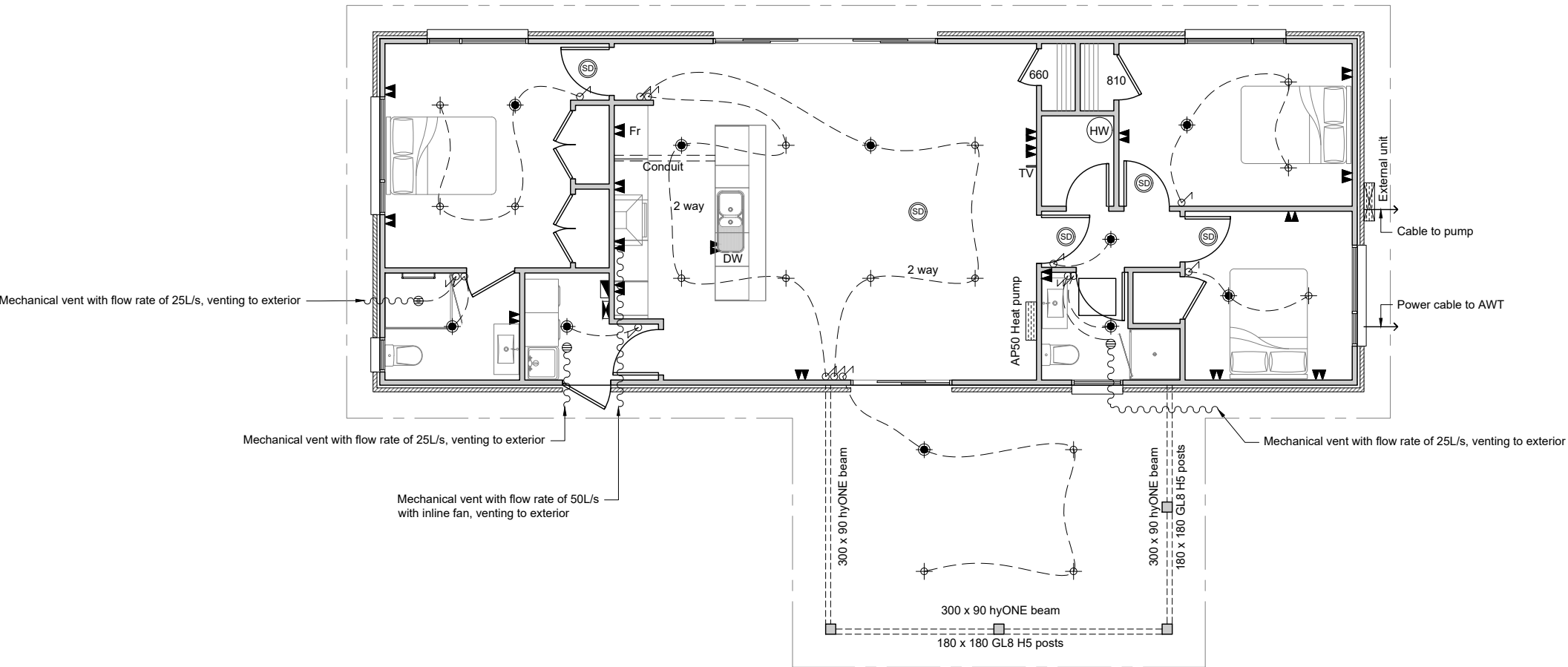
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A03

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SPECIFICATIONS					
Cladding Type	Selected 70 Series Brick				
Stud Height	2.4m				
Roofing Type	Steel Tile				
Roof Pitch	25°				
Joinery	Aluminium				
Wind Zone	High				
Earth Quake Zone	1				
RISK MATRIX					
Risk Factor	L	M	H	VH/EH	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
	Total				2



LEGEND

- 2 2 way
- 5 Smoke detector
- 10 Primary LED down Light
- 16 Secondary LED down light
- 3 Mechanical vent, vented to exterior
- 19 Double power points
- TV I 1 TV outlet
- 1 Meter board
- 1 Distribution board
- 1 Heat pump internal unit
- 1 Heat pump external unit

NOTE:

- All electrical work to be by a registered Electrician to comply with Electricity regulations, NZ Standards & NZBC.
- Electrician to supply electrical "Certificate of Compliance" on completion.
- Electrical layout schematic only. All electrical & lighting fixtures & fittings are shown indicative - not to scale. To be confirmed on site with owner prior to installation.
- All power points to be 350mm above FFL and 200mm above bench top and fixed horizontally unless specified.
- All switches to be 1200mm above FFL and fixed vertically (up/down).
- Power point for rangehood to be in ceiling space
- Electrician to check bracing plan and offset flush boxes 90mm if penetration occurs.
- External power points and electrical Fittings to be IP rated to provide dust and weather protection to comply with NZ Standards.
- All recessed light fixtures to be CA rated to comply with AS/NZS 605982.2 (Insulation to comply with AS/NZS 60695.11.5)
- Interconnected Smoke alarms to be installed to NZS4514:2021 located in all bedrooms, living spaces, hallways, and landings within the building spaces. Where a kitchen is separated from the living spaces with a door a suitable kitchen smoke alarm shall be installed. This may be a heat alarm to avoid nuisance activations.
- Equipment required must be either 10 year long-life battery-operated (non-removable/sealed) or 240v mains powered, interconnected smoke alarms.
- Smoke alarms shall be located on or near the ceiling.
- Smoke alarms shall be located in all bedrooms, living spaces, hallways and landings within the building.
- Where more than one smoke alarm is needed to meet the requirements of this standard, these alarms shall be interconnected so that when one activates, all smoke alarm devices in the household unit will sound. The interconnection between alarms may be wired or wireless.
- Where a kitchen or scullery is separated from the living spaces and hallways by doors that can be closed, an alarm specified by its manufacturer as suitable for a kitchen shall be located in the kitchen. This may be a heat alarm to avoid nuisance activations.

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Electrical Plan

Drawn

17 September 2026

Project No

5324

Rev

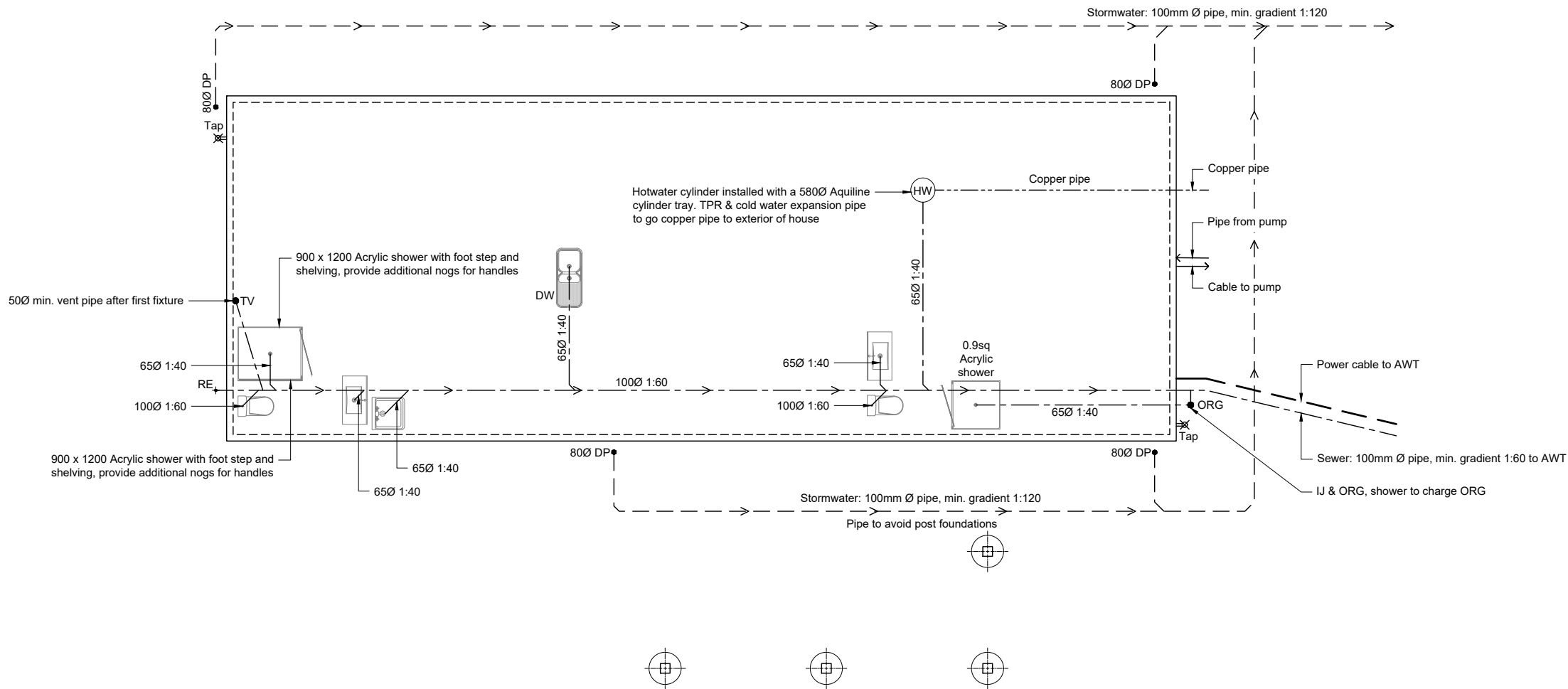
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Sheet

A04

Scale (A3 Original) 1: 100





Waste Pipe Gradients (min)		
40Ø	1:40 Minimum Gradient	4DU
65Ø	1:40 Minimum Gradient	21DU
100Ø	1:60 Minimum Gradient	115DU
Waste Pipe & Discharge Units		
40Ø	Hand basin	1DU
40Ø	Kitchen Sink	3DU
40Ø	Dishwasher	3DU
40Ø	Laundry Tub	3DU
40Ø	Washing Machine	5DU
40Ø	Shower	2DU
40Ø	Bath	4DU
100Ø	WC Pan	4DU
Drainage Pipe Gradient		
65Ø	1:40 Minimum Gradient	25DU
85Ø	1:60 Minimum Gradient	61DU
100Ø	1:60 Minimum Gradient	205DU
150Ø	1:60 Minimum Gradient	1310DU

● TV	Terminal Vent
● ORG	Overflow Relief Gully
+ RE	Rodding Eye
- - - - -	Drainage - Waste Pipe
- - - - -	100mm Ø Stormwater Pipe
- - - - -	HWC Copper pipe

- NOTE:**
- All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
 - All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
 - Number of downpipes required as per NZBC E1/AS1 1 x 74mmØ downpipe per 70m² roof plan area.
 - Stormwater: 100mm Ø UPVC pipe, minimum gradient 1:120.
 - All drainage to comply with AS/NZS 3500 & NZBC G13/AS1.
 - All lateral drains under slab to be a minimum of 65Ø.
 - Provide seismic restraints & temperature valve to hot water cylinder as per NZBC G12/AS1. Refer to separate sheet for details.

Relief vent pipe shall be:

- Discharged to a location easily visible and identifiable and unlikely to cause nuisance or damage to the building of injury to persons.
- Each line shall fall continuously from valve to point of discharge.
- Drain to terminate:
 - Not lower than 200mm of higher than 300mm above an unpaved surface, or
 - Not lower than 75mm or higher than 300mm above a gravel pit not less than 100mm in diameter in a paved surface.
- Have air gaps as required.
- Pipework downstream of the relief valve should be capable of carrying water exceeding 93°C.
- Be located to discharge away from building where necessary so as to adversely effect slab, foundation of footing.

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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G.J. Gardner. **HOMES**
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Project Title
Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title
Drainage Plan

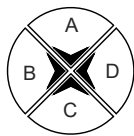
Drawn 17 September 2026

Project No 5324

Rev BC-K-4 **Sheet** A05

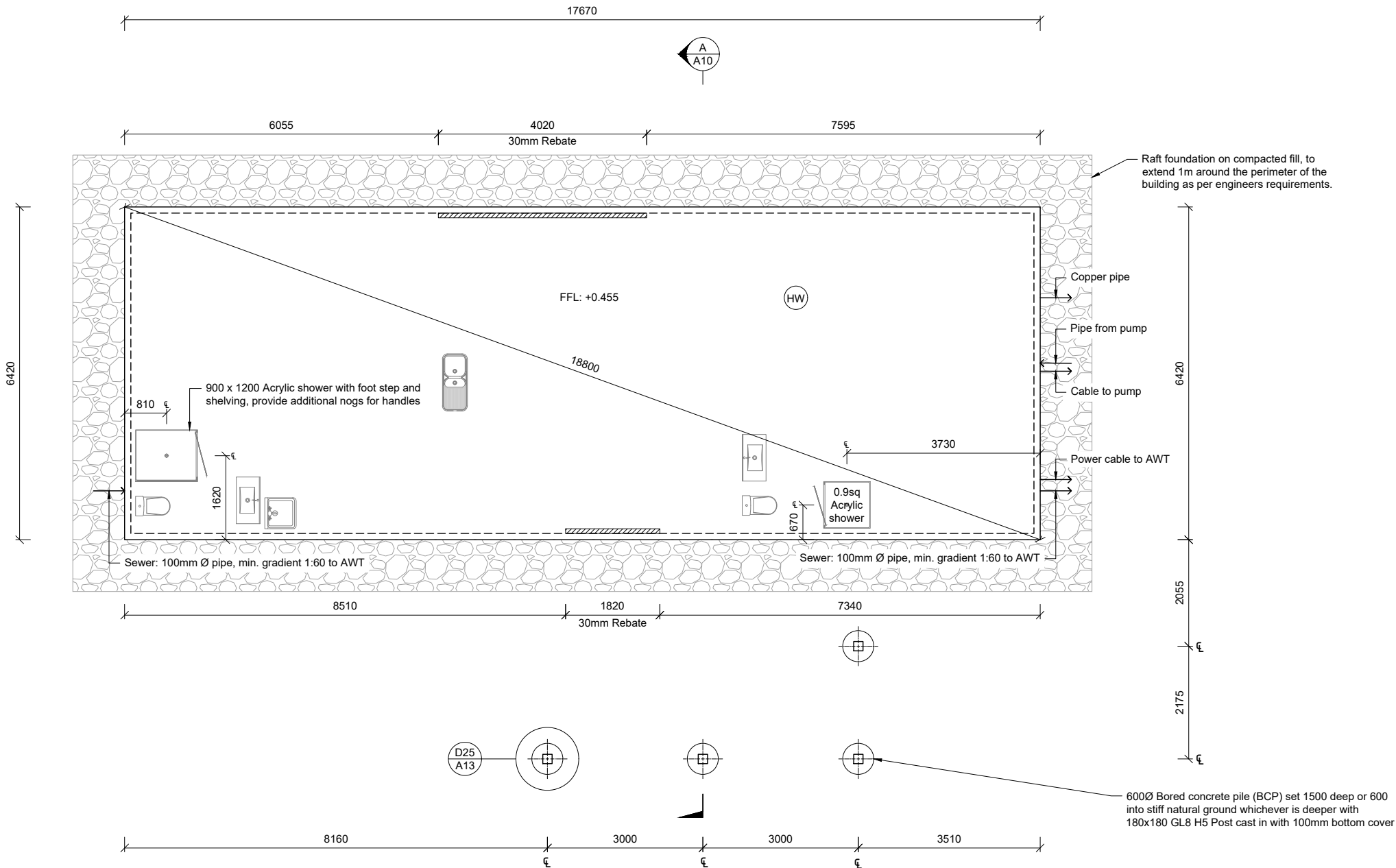
Scale (A3 Original) 1: 100





ENGINEERED RAFT FOUNDATION

Plan to be read in conjunction with
engineers Raft Foundation Calculations.



- NOTE:
1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
 2. Check all existing drain locations and all dimensions on site before construction.
 3. Refer to engineers notes for concrete MPa & other details.
 4. Plans to be read in conjunction with engineers foundation design & PS1.
 5. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.
 6. All external linings to be installed to manufacturers instructions, refer to separate detail sheet for cladding details & notes.
 7. Confirm rebate to slab for external doors with Designer or home builder before construction.
 8. Granular fill to comply with NZS 3604:2011, greater than 600mm to be engineered. Fill to be compacted at 150mm intervals and tested at 300mm intervals. Do not build on uncertified fill.

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Project Title
Sean McCaughan
138D Kapiro Road
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Lot 1 DP 537893

Sheet Title
Foundation Plan

Drawn 17 September 2026

Project No 5324

Rev BC-K-4 Sheet A06

Scale (A3 Original) 1: 100



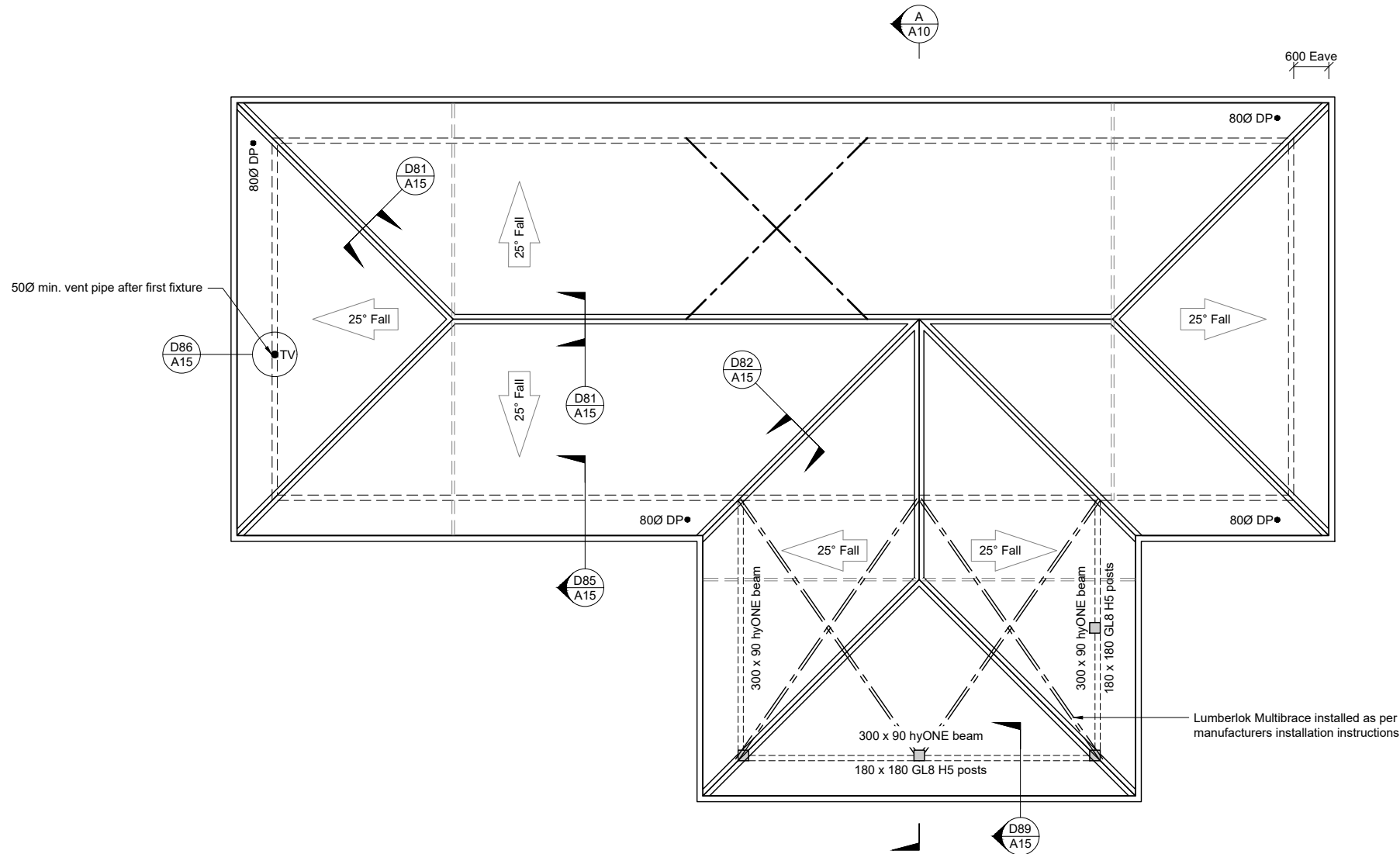
FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

- Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

LEGEND

- Edge of slab
Brick rebate



FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

NOTE:

Unless specifically noted all internal loadbearing walls less than 10KN, so no thickening required

NOTE:

- All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
- Kitchen extractor hood to be vented to exterior.
- Roofing to be installed to New Zealand Metal Roofing Code of Practice and in accordance with manufacturers installation instructions.
- Refer to eave detail for stud, lintel and soffit framing heights.
- Precut manufacturer to provide truss and lintel fixings and Producer Statement.
- All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
- Number of downpipes required as per NZBC E1/AS1 1 x 74mmØ downpipe per 70m² roof plan area.
- Stormwater: 100mm Ø UPVC pipe, minimum gradient 1:120.
- Selected 180 N-Line Continuous Fascia & Spouting with 80Ø PVC downpipe installed to manufactures specifications

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Roof Plan

Drawn 17 September 2026

Project No 5324

Rev BC-K-4

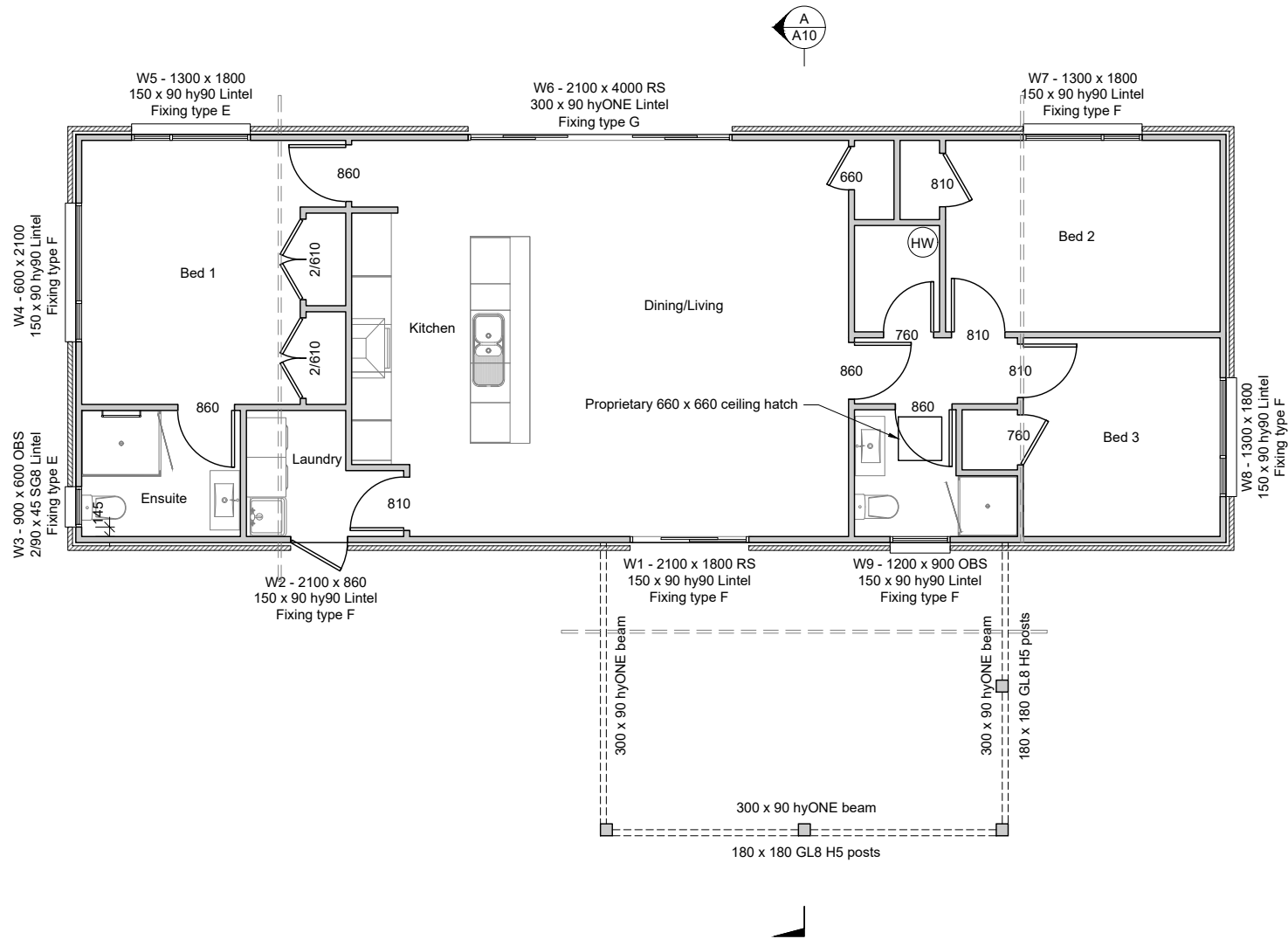
Sheet A07

Scale (A3 Original) 1: 100



LEGEND

- Roof Line
- Load bearing stud
- Girder truss
- Terminal vent
- Lumberlok strip brace both ways in roof plane fixed using 5No. 30 x 3.15mm nails each end and 1No. 30 x 3.15mm nails where brace crosses truss
- Fixings under truss point load as follows:
- Stud to bottom plate connection use GIB HandiBrac fixed using 8 Tek screws & 1 Bowmac screw bolt.
- Stud to top plate connection to Mitek internal loadbearing 16kN connection: Lumberlok CPC 80 each side (16kN pair) with Type 17 - 14g x 35 mm screws + 8Ø product nails



FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

- Exposed fixings to be type 304 stainless steel.
- Sheltered fixings to be hot-dipped galvanize.
- Closed in nail plates in roof space to be continuous coated galvanized steel.
- Closed wire dogs and bolts to be hot dipped galvanized steel.
- All other closed structural fixings to be mild steel (uncoated non galvanized)

LEGEND

- 90 x 45 SG8 H1.2 Timber framing to external load bearing walls at 600 c/c
- 90 x 45 SG8 H1.2 Timber framing to internal load bearing walls at 600 c/c
- 90 x 45 SG8 H1.2 Timber Framing non-load bearing walls at 600 c/c
- Girder truss

NOTE:

- All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
- Refer to NZS3604:2011 Section 4 for durability requirements.
- Do not scale from drawings.
- Check all dimensions before construction commences.
- Refer to Eave detail for stud, lintel and soffit framing heights.
- Precut manufacturer to provide truss and lintel fixings and Producer Statement.
- Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.
- Building underlay must comply with acceptable solution NZBC clause E2/AS1 and NZS 3604.
- Sill support bars conforming to BRANZ evaluation method EM6 to be installed to all windows.
- Flashing tape must have proven compatibility with the selected building underlay and other materials with which it comes into contact as per Table 21 of NZBC clause E2/AS1.
- As per NZBC 9.1.10.8: Install windows & doors using pairs of min 75x3.15 jolt head nails through reveals into surrounding frame at
 - a) 450mm max c/c along sills, jambs & heads
 - b) 150mm max from ends of reveal Install packer between reveals & framing at all fixing points, except between head reveals & lintels.
- All window joinery to comply with NZS 4211:2008
- All glazing to comply with NZS 4223
- All window and door openings to be checked on site prior to manufacture, any discrepancies to be reported to GJ Gardner Homes Ltd.
- All internal doors to be offset from return walls by 90mm minimum.
- Where studs exceed 450mm c/c install polypropylene tape horizontally at 300mm c/c over building wrap.
- Optional: 'HIANDRI' Bottom plate packers to be installed as per manufacturers specifications

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Framing & Lintel Plan

Drawn

17 September 2026

Project No

5324

Rev

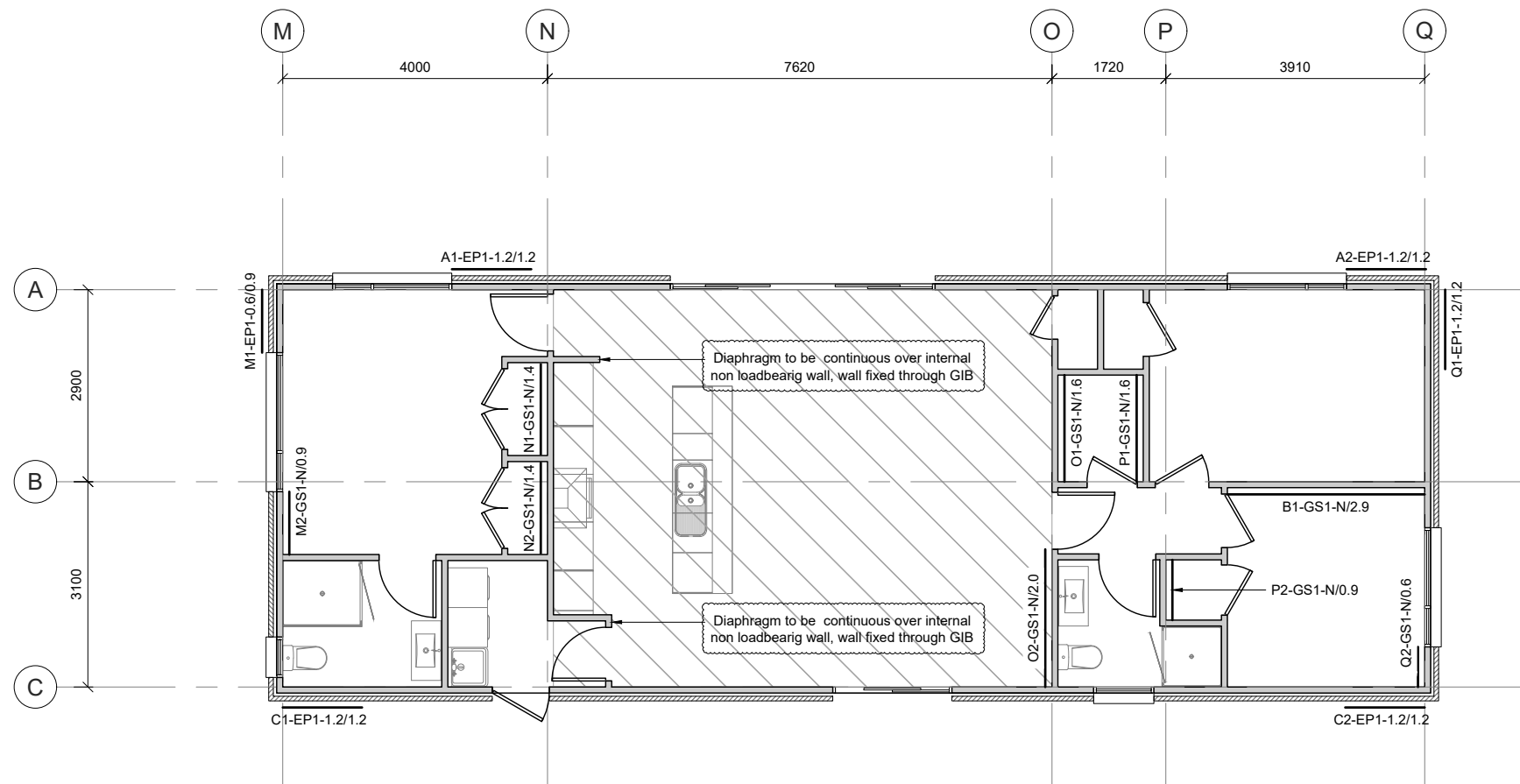
BC-K-4

Sheet

A08

Scale (A3 Original) 1: 100





- NOTE:**
- All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
 - All bracing elements to be installed to manufacturers specifications.
 - Aqualine GIB to all bathroom walls.

WALL BRACING	
GS1-N:	10mm GIB one face Min. 0.4m long, no hold downs.
EP1-0.6:	7mm min Plywood one face min. 0.6m long
EP1-1.2:	7mm min Plywood one face min. 1.2m long

FIXINGS:

Exposure Zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

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Project Title

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Lot 1 DP 537893

Sheet Title

Bracing Plan

Drawn 17 September 2026

Project No 5324

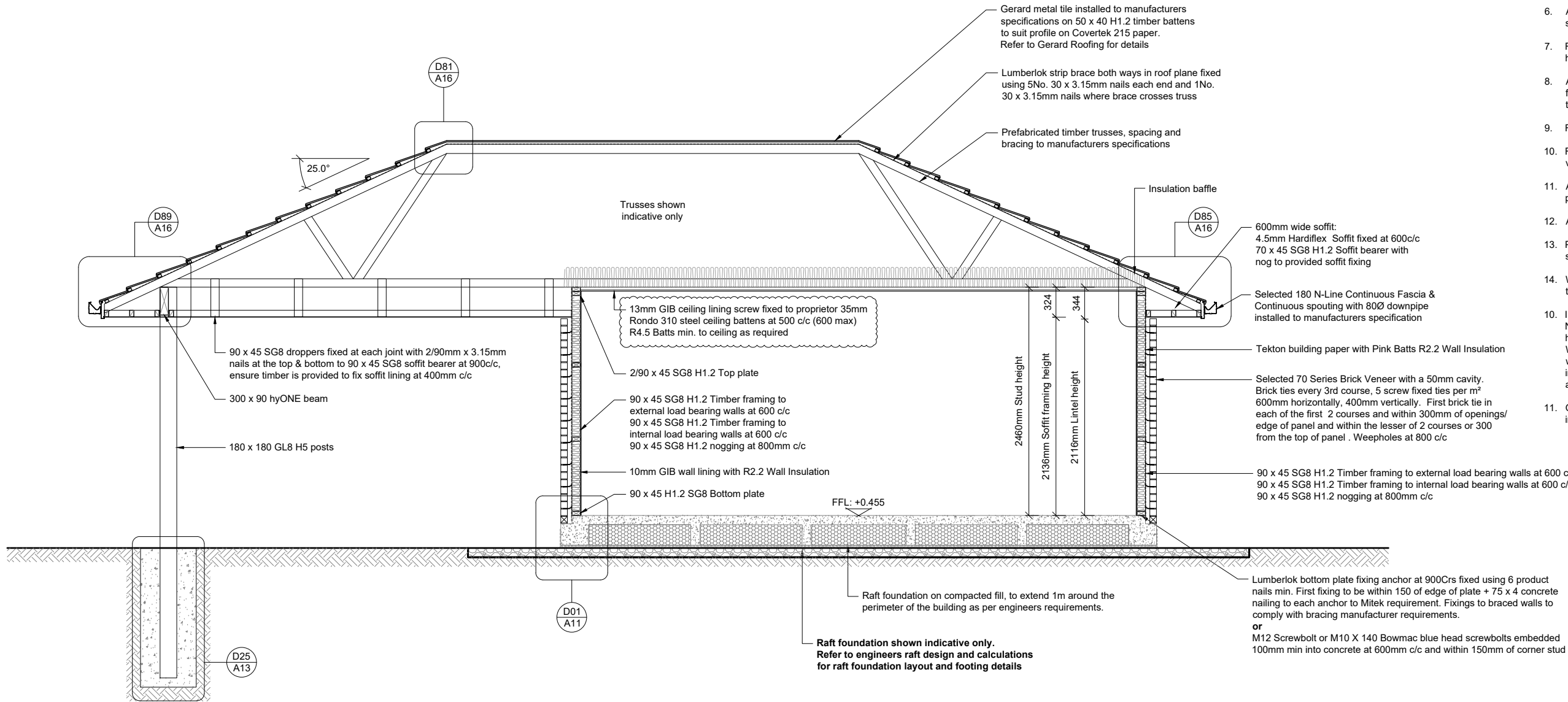
Rev	Sheet
BC-K-4	A09

Scale (A3 Original) 1: 100

LEGEND

GIB Ceiling diaphragm fixed to manufacturers installation instructions.
Perimeter fixings at 100mm centres and each corner in line with GIB EzyBrace 2011 fastener pattern, refer to GIB site guide.





SECTION NOTES:

- Do not scale from drawings.
- Refer to engineers notes for concrete MPa & other details.
- Plans to be read in conjunction with engineers foundation design & PS1.
- Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.
- Fill to be compacted at 150mm intervals. Do not build on uncertified fill. All wet areas to be provided with impervious linings as per NZBC E3/AS1.
- All wall framing typically H1.2 treated unless specifically stated.
- Refer to Eave detail for stud, lintel and soffit framing heights.
- Additional nogs to be installed at framing stage to allow for towel rails, wardrobe & fixed shelves, WC cistern, toilet roll holders & wall mounted extractors.
- Refer to Framing & Lintel Plan for lintel dimensions.
- Refer to Masonry Veneer Details sheet for brick veneer notes.
- All wet areas to be provided with impervious linings as per NZBC E3/AS1.
- Aqualine GIB to all bathroom walls.
- Precut manufacturer to provide truss and producer statement.
- Where studs exceed 450mm c/c install polypropylene tape horizontally at 300mm c/c over building wrap.
- Interconnected Smoke alarms to be installed to NZS4514:2021 located in all bedrooms, living spaces, hallways, and landings within the building spaces. Where a kitchen is separated from the living spaces with a door a suitable kitchen smoke alarm shall be installed. This may be a heat alarm to avoid nuisance activations.
- Optional: 'HIANDRI' Bottom plate packers to be installed as per manufacturers specifications

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Lot 1 DP 537893

Sheet Title

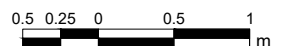
Section A

Drawn 17 September 2026

Project No 5324

Rev BC-K-4 Sheet A10

Scale (A3 Original) 1: 50



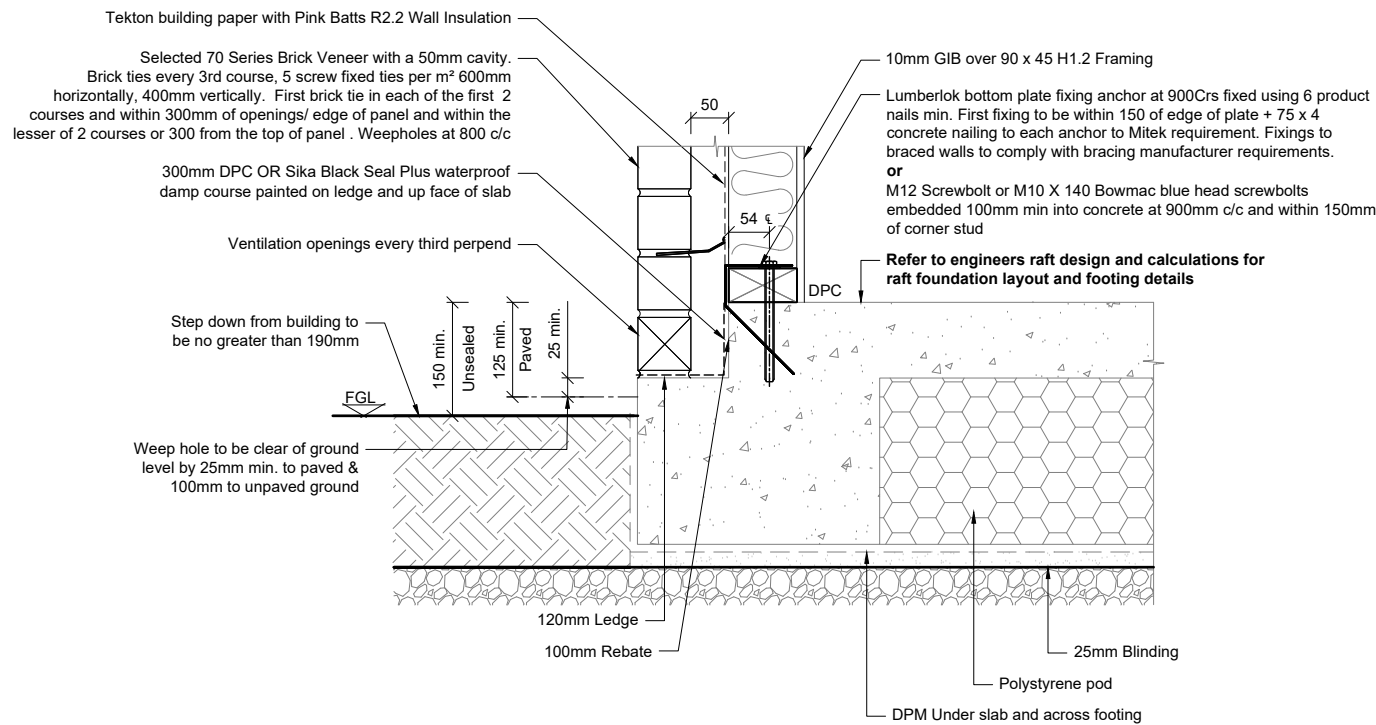
Section A

SCALE = 1:50 @ A3

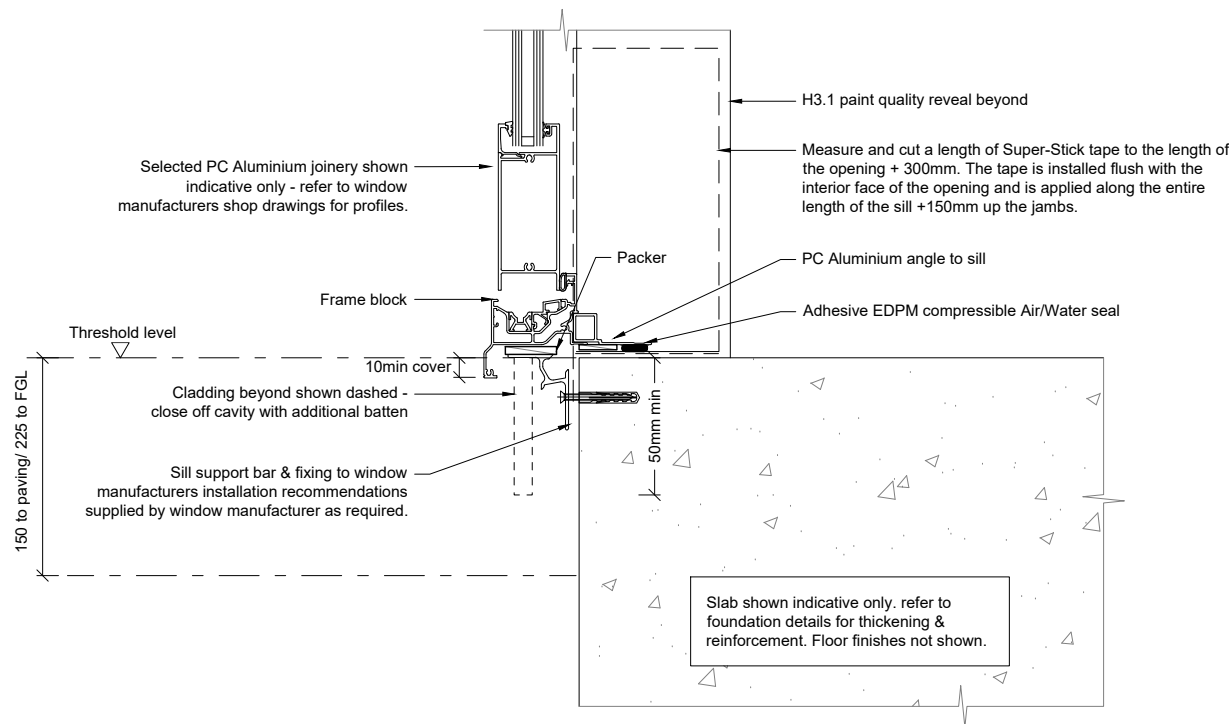
FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

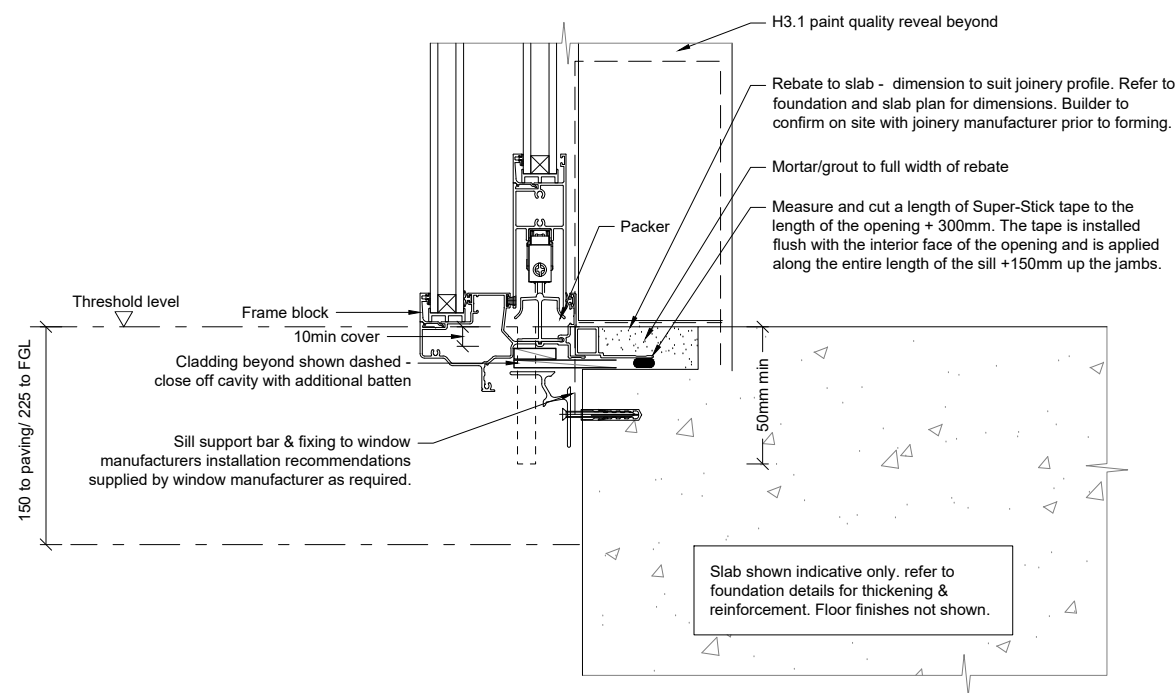
Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanised steel.
Closed wire dogs and bolts to be hot dipped galvanised steel.
All other closed structural fixings to be mild steel (uncoated non galvanised).
Galvanised brick ties.



D01 Brick Veneer to Foundation Clearances Detail
A07 SCALE = 1:10 @ A3



D05 Standard Sill Detail
A03 SCALE = 1:5 @ A3



D07 Rebated Sill Detail
A03 SCALE = 1:5 @ A3

NOTE:

1. Refer to NZS3604:2011 Section 4 for durability requirements.
2. Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.
3. Building underlay must comply with acceptable solution NZBC clause E2/AS1 and NZS 3604.
4. Flashing tape must have proven compatibility with the selected building underlay and other materials with which it comes into contact as per Table 21 of NZBC clause E2/AS1.
5. As per NZBC 9.1.10.8: Install windows & doors using pairs of min 75x3.15 jolt head nails through reveals into surrounding frame at
 - a) 450mm max c/c along sills, jambs & heads
 - b) 150mm max from ends of reveal
 Install packers between reveals & framing at all fixing points, except between head reveals & lintels.
6. All window joinery to comply with NZS 4211:2008
7. All glazing to comply with NZS 4223
8. All window and door openings to be checked on site prior to manufacture, any discrepancies to be reported to the Designer.
9. Details to be read in conjunction with manufacturers installation instruction.
10. Cladding to be installed to manufacturers installation instructions.

FIXINGS:

Exposure Zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

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Project Title

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Lot 1 DP 537893

Sheet Title

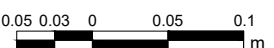
Foundation Edge Detail
Threshold Detail

Drawn 17 September 2026

Project No 5324

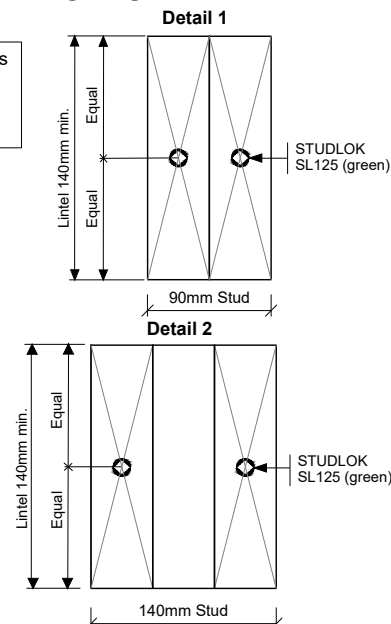
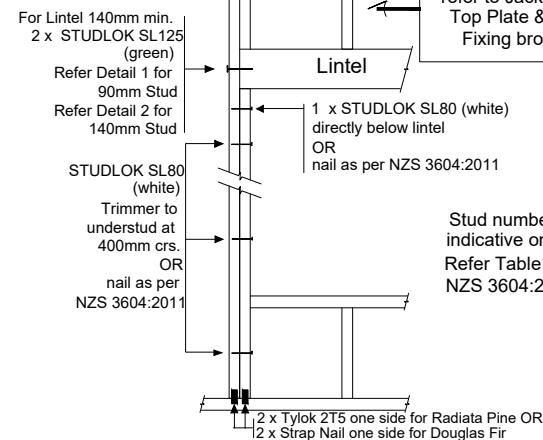
Rev BC-K-4 Sheet A11

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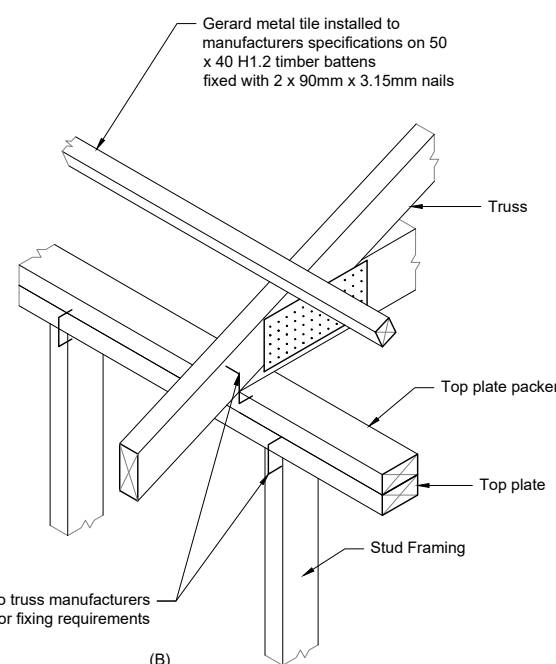
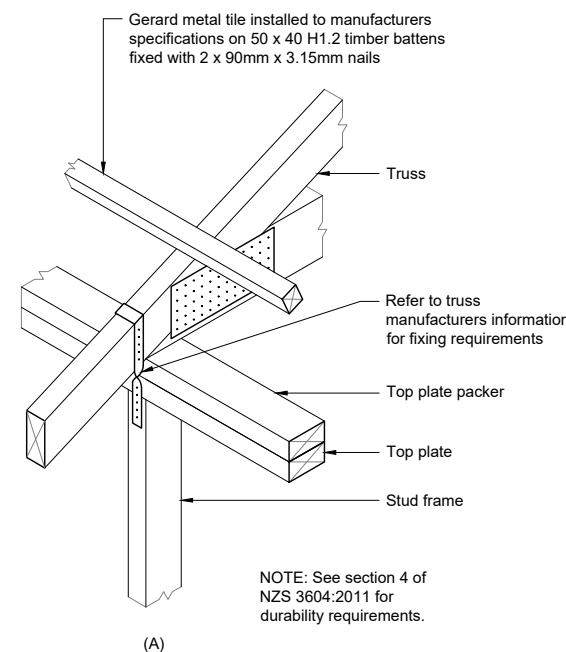
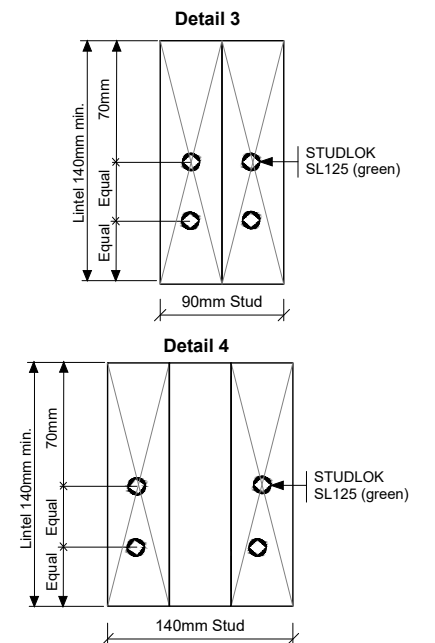
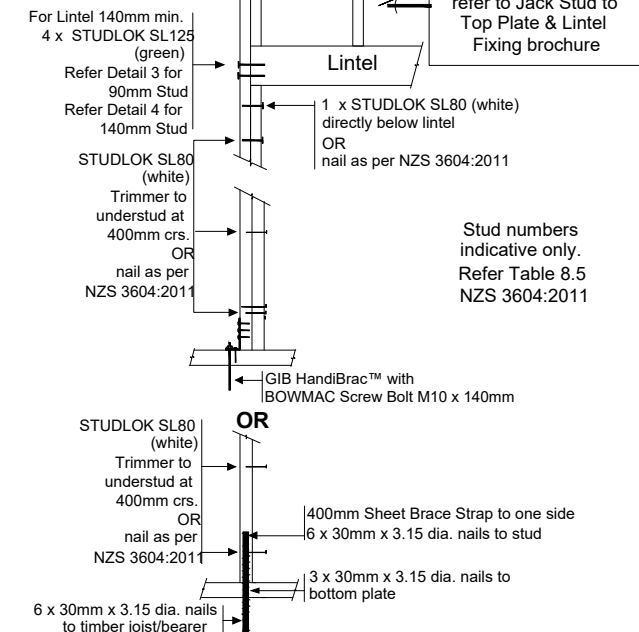


STUDLOK LINTEL FIXING OPTIONS FOR ON-SITE

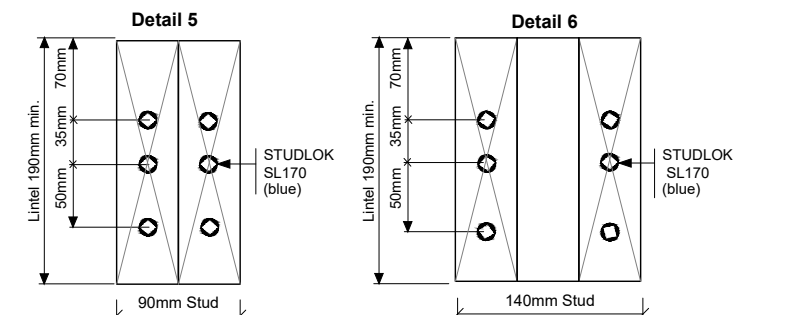
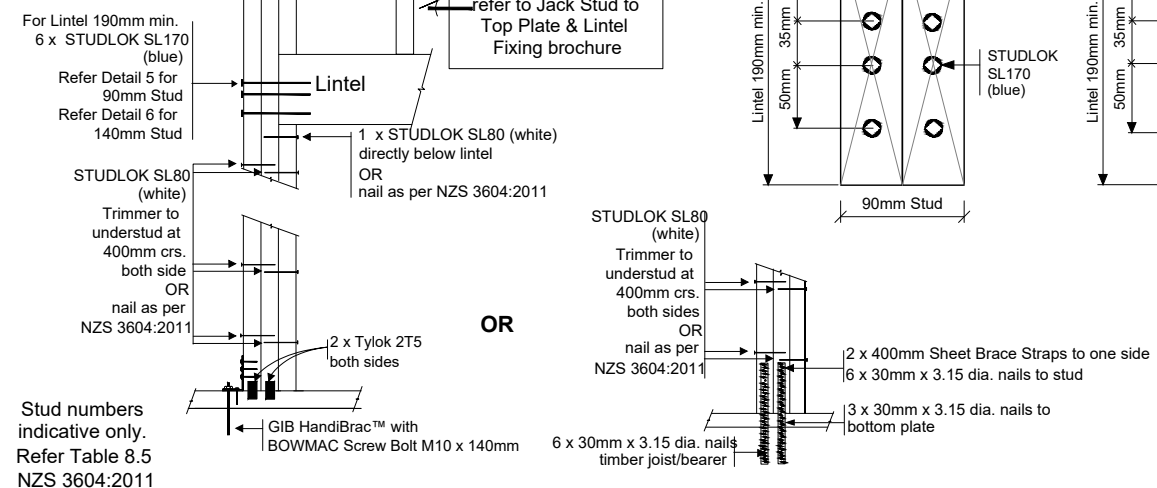
TYPE F 4.0kN



TYPE G 7.5kN



TYPE H 13.5kN



TOP PLATE CONNECTION OPTIONS:

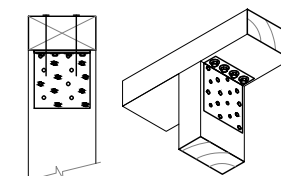
Choose from the three connections below or refer to manufacturers information in specifications for Bowmac Stud-lok fixing

NOTE:

To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

FIXING TYPE B: 4.7KN CHOOSE ANY OF THE 3 OPTIONS BELOW

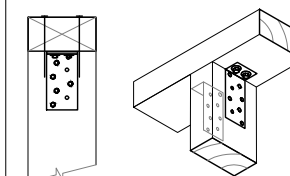
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
LUMBERLOK
6kN Stud Anchor
(CPC80)

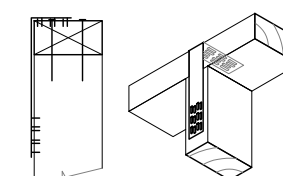
Recommended for internal wall options to avoid lining issues

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
2 x LUMBERLOK
CPC40

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
LUMBERLOK
Stud Strap
(one face only)

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.

Sheltered fixings to be hot-dipped galvanize.

Closed in nail plates in roof space to be continuous coated galvanised steel.

Closed wire dogs and bolts to be hot dipped galvanised steel.

All other closed structural fixings to be mild steel (uncoated non galvanised).

Galvanised brick ties.

D16 Truss Top Plate Connection
SCALE = NTS

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Project Title

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138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Hold Down Details

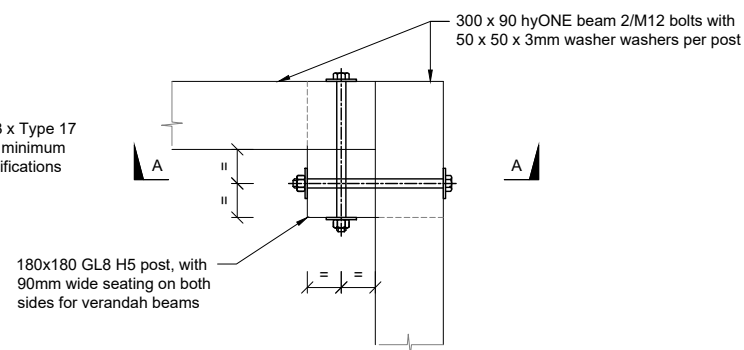
Drawn 17 September 2026

Project No 5324

Rev BC-K-4 Sheet A12

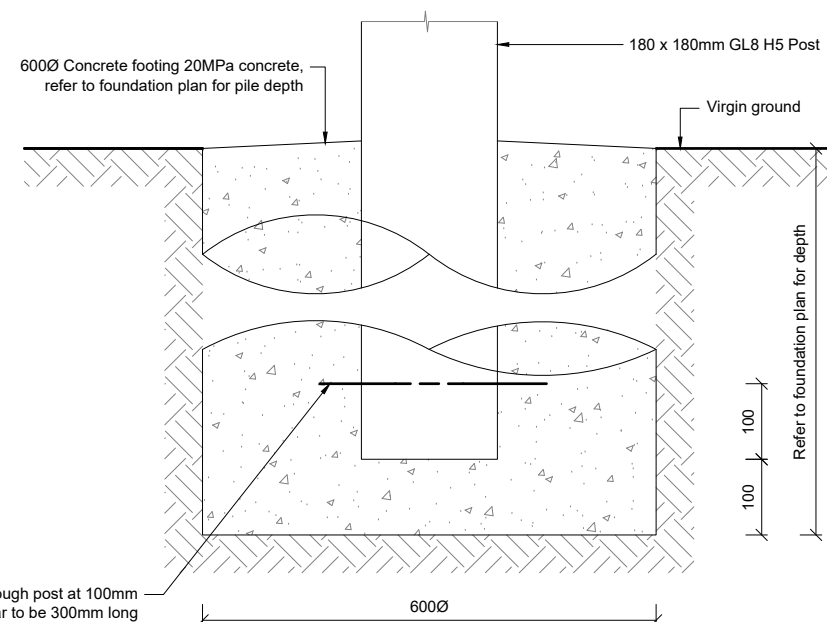
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0.1 0.05 0 0.1 0.2 m



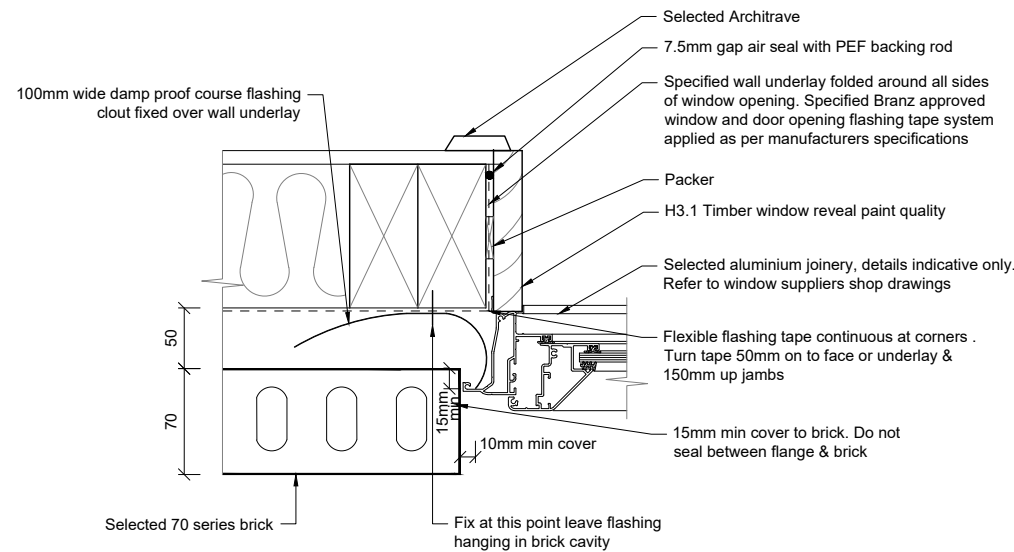
Technical drawing of a beam-to-column connection. The drawing shows a 300 x 90 hyONE beam connected to a 180mm x 180mm GL8 H5 post. The connection uses two 50 x 50 x 3mm washers and two 18mm x 18mm GL8 H5 posts. The drawing includes dimensions for the beam width (B) and the post diameter (D).

A-A Section A-A
SCALE = 1:10 @ A3

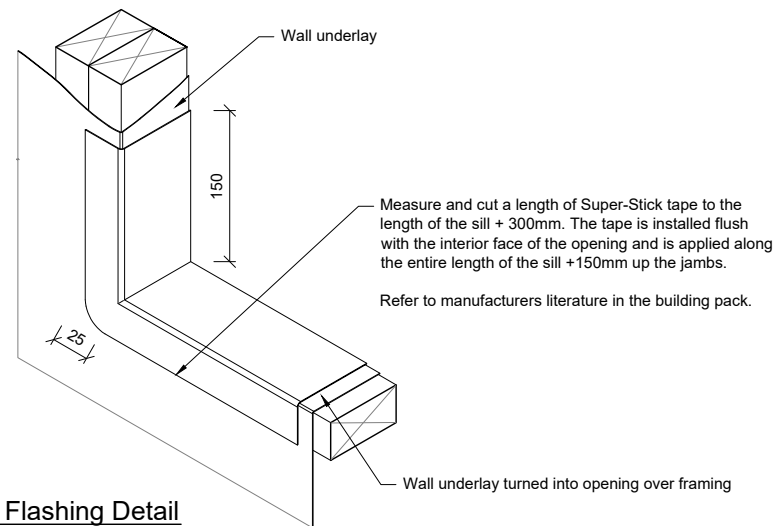


D25 Porch Post Footing Detail
A06 SCALE = 1:10 @ A3

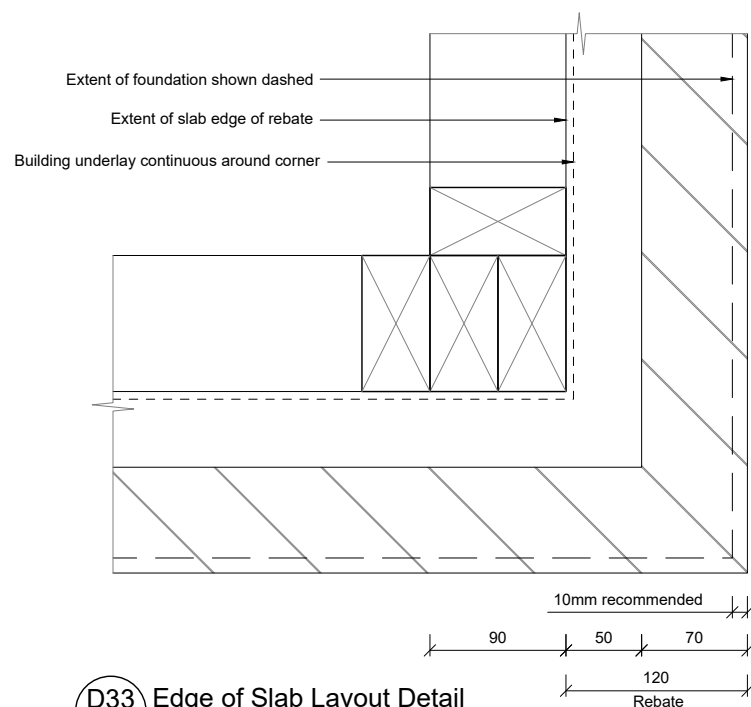
- Exposed fixings to be type 304 stainless steel.
- Sheltered fixings to be hot-dipped galvanized.
- Closed in nail plates in roof space to be continuous coated galvanized steel.
- Closed wire dogs and bolts to be hot dipped galvanized steel.
- All other closed structural fixings to be mild steel (uncoated non galvanized)



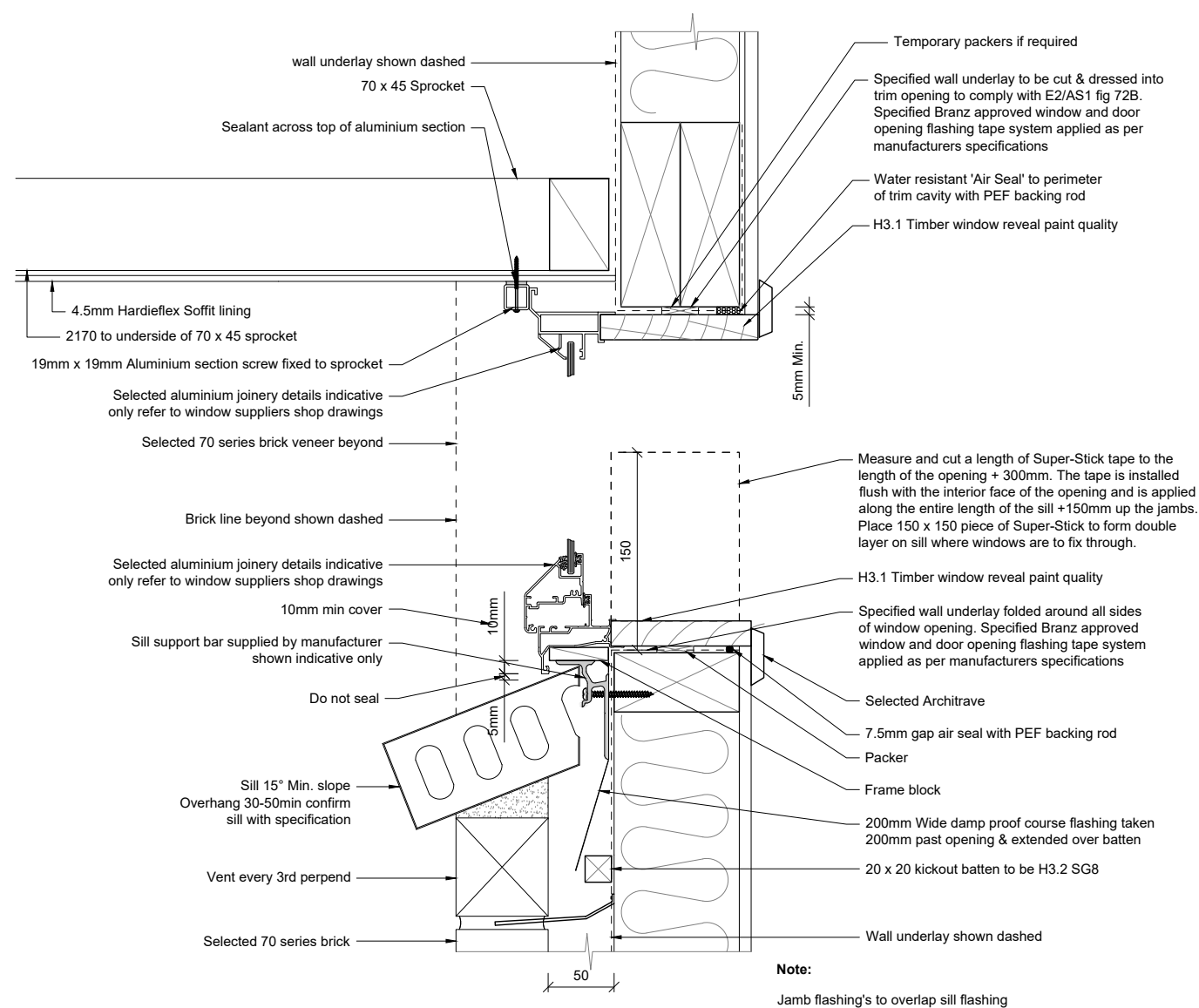
D31 Brick Veneer - Window Jamb Detail
A03 SCALE = 1:5 @ A3



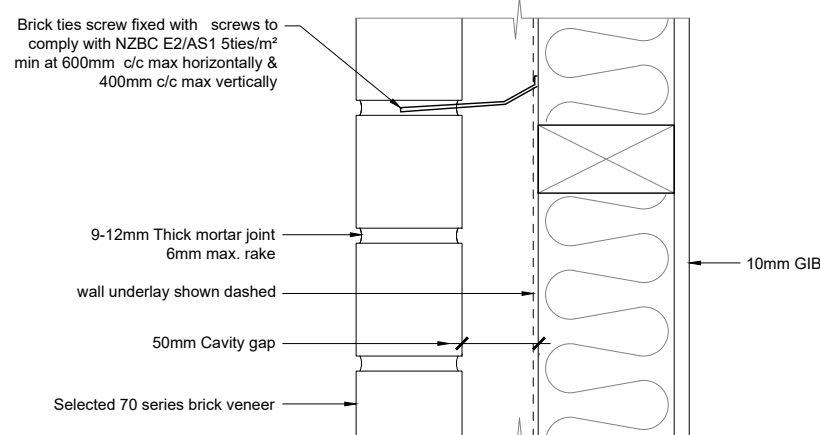
D32 Sill Flashing Detail
SCALE = NTS



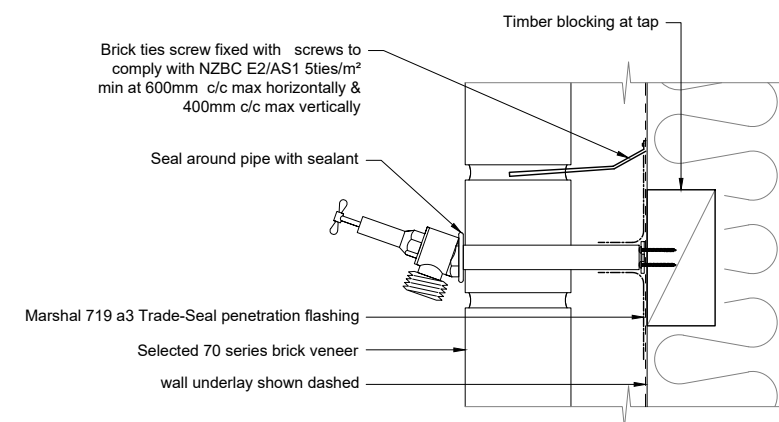
D33 Edge of Slab Layout Detail
A03 SCALE = 1:5 @ A3



D34 Brick Veneer - Sill & Head Detail
A03 SCALE = 1:5 @ A3



D35 Brick Veneer - Wall Detail
SCALE = 1:5 @ A3



D36 Brick Veneer - Wall Penetration Detail
SCALE = 1:5 @ A3

NOTE:

- All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
- Refer to NZS3604:2011 Section 4 for durability requirements.
- Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.
- Building underlay must comply with acceptable solution NZBC clause E2/AS1 and NZS 3604.
- Sill support bars conforming to BRANZ evaluation method EM6 to be installed to all windows.
- Flashing tape must have proven compatibility with the selected building underlay and other materials with which it comes into contact as per Table 21 of NZBC clause E2/AS1.
- As per NZBC 9.1.10.8: Install windows & doors using pairs of min 75x3.15 jolt head nails through reveals into surrounding frame at
 - 450mm max c/c along sills, jambs & heads
 - 150mm max from ends of reveal install packers between reveals & framing at all fixing points, except between head reveals & lintels.
- All window and door openings to be checked on site prior to manufacture, any discrepancies to be reported to GJ Gardner Homes Ltd.
- All window joinery to comply with NZS 4211:2008
- All glazing to comply with NZS 4223
- All window and door openings to be checked on site prior to manufacture, any discrepancies to be reported to the Designer.
- Details to be read in conjunction with manufacturers installation instruction.
- Cladding to be installed to manufacturers installation instructions.
- Brick veneer fixed in accordance with E2/AS1 Section 9.2
- Brick Veneer with a 50mm cavity with brick ties every 3rd course, 5 screw fixed ties per m² 600mm horizontally, 400mm vertically. Weepholes @ 800mm c/c max
- Brick ties to leave corrosion protection to comply with NZBC E2/AS1 table 18C
- Brick veneer ties & spacings to comply with E2/AS1 table 18 A, 18 B & 18C

Note:

Wall underlay & flexible flashing tape to be continuous at corners

First ties in each of the first 2 courses and within 300 of openings/ edge of panel and within the lesser of 2 courses or 300mm of top of panel

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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G.J. Gardner. HOMES
"We're Great Together"

FAR NORTH
Ph: (09) 407 3441
Fax: (09) 407 3442

Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Cladding Details

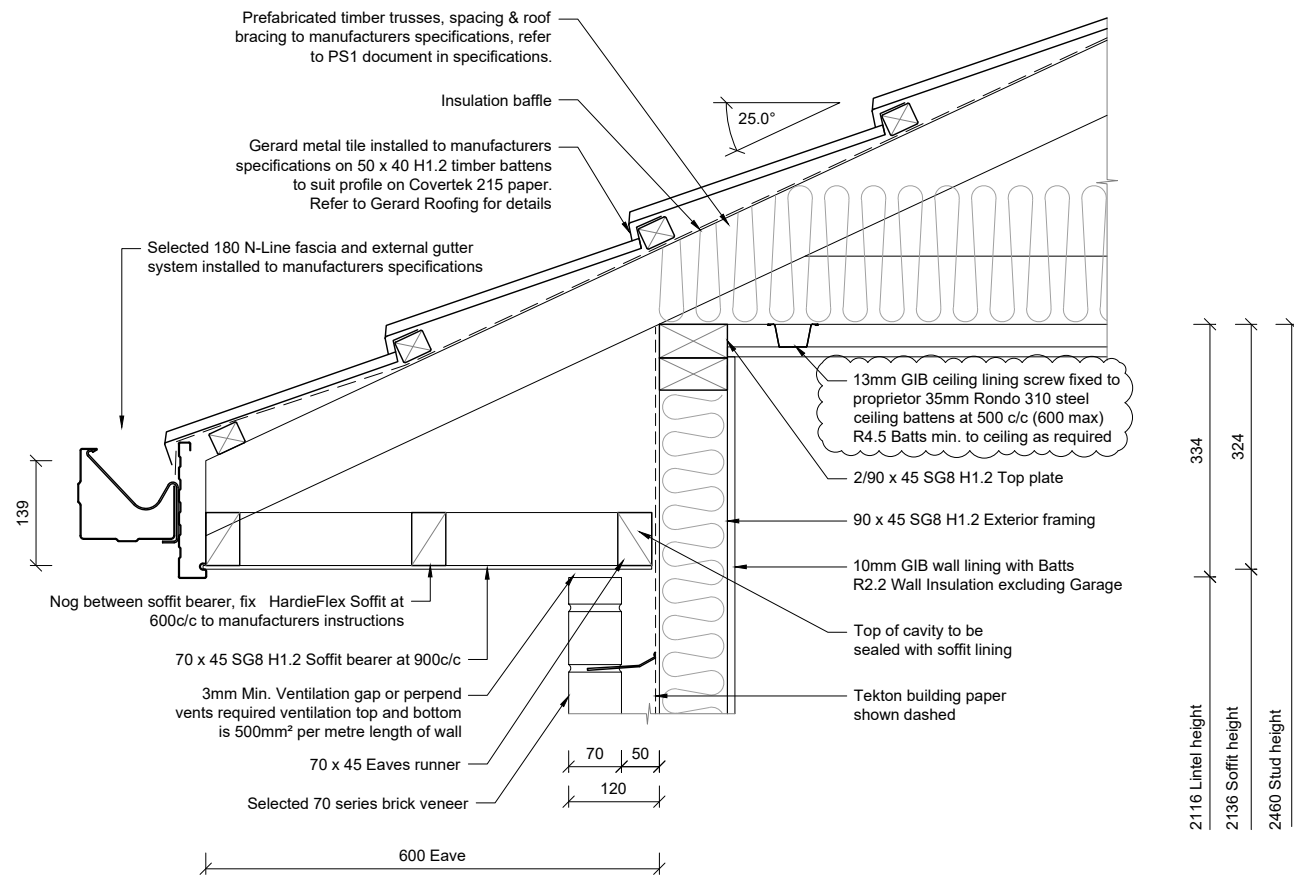
Drawn 17 September 2026

Project No 5324

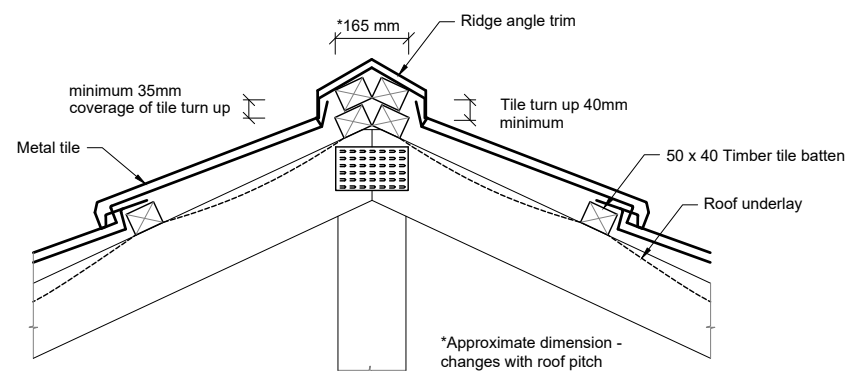
Rev	Sheet
BC-K-4	A14

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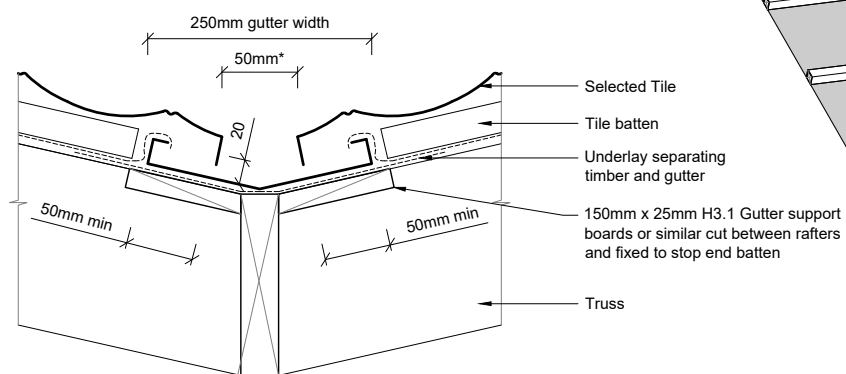




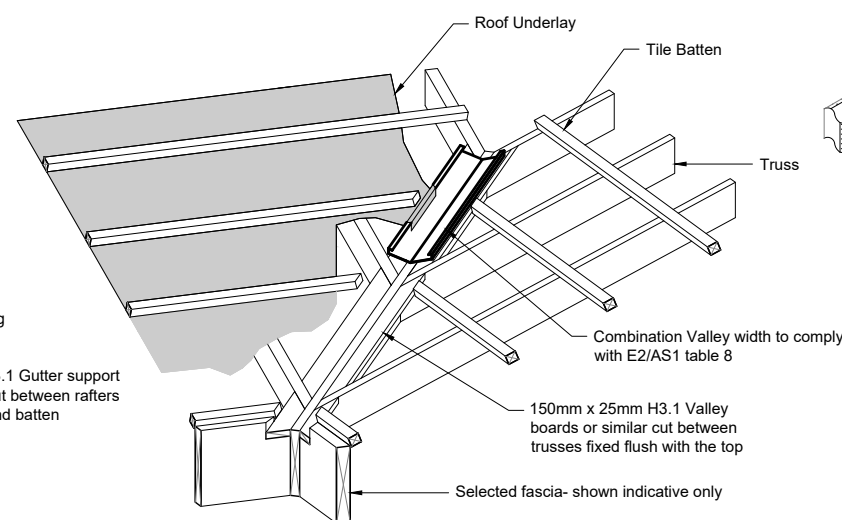
D85 Brick Veneer - 600mm Eave Detail
A07 SCALE = 1:10 @ A3



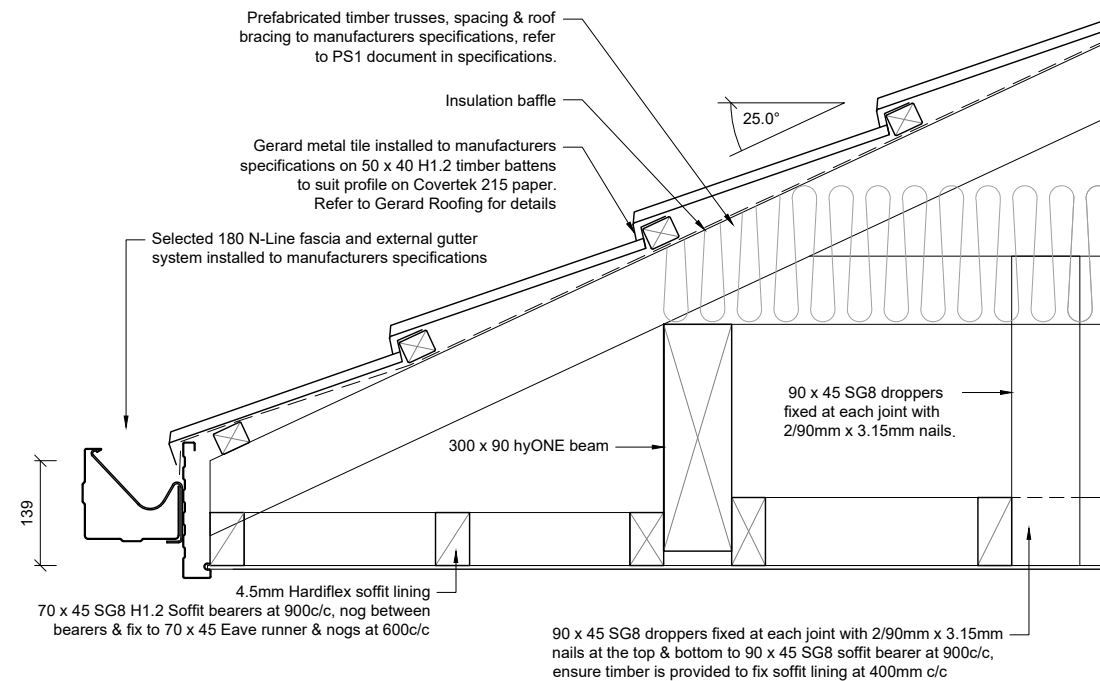
D81 Ridge Flashing Detail
A07 SCALE = 1:10 @ A3



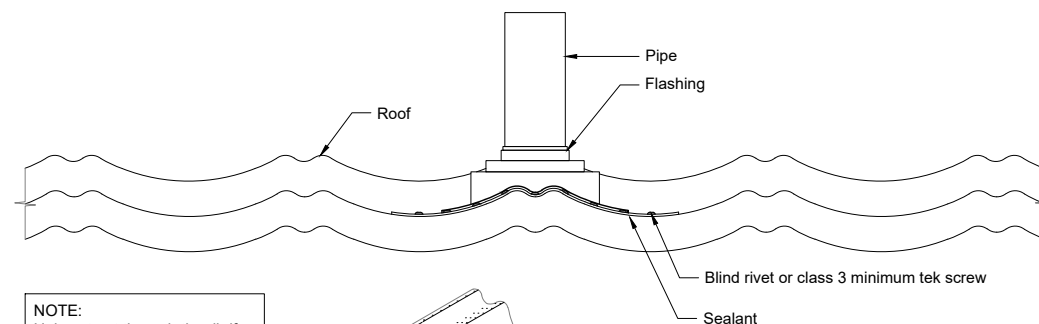
D82 Gutter Valley Detail
A07 SCALE = 1:10 @ A3



D83 Gutter Valley Flashing Detail
A07 SCALE = NTS



D89 Soffit Drop Detail
A07 SCALE = 1:10 @ A3



D86 Vent Flashing Detail
A07 SCALE = 1:10 @ A3

- NOTE:**
1. Refer to Section for specific product selection.
 2. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
 3. Refer to NZS3604:2011 Section 4 for durability requirements.
 4. Do not scale from drawings.
 5. All wall framing typically H1.2 treated unless specifically stated.
 6. Designers connection details to be followed unless specifically design by precut manufacturer.
 7. Refer to Eave detail for stud, lintel and soffit framing heights.
 8. Precut manufacturer to provide truss fixings and Producer Statement.
 9. Refer to Framing & Lintel Plan for lintel to stud fixings.
 10. Details to be read in conjunction with manufacturers specifications and installation requirements.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Roof Details

Drawn 17 September 2026

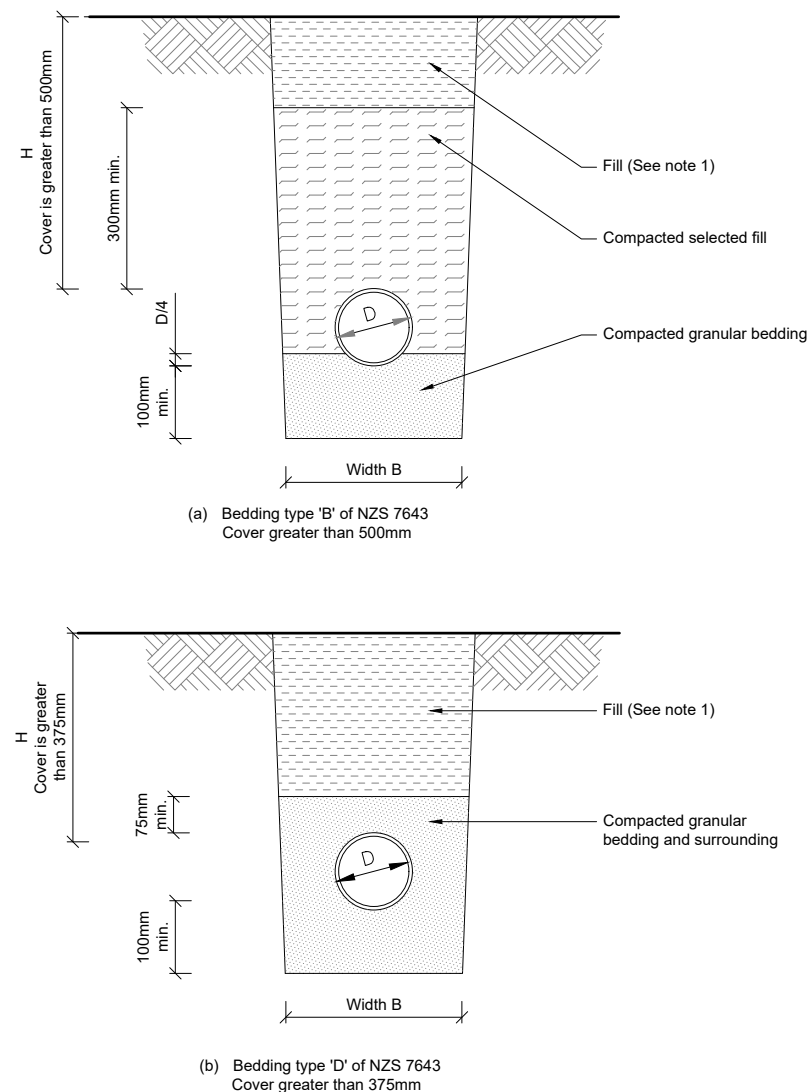
Project No 5324

Rev BC-K-4 Sheet A15

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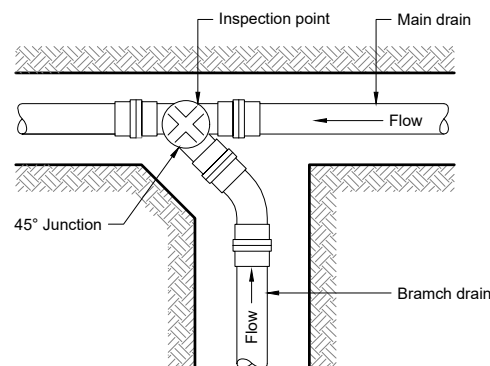
0.1 0.05 0 0.1 0.2 m

Figure 7: Bedding and backfilling
Paragraphs 5.2.1, 5.3.1 and 5.4.1



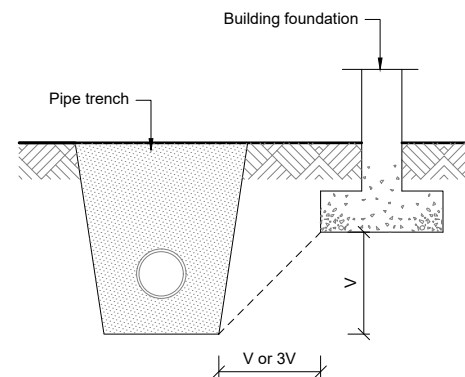
NOTE:
Fill shall be:
Ordinary fill where drains are located below gardens and open country.
Compacted selected fill where the drains are located below residential driveways and similar areas subject to light traffic.

Figure 9: Inspection points
Paragraph 5.7.3



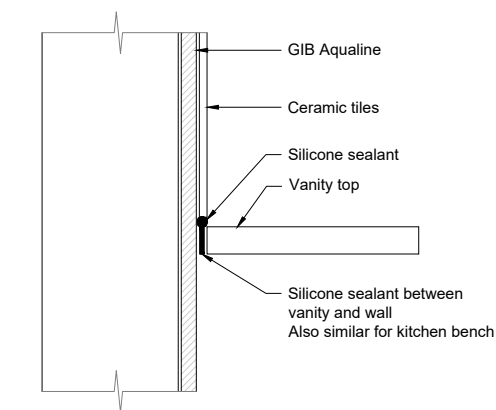
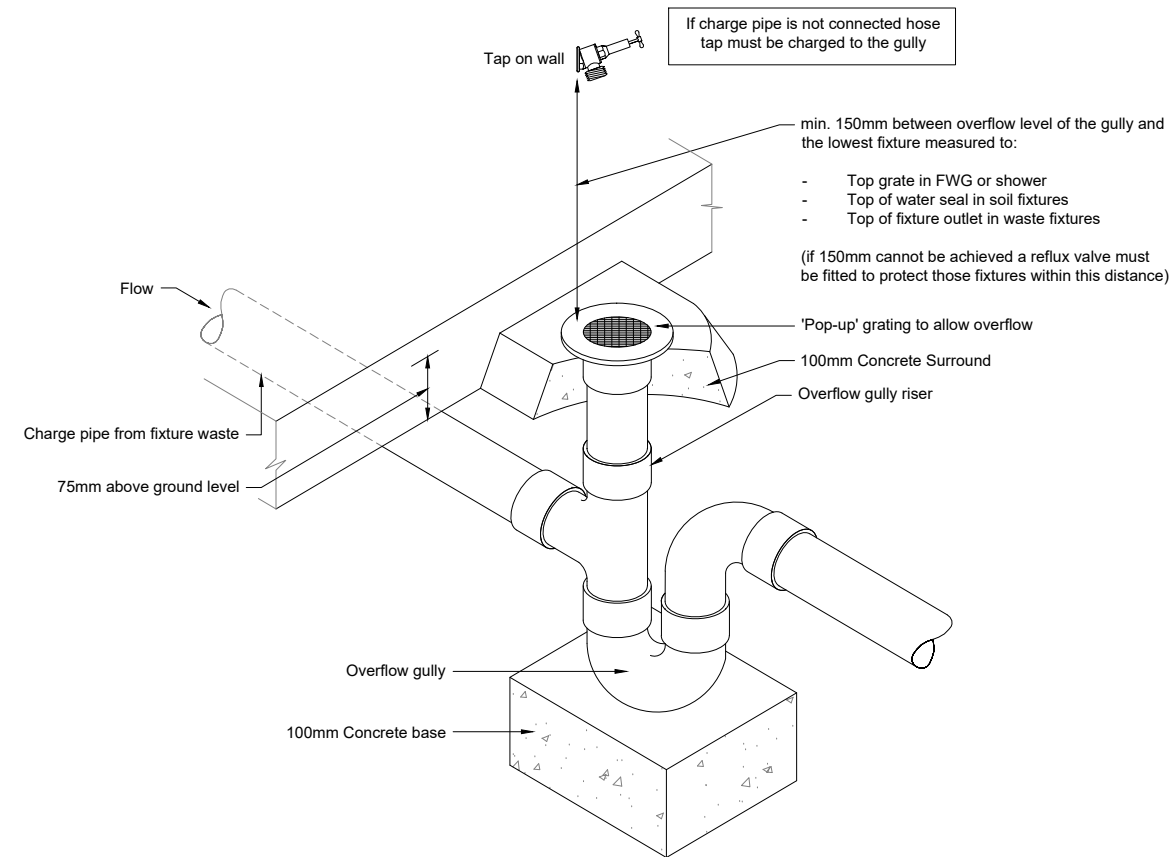
101 Trench & Inspection Joint Details
SCALE = NTS

Figure 8: Relationship of pipe trench to building foundation
Paragraph 5.6.1



Minimum horizontal separation shall be V or 3V depending on length of time trench open, see paragraph 5.6.1

102 Overflow Relief Gully (ORG) Detail
SCALE = NTS



D97 Tile Upstand Detail
SCALE = 1:5 @ A3

- NOTE:
1. All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
 2. Number of downpipes required as per NZBC E1/AS1 1 x 74mmØ downpipe per 70m² roof plan area.
 3. Stormwater: 100mm Ø UPVC pipe, minimum gradient 1:120.
 4. All drainage to comply with AS/NZS 3500 & NZBC G13/AS1.

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.
All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
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Project Title
Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

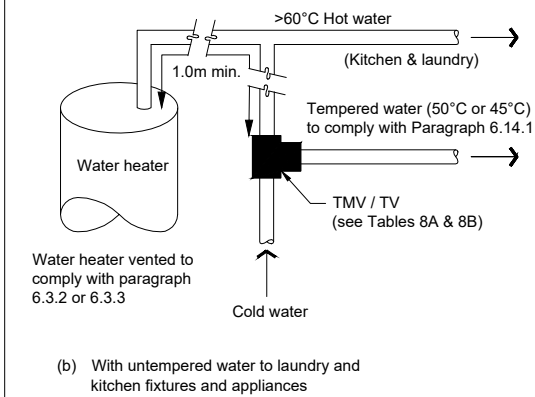
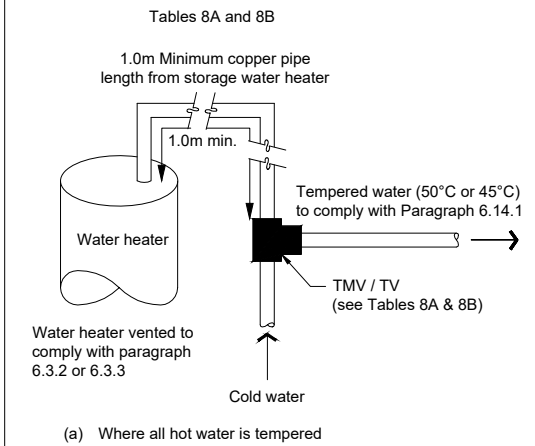
Sheet Title
Drainage Details &
Tiles Sealant Detail

Drawn 17 September 2026

Project No 5324

Rev BC-K-4 **Sheet** A16

Scale (A3 Original) 1: 10
0.1 0.05 0 0.1 0.2 m

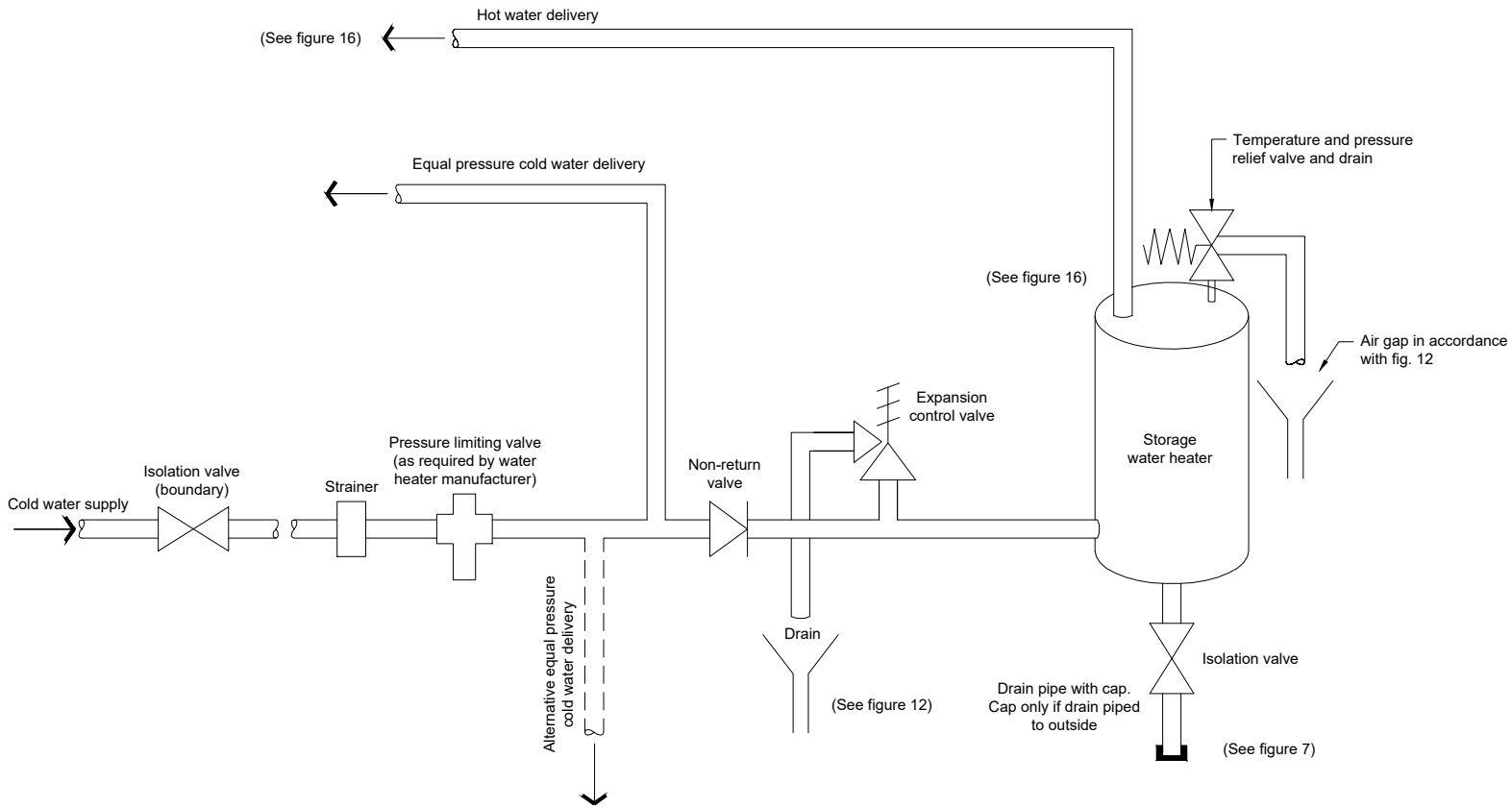


- NOTES
- For optimum system efficiency the tempering control device, for other than a mains pressure system, may be located as low as practicable to achieve the manufacturer's recommended head, at the tempering control device.
 - 1.0m minimum copper pipe length from storage water heater to temperature control device.
 - Untempered hot water must not be provided to fixtures or appliances from a storage water heater that is connected to an uncontrolled heat source, such as a wet-back or solar water heater.

105 Tempering Valve Installation

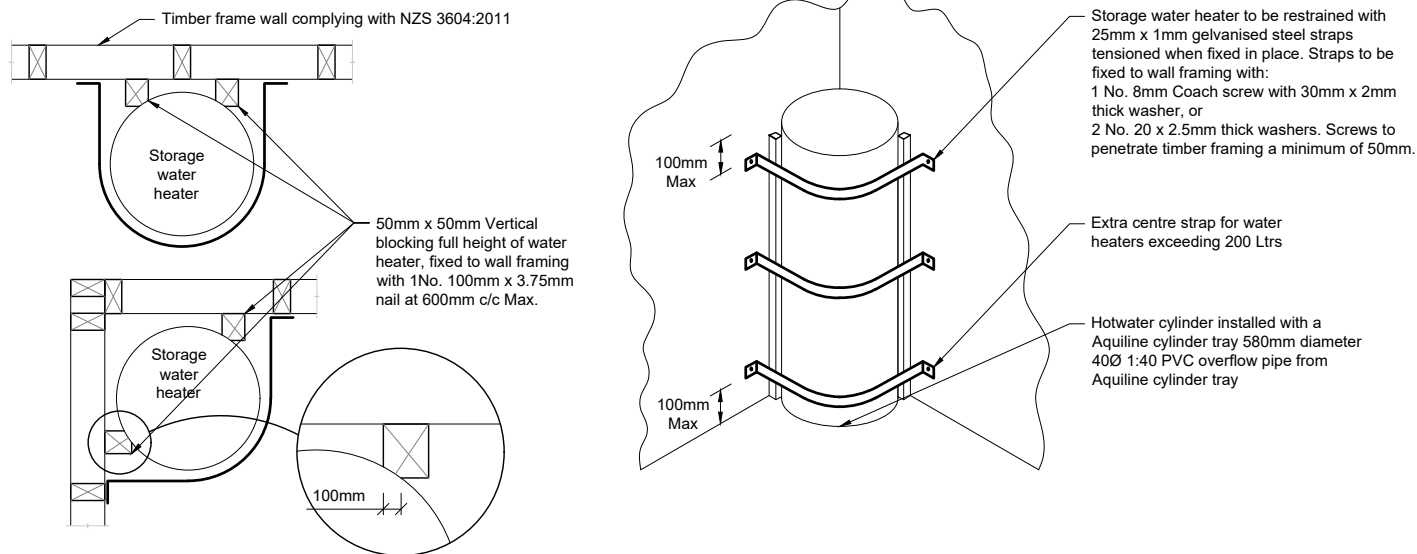
SCALE = NTS

Figure 8: Mains Pressure Storage Water Heater System (unvented)
Paragraphs 6.1.2 and 6.2.1 b)



106 Hotwater Cylinder Schematic

SCALE = 1:10 @ A3



107 Seismic Restraint of Storage Water Heaters 90 - 360 Litre's

SCALE = 1:10 @ A3

NOTE:

- All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
- Number of downpipes required as per NZBC E1/AS1 1 x 74mmØ downpipe per 70m² roof plan area.
- Stormwater: 100mm Ø UPVC pipe, minimum gradient 1:120.
- All drainage to comply with AS/NZS 3500 & NZBC G13/AS1.
- Provide seismic restraints & temperature valve to hot water cylinder as per NZBC G12/AS1. Refer to separate sheet for details.

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

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Ph: (09) 407 3441
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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

HWC Details

Drawn 17 September 2026

Project No 5324

Rev BC-K-4

Sheet A17

Scale (A3 Original) 1: 10

0.1 0.05 0 0.1 0.2
m



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy




R.W. Muir
Registrar-General
of Land

Identifier **895827**
Land Registration District **North Auckland**
Date Issued 08 August 2019

Prior References
NA53C/286

Estate Fee Simple
Area 3.0674 hectares more or less
Legal Description Lot 1 Deposited Plan 537893
Registered Owners
McCaughan Trustee Limited

Interests

Saving and excepting all minerals within the meaning of the Land Act 1924 on or under the land and reserving always to Her Majesty the Queen and all persons lawfully entitled to work the said minerals a right of ingress egress and regress over the said land

Appurtenant hereto are rights of way and water, electricity and telephone supply rights specified in Easement Certificate B214404.5 - 13.9.1983 at 9.02 am

The easements specified in Easement Certificate B214404.5 are subject to Section 309 (1) (a) Local Government Act 1974

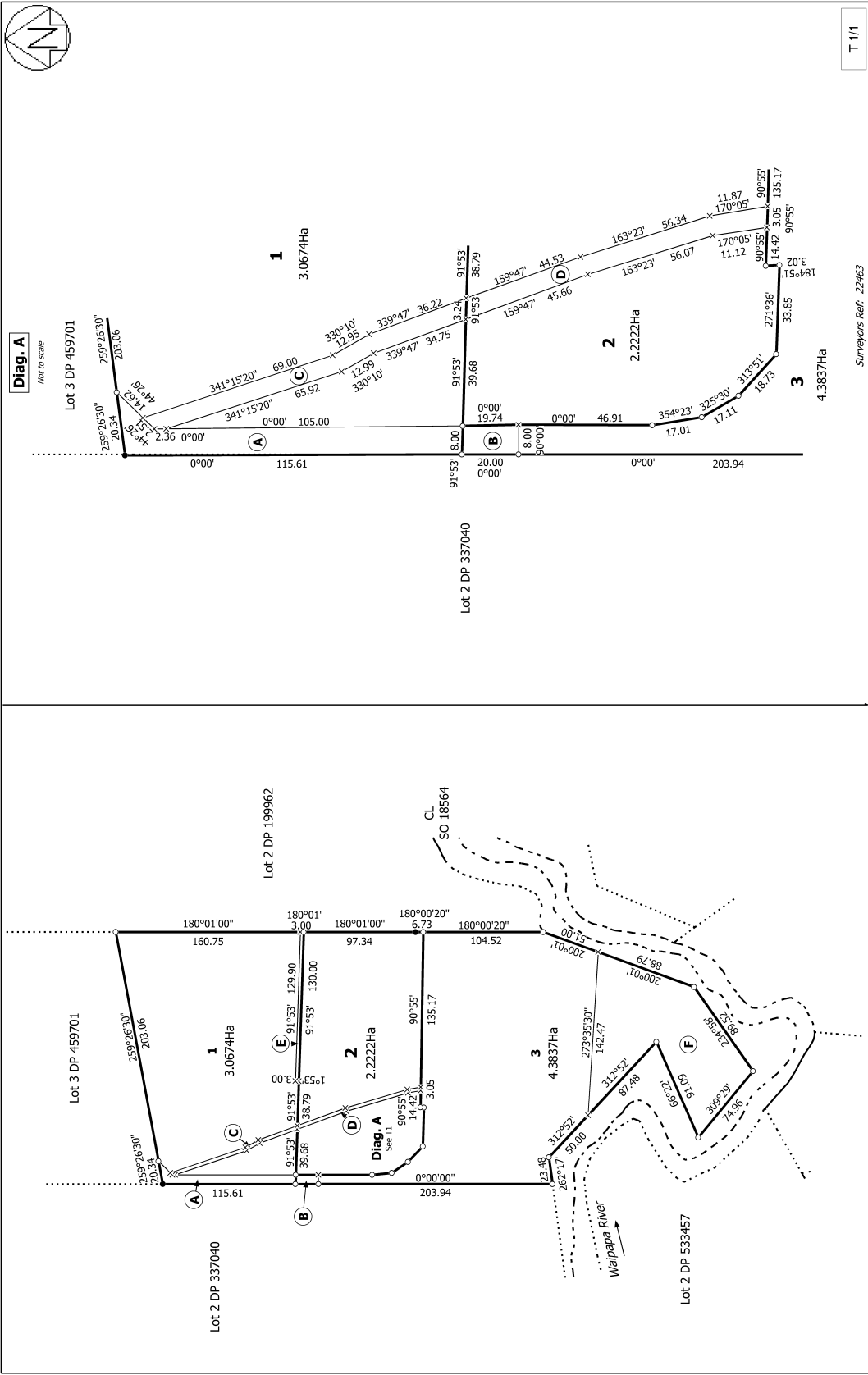
Appurtenant hereto are electricity and telephone supply rights created by Transfer B629517.3 - 16.2.1987 at 9.38 am

The easements created by Transfer B629517.3 are subject to Section 309 (1) (a) Local Government Act 1974

11513976.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 8.8.2019 at 1:04 pm

Subject to a right of way and a right to convey water, electricity and telecommunications over part marked A, a right to convey electricity and telecommunications over part marked C and a right to drain stormwater over part marked E all on DP 537893 created by Easement Instrument 11513976.3 - 8.8.2019 at 1:04 pm

The easements created by Easement Instrument 11513976.3 are subject to Section 243 (a) Resource Management Act 1991



View Instrument Details



Instrument No	11513976.2
Status	Registered
Date & Time Lodged	08 August 2019 13:04
Lodged By	Shepherd, Alicia Kerryanne
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991



Affected Records of Title	Land District
895827	North Auckland
895828	North Auckland
895829	North Auckland

Annexure Schedule Contains 2 Pages.

Signature

Signed by Nicole Jayne Prosser as Territorial Authority Representative on 08/08/2019 10:31 AM

*** End of Report ***



Far North
District Council

Private Bag 752, Memorial Ave
Kaikohe 0440, New Zealand
Freephone: 0800 920 029
Phone: (09) 401 5200
Fax: (09) 401 2137
Email: csf.os@fndc.govt.nz
Website: www.fndc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING RC 2190418

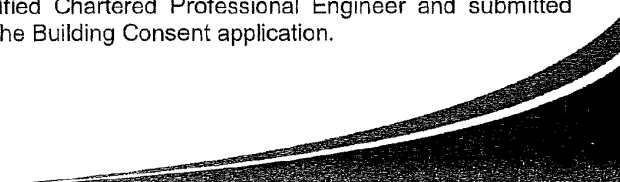
Being the Subdivision of Lot 2 DP 98222
North Auckland Registry

PURSUANT to Section 221 and for the purpose of Section 224 (c) (ii) of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and these are to be registered on the titles of the allotments specified below.

SCHEDULE

Lots 1 & 2 DP 537893

- (i) In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or a FNDC approved TP58 Report Writer and submitted for approval with the Building Consent Application. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.
- (ii) In conjunction with the construction of any building, the lot owner shall install a stormwater detention tank with a flow attenuated outlet. The system shall be designed such that the total stormwater discharged from the site, after development, is at no time greater than the pre development flow from the site for rainfall events up to a 10% AEP plus allowance for climate change of 2.5°C. The details of the on site detention storage and flow attenuation shall be prepared by a suitably experienced qualified Chartered Professional Engineer and submitted for approval with the Building Consent application.





Far North
District Council

Pirrama Bay 752, Memorial Ave
Kaitake D440, New Zealand
Freephone: 0800 920 029
Phone: (09) 401 5200
Fax: (09) 401 2137
Email: asl.as@fndc.govt.nz
Website: www.fndc.govt.nz

- (iii) In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for fire fighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.
- (iv) National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011

Land within this lot has been identified as land that will potentially be covered by the above legislation. As it was production land at time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the regulations include the removing or replacing of a fuel storage system; soil sampling, disturbance and/or removal; subdivision; and changing the use of the land.

Lot 3 DP 537893

- (v) The owner shall preserve the indigenous trees and bush as indicated on the survey plan, as area F and shall not without the prior written consent of the Council and then only in strict compliance with any conditions imposed by the Council, cut down, damage or destroy any of such trees or bush. The owner shall be deemed to be not in breach of this prohibition if any of such trees or bush shall die from natural causes not attributable to any act or default by or on behalf of the owner or for which the owner is responsible.

SIGNED:

Mr Patrick John Killalea - Authorised Officer

By the FAR NORTH DISTRICT COUNCIL

Under delegated authority:

PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at KERIKERI this 21st day of June 2019



15 September 2026

Sean Robert McCaughan
158B Kapiro Road
RD 1
Kerikeri 0294

Tēnā koe,

Building consent number: EBC-2027-190/0
Property ID: 3361329
Address: Lot 1, Kapiro Road, Kerikeri 0294
Description: Proposed 3-bedroom dwelling with onsite wastewater

Requirement for Resource Consent

PIM Assessment of your application has highlighted the need for Resource Consent that must be granted prior to any building works or earthworks commencing.

The site is zoned **Rural Production** under the Operative District Plan and **Rural Production and Horticulture Precinct** under the Proposed District Plan – Appeal Version and Resource Consent is required for breach of the following:

Rule:	Regional Plan for Northland – C.6.1.3 Other on-site treated domestic wastewater discharge – permitted activity <i>Note: Far North District Council issue Discharge Consents under delegated authority from the Northland Regional Council for wastewater from domestic systems up to 3m³/day.</i>
Reason:	Non-compliance with C.6.1.3; part 5) b) in the Wastewater Design Report provided by a small omission of stating a minimum 50mm covering of disposal lines if surface laid. (NB: This can be added along with revision for 100% reserve area as required by consent notice condition (i) below.)

There is a Consent Notice registered on the Record of Title for this property and compliance has not been demonstrated for the following:

Consent Notice:	Consent Notice 11513976.2 condition (i) In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or a FNDC approved TP58 Report Writer and submitted for approval with the Building Consent Application. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area . The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards .
------------------------	---

Reason:	The Wastewater Design Report provided shows a 30% reserve area, and shows non-compliance with C.6.1.3; part 5) b) as detailed in the Regional Plan section above.
Consent Notice:	Consent Notice 11513976.2 condition (ii) In conjunction with the construction of any building, the lot owner shall install a stormwater detention tank with a flow attenuated outlet. The system shall be designed such that the total stormwater discharged from the site, after development, is at no time greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus allowance for climate change of 2.50C. The details of the on-site detention storage and flow attenuation shall be prepared by a suitably experienced qualified Chartered Professional Engineer and submitted for approval with the Building Consent application.
Reason:	Stormwater management design in accordance with this condition has not been provided.
Consent Notice:	Consent Notice 11513976.2 condition (iv) National Environmental Standard for Assessing and Managing Contaminants in Soil to protect Human Health Regulations 2011 (NES-CS) Land within this lot has been identified as that will potentially be covered by the above legislation. As it was production land at time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the regulations include the removing or replacing of a fuel storage system; soil sampling, disturbance and/or removal; subdivision; and changing the use of the land.
Reason:	A Preliminary Site Investigation report prepared by a suitably qualified and experienced person in accordance with the NES-CS permitted activity standard for Subdividing or Changing Use has not been provided.
Regulation:	Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. National Environment standard Section 8(4): <i>Subdividing or changing use:</i> (4) Subdividing land or changing the use of the piece of land is a permitted activity while the following requirements are met: (a) a preliminary site investigation of the land or piece of land must exist: (b) the report on the preliminary site investigation must state that it is highly unlikely that there will be a risk to human health if the activity is done to the piece of land: (c) the report must be accompanied by a relevant site plan to which the report is referenced: (d) the consent authority must have the report and the plan.
Reason:	A Preliminary Site Investigation report prepared by a suitably qualified and experienced person to demonstrate that this project will comply with the subdivision or Change of Use permitted activity standard has not been provided. (NB: As also required by consent notice condition (iv) above.)

Please note there may be other rule breaches found during the Resource Consent process. It is your responsibility to ensure the Resource Consent approved plans match the Consented approved plans.

The application form can be downloaded from www.fndc.govt.nz and submitted to Council's (Planning Department) with the appropriate documentation and instalment fee.

If you have any queries, please contact the Duty Planner on Duty.Planner@fndc.govt.nz or 0800 920 029.

Nāku iti nei, nā



Lysigna Mare

PIM Officer

Delivery and Operations

Emailed to: Colleen.cooper@gjgardner.co.nz

FORM 4
Certificate attached to
PROJECT INFORMATION MEMORANDUM
Section 37, Building Act 2004

Building Consent Number: EBC-2027-190/0

**RESTRICTIONS ON COMMENCING BUILDING WORK UNDER
RESOURCE MANAGEMENT ACT 1991**

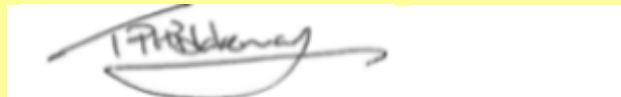
The building work referred to in the attached Project Information Memorandum is also required to have the following **Resource Consent(s)** under the Resource Management Act 1991:

• **Resource Consent – REQUIRED**

As the above Resource Consent(s) will affect the building work to which the Project Information Memorandum relates, until this has been granted no building work may proceed.

Failure to comply with the requirements of this notice may result in legal action being taken against you under the Resource Management Act 1991.

Signature:



Trent Blakeman
Manager - Building Services –
Delivery and Operations

Position:

On behalf of:

Far North District Council (Building Consent Authority)

Date:

15 September 2026



geologix
consulting engineers

COMBINED PRELIMINARY AND DETAILED SITE INVESTIGATION

138D KAPIRO ROAD, KERIKERI

SEAN MCCAUGHAN

C0861N-E-01
JULY 2026
REVISION 1





geologix
consulting engineers

DOCUMENT MANAGEMENT

Document Title	Combined Preliminary and Detailed Site Investigation
Site Reference	138D Kapiro Road, Kerikeri
Client	Sean McCaughan
Geologix Reference	C0861N-E-01
Issue Date	6 July 2026
Revision	01
Reviewed by	Ray Mayor Senior Environmental Consultant, BEng (Env) 
Approved by	Edward Collings Managing Director, CEnvP Reg. 0861, CPEng Reg. 1033153, CMEngNZ

File Reference	<i>Z:\Projects\C0800-C0899\C0861N - 138D Kapiro Road, Kerikeri\06 - Reports\Environmental\C0861N-E-01.docx</i>
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REVISION HISTORY

Date	Issue	Prepared by	Approved
July 2026	First Issue	RM	EC



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1 INTRODUCTION

This combined Preliminary and Detailed Site Investigation (PSI/ DSI) report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for Sean McCaughan as our Client in accordance with our standard short form agreement and general terms and conditions of engagement.

This investigation was to assist with the Consent application in relation to a new dwelling and associated driveway to be constructed on a portion of the property located at 138D Kapiro Road, Kerikeri (herein, referred to as the 'site', Figure 1, Section 2.1).

1.1 Background and Objectives

From discussions with the client, it is understood that it is proposed to construct a new dwelling in the northern portion of the property (refer to Figure 1). The proposed dwelling will be of rectangular shape. Concept plans by G.J. Gardner Homes (dated 24 June 2026) were presented to Geologix at the time of writing and is provided as Appendix A.

The Ministry for Environment's (MfE's) Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES:CS) (MfE, 2011a) applies to all site activities that trigger the NES:CS which are defined by Regulation 5 Subclauses (2) to (6). When one or more of these activities occur within a piece of land for which an activity or industry described by the Hazardous Activities and Industries List (HAIL) is either being undertaken, has previously been undertaken or is more likely than not to have occurred on it the NES:CS is enacted.

Therefore, the objective of this investigation was to:

- Determine the applicability of the NES:CS to the site.
- Assess the likelihood of human health risk associated with the proposed subdivision.
- Characterise site soils within the site (refer to Section 4), to assess the potential risks to human health and the environment; and
- Assess the requirements for potential consents in relation to the NES:CS.

1.2 Scope of Works

The following scope of works was undertaken in accordance with the staged process defined by the MfE Contaminated Land Management Guidelines (CLMG) No. 1 - *Reporting on Contaminated Site in New Zealand*. Ministry for the Environment, Wellington, New Zealand, Revised in 2021 (MfE 2011b).

- Desktop review of:
 - The Northland Regional Council (NRC) Selected Land Use Register (SLUR).



- The Far North District (FNDC) Far North Maps.
- Historical aerial photography available on the Local Government Geospatial Alliance's (LGGA's) Retrolens webpage as well as FNDC Maps LINZ Aerial Imagery.
- Site inspection and interview regarding the site history.
- Soil sampling comprising the collection of 12 surface soil samples from 12 locations within the site.
- As required by the NES:CS, duplicate samples were collected to confirm the consistency of the analysis.
- Soil samples were sent to RJ Hill Laboratories (Hills) for analysis (with Chain of Custody documentation).
- Preparation of this report in general accordance with current contaminated land guideline documents by a Suitably Qualified and Experienced Practitioner (SQEP) as defined by the NES:CS.

2 SITE INFORMATION/ DESCRIPTION

2.1 Site Identification

The site is located within the property at 138D Kapiro Road in Kerikeri, approximately 1.35 km east of the State Highway 10 (Twin Coast Discovery Highway) and Kapiro Road intersection. Topographically, the site is formed across generally flat land (>5°). Access to the site is granted via Right of Way driveway which extends from Kapiro Road to the north to the site.

The property is legally described as Lot 1 DP 537893 with a total area of approximately 30,672 m² and designated by the FNDC Operative District Plan as within the Rural Production zone. Details of the site are listed in Table 1 below.

Table 1: Site Details.

Address	Zone	Legal Description	Property Area (m ²)
138D Kapiro Road, Kerikeri	Rural Production	Lot 1 DP 537893	30,672

The site setting (presented in Figure 1 below) is a typical rural area to the north of the Kerikeri Township, a large block of pastureland with the centre of the property approximately at geographical position NZGD: 1684413, 6104636.



Figure 1: Site Setting.



Source: courtesy of GRIP

2.2 Current Land Use

The site is currently in use for horticultural activities. The site is zoned Rural Production under the FNDC Operative District Plan.

The future site use of the majority of the site is not anticipated to change, while a small portion of the site (i.e., proposed new building location and associated driveway) is proposed for rural residential land use following the proposed development.

2.3 Surrounding Land Uses

The site is surrounded by mixed use rural properties including horticultural land use to the east, south and west, and rural residential property to the north.

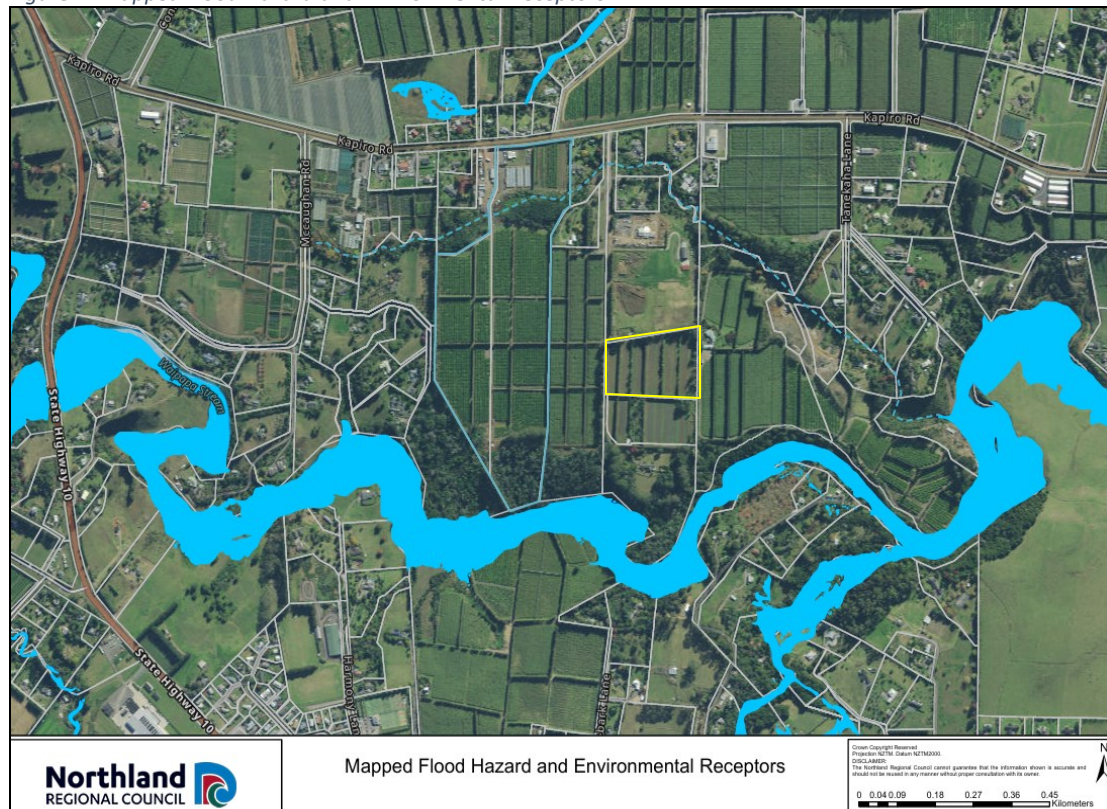
2.4 Environmental Setting/ Ecological Receptors

To provide protection for natural resources, ecological receptors on or near a site should be considered. The nearest ecological receptors are a tributary of the Waipapa Stream located approximately 190 m to the northeast and the Waipapa Stream, located approximately 128 m to the southeast (closest point).

In relation to this consent application, both the tributary of the Waipapa Stream and the Waipapa Stream are not located within an influencing distance (i.e., less than 100 m), therefore, are not considered environmental receptors in this instance.

Additionally, Figure 2 indicates the site is outside of a mapped flood hazard area, flood hazard under all modelled scenarios

Figure 2: Mapped Flood Hazard and Environmental Receptors



To note, the tributary indicated on Figure 2 above (blue dashed line) did not appear on the NRCs Natural Hazards Map, therefore, was manually drawn in for reference purposes only, may not be accurate.

2.5 Geology

Published geological records indicates that to be directly underlain by Kerikeri Volcanic Group Late Miocene basalt of Kaikohe - Bay of Islands Volcanic Field. These Neogene igneous rocks (basalt) can be expected to contain Basalt lava material, volcanic plugs and minor tuff material. (GNS Science, 2022).

2.6 Site Inspection

A site walkover in conjunction with onsite investigation works was undertaken in June 2026 and the following observations were made specific to the proposed development area (i.e., proposed dwelling and driveway locations). Selected site photographs (specifically the areas proposed for change of use) are provided in Appendix B):

- The site appears as outlined by the most recent available 2025 aerial photograph (Google Earth Pro).



- The site was not in use for horticultural purposes. No signs of horticultural activities observed, site is grassed with shelter belts still present.
- No burn pits/ burn areas (e.g., burning of refuse) or farm dumps were observed.
- No treated timber posts (excludes existing boundary fences) observed within the proposed development area.

3 HISTORICAL SITE USE

A review of selected publicly available information was undertaken to gain an understanding of the history of the site, particularly the nature and location of potentially contaminating activities that may have occurred within the site. This included reviews of:

- Publicly available historical aerial photographs from the Local Government Geospatial Alliance's (LGGAs) Retrolens and FNDC Maps (LINZ Aerial Imagery), and
- NRCs SLUR

3.1 Historical Aerial Photographs

Historical aerial photographs of the site and the surrounding area taken between 1950 and 2025 were sourced from the LGGAs Retrolens and FNDC Maps. A summary of observations made from the review of these photographs is provided below. Historical aerial photographs are provided in Appendix C.

Our review comprises visually evident land-use activities within the site boundaries of the site which may pose a risk to human or environmental receptor health. Land-use history activities relevant to the site are summarised as follows:

LGGAs Retrolens

- **1950-1982:** The earliest available historical aerial photographs indicate that the site may have been used for grazing land prior to 1950. No significant changes are observed within the site over this period, however from 1968, the site does appear overgrown.

There are no available historical aerial photographs between 1982 and 2000.

FNDC Maps LINZ Aerial Imagery

- **2000:** The site is utilised for horticultural use, with the majority of the site in orchard. No structures are present on site.
- **2005-2006:** No significant changes observed.

There are no available historical aerial photographs between 2006 and 2014.

- **2014-Present:** The 2014-2016 aerial image shows a change in horticultural use. Trees



(orchard) no longer appear to be present. Horticultural use appears to be food crop type activities.

No other significant changes were observed over this period to date. However, to note, horticulture was not observed onsite during the walkover.

In summary, the site may have been used for farming purposes prior to 1950 until circa early 1980s (refer to Section 3.3), where the site was then used for horticultural land use with the establishment of an orchard (i.e. Macadamia Nuts) and more recently market gardens.

3.2 Selected Land Use Register

A review of the NRCs selected land use register (SLUR) was undertaken in June 2026. No HAIL activities have currently been identified within the property. The nearest identified HAIL area identified is located approximately 400 m to the northeast of the site, off Tanekaha Lane.

3.3 Other information

Additional information (anecdotal information via email attached as Appendix D) provided to us at the time of writing indicated the following:

- Client's father obtained the land from the government after WW2.
- Client cleared the land 46 years ago (early 1980s) from when it was scrub and gorse.
- The site was an orchard growing Macadamia Nuts.
- Recent years was leased to market gardeners to grow courgettes.

The above provided information is in line with observations made from the historical aerial image review.

3.4 Actual/ Potential HAIL Activities

Specific land use and associated activities through the available site history can be appointed to a site wide HAIL category A10; persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds.

The above desktop review presents current and historical potential land-use activities that may have impacted the natural environmental properties of the shallow soils. Considering the nature of these activities are surface based and significant ground disturbance has not visibly been undertaken it can be concluded that potentially impacted soils will lie within the upper 0.5 m of the soil column.

The above land use activities equate to the whole property area (i.e., horticulture over the entire site). Therefore, the entire, 30,672 m² area of the property can be determined as a 'piece of land' according to the definitions of the NES:CS.

4 SAMPLING AND ANALYSIS PLAN

4.1 Potential Contaminants of Concern

Based on the potential HAIL activity(s) identified and from our experience, it is expected that contaminants of concern (CoC) (if any) associated with horticultural activities would typically be contained within the topsoil/ shallow site soils and may include heavy metals and, organochlorine pesticides resulting from the potential spraying of crops.

4.2 Sampling Methodology

The activities involving the above contaminants are anticipated to include surface spraying which may have been worked into shallow soils during site activities. Based on this, the sampling investigation has targeted the surface horizon from within the site area comprising topsoil/ shallow site soils from up to 0.15 m below ground level (bgl) to target the CoCs and to quantify the nature and dispersion of any residual contamination in relation to the proposed subdivision and potential soil disturbance activities.

Soil sampling was undertaken in general accordance with the MfE CLMG No.5 - *Site Investigation and Analysis of Soils* (revised 2021) (MfE, 2011c). From our experience, the following sampling programme was undertaken:

- From within the site area (i.e., proposed driveway and building platform areas), from a total of 12 sample locations (designated C01a, C01b, C01c to C04a, C04b, C04c), 12 shallow soil samples were collected from the surface horizon comprising topsoil from 0.0 - 0.2 m bgl. Samples were composited into four samples (three primary subsamples per one composite sample).
- As required by the NES:CS, one duplicate composite soil sample from one composite location (i.e., C03) was collected and labelled under a unique identification QC01.
- Samples were composited within the laboratory environment.
- Sampling was undertaken in accordance with Geologix Standard Operating Procedures including:
 - Each soil sample was collected using a clean pair of nitrile gloves for each sample, then placed into laboratory supplied sample containers. Prior to sampling at each location, the sampling equipment was decontaminated by washing with potable water, followed by a decontamination solution, and rinsing with deionised water.
 - The soil samples were placed in new laboratory supplied sample containers, placed in chilly bins with ice and couriered to a RJ Hill Laboratories (Hills) in Hamilton alongside Chain of Custody documentation.
- On the basis of the site history and associated potential contaminating activities that were identified at the site, all composite samples were analysed for metals (arsenic,



cadmium, chromium, copper, lead, mercury, nickel and zinc) and OCPs.

- The duplicate composite samples were analysed for metals only.

4.3 Quality Assurance and Quality Control

The quality assurance/ quality control (QA / QC) procedures employed during the works included:

- Collection of soil samples by suitably qualified staff in accordance with Geologix standard operating procedures.
- Submission of all samples to the analytical laboratory within the acceptable holding times for the contaminants of concern.
- Submission of one duplicate composite soil samples from composite location C03. The duplicate sample was submitted under the unique identification QC01 and was analysed for metals only.
- Sample analysis by Hill Laboratories who are accredited by International Accreditation New Zealand (IANZ) for the analyses performed.

4.4 Soil Guideline Values

The following environmental guidelines were used to screen the sample results. Relevant guidelines values are provided in the data analysis table attached as Appendix E.

4.4.1 Background Concentrations

According to Regulation 5(9) of the NES:CS, if a DSI can demonstrate that any contaminants on a HAIL site are at, or below, background concentrations, then the NES:CS regulations do not apply. However, there are no natural background concentration available for Northland region at the time of this investigation. Therefore Regulation 5(9) of the NES:CS is not applicable.

4.4.2 Soil Contaminant Standards (NES:CS)

The NES:CS (MfE, 2011) details soil contaminant standards (SCSs) for seven inorganic substances. SCSs are available for these substances and compounds when present in land used for five land use scenarios. The contaminants analysed at this site for which SCSs are available are arsenic, cadmium, chromium, copper and lead. For this site, a rural residential/ lifestyle block 25% produce land use scenario was adopted, which includes the following source-pathway-receptor assumptions:

- The selected residential SCSs assume that intended future land use will be rural residential/ lifestyle lot, for single dwelling sites with gardens, including some home-grown produce consumption.



- Potential receptors include site workers during the redevelopment works and residents or workers (dependant on the site use) following the redevelopment.
- The NES:CS adopted standards for rural residential/ lifestyle block 25% have been used to assess risks to both site workers and end users of the site.
- It has been assumed that the average soil pH is 5, and that all lead is present in inorganic form.

4.4.3 Other Applicable Human Health Standards

For contaminants of potential concern that are not priority contaminants, the NESCS references the hierarchy defined in the MfE CLMG No.2 – *Hierarchy and Application in New Zealand of Environmental Guideline Values* (MfE, 2011d).

In accordance with this hierarchy, the Australian National Environment Protection Council (NEPC) (1999 rev: 2013) National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM) has been used for two metals (nickel and zinc). Health-based investigation levels for 'Residential A' land use have been selected in accordance with the potential proposed end use of the site and to protect site workers during the development work.

'Residential A' investigation levels are described in the ASC NEPM to include "*Residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake (no poultry), also includes childcare centres, preschools and primary schools*" (NEPC 2013).

5 SAMPLING RESULTS

Laboratory analytical results of the samples collected are summarised in Section 5.1 below and the soil analytical results table attached as Appendix E. The full laboratory analytical reports are provided in Appendix F.

5.1 Analytical Results

As previously mentioned, all composite samples were analysed for metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc) and OCPs. The results of the laboratory analysis indicated the following:

- No heavy metals were detected above human health criteria.
- No OCPs were detected above the laboratory level of reporting.

5.2.1 Confidence in Results

The analytical laboratory is required to conduct cross checking and routine duplicate sample analysis to maintain an IANZ accreditation. Discrete project specific duplicate analysis was undertaken to confirm the reliability of laboratory analysis. In accordance with CLMG, primary to secondary sample acceptable relative difference (RPD) is 50 % for soil samples.



Three duplicate samples (QC01a, b and c samples) were composited into one composite sample and analysed for metals to replicate the analysis of composite sample C03 (a, b and c samples). The relative percentage difference (RPD) between the primary and duplicate samples ranged between 0% and 18%. As such, it is considered that the precision of the sampling and analysis is well within acceptable limits. The results are presented in the data analysis table attached as Appendix E.

5.2 Summary of Results

The result of analytical testing indicates that contaminants concentrations of the CoCs are below human health guidelines for a rural/ lifestyle block land use scenario.

6 DISPOSAL DOCUMENTATION

A disposal criteria analysis for metals has been made in accordance with the MfE Hazardous Waste Acceptance Criteria (WAC) screening criteria for Class A and B landfill facilities and summarised as follows:

- Exceedance of Class A landfill screening criteria for total chromium in all samples.
- Exceedance of Class B landfill screening criteria for:
 - Total chromium from all sample locations.
 - Copper from sample locations C01.
 - Mercury from all sample locations

Based on the above, and as natural background concentrations are not available for Northland, soils do not meet the requirement and definition of clean fill and any soil proposed for removal from site shall be disposed of to an appropriate managed fill facility. Sample results should be provided to a managed fill facility to determine if they can accept.

7 RISK ASSESSMENT

Although all laboratory results were below the human health criteria and no natural background concentrations for northland region are available. Based on the information presented in this report, a quantitative risk assessment of contamination potential to cause an effect upon human and/ or ecological receptors was still undertaken. This is further developed into a regulatory assessment for consent.

The available information summarised above (Sections 2 – 6) indicates the site has been used for horticultural activities conducted from circa early 1980s to date. HAIL activities (category A10 particularly associated with contaminants associated with historical horticultural land-use).

The following Conceptual Site Model (CSM), Table 3 below, has been developed for the potentially complete contaminant pathways at the site:

Table 2: Conceptual Site Model.

Source	Pathway	Receptor	Risk Score
Metals and OCPs	- Incidental soil ingestion. - Inhalation of dusts. - Dermal absorption.	- Site users/ workers of the site. - Future site users.	Incomplete/ very low – as results below human health limits
Metals and OCPs in soil remaining on site.	Migration	- Groundwater - Surface water	Incomplete/ very low – as results below human health limits
Metals and OCPs in soil taken away from site.	Migration	- Groundwater - Surface water	Low – provided taken to a suitable managed fill facility

For an exposure pathway to be complete and subsequently cause a risk, there must be a contamination source, a contaminant transport mechanism (pathway) and a receptor, typically human or ecological.

7.1 Quantification of Risk and Discussion

The actual and potential HAIL activities undertaken (refer to Section 3.3) on site identifies a very low potential risk to human health and ecological receptors across the site area.

As such, due to concentrations below human health criteria, a very low risk is applied to long-term human health exposure to the proposed use for rural residential purposes if these soils are to remain on site.

8 REGULATORY CONSIDERATIONS (CONTAMINATED LAND)

Based on the findings of this investigation, the NES:CS regulations apply to the entire site area (i.e., 30,672 m²). Proposed concept plans are provided in Appendix A. This section provides clarification of consent conditions against national, regional and local standards and regulations in regard to the proposed change of use and soil disturbance only.

8.1 National Environmental Standards

The NES:CS regulation applies to activities of change of use and soil disturbance where HAIL activity is being / has been / more likely than not to have been undertaken. The results of the historical review indicated that, under subclause (7) the NES:CS applies to the site due to the HAIL Category A10; Persistent pesticide bulk storage or use including sport turfs, market garden green house or spray sheds.

In relation to soil disturbance, the NES:CS allows (per year) a soil disturbance volume of 25 m³ per 500 m² of 'piece of land' area and soil disposal volume of 5 m³ per 500 m² of piece of land area. Calculated on a 'piece of land' basis (entire property area, 30,672 m²), allowable



soil disturbance volumes are 1,533.6 m³ for soil disturbance and/ or 306.72 m³ for off-site disposal per year to be able to comply with permitted activity status.

Therefore, where any proposed soil disturbance volume remains below or at the allowable limits, the activity of soil disturbance would be considered to be a permitted activity. In addition, should any soil disturbance volumes exceed the above allowable thresholds, the activity would be considered as a controlled activity.

However, for change of use and soil disturbance activities under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7. Therefore, activities of change of use and soil disturbance is considered to be a controlled activity.

8.2 Northland Regional Plan

Potentially contaminated land refers to land where a HAIL activity is / has been undertaken. Due to the identified HAIL activity within the site, the piece of land (i.e., the entire site) is considered to be potentially contaminated land. However, based on our investigation, contaminants do not pose a human health risk or environmental risk. Therefore, the proposed activity (change of use, and potential future soil disturbance) complies with rule C.6.8.2 (discharges from contaminated land), which is considered a permitted activity under the proposed regional plan.

In addition, and to be noted; Northland Regional Plan Rule C.6.8.1 (Investigating potentially contaminated land – permitted activity), the disturbance of land for a site investigation to assess the concentration of hazardous substances in soil, water or air is a permitted activity, provided:

- 1) The site investigation is certified by a suitably qualified and experienced practitioner, and
- 2) The person or organisation initiating the site investigation provides a copy of the site investigation report to the Regional Council within three months of the completion of the investigation, and
- 3) Site investigations undertaken to assess the concentrations of contaminants in soil are undertaken in accordance with Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (Ministry for the Environment, 2011).

This report complies with items 1 and 3 above, therefore, to fully comply with rule C.6.8.1, this report must be submitted to the Regional Council within three months of the completion of the investigation.

9 SUMMARY AND RECOMMENDATIONS

This combined Preliminary and Detailed Site Investigation (PSI/ DSI) report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for Sean McCaughan (the 'Client'). This investigation was to assist with the Consent application in relation to a new dwelling and associated driveway to be constructed on a portion of the property located at 138D Kapiro Road, Kerikeri (the 'site'). The following summarises the findings of the investigation:



In summary, the site may have been used for farming purposes prior to 1950 until circa early 1980s (refer to Section 3.3), where the site was then used for horticultural land use with the establishment of an orchard (i.e. Macadamia Nuts) and more recently market gardens. Noting that, no horticulture was observed during the site investigation works.

Based on the HAIL activity above, the NES:CS applies.

HAIL category A10 was identified (as indicated in Section 3.3), however, soil results confirm that:

- No heavy metals and OCPs were detected over human health criteria guidelines.
- No OCPs were detected above the laboratory level of reporting in any of the samples analysed for OCPs.

Based on the findings of the investigation, Geologix considers that there is very low risk to long-term human health exposure in the proposed subdivision and soil disturbance activities (if undertaken) if these soils are to remain on site. Site soils, while suitable for onsite use (subject to geotechnical suitability), any soils proposed for removal from site (if any) shall be disposed of to an appropriate managed fill facility.

For change of use and soil disturbance activities (if undertaken) under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7. Therefore, change of use and/ or soil disturbance activities associated with the proposed development regarding contaminated land will be required as a controlled activity under the NES:CS and in addition permitted activity under the proposed Northland Regional Plan.

As previously mentioned, to comply with rule C.6.8.1, this report must be submitted to the Regional Council within three months of the completion of the investigation.

Additionally, based on the site history and laboratory results, it is expected that contaminant levels would be consist across the entire property area.

10 LIMITATIONS

This report has been prepared for Sean McCaughan as our Client. It may be relied upon by our Client and their appointed Consultants, Contractors and for the purpose of Consent as outlined by the specific objectives in this report. This report and associated recommendations, conclusions or intellectual property is not to be relied upon by any other party for any purpose unless agreed in writing by Geologix Consulting Engineers Ltd and our Client. In any case the reliance by any other party for any other purpose shall be at such parties' sole risk and no reliability is provided by Geologix Consulting Engineers Ltd.

The opinions and recommendations of this report are based on plans, specifications and reports provided to us at the time of writing, as referenced. Any changes, additions or amendments to the project scope and referenced documents may require an amendment to this report and Geologix Consulting Engineers should be consulted. Geologix Consulting Engineers Ltd reserve the right to review this plan.



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consulting engineers

The recommendations and opinions in this report are based on arisings extracted from sample points at discrete locations. The nature and continuity of subsurface conditions, interpretation of ground condition and models away from these specific sampling investigation locations are inferred. It must be appreciated that the actual conditions may vary from the assumed conceptual site model. Differences from the encountered ground conditions during construction may require an amendment to the recommendations of this report.

11 REFERENCES

Far North District Council Maps, <https://www.fndc.govt.nz/Our-services/Far-North-Maps>. Accessed June 2026.

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APPENDIX A

Concept floor Plan

Proposed Dwelling

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Index		
Sheet No.	Sheet Title	Rev
A01a	Site Location Plan	C
A01b	Site Plan	C
A02	Floor Plan	C
A03	Elevations	C
A04	Electrical Plan	C
Revisions		
-	-	-

Concept Plans
Date: 24 June 2026



FAR NORTH
Ph: (09) 407 3441
Fax: (09) 407 3442



Site Location Plan



Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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G.J. Gardner. HOMES
"We're Great Together"

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Project Title
Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title
Site Location Plan

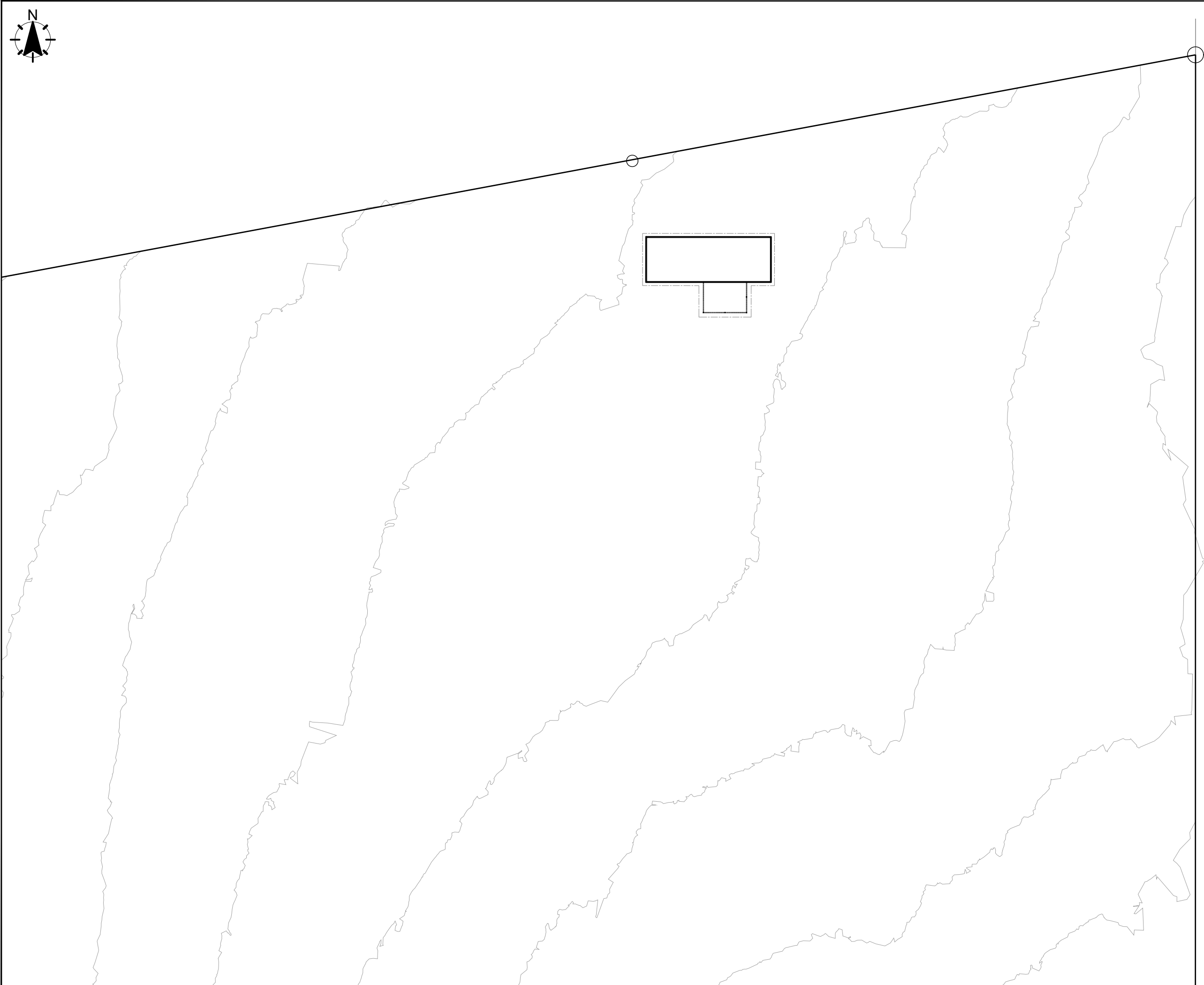
Drawn 24 June 2026

Project No 5324

Rev C	Sheet A01a
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Scale (A3 Original) 1: 1000





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Project Title
Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title
Site Plan

Drawn	24 June 2026
Project No	5324
Rev C	Sheet A01b

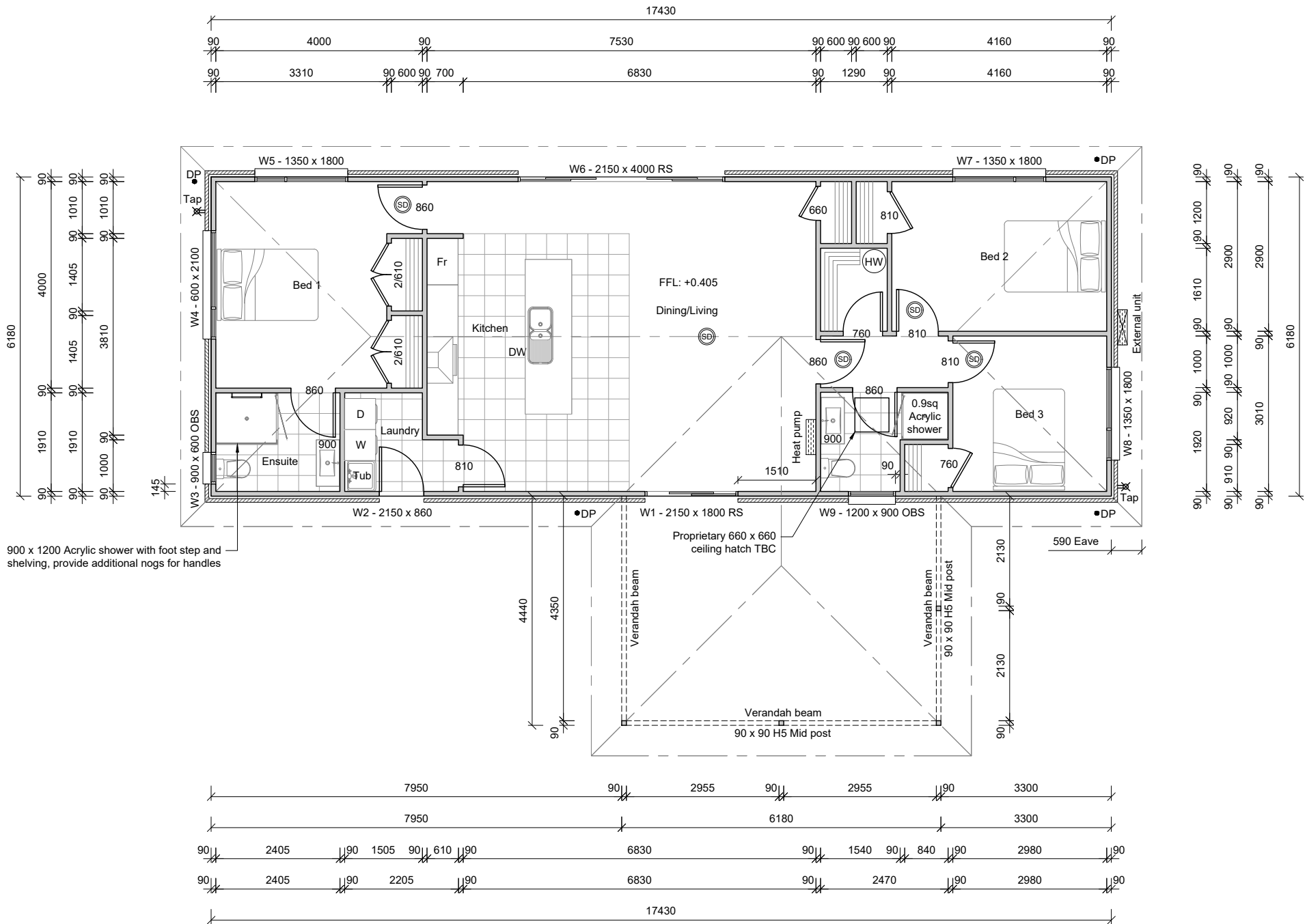
Scale (A3 Original) 1: 500

5 2.5 0 5 10 m



SPECIFICATION:

- Stud height - 2440 (2400 Nominal)
- 70 Series brick veneer
- Gerard metal tile roofing



NOTE:

1. All dimensions taken from the outside of pre-cut, please check all dimensions before construction commences.
2. Refer to Framing & Lintel Plan for lintel dimensions, stud spacing & external door offsets.
2. Refer to eave detail for stud, lintel and soffit framing heights.
3. Additional nogs to be installed at framing stage to allow for towel rails, wardrobe & fixed shelves, WC cistern, toilet roll holders, wall mounted extractors, heat pump, A/C units & garage door components where required.
4. Refer to attached sheet for cladding & roofing notes & details.
5. All wet areas to be provided with impervious linings as per NZBC E3/AS1.
6. Grade A safety glazing in shower screens inline with NZS 4223
7. Where studs exceed 450mm c/c install polypropylene tape horizontally at 300mm c/c over building wrap.
8. All wall framing typically H1.2 treated unless specifically stated.
9. All external linings to be installed to manufacturers instructions, refer to separate detail sheet for cladding details & notes.

BUILDING AREA:

Floor Area (Framing):	107.7m²
Floor Area (Brickline):	113.7m²
Roof Area:	169.6m²

FIXINGS:

Exposure Zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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G.J. Gardner. HOMES
"We're Great Together"

FAR NORTH
Ph: (09) 407 3441
Fax: (09) 407 3442

Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Floor Plan

Drawn 24 June 2026

Project No 5324

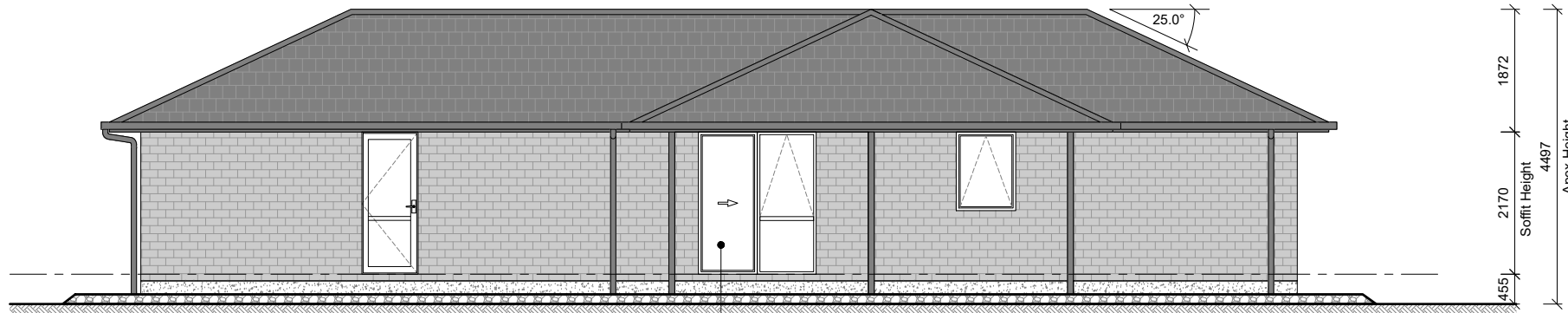
Rev C	Sheet A02
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Scale (A3 Original) 1: 100



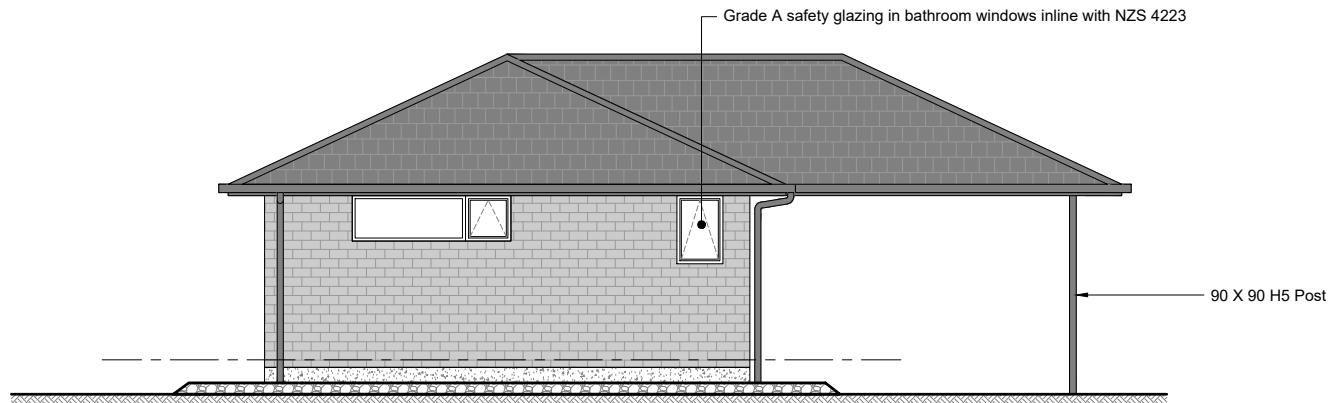
LEGEND

- Smoke Detector
- Roof Line
- 90 x 45 SG8 H1.2 Timber framing walls
- Brick Veneer
- Selected tiles on selected tile underlay to all wet areas installed to manufacturers specifications & Branz tiling good practice guide
- 180L Mains pressure hot water cylinder



A Elevation
A02 SCALE = 1:100 @ A3

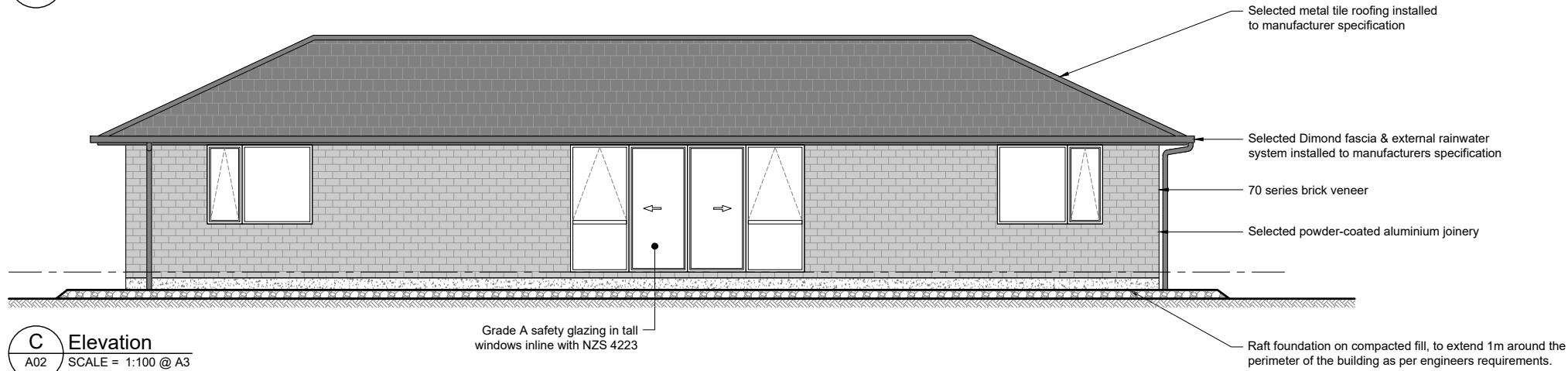
Grade A safety glazing in tall windows inline with NZS 4223



B Elevation
A02 SCALE = 1:100 @ A3

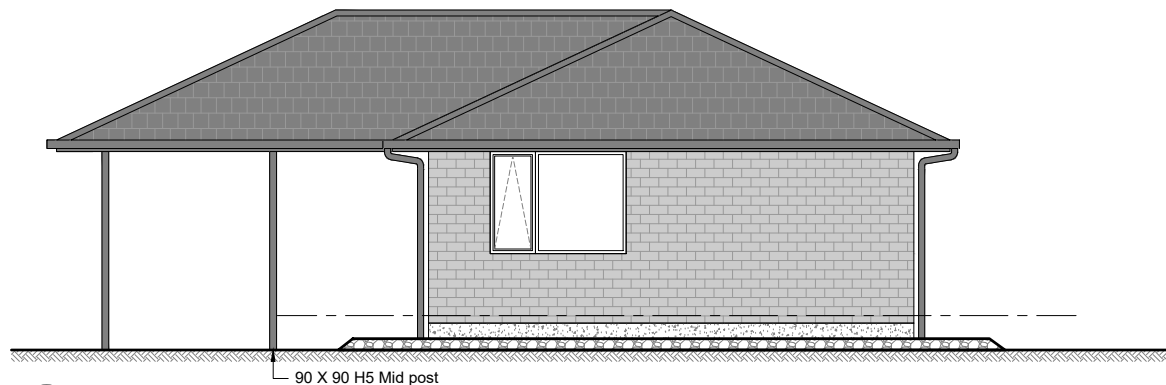
Grade A safety glazing in bathroom windows inline with NZS 4223

90 X 90 H5 Post



C Elevation
A02 SCALE = 1:100 @ A3

Grade A safety glazing in tall windows inline with NZS 4223



D Elevation
A02 SCALE = 1:100 @ A3

90 X 90 H5 Mid post

NOTE:

1. All heights shown are existing ground heights.
2. All external linings to be installed to manufacturers instructions, refer to separate detail sheet for cladding details & notes.
3. Grade A safety glazing in bathrooms & tall windows and sliders inline with NZS 4223.

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Elevations

Drawn 24 June 2026

Project No 5324

Rev	Sheet
C	A03

Scale (A3 Original) 1: 100



NOTE:

1. All electrical work to be by a registered Electrician to comply with Electricity regulations, NZ Standards & NZBC.
2. Electrician to supply electrical "Certificate of Compliance" on completion.
3. Electrical layout schematic only. All electrical & lighting fixtures & fittings are shown indicative - not to scale. To be confirmed on site with owner prior to installation.
4. All power points to be 350mm above FFL and 200mm above bench top and fixed horizontally unless specified.
5. All switches to be 1200mm above FFL and fixed vertically (up/down).
6. Power point for rangehood to be in ceiling space
7. Electrician to check bracing plan and offset flush boxes 90mm if penetration occurs.
8. External power points and electrical Fittings to be IP rated to provide dust and weather protection to comply with NZ Standards.
9. All recessed light fixtures to be CA rated to comply with AS/NZS 605982.2 (Insulation to comply with AS/NZS 60695.11.5)
10. Interconnected Smoke alarms to be installed to NZS4514:2021 located in all bedrooms, living spaces, hallways, and landings within the building spaces. Where a kitchen is separated from the living spaces with a door a suitable kitchen smoke alarm shall be installed. This may be a heat alarm to avoid nuisance activations.
11. Equipment required must be either 10 year long-life battery-operated (non-removable/sealed) or 240v mains powered, interconnected smoke alarms.
12. Smoke alarms shall be located on or near the ceiling.
13. Smoke alarms shall be located in all bedrooms, living spaces, hallways and landings within the building.
14. Where more than one smoke alarm is needed to meet the requirements of this standard, these alarms shall be interconnected so that when one activates, all smoke alarm devices in the household unit will sound. The interconnection between alarms may be wired or wireless.
15. Where a kitchen or scullery is separated from the living spaces and hallways by doors that can be closed, an alarm specified by its manufacturer as suitable for a kitchen shall be located in the kitchen. This may be a heat alarm to avoid nuisance activations.

Verify all dimensions on site before commencing work & do not scale from drawings. Refer any discrepancies to O'Brien Design Consulting Ltd.

All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.

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Project Title

Sean McCaughan
138D Kapiro Road
Kerikeri
Lot 1 DP 537893

Sheet Title

Electrical Plan

Drawn

24 June 2026

Project No

5324

Rev

C

Sheet

A04

Scale (A3 Original) 1: 100



Mechanical vent with flow rate of 25L/s, venting to exterior

Mechanical vent with flow rate of 25L/s, venting to exterior

Mechanical vent with flow rate of 50L/s
with inline fan, venting to exterior

Mechanical vent with flow rate of 25L/s, venting to exterior

LEGEND

- 2 2 way
- 5 Smoke detector
- 10 Primary LED down Light
- 12 Secondary LED down light
- 3 Mechanical vent, vented to exterior
- 19 Double power points
- TV I 1 TV outlet
- 1 Meter board
- 1 Distribution board
- 1 Heat pump internal unit
- 1 Heat pump external unit

APPENDIX B

Selected Site Photographs



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SITE PHOTOGRAPHS

Project: 138D Kapiro Road, Kerikeri

Project no.: C0861N

Figure no.: 1 of 1

Photograph 1: Northern property boundary, looking northeast.



Photograph 2: Approximate site area, looking west.



Photograph 3: Approximate site area, looking north.



APPENDIX C

Historical aerial photographs



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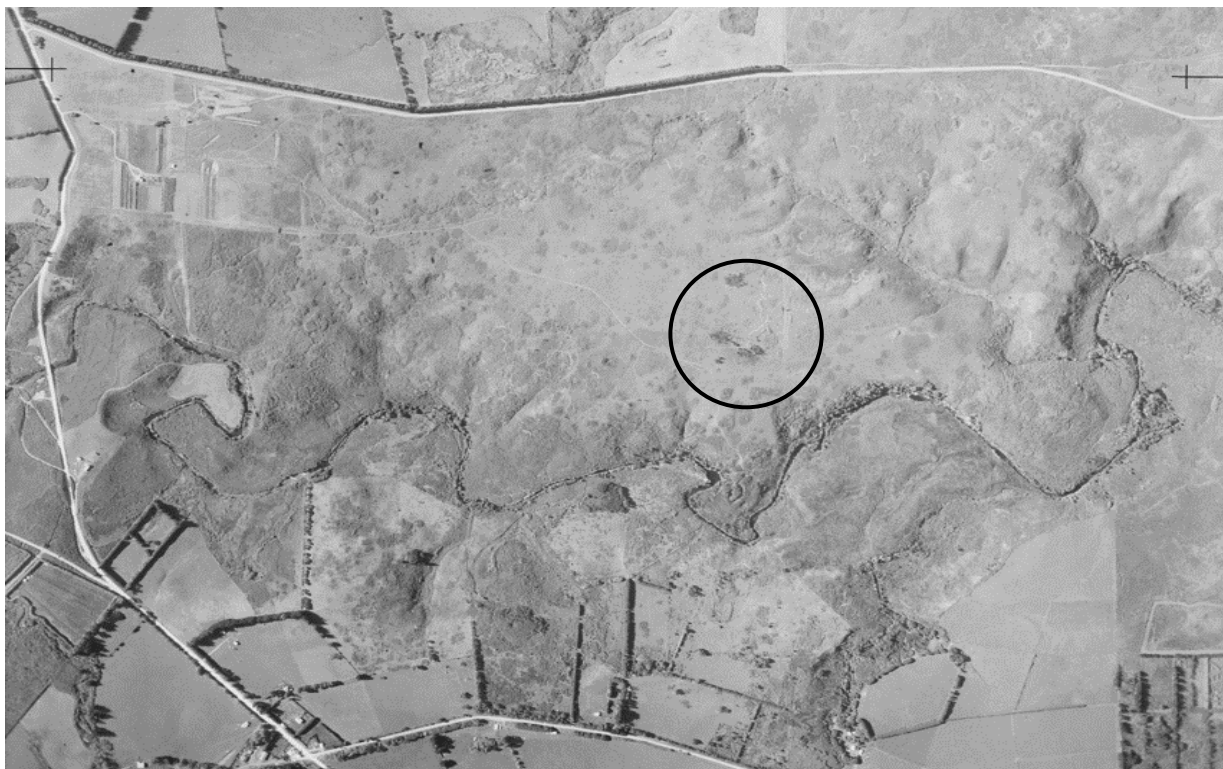
Historical Aerial Photographs

Project: 138D Kapiro Road, Kerikeri

Project no.: C0861N

Figure no.: 1 of 5

1950: Retrolens



1968: Retrolens





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Historical Aerial Photographs

Project: 138D Kapiro Road, Kerikeri

Project no.: C0861N

Figure no.: 2 of 5

1977: Retrolens



1979: Retrolens





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Historical Aerial Photographs

Project: 138D Kapiro Road, Kerikeri

Project no.: C0861N

Figure no.: 3 of 5

1982: Retrolens



2000: FNDC Maps (LINZ Aerial Imagery)





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Historical Aerial Photographs

Project: 138D Kapiro Road, Kerikeri

Project no.: C0861N

Figure no.: 4 of 5

2005-2006: FNDC Maps (LINZ Aerial Imagery)



2014-2016: FNDC Maps (LINZ Aerial Imagery)





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Historical Aerial Photographs

Project: 138D Kapiro Road, Kerikeri

Project no.: C0861N

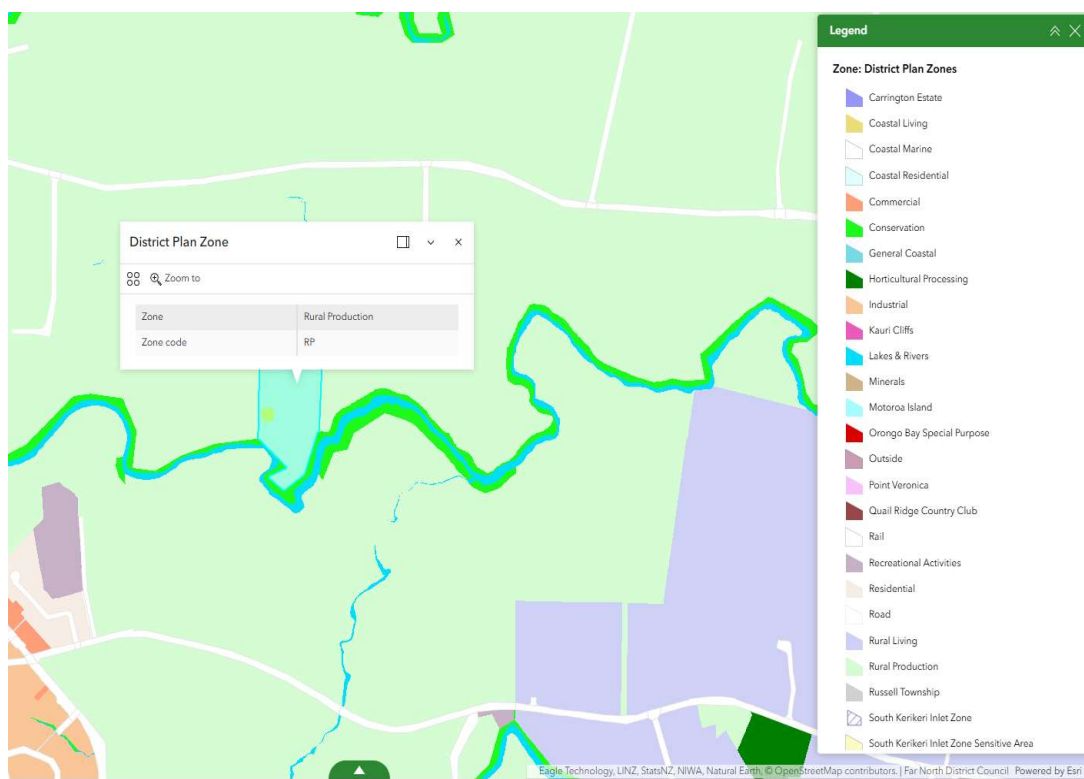
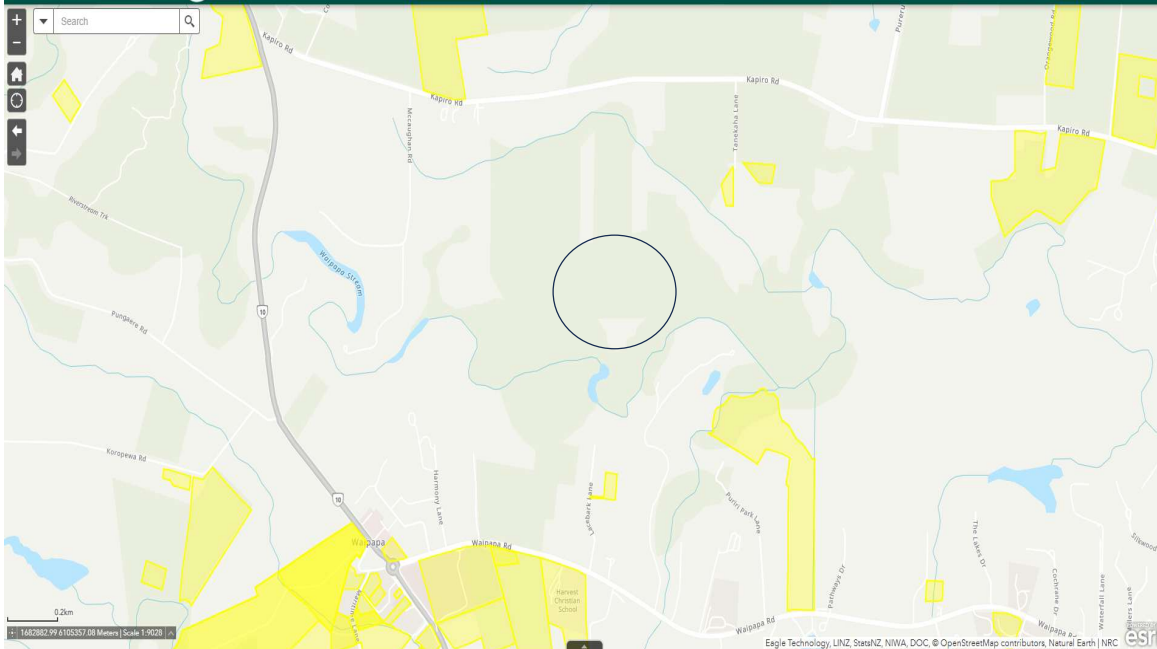
Figure no.: 5 of 5

2023-2025: FNDC Maps (LINZ Aerial Imagery)



APPENDIX D

Selected Property Information



Ray Mayor

From: Sean McCaughan <Sean@siteworx.co.nz>
Sent: Monday, 29 June 2026 11:50 am
To: Ray Mayor
Subject: 138 D Kapiro Rd

Hi Ray

Following on from our telephone conversation this morning.

I haven't applied for a LIM report on this property as I am familiar with it and feel (with all due respect) that I have a greater knowledge than anyone at FNDC about this piece of land.

It is adjacent to land I own and live on and is part of land my father owned. My father obtained the land from his father, who obtained the land from the Government after WW2. I broke this land in 46 years ago from when it was scrub and gorse.

This land in recent years had been leased to market gardeners to grow courgettes, and prior to that was an orchard growing Macadamia nuts. I am confident that your lab reports will come back indicating that this lot is suitable for what we intend. I am purchasing this lot to build a house for my elderly parents who are returning from living in Australia.

Please let me know if there is any other info required.

Sean McCaughan
Po Box 138
Waipapa 0294

APPENDIX E

Summary of Soil Analytical Results

Sample Location Plan

Table 1: Soil Analytical Results	Sample Name	C01 (Composite of C01a, C01b & C01c)	C02 (Composite of C02a, C02b & C02c)	C03 (Composite of C03a, C03b & C03c)			C04 (Composite of C04a, C04b & C04c)	NES:CS ¹ Human Health Rural Residential/ Lifestyle Block Land Use Criteria
				Primary	Duplicate (QC2)	RPD%		
Heavy Metals								
Arsenic		2	< 2	< 2	2	0	2	17
Cadmium		< 0.10	< 0.10	< 0.10	0.10	0	0.11	1
Chromium		131	102	115	122	6	111	290
Copper		13	9	10	10	0	10	>10,000
Lead		6.7	5.7	6.0	6.7	11	6.7	160
Mercury		0.54	1.10	0.89	1.07	18	0.96	200
Nickel		6	4	5	5	0	5	400 ²
Zinc		9	8	10	10	0	10	7,400 ²
Organochlorine Pesticides (OCPs). No OCPs detected over the laboratory limit of reporting in any of the samples analysed for OCPs. Refer to full laboratory reports attached.								

Highlighted, coloured cell indicates samples exceeds human health guidelines.

Notes:

All results in milligrams per kilogram (mg/kg) unless stated otherwise.

Chromium provided as Chromium VI

RPD - Relative Percent Difference

1. Ministry for the Environment National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health; Rural residential/ lifestyle block land use scenario.

2. National Environmental Protection Measure (Assessment of Site Contamination) 1999, update 2013 Schedule B1, Land use Class Residential A.



	DRAWN	SIGNED	DATE							CLIENT: SEAN McCAUGHAN	PROJECT: 138D KAPIRO ROAD KERIKERI NORTHLAND LOT 1 DP 537893	DRAWING TITLE: ENVIRONMENTAL SITE PLAN FOR CONSENT	STATUS: FINAL NOT FOR CONSTRUCTION						
	GB	GB	26/06/26										SCALE	1:1000		SHEET SIZE: A3			
	VERIFIED	SIGNED	DATE											PROJECT NO. C0861N		TYPE: RC	CLASS: 	SHEET NO. 700	REV. A
	LW	LW	26/06/26																
	APPROVED	SIGNED	DATE																
	AW	AW	26/06/26	A	26/06/26	FIRST ISSUE				LW	LW								
				REV.	DATE	REVISION DETAILS				BY	APP.								

APPENDIX F

Laboratory Reports

Certificate of Analysis

Page 1 of 2

Client:	Geologix Consulting Engineers Limited	Lab No:	4248134	SPV2
Contact:	Ray Mayor	Date Received:	23-Jun-2026	
	C/- Geologix Consulting Engineers Limited	Date Reported:	29-Jun-2026	
	13/2181 East Coast Road	Quote No:	113810	
	Stanmore Bay	Order No:		
	Silverdale 0932	Client Reference:	C0861-Kapiro Road	
		Submitted By:	Ray Mayor	

Sample Type: Soil

Sample Name:	Composite of C01a, C01b & C01c	Composite of C02a, C02b & C02c	Composite of C03a, C03b & C03c	Composite of C04a, C04b & C04c	Composite of QC1a, QC1b & QC1c
Lab Number:	4248134.16	4248134.17	4248134.18	4248134.19	4248134.20

Individual Tests

Dry Matter	g/100g as rcvd	75	75	74	73	-
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Heavy Metals with Mercury, Screen Level

Total Recoverable Arsenic	mg/kg dry wt	2	< 2	< 2	2	2
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	< 0.10	< 0.10	0.11	0.10
Total Recoverable Chromium	mg/kg dry wt	131	102	115	111	122
Total Recoverable Copper	mg/kg dry wt	13	9	10	10	10
Total Recoverable Lead	mg/kg dry wt	6.7	5.7	6.0	6.7	6.7
Total Recoverable Mercury	mg/kg dry wt	0.54	1.10	0.89	0.96	1.07
Total Recoverable Nickel	mg/kg dry wt	6	4	5	5	5
Total Recoverable Zinc	mg/kg dry wt	9	8	10	10	10

Organochlorine Pesticides Screening in Soil

Aldrin	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
alpha-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
beta-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
delta-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
gamma-BHC (Lindane)	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
cis-Chlordane	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
trans-Chlordane	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
2,4'-DDD	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
4,4'-DDD	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
2,4'-DDE	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
4,4'-DDE	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
2,4'-DDT	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
4,4'-DDT	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Total DDT Isomers	mg/kg dry wt	< 0.08	< 0.08	< 0.08	< 0.09	-
Dieldrin	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Endosulfan I	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Endosulfan II	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Endosulfan sulphate	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Endrin	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Endrin aldehyde	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Endrin ketone	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Heptachlor	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Heptachlor epoxide	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Hexachlorobenzene	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-
Methoxychlor	mg/kg dry wt	< 0.014	< 0.014	< 0.014	< 0.014	-



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised. The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	16-20
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.10 - 4 mg/kg dry wt	16-20
Organochlorine Pesticides Screening in Soil	Sonication extraction, GC-ECD analysis. Tested on as received sample. In-house based on US EPA 8081.	0.010 - 0.06 mg/kg dry wt	16-19
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	16-19
Composite Environmental Solid Samples*	Individual sample fractions mixed together to form a composite fraction.	-	1-15

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 23-Jun-2026 and 29-Jun-2026. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Kim Harrison MSc
Client Services Manager - Environmental



STATEMENT OF QUALIFICATION

I Edward John Collings of Geologix Consulting Engineers Ltd certify that:

1. This combined Preliminary and Detailed Site Investigation meets the requirements of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (the NES:CS) because it has been:
 - a. Prepared and certified by a suitably qualified and experienced practitioner registered under the Certified Environmental Practitioner Scheme (Registration Number 0861) and Engineering New Zealand Chartered Professional Engineer (Registration Number 1033153).
 - b. The SQEP has over 18 years post graduate experiencing practicing as an environmental consultant with a tertiary education qualification equivalent to a Master of Science with supporting evidence from Engineering New Zealand that the Consultant has equivalent knowledge to Washington Accord equivalence.
 - c. Reported on in accordance with the current edition of Contaminated Land Management Guidelines No. 1 – Reporting on contaminated sites in New Zealand, 2021.
2. This investigation concludes that:
 - a. For subdivision and soil disturbance activities (if any) under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations.

Evidence of qualifications and experience of the suitably qualified and experienced practitioner is available below.

Signed:

Dated: 6 July 2026



Role	Name	Relevant Experience
Project Manager	Ray Mayor Unitec New Zealand, 2010, Bachelor of Engineering (Environmental) Unitec New Zealand, 2007, Diploma in Environmental Technology	Ray is a Senior Environmental Consultant with more than 17 years' experience on contaminated sites. His project experience includes conducting site assessments, compliance monitoring, managing environmental risk and remediation across numerous sites including residential, industrial and commercial developments as well as New Zealand Defence Force sites.
Senior Technical Reviewer	Edward Collings MPhys (Hons) Physical Geography Certified Environmental Practitioner Chartered Professional Engineer	Edward is a Principal Engineer and Managing Director with more than 18 years' experience on geotechnical design and contaminated land remediation on a variety of residential, commercial and critical infrastructure projects in the UK and New Zealand. Edward attained recognition as a Certified Environmental Practitioner in 2016 in Australia and New Zealand with specialist knowledge in contaminated land and groundwater remediation and wastewater design. In recent years Edward has provided professional engineering assessments for prospective candidates to the scheme.