



DEVELOPMENT APPLICATION

PDPLANPMTD-2025/055673

PROPOSAL: Additions & Alterations (Single Dwelling)

LOCATION: 3 Kirra Road, Roches Beach

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 26 November 2025

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 26 November 2025. In addition to legislative requirements, plans and documents can also be viewed at www.ccc.tas.gov.au during these times.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 26 November 2025.

To enable Council to contact you if necessary, would you please also include a day time contact number in any correspondence you may forward.

Any personal information submitted is covered by Council's privacy policy, available at www.ccc.tas.gov.au or at the Council offices.

Clarence City Council



APPLICATION FOR DEVELOPMENT / USE OR SUBDIVISION

The personal information on this form is required by Council for the development of land under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and other related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend your personal information at any time. How we use this information is explained in our **Privacy Policy**, which is available at www.ccc.tas.gov.au or at Council offices.

Proposal:

Alterations & Additions

Location:

Address 3 Kirra Road
Suburb/Town Lauderdale Postcode 7170

Current Owners/s:

Applicant:

Personal Information Removed

Tax Invoice for application fees to be in the name of: (if different from applicant)

Is the property on the Tasmanian Heritage Register?

Yes

No

(if yes, we recommend you discuss your proposal with Heritage Tasmania prior to lodgement as exemptions may apply which may save you time on your proposal)

If you had pre-application discussions with a Council Officer, please give their name

Current Use of Site:

Residential Dwelling

Does the proposal involve land administered or owned by the Crown or Council?

Yes

No

Declaration:

- *I have read the Certificate of Title and Schedule of Easements for the land and am satisfied that this application is not prevented by any restrictions, easements or covenants.*
- *I authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation. I agree to arrange for the permission of the copyright owner of any part of this application to be obtained. I have arranged permission for Council's representatives to enter the land to assess this application*
- *I declare that, in accordance with Section 52 of the Land Use Planning and Approvals Act 1993, that I have notified the owner of the intention to make this application. Where the subject property is owned or controlled by Council or the Crown, their signed consent is attached. Where the application is submitted under Section 43A, the owner's consent is attached.*
- *I declare that the information in this declaration is true and correct.*

Acknowledgement:

- *I acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process; for display purposes during public consultation; and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.*

Applicant's
Signature:

Personal Information Removed

**PLEASE REFER TO THE DEVELOPMENT/USE AND SUBDIVISION CHECKLIST
ON THE FOLLOWING PAGES TO DETERMINE WHAT DOCUMENTATION MUST
BE SUBMITTED WITH YOUR APPLICATION.**

Documentation required:

1. **MANDATORY DOCUMENTATION**

This information is required for the application to be valid. An application lodged without these items is unable to proceed.

- Details of the location of the proposed use or development.
- A copy of the current Certificate of Title, Sealed Plan, Plan or Diagram and Schedule of Easements and other restrictions for each parcel of land on which the use or development is proposed.
- Full description of the proposed use or development.
- Description of the proposed operation.
May include where appropriate: staff/student/customer numbers; operating hours; truck movements; and loading/unloading requirements; waste generation and disposal; equipment used; pollution, including noise, fumes, smoke or vibration and mitigation/management measures.
- Declaration the owner has been notified if the applicant is not the owner.
- Crown or Council consent (if publically-owned land).
- Any reports, plans or other information required by the relevant zone or code.
- Fees prescribed by the Council.

Application fees (please phone 03 6217 9550 to determine what fees apply). An invoice will be emailed upon lodgement.

2. **ADDITIONAL DOCUMENTATION**

In addition to the mandatory information required above, Council may, to enable it to consider an application, request further information it considers necessary to ensure that the proposed use or development will comply with any relevant standards and purpose statements in the zone, codes or specific area plan, applicable to the use or development.

- Site analysis plan and site plan**, including where relevant:
 - *Existing and proposed use(s) on site.*
 - *Boundaries and dimensions of the site.*
 - *Topography, including contours showing AHD levels and major site features.*
 - *Natural drainage lines, watercourses and wetlands on or adjacent to the site.*
 - *Soil type.*
 - *Vegetation types and distribution, and trees and vegetation to be removed.*
 - *Location and capacity of any existing services or easements on/to the site.*
 - *Existing pedestrian and vehicle access to the site.*
 - *Location of existing and proposed buildings on the site.*
 - *Location of existing adjoining properties, adjacent buildings and their uses.*
 - *Any natural hazards that may affect use or development on the site.*
 - *Proposed roads, driveways, car parking areas and footpaths within the site.*
 - *Any proposed open space, communal space, or facilities on the site.*
 - *Main utility service connection points and easements.*
 - *Proposed subdivision lot boundaries.*

Clarence City Council

DEVELOPMENT/USE OR SUBDIVISION CHECKLIST



- Where it is proposed to erect buildings, **detailed plans** with dimensions at a scale of 1:100 or 1:200 showing:
 - *Internal layout of each building on the site.*
 - *Private open space for each dwelling.*
 - *External storage spaces.*
 - *Car parking space location and layout.*
 - *Major elevations of every building to be erected.*
 - *Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites.*
 - *Relationship of the elevations to natural ground level, showing any proposed cut or fill.*
 - *Materials and colours to be used on rooves and external walls.*
- Where it is proposed to erect buildings, a plan of the proposed **landscaping** showing:
 - *Planting concepts.*
 - *Paving materials and drainage treatments and lighting for vehicle areas and footpaths.*
 - *Plantings proposed for screening from adjacent sites or public places.*
- Any additional reports, plans or other information required by the relevant zone or code.

This list is not comprehensive for all possible situations. If you require further information about what may be required as part of your application documentation, please contact Council's Planning Officers on (03) 6217 9550 who will be pleased to assist.

SEARCH OF TORRENS TITLE

VOLUME 20807	FOLIO 9
EDITION 8	DATE OF ISSUE 22-Jun-2023

SEARCH DATE : 16-Apr-2025

SEARCH TIME : 08.31 AM

DESCRIPTION OF LAND

City of CLARENCE
 Lot 9 on Plan 20807
 formerly SPD 564
 Derivation : Part of 30A-0R-0Ps. Located to Charles Dooling
 and Part of 30A-0R-0Ps Located to M. Vicary
 Prior CT 4612/41

SCHEDULE 1

E329327 TRANSFER to ZACHARY THOMAS ROSSITER and JADE ALLYSA
 ROSSITER Registered 22-Jun-2023 at 12.02 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
 SPD 564 BENEFITING EASEMENT: Right of drainage over the
 Drainage Easement shown passing through Lot 6 on Plan
 No. 20807
 SPD 564 BURDENING EASEMENT: Right of drainage (appurtenant to
 Lot 8 on Sealed Plan Deeds No. 564 and for the Warden
 Councillors and Electors of the Municipality of
 Clarence) over the Drainage Easements shown on Plan
 No. 20807 and passing through the said land wit

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

P I N N A C L E

PINNACLE



Note: The images provided are artistic representations only and should not be used as references for final colours, finishes, or external/internal features.












3 Kirra Road, Lauderdale, 7170




Owner(s) or Clients	Zach & Jade Rossiter	Title Reference	20807/9
Building Classification	10a	Zoning	Rural Living
Designer	Jason Nickerson CC6073Y	Land Size	26230m ²
Total Floor Area (Combined)	288.85m ² Deck 43.70m ²	Design Wind Speed	N3
Alpine Area	N/A	Soil Classification	A
Other Hazards	Medium coastal erosion hazard band, Waterway and coastal protection area, Airport obstacle limitation area, Future coastal refugia area, High coastal inundation hazard band, Flood-prone areas	Climate Zone	7
		Corrosion Environment	High
		Bushfire Attack Level (BAL)	N/A

Changes List			
Issue	Description of change	Date	Designer

ID	Sheet Name	Issue
A.01	Location Plan	DA - 01
A.02	Site Plan	DA - 01
A.03	Floor Plan - Existing/Demo	DA - 01
A.04	Lower Floor Plan - Proposed	DA - 01
A.05	Upper Floor Plan - Proposed	DA - 01
A.06	Elevations - Existing	DA - 01
A.07	Elevations - Proposed	DA - 01
A.08	Elevations - Proposed	DA - 01
A.09	Roof Plan	DA - 01
A.10	Electrical Plan - Lower	DA - 01
A.11	Electrical Plan - Upper	DA - 01
A.12	Door & Window Schedule	DA - 01

Legend

-  - Electrical Connection
-  - Electrical Turret
-  - Sewer Connection
-  - Stormwater Connection
-  - Telstra Connection
-  - Telstra Pit
-  - Water Meter
-  - Water Stop Valve
-  - Fire Hydrant
-  - Solar Bollard Light
-  - Spotlight with sensor

-  Coastal erosion area
-  Coastal inundation hazard area
-  Flood prone area



Site Areas

Site Area	26230 m ²
Building Footprint	209.49m ²
Total Site Coverage	00.79%

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Location Plan

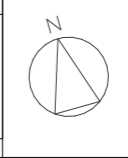
Scale: 1:1000 @ A3
 Pg. No: A.01

Revision: DA - 01
 Approved by: JD

Proposal: Alterations & Additions
 Client: Zach & Jade Rossiter
 Address: 3 Kirra Road, Lauderdale, 7170

Date: 03/09/2025
 Drawn by: JD
 Job No: 020-2025
 Engineer: TBA
 Building Surveyor: TBA












Issue	Date	Designer
NOTE: Refer to cover page for further details on changes.		



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Legend

-  - Electrical Connection
-  - Electrical Turret
-  - Sewer Connection
-  - Stormwater Connection
-  - Telstra Connection
-  - Telstra Pit
-  - Water Meter
-  - Water Stop Valve
-  - Fire Hydrant
-  - Solar Bollard Light
-  - Spotlight with sensor

Surface Water Drainage

Ground to fall away from building in all directions in compliance with AS2870 & N.C.C 2022 3.3.3.

Surface water must be diverted away from a Class 1 building as follows:

- (a) Slab-on-ground - finished ground level adjacent to a building: the external finished surface surrounding the slab must be drained to move surface water away from the building and graded to give a slope of not less than
 - (i) 25mm over the first 1m from the building
 - (A) in low rainfall intensity areas for surfaces that are reasonably impermeable (such as concrete or claypaving); or
 - (B) for any reasonably impermeable surface that forms part of an access path or ramp provided for the purposes of Clauses 1.1 (2) or (4)(c) of the ABCB Standard for Livable Housing Design; or
 - (ii) 50 mm over the first 1 m from the building in any other case.
- (b) Slab-on-ground - finished slab heights: the height of the slab-on-ground above external finished surfaces must be not less than
 - (i) 100 mm above the finished ground level in low rainfall intensity areas or sandy, well-drained areas; or
 - (ii) 50 mm above impermeable (paved or concrete) areas that slope away from the building in accordance with (a); or
 - (iii) 150 mm in any other case.
- (c) The ground beneath suspended floors must be graded so that the area beneath the building is above the adjacent external finished ground level and surface water is prevented from ponding under the building.

Subsoil Drainage

is to comply with AS2870, AS3500 & N.C.C 2022 3.3.4.

Where a subsoil drainage system is installed to divert subsurface water away from the area beneath a building, the subsoil drain must-

- (a) be graded with a uniform fall of not less than 1:300; and
- (b) discharge into an external silt pit or sump with-
 - (i) the level of discharge from the silt pit or sump into an impervious drainage line not less than 50 mm below the invert level of the inlet; and provision for cleaning and maintenance.

Note

All driveway pits and grate drains to be **Class B**.

Stormwater pits are indicative. Location may vary depending on site conditions.



Site Areas

Site Area	26230 m ²
Building Footprint	208.95m ²
Total Site Coverage	00.79%

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Site Plan
 Scale: 1:200 @ A3
 Pg. No: A.02
 Revision: DA - 01
 Approved by: JD

Proposal: Alterations & Additions
 Client: Zach & Jade Rossiter
 Address: 3 Kirra Road, Lauderdale, 7170

Date: 03/09/2025
 Drawn by: JD
 Job No: 020-2025
 Engineer: TBA
 Building Surveyor: TBA

Issue	Date	Designer
NOTE: Refer to cover page for further details on changes.		



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Access Panel



Articulation Joint



Smoke Alarm

Demolition Notes

Generally

1. Compliance

Demolition work must adhere to Australian Standard AS 2601-2001: The Demolition of Structures.

All works to adhere to Regulations 45, 46 & 47 of the Building Act 2016

2. Permit Hours

All demolition activities should be carried out within the permitted hours only.

3. Site Management

The builder is responsible for implementing adequate measures to prevent the tracking of mud and debris onto public roads.

Sediment control measures should be in place to prevent sediment entry into council infrastructure (refer to Site Water Management Plan (SWMP))

The demolition site must be kept clean and tidy at all times.

Prior to Demolition

1. Service Location

Conduct a Dial Before You Dig (DBYD) to obtain a new DYBD and locate all existing services in the demolition area.

Conduct relevant authorities to assist in locating and identifying owned assets.

2. Utilities

Electrical Supply: Terminate electrical supply as required by the relevant authorities.

Plumbing: Cap plumbing services to the satisfaction of the relevant authorities.

Telephone: Cap and terminate all telephone services as required.

Gas: Cap and terminate gas supply as required (if applicable)

3. Hazardous Materials

A safety management plan must be in place, covering aspects like personal protective equipment (PPE), emergency procedures, and safety data sheets for any hazardous materials on-site.

Asbestos: Identify asbestos through a professional inspection and ensure it is removed in accordance with all removal guidelines (if required).

Important Note

During demolition works, hose down down the site as needed to prevent dust travel and ensure a safe environment for workers and nearby residents.

Measures should be taken to protect the public from demolition hazards, This includes securing the site with barriers, providing clear signage, and ensuring that debris does not pose a risk to nearby areas or people.

References:

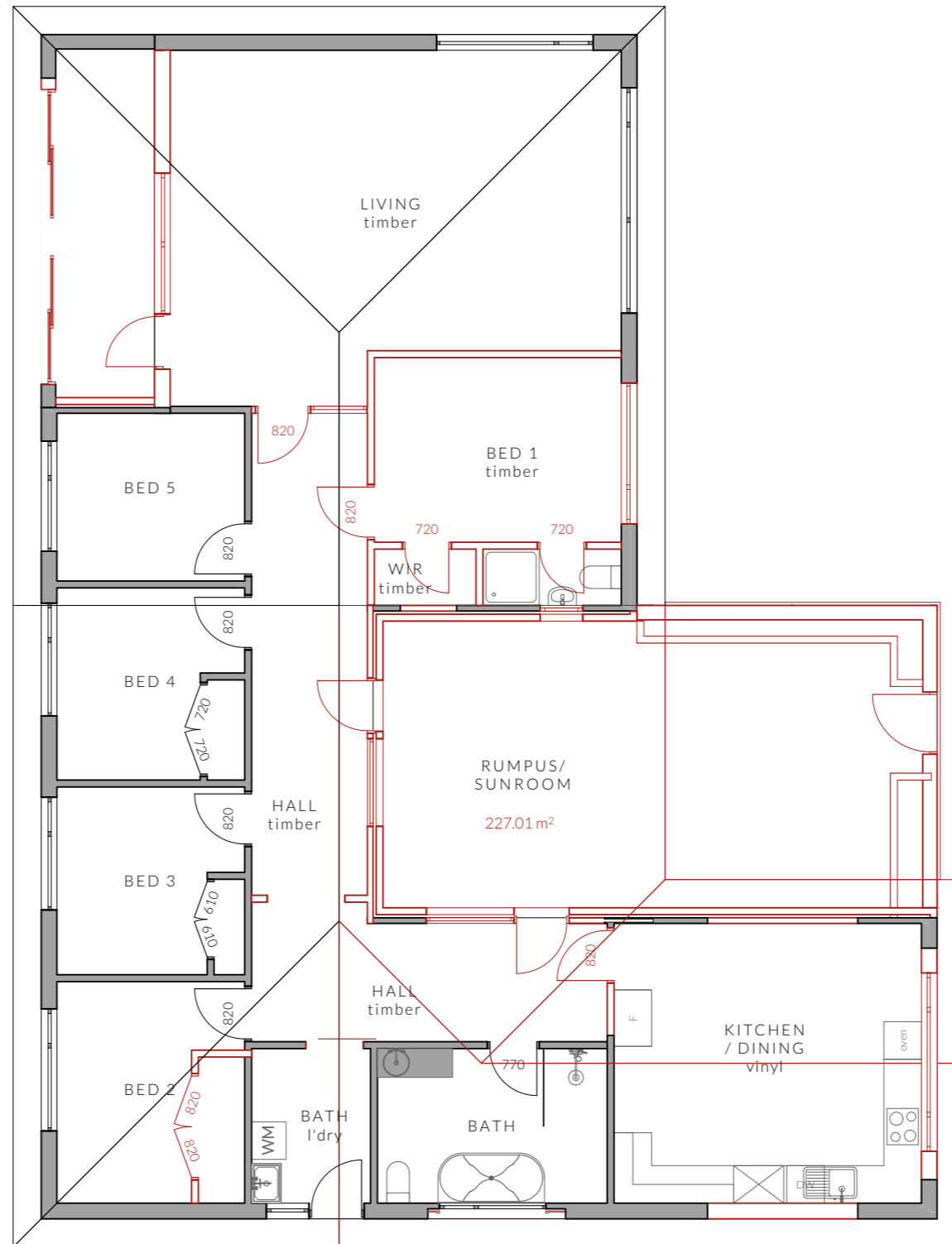
Tasmanian Legislation Online: Provides details on the Building Act 2016, including demolition requirements (Tasmanian Legislation).

Consumer, Building and Occupational Services (CBOS): Offers information on building standards and demolition regulations in Tasmania (CBOS).

Australian Standard AS 2601-2001: The Demolition of Structures

RENOVATION LEGEND

- EXISTING
- DEMOLITION
- NEW CONSTRUCTION
- BATTS TO WALL



Existing Ground Floor - Demolition Plan

NOT FOR CONSTRUCTION

Floor Areas

Total Existing Lower Floor Area	227.01m ²
Proposed Lower Floor	208.95m ²
Proposed Upper Floor	80.59m ²
Total Proposed Floor Area	289.54m ²
Proposed Alfresco	24.00m ²
Proposed Patio	6.90m ²
Proposed Deck	6.26m ²
Proposed Upper Patio	6.76m ²
Total Proposed Deck Area	43.92m ²

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Floor Plan - Existing/Demo

Revision: DA - 01
 Approved by: JD

Scale: 1:100 @ A3
 Pg. No: A.03

Proposal: Alterations & Additions
 Client: Zach & Jade Rossiter
 Address: 3 Kirra Road, Lauderdale, 7170

Date: 03/09/2025
 Drawn by: JD
 Job No: 020-2025
 Engineer: TBA
 Building Surveyor: TBA

Issue	Date	Designer



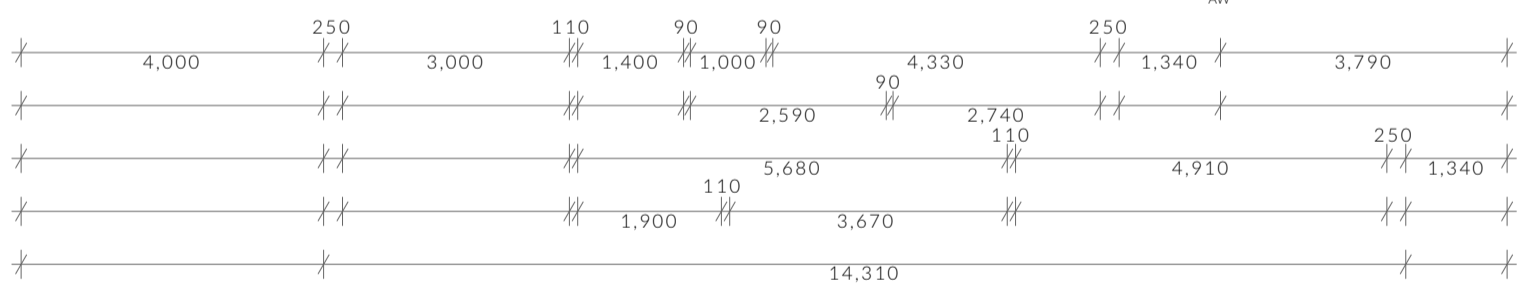
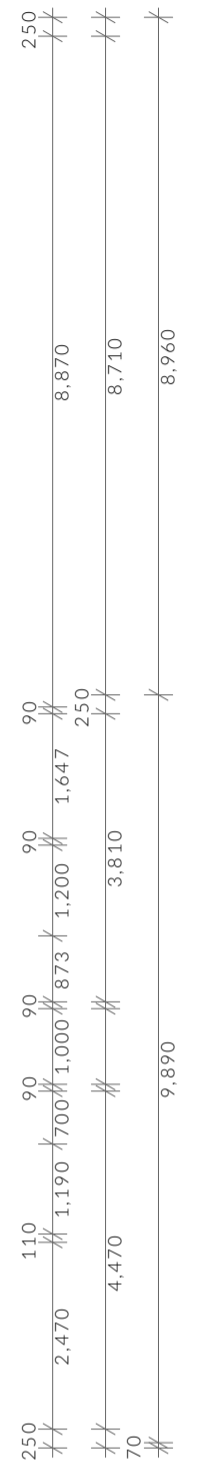
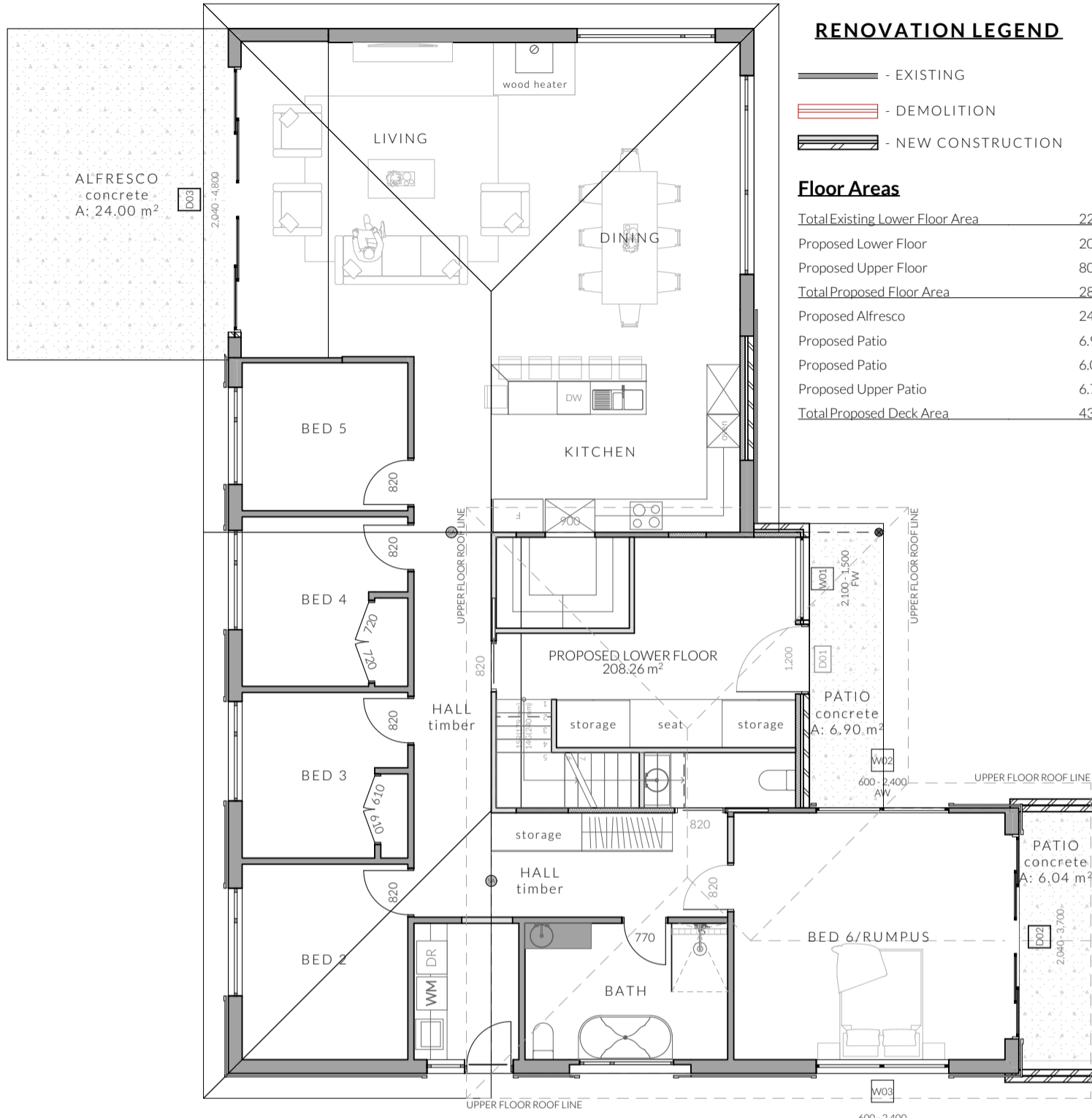
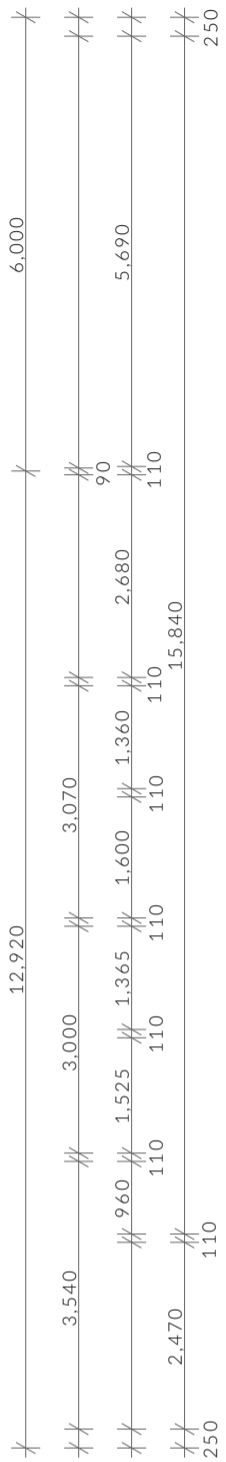
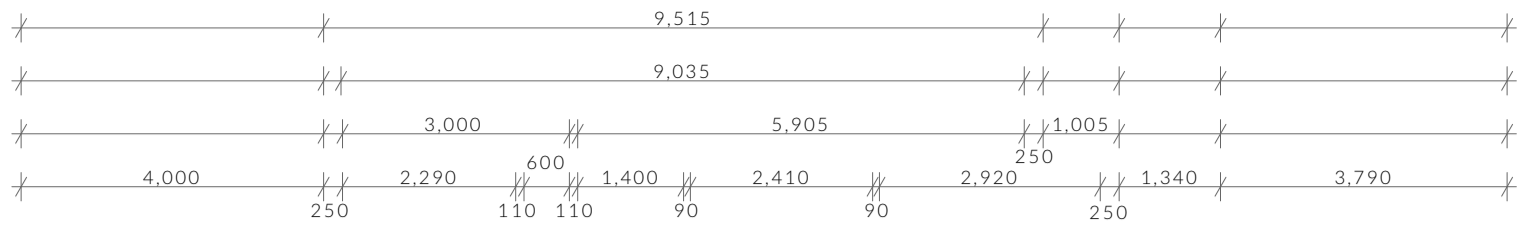
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AP Access Panel

AJ Articulation Joint

SA Smoke Alarm



Floor Plan - Lower - Proposed

Construction of sanitary compartments 10.4.2 of NCC 2022

The door to a fully enclosed sanitary compartment must -

- open outwards; or
- slide; or
- be readily removable from the outside of the compartment.

unless there is a clear space of at least 1.2 m, measured in accordance with Figure 10.4.2 of NCC 2022 Vol II, between the closet pan within the sanitary compartment and the doorway.

Note: Safe Movement & Egress

Openable windows greater than 4m above the surface below are to be fitted with a device to limit opening or a suitable screen so a 125mm sphere cannot pass through. Except for Bedrooms, where the requirement is for heights above 2m. Refer to clauses 11.3.7 and 11.3.8 of NCC 2022 for further information on suitable protective devices.

Note: Paved Areas

All paths and patios to fall away from dwelling.

Note: Stair Construction

All stairs to be constructed in accordance with NCC Vol II 2022 Part 11.2.2:
Riser: Min 115mm - Max 190mm
Going: Min 240mm - Max 355mm
Slope (2R+G): Max 550 - Min 700
For stairways serving non-habitable room used infrequently, refer to table 11.2.2(b).

Landings to comply with Clause 11.2.5 and be a minimum of 750mm deep measured 500mm from the inside edge of the landing.

Slip resistance of treads, nosings and ramps to comply with Clause 11.2.4.

Heights of rooms & other spaces 10.3.1 of NCC 2022

Heights of rooms and other spaces must not be less than;

- in a habitable room excluding a kitchen - 2.4 m; and
- in a kitchen - 2.1 m; and
- in a corridor, passageway or the like - 2.1 m; and
- in a bathroom, shower room, laundry, sanitary compartment, airlock, pantry, storeroom, garage, car parking area or the like - 2.1 m; and
- in a room or space with a sloping ceiling or projections below the ceiling line within- See NCC directly for these items
- in a stairway, ramp, landing, or the like - 2.0 m measured vertically above the nosing line of stairway treads or the floor surface of a ramp, landing or the like.

If required onsite, the builder may work within the tolerances of the above as specified within the NCC 2022 Vol II. Builder to contact Pinnacle before undertaking works.

<p>PINNACLE</p> <p>PINNACLE DRAFTING & DESIGN 7/3 Abernant Way, Cambridge 7170 03 6248 4218 admin@pinnacledrafting.com.au www.pinnacledrafting.com.au Licence Number: CC6073Y</p>	<p>Scale: 1:100 @A3</p> <p>Pg. No: A.04</p>	<p>Proposal: Alterations & Additions</p> <p>Client: Zach & Jade Rossiter</p> <p>Address: 3 Kirra Road, Lauderdale, 7170</p>	<p>Date: 03/09/2025</p> <p>Drawn by: JD</p> <p>Job No: 020-2025</p> <p>Engineer: TBA</p> <p>Building Surveyor: TBA</p>		<p>These drawings are the property of Pinnacle Drafting & Design Pty Ltd. reproduction in whole or part is strictly forbidden without written consent. © 2025. These drawings are to be read in conjunction with all drawings and documentation by Engineers, Surveyors and any other consultants referred to within this drawing set as well as any Certificates of Likely Compliance and/or permit documentation. DO NOT SCALE FROM DRAWINGS. All Contractors are to verify dimensions on site before commencing any orders, works or requesting/producing shop drawings. ANY AND ALL DISCREPANCIES DISCOVERED BY OUTSIDE PARTIES ARE TO BE BROUGHT TO THE ATTENTION OF PINNACLE DRAFTING & DESIGN PTY LTD AS SOON AS PRACTICABLE. This document must be printed in colour. Pinnacle Drafting takes no responsibility for any errors, omissions or omissions caused by contractors and builders not following colour-printed plans.</p>	<p>Issue</p> <p>Date</p> <p>Designer</p>
						<p>NOTE: Refer to cover page for further details on changes.</p>

NOT FOR CONSTRUCTION

AP Access Panel

AJ Articulation Joint

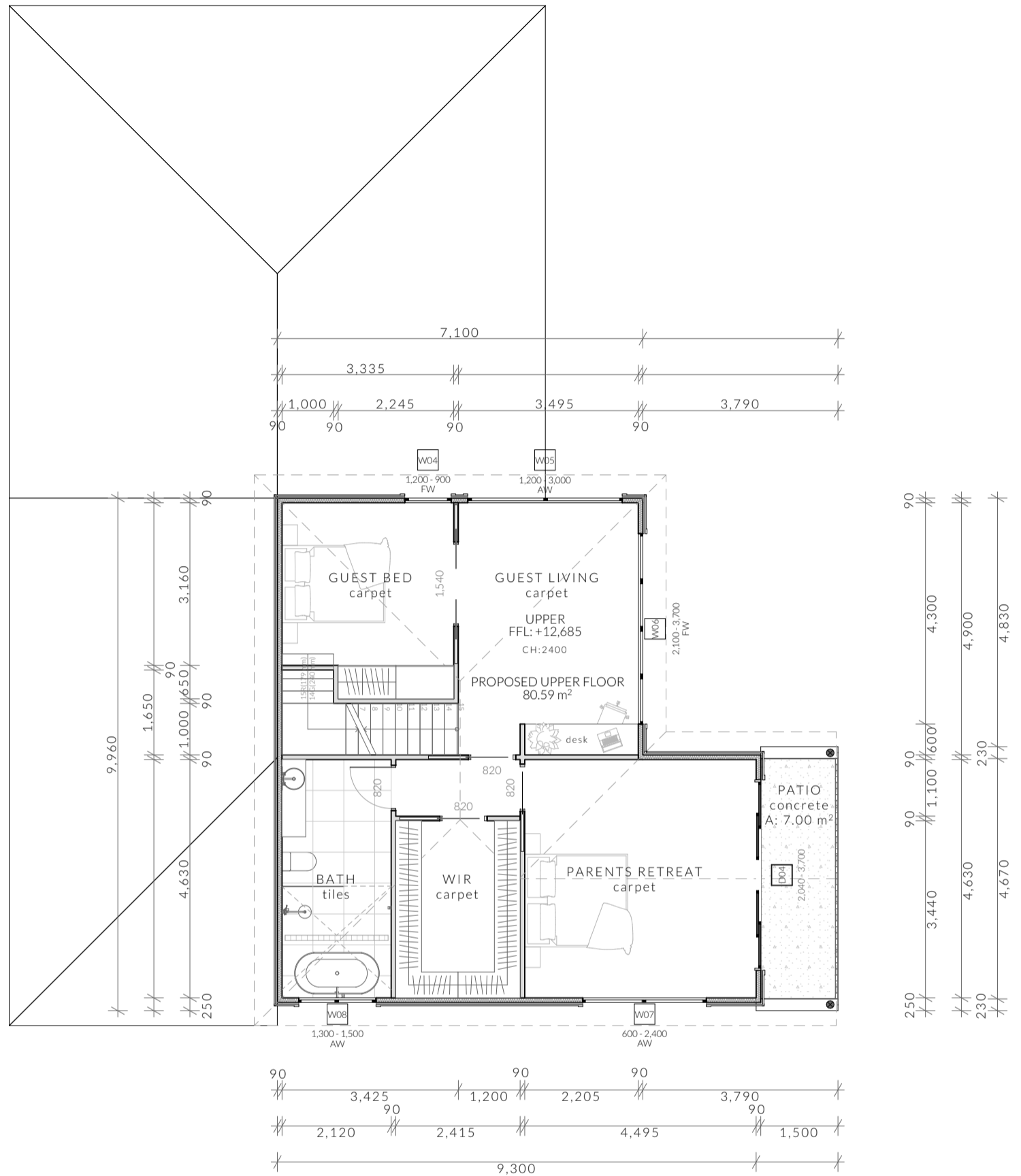
SA Smoke Alarm

RENOVATION LEGEND

- - EXISTING
- ▬ - DEMOLITION
- ▬ - NEW CONSTRUCTION

Floor Areas

Total Existing Lower Floor Area	227.01m ²
Proposed Lower Floor	208.26m ²
Proposed Upper Floor	80.59m ²
Total Proposed Floor Area	288.85m²
Proposed Alfresco	24.00m ²
Proposed Patio	6.90m ²
Proposed Patio	6.04m ²
Proposed Upper Patio	6.76m ²
Total Proposed Deck Area	43.70m²



Floor Plan - Upper - Proposed

Construction of sanitary compartments 10.4.2 of NCC 2022

The door to a fully enclosed sanitary compartment must -

- open outwards; or
- slide; or
- be readily removable from the outside of the compartment.

unless there is a clear space of at least 1.2 m, measured in accordance with Figure 10.4.2 of NCC 2022 Vol II, between the closet pan within the sanitary compartment and the doorway.

Note: Safe Movement & Egress

Openable windows greater than 4m above the surface below are to be fitted with a device to limit opening or a suitable screen so a 125mm sphere cannot pass through. Except for Bedrooms, where the requirement is for heights above 2m. Refer to clauses 11.3.7 and 11.3.8 of NCC 2022 for further information on suitable protective devices.

Note: Paved Areas

All paths and patios to fall away from dwelling.

Note: Stair Construction

All stairs to be constructed in accordance with NCC Vol II 2022 Part 11.2.2:

- Riser: Min 115mm - Max 190mm
 - Going: Min 240mm - Max 355mm
 - Slope (2R+G): Max 550 - Min 700
- For stairways serving non-habitable room used infrequently, refer to table 11.2.2(b).

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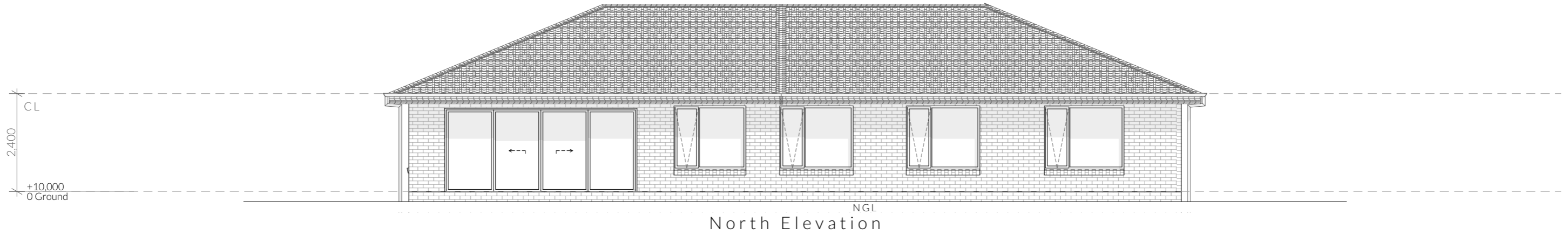
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 - in a kitchen - 2.1 m; and
 - in a corridor, passageway or the like - 2.1 m; and
 - in a bathroom, shower room, laundry, *sanitary compartment*, airlock, pantry, storeroom, garage, car parking area or the like - 2.1 m; and
 - in a room or space with a sloping ceiling or projections below the ceiling line within- See NCC directly for these items
 - in a stairway, ramp, *landing*, or the like - 2.0 m measured vertically above the nosing line of stairway treads or the floor surface of a ramp, *landing* or the like.

If required onsite, the builder may work within the tolerances of the above as specified within the NCC 2022 Vol II. Builder to contact Pinnacle before undertaking works.

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Upper Floor Plan - Proposed Scale: 1:100 @ A3 Revision: DA-01 Approved by: JD	Proposal: Alterations & Additions Client: Zach & Jade Rossiter Address: 3 Kirra Road, Lauderdale, 7170	Date: 03/09/2025 Drawn by: JD Job No: 020-2025 Engineer: TBA Building Surveyor: TBA		<p>These drawings are the property of Pinnacle Drafting & Design Pty Ltd. reproduction in whole or part is strictly forbidden without written consent. © 2025. These drawings are to be read in conjunction with all drawings and documentation by Engineers, Surveyors and any other consultants referred to within this drawing set as well as any Certificates of Likely Compliance and/or permit documentation. DO NOT SCALE FROM DRAWINGS. All Contractors are to verify dimensions on site before commencing any orders, works or requesting/producing shop drawings. ANY AND ALL DISCREPANCIES DISCOVERED BY OUTSIDE PARTIES ARE TO BE BROUGHT TO THE ATTENTION OF PINNACLE DRAFTING & DESIGN PTY LTD AS SOON AS PRACTICABLE. This document must be printed in colour. Pinnacle Drafting takes no responsibility for any errors, issues, or omissions caused by contractors and builders not following colour-printed plans.</p>						



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Elevations - Existing

Revision: **DA - 01**
 Approved by: **JD**

Scale: **1:100** @ A3
 Pg. No: **A.06**

Proposal: Alterations & Additions
 Client: Zach & Jade Rossiter
 Address: 3 Kirra Road, Lauderdale, 7170

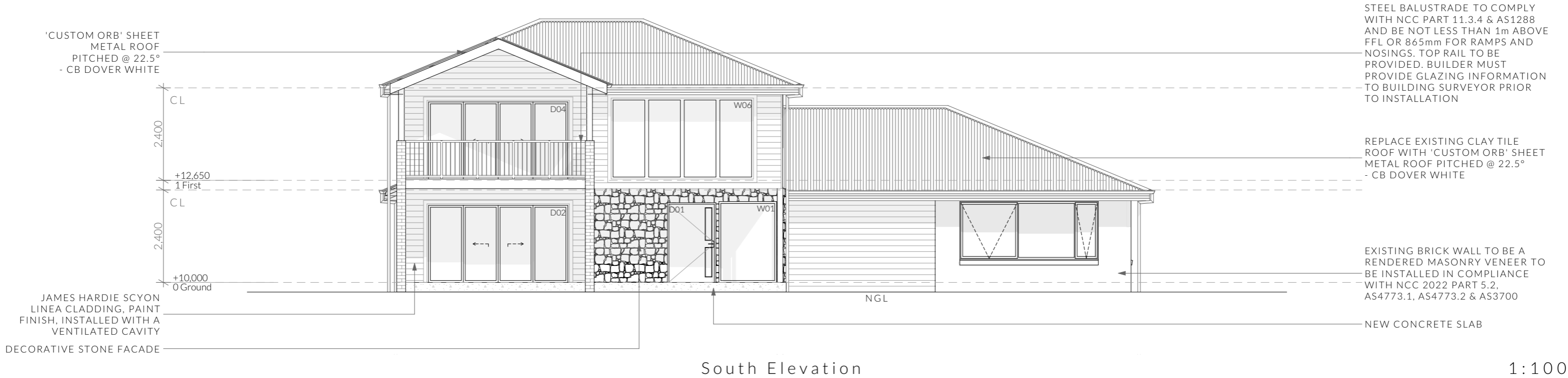
Date: 03/09/2025
 Drawn by: JD
 Job No: 020-2025
 Engineer: TBA
 Building Surveyor: TBA

Issue	Date	Designer

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South Elevation

1:100



West Elevation

1:100

NOTE
Clearances between cladding and ground shall comply with Clause 7.5.7 of the NCC 2022 and shall be a minimum clearance of:
100mm in low rainfall intensity areas or sandy, well-drained areas; or 50mm above impermeable areas that slope away from the building; or 150mm in any other case.

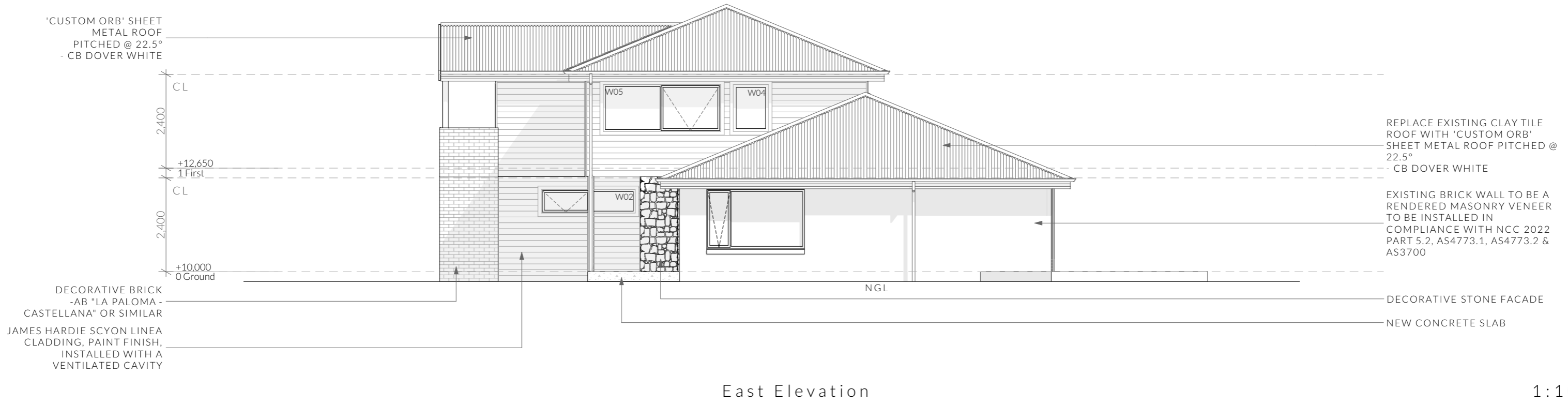
Wall cladding must extend a minimum of 50 mm below the bearer or lowest horizontal part of the suspended floor framing.
U.N.O in builders specifications or located in saline environments or if using a glazed finish brick, brickwork is to be installed in stretcher bond pattern with raked joints.

As per NCC parts 11.3.7 and 11.3.8,
Openable windows greater than 4m above ground level are to be fitted with a device to limit the opening or a suitable screen so a 125mm sphere cannot pass through, and withstand a force of 250N. Except for bedrooms, where the requirement is for heights above 2m.

All stairs to be constructed in accordance with NCC 2022 Vol II Part 11.2.2
Riser: Min 115mm - Max 190mm Going: Min 240mm - Max 355mm Slope (2R+G): Max 550 - Min 700

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<p>Document Set ID: 5738905 Version: 1, Version Date: 05/11/2025</p>													



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100mm in low rainfall intensity areas or sandy, well-drained areas; or 50mm above impermeable areas that slope away from the building; or 150mm in any other case.

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<p>Document Set ID: 5738905 Version: 1, Version Date: 05/11/2025</p>						<p>NOTE: Refer to cover page for further details on changes.</p>								

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Ventilation of roof spaces NCC 2022

Part 10.8.3

A roof must have a roof space that-

- (a) is located-
 - (i) immediately above the primary insulation layer; or
 - (ii) immediately above sarking with a vapour permeance of not less than 1.14 µg/N.s, which is immediately above the primary insulation layer; or
 - (iii) immediately above ceiling insulation; and
- (b) has a height of not less than 20 mm; and
- (c) is either-
 - (i) ventilated to outdoor air through evenly distributed openings in accordance with Table 10.8.3; or
 - (ii) located immediately underneath the roof tiles of an unsarked tiled roof.

Stormwater Notes

All gutters, downpipes and rain heads to be designed and installed in compliance with AS3500.3 & NCC 2022 Volume II Part 7.4.

Roofing Cladding

Roof cladding, flashings, cappings, roof sheeting and fixings are to be installed in accordance with NCC 2022 Volume II Part 7.2 for sheet roofing and Part 7.3 for tiled and shingle roofing.

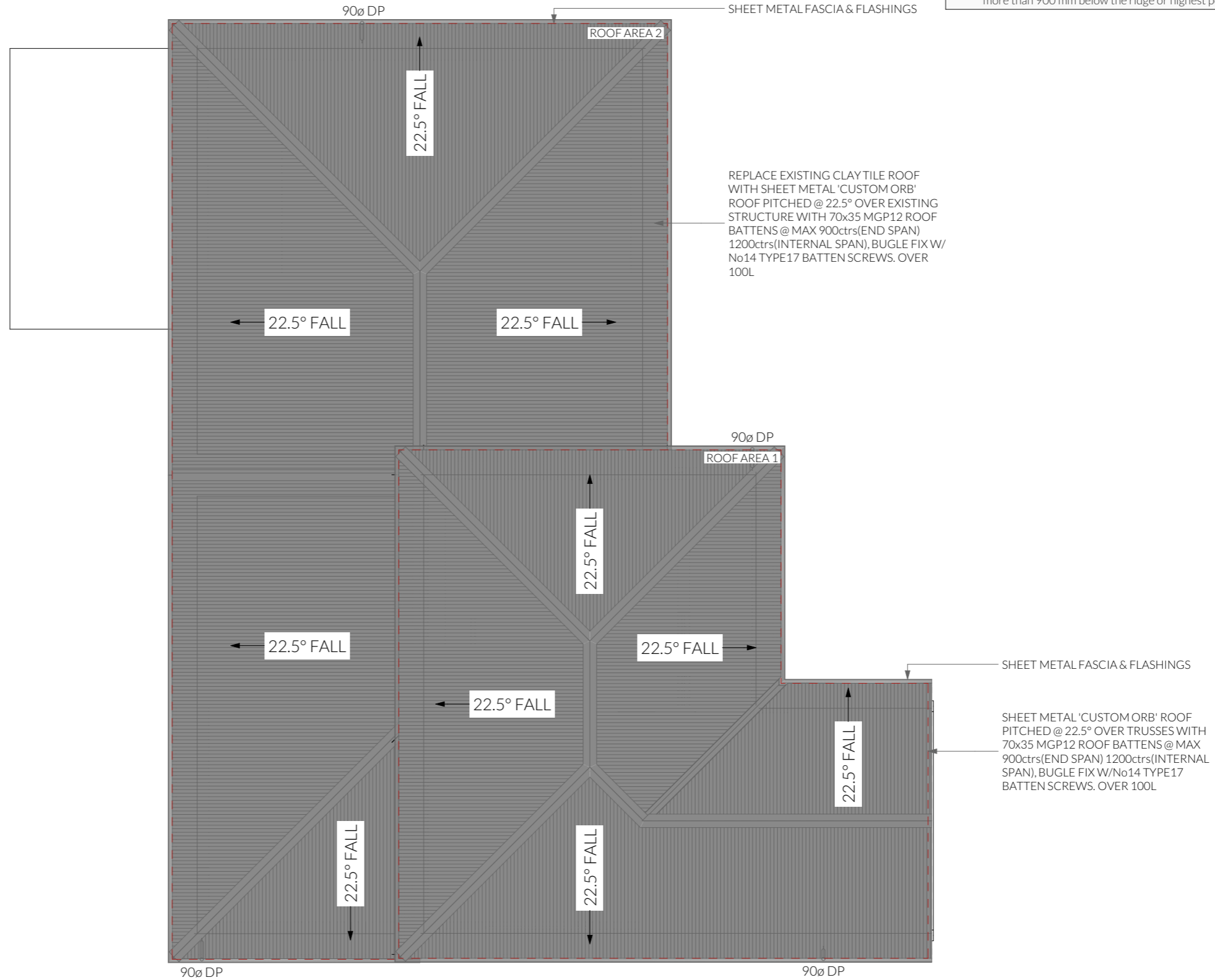
Eaves & Soffit Linings

To comply with NCC 2022 Vol II Part 7.5.5 and where provided, external fibre-cement sheets and linings used as eaves and soffit linings must-

- (a) comply with AS/NZS 2908.2 or ISO 8336; and
- (b) be fixed in accordance with Table 7.5.5 and Figure 7.5.5 using-
 - (i) 2.8 x 30 mm fibre-cement nails; or
 - (ii) No. 8 wafer head screws (for 4.5 mm and 6 mm sheets only); or
 - (iii) No. 8 self embedding head screws (for 6 mm sheets only).

Refer to table 7.5.5 for trimmer and fastener spacings.

ROOF PITCH	VENTILATION OF OPENINGS (TABLE 10.8.3)
>15° AND <75°	7,000 mm ² /m provided at the eaves and 5,000 mm ² /m at high level, plus an additional 18,000 mm ² /m at the eaves if the roof has a cathedral ceiling
(1) Ventilation openings are specified as a minimum free open area per metre length of the longest horizontal dimension of the roof. (2) For the purposes of this Table, high level openings are openings provided at the ridge or not more than 900 mm below the ridge or highest point of the roof space, measured vertically.	



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ELECTRICAL LEGEND - Lower Floor

Symbol	Description	Allowance	Quantity
	FAN - CEILING - EXHAUST		1
	GPO - (2) DOUBLE		8
	GPO - (2) DOUBLE (WITH COOKTOP ISOLATOR SWITCH)		2
	GPO - WEATHER PROOF DOUBLE		1
	LIGHT - CEILING - DOWNLIGHT RECESSED	10W	9
	LIGHT - CEILING - PENDANT - LED STRIP 1200L	20W (LM)	1
	LIGHT - WALL MOUNTED - TYPE 1	10W	3
	SERVICE - SMOKE ALARM		2
	SWITCH - LIGHT 1 GANG		2
	SWITCH - LIGHT 2 GANG		3
	SWITCH - WITH TIMER		1

Notes

U.N.O ceilings are to be plasterboard.

--> Dimmable Circuit

- - - - - Timer Circuit(as fan note)

PB - Plasterboard

CS - Cement Sheet Eaves

PW - Plywood Ceiling

TB - Timber Batten Ceiling

Smoke Alarms Part 9.5 of NCC 2022

- Smoke alarms must-
- (a) be located in-
 - (i) a Class 1a building in accordance with 9.5.2 and 9.5.4; and
 - (ii) a Class 1b building in accordance with 9.5.3 and 9.5.4; and
 - (b) comply with AS 3786, except that in a Class 10a private garage where the use of the area is likely to result in smoke alarms causing spurious signals, any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms complying with AS 3786 are installed elsewhere in the Class 1 building; and
 - (c) be powered from the consumer mains source where a consumer mains source is supplied to the building; and be interconnected where there is more than one alarm.

- In a Class 1a building, smoke alarms must be located in-
- (a) any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
 - (b) each other storey not containing bedrooms.

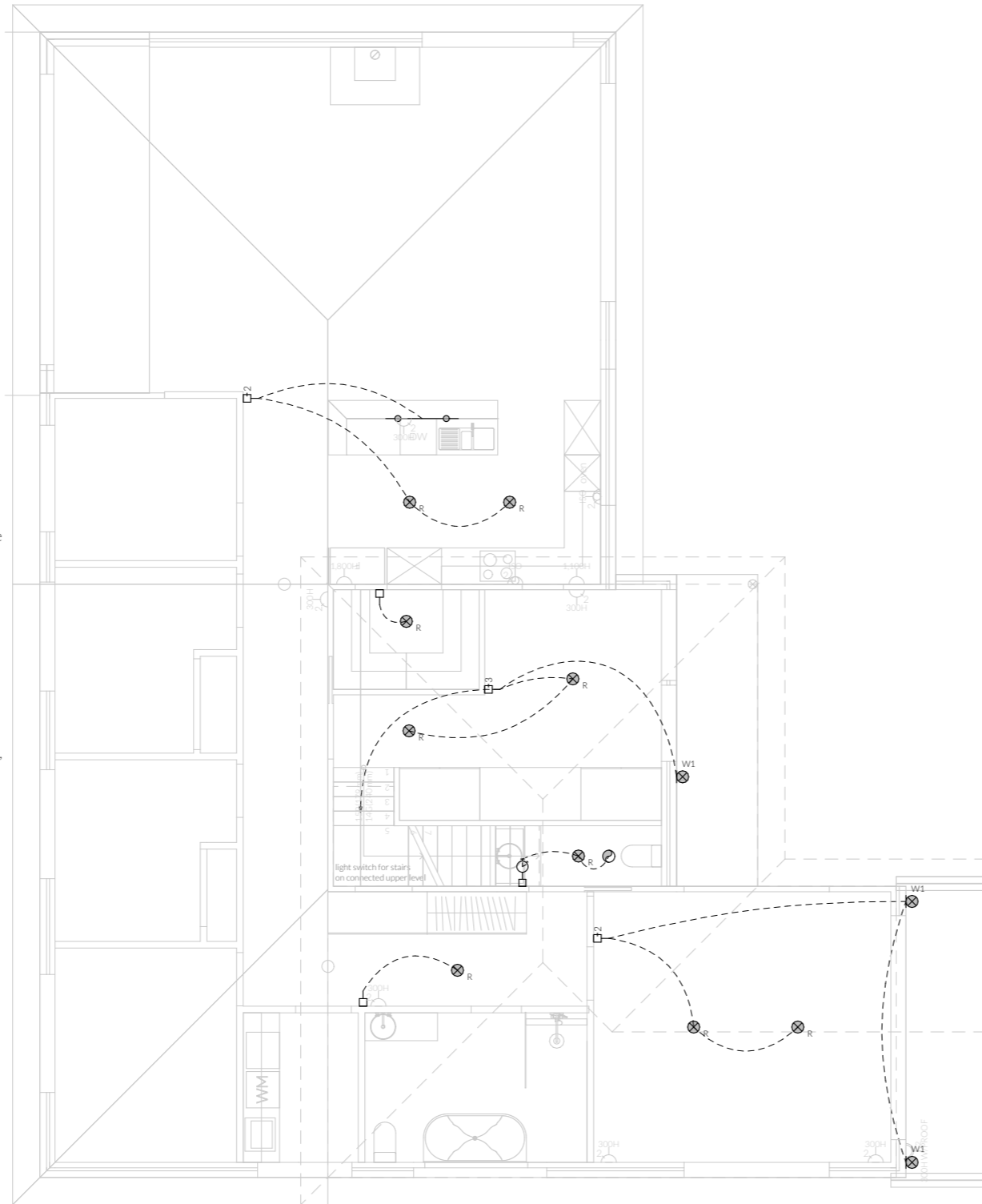
- Smoke alarms required by 9.5.2 and 9.5.3 must be installed on or near the ceiling, in accordance with the following:
- (a) Where a smoke alarm is located on the ceiling it must be-
 - (i) a minimum of 300 mm away from the corner junction of the wall and ceiling; and
 - (ii) between 500 mm and 1500 mm away from the high point and apexes of the ceiling, if the room has a sloping ceiling.
 - (b) Where (a) is not possible, the smoke alarm may be installed on the wall, and located a minimum of 300 mm and a maximum of 500 mm off the ceiling at the junction with the wall.

Note: Exhaust Fans

- Exhaust fans to comply with NCC 2022 Vol 2 Part 10.8.2 and have;
- An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of-
 - (a) 25 L/s for a bathroom or sanitary compartment; and
 - (b) 40 L/s for a kitchen or laundry.
 - Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air.
 - Where a venting clothes dryer is installed, it must discharge directly or via a shaft or duct to outdoor air.
 - An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with 10.6.2(a) must-
 - (a) be interlocked with the room's light switch; and
 - (b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.

Preparation for future Solar Installation:

Should the solar design be required for future installation, 2/25mm solarflex (or similar) conduits marked "solar" are to be installed from the meter box to the roof space



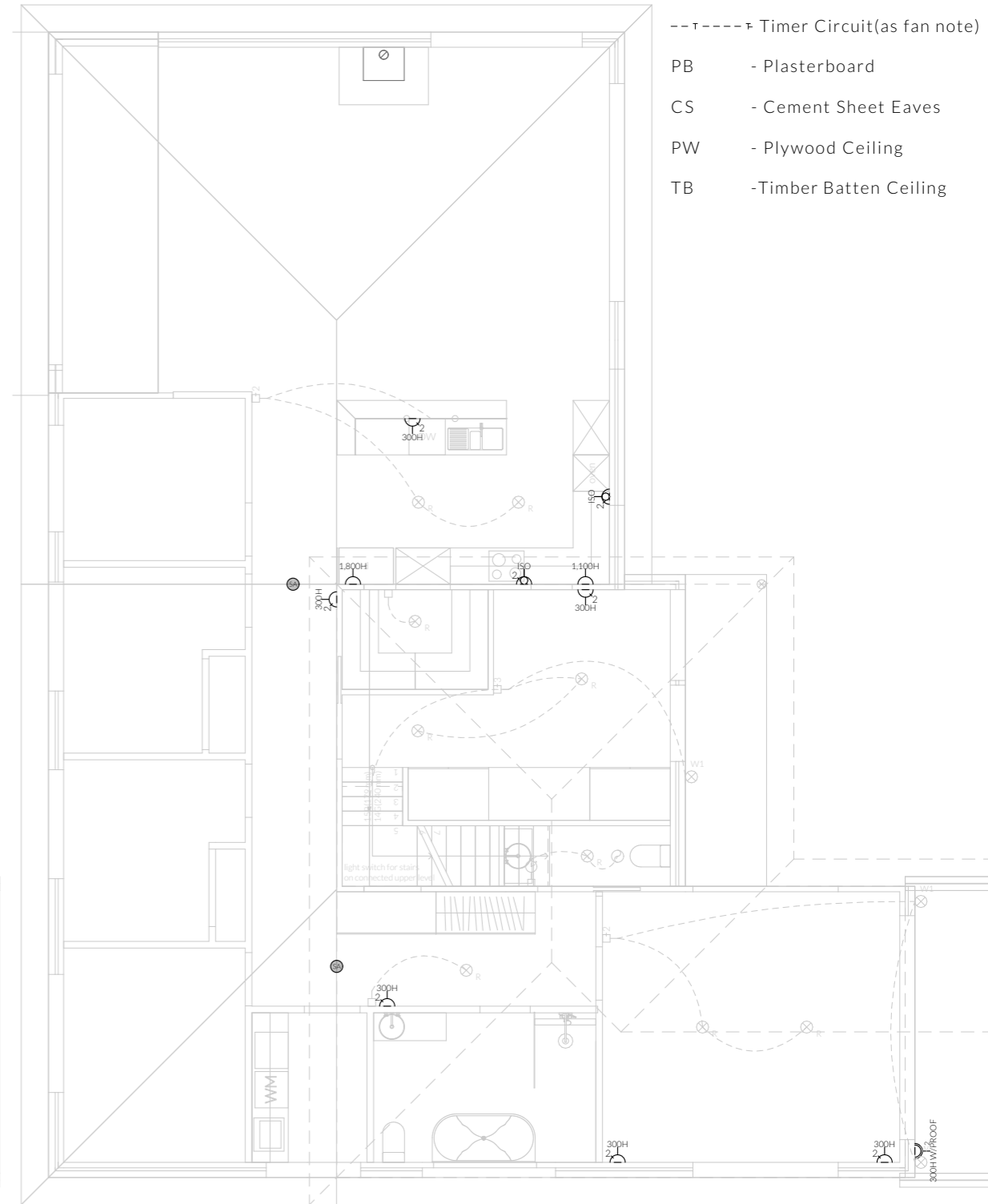
Electrical Plan - Lower - Light/Reflected Ceiling

Note: Lighting

Lighting layout may change, owner to confirm with builder prior to purchase/installation of exact quantity and location of electrical services provided that installation is compliant with AS3000 and artificial lighting allowances do not exceed:

- 5W/m² in class 1a dwellings
- 4W/m² to veranda, balcony or the like
- 3W/m² in a class 10a dwelling associated with the class 1a dwelling

U.N.O - All downlights are to be Insulation Contact (IC) rated.



Electrical Plan - Lower - Power

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Electrical Plan - Lower
 Scale: @A3
 Pg. No: A.10
 Revision: DA - 01
 Approved by: JD

Proposal: Alterations & Additions
 Client: Zach & Jade Rossiter
 Address: 3 Kirra Road, Lauderdale, 7170

Date: 03/09/2025
 Drawn by: JD
 Job No: 020-2025
 Engineer: TBA
 Building Surveyor: TBA

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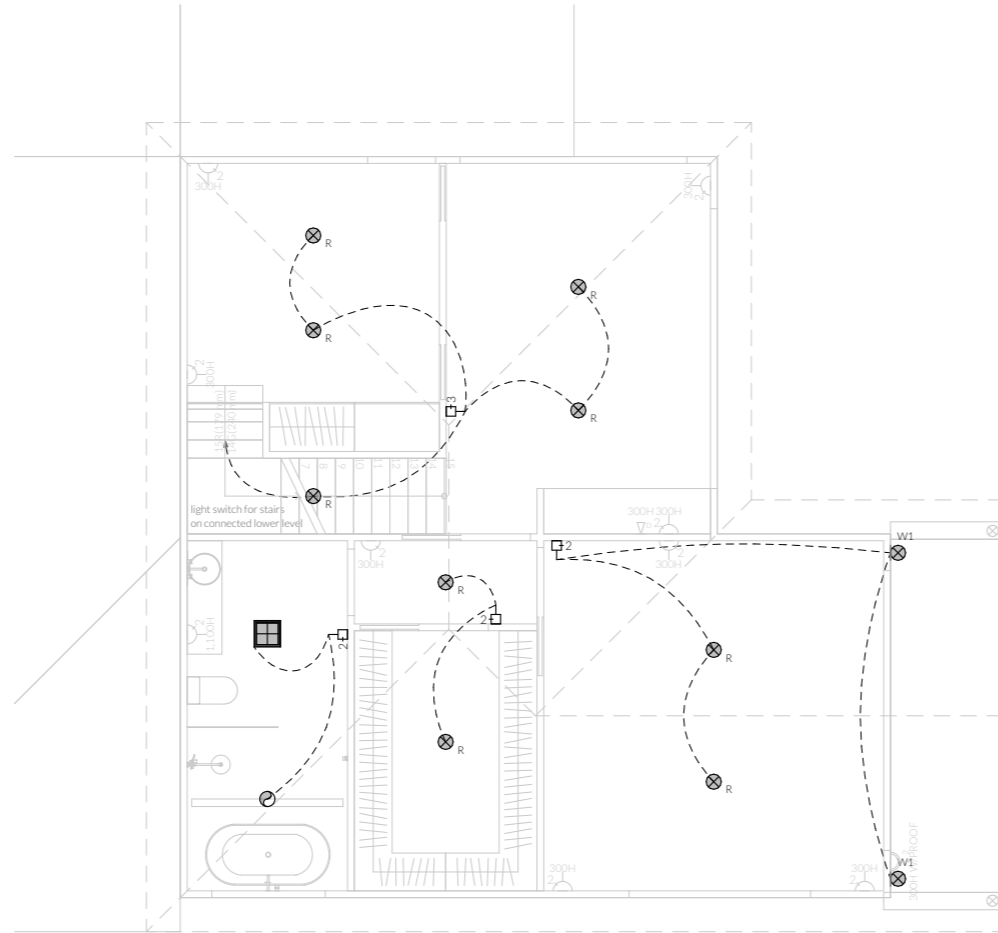
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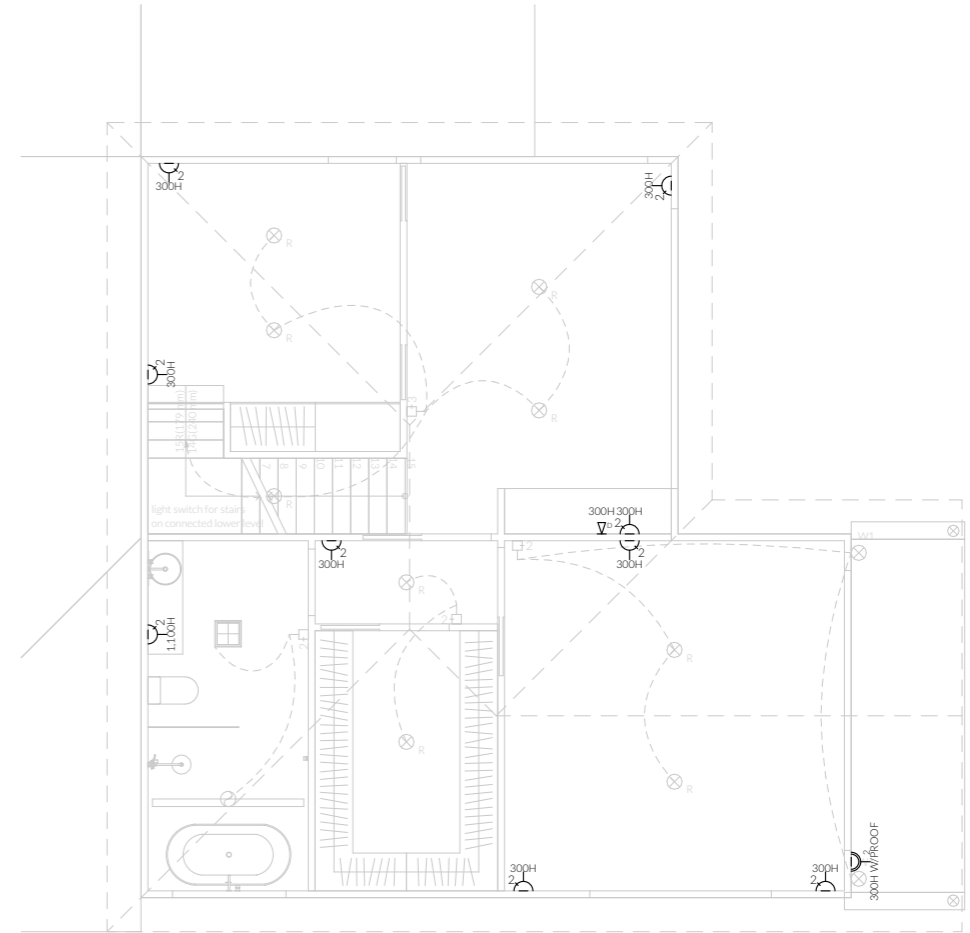
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ELECTRICAL LEGEND - Upper Floor

Symbol	Description	Allowance	Quantity
300H ▽	DATA- CAT 6 (RJ45) - 1 GANG		1
■	FAN - 3 IN 1 (4 LAMP)	10W (LIGHT)	1
⊙	FAN - CEILING - EXHAUST		1
300H 2	GPO - (2) DOUBLE		9
300H W/PROOF 2	GPO - WEATHER PROOF DOUBLE		1
⊗ _R	LIGHT - CEILING - DOWNLIGHT RECESSED	10W	9
⊗ _{W1}	LIGHT - WALL MOUNTED - TYPE 1	10W	2
2	SWITCH - LIGHT 1 GANG		1
3	SWITCH - LIGHT 2 GANG		3



Electrical Plan - Upper - Light/Reflected Ceiling



Electrical Plan - Upper - Power

Smoke Alarms Part 9.5 of NCC 2022

- Smoke alarms must-
- (a) be located in-
 - (i) a Class 1a building in accordance with 9.5.2 and 9.5.4; and
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 - An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with 10.6.2(a) must-
 - (a) be interlocked with the room's light switch; and
 - (b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.

Note: Lighting

- Lighting layout may change, owner to confirm with builder prior to purchase/installation of exact quantity and location of electrical services provided that installation is compliant with AS3000 and artificial lighting allowances do not exceed:
- 5W/m² in class 1a dwellings
 - 4W/m² to veranda, balcony or the like
 - 3W/m² in a class 10a dwelling associated with the class 1a dwelling

U.N.O - All downlights are to be Insulation Contact (IC) rated.

Preparation for future Solar Installation:

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Notes

- U.N.O ceilings are to be plasterboard.
- ▷---▷ Dimmable Circuit
- ┘---┘ Timer Circuit(as fan note)
- PB - Plasterboard
- CS - Cement Sheet Eaves
- PW - Plywood Ceiling
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Electrical Plan - Upper
 Scale: @A3
 Pg. No: A.11
 Revision: DA - 01
 Approved by: JD

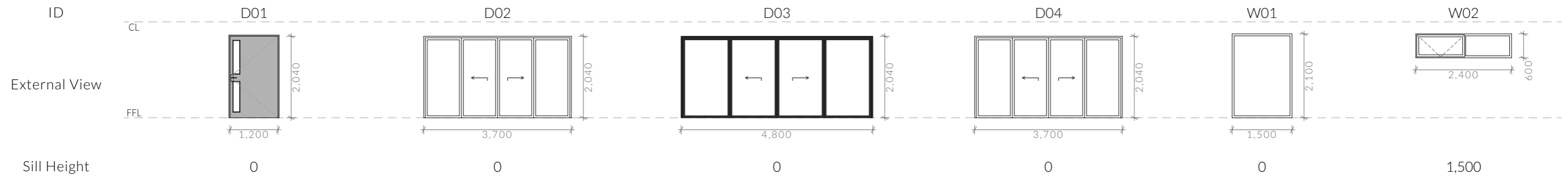
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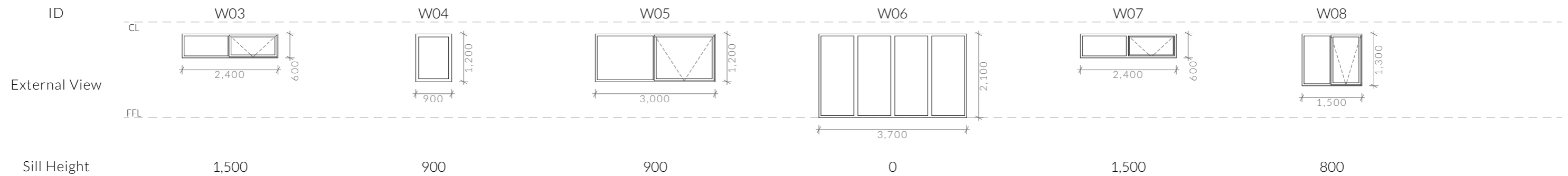
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Notes



Notes

Glazing

All glazing must comply with Section 8 of NCC Vol II 2022.

Windows must be installed in accordance with the following:

- (a) Structural building loads must not be transferred to the window assembly.
- (b) A minimum 10 mm gap must be provided between the top of the window assembly and any loadbearing framing or masonry wall element.
- (c) The requirements of (b) may be increased where necessary to allow for frame settlement over wide openings.
- (d) Packing, if provided between each window assembly and the frame, must be-
 - (i) located along each side and bottom; and
 - (ii) fixed to ensure the sides and bottom of the window assembly remain straight; and
 - (iii) clear of any flashing material.

If a door, side panel or panel is capable of being mistaken for a doorway or opening, the glass must be marked to make it readily visible with an opaque band not less than 20 mm in height located so that-

- (a) the upper edge is not less than 700 mm above the floor; and
- (b) the lower edge is not more than 1.2 m above the floor.

Refer to Part 8.4.7 for exemptions.

Glazing - 52mm Double Glazed (clear)

All windows & doors to be glazed with the minimum following values:

Window Type	U-Value	SHGC
Awning	4.1	0.57
Fixed	3.2	0.67

Values based on products from Clark Windows. Where Argon Gas is specified the U-Value is reduced by 0.1 across all products.

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GEO-ENVIRONMENTAL

S O L U T I O N S

COASTAL VULNERABILITY ASSESSMENT

PROJECT:

Alterations & Additions

Site Address:

3 Kirra Road,
Roches Beach
TAS
7021

CLIENT:

Lyden Builders

DATE:

18/10/2025

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EXECUTIVE SUMMARY

Geo-Environmental Solutions Pty Ltd (GES) were contracted by Lyden Builders to prepare a coastal vulnerability assessment for a proposed works at Roaches Beach, Tasmania. The project area consists of a single cadastral title (CT 20807/9) located at 3 Kirra Road, Roches Beach TAS 7020 (The Site).

An application to conduct construction works has triggered the assessment in accordance with the Tasmania Planning Scheme (TPS) – Clarence City Council and following of the Director’s Determination for Inundation areas which provides building requirements for building and demolition work in inundation hazard areas.

The proposed works are for development of the shed and alterations/additions to the existing dwelling within a medium coastal inundation overlay as per Tasmanian Planning Scheme – Clarence City Council.

GES has established from the risk assessment that the level of risk is a very low and acceptable within the lifetime of the proposed development works. Based on the coastal inundation assessment for Roches Beach, it is recommended that the finished floor levels (FFLs) for habitable areas be designed to a minimum of 3.0 m AHD to meet Clarence City Council requirements for coastal inundation areas. For non-habitable spaces, a minimum finished floor level of 2.7 m AHD is considered appropriate, providing sufficient resilience while maintaining practical design outcomes for the site.

The proposed development meets the requirements for works in the inundation hazard area and it fulfill the performance solution codes C11.6.1, as outlined in the Tasmanian Planning Scheme – Clarence City Council (2021).

1 INTRODUCTION

Geo-Environmental Solutions Pty Ltd (GES) were contracted by Lyden Builders to prepare a coastal vulnerability assessment for a proposed works at Roches Beach, Tasmania. The project area consists of a single cadastral title (CT 20807/9) located at 3 Kirra Road, Roches Beach TAS 7020 (The Site

An application to conduct construction works has triggered the assessment in accordance with the Tasmania Planning Scheme (TPS) – Clarence Council and following of the Director’s Determination for Inundation areas which provides building requirements for building and demolition work in inundation hazard areas.

GES have undertaken this assessment using available scientific literature and datasets. Estimations are determined by approximation with appropriate regional information applied where appropriate to site specific information. Data collection and site-specific modelling was undertaken in assessment of the site.

2 OBJECTIVES

The objective of the site investigation is to:

- Identify which codes need to be addressed in terms of coastal vulnerability and identify the performance criteria relevant to the project which need addressing;
- Conduct a literature review of all geological, geomorphologic, hydrodynamic information and any erosion or inundation assessments which are relevant to the site;
- Identify generalised site inundation potential;
- Review hydrodynamic assessments of the local area to determine projected sea level rise, storm tides and site-specific hydrodynamic conditions and where applicable,
- Conduct a site risk assessment for the proposed development ensuring relevant performance criteria are addressed; and
- Where applicable, provide recommendations on methods and design approach to reduce inundation and erosion impact.

3 SITE DETAILS

3.1 Project Area Land Title

The land studied in this report is defined by the following title reference:

- CT 20807/9

3.2 Project Area

The project area is located on Tasmania's Southeast Coast, approximately 20 km directly southeast from Hobart (Figure 1). The site is located at a rural residential locality of Roches Beach. The site is about 9 kilometres east of the town of Rosny Park. Roches Beach faces east and is sheltered from the southern swells and Tasmania's predominant south westerly winds. The southern section of the beach faces northeast wind. The southern beach section is very protected and usually received low waves, 0.5m high. Rips are known to occasionally occur with surf and increase in strength when waves exceed 1m.

3.2.1 Proposed Works

The project area covers approximately 2,622 square metres and is currently occupied by a residential dwelling and an existing shed located on the southern portion of the site. The proposed development involves constructing a new shed, with access provided from the northern side of the site via Kirra Road. In addition, alterations and additions are proposed to the existing dwelling, including an alfresco area, deck, patio, and upper patio. The total proposed works area is 43.92 m².

Elevations across the site vary, with the southwest area around 2-3m AHD (Australian Height Datum). The contours for the site were exported from Clarence 2019 Lidar data using Qgis software. Plans for the proposed works have been provided to GES from the Pinnacle (Project Code: 020 - 2025, Dated: 16/04/2025). The plans are presented in Figure 2.



Figure 1 - Location of the site



Figure 2 - Site Plans

4 PLANNING

4.1 Australian Building Code Board

This report presents a summary of the overall building construction risk to coastal erosion and inundation processes. This assessment has been conducted a 'normal' building design life category based on a 2023 baseline (ABCB 2015).

'The design life of buildings should be taken as 'Normal' for all building importance categories unless otherwise stated.'

As per Table 3-1, the following sub systems are identified for the proposed development:

- Building foundations subsystems are considered not accessible or economical to repair and therefore are to be designed with a 50-year life till 2073; and
- Wastewater subsystems are considered to have moderate ease of access but difficult or costly to replace or repair and are therefore to be designed with a 15-year life till 2038.

Table 3-1 Design life of building and plumbing installations and their components

Building Design Life Category	Building Design Life (years)	Design life for components or sub systems readily accessible and economical to replace or repair (years)	Design life for components or sub systems with moderate ease of access but difficult or costly to replace or repair (years)	Design life for components or sub systems not accessible or not economical to replace or repair (years)
Short	1 < dl < 15	5 or dl (if dl<5)	dl	dl
Normal	50	5	15	50
Long	100 or more	10	25	100

Note: Design Life (dl) in years

4.2 The Tasmanian Building Regulations 2016

The Tasmanian Building Regulations are regulated by the Consumer, Building and Occupation Services (CBOS) department and are formed from the Tasmanian Building Act 2016. New state-wide planning and building requirements are being implemented for hazardous areas. These include areas potentially subject to landslip, bushfire, flooding, coastal erosion, & costal inundation. Details of the Tasmanian Building Regulations are presented in Appendix 1.

4.3 Tasmanian Planning Scheme Overlay – Clarence Council (TPS, 2021)

4.3.1 Coastal Inundation Hazard Code Overlay (CIHC)

The proposed works are located within the Medium Coastal Inundation Overlay (CIHC) Figure 3.



Figure 3 - Coastal Inundation Hazard Overlay (Source: The List)

4.4 Development & Works Acceptable Solutions

Where applicable, the need for further performance criteria compliance is outlined in Appendix 1.

4.4.1 Coastal Inundation Hazard Areas Code (CIHC)

C11.6.1.P1 Buildings and works.

The proposed development fall within the CIHC overlay and there are no acceptable solutions for buildings and works in a CIHC Area.

The following performance criteria need to be addressed:

- **C11.6.1 P1.1 and P1.2**

*As per Tasmanian Planning Scheme – Clarence Council requirements for the minimum level of the habitable rooms finished floor for the site in Seven Mile Beach the 1% AEP flood level for 2100 is defined at **3.0 m AHD** for Roches Beach – Mays Beach.*

5 COASTAL INUNDATION HAZARD ASSESSMENT

As identified in the directors Determination and regulation 56(3) of the Building Regulations 2016, the defined flood level is the level above the 0 metre Australian Height Datum with a one percent probability of being exceeded in a storm surge flooding event in the year 2100, as specified in the Coastal Inundation Hazard Band Levels List for the relevant locality in the relevant Local Provisions Schedule of the Tasmanian Planning Scheme.

5.1 Storm Tide

Storm tide events may be defined in terms of the culmination of astronomical tide and storm surge events. Maximum storm tide inundation levels have been adopted for the site based on a 1% AEP that an inundation event will occur. GES obtained data for storm tide levels from Canute 3.0. taking in account greenhouse gas emission scenario - very high RCP 8.5, Climate Model Ensemble Percentile Upper (95th), IPCC Version AR6 (Baseline 1995 -2014). (Source: Canute 3.0).

- *The storm tide level adopted for the site is 1.26 m AHD.*

5.2 Sea Level Rise

Storm tide events may be defined in terms of the culmination of astronomical tide and storm surge events. Maximum storm tide inundation levels have been adopted for the site based on a 1% AEP that an inundation

event will occur. The TPS - Clarence Council SLR adopted 0.8m rise by 2100. However, the GES has adopted the most recently published following sea level rise estimates-based Canute 3.0, IPCC AR6 projections (very high RCP8.5 climate scenario):

- *1.01m rise by 2100.*

5.1 Stillwater Levels

The effects of storm tide may be combined with sea levels projections to provide baseline water levels (reported in m AHD) which are referred to as still water level. The still-water levels adopted for the site is based on 1% AEP estimates Table 1.

Table 1 Summary of Site Stillwater Levels for 2100 estimates (1% AEP)

Stillwater Elevations	2100 (Canute 3.0)
Sea Level Rise (m, AHD)	1.01
Tidal Influence & Barometric Low Influence (m)	1.26
Summary (m, AHD)	2.27

6 RISK ASSESSMENT

The qualitative risk assessment criteria have been developed to identify key risks that may arise from building works in areas that are vulnerable to inundation hazard. The risk assessment based on year 2100, 1.01m AHD high SLR scenario. Given the current data set and uncertainty over long term responses (more than 77 years) to climate change the calculated long term future risk must be viewed with caution, and adjustments to the risk assessment will need to be made over time. Future data and modelling may calculate a low or higher risk, and it is important to understand that the risk estimations in this report are based upon worst case scenario sea level rise from the current data sets.

The criteria are based on a risk assessment matrix consistent with Australian Standard AS4360 on Risk Management (AS4360). The qualitative assessment of risk severity and likelihood were used to help provide a qualitative risk assessment based upon the coastal vulnerability assessment completed for the site.

A detailed risk assessment addressing the performance criteria is presented in Appendix 4. GES has established from the risk assessment that the level of risk is low and acceptable within the lifetime of the proposed development works.

7 CONCLUSIONS AND RECOMMENDATIONS.

GES has conducted a site assessment to evaluate the potential risks of sea level rise associated with the proposed construction. Based on the 2100 high emissions scenario (1% Annual Exceedance Probability), stillwater levels could rise to 2.27 metres above the Australian Height Datum (AHD).

Based on the coastal inundation assessment for Roches Beach, it is recommended that the finished floor levels (FFLs) for habitable areas be designed to a minimum of 3.0 m AHD to meet Clarence City Council requirements for coastal inundation areas. For non-habitable spaces, a minimum finished floor level of 2.7 m AHD is considered appropriate, providing sufficient resilience while maintaining practical design outcomes for the site.

LIMITATIONS STATEMENT

The following limitations apply to this report:

- Climate Futures Light Detection and Ranging (LIDAR) digital elevation model is used for the site modelling;
- The values estimated in this report provide an order of magnitude for assessing climate change impacts and in particular climate change induced sea level rise impacts. The information is based on a collation of existing information and data, with some site-specific modelling for planning purposes.

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APPENDIX 1 – ACCEPTABLE SOLUTIONS

Coastal Inundation Hazard Code (CIHC) Areas

C11.6.1 Buildings and works, excluding coastal protection works, within a coastal inundation hazard area	
Objective:	
That:	
(a) building and works, excluding coastal protection works, within a coastal inundation hazard area, can achieve and maintain a tolerable risk from coastal inundation; and	
(b) buildings and works do not increase the risk from coastal inundation to adjacent land and public infrastructure.	
Acceptable Solutions	Performance Criteria
A1	P1.1
No Acceptable Solution.	Buildings and works, excluding coastal protection works, within a coastal inundation hazard area must have a tolerable risk, having regard to:
	(a) whether any increase in the level of risk from coastal inundation requires any specific hazard reduction or protection measures;
	(b) any advice from a State authority, regulated entity or a council; and
	(c) the advice contained in a coastal inundation hazard report.
	P1.2
	A coastal inundation hazard report also demonstrates that the building or works:
	(a) do not cause or contribute to coastal inundation on the site, on adjacent land or public infrastructure; and
	(b) can achieve and maintain a tolerable risk from a 1% annual exceedance probability coastal inundation event in 2100 for the intended life of the use without requiring any specific coastal inundation protection works.

APPENDIX 2 – DIRECTORS DETERMINATION & BUILDING REGULATIONS 2016 COASTAL INUNDATION HAZARD REPORTING

Works in a Coastal Inundation Hazard Area

According to this director's determination, the following regulations are applicable for the works in a coastal inundation hazard area:

- (1) For the purposes of this Determination and regulation 56(3) of the Building Regulations 2016, the defined flood level is the level above the 0 metre Australian Height Datum with a one percent probability of being exceeded in a storm surge flooding event in the year 2100, as specified in the Coastal Inundation Hazard Band Levels List for the relevant locality in the relevant Local Provisions Schedule of the Tasmanian Planning Scheme.
- (2) Where land is not located in a specified locality, the defined flood level for the relevant municipal area average applies.
- (3) A coastal inundation hazard report must be prepared.
- (4) The design of the building footing system must be prepared by an engineer-civil.
- (5) The building design (including the footing system) must take into account the coastal inundation hazard report.
- (6) In determining an application for a Certificate of Likely Compliance, the building surveyor must:
 - (a) take into account the coastal inundation hazard report and any relevant coastal inundation management plan; and
 - (b) be satisfied that the proposed work will not cause or contribute to coastal inundation on the site, on adjacent land or of public infrastructure; and
 - (c) be satisfied that the proposed work can achieve and maintain a tolerable risk for the intended life of the building without requiring any specific coastal inundation protection measures.
- (7) In determining an application for a permit, the permit authority must take into account the coastal inundation hazard report and any relevant coastal inundation management plan.

Report Determination Criteria	Coastal Inundation Hazard Report Compliance Checklist	Compliance	Specific Comments
4. (1)	Report is prepared by a specified practitioner being a practitioner with relevant qualifications, experience and competence in the preparation of coastal inundation hazard reports	Yes	Up to date models, literature and methods are used in this assessment, which draw on regional and site-specific information to determine present day and forward projected site hazards.
4. (1) (a)	Signed Declaration	Yes	
4. (1) (b)	Conclusions based on consideration of the proposed work as to:	Yes	
4. (1) (b) (i)	whether the work is likely to cause or contribute to coastal inundation on the land or on adjacent land or of public infrastructure;	Yes	
4. (1) (b) (iii)	whether the work can achieve and maintain a tolerable risk for the intended life of the building having regard to:	Yes	Modelling has been conducted with measures put in place to ensure that by the end of the building's lifetime, the risks are tolerable in line with the sites typical residential use and typical intensity of this use. This assessment is based on the intended use as outlined in the development application. All potential and site-specific inundation factors are considered to assess tolerable risks which include: <ul style="list-style-type: none"> • Government sea level projections which are calibrated to the Local Government Authority area and scaled to the building design life (DPAC 2016), • Storm tide projections (combined 1% AEP storm surge and tides) which are calculated on a local scale (0.5 km accuracy)
	<ul style="list-style-type: none"> • the nature, intensity and duration of the use; 	Yes	The risk assessment herein is based on the highest intensity of use. The full inundation extent is based on a 1% AEP event occurring at the end of the buildings design life.
	<ul style="list-style-type: none"> • the type, form and duration of any development; 	Yes	This assessment is based on the specific plans as outlined in the development application, with the duration based on the building design life as defined herein.
	<ul style="list-style-type: none"> • the likely change in the risk across the intended life of the building; 	Yes	As indicated in 4. (1) (b) (iii), consideration is given to risk in the most adverse of modelled consecutive 1% AEP storm conditions for the projected end life of the building. Where deemed necessary, a 0.3 m freeboard 'buffer' is to be applied to design 1% AEP stillwater level for the building end of life.

	<ul style="list-style-type: none"> the ability to adapt to a change in the risk; 	Yes	Engineering solutions may be applied if it is so desired to reduce the risk through hazard reduction. Increased risk may occur as a result of increased user vulnerability beyond what is modelled as a tolerable risk in this assessment. Eg. Changed site layout meaning reduced access during a floodwater event. Hazard reduction may include onsite wave attenuation structures such as wave breaker walls and/or revetments.
	<ul style="list-style-type: none"> the ability to maintain access to utilities and services; 	Yes	
	<ul style="list-style-type: none"> the need for specific coastal inundation hazard reduction or protection measures on the site; 	Yes	Coastal inundation hazard reduction or protection measures are not recommended on the site based on the projected lifetime of the proposed development.
	<ul style="list-style-type: none"> the need for coastal inundation hazard reduction or protection measures beyond the boundary of the site; 	NA	Coastal inundation hazard reduction or protection measures are not recommended beyond the boundary of the site based on the projected lifetime of the proposed development.
	<ul style="list-style-type: none"> any coastal inundation management plan in place for the site and/or adjacent land. 	NA	
4. (2)	protection measures for any hazardous chemical used, handled, generated or stored on the site, taking into consideration the potential risks of the hazardous chemical to human health and safety as a consequence of coastal erosion on the site or adjacent land.	Yes	GES are not aware of any proposal for hazardous chemicals to be used, handled, generated or stored on the site. It is recommended that if such chemicals are to be stored within the proposed extension, they are elevated above the designated inundation level.
4. (4)	The declaration format for a coastal inundation hazard report must contain:		
4. (4) (a)	details of, and be signed by, the person who prepared or verified the report;	Yes	

4. (4) (b)	confirmation they have the appropriate qualifications, expertise and level of current indemnity insurance;	Yes	
4. (4) (c)	confirmation that the report has been prepared in accordance with the specified methodology.	Yes	

APPENDIX 3 QUANTITATIVE RISK ASSESSMENT TABLES

Consequence Index

Consequence	Details - Storm Erosion and Inundation	Details – Waterways and Coastal Protection
Catastrophic	Loss of life, loss of significant environmental values due to a pollution event where there is not likely to be recovery in the foreseeable future.	Very serious environmental effects with impairment of ecosystem function. Long term, widespread effects on significant environment (eg. RAMSAR Wetland)
Major	Extensive injuries. Complete structural failure of development, destruction of significant property and infrastructure, significant environmental damage requiring remediation with a long-term recovery time.	Serious environmental impact effects with some impairment of ecosystem function. Relatively widespread medium-long term impacts.
Moderate	Treatment required, significant building or infrastructure damage i.e. loss of minor outbuildings such as car ports, garages and the like. Replacement of significant property components. linings, hard paved surfaces, cladding, flooring. Moderate environmental damage with a short-term natural or remedial recovery time.	Moderate effects on biological or physical environment (air, water) but not affecting ecosystem function. Moderate short term widespread impacts (e.g. significant spills)
Minor	Medium loss – repair of outbuildings and repair and minor replacement of building components of buildings. Replacement of floor/window coverings, some furniture through seepage (where applicable). Minor environmental damage easily remediated.	Minor effects on biological or physical environment. Minor short-term damage to small area of limited significance.
Insignificant	No injury, low loss – no replacement of habitable building components, some remediation of garden beds, gravel driveways etc. Environment can naturally withstand and recover without remediation. Inundation of the site, but ground based access is still readily available and habitable buildings are not inundated, including incorporated garages.	Limited damage to minimal area of low significance.

Likelihood Index

Level	Descriptor	Description	Guideline
A	Almost Certain	Consequence is expected to occur in most circumstances.	Occurs more than once per month.
B	Likely	Consequence will probably occur in most circumstances.	Occurs once every 1 month – 1 year.
C	Occasionally	Consequence should occur at some time.	Occurs once every 1 year - 10 years.
D	Unlikely	Consequence could occur at some time.	Occurs once every 10 years – 100 years.
E	Rare	Consequence may only occur in exceptional circumstances.	Occurs less than once every 100 years.

Source: AS/NZS 4360:2004 Risk Management

Qualitative Risk Matrix

Likelihood of the Consequence	Maximum Reasonable Consequence				
	(1) Insignificant	(2) Minor	(3) Moderate	(4) Major	(5) Catastrophic
(A) Almost certain	11 High	16 High	20 Extreme	23 Extreme	25 Extreme
(B) Likely	7 Moderate	12 High	17 High	21 Extreme	24 Extreme
(C) Occasionally	4 Low	8 Moderate	13 High	18 Extreme	22 Extreme
(D) Unlikely	2 Low	5 Low	9 Moderate	14 High	19 Extreme
(E) Rare	1 Low	3 Low	6 Moderate	10 High	15 High

Source: AS/NZS 4360:2004 Risk Management

APPENDIX 4 QUANTATIVE RISK ASSESSMENT

BUILDING AND WORKS WITHIN A COASTAL INUNDATION HAZARD

Performance Criteria C11.6.1 P1.1 Buildings and works, excluding coastal protection works, within a coastal inundation hazard area must have a tolerable risk, having regard to:	Relevance	Management Options	Preliminary Risk Assessment (where relevant)			Further Assessment Required
			Consequence	Likelihood	Risk	
a) whether any increase in the level of risk from coastal inundation requires any specific hazard reduction or protection measures;	Proposed development will not impose any additional risk.		Minor (2)	Unlikely (D)	Low (5)	No
b) any advice from a State authority, regulated entity or a council; and	N/A		Minor (2)	Unlikely (D)	Low (5)	No
c) the advice contained in a coastal inundation hazard report.	Refer to recommendations		Insignificant (1)	Rare (E)	Low (1)	No