

## PLANNING NOTICE

An application has been received for a Permit under s.57 of the *Land Use Planning Approvals Act 1993*:

<b>APP NO.:</b>	PA\26\0254
<b>APPLICANT:</b>	P Skipper
<b>SITE:</b>	1315 Osmaston Road, Deloraine (CT: 185309/4)
<b>PROPOSAL:</b>	Single dwelling, Residential outbuilding (shed) & 3 rainwater tanks - setback, attenuation area, driveway, parking areas.

The application can be inspected until **Monday, 25 May 2026**, at [www.meander.tas.gov.au](http://www.meander.tas.gov.au) or at the Council Office, 26 Lyall Street, Westbury (during normal office hours).

Written representations may be made during this time addressed to the General Manager, PO Box 102, Westbury 7303, or by email to [planning@mvc.tas.gov.au](mailto:planning@mvc.tas.gov.au). Please include a contact phone number. Please note any representations lodged will be available for public viewing.

If you have any questions about this application please do not hesitate to contact Council's Planning Department on 6393 5320.

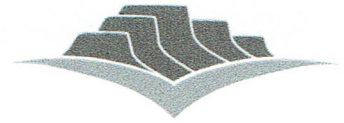
Notified on 9 May 2026.

Jonathan Harmey  
**GENERAL MANAGER**

# APPLICATION FORM

## PLANNING PERMIT

### Land Use Planning and Approvals Act 1993



Meander Valley Council  
Working Together

- Application form & details MUST be completed **IN FULL**.
- Incomplete forms will not be accepted and may delay processing and issue of any Permits.

#### OFFICE USE ONLY

Property No:	<input type="text"/>	Assessment No:	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
DA\	<input type="text"/>	PA\	<input type="text"/>	PC\	<input type="text"/>		

- Is your application the result of an illegal building work?  Yes  No Indicate by ✓ box
- Have you already received a Planning Review for this proposal?  Yes  No
- Is a new vehicle access or crossover required?  Yes  No

#### PROPERTY DETAILS:

Address:	<input type="text" value="1315 Osmaston RD"/>	Certificate of Title:	<input type="text" value="221147/1"/>
Suburb:	<input type="text" value="Deloraine"/> <input type="text" value="7304"/>	Lot No:	<input type="text" value="4"/>
Land area:	<input type="text" value="1.262 ha."/>		m <sup>2</sup> / ha
Present use of land/building:	<input type="text" value="vacant"/>		<input checked="" type="checkbox"/> vacant, <input type="checkbox"/> residential, <input type="checkbox"/> rural, <input type="checkbox"/> industrial, <input type="checkbox"/> commercial or forestry)

- Does the application involve Crown Land or Private access via a Crown Access Licence:  Yes  No
- Heritage Listed Property:  Yes  No

#### DETAILS OF USE OR DEVELOPMENT:

Indicate by ✓ box	<input checked="" type="checkbox"/> Building work	<input type="checkbox"/> Change of use	<input type="checkbox"/> Subdivision	<input type="checkbox"/> Demolition
	<input type="checkbox"/> Forestry	<input type="checkbox"/> Other		
Total cost of development (inclusive of GST):	<input type="text" value="\$ 650,000"/>	Includes total cost of building work, landscaping, road works and infrastructure		
Description of work:	<input type="text" value="New home construction / New kit Shed construction"/>			
Use of building:	<input type="text" value="Dwelling"/>	(main use of proposed building – dwelling, garage, farm building, factory, office, shop)		
New floor area:	<input type="text" value="200"/> m <sup>2</sup>	New building height:	<input type="text" value="4.765"/> m	
Materials:	External walls: <input type="text" value="Light weight cladding"/>	Colour:	<input type="text" value="off white"/>	
	Roof cladding: <input type="text" value="Custom orb"/>	Colour:	<input type="text" value="Zinc"/>	

SEARCH OF TORRENS TITLE

VOLUME 185309	FOLIO 4
EDITION 2	DATE OF ISSUE 22-May-2025

SEARCH DATE : 30-May-2025  
SEARCH TIME : 01.01 PM

DESCRIPTION OF LAND

Parish of CALSTOCK Land District of WESTMORLAND  
Lot 4 on Sealed Plan 185309  
Derivation : Part of Lot 3370, 100A-1R-0P Gtd. to J. Field  
Prior CT 221147/1

SCHEDULE 1

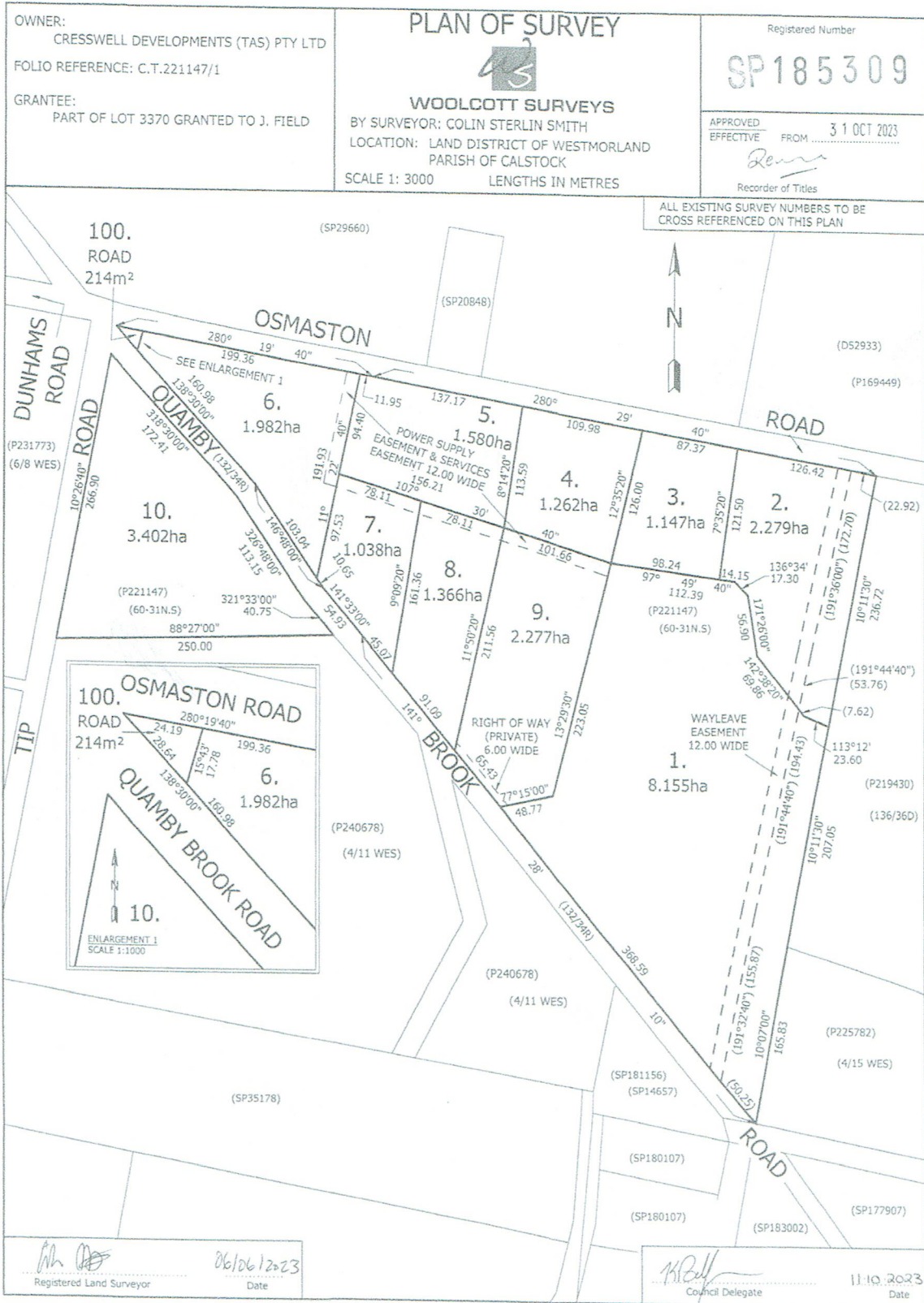
N249443 TRANSFER to PHILLIP JOHN SKIPPER and SONYA MICHELLE  
SKIPPER Registered 22-May-2025 at noon

SCHEDULE 2

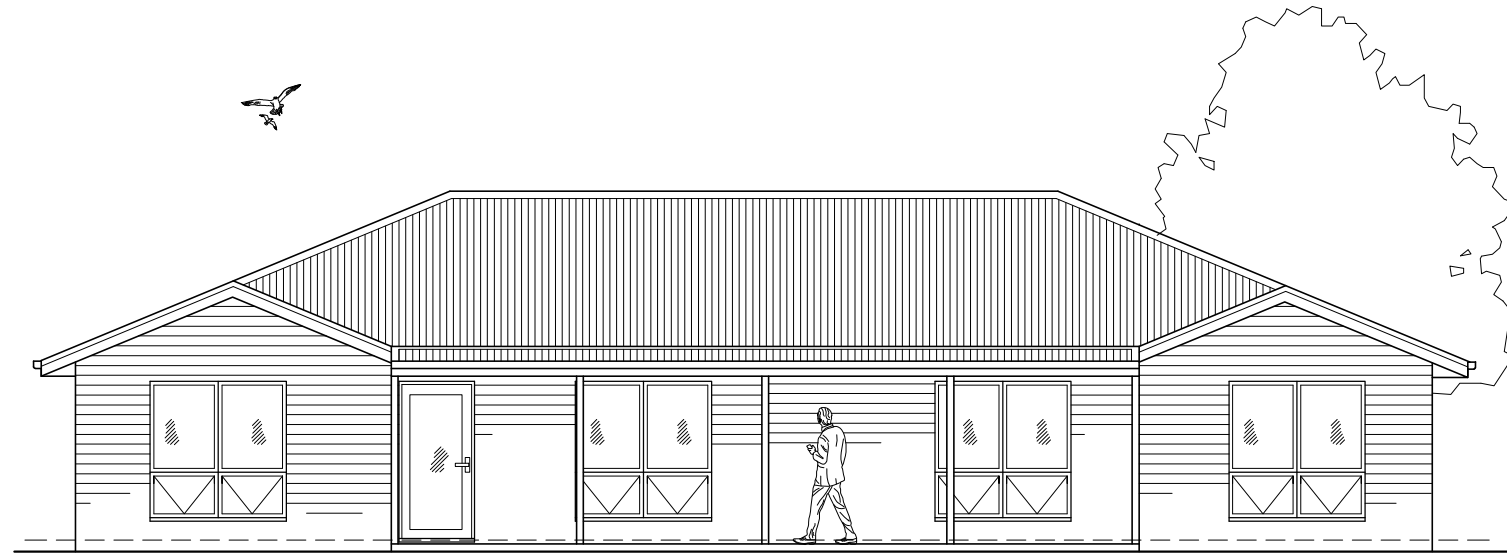
Reservations and conditions in the Crown Grant if any  
SP185309 EASEMENTS in Schedule of Easements  
SP185309 FENCING PROVISION in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



- THIS PLAN HAS BEEN DRAWN BY THIS DESIGNER TO COMPLY WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC Vol.2) AND ALL REQUIREMENTS OF LOCAL AUTHORITIES.
- USE ONLY FIGURED DIMENSIONS. DO NOT SCALE.
- NO WORK SHOULD COMMENCE UNTIL LOCAL AUTHORITIES HAVE APPROVED THE BUILDING APPLICATION. THE DESIGNER DOES NOT ACCEPT ANY RESPONSIBILITY FOR MISCONSTRUCTION OR INTERPRETATION. ALL WORK SHOULD BE IN CONJUNCTION WITH ANY STRUCTURAL ENGINEERS CERTIFICATES.
- CONTRACTORS SHOULD ENSURE ALL WORK IS CLEAR OF EXISTING SERVICES WHETHER SHOWN ON DRAWINGS OR NOT. SERVICES SHOULD BE LOCATED IN CONJUNCTION WITH RELEVANT AUTHORITIES.



**DRAWING SCHEDULE**

- A01 - COVER PAGE
- A02 - SITE / SERVICES PLAN
- A03 - FLOOR PLAN
- A04 - ELEVATIONS
- A05 - SECTION
- A06 - SLAB LAYOUT
- A07 - WINDOW/ DOOR SCHEDULE
- A08 - ROOF PLAN
- A09 - ROOF FRAMING PLAN
- A10 - REFLECTED CEILING PLAN
- A11 - PLUMBING/ DRAINAGE PLAN
- A12 - WET AREA DETAILS 1
- A13 - WET AREA DETAILS 2

**ATTACHMENTS**

- ENERGY RATING ASSESSMENT
- ENGINEERS DRAWINGS AND SPECIFICATIONS
- SOIL REPORT

**P & S SKIPPER**  
**PROPOSED NEW RESIDENCE**  
**1315 (Lot 4) OSMASTON ROAD**  
**DELORAIN 7304**

Job Number: 26SKI1  
 Issue : **A2** – For All Approval and Tenders  
 Meander Valley Council

**Site Information**

Land Title Reference:	<b>185309/4</b>	Certificate folio and volume
Property ID:	<b>9025090</b>	
Wind Classification:	<b>N2</b>	Attached Site Classification to AS 4055–2021
Soil Classification:	<b>H1</b>	Attached Site Classification to AS 2870–2011
Climate Zone:	<b>7</b>	www.abcb.gov.au map
BAL Level	<b>19</b>	Assessment to AS 3959. See relevant construction notes in these drawings and outlined in attached BAL/ Hazard Management Report
Alpine Area:	<b>NA</b>	NCC Vol.2 2022 Schedule1 Glossary Fig. 3 and Table 2
Corrosion Environment:	<b>NA</b>	For steel subject to the influence of salt water, breaking surf or heavy industrial areas, refer to NCC Vol.2 2022 section 6.3.9 & AS 4100. Cladding and fixings to manufacturer’s specifications.
Other Hazards:	<b>NA</b>	High wind, earthquake, flooding, landslpipe, dispersive soils, sand dunes, mine subsidence, landfill, snow & ice or other relevant factors
Enclosed Living Area:	<b>190.7 sq.m</b>	
Garage:	<b>28.8 sq.m</b>	
Verandah Area:	<b>15.8 sq.m</b>	

ISSUE: DATE: DESCRIPTION:

A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

SCALE:  
**1:200**  
 (A3)  
 Check dimensions.  
 Dimensions take  
 precedence over scale

DRAWING NO: **A01**  
 DRAWN BY: ME  
 SHEET NO. :1 of 13

**Building Designs & Drafting**  
 11 Balfour Place  
 Launceston 7250  
 Mob. 0407071492  
 mdebuildingdesigns@bigpond.com  
 ABN 62650579624

Trading as  
**MDE Building Designs**  
 Accred. No. CC1629 D

Document Set ID: 2339332

**LEGEND & NOTES:**

- ANY NOTED DISCREPANCIES ON ANY OF THESE DRAWINGS OR DOCUMENTS FOR THIS PROJECT SHOULD BE MADE AWARE TO THE DESIGNER BEFORE ANY FURTHER WORK CONTINUES.
- ALL CONSTRUCTION TO COMPLY WITH THE LATEST NATIONAL CONSTRUCTION CODE NCC Vol.2 2022 AND AUSTRALIAN STANDARDS.
- ANY ENGINEERS SPECIFICATIONS TAKE PRECEDENT OVER DRAWING NOTES.

CONTOUR INTERVALS = 0.5m

- CONFIRM ALL DIMENSIONS ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
- PROTECTION MUST BE PROVIDED TO ADJOINING PROPERTIES IN ACCORDANCE WITH BUILDING REGULATIONS.
- ENSURE FINISHED FLOOR LEVEL IS 150mm MIN. ABOVE FINISHED GROUND LEVEL.

**SITWORKS SOIL & WATER MANAGEMENT STRATEGIES**

- SITE TO BE PREPARED IAW ENGINEERS OR SURVEYORS REPORT IF APPLICABLE.
- SITE TO BE EXCAVATED OR FILLED TO INDICATED LEVELS IAW NCC Vol.2 PART 3.2 AND AS3798.
- SURFACE DRAINAGE – FINISHED GROUND TO FALL AWAY FROM BUILDING FOR A MINIMUM DISTANCE OF 1000 AT 1:20 MIN. AND TO A POINT WHERE PONDING WILL NOT OCCUR.
- DOWNPIPES TO BE CONNECTED INTO COUNCIL STORMWATER AS SOON AS ROOF IS INSTALLED.
- DRAINAGE WORKS TO BE IAW NCC Vol.2 PART 3.3 AND AS/NZS 3500
- INSTALL ANY AG DRAINS PRIOR TO FOOTING EXCAVATION. SEE DRAINAGE PLAN FOR LOCATION.
- SURFACE DRAINAGE – FINISHED GROUND TO FALL AWAY FROM BUILDING FOR A MINIMUM DISTANCE OF 1m AT 1:20 MIN. AND TO A POINT WHERE PONDING WILL NOT OCCUR.
- PREVENT PONDING OF WATER UNDER SUSPENDED FLOORS.
- EXCAVATED MATERIAL PLACED UP-SLOPE OF AG DRAINS. TO BE REMOVED WHEN BUILDING WORKS ARE COMPLETED AND USED AS FILL ON SITE FOR ANY LOW POINTS. INSTALL A SEDIMENT FENCE ON THE DOWNSLOPE SIDE OF MATERIAL.



Internal Driveway crossing of existing drain/watercourse to allow free flow of any water.



PROPOSED OUTBUILDING SITE



PROPOSED HOUSE SITE

TOTAL BLOCK AREA – 1.262 ha.

ALL DRAINAGE WORK SHOWN IS PROVISIONAL ONLY AND IS SUBJECT TO AMENDMENT TO COMPLY WITH LOCAL AUTHORITIES REQUIREMENTS. ALL WORK IS TO COMPLY WITH AS-3500 AND LOCAL PLUMBING CODE AND MUST BE CARRIED OUT BY A LICENCED PLUMBER. ( See Details Sheet A11)

DOWNPIPES – 90 dia.  
STORMWATER – 100 dia PVC AT 1:100 GRADIENT MIN.  
SEWER – 100 dia PVC AT 1:60 GRADIENT MIN.

--- SEWERAGE  
--- STORMWATER

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• CONTRACTORS SHOULD ENSURE ALL WORK IS CLEAR OF EXISTING SERVICES WHETHER SHOWN ON DRAWINGS OR NOT. SERVICES SHOULD BE LOCATED IN CONJUNCTION WITH RELEVANT AUTHORITIES.

ISSUE: DATE: DESCRIPTION:

A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
PROJECT: PROPOSED NEW RESIDENCE  
1315 (Lot 4) OSMASTON ROAD  
DELORAINE

DRAWING TITLE(S):  
SITE/ SERVICES PLAN

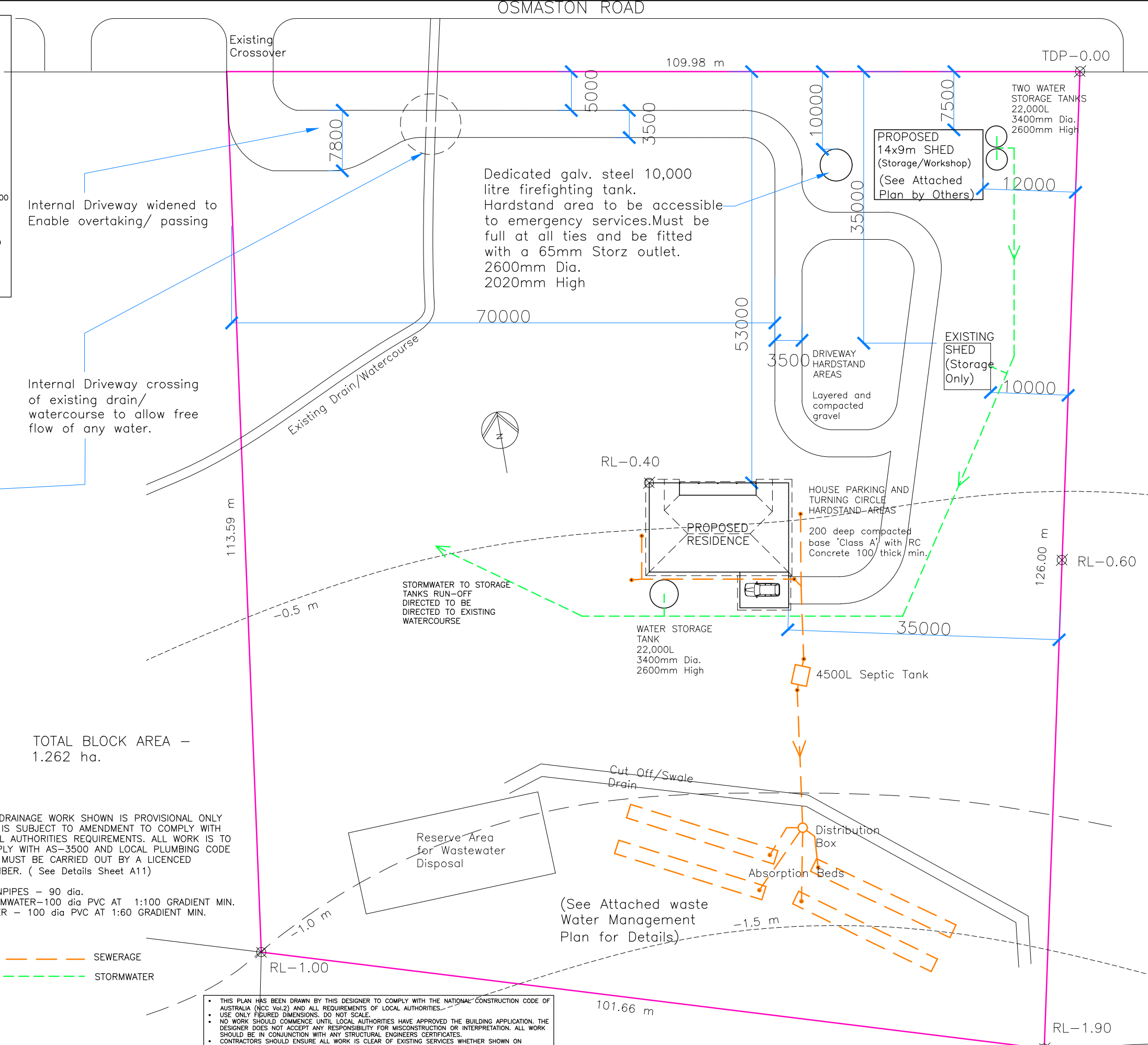
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1:500  
(A3)  
Check dimensions.  
Dimensions take  
precedence over scale

DRAWING NO: **A02**  
DRAWN BY: ME  
SHEET NO. : 2 of 13

Mark Evans

Building Designs & Drafting

11 Balfour Place  
Launceston 7250  
Mob. 0407071492  
mdebuildingdesigns@bigpond.com  
ABN 62650579624



LEVELS	
Temporary Datum Level	0.000
Finished Floor Level	-0.40

**LIVABLE HOUSING DESIGN STANDARD**

CONSTRUCTION MUST BE IN COMPLIANCE WITH THESE DRAWINGS AND MEET ALL ASPECTS OF ABCB STANDARD SATISFYING PART H8 AND PART G7 OF NCC 2022- LIVEABLE HOUSING DEIGN.

**Note:**

- 870 wide 35mm doors to habitable rooms allow 820mm openings between door stops.
- 1200 wide corridor/ hall widths (Stud to stud allowing 10mm plaster lining and architraves)
- Within the bathroom (containing WC) wall reinforcement as required in Part H8 NNC Vol.2 to the Shower, Bath and WC walls with 12mm structural ply (min.) or timber noggins 25mm thick (min.)
- Bathroom shower to be hobless, step free entry with lip not more than 5mm to be provided for water retention purposes.

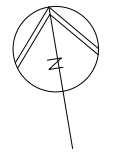
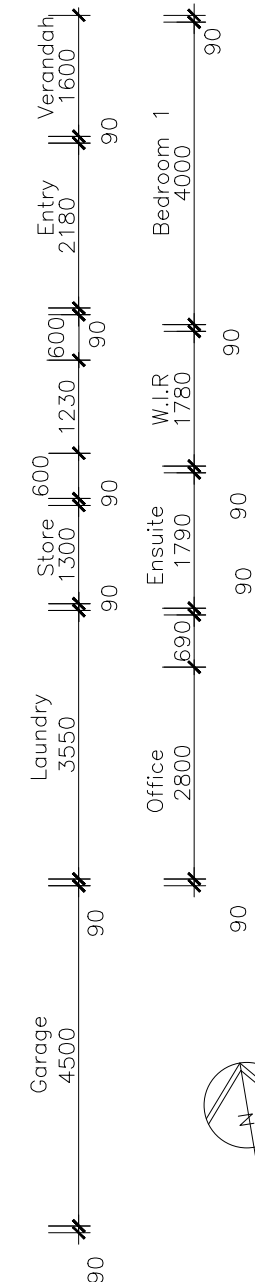
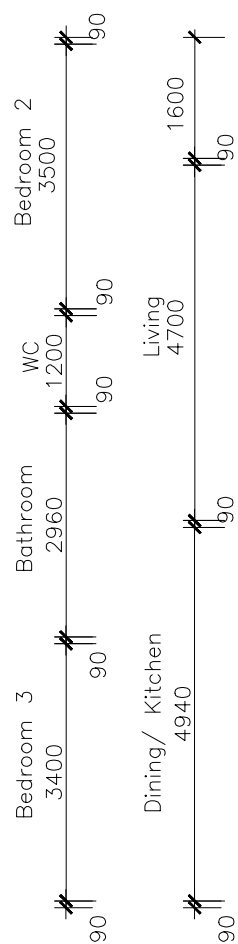
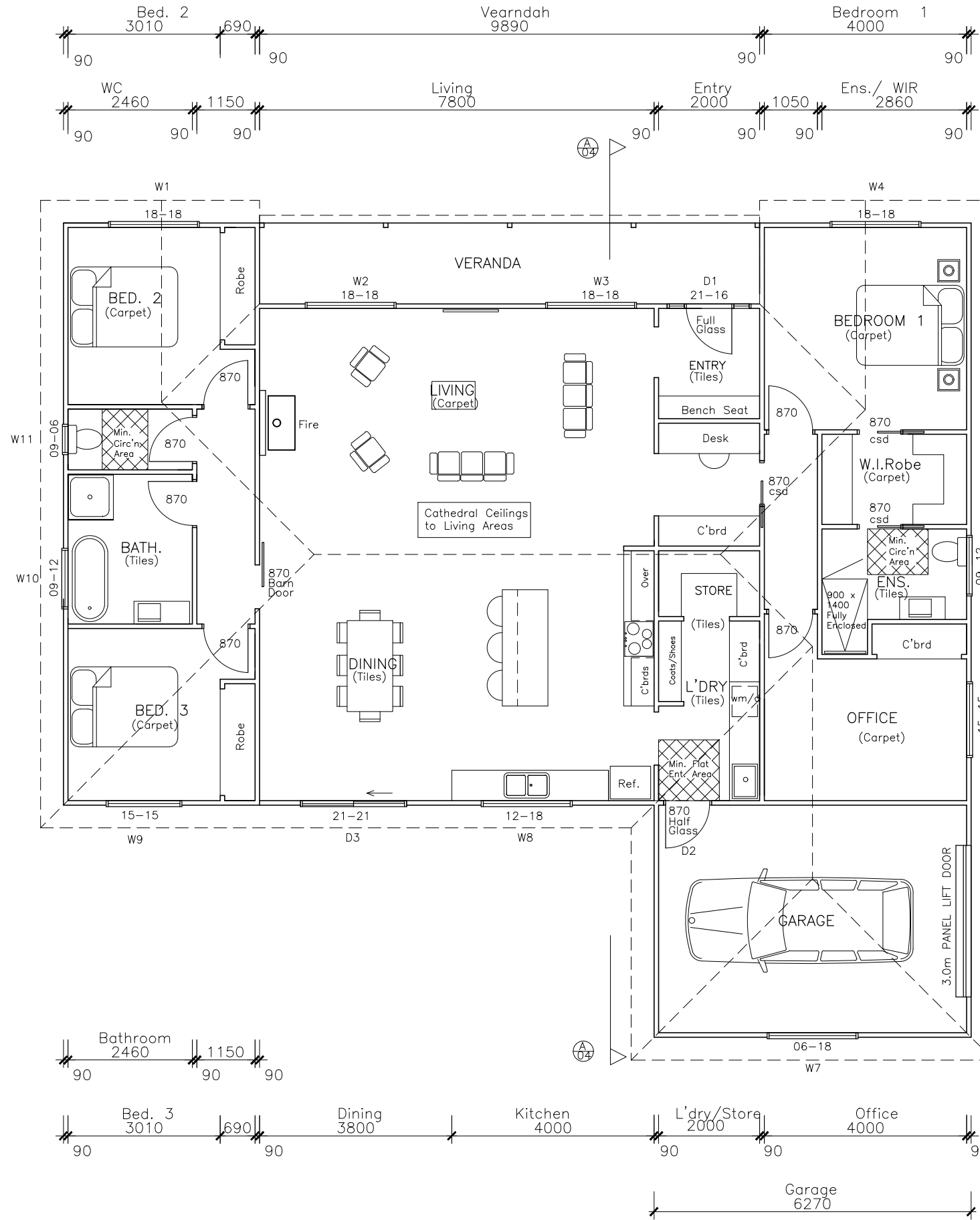
240V HARD-WIRED SMOKE DETECTORS ALL INTER-CONNECTED

**NOTES:**

- KITCHEN LAYOUT IS INDICATIVE ONLY AND SHOULD BE CONFIRMED WITH OWNERS AND RELEVANT CONTRACTORS.
- ALL DIMENSIONS INDICATED ARE FRAME TO FRAME AND DO NOT ACCOUNT FOR WALL LININGS.

ENCLOSED LIVING AREA = 190.7 sq. m (20.7 squares)

GARAGE = 28.8 sq. m  
VERANDAH = 15.8 sq. m



THIS PLAN HAS BEEN DRAWN BY THIS DESIGNER TO COMPLY WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC Vol.2) AND ALL REQUIREMENTS OF LOCAL AUTHORITIES. USE ONLY FIGURED DIMENSIONS. DO NOT SCALE. NO WORK SHOULD COMMENCE UNTIL LOCAL AUTHORITIES HAVE APPROVED THE BUILDING APPLICATION. THE DESIGNER DOES NOT ACCEPT ANY RESPONSIBILITY FOR MISCONSTRUCTION OR INTERPRETATION. ALL WORK SHOULD BE IN CONJUNCTION WITH ANY STRUCTURAL ENGINEERS CERTIFICATES. CONTRACTORS SHOULD ENSURE ALL WORK IS CLEAR OF EXISTING SERVICES WHETHER SHOWN ON DRAWINGS OR NOT. SERVICES SHOULD BE LOCATED IN CONJUNCTION WITH RELEVANT AUTHORITIES.

ISSUE: DATE: DESCRIPTION:

A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
PROJECT: PROPOSED NEW RESIDENCE  
1315 (Lot 4) OSMASTON ROAD  
DELORAINE

DRAWING TITLE(S):  
FLOOR PLAN

SCALE:  
1:100  
(A3)  
Check dimensions.  
Dimensions take  
precedence over scale

DRAWING NO: **A03**  
DRAWN BY: ME  
SHEET NO. :3 of 13

**Mark Evans Building Designs & Drafting**  
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11 Balfour Place  
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Mob. 0407071492  
mdebuildingdesigns@bigpond.com  
ABN 62650579624  
Version 1, Version Date: 22/04/2026

ALL WORK SHALL BE IN ACCORDANCE & COMPLY WITH THE NATIONAL CONSTRUCTION CODE (NCC) Vol. 2, COUNCIL BY-LAWS, RELEVANT AUSTRALIAN STANDARDS AND CURRENT WORKPLACE STANDARDS CODES OF PRACTICE.

**DO NOT SCALE DRAWINGS—IF ANY DOUBT CONTACT DESIGNER.**

- ALL DIMENSIONS IN MILLIMETRES UNLESS SPECIFIED.
- CHECK ALL DIMENSIONS AND VERIFY LEVELS, PRIOR TO SETOUT OR COMMENCEMENT OF ANY BUILDING WORK.
- ANY NOTED DISCREPANCIES ON ANY OF THESE DRAWINGS OR DOCUMENTS REFERRING TO THIS PROJECT SHOULD BE MADE AWARE TO THE DESIGNER BEFORE ANY FURTHER WORK CONTINUES.
- ALL CONSTRUCTION TO COMPLY WITH THE LATEST NATIONAL CONSTRUCTION CODE (NCC Vol.2) AND AUSTRALIAN STANDARDS.
- ENGINEER'S SPECIFICATIONS TAKE PRECEDENCE OVER DRAWING NOTES.
- ALL BUILDING MATERIALS USED NEED TO MEET RELEVANT CORROSION RESISTANT REQUIREMENTS FOR THE LOCAL ENVIRONMENT AND COMPATIBILITY OF MATERIALS.
- ALL PLUMBING AND DRAINAGE TO COMPLY AS3500 AND LOCAL COUNCIL PLUMBING REQUIREMENTS.

**SITWORKS**

- SITE TO BE PREPARED IAW ENGINEERS OR SURVEYORS REPORT IF APPLICABLE.
- SITE TO BE EXCAVATED OR FILLED TO INDICATED LEVELS IAW WITH NCC Vol.2 2022 3.2 AND AS3798.
- DRAINAGE WORKS TO BE IAW NCC Vol.2 2022 PART 3.3 AND AS/NZS 3500
- SURFACE DRAINAGE –FINISHED GROUND TO FALL AWAY FROM BUILDING FOR A MINIMUM DISTANCE OF 1m AT 1:20 MIN. AND TO A POINT WHERE PONDING WILL NOT OCCUR.
- PREVENT PONDING OF WATER UNDER ANY SUSPENDED FLOORS.

**CONCRETE**

- ALL CONCRETE PREPARATION INCLUDING EXCAVATIONS AND PLACEMENT OF REINFORCING IS TO BE APPROVED BY ENGINEER AND/OR BUILDING SURVEYOR PRIOR TO POURING.
- REFER TO ANY ENGINEERS DRAWINGS FOR DETAILS AND NOTES OF CONCRETE WORKS. (AS APPLICABLE)
- REFER TO SOIL REPORT FOR CLASSIFICATION TO AS2870
- DAMP PROOF COURSE TO EXTEND 150mm ABOVE GROUND LEVEL.

**STEELWORK**

- GENERALLY TO BE IAW WITH AS4100—STEEL STRUCTURES AND AS1544—WELDING IN BUILDING.
- STEELWORK TO BE COATED WITH ANTI-OXIDISING PAINT PRIOR TO ERECTION.
- ALL STEEL IN EXPOSED CONDITIONS TO BE GALVANISED OR PROPRIETARY GALVANISED PRODUCT.
- ANY STRUCTURAL STEEL FRAMING TO BE IAW NCC VOL.2 Part 6.3, AS1250, AS4100, MANUFACTURERS SPECIFICATIONS AND STRUCTURAL ENGINEERS DESIGN AND SPECIFICATIONS.

**MASONRY**

- GENERALLY MASONRY WALLS TO BE CONSTRUCTED IN ACCORDANCE WITH NCC VOL.2 2020 PART 5 & AS3700.
- MASONRY VENEER TO NCC VOL.2 2020 PART 5.2,
- CAVITY MASONRY TO NCC VOL.2 2020 PART 5.3,
- UNREINFORCED LEAF MASONRY TO NCC VOL.2 2020 PART 5.4,
- ISOLATED PIERS TO NCC VOL.2 2020 PART 5.5 and
- MASONRY COMPONENTS AND ACCESSORIES TO NCC VOL.2 2020 PART 5.6

**WALL FRAMING**

- ALL TIMBER FRAMING TO COMPLY WITH AS1684.2, NCC Vol.2 2022 PART 6.1, ANY ENGINEERS DETAILS, MATERIAL SUPPLIERS SPECS AND LOCAL COUNCIL REQUIREMENTS.
- HARDWOOD MINIMUM STRESS GRADE F17
- SOFTWOOD MINIMUM STRESS GRADE MGP10,
- TIMBER STUDS: 90x35 MPG 10 STRUC. PINE OR 90x35 F17 HWD AT 450 ctrs.
- TOP AND BOTTOM PLATES & NOGGINS: 90x35 MPG 10 STRUC. PINE OR 90x35 F17 HWD.
- BRACING OF TIMBER CONSTRUCTION TO BE IAW SECTION 8 OF AS1684.2 AND ANY ENGINEERS SPECIFICATIONS
- TIE-DOWN OF TIMBER FRAME TO BE IN ACCORDANCE WITH SECTION 9 OF AS1684.2, AS4055 AND ENGINEER'S SPECIFICATIONS.
- LINTELS AS PER WINDOW SCHEDULE AND/ OR TRUSS MANUFACTURER TAKING INTO ACCOUNT WHERE GIRDER TRUSSES ETC, ARE LOCATED.

**EXTERIOR WALL CLADDING**

- GENERALLY IAW NCC Vol.2 2022 PART 7
- ANY EXTERNAL TIMBER CLADDING TO BE FIXED IAW MANUFACTURERS SPECIFICATIONS.
- IF APPLICABLE WEATHERBOARDS AND CHAMFERBOARDS TO BE PRIMED PRIOR TO FIXING.
- VAPOR PERMEABLE SARKING TO BE PROVIDED BETWEEN EXTERNAL WALL CLADDING AND FRAMING.
- WALL CLADDING TO BE IAW MANUFACTURERS SPECIFICATIONS.
- FLASHINGS TO WINDOW/DOOR OPENINGS ARE TO AS290

**ELECTRICAL**

- ALL WIRING, LIGHTING, ELECTRICAL OUTLETS AND FIXTURES MUST BE INSTALLED BY A LICENCED PRACTITIONER.
- ALL LIGHTING AND ELECTRICAL FITTINGS AND FIXTURES AS PRESCRIBED BY OWNER AT TIME OF INSTALLATION.

**FACILITIES**

- THE DOOR OF A FULLY ENCLOSED SANITARY COMPARTMENT MUST OPEN OUTWARDS, SLIDE OR BE READILY REMOVABLE FROM THE OUTSIDE OF THE COMPARTMENT UNLESS THERE IS A CLEAR SPACE OF AT LEAST 1200mm BETWEEN THE CLOSET PAN AND THE NEAREST PART OF THE DOORWAY.
- PROVISION OF NATURAL LIGHT TO BE IAW NCC Vol.2 2022 PART 10.4
- WINDOWS/ROOFLIGHTS TO PROVIDE LIGHT TRANSMISSION AREA EQUAL TO 10% OF FLOOR AREA OF ROOM.
- VENTILATION TO BE IAW NCC Vol.2 2022 PART 10.6 OR AS 1668.2 FOR MECHANICAL VENTILATION. EXHAUST FAN FOR BATHROOM/ WC TO BE VENTED TO OUTSIDE FOR STEEL ROOF AND TO ROOF SPACE FOR TILE ROOF.
- NATURAL VENTILATION TO BE PROVIDED AT A RATE OF 5% OF ROOM FLOOR AREA IAW NCC Vol.2 2022 PART 10.6

**LIVABLE HOUSING DESIGN STANDARD**

- CONSTRUCTION MUST BE IN COMPLIANCE WITH THESE DRAWINGS AND MEET ALL ASPECTS OF ABCB STANDARD SATISFYING PART H8 AND PART G7 OF NCC 2022— LIVEABLE HOUSING DEIGN

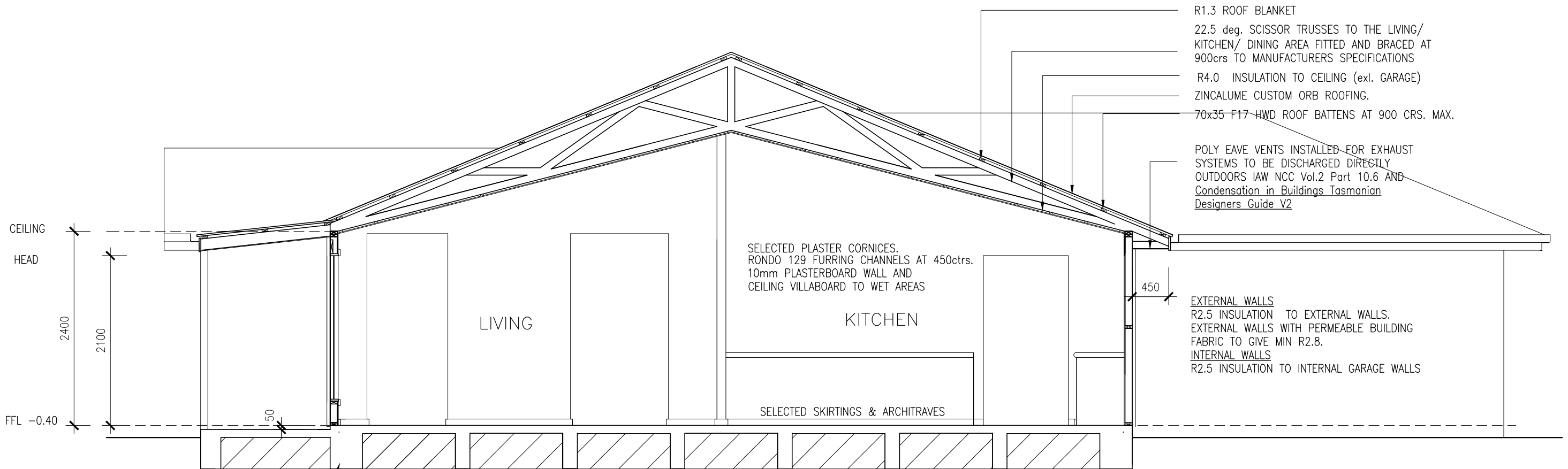
**INTERNAL LINING**

- LINE WALLS AND CEILINGS INTERNALLY WITH 10mm PLASTERBOARD SHEETING WITH SELECTED PLASTER CORNICES.
- CEILING PLASTER FITTED TO METAL FURRING CHANNELS AT 450 ctrs.
- PLASTERBOARD LINING TO WET AREAS TO BE 'VILLABOARD', W.R BOARD OR OTHER APPROVED WATERPROOF LINING
- ALL EAVE AND SOFFIT LININGS TO BE 'VILLABOARD'. W.R BOARD OR OTHER APPROVED WATERPROOF LINING UNLESS OTHERWISE NOTED.
- ALL DOORS, WINDOWS, ARCHITRAVES, SKIRTING, WALL AND FLOOR SURFACES AND ALL FITTINGS AND FIXTURES AS PRESCRIBED BY OWNER.

**GENERAL FIRE SAFETY**

- GENERALLY TO BE IAW NCC Vol.2 2022 PART 9
- FIRE SEPARATION TO IAW NCC Vol.2 2022 PARTS 9.2, 9.3,9.4 EXTERNAL WALLS AND GABLE ENDS CONSTRUCTED WITHIN 900mm OF BOUNDARY ARE TO EXTEND TO UNDERSIDE OF NON COMBUSTIBLE ROOFING/ EAVES AND ARE TO BE CONSTRUCTED OF A MASONRY SKIN 90mm THICK AND WITH AN FRL OF 60/ 60/60.
- SARKING TO HAVE A FLAMMABILITY INDEX LESS THAN 5.
- ROOF LIGHTS NOT TO BE PLACED CLOSER THAN 900 FROM BOUNDARY.
- SMOKE ALARM INSTALLATION TO BE IAW NCC Vol.2 2022 PART 9.5. AND AS1670, LOCATIONS INDICATED ON FLOOR PLAN.
- INSTALLATION LOCATIONS:
  - –CEILING— 300 AWAY FROM WALL JUNCTION.
  - –CATHEDRAL CEILING— 500 DOWN FROM APEX.
  - –WALLS— 300 DOWN FROM CEILING JUNCTION
- HEATING APPLIANCES GENERALLY TO BE IN COMPLIANCE WITH NCC Vol.2 2022 PART 9 AND AS2918 "DOMESTIC SOLID FUEL BURNING APPLIANCE INSTALLATIONS".

Note —All ceiling, roof,external wall & floor insulation nominated in these plans and accompanying Energy rating assessment has been applied only to areas that are connected to external elements (i.e Earth or outside air)



SECTION AA

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A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
 PROJECT: PROPOSED NEW RESIDENCE  
 1315 (Lot 4) OSMASTON ROAD  
 DELORAINE

DRAWING TITLE(S):

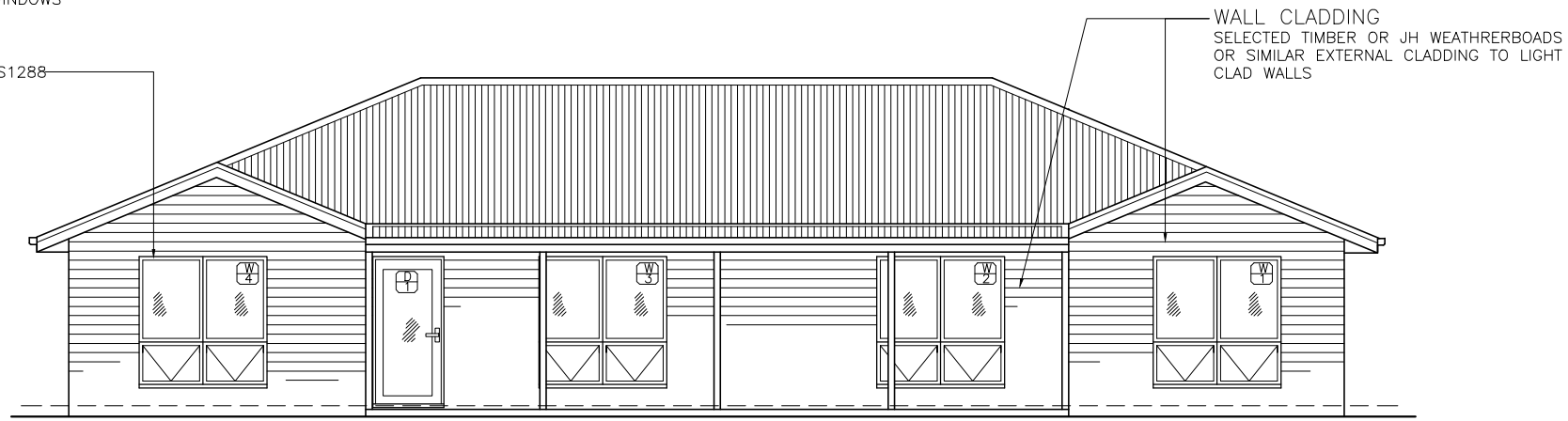
SECTION

SCALE:  
 1:50  
 (A3)  
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DRAWING NO: **A04**  
 DRAWN BY: ME  
 SHEET NO. : 4 of 13

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 No. CC1629 D  
 Version: 1, Version Date: 22/04/2026

WINDOWS & DOORS  
 ALUMINIUM FRAMED DOORS AND AWNING WINDOWS  
 (See window schedule)  
 TAS OAK OR MDF REVELS AND TRIMS  
 ALL FLASHING TO MANUFACTURERS  
 SPECIFICATIONS, NCC Vol.2 PART 8.2 & AS1288

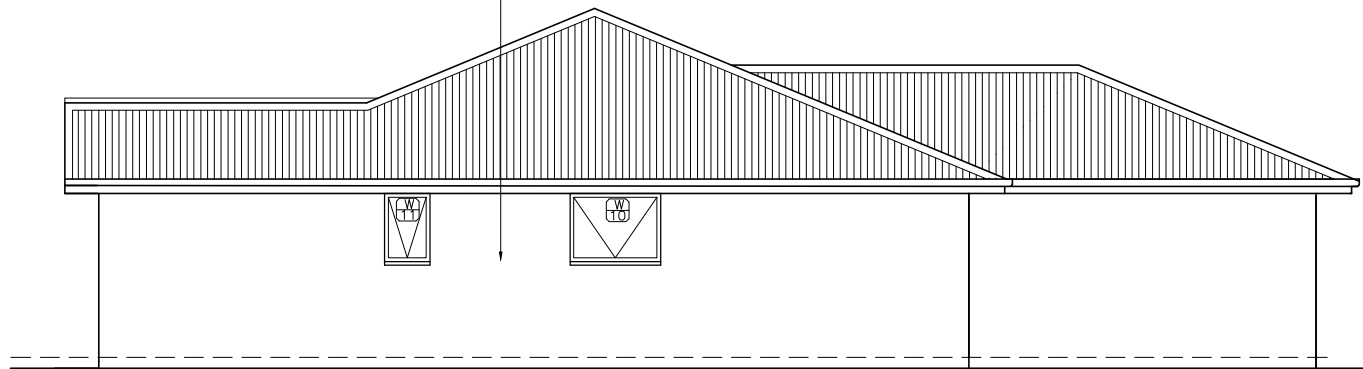


NORTHERN ELEVATION

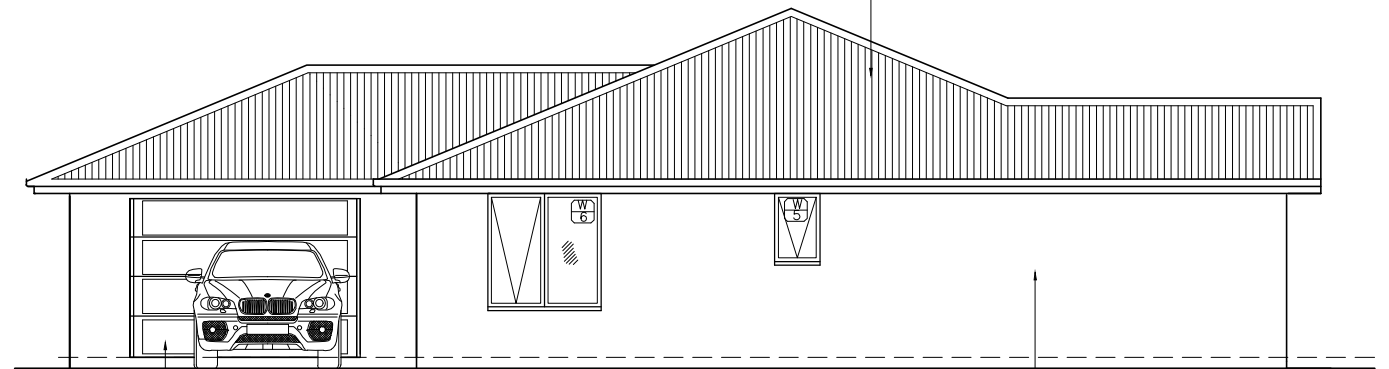
WALL CLADDING  
 SELECTED JH 'Easylap' OR  
 SIMILAR EXTERNAL CLADDING TO  
 LIGHT CLAD WALLS

WALL CLADDING  
 SELECTED TIMBER OR JH WEATHREBOARD  
 OR SIMILAR EXTERNAL CLADDING TO LIGHT  
 CLAD WALLS

ROOFING  
 ZINCALUME CUSTOM ORB ROOF CLADDING,  
 SLOTTED GUTTER AND FASCIA ALL ROUND.  
 INSTALLED IAW MANUFACTURERS INSTRUCTIONS.



WESTERN ELEVATION

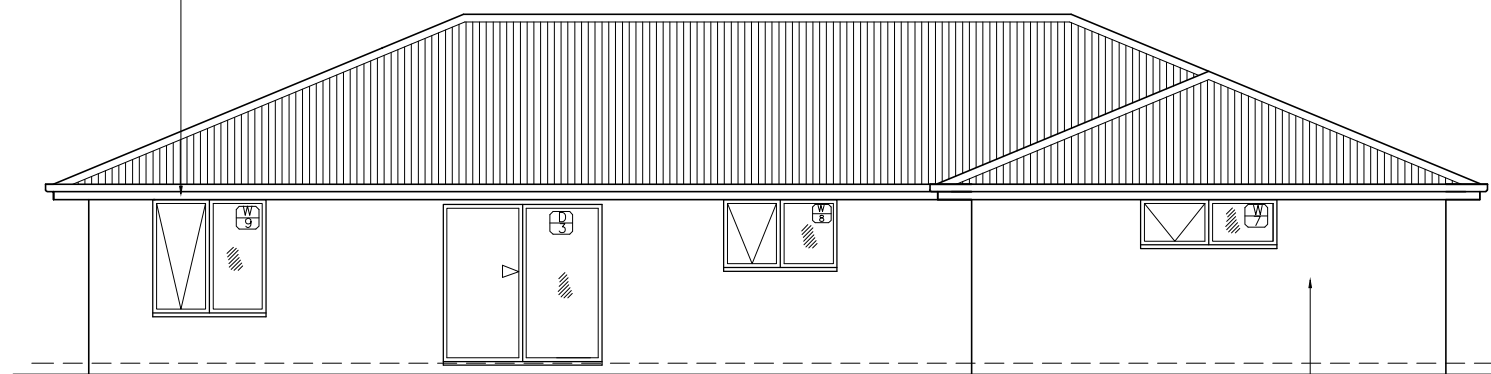


EASTERN ELEVATION

3.0 m C/BOND  
 PANEL-LIFT GARAGE DOOR

WALL CLADDING  
 SELECTED JH 'AXON' OR SIMILAR  
 EXTERNAL CLADDING TO LIGHT  
 CLAD WALLS

WINDOWS & DOORS  
 ALUMINIUM FRAMED DOORS AND AWNING WINDOWS  
 (See window schedule)  
 TAS OAK OR MDF REVELS AND TRIMS  
 ALL FLASHING TO MANUFACTURERS  
 SPECIFICATIONS, NCC Vol.2 PART 8.2 & AS1288



SOUTHERN ELEVATION

WALL CLADDING  
 SELECTED JH 'Easylap' OR  
 SIMILAR EXTERNAL CLADDING TO  
 LIGHT CLAD WALLS

4765  
 Max. Height

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 • CONTRACTORS SHOULD ENSURE ALL WORK IS CLEAR OF EXISTING SERVICES WHETHER SHOWN ON DRAWINGS OR NOT. SERVICES SHOULD BE LOCATED IN CONJUNCTION WITH RELEVANT AUTHORITIES.

ISSUE: DATE: DESCRIPTION:

A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
 PROJECT: PROPOSED NEW RESIDENCE  
 1315 (Lot 4) OSMASTON ROAD  
 DELORAINE

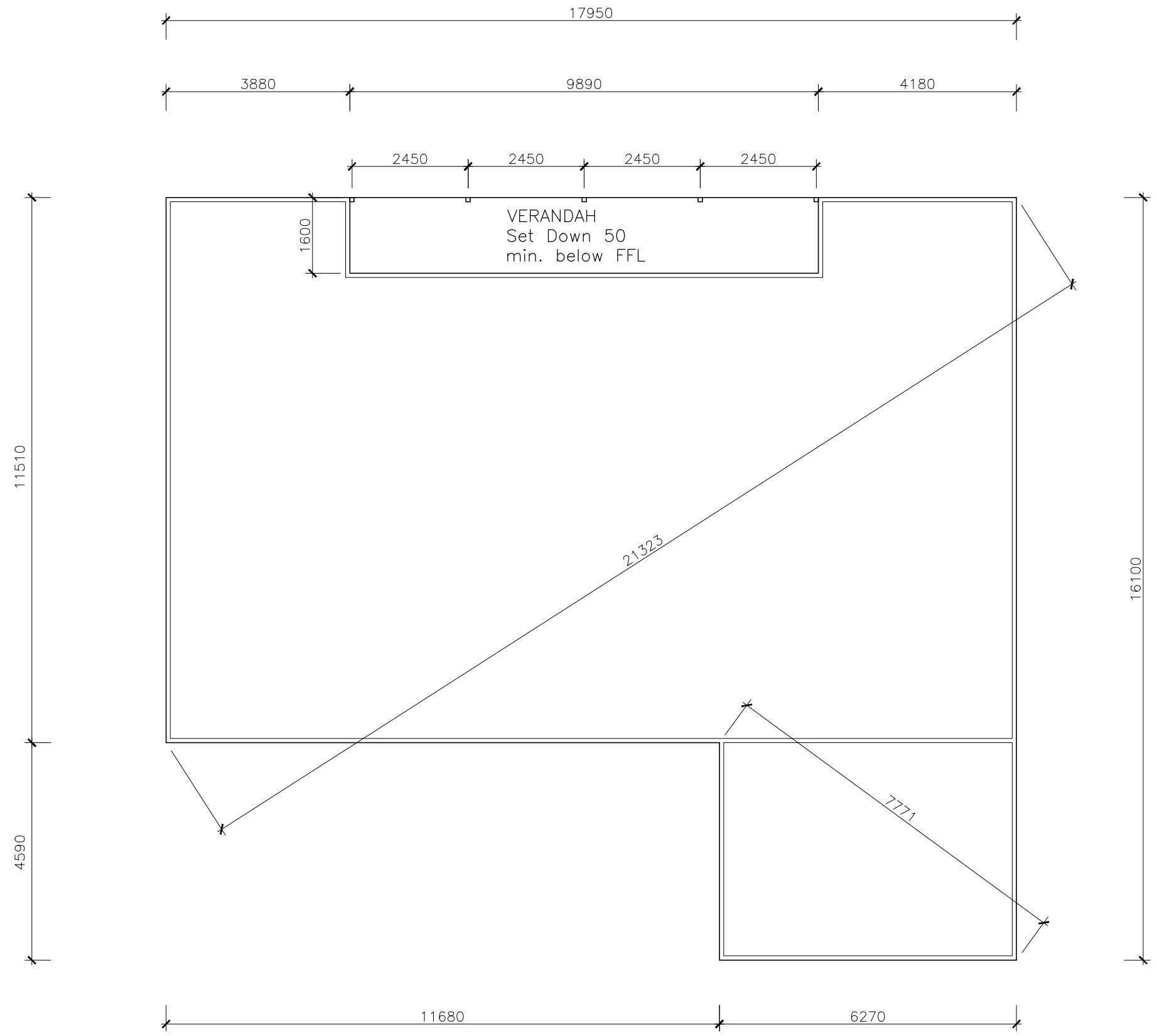
DRAWING TITLE(S):  
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SCALE:  
 1:100  
 (A3)  
 Check dimensions.  
 Dimensions take  
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DRAWING NO: **A05**  
 DRAWN BY: ME  
 SHEET NO. : 5 of 13

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 No. CC1629 D  
 Version 1, Version Date: 22/04/2026



VERANDAH  
Set Down 50  
min. below FFL

THIS PLAN IS FOR BUILDERS SETOUT ONLY  
AND SHOULD READ IN CONJUNCTION WITH  
ACCOMPANYING STRUCTURAL ENGINEERS PLANS.

• THIS PLAN HAS BEEN DRAWN BY THIS DESIGNER TO COMPLY WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC Vol.2) AND ALL REQUIREMENTS OF LOCAL AUTHORITIES.  
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A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
PROJECT: PROPOSED NEW RESIDENCE  
1315 (Lot 4) OSMASTON ROAD  
DELORAINÉ

DRAWING TITLE(S):  
SLAB LAYOUT PLAN

SCALE:  
1:100  
(A3)  
Check dimensions.  
Dimensions take  
precedence over scale

DRAWING NO: **A06**  
DRAWN BY: ME  
SHEET NO. : 6 of 13

**Mark Evans**  
Building Designs & Drafting  
Trading as MDE Building Designs  
Document Set ID: 283932  
Version: 1, Version Date: 22/04/2026

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This is not a Glazing Calculator- Refer to Energy Rating Certificates.

**Enclosed Living Window Schedule & Glazing Areas**

Number	Height	Width	Type	Room	Area (sq.m)	North Sector (sq.m)	Orientation	Glass *	Material
W1	1800	1800	Awning	Bedroom 2	3.24	3.24	North	Double Glazed Clear	Aluminium
W2	1800	1800	Awning	Living	3.24	3.24	North	Double Glazed Clear	Aluminium
W3	1800	1800	Awning	Living	3.24	3.24	North	Double Glazed Clear	Aluminium
W4	1800	1800	Awning	Master Bedroom	3.24	3.24	North	Double Glazed Clear	Aluminium
W5	900	1200	Awning	Ensuite	1.08		East	Double Glazed Obs.	Aluminium
W6	1500	1500	Awning	Office	2.25		East	Double Glazed Clear	Aluminium
W7	600	1800	Awning	Garage	1.08		West	Double Glazed Clear	Aluminium
W8	1200	1500	Awning	Kitchen	1.80		South	Double Glazed Clear	Aluminium
W9	1500	1500	Awning	Bedroom 3	2.25		South	Double Glazed Clear	Aluminium
W10	900	1200	Awning	Bathroom	1.08		West	Double Glazed Obs.	Aluminium
W11	900	600	Awning	WC	0.54		West	Double Glazed Obs.	Aluminium
D1	2100	1600	Full Glass Door/ 2 Side Panels	Entry	3.36	2.10	North	Double Glazed Clear	Aluminium
D2	2100	870	Half Glass (Internal)	Laundry	1.83		South (Internal)	Double Glazed Clear	Aluminium
D3	2100	2100	Slider Door	Dining/ Kitchen	4.41		South	Double Glazed Clear	Aluminium
				Totals	32.64	15.06			

**NOTE:**

- ENSURE GLAZIER IS SUPPLIED WITH A FULL SET OF DRAWINGS, ENERGY RATING AND WIND CLASSIFICATION.
- FOR COMPLIANCE WITH NCC (Vol.2) PART 8.2, SEE CERTIFIED ASSESSMENT CERTIFICATE.
- ALL GLAZED WINDOW & DOOR ASSEMBLIES IN EXTERNAL WALLS TO COMPLY WITH AS 2047. ALL OTHER GLASS TO COMPLY WITH AS1288
- WINDOWS ARE POWDER COATED ALUMINIUM FRAMES MDF OR TAS OAK REVEALS.
- ALL FLASHINGS AND FASTENINGS TO MANUFACTURERS SPECIFICATIONS.
- DIMENSIONS SHOWN IN SCHEDULE FOR THESE WINDOWS ARE NOMINAL ONLY.
- THESE WINDOWS ARE TO BE FABRICATED USING ON-SITE MEASUREMENTS.

**WINDOWS/ DOORS – BUSHFIRE-PRONE AREA BAL RATING 19**  
WINDOW AND DOOR ASSEMBLIES CONSTRUCTION AND FITTING TO COMPLY WITH AS3959-SECTION 6.5

FOR WINDOWS AND DOORS WITHIN 400mm OF THE GROUND GRADE A SAFETY GLASS MINIMUM 5mm TOUGHENED GLASS WITHIN 400mm OF THE GROUND, DECK etc. (THIS IS ONLY REQUIRED ON THE EXTERNAL LEAF OF DOUBLE GLAZED UNITS)

OPENABLE PORTIONS OF WINDOWS SHALL BE SCREENED INTERNALLY OR EXTERNALLY WITH SCREENS THAT HAVE A MESH OR PERFORATED SHEET WITH A MAXIMUM APETURE OF 2mm, MADE OF CORROSION RESISTENT STEEL, BRONZE OR ALUMINIUM. GAPS BETWEEN THE PERIMETER OF THE SCREEN ASSEMBLY AND THE BUILDING ELEMENT TO WHICH IT IS FITTED SHALL NOT EXCEED 3mm. SCREENING SHOULD COMPLY WITH CLAUSE 5.5.3 FOR SPECIFIED SIDE HUNG EXTERNAL DOORS AND CLAUSE 5.5.4 FOR SLIDING DOORS.

EXTERNAL DOORS PROTECTED BY BUSHFIRE SHUTTER OR SCREENED WITH STEEL, BRONZE OR ALUMINIUM MESH OR GLAZED WITH 5 mm TOUGHENED GLASS, NON-COMBUSTIBLE OR 35mm SOLID TIMBER FOR 400mm ABOVE THRESHOLD, METAL OR BUSHFIRE RESISTING TIMBER FRAMED FOR 400mm ABOVE THE GROUND, DECKING, ETC. TIGHT-FITTING WITH WEATHER STRIPS AT BASE.

**NOTE:**

FOR COMPLIANCE WITH NCC (Vol.2) parts 8.2 & 8.3, SEE CERTIFIED ASSESSMENT CERTIFICATE.

- GLAZING ALL DOUBLE LOW-E (EXCLUDING GARAGE -SINGULAR GLAZED CLEAR)
- WINDOWS ARE POWDER COATED ALUMINIUM FRAMES MDF OR TAS OAK REVEALS.
- ALL FLASHINGS AND FASTENINGS TO MANUFACTURERS SPECIFICATIONS.
- DIMENSIONS SHOWN IN SCHEDULE FOR THESE WINDOWS ARE NOMINAL ONLY.
- THESE WINDOWS ARE TO BE FABRICATED USING ON-SITE MEASUREMENTS.
- ALL WINDOW FRAMING TO BE IN COMPLIANCE WITH AS2047 1999 (WINDOWS IN BUILDING-SELECTION AND INSTALLATION)
- ALL GLAZING TO BE IN COMPLIANCE WITH AS1288 AND NCC (Vol.2) PART 8.2 & 8.3
- SUPPLY AND INSTALL FLY SCREENS TO ALL OPENING WINDOW SASHES AND SLIDING AND EXTERNAL LAUNDRY DOOR.
- ALL WINDOWS AND EXTERNAL DOORS FITTED WITH LOCKS.

**Natural Light and Ventilation**

**PART 10.5 LIGHT**

Minimum 10% of the floor area of a habitable room required (natural light)

**PART 10.6 VENTILATION**

Minimum 5% of the floor area of a habitable room required (An exhaust fan may be used for a sanitary compartment, laundry or bathroom provided contaminated air discharges directly to the outside of the building by way of ducts).

Room	Area (m sq.)	Window/ Door No.	Light Required (m sq.)	Light Achieved (m sq.)	Ventilation Required (m sq.)	Ventilation Achieved (m sq.)
Kitchen/Dining/ Living	76.8	W2, W3, W8, D3	7.68	12.69	3.84	6.35
Bedroom 3	11.7	W9	1.17	2.25	0.58	1.13
Bedroom 2	10.7	W1	1.07	3.24	0.54	1.62
Master Bedroom	16.0	W4	1.60	3.24	0.80	1.62
Office	12.6	W6	1.26	2.25	0.63	1.13

**General notes:**

Down lights to be sealed LED units and IC-4 or IC-F rated to allow insulation to fully cover

All exhaust fans are to be self-closing max 250mm dia.

All window frames to be weather-stripped.

All gaps and cracks sealed.

All glazing to refer to NatHERS certificate for minimum U & SHGC values.

Please note the R values noted represent added insulation and not the Total system R value.

R3.0 (R2.5 under NCC 2019) insulation allowed to the ceiling perimeter due to height restrictions (where applicable)

R2.5 insulation to all skylight shafts (where applicable)

Min. R1.0 rigid insulation to the vertical edge of the concrete slab on ground (required only with any slab heating system)

All insulation to be installed in accordance with AS.3999

Refer to Page 5 of the NatHERS certificate for all other NCC energy efficiency requirements

These energy efficiency notes have been included in the NatHERS software assessment and override all other energy notes.

Note –All ceiling, roof, external wall & floor insulation nominated in these plans and accompanying Energy rating assessment has been applied only to areas that are connected to external elements (i.e Earth or outside air)

**LEGEND & NOTES:**

- Refer to Floor Plan and Elevations for window positions and styles.
- Flyscreens to be fitted to all openable windows.
- \*Glazing requirements (typical) as outlined in the attached Energy Certificate.
- Alternative options from glazing supplier may be presented to the Designer and Building Surveyor.
- Glazing types in Tasmania can be accessed at [www.wers.net](http://www.wers.net).
- Shower Screens**
- 1800H Semi-frameless shower screens to comply with NCC (Vol.2) Part 8.4 & AS1288. Minimum 4mm thick Grade A toughened safety glass, labeled to comply with industry standards.
- Opaque Bands**
- Where glazed doors or side panels are capable of being mistaken for a doorway or opening, the glass must be marked to make it readily visible as follows:
  - Marking in the form of an opaque band not less than 20mm in height;
  - The upper edge is not less than 700mm above the door;
  - The lower edge is not more than 1200mm above the floor.
- Flashings to wall openings**
- All openings must be adequately flashed using materials that comply with AS/NZS 2904.
- Flashing to be installed with glazing manufacturer's specifications for brick veneer construction.

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 Document Set ID: 269934  
 Version: 1.1, Version Date: 22/04/2026

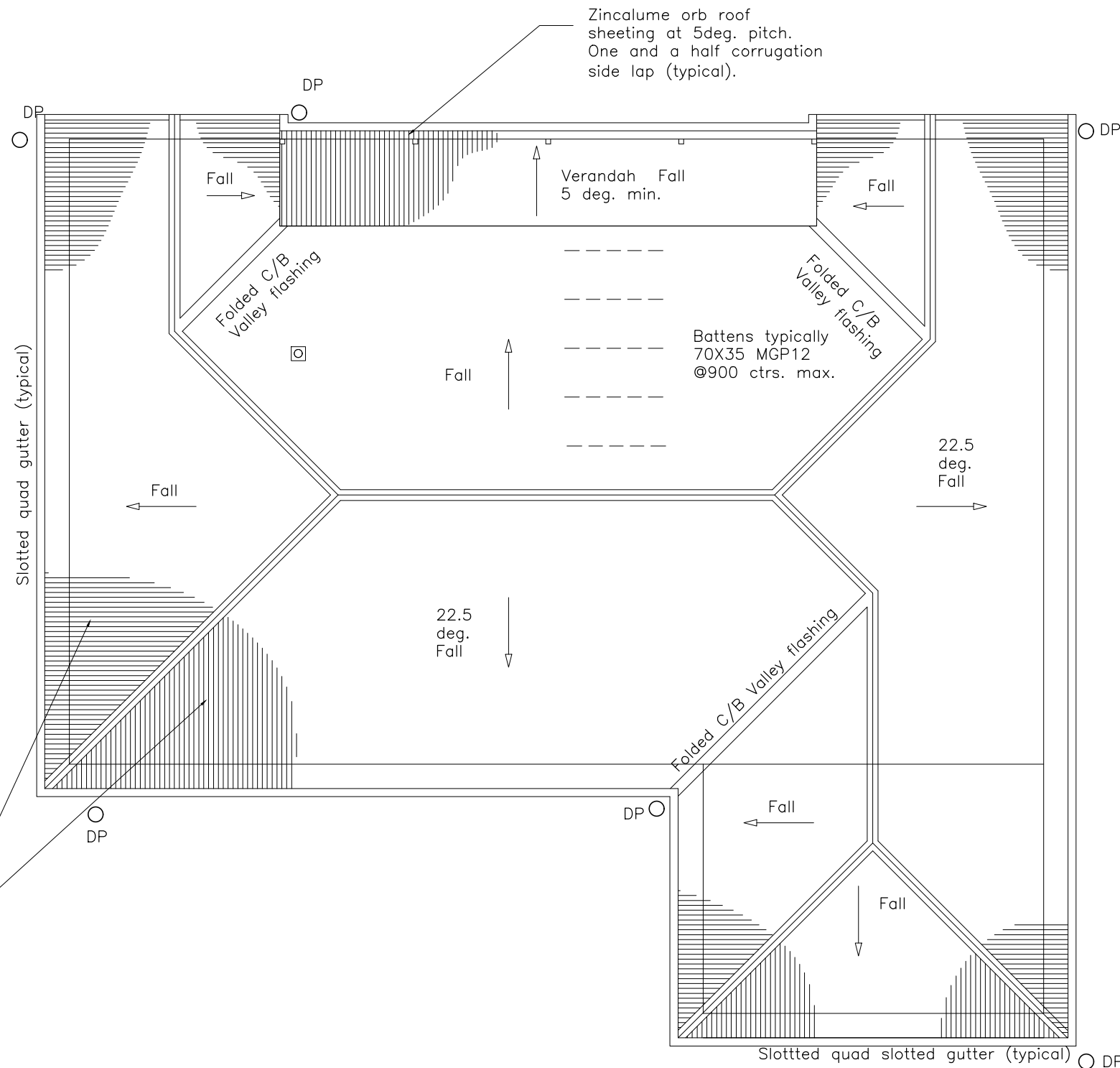
A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
 PROJECT: PROPOSED NEW RESIDENCE  
 1315 (Lot 4) OSMASTON ROAD  
 DELORAINE

DRAWING TITLE(S):  
 WINDOW & DOOR SCHEDULE  
 LIGHTING & VENTILATION DETAILS

SCALE:  
 1:100  
 (A3)  
 Check dimensions.  
 Dimensions take precedence over scale

DRAWING NO: **A07**  
 DRAWN BY: ME  
 SHEET NO.: 7 of 13



**ROOF CLADDING**

ROOF CLADDING TO BE GENERALLY IAW NCC VOL.2 PART 7

ROOF TILES AS2049 & AS 2050 (N/A)  
 METAL SHEET ROOFING AS 1562.1  
 PLASTIC SHEET ROOFING AS/NZS 4256.1,.2,.3&.5 & AS 1562.3.

VAPOR PERMEABLE SARKING TO BE PROVIDED BETWEEN ROOF CLADDING AND FRAMING.

FLASHINGS TO NCC Vol.2 2022 Part 7.2

COLORBOND ROOF CLADDING ON 70x35 ( EDGE ON) BATTENS AT 900 ctrs. MAX. AND ANY CONCRETE ROOF TILES ON 50x30 BATTENS AT 330 MAX. BOTH INSTALLED STRICTLY IAW MANUFACTURERS SPECIFICATIONS

APPROVED ROOF TRUSSES DEIGNED, INSTALLED AND BRACED STRICTLY IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

ALL FIXING DETAILS TO BE ADHERED TO SISILATE ROOF PRIOR TO TO SHEETING.

ALL TRUSS LOADS ARE TO BE DISTRIBUTED TO PERIMETER WALLS ONLY- UNLESS OTHERWISE SPECIFIED.

MECHANICAL VENTILATION IS TO BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE BCA AND MUST BE EXHAUSTED BY WAY OF DUCTS TO THE EXTERIOR OF THE BUILDING IF IT IS THE ONLY SOURCE OF VENTILATION PROVIDED.

CHIMNEYS AND FLUES MUST HAVE A DAMPER THAT CAN BE CLOSED TO SEAL THE CHIMNEY OR FLUE.

Zinalume custom orb roof sheeting at 22.5deg. pitch. One and a half corrugation side lap (typical).

**COMPLIANCE FOR ROOF & ROOFING ELEMENTS WITH AS3959 SECTION 5-CONSTRUCTION FOR BAL 12.5**

**GENERALLY:**

- ALL ROOF COVERINGS AND ACCESSORIES SHALL BE NON-COMBUSTABLE.
- ROOF AND WALL JUNCTIONS SHALL BE SEALED, TO PREVENT OPENINGS GREATER THAN 3mm, EITHER BY THE USE OF FASCIA AND EAVES LININGS OR BY SEALING BETWEEN THE TOP OF THE WALL AND THE UNDERSIDE OF THE ROOF AND BETWEEN THE RAFTERS AT THE LINE OF THE WALL.
- ROOF VENTILATION OPENINGS, SUCH AS GABLE AND ROOF VENTS, SHALL BE FITTED WITH EMBER GUARDS MADE OF NON-COMBUSTABLE MATERIAL OR A MESH OR PERFORATED SHEET WITH A MAXIMUM APETURE OF 2mm, MADE OF CORROSION-RESISTANT STEEL, BRONZE OR ALUMINIUM.

**SPECIFICALLY SHEET ROOF:**

- SHEET ROOF SHALL BE FULLY SARKED. THE SARKING WILL BE LOCATED ON TOP OF THE ROOF FRAMING AND MAY BE INSTALLED OVER THE BATTENS.
- SARKING SHALL COVER THE ENTIRE ROOF AREA INCLUDING RIDGES AND HIPS AND EXTEND INTO GUTTERS AND VALLEYS.
- ANY GAPS GREATER THAN 3mm (eg UNDER CORRUGATIONS AND RIBS) SHALL BE SEALED AT THE FASCIA OR WALL LINE AND AT VALLEYS, HIPS AND RIDGES BY ANY OR A COMBINATION OF:
  - A MESH OR PERFORATED SHEET WITH A MAXIMUM APERTURE OF 2mm, MADE OF CORROSION-RESITANT STEEL, BRONZE OR ALUMINIUM.
  - MINERAL WOOL
  - OTHER NON-COMBUSTABLE MATERIAL.

**ROOF PENETRATIONS:**

- ROOF PENETRATIONS SUCH AS ROOF LIGHTS, ROOF VENTILATORS, ROOF-MOUNTED EVAPORATIVE COOLING UNITS, AERIALS, VENT PIPES AND SUPPORTS FOR SOLAR COLLECTORS, SHALL BE ADEQUATELY SEALED AT THE ROOF WITH A NON-COMBUSTIBLE MATERIAL TO PREVENT GAPS GREATER THAN 3mm.
- OPENINGS IN VENTED ROOF LIGHTS, ROOF VENTILATORS OR VENT PIPES SHALL BE FITTED WITH EMBER GUARDS MADE FROM MESH OR PERFORATED SHEET WITH A MAXIMUM APERTURE OF 2mm, MADE OF CORROSION-RESISTANT STEEL, BRONZE OR ALUMINIUM. THIS DOES NOT APPLY TO EXHAUST FLUES OF HEATING AND COOKING DEVICES WITH CLOSED COMBUSTION CHAMBERS OR GAS APPLIANCE FLUES.
- EAVE VENTILATION OPENINGS GREATER THAN 3mm SHALL BE FITTED WITH EMBER GUARDS MADE OF NON-COMBUSTABLE MATERIAL OR MESH OR PERFORATED SHEET WITH A MAXIMUM APERTURE OF 2mm, MADE OF CORROSION-RESISTANT STEEL, BRONZE OR ALUMINIUM.
- JOINTS IN EAVES LININGS, FASCIAS AND GABLES MAY BE SEALED WITH PLASTIC JOINING STRIPS OR TIMBER STORM MOULDS.

**GUTTERS AND DOWNPIPES:**

- IF INSTALLED, GUTTER AND VALLEY LEAF GUARDS SHALL BE NON-COMBUSTIBLE.
- BOX GUTTERS SHALL BE NON-COMBUSTIBLE AND FLASHED AT THE JUNCTION WITH THE ROOF WITH NON-COMBUSTIBLE MATERIAL.

**EAVES LININGS, FASCIAS AND GABLES:**

- EAVES PENETRATIONS SHALL BE PROTECTED AS FOR ROOF PENETRATIONS.

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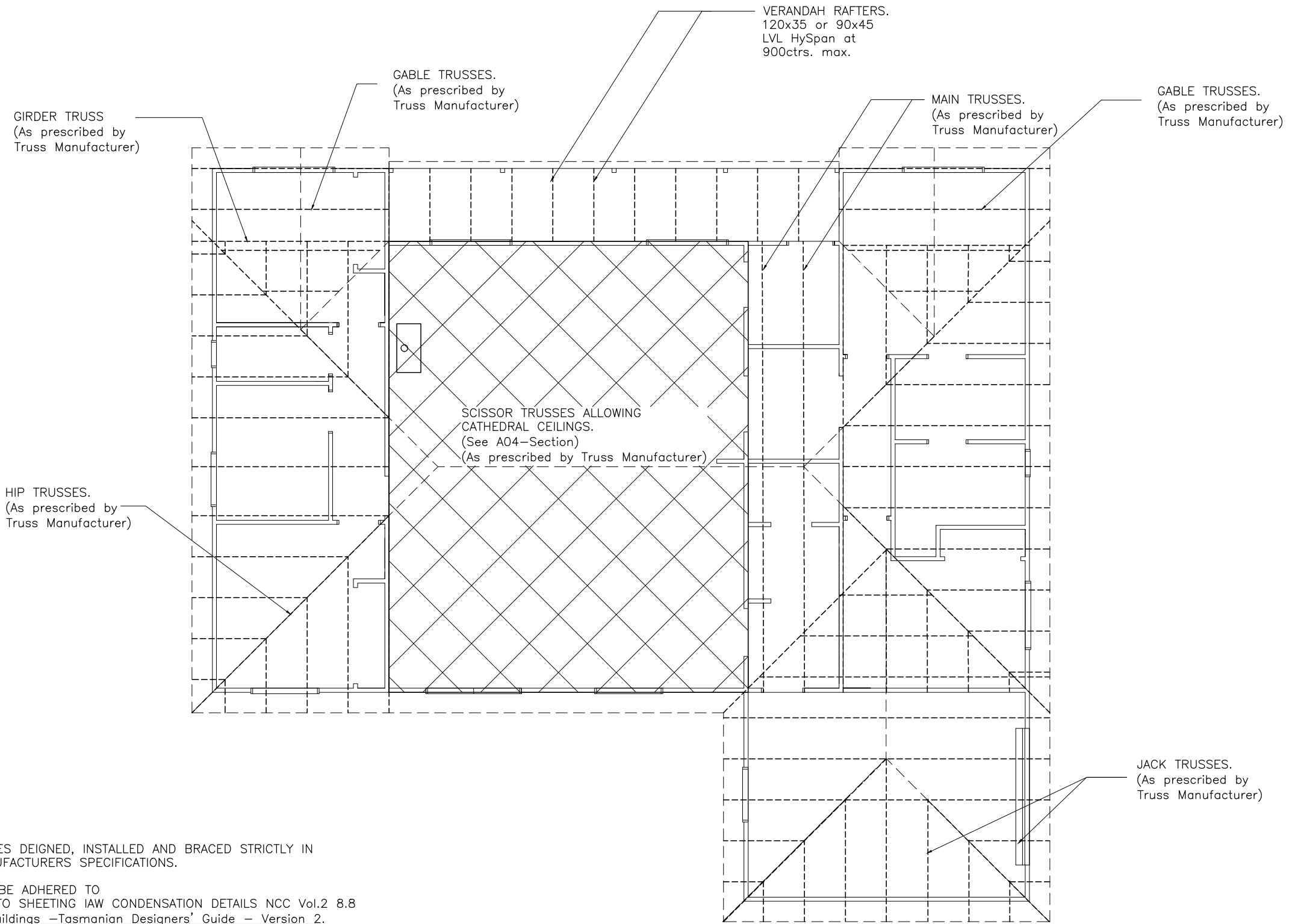
CLIENT: P & S SKIPPER  
 PROJECT: PROPOSED NEW RESIDENCE  
 1315 (Lot 4) OSMASTON ROAD  
 DELORAINE

DRAWING TITLE(S):  
 ROOF PLAN

SCALE: 1:100 (A3)  
 Check dimensions. Dimensions take precedence over scale

DRAWING NO: **A08**  
 DRAWN BY: ME  
 SHEET NO.: 8 of 13

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APPROVED ROOF TRUSSES DEIGNED, INSTALLED AND BRACED STRICTLY IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

ALL FIXING DETAILS TO BE ADHERED TO  
SISILATE ROOF PRIOR TO SHEETING IAW CONDENSATION DETAILS NCC Vol.2 8.8  
AND Condensation in Buildings – Tasmanian Designers’ Guide – Version 2.

ALL TRUSS LOADS ARE TO BE DISTRIBUTED TO PERIMETER WALLS ONLY– UNLESS OTHERWISE SPECIFIED.

BRACING, TIE DOWNS AND LINTELS  
REFER TO ENGINEERS DRAWINGS AND SPECIFICATIONS FOR ALL LINTELS OVER OPENINGS, BRACING AND TIE DOWN DETAILS.  
BRACING AND TIE DOWNS TO COMPLY WITH AS1648.2 AND LATEST NCC (Vol. 2)

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DELORAINE

DRAWING TITLE(S):  
ROOF FRAMING PLAN

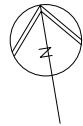
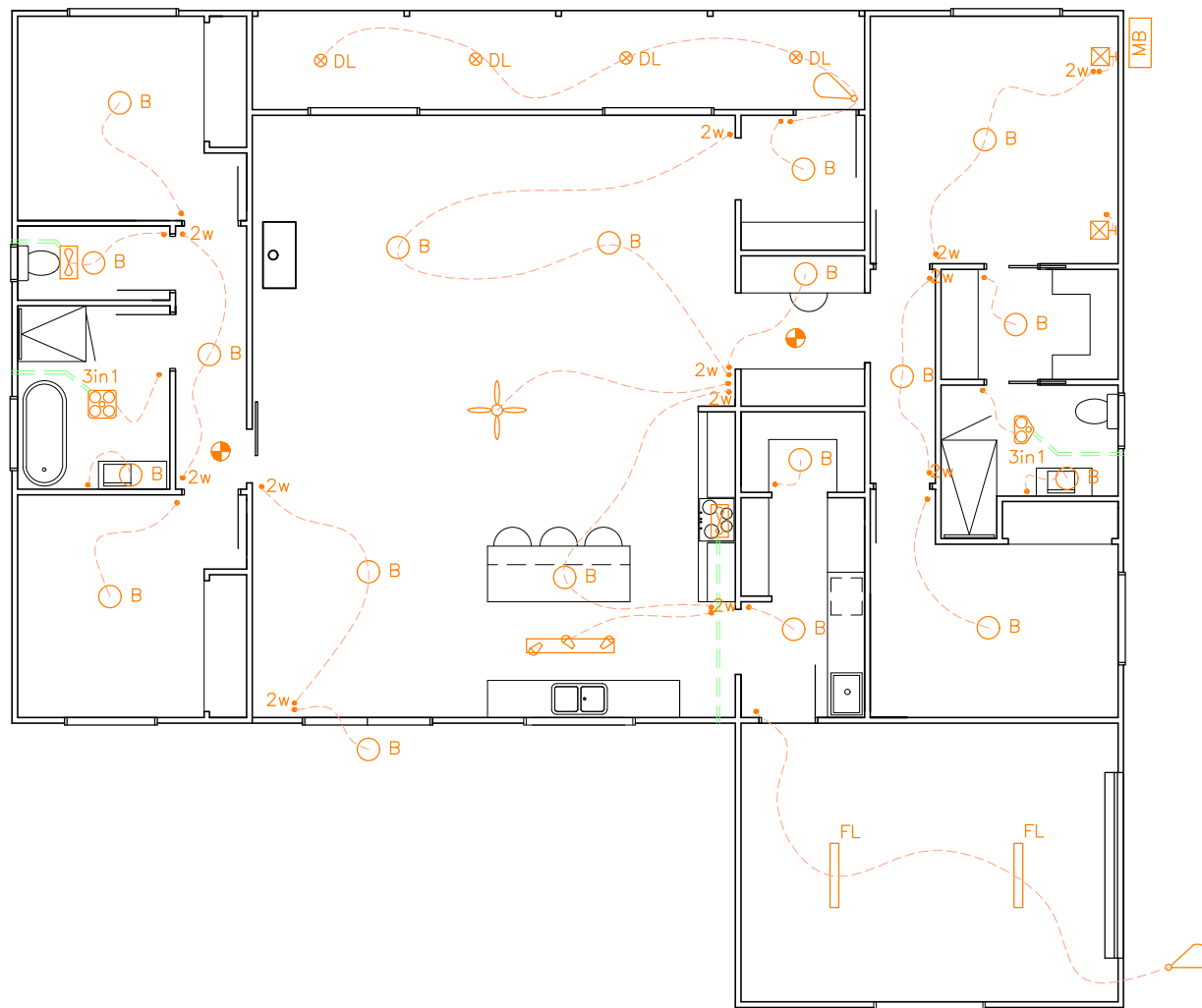
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DRAWING NO: **A09**  
DRAWN BY: ME  
SHEET NO.: 9 of 13

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Trading as  
MDE Building Designs  
Document Set ID: 283982  
Version: 1, Version Date: 22/04/2026

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Light Switch( 2w=2 way switch) (Dim =dimmer)	Ceiling Fans
Meter Box	Combination light, fan & heat lamp unit (4 lamp) 4x275W heat lamps (not included in calculation) 1x 15W fluorescent globe.
Smoke Alarm –all interconnected, hard wired with battery backup. To AS 3786 and Part 3.7.2 of current NCC(Vol2)	Combination light, fan & heat lamp unit (2 lamp) 4x275W heat lamps (not included in calculation) 1x 15W fluorescent globe.
External sensor (to meet NCC requirement that external lights be controlled by a daytime sensor).	Surface mounted 1x 28Wfluorescent fitting
Surface mounted batten light fitting with 11W LED globes.	LED Up/Down exterior wall light (12W) mounted at 1800mm AFL
Downlights –IC Rated LED –fitted with approved covers that allow bulk insulation to fully cover.	LED Up/Down interior wall light (16W) mounted at 1800mm AFL
Track Lights	Exhaust ducts to Exterior
Range Hood/ Exhaust Fan	

All bathroom fans to be fitted with backdraught dampers/ shutters

External lights must be controlled by a daylight sensor (as shown), or have an average light source efficiency of not less than 40 lumens/W

Adjustment of minimum R –Value for loss of ceiling insulation.  
(NCC Vol.2 2020 13.2)

Minimum R–Value of ceiling insulation required to satisfy NCC Vol.2 2022 Table 13.2.3h = R4.5

Total Extension habitable ceiling area: 190.7 sq.m

Area of fans/ lights: 0.95 sq.m

Percentage of ceiling un–insulated due to light fittings and fans(NCC Vol.2 2022 table 13.2) = 0.49%

No adjustment of ceiling insulation is required. (if percentage un–insulated is less than 0.5%)

**BUILDING SEALING**

- GENERALLY TO NCC Vol.2 PART 13.4
- ENSURE ALL ROOF LIGHTS, WINDOWS & DOORS SERVICING HABITABLE ROOMS ARE WEATHER STRIPPED AND SEALED TO NCC V.2 REQUIREMENTS.
- MECHANICAL VENTILATION IS TO BE PROVIDED AND INSTALLED IAW THE NCC V.2 AND MUST BE EXHAUSTED BY WAY OF DUCTS TO THE EXTERIOR OF THE BUILDING IF IT IS THE ONLY SOURCE OF VENTILATION PROVIDED.
- 6 STAR PROVISIONS ALLOW UP TO 1% OF THE CEILING INSULATION AREA TO BE LOST TO PENETRATIONS SUCH AS CEILING FANS AND RECESSED DOWNLIGHTS. IF THIS IS EXCEEDED, THE REMAINDER OF THE INSULATION MUST BE INCREASED BY 25% AND UPWARDS DEPENDING ON ACTUAL PERCENTAGE OF PENETRATIONS.
- ROOF LIGHTS TO HABITABLE ROOMS TO BE FITTED WITH OPERABLE OR PERMANENT SEAL TO MINIMISE AIR LEAKAGE.
- EXHAUST FANS TO HABITABLE ROOMS/ CONDITIONED SPACES TO BE FITTED WITH SELF CLOSING DAMPER OR FILTER.
- CONSTRUCTION JOINTS AND JUNCTIONS OF ADJOINING SURFACES TO BE TIGHT FITTING AND SEALED BY CAULKING, SKIRTING, ARCHITRAVES AND CORNICES AS PER NCC V.2 part13.4
- CHIMNEYS OR FLUES TO BE FITTED WITH SEALING DAMPER OR FLAP THAT CAN BE CLOSED TO SEAL OPENING.

**ENERGY EFFICIENCY**

- GENERALLY IAW NCC Vol. 2. PART 13.6
- REFER TO ATTACHED ENERGY EFFICIENCY STAR RATING DOCUMENTATION.
- CLIMATE ZONE 7 APPLICABLE TO TASMANIA (ZONE 8 APPLICABLE TO ALPINE AREAS).

**BUILDING FABRIC**

NCC Vol.2 PART PART 13.2

- BUILDING FABRIC INSULATION TO BE FITTED TO FORM A CONTINUOUS BARRIER TO ROOF/CEILING WALLS AND FLOORS EXCEPT AROUND SERVICES/FITTINGS (SEE ABOVE–BUILDING SEALING). INSULATION MUST ABUT OR OVERLAP ADJOINING INSULATION OR COLUMNS, STUDS, NOGGINS (ETC). INSULATION MUST RETAIN ITS POSITION AND THICKNESS WHERE IT CROSSES ROOF BATTENS, WATER PIPES, CABLES ETC.
- REFLECTIVE BUILDING MEMBRANE WITH MIN. 0.2 R VALUE, INSTALLED TO FORM 20mm AIRSPACE BETWEEN REFLECTIVE FACE AND EXTERNAL LINING/ CLADDING, FITTED CLOSELY UP TO PENETRATIONS/ OPENINGS, ADEQUATELY SUPPORTED AND JOINTS TO BE LAPPED MIN. 150mm OR TAPED TOGETHER AT LAPS.
- ANY SARKING MUST HAVE A FLAMMABILITY INDEX OF NOT MORE THAN 5.

LIGHTING LAYOUT IS INDICATIVE ONLY AND SHOULD BE CONFIRMED WITH BUILDING CONTRACTOR AND CLIENT PRIOR TO INSTALLATION, HOWEVER MUST COMPLY WITH MINIMUM ILLUMINATION POWER LOAD ALLOWANCES IN THIS TABLE.

LIGHTING SCHEDULE			
ROOM NAME	FLOOR AREA (sqm)	ALLOWANCE (W/sqm)	ILLUMINATION POWER LOAD ALLOWANCE (Watt)
01– GARAGE	28.8	3	86
02– LAUNDRY	5.5	5	28
03– STORE	2,6	5	13
04– LIVING/DINING/ KITCH.	76.8	5	384
05– BEDROOM 3	11.7	5	59
06– BATHROOM	7.3	5	37
07– WC	3.0	5	15
08– BEDROOM 2	10.7	5	54
09– HALLWAY 1	4.9	5	25
10– VERANDAH	15.8	4	63
11– ENTRY	3.9	5	20
12– DESK AREA	4.6	5	23
13– BEDROOM 1	16.0	5	80
14– WALK IN ROBE	5.1	5	26
15– ENSUITE	5.7	5	29
16– OFFICE	12.6	5	63
17– HALLWAY 2	3.6	5	18
TOTAL	218.6		1020

ISSUE: DATE: DESCRIPTION:

A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
 PROJECT: PROPOSED NEW RESIDENCE  
 1315 (Lot 4) OSMASTON ROAD  
 DELORAINE

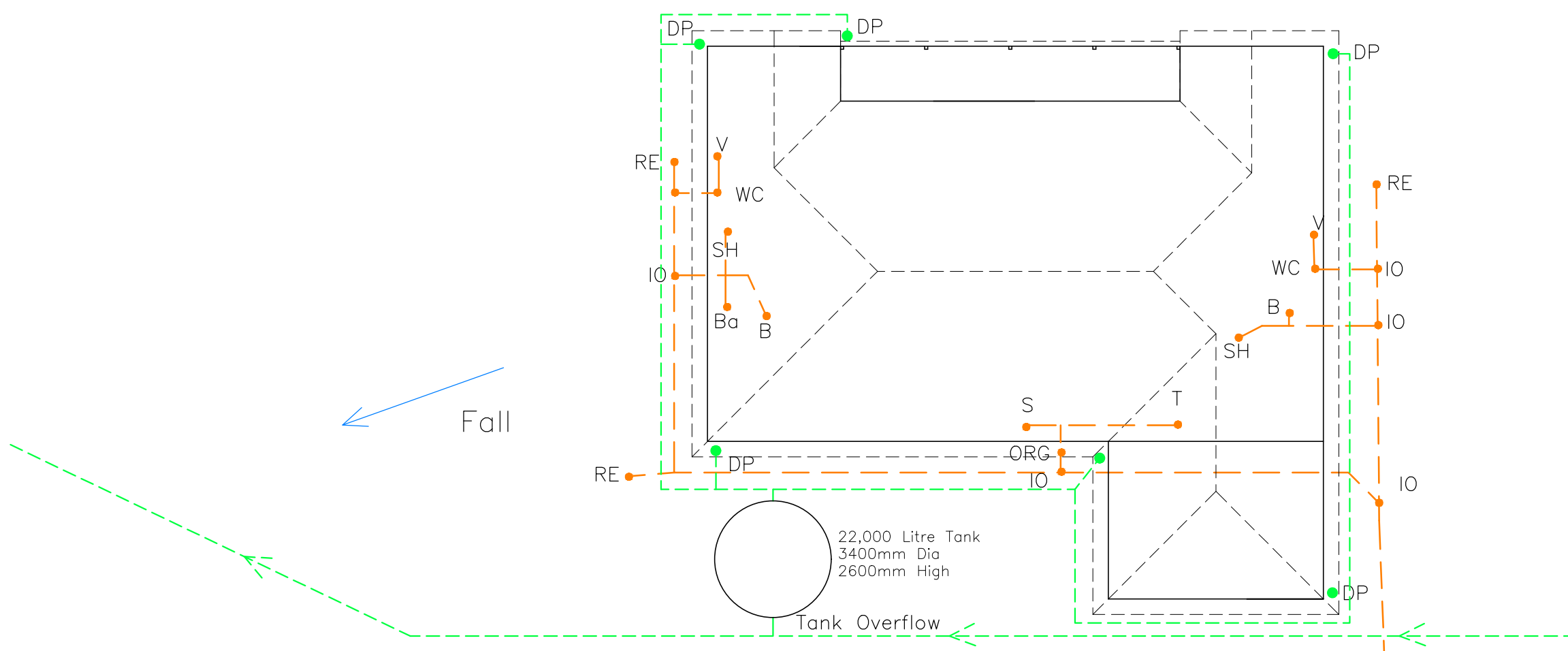
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 REFLECTED CEILING PLAN

SCALE:  
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 (A3)  
 Check dimensions.  
 Dimensions take  
 precedence over scale

DRAWING NO: **A10**  
 DRAWN BY: ME  
 SHEET NO. :10 of 13

**Building Designs & Drafting**  
 11 Balfour Place  
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 ABN 62650579624

Trading as  
 MDE Building Designs  
 No. CC1629 D  
 Version 1, Version Date: 22/04/2026



**NOTES:**

Install inspection openings (IO) at major bends for stormwater and all low points of downpipes.

All plumbing & drainage to be in accordance with local Council requirements.

Provide surface drain to back of bulk excavation to drain levelled pad prior to commencing footing excavation.

**SERVICES**  
The heated water system must be designed and installed with Part B2 of NCC Volume Three—Plumbing Code of Australia.

Thermal insulation for heated water piping must:  
a) be protected against the effects of weather and sunlight; and  
b) be able to withstand the temperatures within the piping; and  
c) use thermal insulation in accordance with AS/NZ 4859.1

Heated water piping that is not within a conditioned space must be thermally insulated as follows:

- Internal Piping**
  - All flow and return internal piping that is –
    - within an unventilated wall space
    - within an internal floor between storeys;
  - or
    - between ceiling insulation and a ceiling
 Must have a minimum R-Value of 0.2 (ie 9mm of closed cell polymer insulation)
- Piping located within a ventilated wall space, an enclosed building subfloor or a roof space.**
  - All flow and return piping
  - Cold water supply piping and Relieve valve piping— within 500mm of the connection to central water heating system  
Must have a minimum R-Value of 0.45 (ie 19mm of closed cell polymer insulation)
- Piping located outside the building or in an unenclosed building sub-floor or roof space**
  - All flow and return piping
  - Cold water supply piping and Relieve valve piping— within 500mm of the connection to central water heating system  
Must have a minimum R-Value of 0.6 (ie 25mm of closed cell polymer insulation)

Piping within an insulated timber framed wall such as that passing through a wall stud, is considered to comply with the above insulation requirements.

All works are to be in accordance with the Water Supply Code of Australia WSA 03–2011–3.1 Version 3.1 MRWA Edition V2.0 and Sewerage Code of Australia Melbourne Retail Water Agencies Code WSA 02–2014–3.1 MRWA Version 2/ WSA 02–2002 Version 2.3 MRWA Edition 1.0 and TasWater’s supplements to these codes.

**NOTES**

THIS PLAN IS INDICATIVE ONLY AND MAY BE VARIED BY PLUMBER. IN THIS EVENT, PLUMBER SHOULD PROVIDE NEW DETAILS.

LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF SITE WORKS

CONFIRM CONNECTION DEPTHS PRIOR TO COMMENCEMENT OF SITE WORKS. DEPTHS MAY DICTATE SLAB HEIGHT.

ALL DRAINAGE WORK SHOWN IS PROVISIONAL ONLY AND IS SUBJECT TO AMENDMENT TO COMPLY WITH LOCAL AUTHORITIES REQUIREMENTS. ALL WORK IS TO COMPLY WITH AS–3500 AND LOCAL PLUMBING CODE AND MUST BE CARRIED OUT BY A LICENCED PLUMBER.

DOWNPIPES – 90 dia.  
STORMWATER–100 dia PVC AT 1:100 GRADIENT MIN.  
SEWER – 100 dia PVC AT 1:60 GRADIENT MIN.

----- SEWERAGE  
----- STORMWATER

**LEGEND**

- B – BASIN
- Ba – BATH
- S – SINK
- T – LAUNDRY TUB
- SH – SHOWER
- WC – WATER CLOSET
- FW – FLOOR WASTE
- DP – DOWN PIPE
- V – VENT
- IO – INSPECTION OPENING
- ORG – OVERFLOW RELIEF GULLY
- RE – RODDING EYE
- HWC – HOT WATER CYLINDER
- X – EXTERNAL TAP

**LEGEND OF DIAMETERS**

- TROUGH = 50mm
  - SINK = 50mm
  - BATH = 40mm
  - BASIN = 40mm
  - SHOWER = 50mm
  - WC = 100mm
- COLD WATER**  
FROM METER TO HOUSE USE 25mm CLASS 12 POLYETHYLENE. INSIDE HOUSE USE 20mm CLASS 'B' WITH 12mm CLASS 'B' COPPER BRANCH LINES
- HOT WATER**  
FROM HWC USE USE 18mm CLASS 'B' WITH 15mm COPPER BRANCH LINES TO FIXTURES. INSTALL 'RMC' OR EQUAL TEMPERING VALVE SET TO 50 deg. C
- HOT WATER SUPPLY SYSTEM DESIGNED AND INSTALLED IAW AS/NZS 3500.

• THIS PLAN HAS BEEN DRAWN BY THIS DESIGNER TO COMPLY WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC Vol.2) AND ALL REQUIREMENTS OF LOCAL AUTHORITIES.  
• USE ONLY FIGURED DIMENSIONS. DO NOT SCALE.  
• NO WORK SHOULD COMMENCE UNTIL LOCAL AUTHORITIES HAVE APPROVED THE BUILDING APPLICATION. THE DESIGNER DOES NOT ACCEPT ANY RESPONSIBILITY FOR MISCONSTRUCTION OR INTERPRETATION. ALL WORK SHOULD BE IN CONJUNCTION WITH ANY STRUCTURAL ENGINEERS CERTIFICATES.  
• CONTRACTORS SHOULD ENSURE ALL WORK IS CLEAR OF EXISTING SERVICES WHETHER SHOWN ON DRAWINGS OR NOT. SERVICES SHOULD BE LOCATED IN CONJUNCTION WITH RELEVANT AUTHORITIES.

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Trading as  
MDE Building Designs  
Document Set ID: 230932 No. CC1629 D  
Version 1, Version Date: 22/04/2026

ISSUE:	DATE:	DESCRIPTION:
A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
PROJECT: PROPOSED NEW RESIDENCE  
1315 (Lot 4) OSMASTON ROAD  
DELORAINE

DRAWING TITLE(S): PLUMBING/ DRAINAGE PLAN

SCALE: 1:150  
Check dimensions. Dimensions take precedence over scale

DRAWING NO: **A11**  
DRAWN BY: ME  
SHEET NO.: 11 of 13

## WATERPROOFING AND WATER RESISTANCE REQUIREMENTS FOR BUILDING ELEMENTS IN WET AREAS:

VESSEL OR AREA WHERE THE FIXTURE IS INSTALLED	FLOORS AND HORIZONTAL SURFACES	WALLS	WALL JUNCTIONS AND JOINTS	PENETRATIONS
ENCLOSED SHOWER WITH HOB	WATERPROOF ENTIRE ENCLOSED SHOWER AREA INCL. HOB	WATERPROOF TO NOT LESS THAN 150mm ABOVE THE SHOWER FLOOR SUBSTRATE OR NOT LESS THAN 25mm ABOVE THE MAX RETAINED WATER LEVEL, WHICH EVER IS GREATER, WITH THE REMAINDER BEING WATER RESISTANT TO 1800mm ABOVE THE FFL.	WATERPROOF INTERNAL & EXTERNAL CORNERS & HORIZONTAL JOINTS WITHIN A HEIGHT OF 1800mm ABOVE FLOOR LEVEL AND NOT LESS THAN 40mm WIDTH EITHER SIDE OF THE JUNCTION.	WATERPROOF ALL PENETRATIONS
ENCLOSED SHOWER WITHOUT HOB	WATERPROOF ENTIRE ENCLOSED SHOWER AREA INCL. WATERSTOP	WATERPROOF TO NOT LESS THAN 150mm ABOVE THE SHOWER FLOOR SUBSTRATE WITH THE REMAINDER BEING WATER RESISTANT TO MIN. 1800mm ABOVE THE FFL.	WATERPROOF INTERNAL & EXTERNAL CORNERS & HORIZONTAL JOINTS WITHIN A HEIGHT OF 1800mm ABOVE FLOOR LEVEL AND NOT LESS THAN 40mm WIDTH EITHER SIDE OF THE JUNCTION.	WATERPROOF ALL PENETRATIONS
ENCLOSED SHOWER WITH STEP DOWN	WATERPROOF ENTIRE ENCLOSED SHOWER AREA INCL. THE STEPDOWN	WATERPROOF TO NOT LESS THAN 150mm ABOVE THE SHOWER FLOOR SUBSTRATE OR NOT LESS THAN 25mm ABOVE THE MAX RETAINED WATER LEVEL, WHICH EVER IS GREATER, WITH THE REMAINDER BEING WATER RESISTANT TO 1800mm ABOVE THE FFL.	WATERPROOF INTERNAL & EXTERNAL CORNERS & HORIZONTAL JOINTS WITHIN A HEIGHT OF 1800mm ABOVE FLOOR LEVEL AND NOT LESS THAN 40mm WIDTH EITHER SIDE OF THE JUNCTION.	WATERPROOF ALL PENETRATIONS
ENCLOSED SHOWER WITH PRE-FORMED SHOWER BASE	NOT APPLICABLE	WATER RESISTANT TO A HEIGHT NOT LESS THAN 1800mm ABOVE THE FFL.	WATERPROOF INTERNAL & EXTERNAL CORNERS & HORIZONTAL JOINTS WITHIN A HEIGHT OF 1800mm ABOVE FLOOR LEVEL AND NOT LESS THAN 40mm WIDTH EITHER SIDE OF THE JUNCTION.	WATERPROOF ALL PENETRATIONS
UN-ENCLOSED SHOWERS	WATERPROOF ENTIRE UN-ENCLOSED SHOWER FLOOR	WATERPROOF TO NOT LESS THAN 150mm ABOVE THE SHOWER FLOOR SUBSTRATE OR NOT LESS THAN 25mm ABOVE THE MAX RETAINED WATER LEVEL, WHICH EVER IS GREATER, WITH THE REMAINDER BEING WATER RESISTANT TO 1800mm ABOVE THE FFL.	WATERPROOF INTERNAL & EXTERNAL CORNERS & HORIZONTAL JOINTS WITHIN A HEIGHT OF 1800mm ABOVE FLOOR LEVEL AND NOT LESS THAN 40mm WIDTH EITHER SIDE OF THE JUNCTION.	WATERPROOF ALL PENETRATIONS
AREAS OUTSIDE THE SHOWER AREA FOR CONCRETE AND COMPRESSED FIBRE CEMENT SHEETING	WATER RESISTANT TO ENTIRE FLOOR	NOT APPLICABLE	WATERPROOF ALL WALL/FLOOR JUNCTIONS WHERE A FLASHING IS USED THE HORIZONTAL LEG MUST NOT BE LESS THAN 40mm	NOT APPLICABLE
AREAS OUTSIDE THE SHOWER AREA FOR TIMBER AND PARTICLE BOARD FLOORING	WATER PROOF TO ENTIRE FLOOR	NOT APPLICABLE	WATERPROOF ALL WALL/FLOOR JUNCTIONS WHERE A FLASHING IS USED THE HORIZONTAL LEG MUST NOT BE LESS THAN 40mm	NOT APPLICABLE
AREAS ADJACENT TO BATHS AND SPAS FOR CONCRETE AND COMPRESSED FIBRE CEMENT SHEETING	WATER RESISTANT TO ENTIRE FLOOR	WATER RESITANT TO A HEIGHT OF NOT LESS THAN 150mm ABOVE THE VESSEL AND EXPOSED SURFACES BELOW THE VESSEL UP TO FLOOR LEVEL.	WATERPROOF EDGES OF THE VESSEL AND JUNCTION OF BATH ENCLOSURE WITH FLOOR. WHERE THE LIP OF THE BATH IS SUPPORTED BY A HORIZONTAL SURFACE, THIS AREA MUST BE WATERPROOF FOR SHOWERS OVER A BATH AND WATER RESITANT FOR ALL OTHER CASES.	WATERPROOF ALL TAP & SPOUT PENETRATIONS ONHORIZONTAL SURFACES
AREAS ADJACENT TO BATHS AND SPAS FOR TIMBER AND PARTICLE BOARD FLOORING	WATER PROOF TO ENTIRE FLOOR	WATER RESITANT TO A HEIGHT OF NOT LESS THAN 150mm ABOVE THE VESSEL AND EXPOSED SURFACES BELOW THE VESSEL UP TO FLOOR LEVEL.	WATERPROOF EDGES OF THE VESSEL AND JUNCTION OF BATH ENCLOSURE WITH FLOOR. WHERE THE LIP OF THE BATH IS SUPPORTED BY A HORIZONTAL SURFACE, THIS AREA MUST BE WATERPROOF FOR SHOWERS OVER A BATH AND WATER RESITANT FOR ALL OTHER CASES.	WATERPROOF ALL TAP & SPOUT PENETRATIONS ON HORIZONTAL SURFACES
INSERTED BATHS	N/A FOR FLOOR UNDER BATH. WATERPROOF ENTIRE SHELF AREA INCORPORATING 'WATERSTOP' UNDER THE BATH LIP AND PROJECT NOT LESS THAN 5mm ABOVE THE TILE SURFACE	NOT APPLICABLE FOR WALL UNDER BATH. WATERPROOF TO NOT LESS THAN 150mm ABOVE THE LIP OF THE BATH.	NOT APPLICABLE FOR WALL UNDER BATH	WATERPROOF ALL TAP & SPOUT PENETRATIONS ON HORIZONTAL SURFACES
WALLS ADJOINING OTHER VESSELS (SINKS, TUBS, BASINS)	NOT APPLICABLE	WATER RESISTANT TO A HEIGHT OF NOT LESS THAN 150mm ABOVE THE VESSEL IF THE VESSEL IS WITHIN 75mm OF THE WALL.	WHERE THE VESSEL IS FIXED TO A WALL, WATERPROOF EDGES FOR EXTENT OF THE VESSEL.	WATERPROOF ALL TAP & SPOUT PENETRATIONS ON HORIZONTAL SURFACES
LAUNDRIES & WC'S	WATER RESISTANT TO ENTIRE FLOOR	WATERPROOF ALL WALL/ FLOOR JUNCTIONS TO NOT LESS THAN 25mm ABOVE THE FFL, SEALED TO FLOOR.	WATERPROOF ALL WALL/ FLOOR JUNCTIONS WHERE A FLASHING IS USED THE HORIZONTAL LEG MUST NOT BE LESS THAN 40mm	NOT APPLICABLE

• THIS PLAN HAS BEEN DRAWN BY THIS DESIGNER TO COMPLY WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC Vol.2) AND ALL REQUIREMENTS OF LOCAL AUTHORITIES.  
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ALL WATERPROOFING USE 'ARDEX' WPM SERIES PRODUCTS (OR SIMILAR) STRICTLY IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND AS 3740- Waterproofing of Wet Areas within Residential Buildings.

	11 Balfour Place Launceston 7250 Mob. 0407071492 mdebuildingdesigns@bigpond.com ABN 62650579624
	Trading as Mark Evans Building Designs & Drafting Document Set ID: 46248046 Version 1, Version Date: 22/04/2026

ISSUE:	DATE:	DESCRIPTION:
A1	APR. 2026	FOR ALL APPROVALS AND TENDERS
A2	APR. 2026	PLANNING PERMIT REQUIREMENTS

CLIENT: P & S SKIPPER  
 PROJECT: PROPOSED NEW RESIDENCE  
 1315 (Lot 4) OSMASTON ROAD  
 DELORAINE

DRAWING TITLE(S):  
WET AREA DETAILS 1

SCALE: N/A (A3) Check dimensions. Dimensions take precedence over scale	DRAWING NO: <span style="font-size: 1.5em; font-weight: bold;">A12</span> DRAWN BY: ME SHEET NO.: 12 of 13
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WP—Waterproof  
WR—Water Resistant

WET AREAS – NCC Vol.2 2022 PART 10.2  
GENERAL NOTES

WET AREAS MUST BE WATER PROOF OR WATER RESISTANT IN ACCORDANCE WITH NCC Vol.2 2022 PART 10.2

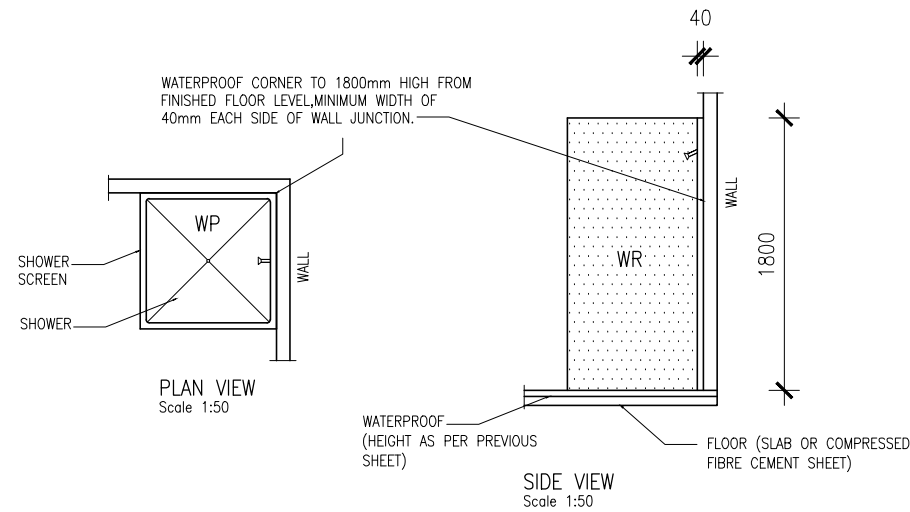
FOR DEFINITIONS OF WATERPROOF & WATER RESISTANT REFER TO NCC Vol.2 2022 PART 10.2

PREFORMED SHOWER BASES MUST BE INSTALLED IN A MANOR TO AVOID DISTORTION AND CRACKING.

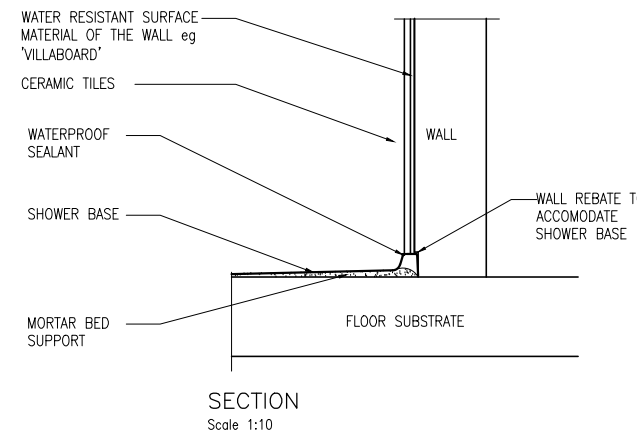
PREFORMED BATHS AND SPAS MUST BE INSTALLED IN A MANOR TO AVOID DISTORTION AND CRACKING.

WET AREA FLOORS MUST BE INSTALLED SO THAT WATER FLOWS TO THE WASTE WITHOUT PONDING. REFER TO NCC Vol.2 2022 Part 10.2

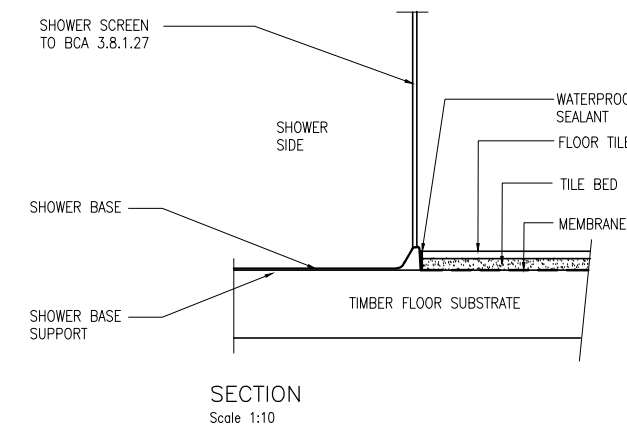
BOND BREAKERS MUST BE INSTALLED AT ALL WALL/ FLOOR, HOB/WALL JUNCTIONS AND AT MOVEMENT JOINTS. BOND BREAKERS MUST BE OF THE TYPE COMPATIBLE WITH THE FLEXIBILITY CLASS OF THE MEMBRANE USED.



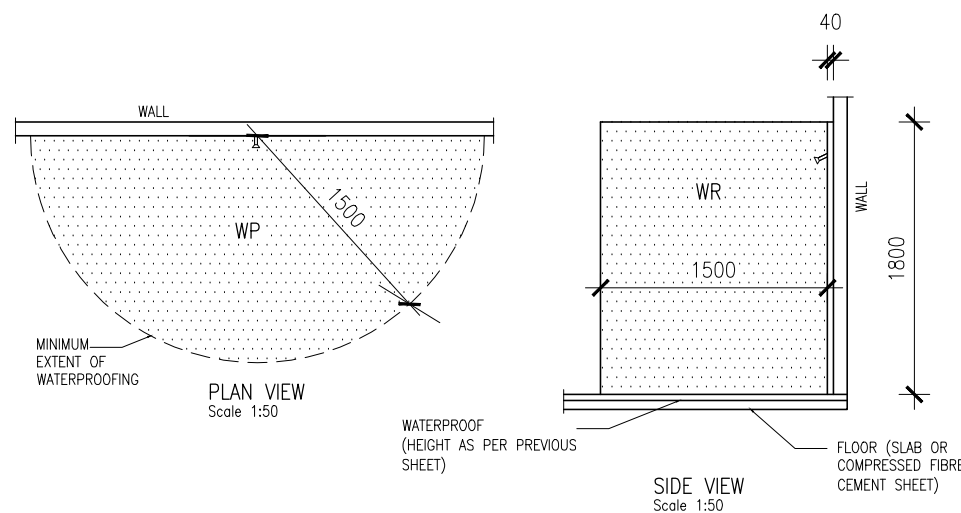
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EXTENT OF TREATMENT FOR SHOWER AREA— CONCRETE & COMPRESSED CEMENT SHEET FLOOR



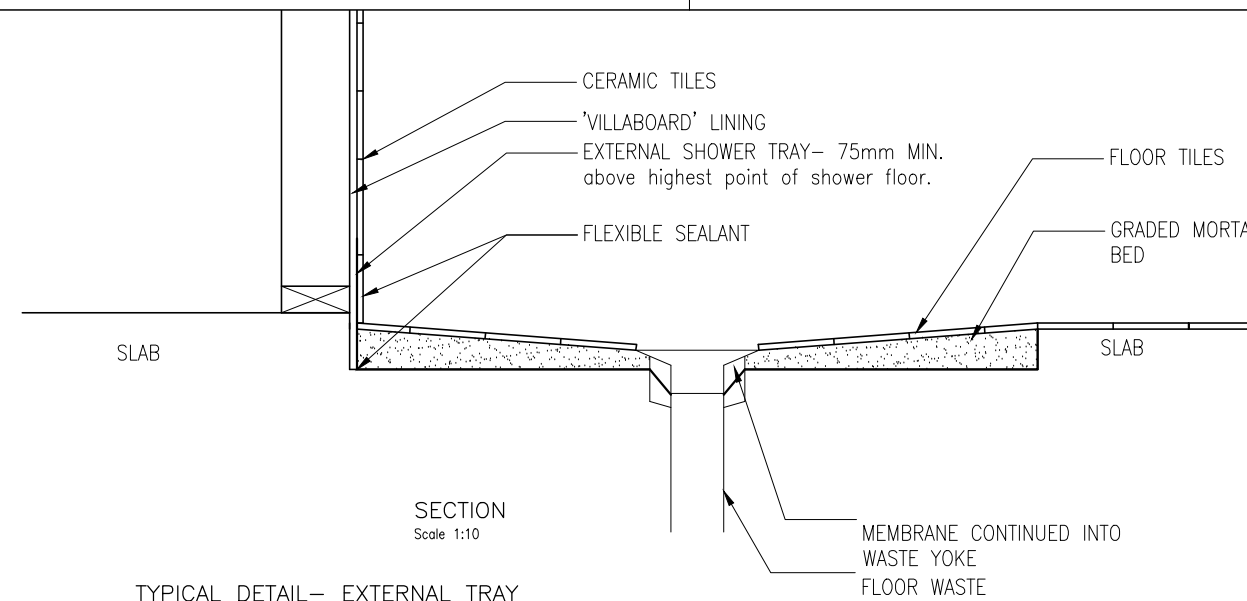
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WALL/FLOOR JUNCTION



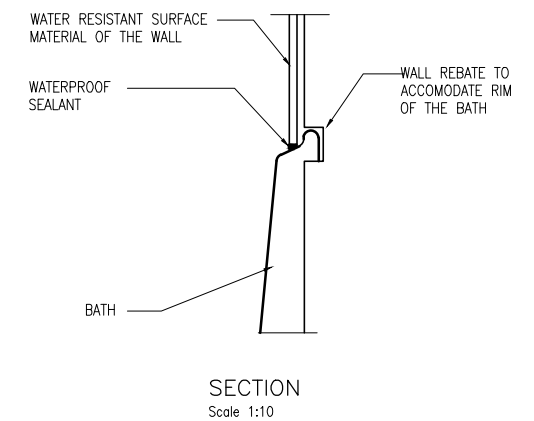
TYPICAL DETAIL—PREFORMED SHOWER BASE/  
SHOWER SCREEN—TIMBER FLOOR



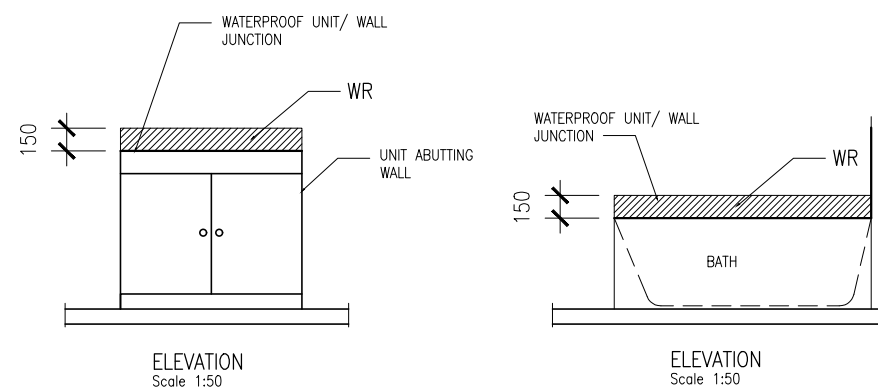
TYPICAL DETAIL UN—ENCLOSED SHOWER  
EXTENT OF TREATMENT FOR SHOWER AREA— CONCRETE & COMPRESSED CEMENT SHEET FLOOR



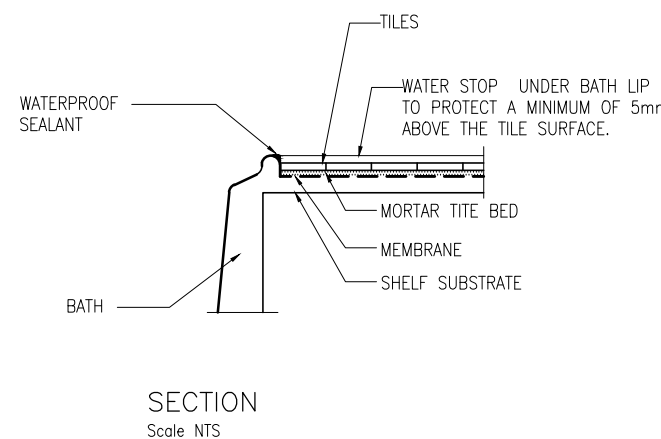
TYPICAL DETAIL— EXTERNAL TRAY  
SHOWER SET DOWN IN SLAB FLOOR



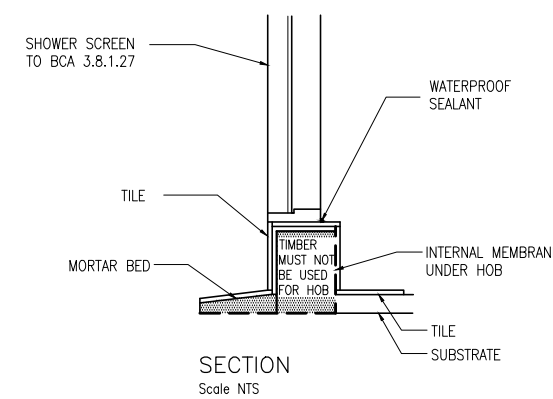
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RECESSED



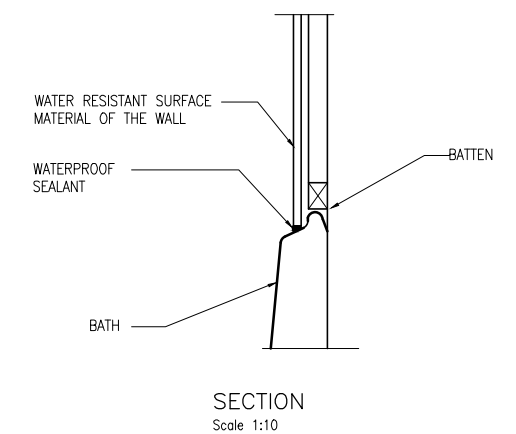
TYPICAL DETAIL —VESSEL & BATH ABUTTING WALL  
—AREAS TO BE TREATED



TYPICAL DETAIL—BATH/SHELF JUNCTION



TYPICAL HOB CONSTRUCTION—EXTERNAL  
(PRE—FORMED) MEMBRANE



TYPICAL DETAIL—BATH/WALL JUNCTION—  
RECESSED

ISSUE: DATE: DESCRIPTION:

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1315 (Lot 4) OSMASTON ROAD  
DELORAINE

DRAWING TITLE(S):

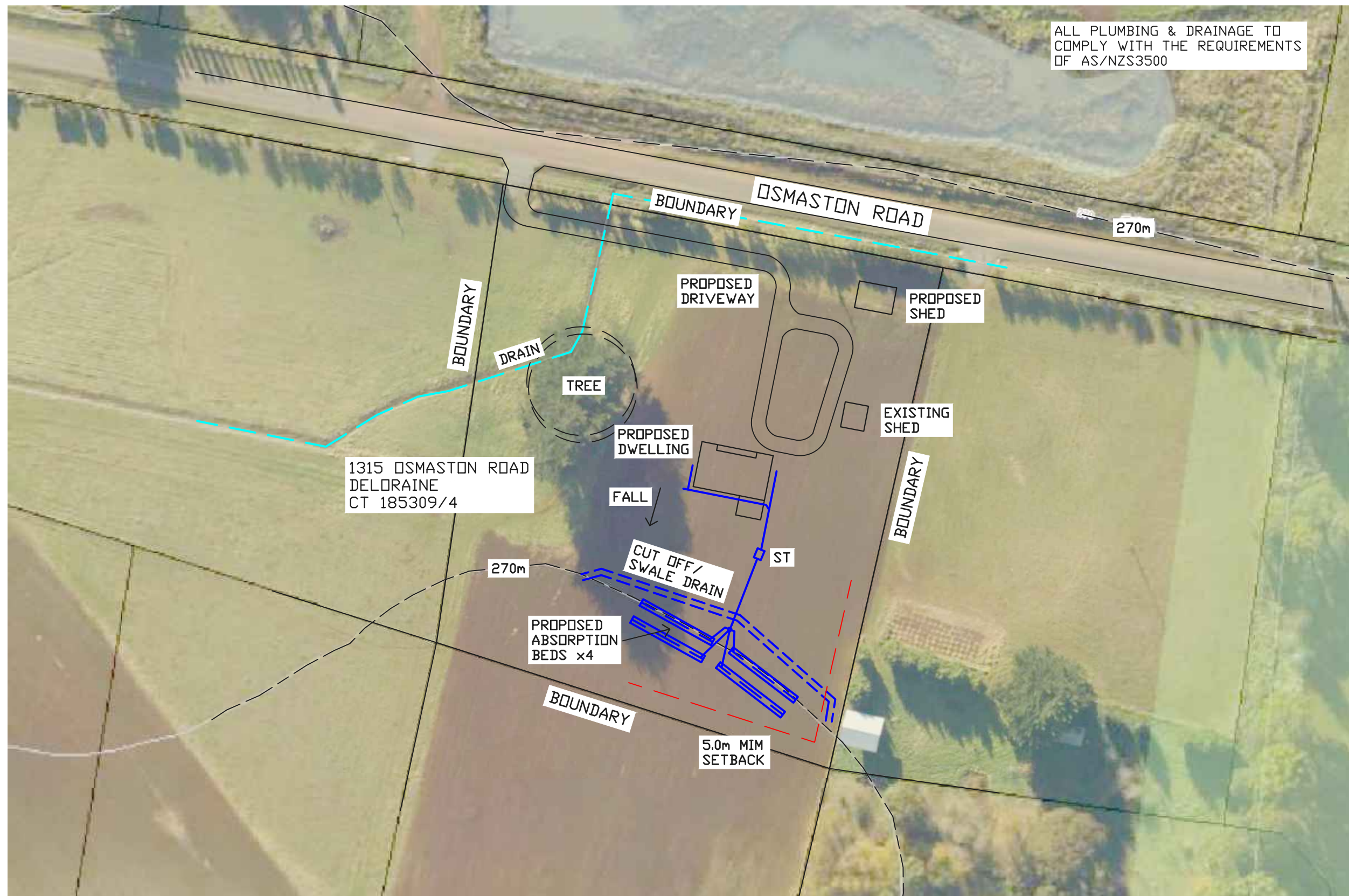
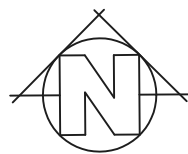
WET AREA DETAILS 2

SCALE:  
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(A3)  
Check dimensions.  
Dimensions take  
precedence over scale

DRAWING NO: **A13**

DRAWN BY: ME

SHEET NO.: 13 of 13



Refer to JD Consulting OSWW Report 03-2026 signed and dated 3 March 2026

*James Doherty*

3.3.2026

JD Consulting  
PO Box 8  
Riverside TAS 7250

ISSUE

INSTALLATION OF OSWW (SEPTIC TANK AND ABSORPTION BEDS) FOR NEW DWELLING

P & S SKIPPER, 1315 OSMASTON ROAD, DELORAIN

SITE PLAN

DATE FEBRUARY 2026

SCALES 1:1000 AT A3

DRAWN MF

DESIGNED JD

CHECKED JD

J DOHERTY, CC6216A

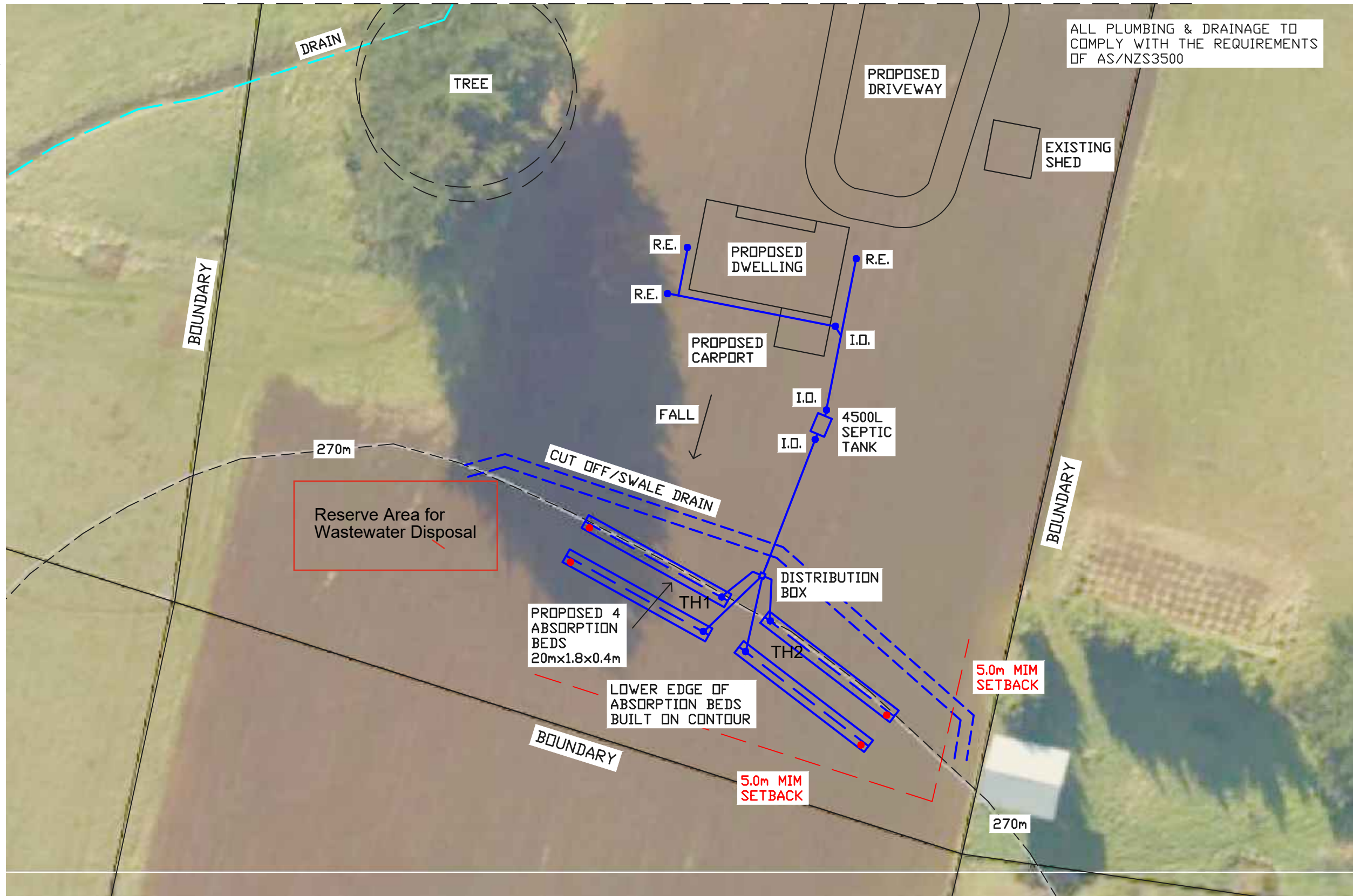
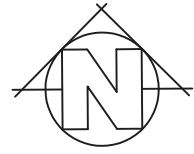
PROJECT No 03-2026

DATE PLOTTED 18.02.2026

DATE CHECKED 18.02.2026

01 OF 06

REV. -



Refer to JD Consulting OSWW Report 03-2026 signed and dated 3 March 2026

*James Doherty*

3.3.2026

JD Consulting  
PO Box 8  
Riverside TAS 7250

ISSUE

INSTALLATION OF OSWW (SEPTIC TANK AND ABSORPTION BEDS) FOR NEW DWELLING

P & S SKIPPER, 1315 OSMASTON ROAD, DELORAINE

PART SITE PLAN - GENERAL LAA LAYOUT

DATE FEBRUARY 2026

SCALES 1:500 AT A3

DRAWN MF

DESIGNED JD

CHECKED JD

J DOHERTY, CC6216A

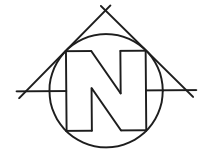
PROJECT No 03-2026

DATE PLOTTED 18.02.2026

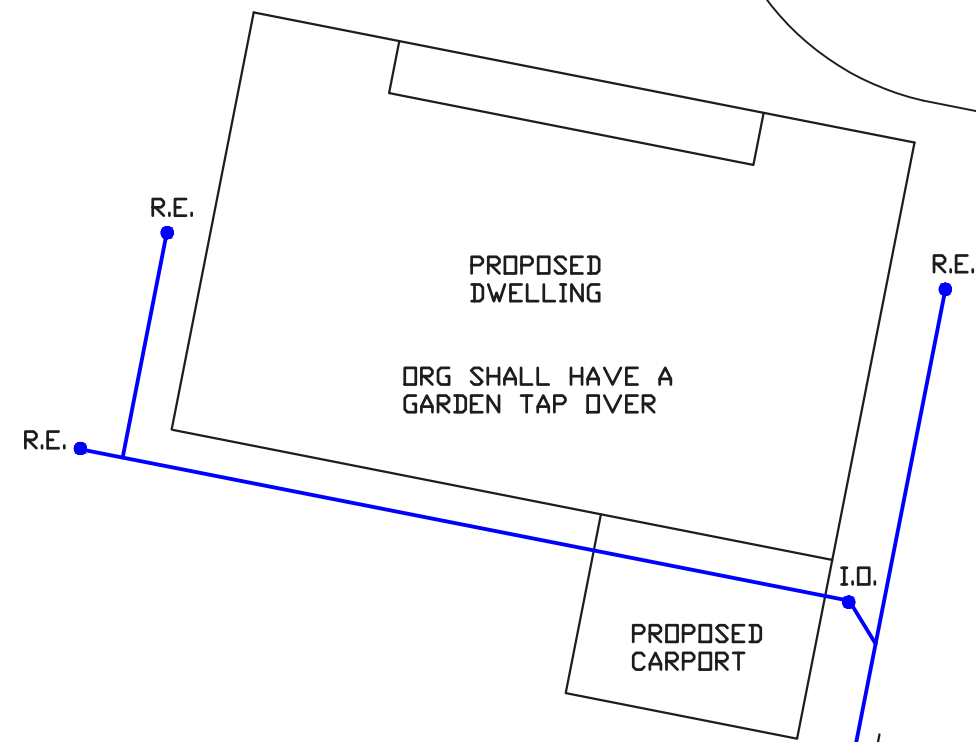
DATE CHECKED 18.02.2026

02 OF 06

REV. -



ALL PLUMBING & DRAINAGE TO COMPLY WITH THE REQUIREMENTS OF AS/NZS3500



SEPTIC TANK 3.0m MIN FROM BUILDING LINE

4500 (MIN) LITRE SEPTIC TANK. AN ORION BLOD 4500 LITRE SEPTIC TANK IS RECOMMENDED

**NOTE**  
IF GRAVITY FALL FROM THE SEPTIC TANK TO THE LAND APPLICATION AREA CANNOT BE ACHIEVED, A 1000 LITRE PUMP STATION WILL NEED TO BE INSTALLED ON THE OUTLET SIDE OF THE SEPTIC TANK

FALL  
100mm UPVC SEWER PIPE TO THE DISTRIBUTION BOX

ABSORPTION BED WITH 230 RELN POLY ARCH

CUT OFF/SWALE DRAIN

270m

Refer to JD Consulting OSWW Report 03-2026 signed and dated 3 March 2026

*James Doherty*

JD Consulting  
PO Box 8  
Riverside TAS 7250

INSTALLATION OF OSWWS (SEPTIC TANK AND ABSORPTION BEDS) FOR NEW DWELLING  
P & S SKIPPER, 1315 OSMASTON ROAD, DELORAINE  
PART SITE PLAN - LAA LAYOUT - DWELLING DRAINAGE

SCALES 1:200 AT A3  
DRAWN MF  
DESIGNED JD  
CHECKED JD

DATE PLOTTED 18.02.2026  
DATE CHECKED 18.02.2026

3.3.2026

ISSUE

DATE

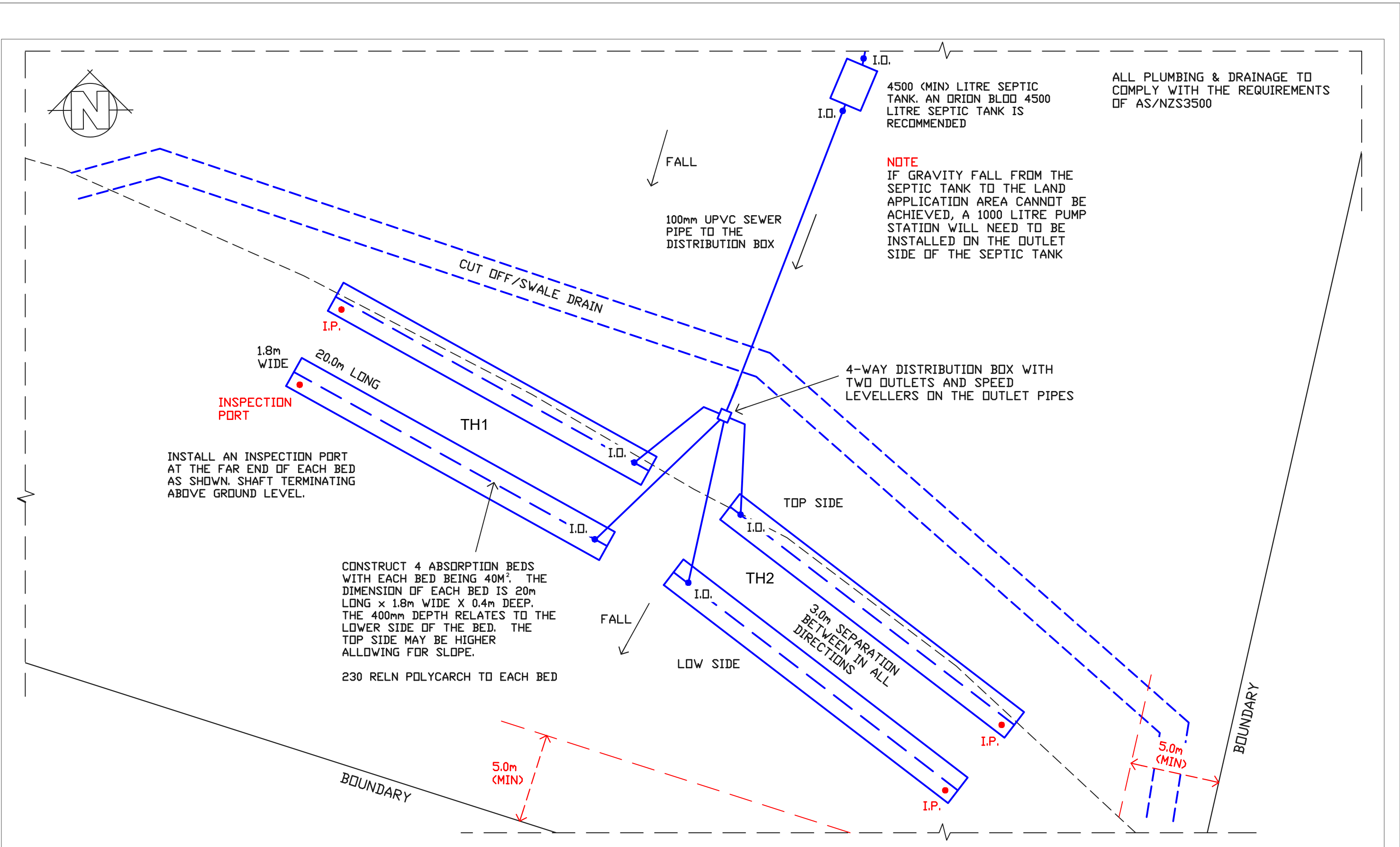
FEBRUARY 2026

J DOHERTY, CC6216A

PROJECT No 03-2026

03 OF 06

REV. -



Refer to JD Consulting OSWW Report 03-2026 signed and dated 3 March 2026

*James Doherty*

3.3.2026

	JD Consulting PO Box 8 Riverside TAS 7250	
ISSUE		DATE

INSTALLATION OF OSWWS (SEPTIC TANK AND ABSORPTION BEDS) FOR NEW DWELLING

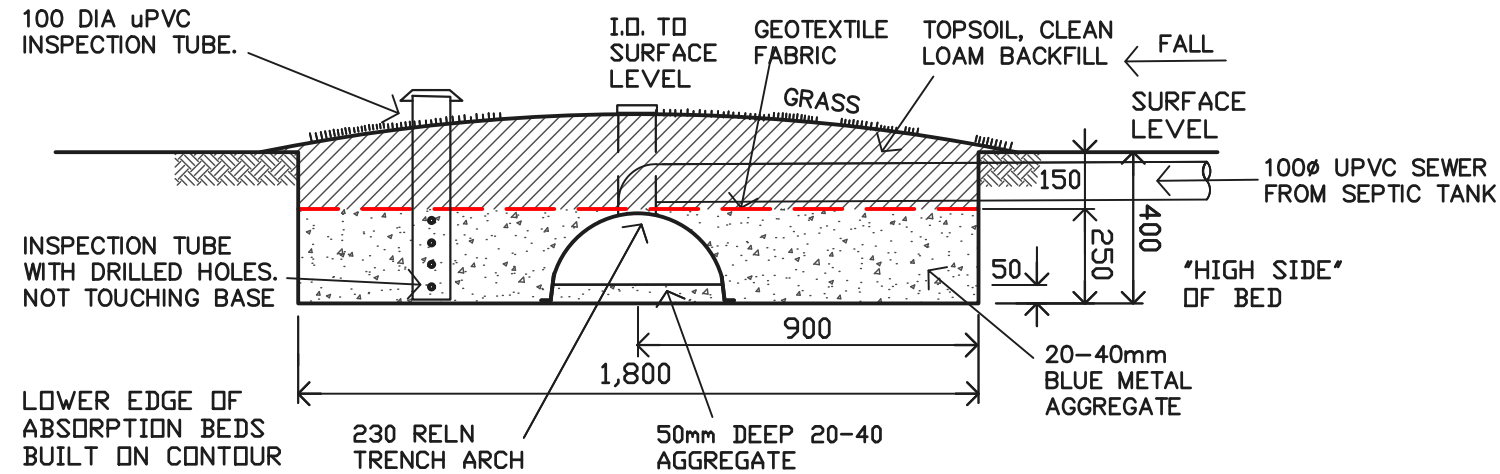
P & S SKIPPER, 1315 OSMASTON ROAD, DELORAINE

PART SITE PLAN - LAA LAYOUT

FEBRUARY 2026

SCALES	1:200 AT A3	DATE PLOTTED	18.02.2026
DRAWN	MF		
DESIGNED	JD	DATE CHECKED	18.02.2026
CHECKED	JD		
J DOHERTY, CC6216A			
PROJECT No	03-2026	04 OF 06	REV. -

ALL PLUMBING & DRAINAGE TO COMPLY WITH THE REQUIREMENTS OF AS/NZS3500

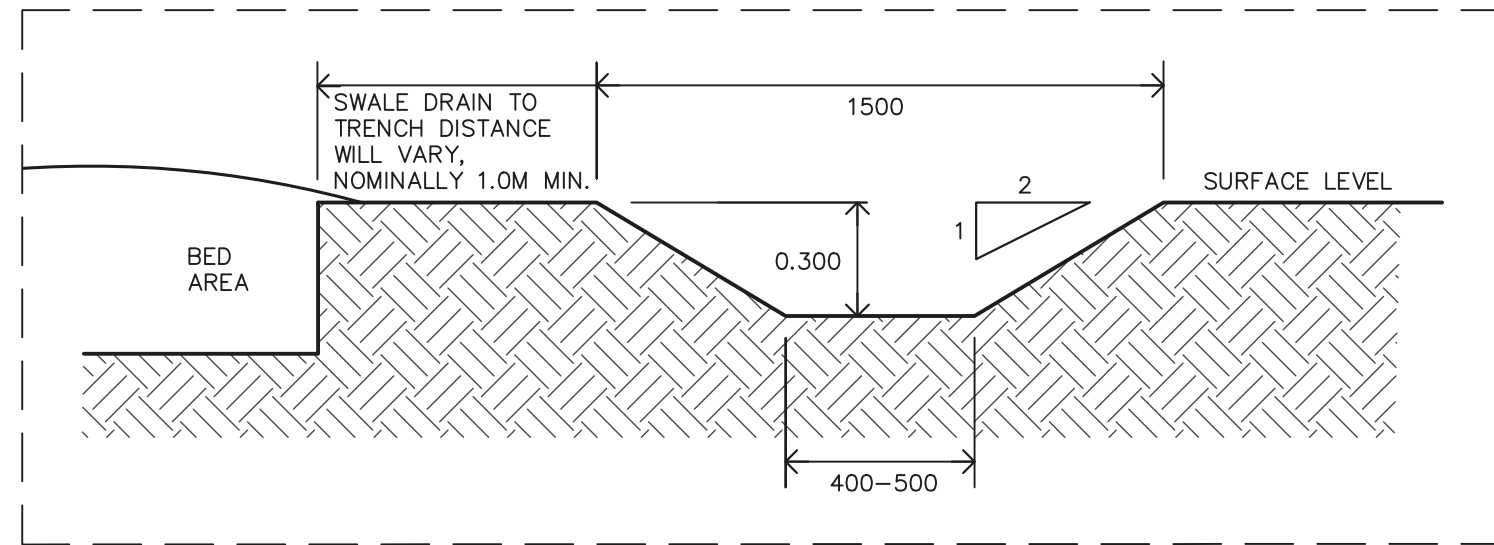


**NOTES**

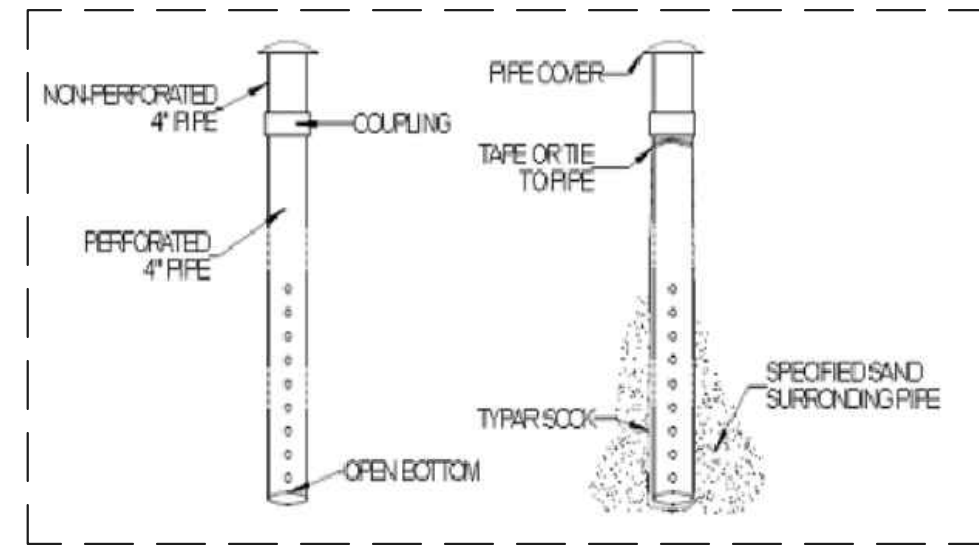
CONSTRUCT 4 ABSORPTION BEDS WITH EACH BED BEING 40M<sup>2</sup>. THE DIMENSION OF EACH BED IS 20m LONG x 1.8m WIDE x 0.4m DEEP. THE 400mm DEPTH RELATES TO THE LOWER SIDE OF THE BED. THE TOP SIDE MAY BE HIGHER ALLOWING FOR SLOPE.

230 RELN POLYCARCH TO EACH BED

ABSORPTION BED SECTION ONE SHOWN AS TYPICAL



CUT OFF/SWALE DRAIN SECTION



INSPECTION TUBE DETAIL ALTERNATIVES

Refer to JD Consulting OSWW Report 03-2026 signed and dated 3 March 2026

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Riverside TAS 7250

3.3.2026

ISSUE

DATE

FEBRUARY 2026

INSTALLATION OF OSWWS (SEPTIC TANK AND ABSORPTION BEDS) FOR NEW DWELLING

P & S SKIPPER, 1315 OSMASTON ROAD, DELORAINE

ABSORPTION BED & CUT OFF/SWALE DRAIN SECTION

SCALES 1:20 AT A3

DRAWN MF

DESIGNED JD

CHECKED JD

J DOHERTY, CC6216A

PROJECT No 03-2026

DATE PLOTTED 18.02.2026

DATE CHECKED 18.02.2026

05 OF 06

REV. -

ALL PLUMBING & DRAINAGE TO  
COMPLY WITH THE REQUIREMENTS  
OF AS/NZS3500

## NOTES

INSTALL A 4500 (MIN) LITRE SEPTIC TANK. AN ORION BLOO 4500 LITRE SEPTIC TANK IS RECOMMENDED.  
FROM THE OUTLET OF THE SEPTIC TANK LAY 100mm UPVC PIPE TO THE DISTRIBUTION BOX.

INSTALL 4 OUTLET LINES FROM THE DISTRIBUTION BOX AND INDIVIDUALLY CONNECT THESE TO THE 4  
ABSORPTION BEDS.

CONSTRUCT 4 ABSORPTION BEDS WITH EACH BED BEING 40m<sup>2</sup>. THE DIMENSION OF EACH BED IS 20m LONG  
x 1.8m WIDE x 0.4m DEEP.

THE 400mm DEPTH RELATES TO THE LOWER SIDE OF THE BED. THE TOP SIDE MAY BE HIGHER ALLOWING  
FOR SLOPE.

THE LOWER EDGE OF EACH ABSORPTION BED IS TO BE LAID OUT ALONG THE CONTOUR USING DUMPY  
LEVEL OR SIMILAR AND A MINIMUM OF 3m SEPARATION IS REQUIRED BETWEEN THE LOWER EDGE OF THE  
TOP BED AND THE TOP EDGE OF THE LOWER BED. THE SEPARATION DISTANCE CAN BE GREATER IF  
REQUIRED.

WITHIN EACH ABSORPTION BED LAY A SINGLE RUN OF 230mm RELN TRENCH ARCH CENTRALLY ALONG THE  
LENGTH OF THE BED.

REFER TO THE SECTION DETAIL ON THE DRAWING SHEETS FOR THE DEPTH OF THE AGGREGATE AND  
TOPSOIL AND THE PLACEMENT OF THE GEOTEXTILE FABRIC.

INSTALL AN INSPECTION PORT AT THE FAR END OF THE BED AS SHOWN IN THE DRAWING SHEET WITH  
THE SHAFT TERMINATING ABOVE GROUND LEVEL.

CONNECT THE 100mm UPVC PIPES FROM THE OUTLET SIDE OF THE DISTRIBUTION BOX TO THE RELN  
TRENCH ARCH USING A SWEEP JUNCTION AND EXTEND THE PIPE FROM THE TOP OF THE JUNCTION TO  
GROUND LEVEL AND CAP.

SETBACK/SEPARATION DISTANCES.

SEPTIC TANK 3.0m MIN FROM BUILDING LINE.

LAA MINIMUM OF 5m FROM THE SOUTHERN AND EASTERN PROPERTY BOUNDARIES.

NOTE

IF GRAVITY FALL FROM THE SEPTIC TANK TO THE LAND APPLICATION AREA CANNOT BE ACHIEVED, A  
1000 LITRE PUMP STATION WILL NEED TO BE INSTALLED ON THE OUTLET SIDE OF THE SEPTIC TANK.

Refer to JD Consulting OSWW Report 03-2026 signed and dated 3 March 2026	JD Consulting PO Box 8 Riverside TAS 7250	INSTALLATION OF OSWWS (SEPTIC TANK AND ABSORPTION BEDS) FOR NEW DWELLING		SCALES	NTS AT A3	DATE PLOTTED
		P & S SKIPPER, 1315 OSMASTON ROAD, DELORAINE		DRAWN	MF	18.02.2026
3.3.2026	ISSUE	NOTES		DESIGNED	JD	DATE CHECKED 18.02.2026
		DATE FEBRUARY 2026		CHECKED	JD	
				J DOHERTY, CC6216A		
				PROJECT No	03-2026	06 OF 06
						REV. -

*James Doherty*

# ENGINEERING SCHEDULE

CERTIFIED STEEL PORTAL FRAME SHED DESIGN IN ACCORDANCE WITH NCC 2022 FOR SITE WIND SPEED "40.76m/s", WIND REGION "A4", TERRAIN CATEGORY "2.16", IMPORTANCE LEVEL "2"

Internal Pressure: 0.5  
Design Snow Load: 0.00 KPa, Roof Snow Load: 0.00 KPa

Customer: Phillip Skipper  
Site Address: 1315 Osmaston Rd, Deloraine TAS 7304

Main Building: Span: 9, Length: 14, Height: 3, Roof Pitch: 11 degrees  
The length being comprised of 4 bays, the largest bay is 3.5m bays.  
Left LeanTo: NA  
Right LeanTo: NA

Total Kit Weight: 3125.52kg

## DOMESTIC & LIGHT INDUSTRIAL STEEL PORTAL FRAME SHED STRUCTURES

This structure is designed in compliance with AS4600, AS3600 and AS1170 1 to 4 as Importance Level 2 with a Live Load of 0.25kPa as "Air Leaky Structures" providing stability when openings are prevalent.

The structures are clad with corrugated pre-painted finish, 0.42mm walls and 0.42mm roof (compliant with AS1562.1 Metal) over cold formed 450 to 550mPa galvanized steel C sections primary frames.

Primary framing is fastened together with 4.6 Class galvanized bolts adequately tensioned on ground prior to erection.

Secondary framing steel bracing, with purlins and girts lapped, are all tek fastened to primary steel with a minimum of two (2) teks per connection as specified in details.

All rainwater products are compliant with AS2179.1 (Metal).

## ENGINEERING

The undersigning engineer has checked that the design of the structure complies with relevant current Australian Standards as stated above and the following i.e AS4671- 2001 Steel Reinforcing materials, AS3600 - Concrete structures. However, he will not be present during construction, neither will he conduct inspections nor construction supervision.

The class 10a buildings are designed for erection on pad footings or slab based on soil of classification "A"- "P" with minimum bearing capacity 100kPa (i.e. organic soil is to be removed to a suitable material below natural surface).

Where (suitable) fill is required to level the site, it should be placed and compacted in layers of 150mm maximum.

Concrete pad footings and slab supply and placement is to be in compliance with AS2870-2011 Residential Slabs & Footings, AS3600-2018 Concrete Structures for A2 and B2 exposure (i.e. 25mPa strength @ 28 days strength) with recommended slump 75 to 80mm for light pneumatic tyred traffic all trafficable floors.

25mm deep concrete saw cut, to be made into the surface of the concrete slab every 6m in width or length as crack control joints.

For sites where these conditions are considered to be inadequate, a customized foundation design for the structure can be supplied to suit a specific purpose.

## CONSTRUCTION

Erection of the structure is to be in compliance with local and state ordinances,

Occupational Health and Safety Regulations and with plans provided.

## GENERAL

The designs as portrayed on the drawings remain the intellectual property of Best Sheds Pty Ltd and are provided for building approval and construction purposes only.

## SNOW LOAD

Following conditions only apply to buildings with snow loading:

- No maintenance or roof traffic permitted on the roof while there is snow present.
- No other structure to be erected within 500mm of the gutters of this building.

INTERNAL PORTALS
Column: 2C15024
Rafter: 2C15024
Knee Brace: 2C10010
Knee Brace Length: 1600
Apex Brace: 2C10010
Apex Brace Length: 4000

END PORTALS
Column: C15024
Rafter: C15024
Knee Brace: NA
Knee Brace Length: NA
Apex Brace: NA
Apex Brace Length: NA
Endwall Mullion: C15024

LEFT LEAN TO PORTALS
Internal Column: NA
Internal Rafter: NA
End Column: NA
End Rafter: NA
Knee Brace: NA
Knee Brace Length: NA

RIGHT LEAN TO PORTALS
Internal Column: NA
Internal Rafter: NA
End Column: NA
End Rafter: NA
Knee Brace: NA
Knee Brace Length: NA

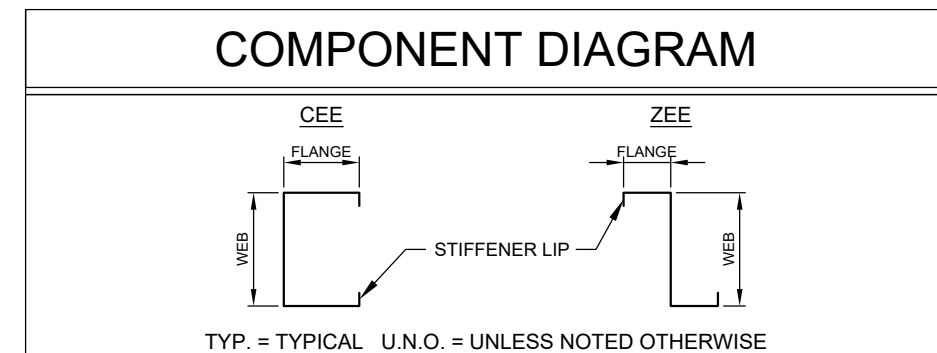
NOTE: All unclad intermediate columns are always back to back (refer to drawing: Floor Plan).

PURLINS AND GIRTS		
Eave Purlin: C10010		
Side Wall Girts: TH64100	Max Spacing: 1250	Overlap: 10%
Front End Wall Girts: TH64100	Max Spacing: 1250	Overlap: 10%
Back End Wall Girts: TH64100	Max Spacing: 1250	Overlap: 10%
Roof Purlins: TH64100	Max Spacing: 1000	Overlap: 10%

NOTE: Girt spacing will vary to a maximum 1.25m where window/s are located.

FASTENERS
Sleeve Anchor Bolts: M12x75 Sleeve Anchor Yellow Zinc
Frame Bolts: M12x30 Purlin Assembly Zinc (Mild)
Frame Screws: Frame Screw 14x14x22
Cross Bracing Strap: 32mm x 1.2 strap
Open Bay Header Height: NA

COLOUR SCHEDULE
Roof Sheets: Slate Grey
External Wall Sheets: Slate Grey
Roller Doors: Slate Grey
Flashings: Slate Grey
PA Doors: Slate Grey
Windows: NA



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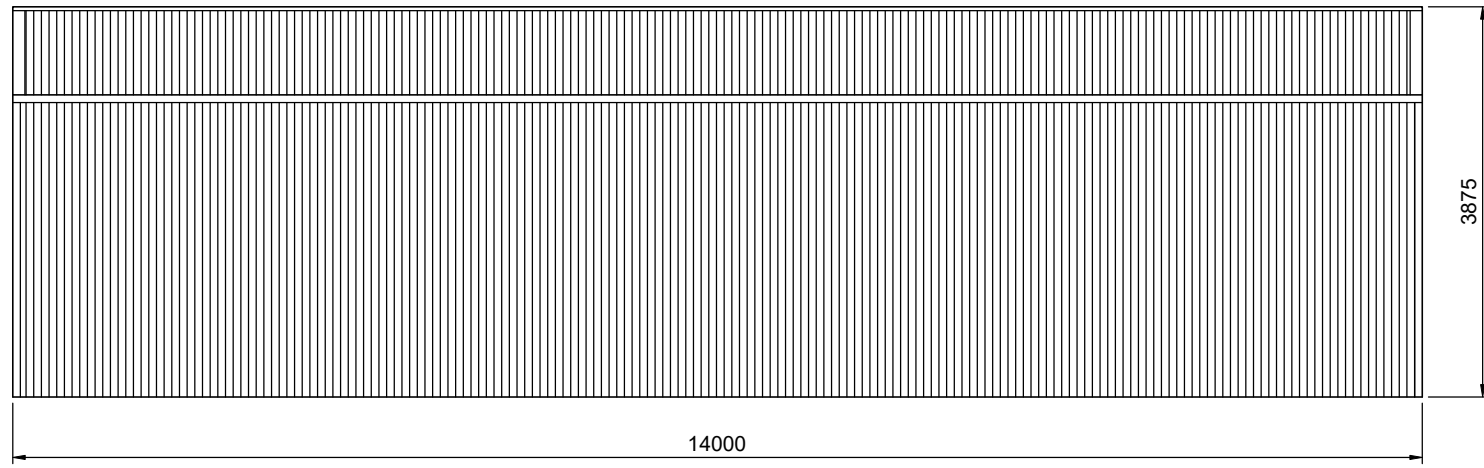
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Bend MIEAust RPEng  
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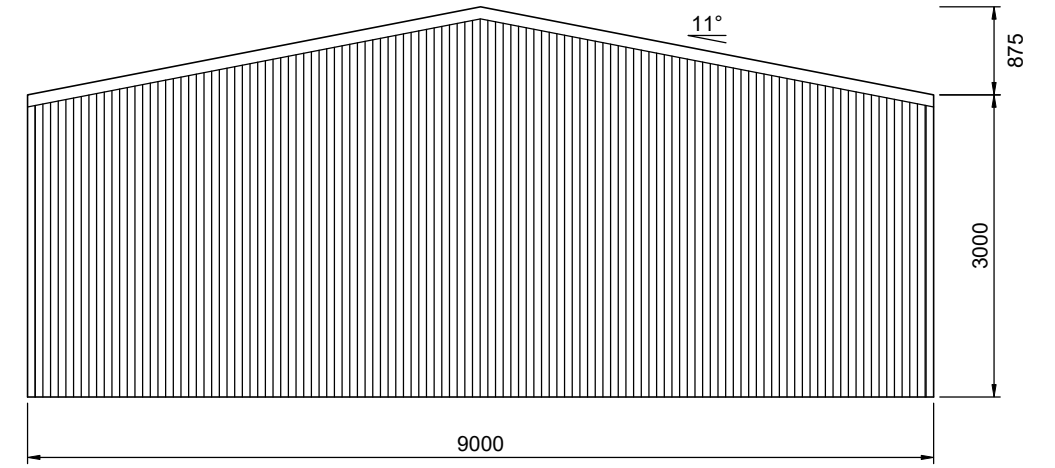
Signature: Date: 23.02.2026

Customer Name: Phillip Skipper  
Site Address: 1315 Osmaston Rd  
Deloraine,  
TAS, 7304

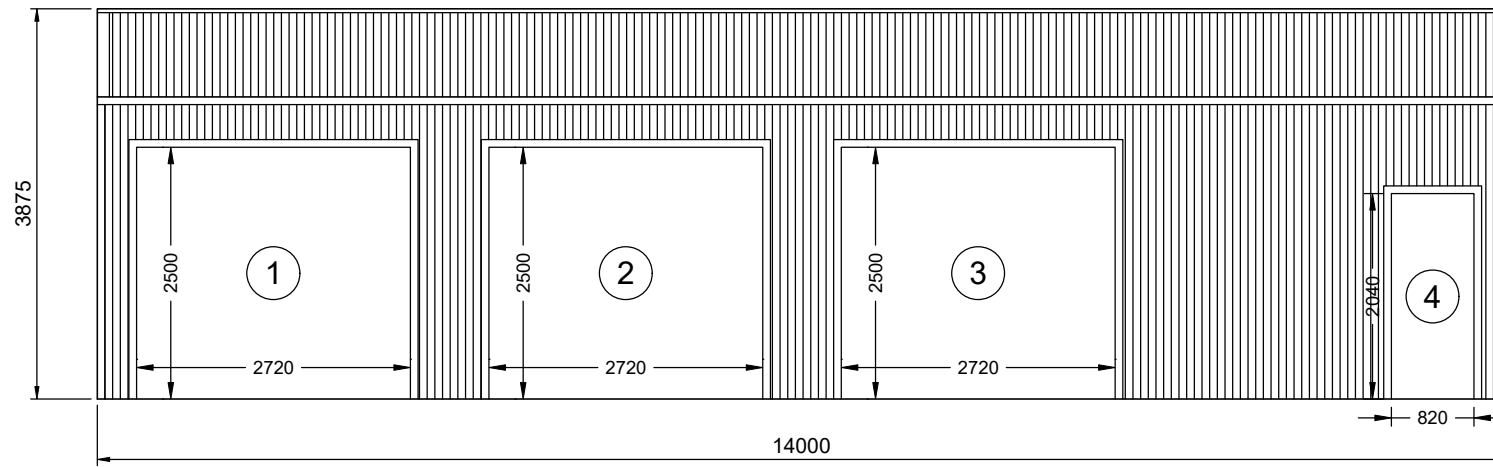
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JOB NO. 2730001652  
SHEET 1 of 7



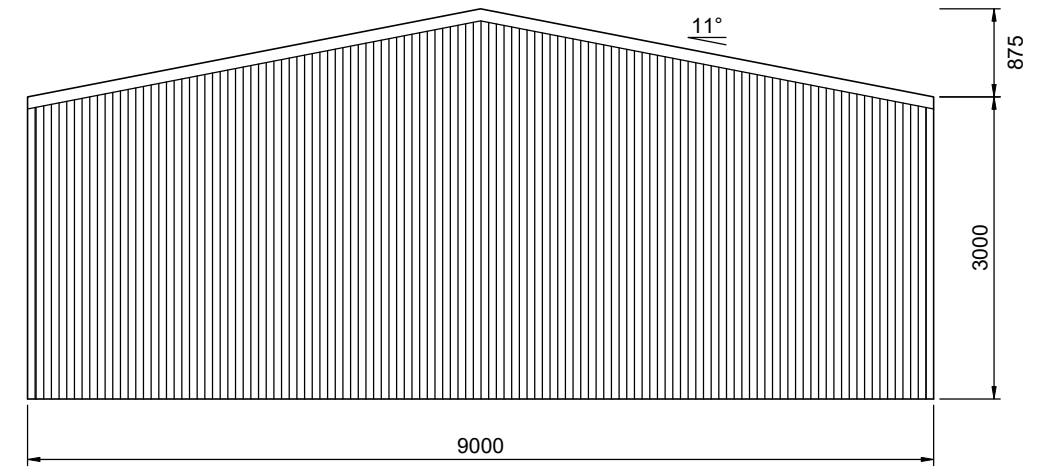
**2 LEFT ELEVATION**  
SCALE: 1:75



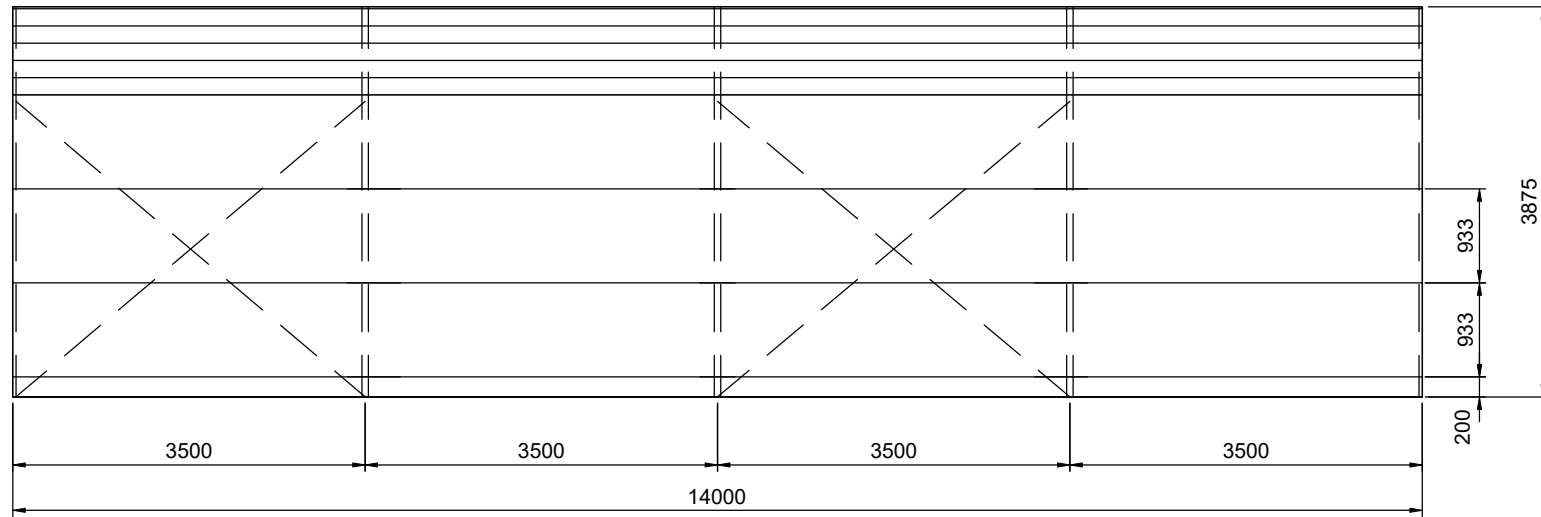
**3 REAR ELEVATION**  
SCALE: 1:75



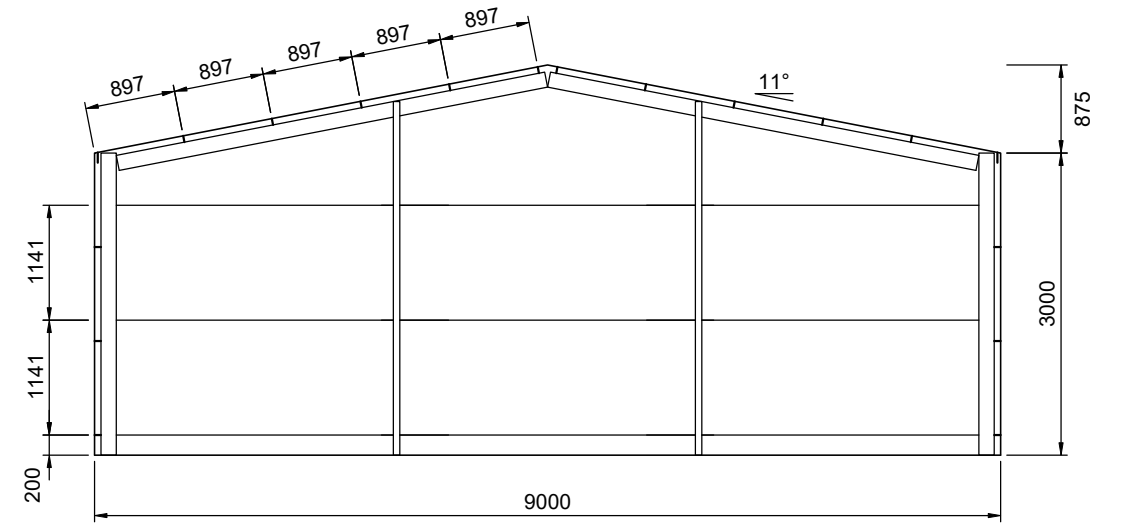
**1 RIGHT ELEVATION**  
SCALE: 1:75



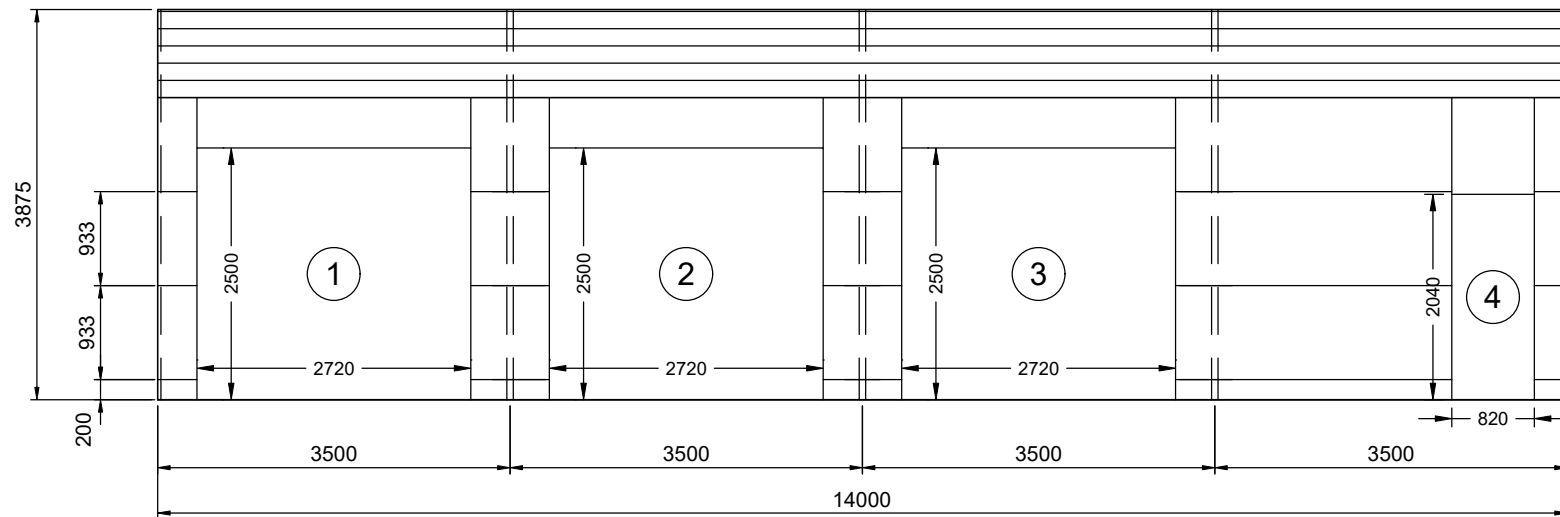
**4 FRONT ELEVATION**  
SCALE: 1:75



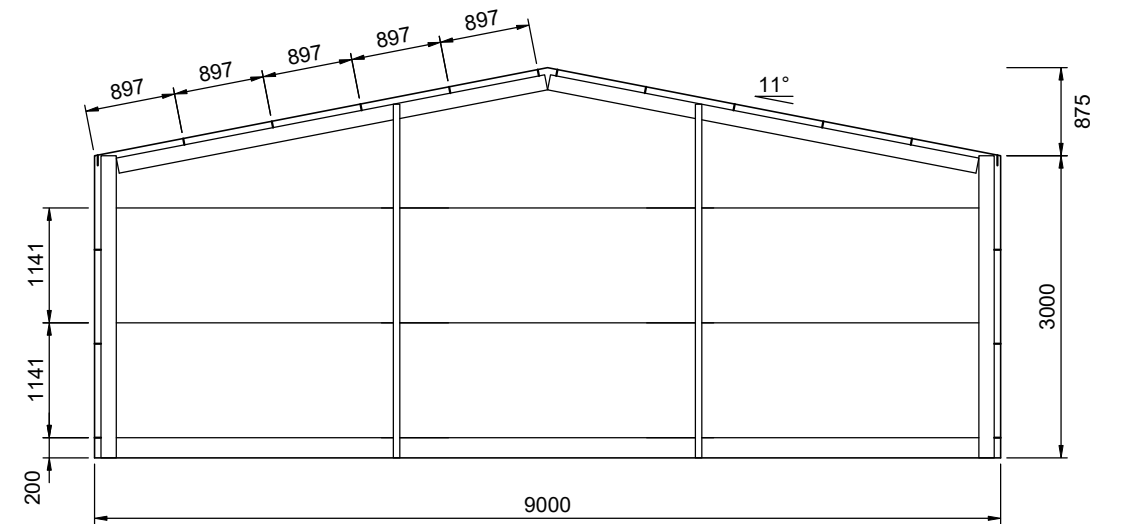
**2** LEFT ELEVATION  
**3** SCALE: 1:75



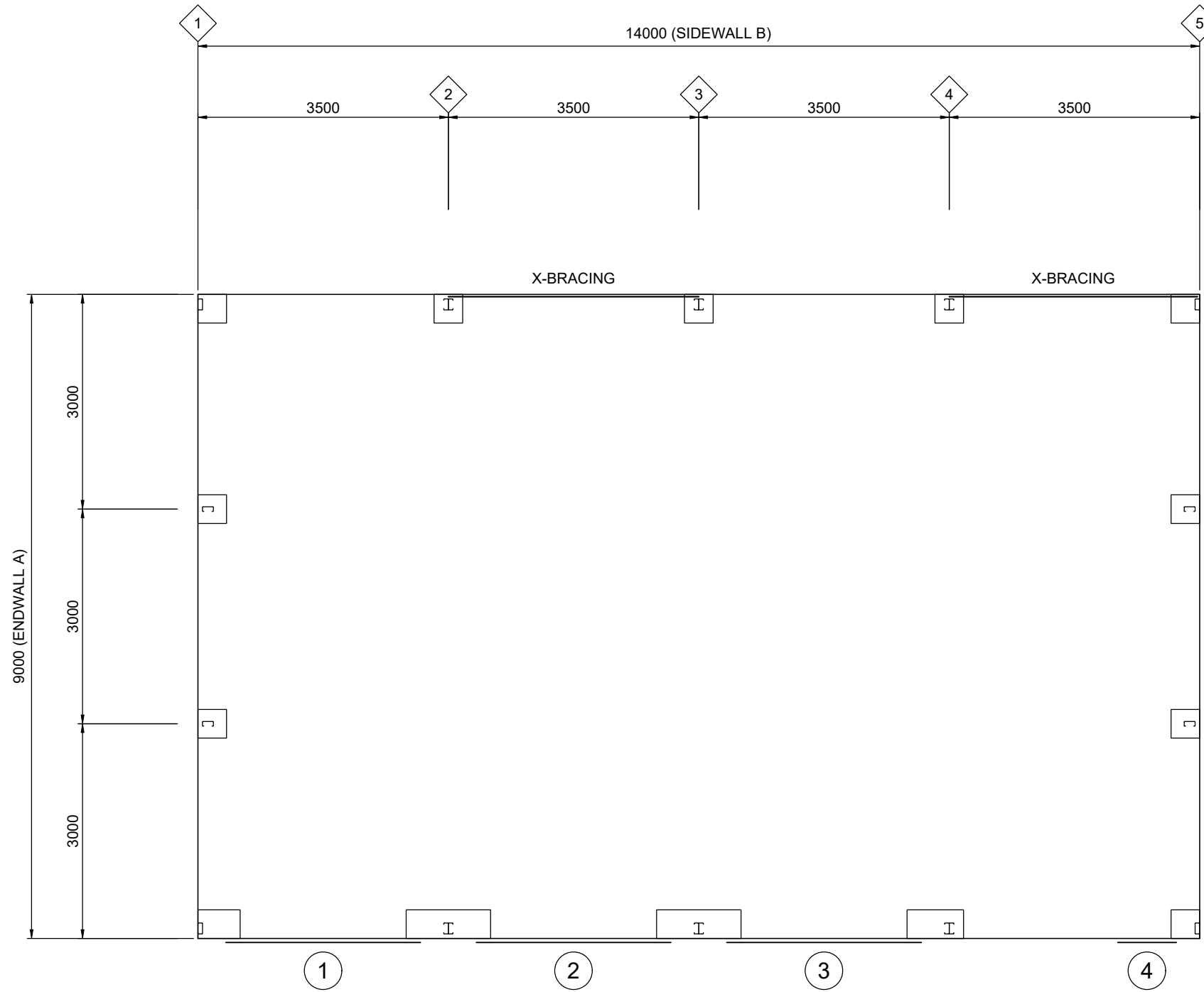
**3** REAR ELEVATION  
**3** SCALE: 1:75 FRAME #5



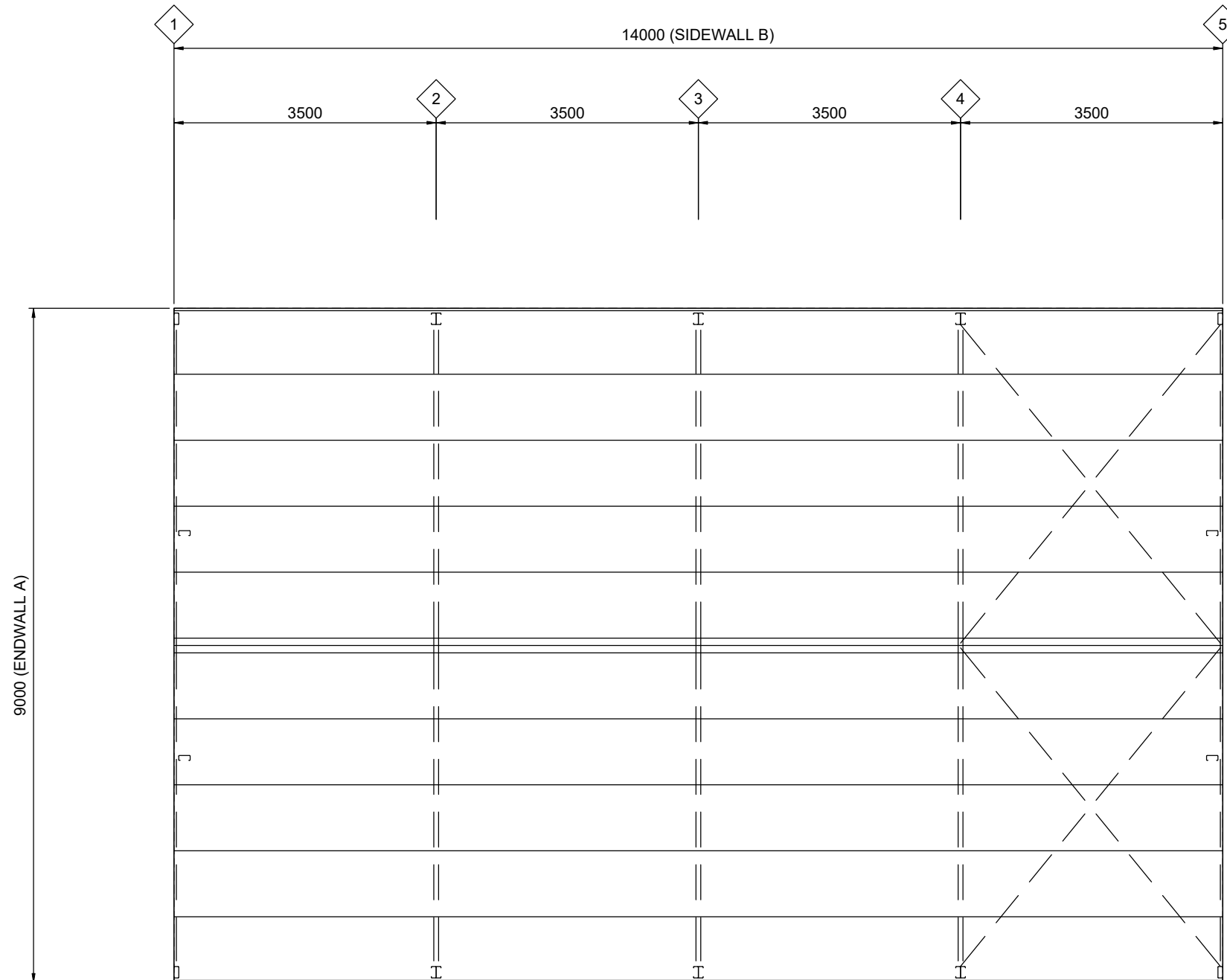
**1** RIGHT ELEVATION  
**3** SCALE: 1:75



**4** FRONT ELEVATION  
**3** SCALE: 1:75 FRAME #1



1 FLOOR PLAN  
4 SCALE: 1:75



1 ROOF FRAMING PLAN  
5 SCALE: 1:75

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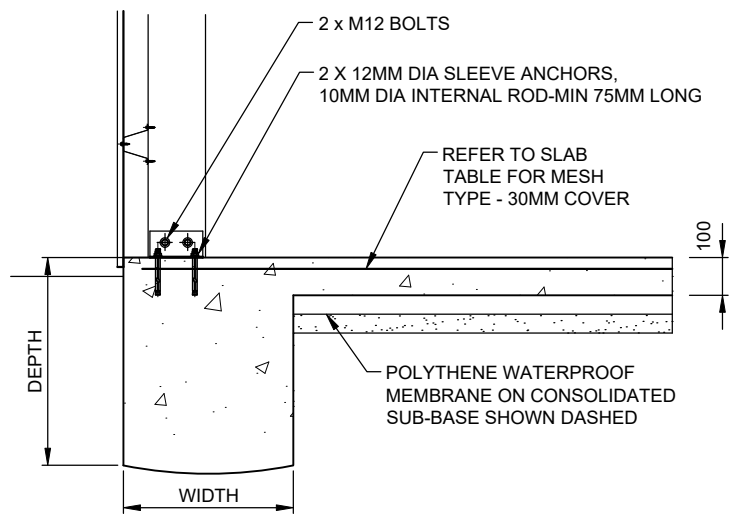
Customer Name: Phillip Skipper  
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DATE 23-02-2026  
JOB NO. 2730001652  
SHEET 5 of 7

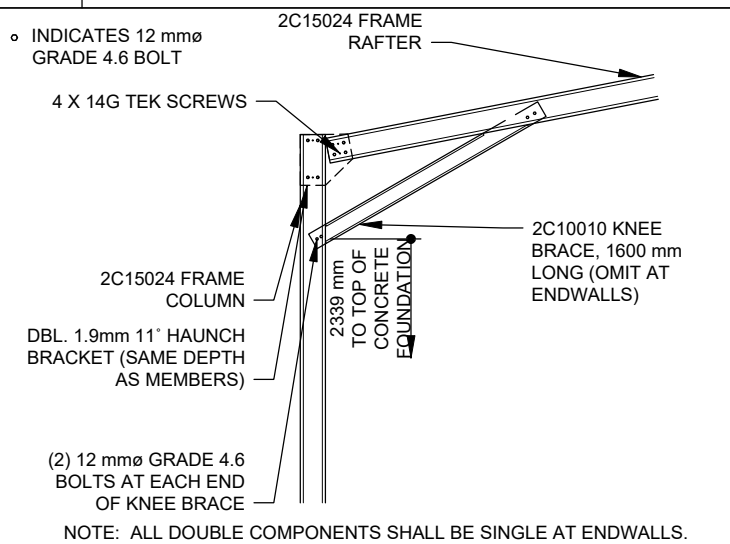
SLAB FOUNDATIONS DOMESTIC / LIGHT INDUSTRIAL (100mm MINIMUM CONCRETE SLAB INCLUDED)					
SOIL CLASSIFICATION (COMPACTED)	REINFORCING IN SLAB	EDGE BEAM	PIER	EDGE BEAM (slab thickness not included)	
	MESH REINFORCING	TRENCH MESH	Ø x DEPTH	DEPTH	WIDTH
A, S, & M	SL72	---	450 x 400	---	---
M - D	SL82	L11TM3	---	300	300
H TO H - D	SL82	L11TM3	---	400	300
E TO E - D	SL82	L11TM4	---	400	400
P (DROP EDGE BEAM OR STANDARD EDGE BEAM WITH PIERS UNDER COLUMNS 300 INTO FIRM GROUND)	SL82	L11TM4	450Ø	400	400

THICKNESS: 100MM WITH MINIMUM 30MM COVER. REFER TO SLAB FOUNDATION TABLE FOR REINFORCING SPECIFICATION

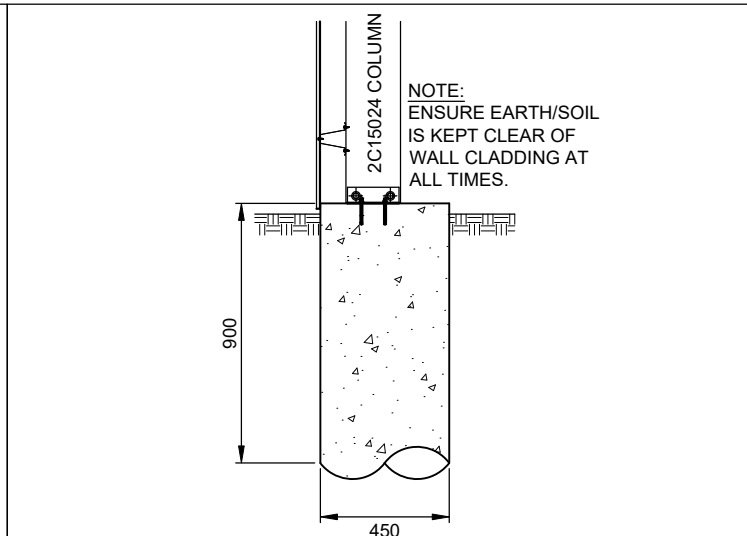
STRENGTH: 25mPa



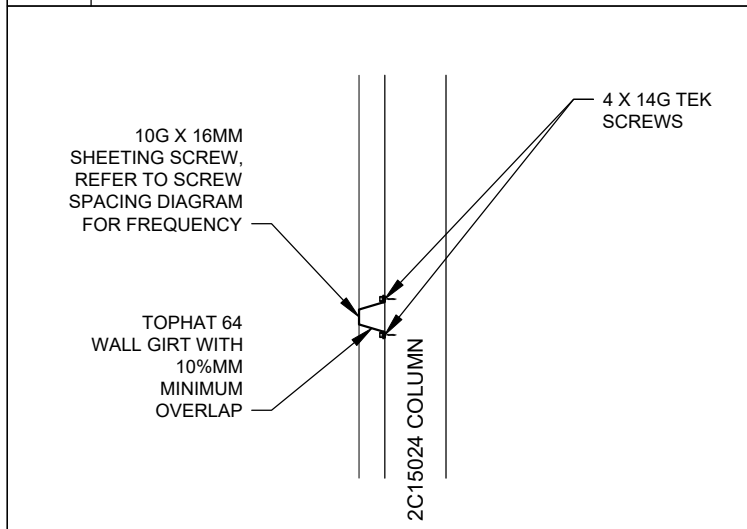
**Y** SLAB DETAIL



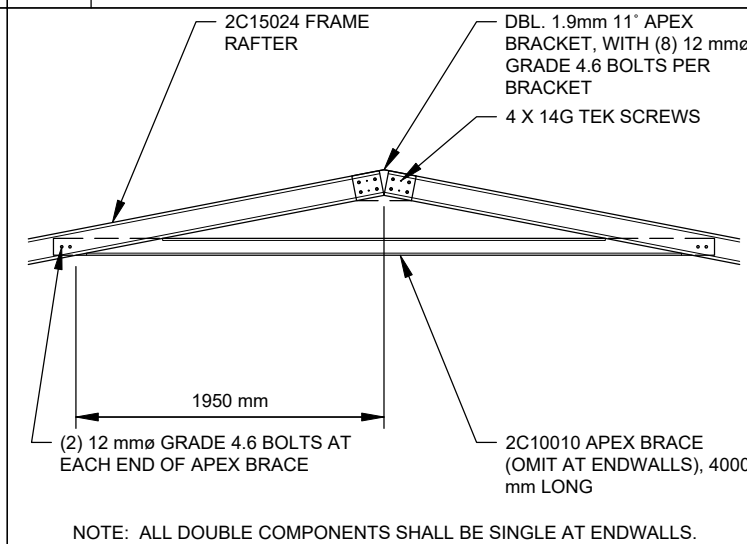
**A** HAUNCH CONNECTION



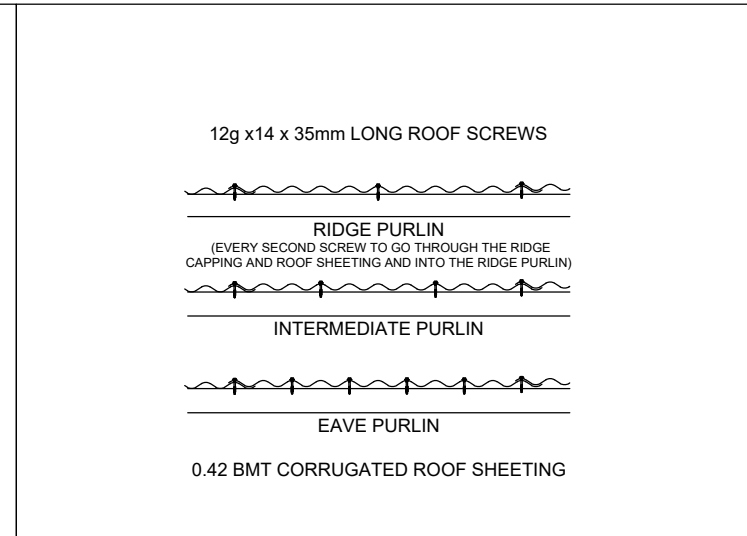
**Z** ALTERNATE PIER DETAIL



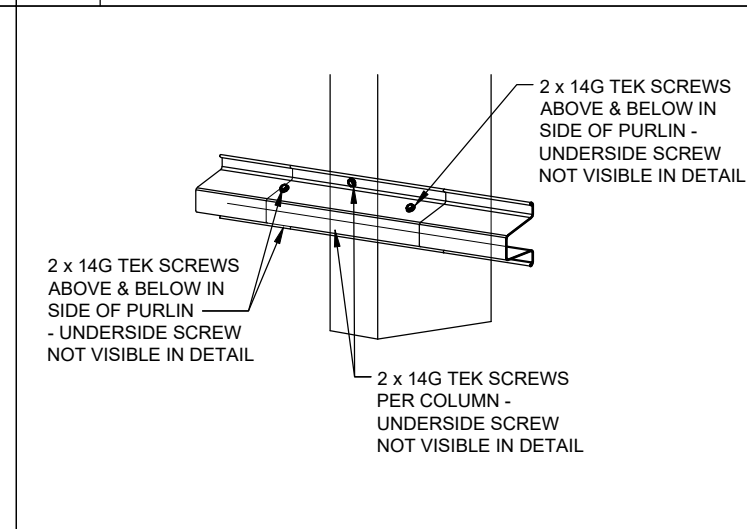
**F** GIRTS CONNECTION



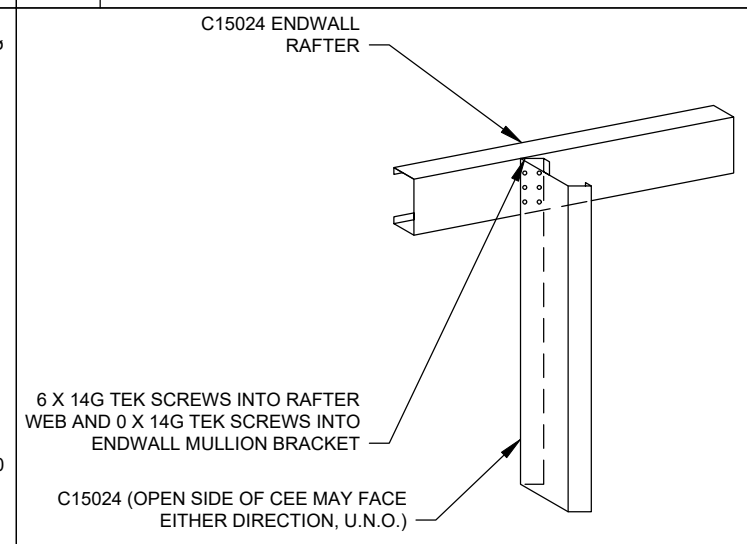
**B** APEX CONNECTION



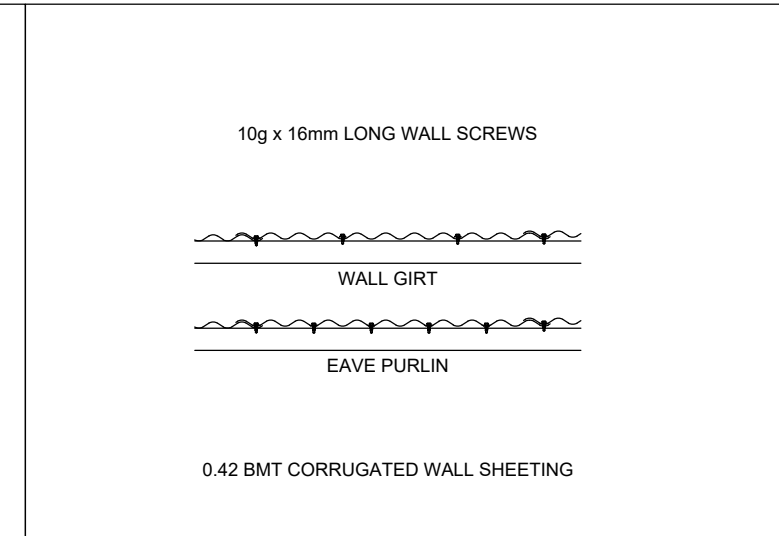
**I** ROOF SHEETING



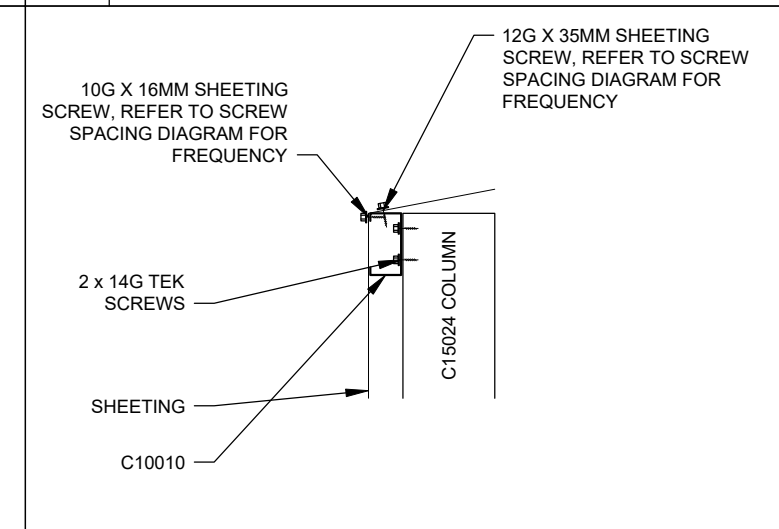
**G** TOP HAT CONNECTION



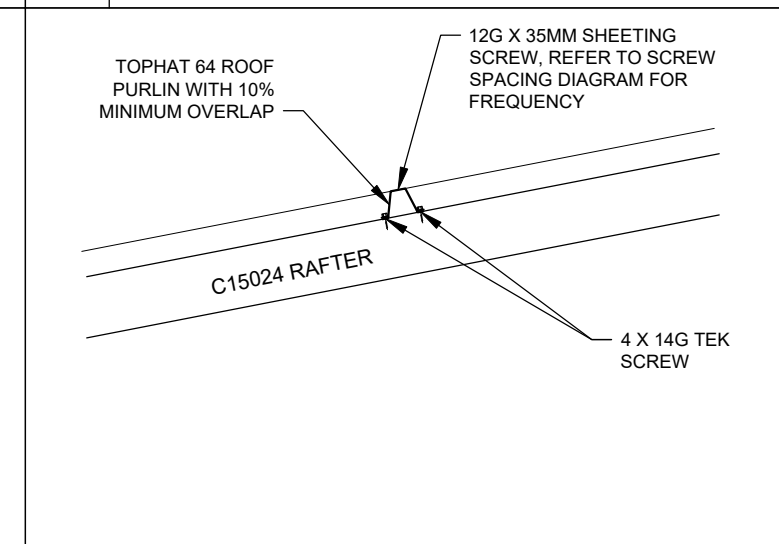
**C** ENDWALL MULLION TO RAFTER



**J** WALL SHEETING



**H** EAVE CONNECTION



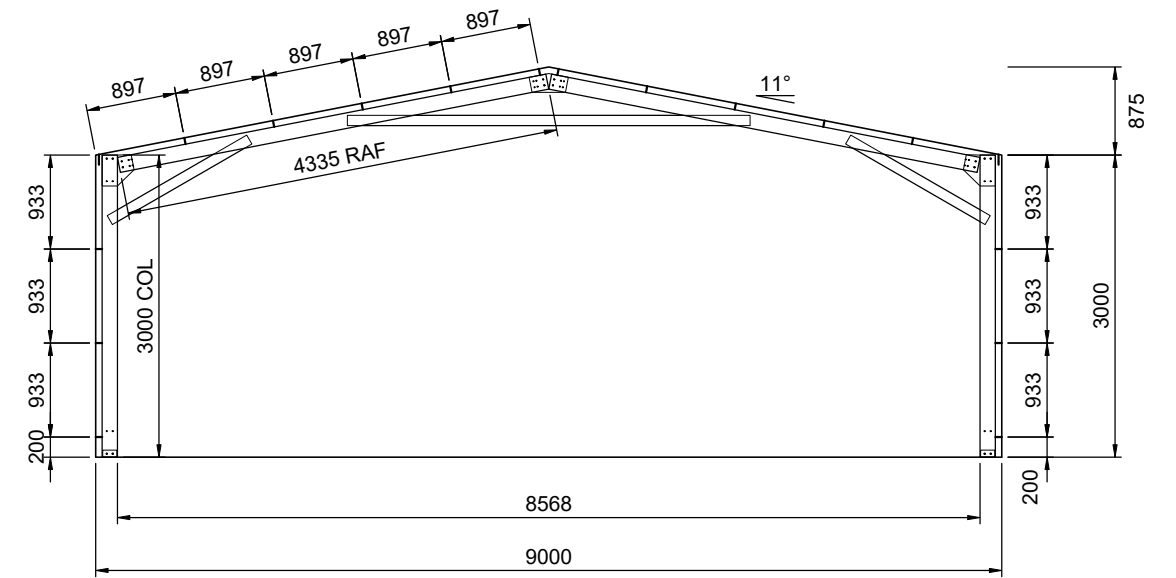
**E** PURLIN CONNECTION

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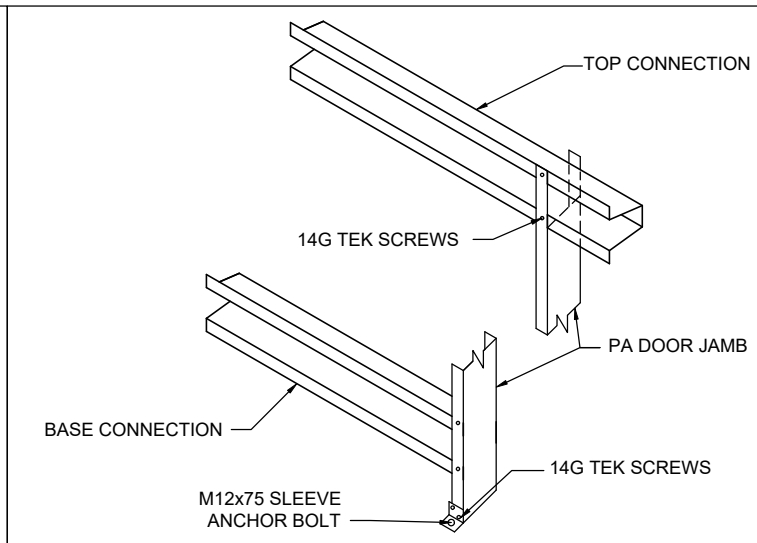
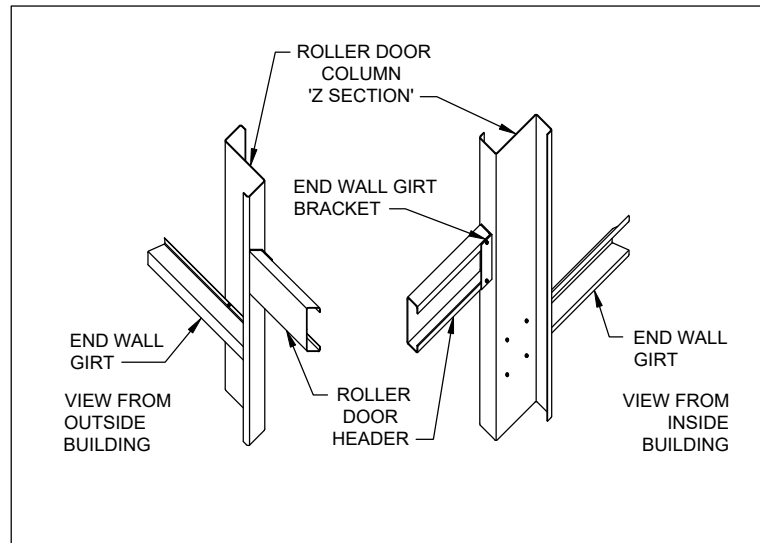
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Signature:   
Date: 23.02.2026

Customer Name: Phillip Skipper  
Site Address: 1315 Osmaston Rd  
Deloraine,  
TAS, 7304  
DATE 23-02-2026  
JOB NO. 2730001652  
SHEET 6 of 7

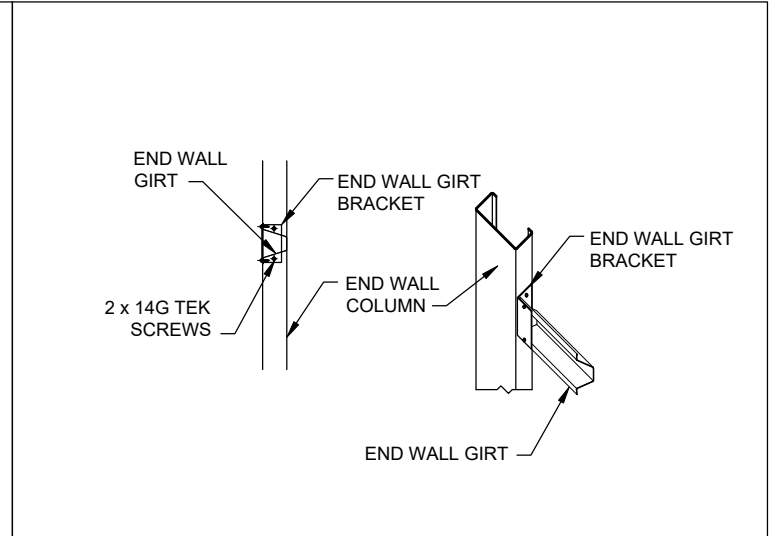
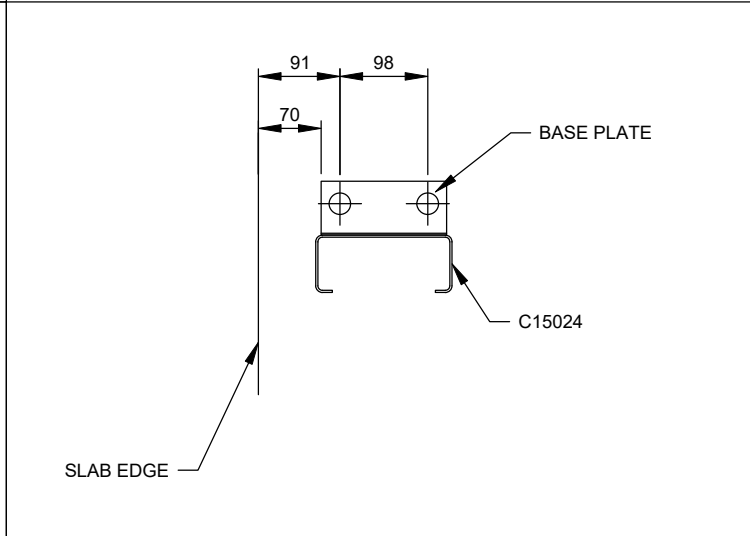
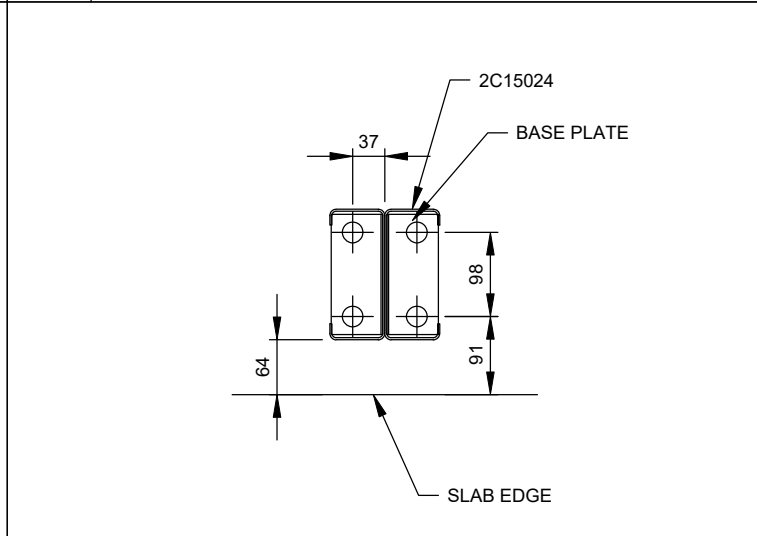
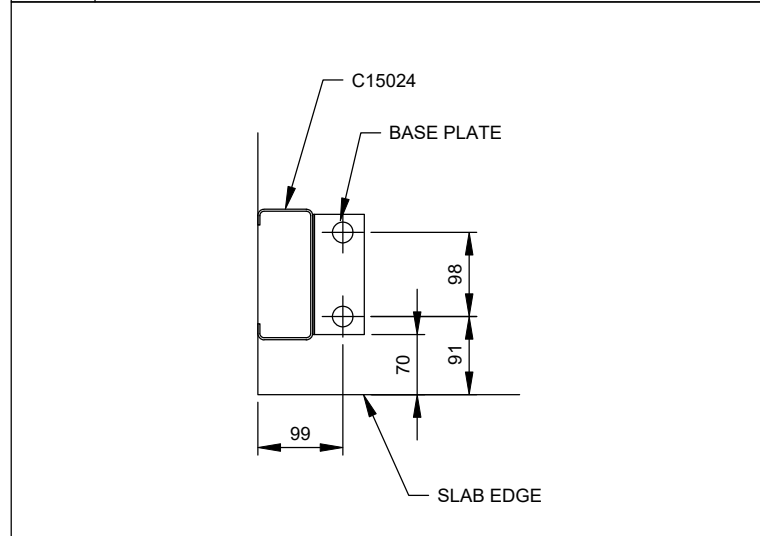


**1** TYP. FRAME CROSS-SECTION  
**7** SCALE: 1:75  
 FRAMES 2-4



**O** SIDE DOOR HEADER AND JAMB

**P** PA DOOR STYLE CONNECTION



**K** CORNER COLUMN BASE

**L** INTERNAL COLUMN BASE

**M** ENDWALL MULLION BASE

**N** ENDWALL GIRT BRACKET

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Signature: *[Signature]* Date: 23.02.2026

Customer Name: Phillip Skipper  
 Site Address: 1315 Osmaston Rd  
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 TAS, 7304

DATE 23-02-2026  
 JOB NO. 2730001652  
 SHEET 7 of 7

11 March 2026

Reference No. GL26097Ab

Phillip & Sonya Skipper  
PO Box 386  
DELORAINES TAS 7304

Dear Sir and Madam

**RE: Site Classification  
1315 Osmaston Road, Deloraine**

We have pleasure in submitting herein our report detailing the results of the geotechnical investigation conducted at the above site.

Should you require clarification of any aspect of this report, please contact Michael Goss on 03 6326 5001.

For and on behalf of

**Geoton Pty Ltd**



**Tony Barriera**

Director – Principal Geotechnical Engineer

Rev No.	Date	Written By	Reviewed By	Description
Ab	11/03/2026	M Goss	S Shahandeh	Original

## 1 INTRODUCTION

A limited scope investigation has been conducted for Phillip & Sonya Skipper at the site of a proposed residential development at 1315 Osmaston Road, Deloraine.

The investigation has been conducted to assess the following:

- The general subsurface conditions at the site and consequently assign a Site Classification in accordance with AS 2870 – 2011 “Residential Slabs and Footings”; and
- The surrounding topography and provide a Wind Classification in accordance with AS 4055 – 2021 “Wind Loads for Housing”.

A site plan of the proposed development was provided, prepared by Mark Evans Building Design & Drafting, Drawing No. A02, dated Feb 2026. We understand that the proposed development comprises a dwelling and a shed to be located within the eastern and northeastern portion of the site,

## 2 FIELD INVESTIGATION

The field investigation was carried out on 19 February 2026 and involved the drilling of 3 boreholes by 4WD mounted auger rig to depths of 2.0m.

Insitu vane shear strength tests were conducted in the clay layers encountered in the investigation, with samples of these soils being obtained for subsequent laboratory testing.

The results of the field and laboratory tests are shown on the borehole logs.

The logs of the boreholes are included in Appendix A and their locations are shown on Drawing 1 attached.

## 3 SITE CONDITIONS

The site falls towards the south at approximately 2° to 3° with a general low cover of grass and is currently partially developed with an existing shed (Plate 1). There are scattered piles of fill located within the northeastern portion of the site.

The MRT Digital Geological Atlas 1:25,000 Series, indicates that the site is predominantly mapped as Cretaceous-Neogene period basalt, with the northwestern portion mapped as Quaternary period sediments and a small southwestern portion mapped as Cambrian period sedimentary rocks. With this being generally confirmed by our field investigation.

Examination of the LIST Landslide Planning Map – Hazard Bands Overlay indicates that the site is not within a mapped landslide hazard band.

The investigation indicated that the soil profile is relatively uniform across the site. The boreholes encountered topsoil/fill comprising clayey silt to the depths of 0.2m to 0.4m, underlain by natural silty clay to the investigated depths of 2.0m.



**Plate 1: View of the site looking to the southwest 19/02/2026.**

The boreholes did not encounter any signs of groundwater seepage over the investigated depths.

Full details of soil conditions encountered are presented on the borehole logs.

An assessment of the plasticity characteristics of the materials encountered indicates that the clay soils at this site possess a moderate shrink/swell potential.

## **4 SITE CLASSIFICATION**

After allowing due consideration of the site geology, drainage and soil conditions, the site has been classified as follows:

### **CLASS H1 (AS 2870)**

Foundation designs in accordance with this classification are to be subject to the overriding conditions of the Foundations section below.

This classification is applicable only for ground conditions encountered at the time of this investigation. If cut or fill earthworks are carried out, then the site classification will need to be re-assessed, and possibly changed.

## **5 FOUNDATIONS**

Particular attention should be paid to the design of footings as required by AS 2870 – 2011.

In addition to normal founding requirements arising from the above classification, particular conditions at this site dictate that the founding medium for all footings would be as follows:

## Site Classification

### **Silty Clay (CI) – medium plasticity, brown and orange**

**encountered beneath the fill and topsoil below 0.2m (BH1 & BH2) to 0.4m (BH3) from the existing ground surface**

An allowable bearing pressure of 100kPa is available for edge beams, strips, pads and bored piers founded as above.

**No structure should be founded on fill without the footings extending through the fill to the natural soils.**

The site classification presented assumes that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to the structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction or tree root action.

Attention is drawn to Appendix B of AS 2870 and CSIRO Building Technical File BTF18 “Foundation Maintenance and Footing Performance: A Homeowner’s Guide” as a guide to maintenance requirements for the proposed structure.

Although the borehole data provides an indication of subsurface conditions at the site, variations in soil conditions may occur in areas of the site not specifically covered by the field investigation. The base of all footing or beam excavations should therefore be inspected to ensure that the founding medium meets the requirements referenced herein with respect to type and strength of founding material.

The boreholes were backfilled shortly after being drilled, not allowing time for groundwater seepage flows to develop. Groundwater seepages or higher groundwater levels can occur during and/or after a prolonged period of wet weather or a heavy rainfall event.

## **6 WIND CLASSIFICATION**

After allowing due consideration of the region, terrain, shielding and topography, the site has been classified as follows:

### **WIND CLASSIFICATION N2 (AS 4055)**

<b>REGION</b>	<b>TERRAIN CATEGORY</b>	<b>SHIELDING</b>	<b>TOPOGRAPHY</b>
A	TC2	NS	T0

## **7 REFERENCES**

Standards Australia Limited. (2011). *AS 2870: Residential Slabs and Footings Construction*. Sydney: SAI Global Limited.

Site Classification

Standards Australia Limited. (2017). *AS 1726: Geotechnical Site Investigation*. Sydney: SAI Global Limited.

Standards Australia Limited. (2021). *AS 4055: Wind Loads for Housing*. Sydney: SAI Global Limited.

**Attachments:**

Limitations of report

Drawing 1: Site Plan

Appendix A: Borehole Logs & Explanation Sheets

Appendix B: Certificate Forms

## Geotechnical Consultants - Limitations of report

These notes have been prepared to assist in the interpretation and understanding of the limitations of this report.

### **Project specific criteria**

The report has been developed on the basis of unique project specific requirements as understood by Geoton and applies only to the site investigated. Project criteria are typically identified in the Client brief and the associated proposal prepared by Geoton and may include risk factors arising from limitations on scope imposed by the Client. The report should not be used without further consultation if significant changes to the project occur. No responsibility for problems that might occur due to changed factors will be accepted without consultation.

### **Subsurface variations with time**

Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. In the event of significant delays in the commencement of a project, further advice should be sought.

### **Interpretation of factual data**

Site assessment identifies actual subsurface conditions only at those points where samples are taken and at the time they are taken. All available data is interpreted by professionals to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist, as it is virtually impossible to provide a definitive subsurface profile which includes all the possible variabilities inherent in soil and rock masses.

### **Report Recommendations**

The report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until earthworks and/or foundation construction is almost complete and therefore the report recommendations can only be regarded as preliminary. Where variations in conditions are encountered, further advice should be sought.

### **Specific purposes**

This report should not be applied to any project other than that originally specified at the time the report was issued.

### **Interpretation by others**

Geoton will not be responsible for interpretations of site data or the report findings by others involved in the design and construction process. Where any confusion exists, clarification should be sought from Geoton.

### **Report integrity**

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way.

### **Geoenvironmental issues**

This report does not cover issues of site contamination unless specifically required to do so by the client. In the absence of such a request, Geoton take no responsibility for such issues.



**Legend**

- BH 1 Approximate Borehole Location
- 0.8 Approximate Depth of FILL (m)
- Approximate Slope angle in Degrees
- Cadastral Parcels
- Hydrographic Lines

Approximate Scale



<b>GEOTON</b> Pty Ltd				Client: <b>PHILLIP &amp; SONYA SKIPPER</b>	
				Project: <b>1315 OSMASTON ROAD DELORAINE</b>	
Date	<b>11/03/2026</b>	Drawn	<b>MG</b>	Title: <b>SITE PLAN</b>	
Scale	<b>As Shown</b>	Approved	<b>TB</b>	Project no: <b>GL26097A</b>	Drawing no. <b>1</b>
Original size	<b>A3</b>	Rev			

# Appendix A

## **Borehole Logs**

Client : Phillip & Sonya Skipper  
 Project : Site Classification  
 Location : 1315 Osmaston Rd, Deloraine

Easting : 473611.38  
 Northing : 5400036.88  
 Inclination : N/A  
 Azimuth :  
 Sheet : 1 OF 1  
 Job No : GL26097A  
 Logged : MG  
 Logged Date : 19/02/2026  
 Drill Rig : Honey Badger - 95mm

Method	Drilling	Water	Samples	Testing		Depth (m)	Graphic Log	Classification Code	Material Description	Moisture condition	Consistency density, index	Structure, Additional Observations
				DCP	V (kPa)							
ADT						0.00	MH	TOPSOIL - Clayey SILT - high plasticity, orange and brown,	D	VSt		
						0.25	CH	Silty CLAY - high plasticity, brown and orange,	M-D	VSt		
				104/refusal		0.50						
				114		1.00						
						1.25						
						1.50						
						1.75						
				refusal		2.00						
								BH1 Terminated at 2 m				



Client : Phillip & Sonya Skipper  
 Project : Site Classification  
 Location : 1315 Osmaston Rd, Deloraine

Easting : 473632.76  
 Northing : 5400050.61  
 Inclination : N/A  
 Azimuth :  
 Sheet : 1 OF 1  
 Job No : GL26097A  
 Logged : MG  
 Logged Date : 19/02/2026  
 Drill Rig : Honey Badger - 95mm

Method	Drilling	Water	Samples	Testing		Depth (m)	Graphic Log	Classification Code	Material Description	Moisture condition	Consistency density, index	Structure, Additional Observations
				DCP	V (kPa)							
ADT						0.25		.	FILL - Clayey SILT - high plasticity, dark grey and dark brown, trace medium to coarse gravel,	D	VSt	FILL
						0.50	CH	Silty CLAY - high plasticity, brown and orange,	M-D	VSt	NATURAL	
									BH3 Terminated at 2 m			

## Investigation Log Explanation Sheet

### METHOD – BOREHOLE

TERM	Description
AS	Auger Screwing*
AD	Auger Drilling*
RR	Roller / Tricone
W	Washbore
CT	Cable Tool
HA	Hand Auger
DT	Diatube
B	Blank Bit
V	V Bit
T	TC Bit

\* Bit shown by suffix e.g. ADT

### METHOD – EXCAVATION

TERM	Description
N	Natural exposure
X	Existing excavation
H	Backhoe bucket
B	Bulldozer blade
R	Ripper
E	Excavator
HT	Hand Tools




### SUPPORT

TERM	Description
M	Mud
N	Nil
C	Casing
S	Shoring

### PENETRATION

1	2	3	4	
■	■	■	■	No resistance ranging to Refusal

### WATER

Symbol	Description
	Water inflow
	Water outflow
	17/3/08 water on date shown

### NOTES, SAMPLES, TESTS

TERM	Description
U <sub>50</sub>	Undisturbed sample 50 mm diameter
U <sub>63</sub>	Undisturbed sample 63 mm diameter
U <sub>81</sub>	Undisturbed sample 81 mm diameter
D	Disturbed sample
N	Standard Penetration Test (SPT)
N*	SPT – sample recovered
N <sub>c</sub>	SPT with solid cone
V	Vane Shear
PP	Pocket Penetrometer
P	Pressumeter
B <sub>s</sub>	Bulk sample
E	Environmental Sample
R	Refusal – Material cannot be penetrated
DCP	Dynamic Cone Penetrometer (blows/100mm)
PL	Plastic Limit
LL	Liquid Limit
LS	Linear Shrinkage

### CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION

Based on AS 1726:2017

### MOISTURE

TERM	Description
D	Dry
M	Moist
W	Wet

### CONSISTENCY/DENSITY INDEX

TERM	Description
VS	very soft
S	soft
F	firm
St	stiff
VSt	very stiff
H	hard
Fr	friable
VL	very loose
L	loose
MD	medium dense
D	dense
VD	Very dense

## Soil Description Explanation Sheet (1 of 2)

### DEFINITION

In engineering terms, soil includes every type of uncemented or partially cemented inorganic or organic material found in the ground. In practice, if the material can be remoulded or disintegrated by hand in its field condition or in water it is described as a soil. Other materials are described using rock description terms.

### CLASSIFICATION SYMBOL AND SOIL NAME

Soils are described in accordance with the AS 1726: 2017 as shown in the table on Sheet 2.

### PARTICLE SIZE DEFINITIONS

NAME	SUBDIVISION	SIZE (mm)
BOULDERS		>200
COBBLES		63 to 200
GRAVEL	Coarse	19 to 63
	Medium	6.7 to 19
	Fine	2.36 to 6.7
SAND	Coarse	0.6 to 2.36
	Medium	0.21 to 0.6
	Fine	0.075 to 0.21
SILT		0.002 to 0.075
CLAY		<0.002

### MOISTURE CONDITION

#### Coarse Grained Soils

**Dry** Non-cohesive and free running.

**Moist** Soil feels cool, darkened in colour. Soil tends to stick together.

**Wet** As for moist but with free water forming when handling.

#### Fine Grained Soils

**Moist, dry of Plastic Limited – w < PL**

Hard and friable or powdery.

**Moist, near Plastic Limit – w ≈ PL**

Soils can be moulded at a moisture content approximately equal to the plastic limit.

**Moist, wet of Plastic Limit – w > PL**

Soils usually weakened and free water forms on hands when handling.

**Wet, near Liquid Limit - w ≈ LL**

**Wet, wet of Liquid Limit - w > LL**

### CONSISTENCY TERMS FOR COHESIVE SOILS

TERM	UNDRAINED STRENGTH $s_u$ (kPa)	FIELD GUIDE
Very Soft	≤12	Exudes between the fingers when squeezed in hand
Soft	12 to 25	Can be moulded by light finger pressure
Firm	25 to 50	Can be moulded by strong finger pressure
Stiff	50 to 100	Cannot be moulded by fingers
Very Stiff	100 to 200	Can be indented by thumb nail
Hard	>200	Can be indented with difficulty by thumb nail
Friable	–	Can be easily crumbled or broken into small pieces by hand

### RELATIVE DENSITY OF NON-COHESIVE SOILS

TERM	DENSITY INDEX (%)
Very Loose	≤15
Loose	15 to 35
Medium Dense	35 to 65
Dense	65 to 85
Very Dense	> 85

### DESCRIPTIVE TERMS FOR ACCESSORY SOIL COMPONENTS

DESIGNATION OF COMPONENT	IN COARSE GRAINED SOILS		IN FINE GRAINED SOILS	TERM
	% Fines	% Accessory coarse fraction	% Sand/ gravel	
Minor	≤5	≤15	≤15	Trace
	>5, ≤12	>15, ≤30	>15, ≤30	With
Secondary	>12	>30	>30	Prefix

### SOIL STRUCTURE

ZONING		CEMENTING	
Layer	Continuous across the exposure or sample.	Weakly cemented	Easily disaggregated by hand in air or water.
Lens	Discontinuous layer of different material, with lenticular shape.		
Pocket	An irregular inclusion of different material.	Moderately cemented	Effort is required to disaggregate the soil by hand in air or water.

### GEOLOGICAL ORIGIN

#### WEATHERED IN PLACE SOILS

Extremely Weathered material	Material is weathered to such an extent that it has soil properties. Structure and/or fabric of parent rock material retained and visible.
Residual soil	Structure and/or fabric of parent rock material not retained and visible.

#### TRANSPORTED SOILS

Aeolian soil	Carried and deposited by wind.
Alluvial soil	Deposited by streams and rivers.
Colluvial soil	Soil and rock debris transported downslope by gravity.
Estuarine soil	Deposited in coastal estuaries, and including sediments carried by inflowing rivers and streams, and tidal currents.
Fill	Man-made deposit. Fill may be significantly more variable between tested locations than naturally occurring soils.
Lacustrine soil	Deposited in freshwater lakes.
Marine soil	Deposited in a marine environment.

## Soil Description Explanation Sheet (2 of 2)

### SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

FIELD IDENTIFICATION PROCEDURES (Excluding particles larger than 63 mm and basing fractions on estimated mass)				GROUP SYMBOL	PRIMARY NAME	
COARSE GRAINED SOIL More than 65% of soil excluding oversize fraction is larger than 0.075 mm	GRAVEL More than half of coarse fraction is larger than 2.36 mm	CLEAN GRAVEL (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes	GW	GRAVEL	
			Predominantly one size or a range of sizes with some intermediate sizes missing	GP	GRAVEL	
		GRAVEL WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML and MH below)	GM	Silty GRAVEL	
			Plastic fines (for identification procedures see CL, CI and CH below)	GC	Clayey GRAVEL	
	SAND More than half of coarse fraction is smaller than 2.36 mm	CLEAN SAND (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate sizes	SW	SAND	
			Predominantly one size or a range of sizes with some intermediate sizes missing	SP	SAND	
		SAND WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML and MH below)	SM	Silty SAND	
			Plastic fines (for identification procedures see CL, CI and CH below)	SC	Clayey SAND	
FINE GRAINED SOIL More than 35% of soil excluding oversize fraction is smaller than 0.075 mm	IDENTIFICATION PROCEDURES ON FRACTIONS <0.075 mm					
		DRY STRENGTH	DILATANCY	TOUGHNESS		
	SILT & CLAY (low to medium plasticity, LL ≤ 50)	None to Low	Slow to Rapid	Low	ML	SILT
		Medium to High	None to Slow	Medium	CL, CI	CLAY
		Low to Medium	Slow	Low	OL	ORGANIC SILT
	SILT & CLAY (high plasticity, LL > 50)	Low to Medium	None to Slow	Low to Medium	MH	SILT
		High to Very High	None	High	CH	CLAY
		Medium to High	None to Very Slow	Low to Medium	OH	ORGANIC CLAY
	Highly Organic Soil	Readily identified by colour, odour, spongy feel and frequently by fibrous texture.			Pt	PEAT

• LL – Liquid Limit.

### COMMON DEFECTS IN SOILS

TERM	DEFINITION	DIAGRAM	TERM	DEFINITION	DIAGRAM
PARTING	A surface or crack across which the soil has little or no tensile strength. Parallel or sub parallel to layering (e.g. bedding). May be open or closed.		SOFTENED ZONE	A zone in clayey soil, usually adjacent to a defect in which the soil has a higher moisture content than elsewhere.	
FISSURE	A surface or crack across which the soil has little or no tensile strength, but which is not parallel or sub parallel to layering. May be open or closed. May include desiccation cracks.		TUBE	Tubular cavity. May occur singly or as one of a large number of separate or inter-connected tubes. Walls often coated with clay or strengthened by denser packing of grains. May contain organic matter.	
SHEARED SEAM	Zone in clayey soil with roughly parallel near planar, curved or undulating boundaries containing closely spaced, smooth or slickensided, curved intersecting fissures which divide the mass into lenticular or wedge-shaped blocks.		TUBE CAST	An infilled tube. The infill may be uncemented or weakly cemented soil or have rock properties.	
SHEARED SURFACE	A near planar curved or undulating, smooth, polished or slickensided surface in clayey soil. The polished or slickensided surface indicates that movement (in many cases very little) has occurred along the defect.		INFILLED SEAM	Sheet or wall like body of soil substance or mass with roughly planar to irregular near parallel boundaries which cuts through a soil mass. Formed by infilling of open defects.	

# Appendix B

## Certificate Forms

# CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To:  Owner /Agent  
 Address  
  Suburb/postcode

Form **55**

## Qualified person details:

Qualified person:   
Address:  Phone No:   
  Fax No:   
Licence No:  Email address:

Qualifications and Insurance details:  (description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Speciality area of expertise:  (description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

## Details of work:

Address:  Lot No:   
  Certificate of title No:   
The assessable item related to this certificate:  (description of the assessable item being certified)  
Assessable item includes –  
- a material;  
- a design  
- a form of construction  
- a document  
- testing of a component, building system or plumbing system  
- an inspection, or assessment, performed

## Certificate details:

Certificate type:  (description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)

building work, plumbing work or plumbing installation or demolition work:

or

a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

Documents:

Geoton Pty Ltd, Report Reference No. GL26097Ab,  
dated 11/03/2026

Relevant  
calculations:

Refer to report

References:

AS 2870 – 2011 Residential Slabs and Footings Construction  
AS 4055 – 2021 Wind Loads for Housing  
CSIRO Building Technical File 18

*Substance of Certificate: (what it is that is being certified)*

Site Classification in accordance with AS2870 - 2011  
Wind Loading in accordance with AS 4055 - 2021  
Findings and recommendations of report

*Scope and/or Limitations*

The classification applies to the site as investigated at the time and does not account for any future alteration to foundation conditions resulting from earthworks, drainage condition changes or site maintenance variations.

**I certify the matters described in this certificate.**

Qualified person:

*Signed:*



*Certificate No:*

GL26097Ab

*Date:*

11/03/2026

**JD Consulting**

ABN 42410316529

PO Box 8

Riverside Tas 7250

Mob: 0457469617

Email: [jldoherty581@bigpond.com](mailto:jldoherty581@bigpond.com)

# **Onsite Wastewater Disposal Assessment**

**at**

## **1315 Osmaston Road, Osmaston**

**Prepared by James Doherty**  
**Date of Report 2 March 2026**

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## Site Assessment Report for Onsite Wastewater Treatment System

<b>Owner &amp; Postal Address</b>	P & S Skipper PO Box 386 Deloraine 7304
-----------------------------------	---

<b>Site Address</b>	1315 Osmaston Road Deloraine TAS 7304
---------------------	---------------------------------------

<b>Title Details</b>	CT 185309/4
<b>PID</b>	9025090

### 1 Introduction

1315 Osmaston Road, Deloraine is an undeveloped parcel of land located on the southern side of Osmaston Road and approximately 260 metres to the west of the Deloraine Golf Club.

The owners are proposing to construct a 3 bedroom dwelling on the site. As there is not sewerage system in this area, the dwelling will be connected to an onsite wastewater system.

The onsite wastewater system will consist of an accredited septic tank for the primary treatment of effluent generated from the sanitary facilities within the dwelling with the treated wastewater being dispersed to a 144m<sup>2</sup> land application comprising of four absorption trenches which will be located towards the southern boundary of the property.

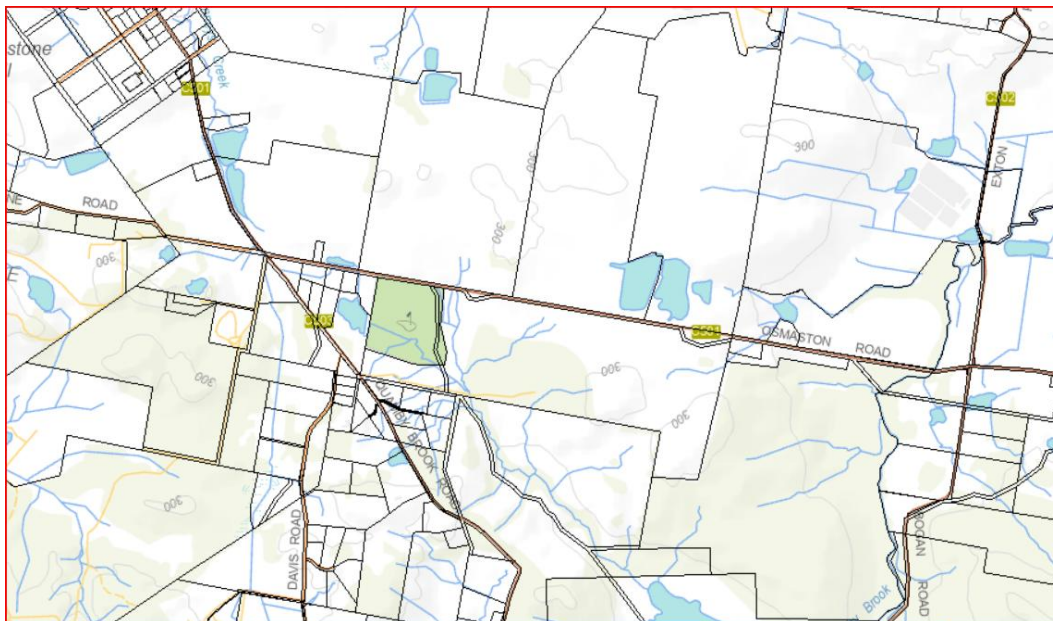


Figure 1 Locality map.

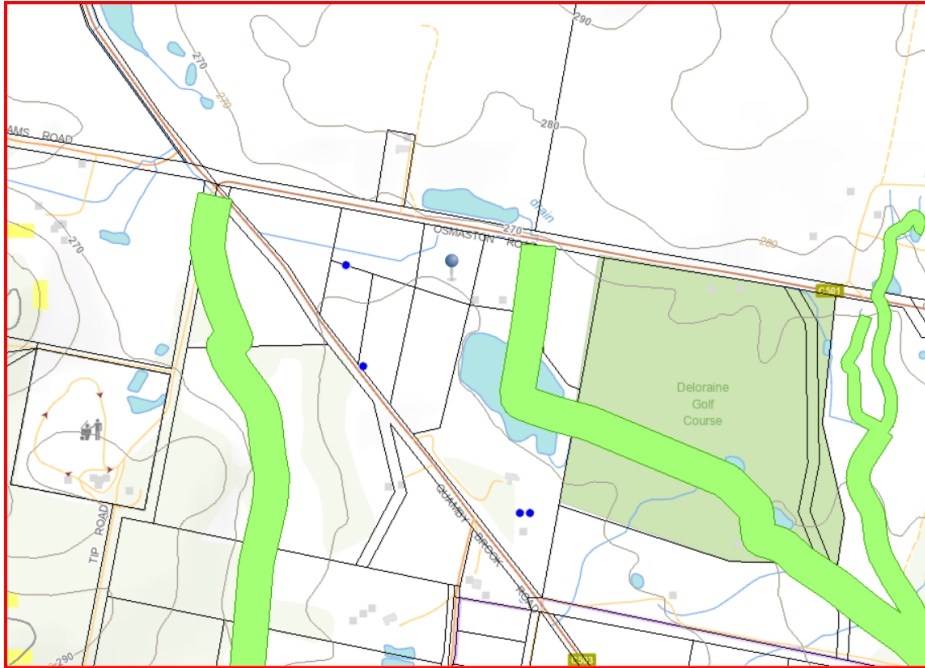


Figure 2 Topographical map showing contours, landslide hazard bands, waterway and coastal protection areas and bores

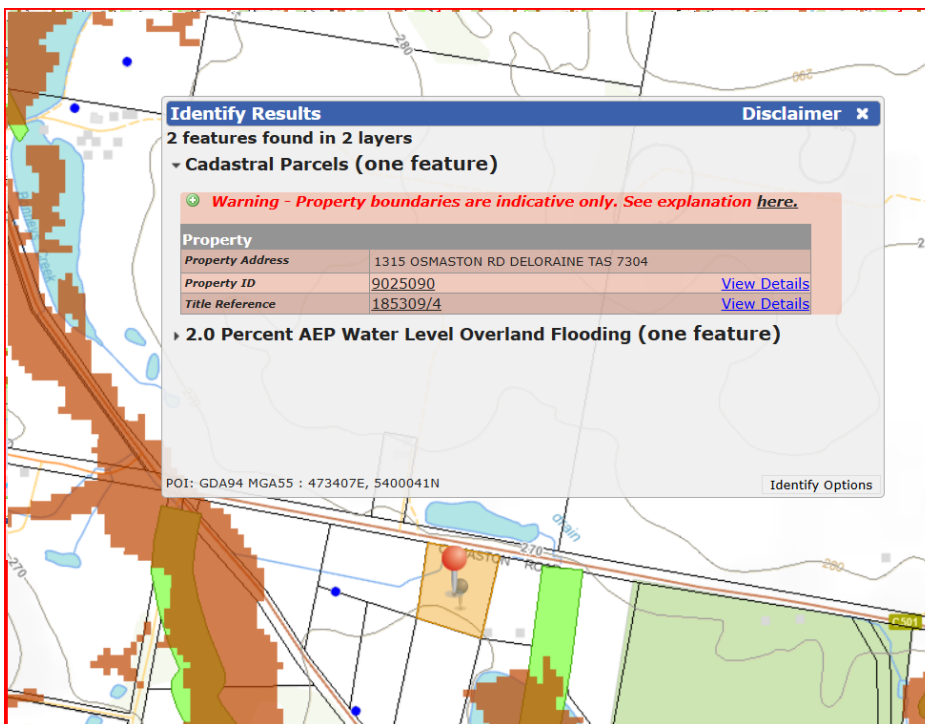


Figure 3 Title details and 2.0 percent AEP Water Level Overland Flooding

## Wastewater Assessment and Recommendations –

### 2 Input data –

<b>Number of bedrooms used for calculations;</b>	<p>A 3 bedroom dwelling with an office and a permanent occupancy of 6 people with a daily wastewater allowance of 120 litres per person. A daily wastewater loading of 720 litres per day has been used to determine the required drainage disposal area.</p> <p>This figure is based on the information provided in Table H1 of AS/NZS 1547:2012 with rainwater tanks being provided to the property and the Director's Guidelines for On-site Wastewater Management Systems (Building Act 2016) - Table 1 Minimum number of persons per bedroom for hydraulic loading calculations for Class 1 and 2 buildings (dwellings)</p>
<b>Wastewater disposal area</b>	<p>Minimum wetted area required – Appendix L – Table L 1</p> <p>Volume of wastewater per day based on bedrooms 720 litres (based on the above.</p> <p><math>720/5 = 144\text{sq metres (min)}</math></p>

### 3 Assessment Documents

Assessment documents include the following:

- a) Bore log
- b) Installation of OSWWS (Septic Tank and Absorption Beds) for New Dwelling Site Plan, Part Site Plan - General LAA Layout, Part Site Plan - LAA Layout – Dwelling Drainage, Part Site Plan – LAA Layout, Absorption Bed & Cut-off/Swale Drain Section, Notes. Project No 03-2026 Rev 00 pages 01 – 06 of 06, dated 18.02.2026.

### 4 Recommendations

- Install a 4500 (min) litre septic tank. An Orion Bloo 4500 litre septic tank is recommended.
- From the outlet of the septic tank lay 100mm Upvc pipe to the distribution box. The distribution box should be set on a slurry of concrete to prevent it from moving with speed levellers installed in each of the outlets to ensure that the absorption beds are receiving the same volume of water. The base of the distribution box should be higher than the ground level at the absorption beds.

NOTE:

Where fall from the outlet of the septic tank to the distribution box cannot be achieved, a 1000 litre pump station will be required to be installed on the outlet side of the septic tank and the wastewater pumped to the distribution box.

- Install 4 outlet lines from the distribution box and individually connect these to the 4 absorption beds.
- Construct 4 absorption beds with each bed being 40m<sup>2</sup>. The dimension of each bed is 20m long x 1.8m wide x 0.4m deep. The 400mm depth relates to the lower side of the bed. The top side may be higher allowing for slope.

- The lower edge of each absorption bed is to be laid out along the contour using dumpy level or similar and a minimum of 3m separation is required between the lower edge of the top bed and the top edge of the lower bed. The separation distance can be greater if required.
- Within each absorption bed lay a single run of 230mm Reln trench arch centrally along the length of the bed.
- Refer to the section detail on the drawing sheets for the depth of the aggregate and topsoil and the placement of the geotextile fabric.
- Install an inspection port at the far end of the bed as shown in the drawing sheet with the shaft terminating above ground level.
- Connect the 100mm Upvc pipes from the outlet side of the distribution box to the Reln trench arch using a sweep junction and extend the pipe from the top of the junction to ground level and cap.

Setback/separation distances.

- Septic tank 3.0m min from building line.  
LAA Minimum of 5m from the southern and eastern property boundaries.

#### Cut-off/AG Drain

- A cut-off/swale drain is to be constructed as shown on the drawing sheets.

## 5 Site Conditions

<b>Area of Land</b>	1.2ha
<b>Boundaries Confirmed</b>	Yes.
<b>Disposal Area Orientation</b>	Southerly.
<b>Existing Buildings</b>	Nil. The site is undeveloped.
<b>Flood Potential</b>	Nil.
<b>Power Supply</b>	Mains power is available.
<b>Land surface shape</b>	The site is located between two 270m contours.
<b>Slope &amp; % Slope Stability</b>	<3 degrees to the south in the area proposed for the dispersal of wastewater.
<b>Surface Drainage</b>	Fair.
<b>Vegetation</b>	Grass.
<b>Water Courses (m)</b>	There is an unnamed watercourse, which is the overflow from the dam located on 175 Quamby Brook Road. This overflow drain runs in a westerly direction along Osmaston Road and enters the northern boundary of the property before heading in a westerly direction through 1315, 1317 & 1341 Osmaston Road. The onsite wastewater disposal area will not impact on or be impacted by this watercourse.
<b>Water Table Depth</b>	Unknown. Estimated to be greater than 2 metres.
<b>Water Reticulation/Source</b>	Rainwater tanks.
<b>Wells/Bores/Groundwater</b>	There are no registered bores on the property.  There are bores within the area. Refer to Figure 3 for the location of the bores.

## 6 Site Evaluation

This section provides an overview of the site for suitability of onsite wastewater disposal and other environmental considerations.

### 6.1 Primary Disposal Area (m<sup>2</sup>)

A primary disposal area of 60m<sup>2</sup> (min) is required.

### 6.2 Reserve Area

There is sufficient area available on the site for the installation of a future system, if required.

### 6.3 Special requirements

Nil.

### 6.4 Capacity Rating

Capacity Rating	Factor	Rating
	Site Drainage	Fair
	Flooding Potential	Nil. Determined from SES flood mapping.

Impervious Layer Depth	Nil
% Gravel	Nil
% Stone	Nil
% Boulders	Nil
% Rock Outcrop	Nil

#### 6.4.1 Adopted Permeability

As per AS/NZS 1547, the site and soil evaluation show the receiving soil is a weakly structured category 3 Silt loam (SM) with a permeability of between 0.5-1.5m/day and a design loading rate of 10mm/day overlying a strongly structured category 5 light Clay (Cl) with a permeability of between 0.12-0.5m/day and a design loading rate of 5m/day.

The design loading rate of 5mm/day has been used to determine the area required for wastewater disposal.

### 7 System Design Criteria

The following disposal design is recommended for this application.

<b>Area required for LAA</b>	144m <sup>2</sup> (min)
<b>Depth of bed</b>	400mm on low side of bed.
<b>Separation distance to boundaries or other features</b>	Septic tank 3.0m min from building line. LAA Minimum of 5m from the southern and eastern property boundaries.

#### 7.1 Comment on Results

The site is deemed appropriate for in-ground absorption of primary treated effluent in the designated area. There is sufficient land available within the proposed property allotment for the construction of a future wastewater disposal area, if or when required.

## 8 Disclaimer

This report is based on the conditions of the site encountered at the time of the inspection only. In the event of significant delays in the commencement of this project it is recommended that a further investigation be conducted to verify the conditions found in this report.

This assessment has been prepared on the basis of the plans and details provided for this development only. This assessment should not be applied to any project other than that originally specified at the time this report was issued.

This report should not be used without further consultation from the wastewater designer if significant changes to the development occur. Change may include but are not limited to variations in the location of the proposed building(s) septic tank location, and/or wastewater disposal areas, earthworks or other work that may impact upon the building settlement or slope stability.

Please note that because there are many factors affecting the successful operation of a septic tank and the land application area, it is likely that at some time in the future additional work may be required to maintain the system operation.

JD Consulting will not be responsible for the interpretations of the report finding by others involved in the design and construction process for this project. Where any confusion exists clarification should be obtained from JD Consulting.

This report and any associated documents are only valid for a period of 12 months from the date below providing there have been no changes to the proposed plans or the site. Please contact the undersigned to confirm if the documentation is still valid if the work has not been commenced or completed within 12 months of the date below.

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### 8.2 Digital Copies of Report

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James Doherty  
Date: 3 March 2026

## Appendices

### Appendix 1 Wastewater Loading Certificate

<b>Waste Water Loading Certificate</b>	
System Capacity	6EP at 120L/Person/Day
Design Summary	
<ul style="list-style-type: none"> <li>• Effluent Quality</li> </ul>	Primary
<ul style="list-style-type: none"> <li>• Adopted Soil Category</li> </ul>	3 overlying 5
<ul style="list-style-type: none"> <li>• Adopted DLR</li> </ul>	5mm/day
<ul style="list-style-type: none"> <li>• Indicative permeability</li> </ul>	012-0.5m/day
<ul style="list-style-type: none"> <li>• LAA Design</li> </ul>	Septic Tank and Absorption Beds.
<ul style="list-style-type: none"> <li>• Primary LAA</li> </ul>	144sq m (min).
<ul style="list-style-type: none"> <li>• Reserve Area</li> </ul>	There is sufficient land available for a Reserve Area.
Fixtures	<p>Standard water fixtures including 6/3 litre cistern, spring loaded aerator faucets or similar.</p> <p>Water efficient fitting and fixtures are not taken into consideration when determining the wastewater loading.</p> <p>The installation of water efficient fitting and fixtures will reduce the loading on the wastewater disposal area and are highly recommended.</p>
<b>Consequence of Variation in Effluent Flows</b>	
<ul style="list-style-type: none"> <li>• High Flows</li> </ul>	<p>The septic tank is designed to collect and treat effluent with a maximum hydraulic load of between 1400-1600 litres/day depending on the brand and model of the unit installed.</p> <p>The wastewater disposal system is designed for a loading of 720 litres/day.</p> <p>Flooding of the wastewater disposal area.</p> <p>A reduction in the life of the wastewater disposal area due to flooding or extended wetted periods</p>
<ul style="list-style-type: none"> <li>• Low Flows</li> </ul>	<p>Should not affect system performance.</p> <p>Allows for a longer dose/rest cycle period.</p>
<b>Consequences of Variation in Effluent Quality</b>	<p>Can cause issues with the processing of effluent within the septic tank.</p> <p>Can affect the wastewater disposal field</p>

	due to the overuse of washing detergents that have high sodium/phosphorus that result in clogging the receiving soils.
<b>Consequences of Lack of Maintenance and Monitoring</b>	<p>The system should be maintained in compliance with the recommendations of the wastewater report dated 3 March 2026, the Certificate of Accreditation issued by the Director of Building Control and any permit conditions listed on the Plumbing Permit</p> <p>Vehicles and livestock should be excluded from the wastewater disposal area.</p> <p>Any failure to maintain the septic tank and the wastewater disposal system may lead to system failure, resulting in foul odours, attraction of pests and weed growth.</p>

## Appendix 2 Standards for Wastewater Land Application Areas

Objective - PCA FP1.5 (a)-(c)

To provide for sustainable onsite wastewater management through the provision of appropriately designed and located land application areas and wastewater treatment units.

Acceptable Solutions	Performance Criteria	Compliance
<p>A1</p> <p>Horizontal separation distance from a building to a land application area must comply with one of the following:</p> <p>a) be no less than 6m;</p> <p>b) be no less than:</p> <ul style="list-style-type: none"> <li>i. 3m from an upslope building or level building;</li> <li>ii. If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building;</li> <li>iii. If secondary treated effluent and subsurface application, no less than 2m plus 0.25m from a downslope building</li> </ul>	<p>P1</p> <p>a) The land application area is located so that the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low.</p>	<p>Complies with A1 a)</p> <p>The LAA is to be located with a separation distance of greater than 6m from a building.</p>
<p>A2</p> <p>Horizontal separation distance from a downslope surface water to a land application area must comply with (a) or (b)</p> <p>a) be no less than 100m; or</p>	<p>P2</p> <p>Horizontal separation distance from downslope surface water to a land application area must comply with all of the following;</p> <p>a) Setbacks must be consistent with AS/NZS1547 Appendix R</p> <p>b) A risk assessment in accordance with Appendix A AS/NZS</p>	<p>Complies with A2 a)</p> <p>There is at least 100m separation between the land application area and the downslope surface water.</p>

<p>b) be no less than the following;</p> <ul style="list-style-type: none"> <li>i. if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or</li> <li>ii. if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to downslope surface water</li> </ul>	<p>1547 has been completed that demonstrates that the risk is acceptable.</p>	
<p>A3</p> <p>Horizontal separation distance from a property boundary to a land application area must comply with either of the following;</p> <p>a) be no less than 40 m from a property boundary; or</p> <p>b) be no less than;</p> <ul style="list-style-type: none"> <li>i. 1.5m from an upslope or level property boundary; and</li> <li>ii. If primary treated effluent 2m for every degree of average gradient from a downslope property boundary;</li> <li>iii. If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope boundary</li> </ul>	<p>P3</p> <p>Horizontal separation distance from a property boundary to a lined application area must comply with all of the following:</p> <p>a) Setback must be consistent with AS/NSZ1547 Appendix R; and</p> <p>b) A risk assessment in accordance with Appendix A of AS/NZS1547 has been completed that demonstrates that the risk is acceptable.</p>	<p>Complies with A3 b) i &amp; ii</p> <p>The land application is greater than 1.5m from an upslope or level property boundary and greater than 6m from a downslope property boundary.</p>

<p>A4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient</p>	<p>P4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following:</p> <ul style="list-style-type: none"> <li>a) Setback must be consistent with AS/NZS1547 Appendix R; and</li> <li>b) A risk assessment completed in accordance with Appendix A of AS/NZS1547 demonstrates that the risk is acceptable</li> </ul>	<p>Complies with A4</p> <p>No wells or bores or similar water supply has been identified within 50m of the wastewater system.</p>
<p>A5</p> <p>Vertical separation distance between groundwater and a land application area must not be less than;</p> <ul style="list-style-type: none"> <li>a) 1.5m if primary treated effluent; or</li> <li>b) 0.6m if secondary treated effluent</li> </ul>	<p>P5</p> <p>Vertical separation distance between groundwater and a land application area must comply with the following;</p> <ul style="list-style-type: none"> <li>a) Setbacks must be consistent with AS/NZS1547 Appendix R; and</li> <li>b) A risk assessment completed in accordance with Appendix A of AS/NZS1547 that demonstrates that the risk is acceptable</li> </ul>	<p>Complies with A5 a)</p> <p>There is at least 1.5m separation between the groundwater and the land application area.</p>
<p>A6</p> <p>Vertical separation distance between a limiting layer and a land application area must be no less than;</p> <ul style="list-style-type: none"> <li>a) 1.5m if primary treated effluent;</li> <li>b) 0.5m if secondary treated effluent</li> </ul>	<p>P6</p> <p>Vertical setback must be consistent with AS/NZS1547 Appendix R</p>	<p>Complies with A6 a)</p> <p>There is at least 1.5m separation between any limiting layer and the land application area.</p>
<p>A7</p> <p>Nil</p>	<p>P7</p> <p>A wastewater treatment unit must be located a sufficient distance from building or neighbouring properties so that emissions (odours, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties.</p>	<p>Complies</p>

# Appendix 3 Borelog

Job No. 03/2026		Borehole No. 1										
Client: P Skipper												
Site Address: 1315 Osmaston Road, Deloraine												
Project: Installation of septic tank and absorption bed for new dwelling												
Date: February 2026												
Logged by: James Doherty												
					Equipment			Auger				
Co-Ords												
Method	Penetration				Notes Samples Tests	Water	Graphic Log	Classification	Material Description	Moisture condition	Consistency density index	Structure, additional observations
	1	2	3	4								
							SM	Silt loam reddish brown	D	Fb	weakly structured	
						N I L						
					0.25		CI	Clay loam		F		
									D			
						0.5	CI	Clay Reddish brown	D	F	strongly structured	
						0.75						
						1.0			D/M	St		
						1.25						
									M	Vst		
						1.50						
							BOH					

Job No. 03/2026    Borehole No.    2

Client: P Skipper

Site Address: 1315 Osmaston Road, Deloraine

Project: Installation of septic tank and absorption bed for new dwelling

Date: February 2026

Logged by: James Doherty

Equipment

Auger

Co-Ords

Method	Penetration				Notes Samples Tests	Water	Graphic Log	Classification	Material Description	Moisture condition	Consistency density index	Structure, additional observations
	1	2	3	4								
								SM	Silt loam reddish brown	D	Fb	weakly structured
						N I L	0.25		Clay loam		F	
							0.5	Cl	Clay Reddish brown	D	F	strongly structured
							0.75					
							1.0			D/M	St	
							1.25			M	Vst	
							1.50					
									BOH			

## Appendix 4 Certificate of Accreditation – Orion Septic Tank



# Certificate of Accreditation

## On-Site Domestic Wastewater Treatment Unit AS/NZS1546.1 Septic Tanks

This Certificate of Accreditation is issued by the Director of Building Control acting pursuant to Section 18 of the *Building Act 2016* and the National Construction Code (NCC), as applicable.

**System:** **Orion Model BLOO UST 4500**

**Manufacturer/Supplier:** **Orion Australia Pty Ltd.**  
**ACN 154671986**

**Of:** **2 East Goderich Street,**  
**Deloraine, TAS 7304**

This is to certify that the **Orion Model BLOO UST 4500** Septic Tank is accredited as an on-site wastewater treatment unit in single dwellings (within plumbing installations in Tasmania). This accreditation is subject to the conditions and permitted uses specified in accordance with the *Building Act 2016* and the NCC as applicable.

A handwritten signature in black ink, appearing to be "P. Graham".

**Peter John Graham**  
**Director of Building Control**  
Consumer, Building and Occupational Services  
Department of Justice

**Date of Issue:** 20 August 2021

**Certificate No:** DOC/21/62539

**This Certificate of Accreditation is valid until 20 August 2026, subject to conditions or unless withdrawn earlier by the Director of Building Control**



**BUSHFIRE  
HAZARD  
REPORT**



**10 Lot Subdivision  
175 Quamby Brook Road, Deloraine**

**June 2022**

Job number: L220109  
Prepared by: James Stewart  
Town Planner & Bushfire Hazard Practitioner BFP 157

Rev. no	Description	Date
1	FINAL	20/06/2022

#### **Disclaimer**

This report deals with the potential bushfire risk only, all other statutory assessments sit outside of this report. This report is not to be used for future or further development on the site, other than what has been specifically provided for in the certified plans attached. Woolcott Surveys Pty Ltd accepts no responsibility to any purchaser, prospective purchaser or mortgagee of the property who in any way rely on this report. This report sets out the owner's requirements and responsibilities and does not guarantee that buildings will survive in the event of a bushfire event. If characteristics of the property change or are altered from those which have been identified, the BAL classification may be different to that which has been identified as part of this report. In this event the report is considered to be void.

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## Executive Summary

Development of a 10-lot subdivision is proposed for 175 Quamby Brook Road, Deloraine. The subdivision consists of 10 residential lots. Lot 2-10 will be vacant lots ready for future residential development, while lot 1 will contain the existing dwelling in the south east of the site. Access to each lot will be via existing or proposed vehicle crossings onto Osmaston Road or Quamby Brook Road.

Future dwelling on lots 2-10 will need to provide a compliant hazard management area, access and fire fighting water supply.

The site is entirely within the boundary of a bushfire prone area shown on an overlay on a planning scheme map for the *Tasmanian Planning Scheme – Meander Valley*. A bushfire event at this site or within the immediate area is likely to impact on future buildings at this location and subject development to considerable radiant heat and ember attack.

A bushfire hazard management plan has been prepared and is provided as an appendix to this report. The plan sets out the owner's responsibilities to maintain a managed area for each lot, taking into consideration the relevant requirements under Australian Standard *AS3959-2018 Construction of buildings in bushfire-prone areas*.

### Conclusions and recommendations

- a) Hazard management areas meeting the requirements of **BAL 19** can be achieved for Lots 2-10
- b) It is considered there is an insufficient increase in risk in relation to hazard management areas, water supply, or access associated with Lot 1.
- c) Future dwellings on lots 2-10 must maintain hazard management areas and follow recommendations as outlined in Bushfire Hazard Management Plan and section 5.2 of this report. Maintenance of these hazard management areas is to be maintained in perpetuity.
- d) Future dwellings on lots 2-10 must establish a dedicated firefighting onsite water supply of 10,000L, ensuring tank and fittings are compliant with standards for building in a bushfire prone area. A static water supply must comply with section 5.4 of this report.
- e) Future dwellings on lots 2-10 must establish access road's in compliance with Table C13.2, ensuring a carriageway width of 4m, with an additional clearance of 0.5m either side.

Signed:



**Author:** James Stewart

**Position:** Town Planner and Accredited Bushfire Practitioner BFP 157

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## 1. Introduction

This Bushfire Hazard Report and Bushfire Hazard Management Plan (BHMP) has been prepared in support of a proposed 10 lot subdivision at 175 Quamby Brook Road, Deloraine.

### 1.1 The subject site

The following is a summary of the application information:

<b>Property address</b>	175 Quamby Brook Road, Deloraine
<b>Certificate of title</b>	CT 221147/1
<b>Property ID (PID)</b>	1845865
<b>Property Owners</b>	Cresswell Developments (Tas) Pty Ltd.
<b>Existing Use and Development</b>	Residential – single dwelling
<b>Zoning</b>	Low Density Residential
<b>Specific Area Plan</b>	Davis Road Specific Area Plan
<b>Planning Scheme</b>	Tasmanian Planning Scheme – Meander Valley
<b>Identified on a Bushfire Overlay Map</b>	Yes
<b>Priority Habitat identified</b>	Portions of the site.
<b>Proposed Works</b>	10 lot subdivision
<b>Water Supply</b>	Static Water Supply.
<b>Vehicular Access</b>	Quamby Brook Road and Osmaston Road.

### 1.2 Bushfire Assessment

A bushfire assessment is a process of analysing information about the potential impacts on a proposed development that is likely to have in a bushfire hazard scenario. A 'bushfire-prone area' is an area where a bushfire event is likely to occur that may result in significant adverse impact on buildings and even lives. In Tasmania, most local Councils have a planning scheme overlay map that identifies bushfire-prone areas. Subdivision within a bushfire-prone area triggers the assessment of the Bushfire-Prone Areas Code under the planning schemes and subsequently requires assessment against the provisions of the Code. The assessment generally requires a BHMP to be provided as part of the application.

The bushfire assessment will determine the Bushfire Attack Level (BAL) for the future lots, which measures the possible exposure of a building to bushfire hazard. The BAL is assessed in accordance with Australian Standard *AS 3959-2018 construction of buildings in bushfire-prone areas*.

The subject site falls within the municipal area of Meander Valley Council. The assessment has been undertaken in accordance with C13.0 Bushfire-Prone Areas Code and to accompany a

subdivision application under the *Tasmanian Planning Scheme – Meander Valley*. Please refer to Section 6 of the report for detail. It is also required to understand the fuel management requirements for the subject site and to demonstrate that future new buildings within each proposed new lots can be constructed to a BAL19 level under the *Building Act 2016*.

### 1.3 References

The following documents were referred in the preparation of, and should be read in connection with, this bushfire assessment report:

- C13.0 Bushfire-Prone Areas Code – Tasmanian Planning Scheme.
- Tasmanian State Government, Director’s Determination – Bushfire Hazard Areas
- Tasmanian Planning Scheme – Meander Valley
- Australian Standard, AS3959-2018 construction of buildings in bushfire-prone areas.
- Building Act 2016
- Tasmanian Fire Service, Bushfire Hazard Advisory Note

## 2. Site Description

### 2.1 Site context

The proposed new lots are within the suburb of Deloraine. The subject site has a total size of approximately 24.5ha, adjoining established lifestyle lots to the south, the Deloraine Golf course to the east, and agricultural land to the west and north. The site currently contains a single dwelling and outbuildings in the southern section of the site. The site is transected by Quamby Brook Road, which splits off a 3.5ha area from the balance of the lot.

The site has direct frontage onto Quamby Brook road in the south, and Osmaston Road in the north. The site sits at 270m AHD and is generally level. The majority of the site is classified as grassland, with patches of remnant vegetation scattered across the 25ha. There is a large dam on the property which will be contained in lot 1.

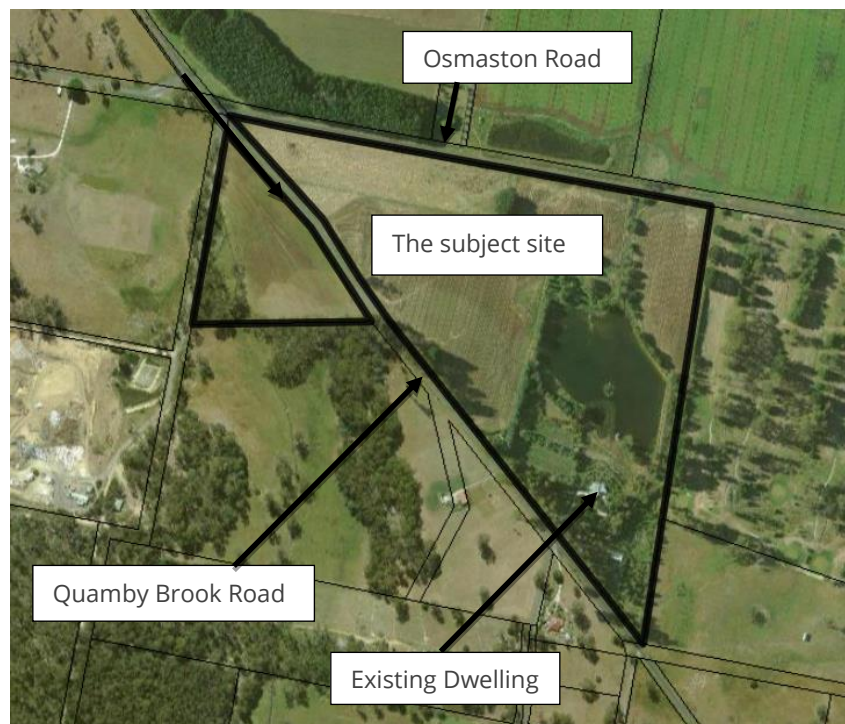


Figure 1 - Aerial view of the subject site and its surrounding area (source: The LIST Map)

## 2.2 Planning controls

The site is within the municipal area of Meander Valley Council. Therefore, the planning instrument is the *Tasmanian Planning Scheme – Meander Valley* (The Scheme).

The subject site is within the Low-Density Residential Zone. Surrounding properties are within the Agricultural zone (north), Rural zone (west), Recreation Zone (east) and Rural Living zone (south east).

The subject site also entirely falls within the Bushfire-Prone Areas Overlay.

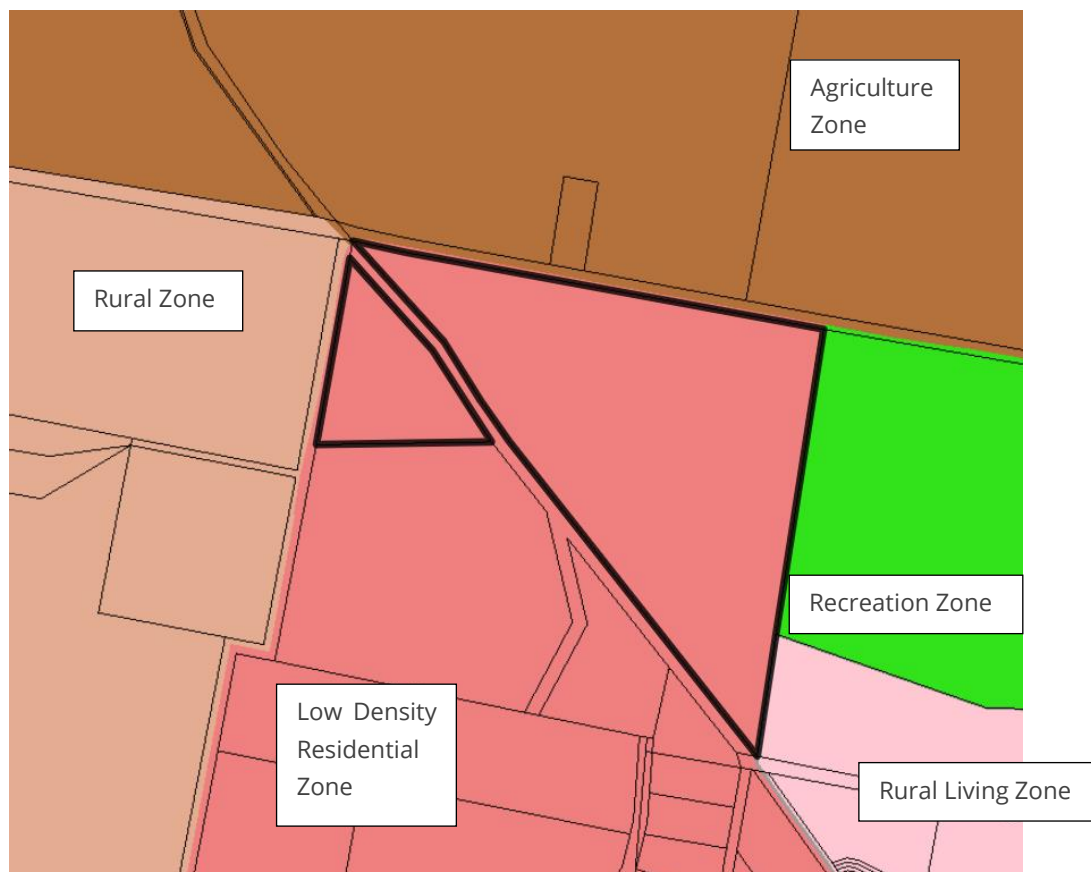


Figure 2 - Zoning map of subject site.

### 3. The Proposal

It is proposed to subdivide the subject site into 10 lots. Lot 1 will contain the existing dwelling and vehicle crossing with frontage onto Quamby Brook Road. The remainder of the lots will be regular lots which front onto Osmaston Road and Quamby Brook Road.

The details of the lots are as follows:

Lot number	Lot size	Lot number	Lot size	Lot number	Lot size	Lot number	Lot size
Lot 1	8.1ha	Lot 4	1.2ha	Lot 7	1.02ha	Lot 10	3.5ha
Lot 2	2.4ha	Lot 5	1.5ha	Lot 8	1.3haha		
Lot 3	1.1ha	Lot 6	1.9ha	Lot 9	2.2ha		

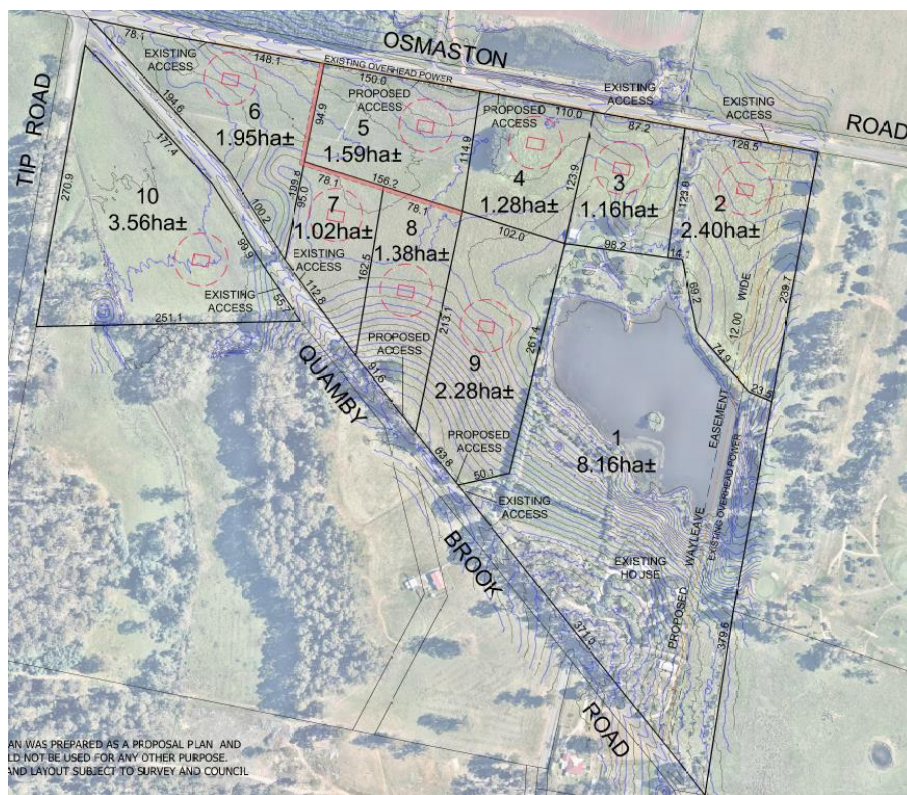


Figure 3 - Extract of proposal plan for 10 lot subdivision

## 4. Bushfire Site Assessment

### 4.1 Vegetation Analysis

#### 4.1.1 TasVeg Mapping

The TasVeg map 4.0 provides general information indicating potential bushfire prone vegetation in the area.

The subject site is predominantly classified as Agricultural Land (FAG), with portions of the land classified as Eucalyptus Forest (DSC). Surrounding land is generally agricultural in nature. The land to the east is classified as modified land, as a result of the Deloraine Golf Course. The land to the south has a large patch of Eucalyptus forest onsite. There is a section of plantation forestry to the north of lot 6 which was not shown

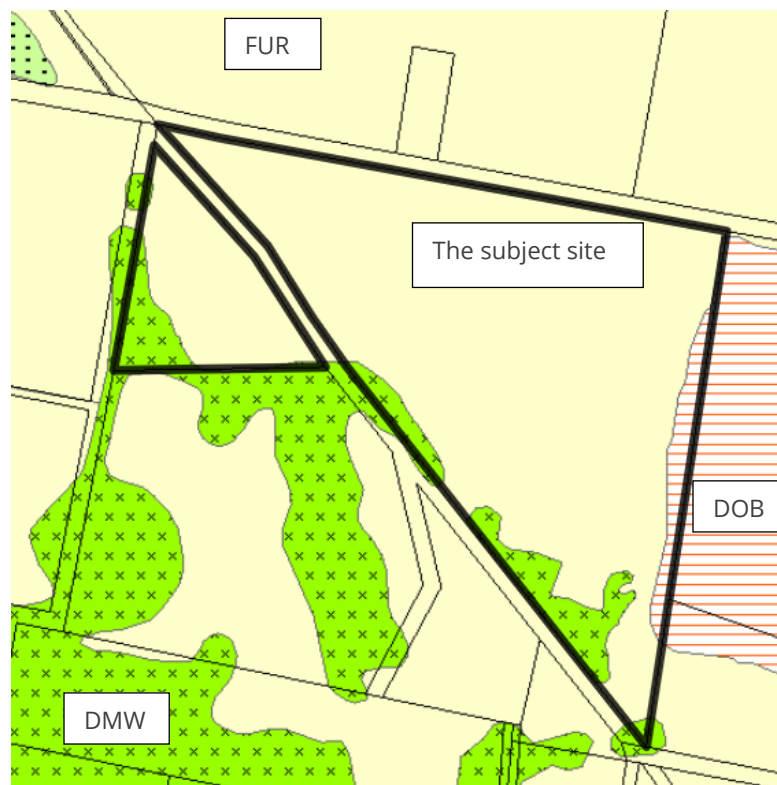


Figure 4 - Extract of vegetation mapping from Tasveg 3.0



*Figure 5 - Vegetation analysis within 100-150m of subject site*

#### 4.2 Effective slope Analysis

Figure 7 below shows the effective slope, which is the slope of land under the classified vegetation **in relation to** the subject site. The land is generally flat across the site.

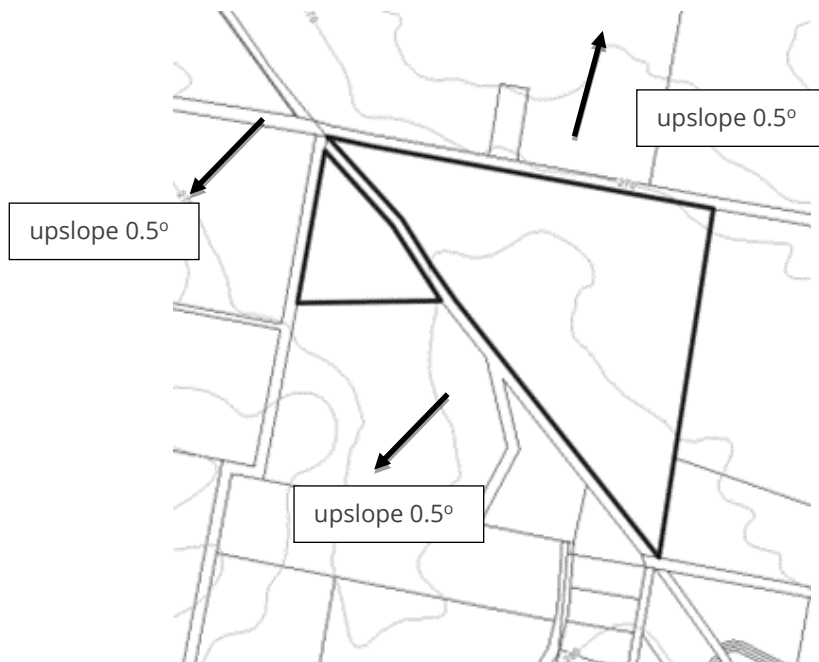


Figure 6 - Slope analysis of surrounding vegetation.

### 4.3 Photos



Figure 7 - Looking north over adjoining farming land on Osmaston Road.



Figure 8 - Looking north over lot 7 from Quamby Brook Road.



Figure 9 – Looking north over lot 1 from Quamby Brook Road



Figure 10 – Looking south down Tip Road, Lot 10 on left of photo.



Figure 11 – Looking south over adjoining grassland at Quamby Brook Road.



Figure 12 – Looking over lot 4 on Osmaston Road.

## 5. Bushfire Protection Measures

### 5.1 BAL Rating and Risk Assessment

The purpose of the BAL rating assessment in this report is to identify the minimum separation between the bushfire prone vegetation to a building area within each proposed lot. The assessment aims to achieve the requirements of **BAL 19** (as per the acceptable solution C13.6.1 A1b under the Scheme, see Section 6 below for detail) and/or lower rating in a bushfire event that hazard management areas can be implemented.

The definition of BAL 19 is highlighted as follows:

Bushfire attack level (BAL)	Predicted bushfire attack and exposure level
<b>BAL-LOW</b>	Insufficient risk to warrant specific construction requirements
<b>BAL-12.5</b>	Ember attack, radiant heat below 12.5kW/m <sup>2</sup>
<b>BAL-19</b>	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m <sup>2</sup>
<b>BAL-29</b>	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m <sup>2</sup>
<b>BAL-40</b>	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m <sup>2</sup>
<b>BAL-FZ</b>	Direct exposure to flames radiant heat and embers from the fire front.

The distances from each building area to the classified vegetation are presented below, along with the slope and type of vegetation. To better demonstrate the required separation as hazard management areas, a 10m x 15m building area is shown on each lot. The existing dwelling on lot 1 has been determined as an insufficient increase in risk.

Lot 2	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-10m Managed 10m- 100m+ Grassland	0m -100m Managed (golf course)	0m -100m+ Managed (water body)	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	NA	NA	Upslope/flat
<b>BAL 19 Setbacks</b>	10m	NA	NA	10m

Lot 3	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -100m+ Managed (water body)	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	NA	Upslope/flat
<b>BAL 19 Setbacks</b>	10m	10m	NA	10m

Lot 4	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	10m	10m	10m	10m

Lot 5	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-41m Managed 41m- 100m+ Forest	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	23m	10m	10m	10m

Lot 6	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-41m Managed 41m- 100m+ Forest	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	23m	10m	10m	10m

Lot 7	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-41m Managed 41m- 100m+ Forest	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	23m	10m	10m	10m

Lot 8	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	10m	10m	10m	10m

Lot 9	North	East	South	West
<b>Vegetation within 100m of indicative building envelope</b>	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	10m	10m	10m	10m

<b>Lot 10</b>	<b>North</b>	<b>East</b>	<b>South</b>	<b>West</b>
<b>Vegetation within 100m of indicative building envelope</b>	0m-10m Managed 10m- 100m+ Grassland	0m-10m Managed 10m- 100m+ Grassland	0m-23m Managed 23m- 100m+ Forest	0m -10m Managed 10m-100m Grassland
<b>Slope (degrees, over 100m)</b>	Upslope/flat	Upslope/flat	Upslope/flat	Upslope/flat
<b>BAL 19 Setbacks</b>	10m	10m	23m	10m

## 5.2 Hazard Management Areas

As outlined in C13.0 *Bushfire-Prone Areas Code*, a Bushfire Hazard Management Area (BHMA) will be managed in accordance with the provided plan. Existing vegetation needs to be strategically modified and then maintained within this area in accordance with the Bushfire Hazard Management Plan to achieve the following outcomes:

- to reduce the quantity of windborne sparks and embers reaching buildings;
- to reduce radiant heat at the building; and
- to halt or check direct flame attack.

The BHMA will be developed within and up to the property boundaries to provide access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present that will significantly contribute to the spread of a bushfire.

The BHMA will be achieved by adoption of the following strategies:

### Maintenance of Fuel Management Areas

It is the responsibility of the property owner to maintain and manage the landscaping in accordance with the Bushfire Hazard Management Plan.

This area is to be regularly managed and maintained. Landscaping in this area will be minimised:

- Grass maintained to a maximum height of 100mm, with fuel loads kept to less than 2 tonnes per hectare which will be maintained at this level.
- Trees and any undergrowth will be clear of (BCA) class 1 – 9 buildings on all sides.
- All undergrowth and understorey of trees (up to 2m) will be removed within the bushfire hazard management area.
- Pathways to 1 metre surrounding the buildings and landscaping material, will be non-combustible (stone, pebbles etc.).
- The total shrub cover will be a maximum of 20% of the available area.
- There will be a clear space from the buildings of at least four (4) times the mature height of any shrubs planted.
- Shrubs will not be planted in clumps, this is to avoid build-up of debris and dead vegetation materials.

### Landscaping

- vegetation along the pathways to comprise non-flammable style succulent ground cover or plants (avoid plants that produce fine fuel which is easily ignited, plants that produce a lot of debris, trees and shrubs which retain dead material in branches or which shed long strips of bark, rough fibrous bark or drop large quantities of leaves in the spring and summer, vines on walls or tree canopies which overhang roofs)
- timber woodchip and flammable mulches cannot be used and brush and timber fencing should be avoided where possible

### 5.3 Access

Private access roads must be constructed as per the following table C13.2:

Element	Requirement
A. Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
B. Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> <li>(a) all-weather construction;</li> <li>(b) load capacity of at least 20t, including for bridges and culverts;</li> <li>(c) minimum carriageway width of 4m;</li> <li>(d) minimum vertical clearance of 4m;</li> <li>(e) minimum horizontal clearance of 0.5m from the edge of the carriageway;</li> <li>(f) cross falls of less than 3 degrees (1:20 or 5%);</li> <li>(g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;</li> <li>(h) curves with a minimum inner radius of 10m;</li> <li>(i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and</li> <li>(j) terminate with a turning area for fire appliances provided by one of the following:                             <ul style="list-style-type: none"> <li>(i) a turning circle with a minimum outer radius of 10m; or</li> <li>(ii) a property access encircling the building; or</li> <li>(iii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.</li> </ul> </li> </ul>
C. Property access length is 200m or greater.	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> <li>(a) the requirements for B above; and</li> <li>(b) passing bays of 2m additional carriageway width and 20m length provided every 200m.</li> </ul>
D. Property access length is greater than 30m, and access is provided to 3 or more properties.	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> <li>(a) complies with requirements for B above; and</li> <li>(b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.</li> </ul>

## 5.4 Fire Fighting Water Supply

Table C13.5 Static water supply for fire fighting.

Element	Requirement
<p>A. Distance between building area to be protected and water supply</p>	<p>The following requirements apply:</p> <ul style="list-style-type: none"> <li>(a) The building area to be protected must be located within 90 metres of the firefighting water point of a static water supply; and</li> <li>(b) The distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area.</li> </ul>
<p>B. A static water supply:</p>	<ul style="list-style-type: none"> <li>a) May have a remotely located offtake connected to the static water supply;</li> <li>b) May be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times;</li> <li>c) Must be a minimum of 10,000 litres per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems;</li> <li>d) Must be metal, concrete or lagged by non-combustible materials if above ground; and</li> <li>e) If a tank can be located so it is shielded in all directions in compliance with Section 3.5 of AS 3959-2009, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by:                             <ul style="list-style-type: none"> <li>(i) metal;</li> <li>(ii) non-combustible material; or</li> </ul> </li> <li>(a) fibre-cement a minimum of 6 mm thickness</li> </ul>
<p>C. Fittings, pipework and accessories (including stands and tank supports)</p>	<p>Fittings and pipework associated with a fire fighting water point for a static water supply must:</p> <ul style="list-style-type: none"> <li>a) Have a minimum nominal internal diameter of 50mm;</li> <li>b) Be fitted with a valve with a minimum nominal internal diameter of 50mm;</li> <li>c) Be metal or lagged by non-combustible materials if above ground;</li> <li>d) Where buried, have a minimum depth of 300mm;</li> <li>e) Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer for connection to fire fighting equipment;</li> <li>f) Ensure the coupling is accessible and available for connection at all times;</li> <li>g) Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length);</li> <li>h) Ensure underground tanks have either an opening at the top of not less than 250 mm diameter or a coupling compliant with this Table; and</li> <li>i) Where a remote offtake is installed, ensure the offtake is in a position that is                             <ul style="list-style-type: none"> <li>(i) Visible;</li> <li>(ii) Accessible to allow connection by firefighting</li> </ul> </li> </ul>

		<p>equipment;</p> <p>(iii) At a working height of 450 – 600mm above ground level; and</p> <p>Protected from possible damage, including damage by vehicles.</p>
D	Signage for Static Water Connections	<p>The firefighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must:</p> <p>a) Comply with tank signage requirements within AS2304:2019; or</p> <p>Comply with the Tasmanian Fire Service Water Supply Signage Guidelines published by the Tasmania Fire Service.</p>
E	Hardstand	<p>A hardstand area for fire appliances must be:</p> <p>(a) no more than 3m from the firefighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like)</p> <p>(b) no closer than 6m from the building area to be protected;</p> <p>(c) a minimum width of 3m constructed to the same standard as the carriageway; and</p> <p>(d) connected to the property access by a carriageway equivalent to the standard of the property access.</p>

## 6. Bushfire-Prone Areas Code Assessment

An assessment of C13.0 Bushfire-Prone Areas Code under the Scheme is provided as follows.

### C13.6 Development Standards for Subdivision

#### C13.6.1 Subdivision: Provision of hazard management areas

<b>Objective</b>	
Subdivision provides for hazard management areas that:	
<ul style="list-style-type: none"> <li>(a) facilitate an integrated approach between subdivision and subsequent building on a lot;</li> <li>(b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and</li> <li>(c) provide protection for lots at any stage of a staged subdivision.</li> </ul>	
<b>Acceptable solutions</b>	<b>Proposed solutions</b>
<p>A1</p> <ul style="list-style-type: none"> <li>(a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or</li> <li>(b) The proposed plan of subdivision:                             <ul style="list-style-type: none"> <li>(i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision;</li> <li>(ii) shows the building area for each lot;</li> <li>(iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of <i>Australian Standard AS 3959 - 2009 Construction of buildings in bushfire-prone areas</i>; and</li> <li>(iv) is accompanied by a bushfire hazard management plan for each individual lot, certified by the TFS or accredited person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of <i>Australian Standard AS 3959 - 2009 Construction of buildings in bushfire-prone areas</i>; and</li> </ul> </li> <li>(c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of</li> </ul>	<ul style="list-style-type: none"> <li>A1a) Acceptable solution achieved for lot 1. The HMA for Lot 1 will not be impacted as a result of the subdivision. The proposed new boundary is located approximately 137m to the west of the existing dwelling. The Hazard Management Areas around the dwelling will experience no increase in risk as a result of the proposed new boundary.</li> <li>A1b) The acceptable solution is achieved. The BHMP:                             <ul style="list-style-type: none"> <li>i) shows all lots within the bushfire prone area.</li> <li>ii) shows a 10m x 15m building area on lots.</li> <li>iii) shows a HMA associated with a possible future dwelling on all lots. This area demonstrates the separation distances required for BAL 19 in Table 2.4.4 of <i>AS 3959 - 2018 Construction of buildings in bushfire-prone area</i>.</li> <li>iv) is prepared by an accredited bushfire hazard practitioner.</li> </ul> </li> <li>A1c) not applicable as Part 5 agreement is not required.</li> </ul>

<p>the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.</p>	
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**C13.6.2 Subdivision: Public and firefighting access**

<p><b>Objective</b></p> <p>Access roads to, and the layout of roads, tracks and trails, in a subdivision:</p> <ul style="list-style-type: none"> <li>(a) allow safe access and egress for residents, fire fighters and emergency service personnel;</li> <li>(b) provide access to the bushfire-prone vegetation that enables both property to be defended when under bushfire attack and for hazard management works to be undertaken;</li> <li>(c) are designed and constructed to allow for fire appliances to be manoeuvred;</li> <li>(d) provide access to water supplies for fire appliances; and</li> <li>(e) are designed to allow connectivity, and where needed, offering multiple evacuation points.</li> </ul>	
<b>Acceptable solutions</b>	<b>Proposed solutions</b>
<p>A1</p> <ul style="list-style-type: none"> <li>(a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of fire fighting; or</li> <li>(b) A proposed plan of subdivision showing the layout of roads and fire trails, and the location of property access to building areas, and which complies to the extent necessary with Tables C13.1, C13.2 &amp; C13.3, is included in a bushfire hazard management plan certified by the TFS or accredited person.</li> </ul>	<ul style="list-style-type: none"> <li>A1a) Lot 1 is considered an insufficient increase in risk. The subdivision has no impact on the existing access arrangements, nor does it effect the existing access in any way.</li> <li>A1b) The acceptable solution is achieved.</li> </ul> <p>Each lot provides access from a Council maintained Road. The access will allow for a 5m carriageway width when measured on the ground.</p>

**C13.6.3 Subdivision: Provision of water supply for fire fighting purposes**

<p><b>Objective</b></p> <p>Adequate, accessible and reliable water supply for the purposes of fire fighting can be demonstrated at the subdivision stage and allow for the protection of life and property associated with the subsequent use and development of bushfire-prone areas.</p>	
<b>Acceptable solutions</b>	<b>Proposed solutions</b>
<p>A1 In areas serviced with reticulated water by the water corporation:</p> <ul style="list-style-type: none"> <li>(a) TFS or an accredited person certifies that</li> </ul>	<p>Not applicable. Subdivision is not located within a reticulated area.</p>

<p>there is an insufficient increase in risk from bushfire to warrant the provision of a water supply for fire fighting purposes;</p> <p>(b) A proposed plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by the TFS or accredited person as being compliant with Table E4; or</p> <p>(c) A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.</p>	
<p>A2 In areas that are not serviced by reticulated water by the water corporation:</p> <p>(a) The TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant provision of a water supply for fire fighting purposes;</p> <p>(b) The TFS or an accredited person certifies that a proposed plan of subdivision demonstrates that a static water supply, dedicated to fire fighting, will be provided and located compliant with Table C13.5; or</p> <p>(c) A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.</p>	<p>A1a) Lot 1 is considered insufficient increase in risk. The subdivision has no impact on the site ability in relation to a water supply. It is recommended that the dwelling provide a future static water supply.</p> <p>b) Acceptable solution achieved. A BHMP provides for a compliant water supply onsite. Future dwellings must provide this.</p>

## 7. Conclusions and Recommendations







The proposal seeks planning approval for 10 lot subdivision of the subject site located within the municipal area of Meander Valley Council. The site and its surrounding land falls within the bushfire prone area and the threats come from grassland, which is the only type of bushfire prone vegetation identified in the area. The bushfire hazard management plan demonstrates that the building area within each proposed new lot can achieve the requirements of BAL 19 subject to suitable controls, such as bushfire management area, access and water supply, in place.

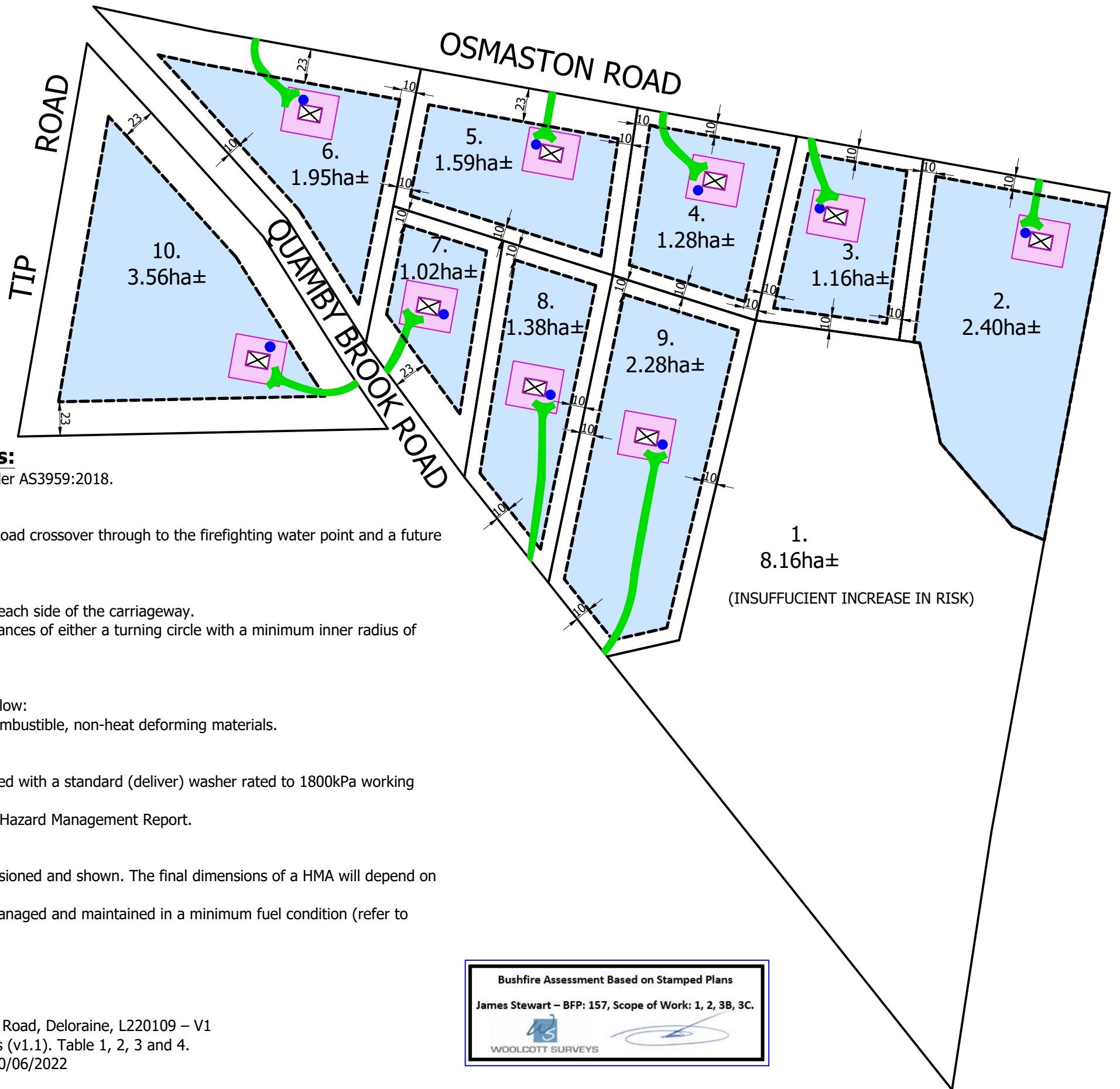
The following requirements are recommended to be included into the planning permit should the planning authority determined approval of the proposal subdivision:

- a) Hazard management areas meeting the requirements of **BAL 19** can be achieved for Lots 2-10
- b) It is considered there is an insufficient increase in risk in relation to hazard management areas, water supply, or access associated with Lot 1.
- c) Future dwellings on lots 2-10 must maintain hazard management areas and follow recommendations as outlined in Bushfire Hazard Management Plan and section 5.2 of this report. Maintenance of these hazard management areas is to be maintained in perpetuity.
- d) Future dwellings on lots 2-10 must establish a dedicated firefighting onsite water supply of 10,000L, ensuring tank and fittings are compliant with standards for building in a bushfire prone area. A static water supply must comply with section 5.4 of this report.
- e) Future dwellings on lots 2-10 must establish access road's in compliance with Table C13.2, ensuring a carriageway width of 4m, with an additional clearance of 0.5m either side.

## Annexure 1 – Bushfire Hazard Management Plan

**LEGEND:**

-  - BUSHFIRE BAL 19 HAZARD MANAGEMENT AREA
-  - BAL 19 POTENTIAL BUILDING AREA
-  - TITLE BOUNDARIES
-  - PROPOSED 10,000L WATER TANK (INDICATIVE)
-  - PROPOSED ACCESS
-  - 10m x 15m INDICATIVE BUILDING AREA



**Hazard Management and Protection Area Requirements:**

Class 1A buildings are to be designed and constructed to BAL19 minimum standard under AS3959:2018.

**Access Road**

Property access greater than 30m in length, is to be maintained/constructed from the Road crossover through to the firefighting water point and a future dwelling. Property access must:

- Be of all-weather construction (minimum)
- Minimum carriageway width of 4m.
- Vegetation must be cleared for a height of 4m above the carriageway and 0.5m each side of the carriageway.
- Future and/or existing dwellings must terminate with a turning area for fire appliances of either a turning circle with a minimum inner radius of 10m, or a hammerhead "T" or "Y" turning head 4 m wide and 8m long

**Static Fire Fighting Water Supply**

A 10,000 Litre dedicated firefighting water supply tank is to be provided as specified below:

- Tanks and above ground fittings and pipes must be made of non-rusting, non-combustible, non-heat deforming materials.
- The tank or remote offtake must not be located within 6m of a future dwelling.
- The tank or remote offtake must be located within 3m of a hardstand area.
- Tanks must be fitted with a standard compliance forged Storz 65mm adapter fitted with a standard (deliver) washer rated to 1800kPa working pressure and 2400kPa burst pressure.
- Bushfire Signage must be clearly displayed in accordance with section 5.4 of the Hazard Management Report.

**Hazard Management – Vegetation Management**

- A future dwelling on lots 2-10 is to provide a hazard management area as dimensioned and shown. The final dimensions of a HMA will depend on the location of a future dwelling.
- Vegetation in the hazard management area (as dimensioned and shown) is to managed and maintained in a minimum fuel condition (refer to section 5.2 of Bushfire Hazard Management Report)

**Notes:**

1. Refer plans –Woolcott Surveys, Proposed 10 Lot Subdivision, 175 Quamby Brook Road, Deloraine, L220109 – V1
2. All future works to comply with Director’s Determination – Bushfire Hazard Area’s (v1.1). Table 1, 2, 3 and 4.
3. Plan to be read in conjunction with Bushfire Hazard Management Report dated 20/06/2022

Bushfire Assessment Based on Stamped Plans


James Stewart – BFP: 157, Scope of Work: 1, 2, 3B, 3C.



WOOLCOTT SURVEYS

**BUSHFIRE HAZARD MANAGEMENT PLAN**  
 PROPOSED 10 LOT SUBDIVISION  
 OWNER: CRESSWELL DEVELOPMENTS (TAS) PTY LTD  
 175 QUAMBY BROOK ROAD, DELORAINÉ 7304  
 C.T.221147/1, PID 1845865



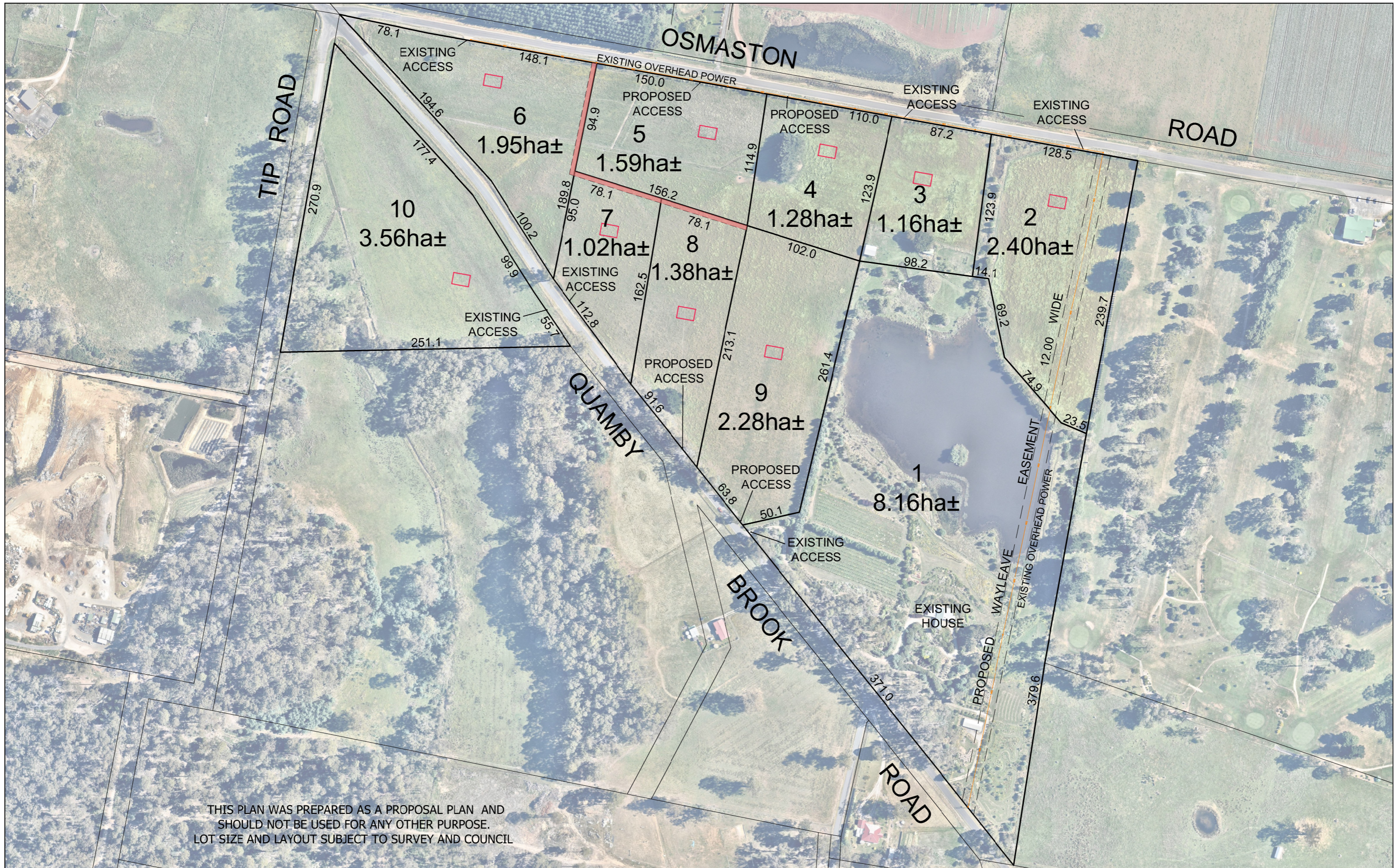
  
**WOOLCOTT SURVEYS**

10 Goodman Court Invermay TAS 7248  
 PO Box 593 Mowbray Heights TAS 7248  
 Phone (03) 6332 3760  
 Fax (03) 6332 3764  
 Email: office@woolcottsurveys.com.au

**Job Number**  
 L220109


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## Annexure 2 – Subdivision Proposal Plan

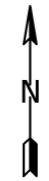


Notes:  
Contours are based on LIDAR

10X15

  
PROPOSED POWER SUPPLY  
EASEMENT, WIDTH TO BE ADVISED BY  
TASNETWORKS.

PROPOSED 10 LOT SUBDIVISION  
175 QUAMBY BROOK RD, DELORAINE  
C.T.221147-1



  
**WOOLCOTT SURVEYS**

10 Goodman Court Invermay TAS 7248  
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Job Number  
L220109

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## Annexure 3 – Planning Certificate

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## BUSHFIRE-PRONE AREAS CODE

### CERTIFICATE<sup>1</sup> UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

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#### 1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

**Street address:**

175 Quamby Brook Road

**Certificate of Title / PID:**

CT221147/1, PID1845865

#### 2. Proposed Use or Development

**Description of proposed Use and Development:**

10 Lot Subdivision

**Applicable Planning Scheme:**

Tasmanian Planning Scheme – Meander Valley

#### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Report	Woolcott Surveys	20/06/2022	1
10 Lot Subdivision Proposal Plan	Woolcott Surveys	05/05/2022	1
Bushfire Hazard Management Plan	Woolcott Surveys	27/06/2022	1

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<sup>1</sup> This document is the approved form of certification for this purpose and must not be altered from its original form.

#### 4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

<input type="checkbox"/> <b>E1.4 / C13.4 – Use or development exempt from this Code</b>	
Compliance test	Compliance Requirement
<input type="checkbox"/> E1.4(a) / C13.4.1(a)	Insufficient increase in risk.

<input type="checkbox"/> <b>E1.5.1 / C13.5.1 – Vulnerable Uses</b>	
Acceptable Solution	Compliance Requirement
<input type="checkbox"/> E1.5.1 P1 / C13.5.1 P1	<b><i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i></b>
<input type="checkbox"/> E1.5.1 A2 / C13.5.1 A2	Emergency management strategy
<input type="checkbox"/> E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan

<input type="checkbox"/> <b>E1.5.2 / C13.5.2 – Hazardous Uses</b>	
Acceptable Solution	Compliance Requirement
<input type="checkbox"/> E1.5.2 P1 / C13.5.2 P1	<b><i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i></b>
<input type="checkbox"/> E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
<input type="checkbox"/> E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

<input checked="" type="checkbox"/> <b>E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas</b>	
Acceptable Solution	Compliance Requirement
<input type="checkbox"/> E1.6.1 P1 / C13.6.1 P1	<b><i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i></b>
<input checked="" type="checkbox"/> E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk. (LOT 1)
<input checked="" type="checkbox"/> E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots
<input type="checkbox"/> E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement

<input checked="" type="checkbox"/>	<b>E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access</b>	
	<b>Acceptable Solution</b>	<b>Compliance Requirement</b>
<input type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<b><i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i></b>
<input checked="" type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk. (LOT 1)
<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

<input checked="" type="checkbox"/>	<b>E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes</b>	
	<b>Acceptable Solution</b>	<b>Compliance Requirement</b>
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk.
<input type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input checked="" type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk (LOT 1)
<input checked="" type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

## 5. Bushfire Hazard Practitioner

Name:

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Accreditation No:

BFP – 157

Scope:

1, 2, 3B, 3C

## 6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

- Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or
- The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed:  
certifier



Name:

James Stewart

Date:

28/06/2022

Certificate Number:

WS-75

(for Practitioner Use only)



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# pitt&sherry

**175 Quamby Brook Road,  
Deloraine**

Noise and Air Assessment

Prepared for  
**Michael Creswell**

Client representative  
**Brett Woolcott (Woolcott Surveys)**

Date  
**10 August 2022**

Rev01



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## Appendices

### Appendix A — Additional Software Setup Details

<b>Prepared by — Douglas Ford</b>		<b>Date — 28 March 2022</b>
<b>Reviewed by — Douglas Fotheringham</b>		<b>Date — 28 March 2022</b>
<b>Authorised by — Andy Turner</b>		<b>Date — 28 March 2022</b>

### Revision History

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
0	Issued	D. Ford	D. Fotheringham	A. Turner	28/03/2022
1	Quarries Added	D. Ford	D. Fotheringham	A. Turner	10/08/2022

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# Executive Summary

This noise and air assessment has been prepared to support a development application for a residential subdivision at 175 Quamby Brook Road, Deloraine. The assessment is required due to the property being within the attenuation zones for the Deloraine Waste Disposal Site and two nearby quarries. Under Clause 24.3.2 P1 of the *Tasmanian Planning Scheme – Meander Valley*, proposed subdivisions, that are within an attenuation zone, must not interfere with or constrain an existing activity such as the waste disposal site or quarry. The conclusion of this assessment is that this requirement is met.

The property is about 3 km SW of Deloraine in a rural/agricultural area that has moderate levels of traffic noise. Existing noise on site also includes noise from agricultural equipment, vehicles and plant operating at the tip, the wind blowing through vegetation and birds and animals.

The Deloraine Waste Disposal Site is currently operated as a solid waste landfill disposal site, by the Meander Valley Council. The existing landfill has reached its maximum permitted capacity and will close and be permanently capped in the coming months. When the landfill closes Council intend to establish a waste transfer facility on the site. Noise and odour emissions will significantly reduce when this happens.

The existing ambient noise in the area of the proposed subdivision was monitored from the 2nd to the 10th of March 2022. Worst case noise levels from equipment operating at the waste disposal site and the quarries were predicted using SoundPlan environmental noise modelling software and found to be low enough not to cause a significant impact on residential amenity.

Emissions of odour from the landfill face, leachate pond and green waste stockpile were modelled using CALPUFF air dispersion modelling software and also found to be low enough not to cause a significant impact on residential amenity.

Dust emissions are not expected to be sufficient to cause an environmental nuisance beyond the boundary of the waste disposal facility.

The level of noise, odour and dust emissions from the waste disposal site and the quarries are all sufficiently low that they will not adversely affect the amenity of the residents of the proposed subdivision. On this basis, the proposed subdivision complies with the requirements of Clause C9.6.1P1 of the planning scheme.

.

# 1. Introduction

This noise and air assessment has been prepared to support a development application for a residential subdivision at 175 Quamby Brook Road, Deloraine. The assessment is required due to the property being within the 750m attenuation area for the Deloraine Waste Disposal Site and the 1000m attenuation areas for two quarries, as identified in *Table C9.1* of the *Tasmanian Planning Scheme – Meander Valley*. Under the planning scheme, proposed subdivisions that contain lots intended for sensitive uses, which are within an attenuation area, must satisfy performance criteria P1 under *Clause C9.6.1. P1* which requires that each lot in the proposed subdivision area must not result in the potential for future sensitive uses (dwellings) to be impacted by emissions from the waste disposal site or the two quarries. The conclusion of this assessment is that the proposed subdivision satisfies P1 and complies with the requirements of *Clause C9.6.1*.

The property is about 3 km SW of Deloraine. The surrounding land is predominantly used for pasture and cropping although it directly adjoins the Deloraine Golf Course to the east and the waste disposal site is about 50m to the SW. Tip Road, the main access road for the waste disposal site runs along the western boundary of the property.

The property is zoned “Low Density Residential” along with the area immediately to the south. The land to the north is zoned “Agriculture” and to the west, ‘Rural”. The area has moderate levels of traffic noise. Existing noise on site also includes noise from agricultural equipment, vehicles and plant operating at the tip, the wind blowing through vegetation and birds and animals.

The site and surrounding area are shown in Figure 1 below. The nearest of the two quarries, owned by DW & PM Frost, is located immediately to the west of the Waste Disposal Site. The second quarry (owned by Cresswells Transport and accessed off Dunhams Road) is a further 600m to the west (not shown in Figure 1).

The proposed subdivision layout has not been confirmed at the time of writing this report, but the nearest house location is likely to be towards the SE corner of the portion of the property between Tip Road and Quamby Brook Road.

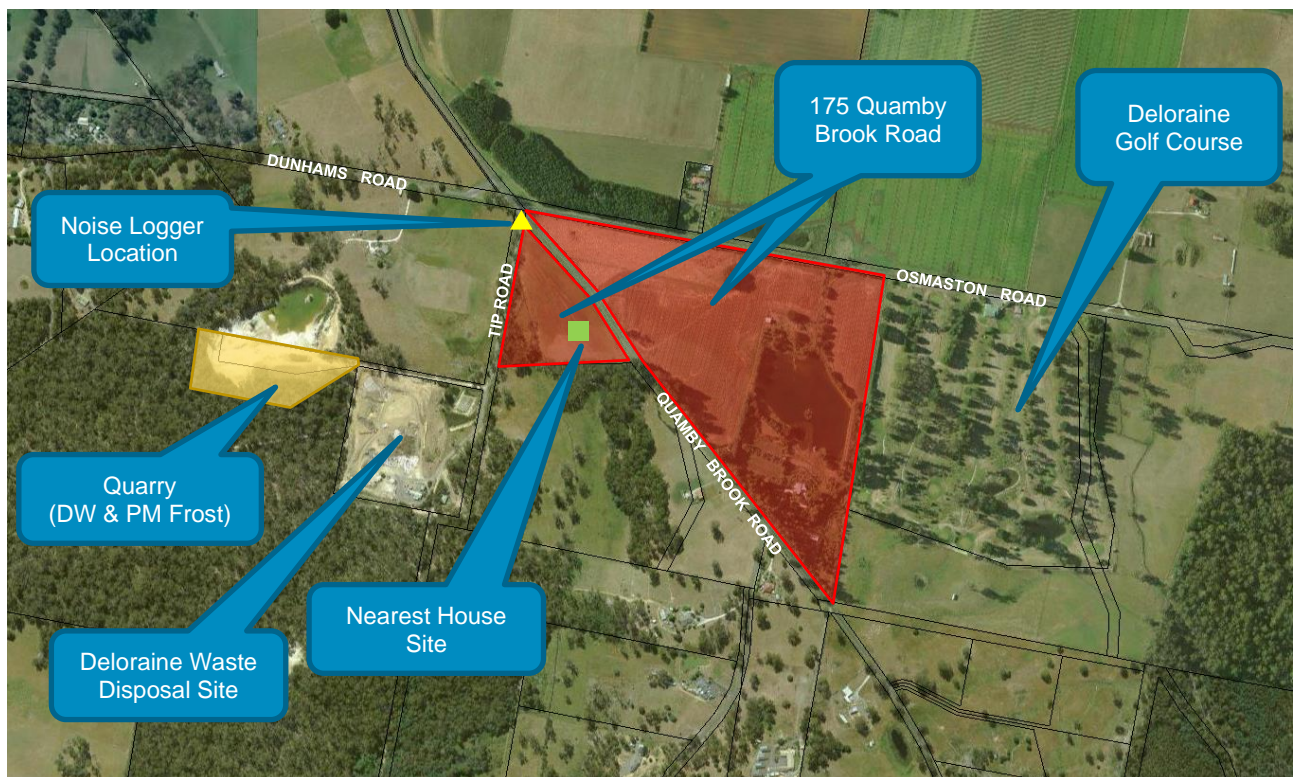


Figure 1 - Location (base image from theList)

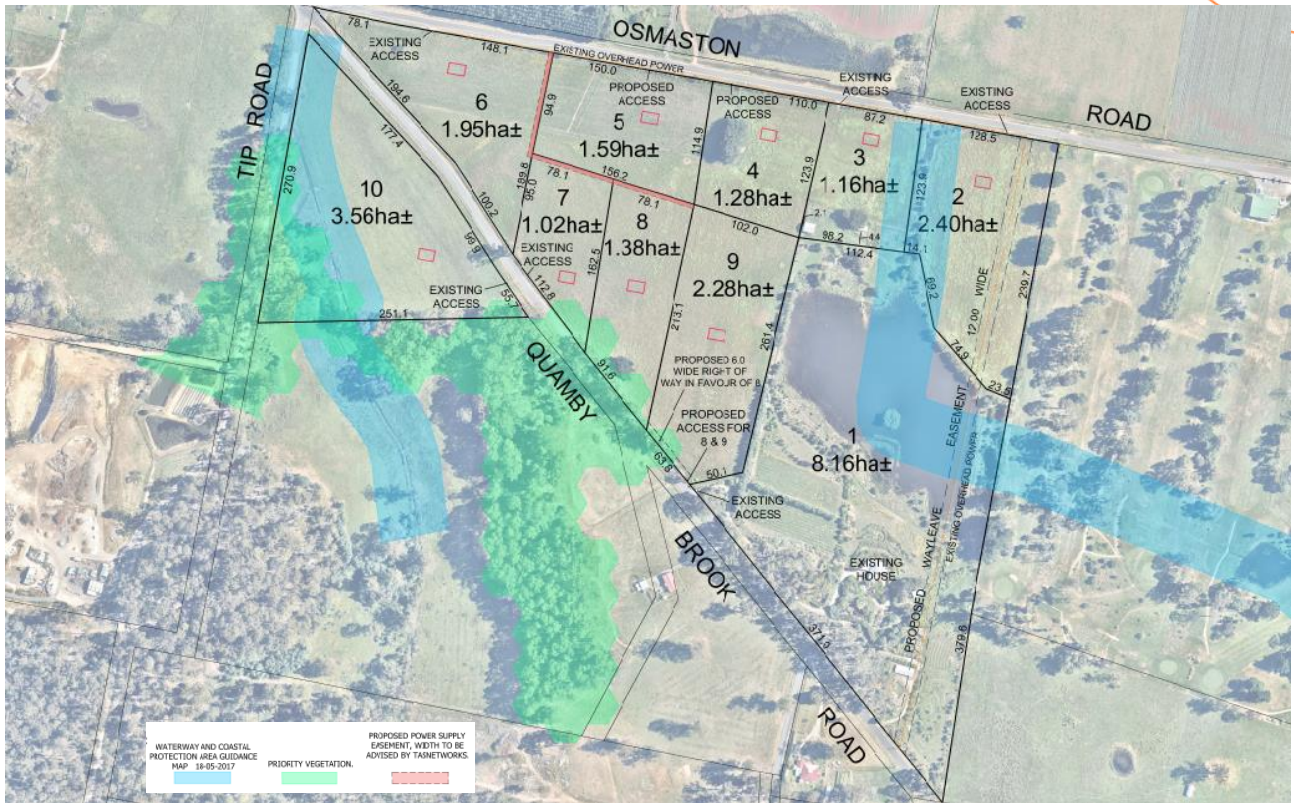


Figure 2 - Proposed Subdivision Layout (Extracted from project drawings)

## 2. Deloraine Waste Disposal Site

The Deloraine Waste Disposal Site is currently operated as a solid waste landfill disposal site, by a contractor on behalf of the Meander Valley Council. It includes a recycling sorting area and “Tip Shop” in the SE corner of the site. The site is open every day from 10:00am to 5:00pm except for Tuesdays and Wednesdays, Good Friday and Christmas Day. Green waste is stockpiled on the southern part of the site and a mobile wood chipper brought in periodically to chip the stockpiled branches before disposal in the landfill. Green waste is not currently composted or otherwise recovered. Similarly building construction rubble is stockpiled and periodically crushed with a mobile crusher before disposal in the landfill. General waste is discharged from trucks and trailers directly onto the landfill. Waste and capping fill material is spread by a front end loader and compacted by an earthmoving roller.

The existing landfill has reached its maximum permitted capacity and will close and be permanently capped in the coming months. As an interim measure Meander Valley Council intend to establish a waste transfer facility on the site. Waste will be transferred into large skips and transported to the Cluan Road land fill site at Westbury. At the time of writing this report, the location on the site and other details of the transfer facility had not been confirmed.

Meander Valley Council has indicated that in the future a new landfill will be developed at the Deloraine site. Again at the time of writing this report no details of the proposed new landfill were available. Additional land would be required. It is assumed that this would be provided by purchasing additional land adjoining the existing site to the west or the south.

# 3. Noise Assessment

## 3.1 Noise Assessment Criteria

### **Planning Scheme**

Clause 9.6.1 P1 of the *Tasmanian Planning Scheme – Meander Valley* requires that:

Each lot, or a lot proposed in a plan of subdivision within an attenuation area, must not result in the potential for a sensitive use to be impacted by emissions, having regard to:

- (a) the nature of the activity with potential to cause emissions including:
  - (i) operational characteristics of the activity;
  - (ii) scale and intensity of the activity; and
  - (iii) degree of emissions from the activity;
- (b) the intended use of the lot.

For the purposes of demonstrating compliance with Clause 9.6.1 P1, Section 3 of this report provides a Noise Assessment, Section 4 provides an Odour Assessment and Section 5 provides a Dust Assessment.

### **EPP**

The *Tasmanian Environmental Protection Policy (Noise) 2009*, the ‘EPP’, provides a table of acoustic guideline indicator levels which may be used to assess the likely impact of environmental noise on various activities.

The guideline levels for avoidance of sleep disturbance are an  $L_{eq}$  and  $L_{max}$  of 45 and 60dB(A) respectively, measured outside an open bedroom window. This reduces to 30 and 45 dB(A) respectively, when measured inside a bedroom. It also provides measures for avoiding ‘Moderate Annoyance’ and ‘Serious Annoyance’ for people engaged in for ‘outdoor daytime living’ activities in their yards, of  $L_{eq}$  equals 50dB(A) and 55dB(A) respectively.  $L_{eq}$  is the ‘equivalent continuous noise level’ which can be thought of as the average noise level over a specific period of time<sup>1</sup>.  $L_{max}$  is the maximum noise level recorded in a specific period of time. These measures relate to the combined total noise level experienced at a location, which is made up of noise from the activity being considered as well as noise from all other sources in the area, such as traffic and other commercial premises, etc.

### **Intrusiveness**

A commonly used measure of the level of impact of noise from an industrial activity is that if the level of the noise emissions from the activity is more than 5 dB(A) higher than the background noise level, the noise is considered to be ‘Intrusive’. This measure has been adopted in the NSW noise policy for industry and in various planning schemes, although it has not been specifically incorporated in Tasmanian state noise policy. The background noise level, also known as the ‘ $L_{90}$ ’, is defined as the noise level in a specific period of time, that is exceeded by 90% of the noise levels measured in that time.

## 3.2 Existing Ambient Noise

The existing ambient noise in the area of the proposed subdivision was monitored from the 2nd to the 10th of March 2022 using a *Rion NL-42* noise logger set up and operated in accordance with the *DEPHWA Noise Measurements Procedures Manual*, 2008. The noise logger was located, at the five way intersection of Tip Road, Quamby Brook Road, Osmaston Road and Dunham Road, as shown in Figure 1 above.

The weather was mostly fine during the noise logging period except for 27mm of rain on the 5<sup>th</sup> of March. There were

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<sup>1</sup> Noise levels measured in decibels are averaged logarithmically.

calm to moderate wind conditions and temperatures ranged between 5 and 25°C, as observed at the nearest Bureau of Meteorology weather station at Sheffield.

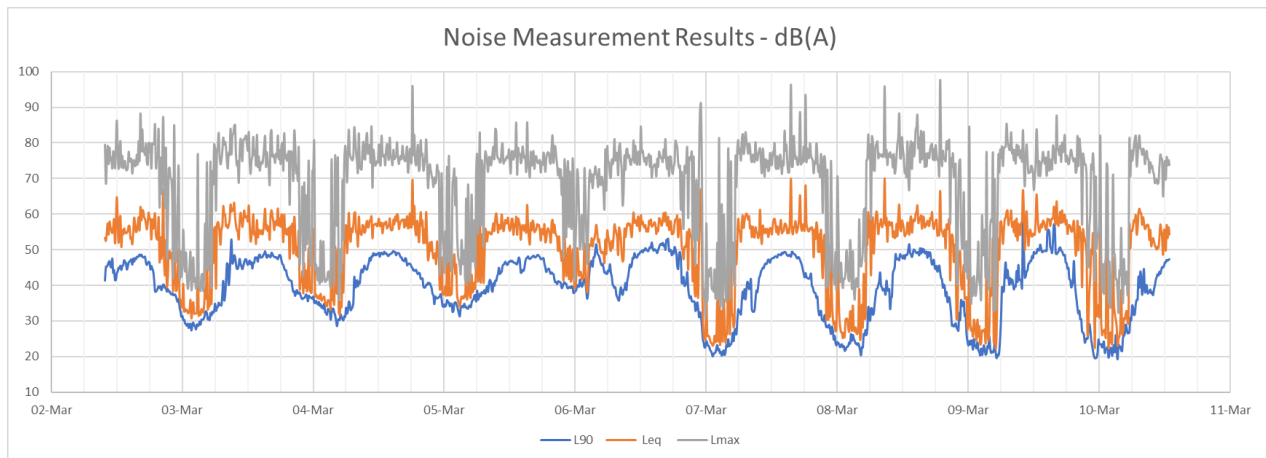


Figure 3 - Noise Logger Results

Figure 3 above shows a graph of the  $L_{Aeq\ 10min}$  (continuous equivalent noise level),  $L_{A90}$  (background noise level) and  $L_{Amax\ 10min}$  logging results over the recording period. The  $L_{Aeq}$  can be thought of as the average noise level over a period of time. The  $L_{A90}$  is the noise level that is exceeded 90% of the time, during a specific period of time. The  $L_{Amax}$  is the maximum noise level, which usually relates to short duration, high level noise “events” such as a vehicle passing close to the noise meter.

As shown in Figure 4 below, the noise levels follow a typical daily pattern increasing in the early morning, remaining constant during the day, then reducing to lower levels overnight when there is less traffic and other activity in the vicinity. Daytime  $L_{Aeq}$  noise levels were nearly always between 50 and 60 dB(A) irrespective of the day of the week. The daytime aggregated background noise level for the logging period was 38.8 dB(A).

While setting up and retrieving the noise logger the ambient noise was dominated by wind blowing in nearby trees and occasional traffic. Noise from heavy vehicles operating on the waste disposal was faintly discernible in the distance.

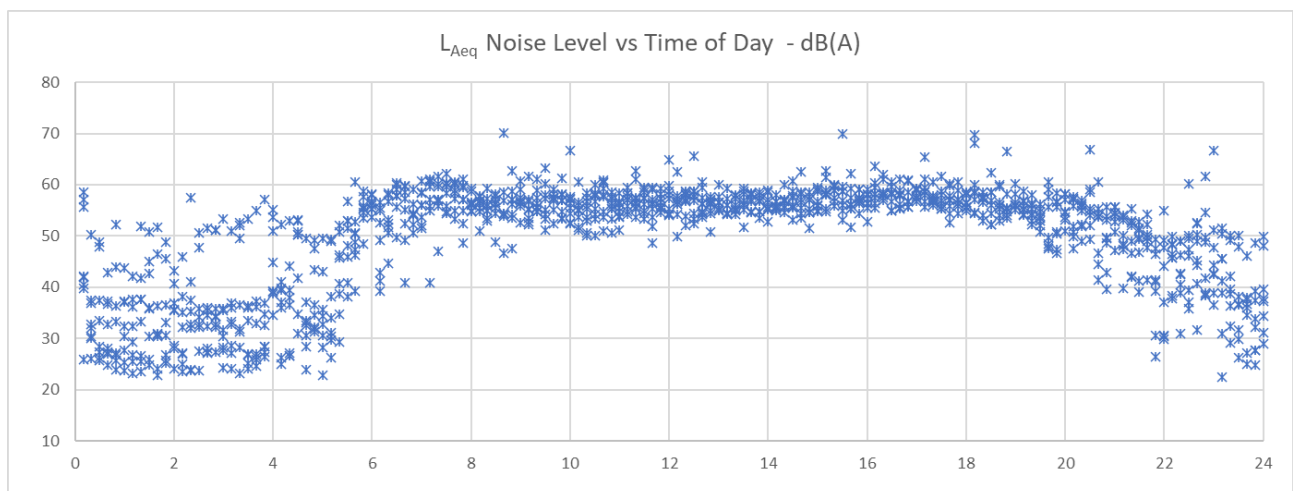


Figure 4 -  $L_{Aeq}$  Noise Level vs Hour of the Day

During the logging period the waste disposal facility site was operating on the 2<sup>nd</sup>, 4<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> and not operating on the other days. It can be seen from Figure 3 that the noise recorded on operating days, is not significantly different from noise recorded on non-operating days.

### 3.3 Noise Sources at the Waste Disposal Site

The main sources of noise emissions from the waste disposal site are from trucks, the compaction roller and front end loader on the tip face. Every couple of months a wood chipper or rock crusher will operate at the southern end of the site, for a day or so. There is no fixed plant. The sound power levels of these noise sources, which have been obtained from equipment suppliers' reference data are:

- Truck (moving at low speed) 104 dB(A)
- Car (moving at low speed) 47 dB(A)
- Front End Loader 105 dB(A)
- Compaction Roller 107 dB(A)
- Mobile Rock Crusher 117 dB(A)
- Mobile Woodchipper 119 dB(A)

### 3.4 Noise Modelling - Methodology and Assumptions

Noise modelling was carried out in accordance with the Tasmanian DEPHA *Noise Measurement Procedures Manual*, 2008. Noise level calculations were implemented using SoundPLAN 8.2 environmental noise modelling software. Modelling assumptions and settings include:

- The ISO 9613-2 noise calculation standard was used within SoundPLAN.
- Existing terrain topography was obtained from 2 metre LIDAR data sourced from the *ELVIS* online elevation database.
- Ground absorption factors were set to 90% soft as most ground surfaces in the modelling area are un-paved.
- Three scenarios have been modelled relating to normal operation, normal operation + the woodchipper and normal operation + the rock crusher.

Figure 5 below shows the layout of the SoundPLAN model. The red/blue dot indicates the woodchipper / rock crusher noise source. Red lines indicate moving noise sources such as the car, truck, loader, or compaction roller. The yellow dots indicates the noise result location.

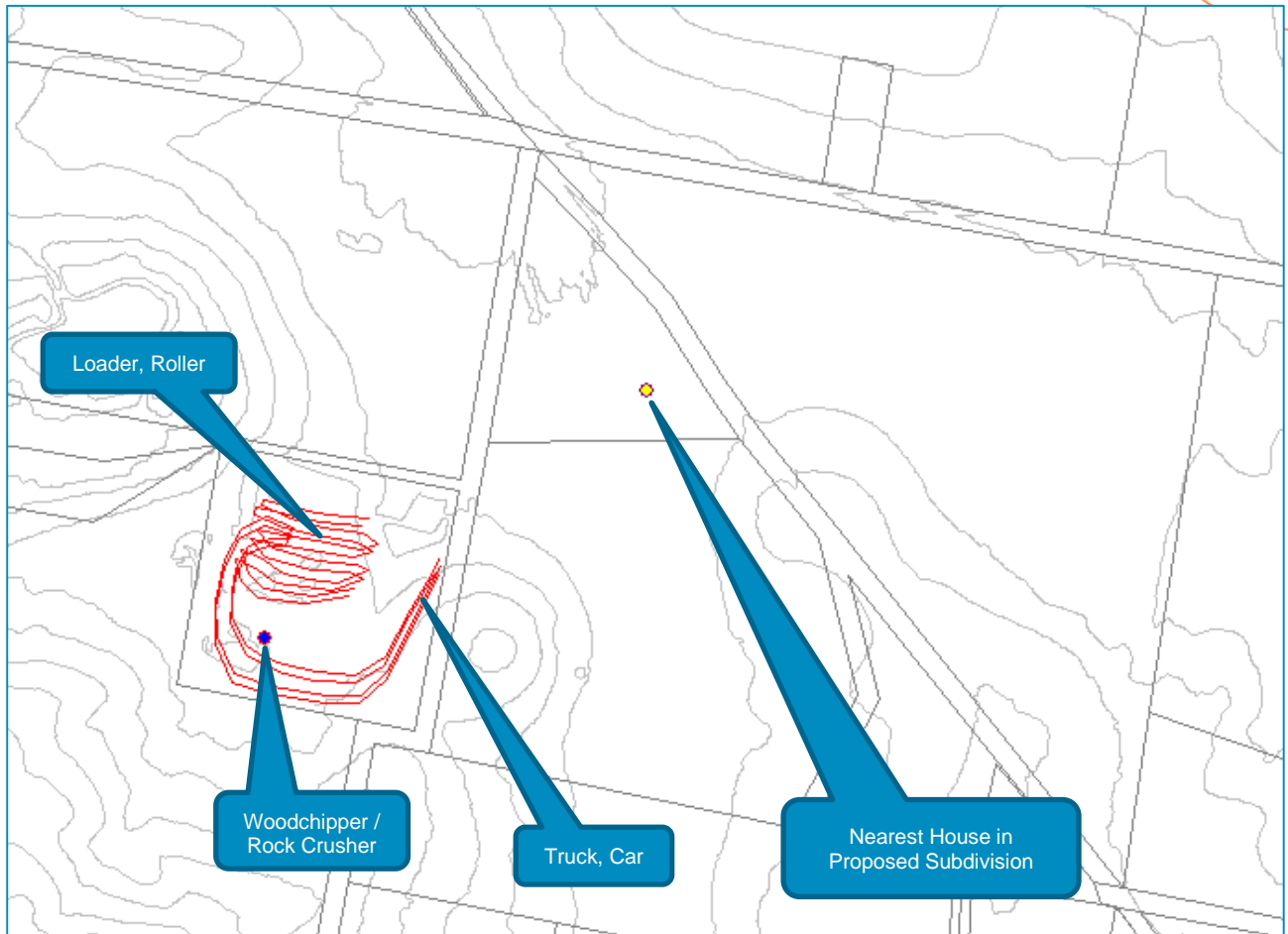


Figure 5 - Plan view of SoundPLAN noise model

### 3.5 Results

The results of the modelling are shown in Table 1 below.

Table 1 - SoundPLAN Results

Scenario	Noise Level dB(A)
Normal Operation	44
Normal Operation + Wood Chipper	51
Normal Operation + Rock Crusher	53

#### Normal Operations Days

The noise level predicted at the nearest house in the proposed subdivision for normal operations is 44 dB(A). During the logging period the daytime background noise level + 5dB(A) during the proposed operating hours was 39+5 = 44 dB(A). The predicted noise level for normal operation does not exceed this level, so the noise would not be considered intrusive.

The ambient noise level expressed as an  $L_{eq,10min}$  measured during the noise logging generally ranged between 50 and 60 dB(A) for the daytime time period. This already exceeds the EPP indicator level for avoiding "Annoyance" during outdoor recreation activities of 50 dB(A). The predicted normal operation noise level of 44 dB(A) is much lower than the total ambient noise levels measured. This indicates the noise from the waste disposal site normally makes an insignificant contribution to the overall noise experienced at the proposed subdivision location which is dominated by traffic and other noise. This is consistent with the qualitative observation made on site that noise from the waste disposal site plant was only faintly discernible in the distance, and the observation that in the logging results the noise levels on the days when the waste disposal facility is open are not noticeably higher than on the days when it is closed.

When the landfill closes noise emissions will reduce further due to elimination of roller compaction work and spreading of refuse and fill by the frontend loader.

### **Wood Chipper and Rock Crusher Operation Days**

On days when the rock crusher or wood chipper is operating the noise level at the nearest house in the subdivision would be considered “intrusive”. At 53 dB(A) the noise level from the waste disposal site is likely to be at a similar level to day time traffic noise and would cause the overall ambient noise level to increase by about 2 dB(A). This would not be apparent to residents inside their houses. Operation of the woodchipper and rock crusher only occurs for a day or so every couple of months and is unlikely to occur on weekends or public holidays when residents are more likely to be using outdoor spaces. The impact of these periods of higher noise would be very limited.

## **3.6 Noise Assessment Conclusion**

On normal operating days noise from the waste disposal site is only faintly audible and is unlikely to have any effect on the amenity of the residents of the proposed subdivision. Noise from wood chipping or rock crushing operations on the site will be more noticeable, but the expected noise level and frequency of occurrence is not high enough to cause a significant adverse impact on residential amenity. On this basis, with respect to noise emissions, the proposed subdivision complies with the requirements of Clause C9.6.1P1 (a) and (b) of the planning scheme.

# **4. Odour Assessment**

## **4.1 Methodology**

This study uses TAPM, CALMET and CALPUFF environmental air dispersion modelling software to predict the dispersion of odour from the waste disposal facility and its likely impact on the proposed subdivision. This software is widely used in Australia and internationally, for the prediction of the ground level concentration of air pollutants emitted from industrial sources. Setup details for the software are summarised in Appendix A.

The modelling methodology used generally follows the Tasmanian EPA’s *Atmospheric Dispersion Modelling Guidelines*, October 2020.

## **4.2 Odour Sources**

Three odour sources at the waste disposal facility have the potential to adversely affect the proposed subdivision. These are odour from the existing land fill face, from the leachate collection pond and from the green waste stockpile. When the land fill closes it will be permanently capped, and will no longer generate odour, but the leachate collection pond and green waste stockpiles are likely to continue to operate indefinitely. The waste transfer station, once it is established also has the potential to generate odour, but this will be a much smaller source than the landfill and will be located further away. If a new landfill is developed in the future it is likely to have a similar odour emissions potential but be located slightly further away. Of these three scenarios, the existing situation (with the existing landfill and leachate pond) is would have the most adverse odour impact on the proposed subdivision. Odour dispersion for this scenario has been assessed by modelling odour dispersion using CALPUFF air dispersion modelling software.

Table 2 below provides details of the odour sources used in the CALPUFF model.

The odour emissions rates used to characterise the odour sources are based on reference data obtained from various other similar sites. Using these rates makes allowance in the modelling for normal variations and abnormal conditions on site. The odour emission rates for the landfill face and the leachate ponds were obtained from SLR’s February 2011 Odour Assessment for Mac’s Reef waste transfer station. The rates for the green waste stockpiles were obtained from measurements at made at the Bayswater Composting Facility in Victoria for general and green waste composting

streams. These results were cited in 2010, by The Odour Unit for a green waste composting facility air assessment in Western Australia, and by Jacobs in 2017, for a green waste composting facility for the Launceston City Council.

Table 2 - Odour Sources

Odour Source	Source Type	Approx Active Area (m <sup>2</sup> )	Coordinates	Base Elevation (m)	Effective Height (m)	SOER <sup>2</sup> (ou.m/s <sup>2</sup> )	OER <sup>3</sup> (ou.m <sup>3</sup> /s)
Landfill Face	Area	4371	472748E 5399785N	286	0.0	0.7	3060 86%
Green Waste Stockpile	Area	707	472785E 5399785N	284	2.0	0.6	424 12%
Leachate Pond	Area	600	472862E 5399837N	279	0.0	0.1	60 2%
<b>TOTAL</b>							<b>3544 ou.m<sup>3</sup>/s</b>

### 4.3 Assessment Criteria

Criteria for the assessment of odour emissions are specified under Schedule 3 of the Tasmanian Environmental Protection Policy (Air Quality). Table 1 of Schedule 3 specifies a maximum ground level concentration of 2 Odour Units (ou) evaluated at or beyond the boundary of a facility. The odour concentration is required to be calculated by atmospheric dispersion modelling and the criteria assessed using a 1-hour averaging period and the 99.5th percentile result where local high quality meteorological and emissions data are available.

An odour unit is a unit of measurement for odour concentration, defined under AS/NZS 4323.3 *Stationary source emissions – Determination of odour concentration by dynamic olfactometry*. One ou corresponds to the typical human threshold of odour detection. Dynamic olfactometry involves establishing the threshold of detection by carrying out dilution trials. For example, a 1 m<sup>3</sup> sample of odorous air with an odour concentration of 100,000ou would require 99,999 m<sup>3</sup> of odour free air (increasing the total volume of the sample to 100,000 m<sup>3</sup>) to dilute the odour concentration to the 1 ou odour threshold.

### 4.4 Meteorology

The distribution of wind speeds and directions experienced in the area of the site greatly affects how emissions to air are diluted and distributed. As there is no weather station near the site, site specific meteorological data was modelled using TAPM and further refined for use in CALPUFF using CALMET.

The predicted wind speed and direction distribution for the year 2020 at the site is shown as the wind rose in Figure 6 below. A wind rose graphs the percentage of the year that the winds blow from each sector (i.e. N, NNE, NE, ENE etc.) The wind rose shows a wind pattern which is typical for much of inland Tasmania, with prevailing light west to north westerly winds, although winds of varying strength occur less frequently from all directions.

<sup>2</sup> SOER: Specific Odour Emissions Rate, the odour emissions rate per unit of surface area of the source.

<sup>3</sup> OER: Odour Emissions Rate.

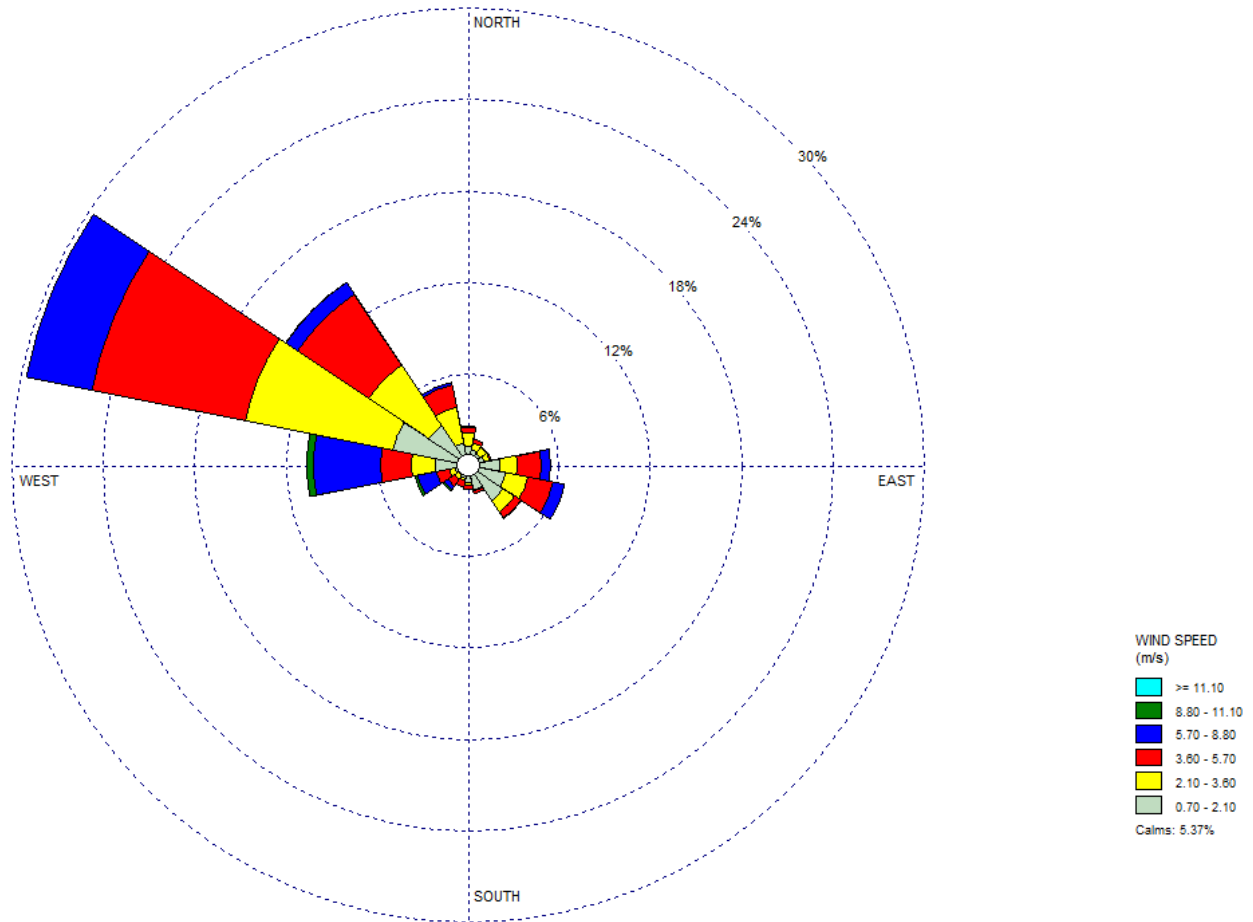


Figure 6 - Site Wind Rose

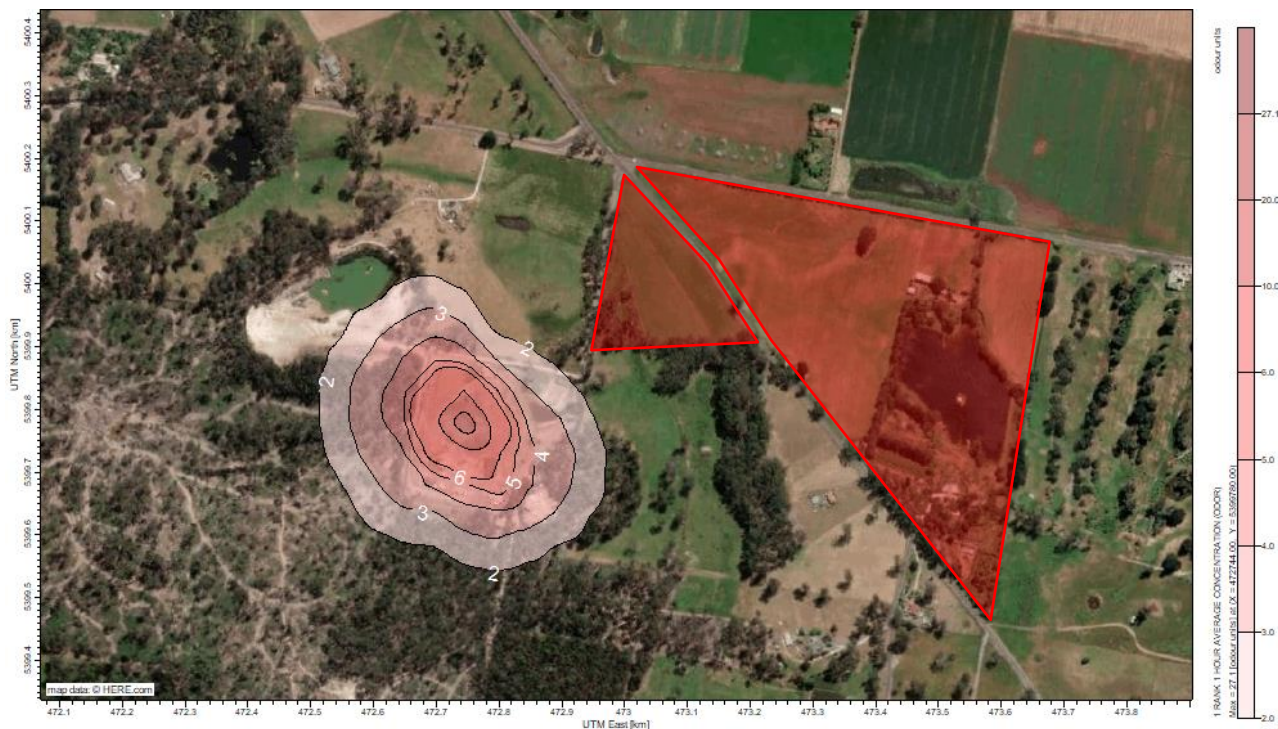
## 4.5 Modelling Results

Figure 7 below shows the results of modelling the odour dispersion from the waste disposal site. As can be seen from the plot, the ground level odour concentration is greatest (a maximum of 27ou) in the middle of the land fill site and diminishes quickly with distance. All predicted odour concentrations on the proposed subdivision site are below the EPP limit of 2ou.

This result indicates that residents of the proposed subdivision would be unable to detect odour from the waste disposal site for the vast majority of the time. However, odour levels may be strong enough to be detected, very occasionally, if light south westerly wind conditions occur.

Once the landfill closes odour emissions will be greatly reduced, with no possibly of odour being detected at the proposed subdivision.

On this basis, with respect to odour emissions, the proposed subdivision complies with the requirements of Clause C9.6.1P1 (a) and (b) of the planning scheme.



<b>Scenario:</b> Existing Deloraine Waste Disposal Facility – Normal Operation		<b>Pollutant:</b> Odour	<b>Units:</b> ou
<b>Result:</b> 99.5 <sup>th</sup> percentile	<b>Averaging Time:</b> 1 hour	<b>Criterion:</b> TAS EPP (Air) 2ou	
<b>Dispersion Model:</b> CALPUFF	<b>Meteorology:</b> TAPM, CALMET	<b>Maximum Concentration:</b> 27 ou at the scrubber stack	
<b>Location:</b> Deloraine Waste Disposal Facility.			

Figure 7: Predicted Ground Level Odour Concentration

## 5. Dust Assessment

Heavy vehicle movements on unsealed roadways and earth moving operations involving spreading and compacting land fill capping material on the waste disposal facility site have some potential to generate dust, especially in dry, windy weather. However, dust control measures are in place to minimise dust generated on site when required. Dust is rarely generated in sufficient quantities to leave the waste disposal facility site. The intervening distance between the waste disposal facility site and the proposed subdivision further reduces the potential for dust emissions to occur that are sufficient to affect the amenity of the proposed subdivision.

Once the landfill site is closed and the waste transfer station established, the potential for a dust nuisance is even further reduced.

On this basis, with respect to odour emissions, the proposed subdivision complies with the requirements of Clause C9.6.1P1 (a) and (b) of the planning scheme.

## 6. Quarry Impact

Two sand and gravel quarries are located within 1000m of the proposed subdivision site. A small quarry owned by DW & PM Frost is located directly to the west of the waste disposal facility, and a larger quarry owned by Creswells Transport is a further 600m to the west, as shown in Figure 8 below. The Creswells quarry is licenced to produce 50,000 tonnes per annum although typically only delivers about 15,000 tpa. The operation utilises drilling and blasting and a mobile

crushing and screening plant. Sand and gravel is dispatched by truck via Dunhams Road. The quarry only operates during the daytime, Monday to Saturday. The intervening land between this quarry and the proposed subdivision is forested and hilly, providing significant shielding of the noise and ground vibration produced.

The Frost quarry is a much smaller operation, running only occasionally, during the daytime. Gravel is excavated and loaded directly onto trucks for dispatch via Tip Road. No drilling, blasting, screening or crushing is carried out on site.

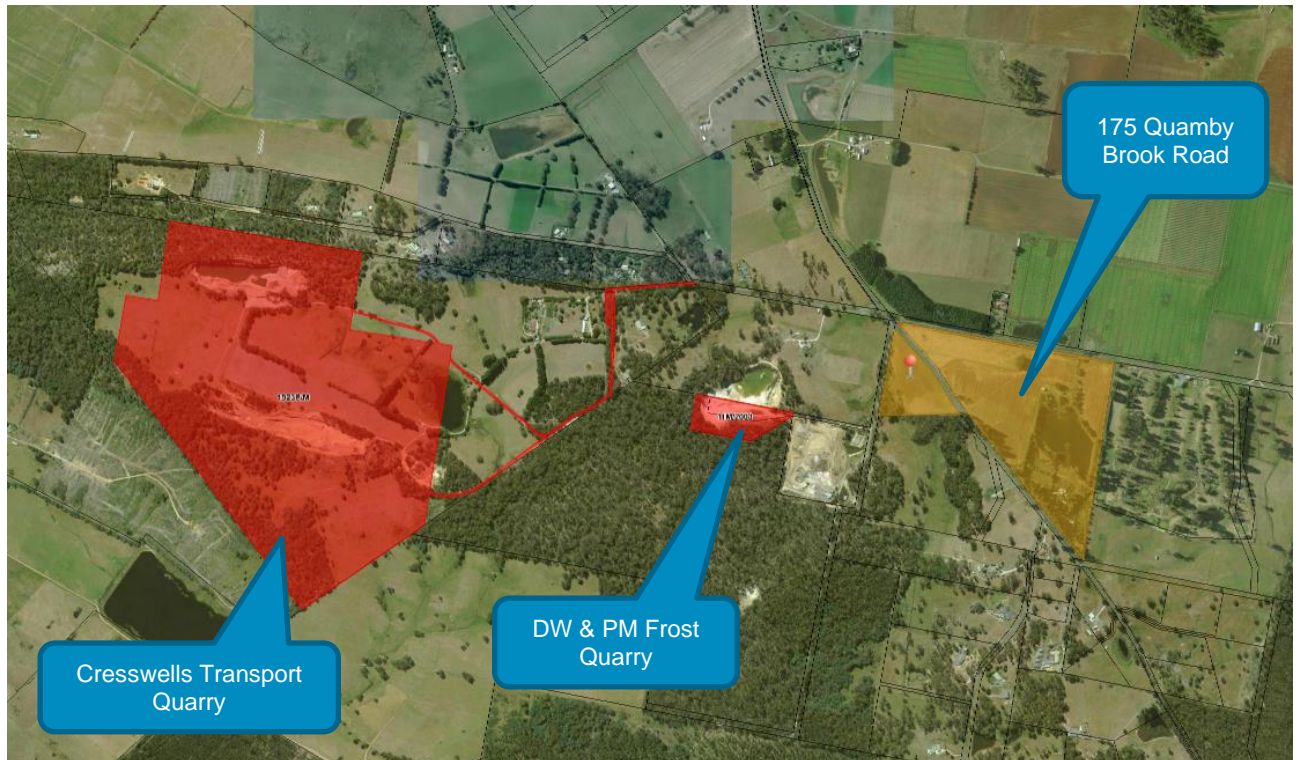


Figure 8 – The two nearby quarries - Mining leases shaded red (base image from TheList)

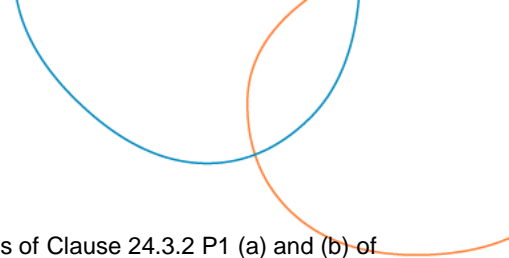
## 6.1 Noise Impact

The SoundPlan noise model was extended to include the plant described above operating on the quarry sites. The sound power levels of these noise sources, which have been obtained from equipment suppliers' reference data are:

- Truck (moving at low speed) 104 dB(A)
- Front End Loader 105 dB(A)
- Mobile Crusher / Screens 117 dB(A)
- Excavator 105 dB(A)
- Drill Rig 105 dB(A)

On the days when the waste disposal facility is not open and assuming both quarries were operating the predicted level of noise level from the quarries at the nearest house in the proposed subdivision is 41 dB(A). On days when the waste disposal facility is operating but not running a crusher or wood chipper on site, the combined level of noise would be 47dB(A) compared with 44 dB(A) when just the waste disposal facility is open. If a crusher or a woodchipper is operating at the waste disposal facility site, the additional noise from the quarry would increase the noise level at the subdivision by about 1 dB(A) to 52 and 54 dB(A) respectively.

The noise from the quarries would be significantly less noticeable than the noise from the waste disposal facility and is unlikely to have any effect on the amenity of the residents of the proposed subdivision. The combined noise level if both quarries are operating and wood chipping or rock crushing is occurring at the waste disposal facility will be more noticeable, but the expected noise level and frequency of occurrence is not high enough to cause a significant adverse



impact on residential amenity. On this basis it may be concluded that the requirements of Clause 24.3.2 P1 (a) and (b) of the planning scheme are met with respect to noise emissions.

## 6.2 Blasting Impact

The distance and topography between the proposed subdivision and the Creswells Transport quarry is sufficient to reduce blast over pressure and ground vibration to levels that will not be discernible at the subdivision site.

## 6.3 Dust Impact

The distance and topography between the proposed subdivision and both quarries is sufficient to prevent any discernible dust emissions from the quarry sites, reaching the proposed subdivision. Some dust may be generated by trucks accessing the Frost quarry along Tip Road, but this is expected to have minimal impact on the proposed subdivision, especially when the low utilisation of the quarry is taken into account.

# 7. Conclusions

The level of noise, odour, dust and ground vibration emissions from the Deloraine Waste Disposal Site and the two nearby quarries are all sufficiently low that they will not adversely affect the amenity of residents of the proposed subdivision. Therefore, the proposed subdivision complies with the requirements of Clause C9.6.1P1 (a) and (b) of the planning scheme.

## Appendix A – Additional Model Setup Details

Parameter	Value
<b>TAPM</b>	
TAPM Version	4
Meteorological Data Period	1 January 2020 - 31 December 2020
Domain Centre	Latitude = S 41.550°
	Longitude = E 146.675°
Terrain Height	NASA STRM 9-Second (250 m)
Land use	RPDC 2003 TasSVLU (250m)
Sea surface temperature	Default database
Advance/experimental settings	Default
Number of Vertical Locations	30
Number of Easting Points	31
Number of Northing Points	31
Outer Grid Spacing	30,000 m × 30,000 m
Grids	5
Grid Resolutions	30km, 10km, 3 km, 1km, 0.3km
<b>CALMET</b>	
CALMET Version	6.5.0
Mode	No Observations
Domain Origin (SW Corner)	Easting: 470.89km
	Northing: 5397.83km
Grid Resolution	200m x 200m
Domain Size	4km × 4km
Number of Vertical Levels	10
Vertical Levels (m)	20, 40, 80, 160, 320, 640, 1200, 2000, 3000, 4000
CALMET Settings	TERRAD = 1.3 km (All other settings left at default)
Terrain Data Source	NASA SRTM (90 m resolution)
Land use data source	Custom built using aerial photography from <i>TheList</i>
<b>CALPUFF</b>	
CALPUFF Version	7.2.1
Modelling Period	1 January 2020 -31 December 2020
Computation Grid Size	2km × 2km
Sampling Grid Resolution	50m x 50m
CALPUFF Settings	MDISP = 2 MPDF = 1 (All other settings left at default)



175 Quamby Brook Road, Deloraine

Noise and Air Assessment

**Pitt & Sherry  
(Operations) Pty Ltd**  
ABN 67 140 184 309

Phone 1300 748 874  
info@pittsh.com.au  
pittsh.com.au

**Located nationally —**

Melbourne  
Sydney  
Brisbane  
Hobart  
Launceston  
Newcastle  
Devonport



# CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94  
Section 106  
Section 129  
Section 155

Form **35**

To:  Owner name  
 Address  
  Suburb/postcode

## Designer details:

Name:  Category:   
 Business name:  Phone No:   
 Business address:   
  Fax No:   
 Licence No:  Email address:

## Details of the proposed work:

**Owner/Applicant**  Designer's project reference No.   
**Address:**  Lot No:   
   
**Type of work:** Building work  Plumbing work  (X all applicable)

### Description of work:

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

### Description of the Design Work (Scope, limitations or exclusions): (X all applicable certificates)

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input checked="" type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	

Deemed-to-Satisfy:  Performance Solution:  (X the appropriate box)

Other details:

<b>Design documents provided:</b>	
-----------------------------------	--

The following documents are provided with this Certificate –

*Document description:*

Drawing numbers:03-2026	Prepared by: J Doherty	Date 18.02.2026
Sheets 01-0t6 of 06 Rev00	Drawn by M Flood	
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Appendix H – Table H1 AS/NZS1547:2012		
Appendix J – Table J1 AS/NZS1547:2012		
Appendix L Table L1 AS/NZS1547:2012		
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

<b>Standards, codes or guidelines relied on in design process:</b>	
--	--

AS/NZS1547:2012  
Director’s Guidelines for On-site Wastewater Management Systems – Building Act 2016

<b>Any other relevant documentation:</b>	
--	--


Onsite Wastewater Report 03-2026 dated 3 March 2026

<b>Attribution as designer:</b>	
---------------------------------	--

I James Doherty am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	James Doherty		3 March 2026

**Assessment of Certifiable Works: (TasWater)**

**Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.**  
**If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.**  
**TasWater must then be contacted to determine if the proposed works are Certifiable Works.**

**I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:**

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater’s sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater’s infrastructure
- The works will not damage or interfere with TasWater’s works
- The works will not adversely affect TasWater’s operations
- The work are not within 2m of TasWater’s infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater’s water system, a water meter is in place, or has been applied for to TasWater.

**Certification:**

I James Doherty being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: The Guidelines for TasWater Certification of Certifiable Works Assessments are available at: [www.taswater.com.au](http://www.taswater.com.au)

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	J Doherty		3 March 2026

# CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To:  Owner /Agent  
 Address  
  Suburb/postcode

Form **55**

## Qualified person details:

Qualified person:   
Address:  Phone No:   
  Fax No:   
Licence No:  Email address:

Qualifications and Insurance details:  (description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Speciality area of expertise:  (description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

## Details of work:

Address:  Lot No:   
   
The assessable item related to this certificate:  (description of the assessable item being certified)  
Assessable item includes –  
- a material;  
- a design  
- a form of construction  
- a document  
- testing of a component, building system or plumbing system  
- an inspection, or assessment, performed

## Certificate details:

Certificate type:  (description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)

building work, plumbing work or plumbing installation or demolition work:

or

a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

Documents:

Drawing numbers: 2730001652– 7(A4) pages  
Schedule numbers: 2730001652– 1(A4) page

Prepared by: SZI Technology P/L  
Date: 23-02-2026

Relevant  
calculations:

References:

*Substance of Certificate: (what it is that is being certified)*

Construction of a \*new building – **10a**

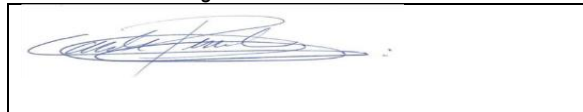
Main Building: 9.000 mm width, 14.000 mm long, Building Class: 10a  
The length being comprised of , 4 bays with max bay spacing 3.500 mm  
Left LeanTo: NA  
Right LeanTo: NA  
Front Garaport: NA  
Back Garaport: NA

*Scope and/or Limitations*

**I certify the matters described in this certificate.**

Qualified person:

*Signed:*



*Certificate No:*

2730001652

*Date:*

23-02-2026

# CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94  
Section 106  
Section 129  
Section 155

Form **35**

To:  Owner name  
 Address  
  Suburb/postcode

## Designer details:

Name:  Category:   
 Business name:  Phone No:   
 Business address:   
  Fax No:   
 Licence No:  Email address:

## Details of the proposed work:

**Owner/Applicant**  Designer's project reference No.   
**Address:**  Lot No:

**Type of work:** Building work  Plumbing work  (X all applicable)

### Description of work:

Construction of a \*new building – **10a**

Main Building: 9.000 mm width, 14.000 mm long, Building Class: 10a  
 The length being comprised of , 4 bays with max bay spacing 3.500 mm  
 Left LeanTo: NA  
 Right LeanTo: NA  
 Front Garaport: NA  
 Back Garaport: NA

*(new building / alteration / addition / repair / removal / re-erection / water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)*

### Description of the Design Work (Scope, limitations or exclusions): (X all applicable certificates)

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input checked="" type="checkbox"/>		Performance Solution: <input type="checkbox"/> <small>(X the appropriate box)</small>
Other details:		

**Design documents provided:**

The following documents are provided with this Certificate –

*Document description:*

Drawing numbers:	Prepared by:	Date:
2730001652/ 7(A4) pages	SZI Technology	23-02-2026
Schedules:	Prepared by:	Date:
2730001652/ 1(A4) page	SZI Technology	23-02-2026

**Standards, codes or guidelines relied on in design process:**


- AS 1170.0 General Principles (2002)
- AS 1170.1 Permanent & Other Actions (2002)
- AS 1170.2 Wind Actions (2011 rev-5)
- AS 1170.3 Snow and Ice Actions (where applicable see Engineering Schedule)
- AS 1170.4 Earthquake Loads (where applicable see Engineering Schedule)
- AS 4100 Steel Structures Code (2020)
- AS 4600 Cold Formed Section Code (2018)
- AS 2870 Residential slab and footings (2011)
- Building Code of Australia Volume 1 & 2 (as applicable)

**Any other relevant documentation:****Attribution as designer:**

I CAMILO PINEDA MORENO am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Camilo Pineda Moreno		23-02-2026
Licence No:	CC7319		

## Assessment of Certifiable Works: (TasWater)

**Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.**

**If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.**

**TasWater must then be contacted to determine if the proposed works are Certifiable Works.**

**I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:**

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- The works will not damage or interfere with TasWater's works
- The works will not adversely affect TasWater's operations
- The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

## Certification:

I CAMILO PINEDA MORENO being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: [www.taswater.com.au](http://www.taswater.com.au)

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	CAMILO PINEDA MORENO		23-02-2026