

## Statement of Environmental Effects In Support of a Development Application

<b>Proposal</b>	<b>NEW DWELLING</b> – 4 Bedroom Brick Veneer & Colorbond Roof dwelling with Rumpus Room, spacious Living, Alfresco & incorporated double garage
<b>Subject Land Address</b>	Lot 6 DP 1310813
	13 Armstrong Pl, YOUNG 2594
<b>Applicant/Owner</b>	Jacqui Arbuthnott (via Mellross Homes)
	Mellross Homes – 02 6382 5350, Jacqui – 0401 287 817, Matthew 0416 579 600
<b>Appn Prepared By</b>	DA Busters – Development Assistance Services Ph: 0466 722 869
<b>LGA</b>	Hilltops Council – former Young Shire Council



Front Elevation

assisted by:



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## 1 Introduction/Executive Summary

This application is for a new dwelling on a residential allotment, within a part of an early stage of an ongoing subdivision of R1 zoned land on the northeastern fringe of Town – the subdivision is only just released. Lot 6 is one of the lots directly down on Armstrong Place, being the key street into the subdivision. The land is on the northeastern side of the cul-de-sac at the end of this new road. This application is for a 4 bed dwelling, with generous living areas, a double garage and a Kids Activity room along with an alfresco area.

### 1.1 History of the Site

The site is currently vacant and has recently been subdivided from Lots 5/1184312 & 524A/754611 in Subdivision 2014/DA-00129 only just released this year. The subject subdivision was approved in 2014 along with a subsequent DA to cut and bench each lot shortly after

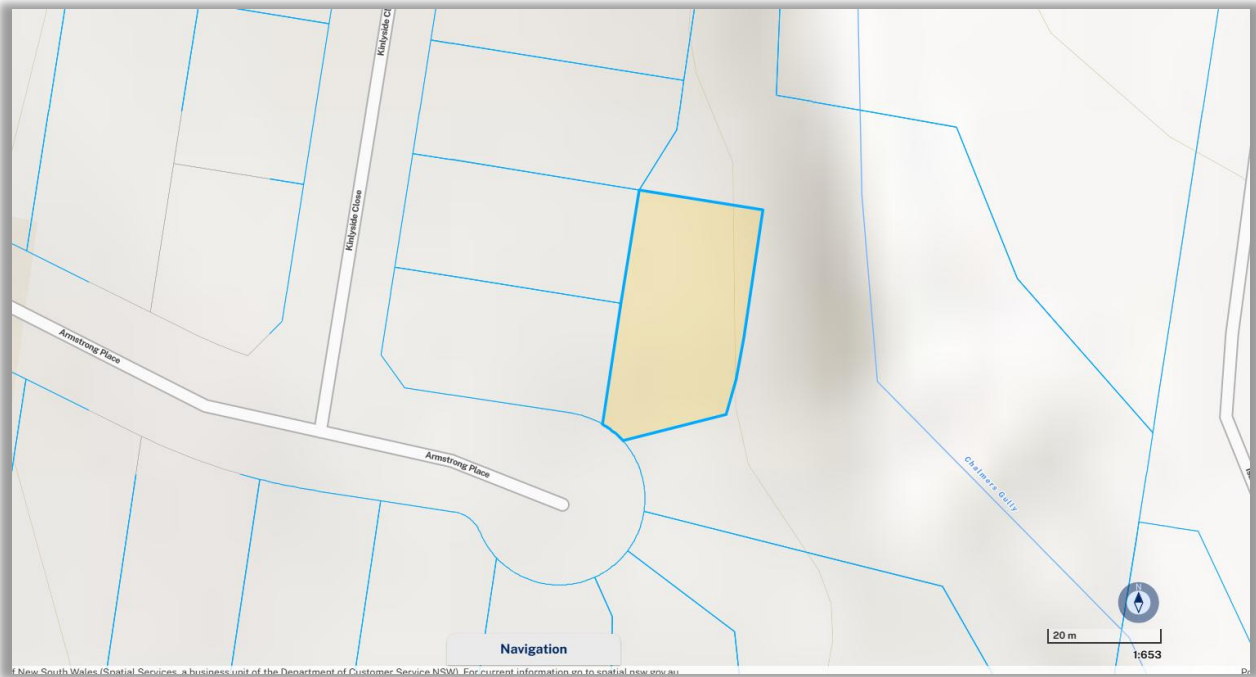


***Google aerial early 2024 with subdivision roughed in***

The land has been previously in Mellross family ownership for quite some time. The Hardy families, over the years did originally develop this whole sector of Town, with the more recent subdivisions (Jordan) and now this, by the Mellross Family.

The subject lot is relatively level, fenced and fronted by kerb and gutter whilst being serviced by frontage water, with sewer and power from the Street also. Minor shaping works are required and a 900mm retaining wall is proposed yet the cut required/involved is actually less than 600mm (most done per prior DA at subdivision stage) and compliant with the DCP yet shaped to be effective on the blind side of the dwelling proposed.

Figure 1b – Cadastre & Contour Plan (source SIX Maps NSW)



## 1.2 Locality

The subject land is approximately 1.856km NE from the Post Office of Young and is on the fringe of an established mixed age but mostly newer dwellings area, on the north eastern sector of the Young Township. The property is via Williams & Armstrong Places or Elizabeth & Orchard Streets, from the CBD being two primary or arterial type thoroughfares to this part of town.

Figure 1b – Locality Map (source SIX Maps)

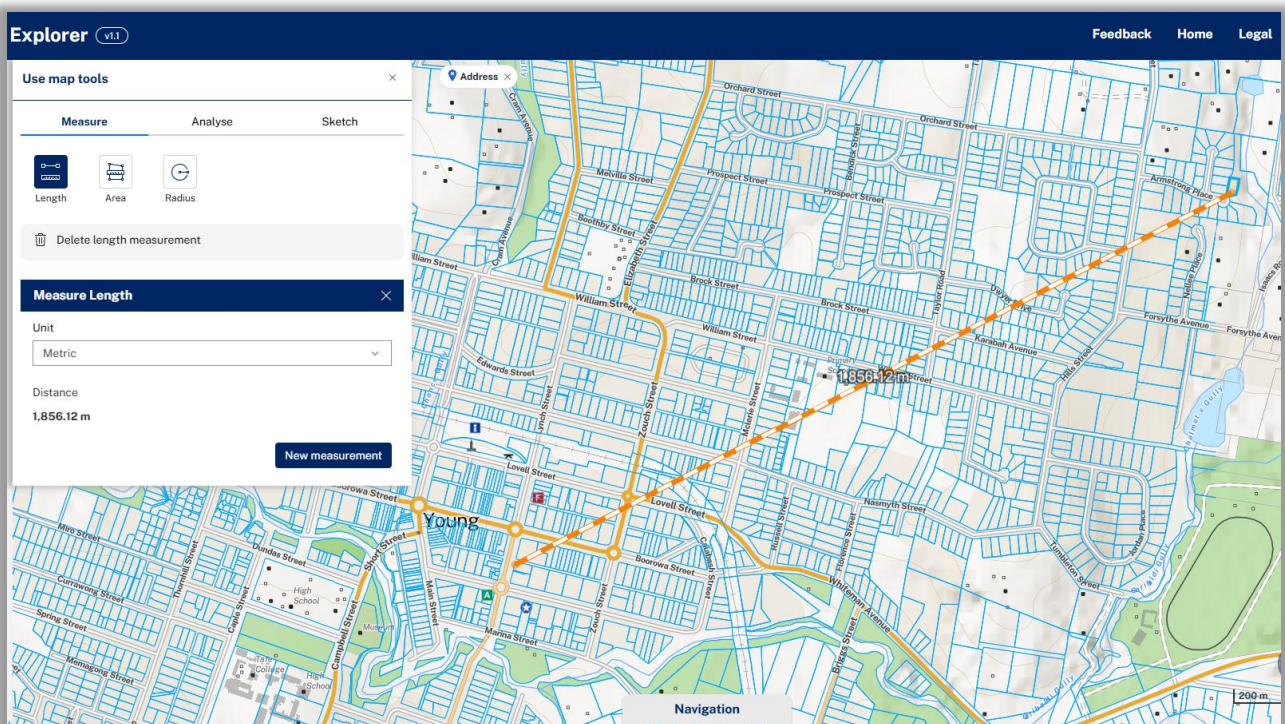




Figure 1c – Neighbourhood Plan (source SIX Maps – approx. 2012)





## 2 Site Analysis

### 2.1 Site Location and Context

The site is located on the fringe northeastern side of the denser populous of the township of Young. The land is within an area developed more for housing on this fringe in the 1980's to 90's between Armstrong Place and the Creek to the east. The locality is characterised by mixed lot sizes and housing styles of more recent newer styles as this eastern side of Armstrong Place was released originally as 6000 sq.m lots. Dwellings are predominantly single storey or split level on level to mildly sloped land, and generally well setback for the 20 – 40 year old housing stock, closer with the newer.

Beyond the land east is R5/RU4 lands whilst to the north and west is the town residential areas.

*Figure 2a – Locality Analysis Plan (source EsPATIAL Portal Viewer)*



### 2.2 Site Description

The land is vacant, pre-levelled as was permitted recently & presented at subdivision. No trees exist in the building locality nor will be affected by this proposal. Most aerial imagery shows shadow lines from the adjacent reserve over the lot. The land has a grassed verge to Armstrong Pl, which itself is sealed, kerb & guttered & footpathed.

The land is benefited at the front for Sewer, and it is directly serviced from the street for water, power & data.

Figure 3a, b, c, – Site Photos



View across road entry to Armstrong Place looking NW



View at lot looking east – entry is offset frontage over services left of image





**View to SE part of lot and house site – note site is pre-benched**



**Services identified**

### 3 Description of Proposed Development

#### 3.1 Elements of the Proposed Development

##### DWELLING

Generally, the proposed development involves the erection of a single storey, three-bedroom dwelling. More specific details of the development include:

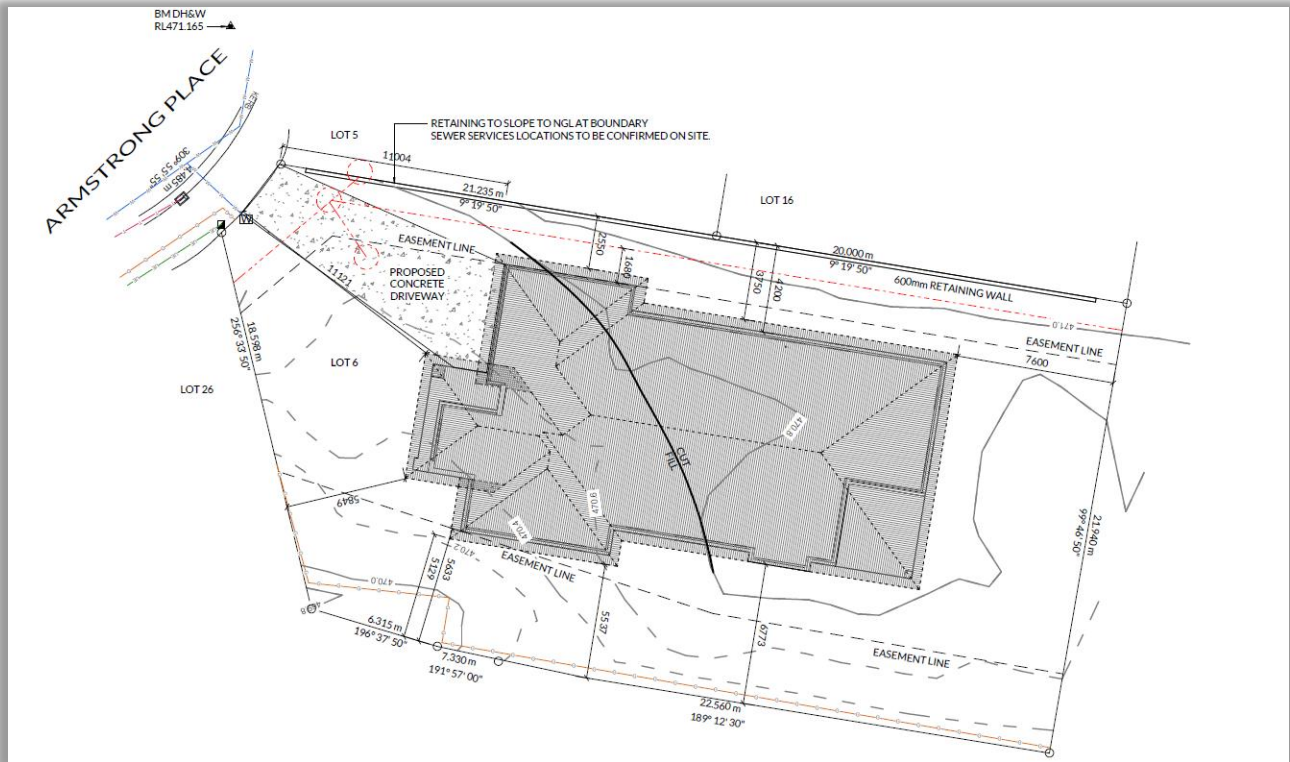


- |  |   |   |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
|--|---|---|-----------------------|---|------------|----------------|-------------|---|--------------|----------------|-------------|---|--------------|--------------------|---------------|---|-------------|-----------------------|
| The number of storeys proposed   | - | 1   |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| The roof type proposed   | - | Colorbond (Dover White)   |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Dwelling wall type proposed  | - | Brick Veneer – PGH Moon Dust Render & Clad colour Maleny Mist   |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Dwelling roof height above finished ground level                                     | - | 5.385 metres to higher ridge  |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Gross floor area (GFA)   | - | Living – 203.4 m <sup>2</sup> , Garage – 35.1 sq.m, Al Fresco – 14.9 sq.m, Porch 7.4 sq.m ( <b>Total = 260.8 sq.m</b> )   |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Setbacks from each current site boundary (in brackets proposed setback after subdiv) | - | <table border="0"> <tr> <td>North (rear)</td> <td>-</td> <td>7.6 metres</td> <td>(to back wall)</td> </tr> <tr> <td>East (side)</td> <td>-</td> <td>5.613 metres</td> <td>(on RATU line)</td> </tr> <tr> <td>West (side)</td> <td>-</td> <td>2.55m metres</td> <td>(on easement line)</td> </tr> <tr> <td>South (front)</td> <td>-</td> <td>11.12metres</td> <td>(front to porch post)</td> </tr> </table>  | North (rear)          | - | 7.6 metres | (to back wall) | East (side) | - | 5.613 metres | (on RATU line) | West (side) | - | 2.55m metres | (on easement line) | South (front) | - | 11.12metres | (front to porch post) |
| North (rear)   | - | 7.6 metres  | (to back wall)        |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| East (side)  | - | 5.613 metres  | (on RATU line)        |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| West (side)  | - | 2.55m metres  | (on easement line)    |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| South (front)  | - | 11.12metres   | (front to porch post) |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Any landscape work proposed  | - | Lawn and garden will be provided to the dwelling curtilage, as per the BASIX certificate.   |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Vehicle, access and parking  | - | Access to the site will be from Armstrong Place to the double garage on the western side of dwelling via a crossover and driveway – kerb is rollover type. A sec 138 application will be made as part of the dwelling's works for access to the site via a crossover and works in the road reserve. All services will be protected in the concrete driveway.  |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Utilities  |   | <p><u>Sewer</u> – effluent disposal will be via connection to Council's sewer. Sewer tie in Southern frontage of lot – easement across.</p> <p><u>Water</u> – The property will be connected to a water meter located to the front of site. The BASIX further provided that stormwater from the roof of the dwelling will be collected in a 5,000 litre rainwater tank, and reticulated back to the dwelling as per the BASIX certificate.</p> <p><u>Power</u> – The client is proposing to connect to mains available in street.</p> |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Is development permissible under another SEPP or EPI ?                               | - | This development is permissible under the provisions of the Hilltops LEP 2023 (see additional discussion below).  |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |
| Describe the extent of demolition  | - | Nil demolition proposed.  |                       |   |            |                |             |   |              |                |             |   |              |                    |               |   |             |                       |



- |   |  |
|---|--|
| Describe the trees to be removed                | - No tree removal expected                 |
| Total open space or unbuilt upon area available | - Dwelling to site FSR Ratio is only 29.8% |
| Subdivision proposed                            | - NO – dwelling house only                 |

**NOTE – Further DCP & LEP assessment to follow – next section**



Site extract

## 4 Relevant Legislation and Planning Controls

### **GENERAL REQUIREMENTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979**

#### **1.7 Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994**

As per these sections of the above Acts, it is not considered that the development is likely to significantly affect threatened species, populations or ecological communities, because:

##### Biodiversity Conservation Act 2016

- the development will not significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, as there are no trees and shrubs to be removed, there are no threatened ecological communities on the site, the development will not adversely impact the life cycle or habitat of any of the threatened species that may occur in the region, and the development is not a key threatening process. [7.2(1)(a)],
- The development does not exceed the biodiversity offsets scheme thresholds (is not mapped as high biodiversity value on the Biodiversity Values Map and does not exceed the clearing threshold) [7.2(1)(b)],
- the site has not been declared as an area of outstanding biodiversity value [7.2(1)(c)].

##### Fisheries Management Act 1994

- as per the seven-part test under section 221ZV of the Act, there are no threatened species, populations or ecological communities, occurring on-site, or are known to be in the area, there is no declared critical habitat in the region and the development is not a key threatening process.

#### **4.10 Designated development**

This development is not a category of designated development, under Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*.

#### **4.14 Consultation and development consent—certain bush fire prone land**

The land is not mapped as bushfire prone so consideration of the requirements of *Planning for Bush Fire Protection* is not required.

#### **4.36 Development that is State significant development**

The development is not State significant development, as it is not identified in *State Environmental Planning Policy (Planning Systems) 2021*.

#### **4.46 Integrated development**

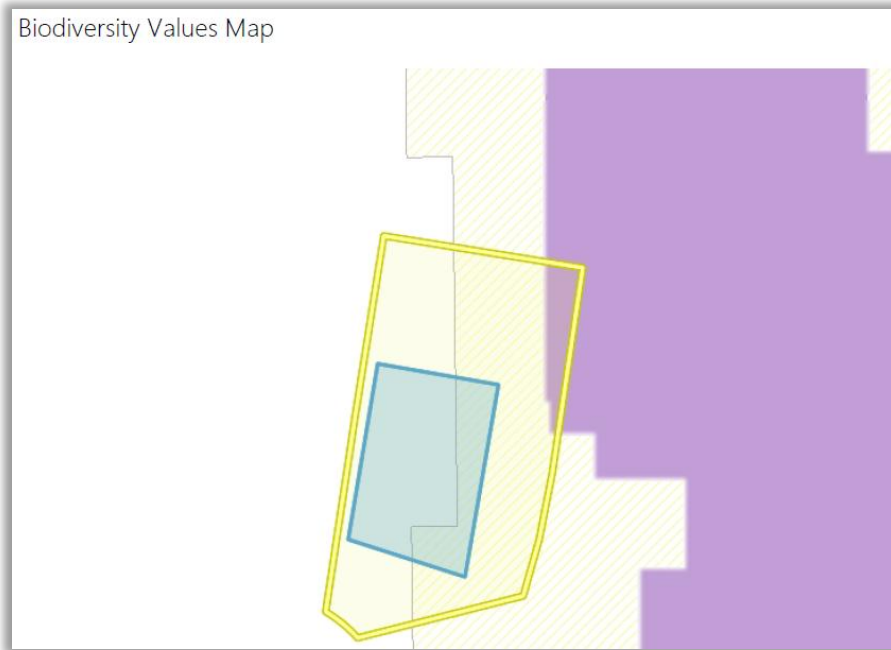
The development is not integrated development, with the only relevant consideration being proximity to watercourses and State heritage items. The proposed dwelling is greater than 40 metres from any watercourse in the area and there are no heritage items on the site.



**4.A. SECTION 4.15 CONSIDERATIONS UNDER THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979:**

**State Environmental Planning Policies (SEPPs)**

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Allowable Clearing Area (pub. 21-10-2022) **Not exceed clearing threshold**
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021) **Not build on mapped lands – easement RATU in subdivision does restrain same**



**BOSET Search – Biodiversity Values**



**Title Plan extract – RATU colour added for emphasis**

- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008) – **pathway not available**
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021) **not inconsistent**
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021) **not applicable this application**
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021) **not applicable this application**

- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12- 2021) **not applicable this application**
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2 -12-2021) **land not previously known to have contaminants or be affected**
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2- 12-2021) **no impact on assets or infrastructure**
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29- 8-2022) **BASIX Cert produced and incorporated into design**
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021) **not traffic generating and has practical and legal access onto a made road.**

#### 4.1 Environmental Planning and Assessment Act 1979

The proposal, as with all development applications, is subject to the provisions of the Environmental Planning and Assessment Act 1979 (EP& Act 1979). No known variations or non-compliances were evident in preparing this application. All of the required information to be furnished with a Development Application are being offered in this report or attached to it.

#### 4.2 Roads Act

Under Section 138 of the Roads Act, consent is required from the appropriate roads authority to:

- erect a structure or carry out a work in, on or over a public road, or
- dig up or disturb the surface of a public road, or
- remove or interfere with a structure, work or tree on a public road, or
- pump water into a public road from any land adjoining the road, or
- connect a road (whether public or private) to a classified road,

Therefore, approval is required under Section 138 from the Hilltops Council (local road) for the new access and crossover work which will primarily service proposed Lot 2182 – see site plan extracts above. Appropriate application will be made upon commencement of work.

#### 4.3 Local Government Act 1993

Under Section 68 of the Local Government Act, consent is required from Council for the following:

Part A Structures or places of public entertainment

- 1 Install a manufactured home, moveable dwelling or associated structure on land

Part B Water supply, sewerage and stormwater drainage work

- 1 Carry out water supply work
- 2 Draw water from a council water supply or a standpipe or sell water so drawn
- 3 Install, alter, disconnect or remove a meter connected to a service pipe
- 4 Carry out sewerage work
- 5 Carry out stormwater drainage work
- 6 Connect a private drain or sewer with a public drain or sewer under the control of a council or with a drain or sewer which connects with such a public drain or sewer

A section 68 application for connection of utilities to the dwelling, will be made. A separate application process exists to obtain a new water meter and sewer connection. These will be undertaken at that time of construction.

#### 4.3 Local Environmental Plan

##### 4.3.1 Hilltops Local Environmental Plan 2023

## Zoning

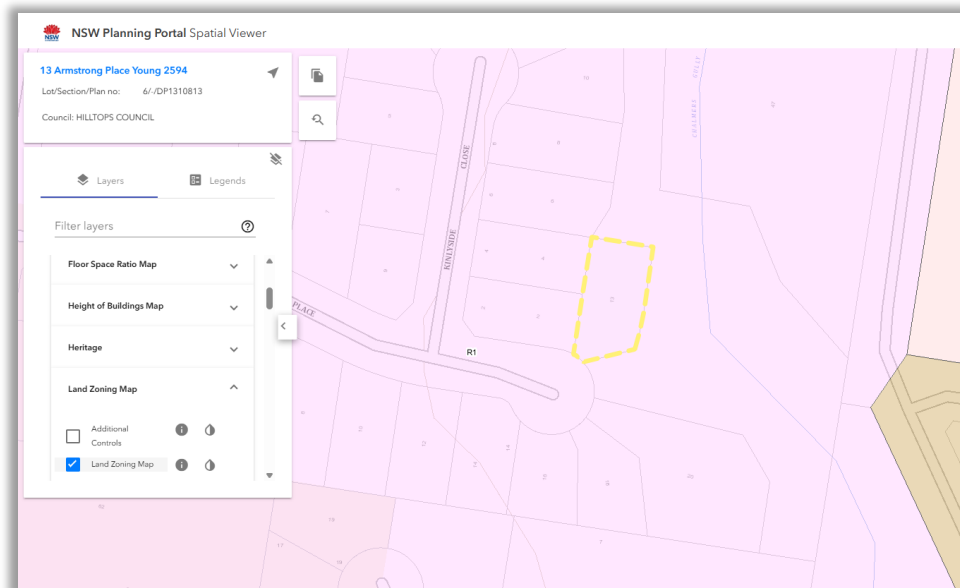
The site is zoned R1 – General Residential under the Young Local Environmental Plan 2010 (LEP) (refer to Figure 7).

The objectives of this zone are:

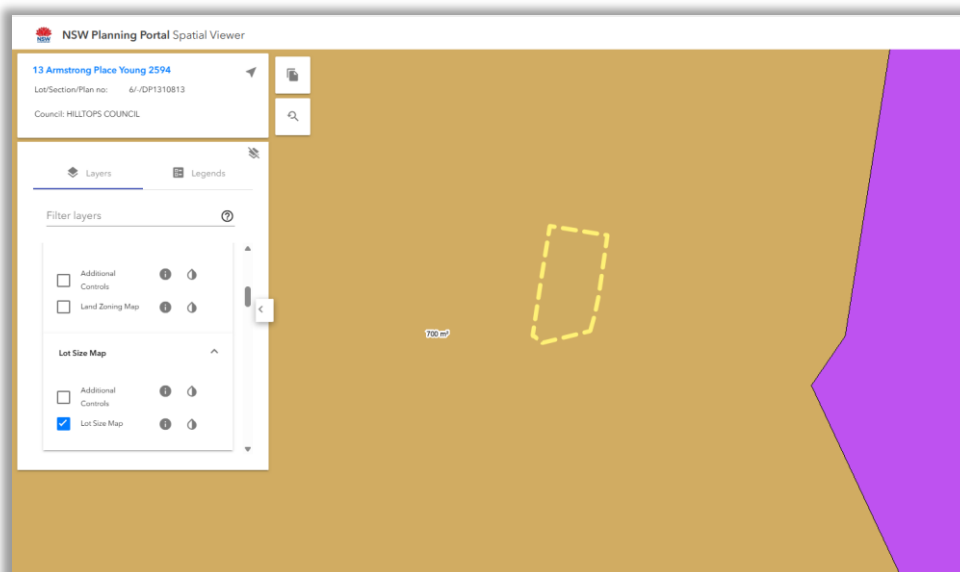
- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide and protect a high quality residential amenity that adds value to the existing character and amenity of the town, neighbourhood and street.
- To provide fully serviced residential lots linked to town water and sewer networks.

The proposed use of the site by way of this development is consistent with the first two and latter two zoning objectives and will be not applicable to the third. Plans and Contributions Policies exist to allow orderly and structured user-pays development in the R1 zone. The proposed use as defined in the LEP is a “dwelling”. This is a permissible use.

Figure 7 – Zoning Map extract



Zone extract – R1



Lot size extract – 700 sq.m min



Clause	Complie s	Comments
1.2 Aims of plan	Yes	<p>The development is consistent with the following aims of the LEP:</p> <p>(b) to provide for the lifestyles sought by current and future residents of Hilltops, including by providing for the following—</p> <ul style="list-style-type: none"> <li>(i) the rural lifestyle and liveability of Hilltops communities,</li> <li>(ii) connected, safe and accessible communities,</li> <li>(iii) diverse and affordable housing options,</li> <li>(iv) timely and efficient provision of infrastructure,</li> <li>(v) sustainable building design and energy efficiency,</li> </ul> <p>(c) to build and sustain healthy, diverse and empowered communities that actively participate in planning and managing their future, including by providing for the following—</p> <ul style="list-style-type: none"> <li>(i) social infrastructure that is appropriately planned and located in response to demand and demographic change,</li> <li>(ii) the protection and enhancement of cultural heritage values,</li> <li>(iii) land management practices that support sustainable outcomes, including water efficiency,</li> <li>(iv) the siting and arrangement of land uses for development in response to climate change,</li> <li>(v) the planning of development to manage emissions,</li> <li>(vi) planning decisions that recognise the basic needs and expectations of diverse community members,</li> </ul> <p>(e) to recognise and sustain the diverse natural environment and natural resources that support the liveability and economic productivity of Hilltops, including by providing for the following—</p> <ul style="list-style-type: none"> <li>(i) the avoidance of further development in areas with a high exposure to natural hazards,</li> <li>(ii) the minimisation of alterations to natural systems, including natural flow regimes and floodplain connectivity, through effective management of riparian environments,</li> <li>(iii) the retention and protection of remnant vegetation,</li> <li>(iv) the revegetation of endemic vegetation to sustain natural resource values, reduce the impact of invasive weeds and increase biodiversity,</li> <li>(v) buffers and setbacks to minimise the impact of conflicting land uses and environmental values, including potential impacts on noise, water, biosecurity and air quality,</li> <li>(vi) the management of water on a sustainable and total water cycle basis to provide sufficient quantity and quality of water for consumption, while protecting biodiversity and the health of ecosystems</li> </ul> <p>The remainder of the aims are not relevant to this proposal, or are not impacted by the proposal.</p>
1.4 Definitions	N/A	The proposed development is defined as a <b><i>dwelling house</i></b> which means, <i>a building containing only one dwelling.</i>
1.9A Suspension of covenants, agreements and instruments	Yes	No restrictions as to user / covenants apply to the site.
2.2 Zoning	N/A	The site is zoned R1 – General Residential
2.3 Zone objectives and land use table	Yes	The development is permitted with consent, in accordance with the land use table, and it is consistent with the objectives of the zone as stated above.
2.7 Demolition	N/A	No demolition proposed.

Clause	Complies	Comments
2.8 Temporary use of land	N/A	The application is not for the temporary use of land.
4.1 Min Subdiv Lot Size	Complies	Per mapping above, lot size exceeds 700 sq.m (1,965sq.m)
4.1A Dual Occupancy Lot sizes	N/A	N/A
4.6 Exceptions to development standards	N/A	Development permissible so no variation sought
5.10 Heritage Conservation	N/A	Land, adjacent land nor buildings in locality listed as Heritage nor in a HCA
5.16 Subdivision of, or dwellings on, land in certain rural, residential or environment protection zones	N/A	Not rural nor affected lands
6.1 Earthworks	OK	This clause is satisfied by the detailing on the site plan. The site was permitted to be primarily benched in 2014 and as such the building pad now requires approximately 700 mm cut/fill to achieve final pad levels. Sedimentation and erosion control measures shall be put in place during construction.
6.2 Essential Services	Complies	Development consent must not be granted to development unless the consent authority is satisfied the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required— (a) the supply of water, <b>available at front of site on application</b> (b) the supply of electricity, <b>available at front of site on application</b> (c) the disposal and management of sewage, <b>to be connected at front of site</b> (d) stormwater drainage or on-site conservation, <b>to be connected at sump front of site in easement</b>
6.3 Terrestrial Biodiversity	N/A	Is mapped as affected on East boundary Constrained by easement to no build zone and pre cleared at subdivision. No trees on site so no impact.
6.4 Water - Riparian	N/A	Not mapped as affected
6.5 Water – G/water Vulnerability	Yes	Not mapped as affected
6.6 Salinity	N/A	Not mapped as affected
6.7 Highly Erodible Soils	N/A	Not mapped as affected
6.8 Drinking Water Catchments	N/A	N/A
6.9 Development along Lachlan & Boorowa Rivers & Lake Wyangla	N/A	N/A
6.10 Development on Carinya Estate	N/A	N/A
6.11 DCP for Urban Release Areas	N/A	Does not apply

#### **4.4 Development Control Plan (Young DCP 2011)**

The relevant sections of the Young DCP are addressed below.

<b>Dwelling DCP 2010 Assessment – overpage</b>
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<b>Dwelling Draft 2025 DCP Assessment thereafter</b>
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## Development Control Plans (DCPs)

### Young Development Control Plan

An assessment of the DCP applicable matters is detailed below.

Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
<b>2.2 Single residential development</b>		
<i>ASR1.1 Cut and fill</i>	<i>Maximum of 1 metre</i>	<p>Complies – plans show nett difference from SE of pad to NW of pad will be 600mm, and will be achieved via a minor cut/fill scalping the raised central area of the land when viewing the contours. The edge filled areas will be shaped, graded and vegetated.</p> <p>Retaining to a height of 900mm is proposed in the NW corner and detailed on plan yet a combination of 2014 pre-bench (approx. 500mm) and up to 400mm current cut/fill shaping will see this wall accommodate the overall difference.</p> <p>As a consequence, this DA only sees 400mm cut/fill and would be currently compliant in a technical sense.</p>
<i>ASR1.2 Construction within easements</i>	<i>To be avoided</i>	No easement impacted upon – is adjacent and relied on for services.
<i>ASR1.3 Construction over natural watercourse/ drainage lines</i>	<i>Prohibited</i>	Complies – there are no drainage lines evident on site
<i>ASR1.4 Property access</i>	<i>Respectful of street trees, structures or road fixtures</i>	Complies – access to be to Council's specifications – rollover kerb, straightforward crossover per a s.138 appn.
<i>ASR1.5 Former orchard lands</i>	<i>Testing for pesticide residue and suitability for use</i>	No former orchard on land or cleared as an issue originally at subdivision

Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
ASR2.1.1 Fencing forward of front building line	To be open style or vegetative screening	Complies – fencing exists from subdivision.
ASR2.1.2 Dwellings to address street	Design to incorporate primary entrance door and windows to habitable rooms.	Complies – front door and multiple windows in the front elevation
ASR2.1.3 Materials	Avoid glare nuisance	Complies – no zincalume proposed
ASR2.2.1 Front setback	6 metres	Complies – 11m+ proposed at closest
ASR2.2.2 Garages	Recessed	Complies - garage is set back from front promenade
ASR2.3.1 Side and rear setbacks	<ul style="list-style-type: none"> <li>▪ 3 metres or windows to be offset to achieve boundary (ground floor)</li> <li>▪ 3 metres + 0.3 metres per metre over 3.6 metres up to 6.9 metres</li> </ul>	<p><u>Rear boundary</u> setback is &gt;7.6 metres north from dwelling- complies</p> <p><u>Western side boundary</u> setback is 3.15 metres to wall (2.515m to eave)</p> <p><u>Eastern side boundary</u> setback is 5.633m to Restriction as to User (RATU) setback from reserve – preserving BOSET mapping - complies</p> <p><u>Front boundary</u> Complies as is 11.121m</p>
ASR2.3.2 Setbacks in R5 zone	10 metres	Not applicable (R1 zone)
ASR2.4.1 Dwelling quality / design	Style and design compatible with adjacent dwellings	Complies – similar materials and design to other more recent houses in the area, being modern in appearance.
ASR3.1 Dwelling height	Maximum 2 storey or 8 metres	compliant at 5.385m
ASR 3.1.2 Wall length	8 m wall lengths to have openings or articulation	Complies – returns, windows and articulations



Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
ASR3.2.1 Permeability – whole of site	Minimum 40%	Complies – 36.04% non permeable or >63.96% permeable
ASR3.2.2 Hard stand area forward of building	Maximum 30%	Does comply – 25.9 % on calc
ASR3.2.3 Site coverage	Maximum of 40%	Complies – 29.8% coverage only – complies
ASR3.3 Private open space	Located adjacent living areas	Complies – joins living and alfresco
ASR4.1.1 Parking spaces	4 (stack parking permitted)	Complies – double garage proposed internal and stack behind
ASR4.1.2 Extra parking onsite in cul-de-sacs	1 (if not available on street)	Adjacent reserve next door yet ample in driveway and adjacent garage
ASR4.2.1 Driveway standard	To Council standards	Complies – access to be constructed to Council's specifications.
ASR4.2.2 Driveway cross grade	Maximum 4%	Complies – access to be constructed to Council's specifications including driveway cross grade.
ASR4.2.3 Driveway width	Single width	Complies – access to be constructed to Council's specifications, including driveway width if required.
ASR5.1.1 Reticulated water	To be connected	Complies – to be connected to main at the front of the property
ASR5.1.2 Reticulated sewer	To be connected	Complies – to be connected to the main at the front of the property
ASR5.1.3 Water and sewer – R5 zone	Exempt on lots 2 ha or greater	Not applicable
ASR5.1.4 Water and sewer contributions	To be paid as per s64 plans	New subdiv lot so n/a

Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
ASR5.2.1 Stormwater	Disposed of without causing nuisance	Complies – roof water will be collected in a rainwater tank, and reticulated back to dwelling, with any overflow from the tank piped to the easement.
ASR5.2.2 Stormwater contributions	Industrial land	N/A
AR6 Vehicle and occupant safety	Compliance with s2.1.5 of DCP	Complies – Door at entry swings inwards to dwelling
<b>4.1 Car Parking and Vehicle Access</b>		
APA1.1 Parking requirements	2 spaces per dwelling (stack parking permitted)	Complies – a double garage is proposed as part of the dwelling, with additional parking available at front of the dwelling and on street.
<b>4.3 Development Requiring Tree Removal or Lopping - These controls apply to the alterations and additions to a dwelling in all zones other than RU1 and RU3</b>		
AT1.1 Design of development	Minimise impact on trees, unless development yield is reduced	Complies – no trees to be removed
AT1.2 Designated trees	Retain where not impacted by development	Complies – no trees to be removed
AT2 Replacement of trees	2 species for each tree removed	Not applicable – no trees to be removed
AT3.1 Work within dripline of retained trees	Qualified arborist to assess and guide	Not applicable – no trees on-site
AT3.2 Pruning works	As per AS4373	Not applicable – no pruning proposed



## 2025 HILLTOPS DRAFT DCP

### SECTION 2.2 - RESIDENTIAL DEVELOPMENT

SECTION/OBJECTIVE	PERFORMANCE REQUIREMENT	COMMENT THIS APPLICATION
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#### **BROADER OBJECTIVES**

##### 2.2.1

##### Objectives

To ensure that residential development is of:

- High visual quality;
- High amenity; and
- Minimises amenity impacts on surrounding development.

Generally complied with – see below

#### **SITE DESIGN**

PSR1 The residential dwelling is to be responsive to the slope of the land, its orientation to the sun and other site attributes to achieve an appropriate design for the specific site.

ASR1.1 A Cut for the purposes of development must not exceed a maximum depth, measured from existing ground level of:

Dist BDY	Max cut depth
<1m	1m
1m-1.5m	2m
1.5m-3m	3m

Cut and fill discussed above – site pre-benched in 2014 see photo. Now needs 400mm cut in rear corner and 200-300mm cut/fill across pad each way. Technically complies at this DA

ASR1.1 B Fill must not be higher than:

- a. 1m when used to construct the house
- b. 0.6m in all other instances
- c. not limited if contained wholly within the building footprint or a drop edge beam
- d. Additionally:

Depth out OF footprint	Max Area
<150mm	
unconstrain	
>150mm	50% of landscaped area

Note: The new ground level as a result of fill cannot be used to measure heights under this code. The existing ground level must be used.

See comment above – 200-300mm cut fill and a large block to lay off the fill batter. See site plan – 400mm cut to shape in rear corner

ASR1.1 C Cut areas should be setback from boundaries a minimum of 0.9 metres, and fill areas are to be setback from boundaries a minimum of 1.5 metres.

Area cut to NW boundary and adequately retained and engineered – no impact to neighbour.

ASR1.2 Construction within registered easements or over utilities is avoided.

Complies

	ASR1.3 Construction over any natural watercourse and natural drainage lines through the land is prohibited.	Complies – n/a
	ASR1.4 Development is not located within 50m of a waterway or 40m from the bank of any perennial watercourse.	Complies – n/a
	ASR1.5 The property access is to be located respectful of street trees, structures or fixtures in the road reserve.	Complies see site plan
	ASR1.6 On lands identified as former orchard lands: • Soil testing for pesticide residue is required; and • Such testing is to demonstrate the land is suitable for the intended use.	N/A not former orchard
<b><u>CHARACTER OF NEIGHBOURHOOD</u></b>		
PSR2 The development is to provide attractive streetscapes, comprising of trees, gardens, building facades, fences and walls.	ASR2.1A Fencing or vegetation forward of the front building line it to be either: • an open style, incorporating pickets, vertical stiles, slats or palings; or • vegetative screening or plantings.	Will comply
	ASR2.1B Fencing or vegetation forward of the front building line is to be no greater than 1.2m in height.	Will comply to 6m setback
	ASR2.2 Dwellings fronting a street is to address that street frontage by: • The primary entrance door to the dwelling facing the street frontage; and • The front elevation incorporating windows to habitable rooms.	Complies yet set well back
	ASR2.3 Reflective materials are to be selectively used so that a glare nuisance is not caused to surrounding neighbours or public roads.	Colorbond elected

	ASR2.4 Residential dwellings avoid fibrous cement and metal cladding of walls.	Avoided
	ASR2.5 Landscaping is provided to the street frontage, which includes canopy trees, shrubs and grass.	Will happen after occupation
PSR3 Dwellings are to ensure that setbacks from the street alignment do not vary dramatically from those in the rest of the street in order to preserve neighbourhood and street presence.	ASR3.1 Dwellings are set back as per the below table: R1 & R2 - 6m primary & 3m secondary R5 - 10m primary & 6m secondary R1, R2, R5 - if differing then averaging permissible	Complies all
	ASR3.2 Garages in dwellings is to: a) Directly address the street frontage; b) Be recessed behind the front facade of the dwelling; and c) Do not project in front of other parts of the dwelling.	Complies
PSR4 The dwelling is to be appropriately located on the site with setbacks that ensure privacy, overshadowing and amenity are respected within the neighbourhood.	ASR4.1 Side and rear setbacks, excluding secondary street frontage, for dwellings in the R1 General Residential Zone and the R2 Low Density Residential zones are setback as follows:	
	a) Single Storey Dwellings • 3m, or • unless windows are offset to achieve a reasonable expectation of privacy between the new development and the existing adjoining development.	Complies
	b) Two storey dwellings (Figure 3) • have the upper level set back from side or rear boundaries by 3m, plus 0.3m for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres; - see Fig 3 in DCP	N/A – single storey
	ASR4.2 Dwellings in the R5 Large Lot Residential Zone are setback not less than 10m from the rear and side boundaries, excluding secondary street frontages.+	N/A not R5

PSR5 Dwellings are to respect and improve upon the quality of development in the neighbourhood, when viewed from the street.	ASR5.1A Dwelling design is to be drawn from surrounding dwellings including: a) window forms, b) external facade treatments c) roof materials d) roof pitches	First lot in new subdiv to be developed
	ASR5.1B Dwelling design is to compliment the style and character of adjoining houses and gardens including: a) the scale, b) materials, c) roof forms and d) types of trees.	n/a – first house
<b>SR3 DWELLING, HEIGHT, BULK &amp; FORM</b>		
PSR6 Dwellings are to minimise the building bulk, form and height on or near boundaries to avoid overshadowing and overlooking of neighbours.	ASR6.1 Dwellings are restricted to the following, whichever is the lesser: • a maximum of two storeys above natural ground level at any point, or • 8.5 metres above existing ground level, as illustrated below:	complies
	ASR6.2 Wall lengths exceeding 8m are to have wall offsets, openings or articulation to break up the building bulk and form avoiding blank walls.	complies
PSR7 Development is to minimise hardstand areas for aesthetics, stormwater, and surface water nuisance impacts.	ASR7.1 Permeable areas are at least 40% of the site.	Complies – large site – exceed 60%
	ASR7.2 A maximum of 30% of the area forward of the front building setback is occupied by paving, access driveways or the like.	Complies – large setback
PSR8 Development is to create a usable outdoor living space for occupants' comfort, health, and enjoyment.	ASR8.1 Private open space for the dwelling must be located adjoining living rooms, or the like, within the dwelling.	Complies
	ASR8.2 Opening up living areas directly onto courtyards and gardens, which benefit from good sunlight.	Complies



	ASR8.3 At least 50% of the minimum required secluded private open space of a development, including within the development and adjoining developments, has sunlight between the hours of 9am and 3pm on 21 June.	Complies – all north side
	<i>Shadow diagrams may be required to illustrate the extent of overshadowing of neighbours for all two storey development, and for single storey development that is both up-slope and in the direction of the sun from existing residential development.</i>	N/A
<b>SR4 ACCESS &amp; PARKING</b>		
PSR9 To avoid site and street congestion, development is to provide adequate parking for the dwelling respectful of the configuration of the street.	ASR9.1 Car parking is provided in the following requirements; a) Two spaces, covered or uncovered. Stacked parking is permitted. b) Car parking spaces, not including a parallel to wall space, is to be a minimum of 2.6m wide by 5.5m long. c) Parallel to a Wall car parking spaces are to be a minimum of 2.8m wide by 5.5m long. d) Enclosed car parking spaces is to be a minimum of 3m wide by 6m long.	2 undercover and at least 2 stacked or adjacent
	ASR9.2 For dwellings in cul-de-sacs, if the site does not have a minimum frontage that enables one car to be parked in front of the site, the site is to contain the ability to park one visitor car on-site in addition to the required number of parking spaces.	Complies – larger lot set well back and accommodates area
	ASR9.3 Vehicular parking should not be on the north side of a dwelling's high occupancy rooms	NW to W side so OK
	ASR9.4 Parking is to be located in the shadow of the buildings, preferably on the southern boundary.	See design – OK for passive solar sun
PSR10 Access driveways are to be of a safe and suitable standard through the road reserve.	ASR10.1 Access driveways, from road edge to property boundary, serving dwellings are to be constructed to the standards set in Council's Engineering Guidelines .	Noted

	ASR10.2 Cross grades for access driveways and parking areas do not exceed 4% grade.	Complies
	ASR10.3 Access driveways to any required parking spaces onsite are provided through a single width crossover, maximum 3.5m wide. Rear lane access will be considered where available.	Noted
	ASR10.4 Residential address for a dwelling is to be provided and clearly identifiable.	Will at OC
<b>DESIGN CUES RESIDENTIAL DEVELOPMENT</b>		
Council will consider alternative designs provided the performance outcomes are achieved.	<ul style="list-style-type: none"> <li>• Landscaping is provided to the street frontage, which includes canopy trees, shrubs and grass.</li> <li>• Gables over garages facing streets are avoided. Note: Dutch gables are considered satisfactory.</li> <li>• Opening up living areas directly onto courtyards and gardens, which benefit from good sunlight.</li> <li>• Dwellings are provided with indoor living areas which are adjoined by outdoor living areas that have a northerly aspect.</li> </ul>	Will comply
	<ul style="list-style-type: none"> <li>• Providing good sunlight to living areas and avoiding overshadowing of neighbours and established garden areas.</li> <li>• At least 50% of the minimum required secluded private open space of a development, including within the development and adjoining dev's, has sunlight between the hours of 9am and 3pm on 21 June:</li> <li>• Shadow diagrams may be required to illustrate the extent of overshadowing of neighbours for all two storey development; and</li> <li>• for single storey development that is both upslope and in the direction of the sun from existing residential development.</li> </ul>	Design complies
	<ul style="list-style-type: none"> <li>• Planning the internal layout of a house to ensure good daylight to living areas.</li> <li>• Vehicular parking should not be on the north side of a dwelling's high occupancy rooms which have sunlight access during daylight hours.</li> </ul>	Design OK these cues

## Statement of Environmental Effects

*Job: Mellross Homes (Mellross/Arbuthnott) (Dwelling – 13 Armstrong Pl, Young)*

	<ul style="list-style-type: none"><li>• Locating parking in the shadow of the buildings.</li><li>• Habitable room windows have at least 2.4m separation from the wall of an adjoining building.</li><li>• Water storage tanks is to not be located on the north side of that dwelling.</li></ul>	Design ok these cues
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## 5 Summary of Assessment of Planning Issues

The following is a summary of the above assessments of the environmental effects of the proposed development as described in the preceding sections of this report. The assessment considers only those matters under Section 79C (1) of the EP&A Act 1979 that are relevant to the proposal.

### 5.1 Compliance with Planning Instruments and Controls

- The proposal meets traffic and access requirements pursuant to reasonable Council Local Road Standards and AusRoads Guidelines;
- The proposal is a permissible use, under Parts 4, 5 & 6 of the Hilltops LEP 2023, within the R1 zone; and
- The proposal is reasonable under the heads of consideration under sec 4.15 of the EP & A Act 1979.

### 5.2 Traffic, Access and Parking

The proposal is reasonable due to;

- Safe sight distances from proposed access location
- Construction of new driveway crossover, to Council standards
- No impact on primary frontage to quiet local road

#### Parking

The allotment is sized adequate to accommodate design for parking

### 5.3 Visual Impact

Will have reasonable and expected street presence.

### 5.4 Amenity

The creation of 1 new dwelling will not create amenity concerns to the area due to planned setbacks from other development allowing all parties the ability to enjoy their own properties without impacting on their neighbours. This development is not inconsistent with residential areas adjacent.

#### 5.4.1 Noise

No untoward noise impacts expected due to adequate lot sizes, planned aspect of development and reasonable opportunities for setbacks for subsequent development.

#### 5.4.2 Privacy

The proposal will not create any privacy concerns to the area or between neighbours due to adequate setbacks from other development and larger private open space areas allowing all parties the ability to enjoy their own properties without impacting on their neighbours.

#### 5.4.3 Overshadowing

No overshadowing is expected due to planned layout of development and aspect of lots, keeping in mind standard appurtenant items like fencing sheds garages etc.

### 5.5 Water Management

Town water exists to the front of the property. It is expected that connection to the main would be required and applicable headworks paid if not paid already– see earlier comment.



#### 5.6 Sediment and Erosion Control

As stated before, sedimentation and erosion control measures will need to be employed when working adjacent the street K & G drain for the new access.

#### 5.7 Social and Economic Impacts

The proposed development on the site is anticipated to have an ongoing positive social and economic impact on the local Young area, and the broader community. This will be as a result of another dwelling in a high value area becoming available.

#### 5.8 Heritage Impact/Aboriginal Object

No known Indigenous or European heritage will be affected by this proposal. Report attached for AHIMs search

#### 5.9 Demolition

No demolition is proposed.

#### 5.10 Utilities and Services

Water & Sewer have been discussed above.

The road network is safe, of a fair standard and table drained. Approved type access/es will be made to this road network.

Data/Telephone exists in Armstrong Pl and will be available to the lot created.

Electricity is available along the frontage footpath area.

### 6 Conclusion

Given the merit of the design of the proposal and the absence of any significant adverse environmental impacts or policy variances, the DA is considered to be in the public's interest and worthy of Council's support.

#### ADVICE NOTE:

**Should there be any technical enquiry about this report, please contact the undersigned first to assist my client. An authority for same has been lodged on the Planning Portal signed by the owners.**



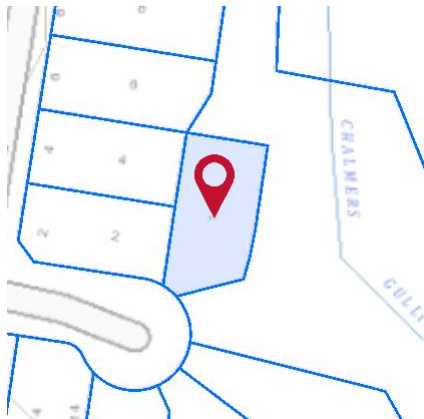
**Craig Filmer**  
Development & Environmental Health Specialist

## **Appendix 1 – NSW Planning Portal Report**



# Property Report

13 ARMSTRONG PLACE YOUNG 2594



## Property Details

Address: 13 ARMSTRONG PLACE YOUNG 2594  
Lot/Section /Plan No: 6/-/DP1310813  
Council: HILLTOPS COUNCIL

## Summary of planning controls

Planning controls held within the Planning Database are summarised below. The property may be affected by additional planning controls not outlined in this report. Please contact your council for more information.

Local Environmental Plans	Hilltops Local Environmental Plan 2022 (pub. 23-12-2022)
Land Zoning	R1 - General Residential: (pub. 23-12-2022)
Height Of Building	NA
Floor Space Ratio	NA
Minimum Lot Size	700 m <sup>2</sup>
Heritage	NA
Land Reservation Acquisition	NA
Foreshore Building Line	NA
Terrestrial Biodiversity	Biodiversity

## Detailed planning information

### State Environmental Planning Policies which apply to this property

State Environmental Planning Policies can specify planning controls for certain areas and/or types of development. They can also identify the development assessment system that applies and the type of environmental assessment that is required.

This report provides general information only and does not replace a Section 10.7 Certificate (formerly Section 149)

# Property Report

13 ARMSTRONG PLACE YOUNG 2594

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Allowable Clearing Area (pub. 21-10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008)
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021)
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29-8-2022)
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021)

## Other matters affecting the property

Information held in the Planning Database about other matters affecting the property appears below. The property may also be affected by additional planning controls not outlined in this report. Please speak to your council for more information

Biodiversity Value (BV) Map	Clearing native vegetation for a development on an area on the BV Map may require a Biodiversity Development Assessment Report. Consult your local council.
Land near Electrical Infrastructure	This property may be located near electrical infrastructure and could be subject to requirements listed under Transport and Infrastructure SEPP 2021 Clause 2.48. Please contact Essential Energy for more information.
Local Aboriginal Land Council	YOUNG
Regional Plan Boundary	South East and Tablelands

This report provides general information only and does not replace a Section 10.7 Certificate (formerly Section 149)



## **Appendix 2 – The Land & It's Attributes**

### **Title – Deposited Plan**



FOLIO: 6/1310813

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SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
16/5/2025	3:34 PM	2	27/2/2025

LAND

-----

LOT 6 IN DEPOSITED PLAN 1310813  
AT YOUNG  
LOCAL GOVERNMENT AREA HILLTOPS  
PARISH OF YOUNG COUNTY OF MONTEAGLE  
TITLE DIAGRAM DP1310813

FIRST SCHEDULE

-----

MATHEW JOHN MELLROSS  
JACQUELINE COLLETTE ARBUTHNOTT  
AS JOINT TENANTS (T AU856248)

SECOND SCHEDULE (9 NOTIFICATIONS)

-----

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 DP1097548 EASEMENT FOR SERVICES 2 METRE(S) WIDE APPURTENANT TO  
THE LAND ABOVE DESCRIBED
- 3 DP1097548 RESTRICTION(S) ON THE USE OF LAND REFERRED TO AND  
NUMBERED (2) IN S.88B INSTRUMENT
- 4 DP1097548 RESTRICTION(S) ON THE USE OF LAND REFERRED TO AND  
NUMBERED (3) IN S.88B INSTRUMENT
- 5 DP1184312 RESTRICTION(S) ON THE USE OF LAND
- 6 DP1310813 EASEMENT FOR DRAINAGE OF SEWAGE 2, 3, 4.5 METRE(S)  
WIDE AND VARIABLE WIDTH AFFECTING THE PART(S) SHOWN SO  
BURDENED IN THE TITLE DIAGRAM
- 7 DP1310813 RESTRICTION(S) ON THE USE OF LAND REFERRED TO AND  
NUMBERED (1) IN THE S.88B INSTRUMENT
- 8 DP1310813 RESTRICTION(S) ON THE USE OF LAND REFERRED TO AND  
NUMBERED (2) IN THE S.88B INSTRUMENT
- 9 AU856249 MORTGAGE TO WESTPAC BANKING CORPORATION

NOTATIONS

-----

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

matt\_jacqui...

PRINTED ON 16/5/2025



M.G.A. COORDINATES (G.D.A.2020)

MARK	EASTINGS	NORTHINGS	ZONE	CLASS	PU	ORIGIN
PM 7115	620869.281	6203172.946	55	A	0.02	SCIMS
PM 7119	620801.897	6202789.819	55	B	0.03	SCIMS
PM 69971	620914.233	6203358.499	55	C	-	SCIMS
SSM 207299	621018.810	6203069.356	55	D	-	TRAV
SSM 207415	621037.657	6203184.797	55	D	-	TRAV
SSM 226580	620874.949	6203110.902	55	D	-	TRAV

SOURCE: SCIMS,  
DATE: 26/09/2024  
COMBINED SCALE FACTOR: 0.999701

PM 7119 X - PM 69971 Y  
11°10'27", 579.843 (MGA GND)  
11°10'27", 579.825 (SURVEY)

Cnr	Bearing	Distance	Mark
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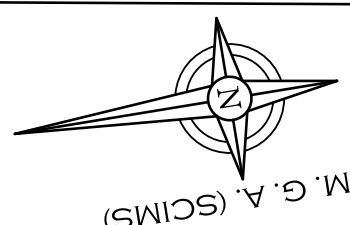
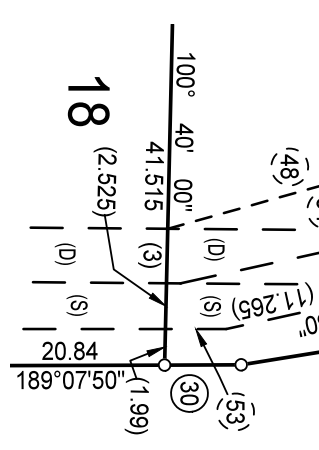
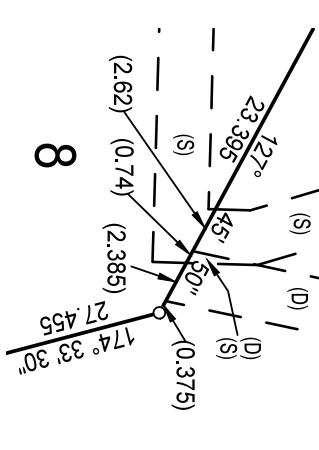
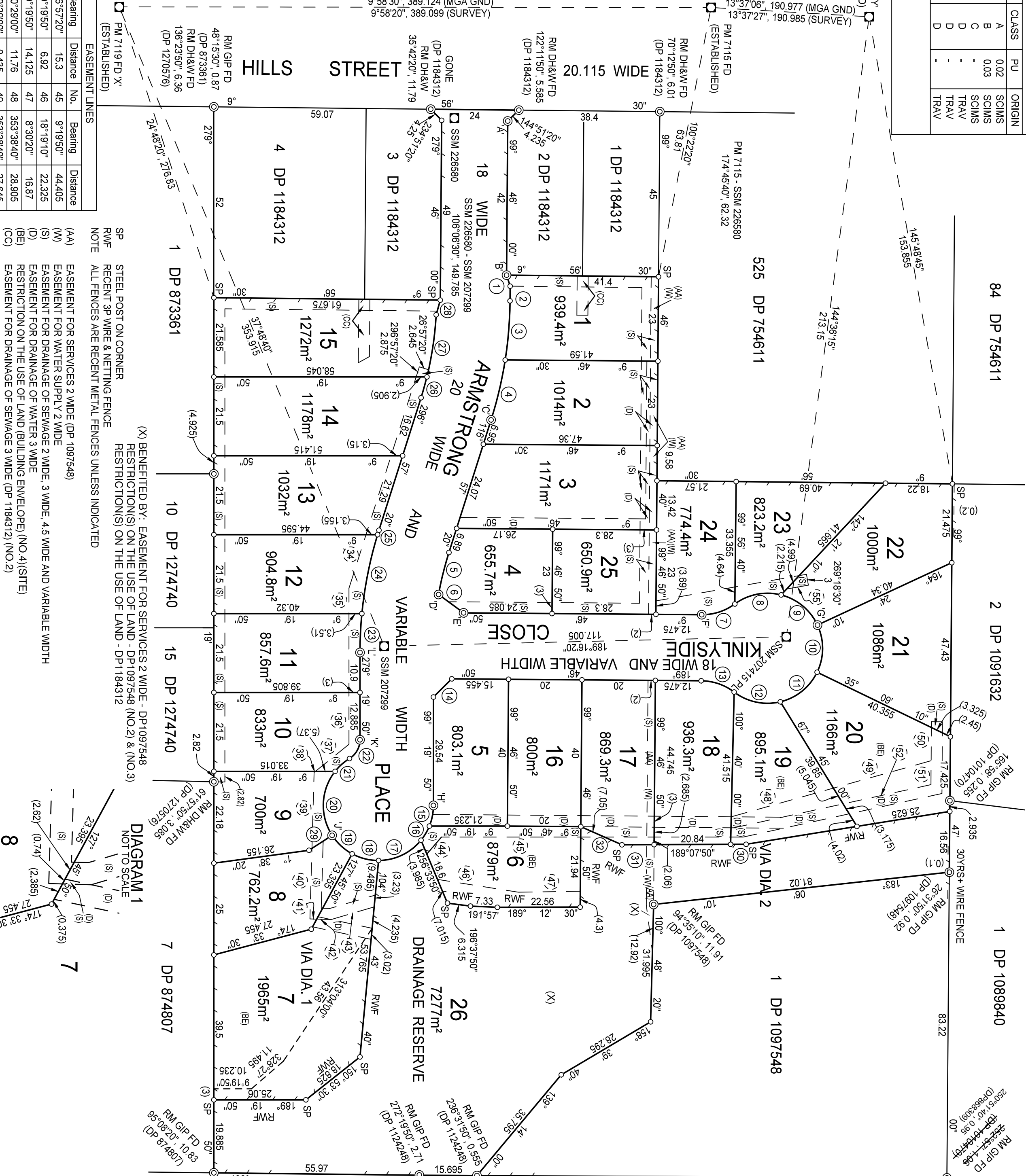
A	12°44'50"	3.015	RM DH&W
	10°41'20"	14.935	RM DH&W
	26°48'00"	18.95	SSM 226580
B	306°25'20"	7.8	RM DH&W
C	344°31'10"	16.195	RM DH&W
D	26°51'00"	15.725	RM DH&W
	23°16'40"	4.41	RM DH&W
E	25°48'50"	15.695	RM DH&W
	273°44'50"	4.275	RM DH&W
F	291°43'00"	13.910	RM DH&W
	276°14'10"	4.29	RM DH&W
G	279°10'40"	13.59	RM DH&W
	308°30'00"	6.39	SSM 207415
H	15°19'40"	4.46	RM DH&W
	279°10'40"	13.59	RM DH&W
J	129°38'40"	4.42	RM DH&W
K	185°00'20"	4.35	RM DH&W
L	167°43'10"	4.825	SSM 207299

No.	Bearing	Distance	Arc	Radius
-----	---------	----------	-----	--------

1	81°21'00"	3.165	-	-
2	99°46'00"	4	-	-
3	103°59'40"	16.16	16.175	110
4	112°35'00"	16.775	16.795	110
5	113°12'00"	11.79	11.8	90
6	45°37'20"	8.455	-	-
7	351°20'40"	9.485	9.655	15
8	358°17'00"	12.855	13.285	15
9	49°01'50"	12.855	13.285	15
10	99°46'40"	12.855	13.285	15
11	150°31'30"	12.855	13.285	15
12	201°16'30"	12.855	13.285	15
13	208°12'50"	9.485	9.655	15
14	144°33'20"	7.045	-	-
15	110°20'00"	5.725	5.76	15
16	129°55'55"	4.485	4.5	15
17	163°49'15"	12.82	13.245	15
18	203°26'20"	7.42	7.5	15
19	232°05'15"	7.42	7.5	15
20	281°57'40"	17.44	18.615	15
21	327°37'40"	5.27	5.295	15
22	308°32'10"	5.855	6.115	6
23	282°05'40"	10.61	10.615	110
24	290°34'40"	21.92	21.955	110
25	296°37'30"	1.265	1.265	110
26	296°05'10"	5.855	5.885	90
27	287°45'00"	17.12	17.145	90
28	294°49'50"	4.14	-	-
29	336°24'40"	7.5	-	-
30	189°07'50"	4.22	-	-
31	189°07'50"	8.755	-	-
32	213°07'20"	12.245	-	-

EASEMENT LINES

No.	Bearing	Distance	No.	Bearing	Distance
34	116°57'20"	15.3	45	9°19'50"	44.405
35	99°19'50"	6.92	46	18°19'10"	22.325
36	99°19'50"	14.125	47	8°30'20"	16.87
37	150°29'00"	11.76	48	353°38'40"	28.905
38	150°29'00"	0.435	49	353°38'40"	27.645
39	100°57'40"	20.72	50	99°41'00"	9.05
40	100°57'40"	19.225	51	99°41'00"	6.53
41	10°57'40"	1.865	52	176°58'30"	24.5
42	10°57'40"	3.915	53	9°19'50"	3.35
43	353°00'00"	12.215	54	9°46'40"	13.91
44	320°06'50"	6.145	55	359°18'30"	5.985






Surveyor: JAMES REGINALD McMAHON  
Date of Survey: 26 September, 2024  
Surveyor's Ref: 17807

PLAN OF SUBDIVISION OF  
LOT 5 DP 1184312 AND  
LOT 524A DP 754611


LGA: HILLTOPS  
Locality: YOUNG  
Subdivision No: SC2024/0027  
Lengths are in metres. Reduction ratio 1:800

Registered  
14/02/2025


DP1310813

PLAN FORM 6 (2020)		WARNING: Creasing or folding will lead to rejection	
DEPOSITED PLAN ADMINISTRATION SHEET			
Office Use Only		Sheet 1 of 6 sheet(s)	
Registered: 14/02/2025 		Office Use Only	
Title System: TORRENS		DP1310813	
PLAN OF SUBDIVISION OF LOT 5 DP 1184312 AND LOT 524A DP 754611		LGA: HILLTOPS Locality: YOUNG Parish: YOUNG County: MONTEAGLE	
Survey Certificate I, James Reginald McMahon of SRD Land Consulting Pty Ltd a surveyor registered under the Surveying and Spatial Information Act 2002, certify that:  *(a) The land shown in the plan was surveyed in accordance with the Surveying and Spatial Information Regulation 2017, is accurate and the survey was completed on 26 <sup>th</sup> September, 2024 or  *(b) The part of the land shown in the plan (being/excluding) was surveyed in accordance with the Surveying and Spatial Information Regulation 2017, the part surveyed is accurate and the survey was completed on _____, the part not surveyed was compiled in accordance with that Regulation, or  *(c) The land shown in this plan was compiled in accordance with the Surveying and Spatial Information Regulation 2017.  Datum Line: 'X' - 'Y' Type: Urban The terrain is Level-Undulating		Crown Lands NSW/Western Lands Office Approval _____ (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given.  Signature: _____ Date: _____ File Number: _____ Office: _____	
Signature:  Surveyor Identification No: 9096 Surveyor registered under the Surveying and Spatial Information Act 2002  *Strike out inappropriate words. **Specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey.		Subdivision Certificate I, A.M.T.HOMAN, of REGINALD Y. McMahon, General Manager/Registered Officer, certify that the provisions of s.6.15 of the Environmental Planning and Assessment Act 1979 have been satisfied in relation to the proposed subdivision, new road or reserve set out herein. Signature:  Registration number: _____ Consent Authority: HILLTOPS COUNCIL Date of endorsement: 30 JANUARY 2025 Subdivision Certificate number: SC2024/2027 File number: 2014/DA-20129  *Strike through if inapplicable.	
Plans used in the preparation of survey/compilation: DP 874807 DP 1089840 DP 1091632 DP 1184312 DP 1274740		Statements of intention to dedicate public roads create public reserves and drainage reserves, acquire/resume land.  IT IS INTENDED TO DEDICATE ROADS 18 WIDE, 20 WIDE AND VARIABLE WIDTH TO THE PUBLIC FOR ROAD PURPOSES  IT IS INTENDED TO DEDICATE LOT 26 TO THE PUBLIC AS DRAINAGE RESERVE	
Surveyor's Reference: 17807		Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A	



PLAN FORM 6A (2019)		DEPOSITED PLAN ADMINISTRATION SHEET		Sheet 2 of 6 sheet(s)	
Registered:  14/02/2025		Office Use Only		Office Use Only	
PLAN OF SUBDIVISION OF LOT 5 DP 1184312 AND LOT 524A DP 754611		<b>DP1310813</b>			
Subdivision Certificate number: <u>SC2024/0027</u> Date of Endorsement: <u>30 JANUARY 2025</u>					
		<p>This sheet is for the provision of the following information as required:</p> <ul style="list-style-type: none"><li>• A schedule of lots and addresses - See 60(c) <i>SSI Regulation 2017</i></li><li>• Statements of intention to create and release affecting interests in accordance with section 88B <i>Conveyancing Act 1919</i></li><li>• Signatures and seals- see 195D <i>Conveyancing Act 1919</i></li><li>• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.</li></ul>			
<p><b>PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT 1919, AS AMENDED, IT IS INTENDED TO CREATE:</b></p> <ol style="list-style-type: none"><li>1. (W) – EASEMENT FOR WATER SUPPLY 2 WIDE</li><li>2. (S) - EASEMENT FOR DRAINAGE OF SEWAGE 2 WIDE, 3 WIDE, 4.5 WIDE AND VARIABLE WIDTH</li><li>3. (D) – EASEMENT FOR DRAINAGE OF WATER 3 WIDE</li><li>4. (BE) – RESTRICTION ON THE USE OF LAND (BUILDING ENVELOPE)</li><li>5. RESTRICTIONS ON THE USE ON LAND</li></ol>					
<p><b>PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT 1919, AS AMENDED, IT IS INTENDED TO RELEASE:</b></p> <ol style="list-style-type: none"><li>1. (BB) – EASEMENT FOR DRAINAGE OF SEWAGE 3 WIDE (DP 1184312)</li></ol>					
<p>If space is insufficient use additional annexure sheet</p>					
Surveyor's Reference: <b>17807</b>					




PLAN FORM 6A (2019) DEPOSITED PLAN ADMINISTRATION SHEET Sheet 3 of 6 sheet(s)


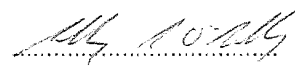
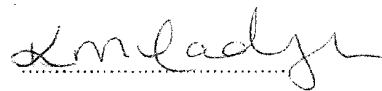
Registered:  14/02/2025	Office Use Only	Office Use Only
PLAN OF SUBDIVISION OF LOT 5 DP 1184312 AND LOT 524A DP 754611		<b>DP1310813</b>
Subdivision Certificate number: <u>SC2024/0027</u> Date of Endorsement: <u>30 JANUARY 2025</u>		
<p>This sheet is for the provision of the following information as required:</p> <ul style="list-style-type: none"><li>• A schedule of lots and addresses - See 60(c) <i>SSI Regulation 2017</i></li><li>• Statements of intention to create and release affecting interests in accordance with section 88B <i>Conveyancing Act 1919</i></li><li>• Signatures and seals- see 195D <i>Conveyancing Act 1919</i></li><li>• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.</li></ul>		


Lot Number	Address Number	Road Name	Road Type	Locality Name
1	3	ARMSTRONG	PLACE	YOUNG
2	5	ARMSTRONG	PLACE	YOUNG
3	7	ARMSTRONG	PLACE	YOUNG
4	9	ARMSTRONG	PLACE	YOUNG
5	2	KINLYSIDE	CLOSE	YOUNG
6	13	ARMSTRONG	PLACE	YOUNG
7	20	ARMSTRONG	PLACE	YOUNG
8	18	ARMSTRONG	PLACE	YOUNG
9	16	ARMSTRONG	PLACE	YOUNG
10	14	ARMSTRONG	PLACE	YOUNG
11	12	ARMSTRONG	PLACE	YOUNG
12	10	ARMSTRONG	PLACE	YOUNG
13	8	ARMSTRONG	PLACE	YOUNG
14	6	ARMSTRONG	PLACE	YOUNG
15	4	ARMSTRONG	PLACE	YOUNG
16	4	KINLYSIDE	CLOSE	YOUNG
17	6	KINLYSIDE	CLOSE	YOUNG
18	8	KINLYSIDE	CLOSE	YOUNG
19	10	KINLYSIDE	CLOSE	YOUNG
20	12	KINLYSIDE	CLOSE	YOUNG
21	11	KINLYSIDE	CLOSE	YOUNG
22	9	KINLYSIDE	CLOSE	YOUNG
23	7	KINLYSIDE	CLOSE	YOUNG
24	5	KINLYSIDE	CLOSE	YOUNG
25	3	KINLYSIDE	CLOSE	YOUNG
26	N/A	N/A	N/A	YOUNG

If space is insufficient use additional annexure sheet

Surveyor's Reference: 17807

PLAN FORM 6A (2019)		DEPOSITED PLAN ADMINISTRATION SHEET		Sheet 4 of 6 sheet(s)	
Registered:  14/02/2025		Office Use Only		Office Use Only	
PLAN OF SUBDIVISION OF LOT 5 DP 1184312 AND LOT 524A DP 754611		DP1310813			
Subdivision Certificate number: SC 2024/0027		<p>This sheet is for the provision of the following information as required:</p> <ul style="list-style-type: none"><li>• A schedule of lots and addresses - See 60(c) <i>SSI Regulation 2017</i></li><li>• Statements of intention to create and release affecting interests in accordance with section 88B <i>Conveyancing Act 1919</i></li><li>• Signatures and seals- see 195D <i>Conveyancing Act 1919</i></li><li>• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.</li></ul>			
Date of Endorsement: 30 JANUARY 2025					
<p>Executed by DJ &amp; TL MELLROSS Pty Ltd ACN 003 878 215 in accordance with section 127(1) of the <i>Corporations Act 2001</i> (Cth) in the presence of:</p> <div><div> Signature DARREN JOHN MELLROSS</div><div> Name of Director</div><div> Date</div></div> <div><div> Signature TRACEY LEE MELLROSS</div><div> Name of Director</div><div> Date</div></div>					
If space is insufficient use additional annexure sheet					
Surveyor's Reference: 17807					

PLAN FORM 6A (2019)		DEPOSITED PLAN ADMINISTRATION SHEET		Sheet 5 of 6 sheet(s)	
Registered:  14/02/2025		Office Use Only		Office Use Only	
PLAN OF SUBDIVISION OF LOT 5 DP 1184312 AND LOT 524A DP 754611		<b>DP1310813</b>			
Subdivision Certificate number: <u>SC2024/0027</u> Date of Endorsement: <u>30 JANUARY 2025</u>					
		This sheet is for the provision of the following information as required: <ul style="list-style-type: none"><li>• A schedule of lots and addresses - See 60(c) SSI Regulation 2017</li><li>• Statements of intention to create and release affecting interests in accordance with section 88B Conveyancing Act 1919</li><li>• Signatures and seals- see 195D Conveyancing Act 1919</li><li>• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.</li></ul>			
Executed by Hilltops Council on the day of _____ by its authorised delegate pursuant to Section 377 of the Local Government Act 1993.					
I certify that I am an eligible witness and that Hilltops Council authorised delegate signed in my presence.					
<p>Mortgagee under Mortgage No. <u>A521026</u> Signed at <u>196 SUMMER ST</u> this <u>6th</u> day of <u>JANUARY</u> <u>2025</u> for National Australia Bank Limited ABN 12 004 044 937 by <u>ALEXANDRA HENDERSON</u> its duly appointed Attorney under Power of Attorney No. 39 Book 4512 Attorney Signature, Level <u>3</u> Attorney <u>[Signature]</u> Witness Signature <u>[Signature]</u> Witness Name <u>THOMAS FIELD</u> Witness Address <u>196 SUMMER STREET ORANGE NSW 2800</u></p>					
If space is insufficient use additional annexure sheet					
Surveyor's Reference: 17807					

PLAN FORM 6A (2019)		DEPOSITED PLAN ADMINISTRATION SHEET		Sheet 6 of 6 sheet(s)	
Registered:  14/02/2025		Office Use Only		Office Use Only	
PLAN OF SUBDIVISION OF LOT 5 DP 1184312 AND LOT 524A DP 754611		DP1310813			
Subdivision Certificate number: .....		<div>This sheet is for the provision of the following information as required:</div> <ul style="list-style-type: none"><li>• A schedule of lots and addresses - See 60(c) <i>SSI Regulation 2017</i></li><li>• Statements of intention to create and release affecting interests in accordance with section 88B <i>Conveyancing Act 1919</i></li><li>• Signatures and seals- see 195D <i>Conveyancing Act 1919</i></li><li>• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.</li></ul>			
Date of Endorsement: .....					
Kevin Willaim Cloake		Matthew John Clarke			
Kim Cloake		Cheryl Lea Clarke			
If space is insufficient use additional annexure sheet					
Surveyor's Reference: 17807					

**Instrument setting out terms of Easements or Profits à Prendre intended to be created or released and of Restrictions on the Use of Land or Positive Covenants intended to be created pursuant to Section 88B Conveyancing Act 1919**

(Sheet 1 of 6 sheets)

Plan: **DP1310813**

Plan of Subdivision of Lot 5 DP1184312 and Lot 524A DP754611 covered by Subdivision Certificate No.

**Full name and address of the owner of the land:** DJ & TL Mellross Pty Limited ACN 003 878 215  
 4/326 Boorowa Street, Young, NSW 2594

**Part 1 (Creation)**

Number of item shown in the intention panel on the plan	Identity of easement, profit à prendre, restriction or positive covenant to be created and referred to in the plan.	Burdened lot(s) or parcel(s):	Benefited lot(s), road(s), bodies or Prescribed Authorities:
1	Easement for Water Supply 2 Wide (W)	Lots 1, 2, 3, 17, 25 and 26	Hilltops Council
2	Easement for Drainage of Sewage 2 Wide, 3 Wide, 4.5 Wide and Variable Width (S)	Lots 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24 25 and 26	Hilltops Council
3	Easement for Drainage of Water 3 Wide (D)	Lot 2	Lot 1
		Lot 3	Lots 1 and 2
		Lot 5	Lots 16, 17, 18, 19, 20 and 21
		Lot 7	Lot 8
		Lot 16	Lots 17, 18, 19, 20, and 21
		Lot 17	Lots 18, 19, 20 and 21
		Lot 18	Lots 19, 20 and 21
		Lot 19	Lots 20 and 21
		Lot 20	Lot 21
4	Restrictions on the Use of Land (Building Envelope) (BE)	Lots 6, 7, 19 and 20	Hilltops Council
5	Restrictions on the Use of Land	1 to 25	Every other Lot



(Sheet 2 of 6 Sheets)

Plan: **DP1310813**

Plan of Subdivision of Lot 5 DP1184312 and Lot 524A  
DP754611 covered by Subdivision Certificate No.

### Part 1A (Release)

Number of item shown in the intention panel on the plan	Identity of easement or profit à prendre to be released and referred to in the plan.	Burdened lot(s) or parcel(s):	Benefited lot(s), road(s), bodies or Prescribed Authorities:
1	Easement for Drainage of Sewage 3 Wide (DP1184312) (BB)	Lot 5 DP1184312	Hilltops Council

### Part 2 (Terms)

1. Terms of easement, profit à prendre, restriction, or positive covenant numbered four (4) in the plan:
  - a) No dwelling shall be erected on the lot burdened unless it is within the nominated building envelope marked (BE) on the plan in accordance with the policies of Hilltops Council.
  - b) The authority having the right to release vary or modify this restriction is Hilltops Council.
2. Terms of easement, profit à prendre, restriction, or positive covenant numbered five (5) in the plan:
  - 2.1 No main building shall be erected on each lot burdened other than with:
    - a) external walls of brick, weatherboards, Hardiplank, exposed timber, render, lightweight cladding, stone or a combination thereof, provided that nothing contained herein shall prevent the use of timber and glass in any external walls provided that the proportion of timber and/or glass in total forms of the external walls does not exceed 25 per centum by area of the external walls; and
    - b) a façade constructed with a minimum of 2 external wall materials; and
    - c) concrete tile or colourbond roofing; and
    - d) an area no less than 160 square metres including garage and alfresco areas; and
    - e) a minimum 1.92 square metre covered porch/entry area; and



(Sheet 3 of 6 Sheets)

Plan: **DP1310813**

Plan of Subdivision of Lot 5 DP1184312 and Lot 524A  
DP754611 covered by Subdivision Certificate No.

- f) a minimum setback to the garage to comply with building envelope where applicable, otherwise a setback of 5.5 metres; and
  - g) a garage located a minimum of 0.5 meters behind the main building line of the dwelling; and
  - h) minimum 450mm eaves to all street facing elevations and where a dwelling incorporates eaves to the façade only, eaves must return a minimum of 2 metres.
- 2.2 If the lot burdened is a corner lot or a lot adjoining a public reserve no main building shall be erected other than with:
- a) the terms set out in clause 2.1 of this document; and
  - b) all walls visible from the public areas detailed in the same manner as the front elevation including as a minimum an opening or window of at least 1.5 square metres in area and at least one of the following elements of the front elevation:
    - i) a balcony, veranda or portico; or
    - ii) a wall element with materials and or colours matching features of the front façade.
- 2.3 Not to build or erect, or permit or suffer to be built, or erected any structure on any part of the land which is intended or is suitable for use as a toilet or sanitary convenience or to alter any structure on the land for that purpose, unless it is permanently attached to and forms part of the main building which is erected on the land.
- 2.4 No fence shall be erected on each lot burdened other than powder coated post and rail colourbond steel fencing of a height of 1.5 metres in Surfmist colour.
- 2.5 No retaining walls visible from the street are to be constructed on the lot burdened other than of concrete construction.
- 2.6 No driveway is to be constructed on the lot burdened other than a driveway constructed with concrete material and with a width to match the garage opening width.
- 2.7 No parking bays are to be created on the lot burdened in lieu of garden areas.
- 2.8 No camper trailer, caravan or similar is permitted to remain on the lot burdened unless the same is screened or not visible from any public road or place.
- 2.9 No existing dwelling house or transportable house shall be partly or wholly moved to, placed upon, re-erected upon, reconstructed on or permitted to remain on any lot burdened.
- 2.10 Not to erect or permit or suffer to be erected or to be attached or in any way affixed to the land or any part of its or to any fixture or chattels situated on the land any advertising hoarding or other structure which is intended or is suitable for the display



(Sheet 4 of 6 Sheets)

Plan: **DP1310813**

Plan of Subdivision of Lot 5 DP1184312 and Lot 524A  
DP754611 covered by Subdivision Certificate No.

of advertisements or notices and the land or any part of it shall not be used for the display of advertisements or notices.

- 2.11 No boarding kennels shall be constructed or permitted to remain on any lot burdened.
- 2.12 No fence shall be erected on any part of the land or on any of its boundaries to divide it from any adjoining land owned by DJ & TL Mellross Pty Limited A.C.N. 003 878 215 (called "the original proprietors") without the consent of the original proprietors, their successor or assigns, other than purchasers on sale, but such consent shall not be withheld if such a fence is erected without expense to the original proprietors, their successors or assigns and in favour of any person dealing with the owner for the time being of the land, such consent shall be deemed to have been given in respect of every such fence for the time being erected PROVIDED HOWEVER this covenant in regard to fencing shall be binding on the registered proprietor of each lot burdened, his executor, administrators and assigns, only during the ownership of the said adjoining land by the original proprietors, their successors or assigns other than purchasers on sale.
- 2.13 Any release variation or modification of these restrictions shall be made and done in all respects at the cost and expense of the person or persons requesting the same.
- 2.14 The person or persons having the right to release vary or modify these restrictions are the "original proprietors" as defined in clause (2.12) their successors or assigns other than purchasers on sale or, if the original proprietors, their successors and assigns, other than purchasers on sale, no longer are the registered proprietors of any of the land comprised in the plan of subdivision, then a simple majority of the persons for the time being registered as the proprietors of the land in the plan of subdivision shall have the right to release, vary or modify these restrictions.



(Sheet 5 of 6 Sheets)

Plan: **DP1310813**

Plan of Subdivision of Lot 5 DP1184312 and Lot 524A  
DP754611 covered by Subdivision Certificate No.

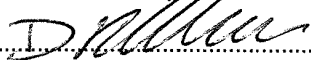
Certified correct for the purposes of the Real Property Act  
1900 and executed on behalf of the corporation named  
below by the authorised person(s) whose signature(s)  
appears(s) below pursuant to the authority specified.

Corporation: DJ & TL Mellross Pty Limited ACN 003 878  
215

Capacity:

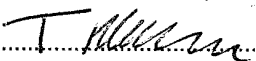
Authority: section 127 of the Corporations Act 2001

Signature of authorised person:

.....


Name of authorised person: Darren John Mellross  
Office held: Director

Signature of authorised person:

.....

Name of authorised person: Tracey Lee Mellross  
Office held: Director


I certify that I am an eligible witness and that the Attorney  
signed in my presence

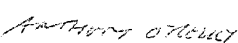
Signature of witness: 

Name of witness: 

Address of witness: 189 Boorowa St  
YOUNG NSW 2594

Hilltops Council by its authorised delegate pursuant to  
s.377 Local Government Act 1993

Signature of delegate: 

Name of delegate: 



Plan: **DP1310813**

(Sheet 6 of 6 Sheets)

Plan of Subdivision of Lot 5 DP1184312 and Lot 524A  
DP754611 covered by Subdivision Certificate No.

**MORTGAGEE'S CONSENT**

Mortgagee under Mortgage No. AS 21026  
Signed at 196 SUMMER ST ORANGE this 6<sup>th</sup> day of JANUARY  
2025 for National Australia Bank Limited ABN 12 004 044 937  
by ALEXANDRA HENDERSON its duly  
appointed Attorney under Power of Attorney No. 39 Book 4512  
Attorney Signature, Level 3 Attorney [Signature]  
Witness Signature [Signature]  
Witness Name THOMAS FIELD  
Witness Address 196 SUMMER STREET ORANGE NSW 2800

REGISTERED:



14/02/2025

[Signature]

## **Appendix 3 – BMAT Search**

### **Biodiversity Impacts**



## Biodiversity Values Map and Threshold Report

This report is generated using the Biodiversity Values Map and Threshold (BMAT) tool. The BMAT tool is used by proponents to supply evidence to your local council to determine whether or not a Biodiversity Development Assessment Report (BDAR) is required under [the Biodiversity Conservation Regulation 2017 \(Cl. 7.2 & 7.3\)](#).

The report provides results for the proposed development footprint area identified by the user and displayed within the blue boundary on the map.

There are two pathways for determining whether a BDAR is required for the proposed development:

1. Is there Biodiversity Values Mapping?
2. Is the 'clearing of native vegetation area threshold' exceeded?

Biodiversity Values Map and Threshold Report		
Date of Report Generation		16/05/2025 3:36 PM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	<b>Does the development Footprint intersect with BV mapping?</b>	no
1.2	Was <u>ALL</u> BV Mapping within the development footprint added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
1.3	<b>Date of expiry of dark purple 90 day mapping</b>	N/A
1.4	<b>Is the Biodiversity Values Map threshold exceeded?</b>	no
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	<b>Size of the development or clearing footprint</b>	268.7 sqm
2.2	<b>Native Vegetation Area Clearing Estimate (NVACE)</b> (within development/clearing footprint)	80.3 sqm
2.3	<b>Method for determining Minimum Lot Size</b>	LEP
2.4	<b>Minimum Lot Size</b> (10,000sqm = 1ha)	700 sqm
2.5	<b>Area Clearing Threshold</b> (10,000sqm = 1ha)	2,500 sqm
2.6	<b>Does the estimate exceed the Area Clearing Threshold?</b> (NVACE results are an estimate and can be reviewed using the <a href="#">Guidance</a> )	no
REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area?		<b>no</b>
(Your local council will determine if a BDAR is required)		

## What do I do with this report?

- If the result above indicates the BOS Threshold has been exceeded, your local council may require a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>.
- If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is “likely to significantly affect threatened species” as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.
- If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.
- If all Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

For more detailed advice about actions required, refer to the Interpreting the evaluation report section of the [Biodiversity Values Map Threshold Tool User Guide](#) .

## Review Options:

- If you believe the Biodiversity Values mapping is incorrect please refer to our [BV Map Review webpage](#) for further information.
- If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the [Guide for reviewing area clearing threshold results from the BMAT Tool](#).

## Acknowledgement

I, as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature: \_\_\_\_\_

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

Date: \_\_\_\_\_

16/05/2025 03:36 PM

## Biodiversity Values Map and Threshold Tool

The Biodiversity Values (BV) Map and Threshold Tool identifies land with high biodiversity value, particularly sensitive to impacts from development and clearing.

The BV map forms part of the Biodiversity Offsets Scheme threshold, which is one of the factors for determining whether the Scheme applies to a clearing or development proposal. You have used the Threshold Tool in the map viewer to generate this BV Threshold Report for your nominated area. This report calculates results for your proposed development footprint and indicates whether Council may require you to engage an accredited assessor to prepare a Biodiversity Development Assessment Report (BDAR) for your development.

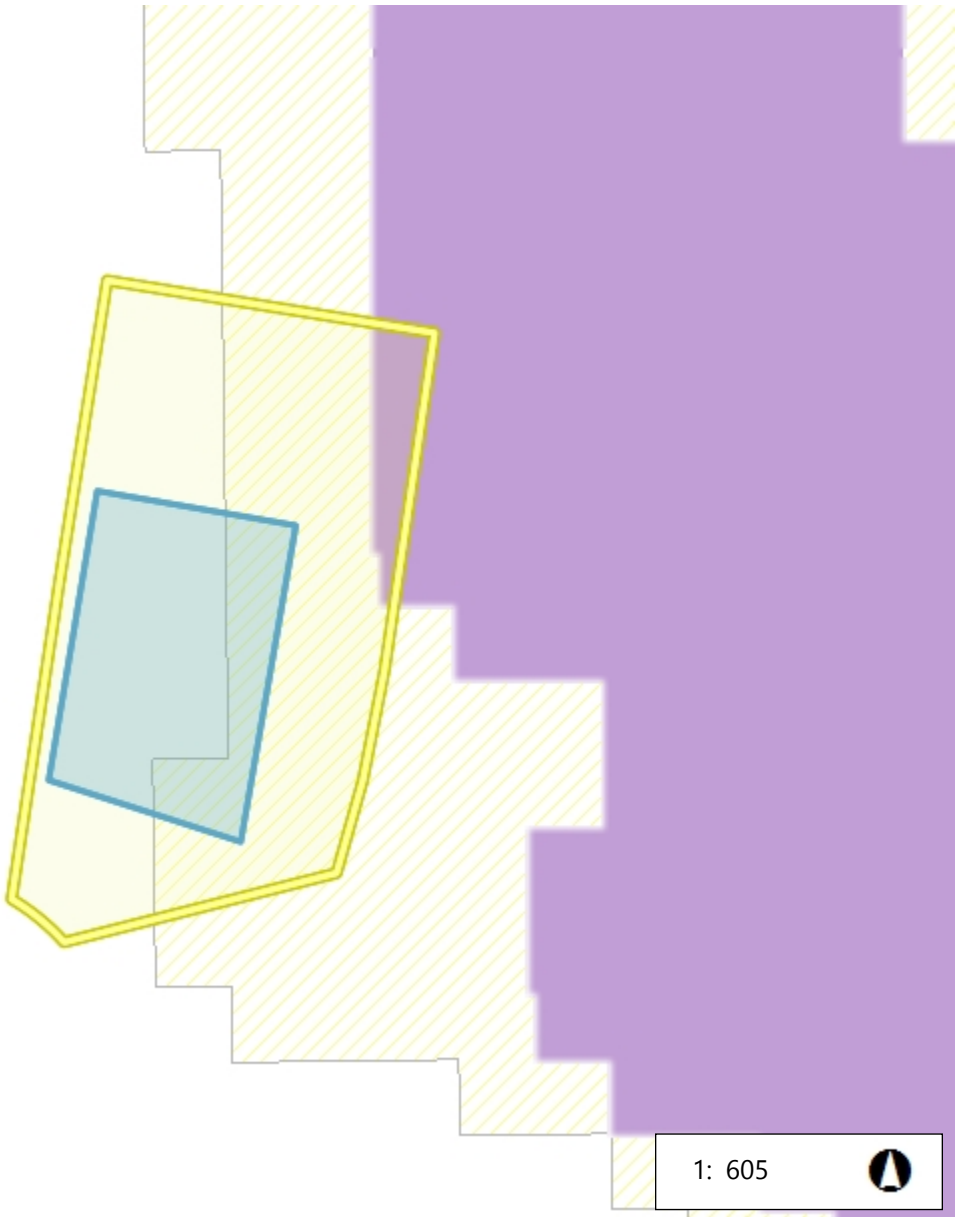
This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the [Biodiversity Values Map webpage](#).

Map Review: Landholders can request a review of the BV Map where they consider there is an error in the mapping on their property. For more information about the map review process and an application form for a review go to the [Biodiversity Values Map Review webpage](#).

If you need help using this map tool see our [Biodiversity Values Map and Threshold Tool User Guide](#) or contact the Map Review Team at [map.review@environment.nsw.gov.au](mailto:map.review@environment.nsw.gov.au) or on 1800 001 490.

# Biodiversity Values Map



30.7 0 15.37 30.7 Metres

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days
- Native Vegetation Area Clearing Estimate (NVACE)
- Development area selected by proponent

16/05/2025 03:36 PM

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Imagery © Airbus DS/Spot Image 2016  
© NSW Department of Customer Service, Basemaps 2019  
© NSW Department of Planning and Environment

The results provided in this tool are generated using the best available mapping and knowledge of species habitat requirements.

This map is valid as at the date the report was generated. Checking the [Biodiversity Values Map viewer](#) for mapping updates is recommended.

## **Appendix 4 – AHIMs REPORT**

### **Indigenous Heritage Search**

Kenneth Filmer

Date: 16 May 2025

18 Pineview Cct 91 Boorowa Street Young  
Young New South Wales 2594

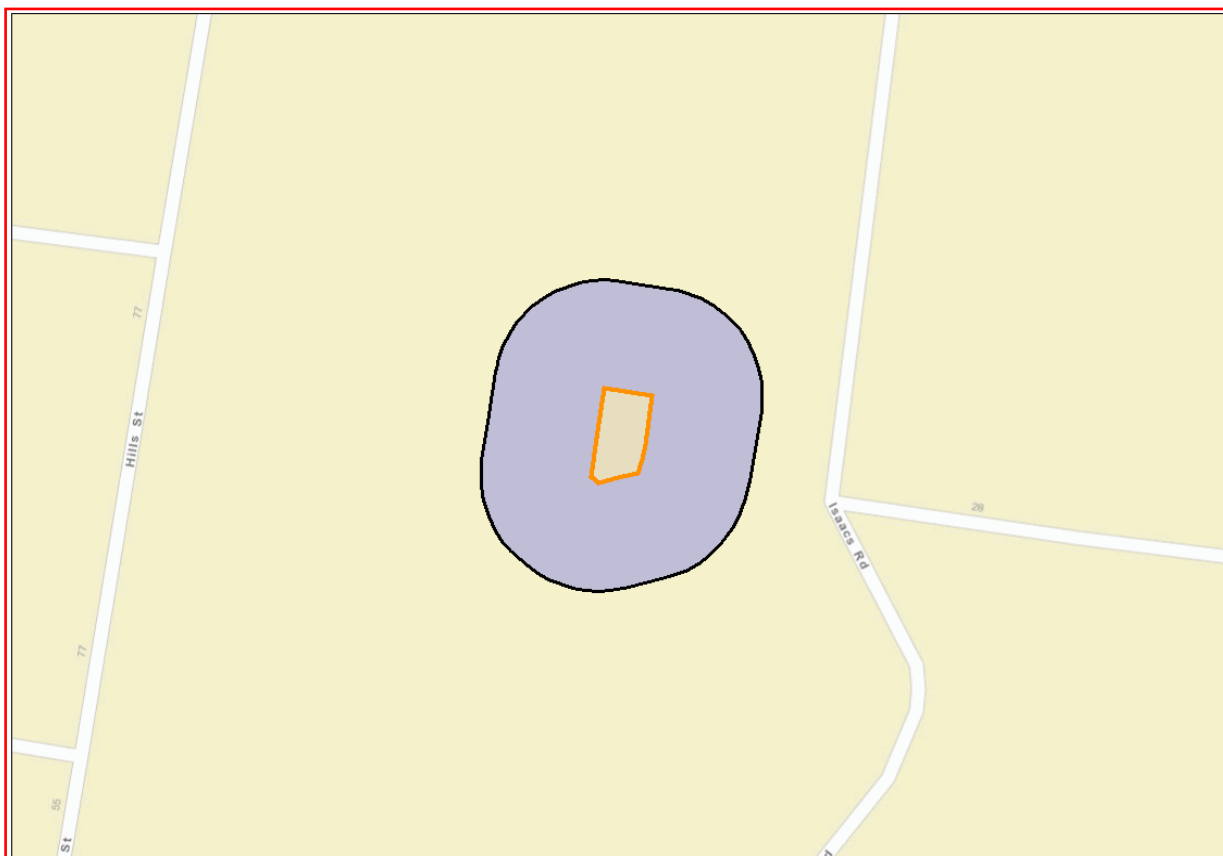
Attention: Kenneth Filmer

Email: craig@dabusters.com

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 6, DP:DP1310813, Section : - with a Buffer of 50 meters, conducted by Kenneth Filmer on 16 May 2025.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



**If your search shows Aboriginal sites or places what should you do?**

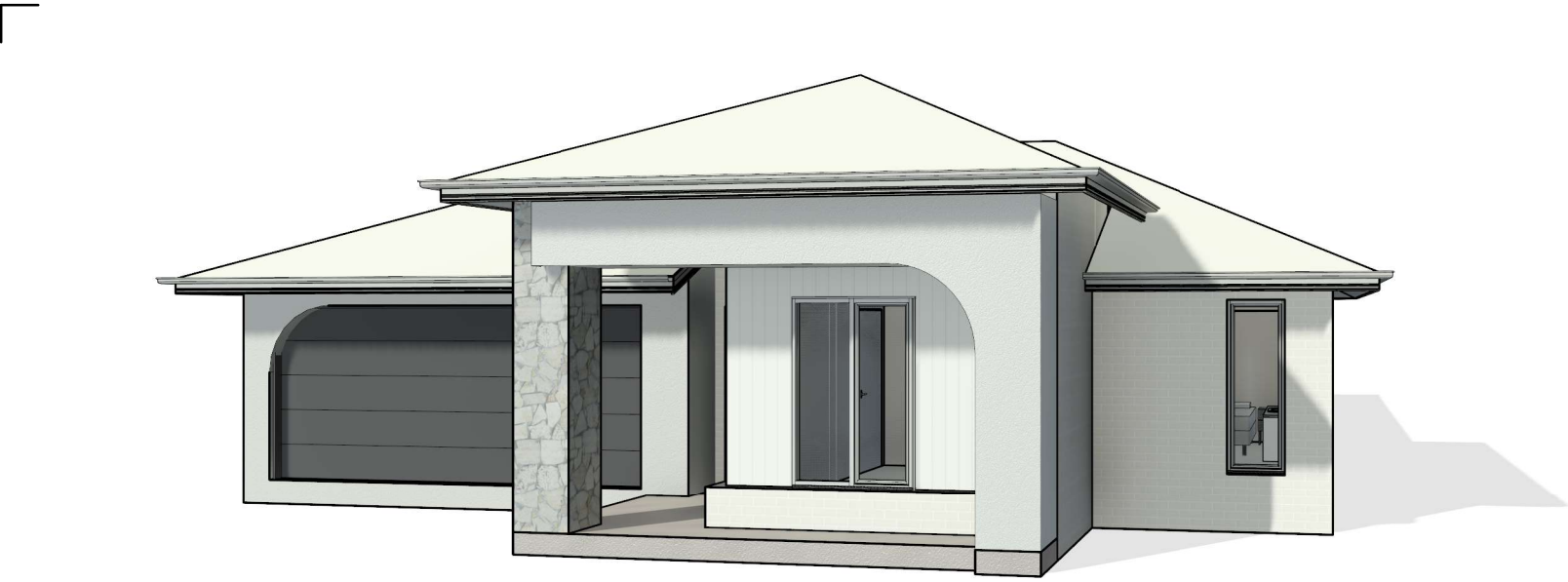
- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

## **Appendix 5 – DWELLING**

### **DWELLING PLANS & BASIX REPORT**



# PRELIMINARY ISSUE

## REVISION E

PROPOSED RESIDENCE FOR

MAT & JACQUI

AT

LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594

PAGE LIST	
PAGE NO	PAGE TITLE
01	COVER
02	SITE PLAN
03	FLOOR PLAN
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05	ELEVATIONS A & B
06	ELEVATIONS C & D
07	ELECTRICAL & FIXTURES PLAN
08	KITCHEN CABINETRY
09	LAUNDRY & ROBES
10	BATHROOM CABINETRY
11	ENSUITE CABINETRY

### GENERAL NOTES:

- ALL DESIGN, CONSTRUCTION METHODS AND MATERIALS TO BE IN ACCORDANCE WITH:
  - THE CURRENT NATIONAL CONSTRUCTION CODES (NCC)
  - THE STATE DEVELOPMENT CODE
  - BUILDING REGULATIONS
  - CURRENT ISSUES OF AUSTRALIAN STANDARDS & MANUFACTURERS SPECIFICATIONS & INSTALLATION DETAILS FOR MATERIALS USED
- THESE PLANS ARE TO BE READ IN CONJUNCTION WITH CONTRACT DOCUMENTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS. RESPONSIBLE PARTIES ARE TO BE NOTIFIED OF ANY DISCREPANCIES.
- SUBSTITUTION OF ANY STRUCTURAL MEMBERS & OR VARIATIONS TO ANY PART OF THE DESIGN WILL VOID ANY RESPONSIBILITIES OF THE BUILDING DESIGNER FOR THE STRUCTURAL INTEGRITY & PERFORMANCE OF THE BUILDING.
- 3D VIEWS, PERSPECTIVES AND ILLUSTRATIONS ARE INTENDED TO BE A VISUAL AID ONLY. THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.
- ALL DIMENSIONS IN MILLIMETERS.
- DIMENSIONS TAKE PREFERENCE TO SCALE AND ARE TO STRUCTURE NOT FINISH ON NEW WORK. EXISTING WALLS MAY BE NOMINALLY DIMENSIONED.
- ALL DIMENSIONS, DETAILS, SITE LEVELS AND FINISHED FLOOR LEVELS TO BE CONFIRMED BY CONTRACTOR BEFORE COMMENCEMENT OF ANY CONSTRUCTION AND RESPONSIBLE PEOPLE NOTIFIED OF ANY DISCREPANCIES.
- MANUFACTURER'S SPECIFICATION MEANS A CURRENT APPROVED SPECIFICATION FOR USE UNDER THE CONDITIONS APPLICABLE THESE DRAWINGS ARE AVAILABLE DIGITALLY, IF REQUIRED.
- ANY DATA SUPPLIED BY OTHERS AND SHOWN ON THESE DRAWINGS ARE NOT THE RESPONSIBILITY OF THIS DESIGNER. ALL USERS OF THESE DRAWINGS ARE ADVISED TO CHECK OTHER SUPPLIED DATA.
- OWNER REMAINS RESPONSIBLE FOR ONGOING MAINTENANCE OF BUILDING. STRUCTURAL ELEMENTS IN PARTICULAR ARE TO REMAIN PROTECTED BY THE METHODS SHOWN AND LISTED IN THESE DRAWINGS.
- ALL WINDOW AND DOOR DIMENSIONS ARE NOMINAL.

### SITE WORKS NOTES:

- POSITION OF DWELLING TO BE CONFIRMED BY SURVEYOR & CLIENT PRIOR TO ANY SITE WORKS.
- ALL STORMWATER, DOWN PIPES, RAIN WATER TANKS & SITE DRAINAGE TO BE SIZED & LOCATED BY THE HYDRAULIC CONSULTANT/ PLUMBER IN ACCORDANCE WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 3.3** AND STATE LEGISLATION/ LOCAL PLANNING SCHEME HOUSE CODE AND AS 3500 ALL PARTS.
- BUILDER TO ENSURE THAT ACTUAL SEWER LINE AND MANHOLE POSITIONS MATCH THOSE AS SHOWN AS BASED ON LOCAL AUTHORITY DOCUMENTS. ANY DISCREPANCIES MUST BE BROUGHT TO ATTENTION AND RESOLVED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- BUILDER TO DETERMINE APPROPRIATE PLATFORMING METHOD ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS. FINISHED FLOOR LEVEL IS TO BE ABOVE THE MINIMUM LEVEL AS PER LOCAL AUTHORITIES REQUIREMENTS & TO COMPLY WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 3.3.3**
- FALL OF LAND UNKNOWN AND IS TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF CONSTRUCTION. ANY REQUIRED EARTHWORKS INCLUDING CUT, FILL, BATTERS AND RETAINING MUST COMPLY WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 4.2.2**, AS 3798, AS4200 & **AS 4678**.
- THE FINISHED SURFACE IMMEDIATELY SURROUNDING THE DWELLING, 1000mm WIDE, IS TO FALL AWAY FROM THE DWELLING AT A SLOPE OF 1 IN 20 MINIMUM.
- STORMWATER MUST BE CONNECTED TO A LEGAL POINT OF DISCHARGE -
  - STORMWATER KERB ADAPTERS TO STREET (2 MAX.)
  - ROOFWATER/STORMWATER PIPE
  - BUBBLERS TO COUNCIL SPECIFICATION.
  - RAINWATER TANK, OVERFLOW MUST CONNECT TO STORMWATER SYSTEM.
- SURFACE DRAINAGE IS TO DISCHARGE EVENLY WITHIN THE SITE AND WITHOUT NUISANCE TO ADJOINING PROPERTIES.
- ALL SUB-FLOOR AREAS MUST BE GRADED TO AVOID THE PONDING OF WATER.
- THE HEIGHT OF FENCES, INCLUDING THE HEIGHT OF RETAINING WALLS ARE NOT TO EXCEED 2.0m ABOVE FINISHED GROUND LEVEL **UNLESS** INDICATED ON THE PLANS AND TO LOCAL AUTHORITY APPROVAL
- WHERE SERVICES / PIPEWORK ARE LOCATED UNDER DRIVEWAYS AND SLABS CONTRACTORS ARE TO ENSURE ADEQUATE COMPACTION TO TRENCH BACKFILL IS ACHIEVED TO SUPPORT CONCRETE.

### PATH/DRIVEWAY NOTES:

- DRIVEWAY SLOPE NOT TO EXCEED 1:4. CHECK WITH LOCAL AUTHORITY REQUIREMENTS PRIOR TO CONSTRUCTING ANY DRIVEWAYS, PATHWAYS OR CROSSEOVERS BETWEEN THE PROPERTY BOUNDARY AND ROAD KERB.
- PROVIDE A LAYER OF SAND A MINIMUM OF 20mm THICK UNDER THE SLAB, COMPACTED AND LEVELED.
- SLAB THICKNESS, MESH TO ENGINEERS DESIGN.

### 3D VIEW NOTES:

- GROUND LINE OR SLOPE OF SITE IS NOT REPRESENTED ON 3D VIEWS.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- 3D VIEWS, PERSPECTIVES AND ILLUSTRATIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.

### ELECTRICAL NOTES:

- SMOKE ALARMS TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 9.5** SMOKE ALARMS MUST COMPLY WITH AS 3786.
  - ONLY USE PHOTOELECTRIC TYPE SMOKE ALARMS
  - ALL SMOKE ALARMS TO BE INTERCONNECTED
  - INSTALL LOCATIONS:
    - ON EACH LEVEL OF LIVING SPACE
    - OUTSIDE EACH BEDROOM AREA
    - IN EVERY BEDROOM (**QLD**)
- THIS PLAN IS INDICATIVE ONLY AND IS TO BE USED ONLY AS AN EXAMPLE. OWNERS TO NOMINATE FINAL POSITIONS OF ELECTRICAL APPLIANCES, LIGHTING AND ELECTRICAL FITTINGS.

### ELEVATION NOTES:

- WALL FINISHES AND WINDOW TYPES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE. REFER TO BUILDERS SPECIFICATIONS FOR DETAILS.
- GROUND LINE SHOWN ON ELEVATIONS DOES NOT RELATE TO ACTUAL SLOPE OF SITE.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- ELEVATIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.

### SECTION NOTES:

- TRUSS DESIGN IS INDICATIVE ONLY AND IS NOT PRESCRIPTIVE. FINAL DESIGN TO TRUSS MANUFACTURER SPECIFICATIONS.
- ALL PINE TO BE JD4 MIN.
- ALL HWD. TO BE F14 MIN.
- GROUND LINE SHOWN DOES NOT RELATE TO ACTUAL SLOPE OF SITE.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- SECTIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.

### FOUNDATION NOTES:

- THESE PLANS ARE TO BE READ IN CONJUNCTION WITH CONTRACT DOCUMENTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS. RESPONSIBLE PARTIES ARE TO BE NOTIFIED OF ANY DISCREPANCIES. SITE CLASSIFICATION IS TO BE CONFIRMED BY INSPECTION OF FOOTING EXCAVATIONS.
- PLUMBER RESPONSIBLE TO LOCATE AND CONFIRM SEWER HOUSE CONNECTION LOCATION ACCURATELY PRIOR TO COMMENCEMENT. PLUMBER IS TO VERIFY WITH SITE SUPERVISOR PRIOR TO SETTING OUT FIXTURE DRAINAGE POINTS. NO AMENDMENTS OR SPECIAL FIXTURES HAVE BEEN NOMINATED.
- WHERE SERVICES / PIPEWORK ARE LOCATED UNDER DRIVEWAYS AND SLABS CONTRACTORS ARE TO ENSURE ADEQUATE COMPACTION TO TRENCH BACKFILL ACHIEVED TO SUPPORT CONCRETE.
- REBATE GARAGE DOORS & SLIDING GLASS DOORS 20mm, AND SHOWER RECESSES 50mm IN LOCATIONS SHOWN.
- ACCORDING TO MANUF' SPEC. OR BUILDERS DIRECTIONS.
- MINIMUM COVER TO GROUND - 50mm.
- TOP COVER TO SLAB REINFORCEMENT - 30mm.
- GRADE FINISHED GROUND SURFACE TO DIVERT WATER AWAY FROM BUILDING.
- WATERPROOF MEMBRANE IS 0.2mm POLYETHYLENE. JOINTS ARE TO BE LAPPED 300mm AND TAPED.
- REINFORCEMENT TO BE SUPPORTED ON PLASTIC CHAIRS AT 1000mm CRS.
- ALL CONCRETE IS TO BE MECHANICALLY VIBRATED DURING PLACING.
- FILL MATERIAL AND SAND UNDER SLABS IS TO BE COMPACTED TO 95% OF MAX. DRY DENSITY.
- FLOORS TO ALL WET AREAS TO HAVE A FALL TO A FLOOR WASTE.

### TERMITE RISK NOTES:

- TERMITE CONTROL BARRIERS TO BE IN ACCORDANCE WITH AS 3660.1 AND THE CURRENT **ABCB HOUSING PROVISIONS PART 3.4**
- ANY UNTREATED TIMBER POSTS, STAIRS AND THE LIKE SHALL BE SET 75MM MINIMUM CLEAR OF GROUND FOR VISUAL TERMITE CONTROL.
- TWO APPROVED NOTICES SHALL BE AFFIXED TO THE DWELLING AS REQUIRED ADVISING OWNERS OF THE METHOD OF TERMITE RISK MANAGEMENT USED, AND THEIR ONGOING RESPONSIBILITY FOR THE MAINTENANCE OF THE SYSTEMS.
- BUILDER TO CONFIRM WITH OWNER THE CHOSEN METHOD OF TIMBER PROTECTION.
- OWNER REMAINS RESPONSIBLE FOR ONGOING INSPECTION OF STRUCTURAL TIMBER ELEMENTS, AND THAT BARRIERS ARE NOT COMPROMISED.
- WHERE CONCRETE SLAB FORMS BARRIER, SLAB TO BE CONSTRUCTED AS PER AS2870. SLAB & FOOTINGS TO BE "MONOLITHIC". TERMITE COLLAR FLANGE TO BE CLAMPED TO PIPES AND SET IN SLAB. 75MM MIN OF EXPOSED SLAB EDGE TO REMAIN ABOVE FINISHED PERIMETER LEVEL. EXPOSED EDGE NOT TO BE COVERED BY SOIL, RENDERED OR TILED, BUT MAY BE PAINTED. WHERE BRICKWORK CONCEALS EDGE OF SLAB, IN ADDITION TO ABOVE, PROVIDE TERMITE COLLAR BARRIER BELOW D.P.C. FIXED TO SLAB EDGE.
- INSTALL ANT CAPPING TO ALL BRICK PIERS, TIMBER OR CONC STUMPS. KEEP TIMBER CLEAR OF GROUND WHEN ON STEEL ANCHORS. NON-TIMBER ELEMENTS (EG STEEL POSTS) NEED NO PROTECTION FROM TERMITES.
- ALL TIMBER IN DIRECT CONTACT WITH CONC TO BE SEPARATED BY G.I. FLASHING.

### FLOOR PLAN NOTES:

- SMOKE ALARMS TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 9.5**. SMOKE ALARMS MUST COMPLY WITH AS3786.
  - ONLY USE PHOTOELECTRIC TYPE SMOKE ALARMS
  - ALL SMOKE ALARMS TO BE INTERCONNECTED
  - INSTALL LOCATIONS:
    - ON EACH LEVEL OF LIVING SPACE
    - OUTSIDE EACH BEDROOM AREA
    - IN EVERY BEDROOM (**QLD ONLY**)
- WALL FINISHES AND WINDOW TYPES ON 3D VIEWS ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- ALL GLAZING TO BE IN ACCORDANCE WITH AS1288. WINDOWS SIZES MAY VARY DUE TO MANUFACTURER'S SPECIFICATIONS.
- BUILDER TO CONFIRM ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONS ARE TO FRAME ONLY AND DO NOT INCLUDE CLADDING/LININGS (UNO).
- S.S. BALUSTRADING TO COMPLY WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 11.3.6**
- DOORS TO W.C.'S TO HAVE LIFT OFF HINGES (ONLY IF THE DOORS SWING IN TOWARDS THE W.C).
- MASONRY CONSTRUCTION TO AS 3700.
- REFER ENGINEERS DRAWINGS & SPECIFICATIONS FOR ALL STRUCTURAL DETAILS, FRAMING, BRACING, TIE DOWN AND SLAB/FOOTING DETAILS.
- SEAL WET AREAS IN ACCORDANCE WITH AS3740 & THE CURRENT **ABCB HOUSING PROVISIONS PART 10.2**.
- PROVIDE FLOOR WASTE TO ALL WET AREAS.

### ROOF DRAINAGE NOTES:

- ALL GUTTER AND DOWNPIPE WORKS TO AS/NZS 3500.3 AND THE CURRENT **ABCB HOUSING PROVISIONS PART 7.4**.
- DOWNPIPES (DP) TO BE 90mmØ UPVC.
- TEMPORARY DOWNPIPES TO BE PROVIDED AT DP LOCATIONS DURING CONSTRUCTION DRAINING ROOFWATER ONTO GROUND, 2M MIN AWAY FROM BUILDING.
- ALL STORMWATER, DOWN PIPES, RAIN WATER TANKS & SITE DRAINAGE TO BE SIZED & LOCATED BY THE HYDRAULIC CONSULTANT/ PLUMBER IN ACCORDANCE WITH **THE CURRENT NCC VOL. 3 PART B6, AND B7**. THE CURRENT **ABCB HOUSING PROVISIONS PART 7.4**, STATE LEGISLATION/ LOCAL PLANNING SCHEME HOUSE CODE AND AS 3500 ALL PARTS.
- THE ROOF DRAINAGE SYSTEM MUST BE PROVIDED WITH AN OVERFLOW TO PREVENT THE BACKFLOW OF WATER INTO THE BUILDING.
- THE AREA SPECIFIC RAINFALL INTENSITY **FOR GUTTERING SELECTION, OVERFLOW MEASURES & DOWNPIPES MUST BE SELECTED FROM THE RELEVANT TABLES IN THE CURRENT ABCB HOUSING PROVISIONS PART 7.4** OR FROM AS/NZ3500.
- EAVES GUTTERS MUST BE INSTALLED AT A FALL NOT LESS THAN 1 IN 500 WITH SUPPORT BRACKETS AT 1.2m MAXIMUM CENTRES.
- BOX GUTTERS MUST BE INSTALLED AT A FALL NOT LESS THAN 1 IN 100 IN ACCORDANCE WITH AS/NZ3500.3.
- DOWNPIPES MUST SERVE NOT MORE THAN 12 METERS OF GUTTER LENGTH FOR EACH DOWNPIPE WHICH MUST BE LOCATED AS CLOSE AS POSSIBLE TO VALLEY GUTTERS. EAVES GUTTERS MUST BE PROVIDED WITH AN OVERFLOW SYSTEM WHERE DOWNPIPES ARE LOCATED MORE THAN 1.2 METRES FROM A VALLEY GUTTER.



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MELLROSS HOMES #: 4585  
PLAN NUMBER: #2382/25  
AREI PLAN CODE: CAPITAL COLLECTION 5

CLIENT: MELLROSS HOMES  
DRAWING NAME: COVER

PROJECT: PROPOSED RESIDENCE FOR MAT & JACQUI AT LOT 6 NO. 13 ARMSTRONG PLACE YOUNG NSW 2594

PAGE NO: 01 OF 11  
SCALE @ A3 NTS  
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SCALE NOT APPLICABLE

PROPERTY DESCRIPTION

LOT: 6  
SUBURB: YOUNG  
LOCAL AUTHORITY: HILLTOPS COUNCIL

AREA OF LOT - 874m<sup>2</sup>  
AREA OF RESIDENCE - 260.8m<sup>2</sup>  
SITE COVERAGE - 29.8%

WIND LOADS FOR HOUSING CLASSIFICATION

- REGION:
- TERRAIN CATEGORY:
- SHIELDING CLASSIFICATION:
- TOPOGRAPHIC CLASSIFICATION:
- WIND SPEED CLASSIFICATION:
- BUSHFIRE ATTACK LEVEL (BAL):

ENERGY EFFICIENCY REQUIREMENTS

- R3.5 BATTS TO CEILING
- R2.5 BATTS TO EXTERNAL WALLS AND GARAGE INTERNAL WALL
- DOWNLIGHTS TO BE MIN IC RATED
- ALL WINDOWS AND SLIDING GLASS DOORS SINGLE GLAZED

LEGEND

- GM

HYDRANT

STORM WATER PIT

WATER CONNECTION

ELECTRICAL TURRET

TELSTRA PIT

MAN HOLE

DP

100mm DOWN PIPE

PP

POWER POLE

STREET LIGHT

SITE BENCH MARK

SEWER LINE

CONTOUR LINE

EXISTING RETAINING

NEW RETAINING

ROOF LINE

STORM WATER LINE

FENCE

ELECTRICAL

TELSTRA COMMUNICATIONS

WATER LINE



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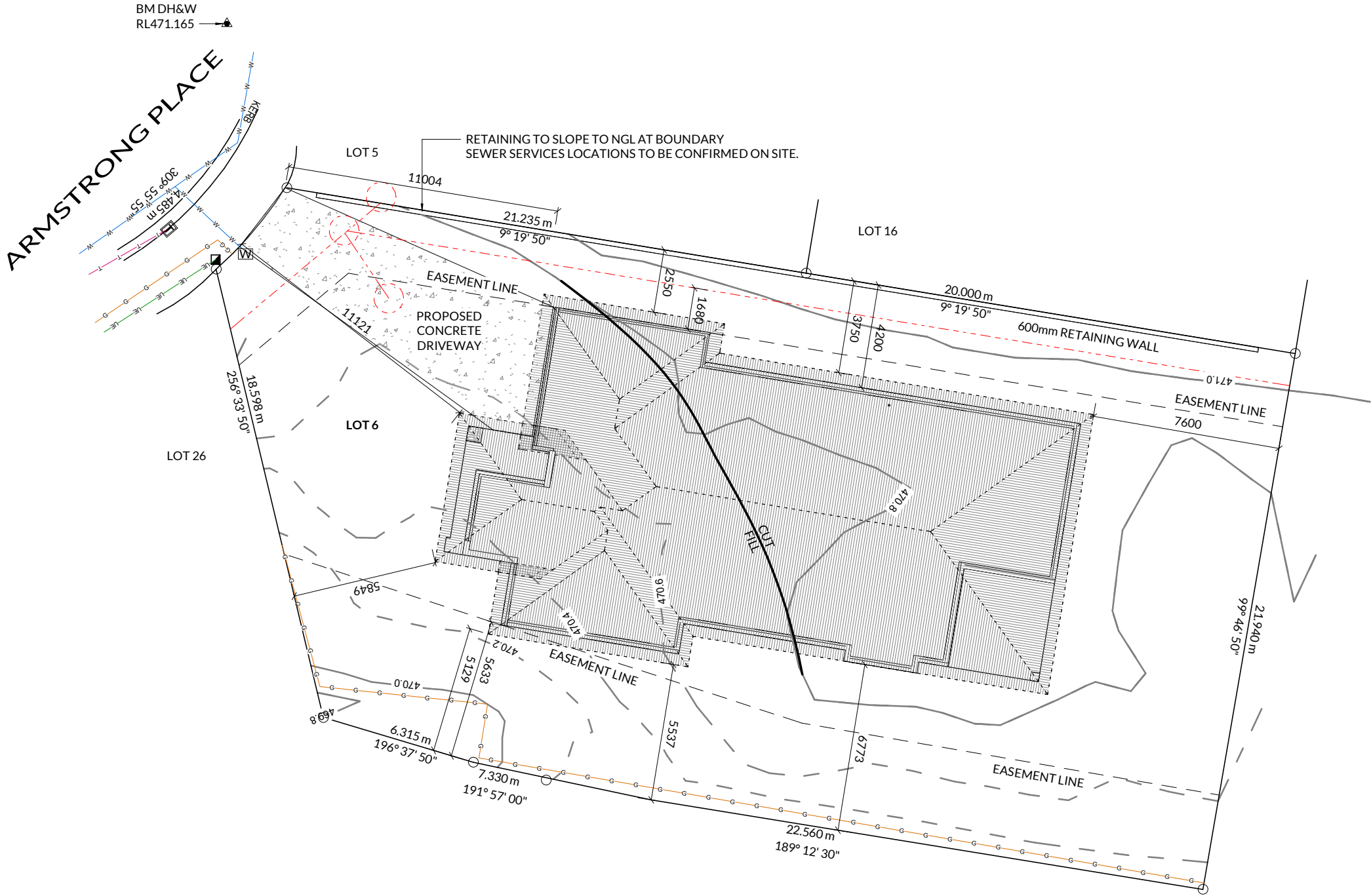
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**MELLROSS HOMES**  
  
DRAWING NAME:  
**SITE PLAN**

PROJECT:  
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LEGEND

- C CASEMENT WINDOW  
SL.G.D SLIDING GLASS DOOR  
S.W SLIDING WINDOW  
A AWNING WINDOW  
D.HU DOUBLE HUNG WINDOW  
B.D. BIFOLD DOORS  
LU LOUVERS  
SL SIDELIGHT  
M.V. MECHANICAL VENT  
SKL SKYLIGHT  
F.G. FIXED GLASS WINDOW

- ☼ SMOKE ALARM  
† HOSE COCK  
▬ ELEC M/BOX  
⊗ GAS BOTTLES  
⊗ HOT WATER  
⊕ FLOOR WASTE

FLOOR AREAS

ROOM	SQUARES	SQM
ALFRESCO	1.60	14.9 m <sup>2</sup>
GARAGE	3.78	35.1 m <sup>2</sup>
LIVING	21.89	203.4 m <sup>2</sup>
PORCH	0.80	7.4 m <sup>2</sup>
TOTAL	28.07	260.8 m <sup>2</sup>

DOOR SCHEDULE

MARK	SIZE	DOOR TYPE
D1	2040 x 1020	GLASS ENTRY DOOR
D2	2100 x 4800	PANEL LIFT DOOR
D3	2040 x 870	HOLLOW CORE SWING
D4	2040 x 870	HOLLOW CORE SWING
D4	2040 x 870	HOLLOW CORE SWING
D5	2040 x 720	HOLLOW CORE SWING
D6	2040 x 870	HOLLOW CORE SWING
D7	2040 x 870	HOLLOW CORE SWING
D8	2040 x 870	HOLLOW CORE SWING
D9	2040 x 870	HOLLOW CORE SWING
D10	2040 x 720	HOLLOW CORE CAVITY SLIDER
D11	2040 x 720	HOLLOW CORE SWING
D12	2040 x 870	HOLLOW CORE SWING
D13	2040 x 870	HOLLOW CORE SWING

WINDOW SCHEDULE

MARK	SIZE	DESCRIPTION
W1	1800 x 600	ALUM. FRAMED AWNING
W2	1800 x 1200	ALUM. FRAMED AWNING
W3	2100 x 1500	ALUM. FRAMED SLIDING GLASS DOOR
W4	1200 x 1800	ALUM. FRAMED AWNING
W5	1800 x 600	ALUM. FRAMED AWNING
W6	1200 x 1800	ALUM. FRAMED AWNING
W7	1800 x 1200	ALUM. FRAMED AWNING
W8	1800 x 1200	ALUM. FRAMED AWNING
W9	600 x 2100	ALUM. FRAMED AWNING
W10	2100 x 3600	ALUM. FRAMED SLIDING GLASS DOOR
W11	1800 x 600	ALUM. FRAMED AWNING
W12	1800 x 600	ALUM. FRAMED AWNING
W13	600 x 2400	ALUM. FRAMED FIXED GLASS
W14	600 x 1200	ALUM. FRAMED FIXED GLASS
W15	1800 x 2400	ALUM. FRAMED AWNING



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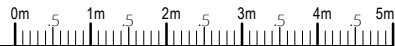
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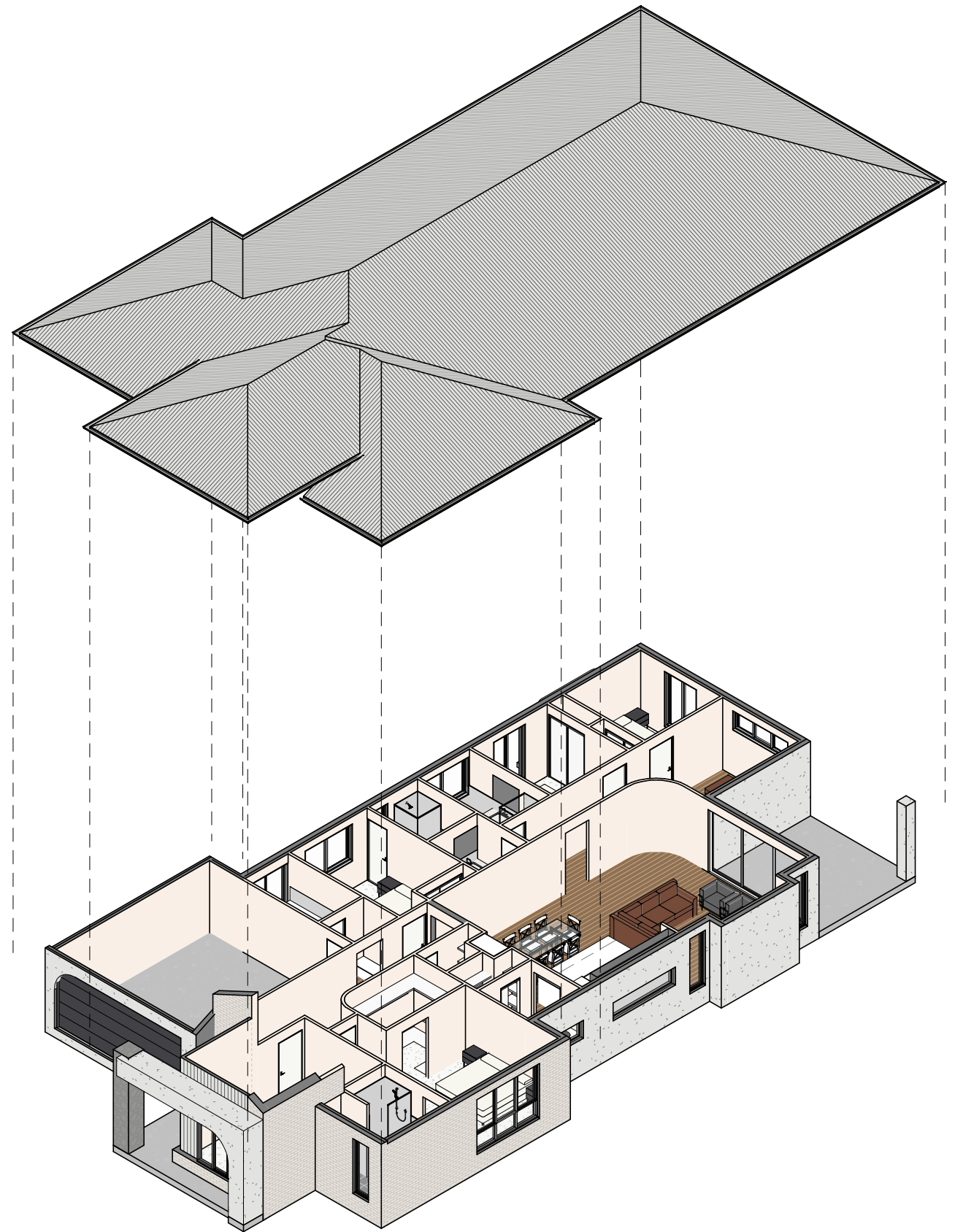
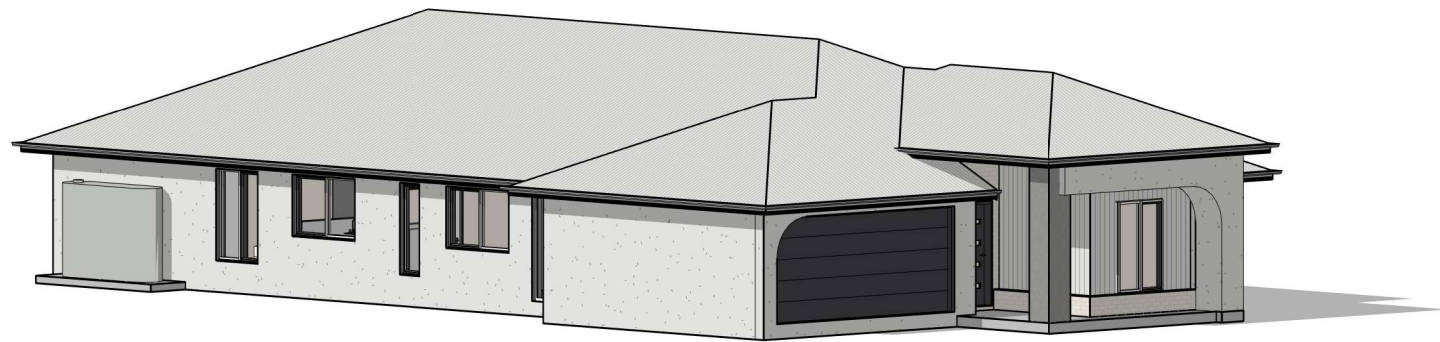
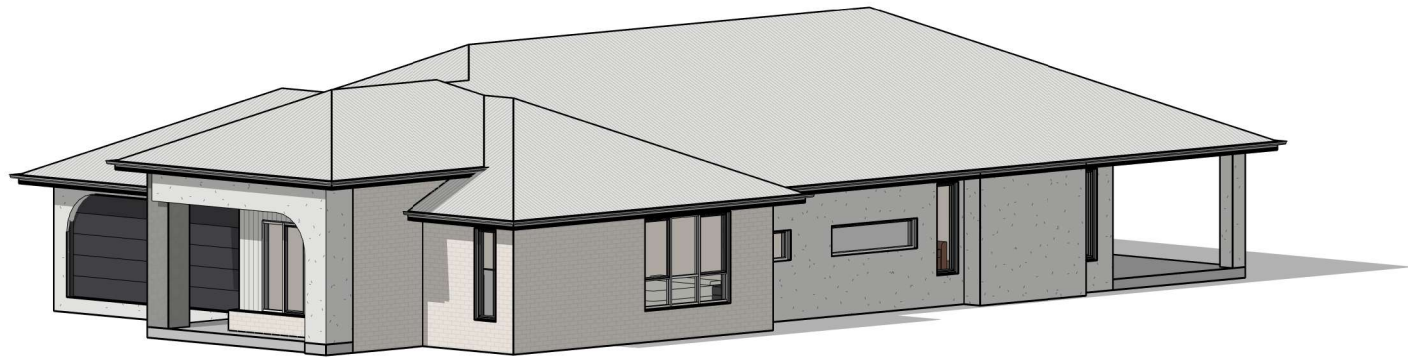
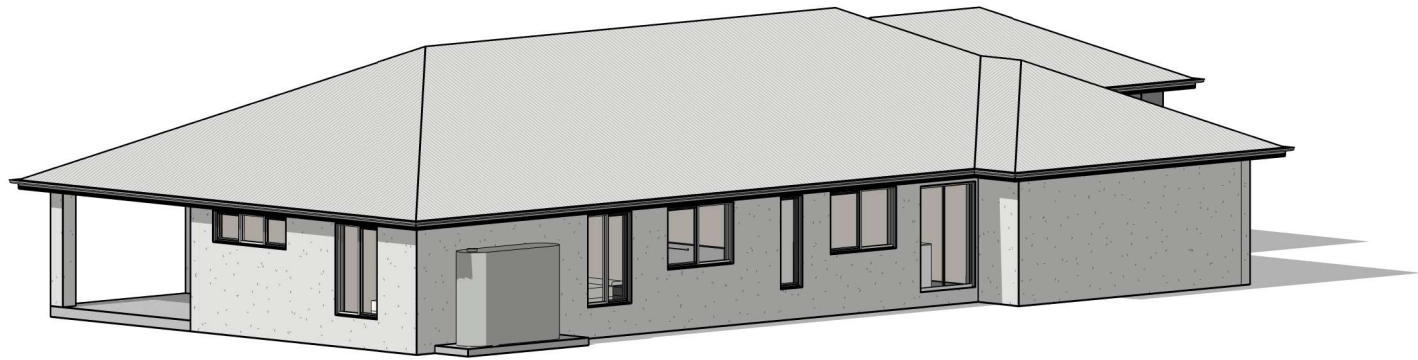
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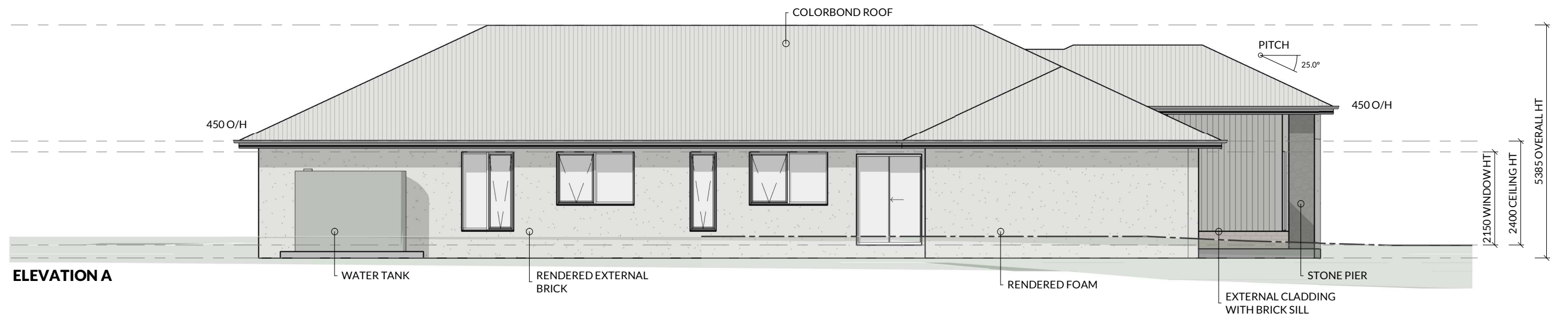
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**3D VIEWS**

PROJECT:  
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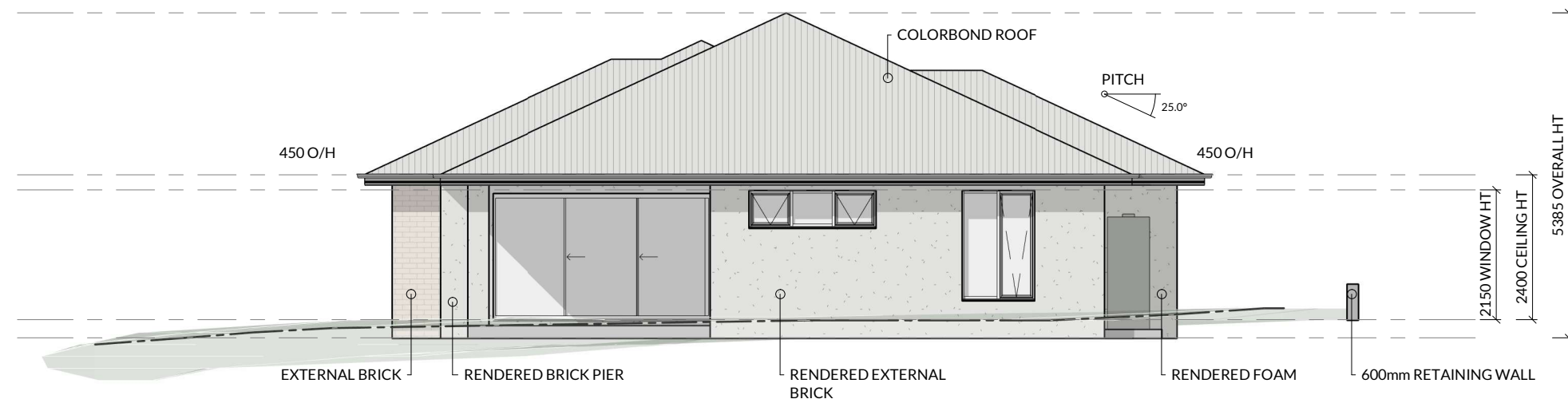
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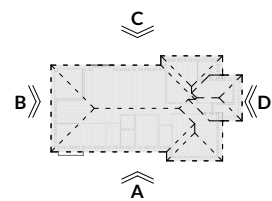
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ELEVATION A

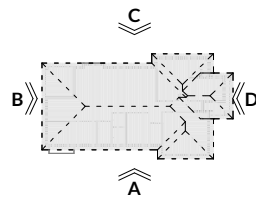
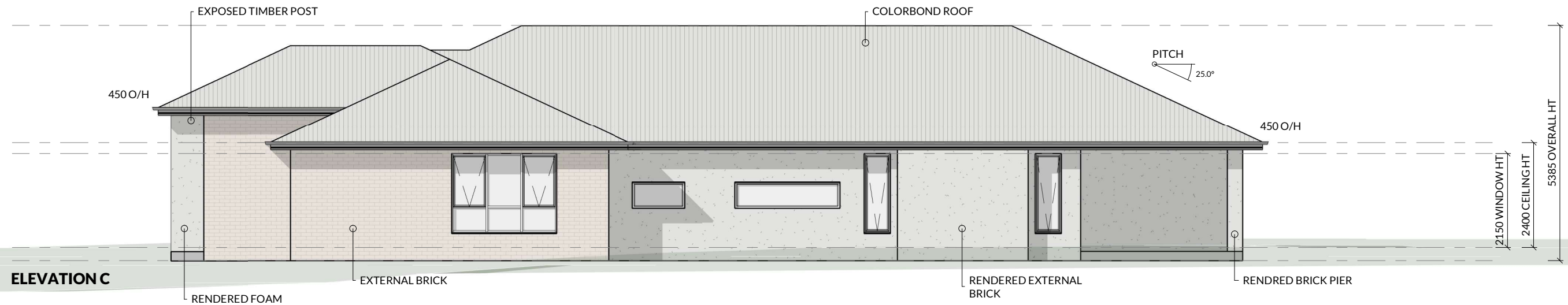


ELEVATION B



REV.	DESCRIPTION	DRAWN	DATE
B	PRELIMINARY ISSUE	CAJ	29/01/25
C	PRELIMINARY ISSUE	CAJ	10/02/25
D	PRELIMINARY ISSUE	CAJ	27/02/25
E	PRELIMINARY ISSUE	SM	19/03/25





REV.	DESCRIPTION	DRAWN	DATE
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E	PRELIMINARY ISSUE	SM	19/03/25

ELECTRICAL & FIXTURES LEGEND

LIGHTING SYMBOL	DESCRIPTION
	DOWN LIGHT RECESSED
	FLUORO SINGLE 1200mm
	FLUORO DOUBLE 1200mm
	DOWN LIGHT RECESSED 200mm
	PENDANT
	OYSTER LED LIGHT
	TRACK LIGHT
	WALL LIGHT
	EXTERIOR SENSOR LIGHT
	FLOOD LIGHT EXTERNAL
	FLOOD LIGHT EXTERNAL (2)
	HEAT LAMP LIGHT
	HEAT EXHAUST LIGHT (3in1)
	EXHAUST LIGHT
	LED STRIP LIGHTING

POWER & COMMS

SYMBOL	DESCRIPTION
	GPO SINGLE
	UBO & R/HOOD CONNECTIONS W/ EXHAUST FAN (EXHAUST MIN. 40L/s)
	GPO DOUBLE
	GPO SINGLE WATERPROOF
	GPO DOUBLE WATERPROOF
	TELEVISION POINT
	PHONE/DATA POINT
	DISTRIBUTION BOX
	METER BOX
	NBN CONNECTION

FIXTURES

SYMBOL	DESCRIPTION
	SMOKE ALARM
	AIR CON HEAD (SPLIT)
	AIR CON UNIT (SPLIT)
	HOT WATER SYSTEM
	FLOOR WASTE
	GAS BOTTLES
	GAS CONNECTION
	HOSE COCK
	EXHAUST CEILING FAN
	EXHAUST WALL FAN
	CEILING FAN
	CEILING FAN W/ LIGHT
	MANHOLE
	DUCTED HEATING UNIT
	ELECTRICAL LINE

	CLOTHES LINE
--	--------------

ELECTRICAL ITEMS SCHEDULE

DESCRIPTION	QTY
DOWN LIGHT RECESSED	56
FLUORO SINGLE 900mm	2
WALL LIGHT	2
HEAT LAMP LIGHT	3
SMOKE ALARM	3
EXHAUST CEILING FAN	2

NOTES:-

**MECHANICAL VENTS**  
ALL MECHANICAL VENTS TO COMPLY WITH NCC 10.8.2. AND DISCHARGE TO OUTDOOR AIR. MIN. FLOW RATE OF 25L/s FOR BATHROOMS & SANITARY COMPARTMENTS, 40L/s FOR KITCHEN AND LAUNDRY.

**ARTIFICIAL LIGHTING**  
ARTIFICIAL LIGHTING WATTAGES TO COMPLY WITH NCC 13.7.6.  
5W/m² FOR MAIN RESIDENCE, 4W/m² FOR VERANDAHS & BALCONIES, 3 W/m² FOR GARAGES/CARPORTS.

SPECIAL SWITCH TYPES

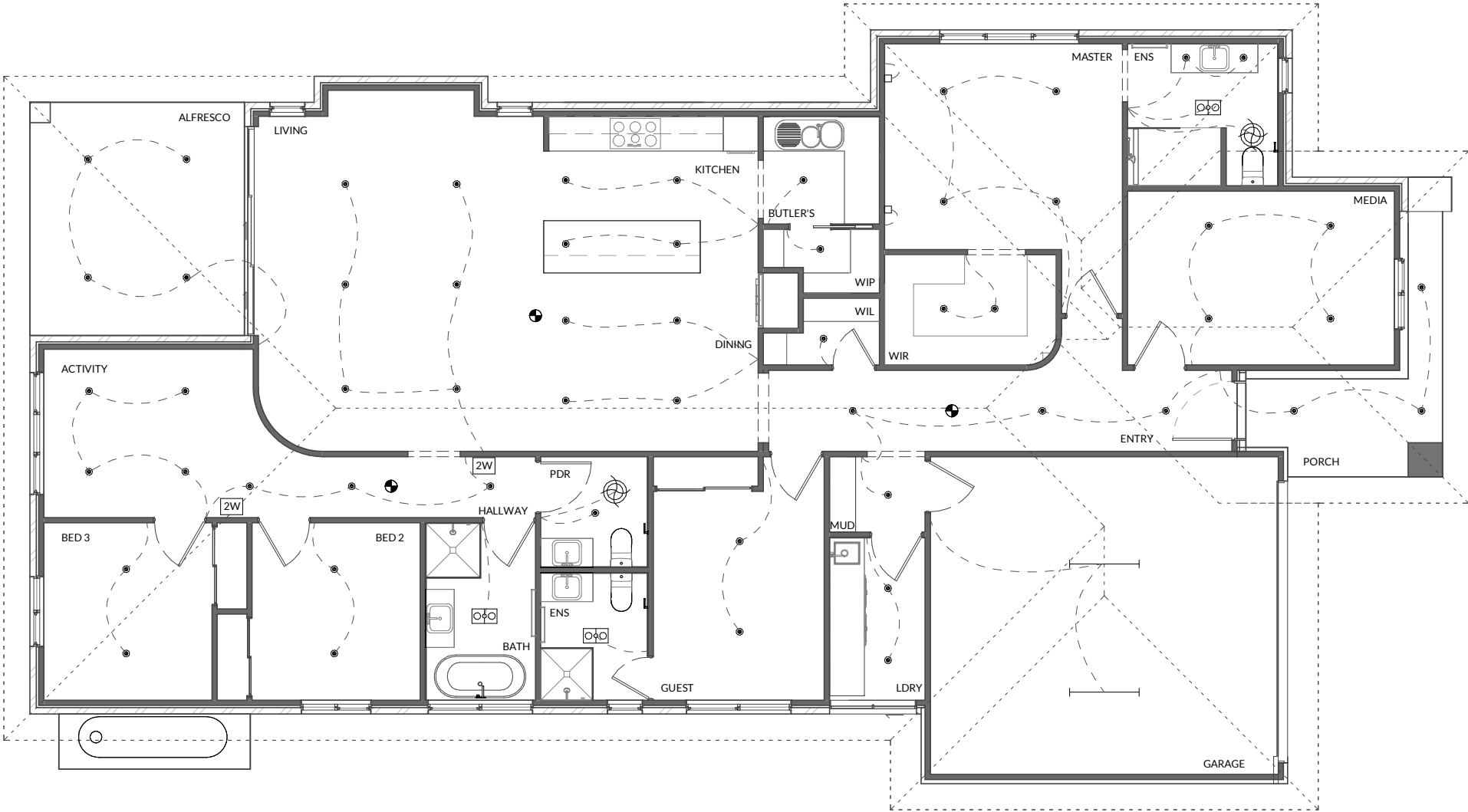
	TWO WAYS SWITCH
	THREE WAYS SWITCH

POWER POINT HEIGHTS AFL

LIGHT SWITCHES	1150mm	AFL
WALL MOUNTED LIGHTS	2000mm	AFL
POWER OUTLETS (STANDARD)	300mm	AFL

POWER OUTLETS OTHER

M/WAVE OVEN POWER	1800mm	AFL
M/WAVE UNDER BENCH	300mm	AFL
KITCHEN BENCH	1000mm	AFL
REFRIGERATOR	1500mm	AFL
RANGEHOOD	1800mm	AFL
D/WASH	300mm	AFL
VANITY BASINS	1000mm	AFL
LAUNDRY BENCH	1000mm	AFL
W/MACHINE	1500mm	AFL



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TAS BSP: 071565667  
ABN: 31 615 195 818

MELLROSS HOMES #:  
4585  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

CLIENT:  
**MELLROSS HOMES**  
  
DRAWING NAME:  
**ELECTRICAL & FIXTURES PLAN**

PROJECT:  
**PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594**

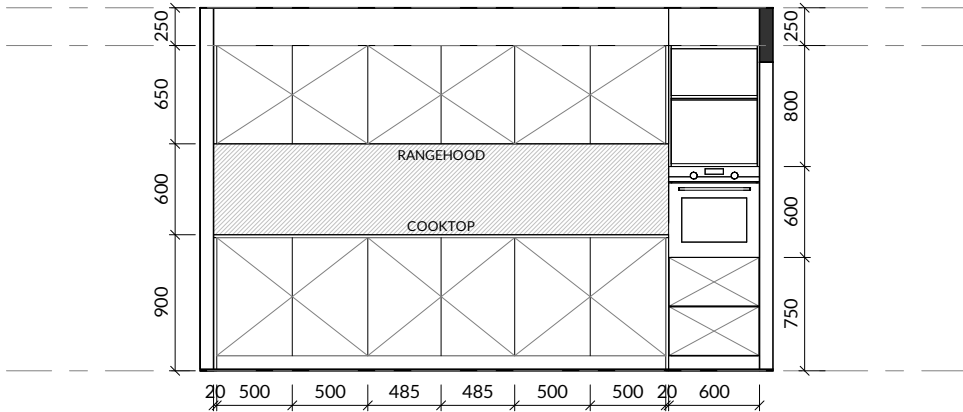
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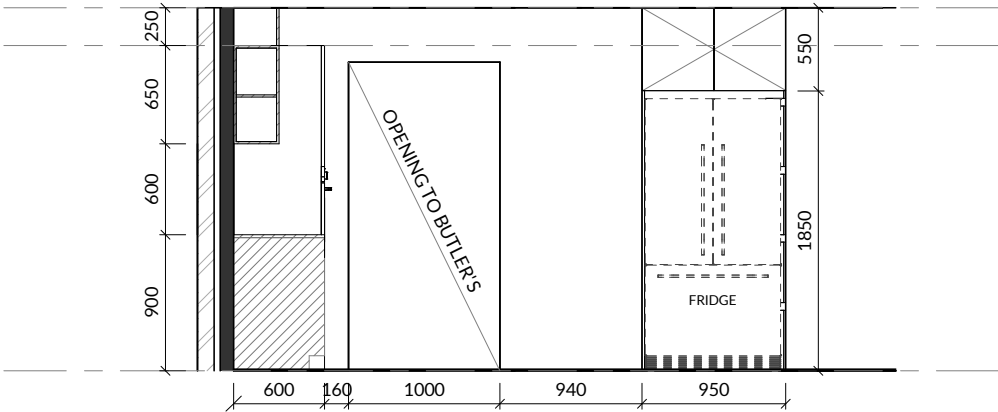
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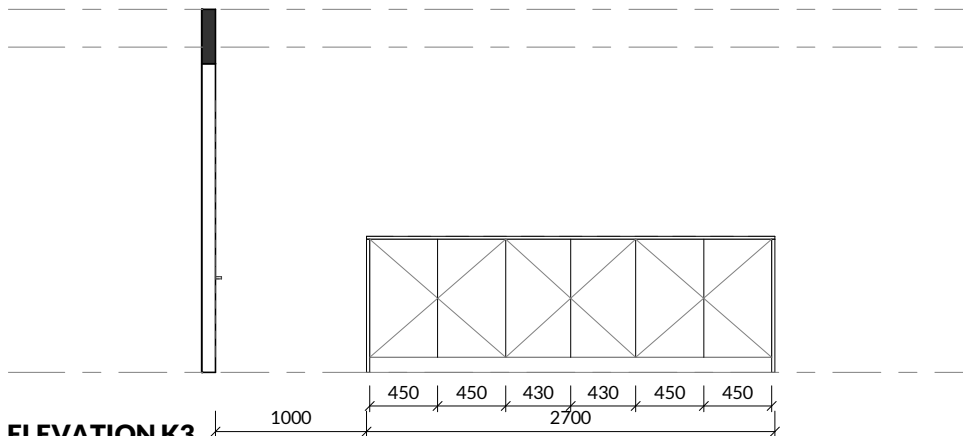
**KITCHEN PLAN**  
1:50



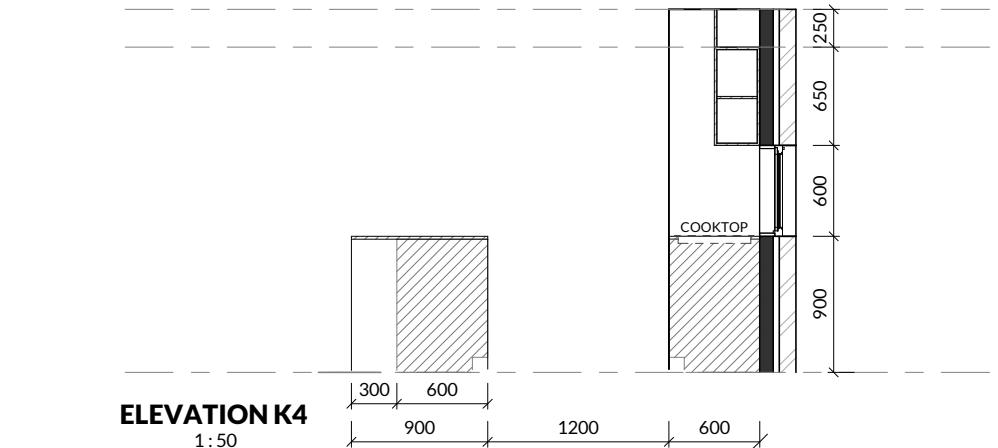
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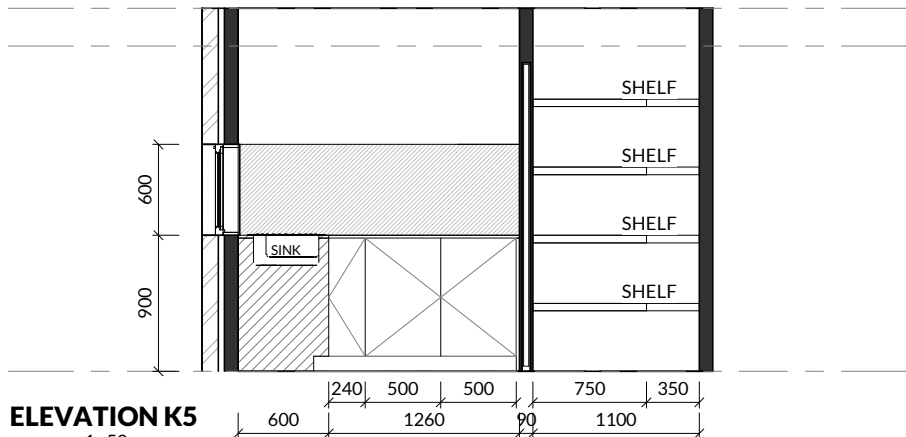
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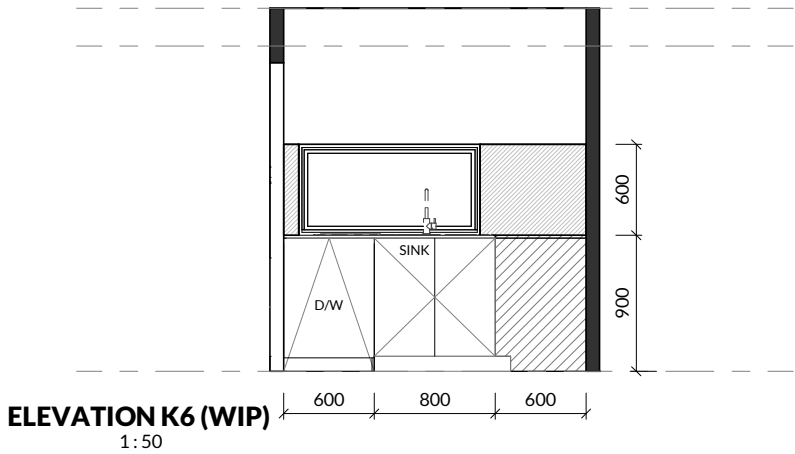
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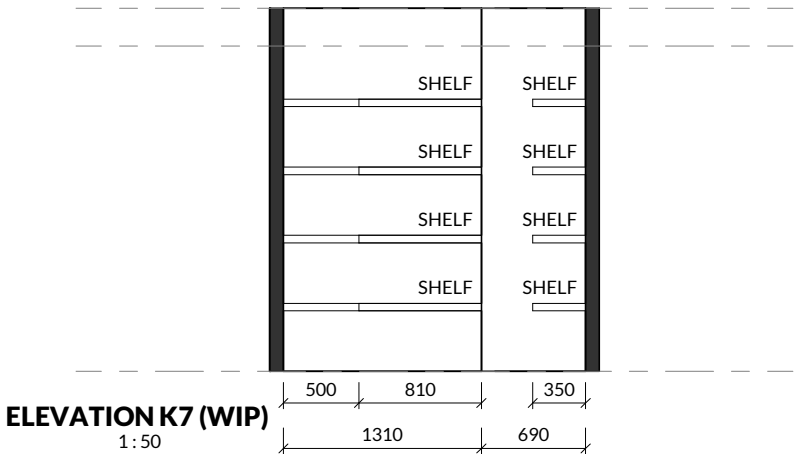
**ELEVATION K4**  
1:50



**ELEVATION K5**  
1:50



**ELEVATION K6 (WIP)**  
1:50



**ELEVATION K7 (WIP)**  
1:50

FINAL LAYOUTS OF ALL JOINERY TO BE  
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PLAN NUMBER:  
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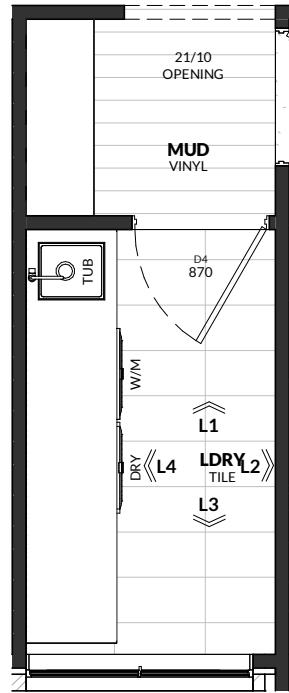
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**MELLROSS HOMES**  
  
DRAWING NAME:  
**KITCHEN CABINETRY**

PROJECT:  
**PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594**

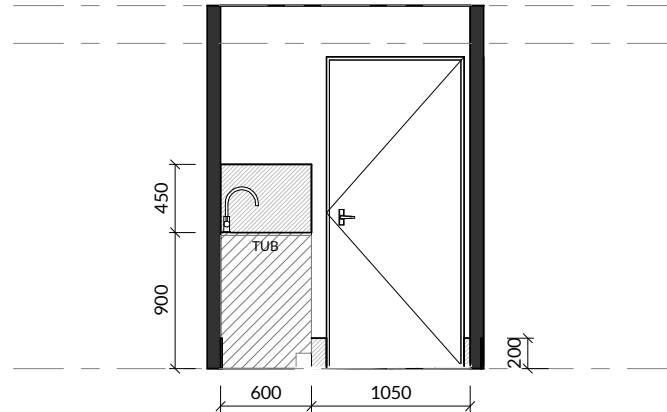
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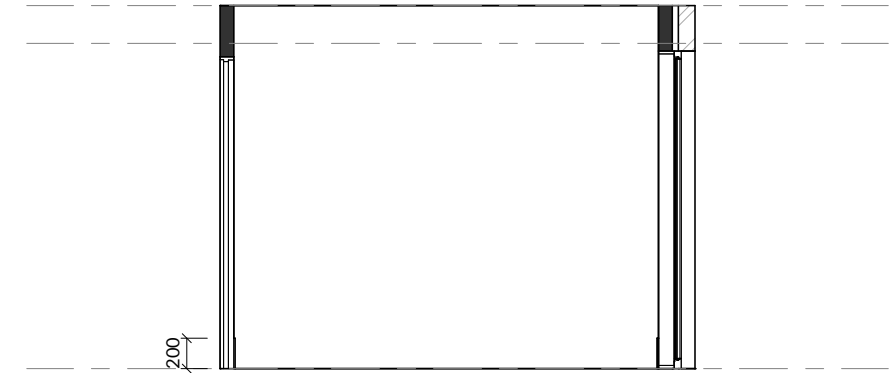
W3  
21/15 SL.G.D  
**LDRY PLAN**  
1:50



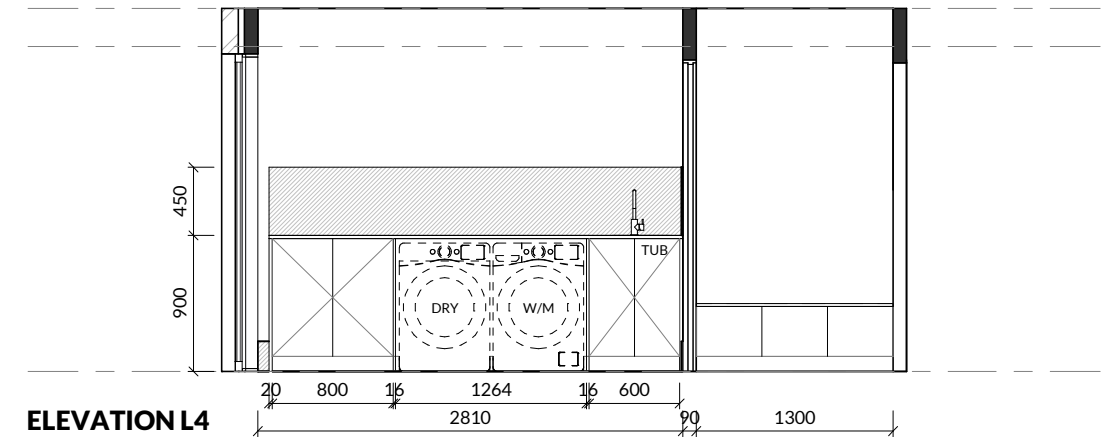
**ELEVATION L1**  
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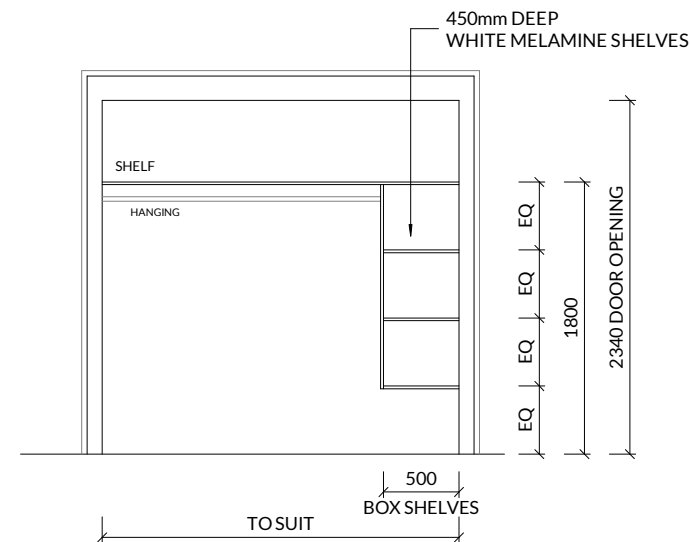
**ELEVATION L3**  
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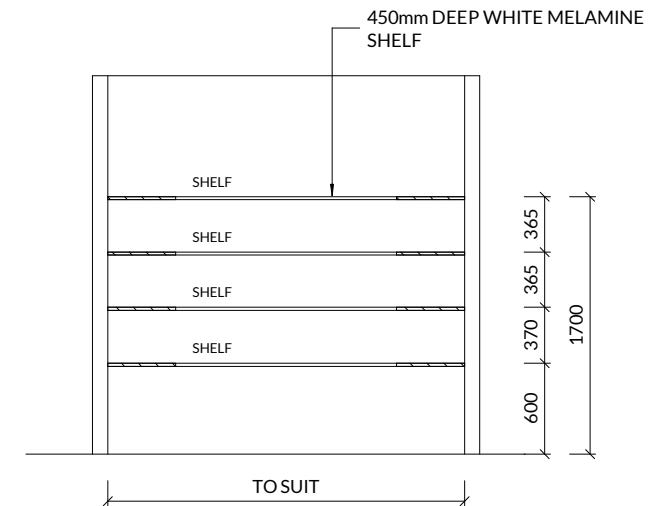
**ELEVATION L2**  
1:50



**ELEVATION L4**  
1:50

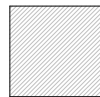


**ROBE SHELVE & HANGING TYPICAL DETAIL**  
1:50

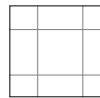


**WIL TYPICAL SHELVE DETAIL**  
1:50

## LEGEND



DENOTES GENERAL  
TILED WALL AREAS



DENOTES FEATURE TILED  
AREA, WALL TILES TO  
MATCH FLOOR TILES

**NOTE:** TILE & CABINETRY LAYOUTS ARE  
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ABN: 31 615 195 818

MELLROSS HOMES #:  
**4585**  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

CLIENT:  
**MELLROSS HOMES**  
DRAWING NAME:  
**LAUNDRY & ROBES**

PROJECT:  
**PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594**

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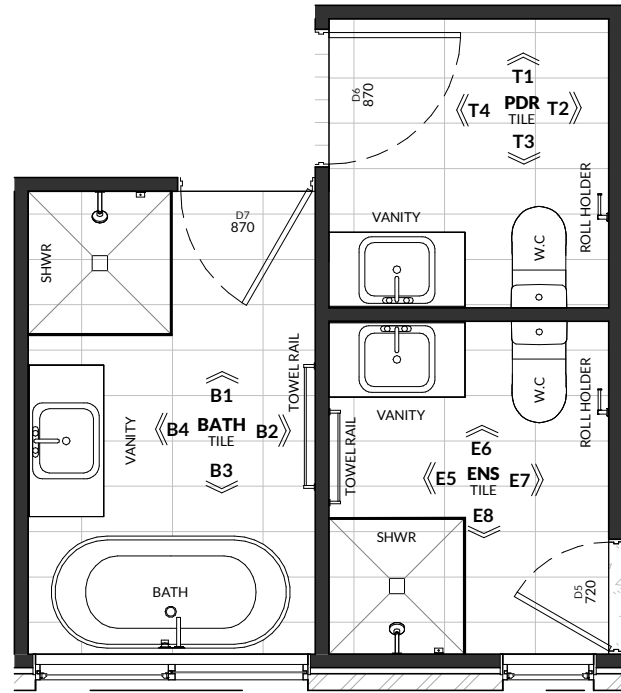
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FINAL LAYOUTS OF ALL JOINERY TO BE  
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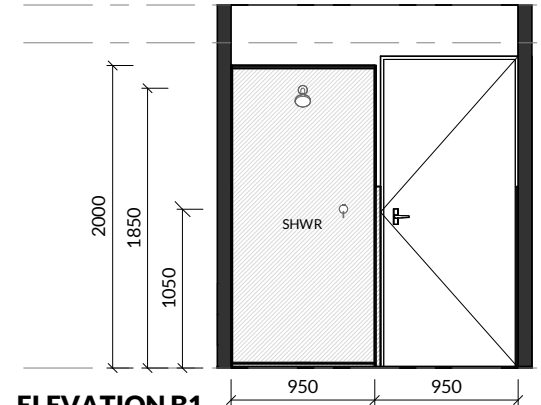
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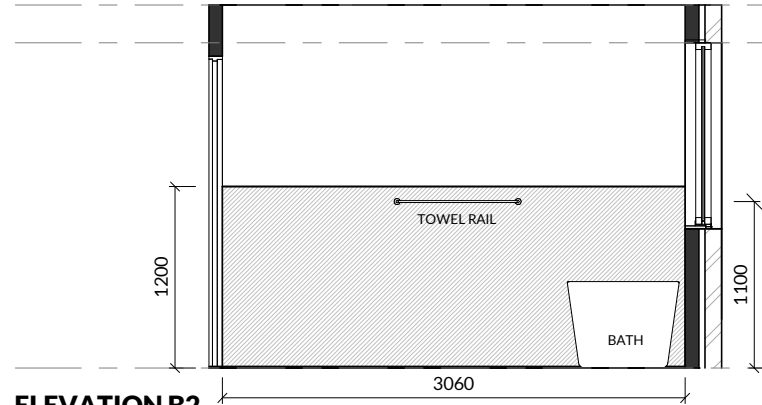




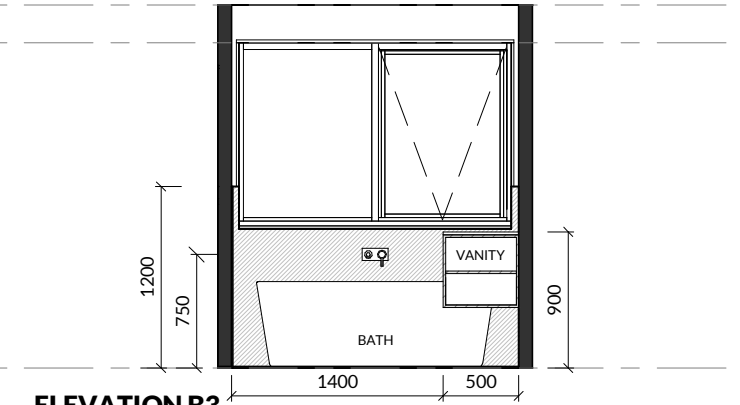
**BATHROOM PLAN**  
1:50



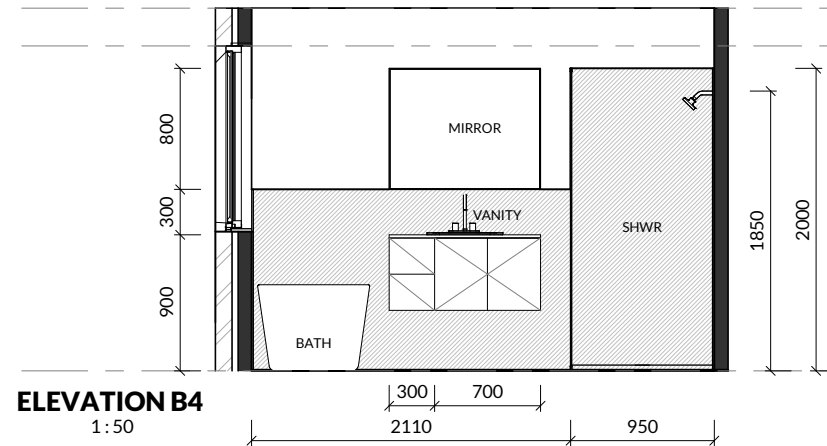
**ELEVATION B1**  
1:50



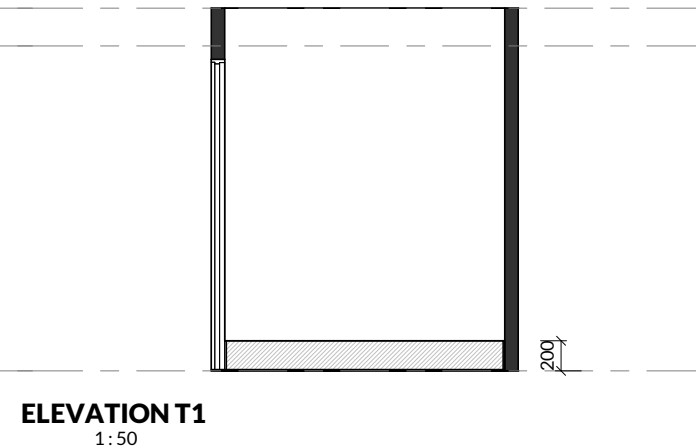
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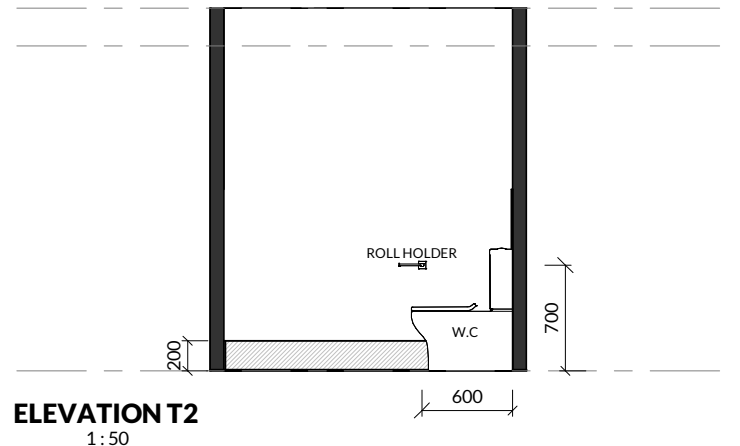
**ELEVATION B3**  
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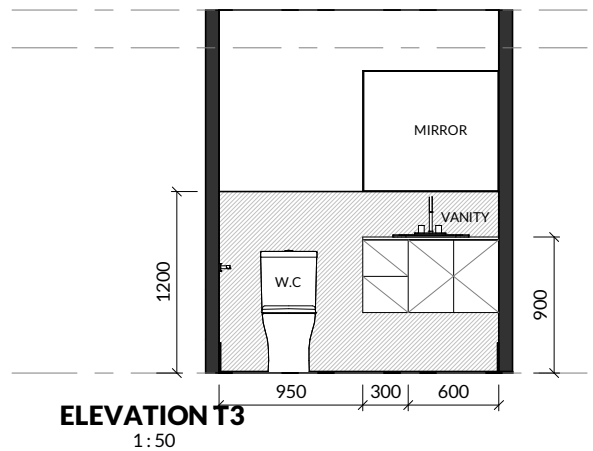
**ELEVATION B4**  
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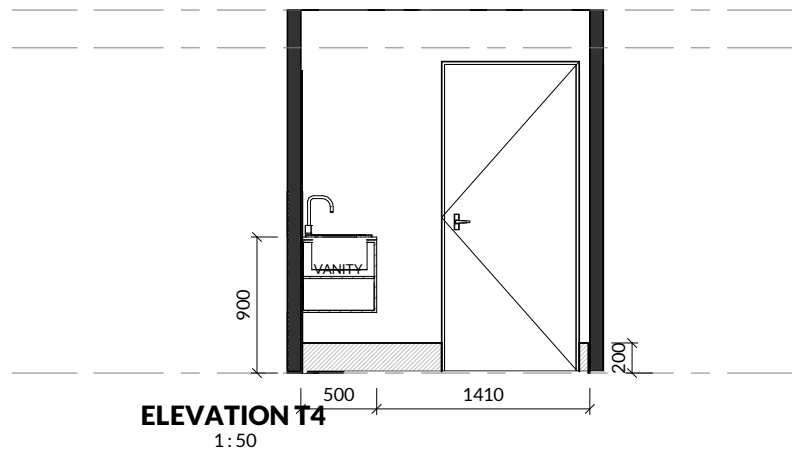
**ELEVATION T1**  
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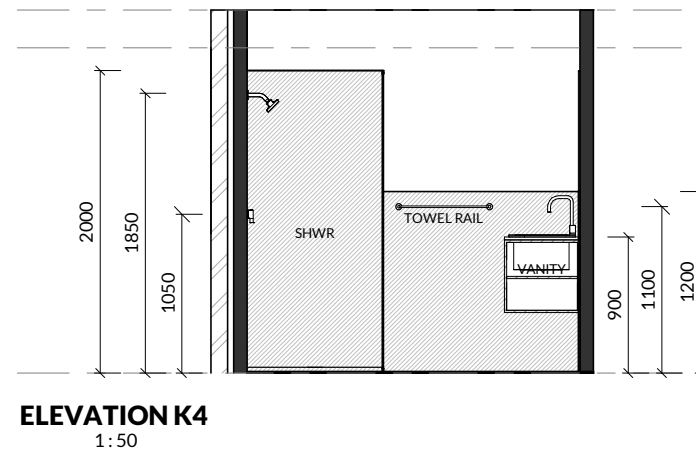
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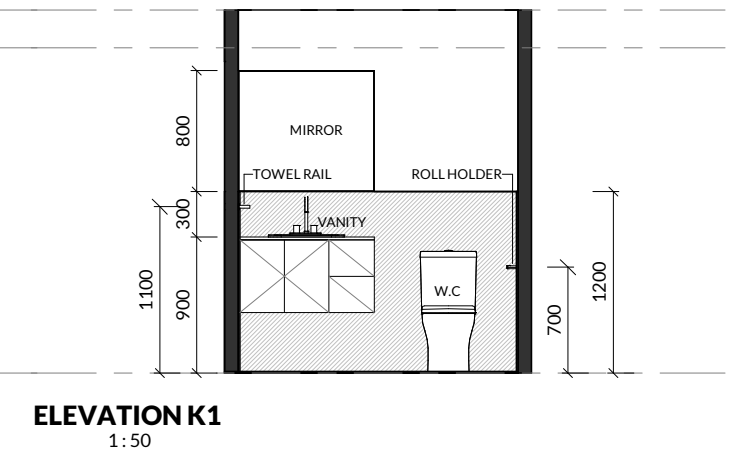
**ELEVATION T3**  
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**ELEVATION T4**  
1:50



**ELEVATION K4**  
1:50

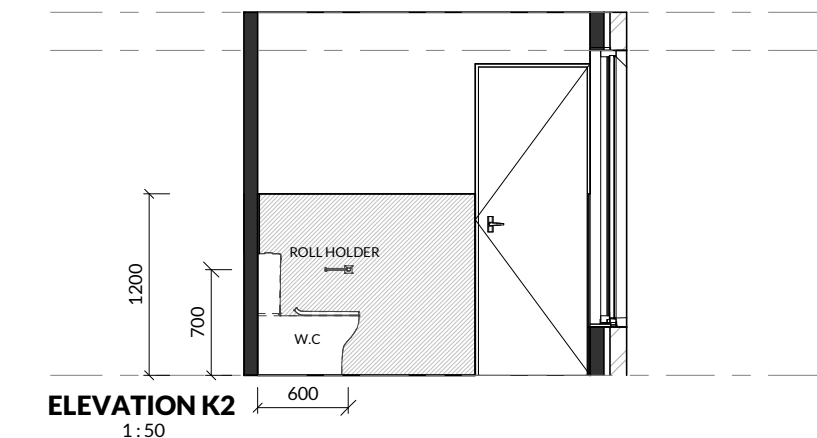


**ELEVATION K1**  
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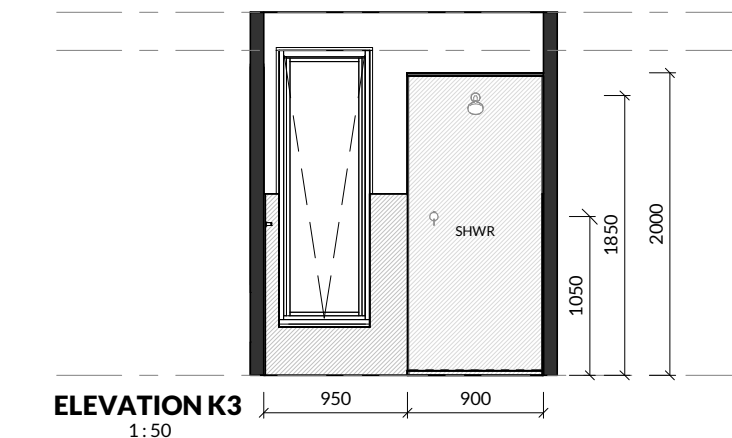
**LEGEND**

- DENOTES GENERAL TILED WALL AREAS
- DENOTES FEATURE TILED AREA, WALL TILES TO MATCH FLOOR TILES

**NOTE:** TILE & CABINETRY LAYOUTS ARE APPROXIMATE ONLY AND MAY ALTER TO SUIT.



**ELEVATION K2**  
1:50



**ELEVATION K3**  
1:50

FINAL LAYOUTS OF ALL JOINERY TO BE CONFIRMED BY CABINETMAKER.



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ABN: 31 615 195 818

MELLROSS HOMES #:  
4585  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

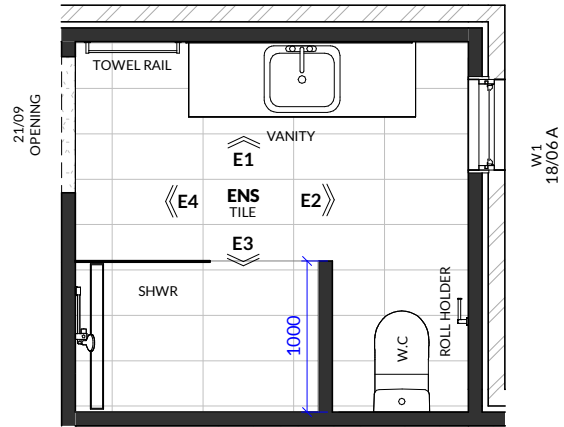
CLIENT:  
**MELLROSS HOMES**  
DRAWING NAME:  
**BATHROOM CABINETRY**

PROJECT:  
**PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594**

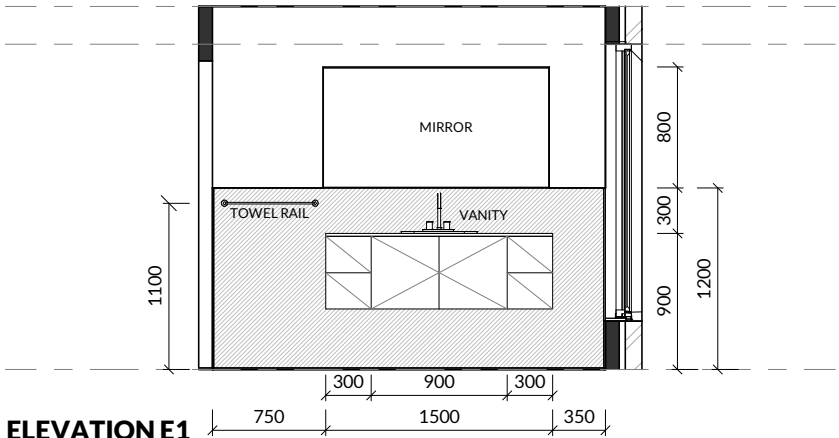
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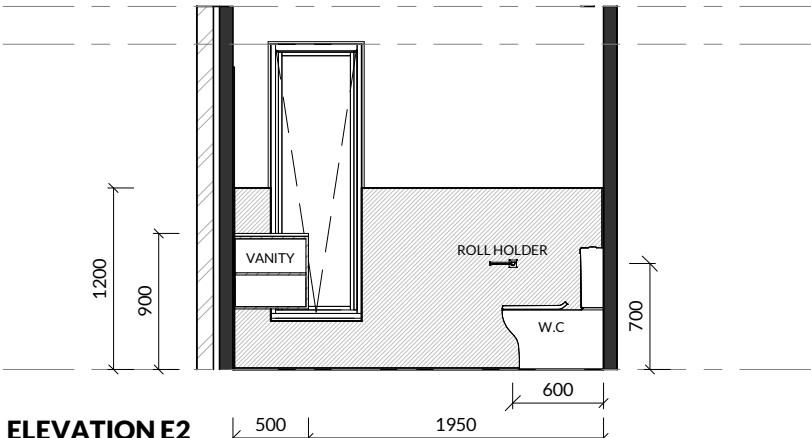
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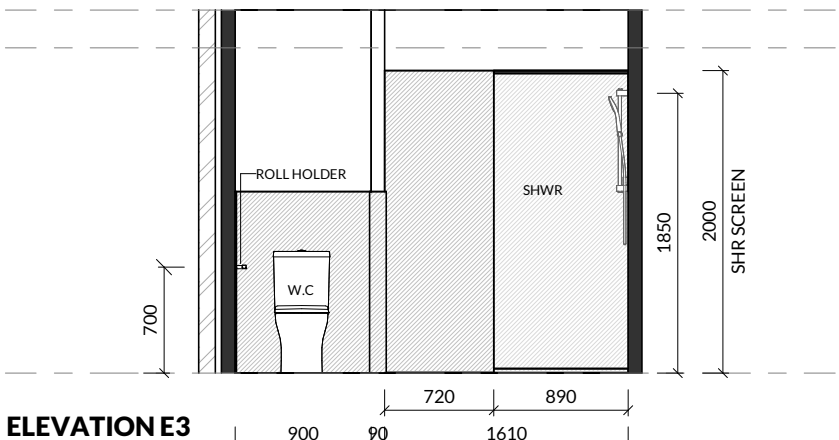
ENSUITE PLAN  
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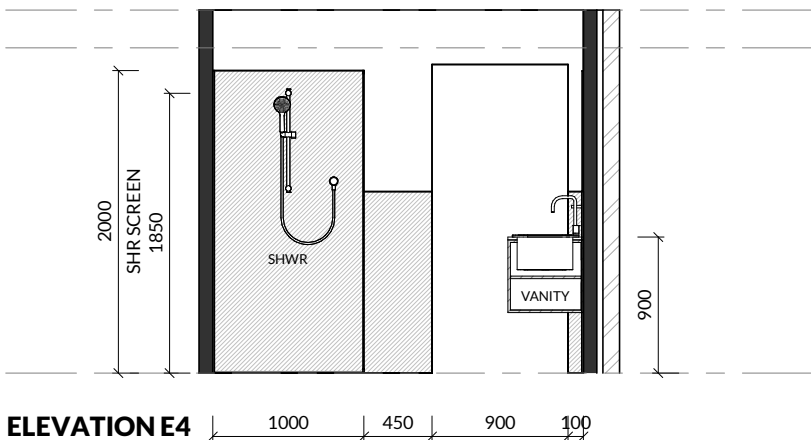
ELEVATION E1  
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ELEVATION E2  
1:50



ELEVATION E3  
1:50



ELEVATION E4  
1:50

LEGEND

- DENOTES GENERAL  
TILED WALL AREAS
- DENOTES FEATURE TILED  
AREA, WALL TILES TO  
MATCH FLOOR TILES

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MELLROSS HOMES #: 4585  
PLAN NUMBER: #2382/25  
AREI PLAN CODE: CAPITAL COLLECTION 5

CLIENT: MELLROSS HOMES  
DRAWING NAME: ENSUITE CABINETRY

PROJECT: PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594

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# BASIX™ Certificate

Building Sustainability Index

[www.planningportal.nsw.gov.au/development-and-assessment/basix](http://www.planningportal.nsw.gov.au/development-and-assessment/basix)

## Single Dwelling

Certificate number: 1794041S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at [www.planningportal.nsw.gov.au/definitions](http://www.planningportal.nsw.gov.au/definitions)

Secretary

Date of issue: Monday, 05 May 2025

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 1W6B7VEZ3R.

### Project summary

Project name	13 Armstrong Place
Street address	13 ARMSTRONG Place YOUNG 2594
Local Government Area	Hilltops Council
Plan type and plan number	Deposited Plan DP1310813
Lot no.	6
Section no.	-
Project type	dwelling house (detached)
No. of bedrooms	4

### Project score

Water	✓ 40	Target 40
Thermal Performance	✓ Pass	Target Pass
Energy	✓ 86	Target 61
Materials	✓ -39	Target n/a

### Certificate Prepared by

Name / Company Name: OLIVER WOODWARD

ABN (if applicable):



# Description of project

## Project address

Project name	13 Armstrong Place
Street address	13 ARMSTRONG Place YOUNG 2594
Local Government Area	Hilltops Council
Plan type and plan number	Deposited Plan DP1310813
Lot no.	6
Section no.	-

## Project type

Project type	dwelling house (detached)
No. of bedrooms	4

## Site details

Site area (m <sup>2</sup> )	1000
Roof area (m <sup>2</sup> )	300
Conditioned floor area (m <sup>2</sup> )	170.2
Unconditioned floor area (m <sup>2</sup> )	10.4
Total area of garden and lawn (m <sup>2</sup> )	500
Roof area of the existing dwelling (m <sup>2</sup> )	0

## Assessor details and thermal loads

NatHERS assessor number	61771
NatHERS certificate number	1W6B7VEZ3R
Climate zone	65
Area adjusted cooling load (MJ/ m <sup>2</sup> .year)	8
Area adjusted heating load (MJ/ m <sup>2</sup> .year)	148

## Project score

Water	✔ 40	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 86	Target 61
Materials	✔ -39	Target n/a

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Landscape</b>			
The applicant must plant indigenous or low water use species of vegetation throughout 250 square metres of the site.	✓	✓	
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 5000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 300 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> <li>the cold water tap that supplies each clothes washer in the development</li> <li>at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> </ul>		✓ ✓	✓ ✓

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Simulation Method</b>			
Assessor details and thermal loads			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate and the "Construction" and "Glazing" tables below.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.	✓	✓	✓
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.	✓	✓	✓

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Construction			
The applicant must construct the floors, walls, roofs, ceilings and glazing of the dwelling in accordance with the specifications listed in the tables below.	✓	✓	✓
The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below.			✓

Construction	Area - m <sup>2</sup>	Insulation
floor - concrete slab on ground, waffle pod slab.	180.6	none
garage floor - concrete slab on ground, waffle pod slab.	32.9	none
external wall: brick veneer; frame: timber - untreated softwood.	124	fibreglass batts or roll
external wall: framed (fibre cement sheet or boards); frame: timber - untreated softwood.	19	fibreglass batts or roll
external garage wall: external insulated façade system (EIFS); frame: timber - untreated softwood.	32.5	none
internal wall: plasterboard; frame: timber - untreated softwood.	186	none
ceiling and roof - flat ceiling / pitched roof, framed - metal roof, timber - untreated softwood.	300	ceiling: fibreglass batts or roll; roof: foil/sarking.

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Glazing			
The applicant must install windows, glazed doors and skylights as described in the table below, in accordance with the specifications listed in the table.	✓	✓	✓

Frames	Maximum area - m2
aluminium	33.82
timber	0
uPVC	0
steel	0
composite	0

Glazing	Maximum area - m2
single	0
double	33.82
triple	0

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 6 stars.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER 3.5 - 4.0		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER 3.5 - 4.0		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development: At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		✓	✓
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Alternative energy</b>			
The applicant must install a photovoltaic system as part of the development. The applicant must connect this system to the development's electrical system.	✓	✓	✓
The photovoltaic system must consist of: <ul style="list-style-type: none"> <li>• photovoltaic collectors with the capacity to generate at least 3 peak kilowatts of electricity, installed at an angle between 10 degrees and 25 degrees to the horizontal facing north</li> </ul>	✓	✓	✓
<b>Other</b>			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	



## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a  in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a  in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

# Nationwide House Energy Rating Scheme®

## NatHERS® Certificate No. 1W6B7VEZ3R

Generated on 5 May 2025 using FirstRate5: 5.5.5a (3.22)

### Property

**Address** 13 Armstrong Place,  
Young, NSW, 2594  
**Lot/DP** 6/TBA  
**NCC Class\*** Class 1a  
**Floor/all Floors**  
**Type** New Home

### Plans

**Main plan** #2382/25\_  
**Prepared by** Arei Designs

### Construction and environment

<b>Assessed floor area [m²]*</b>	<b>Exposure type</b>
Conditioned* 170.2	suburban
Unconditioned* 43.3	<b>NatHERS climate zone</b>
Total 213.5	65 Orange AP
Garage 32.9	



### Accredited assessor

**Name** Oliver Woodward  
**Business name** Oliver Woodward  
**Email** odwoodward@gmail.com  
**Phone** 0417364919  
**Accreditation No.** 61771  
**Assessor Accrediting Organisation**  
ABSA  
**Declaration of interest** No

### NCC Requirements

**NCC provisions** Volume 2  
**State/Territory variation** No

#### National Construction Code (NCC) requirements

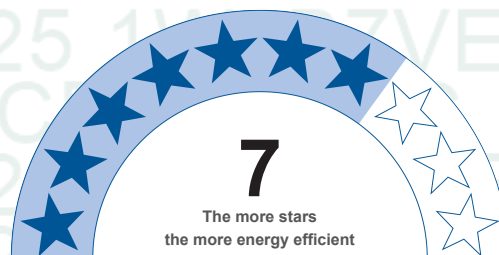
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at [www.abcb.gov.au](http://www.abcb.gov.au).

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

### Thermal performance star rating



**NATIONWIDE  
HOUSE**  
ENERGY RATING SCHEME®

**155.5 MJ/m²**

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

For more information on your dwelling's rating see:  
[www.nathers.gov.au](http://www.nathers.gov.au)

### Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022

	Heating	Cooling
<b>Modelled</b>	147.9	7.6
<b>Load limits</b>	N/A	N/A
<b>Features determining load limits</b>		
Floor type (lowest conditioned area)		N/A
NCC climate zone 1 or 2		N/A
Outdoor living area		N/A
Outdoor living area ceiling fan		N/A

### Whole of Home performance rating

No Whole of Home performance rating generated for this certificate

### Verification

To verify this certificate, scan the QR code or visit <https://www.fr5.com.au/QRCodeLanding?PublicId=1W6B7VEZ3R>. When using either link, ensure you are visiting [www.fr5.com.au](http://www.fr5.com.au).





## About the ratings

### Thermal performance rating

NatHERS thermal software models the expected heating and cooling energy loads using information about the design, construction, climate and common patterns of household use. The thermal performance rating (shown as a star rating on this Certificate) does not take into account appliances, apart from the airflow impacts from ceiling fans.

### Whole of Home performance rating

NatHERS Whole of Home software uses the heating and cooling energy loads combined with the energy performance of the home's appliances (heating, cooling, hot water, lighting, pool/spa pump and onsite renewable energy generation and storage) and models the expected energy value\* of the whole home. The Whole of Home performance rating is shown as a score out of 100 on this Certificate.

## Heating & Cooling Load Limits

### Additional information

In some locations under the NCC NatHERS pathway, separate heating and cooling load limits may apply. Minimum required star ratings in northern parts of Australia may also be affected by the presence or absence of an outdoor living area and/or an outdoor living area ceiling fan. Refer to the ABCB NatHERS heating and cooling load limits Standard 2022 for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

### Setting options:

Floor type:

CSOG – Concrete Slab on Ground

SF – Suspended Floor (or a mixture of CSOG and SF)

NA – Not Applicable

NCC climate Zone 1 or 2:

Yes

No

NA – not applicable

Outdoor living area:

Yes

No

NA – not applicable

Outdoor living area ceiling fan:

Yes

No

NA – not applicable

## Predicted Whole of Home annual impact by appliance

Shows the contribution each appliance has on the home's annual energy use, greenhouse gas emissions and cost without solar

### Energy use:

No Whole of Home performance assessment conducted for this certificate.

### Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

### Cost:

No Whole of Home performance assessment conducted for this certificate.

### Graph key:



## Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.



## Certificate check

The checklist covers important items impacting the dwelling's ratings.  
It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item.  
It is not mandatory to complete this checklist.

	Approval stage		Construction stage		
	Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other
<b>Genuine certificate check</b>					
Does this Certificate match the one available at the web address or QR code verification link on the front page?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the NatHERS certificate number on the NatHERS-stamped plans match the number on this Certificate?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Thermal performance check</b>					
<b>Windows and glazed doors</b>					
Does the window size, opening type and location shown on the NatHERS-stamped plans or as installed match what is shown in 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' tables on this Certificate?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>External walls</b>					
Does the external wall bulk insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the External wall type table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the external wall shade (colour) match what is shown in the 'External wall type' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Floor</b>					
Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Floor type' table on this certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Ceiling penetrations*</b>					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Ceiling</b>					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Roof</b>					
Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the 'Roof type' table on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Apartment entrance doors (NCC Class 2 assessments only)</b>					
Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<b>Exposure*</b>					
Has the appropriate exposure type (terrain) (shown on page 1) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<b>Heating and cooling load limits*</b>					
Do the load limits settings (shown on page 1) match the values in the ABCB Standard 2022: NatHERS heating and cooling load limits for the appropriate climate zone?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





## Certificate check

Continued

	Approval stage		Construction stage		Occupancy/other
	Assessor checked	Consent authority/surveyor checked	Builder checked	Consent authority/surveyor checked	

### Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

#### Thermal bridging

Does the dwelling meet the NCC requirement for thermal bridging?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#### Insulation installation method

Has the insulation been installed according to the NCC requirements?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#### Building sealing

Does the dwelling meet the NCC requirements for Building Sealing?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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### Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

#### Appliances

Does the cooling appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the Appliance schedule on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the heating appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or installed, match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the pool pump efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the onsite renewable energy system type, orientation and system size or generation capacity shown on the NatHERS stamped plans or installed match the 'Onsite Renewable Energy schedule' on this Certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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### Additional NCC Requirements for Services (not included in the NatHERS assessment)

Does the lighting meet the artificial lighting requirements specified in the NCC?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the hot water system meet the additional requirements specified in the NCC?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#### Provisional values\* check

Have provisional values* been used in the assessment and, if so, are they noted in 'Additional notes' table below?	<input type="checkbox"/>	<input type="checkbox"/>			
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#### Other NCC requirements

Note: This Certificate only covers the energy efficiency requirements in the NCC. Additional requirements that must also be satisfied include, but are not limited to: condensation, structural and fire safety requirements and any state or territory variations to the NCC energy efficiency requirements.

#### Additional notes

WALL INSULATION: R2.5 BATTS &amp; VAPOUR PERMEABLE WRAP

CEILING INSULATION: R6.0 BATTS

WINDOWS: DOUBLE GLAZED ALUMINIUM

DOWNLIGHTS: MIN IC RATED - INSULATION ABUTTED AND COVERED



Room *schedule*

Room	Zone Type	Area [m²]
Bedroom 1	bedroom	15.7
Bedroom 2	bedroom	9.8
Bedroom 3	bedroom	9.8
Media	living	13.8
Guest	bedroom	12.4
WIR	nightTime	5.6
Ldry	unconditioned	4.6
Guest Ens	nightTime	4.1
Pdr	dayTime	3.5
Bath	unconditioned	5.8
Ens	nightTime	6.4
Activity	living	16.1
Butlers	dayTime	3.7
WIP	dayTime	1.9
WIL	dayTime	1.9
Entry	dayTime	14.5
Kitchen/Living	kitchen	51.1
Garage	garage	32.9

Window and glazed door *type and performance*

Default\* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom\* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
GJA-001-61 A	Type 048 Series Awning Window DG 5-10-5	4.04	0.55	0.52	0.58
GJA-071-15 A	Type 245 Aluminium Sliding Door DG 6/8/4	4.07	0.61	0.58	0.64
GJA-031-53 A	Type 451 Aluminium Fixed Window DG 4-12-4	3.82	0.64	0.61	0.67

Window and glazed door *schedule*



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Bedroom 1	GJA-001-61 A	Opening 15	1800	2400	awning	45.0	E	No
Bedroom 2	GJA-001-61 A	Opening 7	1800	1200	awning	45.0	W	No
Bedroom 3	GJA-001-61 A	Opening 8	1800	1200	awning	45.0	N	No
Media	GJA-001-61 A	Opening 2	1800	1200	awning	45.0	S	No
Guest	GJA-001-61 A	Opening 4	1200	1800	awning	45.0	W	No
Ldry	GJA-071-15 A	Opening 3	2150	1500	sliding	45.0	W	No
Guest Ens	GJA-001-61 A	Opening 5	1800	600	awning	90.0	W	No
Bath	GJA-001-61 A	Opening 6	1200	1800	awning	45.0	W	No
Ens	GJA-001-61 A	Opening 1	1800	600	awning	90.0	S	No
Activity	GJA-001-61 A	Opening 9	600	2100	awning	45.0	N	No
Butlers	GJA-031-53 A	Opening 14	600	1200	fixed	0.0	E	No
Kitchen/Living	GJA-071-15 A	Opening 10	2150	3600	sliding	60.0	N	No
Kitchen/Living	GJA-001-61 A	Opening 12	1800	600	awning	90.0	E	No
Kitchen/Living	GJA-031-53 A	Opening 13	600	2400	fixed	0.0	E	No
Kitchen/Living	GJA-001-61 A	Opening 11	1800	600	awning	90.0	E	No

Roof window\* type and performance value

Default\* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom\* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window\* schedule

Location	Window ID	Window no.	Opening %	Area [m²]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orient-ation	Outdoor shade	Diffuser
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No Data  
Available

## External door *schedule*

Location	Height [mm]	Width [mm]	Opening %	Orientation
Entry	2100	1020	100.0	S
Garage	2100	4800	100.0	S

## External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
1	C - Brick Veneer	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
2	C - Cladding	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
3	C - Foam Clad Insulated	0.5	Medium		No

## External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature* (yes/no)
Bedroom 1	1	2400	1249	N	450	Yes
Bedroom 1	1	2400	4098	E	442	No
Bedroom 2	1	2400	3497	W	450	Yes
Bedroom 3	1	2400	3061	N	450	No
Bedroom 3	1	2400	2900	W	450	Yes
Media	2	2400	3002	S	1165	No
Media	2	2400	1998	E	553	Yes
Media	2	2400	2798	W	2249	Yes
Guest	1	2400	2931	W	450	Yes
Ldry	1	2400	1651	W	450	Yes
Guest Ens	1	2400	1850	W	450	Yes
Bath	1	2400	1901	W	450	Yes
Ens	1	2400	2443	S	450	Yes
Ens	1	2400	2603	E	450	No
Activity	1	2400	3611	E	4472	Yes
Activity	1	2400	2900	N	450	No
Butlers	1	2400	1998	E	450	Yes
Entry	1	2400	1397	S	3842	Yes
Kitchen/Living	1	2400	4022	N	4206	Yes
Kitchen/Living	1	2400	4902	E	450	Yes
Kitchen/Living	1	2400	449	S	6000	Yes



Kitchen/Living	1	2400	2519	E	0	Yes
Kitchen/Living	1	2400	449	N	5352	Yes
Kitchen/Living	1	2400	1202	E	450	Yes
Garage	3	2400	1279	N	513	Yes
Garage	3	2400	6003	W	481	Yes
Garage	3	2400	5479	S	542	Yes
Garage	3	2400	800	E	0	Yes

### Internal wall type

Wall ID	Wall type	Area [m²]	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	186.1	
2	FR5 - Internal Plasterboard Stud Wall	22.5	Glass fibre batt: R2.5 (R2.5)

### Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bedroom 1	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	15.7	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	9.8	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	9.8	Enclosed	R0.0	Carpet
Media	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	13.8	Enclosed	R0.0	Carpet
Guest	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	12.4	Enclosed	R0.0	Carpet
WIR	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	5.6	Enclosed	R0.0	Carpet
Ldry	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	4.6	Enclosed	R0.0	Tiles
Guest Ens	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	4.1	Enclosed	R0.0	Tiles
Pdr	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	3.5	Enclosed	R0.0	Tiles
Bath	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	5.8	Enclosed	R0.0	Tiles
Ens	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	6.4	Enclosed	R0.0	Tiles
Activity	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	16.1	Enclosed	R0.0	Vinyl
Butlers	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	3.7	Enclosed	R0.0	Vinyl
WIP	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	1.9	Enclosed	R0.0	Vinyl



WIL	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	1.9	Enclosed	R0.0	Vinyl
Entry	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	14.5	Enclosed	R0.0	Vinyl
Kitchen/Living	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	51.1	Enclosed	R0.0	Vinyl
Garage	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	32.9	Enclosed	R0.0	none

## Ceiling type

Location	Construction material/type	Bulk insulation R-value [may include edge batt values]	Reflective wrap*
Bedroom 1	Plasterboard	R6.0	No
Bedroom 2	Plasterboard	R6.0	No
Bedroom 3	Plasterboard	R6.0	No
Media	Plasterboard	R6.0	No
Guest	Plasterboard	R6.0	No
WIR	Plasterboard	R6.0	No
Ldry	Plasterboard	R6.0	No
Guest Ens	Plasterboard	R6.0	No
Pdr	Plasterboard	R6.0	No
Bath	Plasterboard	R6.0	No
Ens	Plasterboard	R6.0	No
Activity	Plasterboard	R6.0	No
Butlers	Plasterboard	R6.0	No
WIP	Plasterboard	R6.0	No
WIL	Plasterboard	R6.0	No
Entry	Plasterboard	R6.0	No
Kitchen/Living	Plasterboard	R6.0	No
Garage	Plasterboard	R0.0	No

## Ceiling penetrations\*

Location	Quantity	Type	Height [mm]	Width [mm]	Sealed/unsealed
Bedroom 1	4	Downlights	0	0	Sealed
Bedroom 2	2	Downlights	0	0	Sealed
Bedroom 3	2	Downlights	0	0	Sealed
Media	4	Downlights	0	0	Sealed
Guest	2	Downlights	0	0	Sealed
WIR	2	Downlights	0	0	Sealed
Ldry	2	Downlights	0	0	Sealed
Guest Ens	1	Exhaust Fans	250	250	Sealed



Pdr	1	Downlights	0	0	Sealed
Pdr	1	Exhaust Fans	250	250	Sealed
Bath	1	Exhaust Fans	250	250	Sealed
Ens	2	Downlights	0	0	Sealed
Ens	1	Exhaust Fans	250	250	Sealed
Activity	7	Downlights	0	0	Sealed
Butlers	1	Downlights	0	0	Sealed
WIP	1	Downlights	0	0	Sealed
WIL	1	Downlights	0	0	Sealed
Entry	4	Downlights	0	0	Sealed
Kitchen/Living	14	Downlights	0	0	Sealed
Kitchen/Living	1	Exhaust Fans	150	150	Sealed

## Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

## Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Cont:Attic-Continuous	0.0	0.28	Light

## Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]	Steel thickness [BMT,mm]	Thermal break [R-value]
No Data Available				

## Appliance *schedule*

(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

Note: A flat assumption of 5W/m2 is used for lighting, therefore lighting is not included in the appliance schedule.

### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

### Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.				

### Hot water system



Appliance/ system type	Fuel type	Minimum efficiency/ performance	Hot Water CER Zone	Zone 3 STC	Assessed daily load
No Whole of Home performance assessment conducted for this certificate.					

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Whole of Home performance assessment conducted for this certificate.			

Onsite renewable energy *schedule*  
(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

System type	Orientation	System size or generation capacity
No Whole of Home performance assessment conducted for this certificate.		

Battery *schedule*  
(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

System type	Size [battery storage capacity]
No Whole of Home performance assessment conducted for this certificate.	



## Explanatory Notes

### About this report

NatHERS ratings are a reliable guide for comparing different dwelling designs and to demonstrate that designs meet the energy efficiency requirements in the National Construction Code.

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the heating and cooling energy loads and energy value\* of the whole home. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy generation and storage to estimate the homes energy value\*.

The actual energy loads, cost and greenhouse gas emissions of a home may vary from that predicted. This is because the assumptions will not always match the actual occupant usage patterns. For example, the number of occupants and how people use their appliances will vary. Energy efficient homes use less energy, are warmer on cool days, cooler on hot days and cost less to run.

### Accredited assessors

For quality assured NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and are not quality assured.

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

### Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in the certificate is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy load, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor using the NatHERS accredited software tool are presented in this report and further details or data files may be obtained from the assessor.

## Glossary

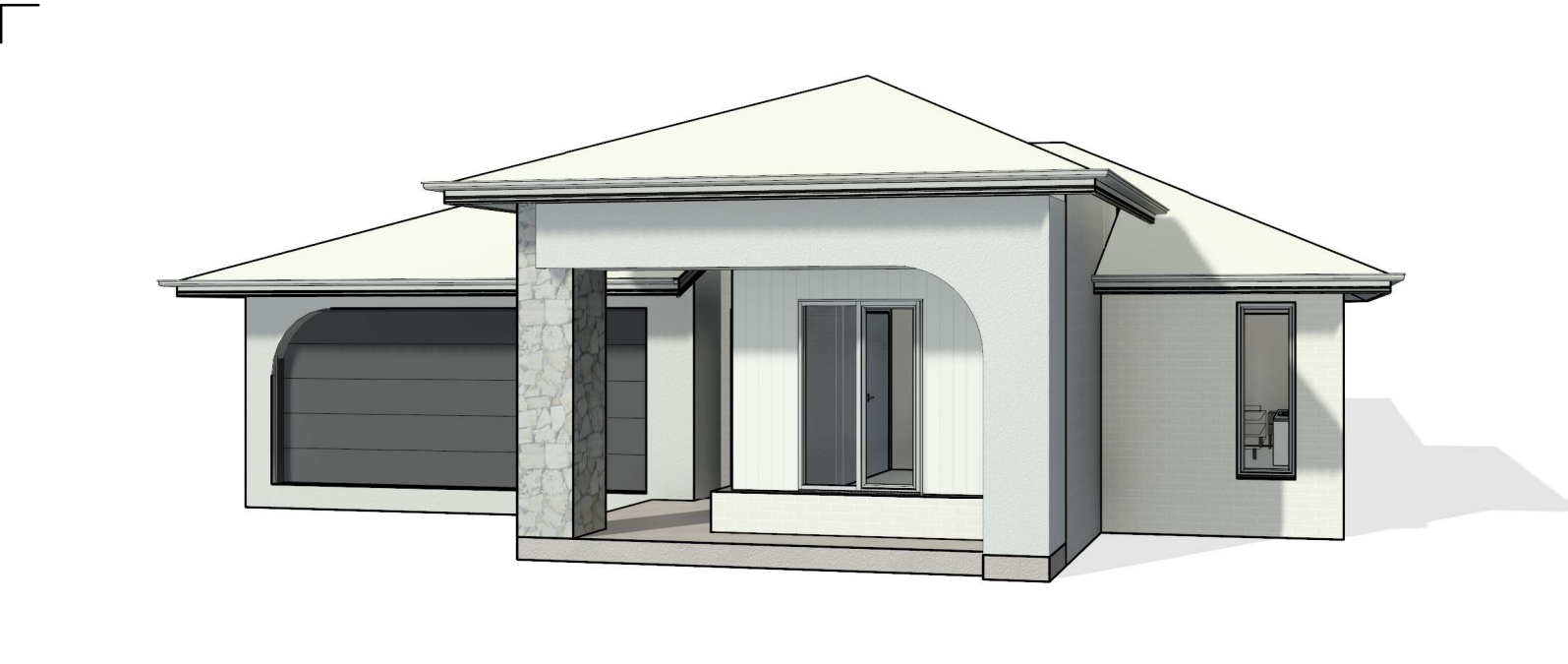
<b>Annual energy load</b>	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
<b>AFRC</b>	Australian Fenestration Rating Council
<b>Assessed floor area</b>	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
<b>Ceiling penetrations</b>	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
<b>Conditioned</b>	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
<b>COP</b>	Coefficient of performance
<b>Custom windows</b>	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
<b>Default windows</b>	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
<b>EER</b>	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
<b>Energy use</b>	This is your homes rating without solar or batteries.
<b>Energy value</b>	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
<b>Entrance door</b>	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
<b>Exposure category – exposed</b>	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
<b>Exposure category – open</b>	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
<b>Exposure category – suburban</b>	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
<b>Exposure category – protected</b>	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
<b>Horizontal shading feature</b>	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
<b>National Construction Code (NCC) Class</b>	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at <a href="http://www.abcb.gov.au">www.abcb.gov.au</a> .
<b>Net zero home</b>	a home that achieves a net zero energy value*.
<b>Opening percentage</b>	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
<b>Provisional value</b>	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at <a href="http://www.nathers.gov.au">www.nathers.gov.au</a>
<b>Recommended capacity</b>	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
<b>Reflective wrap (also known as foil)</b>	can be applied to walls, roofs and ceilings. When combined with an appropriate air gap and emissivity value, it provides insulative properties.
<b>Roof window</b>	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
<b>Shading features</b>	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
<b>Solar heat gain coefficient (SHGC)</b>	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
<b>Skylight (also known as roof lights)</b>	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.

\*Refer to glossary.



<b>STCs</b>	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
<b>Thermal breaks</b>	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
<b>U-value</b>	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
<b>Unconditioned</b>	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
<b>Vertical shading features</b>	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
<b>Window shading device</b>	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)





# PRELIMINARY ISSUE

## REVISION E

PROPOSED RESIDENCE FOR

MAT & JACQUI

AT

LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594



PAGE LIST	
PAGE NO	PAGE TITLE
01	COVER
02	SITE PLAN
03	FLOOR PLAN
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05	ELEVATIONS A & B
06	ELEVATIONS C & D
07	ELECTRICAL & FIXTURES PLAN
08	KITCHEN CABINETRY
09	LAUNDRY & ROBES
10	BATHROOM CABINETRY
11	ENSUITE CABINETRY

### GENERAL NOTES:

- ALL DESIGN, CONSTRUCTION METHODS AND MATERIALS TO BE IN ACCORDANCE WITH:
  - THE CURRENT NATIONAL CONSTRUCTION CODES (NCC)
  - THE STATE DEVELOPMENT CODE
  - BUILDING REGULATIONS
  - CURRENT ISSUES OF AUSTRALIAN STANDARDS & MANUFACTURERS SPECIFICATIONS & INSTALLATION DETAILS FOR MATERIALS USED
- THESE PLANS ARE TO BE READ IN CONJUNCTION WITH CONTRACT DOCUMENTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS. RESPONSIBLE PARTIES ARE TO BE NOTIFIED OF ANY DISCREPANCIES.
- SUBSTITUTION OF ANY STRUCTURAL MEMBERS & OR VARIATIONS TO ANY PART OF THE DESIGN WILL VOID ANY RESPONSIBILITIES OF THE BUILDING DESIGNER FOR THE STRUCTURAL INTEGRITY & PERFORMANCE OF THE BUILDING.
- 3D VIEWS, PERSPECTIVES AND ILLUSTRATIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.
- ALL DIMENSIONS IN MILLIMETERS.
- DIMENSIONS TAKE PREFERENCE TO SCALE AND ARE TO STRUCTURE NOT FINISH ON NEW WORK. EXISTING WALLS MAY BE NOMINALLY DIMENSIONED.
- ALL DIMENSIONS, DETAILS, SITE LEVELS AND FINISHED FLOOR LEVELS TO BE CONFIRMED BY CONTRACTOR BEFORE COMMENCEMENT OF ANY CONSTRUCTION AND RESPONSIBLE PEOPLE NOTIFIED OF ANY DISCREPANCIES.
- MANUFACTURER'S SPECIFICATION MEANS A CURRENT APPROVED SPECIFICATION FOR USE UNDER THE CONDITIONS APPLICABLE THESE DRAWINGS ARE AVAILABLE DIGITALLY, IF REQUIRED.
- ANY DATA SUPPLIED BY OTHERS AND SHOWN ON THESE DRAWINGS ARE NOT THE RESPONSIBILITY OF THIS DESIGNER. ALL USERS OF THESE DRAWINGS ARE ADVISED TO CHECK OTHER SUPPLIED DATA.
- OWNER REMAINS RESPONSIBLE FOR ONGOING MAINTENANCE OF BUILDING. STRUCTURAL ELEMENTS IN PARTICULAR ARE TO REMAIN PROTECTED BY THE METHODS SHOWN AND LISTED IN THESE DRAWINGS.
- ALL WINDOW AND DOOR DIMENSIONS ARE NOMINAL.

### SITE WORKS NOTES:

- POSITION OF DWELLING TO BE CONFIRMED BY SURVEYOR & CLIENT PRIOR TO ANY SITE WORKS.
- ALL STORMWATER, DOWN PIPES, RAIN WATER TANKS & SITE DRAINAGE TO BE SIZED & LOCATED BY THE HYDRAULIC CONSULTANT/ PLUMBER IN ACCORDANCE WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 3.3** AND STATE LEGISLATION/ LOCAL PLANNING SCHEME HOUSE CODE AND AS 3500 ALL PARTS.
- BUILDER TO ENSURE THAT ACTUAL SEWER LINE AND MANHOLE POSITIONS MATCH THOSE AS SHOWN AS BASED ON LOCAL AUTHORITY DOCUMENTS. ANY DISCREPANCIES MUST BE BROUGHT TO ATTENTION AND RESOLVED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- BUILDER TO DETERMINE APPROPRIATE PLATFORMING METHOD ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS. FINISHED FLOOR LEVEL IS TO BE ABOVE THE MINIMUM LEVEL AS PER LOCAL AUTHORITIES REQUIREMENTS & TO COMPLY WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 3.3.3**
- FALL OF LAND UNKNOWN AND IS TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF CONSTRUCTION. ANY REQUIRED EARTHWORKS INCLUDING CUT, FILL, BATTERS AND RETAINING MUST COMPLY WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 4.2.2**, AS 3798, AS4200 & **AS 4678**.
- THE FINISHED SURFACE IMMEDIATELY SURROUNDING THE DWELLING, 1000mm WIDE, IS TO FALL AWAY FROM THE DWELLING AT A SLOPE OF 1 IN 20 MINIMUM.
- STORMWATER MUST BE CONNECTED TO A LEGAL POINT OF DISCHARGE -
  - STORMWATER KERB ADAPTERS TO STREET (2 MAX.)
  - ROOFWATER/STORMWATER PIPE
  - BUBBLERS TO COUNCIL SPECIFICATION.
  - RAINWATER TANK, OVERFLOW MUST CONNECT TO STORMWATER SYSTEM.
- SURFACE DRAINAGE IS TO DISCHARGE EVENLY WITHIN THE SITE AND WITHOUT NUISANCE TO ADJOINING PROPERTIES.
- ALL SUB-FLOOR AREAS MUST BE GRADED TO AVOID THE PONDING OF WATER.
- THE HEIGHT OF FENCES, INCLUDING THE HEIGHT OF RETAINING WALLS ARE NOT TO EXCEED 2.0m ABOVE FINISHED GROUND LEVEL **UNLESS** INDICATED ON THE PLANS AND TO LOCAL AUTHORITY APPROVAL.
- WHERE SERVICES / PIPEWORK ARE LOCATED UNDER DRIVEWAYS AND SLABS CONTRACTORS ARE TO ENSURE ADEQUATE COMPACTION TO TRENCH BACKFILL IS ACHIEVED TO SUPPORT CONCRETE.

### PATH/DRIVEWAY NOTES:

- DRIVEWAY SLOPE NOT TO EXCEED 1:4. CHECK WITH LOCAL AUTHORITY REQUIREMENTS PRIOR TO CONSTRUCTING ANY DRIVEWAYS, PATHWAYS OR CROSSEOVERS BETWEEN THE PROPERTY BOUNDARY AND ROAD KERB.
- PROVIDE A LAYER OF SAND A MINIMUM OF 20mm THICK UNDER THE SLAB, COMPACTED AND LEVELED.
- SLAB THICKNESS, MESH TO ENGINEERS DESIGN.

### 3D VIEW NOTES:

- GROUND LINE OR SLOPE OF SITE IS NOT REPRESENTED ON 3D VIEWS.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- 3D VIEWS, PERSPECTIVES AND ILLUSTRATIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.

### ELECTRICAL NOTES:

- SMOKE ALARMS TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 9.5** SMOKE ALARMS MUST COMPLY WITH AS 3786.
  - ONLY USE PHOTOELECTRIC TYPE SMOKE ALARMS
  - ALL SMOKE ALARMS TO BE INTERCONNECTED
  - INSTALL LOCATIONS:
    - ON EACH LEVEL OF LIVING SPACE
    - OUTSIDE EACH BEDROOM AREA
    - IN EVERY BEDROOM (**QLD**)
- THIS PLAN IS INDICATIVE ONLY AND IS TO BE USED ONLY AS AN EXAMPLE. OWNERS TO NOMINATE FINAL POSITIONS OF ELECTRICAL APPLIANCES, LIGHTING AND ELECTRICAL FITTINGS.

### ELEVATION NOTES:

- WALL FINISHES AND WINDOW TYPES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE. REFER TO BUILDERS SPECIFICATIONS FOR DETAILS.
- GROUND LINE SHOWN ON ELEVATIONS DOES NOT RELATE TO ACTUAL SLOPE OF SITE.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- ELEVATIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.

### SECTION NOTES:

- TRUSS DESIGN IS INDICATIVE ONLY AND IS NOT PRESCRIPTIVE. FINAL DESIGN TO TRUSS MANUFACTURER SPECIFICATIONS.
- ALL PINE TO BE JD4 MIN.
- ALL HWD. TO BE F14 MIN.
- GROUND LINE SHOWN DOES NOT RELATE TO ACTUAL SLOPE OF SITE.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- SECTIONS ARE INTENDED TO BE A VISUAL AID ONLY, THEY ARE NOT PRESCRIPTIVE BUT INDICATIVE ONLY. THE IMAGES ARE NOT TO BE RELIED UPON IN ANY WAY FOR FINAL CONSTRUCTION FINISHES AND RESULTS.

### FOUNDATION NOTES:

- THESE PLANS ARE TO BE READ IN CONJUNCTION WITH CONTRACT DOCUMENTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS. RESPONSIBLE PARTIES ARE TO BE NOTIFIED OF ANY DISCREPANCIES. SITE CLASSIFICATION IS TO BE CONFIRMED BY INSPECTION OF FOOTING EXCAVATIONS.
- PLUMBER RESPONSIBLE TO LOCATE AND CONFIRM SEWER HOUSE CONNECTION LOCATION ACCURATELY PRIOR TO COMMENCEMENT. PLUMBER IS TO VERIFY WITH SITE SUPERVISOR PRIOR TO SETTING OUT FIXTURE DRAINAGE POINTS. NO AMENDMENTS OR SPECIAL FIXTURES HAVE BEEN NOMINATED.
- WHERE SERVICES / PIPEWORK ARE LOCATED UNDER DRIVEWAYS AND SLABS CONTRACTORS ARE TO ENSURE ADEQUATE COMPACTION TO TRENCH BACKFILL ACHIEVED TO SUPPORT CONCRETE.
- REBATE GARAGE DOORS & SLIDING GLASS DOORS 20mm, AND SHOWER RECESSES 50mm IN LOCATIONS SHOWN.
- ACCORDING TO MANUF' SPEC. OR BUILDERS DIRECTIONS.
- MINIMUM COVER TO GROUND - 50mm.
- TOP COVER TO SLAB REINFORCEMENT - 30mm.
- GRADE FINISHED GROUND SURFACE TO DIVERT WATER AWAY FROM BUILDING.
- WATERPROOF MEMBRANE IS 0.2mm POLYETHYLENE. JOINTS ARE TO BE LAPPED 300mm AND TAPED.
- REINFORCEMENT TO BE SUPPORTED ON PLASTIC CHAIRS AT 1000mm CRS.
- ALL CONCRETE IS TO BE MECHANICALLY VIBRATED DURING PLACING.
- FILL MATERIAL AND SAND UNDER SLABS IS TO BE COMPACTED TO 95% OF MAX. DRY DENSITY.
- FLOORS TO ALL WET AREAS TO HAVE A FALL TO A FLOOR WASTE.

### TERMITE RISK NOTES:

- TERMITE CONTROL BARRIERS TO BE IN ACCORDANCE WITH AS 3660.1 AND THE CURRENT **ABCB HOUSING PROVISIONS PART 3.4**
- ANY UNTREATED TIMBER POSTS, STAIRS AND THE LIKE SHALL BE SET 75MM MINIMUM CLEAR OF GROUND FOR VISUAL TERMITE CONTROL.
- TWO APPROVED NOTICES SHALL BE AFFIXED TO THE DWELLING AS REQUIRED ADVISING OWNERS OF THE METHOD OF TERMITE RISK MANAGEMENT USED, AND THEIR ONGOING RESPONSIBILITY FOR THE MAINTENANCE OF THE SYSTEMS.
- BUILDER TO CONFIRM WITH OWNER THE CHOSEN METHOD OF TIMBER PROTECTION.
- OWNER REMAINS RESPONSIBLE FOR ONGOING INSPECTION OF STRUCTURAL TIMBER ELEMENTS, AND THAT BARRIERS ARE NOT COMPROMISED.
- WHERE CONCRETE SLAB FORMS BARRIER, SLAB TO BE CONSTRUCTED AS PER AS2870. SLAB & FOOTINGS TO BE "MONOLITHIC". TERMITE COLLAR FLANGE TO BE CLAMPED TO PIPES AND SET IN SLAB. 75MM MIN OF EXPOSED SLAB EDGE TO REMAIN ABOVE FINISHED PERIMETER LEVEL. EXPOSED EDGE NOT TO BE COVERED BY SOIL, RENDERED OR TILED, BUT MAY BE PAINTED. WHERE BRICKWORK CONCEALS EDGE OF SLAB, IN ADDITION TO ABOVE, PROVIDE TERMITE COLLAR BARRIER BELOW D.P.C. FIXED TO SLAB EDGE.
- INSTALL ANT CAPPING TO ALL BRICK PIERS, TIMBER OR CONC STUMPS. KEEP TIMBER CLEAR OF GROUND WHEN ON STEEL ANCHORS. NON-TIMBER ELEMENTS (EG STEEL POSTS) NEED NO PROTECTION FROM TERMITES.
- ALL TIMBER IN DIRECT CONTACT WITH CONC TO BE SEPARATED BY G.I. FLASHING.

### FLOOR PLAN NOTES:

- SMOKE ALARMS TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 9.5**. SMOKE ALARMS MUST COMPLY WITH AS3786.
  - ONLY USE PHOTOELECTRIC TYPE SMOKE ALARMS
  - ALL SMOKE ALARMS TO BE INTERCONNECTED
  - INSTALL LOCATIONS:
    - ON EACH LEVEL OF LIVING SPACE
    - OUTSIDE EACH BEDROOM AREA
    - IN EVERY BEDROOM (**QLD ONLY**)
- WALL FINISHES AND WINDOW TYPES ON 3D VIEWS ARE INDICATIVE ONLY AND ARE NOT PRESCRIPTIVE.
- ALL GLAZING TO BE IN ACCORDANCE WITH AS1288. WINDOWS SIZES MAY VARY DUE TO MANUFACTURER'S SPECIFICATIONS.
- BUILDER TO CONFIRM ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONS ARE TO FRAME ONLY AND DO NOT INCLUDE CLADDING/LININGS (UNO).
- S.S. BALUSTRADING TO COMPLY WITH THE CURRENT **ABCB HOUSING PROVISIONS PART 11.3.6**
- DOORS TO W.C.'S TO HAVE LIFT OFF HINGES (ONLY IF THE DOORS SWING IN TOWARDS THE W.C).
- MASONRY CONSTRUCTION TO AS 3700.
- REFER ENGINEERS DRAWINGS & SPECIFICATIONS FOR ALL STRUCTURAL DETAILS, FRAMING, BRACING, TIE DOWN AND SLAB/FOOTING DETAILS.
- SEAL WET AREAS IN ACCORDANCE WITH AS3740 & THE CURRENT **ABCB HOUSING PROVISIONS PART 10.2**.
- PROVIDE FLOOR WASTE TO ALL WET AREAS.

### ROOF DRAINAGE NOTES:

- ALL GUTTER AND DOWNPIPE WORKS TO AS/NZS 3500.3 AND THE CURRENT **ABCB HOUSING PROVISIONS PART 7.4**.
- DOWNPIPES (DP) TO BE 90mmØ UPVC.
- TEMPORARY DOWNPIPES TO BE PROVIDED AT DP LOCATIONS DURING CONSTRUCTION DRAINING ROOFWATER ONTO GROUND, 2M MIN AWAY FROM BUILDING.
- ALL STORMWATER, DOWN PIPES, RAIN WATER TANKS & SITE DRAINAGE TO BE SIZED & LOCATED BY THE HYDRAULIC CONSULTANT/ PLUMBER IN ACCORDANCE WITH **THE CURRENT NCC VOL. 3 PART B6, AND B7**. THE CURRENT **ABCB HOUSING PROVISIONS PART 7.4**, STATE LEGISLATION/ LOCAL PLANNING SCHEME HOUSE CODE AND AS 3500 ALL PARTS.
- THE ROOF DRAINAGE SYSTEM MUST BE PROVIDED WITH AN OVERFLOW TO PREVENT THE BACKFLOW OF WATER INTO THE BUILDING.
- THE AREA SPECIFIC RAINFALL INTENSITY **FOR GUTTERING SELECTION, OVERFLOW MEASURES & DOWNPIPES MUST BE SELECTED FROM THE RELEVANT TABLES IN THE CURRENT ABCB HOUSING PROVISIONS PART 7.4** OR FROM AS/NZ3500.
- EAVES GUTTERS MUST BE INSTALLED AT A FALL NOT LESS THAN 1 IN 500 WITH SUPPORT BRACKETS AT 1.2m MAXIMUM CENTRES.
- BOX GUTTERS MUST BE INSTALLED AT A FALL NOT LESS THAN 1 IN 100 IN ACCORDANCE WITH AS/NZ3500.3.
- DOWNPIPES MUST SERVE NOT MORE THAN 12 METERS OF GUTTER LENGTH FOR EACH DOWNPIPE WHICH MUST BE LOCATED AS CLOSE AS POSSIBLE TO VALLEY GUTTERS. EAVES GUTTERS MUST BE PROVIDED WITH AN OVERFLOW SYSTEM WHERE DOWNPIPES ARE LOCATED MORE THAN 1.2 METRES FROM A VALLEY GUTTER.



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TAS BSP: 071565667  
ABN: 31 615 195 818

MELLROSS HOMES #:  
4585  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

CLIENT:  
**MELLROSS HOMES**  
  
DRAWING NAME:  
**COVER**

PROJECT:  
**PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594**

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SCALE NOT APPLICABLE



PROPERTY DESCRIPTION

LOT: 6  
SUBURB: YOUNG  
LOCAL AUTHORITY: HILLTOPS COUNCIL

WIND LOADS FOR HOUSING CLASSIFICATION

- REGION:
- TERRAIN CATEGORY:
- SHIELDING CLASSIFICATION:
- TOPOGRAPHIC CLASSIFICATION:
- WIND SPEED CLASSIFICATION:
- BUSHFIRE ATTACK LEVEL (BAL):

ENERGY EFFICIENCY REQUIREMENTS

- R3.5 BATTS TO CEILING
- R2.5 BATTS TO EXTERNAL WALLS AND GARAGE INTERNAL WALL
- DOWNLIGHTS TO BE MIN IC RATED
- ALL WINDOWS AND SLIDING GLASS DOORS SINGLE GLAZED

LEGEND

- GM

HYDRANT

STORM WATER PIT

WATER CONNECTION

ELECTRICAL TURRET

TELSTRA PIT

MAN HOLE

DP

100mm DOWN PIPE

PP

POWER POLE

STREET LIGHT

SITE BENCH MARK

SEWER LINE

CONTOUR LINE

EXISTING RETAINING

NEW RETAINING

ROOF LINE

STORM WATER LINE

FENCE

ELECTRICAL

TELSTRA COMMUNICATIONS

WATER LINE



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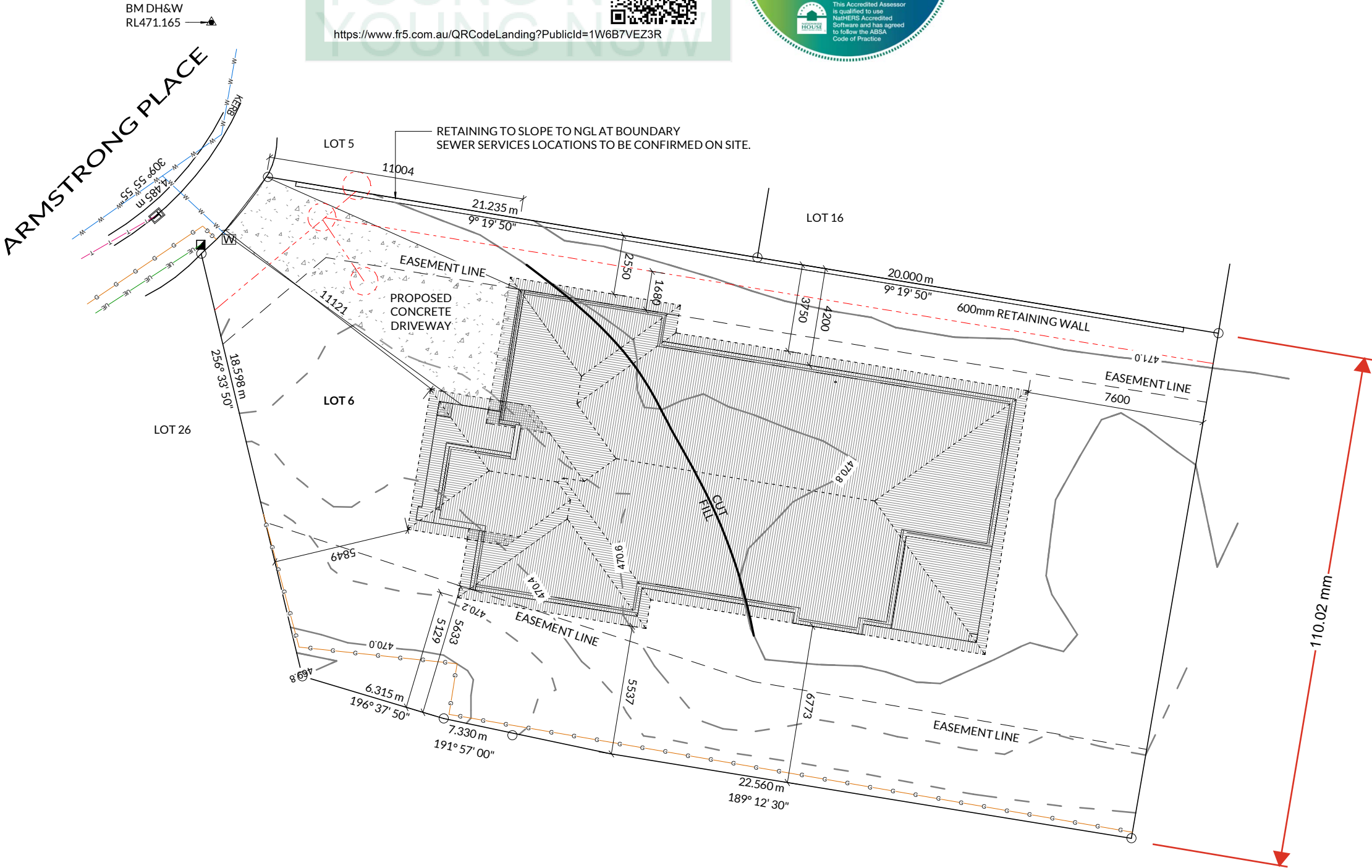
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**SITE PLAN**

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Assessor name Oliver Woodward  
Accreditation No. 61771  
Property Address 13 Armstrong Place,  
Young, NSW, 2594

<https://www.fr5.com.au/QRCodeLanding?PublicId=1W6B7VEZ3R>

Assessments completed within the accreditation period are part of the ABSA quality audit system

Accreditation Period 31/03/2025 - 31/03/2026

Assessor Name Oliver Woodward

Assessor Number 61771

This Accredited Assessor is qualified to use NETHERS Accredited Software and has agreed to follow the ABSA Code of Practice

LEGEND

- C CASEMENT WINDOW  
SL.G.D SLIDING GLASS DOOR  
S.W SLIDING WINDOW  
A AWNING WINDOW  
D.HU DOUBLE HUNG WINDOW  
B.D. BIFOLD DOORS  
LU LOUVERS  
SL SIDELIGHT  
M.V. MECHANICAL VENT  
SKL SKYLIGHT  
F.G. FIXED GLASS WINDOW

- ☼ SMOKE ALARM  
† HOSE COCK  
ELEC M/BOX  
⊙⊙ GAS BOTTLES  
⊗ HOT WATER  
⊕ FLOOR WASTE

FLOOR AREAS

ROOM	SQUARES	SQM
ALFRESCO	1.60	14.9 m <sup>2</sup>
GARAGE	3.78	35.1 m <sup>2</sup>
LIVING	21.89	203.4 m <sup>2</sup>
PORCH	0.80	7.4 m <sup>2</sup>
TOTAL	28.07	260.8 m <sup>2</sup>

DOOR SCHEDULE

MARK	SIZE	DOOR TYPE
D1	2040 x 1020	GLASS ENTRY DOOR
D2	2100 x 4800	PANEL LIFT DOOR
D3	2040 x 870	HOLLOW CORE SWING
D4	2040 x 870	HOLLOW CORE SWING
D4	2040 x 870	HOLLOW CORE SWING
D5	2040 x 720	HOLLOW CORE SWING
D6	2040 x 870	HOLLOW CORE SWING
D7	2040 x 870	HOLLOW CORE SWING
D8	2040 x 870	HOLLOW CORE SWING
D9	2040 x 870	HOLLOW CORE SWING
D10	2040 x 720	HOLLOW CORE CAVITY SLIDER
D11	2040 x 720	HOLLOW CORE SWING
D12	2040 x 870	HOLLOW CORE SWING
D13	2040 x 870	HOLLOW CORE SWING

WINDOW SCHEDULE

MARK	SIZE	DESCRIPTION
W1	1800 x 600	ALUM. FRAMED AWNING
W2	1800 x 1200	ALUM. FRAMED AWNING
W3	2100 x 1500	ALUM. FRAMED SLIDING GLASS DOOR
W4	1200 x 1800	ALUM. FRAMED AWNING
W5	1800 x 600	ALUM. FRAMED AWNING
W6	1200 x 1800	ALUM. FRAMED AWNING
W7	1800 x 1200	ALUM. FRAMED AWNING
W8	1800 x 1200	ALUM. FRAMED AWNING
W9	600 x 2100	ALUM. FRAMED AWNING
W10	2100 x 3600	ALUM. FRAMED SLIDING GLASS DOOR
W11	1800 x 600	ALUM. FRAMED AWNING
W12	1800 x 600	ALUM. FRAMED AWNING
W13	600 x 2400	ALUM. FRAMED FIXED GLASS
W14	600 x 1200	ALUM. FRAMED FIXED GLASS
W15	1800 x 2400	ALUM. FRAMED AWNING

— DENOTES RENDER



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ABN: 31 615 195 818

MELLROSS HOMES #:  
4585  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

CLIENT:  
**MELLROSS HOMES**  
DRAWING NAME:  
**FLOOR PLAN**

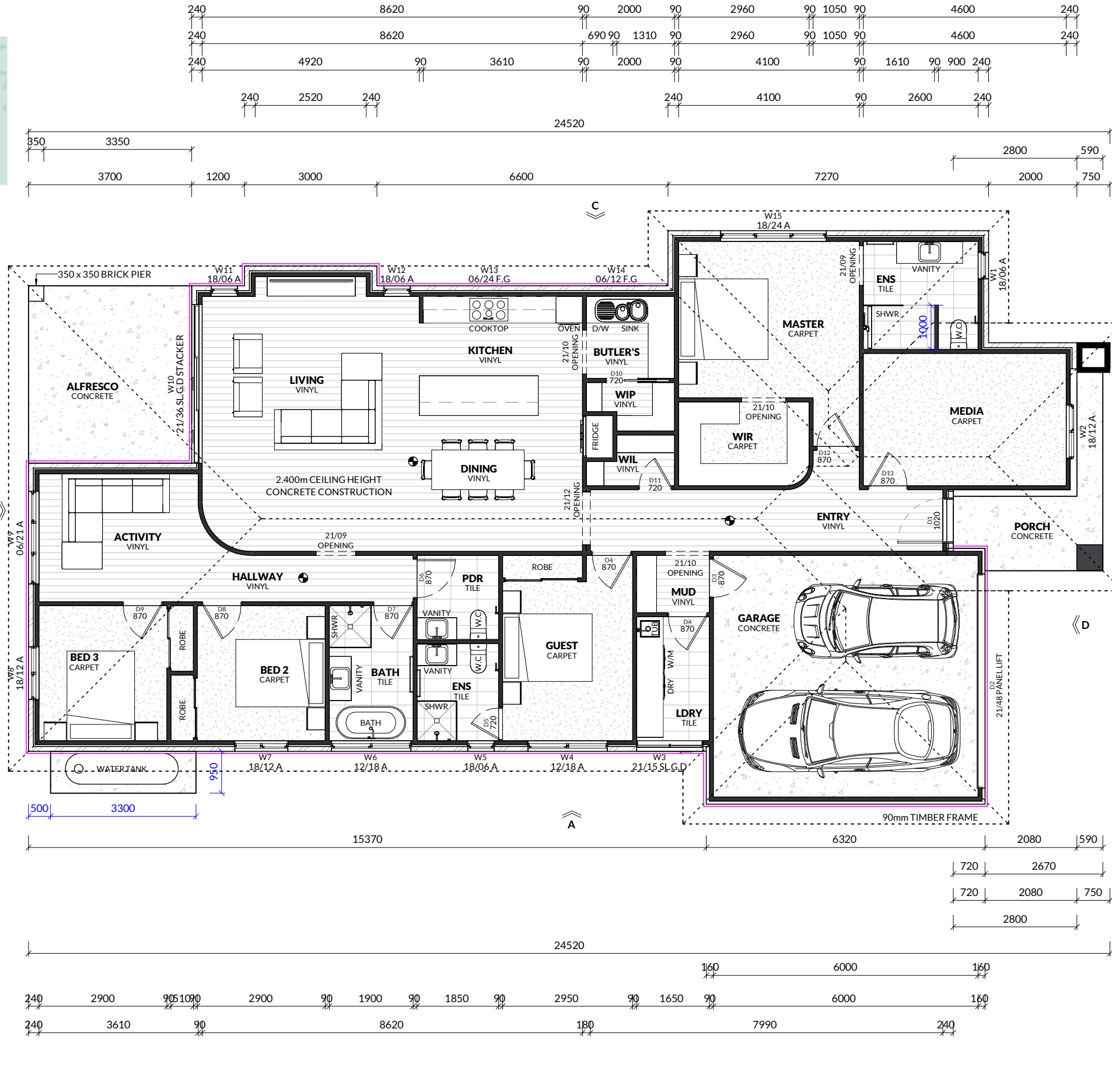
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**PROPOSED RESIDENCE FOR  
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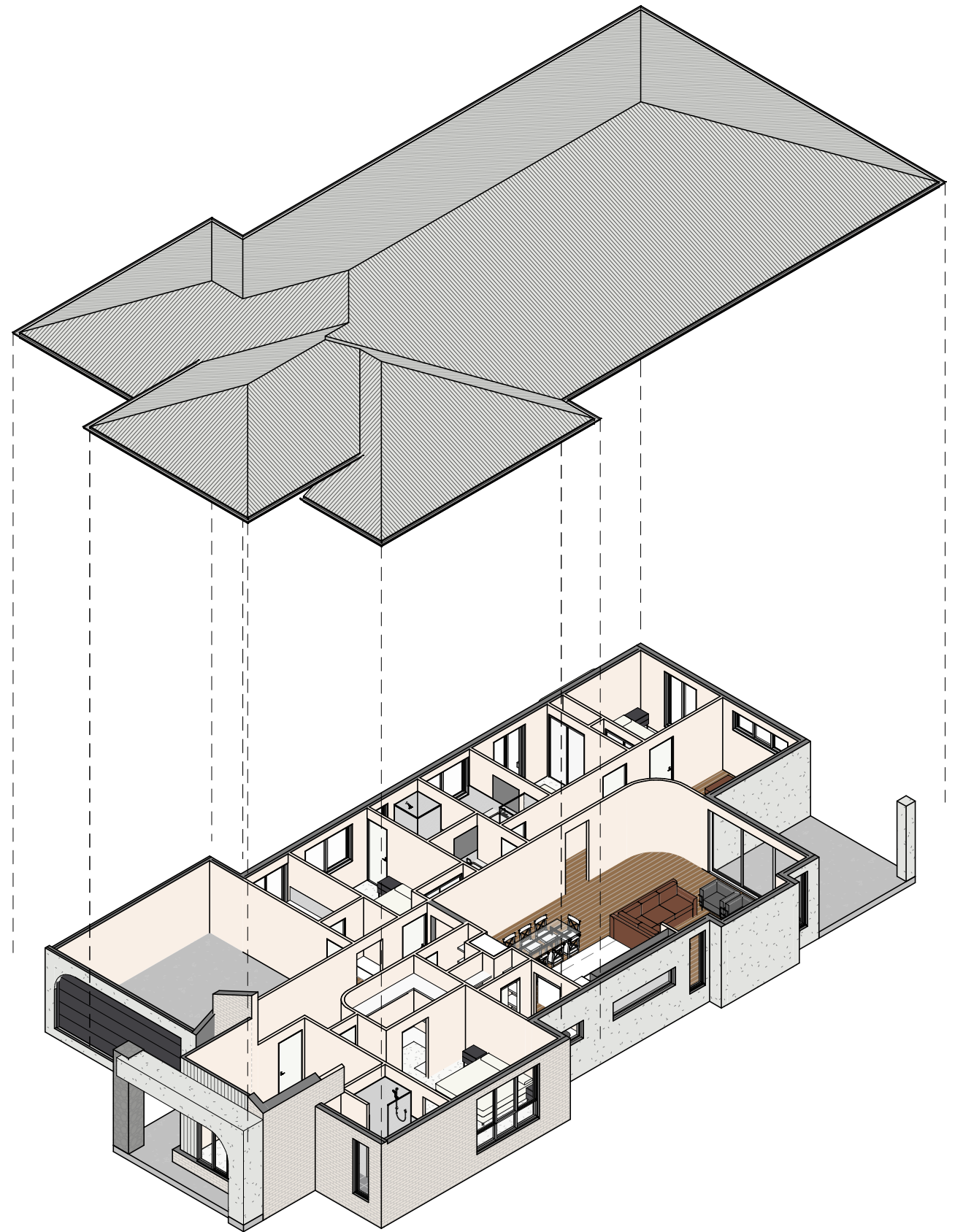
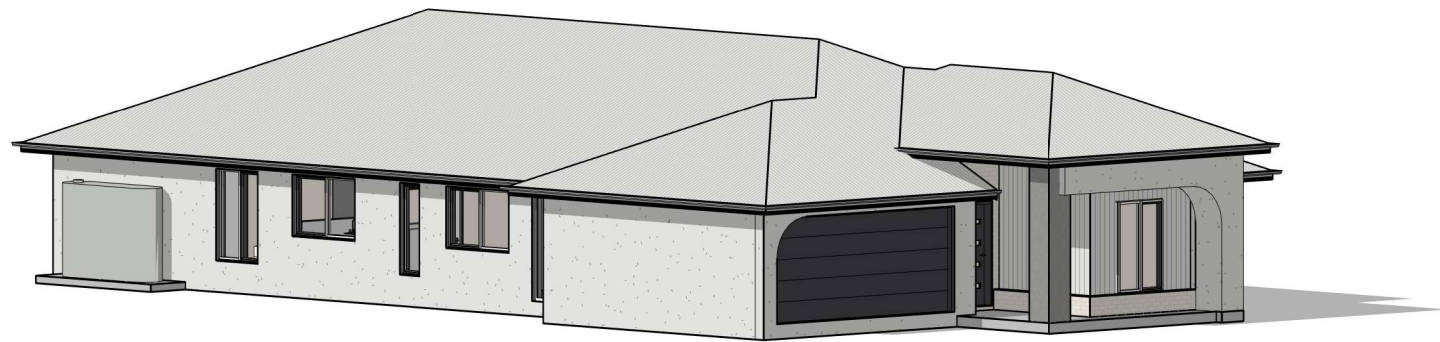
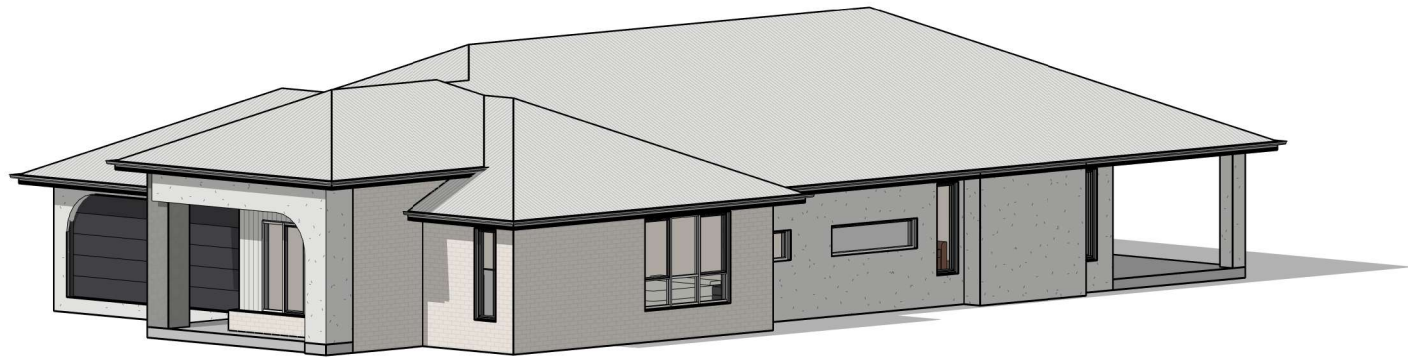
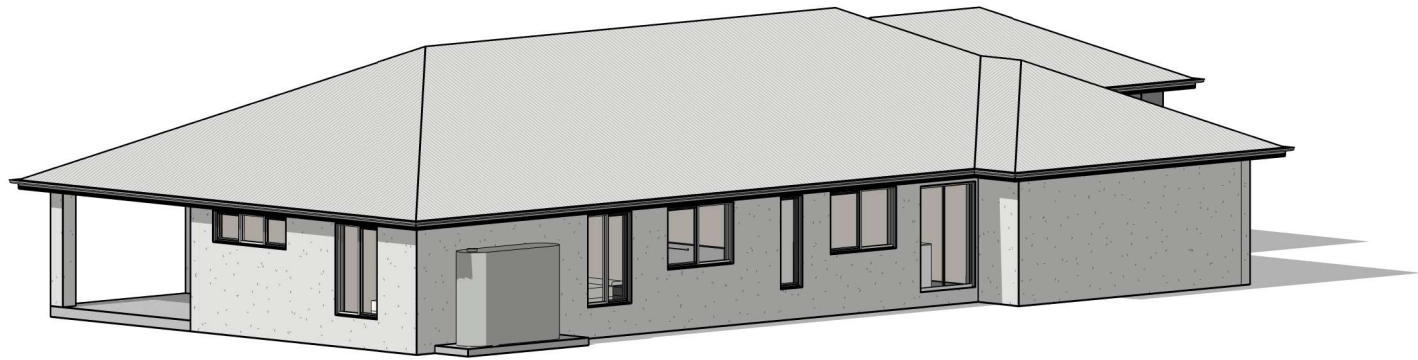
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DRAWING NAME:  
**3D VIEWS**

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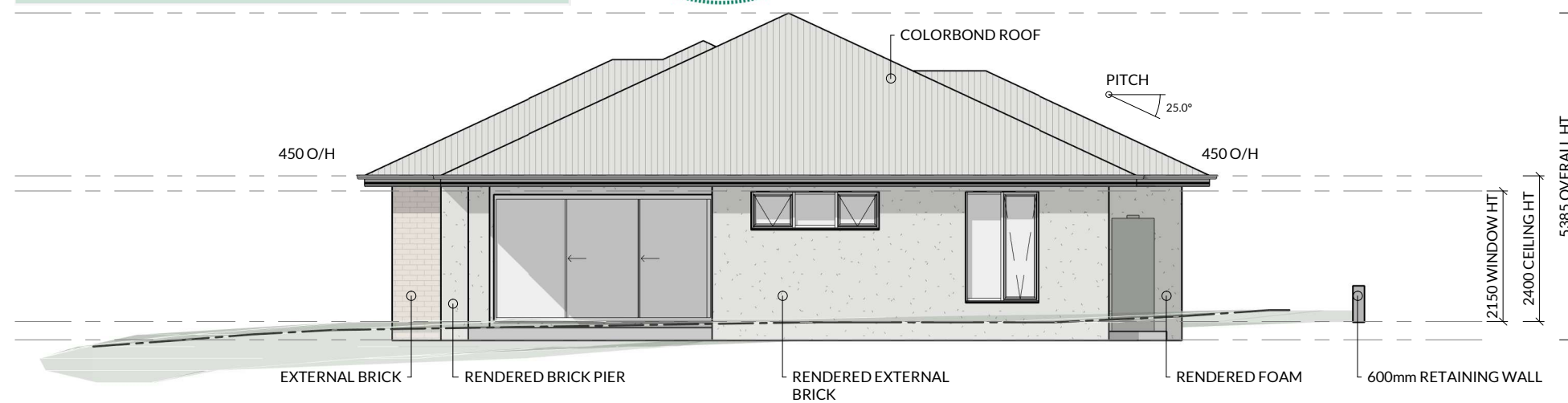
ELEVATION A

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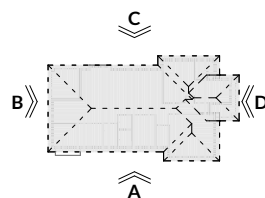
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**Accreditation No.** 61771  
**Property Address** 13 Armstrong Place, Young, NSW, 2594

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ELEVATION B



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PLAN NUMBER: #2382/25  
AREI PLAN CODE: CAPITAL COLLECTION 5

CLIENT: MELLROSS HOMES  
DRAWING NAME: ELEVATIONS A & B

PROJECT: PROPOSED RESIDENCE FOR MAT & JACQUI AT LOT 6 NO. 13 ARMSTRONG PLACE YOUNG NSW 2594

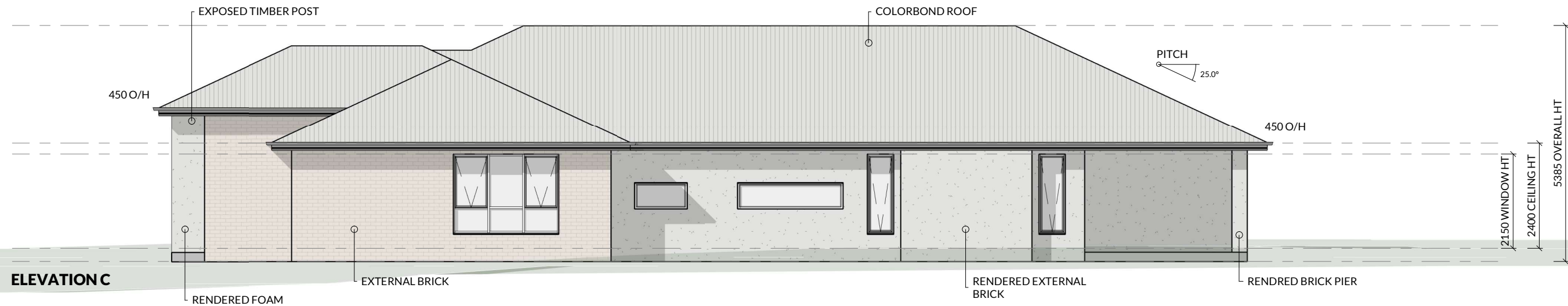
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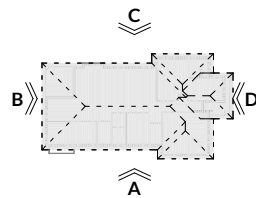



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**Accreditation No.** 61771  
**Property Address** 13 Armstrong Place, Young, NSW, 2594

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AREI PLAN CODE:  
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CLIENT:  
**MELLROSS HOMES**  
DRAWING NAME:  
**ELEVATIONS C & D**

PROJECT:  
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ELECTRICAL & FIXTURES LEGEND

LIGHTING SYMBOL	DESCRIPTION
	DOWN LIGHT RECESSED
	FLUORO SINGLE 1200mm
	FLUORO DOUBLE 1200mm
	DOWN LIGHT RECESSED 200mm
	PENDANT
	OYSTER LED LIGHT
	TRACK LIGHT
	WALL LIGHT
	EXTERIOR SENSOR LIGHT
	FLOOD LIGHT EXTERNAL
	FLOOD LIGHT EXTERNAL (2)
	HEAT LAMP LIGHT
	HEAT EXHAUST LIGHT (3in1)
	EXHAUST LIGHT
	LED STRIP LIGHTING

POWER & COMMS SYMBOL	DESCRIPTION
	GPO SINGLE
	UBO & R/HOOD CONNECTIONS W/ EXHAUST FAN (EXHAUST MIN. 40L/s)
	GPO DOUBLE
	GPO SINGLE WATERPROOF
	GPO DOUBLE WATERPROOF
	TELEVISION POINT
	PHONE/DATA POINT
	DISTRIBUTION BOX
	METER BOX
	NBN CONNECTION

FIXTURES SYMBOL	DESCRIPTION
	SMOKE ALARM
	AIR CON HEAD (SPLIT)
	AIR CON UNIT (SPLIT)
	HOT WATER SYSTEM
	FLOOR WASTE
	GAS BOTTLES
	GAS CONNECTION
	HOSE COCK
	EXHAUST CEILING FAN
	EXHAUST WALL FAN

	CEILING FAN
	CEILING FAN W/ LIGHT

	MANHOLE
	DUCTED HEATING UNIT

ELECTRICAL LINE

	CLOTHES LINE
--	--------------

ELECTRICAL ITEMS SCHEDULE

DESCRIPTION	QTY
DOWN LIGHT RECESSED	56
FLUORO SINGLE 900mm	2
WALL LIGHT	2
HEAT LAMP LIGHT	3
SMOKE ALARM	3
EXHAUST CEILING FAN	2

NOTES:-

**MECHANICAL VENTS**  
ALL MECHANICAL VENTS TO COMPLY WITH NCC 10.8.2. AND DISCHARGE TO OUTDOOR AIR. MIN. FLOW RATE OF 25L/s FOR BATHROOMS & SANITARY COMPARTMENTS, 40L/s FOR KITCHEN AND LAUNDRY.

**ARTIFICIAL LIGHTING**  
ARTIFICIAL LIGHTING WATTAGES TO COMPLY WITH NCC 13.7.6.  
5W/m² FOR MAIN RESIDENCE, 4W/m² FOR VERANDAHS & BALCONIES, 3 W/m² FOR GARAGES/CARPORTS.

SPECIAL SWITCH TYPES

	TWO WAY SWITCH
	THREE WAY SWITCH

POWER POINT HEIGHTS AFL

LIGHT SWITCHES	1150mm	AFL
WALL MOUNTED LIGHTS	2000mm	AFL
POWER OUTLETS (STANDARD)	300mm	AFL

POWER OUTLETS OTHER

M/WAVE OVEN POWER	1800mm	AFL
M/WAVE UNDER BENCH	300mm	AFL
KITCHEN BENCH	1000mm	AFL
REFRIGERATOR	1500mm	AFL
RANGEHOOD	1800mm	AFL
D/WASH	300mm	AFL
VANITY BASINS	1000mm	AFL
LAUNDRY BENCH	1000mm	AFL
W/MACHINE	1500mm	AFL



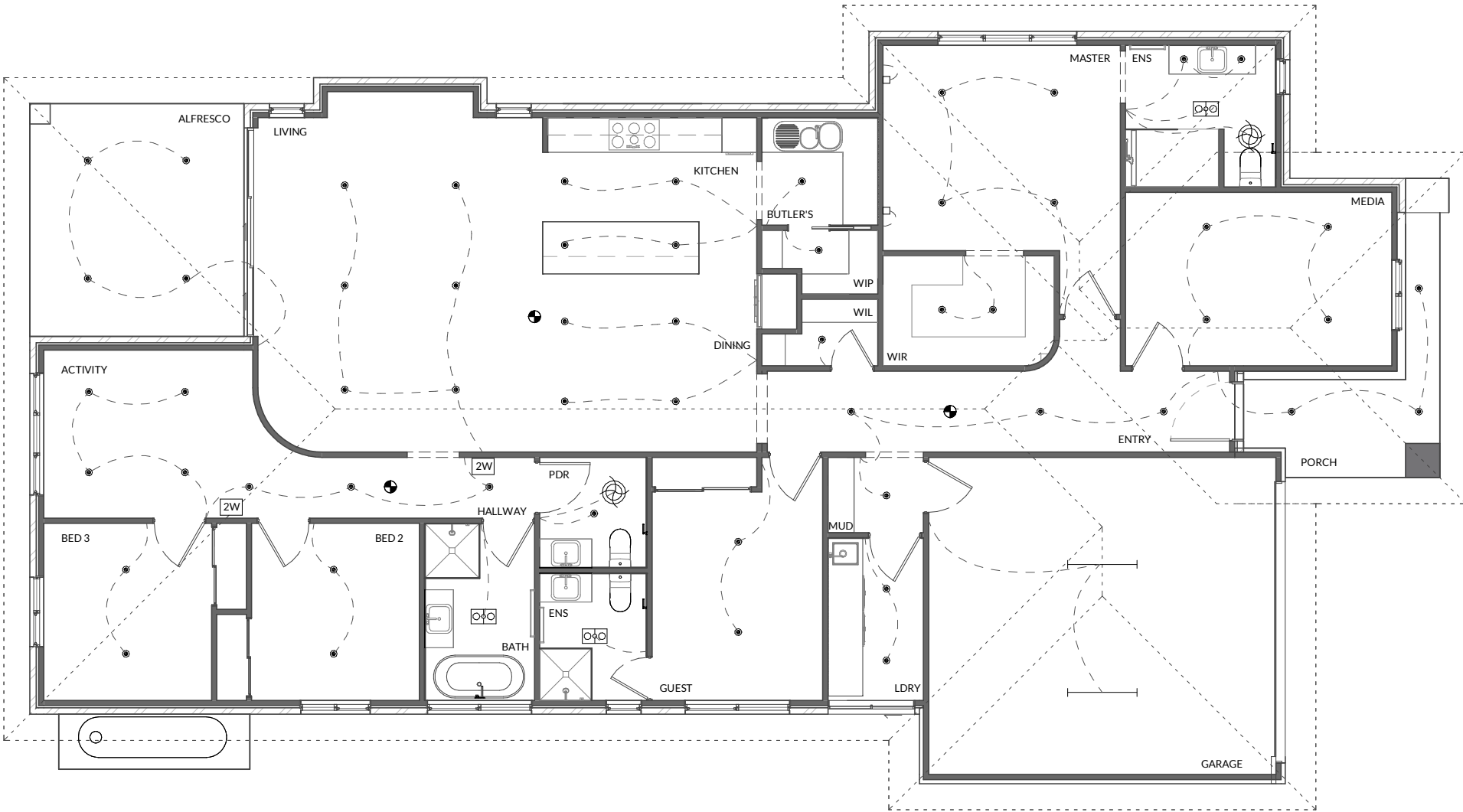
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CLIENT:  
**MELLROSS HOMES**  
  
DRAWING NAME:  
**ELECTRICAL & FIXTURES PLAN**

PROJECT:  
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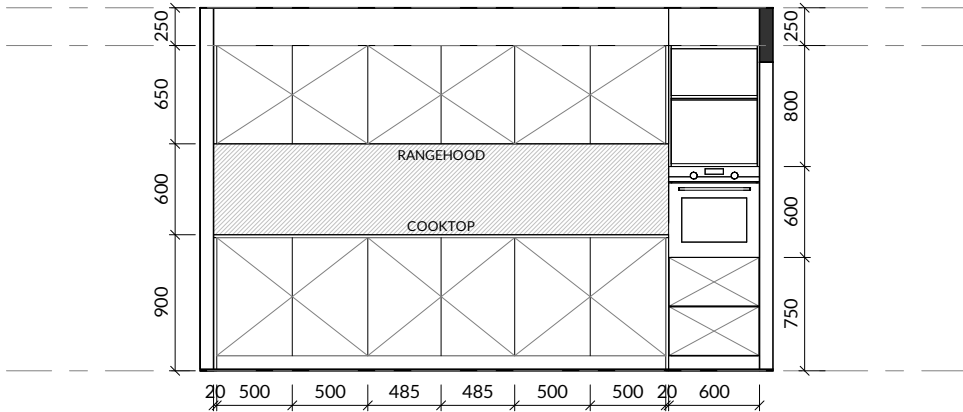
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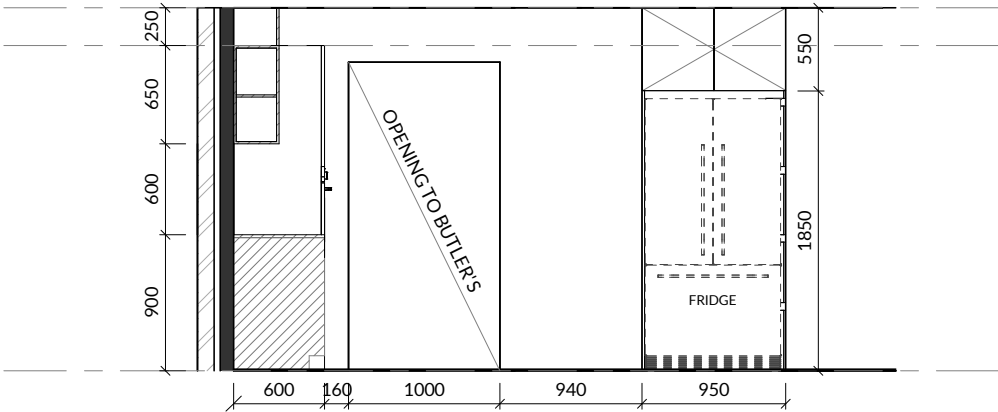
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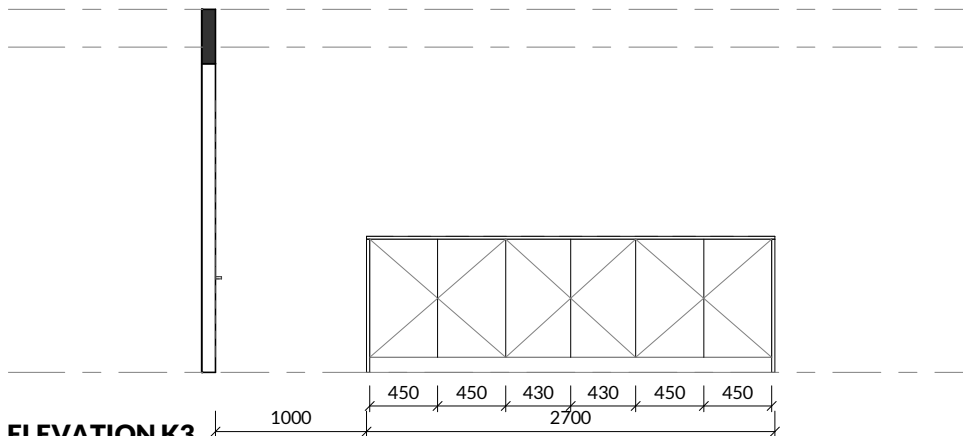
**KITCHEN PLAN**  
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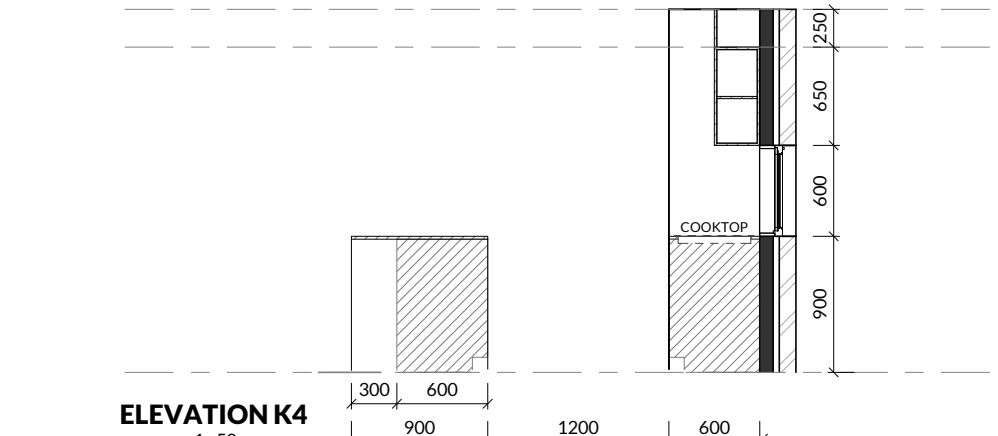
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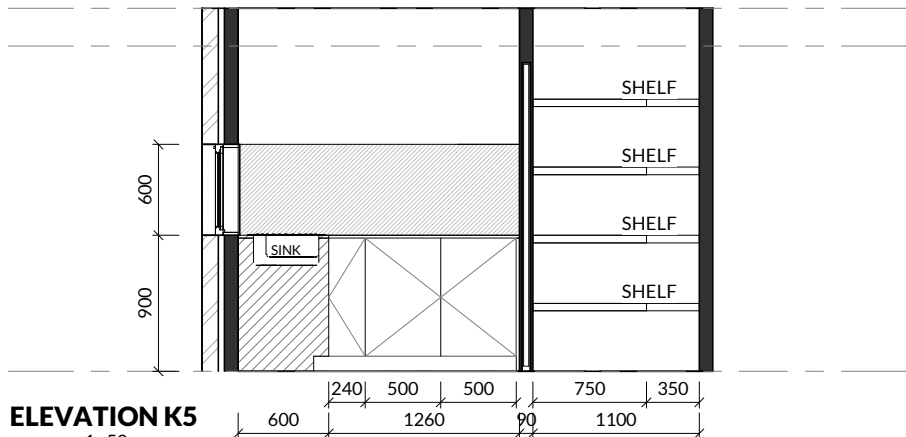
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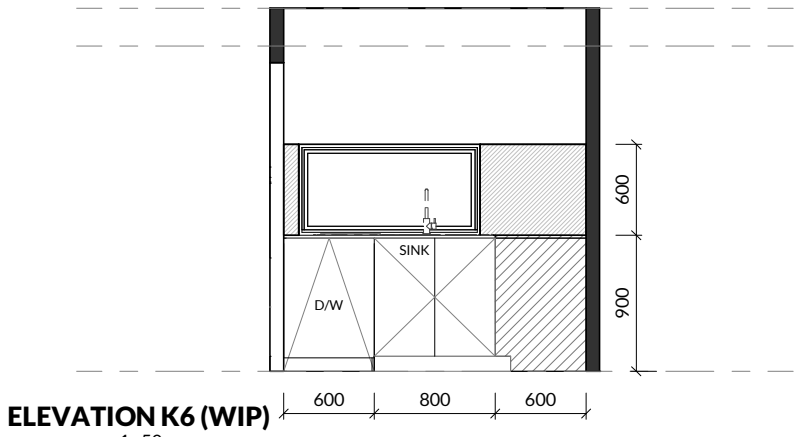
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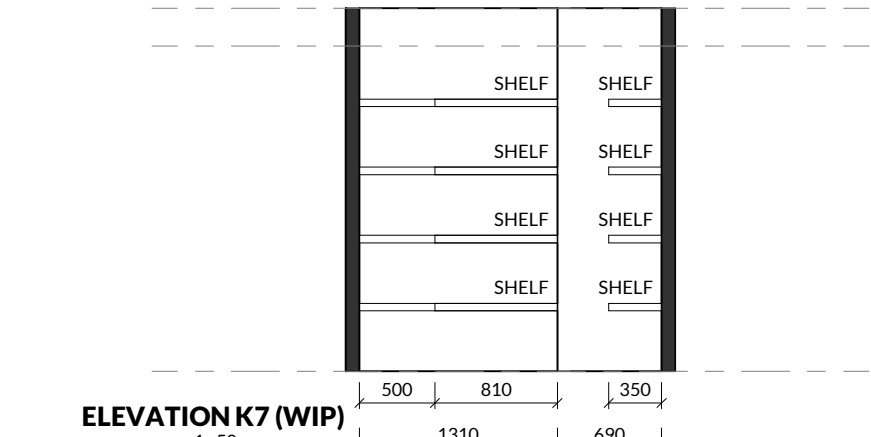
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1:50



**ELEVATION K5**  
1:50



**ELEVATION K6 (WIP)**  
1:50



**ELEVATION K7 (WIP)**  
1:50

FINAL LAYOUTS OF ALL JOINERY TO BE  
CONFIRMED BY CABINETMAKER.



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CAPITAL COLLECTION 5

CLIENT:  
**MELLROSS HOMES**  
  
DRAWING NAME:  
**KITCHEN CABINETRY**

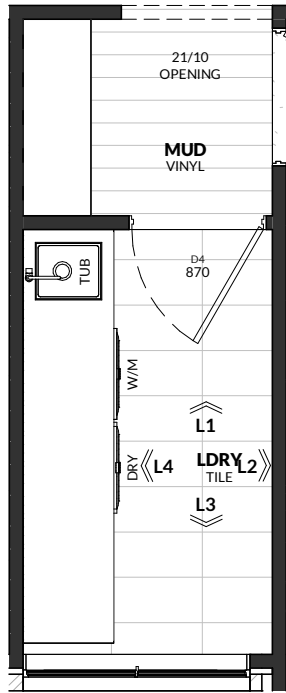
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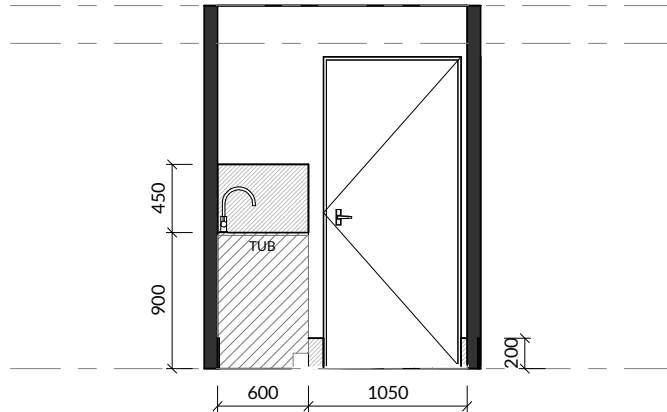
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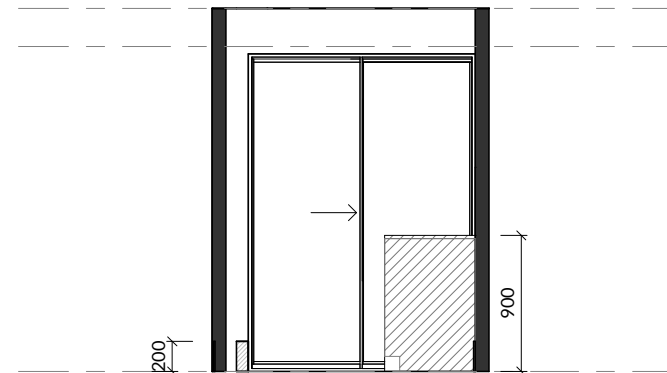




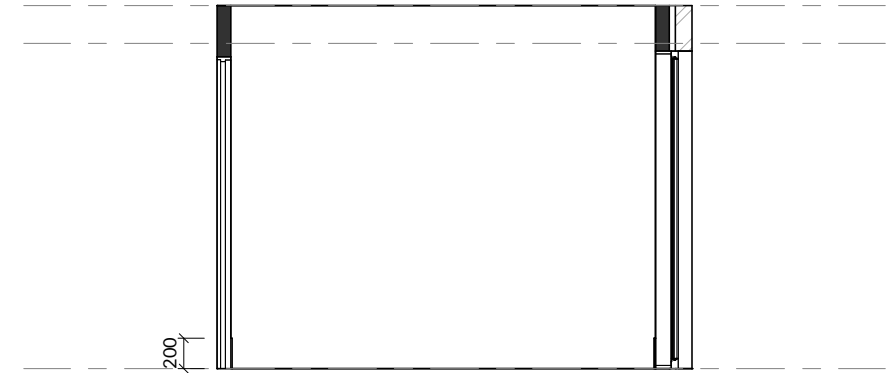
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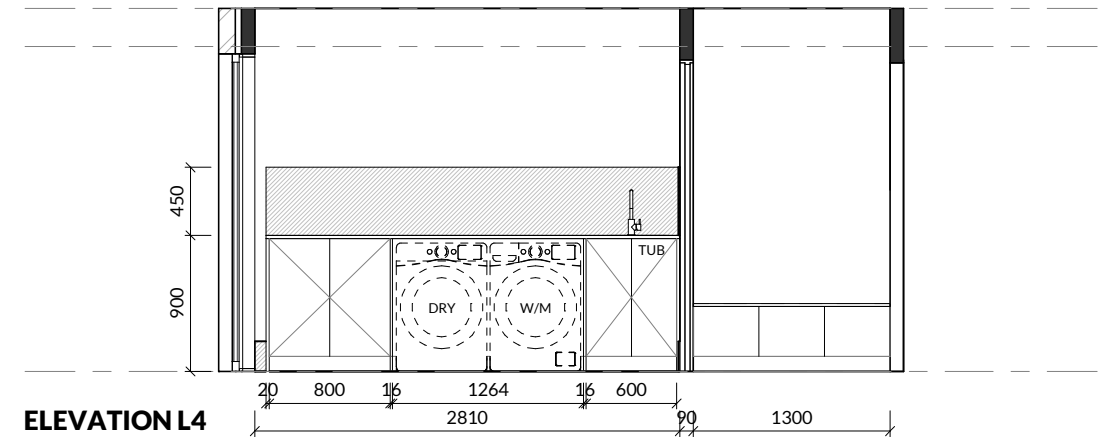
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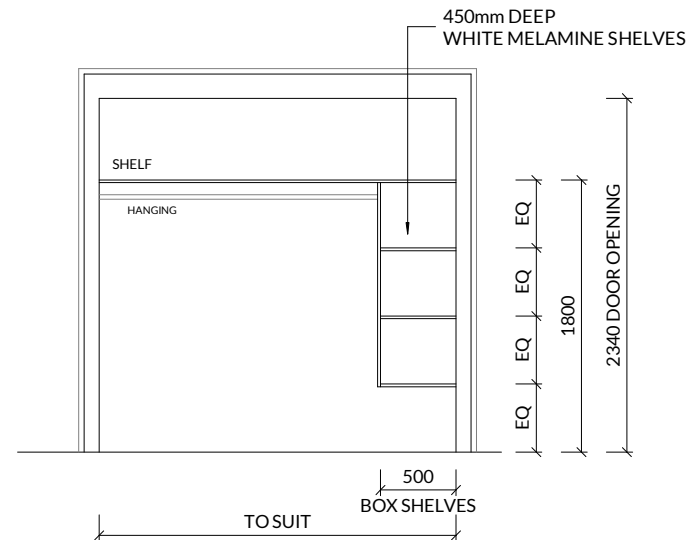
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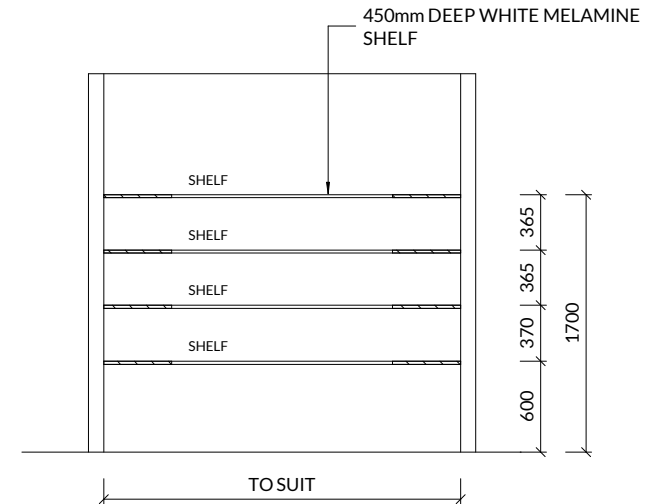
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**ELEVATION L4**  
1:50

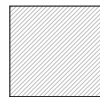


**ROBE SHELVE & HANGING TYPICAL DETAIL**  
1:50

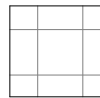


**WIL TYPICAL SHELVE DETAIL**  
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## LEGEND



DENOTES GENERAL  
TILED WALL AREAS



DENOTES FEATURE TILED  
AREA, WALL TILES TO  
MATCH FLOOR TILES

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**4585**  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

CLIENT:  
**MELLROSS HOMES**  
DRAWING NAME:  
**LAUNDRY & ROBES**

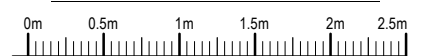
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**PROPOSED RESIDENCE FOR  
MAT & JACQUI AT  
LOT 6 NO. 13 ARMSTRONG PLACE  
YOUNG NSW 2594**

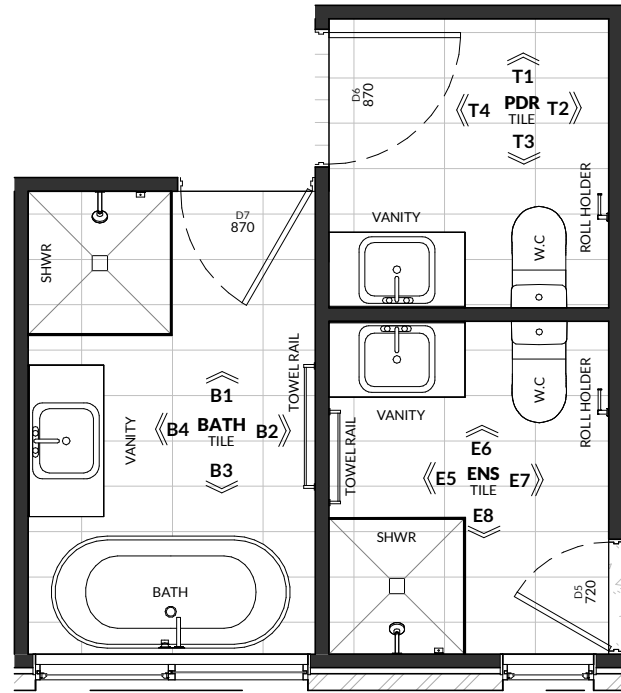
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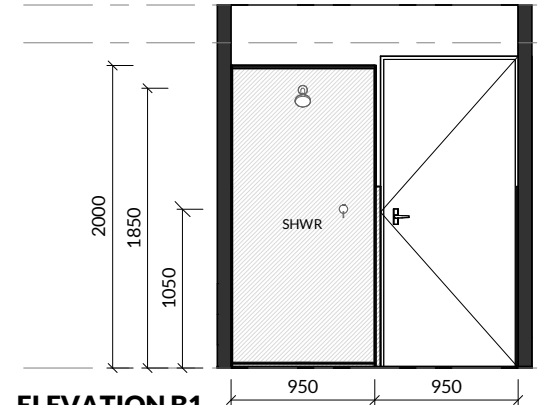
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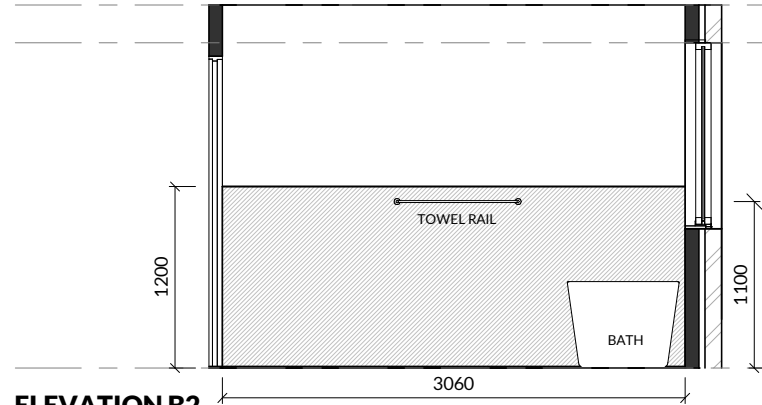




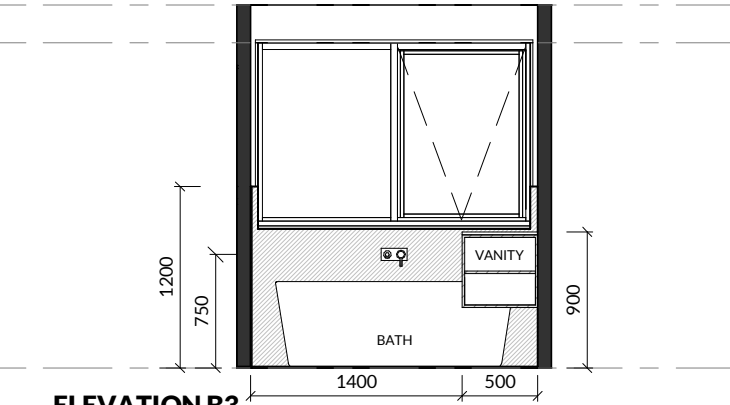
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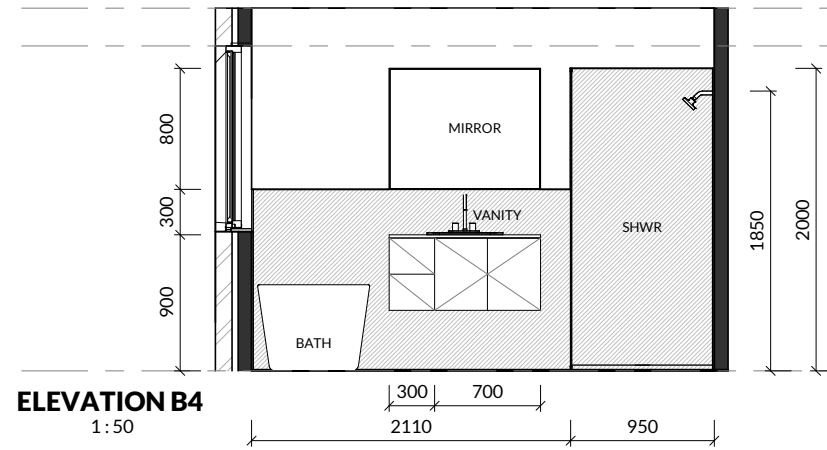
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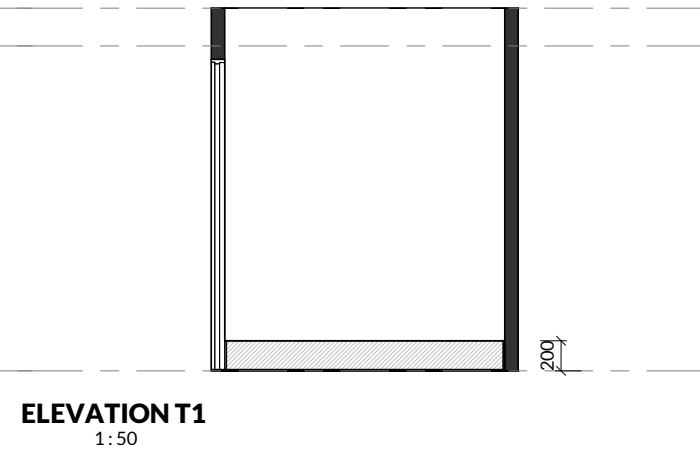
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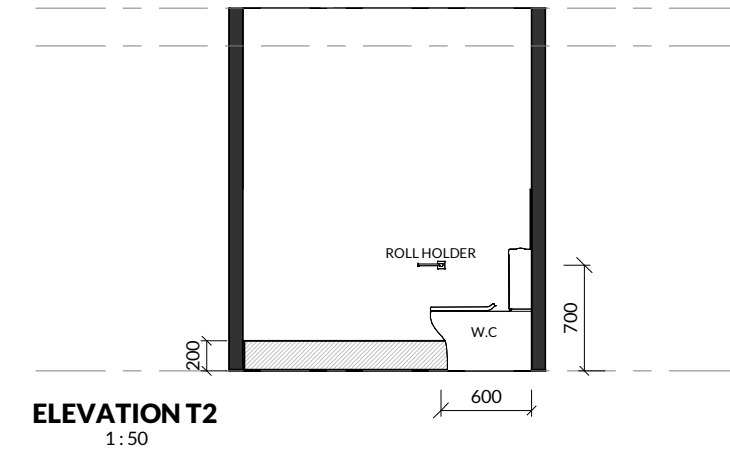
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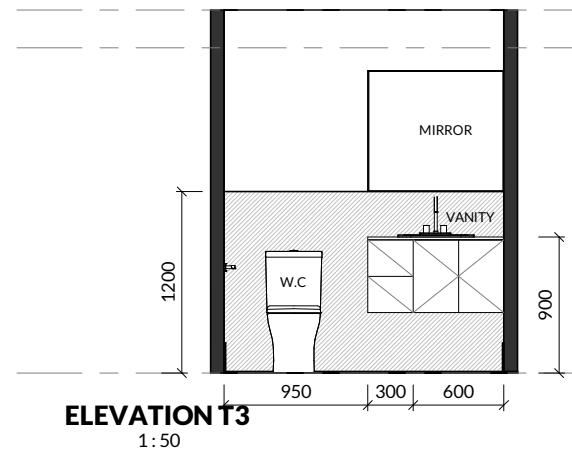
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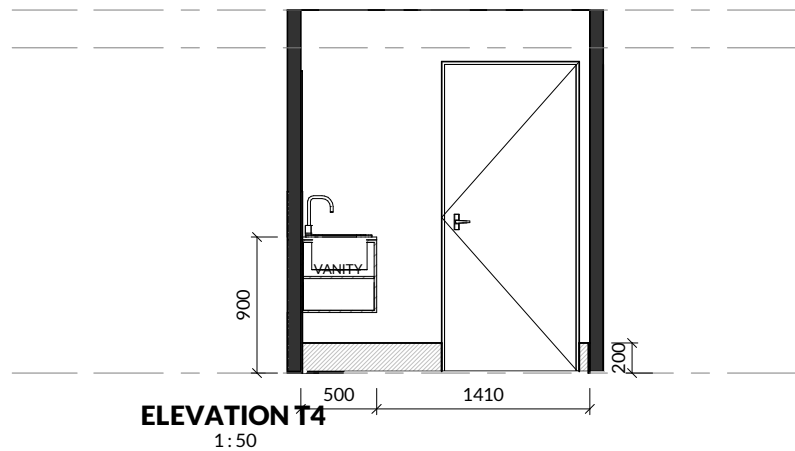
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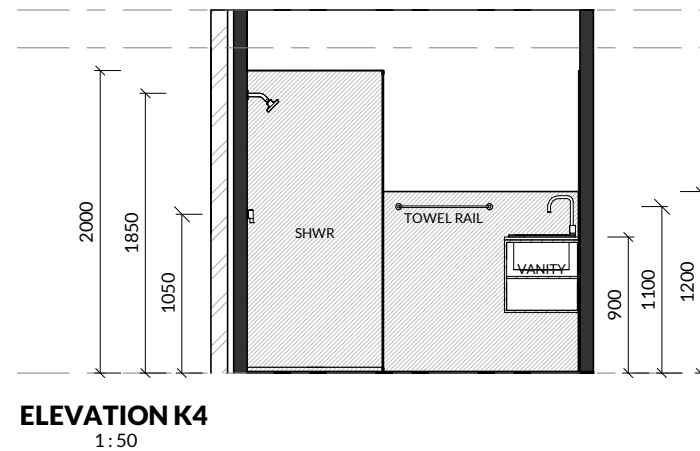
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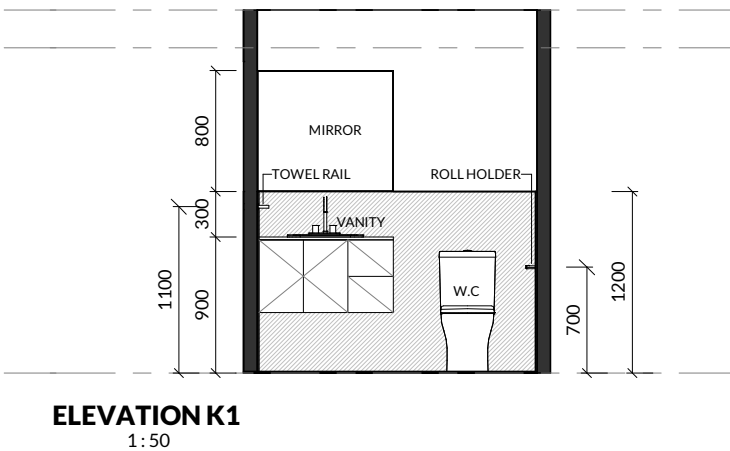
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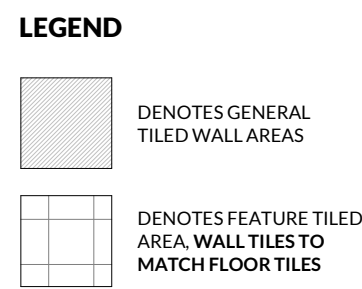
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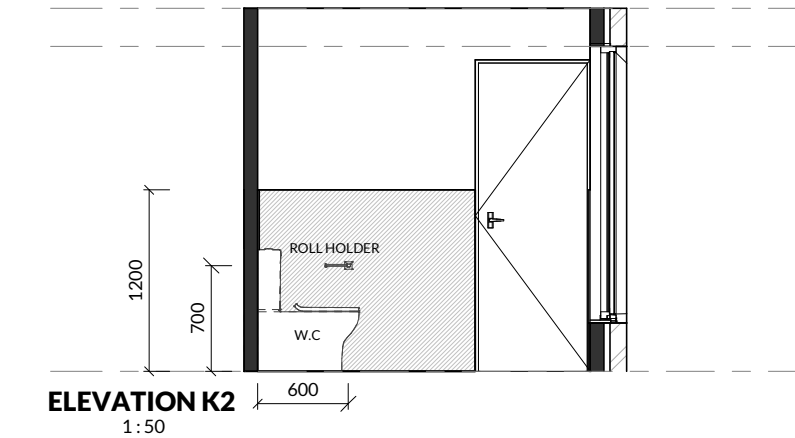
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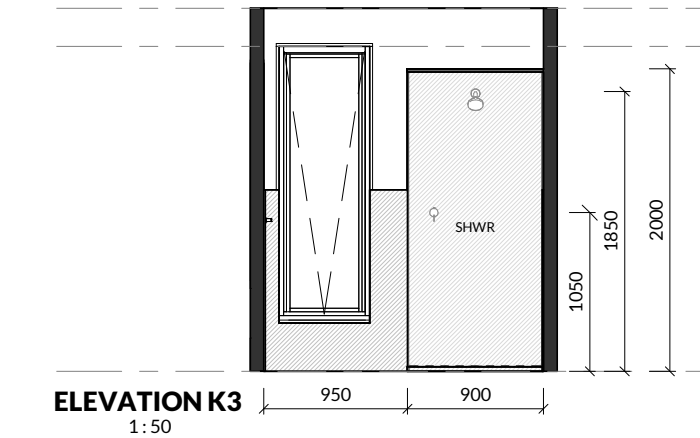
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**ELEVATION K2**  
1:50



**ELEVATION K3**  
1:50

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MELLROSS HOMES #:  
4585  
PLAN NUMBER:  
#2382/25  
AREI PLAN CODE:  
CAPITAL COLLECTION 5

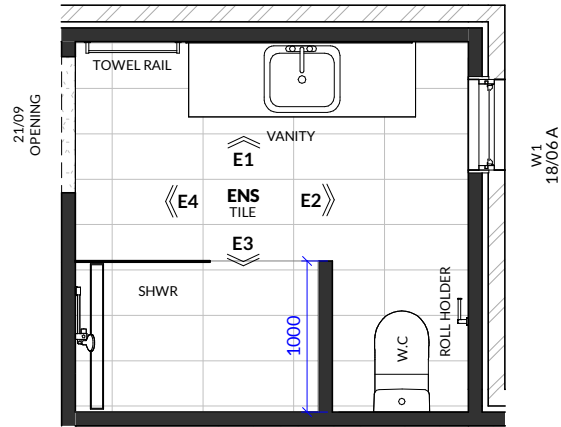
CLIENT:  
**MELLROSS HOMES**  
DRAWING NAME:  
**BATHROOM CABINETRY**

PROJECT:  
**PROPOSED RESIDENCE FOR  
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YOUNG NSW 2594**

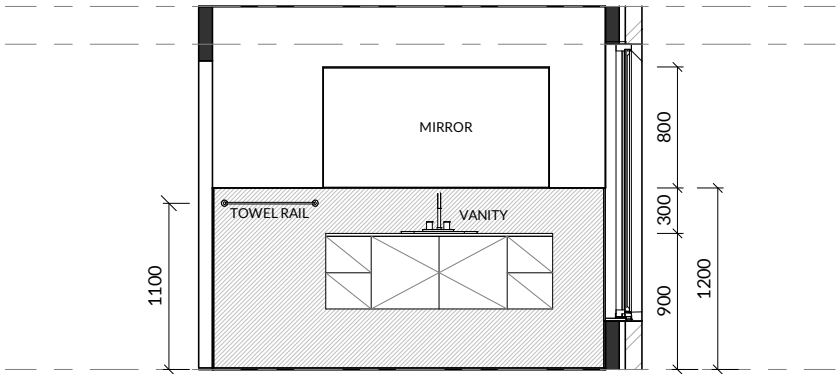
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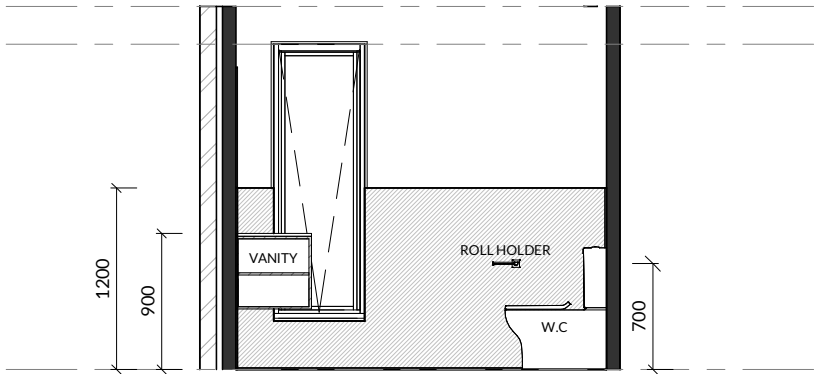
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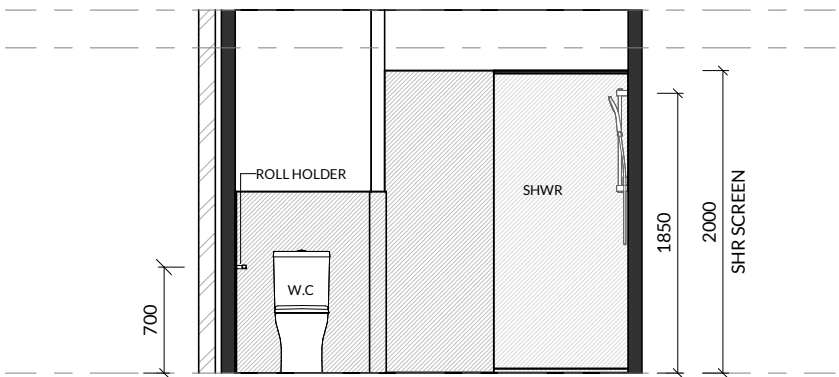
ENSUITE PLAN  
1:50



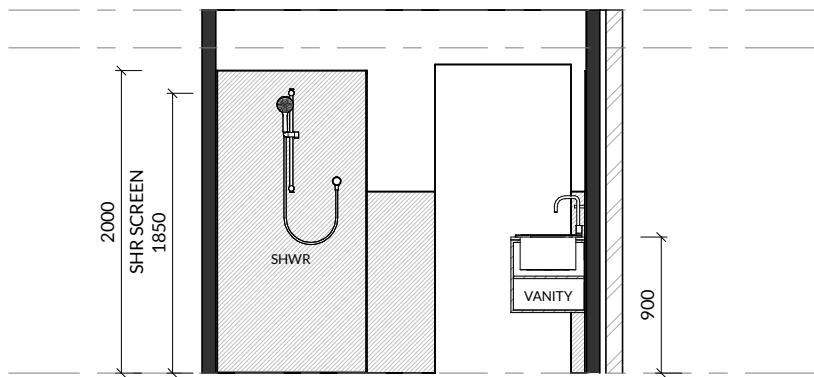
ELEVATION E1  
1:50



ELEVATION E2  
1:50



ELEVATION E3  
1:50



ELEVATION E4  
1:50

LEGEND

- DENOTES GENERAL  
TILED WALL AREAS
- DENOTES FEATURE TILED  
AREA, WALL TILES TO  
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ABN: 31 615 195 818

MELLROSS HOMES #: 4585  
PLAN NUMBER: #2382/25  
AREI PLAN CODE: CAPITAL COLLECTION 5

CLIENT: MELLROSS HOMES  
DRAWING NAME: ENSUITE CABINETRY

PROJECT: PROPOSED RESIDENCE FOR  
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## **Appendix 6 – DWELLING**

### **GEOTECH & ENGINEERING**

**Services completed for this site**☒ Lot Classifications☐ Contamination Report☐ Wastewater Management Report**LOT CLASSIFICATION REPORT**

**Prepared for:** MELLROSS HOMES  
LOT 5 DP 1184312 SUBLOT 6 72 HILLS STREET  
**Site Address:** YOUNG NSW 2594

Revision: 01/07/2021  
Site Test: 22/01/2025  
Lab Test: 05/02/2025  
Customer Job: M72HY  
Job Number: 25003  
Technician: JM

**Site Classification****S****Soil Classification****S****Ys 10-20 mm****Standards**

Test results completed in this report are in accordance with the following standards:

- AS 2870-2011 Residential slabs and footings
- AS 1726-1993 Geotechnical site investigations
- AS 3798-2007 Guidelines on earthworks for commercial and residential developments
- AS 1289.6.3.2-1997 Dynamic Cone Penetrometer
- ASNZS 1547-2012 On-Site Domestic Wastewater Management

**1.0 BACKGROUND**

Site is a BE for a 0.1 ha residential dwelling at the E edge of a 2.9 Ha residential subdivision in E Young. Geology is granodiorite. Site and soil classification is 'S' with a net vertical ground movement of 20 mm. The E half of the lot is well compacted fill. The BE appears to reside on essentially the cut. Movement of the BE further E will encounter fill > 0.4 m bgs and a 'P' classification with potential for piers.



## 2.0 SITE ANALYSIS

Is there current evidence of the following that would likely affect this site?

NB: \* denotes relevant to PROBLEM SITE

2.1*	Existing fill (>400 mm onsite)	No
2.2*	Fill containing wood, metal, plastic, or other deleterious materials	No
2.3*	Residential allotment (<1000 m <sup>2</sup> ) with over 1.6 m fill	No
2.4*	Rural allotment (>1000 m <sup>2</sup> ) with over 2.4 m fill	No
2.5*	Soft or collapsing soils	No
2.6*	Are there any trees (or removed trees) on site or adjoining site? If yes, show locations at 6.0	No
2.7	Is the project a knock down re-build?	No
2.8	Floating boulders	No
2.9	Rock (difficult excavation)	No
2.10	Underground flowing water and/or seepage evidence	No
2.11	Marine environment or other risk of corrosion (within 1km from water with surf)	No
2.12	Erosion	No

## 3.0 INSPECTION OF SITE

3.1	Site status - platform slope is: <b>Slope:</b> 7% <b>Fall direction:</b> E	
3.2	Slope stability assessment recommended (> 11 Degrees)	No
3.3	Are there any Retaining Walls supporting this site? (if yes, see attached plan drawing 6.0)	No

## 4.0 VISUAL OBSERVATION OF NEIGHBOURHOOD

4.1	Presence of rock Is near-surface rock visible on this site? or on adjoining lots? in nearby excavations?	No
4.2	Existing masonry buildings Is there significant cracking of existing masonry walls? Building Type:	No
4.3	Indicators of movement in the following: Roads, Kerbs, Pavements, Masonry Fences, and/or Ground Surfaces. Is there significant movement in any of the above?	No



# 5.1 FIELD LOG

**Clayey gravelly silt,**  
**Customer Job:** M72HY  
**Job Number:** 25003  
**Site Address:** LOT 5 DP 1184312 SUBLOT 6 72 HILLS STREET YOUNG NSW 2594

22/01/2025

**Borehole:** DCP1/BH1  
**Surface RL:** 515.2  
**Latitude:** 34°30.629  
**Longitude:** 148°31.587

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.15 0.30 0.45 0.60 0.75	10 8 7 8 6				Clayey sandy grave/gravelly clay, strong brown Coarse aggregate 1-4 mm 50% Cravelly sandy clay, strong brown Coarse aggregate 1-3 mm 25%  Gravelly clay, strong brown rolls a rod 2-3 mm x 80 mm Coarse aggregate1-5 mm 35%	Da  M   M			VSt  St   F	
	0.9 1.05 1.20 1.35 1.50	6 6 8 7 7				Sandy gravelly clay, pale brown, yellowish brown Coarse aggregate 1-12 mm 45%	M 13.4	1.5	30	St	
	1.65 1.80 1.95 2.10 2.25	6 8 11 14				End of Borehole 1.6 m bgs!					
	2.40 2.55 2.70 2.85 3.00										
	3.15 3.30 3.45 3.60 3.75										
	3.90 4.05 4.20 4.35 4.50										
		WT – Water Table      UTP – Unable to pernitrate      DCP – 9kg Dynamic Cone Penetrometer      PP- Pocket Penetrometer									
AND – Density Index vs Approx. Penetrometer results						SILTS & CLAY – Cu vs Approx. Penetrometer results				MOISTURE	
DENSITY		Density Index	DCP Blow Count (blows/100mm)	CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Dial Indicator				
VL - Very Loose  L – Loose MD – Medium Dense D – Dense VD - Very Dense		< 15 % 15 – 35 % 35 – 65 % 65 – 85 % > 65 – 85 %	< 1 1 – 3 3 – 9 9 – 15 > 15	VS – Very Soft  S – Soft F – Firm St – Stiff VSt – Very Stiff H – Hard	0 – 12 12 - 25 25 – 50 50 - 100 100 – 200 > 200	< 1 1 - 2 2 – 3 3 – 5 5 – 8 > 8	0 - 0.2 0.2 - 0.5 0.5 - 1.0 1.0 - 2.0 3.0 - 4.0 > 4.0	D – Dry Da- Damp M – Moist W – Wet W <sub>P</sub> - Plastic Limit W <sub>L</sub> – Liquid Limit			

# 5.1 FIELD LOG

**Clayey gravelly silt,**  
**Customer Job:** M72HY  
**Job Number:** 25003  
**Site Address:** LOT 5 DP 1184312 SUBLOT 6 72 HILLS STREET YOUNG NSW 2594

22/01/2025

**Borehole:** DCP2/BH02

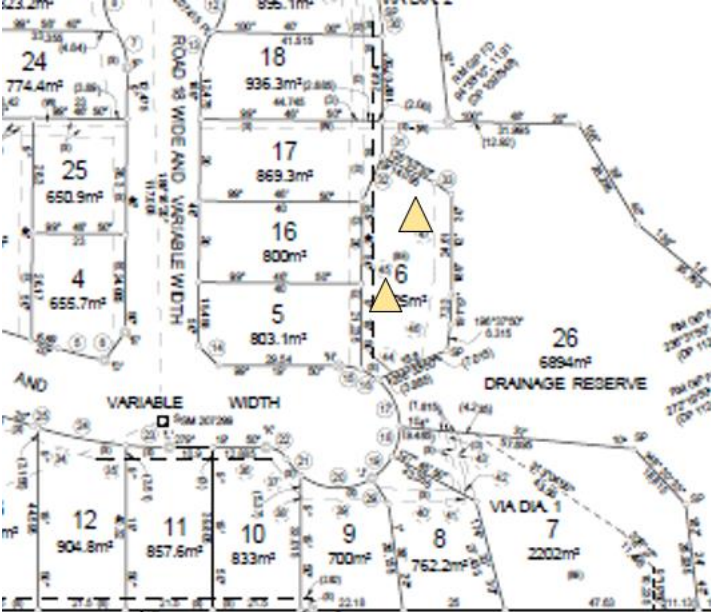
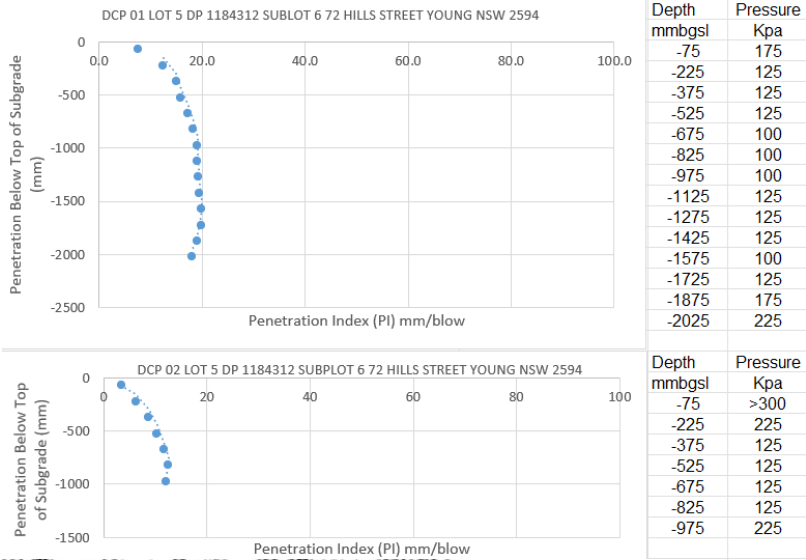
**Surface RL:** 514.8

**Latitude:** 34°30.613

**Longitude:** 148°31.589

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.15 0.30 0.45 0.60 0.75	22 14 7 8 7				Gravelly sandy clay, strong brown = dark brown, brownish red	Da    12.8			St	
	0.9 1.05 1.20 1.35 1.50	8 14				Gravelly sandy clay, strong brown, pale reddish brown Rolls a rod 3 mm x 100 mm Gravelly fine sandy clay, pale brown  Gravelly fine sandy clay, yellowish brown, strong brown coarse aggregate 1-3 mm 25%	M M M			H F F	
	1.65 1.80 1.95 2.10 2.25					End of Borehole 1.6 mbgs!					
	2.40 2.55 2.70 2.85 3.00										
	3.15 3.30 3.45 3.60 3.75										
	3.90 4.05 4.20 4.35 4.50										
		WT – Water Table      UTP – Unable to pernitrate      DCP – 9kg Dynamic Cone Penetrometer      PP- Pocket Penetrometer									
AND – Density Index vs Approx. Penetrometer results					SILTS & CLAY – Cu vs Approx. Penetrometer results					MOISTURE	
DENSITY		Density Index	DCP Blow Count (blows/100mm)	CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Dial Indicator				
VL - Very Loose L - Loose MD – Medium Dense D – Dense VD - Very Dense		< 15 % 15 – 35 % 35 – 65 % 65 – 85 % > 65 – 85 %	< 1 1 – 3 3 – 9 9 – 15 > 15	VS – Very Soft S – Soft F – Firm St – Stiff VSt – Very Stiff H – Hard	0 – 12 12 - 25 25 – 50 50 - 100 100 – 200 > 200	< 1 1 - 2 2 – 3 3 – 5 5 – 8 > 8	0 - 0.2 0.2 - 0.5 0.5 - 1.0 1.0 - 2.0 3.0 - 4.0 > 4.0	D – Dry Da- Damp M – Moist W – Wet W <sub>P</sub> - Plastic Limit W <sub>L</sub> – Liquid Limit			

6.0 LOCATION SKETCH



7.0 COMMENTS & RECOMMENDATIONS

Site and soil classification is ‘S’ with a net vertical ground surface movement of 20 mm.

## 8.0 CERTIFICATION

The attachment of the signature below is to certify that this report has been compiled in accordance with Australian Standards AS2870-2011, AS1726-1993 and AS3798-2007.

## 9.0 REPORT CONDITIONS & LIMITATIONS

### CONDITIONS OF THE RECOMMENDATIONS

- This is a site classification report generally in accordance with AS-2870-2011 and should be sufficient for a qualified person to design footings for structures covered under the scope of this standard.
- This site classification was completed by an experienced soil technician and does not make any allowance for any possible mine subsidence within the building envelope.
- The advice given in this report assumes that the test results are representative of the overall subsurface conditions. However, it should be noted that actual conditions in some parts of the building site may differ from those found in the boreholes. If excavations reveal soil conditions significantly different from those shown in our attached Borehole Log(s), Enviroseer must be consulted, and excavations stopped immediately.
- Any sketches in this report should be considered as only approximate pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions or slope information should not be used for any building cost calculations and/or positioning of the building. Dimensions on logs are correct.

### REPORT LIMITATIONS

The investigations addressed in this report are not intended nor designed to locate all possible ground conditions on the site. It is not possible to identify all possible ground conditions. Further, one site may have a variety of ground conditions and, the ground conditions identified by the testing articulated in this report may change, even over noticeably short periods of time.

The advice and recommendations contained in this report are based on the test results obtained from the samples tested, and on the assumption that those test results are representative of the overall ground conditions of the entire site. The actual conditions in some parts of the site might differ from those tested. If excavation reveals ground conditions that vary from those outlined in our findings in this report and the advice contained in this report may differ significantly and must be revisited. If this occurs, Enviroseer must be consulted before any further work is carried out on the site, Enviroseer should be engaged for a supplementary report and updated recommendations.

The scope and relevance of the advice provided in the report is subject to restrictions and limitations. Enviroseer did not perform a complete assessment of all possible conditions or circumstances that may exist on the site. If a service is not expressly indicated that means it has not been provided, and the reader should not assume that it has been. If a matter is not specifically addressed then Enviroseer has not decided in relation to it, and the reader should not assume that it has.

Where data and information has been supplied by the client or a third party, the accuracy of the advice and recommendations in this report is dependent upon the accuracy of that data and information. Enviroseer is not responsible for verifying the accuracy of data or information provided to it by third parties. Enviroseer is not liable nor responsible for inaccurate advice provided upon reliance of incomplete or inaccurate data supplied by third parties.



# Foundation Maintenance and Footing Performance: A Homeowner's Guide



CSIRO

**BTF 18**  
replaces  
Information  
Sheet 10/91

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the homeowner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

This Building Technology File is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking in buildings.

## Soil Types

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. The table below is Table 2.1 from AS 2870, the Residential Slab and Footing Code.

## Causes of Movement

### Settlement due to construction

There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction, but has been known to take many years in exceptional cases.

These problems are the province of the builder and should be taken into consideration as part of the preparation of the site for construction. Building Technology File 19 (BTF 19) deals with these problems.

### Erosion

All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

### Saturation

This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume – particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

### Seasonal swelling and shrinkage of soil

All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

### Shear failure

This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.
- In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

## GENERAL DEFINITIONS OF SITE CLASSES

Class	Foundation
A	Most sand and rock sites with little or no ground movement from moisture changes
S	Slightly reactive clay sites with only slight ground movement from moisture changes
M	Moderately reactive clay or silt sites, which can experience moderate ground movement from moisture changes
H	Highly reactive clay sites, which can experience high ground movement from moisture changes
E	Extremely reactive sites, which can experience extreme ground movement from moisture changes
A to P	Filled sites
P	Sites which include soft soils, such as soft clay or silt or loose sands; landslip; mine subsidence; collapsing soils; soils subject to erosion; reactive sites subject to abnormal moisture conditions or sites which cannot be classified otherwise

#### Tree root growth

Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.
- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

### Unevenness of Movement

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Swelling gradually reaches the interior soil as absorption continues. Shrinkage usually begins where the sun's heat is greatest.

### Effects of Uneven Soil Movement on Structures

#### Erosion and saturation

Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpendes).

Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

#### Seasonal swelling/shrinkage in clay

Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will be temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.

#### Trees can cause shrinkage and damage



As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the external footings. The doming is accentuated and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

#### Movement caused by tree roots

In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

#### Complications caused by the structure itself

Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

#### Effects on full masonry structures

Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.



The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

#### Effects on framed structures

Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation cause a footing to fall away, this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

#### Effects on brick veneer structures

Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

### Water Service and Drainage

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem.

Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.

- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

### Seriousness of Cracking

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. The table below is a reproduction of Table C1 of AS 2870.

AS 2870 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

### Prevention/Cure

#### Plumbing

Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible, and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

#### Ground drainage

In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a grated drain system connected to the stormwater collection system is usually an easy solution.

It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject is referred to in BTF 19 and may properly be regarded as an area for an expert consultant.

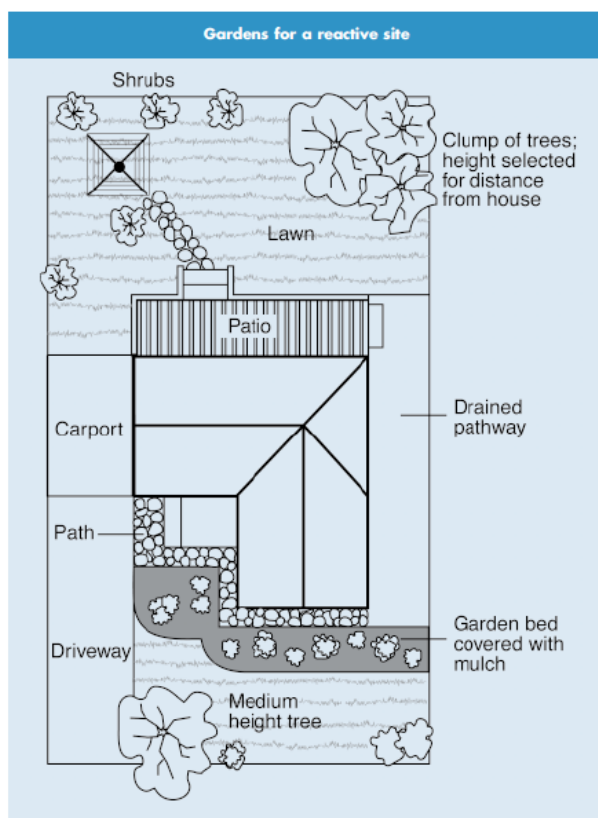
#### Protection of the building perimeter

It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving

### CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS

Description of typical damage and required repair	Approximate crack width limit (see Note 3)	Damage category
Hairline cracks	<0.1 mm	0
Fine cracks which do not need repair	<1 mm	1
Cracks noticeable but easily filled. Doors and windows stick slightly	<5 mm	2
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired	5–15 mm (or a number of cracks 3 mm or more in one group)	3
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted	15–25 mm but also depend on number of cracks	4



should extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill from it (see BTF 19).

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

#### Condensation

In buildings with a subfloor void such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

**Warning:** Although this Building Technology File deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

#### The garden

The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order.

Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

#### Existing trees

Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

#### Information on trees, plants and shrubs

State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information. For information on plant roots and drains, see Building Technology File 17.

#### Excavation

Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

### Remediation

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the homeowner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

**This BTF was prepared by John Lewer FAIB, MIAMA, Partner, Construction Diagnosis.**

The information in this and other issues in the series was derived from various sources and was believed to be correct when published.

The information is advisory. It is provided in good faith and not claimed to be an exhaustive treatment of the relevant subject.

Further professional advice needs to be obtained before taking any action based on the information provided.

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### CONSTRUCTION NOTES

- CN19. REINFORCEMENT SYMBOLS:  
 S - DENOTES GRADE 230S HOT ROLLED DEFORMED BARS TO AS 1302.  
 R - DENOTES GRADE 230R HOT ROLLED PLAIN BARS TO AS 1302.  
 W - DENOTES HARD-DRAWN PLAIN WIRE TO AS 1303.  
 N - DENOTES GRADE 250N TRENCH MESH TO AS 4671.  
 SL/RL - DENOTES D500L REINFORCEMENT FABRIC TO AS 4671.  
 TM - DENOTES GRADE D500L TRENCH MESH TO AS 4671.
- REINFORCEMENT NOTATION SHALL BE AS FOLLOWS:  
 NUMBER OF BARS IN GROUP      BAR GRADE & TYPE  
    17 N 20 - 250
- NOMINAL BAR SIZE IN mm      SPACING IN mm
- THE FIGURE FOLLOWING THE FABRIC SYMBOLS SL, RL, TM IS THE REFERENCE NUMBER FOR FABRIC AS 4671.

## SITE DRAINAGE

ALLOTMENTS CONTAINING REACTIVE SITE SHALL BE PROVIDED WITH AN ADEQUATE SYSTEM OF DRAINAGE DESIGNED IN ACCORDANCE WITH THE FOLLOWING RECOMMENDATIONS:

- SD1. THE FOOTING AND SLAB DESIGN REQUIRES ADEQUATE SURFACE DRAINAGE AROUND THE PERIMETER OF THE BUILDING. CARE SHALL BE TAKEN WITH THE SURFACE DRAINAGE OF THE ALLOTMENT FROM THE START OF CONSTRUCTION. THE DRAINAGE SYSTEM SHOULD BE COMPLETED BY THE FINISH OF CONSTRUCTION OF THE BUILDING.
- SD2. THE DRAINAGE SHALL BE DESIGNED & CONSTRUCTED TO AVOID ANY POSSIBILITY OF WATER PONDING AGAINST OR NEAR THE BUILDING. THE GROUND IN THE IMMEDIATE VICINITY OF THE BUILDINGS SHOULD BE GRADED TO SLOPE 50mm AWAY FROM THE BUILDING OVER A DISTANCE OF 1m FROM THE BUILDING. ANY PAVING SHOULD ALSO BE SUITABLY SLOPED.
- SD3. PARTICULAR ATTENTION SHOULD BE GIVEN TO ENSURING THAT PLUMBING TRENCHES DO NOT INTRODUCE WATER TO THE FOUNDATION OF THE BUILDING. SPECIFICALLY, THE TRENCHES SHOULD BE SLOPED AWAY FROM THE BUILDING & SHOULD BE BACK FILLED WITH CLAY IN THE TOP 300mm WITH 15m OF THE BUILDING. WHERE WRES PASS UNDER THE FOOTING, THE TRENCH SHOULD BE BACK FILLED WITH CLAY OR CONCRETE TO PREVENT THE INGRESS OF WATER BENEATH THE FOOTING.
- SD4. SUBSURFACE DRAINS TO REMOVE GROUNDWATER SHALL NOT BE USED WITHIN 15m OF THE BUILDINGS UNLESS DESIGNED IN ACCORDANCE WITH ENGINEERING PRINCIPLES.

## PLUMBING & DRAINAGE DETAILING

ON REACTIVE CLAY SITES ADDITIONAL CARE IS NEEDED TO REDUCE THE RISK OF LEAKS NEAR THE FOOTINGS & THE FOLLOWING IS RECOMMENDED:

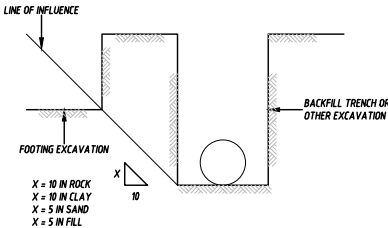
- PD1. PENETRATIONS OF THE SLAB & BEAMS SHOULD BE AVOIDED IF POSSIBLE, HOWEVER, WHERE NECESSARY, HORIZONTAL PENETRATIONS SHALL BE SLEEVED TO ALLOW FOR MOVEMENT WITH 10mm THICK CLOSED CELL POLYETHYLENE LAGGING FOR M CLASS SITES, 20mm THICK FOR R1 CLASS SITES & 40mm THICK FOR H2 & E CLASS SITES. VERTICAL PENETRATIONS DO NOT REQUIRE LAGGING.
- PD2. CONNECTION OF STORM WATER DRAINS & WASTE DRAINS SHOULD INCLUDE FLEXIBLE CONNECTIONS, PARTICULARLY ON REACTIVE SITES. IN ACCORDANCE WITH AS 2870 & THE PLUMBING CODE OF AUSTRALIA.
- PD3. SEPTIC TANKS & ASSOCIATED SOAKAGE AREAS SHOULD BE LOCATED TO MINIMISE THEIR EFFECT ON THE FOUNDATIONS.
- PD4. PLUMBING & DRAINAGE UNDER A SLAB SHOULD BE AVOIDED WHERE PRACTICAL. PIPES SLEEVED WITH POLYETHYLENE MAY BE ENCASED IN CONCRETE OR RECESS IN THE SLAB & PROVIDED WITH FLEXIBLE JOINTS AT THE EXTERIOR OF THE SLAB. NOTE: METHODS USED SHOULD COMPLY WITH LOCAL PLUMBING & DRAINAGE REGULATIONS.



IT IS IMPORTANT TO REALISE THAT ENGINEERING DESIGN ON REACTIVE CLAYS IS A COMPROMISE SOLUTION BETWEEN COSTS & BUILDING PERFORMANCE. ENGINEERING DESIGN AIMS AT ACCOMMODATING DIFFERENTIAL MOVEMENTS CAUSED BY EXTREME SEASONAL MOISTURE CHANGES & DOES NOT ALLOW FOR UNCONTROLLED LOCALISED MOISTURE CHANGES WHICH ARE CONTROLLABLE BY ADEQUATE SITE MANAGEMENT TECHNIQUES. IT IS VIRTUALLY IMPOSSIBLE TO DESIGN AN ECONOMIC FOUNDATION THAT WILL TOTALLY PREVENT DIFFERENTIAL MOVEMENT. IT IS THEREFORE TO BE EXPECTED THAT SOME NON-STRUCTURAL CRACKING & MOVEMENT WILL OCCUR. SLIGHT CRACKING (DEFINED AS CRACK WIDTHS TO 5mm), SHOULD HAVE NO STRUCTURAL INFLUENCE ON THE FUNCTION OF THE WALL. THE RECTIFICATION OF SUCH PROBLEMS TO BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER. EXPERIENCED WITH REACTIVE SITE CONDITIONS. FOR REACTIVE SITES, THE FOLLOWING OWNER/TENANT RECOMMENDATIONS ARE SUGGESTED AS A MEANS OF MINIMISING LOCAL DIFFERENTIAL MOVEMENT PROBLEMS WITH THE FINISHED CONSTRUCTION.

SM1. LEAKING PIPING & BLOCKED DRAINS SHOULD BE PROMPTLY ATTENDED TO IN ADDITION. GARDEN WATERING SHOULD BE CAREFULLY CONTROLLED TO PREVENT EXCESSIVE MOISTURE VARIATIONS AROUND THE BUILDING. MEASURES AIMED AT PRODUCING A UNIFORM GROUND MOISTURE CONTENT YEAR ROUND ARE BENEFICIAL.

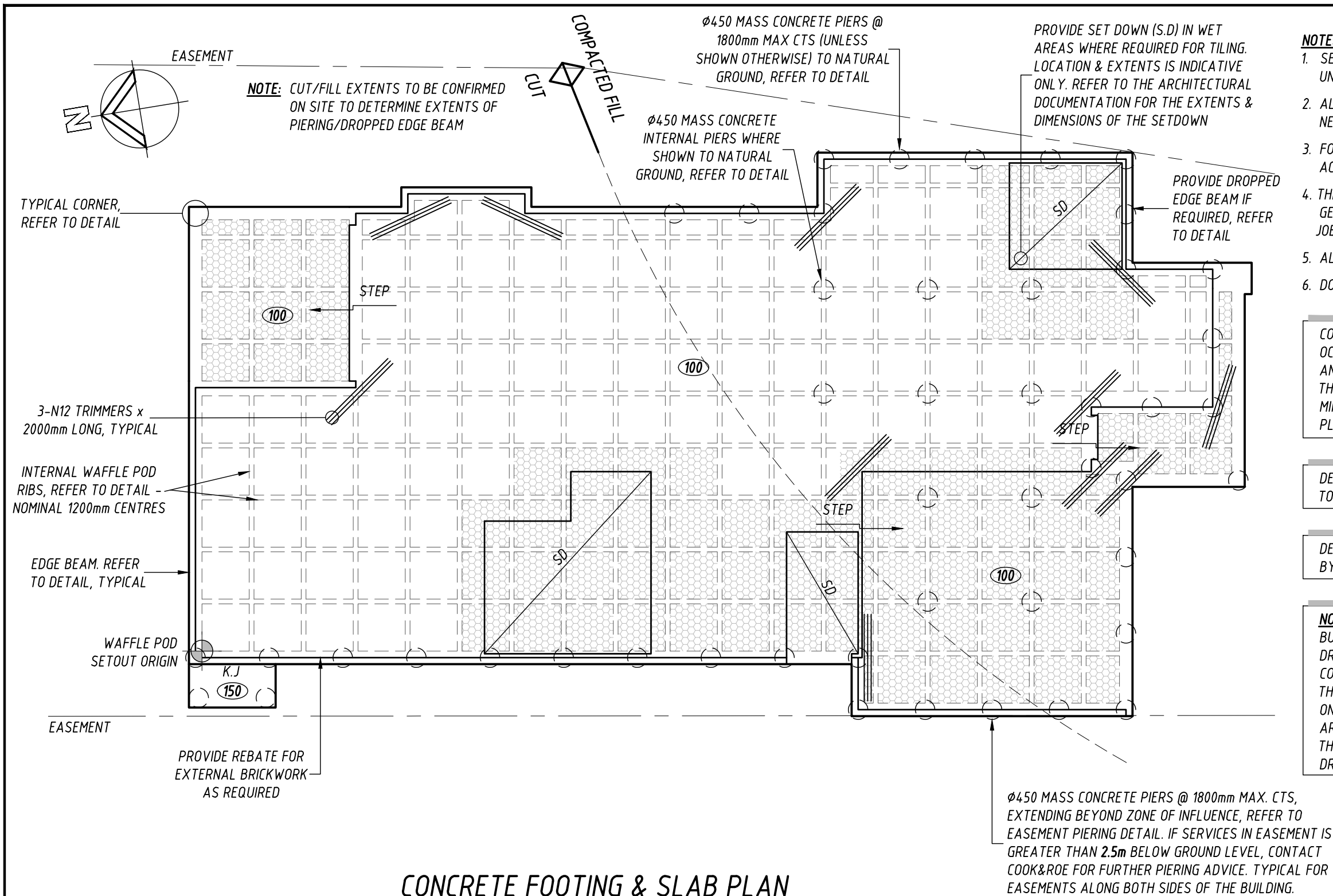
- SM2. TREES & LARGE SHRUBS, WHEN PLANTED CLOSE TO THE BUILDING CAN CAUSE SIGNIFICANT MOISTURE CHANGES UNDER THE CONSTRUCTION IN TIMES OF DROUGHT. PROBLEMS FROM THIS CAUSE CAN BE SIGNIFICANTLY REDUCED BY PLANTING TREES SOME DISTANCE AWAY FROM BUILDINGS. 75% OF THE MATURE TREE HEIGHT IS A RECOMMENDED MINIMUM, HOWEVER RECOMMENDED DISTANCE VARIES DEPENDING ON SITE CONDITIONS & TREE SPECIES.
- SM3. IN TIMES OF DROUGHT, WATER DEMAND OF TREES CAN BE SUBSTANTIALLY REDUCED BY EXTENSIVE PRUNING, OR ALTERNATIVELY PROVISION OF ADEQUATE WATER WILL REDUCE THE DEGREE OF BUILDING DAMAGE THAT TREES CAUSE. WATERING IS PROBABLY BEST ACHIEVED BY PROVIDING BORE HOLES OR TRENCHES BETWEEN THE TREE & THE BUILDING. CARE SHOULD BE TAKEN NOT TO DESTABILISE THE BUILDING BY EXCAVATING TRENCHES TOO CLOSE TO THE BUILDING. FILLING ANY TRENCHES WITH COMPACTED GRANULAR MATERIAL IS RECOMMENDED.
- SM4. LIMITATIONS OF EXCAVATIONS NEAR FOOTINGS TO BE AS FOLLOWS



IF AN EXISTING SERVICE PIPE, EASEMENT OR ANY EXCAVATION (INCLUDING SWIMMING POOL) EXISTS ADJACENT TO AN EDGE BEAM, THE BUILDING CONTRACTOR IS TO VERIFY THE EXCAVATION OR SERVICE PIPE DEPTH. IF COMPLIANCE WITH ABOVE DETAIL CANNOT BE ACHIEVED THEN THE ENGINEER SHOULD BE CONTACTED PRIOR TO PROCEEDING.

DRAWING LIST	
Dwg. No.	DESCRIPTION
S.01	GENERAL NOTES & DRAWING LIST
S.02	CONCRETE FOOTING & SLAB PLAN
S.03	CONCRETE DETAILS '1'
S.04	CONCRETE DETAILS '2'
S.05	CONCRETE DETAILS '3'
S.06	ARTICULATION JOINT PLAN & DETAIL

[illegible]



## CONCRETE FOOTING & SLAB PLAN

### WAFFLE PODS

SLAB TO BE 100mm MINIMUM THICK REINFORCED WITH SL82 MESH IN TOP THROUGHOUT, U.N.O. 20mm COVER TO INTERNAL SURFACES & 30mm COVER TO EXTERNAL SURFACES.

SLAB TO BE PLACED ON APPROVED VOID FORMERS PLACED ON COMPACTED FILL MATERIAL OVERLAID WITH AN APPROVED WATERPROOF MEMBRANE.

XXX DENOTES SLAB THICKNESS

K.J — DENOTES KEY JOINT - REFER TO DETAIL

DENOTES USE OF 225mm DEEP VOID FORMERS FOR GARAGE, PORCH, ALFRESCO & WET AREA SETDOWN, REFER TO DETAIL

#### NOTES:

- SEE GENERAL NOTES & DETAILS REGARDING FILL REQUIREMENTS UNDER SLAB.
- ALL BEAMS SUPPORTING BRICKWORK TO BE DEEPEMED AS NECESSARY TO EXTEND THROUGH ANY FILL MATERIAL.
- FOOTINGS & SLABS HAVE BEEN DESIGNED FOR A CLASS 'S' SITE IN ACCORDANCE WITH AS 2870:2011. RESIDENTIAL SLABS & FOOTINGS.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER GENERAL BUILDING PLANS & SPECIFICATIONS. JOB BY: AREI DESIGNS JOB NO. 4585
- ALL DIMENSIONS ARE GIVEN IN MILLIMETRES, U.N.O.
- DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS. IF IN DOUBT - ASK.

CONCRETE SLABS CAN CRACK. TO MINIMISE THE CHANCE OF CRACK OCCURRENCE WHERE BRITTLE FLOOR COVERINGS ARE TO BE USED IN AN AREA GREATER THAN 16 SQUARE METRES, IT IS RECOMMENDED THAT REINFORCEMENT IS INCREASED TO SL92 MINIMUM. OR ALLOW A MINIMUM PERIOD OF 3 MONTHS DRYING OF CONCRETE BEFORE PLACEMENT OF BRITTLE FLOOR COVERINGS.

DESIGN BASED UPON ARTICULATED MASONRY VENEER CONSTRUCTION TO AS 2870:2011.

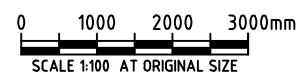
DESIGN BASED UPON CLASS 'S' SOIL CLASSIFICATION AS ADVISED BY ENVIROSEER, REPORT: 25003

NOTE: ENSURE ALL SITE EARTHWORKS ARE GRADED AWAY FROM THE BUILDING & SITE LANDSCAPING CONSTRUCTED TO ADEQUATELY DRAIN OVERLAND FLOW & PREVENT ABNORMAL MOISTURE CONDITIONS ADJACENT TO THE FOOTINGS. THIS IMPORTANT THROUGHOUT THE CONSTRUCTION PHASE OF THE BUILDING & BEYOND ONCE THE BUILDING & LANDSCAPING IS COMPLETE. IF STRIP DRAINS ARE TO BE INSTALLED AROUND THE PERIMETER OF THE BUILDING THESE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SITE DRAINAGE NOTES ON DRAWING S.01 & THE REQUIREMENTS OF AS 2870

THE TOTAL NUMBER OF REINFORCEMENT BARS IN BEAMS SHALL BE AS FOLLOWS:

STEM WIDTH	TOP STEEL (ADDITIONAL TO FABRIC)
110 - 150mm	0
151 - 220mm	1
221 - 330mm	2
331 - 440mm	3
BEAM/STEM WIDTH	BOTTOM STEEL (IN TOTAL)
110 - 150mm	1
151 - 220mm	2
221 - 330mm	3
331 - 440mm	4

Rev	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	BJK	WGR	24.03.25



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Project

**PROPOSED NEW RESIDENCE  
LOT 6 ARMSTRONG PLACE, YOUNG**

Title

**CONCRETE FOOTING & SLAB PLAN**

Client **MELLROSS HOMES**

Drawn BJK

Designed WGR

Approved

Scale 1:100

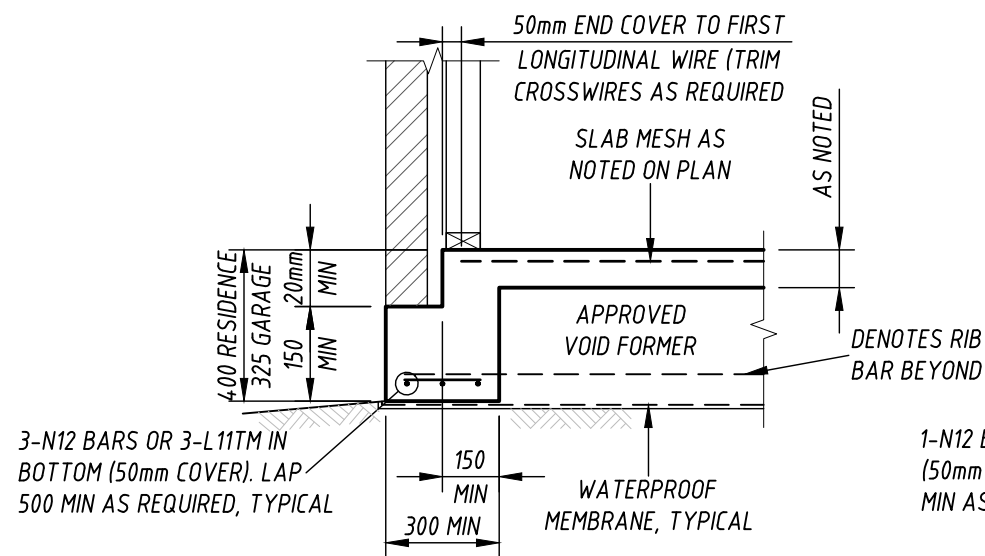
Date MARCH 2025

Wayne Roe  
BE MIE Aust CPEng NER (2476635)

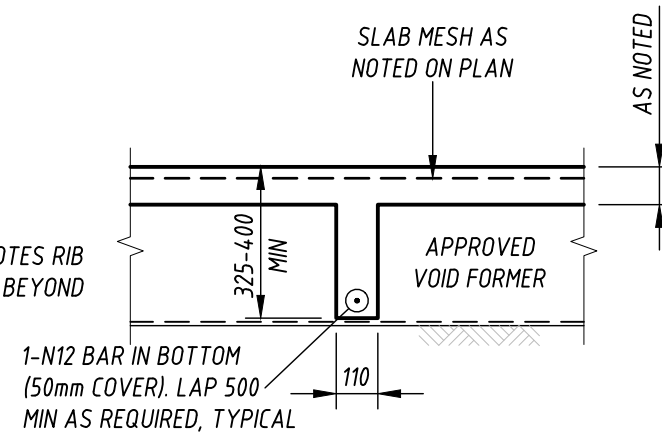
Job No: **250177**

Dwg No: **S.02**

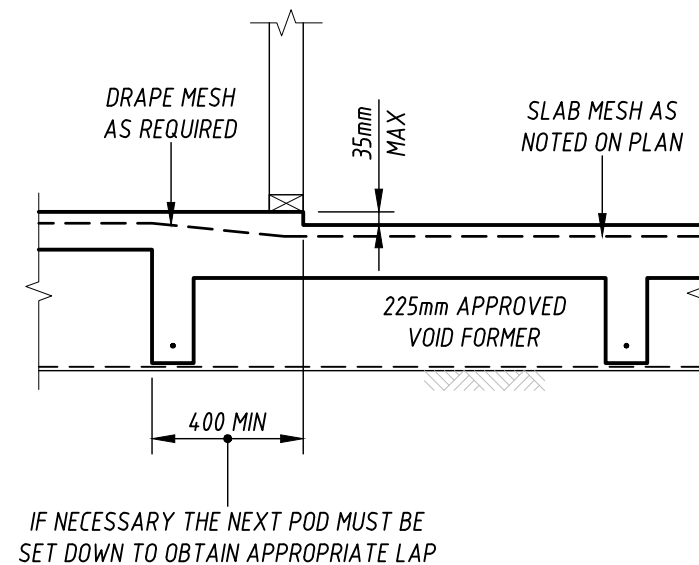
This Drawing must not be used for Construction unless signed as Approved  
Original Size **A3**



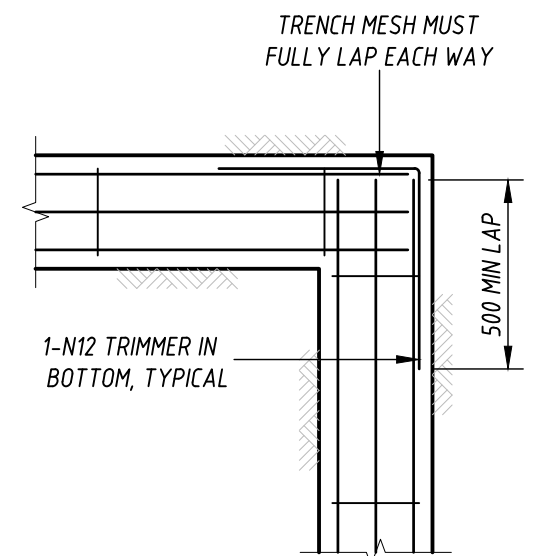
**EDGE BEAM DETAIL**



**INTERNAL RIB DETAIL**

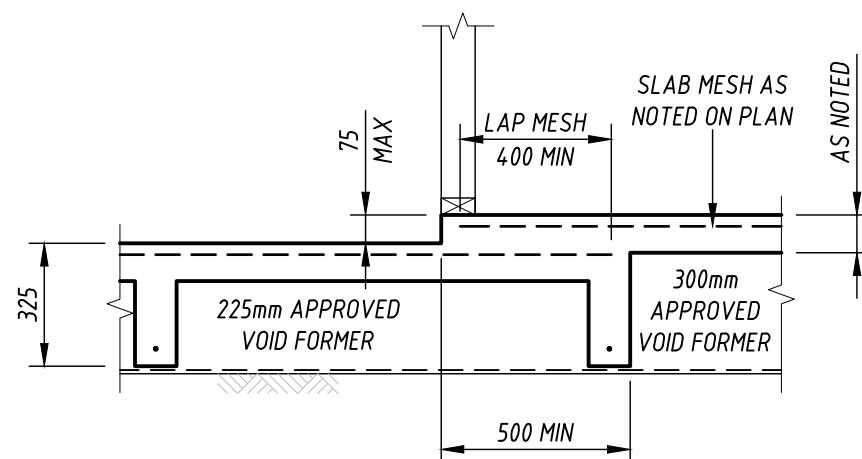


**SLAB SETDOWN (S.D) DETAIL**



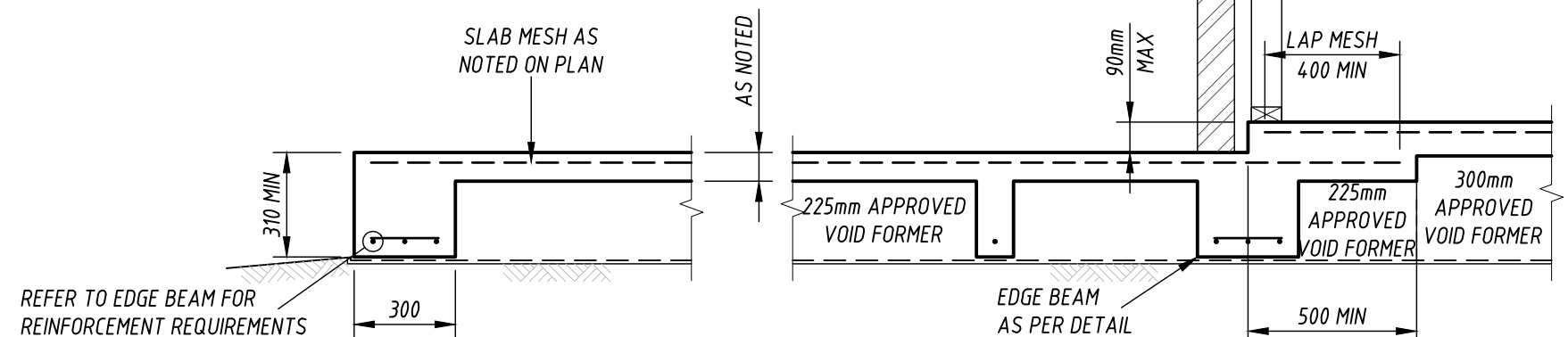
**TYPICAL CORNER DETAIL**

PLAN VIEW: TYPICAL AT ALL CORNERS



**GARAGE AREA SETDOWN DETAIL**

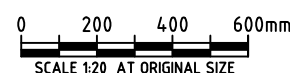
NOTE: RIB LOCATIONS SHOWN ARE INDICATIVE ONLY. REFER TO PLAN FOR RIB LOCATIONS.



**ALFRESCO SETDOWN DETAIL**

(PORCH SIMILAR)

A	ISSUED FOR APPROVAL	BJK	WGR	24.03.25
Rev	Revision Description	Drawn	Approved	Date




**DO NOT SCALE**

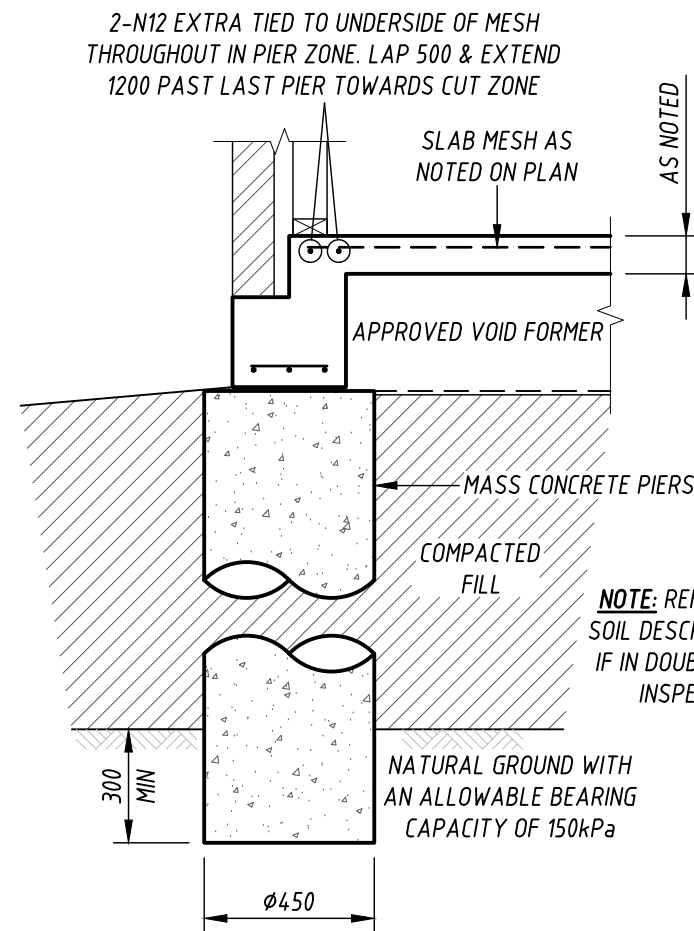
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Project	<b>PROPOSED NEW RESIDENCE LOT 6 ARMSTRONG PLACE, YOUNG</b>
Title	<b>CONCRETE DETAILS '1'</b>

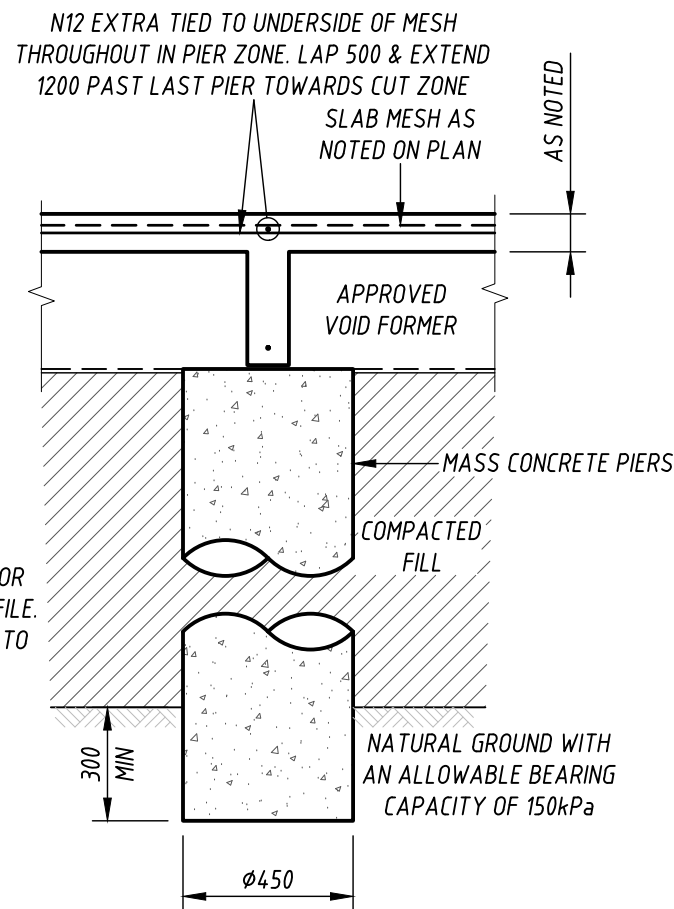
Client					<b>MELLROSS HOMES</b>						
Drawn		BJK		Designed		WGR		Approved			
Scale		1:20		Date		MARCH 2025		Wayne Roe		BE MIE Aust CPEng NER (2476635)	
Job No:		<b>250177</b>		Dwg No:		<b>S.03</b>		This Drawing must not be used for Construction unless signed as Approved		Original Size	
										<b>A3</b>	





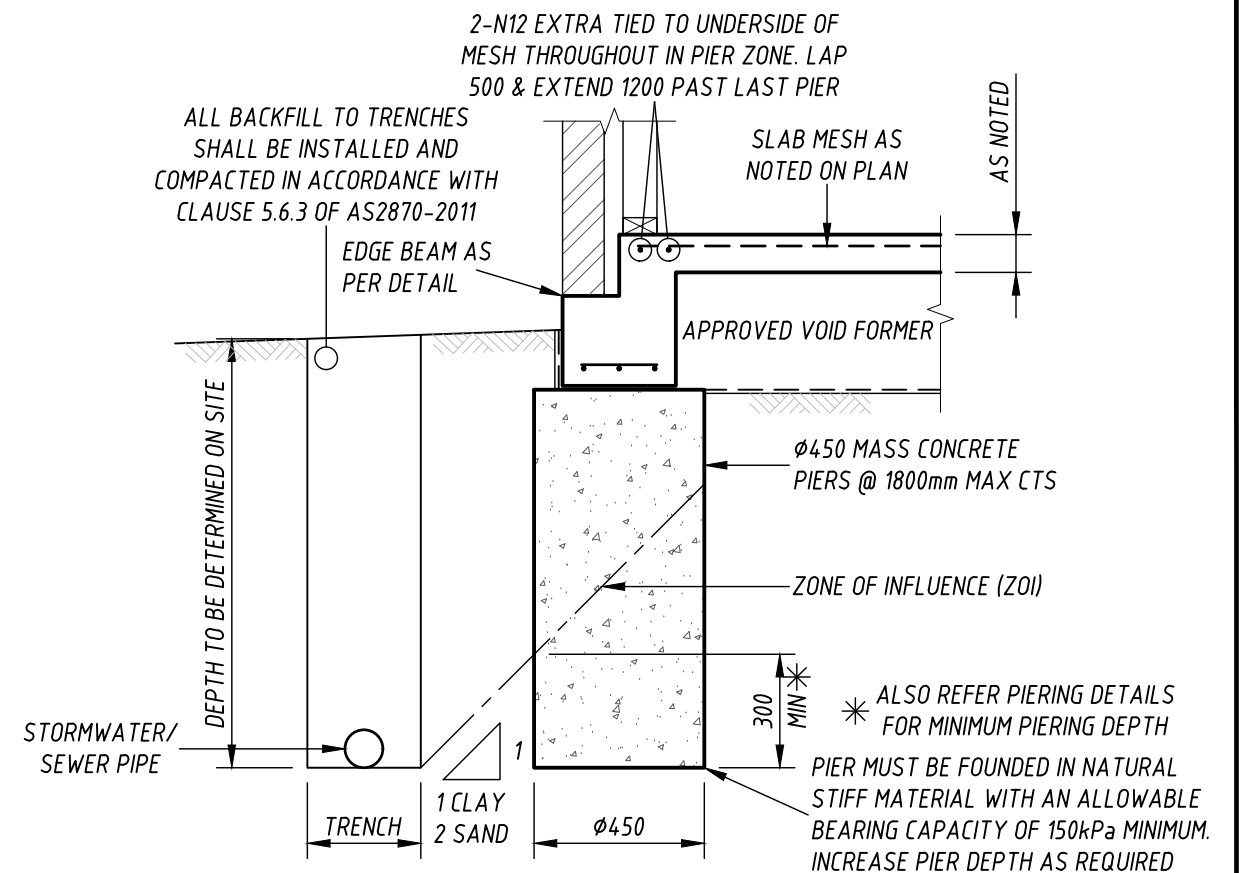
## EXTERNAL MASS CONCRETE PIER DETAIL

WHERE REQUIRED



## INTERNAL MASS CONCRETE PIER DETAIL

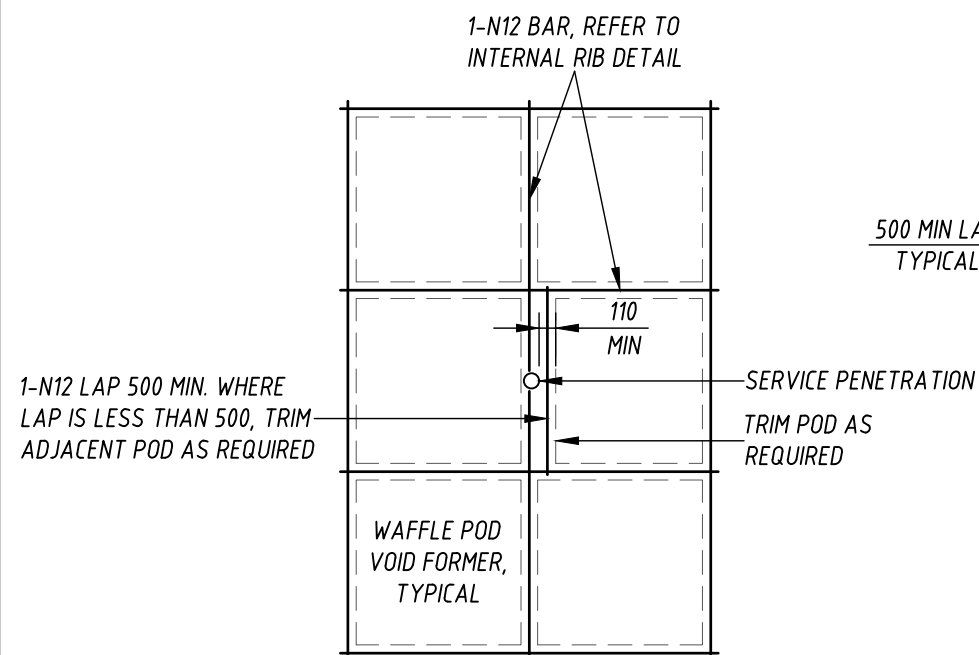
WHERE REQUIRED



## SEWER/STORMWATER PIERING DETAIL

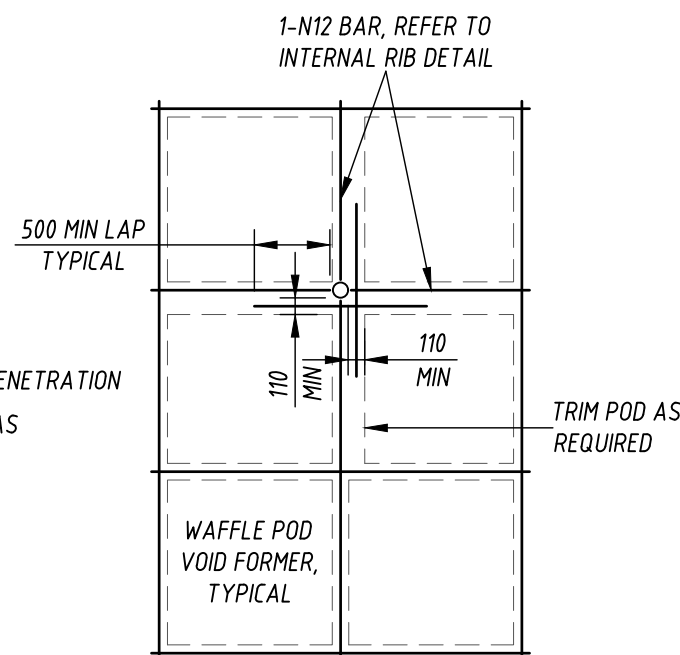
(IF REQUIRED)

NOTE: IT IS THE BUILDERS RESPONSIBILITY TO DETERMINE IF PIERING IS REQUIRED AS THE DEPTH OF THE SERVICES & LOCATION HAS NOT BEEN MADE AVAILABLE TO THIS OFFICE



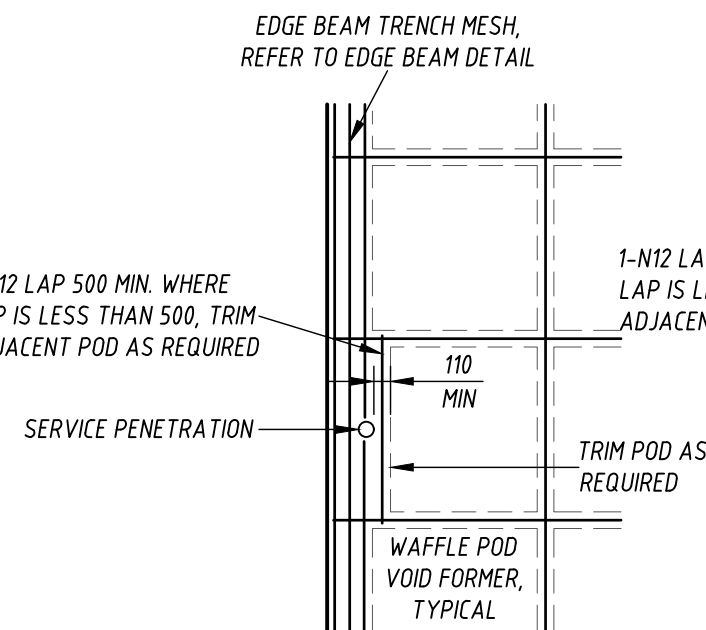
## PIPE PENETRATION TO INTERNAL RIB DETAIL

SCALE 1:50



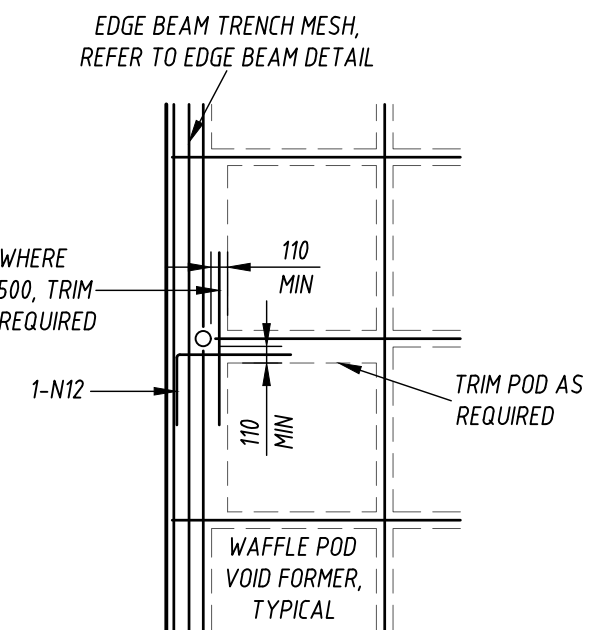
## PIPE PENETRATION @ INTERNAL RIB INTERSECTION

SCALE 1:50



## PIPE PENETRATION TO EDGE BEAM DETAIL

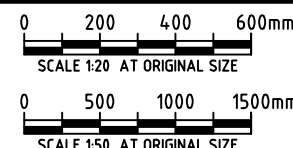
SCALE 1:50



## PIPE PENETRATION @ EDGE BEAM & INTERNAL RIB DETAIL

SCALE 1:50

Rev	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	BJK	WGR	24.03.25



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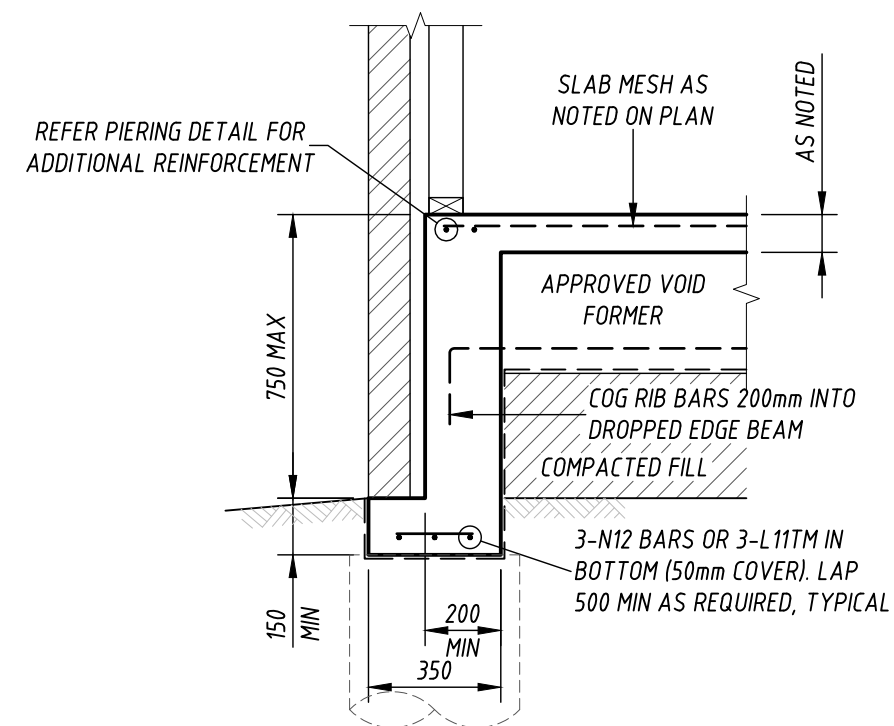
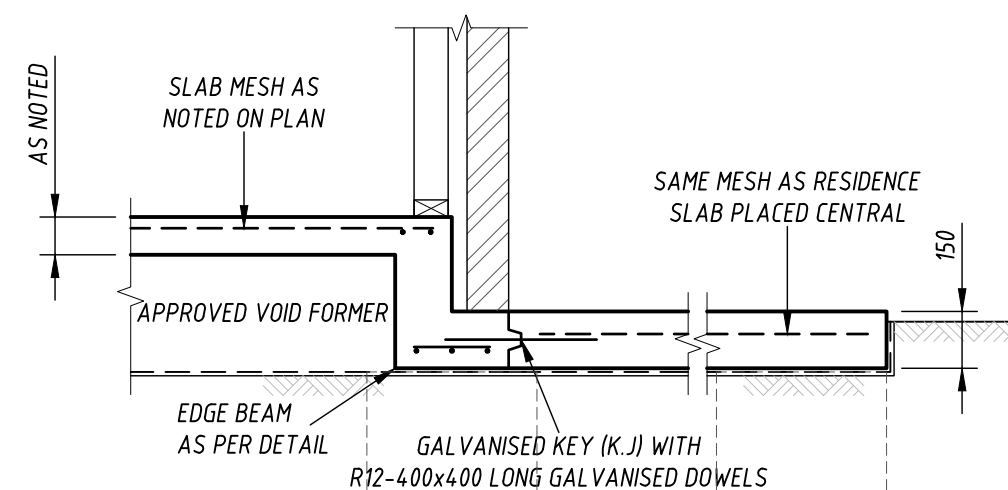
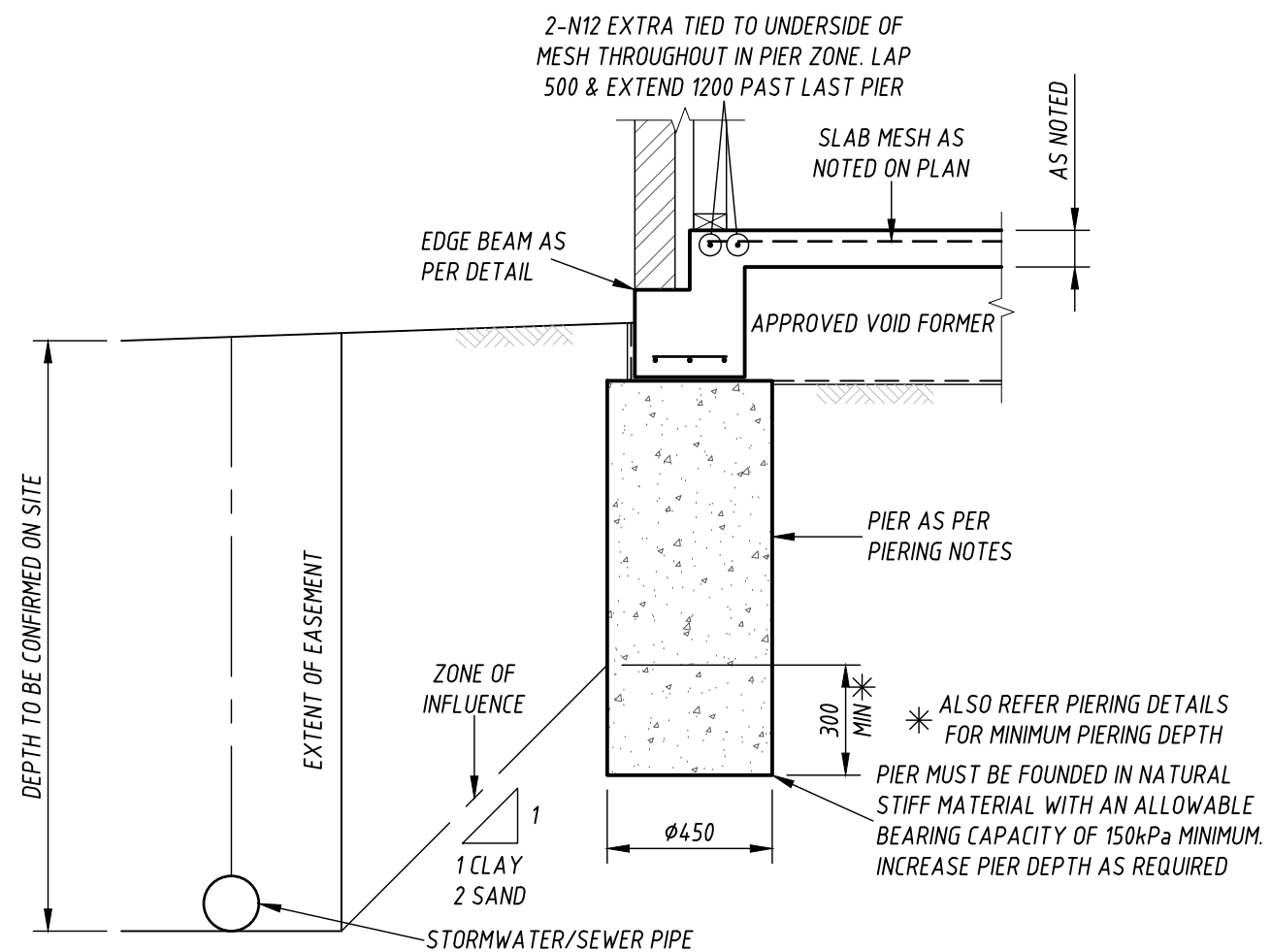
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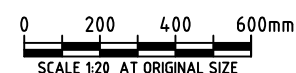
Project	<b>PROPOSED NEW RESIDENCE LOT 6 ARMSTRONG PLACE, YOUNG</b>
Title	<b>CONCRETE DETAILS '2'</b>

Client	<b>MELLROSS HOMES</b>
Drawn	BJK
Designed	WGR
Approved	<i>Wayne Roe</i>
Scale	1:20 U.N.O
Date	MARCH 2025
Job No:	<b>250177</b>
Dwg No:	<b>S.04</b>
Original Size	<b>A3</b>






A	ISSUED FOR APPROVAL	BJK	WGR	24.03.28
Rev	Revision Description	Drawn	Approved	Date

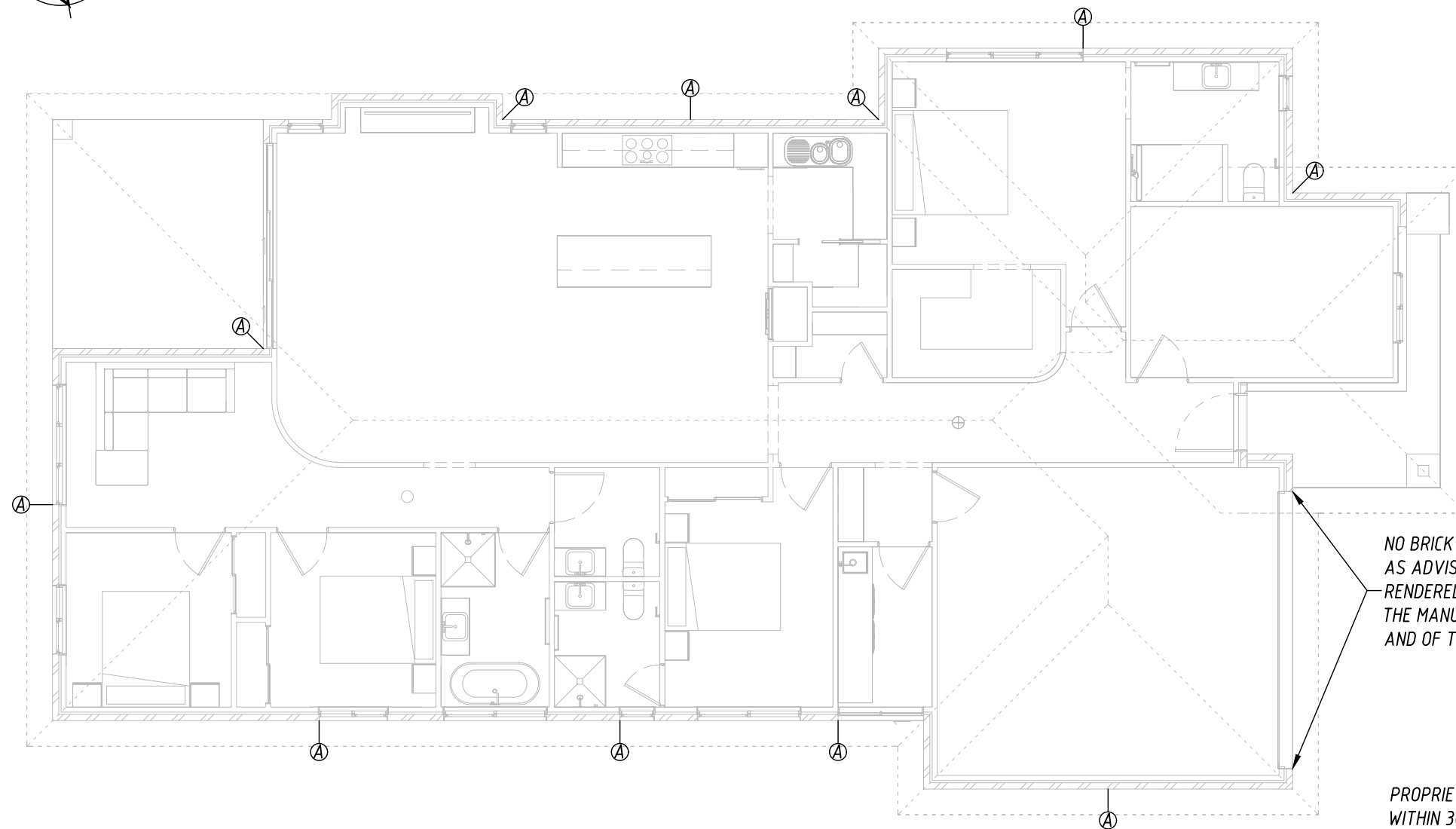
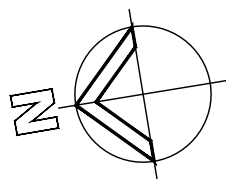


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Project	<b><i>PROPOSED NEW RESIDENCE LOT 6 ARMSTRONG PLACE, YOUNG</i></b>
Title	<b><i>CONCRETE DETAILS '3'</i></b>

Client <b>MELLROSS HOMES</b>			
Drawn	BJK	Designed	WGR
Scale	1:20	Date	MARCH 2025
Job No:	<b>250177</b>	Dwg No:	<b>S.05</b>
Approved  Wayne Roe BE MIE Aust CPEng NER (2476635)			This Drawing must not be used for Construction unless signed as Approved
			Original Size <b>A3</b>

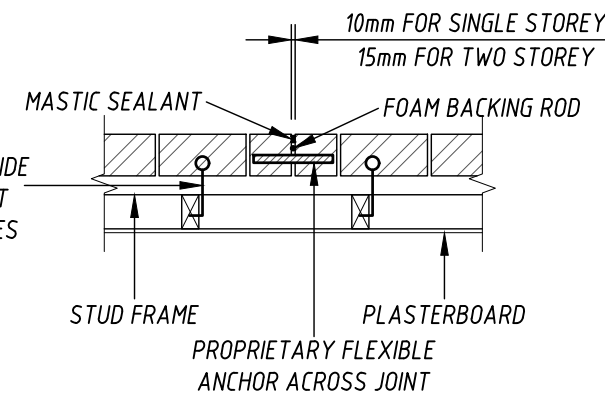


## ARTICULATION JOINT PLAN

Ⓐ — DENOTES LOCATION OF MASONRY ARTICULATION JOINTS

NO BRICKWORK TO FRONT OF GARAGE ASSUMED AS ADVISED BY BUILDER. PROVIDE JOINT IN RENDERED FOAM BOARD IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AT EACH AND OF THE GARAGE DOOR OPENING.

PROPRIETARY WALL TIES WITHIN 300-400mm EACH SIDE OF JOINT & SPACED TO NOT MORE THAN 400mm CENTRES



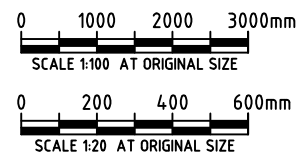
## ARTICULATION JOINT DETAIL

SCALE 1:20

DENOTED AS Ⓐ ON PLAN

**NOTE:** CONSTRUCTION OF ARTICULATION JOINTS TO BE IN ACCORDANCE WITH AS4773.2. (CURRENT EDITION)

Rev	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	BJK	WGR	24.03.25



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Project	<b>PROPOSED NEW RESIDENCE LOT 6 ARMSTRONG PLACE, YOUNG</b>			Client	<b>MELLROSS HOMES</b>		
Title	<b>ARTICULATION JOINT PLAN &amp; DETAIL</b>			Drawn	BJK	Designed	WGR
				Scale	1:100 U.N.O	Date	MARCH 2025
				Job No:	250177	Dwg No:	S.06
				Approved	Wayne Roe BE MIE Aust CPEng NER (2476635)		
					This Drawing must not be used for Construction unless signed as Approved		
					Original Size <b>A3</b>		