Statement of Environmental Effects & DA Package			
In Support of a Development Application			
Proposal	Dwelling house – to erect a four (4) bedroom dwelling, with an incorporated double & single garage and integrated Living, Dining Al Fresco area.		
Subject Land and address	Lot 24 DP 1066526 Monteagle Street BINALONG NSW 2584		
Applicant	Mr Mark Isaacs via Mellross Homes		
Owner	Mr Mark & Kimberly Isaacs (0497 563 221)		
Application prepared by	DA Busters – Development Assistance Services Ph: 0466 722 869 Email: Craig@DAbusters.com		
LGA	Yass Valley Council		





### Proudly assisted by:



### The locality

The site is located in the central Village part of Binalong, 334 metres west of the Village Centre but mere 50m from the main internal highway intersection of Stephens and Queen Street.

The land is a recently divided block and is approx. 2005 sq.m sited on Stephens Street which is the Burley Griffin Way through this part of Binalong. The dwelling will however front Monteagle Street – being on the corner. Generally the lot has a NW aspect but is a spacious double sized lot regardless. There is a mix of new and older housing and development nearby.



Locality Map (Source: NSW Six Maps)

Neighbourhood Map (Source: NSW Six Maps - Topographic View)



Aerial imagery of site and surrounding area - site coloured yellow (Source: Google Earth, imagery date 2023)



Lot imagery of site and immediate area - site shaded yellow (Source: SIX Maps circa 2012)



Note: Cadastre is not properly aligned

<u>The site</u>

The address and property details:

Lot 24 DP 1066526 Monteagle Street BINALONG NSW 2584 The site is presently vacant land.

What is the present and past use of the site?



Streetview of current older styled block residence to be demolished.

What is the area of the site ?

If applicable, describe the existing dwelling or built structures

Describe the key features of the site (e.g. any significant slope, significant trees or vegetation, water bodies etc):

Is the site classified as Bushfire Prone or Flood Prone land ?

The site is square to rectangular in shape, with a total area of 2,005  $m^2$ , and is approximately 50.5 metres deep and 39.7 m wide.

The site is vacant

The site has a general slope from south to north diagonally across the site with an easterly slant as well. This presents with fall to the lower corner on the Monteagle Street frontage. The site contains no trees or shrubs of note on site, and is not encumbered by any infrastructure, or easements.

The site is not mapped as either flood prone land or bushfire prone land.



### The Site Context

How would you describe the setting of the area, and the relationship of the development to it? The area comprises larger sized (up to double block size or larger) residential lots in this the original village area. The locality is a mixture of older housing in differing styles of no great consistency of storeys, form, external cladding or roofing types. This is mixed with newer and urban renewal styles nearby.

Across the road is the Black Swan Restaurant which is a prominent historic building, however the siting and different aspect will not detract from this item however.



**Deposited Plan extract** 

### B. The Proposed Development

Generally, the proposed development involves the erection of a single storey, four-bedroom dwelling with an attached double and single garage, along with integrated Living, Dining & Al Fresco living areas.

More specific	details	of the	e development include:	
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The number of storeys proposed	- 1 storey IRONSTONE Colerbond
The roof type proposed	- Colorbond (ironstone)
Wall type proposed	- Dwelling – PGH Bricks Dark & Stormy Range - Lightning
Dwelling wall height and roof height measured from finished ground level	<ul> <li>Dwelling – 5.099m to ridge line</li> <li>GFL Soffit 150mm</li> <li>FFL to Ceiling - 2400mm</li> <li>Roof structure - 5099mm</li> </ul>
Gross floor area (GFA)	- Dwelling – 262.4 m <sup>2</sup> gross
	FLOOR AREASROOMSQUARESSQMALFRESCO2.6824.9 m²GARAGE6.2157.7 m²LIVING18.58172.6 m²PORCH0.777.1 m²TOTAL28.24262.4 m²
Setbacks from each site boundary	SetbackNW (Street front)8.87 m (wall) – 8m to verandah postNE (side)-SW (Second front)6.0 metresSE (rear)-21.4 metres
Any landscape work proposed	<ul> <li>Lawn and garden exists but will be further supplemented, as per the BASIX certificate.</li> </ul>
Vehicle, access and parking	- Access to the site will be via a driveway crossing in Monteagle Street.
Utilities	<u>Sewer</u> – AWTS per Hydrogeological report attached <u>Water</u> – water will be supplied to the dwelling from the rainwater tank to be installed on the site (2,000 litres in total) supplemented by Town supply as needed under BASIX <u>Power</u> – is located in Stephens Street and will be connected to the dwelling <u>Stormwater</u> – to be discharged to Monteagle St after tank overflow.
Is development permissible under another SEPP or EPI ?	- This development is permissible with consent under the provisions of the Yass Valley LEP 2013 (see additional discussion below).

Describe the extent of any demolition proposed	-	Nil demolition proposed.
If any trees are to be removed, or impacted upon, describe the trees	-	Nil trees to be removed
Total open space or unbuilt upon area available	-	>80 % of the site
Subdivision proposed	-	No subdivision proposed



Rendered view from Stephens and Monteagle St corner

### C. Compliance with 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 locality 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 (State and Regional Development) 2011.* 

### 4.46 Integrated development

The development is not integrated development, with the only relevant consideration being proximity to watercourses. The proposed dwelling is greater than 40 metres from any watercourse in the area.

### SECTION 4.15 CONSIDERATIONS UNDER THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979:

### State Environmental Planning Policies (SEPPs)

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Excluded (pub. 21 -10-2022) not exceed clearing thresholds
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021) not on mapped lands
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008) pathway not chosen heritage
- 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) no contaminated or other issue on site
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2- 12-2021) not adjacent infrastructure or in conflict
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29- 8-2022) BASIX attached
- State Environmental Planning (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021) not fronting classified road

### Local Environmental Plans (LEPs)

### Yass Valley LEP 2013

The relevant provisions of the above LEP, are discussed as follows:

Clause	Complies	Comments
1.2 Aims of plan	Yes	<ul> <li>The development is consistent with the following aims of the LEP:</li> <li>(c) to encourage housing diversity,</li> <li>(k) to minimise land use conflicts.</li> <li>The remainder of the aims are not relevant to this proposal, or are not impacted by the proposal.</li> </ul>
1.4 Definitions	N/A	The proposed development is defined as a <i>dwelling house</i> which means, <i>a building containing only one dwelling</i> .
1.9A Suspension of covenants, agreements and instruments	No	DP attached – no restrictions noted
2.2 Zoning	N/A	The site is zoned RU5 – Village.
2.3 Zone objectives and land use table	Yes	<ul> <li>The development is permitted with consent, in accordance with the land use table, and it is consistent with the following objectives of the zone:</li> <li>to ensure that development is compatible with village character and amenity – the development sits within spacious double blocks surrounding – a 2 storey dwelling is not out of character nor context in this setting</li> <li>to ensure that development is provided with an adequate water supply and the disposal of sewage – the development has provided the required amount of rainwater storage reticulated back to the dwelling, and will be connected to Council's reticulated sewage system.</li> <li>The remaining objective is not relevant to this proposal.</li> </ul>

Clause	Complies	Comments
2.7 Demolition	Yes	Nil
2.8 Temporary use	N/A	The application is not for the temporary use of land.
4.3 Heights of	N/A	This clause does not apply to this land.
	N1/A	
4.4 Floor space ratio	N/A	This clause does not apply to this land.
4.6 Exceptions to	N/A	No variation to development standards are sought.
development		
5 10 Heritage	Voc	There are no items of European heritage or archaeological significance identified
Conservation	165	on either the State Heritage Register or in the LEP as being present on-site, however the site is located in a Heritage Conservation Area (HCA). The site is not mapped as an Aboriginal Place of Heritage significance.
		No impact within HCA proposed and is distant and out of visage of item across the road. No impact anticipated.
5.16 Subdivision of,	N/A	Clause does not apply to the RU5 zone.
or dwellings on, land in certain zones		
6.1 Earthworks	Yes	There is a change across the building pad of approximately 1.4m as demonstrated on the site plan contours. This accounts broadly for a 700mm cut and 700mm batter which will need to be graded off and vegetated and drained.
6.2 Flood planning	N/A	The site is not flood affected. See earlier extract from FRMP.
6.3 Terrestrial biodiversity	N/A	None of the site has been identified as "biodiversity" on the Natural Resource Sensitivity Map.
6.4 Groundwater vulnerability	N/A	The site as is the entire Village has been identified as "groundwater vulnerability" on the Groundwater Vulnerability Map. The OSM system has been carefully and professionally assessed by a Geotechnical Engineer however other than this all other site inputs are managed with SW to the street.
6.5 Riparian land and watercourses	N/A	None of the site has been identified as "watercourse" on the Riparian Lands and Watercourses Map
6.6 Salinity	N/A	None of the site has been identified as "dryland salinity" on the Natural Resources Land Map.
6.7 Highly erodible soils	N/A	None of the site has been identified as "high soil erodibility" on the Natural Resources Land Map.
6.8 Essential services	Yes	<ul> <li>(a) the supply of water – water supply to the dwelling will be from the tank and town supply supplementing,</li> </ul>
		<ul> <li>(b) the supply of electricity – power is available in the form of an underground service that runs within the road reserve of Monteagle/Stephens Street, adjacent the property's front boundary corner,</li> <li>(c) the disposal and management of sewage – the development will be connected to an AWTS OSM</li> </ul>
		<ul> <li>(d) stormwater drainage or on-site conservation – stormwater will discharge to Council's stormwater drainage system, located in Monteagle Street, on overflow</li> <li>(a) suitable vehicular access – the existing access off Monteagle Street, will be</li> </ul>
		<ul> <li>(f) connection to a communications network with voice or data capability (or both) – NBN infrastructure exists in Monteagle Street.</li> </ul>
6.9 Designated buffer area	N/A	This land has not been identified as "water, waste and sewerage Buffers" on the Water, Waste and Sewerage Buffer Map.
6.10 Barton Highway	N/A	This land has not been identified as "Barton Highway Corridor" on the Barton Highway Duplication Map.
6.11 Restricted premises	N/A	The development is not for a restricted premises or sex services premises.

Clause	Complies	Comments
6.12 Gundaroo and	N/A	This development is not in the R2 Low Density Residential Zone.
Sutton Zone R2		
6.13 Development	N/A	This development is not in Sutton in the R5 Large Lot Residential Zone.
in Sutton Zone R5		

### **Development Control Plans (DCPs)**

### 2.3 DEVELOPMENT CONTROL PLAN

The following section discusses the relevant planning controls pursuant to the YVDCP2024.

### Yass Valley Development Control Plan 2024

The DCP provides the non-statutory planning, design and environmental objectives and controls to ensure orderly, efficient and sensitive development within the LGA is achieved. The relevant sections of the DCP considered to apply to the proposed development include:

- Part B Principles for all Development
- Part D Residential Development Controls
- Part H Development in Hazard Affected Areas
- Part I Carparking and Access
- Part J Heritage
- Part K Natural Resources

### TABLE 4 – COMPLIANCE WITH THE YVDCP2024

PART B – PRINCIPLES FOR ALL DEVELOPMENT		
CONTROLS		COMPLIANCE
B1 Sustainability		
а.	Increase tree retention and provision at development stage to increase and enhance tree cover, for visual, social, environmental, economic and	Consistent the proposed development has been prepared in accordance with the relevant legislation and has consciously been prepared to promote ecological sustainable development, as indicated earlier in this Statement.
b.	ecological values. Discourage the use of heat producing surfaces in preference of natural materials, surfaces and finishes.	The proposed development is actively utilising the principles behind ESD as it is a development that meets the needs of the present generation whilst not compromising the ability of future generations to also meet their needs.
С.	Encourage the use of sustainable building materials.	BASIX encourages use of low CO <sub>2</sub> emission materials also.
d.	Avoid excessive resource consumption and minimise waste.	

B2 Site Suitability	
All development applications are assessed on their individual merits and take account of, amongst other things, the suitability of the site for the proposed development.	Complies. The proposed development represents a coordinated approach to infill residential development within the village of Binalong, through the efficient use of land for rural residential village development and the enabling of housing choice which supports higher levels of amenity and accessibility. The site is considered to be well positioned to cater for a mixed demographic of groups likely to be attracted to regional living.
	The availability of access, electricity, water and disposing of sewerage are existing onsite/ to be connected as part of this development.
	The suitability of the site for the proposed development is assessed and found to be consistent with Councils standards for new development of rural residential/village land, specifically being respectful to the topography and neighbourhood to which the proposed development relates.
<b>B3 Site Analysis Plan</b> All applications must be accompanied by a site analysis plan.	Complies. The proposed Site Plan demonstrates the location of the proposed Dwelling in relation to the boundaries and any existing infrastructure, noting these have taken into consideration as mentioned in B2 above. (refer <b>Appendices</b> ). The scale of the development has been derived from planning controls and desires a high degree of amenity for the existing and future residents.
<b>B4 Crime Prevention and Safety</b> Good design optimises safety in development which can lead to a reduction in crime and improve overall safety and liveability. The principles of crime prevention through design seek to minimise preventable crime by considering crime opportunities in the development design phase. Design that encourages effective surveillance, controls access and maintains a high standard in the public realm has positive cumulative effect in crime prevention and reduction.	Complies. The design and nature of the proposed development of the site will ensure that the proposed development will not increase the opportunities for crime occurrences. The proposed development has been designed to be oriented to the street to provide surveillance of public areas and pedestrian footpaths. This will assist in achieving a sense of community ownership over this land with the future occupants more likely to report any maintenance issues to ensure this space is well looked after. The activity and guests/ contractors onsite will also ensure internal passive surveillance. The lot is near a key well lit intersection also that affords natural surveillance in passing of an evening.
B4 Neighbourhood Character	

Each neighbourhood is unique and its characteristics assist people in finding	Complies. The proposed development has been designed to take into consideration the specific site characteristics, and the specific design
their way and contributes to a sense of	controls within the YVDCP2024.
important that development is	The creation of the dwelling house responds to and contributes
	The election of the dwelling house responds to and contributes
respectful of, and responsive to, the	positively to the character and amenity of the existing and future
individual character of each	neighbourhood.
neighbourhood.	
	It is noted the proposed development is recognised as infill
	development that is sympathetic to the existing streetscape and neighbourhood character.
	The proposed douglopment has taken into consideration the
	Interproposed development has taken into consideration the
	to the characteristics of the land and surrounding environment, in turn actively maintaining the neighbourhood character of Binalong.

PART D - RESIDENTIAL DEVELOPIVIENT CONTROLS		
CONTROLS	COMPLIANCE	
D.1 Fences and retaining walls		
To ensure that fences and retaining walls are appropriately designed and placed in a manner that is compatible with safer by design principles so as not to detract from visual amenity and do not obstruct, concentrate or direct the natural overland flow of water	Complies. The subject site has proposed perimeter fencing (refer <b>Figure 2.5</b> ). It is confirmed the fence will be appropriately designed and placed in a manner that is compatible with safer by design principles so as not to detract from visual amenity and it does not obstruct, concentrate or direct the natural overland flow of water. It is expected the older rural fencing will be replaced with a more urban style colorbond fencing.	
D2 Stormwater		
To ensure that stormwater is appropriately designed to minimise harm to the environment or buildings.	Complies. The proposed residential development will have minimal effect on the existing natural overland flow path for stormwater runoff.	
	All appropriate stormwater drainage techniques are existing and are intended to remain in place.	
D3 Services	Complies. Essential services such as:	
To ensure that services essential for residential development are considered in the design phase.	<ul> <li>The supply of water</li> <li>The supply of electricity</li> <li>The disposal and management of sewage</li> <li>Stormwater drainage or on-site conservation</li> <li>Suitable vehicular access of Monteagle Street. It is noted a new access way of Monteagle Street will need to be constructed as part of this development.</li> <li>Connection to the telecommunications network</li> </ul>	

	are existing and/ or will be connected into during the construction of the proposed development.	
<b>D.4 Solar access</b> To ensure that living and private open	Complies. The proposed dwelling house has the living areas	
space areas are provided with adequate solar access.	<ul> <li>complies. The proposed dwelling house has the living areas positioned to the North &amp; East which allows adequate sunlight into living and open space areas. Specifically:</li> <li>a) Solar access will be available to the living area for a minimum duration of 3 hours during winter solstice.</li> <li>b) The internal living areas are located on the northern side of the proposed dwelling to maximise solar access.</li> <li>c) Windows have been purposefully located and shaded so as to reduce summer heat load and to permit entry of winter sunlight.</li> <li>d) An outdoor drying area with access to sunlight and breezes will be provided for.</li> </ul>	
D1 Single Dwellings		
This section applies to new dwellings or alterations and additions to existing dwellings.	<u>D1.1 Siting of Dwellings</u> Complies. The proposed dwelling house has been sited taking into consideration the constraints and opportunities of the subject site. The detailed site plan includes the relevant details applicable to the site (refer <b>Appendix A</b> ).	
	D1.2 Streetscape Character (front setbacks) Complies. The proposed dwelling house has a front setback of more than 8 metres, creating an attractive and visually appealing streetscape within an existing neighbourhood.	
	<u>D1.3 Side Setbacks</u> Complies. The proposed dwelling house has a side setback of considerably more than 3m and 900mm on both the north-eastern and south-western boundaries.	
	<u>D1.4 Site Coverage</u> Not applicable. The RU5 Village zone has no maximum site coverage.	
	<u>D1.5 Building Height</u> Complies. The subject site is identified with a maximum prescriptive building height of 8.5 metres.	
	The height of the proposed Dwelling has a maximum finished ridge height of 5.099 metres, therefore consistent with the requirements of this clause.	
	The proposed new Dwelling is consistent with, or improves the existing streetscape and character of the area. We have taken into consideration any neighbouring properties mostly open or somewhat	

distant from this site, and it is intended the proposed development will have minimal impact in relation to solar access and privacy.
<u>D1.6 Building Design</u> Complies. The proposed development compliments the existing
streetscape and has been designed to be respectful to the existing character of the neighbourhood. Specifically:
<ul> <li>The proposed development has been designed to have regard to the locality and to the neighbourhood to which the subject lot relates.</li> </ul>
b) The proposed development is of a similar scale and character to existing dwellings within the vicinity.
<ul> <li>Not applicable. There is no garage included with the proposed development.</li> </ul>
<ul> <li>d) Not applicable. There is no garage included with the proposed development.</li> </ul>
<ul> <li>e) A habitable room is included on the front façade of the proposed transportable home.</li> </ul>
<ul> <li>f) The primary street façade of the proposed dwelling house incorporates an entry feature, recessing and an open verandah.</li> </ul>
g) Windows and doors within the street frontage provide balance and respond to the aspect of the subject site.
<ul> <li>h) The entry to the proposed Dwelling provides a visible line of sight from the street and an internal accessway.</li> </ul>
i) The proposed cladding and roof material is not zincalume.
D1.7 Private Open Space
Complies. The proposed development incorporates the required open space that is directly accessed from and adjacent to a habitable room.

E1.4 Facilities and essential services	Complies. Essential services such as:	
To ensure that water and on site sewage management systems are adequately sized, designed and located to service the needs of the dwellings without resulting in negative environmental impacts.	<ul> <li>The supply of water</li> <li>The supply of electricity</li> <li>The disposal and management of sewage</li> <li>Stormwater drainage or on-site conservation</li> <li>Suitable vehicular access of Monteagle Street. It is noted a new access way of Monteagle Street will need to be constructed as part of this development.</li> <li>Connection to the telecommunications network</li> <li>are existing and/ or will be connected into during the construction of the proposed development.</li> </ul>	
D2 Medium Density Housing	Not applicable. The proposed development is not classified as medium density housing.	
D3 Ancillary Development	Not applicable. The proposed development is not classified as ancillary development.	

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CONTROLS	COMPLIANCE	
H1 Flooding		
To ensure that development is appropriately located and constructed having account of the risk of flood impact.	Not applicable. The subject land is not identified as a flood affected lot within the Murrumbateman, Bowning, Bookham and Binalong Flood Study Addendum Report prepared by Lyall & Associates dated July 2021.	
H2 Bushfire Prone		
The objective of this part are to:	Complies. The land is not identified as Bushfire Prone	
<ul> <li>a) Prevent the loss of life and property by providing development that is compatible with the identified bushfire hazard.</li> <li>b) Ensure that the risks associated with bushfire are appropriately and effectively managed</li> </ul>		
c) Ensure that bushfire risk is managed in conjunction with the ecological values of the site and neighbouring lands d)		

H3 Contaminated Land	
To ensure that potentially contaminated land is suitable for the proposed development.	Complies. The consent authority must consider the contamination potential of the land, and if the land is contaminated, it is satisfied that the land is suitable for the development in its contaminated state, or that appropriate arrangements have been made to remediate the site prior to the development being carried out. It is noted the proposed development is not located on 'Contaminated Land'. 'Contaminated Land' means land in, on or under which any substance is present at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment. Taking into consideration the historic use of the site Council can be satisfied that the land is not contaminated and is not land specified in subsection (4) of clause 4.6 of the SEPP (such that there is no requirement for a preliminary site investigation report).
PART I – CARPARKING AND ACCESS	
CONTROLS	COMPLIANCE
<b>I1 Carpark Design</b> To ensure that carpark design facilitates the safe and efficient movement of pedestrian and vehicles.	Complies – garages proposed and reasonable driveway
<i>I2 Loading Docks</i> To ensure that loading docks are located and designed in a manner that facilitates ease of truck usage and does not increase crime opportunities.	Not applicable.

<b>I3 Carpark Construction</b> To ensure that carpark construction is suitable for the type and number of vehicles likely to visit the site.	Not applicable.
<i>I4 Carparking Credits and Contributions</i> Developments involving a change of use or additions/ alterations may attract parking credits. Parking credits will be determined by length of street frontage, type of existing parking (parallel or angled), the existing use and the number of existing carparking spaces on site and the demand for on-site parking from the proposed development.	Not applicable.
<b>I5 Carparking Ratios</b> Areas subject to on street carparking credits in Figure 25.	Not applicable. This DA is for a Dwelling
<i>I6 Residential Carparking</i> To ensure that carparking facilities are provided for residential development in a manner that caters to the needs of all residents and future residents.	Complies. The proposed development/ subject lot provides for suitable covered and uncovered parking spaces for the residents
<b>I7 Property Access Crossings</b> To ensure that access to site is provided in a location and manner that facilitates safety, efficient traffic movement and minimise negative environmental impact.	Complies. There is suitable vehicular access of Monteagle Street. It is noted a new access way of Monteagle Street will need to be constructed as part of this development. It is noted this will require a S138 for any works done in Councils Road Reserve.

PART J - HERITAGE				
CONTROLS	COMPLIANCE			
J.1 Character To provide guidance on the character of development on heritage items and in heritage conservation areas to maintain their heritage significance.	Consistent. The subject site is identified within the General Heritage Conservation Area of Binalong Village in the YVLEP2013. It is however within a short distance to this area and the following items listed as Local Heritage Significance (refer <b>Figure 2.3</b> ):			
	LOT/ DP	ADDRESS	ITEM # WITHIN YVLEP2013	DESCRIPTION OF ITEM #
	12/25/758109	25 Stephens St, BINALONG	1029	Black Swan
	1/538441	20 Stephens St, BINALONG	1025	C of E Church
	15/31/758109	32 Queen St, BINALONG	1021	Cof E Rectory
	7-10/26/ 758109	23 Monteagle, BINALONG	1023	The Elms
	<ul> <li>However, it is important to note that the proposed Dwelling has been sited to take into consideration the surrounding existing structures and the heritage significance of the village of Binalong.</li> <li>The proposal is not likely to result in any significant loss of heritage value to any of the adjoining properties nor to the conservation area of Binalong Village or the items listed above as items of Local Heritage Significance.</li> <li>The proposed development is considered to have a neutral</li> </ul>			
	relationship to the streetscape of Monteagle Street which will not impact upon the setting of the existing buildings along Monteagle Street and the neighbouring streets.			
	It is considered the proposal is consistent with the surrounding development in terms of compatibility with the Yass Local Environmental Plan 2013, as outlined in CL5.10.			
	Accordingly, the from a heritage p	subject developmer perspective.	nt application w	varrants approval
J.1 Scale, Height and Bulk				

To ensure that bulk, scale and height of development does not negatively impact upon the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
<i>J.3 Form</i> To ensure that form of new development is appropriate for heritage items and conservation areas.	Complies. See response to J.1.
J.4 Siting and Orientation To ensure that additions, alterations, and new development are sited in a manner that does not negatively impact upon the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
J.5 Site Coverage To ensure that the site coverage of new development is respectful of the existing site coverage precedent of the area.	Complies. See response to J.1.
J.6 Building Materials To ensure that new building materials do not detract from the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
J.7 Roofs To ensure that roof forms do not negatively impact upon the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
J.8 Windows and Doors To ensure that windows and doors are appropriate for the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.

J.9 Paint and Colour To ensure that paints and colours are compatible to the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
<b>J.10 Detailing</b> To ensure that detailing for the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
J11 Ancillary Development to Heritage Items Ancillary development includes garages and carports, sheds, bird aviaries and the like, post boxes, decks and patios, pergolas, trellises and gazebos, driveways, fences skylights, solar panels, satellite dishes, air conditioning units and signage. Some ancillary development may be assessed by Council as being of a minor nature for which development consent is not required.	Not applicable. The proposed development does not include Ancillary Development.
J.12 New Buildings in Heritage Conservation Areas To ensure that new development is respectful of, and appropriate for, the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
J.12.1 Additional Dwellings in or Near Heritage Areas and Items To ensure that additional dwellings do not negatively impact upon the heritage values or significance of heritage items and conservation areas.	Complies. See response to J.1.
J.13 Contributory Items and Conservation Areas To ensure that the bulk and scale, and height of contributory items do not detract from the heritage values or	Complies. See response to J.1.

Not applicable. The proposed development does not include Demolition.
Not applicable. This DA is not for the change of use of any structure.
Not applicable. This DA does not include subdivision.
Complies. See response to J.1.
Not applicable. The subject lot does not fall within the Bowning Conservation Area.
Not applicable. The subject lot does not fall within the Gundaroo Conservation Area.
Not applicable. The subject lot does not fall within the Yass Conservation Area.
COMPLIANCE
Not applicable. The subject site is not identified on the Salinity Map within the YVLEP2013.

offsite or negatively impact upon buildings.	
K1.2 Erodible Soils	
<i>To ensure that any development does not exacerbate erosion on site or sedimentation offsite.</i>	Not applicable. The subject site is not identified on the Erodible Soils Map within the YVLEP2013.
K2 Terrestrial Biodiversity	
To ensure that any development does not negatively impact upon the biodiversity of the site or the region overall.	Not mapped this affectation
K3 Groundwater Vulnerability, Riparian Lands and Watercourses	
K3.1 Groundwater	
To ensure that any development does not negatively impact upon groundwater quality, quantity, or ecosystem dependent species	Complies. As indicated on Council's LEP Groundwater Vulnerability Map, the subject land is highlighted as having groundwater vulnerability.
	However, it is anticipated that this proposed development will not have any adverse impact upon the groundwater of the subject lot.
	The proposed key management measures to minimise the potential for any adverse groundwater impacts include the implementation of erosion and sediment control measures and stabilization of all drainage lines.
	As we are proposing to erect a Dwelling a consultant has prepared a Wastewater Report (refer <b>Appendix).</b>
	The OSM design is strictly in accordance.

### **Construction Impacts**

Will the proposal impact upon any trees, or have any impact on the soil or site drainage patterns during construction?

The development does not involve the removal of trees, and the localised earthworks will have minimal impact on site drainage.

How will construction noise and rubbish removal be managed during construction?

Construction work will be carried out during normal work hours, and in compliance with any conditions of consent relating to hours of construction. It is not expected that there will be any detrimental impacts on adjacent properties in this regard. In the unlikely event this occurs, the noise would be a short-term, transient event.

Construction waste will be stored on-site in suitable receptacles, and shall be removed from site on a regular basis, to minimise the chances of windblown rubbish and nuisance.

### Sedimentation and erosion controls

Sedimentation and erosion control measures shall be installed prior to work commencing on-site, and will be maintained throughout the duration of the works, to prevent sediment leaving the site or polluting the adjacent gully.

### Privacy

Will the proposal result in the loss of visual or acoustic privacy to any neighbouring land use? No If so, what measure will be taken to minimise that loss?

The proposed dwelling will not result in any loss of visual or acoustic privacy given the large side and rear boundary setbacks proposed, and the location of the existing dwellings on the adjacent lots.

### Views

Will the proposal result in the loss of views to any neighbouring land use? No Given the nature of the land, being relatively flat, views will not be compromised by the proposed development.

### Overshadowing

Will your proposal result in any additional overshadowing to any neighbouring land use? No There will be no adverse overshadowing as a result of the development, given the setback of the proposed dwelling and the dwelling to the south.

### **Economic and Social Impacts**

Will your proposal result in any social and economic impacts within the locality? No No negative socio-economic impacts to the locality are foreshadowed. The construction phase will generate a small but positive economic benefit, for tradesman and businesses in the region.

### Drainage

What are the proposed methods of disposing of stormwater from the site and are any new easements required? Stormwater will be collected in a rainwater tank, reticulated back to the dwelling, and any overflow from the tank piped to Camp Street.

### Access and Traffic

The introduction of an additional dwelling in the area, will result in additional vehicle movements, typically 9 movements per day. It is considered that the local road network will adequately cater for this increase in vehicle movements, with no roadworks required.

**Planning Portal report** 



# Property Report

**MONTEAGLE STREET BINALONG 2584** 



### **Property Details**

Address:	MONTEAGLE STREET BINALONG 2584
Lot/Section /Plan No:	24/-/DP1066526
Council:	YASS VALLEY 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	Yass Valley Local Environmental Plan 2013 (pub. 17-7-2020)
Land Zoning	RU5 - Village: (pub. 24-2-2023)
Height Of Building	NA
Floor Space Ratio	NA
Minimum Lot Size	2000 m²
Heritage	Binalong Significance: Local
Land Reservation Acquisition	NA
Foreshore Building Line	NA
Groundwater Vulnerability	Groundwater Vulnerability

### **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

## **MONTEAGLE STREET BINALONG 2584**

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Excluded (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

1.5 m Buffer around Classified Roads	Classified Road Adjacent
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	ONERWAL
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)

Title



**REGISTRY** Title Search



NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 24/1066526

LAND

SERVICES

\_\_\_\_

 SEARCH DATE
 TIME
 EDITION NO
 DATE

 ---- ---- ---- ---- 

 25/3/2025
 12:39 PM
 5
 19/8/2024

## LAND

LOT 24 IN DEPOSITED PLAN 1066526 AT BINALONG LOCAL GOVERNMENT AREA YASS VALLEY PARISH OF BINALONG COUNTY OF HARDEN TITLE DIAGRAM DP1066526

FIRST SCHEDULE

KIMBERLEY LOUISE ISAACS MARK RODNEY ISAACS AS JOINT TENANTS

(T AU334965)

SECOND SCHEDULE (2 NOTIFICATIONS)

-----

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

2 AU334966 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

NOTATIONS

\_\_\_\_\_

UNREGISTERED DEALINGS: NIL

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

\* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

**DP and 88B instrument** 



**PLANS & BASIX** 



# CONSTRUCTION **REVISION B**

## PROPOSED RESIDENCE FOR M & K ISAACS

LOT 24, 26 STEPHENS STREET **BINALONG NSW 2584** 

3.

TERMITE RISK NOTES:

TERMITES

FLOOR PLAN NOTES:

ALARMS

2.

PRESCRIPTIVE.

(UNO)

INSTALL LOCATIONS:

AS3786

2.

SMOKE ALARMS TO BE INSTALLED IN

ACCORDANCE WITH THE NCC PART 3.7.5 - SMOKE

ALARMS. SMOKE ALARMS MUST COMPLY WITH

ONLY USE PHOTOELECTRIC TYPE SMOKE

3. IN EVERY BEDROOM

ALL GLAZING TO BE IN ACCORDANCE WITH

AS 1288. WINDOWS SIZES MAY VARY DUE TO

CONSTRUCTION. DIMENSIONS ARE TO FRAME

BUILDER TO CONFIRM ALL DIMENSIONS PRIOR TO

ONLY AND DO NOT INCLUDE CLADDING/LININGS

S.S. BALUSTRADING TO COMPLY WITH CURRENT

DOORS TO W.C.'S TO HAVE LIFT OFF HINGES (ONLY

**REFER ENGINEERS DRAWINGS & SPECIFICATIONS** 

BRACING, TIE DOWN AND SLAB/FOOTING DETAILS.

SEAL WET AREAS IN ACCORDANCE WITH AS3740 &

IF THE DOORS SWING IN TOWARDS THE W.C).

ARE INDICATIVE ONLY AND ARE NOT

MANUFACTURER'S SPECIFICATIONS.

NCC VOLUME 2 SECTION 3.9.2.3 'WIRE

MASONRY CONSTRUCTION TO AS 3700.

FOR ALL STRUCTURAL DETAILS, FRAMING,

BALUSTRADING CONSTRUCTION'

ALL SMOKE ALARMS TO BE INTERCONNECTED

ON EACH LEVEL OF LIVING SPACE

OUTSIDE EACH BEDROOM AREA

VISUAL TERMITE CONTROL

### GENERAL NOTES:

- 1. 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.
- 10. 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
- 11. ALL WINDOW AND DOOR DIMENSIONS ARE NOMINAL.

- SITE WORKS NOTES: 1. 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 NCC VOL. 2.3.1.2 & 3.5.2 AND STATE LEGISLATION/ LOCAL PLANNING SCHEME HOUSE CODE AND AS 3500 ALL PARTS. BUILDER TO ENSURE THAT ACTUAL SEWER LINE З
- 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 NCC VOL. 2.3.1.2.3.
- 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 NCC VOLUME 2 3.1.1, AS 3798 & AS 4200.
- THE FINISHED SURFACE IMMEDIATELY SURROUNDING THE DWELLING, 1000mm WIDE, IS TO FALL AWAY FROM THE DWELLING AT A SLOPE OF 1 IN 20 MINIMUM
- 7. 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.
- 8. 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.
- 10. THE HEIGHT OF FENCES, INCLUDING THE HEIGHT OF RETAINING WALLS ARE NOT TO EXCEED 2.0m ABOVE FINISHED GROUND LEVEL ONLY IF INDICATED ON THE PLANS AND TO LOCAL AUTHORITY APPROVAL.
- 11. 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: 1. DRIVEWAY SLOPE NOT TO EXCEED 1:4. CHECK WITH LOCAL AUTHORITY REQUIREMENTS PRIOR TO CONSTRUCTING ANY DRIVEWAYS, PATHWAYS OR CROSSOVERS BETWEEN THE PROPERTY BOUNDARY AND ROAD KERB.
- PROVIDE A LAYER OF SAND A MINIMUM OF 20mm THICK UNDER THE SLAB, COMPACTED AND I FVFI FD
- SLAB THICKNESS, MESH TO ENGINEERS DESIGN. 3

### **3D VIEW NOTES:**

- GROUND LINE OR SLOPE OF SITE IS NOT REPRESENTED ON 3D VIEWS.
- 2 ONLY AND ARE NOT PRESCRIPTIVE.
- 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:

ACCORDANCE WITH THE NCC PART 3.7.5 - SMOKE ALARMS. SMOKE ALARMS MUST COMPLY WITH AS 3786

- ONLY USE PHOTOELECTRIC TYPE SMOKE AI ARMS
- ALL SMOKE ALARMS TO BE INTERCONNECTED
- INSTALL LOCATIONS:
- ON EACH LEVEL OF LIVING SPACE
- OUTSIDE EACH BEDROOM AREA 2. IN EVERY BEDROOM 3
- 2. 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 DFTAILS.
- 2 GROUND LINE SHOWN ON ELEVATIONS DOES NOT RELATE TO ACTUAL SLOPE OF SITE.
- FURNITURE AND FIXTURES ARE INDICATIVE ONLY 3. 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.

| PROJECT.

**PROPOSED RESIDENCE FOR** 

LOT 24, 26 STEPHENS STREET

M & K ISAACS AT

**BINALONG NSW 2584** 

#### SECTION NOTES:

- 1. 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
- 4 ACTUAL SLOPE OF SITE. FURNITURE AND FIXTURES ARE INDICATIVE ONLY
- 5. 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

- EOUNDATION NOTES: 1. 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.
- 3. 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 5. DIRECTIONS.
- MINIMUM COVER TO GROUND 50mm
- TOP COVER TO SLAB REINFORCEMENT 30mm. GRADE FINISHED GROUND SURFACE TO DIVERT
  - 5 WATER AWAY FROM BUILDING.
- WATERPROOF MEMBRANE IS 0.2mm POLYETHYLENE. JOINTS ARE TO BE LAPPED 300mm AND TAPED.
- 10. REINFORCEMENT TO BE SUPPORTED ON PLASTIC CHAIRS AT 1000mm CRS.
- 11. ALL CONCRETE IS TO BE MECHANICALLY VIBRATED DURING PLACING.
- 12. FILL MATERIAL AND SAND UNDER SLABS IS TO BE COMPACTED TO 95% OF MAX. DRY DENSITY. 13. FLOORS TO ALL WET AREAS TO HAVE A FALL TO A

| CHECKED:

ODW

| PAGE NO:

01 OF 13

| SCALE @ A3 NTS

- FLOOR WASTE.
- REV DESCRIPTION A PRELIMINARY ISSUE **B** CONSTRUCTION ISSUE

NCC REQUIREMENTS.

M: 0403 508 705 E: plans@areidesigns.com.au	Ι	PLAN NUMBER: #4575
W: areidesigns.com.au QLD QBCC: 15040886 VIC VBA: CDB-U 73620 TAS BSP: 071565667 ABN: 31 615 195 818		BUILDERS NUMBER: DURAL 211 - SERENITY AREI PLAN CODE: AREI DESIGNS

**MELLROSS HOMES** | DRAWING NAME: COVER

| CLIENT

- SMOKE ALARMS TO BE INSTALLED IN

FURNITURE AND FIXTURES ARE INDICATIVE 3D VIEWS, PERSPECTIVES AND ILLUSTRATIONS

	PAG
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PAGE NO	PAGE TITLE
01	COVER
02	SITE PLAN
03	FLOOR PLAN
04	3D VIEWS
05	ELEVATIONS A & B
06	ELEVATIONS C & D
07	CROSS SECTION
08	FOUNDATION PLAN
09	ELECTRICAL & FIXTURES PLAN
10	ROOF DRAINAGE
11	KITCHEN CABINETRY
12	LAUNDRY & ENSUITE CABINETRY
13	BATHROOM CABINETRY

PAGE LIST

TERMITE CONTROL BARRIERS TO BE IN ACCORDANCE WITH AS 3660.1 AND NCC CLAUSE 3.1.3. ANY UNTREATED TIMBER POSTS, STAIRS AND THE LIKE SHALL BE SET 75MM MINIMUM CLEAR OF GROUND FOR

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

TEROTITES.
ALL TIMBER IN DIRECT CONTACT WITH CONC TO
BE SEPARATED BY G.I. FLASHING.

- **ROOF DRAINAGE NOTES:** 1. ALL GUTTER AND DOWNPIPE WORKS TO AS/NZS 3500.3 AND CURRENT NCC VOLUME 2 PART 3.5.2.
- DOWNPIPES (DP) TO BE 100mmØ UPVC. TEMPORARY DOWNPIPES TO BE PROVIDED AT DE 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 NCC VOL. 2.3.1.2 & 3.5.2 AND STATE LEGISLATION/ LOCAL PLANNING SCHEME HOUSE
- CODE AND AS 3500 ALL PARTS.
- WALL FINISHES AND WINDOW TYPES ON 3D VIEWS 5. THE ROOF DRAINAGE SYSTEM MUST BE PROVIDED WITH AN OVERFLOW TO PREVENT THE BACKFLOW OF WATER INTO THE BUILDING
  - THE AREA SPECIFIC RAINFALL INTENSITY MUST BE SELECTED FROM NCC TABLE 3.5.2.1 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.

10. PROVIDE FLOOR WASTE TO ALL WET AREAS.

COPYRIGHT AREI DESIGNS	DATE	DRAWN	
4 ALL RIGHTS RESERVED	18/09/2024	SM	
5	13/01/2025	SM	
SCALE NOT APPLICABLE			







**R**EI

M: 0403 508 705PLAN NUMBER:E: plans@areidesigns.com.au#4575W: areidesigns.com.auBUILDERS NUMBER:QLD QBCC: 15040886DURAL 211 - SERENITYVIC VBA: CDB-U 73620AREI PLAN CODE:TAS BSP: 071565667AREI DESIGNS

| CLIENT: MELLROSS HOMES

| DRAWING NAME: 3D VIEWS PROJECT: PROPOSED RESIDENCE FOR M & K ISAACS AT LOT 24, 26 STEPHENS STREET BINALONG NSW 2584 | CHECKED: ODW | PAGE NO: 04 OF 13 | SCALE @ A3 1:150

REVDESCRIPTIONAPRELIMINARY ISSUEBCONSTRUCTION ISSUE

DRAWN	DATE	© COPYRIGHT AREI DESIGNS		
SM	18/09/2024	ALL RIGHTS RESERVED		
SM	13/01/2025	USE SCALE & RULER AS A GUIDE ONLY		
		0m 1.5m 3m 4.5m 6m 7.5m		
	WINDOW SCHEDULE			
------	-----------------	---------------------------------	--	--
MARK	SIZE	DESCRIPTION		
W1	1800 x 2400	ALUM. FRAMED SLIDING WINDOW		
W2	1800 x 1800	ALUM. FRAMED SLIDING WINDOW		
W3	2100 x 2400	ALUM. FRAMED SLIDING GLASS DOOR		
W4	1800 x 1800	ALUM. FRAMED SLIDING WINDOW		
W5	1200 x 1800	ALUM. FRAMED SLIDING WINDOW		
W6	1200 x 1800	ALUM. FRAMED SLIDING WINDOW		
W7	1800 x 600	ALUM. FRAMED SLIDING WINDOW		
W8	1200 x 1500	ALUM. FRAMED SLIDING WINDOW		
W9	1200 x 1800	ALUM. FRAMED SLIDING WINDOW		
W10	1000 x 600	ALUM. FRAMED SLIDING WINDOW		
W11	1800 x 600	ALUM. FRAMED SLIDING WINDOW		
W12	1800 x 600	ALUM. FRAMED SLIDING WINDOW		

DOOR SCHEDULE			
MARK	SIZE	DOOR TYPE	
D1	2040 x 820	GLASS ENTRY DOOR	
D2	2100 x 4800	PANEL LIFT DOOR	
D3	2100 x 2400	PANEL LIFT DOOR	
D4	2100 x 2400	ROLL - A - DOOR	
D5	2040 x 920	GLASS ENTRY DOOR	
D7	2040 x 820	HOLLOW CORE SWING	
D8	2040 x 820	HOLLOW CORE SWING	
D9	2040 x 770	HOLLOW CORE SWING	
D10	2040 x 770	HOLLOW CORE SWING	
D11	2040 x 820	HOLLOW CORE SWING	
D12	2040 x 720	HOLLOW CORE SWING	
D13	2040 x 820	HOLLOW CORE SWING	
D14	2040 x 820	HOLLOW CORE SWING	
D15	2040 x 720	HOLLOW CORE CAVITY SLIDER	
D16	2040 x 720	HOLLOW CORE SWING	
D17	2040 x 820	HOLLOW CORE SWING	









M: 0403 508 705PLAN NUMBER:E: plans@areidesigns.com.au#4575W: areidesigns.com.auBUILDERS NUMBER:QLD QBCC: 15040886DURAL 211 - SERENITYVIC VBA: CDB-U 73620AREI PLAN CODE:TAS BSP: 071565667AREI PLAN CODE:ABN: 31 615 195 818AREI DESIGNS

CLIENT: MELLROSS HOMES DRAWING NAME: ELEVATIONS A & B

PROJECT: PROPOSED RESIDENCE FOR M & K ISAACS AT LOT 24, 26 STEPHENS STREET BINALONG NSW 2584 | CHECKED: ODW | PAGE NO: 05 OF 13 | SCALE @ A3 1:100

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5099 OVERALL HT



ABN: 31 615 195 818



SIGNS
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ONLY
.5 5m





SLAB TOP EDGE

OUTSIDE FACE OF EXTERNAL WALL

SLAB REBATE

NOTE: DIMENSIONS ARE TO SLAB TOP EDGE WITH 150mm WIDE REBATE

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			ELECTRICAL ITEMS SCHEDULE			
SYMBOL	DESCRIPTION		DESCRIPTION	Q	ΓY	
۲	DOWN LIGHT RECESSED					
	FLUORO SINGLE 1200mm		DOWN LIGHT RECESSED	3	8	
	FLUORO DOUBLE 1200mm		FLUORO SINGLE 900mm	2) 2	3	
			HEAT EXHAUST LIGHT (3in	1) 2	2	
8			EXHAUST LIGHT	1	L	
$\odot$	OYSTERLEDLIGHT		GPO SINGLE	5	5	
~~~~ _			UBO RHOOD CONNECTIO	NS 1		R
				0E 2	3	i i i i i i i i i i i i i i i i i i i
	EXTERIOR SENSOR LIGHT		TELEVISION POINT	2	2	
\ \∕s	FLOOD LIGHT EXTERNAL		SMOKE ALARM	2	2	
K⊊. I⊐I⊐I	FLOOD LIGHT EXTERNAL (2)					
000						
<u>ŏ'ŏ</u>	HEAT EXHAUST LIGHT (3in1)					i i
00						
						SENSOR
YMBOL	COMMS DESCRIPTION					
<u> </u>	GPO SINGLE					
-		15 \//				
4	EXHAUST FAN (EXHAUST MIN.	40L/s)				۲
Щ.	GPO DOUBI F					
÷	GPO SINGLE WATERPROOF					
	GPO DOUBLE WATERPROOF					
<b>—</b>	TELEVISION POINT					
Ě	PHONE/DATA POINT					
Ň	DISTRIBUTION BOX					 
	METER BOX					
曱	NBN CONNECTION					
IXTURES					N	···· 、
SYMBOL	DESCRIPTION				) D	
•	SMOKE ALARM					, L
	AIR CON HEAD (SPLIT)					•
	AIR CON UNIT (SPLIT)					·
$\bigotimes$	HOT WATER SYSTEM					
) •	FLOOR WASTE					```
۹۹	GAS BOTTLES					۲
► +	GAS CONNECTION					
	HOSE COCK					
¢.	EXHAUST CEILING FAN					1
₩\$	EXHAUST WALL FAN					۵
~ [] ~						
11	CEILING FAN	SPECI	AL SWITCH TYPES		F IL	
					,	
~ [] \		2W	TWO WAY SWITCH			
	CEILING FAN W/ LIGHT	3W	THREE WAY SWITCH			
(-)		POW	ER POINT HEIGHTS AFL			
г — ¬	ΜΑΝΗΟΙ Ε	LIGH		1150mm	AFL	
		WAL POW	L MOUNTED LIGHTS (ER OUTLETS (STANDARD)	2000mm 300mm	AFL	
	DUCTED HEATING UNIT	DOM				NOTES:-
		M/W	AVE OVEN POWER	1800mm	AFL	
- , ,		M/W	AVE UNDER BENCH	300mm	AFL	ALL MEC
`_'		KITCI REFR	HEN BENCH	1000mm 1500mm	AFL AFL	DISCHA
	]	RANG	GEHOOD	1800mm	AFL	
		D/WA	ASH TY BASINS	300mm 1000mm	AFL AFI	ARTIFIC
	CLOTHES LINE	LAUN	IDRY BENCH	1000mm	AFL	ARTIFIC
		W/M	ACHINE	1500mm	AFL	5VV/m <sup>2</sup> F BALCON
	M: 0403 508 705 E: plans@areides	igns.com =	PLAN NUMBER: au #4575	I	CLIENT:	
<b>V</b> )	W: areidesigns.co	om.au		R٠	MELLROSS	HOMES
/ <b>\</b> {		40886	DURAL 211 - SEREI	VITY		
	TAS BSP: 071565	5667	AREI PLAN CODE:	1		
	ARN: 31 415 105	818	AREI DESIGNS			NL & FIX

**ELECTRICAL & FIXTURES PLAN** 



ECHANICAL VENTS LL MECHANICAL VENTS TO COMPLY WITH NCC 10.8.2. AND ISCHARGE TO OUTDOOR AIR. MIN. FLOW RATE OF 25L/s FOR ATHROOMS & SANITARY COMPARTMENTS, 40L/s FOR TCHEN AND LAUNDRY. RTIFICIAL LIGHTING RTIFICIAL LIGHTING WATTAGES TO COMPLY WITH NCC 13.7.6. W/m<sup>2</sup> FOR MAIN RESIDENCE, 4W/m<sup>2</sup> FOR VERANDAHS & ALCONIES, 3 W/m<sup>2</sup> FOR GARAGES/CARPORTS.

PROJECT:
PROPOSED RESIDENCE FOR
M & K ISAACS AT
LOT 24, 26 STEPHENS STREET
<b>BINALONG NSW 2584</b>

| CHECKED: ODW | PAGE NO: 09 OF 13 | SCALE @ A3 1:100

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### TOTAL ROOF AREA = 308.5 m<sup>2</sup>

ROOF TYPE: FASCIA & GUTTER TYPE: COLORBOND EAVES (TYP. O/H): ROOF PITCH:

COLORBOND 450mm 22.5°

### DOWNPIPES (DP):

DP MAX. LINEAL SPACING: RAINFALL INTENSITY LOCATION: NSW - YASS ARI ONCE IN 20 YEARS mm/hr: MIN. DP DIAMETER (Ø): MIN. GUTTER CROSS SECTION: MAX. ROOF AREA PER DP:

12 m 111 mm 90 mm 5400 mm<sup>2</sup> 35 m²

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LAUNDRY PLAN 1:50



ENSUITE PLAN 1:50

### 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.



| PLAN NUMBER: #4575 E: plans@areidesigns.com.au W: areidesigns.com.au | BUILDERS NUMBER: DURAL 211 - SERENITY QLD QBCC: 15040886 VIC VBA: CDB-U 73620 AREI PLAN CODE: TAS BSP: 071565667 ABN: 31 615 195 818

CLIENT:	PROJECT:
MELLROSS HOMES	PROPOSED RES
	M & K ISAACS
DRAWING NAME:	LOT 24, 26 STEI
LAUNDRY & ENSUITE CABINETRY	BINALONG NS

SIDENCE FOR AT PHENS STREET W 2584

| CHECKED: ODW | PAGE NO: 12 OF 13 | SCALE @ A3 1:100 REV DESCRIPTION A PRELIMINARY ISSUE B CONSTRUCTION ISSUE





**ELEVATION E1** 1:50

8 2000 SHWR

1200

**ELEVATION E2** 1:50



ROLL HOLDER 200 200 W.C 600 **ELEVATION E4** 1:50









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BATHROOM & WC PLAN 1:50









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







REI

 M: 0403 508 705
 |
 PLAN NUMBER:

 E: plans@areidesigns.com.au
 #4575

 W: areidesigns.com.au
 |
 BUILDERS NUMBER:

 QLD QBCC: 15040886
 |
 BUILDERS NUMBER:

 VIC VBA: CDB-U 73620
 |
 AREI PLAN CODE:

 TAS BSP: 071565667
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| CLIENT: MELLROSS HOMES | DRAWING NAME: BATHROOM CABINETRY PROJECT: PROPOSED RESIDENCE FOR M & K ISAACS AT LOT 24, 26 STEPHENS STREET BINALONG NSW 2584

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# **BASIX**<sup>°</sup>Certificate

Building Sustainability Index www.basix.nsw.gov.au

## Single Dwelling

Certificate number: 1782130S

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.basix.nsw.gov.au

### Secretary

Date of issue: Tuesday, 04 February 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 LV0O979P13.

Project summary			
Project name	name 26 Stephens Street		
Street address	26 STEPHENS STREET BINALON	G 2584	
Local Government Area	Yass Valley Council		
Plan type and plan number	Deposited Plan		
Lot no.	24 DP1066526		
Section no.	n no		
Project type	dwelling house (detached)		
No. of bedrooms	4		
Project score			
Water	40	Target 40	
Thermal Performance	V Pass	Target Pass	
Energy	<b>v</b> 100	Target 67	
Materials	-57	Target n/a	

## **Certificate Prepared by**

Name / Company Name: Mr Oliver Woodward

ABN (if applicable):

BASIX Department of Planning, Housing and Infrastructure www.basix.nsw.gov.au Version: 4.03 / E

Version: 4.03 / EUCALYPTUS 03 01 0 Certificate No.: 1782130S

## **Description of project**

## Project address

Project name	26 Stephens Street
Street address	26 STEPHENS STREET BINALONG 2584
Local Government Area	Yass Valley Council
Plan type and plan number	Deposited Plan
Lot no.	24 DP1066526
Section no.	-
Project type	
Project type	dwelling house (detached)
No. of bedrooms	4
Site details	
Site area (m²)	2005
Roof area (m²)	309
Conditioned floor area (m <sup>2</sup> )	126.04
Unconditioned floor area (m <sup>2</sup> )	13.56
Total area of garden and lawn (m <sup>2</sup> )	1000
Roof area of the existing dwelling (m <sup>2</sup> )	0

Assessor details and thermal loads					
NatHERS assessor number	61771				
NatHERS certificate number	LV0O979P13				
Climate zone	20				
Area adjusted cooling load (MJ/ m².year)	17				
Area adjusted heating load (MJ/ m².year)	71				
Project score					
Water	40	Target 40			
Thermal Performance	V Pass	Target Pass			
Energy	<b>V</b> 100	Target 67			
Materials	<ul><li>✓ -57</li></ul>	Target n/a			

page 2/9

## 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
Landscape			
The applicant must plant indigenous or low water use species of vegetation throughout 700 square metres of the site.	~	~	
Fixtures			
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.		~	
Alternative water			
Rainwater tank			-
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 308.5 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:			
the cold water tap that supplies each clothes washer in the development		~	<b>~</b>
<ul> <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>		<b>~</b>	<b>~</b>

page 3/9

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
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.	>	<b>~</b>	<
The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below.			~

Construction	Area - m²	Insulation
floor - concrete slab on ground, waffle pod slab.	153.2	none
garage floor - concrete slab on ground, waffle pod slab.	51.7	none
external wall: brick veneer; frame: timber - untreated softwood.	all external walls	fibreglass batts or roll
external garage wall: brick veneer; frame: timber - untreated softwood.	26	none
external garage wall: cavity brick; frame: no frame.	20.7	none
internal wall: plasterboard; frame: timber - untreated softwood.	151.5	none
ceiling and roof - flat ceiling / pitched roof, framed - metal roof, timber - untreated softwood.	308.5	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.	>	<b>~</b>	>

Frames	Maximum area - m2
aluminium	30.24
timber	3.65
uPVC	0
steel	0
composite	0

Glazing	Maximum area - m2
single	3.65
double	30.24
triple	0

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric storage.	<b>~</b>	<b>~</b>	~
Cooling system			
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		>	>
Heating system			
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		~	~
Ventilation		•	÷
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		<ul> <li></li> </ul>	<ul> <li>Image: A set of the set of the</li></ul>
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	<ul> <li>Image: A set of the set of the</li></ul>
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	<ul> <li>Image: A second s</li></ul>
Artificial lighting			•
The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting- diode (LED) lamps.		~	~
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	~	~	~

BASIX Department of Planning, Housing and Infrastructure

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.	>	~	>
Alternative energy			
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 photovolatic system must consist of:			
<ul> <li>photovolatic collectors with the capacity to generate at least 6.6 peak kilowatts of electricity, installed at an angle between 10 degrees and 25 degrees to the horizontal facing east</li> </ul>	~	<b>~</b>	~
Other		`	
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 V 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 V 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 V 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.

## **APPENDIX # 5**

**ENGINEERING** 

**GEOTECH** 



LEVEL 1, 146-148 LORDS PL, ORANGE PO BOX 1935, ORANGE NSW 2800 E OFFICE@COOKANDROE.COM.AU CROE PTY LTD T/A COOK AND ROE ABN 92 154 518 699 ACN 154 518 699 WWW.COOKANDROE.COM.AU

Our Ref: 250071-0

11 February 2025

Mellross Homes E: natasha@mellrosshomes.com.au

## PROPOSED RESIDENTIAL DWELLING AT LOT 24 STEPHENS STREET, BINALONG STRUCTURAL DESIGN CERTIFICATE

We advise that we have carried out the structural design for the proposed residential dwelling at Lot 24 Stephens Street, Binalong, as shown on the Cook and Roe drawings with Job No. 250071. The design has been prepared in accordance with the following Australian Standards:

- AS/NZS 1170.0 2002 Structural design actions General principles
- AS/NZS 1170.1 2002 Structural design actions Permanent, imposed & other actions
  - AS 1684.2 2021 Residential timber-framed construction Non-cyclonic areas
- AS 2159 2009 Piling -Design and installation
- AS 2870 2011 Residential slabs and footings
- AS 4055 2021 Wind loads for housing
- AS 4773.1 2015 Masonry in small buildings Design

We certify that the design meets the requirements of the National Construction Code (NCC 2022 - Volume 2) and the relevant Australian Standards listed above.

This certification shall not be construed as relieving any other party of their responsibilities, liabilities or contractual obligations. We trust that this information meets your requirements. Please do not hesitate to contact the undersigned should you require any further information.

Yours faithfully, **COOK AND ROE** 

•

Wayne Roe BE MIEAust CPEng NER Senior Structural Engineer

# **PROPOSED NEW RESIDENCE** LOT 24 STEPHENS STREET, BINALONG

### **CONSTRUCTION NOTES**

- CN1. BEFORE PLACING ANY FILLING. ALL ORGANIC MATERIAL. UNCOMPACTED FILL & TOP SOIL ARE TO RE REMOVED & THE AREA PROOF ROLLED TO IDENTIFY ANY LOW STRENGTH AREAS IN NECESSARY, LOW STRENGTH MATERIAL IS TO BE EXCAVATED TO OBTAIN A UNIFORM STRENGTH BASE PRIOR TO PLACEMENT OF FILL MATERIAL
- CN2. FOOTINGS ARE GENERALLY TO BE FOUNDED ON UNIFORM NATURAL GROUND, ALL FILL UNDER THE SLAB SHALL BE COMPACTED & TESTED IN ACCORDANCE WITH AS 3798/2007 GUIDELINES ON EARTHWORKS FOR COMMERCIAL & RESIDENTIAL DEVELOPMENTS. FOR RESIDENTIAL SITES THIS REQUIRES A MINIMUM DENSITY RATIO OF 95% (AT STANDARD COMPACTIVE EFFORT). WHERE RECURRES A MINIMUM DENSITI KATIO OF 95% IAI STANDARD COMPACTIVE EFFORT, MHERE REACTIVE SOLIS ARE TO BE USED AS FILL, THE MOSTURE CONTENT AT FLACEMENT SHALL NOT EXCEED ±2% OF STANDARD OPTIMUM MOISTURE CONTENT. FURTHERMORE, COMPACTED FILL MUST EXTEND A MINIMUM OF THB BEYOND THE BUILDING FOOTPRINT TO ENSURE PROPER COMPACTION UNDER THE ENTITUES IS CALIEVED. TESTS SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 3798-2007, WITH NOT LESS THAN ONE

TEST STALL DE CANDID. DO'T M'ACCONDANCE M'ITAS J'JOLDO', WITH NOT LEST TRAINO TEST PER LAYER OF FILL, OR OWE TEST PER JONO FO MATERIAL - WHICHVEEN ES GEATER. TESTS SHOULD BE DISTRIBUTED EVENLY THROUGHOUT THE FULL DEPTH & AREA. AT THE COMPLETION OF FILLING THE GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE ALL TEST DATA, INCLUDING TEST LOCATIONS & RESULTS, AS REQUIRED FOR LEVEL 2 SAMPLING & TESTING IN ACCORDANCE WITH AS 3796207. ALTERNATIVELY, IF FILL IS UNCOMPACTED CONTACT THIS OFFICE FOR PIERING REQUIREMENTS.

- CN3. THE BASE OF FOOTINGS & EDGE BEAMS MAY BE STEPPED OR MAY BE SLOPED NOT MORE
- CN4. MINIMUM ALLOWABLE BEARING CAPACITY, INCLUDING EDGE BEAM, IS 100kPa.
- CNS. IN AREAS OF POTENTIAL TERMITE RISK, FOUNDATIONS SHALL BE CHEMICALLY OR OTHERWISE TREATED IN ACCORDANCE WITH AS 3660-CURRENT EDITION. THIS IS RECOMMENDED FOR ALL SITES. PROVIDE FOR TERMITE PROTECTION AS REQUIRED AT SLAB JOINTS.
- CN6. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE 40mm TO UNPROTECTED GROUND, 30mm TO MEMBRANE IN CONTACT WITH GROUND, 20mm TO INTERNAL SURFACES & 30mm TO EXTERNAL SURFACES.
- CN7. IN BEAM DEPTHS OVER 500mm, SERVICE PENETRATIONS SHALL BE PERMITTED THROUGH THE MIDDLE THIRD OF THE EDGE BEAM & FOOTING BEAM DEPTH. ALL HORIZONTAL RUNS SHALL BE LOCATED BELOW THE SLAB REINFORCEMENT. PIPES IN EXCESS OF Ø20mm. SHALL NOT BE USED IN HORIZONTAL RUNS UNLESS THE SLAB IS THICKENED.
- CN8. TRENCH MESH SHALL HAVE ALL CROSS WIRES CUT FLUSH WITH OUTER MAIN WIRES. TRENCH MESH IN BEAMS SHALL BE OVERLAPPED BY WIDTH OF MESH AT "T" & "L" JUNCTIONS, TRENCH MESH SHALL BE SPLICED WHERE NECESSARY BY A LAP OF 500mm.
- CN9. WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS 2870 RESIDENTIAL SLABS & FOOTINGS & THE "ACCEPTABLE STANDARDS OF DOMESTIC CONSTRUCTION", NEW SOUTH WALES.
- CNI0. CONCRETE 28 DAY DESIGN STRENGTH TO BE f'€=25MPa, WITH A MAXIMUM SLUMP OF 80mm, 20mm MAX. SIZE AGGREGATE. IF HYDRONIC HEATING \$/OR POLISHED CONCRETE IS PROPOSED, THIS MAY AFFECT THE PROPOSED DESIGN. CONTACT COOK&ROE FOR FURTHER ADVICE ON SLAB REINFORCEMENT, THICKNESS & CONCRETE REQUIREMENTS, FURTHERMORE, IN GROUND CONDITIONS WITH HIGH SALINITY, CONCRETE STRENGTH SHALL BE INCREASED TO f'c=32MPa.
- CN11. CONCRETE SHALL BE VIBRATED TO COMPLETELY FILL THE FORMWORK TO THE INTENDED LEVEL, EXPEL ENTRAPPED AIR, & CLOSELY SURROUND ALL REINFORCEMENT, TENDONS & EMBEDMENTS
- CN12. CONCRETE SHALL BE CURED (KEPT CONTINUOUSLY WET) FOR A MINIMUM PERIOD OF 7 DAYS AFTER PLACEMENT.
- CN13. ENSURE THAT WATER DOES NOT POND AROUND THE BUILDING, ON CUT & FILL SITES, GRADE GROUND AWAY FROM THE BUILDING A MINIMUM OF 1:20 SLOPE FOR 1.0m. ON LEVEL SITES THE MINIMUM HEIGHT OF SLAB ABOVE FINISHED EXTERNAL LEVELS SHALL BE 225mm THIS MAY BE REDUCED LOCALLY TO 50mm NEAR PAVED AREAS THAT SLOPE AWAY FROM THE BUILDING
- CN14. SLAB DESIGN DOES NOT ALLOW FOR SHRINKAGE CRACK CONTROL REFER TO ENGINEER IF CRACK CONTROL TO ALLOW FOR EXTENSIVE BRITTLE FLOOR COVERINGS IS REQUIRED.
- CN15. IF ENGINEERING INSPECTION OF SITE PREPARATIONS PRIOR TO CONCRETING IS REQUIRED, PROVIDE NIMUM OF FORTY EIGHT HOURS PROVISIONAL NOTIFICATION
- CN16. WHERE DEPTH OF FILLING BELOW SLABS EXCEEDS 400mm THE FILLING SHALL BE DEEMED TO BE UNCOMPACTED UNLESS SITE DENSITY TESTING IS CARRIED OUT
- CNT7. THE DETAILS SHOWN ON THIS DRAWING ASSUME COMPACTED FILL REFER TO ENGINEER FOR CHANGES TO CONSTRUCTION REQUIREMENTS TO ALLOW FOR UNCOMPACTED FILL BELOW SLAB OR EDGE BEAMS.
- CN18. LAP LENGTHS SHALL BE 40 × BAR DIAMETERS U.N.O. FOR DEFORMED BARS. NOTE: WHERE BARS WITH DIFFERENT DIAMETERS LAP, THE LAP LENGTH SHALL APPLY FOR THE SMALLER BAR DIAMETER ALL COGS TO BE STANDARD COGS UN O



- 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

BJK WGR 11.02.2

Drawn Approved Date

A ISSUED FOR APPROVAL

Revision Description

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\_\_\_\_\_\_

## NOMINAL BAR SIZE IN mm \_\_\_\_\_\_\_ SPACING IN mm THE FIGURE FOLLOWING THE FABRIC SYMBOLS SL, RL, TM IS THE REFERENCE NUMBER FOR FABRIC

### SITE DRAINAGE

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

- SD1. THE FOOTING & 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 BUILDING 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 WITHIN 15m OF THE BUILDING. WHERE PUEPES PASS UNDER THE FOOTING, THE TRENCH SHOULD BE BACK FILLED WITH CLAY OR CONCRETE TO PREVENT THE INGRESS OF WATER BENEATH THE
- SD4. SUBSURFACE DRAINS TO REMOVE GROUNDWATER SHALL NOT BE USED WITHIN 1.5m OF THE BUILDING 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 H1 CLASS SITES & 40mm THICK FOR H2 & E CLASS SITES. VERTICAL PENETRATIONS DO NOT REQUIRE
- 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 POLVETHVLENE MAY BE ENCASED IN CONCRETE OR RECESS IN THE SLAB & PROVIDED WITH FLEXIBLE JOINTS AT THE EXTERNOR OF THE SLAB. NOTE: METHODS USED SHOULD COMPLY WITH LOCAL PLUMBING & DRAINAGE REGULATIONS.

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

### **RECOMMENDED SITE MANAGEMENT TECHNIQUES**

IT IS IMPORTANT TO REALISE THAT ENGINEERING DESIGN ON REACTIVE CLAYS IS A COMPROMISE SOLUTION BETWEEN COSTS & BUILDING PERFORMANCE ENGINEERING DESIGN AIMS AT ACCOMMODATING SOLUTION BETWEEN COSTS & BUILDING PERFORMANCE. ENGINEERING DESIGN AIMS AT ALCOMMODATIN DIFFERENTIAL MOVEMENTS CAUSED BY EXTEME SEASONAL MOISTURE (HANGES & 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 MULL TOTALLY PREVENT DIFFERITIAL MOVEMENT. II IS THEREFORE TO BE EXPECTED THAT SOME NOM-STRUCTURAL AESTHETIC CRACKING & MOVEMENT WILD CCLUP, SLIGHT CRACKING IDEFINED AS COLORY MOTIVE ID TO SOLE AUCULAL VIEW DETURIED AT UNELLINGT ALL THE FORMET OF THE ENVIRONMENT. CRACK WIDTHS UP TO 5mm). USUALLY HAVE NO STRUCTURAL INFLUENCE ON THE FUNCTION OF THE WALL RECTIFICATION OF MOVEMENT PROBLEMS TO BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER EXPERIENCED WITH REACTIVE SITE CONDITIONS. FOR REACTIVE SITES. THE FOLLOWING OWNER/TENAN RECOMMENDATIONS ARE SUGGESTED AS A MEANS OF MINIMISING LOCAL DIFFERENTIAL MOVEMENT PROBLEMS WITH THE FINISHED CONSTRUCTION

- SM1. LEAKING PLUMBING & 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 INCL'S & LANGE SMORSES, MIENT FLANTED LEUSE (UI TIMES DE PODUIDING LAN CANGES SIONIFICANT) MOISTURE CHANGES UNDER THE CONSTRUCTION IN TIMES DE PODUGHT. PROBLEMS FROM THIS CAUSE CAN BE SIGNIFICANTLY REDUELD BY PLANTING TREES SOME DISTANCE AWAY FROM BULIDINGS, 75X dO THE MATURE TREE HEIGHT IS A RECOMMENDED MINIWUM, HONEVER 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
- SM4. LIMITATIONS OF EXCAVATIONS NEAR FOOTINGS TO BE AS FOLLOWS LINE OF INFLUENCE



IF A 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 OPETH IF COMPLIANCE WITH ABOVE DETAIL CANNOT BE ACHIEVED THEN THE ENGINEER SHOULD BE CONTACTED PRIOR TO PROCEEDING.

DO NOT SCALE	
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and must not be used by any other person or for any other purpose	and the last toperand heritige one leaves were housed for the second statement of pre-

PROPOSED NEW RESIDENC LOT 24 STEPHENS STREET, BINA

**GENERAL NOTES & DRAWING** 

W - DENOTES GRADE D500N BARS TO AS 503. N - DENOTES GRADE D500N BARS TO AS 4671. SL/RL - DENOTES D500L REINFORCEMENT FABRIC TO AS 4671. TM - DENOTES GRADE D500L TRENCH MESH TO AS 4671.

BACKFILL TRENCH OR OTHER EXCAVATION

ALL FOOTINGS TO BE FOUNDED ON CONSISTENT STRATA.

PROVIDE ARTICULATION JOINTS IN ACCORDANCE WITH AS 4773.1 & AS 4773.2.

E	Client MELLROSS HOMES										
	Drawn	вјк	Designed WGR Date FEBRUARY 2025		Approved W. Be						
20/10	Scale	-			Wayne Roe BE MIE Aust CPEng NER (2476635)						
LIST	Job No: <b>25</b>	0071	Dwg No: S	.01	This Drawing must not be used for Construction unless signed as Approved	Original Size <b>A3</b>					



1. SEE GENERAL NOTES & DETAILS REGARDING FILL REQUIREMENTS UNDER SLAB.

2. ALL BEAMS SUPPORTING BRICKWORK TO BE DEEPENED AS NECESSARY TO EXTEND THROUGH ANY FILL MATERIAL.

3. FOOTINGS & SLABS HAVE BEEN DESIGNED FOR A <u>CLASS 'M' SITE</u> IN ACCORDANCE WITH AS 2870:2011. RESIDENTIAL SLABS & FOOTINGS.

4. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER GENERAL BUILDING PLANS & SPECIFICATIONS. JOB BY. AREI DESIGN JOB NO. 4575

5. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES, U.N.O.

6. 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. <u>OR ALLOW</u> 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 ' M ' SOIL CLASSIFICATION AS ADVISED BY ENVIROSEER, REPORT: 24113

**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 SHA	LL BE AS FOLLOWS:
	TOP STEEL
STERWIDTH	(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

E	Client MELLROSS HOMES									
NONG	Drawn	BJK	Designed WGR		Approved W. Be					
20/10	Scale	1:100	Date FEBRUARY 2025		Wayne Roe BE MIE Aust C	PEng NER (	2476635)			
'LAN	Job No: <b>2</b>	50071	Dwg No: <b>S</b>	.02	This Drawing n used for Con unless signed a	nust not be struction s Approved	Original Size <b>A3</b>			











geotechnical

## environmental

3004 Cargo Road CARGO NSW 2800 ABN: 57 021 223 814 P: 0428 619 282 E: info@enviroseer.com.au http://www.enviroseer.com.au/

### Services completed for this site

Contamination Report

U Wastewater Management Report

## LOT CLASSIFICATION REPORT

Prepared for:

Site Address:

☑ Lot Classifications

MELLROSS HOMES LOT 24 DP 1066526 26 STEPHENS STREET BINALONG NSW 2584 Revision: 01/07/2021 Site Test: 22/08/2024 Lab Test: 03/09/2024 Customer Job: 4575 Job Number: 24113 Technician: JM



## 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

The site is a BE for a 4BR residence on a 0.2 Ha lot in the village of Binalong which is 10 km SE of Galong, 15 km NNW of Bookham and 20 km NW of Bowning in southern NSW. Site and soil classification is 'M' with a net vertical movement of 25 mm. Soil depth to rock is less than 1 m. topsoil is silt to 450 mm which can be removed, reinforced with up to 300 mm of coarse aggregate or gypsum 10 kg/m<sup>2</sup> amended and plate compacted.

## 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> 6%	Fall direction: NE						
3.2	Slope stability assessment recommended (> 11 Degrees)							
3.3	Are there any Retaining Walls supporting this site?							
	(if yes, see atta	ached 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?	No
	Building Type:	
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

22/08/2024

LOT 24 DP 1066526 26 STEPHENS

STREET BINALONG NSW 2584

4575

24113

Clayey

gravelly silt, Customer Job:

Job Number:

Site Address:

B

### Borehole:

Surface RL: Latitude: Longitude: **DCP1BH1** 495 -34°67.203 148°62.929

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code		Materia Descripti	l on		Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	E
	0.15					Gravelly silt	, brown, coarse ag	gregate 1-10 mm 20	%	М			F	ļ
	0.15	2				Clayey	gravelly slit brown o	co.ag. 1-5 mm 50%						
	0.30	3												
	0.45	3				Gra	avelly clay, dark ye	ellowish brown		Da			St	
	0.60	6				C	Coarse aggregate 1	1-7 mm 40%		14.5	1.5	21		
	0.75	10				Coa	Clayey gravel, brov arse aggregate 1-1	vnish yellow  5 mm 70-80%		Dy			Н	
	0.9	15								10.8	8.5	37		
	1.05	16												
	1.20													
	1.35													
	1.50													
	1.65						End of borehole at	1.7 m bgsl						
	1.80													
	1.95													
	2.10													
	2.25													
	2.40													
	2.55													
	2.70													
	2.85													
	3.00													
	0.00													
	3.15													
	3.30													
	3.45													
	3.60													
	3.75													
	3.90													
	4.05													
	4.20													
	4.35													
	4.50													
			<b>WT</b> – V	Vater Table	UTP	<ul> <li>Unable to pernit</li> </ul>	rate <b>D</b>	<b>CP</b> – 9kg Dynami	ic Cone F	Penetro	meter	1	PP- Poo	cket
A	VD – Densi	ty Index vs	s Approx. I	Penetrometer	results	SILTS	& CLAY – Cu vs /	Approx. Penetromete	er results					
				DCP	Blow		Undrained	DCP Blow		<b>.</b>		MO	STUDE	
	DENSITY		Density Index	Coun	/100 \	CONSISTENCY	Shear Strenath	Count	PP Indi	Dial cator		IVIUI	JIUNL	
				(blow:	/100mm)		(kPa)	(mm001/2wold)				-	Drei	
V	L - Very Loc	se	< 15 %		< 1	VS – Very Soft	0 – 12	< 1	0 -	0.2		D Da	– Dry - Damp	
MD -	L – Loose Medium De	nse	15 - 35 9 35 - 65 9	% %	1 – 3 3 – 9	S – Soft F – Firm	12 - 25 25 <b>-</b> 50	1 - 2 2 <b>-</b> 3	0.2 0.5	- 0.5 - 1.0		M - W	– Moist – Wet	
	D - Dense		65 - 85 9	%	- 15	St - Stiff	50 - 100	3-5	1.0	- 2.0		WP - P	lastic Limit	
VL	- very Der	158	> co – co	/0	2 10	H – Hard	> 200	α-c 8 <	3.0	- 4.0 4.0		VVL — L	iquiù Limit	



## 5.1 FIELD LOG

22/08/2024

Clayey

gravelly silt, Customer Job:

Job Number:

Site Address:

4575 24113 LOT 24 DP 1066526 26 STEPHENS STREET BINALONG NSW 2584

Borehole:

Latitude:

Longitude:

DCP02 Surface RL: 494

-34°67.192 148°62.931

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code		Materia Descripti	ll on		Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	E
	0.15	3				-								<b></b>
	0.30	3												
	0.45	3												
	0.60	6												
	0.75	10bb												
	0.9													-
	1.05													
	1.05													
	1.20													
	1.35													
	1.50													
	1.65													
	1.80													
	1.95													
	2.10													
	2.25													
	2.40												-	
	2.55													
	2.70													
	2.85													
	3.00													
	3.15													
	3.30													
	3.45													
	3.60													
	3 75													
	3.00													
	4.05													
	4.00													
	4.20													
	4.35													
	4.50													
			<b>WT</b> – V	Vater Table	UTP	<ul> <li>Unable to pernit</li> </ul>	rate <b>D</b> enetro	<b>CP</b> – 9kg Dynami ometer	ic Cone F	Penetro	meter		PP- Poo	cket
A	ND – Densi	ty Index v	s Approx.	Penetrometer	results	SILTS	& CLAY – Cu vs /	Approx. Penetromete	r results					
DENSITY Density DCP Blow Index (blows/100mm)		CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Indie	Dial MOISTURE cator								
V	L - Very Loo	se	< 15 %		< 1	VS – Very Soft	0 - 12	< 1	0 -	0.2		D	– Dry	
	L – Loose		15 - 35	%	I <b>-</b> 3	S – Soft	12 - 25	1 - 2	0.2	- 0.5		Da- M -	- Moist	
MD –	Medium Der D – Dense	nse	35 – 65 ° 65 – 85 °	% %	3 <b>-</b> 9 - 15	F – Firm St – Stiff	25 <b>-</b> 50 50 - 100	2 - 3 3 - 5	0.5 1.0	- 1.0 - 2.0		W Wp - P	– Wet lastic Limit	
VE	) - Very Der	nse	> 65 - 85	%	> 15	VSt – Very Stiff H – Hard	100 – 200 > 200	5 – 8 > 8	3.0	- 4.0 4.0		WL-L	iquid Limit	

## **6.0 LOCATION SKETCH**





## 7.0 COMMENTS & RECOMMENDATIONS

Site classification is 'M' with a net vertical movement of 25 mm. Topsoil can be cut and or plate compacted with or without gypsum amendment.

## **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



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 boglike 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							
А	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							
М	Moderately reactive clay or silt sites, which can experience moderate ground movement from moisture changes							
Н	Highly reactive clay sites, which can experience high ground movement from moisture changes							
Е	Extremely reactive sites, which can experience extreme ground movement from moisture changes							
A to P	Filled sites							
Р	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 perpends).

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 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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## **APPENDIX # 6**

AHIMS

**BMAT**


Your Ref/PO Number : MELLROSS Client Service ID : 988487

Date: 25 March 2025

Kenneth Filmer

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 : 24, DP:DP1066526, Section : - with a Buffer of 50 meters, conducted by Kenneth Filmer on 25 March 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) 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.



Department of Planning and Environment

# 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** 

25/03/2025 12:42 PM

1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)									
1.1	Does the development Footprint intersect with BV mapping?	no							
1.2	Was <u>ALL</u> BV Mapping within the development footprinted added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no							
1.3	Date of expiry of dark purple 90 day mapping	N/A							
1.4	Is the Biodiversity Values Map threshold exceeded?	no							
2. Ar	rea Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Sectio	n 7.2)							
2.1	Size of the development or clearing footprint	192.4 sqm							
2.2	Native Vegetation Area Clearing Estimate (NVACE) (within development/clearing footprint)	0.1 sqm							
2.3	Method for determining Minimum Lot Size	LEP							
2.4	Minimum Lot Size (10,000sqm = 1ha)	2,000 sqm							
2.5	Area Clearing Threshold (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 <u>Guidance</u> )	no							
REP proj (You	ORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the posed development footprint area? Ir local council will determine if a BDAR is required)	no							



Department of Planning and Environment

## 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: <a href="https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor">https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor</a>.

• If the result above indicates the BOS Threshold <u>has not been exceeded</u>, 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 <u>Biodiversity Values Map Threshold Tool User Guide</u>.

## **Review Options:**

• If you believe the Biodiversity Values mapping is incorrect please refer to our <u>BV Map Review webpage</u> 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 <u>Guide for reviewing area clearing threshold results from the BMAT Tool</u>.

### 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: \_\_\_

Date:

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

25/03/2025 12:42 PM



Department of Planning and Environment

## 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 <u>Biodiversity Values Map webpage</u>.

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 <u>Biodiversity Values Map Review webpage</u>.

If you need help using this map tool see our <u>Biodiversity Values Map and Threshold Tool User Guide</u> or contact the Map Review Team at <u>map.review@environment.nsw.gov.au</u> or on 1800 001 490.



# **APPENDIX # 7**

**OSM GEOTECH** 



geotechnical

environmental

54 Wiare Cct Orange NSW 2800 ABN: 57 021 223 814 P: 0428 619 282 E: info@enviroseer.com.au http://www.enviroseer.com.au/

Wastewater Management Report

#### Services completed for this site

Lot Classifications

Site Contamination Report

DOMESTIC WASTEWATER REPORT

Prepared for:

Site Address:

MELLROSS HOMES LOT 24 DP 1066526 26 STEPHENS STREET BINALONG NSW 2584 Revision: 01/07/2021 Site Test: 22/08/2024 Lab Test: 27/08/2024 Customer Job: 4575 Job Number: 24114 Technician: JM



#### 1.0 SUMMARY

Permeability is very good due to a silty topsoil. Soil depth is >800 mm. Coarse aggregate content is low to 800 mm bgsl. Primary effluent treatment for a 4BR house to a 3 kL septic tank can be distributed to two 1.3 m wide x 23 m long trenches.

Alternatively effluent can be directed to a 6-10 person AWTS and then to four above ground sprinkler lines of 3 m spray diameter, eight per line. The lead on each hose may be at least 15 m, provided radius is maintained. If not, then five lines of six sprinklers will suffice. Thirt-two roses of spray radius 1.5 m will achieve coverage for the total 224 m<sup>2</sup> required.

03/10/2024



## 3.0 SITE ANALYSIS

Geology	Geology is residual deposits with near pockets of ignimbrite. Surface water in											
& Water	the form of creeks lie 280 m N. There are 5 registered bores within 500 m of											
	the drain field. Depth to groundwater for three of these is between 4 and 9 m											
	bgsl.											
Constraints	The key constraints for the	drain-field area Sl	E of the proposed	d residence are:								
	1) residual soils 2) soil depth approaching 10 m; 3) small block; 4) 4 BR house.											
Advantages	The key advantages are: 1) permeable silty topsoil; 2) deep topsoil to 800 mm;											
	3) good evaporation;											
Soil Physico-	Average pH for the area is	6.7 ECe is < 0.1 d	S/m which is nor	n saline.								
chemistry	Emmerson Aggregate is slaking without dispersion.											
	Parameter BH01 0-0.8 m BH01 0.8-1.7 m											
	pH 6.2 ± 0.1 7.3 ± 0.1											
	Electrical Conductivity uS/cm (ppm) 57±2 34±1											
	ECe mS/dm Non saline 0.5 Non saline 0.3											
	Phosphorus Absorption mg/kg	Estimated : 300	Estimated : 300									
	Emerson Aggregate Test	slakes, minor dispersion	slakes, minor dispersio	in								

## 4.0 RESULTS



Wide Bed Trench ETA Bed	Two 4 m x 7,5 m wide beds, 9 m <sup>3</sup> aggregate, 0,4 m vital depth Four 1.3 m double arch x 22 m trenches, 9 m <sup>3</sup> aggregate, 0,4 m depth (3,5 kL septre Tank) (1,0 m) (1,0 m)							
Recommendation	Two 1.3 m x 23 m double arch trenches							
SECONDARY	Secondary Effluent     Above Ground     Sub-surface       Example     Large droplet Sprinkler     LPED       Field Number     2     2       Area (m2)/field     113     125							
	Sprinklers or lines/field 13 5							
	Field Size Example 9 x 12 25							
	Judgement Ample buffer setback, Avoid mowers waves and flush valves result of the set of							
IRRIGATION:	Secondary treatment is typically by aerated wastewater treatment system AWTS.							
ABOVE-	AWTS disposal to bed and trench effectively halves the area required by septic							
	tank in moderately low $K_{sat}$ environments. AWTS is usual when wastewater is							
& SUB- SURFACE SSI	rrigated either Above-Ground for flexibility of watering or Sub-Surface if regular							
001117102001	watering of tree lots is proposed. A split system can mine phosphorus from							
	plackwater and/or utilizes moisture from greywater, without the employ of AWTS							
	and the requisite chlorination. Composting toilets provide conditions where enteric							
	and the requisite chomation. Composing tonets provide conditions where entend							
Above Ground								
Irrigation or Sub-Surface Irrigation	Secondary effluent treatment to above ground irrigation, is a good use of water in summer. In winter, rainfall run-off can be problematic. Large droplet sprinkler minimizes drift. Secondary treated effluent to sub-surface Irrigation (SSI) removes drift risk, while directing water to tree lots and orchard and garden. Stock and vehicular movements can damage pipes and compact the soil. AGI is movable and accessible. SSI is harder to troubleshoot.							
Recommendation	AWIS secondary treated wastewater to above-ground irrigation comprising four							
	alternating fields of 8 sprinklers of 1.5 m spray radius.							

03/10/2024

DESIGN CALCULATIONS		
Annual Rainfall (mm)	650	Ya
Annual Evaporation (mm)	1535	Estimat
Hydraulic Loading	900L/day	Rainwa
Soil Classification	Average	Subsoil class
Permeability K <sub>zat</sub>	mł day	0.
DIR	litres mm/day	
RECOMMENDATION	Primary Effluent	to Double Arch Trench
Design Load Rate DLR	mmłday	15 primary 30 seconda
Double Arch Trench	Number	
Trench Dimensions (m)	L×W×D	1.3m x 23
Minimum Input Quality	Primary	septic ta
Tank Size (kL) Table J1	KL	
Design Irrigation Area : Meterol.	m²	2
Design Irrigation Area : Nutrient	m²	
Design Irrigation Area : Hydrau	SSI/AGI m²	250/2
RECOMMENDATION	Secondary Effluent	to Above Ground Irrigation
Design Load Rate DIR	mmłday	
Lines	No.	
Area per sprinkler (spray rose)	m²	
Sprinklers per line	No.	
Spray diameter	m	
Spacing between roses	m	
Minimum Input Quality	Secondary	AWTS - 6 pers
Retentinon time 2.5 kL	days	

#### 5.0 CONCLUSION & RECOMMENDATIONS

Although the primary treatment solution is appealing and workable, the geology of residual soils favours secondary treatment by AWTS with distribution to above ground sprinklers. This will enable use of the lawn area for recreational use. The total sprinkler area of 224 m<sup>2</sup> as four hoses with 8 roses of spray radius 1.5 m, is optimistic. If the pressure range is less than that delivering a 3 m diameter the number of lines can be increased to five with six sprinklers per line. If you don't mind the ongoing costs associated with electric pump maintenance and performance testing.



Date:

22/08/2024

#### **Borehole:**

Latitude:

Longitude:

Surface RL:

477.3 m -34°67.181 148°62.929

BE1

5.1 FIELD LOG

**Customer Job:** Job Number: Site Address:

4575 24114 LOT 24 DP 1066526 26 STEPHENS STREET BINALONG NSW 2584

Water	Depth (m)	DCP (blows per 150 mm	PP (kPa)	Sample	Classification Code	Material Description				Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.15	7				Clayey gravelly	Fine sandy silt, dark grey Clayey gravelly silt co.ag. 1-9 mm 20% dark yellowish brown			М			F	
	0.30	5				Silty clay, rolls roo	1 1 mm x 100 mm (	dark vel red Brownis	h vellow	м			St	
	0.60	5				City day, tono roc			ii yonow				U.	
	0.75	6												
	0.9	12												
	1.05	4bb												
	1.20													
	1.35													
	1.50													
	1.65													
	1.80													
	1.95													
	2.10													
	2.25													
	2.40													
	2.55													
	2.70													
	2.85													
	3.00													
	3 30													
	3.45													
	3.60													
	3.75													
	3.90													
	4.05													
	4.20													
	4.35													
	4.50													
			<b>WT</b> – V	Vater Table	UTP -	- Unable to pernit	rate <b>D</b>	<b>CP</b> – 9kg Dynami	c Cone F	Penetror	neter		PP- Poo	cket
A	ND – Densi	ty Index v	s Approx. I	Penetrometer	results	SILTS	& CLAY – Cu vs /	Approx. Penetromete	er results					
DENSITY D		Density Index DCP Blow Count (bloAS/100mm)		CONSISTENCY	CY Strength (bloAS/100mm)		Dial cator		MOI	STURE				
V	L - Very Loo	se	< 15 %		< 1	VS – Very Soft	0 - 12	< 1	0 -	0.2		D	– Dry Damp	
L – Loose MD – Medium Dense D – Dense VD - Very Dense		<pre>&lt; 15 % &lt; 1 15 - 35 % 1 - 3 35 - 65 % 3 - 9 65 - 85 % 9 - 15 &gt; 65 - 85 % &gt; 15</pre>		S – Soft F – Firm St – Stiff VSt – Very Stiff H – Hard	12 - 25 25 <b>-</b> 50 50 - 100 100 <b>-</b> 200 > 200	1 - 2 2 - 3 3 - 5 5 - 8 > 8	0.2 - 0.5 M – Moist 0.5 - 1.0 W – Wet 1.0 - 2.0 W <sub>P</sub> - PIAStic L 3.0 - 4.0 W <sub>L</sub> – Liquid Li		– Moist – Wet AStic Limit iquid Limit					



4.35

Date:

22/08/2024

#### **Borehole:**

Latitude:

Longitude:

Surface RL:

476.6 m -34°67.175 148°62.924

BE2

5.1 FIELD LOG

**Customer Job:** Job Number: Site Address:

4575 24114 LOT 24 DP 1066526 26 STEPHENS

STREET BINALONG NSW 2584

	Water	Depth (m)	DCP (blows per 150 mm	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	E	
ĺ		0.15					Fine sandy silt dark greyish brown Clayey gravelly silt co.ag 1-8 mm 20% yellowish brown	M M			F F		
		0.30											
		0.45											
		0.60											
		0.75											
		0.9											
		1.05											
		1.20											
		1.35											
		1.50											
		1.65											
		1.80											
		1.95											
		2.10											
		2.25											
		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											

4.50	WT – Wate	er Table UTP -	- Unable to pernit	rate <b>D</b>	<b>CP</b> – 9kg Dynami	c Cone Penetrome	ter <b>PP</b> - Pocket
AND – Density Index	vs Approx. Pene	trometer results	Approx. Penetromete	r results			
DENSITY	Density Index	DCP Blow Count (bloAS/100mm)	CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (bloAS/100mm)	PP Dial Indicator	MOISTURE
VL - Very Loose	< 15 %	< 1	VS – Very Soft	0 – 12	< 1	0 - 0.2	D – Dry Da- Damp
L – Loose MD – Medium Dense D – Dense VD - Very Dense	15 - 35 % 35 - 65 % 65 - 85 % > 65 - 85 %	1 - 3 3 - 9 9 - 15 > 15	S – Soft F – Firm St – Stiff VSt – Very Stiff H – Hard	12 - 25 25 <b>-</b> 50 50 - 100 100 <b>-</b> 200 > 200	1 - 2 2 - 3 3 - 5 5 - 8 > 8	0.2 - 0.5 0.5 - 1.0 1.0 - 2.0 3.0 - 4.0 > 4.0	$\begin{array}{l} M - \text{Moist} \\ W - \text{Wet} \\ W_P - \text{PIAStic Limit} \\ W_L - \text{Liquid Limit} \end{array}$

## CONDITIONS OF THE RECOMMENDATIONS

- This on-site domestic wastewater report generally in accordance with AS NZS 1547 2012 guidance on and should be sufficient for a qualified person to ascertain the consequence of its findings.
- This domestic wastewater report was completed by an experienced soil technician and does not make any allowance for the lot outside of the proposed drainage field situated near the BE.
- 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 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 should 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 the minimum required to facilitate both regulatory oversight and effective trade installation for a designated area. They 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, while anomalies are usually detected by site visit and historical searches, the potential for undisclosed hotspots of CoPC arising from undisclosed spillage or dumping cannot be entirely removed.

The advice and recommendations contained in this report are based on analyses obtained from the samples tested, and on the assumption that those test results are representative of the overall ground conditions of the entire building envelope and house yard. The actual conditions in some parts of the site might differ from those tested.

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, contaminants 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.