

# Wollongong Local Planning Panel Assessment Report | 14 November 2019

<b>WLPP No.</b>	Item 2
<b>DA number</b>	RD-2019/156/A
<b>Proposal</b>	Residential - demolition of existing structures and tree removals, construction of a two storey dual occupancy development and Subdivision - Torrens title - two (2) lots
<b>Property</b>	7 George Street, THIRROUL NSW 2515 Lot 17 DP 5961
<b>Applicant</b>	Urbanesque Planning Pty Ltd – Eugene Sarich
<b>Responsible Team</b>	Development Assessment and Certification - City Wide Planning Team (JS)

## ASSESSMENT REPORT AND RECOMMENDATION

### Executive Summary

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#### Reason for consideration by Local Planning Panel

The proposal has been referred to the WLPP for **advice** pursuant to clause 2.19(1) (c) of the Environmental Planning and Assessment Act 1979. The application has been identified as a significant planning policy matter by Council's General Manager and Director of Planning in accordance with clause 4 of Council's Draft Submissions Policy.

#### Proposal

The proposal seeks consent for the demolition of the existing dwelling house and tree removal, construction of a two storey dual occupancy and Torrens Title subdivision of the dual occupancy.

#### Permissibility

The proposed dual occupancy is permissible in the R3 Medium Density Residential zone pursuant to the Wollongong Local Environmental Plan (WLEP) 2009. Demolition and subdivision are also permissible on land to which the WLEP 2009 applies.

#### Consultation

The proposal was exhibited in accordance with Appendix 1 of the Wollongong Development Control Plan (WDCP) 2009. The application received 2 submissions by way of objection and one letter of support following notification. The issues raised in the submissions are as follows:

- Parking and traffic
- Inconsistency with character of the area
- Amenity impacts
- Planting selection

These concerns are discussed in greater detail at section 1.6 of this report.

Details of the proposal were referred to Council's Traffic, Landscape, Heritage and Development Engineering Officers. Amended plans were requested by Councils Traffic, Heritage and Landscape Officers. The additional information submitted has been reviewed, however it not considered to have adequately addressed the concerns raised. The outstanding concerns are also primarily consistent with the concerns raised as part of the assessment of the original development application. Councils Development Engineering Officer has provided conditionally satisfactory referral advice.

### **Main Issues**

The main issues arising from the development assessment process are:-

- Stacked parking
- Character of the area
- Landscaping treatment
- Impacts on trees

### **RECOMMENDATION**

It is recommended that RD-2019/156/A be **Refused** for the reasons detailed at section 5 of this report.

# 1 APPLICATION OVERVIEW

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## 1.1 PLANNING CONTROLS

The following planning controls apply to the proposal:

### State Environmental Planning Policies:

- SEPP No. 55 – Remediation of Land
- SEPP (Building Sustainability Index: BASIX) 2004

### Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

### Development Control Plans:

- Wollongong Development Control Plan (WDCP) 2009

### Other policies

- Wollongong City Wide Development Contributions Plan 2018
- Biodiversity Conservation Act 2016

## 1.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 DIVISION 8.2 REVIEWS

The application seeks a Review of Determination under Sections 8.2-8.5 of the Environmental Planning and Assessment (EP&A) Act 1979. The Review seeks approval for the demolition of the existing structures, tree removal, the construction of a two storey dual occupancy and torrens title subdivision.

The original DA (DA-2019/156) was refused by Wollongong City Council on 26 July 2019.

**An assessment against the relevant sections of the EP&A Act 1979 is provided below.**

### Section 8.2 Determinations and decisions subject to review

*(1) The following determinations or decisions of a consent authority under Part 4 are subject to a review under this Division:*

- (a) The determination of an application for development consent by a council, by a local planning panel, by a Sydney district or regional planning panel or by any person acting as a delegate of the Minister (other than the Independent Commissions or the Planning Secretary),*

...

DA-2019/156 was refused by Wollongong City Council on 26 July 2019. A determination by a council is subject to review under this division.

### Section 8.3 Application for and conduct of review

*(1) An applicant for development consent may request a consent authority to review a determination or decision made by the consent authority. The consent authority is to review the determination or decision if duly requested to do so under this Division.*

The applicant has sought the review of the determination of DA-2019/156, lodging the review application with Council on 11 September 2019.

*(2) A determination or decision cannot be reviewed under this Division:*

*(a) after the period within which any appeal may be made to the Court has expired if no appeal was made, or*

*(b) after the Court has disposed of an appeal against the determination or decision.*

The application can be reviewed under section 8.3 and was requested within the period prescribed by the Regulations, being within 6 months of the refusal date of DA-2019/156 – the 26 July 2019. RD-2019/156/A was lodged on 11 September 2019. The period within which an appeal may be made to the Court is 6 months after the date of the decision, pursuant to s8.10 of the EP&A Act 1979. The subject application must therefore be determined prior to the 26 January 2020.

*(3) In requesting a review, the applicant may amend the proposed development the subject of the original application for development consent or for modification of development consent. The consent authority may review the matter having regard to the amended development, but only if it is satisfied that it is substantially the same development.*

The review application included amended plans and supporting documents. The information submitted as part of the review of determination application is considered substantially the same as the original proposal.

A copy of the submitted Review Statement provided with the request for review are provided at Attachment 1.

*(4) The review of a determination or decision made by a delegate of a council is to be conducted:*

*(a) by the council (unless the determination or decision may be made only by a local planning panel or delegate of the council), or*

*(b) by another delegate of the council who is not subordinate to the delegate who made the determination or decision.*

DA-2019/156 was determined by Wollongong City Council and the review will also be determined by the Council. The proposal has been referred to the WLPP for advice pursuant to clause 2.19(1) (c) of the Environmental Planning and Assessment Act 1979.

*(5) The review of a determination or decision made by a local planning panel is also to be conducted by the panel*

N/A

*(6) The review of a determination or decision made by a council is to be conducted by the council and not by a delegate of the council.*

N/A

*(7) The review of a determination or decision made by a Sydney district or regional planning panel is also to be conducted by the panel.*

N/A

*(8) The review of a determination or decision made by the Independent Planning Commission is also to be conducted by the Commission.*

N/A

*(9) The review of a determination or decision made by a delegate of the Minister (other than the Independent Planning Commission) is to be conducted by the Independent Planning Commission or by another delegate of the Minister who is not subordinate to the delegate who made the determination or decision*

N/A

### **1.3 DETAILED DESCRIPTION OF PROPOSAL**

The application seeks consent for development in three phases, as per the below:

Phase 1 – demolition of the existing structures and tree removal;

Phase 2 – construction of an attached, two storey dual occupancy; and

Phase 3 – 2 lot Torrens title subdivision of the dual occupancy.

The proposal comprises the following:

#### Site preparation

- Demolition of the existing dwelling house
- Removal of 15 trees
- Site preparation earthworks

#### Works / Construction / building details

- Two storey dual occupancy, each proposed with a single garage, sitting room, laundry, powder room, butlers pantry and open plan kitchen, living dining area opening out to the alfresco area on the ground floor. On the first floor, each dwelling is proposed with 4 bedrooms, an ensuite to the main bedroom and family bathroom.

#### Traffic, parking and servicing

- Stacked parking, one space within the garage and one on the driveway area for each dwelling.
- 2 driveways.
- On street garbage collection proposed.

### **1.4 BACKGROUND**

Council does not have any development history for the subject site, with the exception of DA-2019/156 which was refused on the 26 July 2019. No prelodgement meeting was held for the proposal.

#### Application History:

DA-2019/156, was lodged on 21 February 2019. The applicant was provided with a request to withdraw the application on 13 May 2019. The request to withdraw indicated that the application as proposed was not supported due to several unresolved matters including the provision of stacked parking, separate driveways, the proposed development did not relate to the character of the area and surrounding architecture and insufficient landscaping information.

Council indicated that consideration should be given to constructing the dual occupancy with one dwelling to the front and one dwelling to the rear so as to facilitate a better design response to the character of the area and vehicular parking and access matters.

Amended architectural plans and documentation were provided by the applicant. The amended plans and documentation were referred to Council's Traffic, Landscape and Heritage Officers for review, however were not considered to resolve concerns raised. DA-2019/156 was refused on 26 July 2019.

The subject review was lodged on the 11 September 2019. Minimal amendments were made to the proposal as part of the review application package.

#### Customer service actions

There are no outstanding customer service requests of relevance to the development.

### **1.5 SITE DESCRIPTION**

The site is located at 7 George Street, Thirroul and the title reference is Lot 17 DP 5961. The site is currently comprised of a single storey clad swelling and a detached garage. The site has a total area of 657.6sqm by survey. The front, eastern side boundary and rear of the property are densely planted with a mix of species.

The site is regular in shape and falls from the rear to the street. Development immediately adjoining the property consists of single dwelling houses. In the area there are some examples of multidwelling housing, other dual occupancy developments and the Ryan's Hotel.

#### Property constraints

There are no constraints on the property.

There are no restrictions on the title.

The property is within proximity to several heritage items.



**Figure 1: Aerial photograph**

## 1.6 SUBMISSIONS

The review application was notified in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising. 3 submissions were received, two objecting to the development and one indicating support for the proposal. The issues identified are discussed below.

**Table 1: Submissions**

Concern	Comment
<p>1. <u>Character of the area</u></p> <p>The style of the development will not fit in with the existing streetscape.</p> <p>The bulk and scale will set an undesirable precedent.</p>	<p>Concerns regarding whether the proposal is consistent with the character of the area remain. Councils Heritage Officer has recommended that additional timber cladding or a treatment more consistent with the streetscape be incorporated into the ground floor. The proposal is not considered to respond appropriately to the local character.</p>
<p>2. <u>Traffic</u></p> <ul style="list-style-type: none"> <li>– George Street is already busy with traffic and on street parking is heavily used due to the proximity to Thirroul Station, the intersection with Phillip Street and Lawrence Hargrave Drive and O’Neil’s (Ryan’s) Hotel.</li> <li>– The concerns raised regarding the stacked parking has not been addressed as part of the review request.</li> <li>– A development which proposed one dwelling behind the other would be more appropriate and allow for the provision of garages that will accommodate two cars per dwelling.</li> <li>– The applicants position that due to the congestion, residents will use the off street parking, however given that parking will be tandem, this is considered unlikely and at least one car would remain on the street.</li> <li>– The development will create further traffic issues by removing the existing spaces in front of the house via the new driveway, plus additional cars for each household, resulting in more parking congestion for residents.</li> <li>– Safety concerns for pedestrians resulting from the increased traffic are raised. There have already been a few near misses at the pedestrian crossing when the traffic banks up.</li> </ul>	<p>Comments noted. See further discussion at Chapter E3 below.</p>

Concern	Comment
3. <u>Solar Access</u> The adjoining property will be in shadow from 2pm in the afternoon during winter.	Shadow diagrams have been provided demonstrating that both adjoining properties would retain in excess of 3 hours of solar access on June 21.
4. The proposal indicates rainwater tanks and air conditioners immediately adjoining dwelling houses on neighbouring properties. Concerns have been raised as to noise impacts resulting from both.	Amended plans have been provided which have relocated the rainwater tank. Noise resulting from the air-conditioning units would be considered minimal.
5. The existing 1.5m fence is not enough to provide privacy to adjoining properties.	Any consent issued would require the replacement of the fencing.
6. The planting selection is inappropriate and will result in encroachments on adjoining properties and impacts on solar access. The existing garden should be maintained due to its established nature and as it provides habitat for small birds and bees.	Councils Landscape Officer has considered the submitted landscape concept plan and raised concerns with regard to tree removals proposed and landscaped treatment. See further discussion below at Attachment 3.

## 1.7 CONSULTATION

### 1.7.1 INTERNAL CONSULTATION

#### Landscape

Council's Landscape Officer reviewed the application and sought additional information regarding tree removal and retention, compensatory planting, rainwater tank location, inconsistencies with the character of the area, landscape design and accounting for the power pole at the front of the property on the landscape plan. Amended plans were provided, however concerns with regard to impacts on trees to be retained, insufficient compensatory planting being proposed in response to the removal of 15 trees, conflicts between the landscape and stormwater plans, potential amenity impacts on adjoining property and the landscaping not being sympathetic to the character of the area. Therefore, Council's Landscape Officer is unable to support the application in its current form.

#### Heritage

Council's Heritage Officer reviewed the application and advised that the development was not considered to be consistent with the character of the area, particularly with regard to the dual crossovers and material selection. Amended plans which incorporated additional timber cladding, larger windows and paler colour tones, and the incorporation of timber cladding or a treatment more consistent with the streetscape on the ground floor were sought, but not provided. The applicant has advised that the treatment is consistent with the coastal theme of the area and there are no reasonable opportunities for cladding to be included at the ground floor level. The proposal is not considered to respond to the local character and streetscape of the area and is not supported from a heritage perspective.

#### Traffic

Councils Traffic Officer has considered the proposal with regard to car parking provision and design. Concerns have been raised with regard to the stacked parking design and resultant impacts on the

streetscape. Amended plans were requested seeking a redesign of the proposal to comply with car parking controls. The amended plans submitted have included some minor amendments, however have not addressed Councils Traffic Officers primary concern regarding the development, being the reliance on stacked parking. As such, the proposal is not supported.

### **Development Engineering**

Councils Development Engineering Officer has reviewed the application in regard to stormwater and subdivision matters. Conditions of consent were recommended in this regard.

## **1.7.2 EXTERNAL CONSULTATION**

None required

## **2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

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### NSW BIODIVERSITY CONSERVATION ACT 2016

Section 1.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act) provides that Act has effect subject to the provisions of Part 7 of the Biodiversity Conservation Act 2016 (BC Act).

Part 7 of the BC Act relates to Biodiversity assessment and approvals under the EP&A Act where it contains additional requirements with respect to assessments, consents and approvals under this Act.

Clause 7.2 of the Biodiversity Conservation Regulation 2017 provides the minimum lot size and area threshold criteria for when the clearing of native vegetation triggers entry of a proposed development into the NSW Biodiversity offsets scheme. For the subject site, entry into the offset scheme would be triggered by clearing of an area greater than 0.25 hectares based upon the minimum lot size of the WLEP 2009 R2 zoned land (i.e. less than 1 hectare minimum lot size). Approximately 0.02ha of native vegetation is proposed to be removed to allow for the development, and therefore the proposal does not trigger the requirement for a biodiversity offset scheme.

The site is not identified as being of high biodiversity value on the Biodiversity Values Map.

The development would therefore not be considered to result in adverse impacts on biodiversity and is consistent with the provisions of the Biodiversity Conservation Act 2016.

## **3 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT**

### **3.1.1 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND**

#### **7 Contamination and remediation to be considered in determining development application**

- (1) *A consent authority must not consent to the carrying out of any development on land unless:*
- (a) *it has considered whether the land is contaminated, and*
  - (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
  - (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

A desktop audit of previous land uses does not indicate any historic use that would contribute to the contamination of the site, with the properties being used for residential purposes since the 1940's. Minor earthworks are required and the existing and proposed land uses are both residential in

nature. No concerns are raised regarding contamination as relates to the intended use of the land and the requirements of clause 7.

### 3.1.2 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

The proposal is BASIX affected development to which this policy applies. In accordance with Schedule 1, Part 1, 2A of the Environmental Planning and Assessment Regulation 2000, a BASIX Certificate has been submitted in support of the application demonstrating that the proposed scheme achieves the BASIX targets.

The BASIX certificate was issued no earlier than 3 months before the date on which the development application was lodged.

### 3.1.3 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

#### Part 1 Preliminary

##### Clause 1.4 Definitions

**Demolition:** In relation to a building means wholly or partly destroy, dismantle or deface the building.

**Dual Occupancy** is defined as two (2) dwellings (whether attached or detached) on one lot of land (not being an individual lot in a strata plan or community title scheme), but does not include a secondary dwelling.

**Dual occupancy (attached)** means 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.

**Note.** Dual occupancies (detached) are a type of **dual occupancy**—see the definition of that term in this Dictionary.

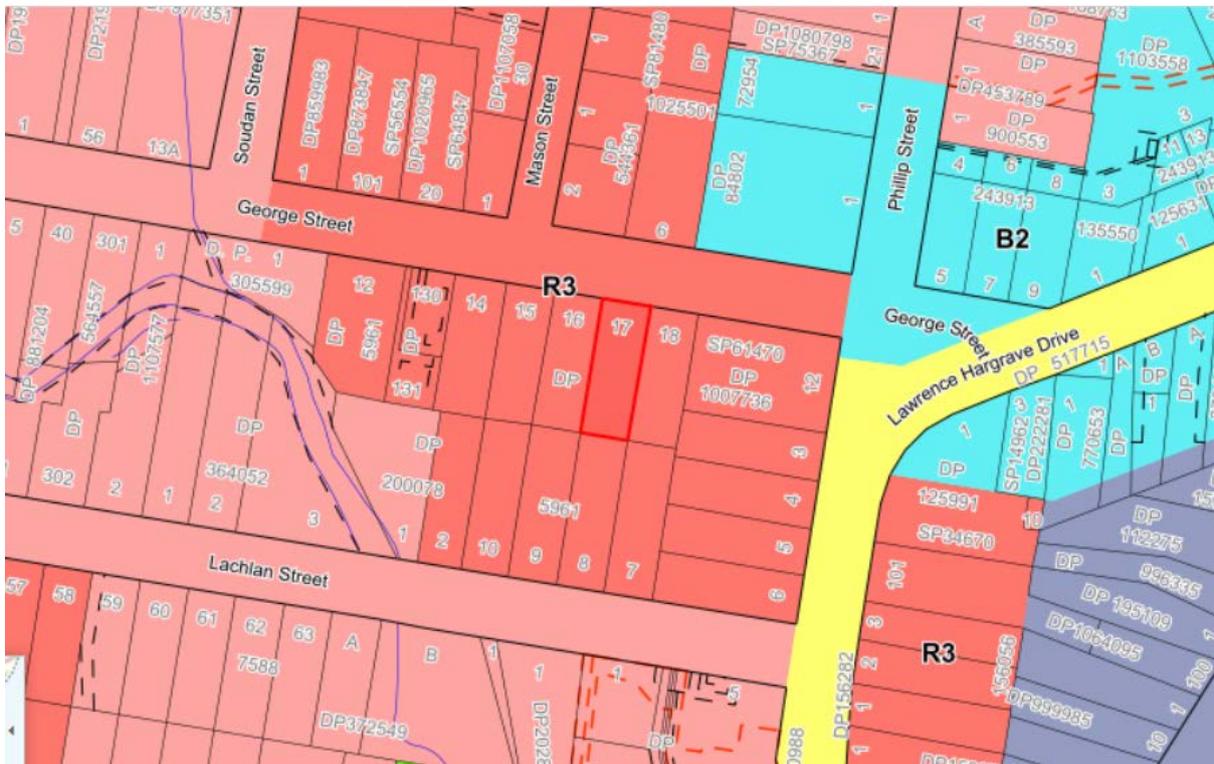
**Subdivision of land** for the purposes of the Environmental Planning & Assessment Act 1979, means the division of land into two or more parts that, after the division, would be obviously adapted for separate occupation, use or disposition. The division may (but need not) be effected:

- (a) by conveyance, transfer or partition, or
- (b) by any agreement, dealing, plan or instrument rendering different parts of the land available for separate occupation, use or disposition.

#### Part 2 Permitted or prohibited development

##### Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned R3 Medium Density Residential as demonstrated by Figure 2 below.



**Figure 2:** WLEP Land Use Zoning Map

Clause 2.3 – Zone objectives and land use table

The objectives of the R3 zone are as follows:

- *To provide for the housing needs of the community within a medium density residential environment.*
- *To provide a variety of housing types within a medium density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To allow for a range of residential densities and for urban consolidation in appropriate locations.*
- *To allow some diversity of activities and densities, provided that:*
  - *the scale and height of any proposed building is comparable with the scale and height of existing buildings in the locality, and*
  - *traffic generation can be managed in a way that avoids adverse impacts on the local road system, and*
  - *there will be no significant detracting from the character of the locality or the amenity of any existing or proposed development nearby.*

The proposal would be considered generally satisfactory with regard to the above objectives.

**Dual Occupancies** are permissible in the R3 Medium Density Residential zone with development consent.

Clause 2.6 Subdivision—consent requirements

Subdivision is permissible with consent as the subject site is on land to which the Wollongong Local Environmental Plan 2009 applies.

Clause 2.7 Demolition requires development consent

Demolition of a building may be carried out only with development consent. The demolition of the existing structures on the land is required to facilitate access to the development as proposed and sought as part of the subject application.

## Part 4 Principal development standards

### Clause 4.1 Minimum subdivision lot size

Phase 3 of the proposal involves a two (2) lot Torrens title subdivision of the dual occupancy. Subclause 4.1(4C) identifies that clause 4.1 does not apply in relation to the subdivision of an existing dual occupancy. A condition could be recommended requiring that the subdivision not occur until such time as the Occupation Certificate for the Dual Occupancy be issued, should the application be supported.

### Clause 4.3 Height of buildings

The proposed building height of 8.125m does not exceed the maximum of 13m permitted for the site.

### Clause 4.4 Floor space ratio

<b>Maximum FSR permitted for the site:</b>		<b>0.75:1</b>	
<b>Phase 2:</b>		Site Area	657.6sqm
		Ground Floor	279.1sqm
		First Floor	225.7sqm
		Exclusions	18+18 (garages)
		GFA	468.8sqm
		FSR	468.8/657.6 <b>=0.71:1</b>
<b>Phase 3:</b>	Proposed Lot 1	Proposed Lot 1 area	329.5sqm
		Ground Floor	133.5
		First Floor	110
		Exclusions	18
		GFA	225.5
		FSR	225.5/329.5 <b>= 0.68:1</b>
	Proposed Lot 2	Proposed Lot 2 area	329.sqm
		Ground Floor	133.5
		First Floor	109
		Exclusions	18
		GFA	224.5
		FSR	224.5/329.5 <b>= 0.68:1</b>

The proposed floor space ratio does not exceed the maximum permissible for the site.

## Part 5 Miscellaneous provisions

### Clause 5.10 Heritage conservation

The subject site is located in the vicinity of several heritage items, as demonstrated by Figure 3 below.



**Figure 3:** WLEP 2009 Local Heritage Items

The subject site is in close proximity to local heritage item 6164 at 1 Lachlan Street. However due to the physical separation between the site and the heritage listed dwelling, the proposal would not be considered to result in a significant impact on the item. See also section 1.7 for concerns raised in relation to the character of the area.

## Part 7 Local provisions – general

### Clause 7.1 Public utility infrastructure

It is anticipated that public utility infrastructure could be extended where required to service the development.

### Clause 7.6 Earthworks

The proposal would comprise minimal cut and fill, generally of less than 500mm to achieve the proposed building platform. The earthworks would not be expected to have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features surrounding land.

## 3.2 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT

None applicable.

### 3.3 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN

#### 3.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The development has been assessed against the relevant chapters of WDCP 2009 and compliance tables can be found at Attachment 3 to this report.

The proposal seeks a variation to WDCP 2009 Chapter E3 part 7.7 Car Parking Layout and Design. The proposal also remains non-compliant with regard to part 4.23 Additional Controls for Dual Occupancy's – Deep Soil Zones of Chapter B1 which has not been addressed as part of the review application.

Councils consideration of the variation request to Chapter E3 is discussed below:

#### CHAPTER A1 – INTRODUCTION

#### 8 Variations to development controls in the DCP

##### Chapter E3: Car Parking Access Servicing and Loading

##### Part 7.7 Car Parking Layout and Design

Part 7.7.2(b) requires that stacked parking may only be permitted where five criteria are met, as reflected below. The first criteria requires that the applicant demonstrate that there is a need for stacked parking and that the parking will not affect the safe, efficient and effective use of the site and the third criteria requires that provision be made for the shifting of cars on site without the movement of vehicles onto public streets, as demonstrated below.

*(b) Stacked parking may be permitted in the following circumstances:*

- i. The applicant must demonstrate that there is a need for stacked parking and that the provision of stacked parking will not adversely affect the safe, efficient and effective use of the site;*
- ii. No more than two cars are parked in a stacked arrangement, so that no more than one vehicle has to move to allow egress of another;*
- iii. Provision shall be made on site for shifting cars without the movement of vehicles onto public streets;*
- iv. Residential: only permitted where both spaces are utilised by the same dwelling and such spaces do not interfere with common manoeuvring areas; and*
- v. Business or Industrial: only permitted for staff spaces, provided the spaces are used by the occupants of one tenancy*

Both proposed dwellings would have a GFA of more than 125sqm, and therefore each would require 2 car parking spaces to be provided per dwelling, pursuant to Schedule 1 of Chapter E3. The design proposes that for both dwellings, one space be located in a single garage and the second be provided on the hardstand driveway in-front of the garage, meaning that for a car to exit the garage space, a car on the driveway would be required to move onto George Street.

The applicants' response to Councils request to redesign the proposal to provide compliant parking argues that due to the high demand for on street parking in the area immediately surrounding the site, the occupants would be highly likely to use their off-street parking because it would be available to them without resorting to street parking.

The applicant has not provided a variation request as required via clause 8 of Chapter A1 of the WDCP. Notwithstanding, the following outlines Council's consideration of the requested variation against the requirements of the DCP;

Control	Comment
1. The variation statement must address the following points:	
a) The control being varied; and	The control sought to be varied is part 7.7 of Chapter E3 of the WDCP.
b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and	<p>The extent of the variation is that stacked car parking is proposed for each dwelling. This would require that when the shifting of cars was required, one vehicle would be required to manoeuvre onto the public road to allow the other to exit the site.</p> <p>It has been suggested to the applicant that a dual occupancy development which proposes one dwelling behind the other would be a more appropriate response to this site and negate the need for the double driveways and stacked parking. The applicant has not significantly amended the design of the development from that originally lodged, retaining the pigeon pair/mirror dual occupancy design.</p> <p>The need for the stacked parking is resulting from the size of the dwellings proposed and the design pursued for the site. It is not considered that there is a demonstrated need for stacked parking, in this location.</p> <p>The applicant has outlined that due to the high demand for on street parking, the occupants would be highly likely to use their off-street parking.</p> <p>One on street car parking space would also be maintained between the two crossovers.</p>
c) Demonstrate how the objectives are met with the proposed variations; and	<p>There are no objectives which relate specifically to part 7.7, or part 7 of the Chapter. The overall objectives of the chapter are as per the below:</p> <ul style="list-style-type: none"> <li>a) <i>Ensure that transport networks are able to support the proposed development in a manner that maintains safe levels of service</i></li> <li>b) <i>Provide adequate and safe vehicular access to sites without compromising streetscape qualities</i></li> <li>c) <i>Incorporate provisions that manage the demand for parking rather than seeking to accommodate peak demand.</i></li> <li>d) <i>Recognise variable accessibility to public transport in parking rates for different parts of the city.</i></li> <li>e) <i>Support an increase in bicycle and motorcycle usage by requiring provision of bicycle and motorcycle parking, storage and end-of-trip facilities for certain developments.</i></li> <li>f) <i>Ensure that the design of access and parking areas meets relevant Australian Standards.</i></li> <li>g) <i>Ensure that developments are designed to be accessible for pedestrians, cyclists and motorists.</i></li> </ul>

	<p><i>h) Provide adequate access, loading facilities and on-site manoeuvring for service and waste collection vehicles</i></p> <p><i>i) Ensure that parking facilities are integrated into the design of developments and minimise visual impacts</i></p> <p><i>j) Ensure safe access for pedestrians and people with a disability.</i></p> <p>The development and requested variation are not considered to be consistent with the above objectives. In particular, objective b) requires that adequate and safe vehicular access be provided to sites without compromising streetscape qualities. In this case, a development which did not rely on stacked parking would provide a safer vehicular access, and a single crossover and driveway would be more consistent with the streetscape.</p>
<p>d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.</p>	<p>The development is considered to have the potential to result in adverse impacts as a result of the variation.</p>
<p>Comment:</p> <p>The requested variation has been considered and is not supported in this case, as outlined above</p>	

### 3.3.2 WOLLONGONG CITY WIDE DEVELOPMENT CONTRIBUTIONS PLAN 2018

The estimated cost of works is \$501,133.00 and a levy of 1% would be applicable under this plan as the threshold value is \$200,000. However the proposed development is recommended for refusal.

### 3.4 SECTION 4.15(1)(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 7.4, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 7.4

There are no planning agreements entered into or any draft agreement offered to enter into under S7.4 which affect the development.

### 3.5 SECTION 4.15(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

92 What additional matters must a consent authority take into consideration in determining a development application?

Conditions of consent could be recommended with regard to demolition.

93 Fire safety and other considerations

The proposal would not relate to a change of use.

94 Consent authority may require buildings to be upgraded

The proposal would relate to a new building, and as such no upgrade works would be required.

### **3.6 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT**

#### Context and Setting:

Generally, the built form bulk and scale of the development proposed would be considered inconsistent with the context and setting of the immediate locality with regard to street presentation. The context of the site is that primarily of single dwelling houses. Whilst there are examples of multidwelling housing and other dual occupancy developments in the area, they have been designed with a single dwelling fronting the street. The applicant's submission that the dual occupancy with a coastal façade and landscaping should be considered compatible with the local character and reflective of the expected development within the R3 zone is noted.

Council could support a development for the purposes of a dual occupancy on the site, provided the development could comply with the relevant controls. Further, the subject site is not within the coastal zone, does not provide sufficient deep soil zone area and could not be reasonably constructed without requiring the removal of 15 trees, and impacts on others to be retained in the road reserve and on adjoining properties. The proposal should be designed with regard to the context of the area, which is predominately weatherboard dwelling houses in a landscaped setting. It is considered that a dual occupancy proposal where one dwelling is located behind the other would be a more appropriate response to the context and setting of the surrounding area.

#### Access, Transport and Traffic:

The development is reliant on stacked parking for both dwellings. Council's Traffic Officer has considered the development and raised concerns with regard to the design presented and is not supportive of the variation sought to Council's controls in this location.

#### Public Domain:

The development is reliant on stacked parking and a dual driveway design. The second driveway and the impacts on vegetation in this area is considered to result in impacts on the public domain, and would set a precedent for similar developments in the area. The streetscape rhythm would be impacted by a side by side development.

#### Utilities:

The proposal would not be envisaged to place an unreasonable demand on utilities supply. It is anticipated that the existing utilities could be extended to service the proposal.

#### Heritage:

The site is located in the vicinity of several heritage items, as discussed at 3.1.3 above. The proposal would not be envisaged to result in significant impacts on the nearby heritage items.

Although not a local heritage item, the existing dwelling is part of the historic building stock of Thirroul and contributes strongly to the local character of the area with many dwellings on the southern side of George Street between house numbers 5 and 17 being constructed of the similar designs and era. The proposal is not considered to be sympathetic to the character of the immediate area, and suggested design amendments to minimise the impact have not been incorporated as part of the submission of amended plans. Council's Heritage Officer has considered the proposal and raised concern with regard to the impact of the development on the streetscape.

#### Other land resources:

The proposal would not be envisaged to impact upon valuable land resources.

#### Water:

The site is presently serviced by Sydney Water, which would be expected to be capable of extension to meet the requirements of the proposed development. A BASIX certificate has been provided for the proposal as discussed at section 3.1.2 above.

The proposal would not be envisaged to have unreasonable water consumption.

#### Soils:

The site is not identified as contaminated land and minimal earthworks are proposed.

#### Air and Microclimate:

The proposal would not be expected to result in negative impacts on air or microclimate.

#### Flora and Fauna:

Councils Landscape Officer has reviewed the proposal with regard to tree removal and landscaping, and raised concerns with regard to the development, as discussed at section 1.7.1 above.

#### Waste:

A condition could be recommended requiring that an appropriate receptacle be in place for any waste generated during the construction. On street garbage collection is proposed to be relied upon.

#### Energy:

The proposal would not be envisaged to have unreasonable energy consumption. See BASIX considerations at section 3.1.2 above.

#### Noise and vibration:

Conditions could be recommended requiring that nuisance be minimised during any construction, demolition, or works.

#### Natural hazards:

There are no natural hazards affecting the site which would preclude the proposal.

#### Technological hazards:

The site is not affected by any technological hazard which would preclude the proposal.

#### Safety, Security and Crime Prevention:

This application would not be expected to result in greater opportunities for criminal or antisocial behaviour.

#### Social Impact:

The proposal would not be envisaged to result in negative social impacts.

#### Economic Impact:

The proposal would not be envisaged to result in negative economic impacts.

#### Site Design and Internal Design:

The application does not result in any departures development standards as discussed throughout the report.

The proposal does request variations to development controls relating to stacked parking and deep soil provision as discussed above, which are not supported by Council. The development is not considered to be sympathetic with regard to the surrounding streetscape.

The review request submission is not considered to have appropriately responded to the reasons for refusal of the original development application.

The site and internal design are therefore considered unsatisfactory.

#### Construction:

Conditions could be recommended in relation to construction impacts for hours of work, erosion and sedimentation controls, works in the road reserve, excavation, demolition and use of any crane, hoist, plant or scaffolding.

A condition could be attached to any consent granted that all works are to be in compliance with the Building Code of Australia.

#### Cumulative Impacts:

Considering the matters as outlined throughout this report and Attachments, Council cannot be satisfied that the proposal would not result in adverse cumulative impacts.

#### Ecologically Sustainable Development Considerations

The proposed development would not be considered to be inconsistent with ESD principles.

### **3.7 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT**

#### Does the proposal fit in the locality?

The design of the proposal is not considered an appropriate response with regard to the locality. The development would be considered to result in adverse impacts on the character and amenity of adjoining developments, and unreasonable impacts on the surrounding area.

#### Are the site attributes conducive to development?

The site attributes, being within the context and proximity of several weatherboard style dwellings with single driveways, reduced front setbacks and vegetated front setbacks are not considered to have been adequately reflected in the design of the proposal. The development is not considered to be sympathetic to the context of the immediate area.

### **3.8 SECTION 4.15(1)(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS**

See section 1.5 above.

### **3.9 SECTION 4.15(1)(E) THE PUBLIC INTEREST**

The application is considered to have the potential to result in negative impacts on the amenity of the locality. The proposal is considered inappropriate with consideration to the site context, is contrary to the relevant planning controls and in the current form, approval would not be considered to be in the public interest.

## 4 CONCLUSION

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This application has been assessed having regard to the Heads of Consideration under Section 4.15 and Division 8.2 of the Environmental Planning and Assessment Act 1979, the provisions of the Wollongong Local Environmental Plan 2009 and all relevant Councils Development Control Plan, Codes and Policies.

Whilst the need for additional housing options in close proximity to town centres is acknowledged, it is not considered that the review has appropriately responded to the concerns raised through the original development assessment process and has not demonstrated that the development would not result in an adverse development outcome or that the site is suitable for the design presented.

The proposal is reliant on a stacked parking arrangement and a variation to the minimum deep soil zone requirements.

Some issues raised in the public submissions remain unresolved and a number of internal referrals are unsatisfactory with outstanding issues identified.

It is considered that the application has failed to adequately demonstrate that the impacts of the development on the amenity of the surrounding area, environment and adjoining development will not be adverse.

## 5 RECOMMENDATION

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It is recommended that RD-2019/156/A be refused for the following reasons:

1. Pursuant to the provisions of Section 4.15 (1)(a)(iii) of the Environmental Planning and Assessment Act 1979, it is considered the proposal fails to demonstrate consistency with the provisions of the Wollongong Development Control Plan 2009:
  - Chapter B1: Residential Development
  - Chapter D1: Character Statements
  - Chapter E3: Car Parking, Access, Servicing/Loading Facilities and Traffic Management;
  - Chapter E6: Landscaping;
  - Chapter E11: Heritage Management; and
  - Chapter E17: Preservation and Management of Trees and Vegetation.
2. Pursuant to the provisions of Section 4.15 (1)(b) of the Environmental Planning and Assessment Act, 1979, it is considered the proposal fails to demonstrate that the likely impacts of the development will not be adverse.
3. Pursuant to the provisions of Section 4.15 (1)(c) of the Environmental Planning and Assessment Act, 1979, it is considered the proposal fails to demonstrate that the site is suitable for the development.
4. Pursuant to the provisions of Section 4.15 (1)(d) of the Environmental Planning and Assessment Act 1979, it is considered that having regard for public submissions, the development is unsuitable with respect to:
  - Parking impacts; and
  - Character of the area.
5. Pursuant to the provisions of Section 4.15 (1)(e) of the Environmental Planning and Assessment Act, 1979, it is considered that approval of the development would set an undesirable precedent for similar inappropriate development and is therefore, not in the public interest.

## 6 ATTACHMENTS

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- 1 Section 8.2 Review Statement
- 2 Architectural Plans, landscape plan, drainage plan and site survey
- 3 WDCP 2009 compliance table



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## ***SECTION 8.2***

# ***REVIEW OF DETERMINATION***

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***DEVELOPMENT APPLICATION DA-2019/156***

***No. 7 GEORGE STREET***

***FOR***

***ZULU COASTAL PTY LTD***

August 2019

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## APPLICATION FOR REVIEW OF DETERMINATION

### SECTION 8.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT

<b>Development Application No:</b>	DA-2019/156
<b>Date of Determination:</b>	26 July 2019
<b>Premises:</b>	7 George Street Thirroul
<b>Description:</b>	Construction of attached dual occupancy with Torrens title subdivision.
<b>Proposed Modification/s:</b>	Revised architectural plans with coastal style facade.

## 1.0 BACKGROUND

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This application is made on behalf of Zulu Coastal Pty Ltd, the owners of the subject property. The submission is made pursuant to Section 8.2 of the Environmental Planning and Assessment Act and seeks to cause a review of the Council's determination of Development Application No. DA-2019/156. It is requested that the determination of the review be undertaken by the Wollongong Local Planning Panel.

On 26 July 2019, Council determined the above development application by refusing development consent for the construction of an attached dual occupancy with subsequent Torrens title subdivision.

The primary reasons for refusal are related to parking impacts and the impact on the character of the area. The reasons for refusal are set out in the Notice of Determination dated 26 July 2019 (Appended).

This application is to be read in conjunction with the following documents:-

1. Notice of Determination dated 26 April 2019.
2. Amended Architectural Plans, Metricon, Revision G, dated 11 June 2019.
3. Amended Statement of Environmental Effects, Rev 1, June 2019.
4. Amended Basix Certificate, No. 982008M\_03, 31 May 2019.
5. Amended Landscape Plans, Site Design Studios, No. 694187/694189.
6. Arborist's Report, David Prieto, Arboreport, 16 January 2019.
7. Amended Schedule of External Finishes.
8. Amended Stormwater Plans, Ibrahim Stormwater Consultants, dated 31 May 2019.

## 2.0 PROPERTY DESCRIPTION

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The subject property is described as **No. 7 George Street Thirroul**, being Lot 17 in DP 5961. Significantly, the land and surrounding area are zoned R3 – Medium Density Residential under the Wollongong Local Environmental Plan 2009 (WLEP).

The site is not identified as being heritage listed or within or near a heritage conservation area. The site is located diagonally adjacent to a heritage item, this is addressed in Section 6.1.1 of this report. The site is not identified as bushfire prone land or flood affected. The is affected by Acid Sulfate Soils Class 5.

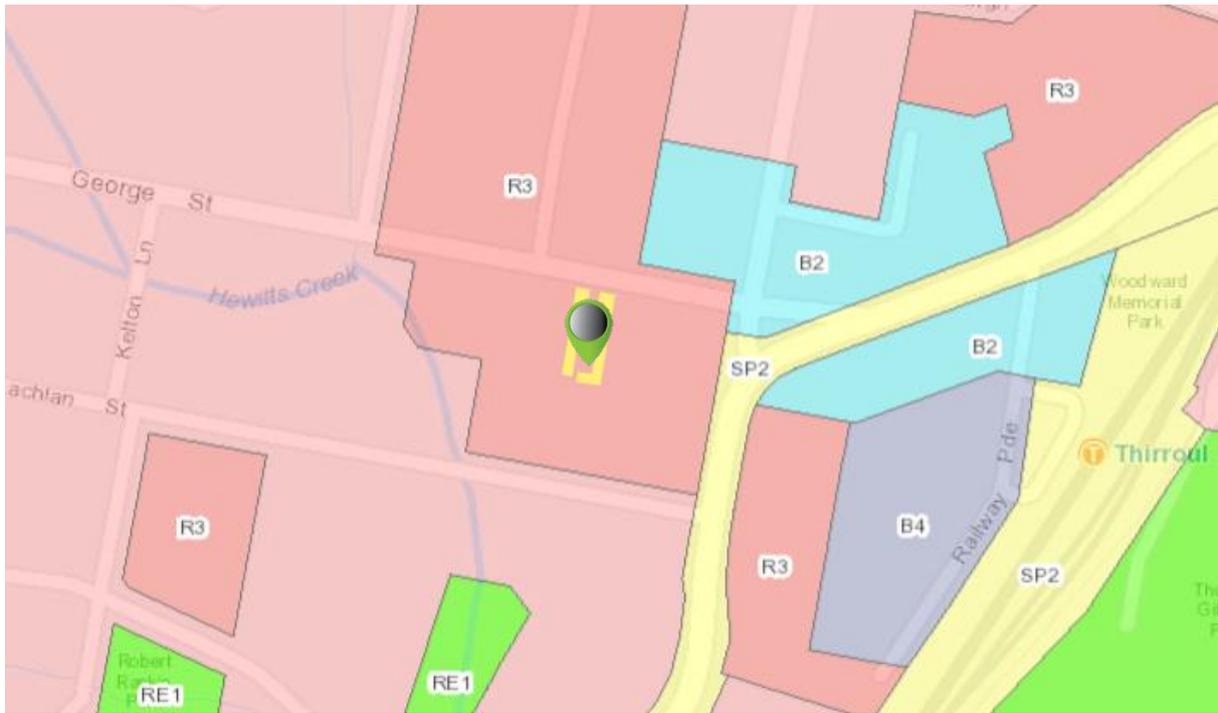


Figure 1: Location and Zoning Map noting predominant R3 Low Density Residential zoning of the locality.



Figure 2: Extract from WLEP heritage map. While the site is diagonally next to a heritage dwelling, there is no direct physical or visual relationship between the properties.

### 3.0 DESCRIPTION OF SITE AND SURROUNDING AREA

The subject site is located on the southern side of George Street. Rectangular in shape, the site comprises a total area of 657.6m<sup>2</sup>. The site frontage to the street has a total length of 15.24m. The eastern and western side boundaries have a length of 43.28m. The rear boundary is 15.24m wide.

Currently the site is occupied by a single storey weatherboard dwelling with a metal roof and a fibro garage in the rear yard. The site has a slight fall from east to west.

George Street, between Soudan Street and Philip Street, is zoned R3 Medium Density Residential and B2 Local Centre. The site is within walking distance of the Thirroul town centre and Thirroul railway station. The zoning of the area has resulted in gradual change from a low density single dwelling character to a medium density character with the introduction of villas, town houses and dual occupancies. The following images should be referred in connection with the following discussion.



Figure 3: Aerial view of subject site (highlighted in yellow) showing surrounding environment.



Figure 4: Looking east from the subject site – Ryan's Hotel and liquor drive-through.



Figure 5: Streetscape view of No. 7 George Street.



Figure 6: Close-up view of the existing dwelling on the subject site.



Figure 7: Townhouse development – corner George Street and Phillip Street (to the east of the subject site).



Figure 8: Adjoining dwelling to the east, No. 5 George Street.



Figure 9: Adjoining dwelling to the west, No. 9 George Street.



Figure 10: Dwelling at No. 11 George Street.



Figure 11: Multi dwelling housing development at 14 George Street.



Figure 12: Multi dwelling housing development at 12 George Street.

## 4.0 PROPOSED DEVELOPMENT

The proposal involves the demolition of the existing dwelling and garage; removal of selected vegetation and the construction of a two-storey attached dual occupancy development with landscaping and subsequent Torrens title subdivision.

### Ground Floor (Unit A and Unit B)

- Front portico
- Single garage
- Sitting room
- Powder room and laundry
- Open plan kitchen/living/family/dining area at the rear
- Each dwelling will have an outdoor room accessible directly from the living areas at the rear

### First Floor (Unit A and Unit B)

- Master bedroom with ensuite and walk-in-wardrobe,
- Three bedrooms
- WC and bathroom

The front façade of the building is designed to appear more as a single dwelling than two dwellings. This is achieved by the use of central cascading gables and recessed garages to the sides. Further, the dwellings will not be mirror images of each other. The external finishes will be of contrasting colours compatible with the coastal location. The design also introduces the use of weatherboard on windows with horizontal orientation. **NOTE:** This façade has been changed from the original application to address the Council's streetscape character concerns. This was not re-notified to the public.



Figure 13: 3D rendered image of the front façade of the proposed dual occupancy.

## 5.0 GROUNDS FOR REVIEW

In accordance with Section 8.2 of the Act, the applicant is permitted to amend a development application or provide additional information provided that the consent authority is satisfied that the development, as amended, is substantially the same development as that described in the original application.

In this instance the applicant relies on the amended architectural plans (Revision G, dated 11 June 2019). These plans were submitted in response to Council's concerns about the streetscape character but ultimately refused on 26 July 2019 without re-notification to the public.

The principal purpose of the original application was for the construction of an attached dual occupancy, landscaping and Torrens title subdivision. This purpose does not change under the application for review. Therefore, the application satisfies the substantially the same development test.

The reasons of refusal are principally concerned with streetscape character and parking impacts as articulated in reason for refusal No. 4:-

Pursuant to the provisions of Section 4.15 (l)(d) of the Environmental Planning and Assessment Act 1979, it is considered that having regard for public submissions, the development is unsuitable with respect to:

- Parking impacts; and
- Character of the area.

### **Parking Impacts**

Council contends that tandem parking for the second car space is unsatisfactory as there is a high demand for street parking in George Street and the occupants will not use the external car space.

In response to this we say that for this very reason, the occupants are highly likely to use their off-street parking because it will be available to them without resorting to street parking.

Parking comprised of single garages with one external space is an arrangement that is routinely accepted across all local government areas that we are aware of. The development will allow for 4 cars to be parked on-site which will alleviate street parking.

For the above reasons we ask that Council reviews and favourably determines this issue.

### **Character of the Area**

Council's DCP 2009, Part D, Chapter D1 contains character statements for various localities in the Wollongong local government area. Section 3.14 contains the character statement for Thirroul (appended).

Council contends that the development is unsuitable with respect to its impacts on the streetscape character. We say that the proposed development as amended, is *compatible* with the character of the area, compatibility being the appropriate test.

The streetscape of George Street is mixed, bearing in mind it is predominantly zoned R3 medium density and B2 Local Centre in the immediate vicinity. Refer to Figure 1. The R3 zone extends to Soudan Street to the west. The medium density zoning indicates that the area is identified for future incremental change. A full description of the street and surrounds is contained under Part 3 of this report.

The most important issue to consider is what is understood by the term compatibility in terms of local character. Compatibility goes beyond being the same or similar to surrounding dwellings. The local area must be considered in a wider context. A dual occupancy, multi dwelling housing, a child care centre or other permissible uses in the R3 zone other than the original stock of single dwellings can be expected to look different to the dwelling houses and to make incremental change to the character of the area.

It is worthwhile considering the comments of Senior Commissioner Roseth in the case of *Broockmann v Ku-ring-gai Council [2008] NSWLEC 1236*. In that case the question of local character was considered in a dual occupancy appeal where the character test applied under SEPP 53.

21. A complete reading of SEPP 53 makes it clear that, if the Policy required the continuation of the existing character, no dual occupancy development could be approved under it. The basic concept of dual occupancy is that there will be two houses on allotments on which there is now only one. ... An area with two houses on an allotment has a different character to an area with only one house. When read in the context of the whole Policy, cl 32(a)(i) should be understood to say that the attractive elements in an area's character should not be destroyed, not that the character must remain frozen in time. Change is an inevitable consequence of applying the Policy.

22. In my opinion, the proposal complies with cl 32(a)(i) of SEPP 53.

Consistent with the above reasoning, the approval of this dual occupancy will inevitably change the area's character. The local character is interspersed with single dwellings, multi dwelling housing and commercial uses. It would be a harsh and improper assessment in our view to say that the proposed dual occupancy with a coastal façade and landscaping is not compatible with the local character.

It is incumbent on the Council, as a responsible planning authority to consider local character in the way it is interpreted by the Land and Environment Court. The assessment must be made, not in a narrow way, but be considerate of the bigger picture.

Case law has held that the test in Clause 30A is "one of compatibility not sameness" (*Gow v Warringah Council [2013] NSWLEC 1093 (15 March 2013)*). Compatibility is widely accepted to mean "capable of existing together in harmony" (*Project Venture Developments Pty Ltd v Pittwater Council [2005] NSWLEC 191*).

It has also been held that in assessing 'compatibility' both the existing and future character of the local area needs to be taken into account, viz *Sales Search Pty Ltd v The Hills Shire Council [2013] NSWLEC 1052 (2 April 2013* and *Redevelop Projects Pty Ltd v Parramatta City Council [2013] NSWLEC 1029*.

In *Redevelop Projects Pty Ltd v Parramatta City Council [2013] NSW LEC 1029*, Commissioner Morris concluded that the 'local area' includes both sides of the street and that the 'visual catchment' is the minimum area to be considered in determining compatibility.

The visual catchment which incorporates the subject site is characterised by a mix of single dwellings, multi dwelling housing and commercial uses with a variety of forms, heights and densities (Refer to Figures 3 to 12).

Of most relevance to the character is the design response of the development. Refer to Figure 13. The design responds to the remnant low density dwelling typology of typically weatherboard or fibro dwellings with metal or tiled pitched and gabled roofs. It should be noted that the variety of building typologies in the street contribute to the variable character of the area and the proposal would not be out of place in its setting.

The general built form is therefore considered to be compatible with the surrounding built environment in the R3 zone and is consistent with the present character and desired future character as expressed in the visual catchment and the DCP Character Statement (attached). From Page 11 of the Future Character Statement:-

“...Residential development will remain primarily low density in nature. Some restricted medium density within close vicinity to the Thirroul village centre and the railway station is envisaged. Any new housing must be sympathetic with the existing Thirroul village built form and streetscape, particularly in older areas with weatherboard housed, pitched roofs and wide eaves.

... Any dwellings should be designed to minimise the scale and bulk of the development through well-articulated building forms.”

The Future Character Statement recognises change and gives guidance. It is our strong assertion that the amended design satisfies the compatibility test by responding to the local built character as described. The façade is of a coastal appearance, has wide eaves, gabled roof and a lightweight weatherboard upper storey.

Our conclusion therefore is that the building will be compatible with the present and future character established and envisaged under the Wollongong LEP and DCP.

Lastly, it is reasonable to recognise that the dual occupancy will have a different landscape character impact but it is appropriate to exercise flexibility in an area identified for change. The proposal is considered to satisfy the local character requirements of the Council's controls.

## 6.0 CONCLUSION

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This application for the construction of an attached dual occupancy and subsequent Torrens title subdivision, is considered to overcome the reasons for refusal as discussed above.

We therefore ask that Council review the determination of the application based on the facts and merits of the case and the revised plans which were not notified to the public.

It is considered that the predominant issue of the *original* application has been addressed in this submission. It is considered that the application as amended will not cause any unreasonable detrimental impacts to the surrounding residences or the local environment.

Lastly, the proposal will have a satisfactory relationship with the neighbouring properties and will be compatible with the character of the locality and the desired future character.

In our opinion the application is of sufficient merit to warrant the consent of the Council. The reasons for refusal have been appropriately addressed in this submission and we ask that Council support this application for review under Section 8.2 of the Act.



Eugene Sarich  
**Urbanesque Planning Pty Ltd**

**Attachment:** Wollongong DCP 2009, Part D, Chapter D1

## Desired Future Character

The village atmosphere of Austinmer should be retained and the existing retail centre should remain relatively 'low key'.

Austinmer should retain its low density leafy seaside character and any new residential development should not dominate the scenic environmental quality of the coastal strip and forested escarpment. Dwellings should be generally one to two storeys in height and be designed to retain the nature attributes of the immediate locality.

Any new dwellings or major alterations and additions to existing dwellings should be designed to minimise the scale and bulk of the development through well-articulated building forms. Individually designed dwellings with weatherboard or colourbond facades with lighted coloured or light or mid grey finishes are preferred for properties along the coastal strip. The rooflines for dwellings along the coastal strip may either be flat, curved or gently pitched, depending upon existing view sheds from neighbouring properties. In some cases, split-level or varied setbacks for two storey dwellings and sloping flat or gently pitched roof forms may be necessary, to maximise view sharing opportunities for neighbouring dwellings.

The impact of upper storeys of a dwelling should also be minimised through a combination of additional front and side setbacks from the ground floor of the dwelling and the selective use of balconies and verandahs.

Balconies should be lightly framed in steel and / or timber finishes, rather than of brick or masonry construction.

For properties within the treed areas near the escarpment, face brick dwellings with pitched tile or colourbond rooflines in muted earthy colour finishes are preferred.

For properties on sloping sites towards the escarpment, new dwellings should be stepped down the slope with suspended floors and decks used to minimise the disturbance of the natural contours of the site and to ensure new dwellings upon the escarpment footslopes are nestled below the tree canopy line.

Where front or rear facades of new dwellings are likely to be higher than neighbouring dwellings, the screening of balconies and additional setbacks may be necessary, to minimise any potential privacy or amenity impacts.

All new dwellings and major alterations and additions to existing dwellings upon lands classified as a "bush fire" hazard risk must be designed and constructed in accordance with the NSW Rural Fire Service *Planning for Bushfire Protection 2006* guidelines and *Australian Standard AS 3959 – 1999 Construction of Buildings in Bushfire Prone Areas*.

Some medium density housing types (ie townhouses and villas) may occur along the coastal strip provided such developments are designed to reflect the natural attribute's of the particular locality and to maximise view sharing opportunities for dwellings upon neighbouring properties.

New or improved pedestrian and / or bicycle links may be considered as part of the future precinct planning for Austinmer, which may include a possible link between the railway station and Austinmer beach.

## 3.14 Thirroul

### Existing Character

Thirroul is the focal retail, business and cultural point for residents of the northern suburbs. Thirroul is situated between the Bulli Pass Scenic Reserve to the west and the Pacific Ocean to the east. It has a distinctive cultural identity that is supported by the retail amenity and the convenient clustering of community and educational facilities in or near the village centre.

Thirroul's village centre is separated into two distinct areas by the South Coast Railway line. The northern side of the village is the core focal point for retail and community services within the suburb and contains St Michael's Catholic Church and primary school. The southern side comprises of a small mix of retail and community services with a more village, compact character, highlighted by its close proximity to the Thirroul Railway Station. It contains a Montessori preschool and Thirroul Public School. The two sides of the village centre are unique and offer a variety of services and facilities that promote and improve the quality of life of all residents.

The north and south sides of the village centre are linked via a railway bridge over Lawrence Hargrave Drive and a footbridge at the Thirroul Railway Station providing vehicular and pedestrian access.

Thirroul residential area is characterised by a mix of single storey to two storey dwelling-houses including a number of circa 1920's and 1930's weatherboard and corrugated iron roofed bungalows. The coastal strip of Thirroul including along Lawrence Hargrave Drive contains a mix of single storey weatherboard and fibro dwellings and new contemporary dwellings and some medium density townhouses and walk up residential flat buildings.

New hinterland subdivisions on the foothill slopes of the escarpment contain new contemporary split – level and two storey dwelling styles with weatherboard or rendered brick wall construction and pitched, sloping flat or curved roofline forms.

Thirroul also contains a number heritage items, including Thirroul railway station, Former Kings Theatre, Thirroul Baths (inter-war) precinct, old railway barracks, Thirroul public school, several federation and inter-war dwellings which also add to the distinct character of the village.

Thirroul also boasts the new district community centre and library.

### Desired Future Character

Thirroul should retain its village atmosphere. The village centre of Thirroul should retain its strong identity as a low rise village centre because of the relationship between the sea and escarpment. It should remain the social / cultural hub by continuing to feature a combination of unique specialty retail shops, cafes, restaurants and other businesses.

The significance of the village centre as a retail and business precinct will be strengthened through the consolidation of existing retail and business centre and the continued encouragement of active front shops. The active street frontages will enhance the existing character of Thirroul and also help encourage the on-going vitality of this centre, especially at night-time and weekends. To retain the appeal of Thirroul village centre, further large scale retail development is discouraged.

If Thirroul is to be positioned as a tourist destination, only low key tourism development should be supported that complements the village character of Thirroul is also encouraged.

Residential development will remain primarily low density in nature. Some restricted medium density within close vicinity to the Thirroul village centre and the railway station is envisaged. Any new housing must be sympathetic with the existing Thirroul village built form and streetscape, particularly in older areas with weatherboard houses, pitched roofs and wide eaves. Environmental zones will be retained close to the escarpment to further maintain the strong village character of Thirroul.

Any dwellings should be designed to minimise the scale and bulk of the development through well-articulated building forms.

The siting, height and design of new dwellings is critical to maximise view sharing opportunities for neighbouring properties. The roof forms for dwellings especially within the eastern part of Thirroul should be designed to maximise view sharing opportunities for rear neighbouring dwellings and hence, should be either sloping flat or gently pitched only. There should also be generous eaves to decrease the need for air conditioning. The impact of upper storeys of a dwelling should also be minimised through a

combination of additional front and side setbacks from the ground floor of the dwelling and the selective use of balconies and verandahs. New dwellings should provide small to medium trees, wherever possible, taking into account view sharing opportunities.

Individually designed dwellings with weatherboard, rendered or colourbond facades with lightly coloured finishes and sloping flat, curved or gently pitched rooflines are preferred for properties along the coastal strip.

For properties within the treed upper slopes of Thirroul, moderately pitched rooflines are preferred. New dwellings on sloping sites should be stepped down the slope with suspended floors and decks, to minimise the disturbance of the natural contours of the site and any such new dwelling should be designed to fit below the tree canopy line.

Where front or rear facades of new dwellings are likely to be higher than neighbouring dwellings, the screening of balconies and additional setbacks may be necessary, to minimise any potential privacy or amenity impacts.

Balconies should be lightly framed in steel and / or timber finishes, rather than of brick or masonry construction.

### **3.15 Bulli**

#### **Existing Character**

The historic township of Bulli lies between the Illawarra Escarpment and the ocean, where the coastal plain widens to the south of Thirroul.

Bulli contains a mix of housing styles and building form, including older low density detached dwelling-houses as well as medium density housing in the form of villas and townhouses. The detached dwelling-houses are predominantly single storey in height and are generally of a weatherboard, fibro and brick construction. Within the coastal precincts of Bulli, some new two storey dwellings are starting to replace the older dwelling stock.

Bulli is also characterised by a large number of heritage items including the Bulli railway station and station masters residence, Bulli Colliery and associated railway bridge embankments, miner's cottages, Denmark Hotel and stables, Bulli Hotel, Bulli post office as well as a number of other significant circa 1920's and 1930's bungalows etc.

Rural residential development also occurs within the landscape clearings adjacent to the Princes Highway, Bulli Pass and the foot hills of the escarpment.

The Bulli showground and racing complex is a regional recreational and sporting facility. Other important open space areas include Slacky Flat Park, Bulli Park and Sandon Point Reserve and beach.

The Bulli retail and business centre is situated on the Princes Highway approximately 1 kilometre south of the Princes Highway and Lawrence Hargrave Drive intersection. The Bulli centre is a traditional retail strip centre strip concentrated along the Princes Highway between the Bulli Railway Station to the north and the intersection of the Princes Highway and Park Road to the south and is a small traditional retail shopping strip which mainly serves the daily convenience needs of the surrounding local population.

#### **Desired Future Character**

Bulli should retain its relatively low density residential suburban character with some limited multi-dwelling housing opportunities within a short walking distance (ie 400 – 600 metres) to Bulli railway station. Any multi-dwelling housing should generally be restricted to two storeys in height. Therefore, villas, integrated developments and townhouses are considered the most appropriate forms of multi-dwelling housing.

<b>KNOCKDOWN/REBUILD</b>		
REF. WOLLONGONG DCP 2009 & LEP 2009		
<b>SITE AREA CALCULATIONS</b>		
VALUES DENOTE SQUARE METRES (UNLESS NOTED OTHERWISE)		
OVERALL SITE AREA	657.6	
TOTAL ROOF AREA	330.9M2	
APPROX. AREA AFTER SUBDIVISION	UNIT A	UNIT B
	328.8	328.8
<b>FLOOR SPACE RATIO</b>		
GROUND FLOOR (SQM)	115.65	115.65
FIRST FLOOR (SQM)	107.25	107.25
GARAGE (SQM) (165M2 EXCL)	21.45	21.45
GARAGE AREA INCL. IN F.S.R	4.95	4.95
TOTAL LIVING AREA/UNIT	227.85	227.85
FSR PROPOSED:	455.57 M2 / 69.27%	
AREAS MEASURED FROM THE INTERNAL FACE OF THE EXTERNAL WALLS INCLUDES PARTI WALL AND GROUND FLOOR STAIRS (EXCLUDES MIN. GARAGE REQUIREMENT, AND ALL VOIDS)		
MAX. ALLOWABLE:	475.9M2 / 0.75	
<b>BUILDING COVERAGE</b>		
BUILDING FOOTPRINT	328.60M2/49.96%	
MAX. ALLOWABLE:	328.80M2 / 50%	
<b>LANDSCAPE AREA</b>		
MIN. REQUIRED:	137.28M2	
LANDSCAPE AREA ACHIEVED:	277.42M2	
<b>PRIVATE OPEN SPACE</b>		
MIN. REQUIRED:	24M2 / >4M	
P.O.S PROPOSED:	24M2	24M2

WINDOW/DOOR SCHEDULE		
No.	TOP RL	BOT. RL
W1	23.15	22.60
D1	23.15	NOT VIS
D2	23.15	NOT VIS

**RAIN WATER TANK** PREFERRED LOCATION OF RAINWATER TANK

**HWU** PREFERRED LOCATION OF HOT WATER UNIT

**A/C U.** PREFERRED LOCATION OF A/C UNIT

**BUILDING ADJACENT SEWER**  
SEWER PEGOUT AND DETAILS REQUIRED

**TERMITE PROTECTION**  
PROVIDE TERMITE PROTECTION IN ACCORDANCE WITH A.S.3660.1

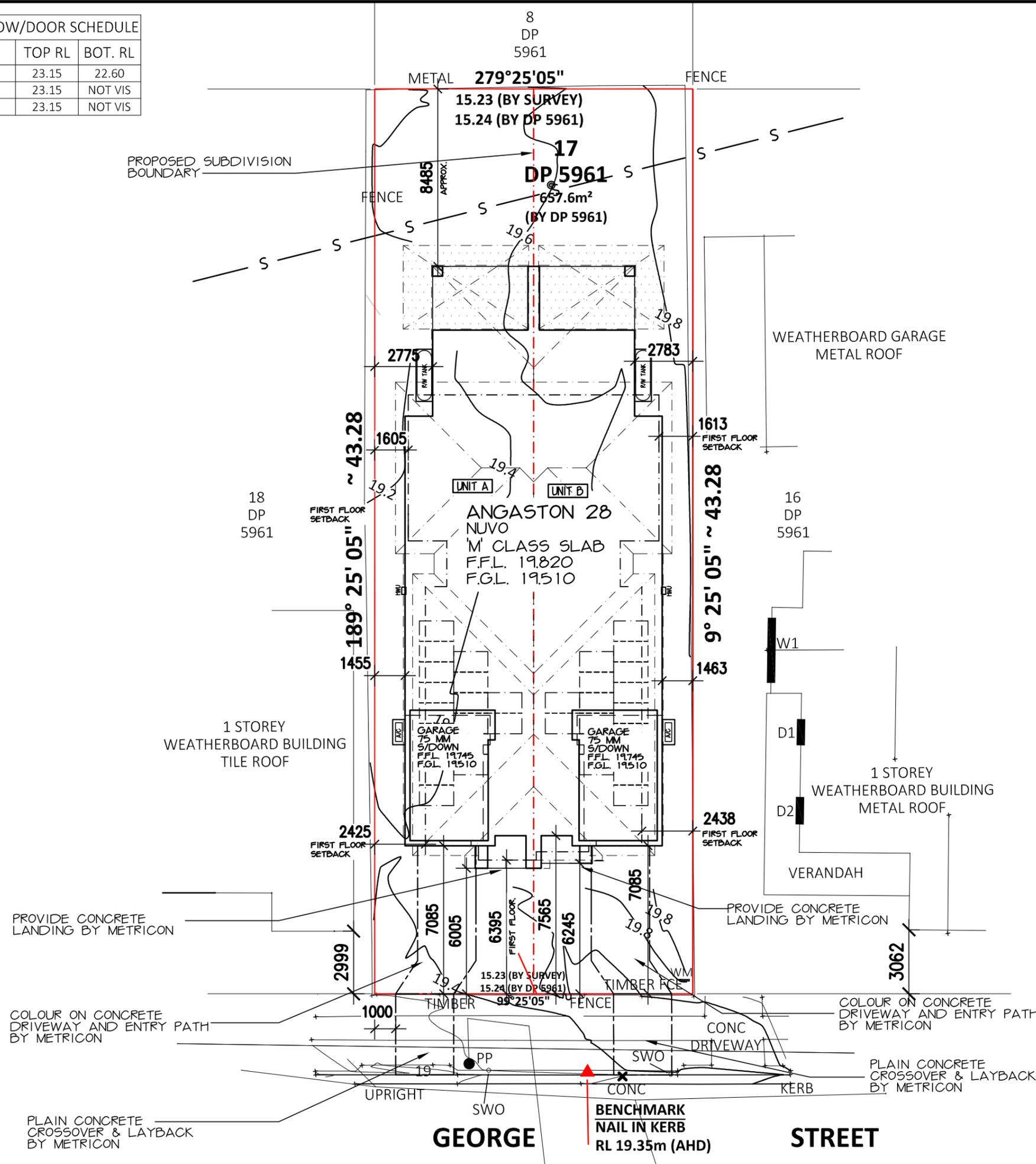
**SURVEYORS NOTES**

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C. SERVICES SHOWN HAVE BEEN DERIVED FROM VISUAL EVIDENCE APPARENT AT THE TIME OF SURVEY. THE RELEVANT SERVICE AUTHORITY SHALL BE CONTACTED TO VERIFY THE EXISTENCE AND POSITION OF ALL SERVICES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION.

D. CONTOURS ARE INDICATIVE OF SURFACE TOPOGRAPHY ONLY. SURVEYED SPOT LEVELS ARE THE ONLY VALUES TO BE RELIED ON FOR REDUCED LEVELS ON PARTICULAR FEATURES.



	SUBDIVISION: TORRENS TITLE	
	LOT NO: LOT 17	
	DEPOSITED PLAN: DP 5961	
	COUNCIL / LGA: WOOLONGONG	
	SLAB CLASS: M	WIND SPEED: N2
MGA		

**STORMWATER TO DRAIN TO STREET VIA ON-SITE DETENTION AND RAINWATER TANK(S)**  
REFER TO HYDRAULIC ENGINEER'S DETAILS

**TEMPORARY SITE FENCING**  
METRICON TO PROVIDE FENCING TO ANY UNFENCED BOUNDARIES (AS REQUIRED)

**ALL WEATHER ACCESS**  
METRICON TO SUPPLY UP TO 5M SUITABLE ALL WEATHER ACCESS TO BUILDING PLATFORM DURING CONSTRUCTION

**SURVEY LEGEND**

	GULLY PIT		SEWER LINE
	HYDRANT		VEHICLE CROSSING
	SURFACE INLET PIT		WATER TAP
	SEWER INSPECTION COVER		DEEP EDGE BEAM
	SEWER MANHOLE		LIGHT POLE
	WATER METER		INVERT
	RECYCLED WATER METER		TOP OF KERB
	ELECTRICITY BOX		KORB OUTLET
	STORMWATER MANHOLE		UNDERGROUND ELEC.
	TELSTRA PIT		OVERHEAD ELEC.
	GAS METER		GAS LINE
	SIGN		WATER LINE
	STOP VALVE		RETAINING WALL TOP
			BOTTOM OF BANK
			SEWER VENT PIPE

SURVEYPLUS DATE: 02.05.18

CONTOUR INTERVALS: 200MM

LEVELS TO: AHD.

**SITE PLAN**

**metricon** Build E, Level 4, 32 Lexington Dr, Baulkham Hills NSW 2153  
P.O. Box 7510, Norwest Business Park NSW 2153  
Tel: 02 8887 9000 Fax: 02 8079 5901  
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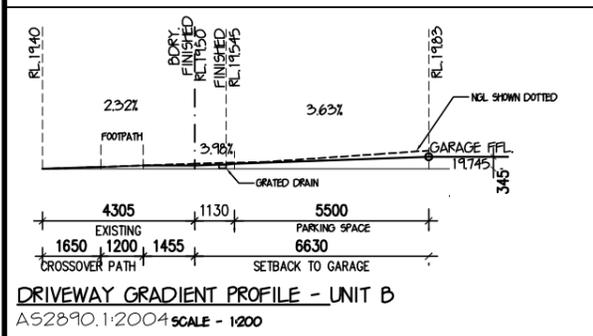
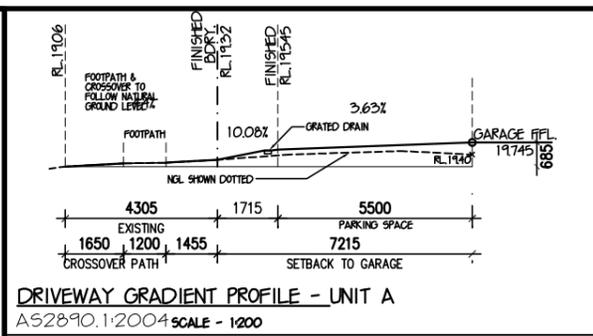
**ZULU COASTAL PTY LTD**  
LOT 17, NO 7. GEORGE STREET  
**THIRROUL**

JOB No: 694187-694189

DATE: 14.9.2018 DRAWN: SMX

SCALE: 1:200 SHEET: 1 OF 14

UBD REF: SYD XX XX



**NOTE:**  
REFER TO LANDSCAPE PLANS AND STORMWATER DRAINAGE PLANS FOR RETAINING WALL DETAILS AND SPECIFICATIONS

**BUILDING HEIGHT.**  
(AS PER LEP 2009)  
HIGHEST RIDGE LEVEL: RL 27.525  
NGL BELOW HIGHEST RIDGE LEVEL: RL 19.515  
TOTAL HEIGHT: 27.525-19.515=8.01M

**BUILDING HEIGHT RESTRICTION**  
MAXIMUM 13M RIDGE HEIGHT  
(PROPOSED BUILDING HEIGHT: 8.01M)

**TERMITE PROTECTION**  
PROVIDE TERMITE PROTECTION  
IN ACCORDANCE WITH A.S.3660.1

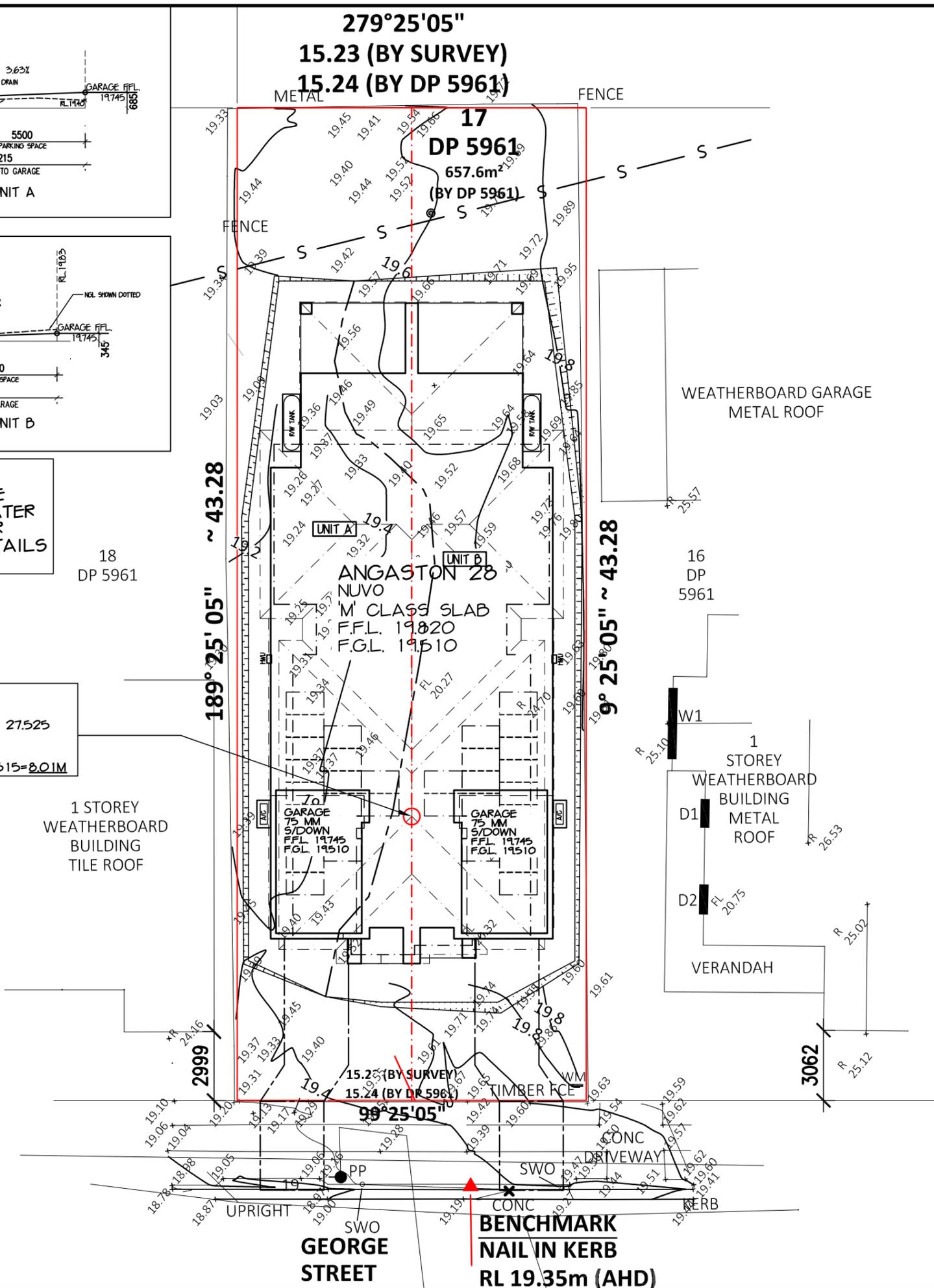
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	SUBDIVISION: TORRENS TITLE	
	LOT NO: LOT 17	
	DEPOSITED PLAN: DP 5961	
	COUNCIL / LGA: WOOLONGONG	
MGA	SLAB CLASS: M	WIND SPEED: N2

**EXCAVATION NOTES:**  
50MM (+/-) TOLERANCE TO NOMINATED RL'S  
EXCAVATE APPROX. 290MM ON R.L. 19.510 AND FILL APPROX. 110MM  
EXCAVATIONS ARE TO START A MINIMUM OF 1000MM FROM THE EDGE OF THE BUILDING AND ARE TO BE BATTERED BACK TO SUIT  
IT IS THE RESPONSIBILITY OF THE OWNER TO PROVIDE A GRATED DRAIN ACROSS GARAGE OPENINGS (IF REQUIRED) DUE TO CONSTRUCTION OF DRIVEWAY

**IMPORTANT NOTES:**  
SITE CUTS ARE SUBJECT TO COUNCIL APPROVAL & NOT TO BE USED BY ANY OTHER CONTRACTORS OTHER THAN METRICON HOMES PTY LTD

**TEMPORARY SITE FENCING:**  
METRICON TO PROVIDE FENCING TO ANY UNFENCED BOUNDARIES (AS REQUIRED)

**ALL WEATHER ACCESS:**  
METRICON TO SUPPLY UP TO 5M SUITABLE ALL WEATHER ACCESS TO BUILDING PLATFORM DURING CONSTRUCTION

**SURVEY LEGEND**

GULLY PIT	SEWER LINE
HYDRANT	VEHICLE CROSSING
SURFACE INLET PIT	WATER TAP
SEWER INSPECTION COVER	DEEP EDGE BEAM
SEWER MANHOLE	LIGHT POLE
WATER METER	INVERT
RECYCLED WATER METER	TOP OF KERB
ELECTRICITY BOX	KERB OUTLET
STORMWATER MANHOLE	UNDERGROUND ELEC.
TELSTRA PIT	OVERHEAD ELEC.
GAS METER	GAS LINE
SIGN	WATER LINE
STOP VALVE	RETAINING WALL TOP
	BOTTOM OF BANK
	SEWER VENT PIPE

**SURVEYPLUS DATE:** 02.05.18

**CONTOUR INTERVALS:** 200MM

**LEVELS TO:** AHD.

**EARTHWORKS**

**metricon** Build. E. Level 4, 32 Lexington Dr, Baulkham Hills NSW 2153  
P.O. Box 7510, Norwest Business Park NSW 2153  
Tel: 02 8887 9000 Fax: 02 8079 5901  
Contractor Licence No: 174 699  
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**ZULU COASTAL PTY LTD**  
LOT 17, NO 7. GEORGE STREET  
**THIRROUL**

**JOB No:** 694187-694189

DATE: 14.9.2018	DRAWN: SMX
SCALE: 1:200	SHEET: 1A OF 14
UBD REF: SYD XX XX	

**EXISTING TREES TO BE LOPPED/REMOVED BY OWNER**

**TREE REMOVAL REQUIREMENTS**  
 SITE TO BE CLEARED BY OWNER OF ANY EXISTING TREES AND/OR PRUNE TREES WHICH WILL EFFECT THE BUILDING AREA PRIOR TO CONSTRUCTION  
 IT IS THE RESPONSIBILITY OF THE OWNER TO OBTAIN SEPARATE COUNCIL APPROVAL IF REQUIRED

**DEMOLITION REQUIREMENTS**  
 SITE TO BE CLEARED OF ALL EXISTING STRUCTURES, LEVELLED AND ALL SERVICES RELOCATED BY THE OWNER TO THE SATISFACTION OF METRICON HOMES P/L.

**TERMITE PROTECTION**  
 PROVIDE TERMITE PROTECTION IN ACCORDANCE WITH A.S.3660.1

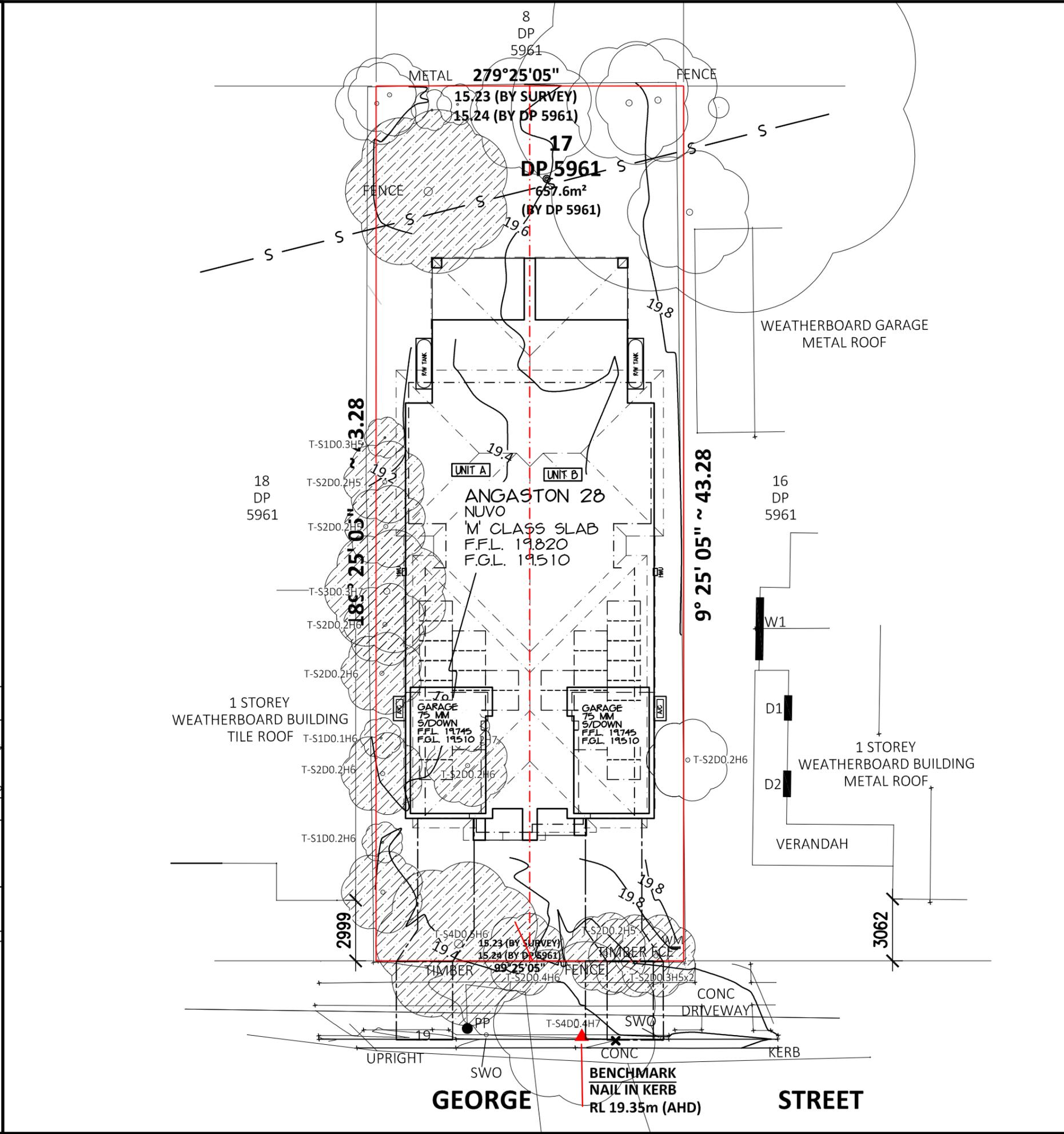
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	SUBDIVISION: TORRENS TITLE	
	LOT NO: LOT 17	
	DEPOSITED PLAN: DP 5961	
	COUNCIL / LGA: WOOLONGONG	
MGA	SLAB CLASS: M	
	WIND SPEED: N2	

**TEMPORARY SITE FENCING**  
 METRICON TO PROVIDE FENCING TO ANY UNFENCED BOUNDARIES (AS REQUIRED)

**ALL WEATHER ACCESS**  
 METRICON TO SUPPLY UP TO 5M SUITABLE ALL WEATHER ACCESS TO BUILDING PLATFORM DURING CONSTRUCTION

**SURVEY LEGEND**

GULLY PIT	SEWER LINE
HYDRANT	VEHICLE CROSSING
SURFACE INLET PIT	WATER TAP
SEWER INSPECTION COVER	DEEP EDGE BEAM
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GAS METER	GAS LINE
SIGN	WATER LINE
STOP VALVE	RETAINING WALL TOP
	BOTTOM OF BANK
	SEWER VENT PIPE

SURVEYPLUS DATE: 02.05.18

CONTOUR INTERVALS: 200MM

LEVELS TO: AHD.

**TREE REMOVAL PLAN**

**m** **metricon**

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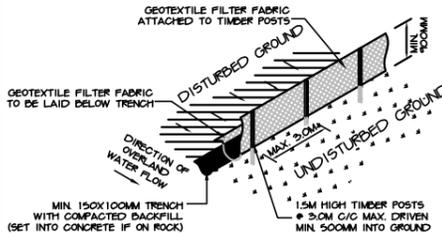
ZULU COASTAL PTY LTD  
 LOT 17, NO 7. GEORGE STREET  
 THIRROUL

JOB No: 694187-694189

DATE: 14.9.2018	DRAWN: SMX
SCALE: 1:200	SHEET: 1B OF 14
UBD REF: SYD XX XX	

**SEDIMENT CONTROL NOTES**

1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING REVEGETATION AND STORAGE OF SOIL AND TOPSOIL, SHALL BE IMPLEMENTED TO THE STANDARDS OF THE SOIL CONSERVATION OF NSW AND INSPECTED REGULARLY BY THE SITE MANAGER.
2. ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILIZED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
3. SEDIMENT TRAPS SHALL BE CONSTRUCTED AROUND ALL INLET PITS, CONSISTING OF 300MM WIDE X 300MM DEEP TRENCH.
4. ALL SEDIMENT BASINS AND TRAPS SHALL BE CLEANED WHEN THE STRUCTURES ARE A MAXIMUM OF 60% FULL OF SOIL MATERIALS, INCLUDING THE MAINTENANCE PERIOD.
5. SOIL AND TOPSOIL STOCKPILES SHALL BE LOCATED AWAY FROM DRAINAGE LINES AND AREA WHERE WATER MAY CONCENTRATE. ALL ROADS AND FOOTPATHS TO BE SWEEP DAILY.
6. FILTER SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR APPROVED EQUIVALENT BETWEEN POST AT 3.0M CENTRES. FABRIC SHALL BE BURIED 150MM ALONG ITS LOWER EDGE.
7. DUST PREVENTION MEASURES TO BE MAINTAINED AT ALL TIMES.



SEDIMENT FENCE DETAIL  
NOT TO SCALE

**TEMPORARY SECURITY FENCING**

TEMPORARY SECURITY FENCING TO THE PERIMETER OF BOUNDARY WHERE REQUIRED TO PREVENT PUBLIC ACCESS ONTO SITE.

**CUT & FILL BATTERS**

ALL GROUND LINES ARE APPROXIMATE. EXTENT OF CUT AND FILL BATTERS WILL BE DETERMINED ON SITE. SEDIMENT BARRIERS ARE TO BE CUSTOMISED SITE SPECIFIC

SEDIMENT FENCE

WASTE STORAGE AREA



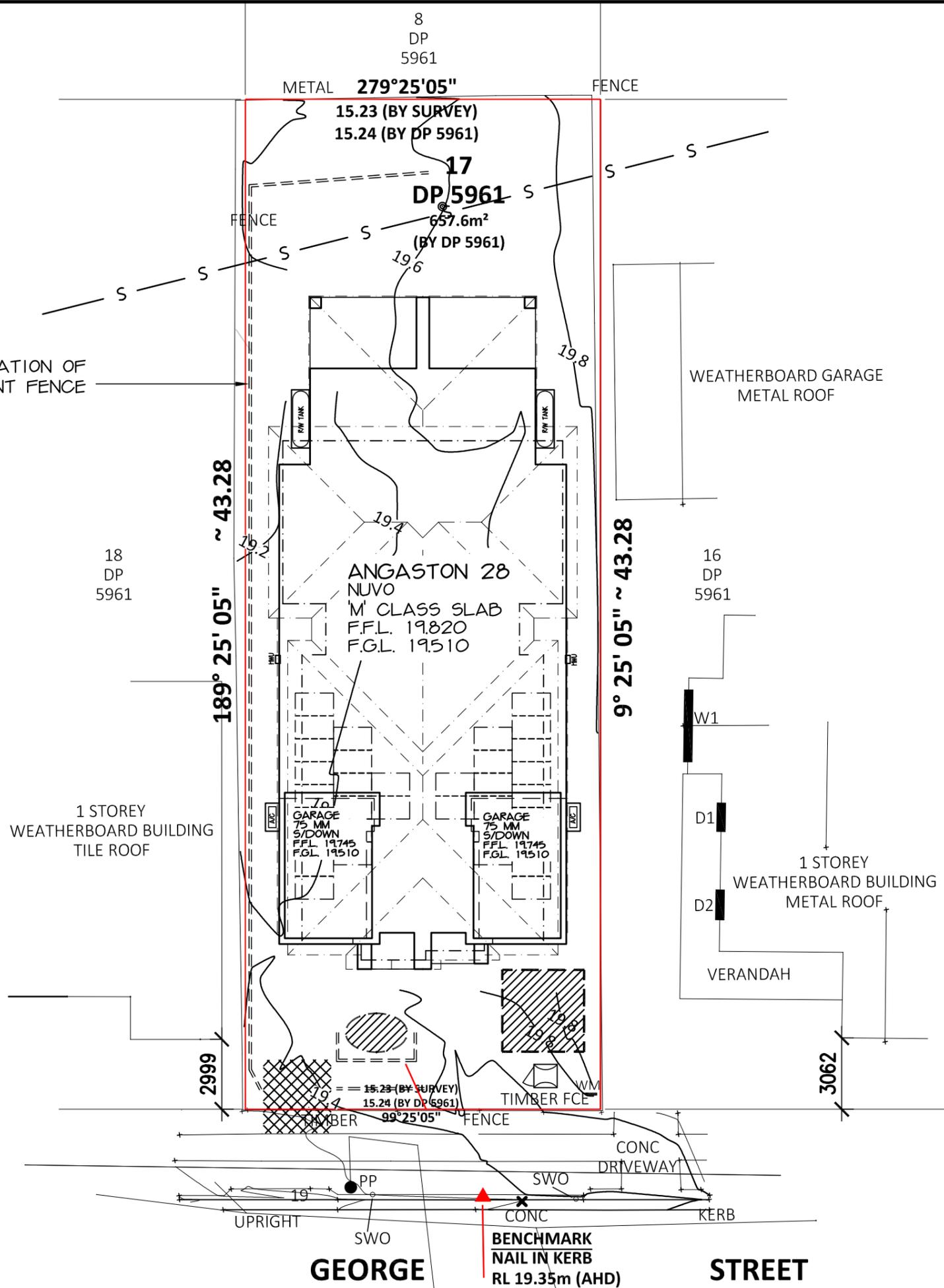
MATERIAL STORAGE AREA



PORTABLE TOILET



APPROX. LOCATION OF SEDIMENT FENCE



SUBDIVISION: TORRENS TITLE	
LOT NO: 17	
DEPOSITED PLAN: DP 5961	
COUNCIL / LGA: WOOLONGONG	
SLAB CLASS: M	
WIND SPEED: N2	

**TEMPORARY FENCING:**  
BUILDER TO PROVIDE FENCING TO ANY UNFENCED BOUNDARIES (LOCAL AUTH. BYLAW)

**ALL WEATHER ACCESS:**  
METRICON TO SUPPLY UP TO 5M SUITABLE ALL WEATHER ACCESS TO BUILDING PLATFORM DURING CONSTRUCTION

**EROSION & SEDIMENT CONTROL PLAN**

**CONSTRUCTION PLAN**

**m**  
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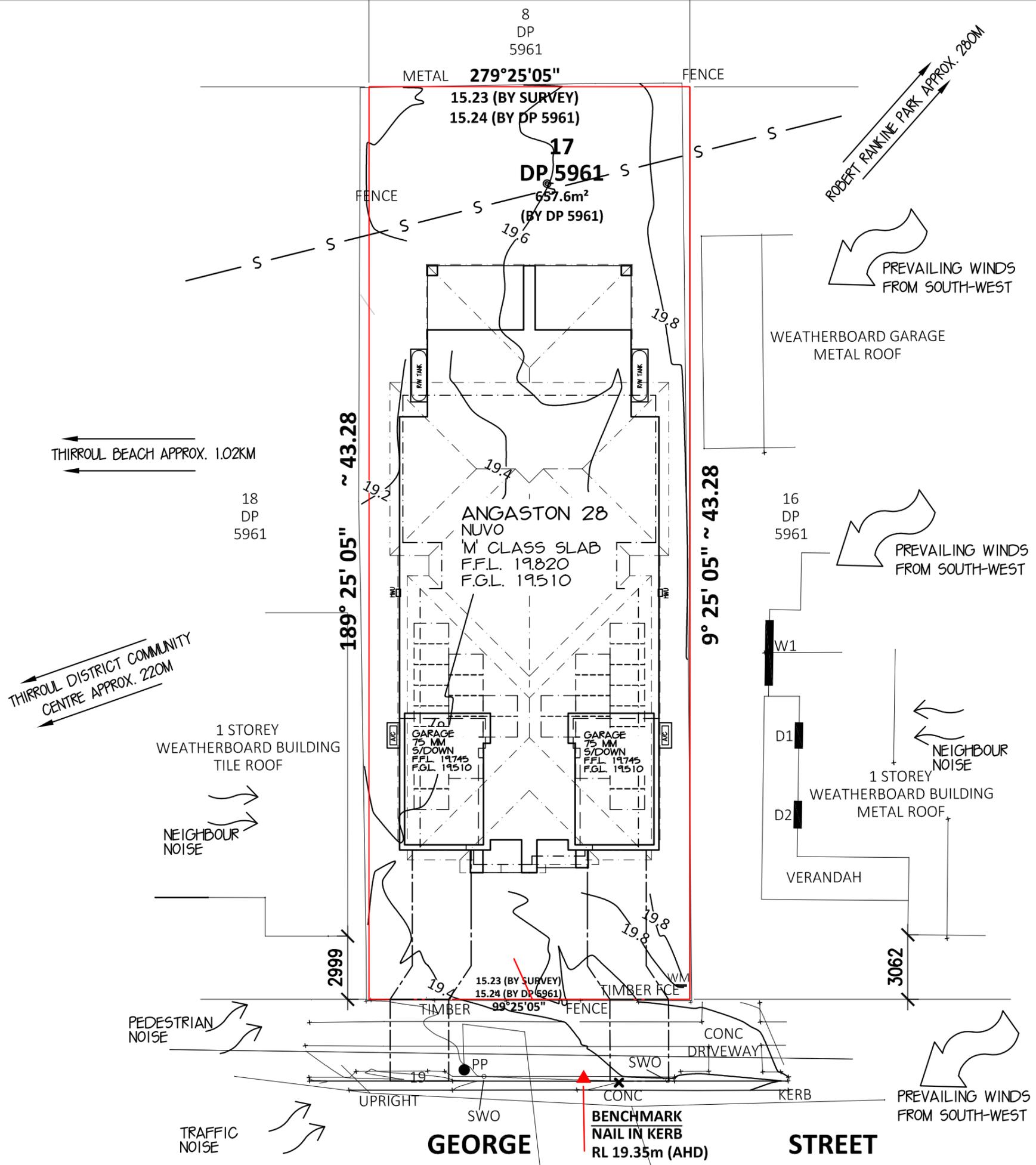
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LOT 17, NO 7. GEORGE STREET THIRROUL

JOB No: 694187-694189

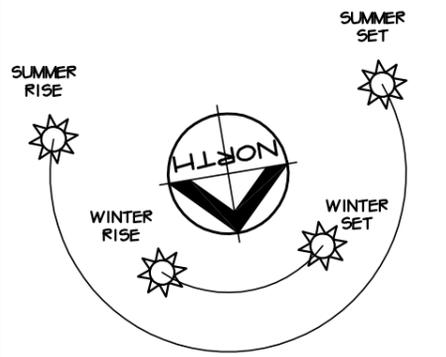
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SCALE: 1:200	SHEET: 1C OF 14
UBD REF: SYD XX XX	

**LEGEND**

-  MAIN VIEWS
-  PRIVATE OPEN SPACE
-  NUMBER OF STOREYS
-  NOISE SOURCE
-  PREVAILING WINDS FROM SOUTH-WEST



SUBDIVISION: TORRENS TITLE	
LOT NO: LOT 17	
DEPOSITED PLAN: DP 5961	
COUNCIL / LGA: WOOLLONGONG	
SLAB CLASS: M	
WIND SPEED: N2	



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**SITE ANALYSIS PLAN**

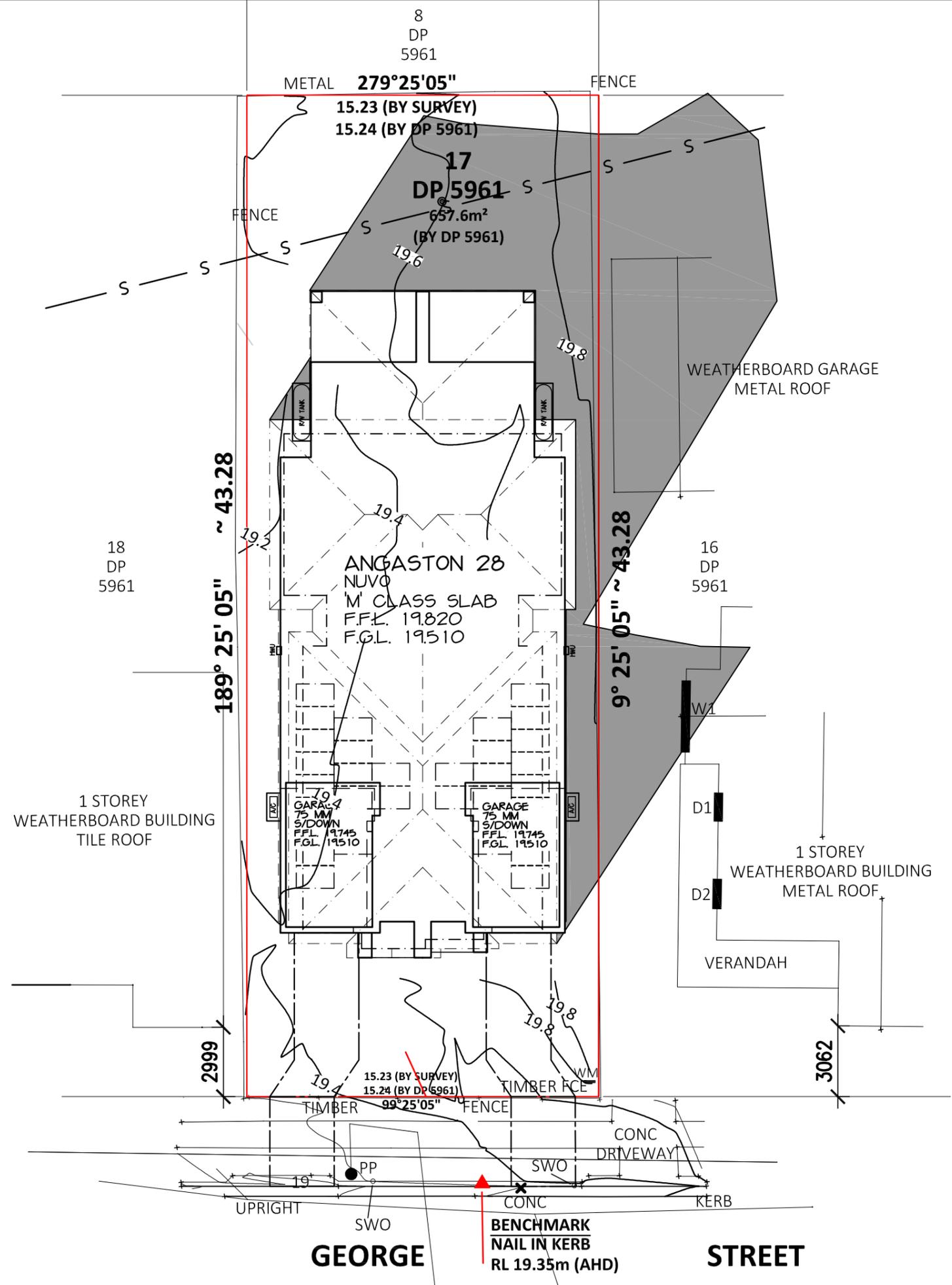
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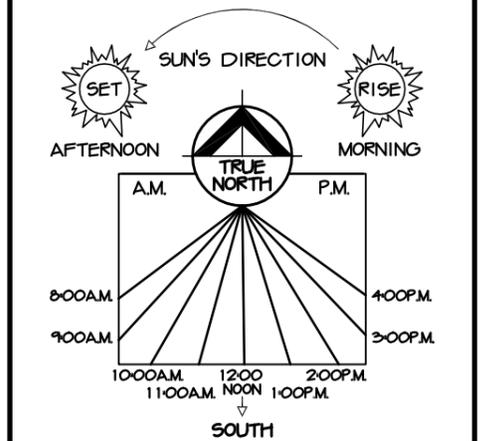
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**THIRROUL**

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SUBDIVISION: TORRENS TITLE	
LOT NO: LOT 17	
DEPOSITED PLAN: DP 5961	
COUNCIL / LGA: WOOLONGONG	
SLAB CLASS: M	
WIND SPEED: N2	



NOTE: PICTORIAL REPRESENTATION ONLY. NOT TO BE USED AS TRUE NORTH POINT FOR THIS JOB

**SHADOW LOCATION TIME OF DAY**

9:00 A.M. JUNE 21

TIME	SHADOW LENGTH RATIO (METRES)	ALTITUDE (DEGREES)	AZIMUTH (DEGREES)
8:00 AM	5.82	9.76	53.12
9:00 AM	2.91	18.96	42.59
10:00 AM	2.02	26.33	30.01
11:00 AM	1.66	31.14	15.3
12:00 PM	1.56	32.72	359.19
1:00 PM	1.68	30.8	343.16
2:00 PM	2.08	25.7	328.65
3:00 PM	3.06	18.11	316.28
4:00 PM	6.48	8.77	305.94

**SHADOW DIAGRAM @ JUNE 21**

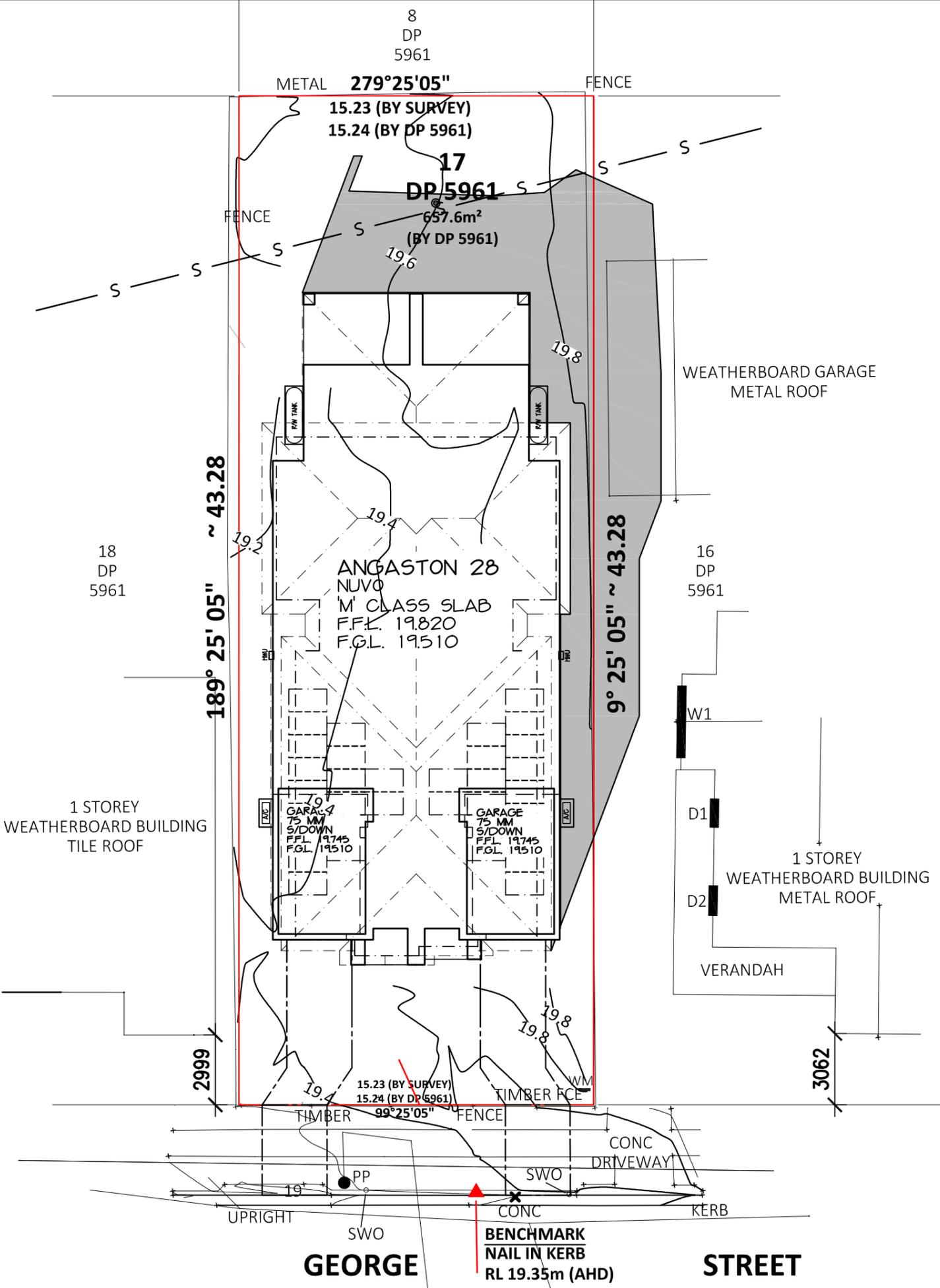
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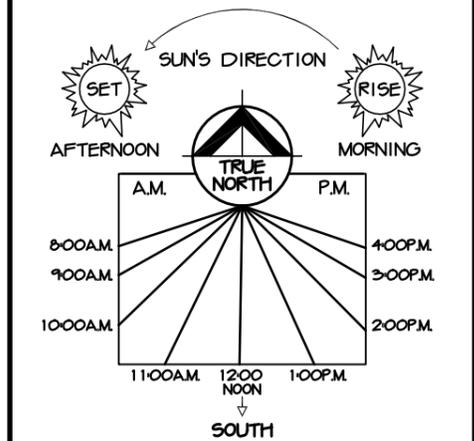
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UBD REF: SYD XX XX	



	SUBDIVISION: TORRENS TITLE	
	LOT NO: LOT 17	
	DEPOSITED PLAN: DP 5961	
	COUNCIL / LGA: WOOLONGONG	
	SLAB CLASS: M	
MGA	WIND SPEED: N2	



NOTE: PICTORIAL REPRESENTATION ONLY. NOT TO BE USED AS TRUE NORTH POINT FOR THIS JOB

**SHADOW LOCATION TIME OF DAY**

10:00 AM JUNE 21

TIME	SHADOW LENGTH RATIO (METRES)	ALTITUDE (DEGREES)	AZIMUTH (DEGREES)
8:00 AM	2.28	23.72	71.93
9:00 AM	1.42	35.11	60.70
10:00 AM	1.00	45.10	46.01
11:00 AM	0.77	52.46	26.05
12:00 PM	0.69	55.39	0.92
1:00 PM	0.76	52.80	335.58
2:00 PM	0.98	45.67	315.25
3:00 PM	1.39	35.79	300.28
4:00 PM	2.20	24.46	288.89

**SHADOW DIAGRAM @ JUNE 21**

**m**  
**metricon**  
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 P.O. Box 7510, Norwest Business Park NSW 2153  
 Tel: 02 8887 9000 Fax: 02 8079 5901  
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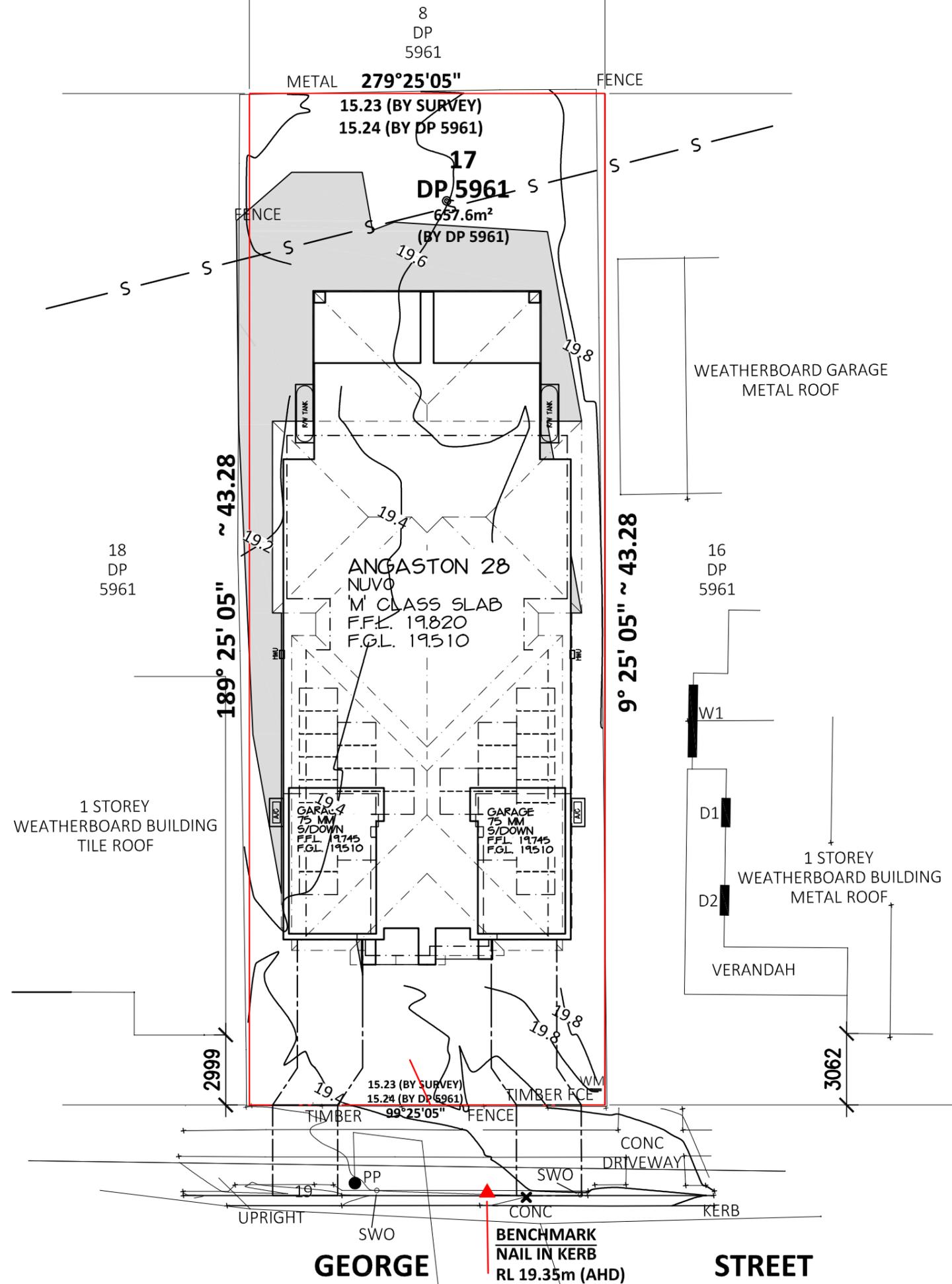
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 THIRROUL

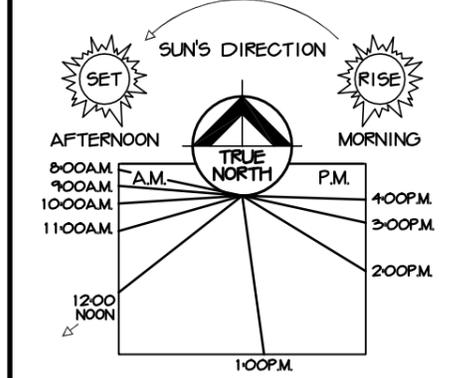
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UBD REF: SYD XX XX	





SUBDIVISION: TORRENS TITLE	
LOT NO: LOT 17	
DEPOSITED PLAN: DP 5961	
COUNCIL / LGA: WOOLONGONG	
SLAB CLASS: M	
WIND SPEED: N2	



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**SHADOW LOCATION TIME OF DAY**

12:00 PM, JUNE 21

TIME	SHADOW LENGTH RATIO (METRES)	ALTITUDE (DEGREES)	AZIMUTH (DEGREES)
8:00 AM	1.77	29.4	101.85
9:00 AM	1.26	38.37	94.59
10:00 AM	0.82	50.80	86.3
11:00 AM	0.51	63.08	74.0
12:00 PM	0.28	74.29	51.98
1:00 PM	0.19	79.5	352.19
2:00 PM	0.32	72.18	301.43
3:00 PM	0.56	60.58	282.38
4:00 PM	0.89	48.23	271.84

**SHADOW DIAGRAM @ JUNE 21**

**m** Build. E. Level 4, 32 Lexington Dr, Baulkham Hills NSW 2153  
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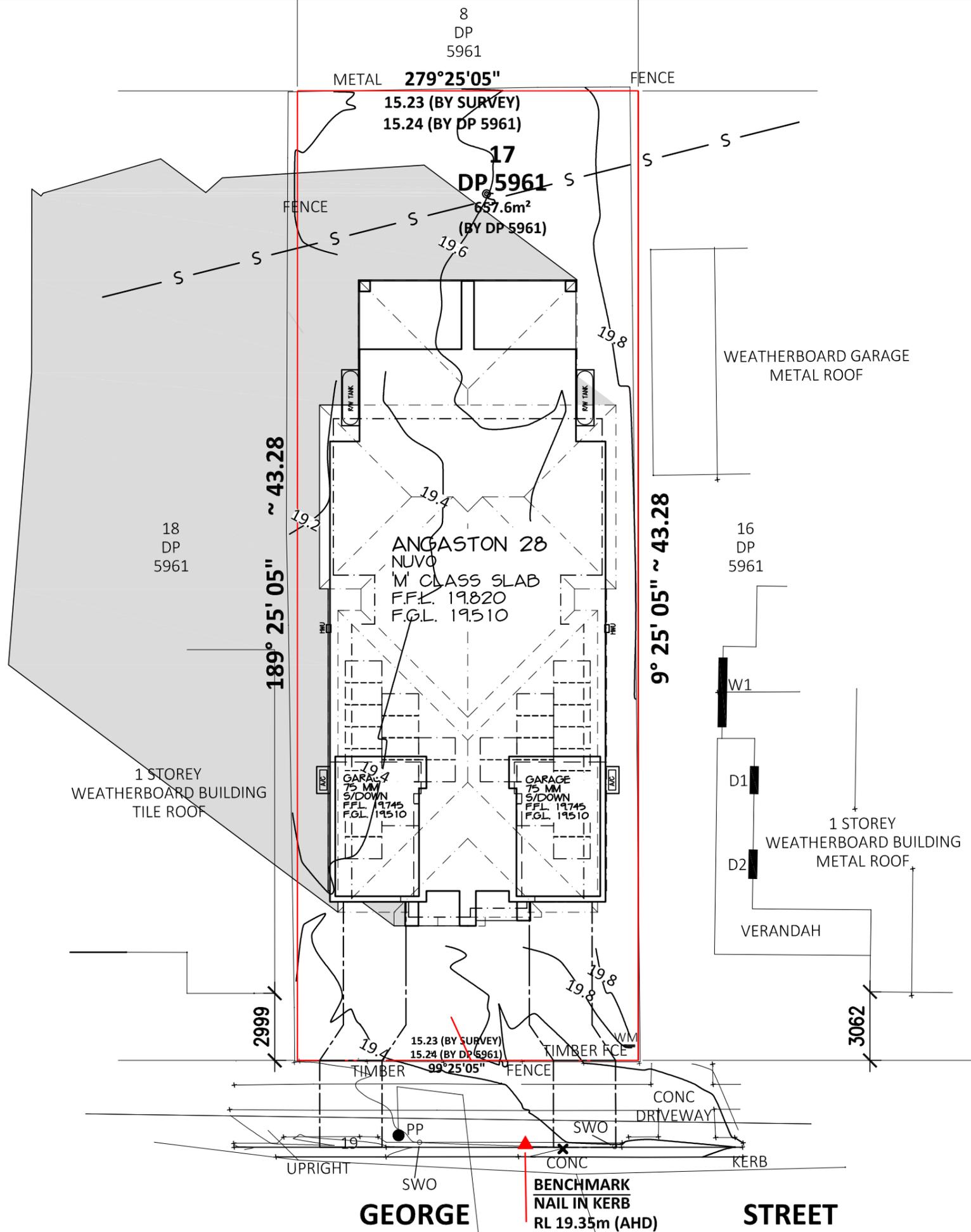
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THIRROUL

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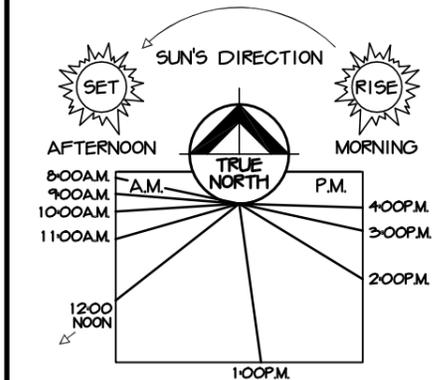
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SCALE: 1:200	SHEET: 11 OF 14
UBD REF: SYD XX XX	







SUBDIVISION: TORRENS TITLE	
LOT NO: LOT 17	
DEPOSITED PLAN: DP 5961	
COUNCIL / LGA: WOOLONGONG	
SLAB CLASS: M	
WIND SPEED: N2	



NOTE: PICTORIAL REPRESENTATION ONLY. NOT TO BE USED AS TRUE NORTH POINT FOR THIS JOB

**SHADOW LOCATION TIME OF DAY**

3:00 PM, JUNE 21

TIME	SHADOW LENGTH RATIO (METRES)	ALTITUDE (DEGREES)	AZIMUTH (DEGREES)
8:00 AM	1.77	29.4	101.85
9:00 AM	1.26	38.37	94.59
10:00 AM	0.82	50.80	86.3
11:00 AM	0.51	63.08	74.0
12:00 PM	0.28	74.29	51.98
1:00 PM	0.19	79.5	352.19
2:00 PM	0.32	72.18	301.43
3:00 PM	0.56	60.58	282.38
4:00 PM	0.89	48.23	271.84

**SHADOW DIAGRAM @ JUNE 21**

**m** Build E, Level 4, 32 Lexington Dr, Baulkham Hills NSW 2153  
P.O. Box 7510, Norwest Business Park NSW 2153  
Tel: 02 8887 9000 Fax: 02 8079 5901  
Contractor Licence No: 174 699  
A.C.N. 005 108 752 www.metricon.com.au

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**ZULU COASTAL PTY LTD**  
LOT 17, NO 7, GEORGE STREET  
**THIRROUL**

JOB No: 694187-694189

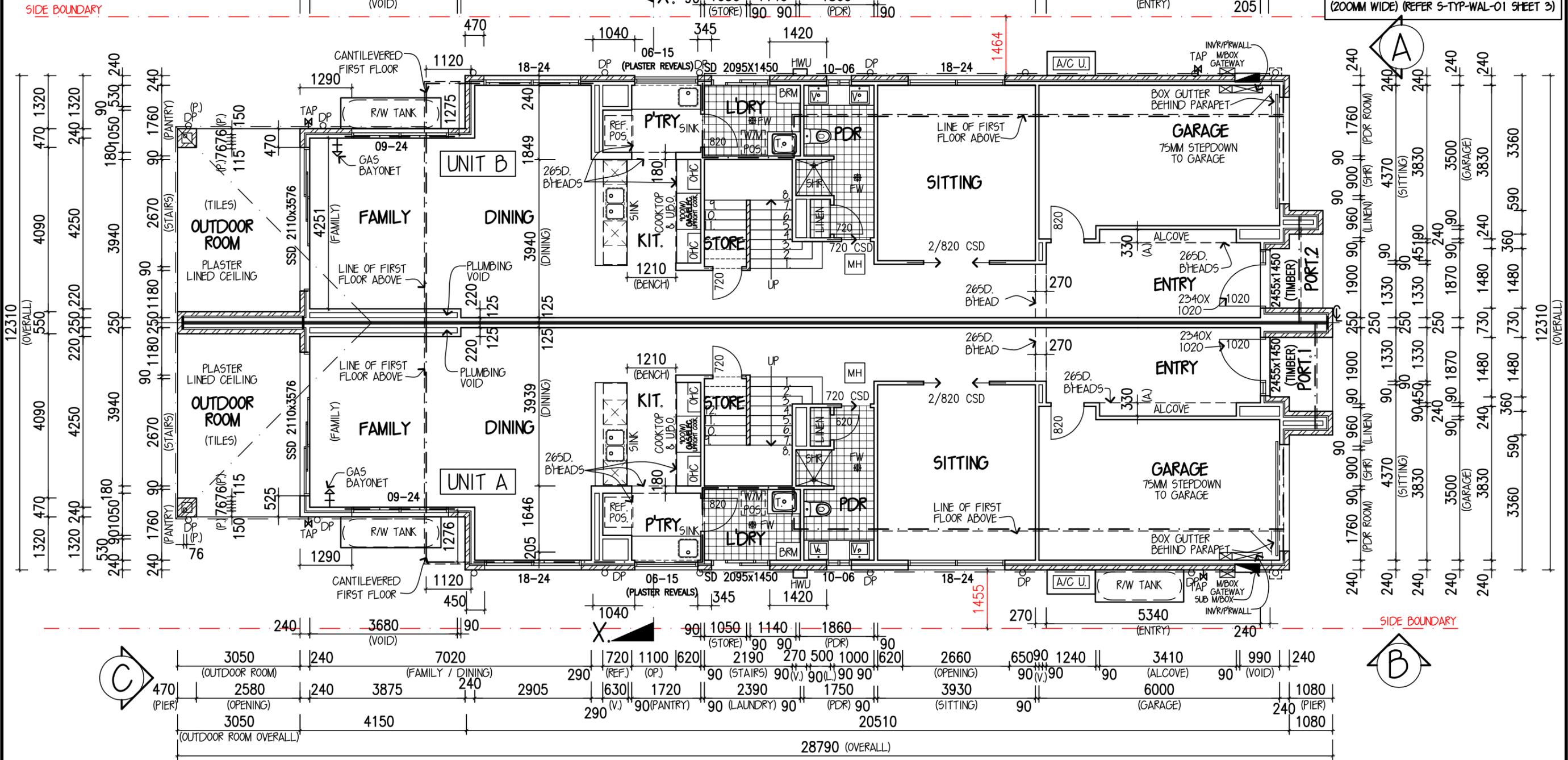
DATE: 14.9.2018	DRAWN: SMX
SCALE: 1:200	SHEET: 1K OF 14
UBD REF: SYD XX XX	

NOTE:  
PROVIDE ELECTRIC SOLAR  
POWER SYSTEM



PROVIDE 2340MM (H) INTERNAL  
DOORS THROUGHOUT  
(EXCLUDING SLIDING ROBE DOORS)  
TO BOTH UNITS

NOTE: PARTI WALL CONSTRUCTION COMPRISING  
OF 90MM TIMBER STUD, CAVITY & 25MM  
THICK SHAFT LINER AS PER BORAL'S  
PARTI WALL INSTALLATION INSTRUCTIONS.  
CONTINUOUS COMPRESSED PARTI WALL BATTS  
(200MM WIDE) (REFER S-TYP-WAL-01 SHEET 3)



**SYMBOL LEGEND**

- DOWNPIPE  
90mm ROUND PVC
- DOWNPIPE  
100x50mm RECT. C/BOND
- DOWNPIPE  
WITH SPREADER
- DOWNPIPE  
WITH RAINWATER HEAD
- EXHAUST FAN.  
INSTALLED AS PER B.C.A. 3.8.5.  
& TO COMPLY WITH A.S.1668.2.
- GARDEN TAP
- GAS BAYONET
- COLD WATER POINT
- FLOOR WASTE
- ELEC. METERBOX  
600x600 RECESSED
- AIR COND. UNIT
- MANHOLE  
FOR CEILING ACCESS
- SMOKE ALARM  
APPROX. POSITION INSTALLED AS PER  
N.C.C. 3.7.2 & TO COMPLY WITH AS 3786.  
SMOKE ALARMS TO BE INTERCONNECTED
- ARTICULATION JOINT  
WHERE ARTICULATION JOINTS ARE NOT SHOWN  
REFER TO STRUCTURAL ENGINEER'S DETAILS
- LOAD BEARING WALL
- 70mm STUD WALL
- 120mm STUD WALL

UNIT 1 AREAS:		UNIT 2 AREAS:	
GRD FLR:	121.64 SQM	GRD FLR:	116.33 SQM
FIRST FLR:	117.34 SQM	FIRST FLR:	117.34 SQM
FLR. TOTAL:	238.98 SQM	FLR. TOTAL:	233.67 SQM
GARAGE:	23.45 SQM	GARAGE:	23.45 SQM
OUTDOOR:	14.74 SQM	OUTDOOR:	14.74 SQM
PORTICO:	3.90 SQM	PORTICO:	3.32 SQM
TOTAL:	281.07 SQM	TOTAL:	275.18 SQM
	30.25 SQM		29.62 SQM

DESIGN: **ANGASTON 28**  
 FACADE: **YALE** CEILING: 25 L/R  
 GARAGE: **SINGLE** LOCATION: **F**

**GROUND FLOOR PLAN**

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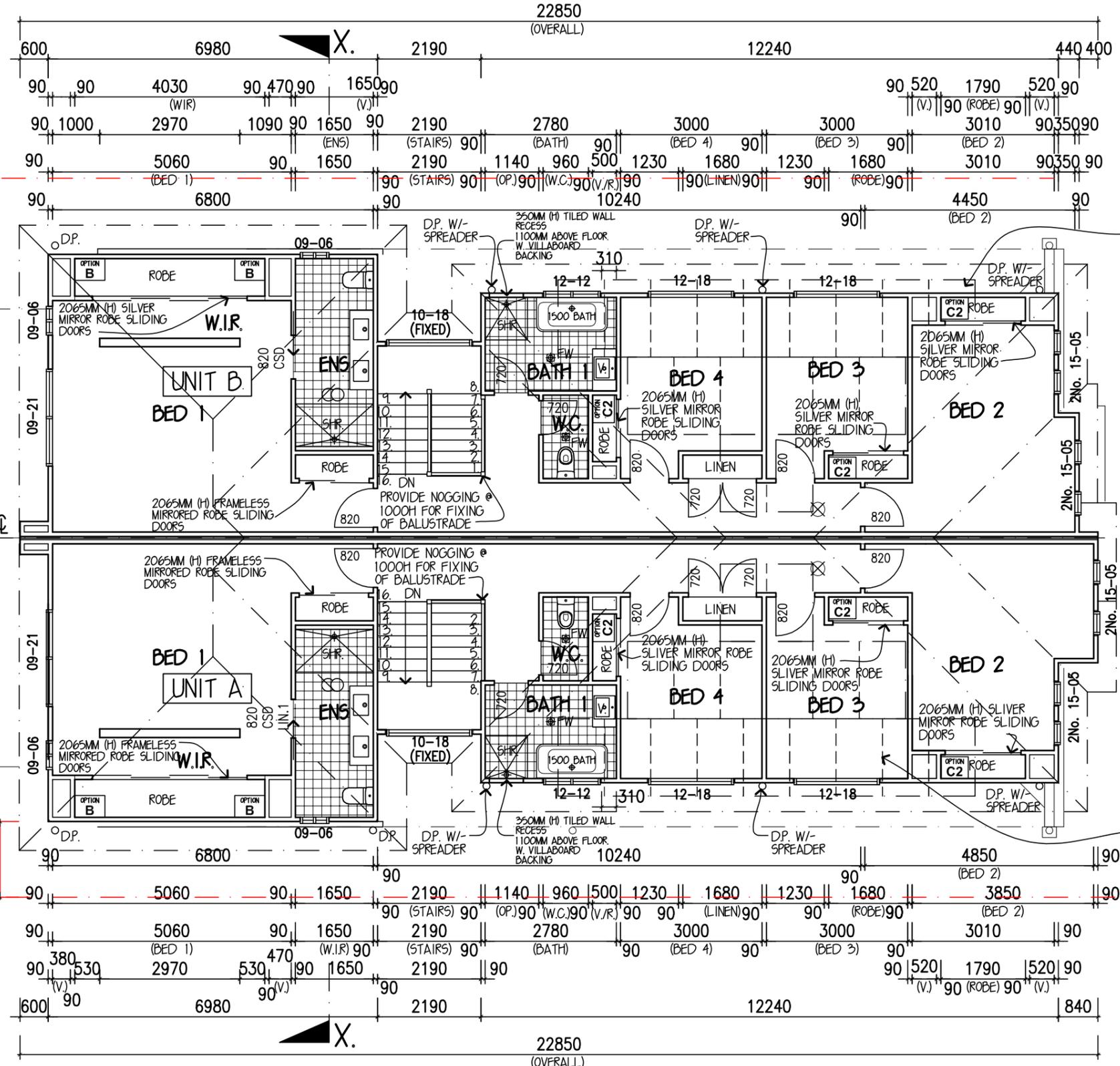
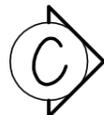
**DualOcc**

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OWNER: **ZULU COASTAL PTY LTD**  
**LOT 17. NO. 7, GEORGE STREET**  
**THIRROUL**

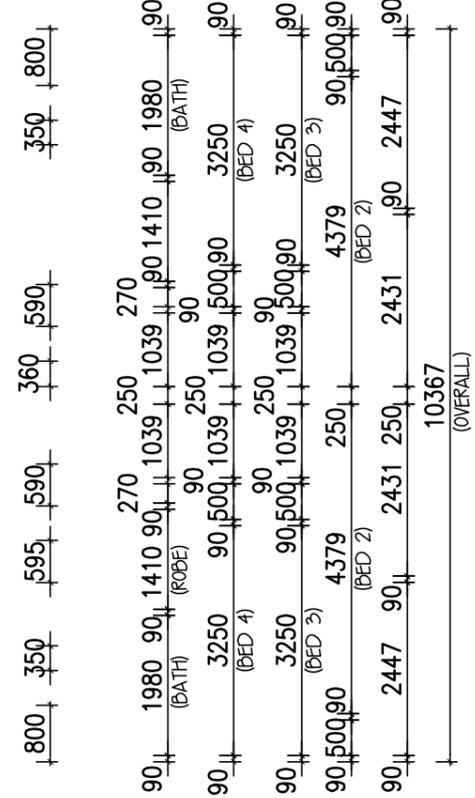
JOB No: **694187-694189** DATE: **14.09.18**  
 FC DATE: **DD.MM.YYYY** MST VER: **10.11.2017**  
 SCALE: **1:100 ON A3 SHEET** REVISION: **H**  
 DRAWN: **SMX** CHECK: **XX** SHEET: **2 of 14**



NOTE: PARTI WALL CONSTRUCTION COMPRISING OF 90MM TIMBER STUD, CAVITY & 25MM THICK SHAFT LINER AS PER BORAL'S PARTI WALL INSTALLATION INSTRUCTIONS.  
CONTINUOUS COMPRESSED PARTI WALL BATTS (200MM WIDE) (REFER S-TYP-WAL-01 SHEET 3)

NOTE: PROVIDE ELECTRIC SOLAR POWER SYSTEM

APPROX. LOCATION OF (MAX. 20) ELEC. SOLAR PANELS



APPROX. LOCATION OF (MAX. 20) ELEC. SOLAR PANELS

**SYMBOL LEGEND**

- DOWNPIPE 90mm ROUND PVC
- DOWNPIPE 100x50mm RECT. C/BOND
- DOWNPIPE WITH SPREADER
- DOWNPIPE WITH RAINWATER HEAD
- EXHAUST FAN. INSTALLED AS PER B.C.A. 3.8.5. & TO COMPLY WITH A.S.1668.2.
- GARDEN TAP
- GAS BAYONET
- COLD WATER POINT
- FLOOR WASTE
- ELEC. METERBOX 600x600 RECESSED
- AIR COND. UNIT
- MANHOLE FOR CEILING ACCESS
- SMOKE ALARM APPROX. POSITION INSTALLED AS PER N.C.C. 3.7.2. & TO COMPLY WITH AS 3786. SMOKE ALARMS TO BE INTERCONNECTED
- ARTICULATION JOINT WHERE ARTICULATION JOINTS ARE NOT SHOWN REFER TO STRUCTURAL ENGINEER'S DETAILS
- LOAD BEARING WALL
- 70mm STUD WALL
- 120mm STUD WALL

DESIGN: **ANGASTON 28**  
FACADE: **YALE** CEILING: 25 L/R  
GARAGE: **SINGLE** LOCATION: **F**

**DualOcc**

OWNER: **ZULU COASTAL PTY LTD**  
**LOT 17. NO. 7, GEORGE STREET**  
**THIRROUL**

**FIRST FLOOR PLAN**  
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JOB No: <b>694187-694189</b>	DATE: <b>14.09.18</b>
FC DATE: <b>DD.MM.YYYY</b>	MST VER: <b>10.11.2017</b>
SCALE: <b>1:100 ON A3 SHEET</b>	REVISION: <b>H</b>
DRAWN: <b>SMX</b>	CHECK: <b>XX</b>
SHEET: <b>3</b> of <b>14</b>	

**IMPORTANT NOTE:**  
REFER TO FACADE DETAIL  
REF. NO. **S-TYP-NUVO-03**

PROVIDE JAMES HARDIES SCYON  
**AXON SHEET CLADDING**  
TO FIRST FLOOR ELEVATIONS  
(UNLESS NOTED OTHERWISE)  
REFER TO DETAIL: **S-TYP-CLAD-07**

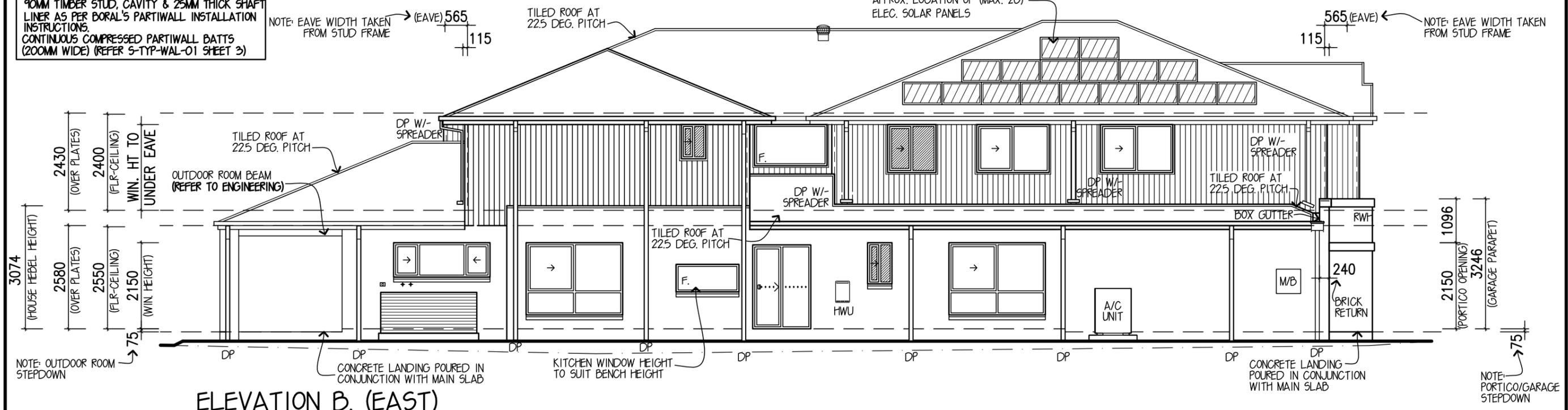
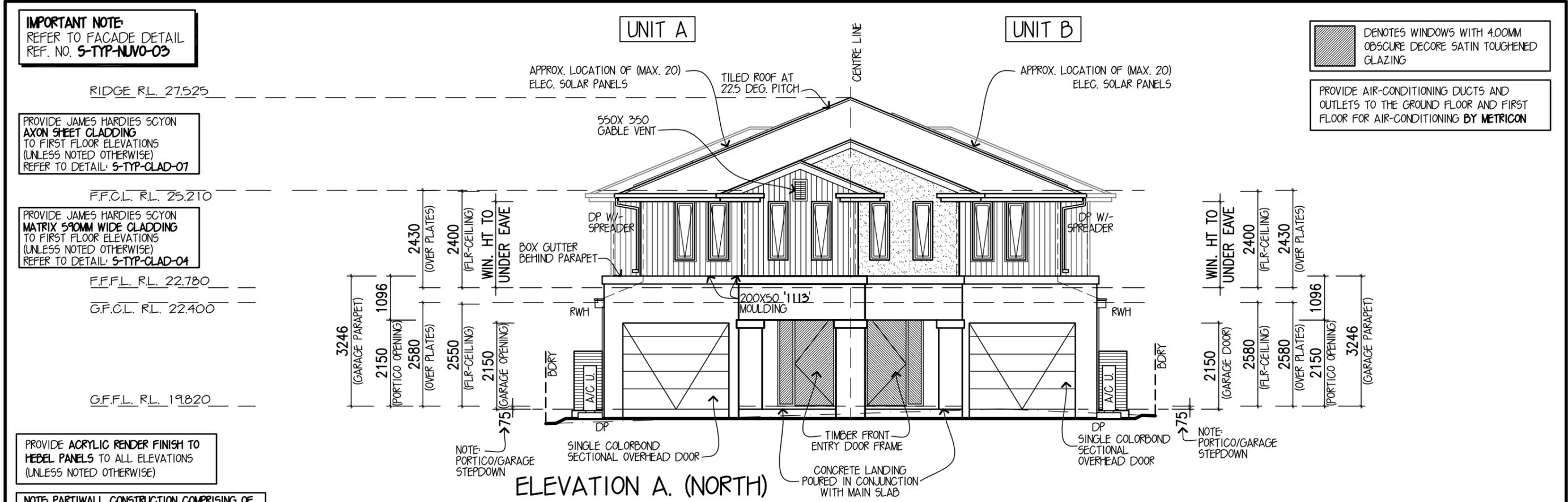
PROVIDE JAMES HARDIES SCYON  
**MATRIX 590MM WIDE CLADDING**  
TO FIRST FLOOR ELEVATIONS  
(UNLESS NOTED OTHERWISE)  
REFER TO DETAIL: **S-TYP-CLAD-04**

PROVIDE **ACRYLIC RENDER FINISH** TO  
**HEBEL PANELS** TO ALL ELEVATIONS  
(UNLESS NOTED OTHERWISE)

NOTE: PARTI WALL CONSTRUCTION COMPRISING OF  
90MM TIMBER STUD, CAVITY & 25MM THICK SHAFT  
LINER AS PER BORAL'S PARTI WALL INSTALLATION  
INSTRUCTIONS.  
CONTINUOUS COMPRESSED PARTI WALL BATTS  
(200MM WIDE) (REFER S-TYP-WAL-01 SHEET 3)

■ DENOTES WINDOWS WITH 4.00MM  
OBSCURE DECORE SATIN TOUGHENED  
GLAZING

PROVIDE AIR-CONDITIONING DUCTS AND  
OUTLETS TO THE GROUND FLOOR AND FIRST  
FLOOR FOR AIR-CONDITIONING BY **METRICON**



**SYMBOL LEGEND**

RECESSED ELECTRICITY METER BOX	ARTICULATION JOINT WHERE ARTICULATION JOINTS ARE NOT SHOWN REFER TO STRUCTURAL ENGINEER'S DETAILS
DOWNPIPE W/- RAINWATER HEAD	
ROTATING ROOF VENTILATOR	

DESIGN: <b>ANGASTON 28</b>
FACADE: <b>YALE</b> CEILING: 25 L/R
GARAGE: <b>SINGLE</b> LOCATION: F
<b>ELEVATIONS</b>
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<b>DualOcc</b>	<b>m</b> metricon
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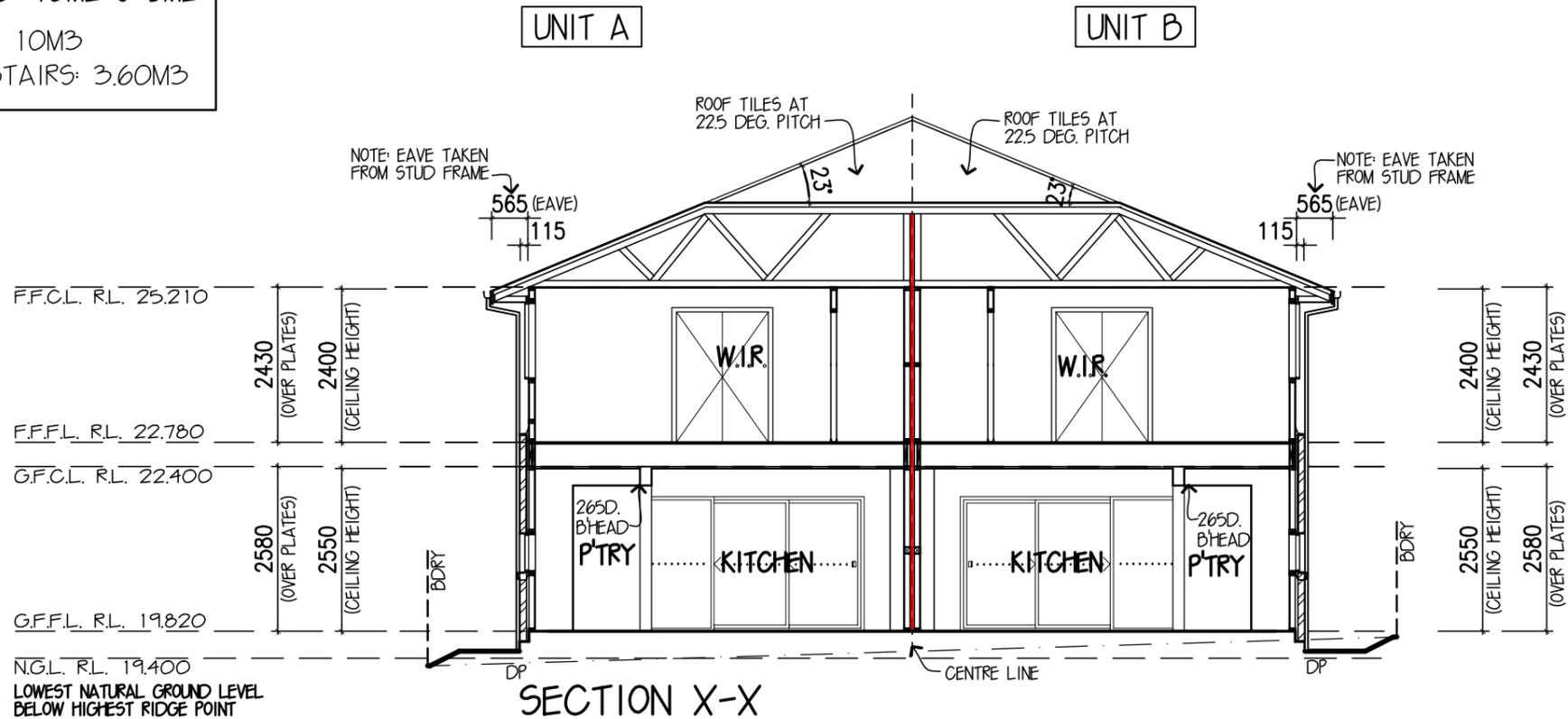
OWNER: <b>ZULU COASTAL PTY LTD</b>	
LOT 17. NO. 7, GEORGE STREET	
<b>THIRROUL</b>	
JOB No: <b>694187-694189</b>	DATE: <b>14.09.18</b>
FC DATE: <b>DD.MM.YYYY</b>	MST VER: <b>10.11.2017</b>
SCALE: <b>1:100 ON A3 SHEET</b>	REVISION: <b>H</b>
DRAWN: <b>SMX</b>	CHECK: <b>XX</b>
SHEET: <b>4</b> of <b>14</b>	



NOTE: PARTI-WALL CONSTRUCTION COMPRISING OF 90MM TIMBER STUD, CAVITY & 25MM THICK SHAFT LINER AS PER BORAL'S PARTI-WALL INSTALLATION INSTRUCTIONS.  
CONTINUOUS COMPRESSED PARTI-WALL BATTS (200MM WIDE) (REFER S-TYP-WAL-01 SHEET 3)

STORAGE PROVISIONS:  
MIN. REQUIRED: 10M<sup>2</sup> & 5M<sup>2</sup>

- GARAGE: 10M<sup>3</sup>
- UNDER STAIRS: 3.60M<sup>3</sup>



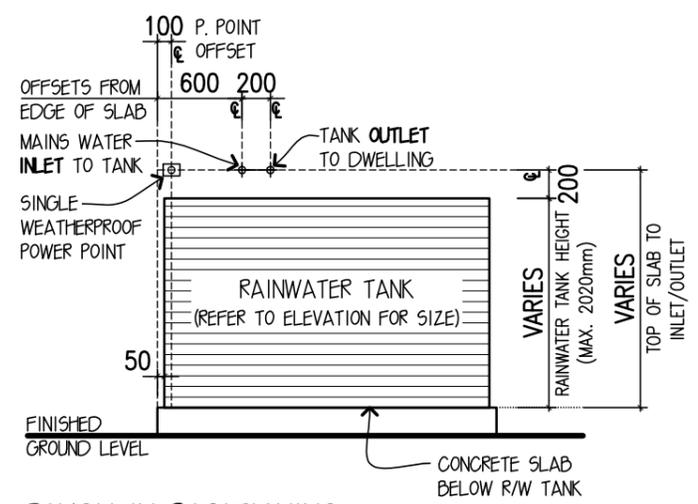
PROVIDE SQUARE SET CEILING CORNERS TO:

- BATHROOM 1

PROVIDE 2340MM (H) INTERNAL DOORS TO THE GROUND FLOOR ONLY (EXCLUDING SLIDING ROBE DOORS)

NOTE: PROVIDE ELECTRIC SOLAR POWER SYSTEM

PROVIDE AIR-CONDITIONING DUCTS AND OUTLETS TO THE GROUND FLOOR AND FIRST FLOOR FOR AIR-CONDITIONING BY METRICON



ROUGH-IN POSITIONING (NOT TO SCALE)  
**'EVOLUTION' MK2 TANK DETAIL**  
(NOT SUITABLE FOR TANKS EXCEEDING 2020MM HIGH)

DESIGN: **ANGASTON 28**  
FACADE: **YALE** CEILING: 25 L/R  
GARAGE: **SINGLE** LOCATION: **F**

**SECTION**

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**THIRROUL**

JOB No: <b>694187-694189</b>	DATE: <b>14.09.18</b>
FC DATE: <b>DD.MM.YYYY</b>	MST VER: <b>10.11.2017</b>
SCALE: <b>1:100 ON A3 SHEET</b>	REVISION: <b>H</b>
DRAWN: <b>SMX</b>	CHECK: <b>XX</b>
SHEET: <b>6</b> of <b>14</b>	

DATE:  
13/06/19

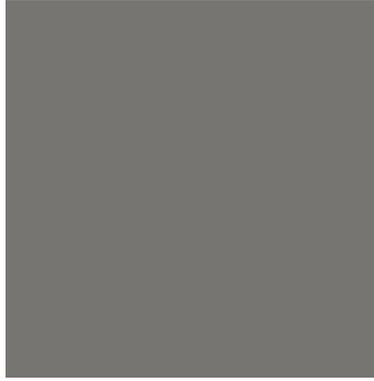
ADDRESS: Lot 17, 7 Unit A & B George St, Thirroul, NSW 2515

ROOF TILE



BRISTILE CLASSIC / MICA

BARGEBOARD/GUTTER & FASCIA



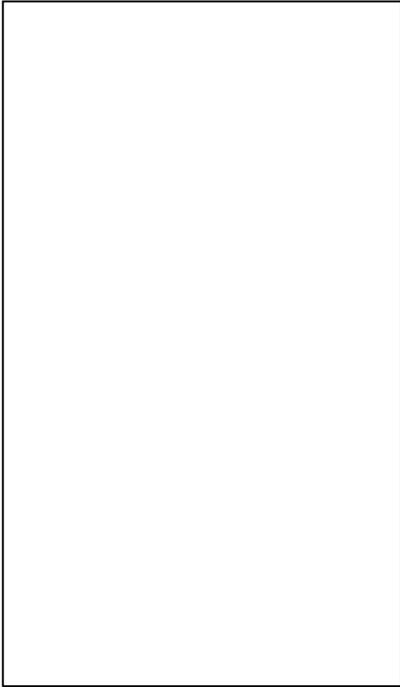
COLORBOND WALLABY

EAVES / LINING / BEAMS



COLORBOND SURFMIST

ALUMINIUM WINDOW  
FRAMES



PEARL WHITE

BRICKS



BOWRAL - CHILLINGHAM

CLADDING/ GABLE VENT &  
RENDER



DULUX NATURAL WHITE

GARAGE



COLORBOND WALLABY

ENTRY DOOR



CABOTS NEW TEAK

**IMPORTANT NOTE**  
REFER TO FACADE DETAIL  
REF. NO. S-TYP-NLVO-03

PROVIDE JAMES HARDIES SCYON  
AXON SHEET CLADDING  
TO FIRST FLOOR ELEVATIONS  
(UNLESS NOTED OTHERWISE)  
REFER TO DETAIL: S-TYP-CLAD-07

PROVIDE JAMES HARDIES SCYON  
MATRIX 540MM WIDE CLADDING  
TO FIRST FLOOR ELEVATIONS  
(UNLESS NOTED OTHERWISE)  
REFER TO DETAIL: S-TYP-CLAD-04

PROVIDE ACRYLIC RENDER FINISH TO  
HEBEL PANELS TO ALL ELEVATIONS  
(UNLESS NOTED OTHERWISE)

NOTE PARTI WALL CONSTRUCTION COMPRISING OF  
90MM TIMBER STUD, CAVITY & 25MM THICK SHAFT  
LINER AS PER DORAL'S PARTI WALL INSTALLATION  
INSTRUCTIONS  
CONTINUOUS COMPRESSED PARTI WALL BATTS  
(200MM WIDE) (REFER S-TYP-WAL-01 SHEET 3)

DENOTES WINDOWS WITH 4.00MM  
OBSCURE DECORE SATIN TOUGHENED  
GLAZING

PROVIDE AIR-CONDITIONING DUCTS AND  
OUTLETS TO THE GROUND FLOOR AND FIRST  
FLOOR FOR AIR-CONDITIONING BY METRICON

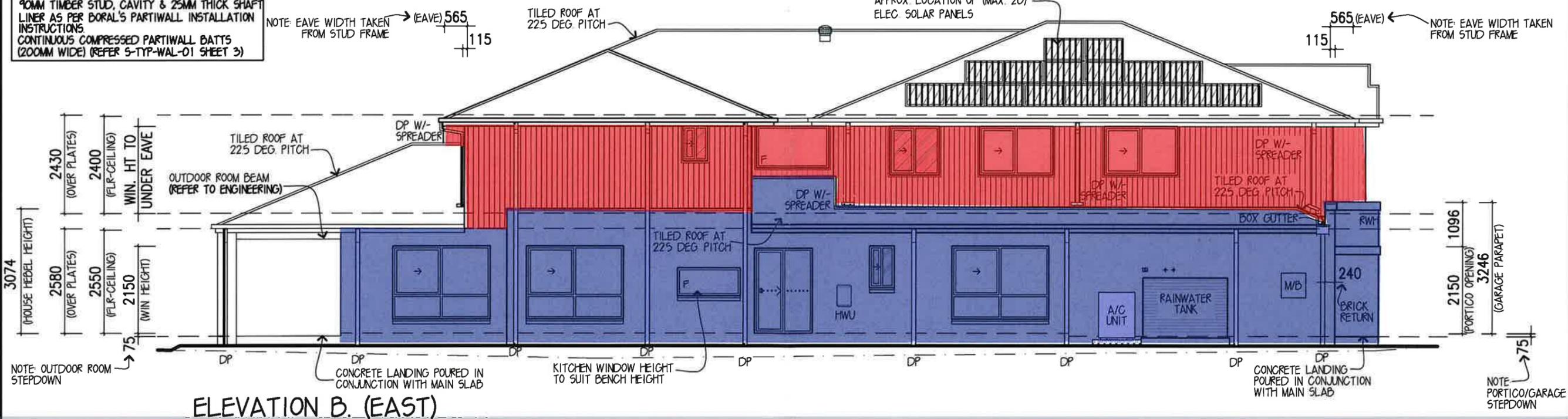
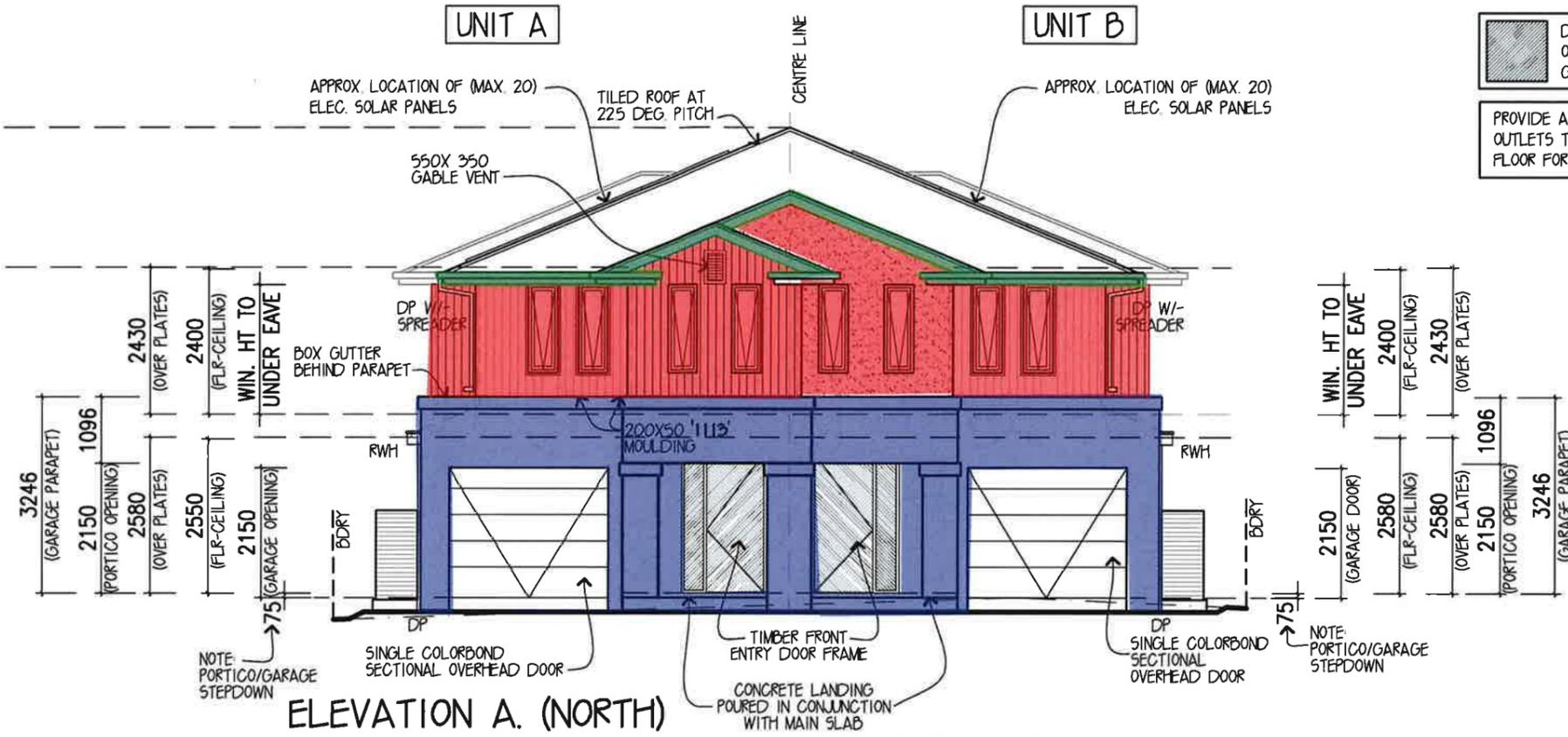
RIDGE R.L. 27.525

FF.C.L. R.L. 25.210

FF.F.L. R.L. 22.780

GF.C.L. R.L. 22.400

GFF.L. R.L. 19.820



**SYMBOL LEGEND**

- M/B RECESSED ELECTRICITY METER BOX
- RWH DOWNPIPE W/- RAINWATER HEAD
- DP ROTATING ROOF VENTILATOR
- AJ ARTICULATION JOINT WHERE ARTICULATION JOINTS ARE NOT SHOWN REFER TO STRUCTURAL ENGINEER'S DETAILS

- Cladding & EPS Render - Dulux Natural White
- Brick - Austral Bowral "Chillingham White"
- Bargeboard - Colorbond Wallaby

DESIGN: **ANGASTON 28**  
FACADE: **YALE** CEILING: 25 L/R  
GARAGE: **SINGLE** LOCATION: F

**DualOcc**

**m**  
metricon

OWNER: **ZULU COASTAL PTY LTD**  
**LOT 17. NO. 7, GEORGE STREET**  
**THIRROUL**

**ELEVATIONS**

BY METRICON

JOB No: **694187-694189** DATE: **14.09.18**

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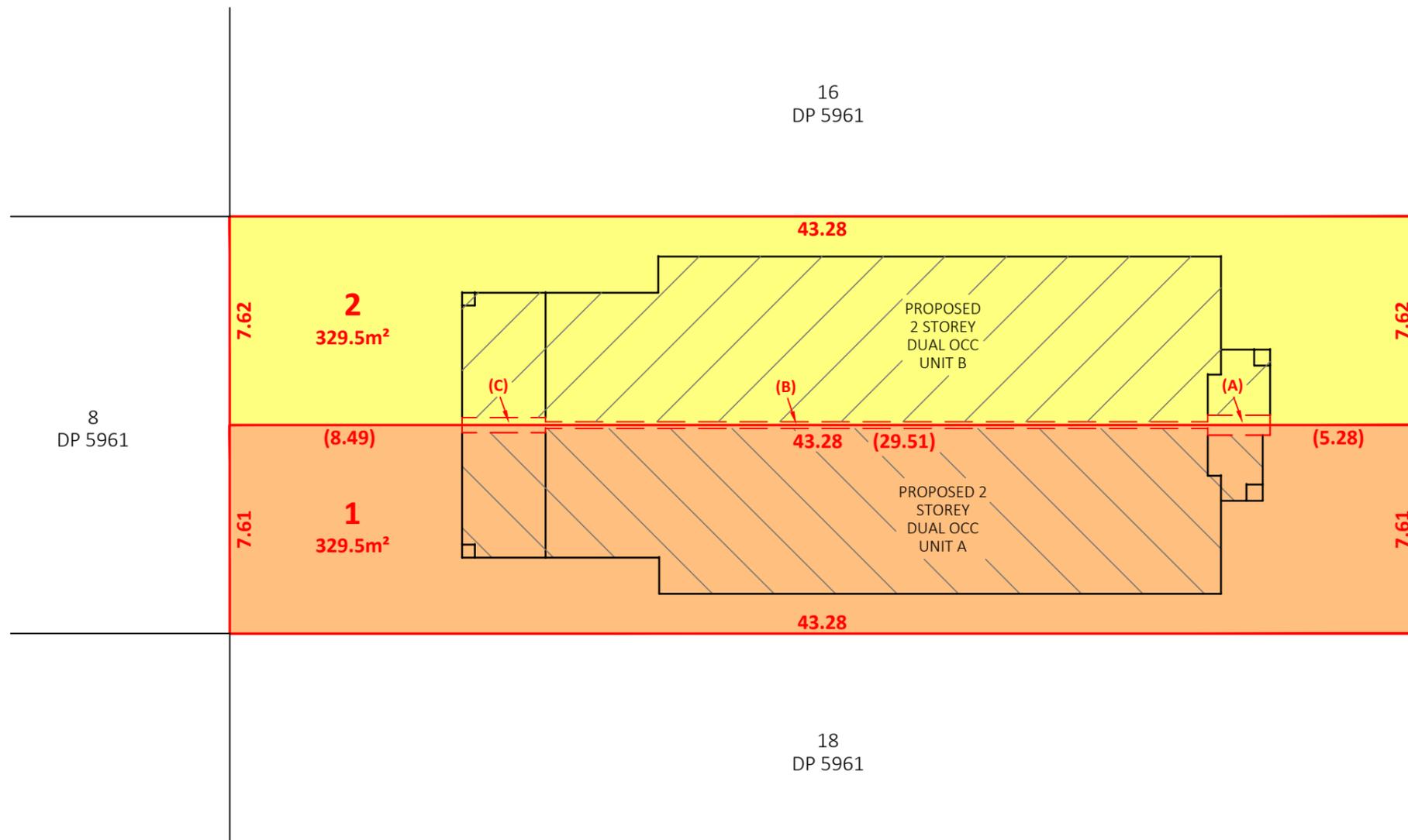
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FC DATE: **DD.MM.YYYY** MST VER: **10.11.2017**

SCALE: **1:100 ON A3 SHEET** REVISION: **F**

DRAWN: **SMX** CHECK: **XX** SHEET: **4 of 14**





STREET

GEORGE

**NOTES**

- Do not scale from this plan.
- This plan shows a proposed Torrens Title subdivision layout for DA purposes and must not be used for any other purpose. The information shown is subject to change following input from the relevant regulatory authorities.
- Proposed areas shown may differ slightly from the area stated on the current Deposited Plan due to advances in technology since the date of registration of this plan. Areas shown on this plan were calculated using CAD software and have a higher degree of accuracy than the area shown on the current Deposited Plan which was calculated without the benefit of modern computers.
- Boundary dimensions and areas have been compiled from the current subject site Deposited Plan. No boundaries have been surveyed or marked. If any work is to be undertaken on or adjacent to a boundary then a Boundary Survey is recommended to define the boundaries of the site.
- All dimensions, areas and easements shown are approximate only and subject to site survey, regulatory approval, final survey and registration of the Plan of Subdivision at LRS NSW.
- This drawing and the information it contains is copyright and remains the property of SurveyPlus Pty Ltd. It must not be copied, used or altered without the express authority of SurveyPlus.
- These notes form an integral part of this plan and must not be erased.

- (A) - Proposed party wall 0.73 wide
- (B) - Proposed party wall 0.25 wide
- (C) - Proposed party wall 0.55 wide



CLIENT <b>Metricon Homes 694187-694189</b>				
REV/DATE	DETAILS	SVY	DWN	APP
A/14.02.19	INITIAL ISSUE	--	CE	GC



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DATE OF SURVEY	N / A
ORIGIN OF LEVELS	N / A
ORIGIN OF COORDS	N / A
CONTOUR INTERVAL	N / A

TITLE  
**PROPOSED SUBDIVISION PLAN**  
**PROP. TORRENS SUBDIVISION OF LOT 17 DP 5961**  
**No. 7 GEORGE STREET, THIRROUL**

SCALE	1:200 @ A3
REVISION	A
SHEET	1 OF 1
REF	17230_SUB_1A

**LANDSCAPE MAINTENANCE NOTES**

MONTH	MOWING EDGING BLOWING	FERTILISING (SEASOIL)	CHECK IRRIGATION	HAND WEED REMOVAL	PRUNING	WEED SPRAYING	WATERING/ IRRIGATION	PLANT REPLACEMENT IF REQUIRED
DEC	W	M	M	W	F	M	D	W
JAN	W	M	M	W	F	M	D	W
FEB	W	M	M	W	F	M	D	W
MAR	F	M	M	F	M	M	D	W
APR	F	N/A	M	F	M	M	D	W
MAY	F	N/A	M	M	M	M	D	W
JUNE	M	N/A	M	M	N/A	N/A	2ND D	W
JULY	M	N/A	M	M	N/A	N/A	2ND D	W
AUG	M	N/A	M	M	N/A	N/A	2ND D	W
SEP	M	M	M	M	N/A	N/A	2ND D	W
OCT	F	F	M	F	M	M	D	W
NOV	F	F	M	F	M	M	D	W

PLANTING ESTABLISHMENT PERIOD - 12 MONTHS  
 LANDSCAPE MATERIAL ESTABLISHMENT - 12 MONTHS  
 KEY: D-DAILY, W-WEEKLY, F-FORTNIGHT, M-MONTHLY, 2ND DAY

**LEGEND**

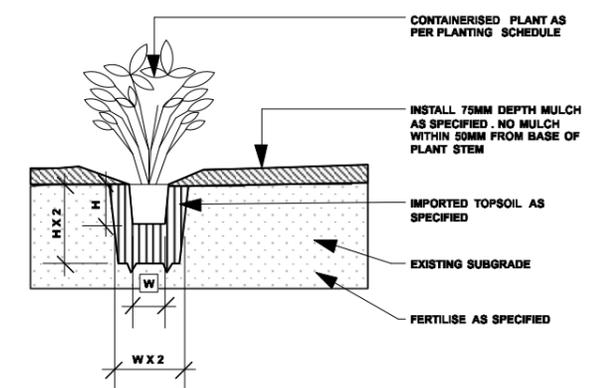
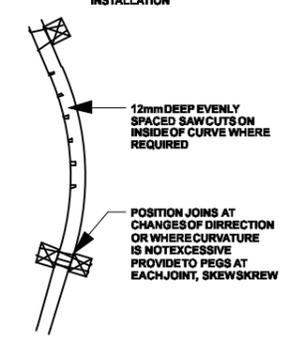
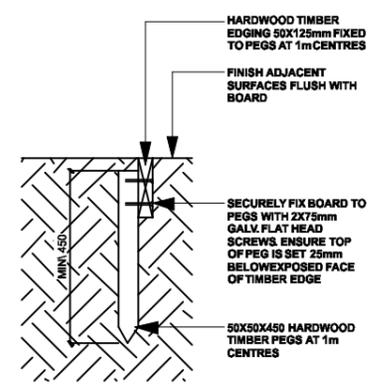
**COLOUR CONCRETE**  
**PLAIN CONCRETE**  
**TURF AREAS**  
**GARDEN BEDS**  
**PROPOSED RESIDENCE**  
**AS SELECTED TILES**  
**TIMBER GARDEN EDGING**  
**RIVER PEBBLES**

**EXISTING TREES TO BE RETAINED**  
**TREES TO BE REMOVED**

**NOTE:** ALL TIMBER TO BE PRESERVATIVE TREATED PRIOR TO INSTALLATION

**CONTAINERISED PLANT AS PER PLANTING SCHEDULE**  
**INSTALL 75MM DEPTH MULCH AS SPECIFIED. NO MULCH WITHIN 50MM FROM BASE OF PLANT STEM**  
**IMPORTED TOPSOIL AS SPECIFIED**  
**EXISTING SUBGRADE**  
**FERTILISE AS SPECIFIED**

**LANDSCAPED AREA:**  
 Min Required : 137.28 Sqm  
 Landscape Area Achieved : 277.42 Sqm



**TIMBER EDGE**  
 NTSual Size

**INDIVIDUAL PLANTING**  
 NTSual Size

**Camellia sasanqua**  
**Camellia**

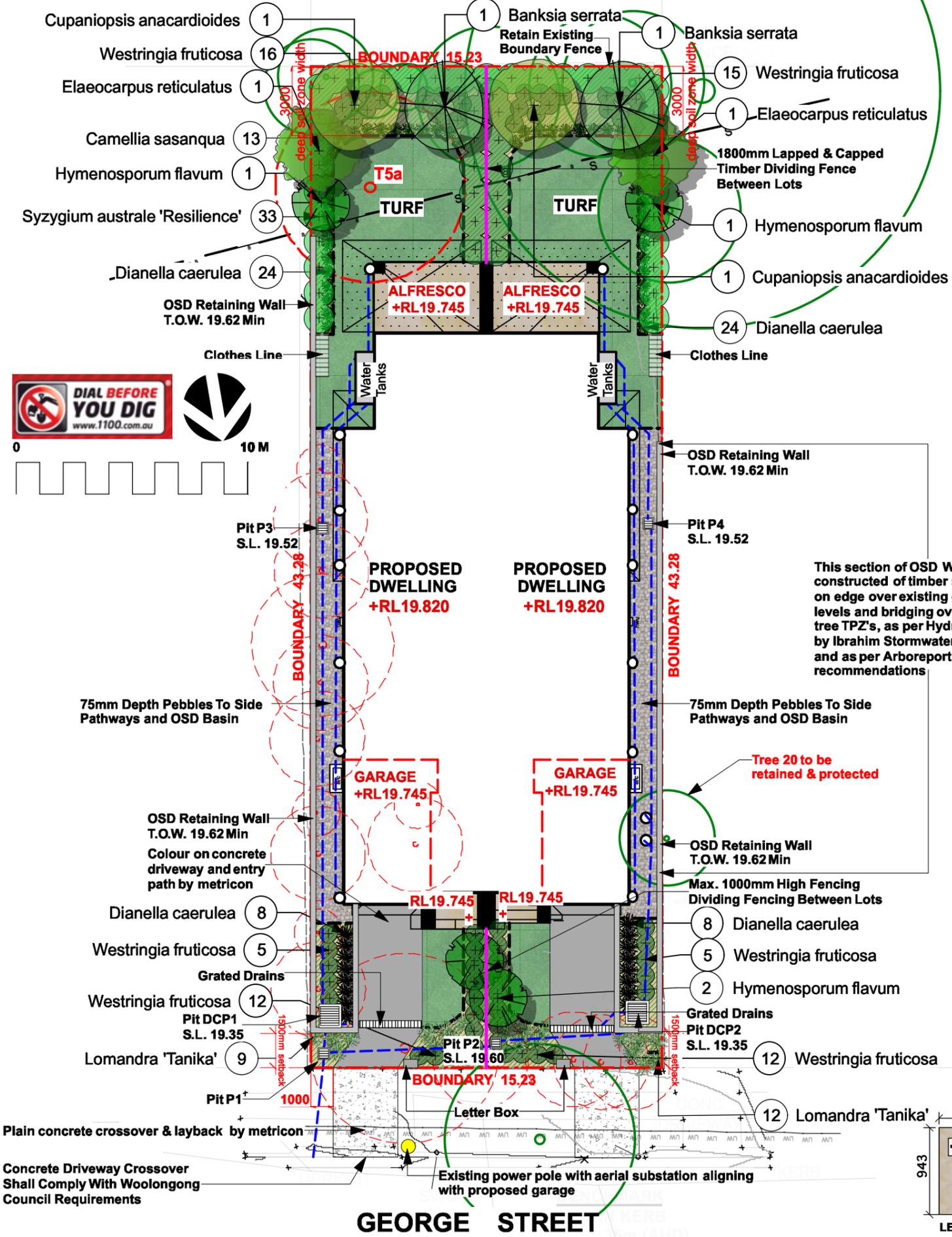
**Westringia fruticosa**  
**Coastal Rosemary**

**Hymenosporum flavum**  
**Native frangipani**

**Dianella caerulea**  
**Paroo Lilly**

**PLANT SCHEDULE**

ID	Qty	Common Name	Botanical Name	Scheduled Size	Mature Height	Mature Spread
<b>Trees</b>						
Ban-ser	2	Old Man Banksia	Banksia serrata	45L	3-4m	2-4m
CAna	2	Tuckeroo	Cupaniopsis anacardioides	45L	10 - 15m	3.5 - 6m
EReti	2	Blueberry Ash	Elaeocarpus reticulatus	45L	5 - 10m	2-4m
Hym-fl	4	Native frangipani	Hymenosporum flavum	45L	6m	2.5m
<b>Shrubs</b>						
Cam-sas	13	Sasanqua Camellia	Camellia sasanqua	200mm	1.5-4m	1.5-4m
syz-au're	33	Lilly Pilly	Syzygium australe 'Resilience'	200mm	1 - 2.5m	1.5m
Wes-fru	65	Coastal Rosemary	Westringia fruticosa	200mm	0.6m	0.9m
<b>Grasses</b>						
Dia-cae	64	Paroo Lilly, Blue Flax-lily	Dianella caerulea	150mm	0.6 - 0.75m	0.6 - 0.9m
lom-ta	21	Fine-leaved mat rush	Lomandra 'Tanika'	150mm	0.5m	0.6m
<b>Total</b>	<b>206</b>					



This section of OSD Wall to be constructed of timber sleepers on edge over existing ground levels and bridging over adjoining tree TPZ's, as per Hydraulic Design by Ibrahim Stormwater Consultants and as per Arboreport Arborist recommendations

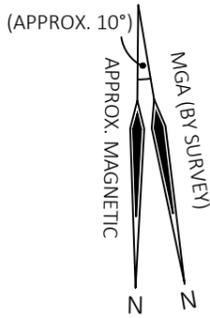
Tree 20 to be retained & protected

NOTE: BRICK LETTER BOX 230 DEEP

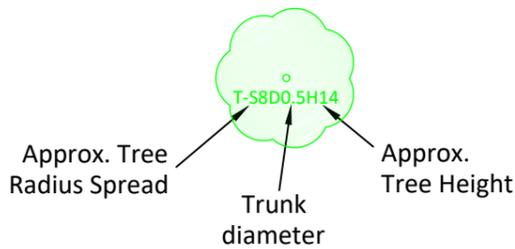
SYDNEYNORTHSTUDIO  
 PO Box 265  
 SEAFORTHNSW 2092  
 0417685846  
 p 130022 44 55  
 Designer@sdstudios.com.au  
 www.sdstudios.com.au

Project **PROPOSED LANDSCAPE WORKS**  
 Address **LOT 17 NO.7 GEORGE STREET THIRROUL**  
 Drawing Title **LANDSCAPE PLAN**  
 Client **ZULU COASTAL PTY LTD** Scale **1:200@A3** Drawing No. **694189**

Page **L-01 G**



### TREE DIAGRAM



### LEGEND

FL	- Floor Level
PP	● - Power Pole
R XX.XX	- Ridge/Roof RL XX.XX
SIP	⊙ - Sewer Inspection Pit
SWO	○ - Stormwater Outlet
TPIT	□ - Telecommunication Pit
WM	— - Water Meter
X	- Damage to Kerb/Footpath
UE	— - Underground Electricity Service (Approx. Location by DBYD)
US	— - Underground Sewer Service (Approx. Location by DBYD)
UT	— - Underground Communications Service (Approx. Location by DBYD)
UW	— - Underground Water Service (Approx. Location by DBYD)

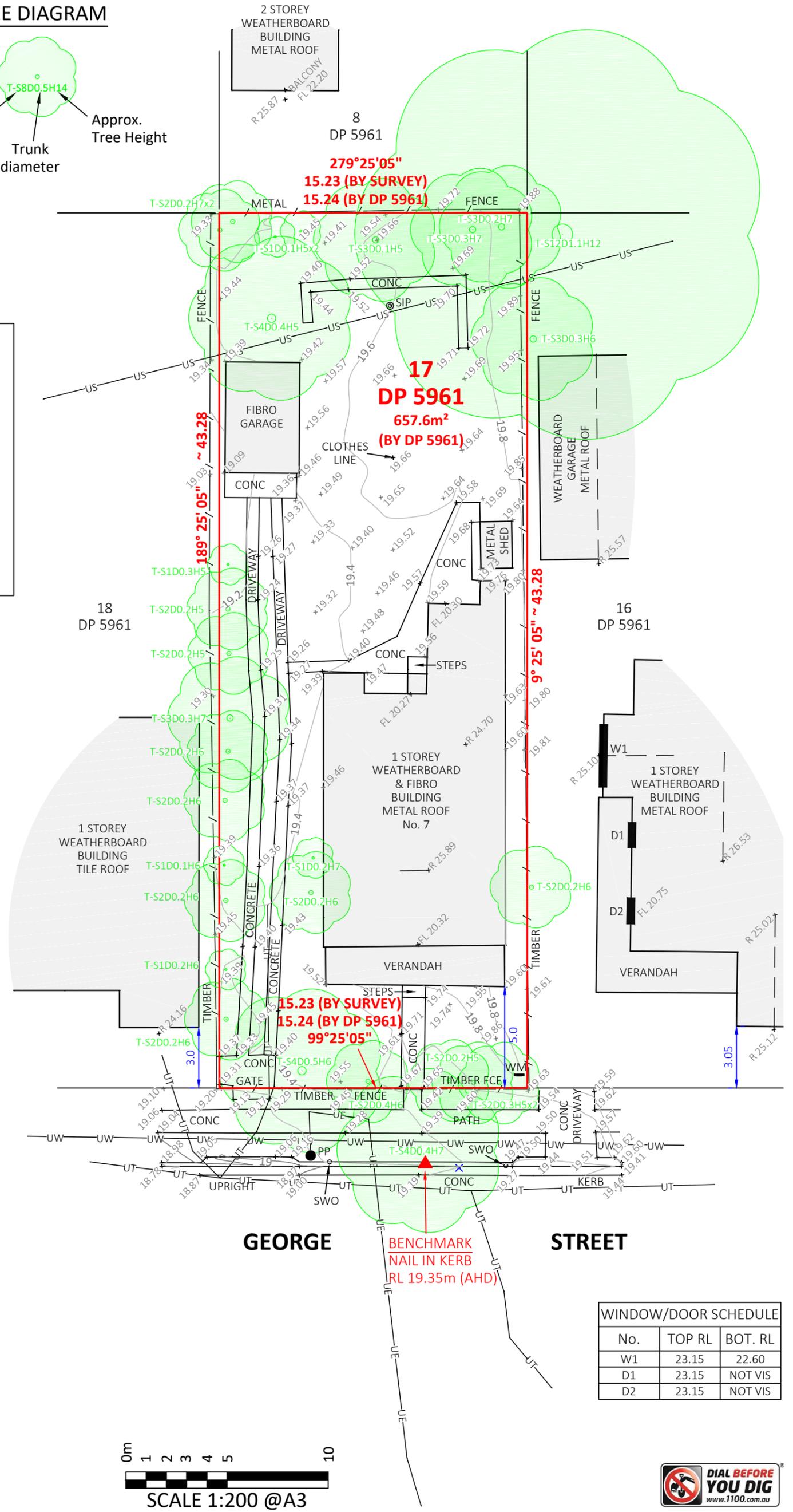
#### INTERESTS RELATING TO THE SUBJECT SITE:

The Certificate of Title for Lot 17 DP5961 ordered on 19.04.2018 identified the following interests (refer to the original 88B Instrument or Dealing creating the interest for specific terms - we recommend this be undertaken prior to design or construction):

- Reservations and conditions in the Crown Grant(s) (not investigated)
- Mortgage to Medfin Australia Pty Ltd (AJ405700) (not investigated)

#### NOTES

- Do not scale from this plan.
- The purpose of this Detail Survey plan is to show detail and levels for planning and design. Do not use the information shown for any other purpose.
- Plan coordinates have been determined from ground (real) distances and are related to an MGA (grid) point of origin. A scale factor must be applied to convert plan coordinates to true MGA grid coordinates.
- Contours are an indication of the topography and should only be used for planning purposes. Spot levels only should be used for detailed design.
- A preliminary fixation of subject site boundaries has been made. Boundary dimensions and areas have been compiled from the current subject site Deposited Plan. If any work is to be undertaken on or adjacent to a boundary then a Boundary Survey is recommended to define the boundaries of the site.
- The relationship of built form and natural features to boundaries is diagrammatic and if critical should be confirmed by a Boundary Survey. Boundary setbacks (if shown) are approximate only.
- Building and feature descriptions are to be used for general identification purposes only and may require further investigation.
- Underground service locations are approximate only and have been scaled using Dial Before You Dig service diagrams current on the date of survey (except Telstra services and sewer house connection lines). Other visible services have been located by survey. It is recommended to contact Dial Before You Dig and the relevant service authority prior to commencement of any work.
- Only those windows visible and unobscured from within the subject property on the date of survey have been located.
- Tree information and canopy location is approximate (and not necessarily symmetrical) and if critical may require further assessment.
- The DWG format file for this plan is integral and contains additional spatial information not able to be displayed in the PDF file.
- This drawing and the information it contains is copyright and remains the property of SurveyPlus Pty Ltd. It must not be copied, used or altered without the express authority of SurveyPlus.
- These notes and interests noted in the Certificate of Title form an integral part of this plan and must not be erased.



No.	TOP RL	BOT. RL
W1	23.15	22.60
D1	23.15	NOT VIS
D2	23.15	NOT VIS



CLIENT <b>Meticon Homes 694187-694189</b>				
REV/DATE	DETAILS	SVY	DWN	APP
A/04.05.18	AS SURVEYED ON SITE	RL	CE	MG

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TITLE **PLAN SHOWING DETAIL AND LEVELS OVER LOT 17 DP 5961 No. 7 GEORGE STREET, THIRROUL**

ORIGIN OF COORDS: **SSM 32147 (MGA)** DATE OF SURVEY: **02.05.2018**  
ORIGIN OF LEVELS: **SSM 36452 RL 23.571 (AHD)** CONTOUR INTERVAL: **0.2m**

SCALE	1:200 @ A3
REVISION	A
SHEET	1 OF 1
REF	17230_DET_1A

**STORMWATER LAYOUT NOTES**

-PITS UP TO 600 DEEP TO BE 450 x 450 U.N.O., PITS UP TO 900 DEEP TO BE 600 x 600 U.N.O., PITS UP TO 1200 DEEP TO BE 900 x 600 U.N.O., PITS EXCEEDING 1200 DEEP TO BE 900 SQ. U.N.O. PITS TO BE PRECAST CONCRETE OR RENDERED BRICK WITH CONCRETE HEAVY DUTY GRATES. U.N.O. LIGHT DUTY PITS AND GRATES MAY BE USED ONLY IN LIGHT/FOOT TRAFFICABLE AREAS. U.N.O. ALL PITS TO BE BENCHED TO DISCHARGE PIPES U.N.O. GAL. STEP IRONS TO ALL PITS EXCEEDING 900 DEPTH.  
 -COVER AND SUMP GRATES SHALL COMPLY WITH AS2733 & AS4198.  
 -DOWNPIPES TO BE 90 DIA IF CHARGED AND 100 x 50 BOX IF GRAVITY. U.N.O. DP'S SHALL BE INSTALLED IN ACCORDANCE WITH AS3500.3.2:4.11 & AS4198. MAX. ROOF AREA PER DOWNPIPE WITH A NOMINATED GUTTER SIZE TO BE DETERMINED USING MANUFACTURERS SPECIFICATIONS WITH OVERFLOW PROVISIONS BY INSTALLERS.  
 -PIPES TO HAVE 1% MIN.GRADE U.N.O. BY PIT INVERTS. PIPES TO BE V.C. CLASS 'X' OR U.P.V.C. CLASS STORMWATER PIPE TO AS1254,1260,1273,1477,2179.2 AND WHERE EXPOSED TO DIRECT SUNLIGHT TO HAVE ADEQUATE PROTECTION TO U.V. RADIATION IN ACCORDANCE WITH AS2032. SEWER GRADE/GAL. PIPES AND KERB ADAPTORS TO BE USED WHERE COUNCIL POLICY OR CONSENT REQUIRE SUCH.  
 -GUTTER OUTLETS SHALL BE FITTED VERTICALLY TO THE SOLE OF THE EAVE GUTTERS. RAINHEADS TO HAVE AN OVERFLOW DUCT OR WEIR 50mm BELOW THEIR CREST.  
 -PROVIDE OVERFLOW SPITTERS TO ALL COVERED BALCONIES/TERRACES. NOT TO BE DIRECTED ON TO ROOF SURFACES  
 -RISING MAINS (PRESSURE PIPE) TO BE IN ACCORDANCE WITH AS3500.1:2.  
 -SUBSOIL DRAINS TO BE IN ACCORDANCE WITH AS2439.1 CLASS 100 TO BE USED ONLY IN SINGLE DWELLINGS.  
 -ALL PIPE JOINTS, VALVES TO BE IN ACCORDANCE WITH AS3500.3.2:2.7 & AS3500.3.2  
 -EXPANSION JOINTS SHALL COMPLY WITH AS3500.3.2:TABLE 4.1 PVC JOINTS AND ACCESSORIES TO COMPLY WITH AS2179.2 & AS4198.  
 -ALL TRENCHES TO BE IN ACCORDANCE WITH AS3500.3.2:7.2.8-14. EMBEDMENT MATERIAL AND TRENCH FILL TO ALL PIPES & SUBSOIL DRAINS TO BE IN ACCORDANCE WITH AS3500.3.2:7, ALL WORKS TO BE IN ACCORDANCE WITH AS1254, 1741, 2032, 2733, 2865, 3996, 1260, 1477, 2179.1 & 2,2566, 6367, 8301, ARR97 & BCA.  
 -IT IS THE BUILDER'S RESPONSIBILITY TO CONFIRM THAT LEVELS AND SURVEYS ARE IN ACCORDANCE WITH LEVELS ON SITE & ARE APPROVED BY COUNCIL & ARCHITECT BEFORE COMMENCING WORK.  
 -NO SEWER VENTS, GULLY PITS OR SIMILAR TO BE LOCATED BELOW THE MAXIMUM WATER SURFACE LEVEL IN DETENTION BASINS. ALL BASIN WALLS TO BE WATERTIGHT & STRUCTURALLY DESIGNED BY A STRUCTURAL ENGINEER.  
 -ALL FENCES WHICH MAY DIVERT FLOW FROM PROPOSED DIRECTION TO BE RAISED 100mm.  
 -BUILDER TO ENSURE ALL DRAINAGE AREAS INCLUDING EXPOSED BALCONIES TO HAVE OVERFLOW MECHANISM IN PLACE IN THE EVENT OF BLOCKAGE WITH ADEQUATE OVERFLOW SECTION THROUGH PLANTERS, PARAPETS ETC.  
 -ALL EXTERIOR FINISHED GROUND LEVELS TO BE SLOPING AWAY FROM PERIMETER WALLS IN ALL CASES.  
 -ALL HEADROOM CLEARANCES TO BE COORDINATED BETWEEN BUILDER & ARCHITECT. NOTIFY ENGINEER FOR APPROVAL IF ANY CHANGES OCCUR.  
 -ALL GULLY POSITIONS ARE DIAGRAMMATIC ONLY- BUILDER SHOULD CONSULT ARCHITECTURALS FOR DIMENSIONS TO LOCATE STORMWATER ELEMENTS U.N.O.  
 -FIRE RATING TO ARCHITECT'S SPECIFICATION.  
 -ALL FINISHED FLOOR LEVELS ARE NOMINATED BY ARCHITECT.  
 -ALL SITE SAFETY MEASURES AND WORK METHOD STATEMENTS PREPARED BY BUILDER/SUB-CONTRACTORS ARE TO BE IMPLEMENTED DURING CONSTRUCTION. NO WORK IS TO COMMENCE UNTIL ALL WORKERS CARRY OUT SITE INDUCTION, PREPARED AND CARRIED OUT BY BUILDER. ANY HAZARD IDENTIFICATION TO BE REPORTED IMMEDIATELY TO SITE SUPERVISOR TO CARRY OUT NECESSARY PROCEDURES TO ELIMINATE HAZARD, PRIOR TO PROCEEDING WITH WORK. STRUCTURAL AND GEOTECHNICAL ADVICE SHOULD BE SOUGHT IN ALL CASES.  
 -CONFINED SPACES SIGNAGE TO BE INSTALLED IN ACCESSIBLE UNDERGROUND TANKS TO WORK COVER SPECIFICATIONS. ALL PITS EXCEEDING 600mm DEPTH TO HAVE 'J' BOLTS OR SIMILAR INSTALLED TO GRATES.  
 -MAINTENANCE DEVICES REQ'D BY AUTHORITIES ARE NOT TO BE ASSUMED SHOWN ON DRAWINGS.  
 -EARTH MOUNDING SHOWN AS TEMPORARY MEASURE UNTIL LANDSCAPING COMPLETED TO DIRECT FLOWS AS SHOWN.

MIN. 1500LITRE- RAINWATER TANK PROVIDE 1600L RAINWATER TANK WITH PUMPS TO SUPPLY GARDEN TAPS AND INTERNAL RE-USE TO BE CONNECTED AS PER ARCHITECTURAL DETAILS, BASIX ASSESSMENT AND WATER AUTHORITY GUIDELINES.  
 Overflow pipe to Pit DCP2. LOCATION SHOWN DIAGRAMMATIC ONLY.  
 Max. Overflow RL.21.14m  
 Outlet to be mosquito proofed. All exposed pipework to be painted to withstand external elements.PIPES INLETS AND OUTLETS AS PER DETAILS ON SHEET 2.  
 1600L SLIMLINE SQUAT TANK (2400L x 700W x 1020H)

PIT P4  
 S.L.19.52  
 I.L.19.32

**DETENTION AREA-B**  
 MAX. POOL R.L. 19.52  
 MAX. POOL DEPTH 170mm.  
 VOLUME STORED 1cu.m.  
 (No mulch in basin)

MIN. 1500LITRE- RAINWATER TANK PROVIDE 1600L RAINWATER TANK WITH PUMPS TO SUPPLY GARDEN TAPS AND INTERNAL RE-USE TO BE CONNECTED AS PER ARCHITECTURAL DETAILS, BASIX ASSESSMENT AND WATER AUTHORITY GUIDELINES.  
 Overflow pipe to Pit DCP2. LOCATION SHOWN DIAGRAMMATIC ONLY.  
 Max. Overflow RL.21.14m  
 Outlet to be mosquito proofed. All exposed pipework to be painted to withstand external elements.PIPES INLETS AND OUTLETS AS PER DETAILS ON SHEET 2.  
 1600L SLIMLINE SQUAT TANK (1700L x 700W x 1480H)

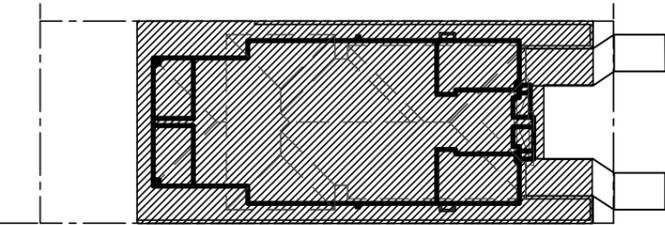
PIT P3  
 S.L.19.52  
 I.L.19.32

**DETENTION AREA-A**  
 MAX. POOL R.L. 19.52  
 MAX. POOL DEPTH 170mm.  
 VOLUME STORED 1cu.m.  
 (No mulch in basin)

**GROUND FLOOR LAYOUT**

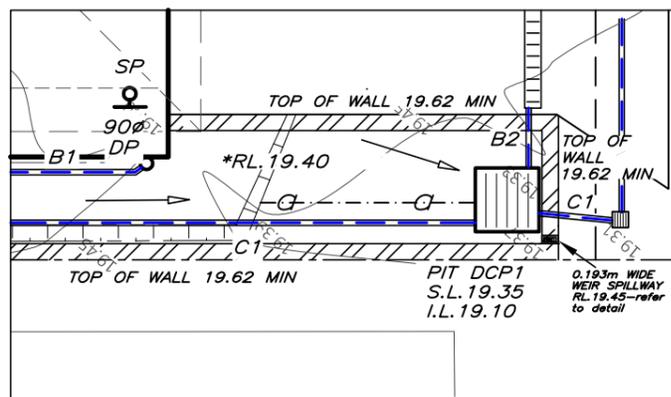
REFER TO SHEET 2 FOR RAINWATER TANK DETAILS. LEAF GUTTER GUARDS OR SIMILAR SCREENING RECOMMENDED TO ALL GUTTERS.

WHSA HAZARD IDENTIFICATION:  
 TRENCHING-ALL PERSONS TO FOLLOW THEIR APPROVED SWMS IN RELATION TO BARRICADING DEEP TRENCHES AND WEARING APPROPRIATE CLOTHING. ANY PERSON WORKING INSIDE A TRENCH MUST BE SUPERVISED BY ANOTHER PERSON. DIAL BEFORE YOU DIG 1100 MUST BE CHECKED BEFORE ANY TRENCHING COMMENCES ON SITE. ANY WORKS NEAR IDENTIFIED SERVICES TO BE CARRIED OUT IN ACCORDANCE WITH THE TRADES SWMS.  
 INSTALLATION OF DOWNPIPES AND GUTTERING TO BE CARRIED OUT IN ACCORDANCE WITH INSTALLERS APPROVED SWMS.



**CATCHMENT LAYOUT**

TRIBUTARY AREA SHOWN HATCHED



**TYPICAL OSD BASIN DETAIL** 1:100

**PIPE SCHEDULE**

REFER TO NOTES FOR PIPE CLASS

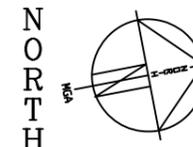
TAG	PIPE DIA.	MIN.GRADE
B1	100	CHARGED
B2	100	1%
C1	150	1%
D1	200x100 GAL. PIPE	1%

ALL OTHER SURFACE WATERS TO BE STRICTLY CONNECTED TO A SEPARATE SYSTEM BY OWNER IN ACCORDANCE WITH AS 3500.3:2003 AND BCA PART 3.1.2.3.

RAINWATER TANKS WITH PUMPS TO SUPPLY GARDEN TAPS AND INTERNAL RE-USE AS PER BASIX ASSESSMENT

**LEGEND**

R.L. 0.00	NEW REDUCED LEVEL (NEW FINISHED GROUND LEVEL)
+00.00	EXISTING LEVEL
S.L. 0.00	SURFACE LEVEL
I.L. 0.00	INVERT LEVEL
T.O.W.	TOP OF WALL LEVEL
G.F.L.0.00	GARAGE FLOOR LEVEL
F.F.L.0.00	FINISHED FLOOR LEVEL
A,B,C etc.	SEE PIPE SCHEDULE
LT	PIPE LABEL
PIT P1	SURFACE INLET PIT
PIT OP1	OVERLAND FLOW PIT
a-a	90mm. AG. LINE
DP	DOWNPIPE-SIZE
REFER TO NOTES FOR DP SIZE	
GP	GULLY PIT
GP	GARDEN GULLY PIT
O/F	OVERFLOW-200x100
RWH	RAIN WATER HEAD
SP	DP WITH SPREADER
BG	BALCONY GULLY PIT
CE	CLEANING EYE
	GROUND FALL
))))	100 HIGH EARTH MOUNDING



REVISIONS

NO.	DESCRIPTION
B	rain tanks relocated and arborist co-ordination
A	Arch. revisions

ISSUE	PRINTS	ISSUED TO	DATE
1	EMAIL	BUILDER/CLIENT	7-2-19
2	EMAIL	BUILDER/CLIENT	31-5-19
3	EMAIL	BUILDER/CLIENT	29-10-19

SCALE(A3) 1:200,100 u.n.o.  
 SCALE BAR - 1m INTERVALS  
 DATE SEP. 2018  
 DRAWN M.I.  
 DESIGNED M.I.  
 APPROVED



**IBRAHIM STORMWATER CONSULTANTS**  
**CONSULTING CIVIL ENGINEERS**  
 P.O. BOX 400 CHERRYBROOK NSW 2126  
 TELEPHONE: (02) 9980 5515 FAX: (02) 9980 6114  
 www.stormwater.net.au email: mail@stormwater.net.au

PROJECT  
**PROPOSED RESIDENCE**  
**AT 7 (UNIT A & B) GEORGE STREET, THIRROUL**  
**FOR ZULU COASTAL PTY LTD**

THIS DRAWING  
**STORMWATER LAYOUT SH.1**  
 BUILDER  
 METRICON HOMES

JOB NUMBER  
**M8748-694187**  
 SHEET No. **1** of **2** REVISION **B**

### Attachment 3: WDCP 2009 compliance table

#### CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Development controls to improve the sustainability of development throughout Wollongong are integrated into the relevant chapters of this DCP.

Generally speaking, the proposal could be considered to be consistent with the principles of Ecologically Sustainable Development.

#### CHAPTER B1 – RESIDENTIAL DEVELOPMENT

##### 4.0 General Residential controls

<i>Controls/objectives</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>4.1 Maximum Number of Storeys</u></p> <ul style="list-style-type: none"> <li>• Battle axe allotments - 1 storey</li> <li>• R2 where development occurs within the 8m rear setback the development is limited to single storey.</li> <li>• Built form that has a positive impact on the visual amenity of the area and addresses site constraints and overlooking of neighbouring properties</li> </ul>	<p>The subject site is located within an R3 zone and is a maximum of two storeys.</p> <p>The proposed built form is not considered to provide a positive impact on the visual amenity of the area.</p>	No
<p><u>4.2 Front Setbacks</u></p> <ul style="list-style-type: none"> <li>• Infill 6m min or dependent on street character</li> <li>• Less than 6 metres where the prevailing street character permits and the future desired character of the area is not prejudiced.</li> <li>• Garages and carports 5.5m min</li> </ul>	<p>Unit A:6.005m Unit B: 6.245m</p> <p>Both garages are proposed to be setback 7.025m.</p> <p>The existing dwelling house is setback approximately 5m from the property boundary, and the adjoining dwellings to the immediate east and west are setback approximately 3m from the front property boundary. It is considered that the prevailing character of the street in the immediate surrounds of the site would require a front setback of less than 6m.</p>	No
<p><u>4.3 Side and Rear Setbacks</u></p> <ul style="list-style-type: none"> <li>• Wall Setback: 0.9m min</li> <li>• 3m where the wall height exceeds 7m</li> <li>• Eave Setback: 0.45m</li> <li>• Rear Setback 8m</li> </ul>	<p>Ground Floor - 1.455m (East) and 1.463m (West)</p> <p>First Floor – 2.425m (East) and 2.438m (West)</p> <p><u>Rear setbacks</u></p> <p>Ground floor: 11.6m</p>	Yes

<p><u>4.4 Site Coverage</u></p> <p>The maximum site coverage for a dwelling, dual occupancy, and combined maximum coverage for a principle dwelling and secondary dwelling, is as follows:</p> <ul style="list-style-type: none"> <li>• 55% of the area of the lot, if the lot has an area less than 450m<sup>2</sup>.</li> <li>• 50% of the area of the lot, if the lot has an area of at least 450m<sup>2</sup> but less than 900m<sup>2</sup>.</li> </ul>	<p>First Floor: 14.6m</p> <p>Proposed site coverage:</p> <p><u>Phase 2:</u> 45% (296.1/657.6)</p> <p><u>Phase 3:</u> Lot 1: 45% (148m<sup>2</sup>/329.5m<sup>2</sup>) Lot 2: 45% (145.8m<sup>2</sup>/329.5m<sup>2</sup>)</p>	<p>Yes</p>
<p><u>4.5 Landscaped Area</u></p> <ul style="list-style-type: none"> <li>• Minimum landscaped area required: <ul style="list-style-type: none"> <li>- Lot area 600sqm-900sqm – 120sqm +30% of the site area &gt;600sqm.</li> <li>- Lot area less than 600sqm – 20% landscaped area</li> </ul> </li> <li>• 50% behind the building line to the primary road</li> <li>• Integrated with drainage design</li> <li>• Dual occupancy development requires 1.5m wide landscape strip within front setback for the majority of the site.</li> </ul>	<p>Phase 2:</p> <p>Required – 137.28sqm Provided – 206 sqm</p> <p>Phase 3:</p> <p>Proposed Lot 1: Approximately 30% Proposed Lot 2: Approximately 30%</p> <p>More than 50% of the landscaped area is proposed behind the front building line.</p> <p>Details of the application submission were referred to Council’s Landscape Officer for comment with concerns raised as discussed at 1.7.1 above.</p>	<p>Yes</p>
<p><u>4.6 Private Open Space</u></p> <ul style="list-style-type: none"> <li>• 24m<sup>2</sup> of private open space must be directly accessible from the living areas; min width of 4m and no steeper than 1:50.</li> <li>• Not to be located on side boundaries or front yards without variation.</li> </ul>	<p>The applicant has indicated that both dwellings will have a private open space area with a minimum area of 24m<sup>2</sup>.</p>	<p>Yes</p>
<p><u>4.7 Solar Access Requirements</u></p> <ul style="list-style-type: none"> <li>• Windows to living rooms of adjoining dwellings must receive at least 3hrs continuous sunlight between 9.00am - 3.00pm on 21 June.</li> <li>• At least 50% of the private open areas of adjoining residential properties must receive at least 3hrs</li> </ul>	<p>The proposed dual occupancy development will have minimal impact on adjoining properties in terms of Solar Access as reasonable setbacks and building heights have been maintained.</p> <p>Submitted shadow diagrams for June 21 are considered satisfactory.</p>	<p>Yes</p>

continuous sunlight between 9.00am - 3.00pm on June 21.

4.8 Building Character and Form

- Design, height and siting of a new dwelling-house or secondary dwelling must respond to its site context
- New dwelling-houses within established residential areas should be sympathetic with the existing character of the immediate locality.
- All residential buildings must be designed with building frontages and entries clearly addressing the street frontage.
- Where garages are proposed on the front elevation they must be articulated from the front façade.
- Where the garage door addresses the street they must be a maximum of 50% of the width of the dwelling.

4.9 Fences

- Fences must be constructed to allow natural flow of stormwater or runoff.
- Fences within front and secondary building lines should be mainly constructed of transparent fence materials.
- Any fence or related retaining wall within the front setback from the primary road frontage must be a max 1.2m in height

4.10 Car parking and Access

- 2 spaces per dwelling with a GFA of greater than 125m<sup>2</sup>
- Car parking spaces may be open hard stand space, driveway, carport or a garage.
- Garage door facing roads—not greater than 50% of the width of the dwelling.
- Garages must be setback min of 5.5m from front boundary.
- Driveways shall be separated from side boundaries by a minimum of

The development as proposed is not considered to take into account the built form features of the locality and is not sympathetic with the existing character of the immediate locality.

Council’s Heritage Officer has reviewed the application submission and raised concerns with regard to whether the development could be considered sympathetic with the context of the immediate locality, as discussed at section 1.7.1 above.

It is noted that building frontages clearly address the street, the garages are articulated from the front façade and garage doors are less than 50% of the width of the dwelling.

Fencing could be undertaken pursuant to the Dividing Fences Act 1991.

Each dwelling is proposed with a GFA of more than 125sqm and as such, the development would require 4 car parking spaces.

The proposal includes a single garage and a hardstand car parking space on the driveway in front of each garage. Each driveway is separated from the side boundary by more than 1m.

The garage doors would not comprise more than 50% of the width of the dwellings.

No

N/A

Yes

<p>1m.</p> <ul style="list-style-type: none"> <li>• Driveways shall have a max cross-over width of 3m.</li> </ul>	Each driveway is proposed with a crossover of 2.8m.	
<p><u>4.11 Storage Facilities</u></p> <ul style="list-style-type: none"> <li>• 3 bedroom- 10m<sup>3</sup> storage volume to 5m<sup>2</sup> storage area</li> </ul>	The proposed development would provide adequate storage facilities.	Yes
<p><u>4.12 Site Facilities</u></p> <ul style="list-style-type: none"> <li>• letterboxes in an accessible location</li> <li>• air-con, satellite dishes and other ancillary structures to be located away from street frontage, not in a place where they are a skyline feature and adequately setback</li> </ul>	The necessary site facilities have been provided and would be considered acceptable in this circumstance.	Yes
<p><u>4.13 Fire Brigade Servicing</u></p> <ul style="list-style-type: none"> <li>• All dwellings located within 60m of a fire hydrant</li> </ul>	The subject site could be adequately serviced by fire fighting vehicles in this circumstance.	Yes
<p><u>4.14 Services</u></p> <ul style="list-style-type: none"> <li>• Encourage early consideration of servicing requirements</li> </ul>	Water, electricity, sewage and telephone services are available to the site	Yes
<p><u>4.15 Development near the coastline</u></p> <ul style="list-style-type: none"> <li>• Must minimise built intrusions into coastal landscape</li> <li>• Retain views to the ocean from roads and public spaces</li> <li>• Maintain buildings consistent with coastal character</li> </ul>	The site is not located in close proximity to the coastline.	N/A
<p><u>4.16 View sharing</u></p> <ul style="list-style-type: none"> <li>• To protect and enhance view sharing, significant view corridors</li> <li>• A range of view sharing measures to be considered for building design</li> </ul>	The proposed development will have minimal impact on view corridors of existing development.	Yes
<p><u>4.17 Retaining walls</u></p> <ul style="list-style-type: none"> <li>• To ensure well designed retaining walls that are structurally sound</li> </ul>	The proposed retaining walls are considered acceptable in this circumstance. All retaining walls proposed are less than 600mm in height and could otherwise be undertaken as exempt development.	Yes
<p><u>4.21 Additional controls for Dual Occupancies minimum site width</u></p> <ul style="list-style-type: none"> <li>• Provide sites adequate for buildings,</li> </ul>	The subject site has a width of 15.24m.	Yes

<p>car parking, POS, landscaping</p> <ul style="list-style-type: none"> <li>Sites must not be significantly constrained by flood, geotechnical or other environmental hazards</li> </ul>	<p>The depth of the subject site 43.28m.</p> <p>The proposed development satisfies the objectives of Council's additional controls for dual occupancies site width in this circumstance.</p>	
<p><u>4.22 Additional controls for Dual Occupancies –building character and form</u></p>	<p>The site is not located on a corner.</p> <p>The garages proposed are articulated from the front elevation.</p> <p>The proposal does not relate to alterations and additions or seek to convert an existing outbuilding to a dual occupancy.</p>	<p>Yes</p>
<p><u>4.23 Additional Controls for Dual Occupancy's – Deep Soil Zones</u></p>	<p>The submitted landscape plan indicates that a deep soil zone, 3m wide is proposed along the rear property boundary, comprising an area of 48sqm.</p> <p>A minimum 10% of the site area is required to be provided as deep soil zone area, as required via this clause The landscaped area required for Phase 2 of the development via clause 4.5 above is 137.38sqm. This clause requires that half of the landscaped area be provided as deep soil area. 50% of the required landscaped area is 68.64sqm.</p> <p>It is noted that no variation request was submitted with the review application submission. It is also noted that this matter was raised as part of the original assessment.</p>	<p>No</p>

**CHAPTER B2 – RESIDENTIAL SUBDIVISION**

The proposal seeks consent for the torrens title subdivision of the dual occupancy, which could not occur until such time as the Occupation Certificate was issued for the Phase 2 works. As such the majority of controls within this Chapter would not strictly apply to the proposed development. Notwithstanding, an assessment against the primary controls is provided below for reference.

<i>Controls/objectives</i>	<i>Comment</i>	<i>Compliance</i>
<u>5 Subdivision design - topography, natural landform &amp; significant vegetation</u>	The subdivision would be considered to have adequate regard to the natural topography of the site. The siting of the proposed development and subsequent development would be considered appropriate as evidenced by the assessment against Chapter B1 above.	Yes
<u>6 Subdivision lot layout – aspect &amp; solar access orientation</u>	The aspect and solar access of the proposed lots is considered acceptable.	Yes
<u>7 Minimum allotment size requirements</u>	See section 2.1.3 above.	Yes
<u>8 Lot width &amp; depth requirements</u>	The lot width and depth proposed is considered satisfactory.	Yes
<u>10 Building envelopes</u>	Building envelopes would not be required in this instance. The siting of the development on the site would be determined by the dual occupancies.	N/A

## CHAPTER D1 – CHARACTER STATEMENTS

### Thirroul

#### **Existing Character:**

*Thirroul residential area is characterised by a mix of single storey to two storey dwelling-houses including a number of circa 1920's and 1930's weatherboard and corrugated iron roofed bungalows. The coastal strip of Thirroul including along Lawrence Hargrave Drive contains a mix of single storey weatherboard and fibro dwellings and new contemporary dwellings and some medium density townhouses and walk up residential flat buildings.*

#### **Desired Future Character:**

*Residential development will remain primarily low density in nature. Some restricted medium density within close vicinity to the Thirroul village centre and the railway station is envisaged. Any new housing must be sympathetic with the existing Thirroul village built form and streetscape, particularly in older areas with weatherboard housed, pitched roofs and wide eaves. Environmental zones will be retained close to the escarpment to further maintain the strong village character of Thirroul.*

*Any dwellings should be designed to minimise the scale and bulk of the development through well articulated building forms.*

The proposal is for demolition of the existing structures, tree removal, construction of an attached dual occupancy and Torrens title subdivision of the dual occupancy once constructed. The subject site is zoned R3 Medium Density Residential. Dual Occupancy development is considered low density development, permissible in the zone and would normally be considered generally satisfactory with regard to the objectives of the R3 zone.

However, this chapter requires that any new housing be sympathetic with the existing built form and streetscape in this area, being an older area of Thirroul with weatherboard houses, pitched roofs and wide eaves. The submitted schedule of external finishes indicates that the development is proposed with face brick on the ground floor and a mix of vertical cladding and render on the upper floor. The applicant was requested via additional information to provide additional opportunities for cladding to be incorporated into the design of the ground floor be explored, however minimal changes in materials has been provided. The increased setback of the development coupled with the built form is not considered sympathetic to the surrounding historic building stock and local character of the area.

Therefore the development as proposed is not considered compatible with the desired future character statement for Thirroul in Chapter D1 in this circumstance.

### **CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT**

The application is reliant on a variation to part 7.7 of this Chapter, as discussed at Chapter A1 above. Councils Traffic Officer has advised that the design as presented is not considered appropriate.

Pursuant to Schedule 1 of this Chapter, as each dwelling is proposed with a GFA of 224sqm, 2 car parking spaces per dwelling are required. The proposal seeks consent for one of those spaces to be provided within a single garage, and one hardstand space on the driveway, being stacked parking. Due to the design of the development, the proposal is reliant on the variation to clause 7.7 being supported.

The proposed development does not comply with the requirements of Council's Car Parking Requirements controls and policies.

### **CHAPTER E6: LANDSCAPING**

The application submission was referred to Council's Landscape Officer for comment. Advice received indicates there are issues with the proposal.

Council's Landscape Officer has indicated the following:

- The impact of the development on the existing street tree is unreasonable – the proposal involves a major encroachment on Tree 21, a street tree, consistent with the streetscape character of the area. The driveway is proposed 1.3m from the tree trunk and works are proposed within the Structural Root Zone (SRZ) of tree. In addition, a masonry letter box, drainage pit, trench grate and uPVC pipe & trench are proposed within the Tree Protection Zone (TPZ). Councils position that a development which required only a single driveway on eastern side of the site would lessen the impact on the tree remains. The impact on Tree 21 is considered unreasonable;
- Planting is proposed within the OSD tank areas which would impact on their function. Whilst no mulch is proposed, the strappy leaved and coastal planting proposed would by their nature drop leaves over time and spread vegetatively which would impede the function of the OSD;
- a continuous hedge along eastern boundary is proposed to be removed which provides substantial screening and privacy to adjoining development. No planting is proposed along this

section of property with second storey bedroom windows overlooking and ground floor living spaces and utility area windows adjacent;

- turf is proposed leading to front door and with stacked parking proposed turf is unlikely to thrive. In addition turf is proposed on southern side of two storey dwelling and beneath roof eaves;
- the front garden bed has masonry letter boxes, two stormwater pits, uPVC pipes, an 1m easement within proposed planting area and two OSD weirs directing overflow into area;
- The proposed clotheslines are sited on the southern side of dwelling and are in shade;
- Fifteen trees are proposed to be removed and only ten are proposed to be installed as compensatory planting. A ratio of 1:1 is required. The screening function of existing vegetation should also be considered. The compensatory planting proposed is included to be within one metre of trees to be retained which would not be considered appropriate; and:
- The proposed landscaping design of the front yard is not considered consistent with the character of the area. The plants selected would be commonly selected for roadside median strips. Planting should be selected that suits and complements existing streetscape.

Therefore Council's Landscape Officer is unable to support the application in its current form.

#### **CHAPTER E7: WASTE MANAGEMENT**

It is considered that the proposed development satisfies the objectives of WDCP2009 Chapter E7 Waste Management. Conditions could be imposed to ensure that Waste Management is carried out to Council's Waste Management specification during construction.

#### **CHAPTER E11 HERITAGE CONSERVATION**

Council records indicate that a Local Heritage Item, WLEP2009 Heritage Item 6164, is within the immediate vicinity of the subject site. Due to the physical separation of the site and this item however, the development would not be considered to result in significant impacts on the heritage item.

Under Part 14.2.2 of this Chapter the impacts of the proposed development on the existing streetscape, visual relationship, character and external appearance, landscaping and as well as the vehicle access ways must be considered. As proposed, the development is reliant on stacked parking and dual driveways, which are not consistent with the character of the surrounding area. The materials and finishes proposed are also not considered to be sympathetic to the

Although not a local heritage item in its own right, the existing dwelling is part of the historic building stock of Thirroul and contributes strongly to the local character of the area with the dwellings on the southern side of George Street between house numbers 5 and 17 being constructed of the similar designs and era.

Council's Heritage Officer has reviewed the application submission and sought amendments to the materials and finishes

#### **CHAPTER E14 STORMWATER MANAGEMENT**

The application has been reviewed by Council's Development Engineering Officer in relation to stormwater management. Advice received indicates that the proposed development satisfies the objectives of WDCP2009 Chapter E14 Stormwater Management and is considered conditionally satisfactory with regards to stormwater management.

#### **CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION**

The application requires the removal of 15 trees to facilitate the proposal. The application submission was referred to Council's Landscape Officer for comment. As discussed at E6 above,

concerns have been raised that insufficient compensatory planting is proposed in response to the removal of 15 trees, there are conflicts between the landscape and stormwater plans with proposed works detailed within the Structural Root Zone (SRZ) of existing street trees and mulched garden beds within Onsite Detention Areas, potential amenity impacts on adjoining property through the removal of the trees/hedge along the Eastern side boundary, the Landscaping does not suit the character of the area and a 1.5m wide landscape strip has not been provided to the front of the property. Therefore, Council's Landscape Officer is unable to support the application in its current form.

#### **CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)**

The proposal involves minor earthworks to facilitate the proposed development.

The application submission was referred to Council's Development Engineering Officers for comment and no objections were raised. It is considered that the earthworks would have minimal detrimental impact on environmental functions and processes, neighbouring uses items and features of the surrounding land. Conditions could be recommended in this regard.

#### **CHAPTER E21 DEMOLITION AND ASBESTOS MANAGEMENT**

The application submission proposes demolition of the existing structures. A Site Waste Minimisation Plan, including waste removal was included in the application submission. Conditions could be imposed to minimise impacts and ensure that demolition is carried out to Council's and Work Safe NSW requirements.

#### **CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL**

Conditions could be imposed to minimise the impacts of the proposed works on the environment.