WLPP No.	Item No.2
DA No.	DA-2022/60
Proposal	Residential - demolition of existing dwelling, construction of a dual occupancy, retaining wall and Subdivision - Torrens title - two (2) lots
Property	3 Kathleen Crescent, Woonona
Applicant	Ingenuity Home Design
Responsible Team	Development Assessment and Certification - City Wide Team – (MJC)
Prior WLPP meeting	N/A

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Wollongong Local Planning Panel

The proposal has been referred to Local Planning Panel for advice pursuant to the Draft Wollongong Local Planning Panel Submissions Policy as the proposal has attracted 9 unique submissions following exhibition.

Proposal

The proposal seeks consent for the following:

- Demolition of the dwelling house; and
- Construction of two (2) attached dwelling housing associated drainage and landscaping; and
- Construction of a retaining wall; and
- Two (2) lot Torrens title subdivision of the development once constructed.

Permissibility

The site is zoned R2 Low Density Residential pursuant to Wollongong Local Environmental Plan (WLEP) 2009. The proposal is categorised as a dual occupancy (attached) and is permissible in the zone with development consent. Demolition is ancillary works to facilitate the proposal and the proposed Torrens subdivision of the completed development is also permissible.

Consultation

The application received nine (9) submissions in objection following notification from the 1 February 2022 to 15 February 2022 which are discussed at section 1.3 The main issues included:

- Traffic and parking;
- Privacy and amenity;
- View loss and
- Character of the area

The response from the applicant addressed the issues raised through revised stormwater plans and an amended built form design. Internal referrals with Development Engineering have been completed and considered satisfactory, including conditions of consent.

RECOMMENDATION

DA-2022/60 be approved subject to the conditions at Attachment 8.

1 APPLICATION OVERVIEW

1.1 PLANNING CONTROLS

The following planning controls apply to the development:

State Environmental Planning Policies:

- State Environmental Planning Policy (Resilience and Hazards) 2021
- State Environmental Planning Policy (Biodiversity and Conservation) 2021
- SEPP (Building Sustainability Index: BASIX) 2004

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan 2009

Other policies

- Wollongong City Wide Development Contributions Plan 2022
- Wollongong Community Participation Plan 2019

1.2 DETAILED DESCRIPTION OF PROPOSAL

The proposal comprises the following:-

Demolition

- demolition of existing dwelling and structures;

Construction

- Construction of an attached two storey dual occupancy.
- Construction of a retaining wall.
- Each dwelling will contain three (3) bedrooms with private open space located at ground level, accessed via internal living areas.
- A 3m wide deep soil zone is proposed along the rear boundary of the site with an area of 29.1sqm for unit one (1) and 29.8sqm for unit two (2).
- Both dwellings will be accessed via separate 3m wide driveways separated from one another by landscape planting.
- Both dwellings will be provided with a double car garage (6m x 6m) and available stacked car space forward of the building line (setback 6m). Pedestrian access to each dwelling will be obtained via the driveway and footpath to the front doors.
- Construction and finishing materials will comprise lightweight cladding, face brickwork, rendered brickwork and metal sheet roofing.

Subdivision

- 2 lot Torrens title subdivision is proposed following completion of the dual occupancy development.

1.1 BACKGROUND

Development History

Council's records indicate the following prior approvals for the site:-

BA-1995/121	Pergola	COMPLETED
BC-1999/213	Dwelling & Garage	COMPLETED
BA-1971/503	Dwelling & Garage	COMPLETED
BA-1975/280	Double Carport	COMPLETED
BA-1977/2136	Garage	COMPLETED
DA-2022/60	Residential - demolition of existing dwelling, construction of a dual occupancy and Subdivision - Torrens title - two (2) lots	Under assessment

No pre-lodgement meeting was held for the proposal.

Customer service actions

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

1.2 SITE DESCRIPTION

The site is zoned as R2 and located at 3 Kathleen Crescent, Woonona and the title reference is Lot 14 DP 239587. The site is located on the eastern side of Kathleen Crescent. The subject site is irregular in shaped with an area of 576sqm, with a street frontage length of 20.115m and rear boundary 18.29m. There is an existing single storey brick dwelling with ancillary structures on the site, all of which are to be demolished to make way for the proposed development.

The site slopes from the southern side boundary to northern side boundary, fall of 1m. The proposed stormwater drainage is to rainwater / OSD tanks with overflow discharged to kerb and gutter on Kathleen Crescent.

No trees are proposed for removal.

The site is located within an established residential area. Surrounding development comprises predominantly one and two storey detached dwellings.

Adjoining development is as follows:

- North (5 Kathleen Crescent) – battle axe single storey detached dwelling with driveway access to the north of the subject site.
- North (7 Kathleen Crescent) – Located north of the driveway access to 5 Kathleen Crescent, stepped dwelling including garage located under the dwelling due to the topography of the site. Detached brick dwelling.
- South (1 Kathleen Crescent) – two storey brick dwelling with access from both Doris Avenue and Kathleen Crescent.
- West (4 Kathleen Crescent) – two storey brick rendered dwelling.
- East (6 Doris Avenue) – single storey brick dwelling with POS orientated towards the north of the site.

Property constraints

Council records identify the land as being impacted by the following constraints:

- Acid Sulfate Soils – Class 5 – noted that the ADH RL has a minimum of 14.25 at the lowest point on site.

Reference to the deposited plan indicates that there are no restrictions on the title.

The aerial imagery and site inspection photographs forms Attachment 1.

The WLEP 2009 zoning map extract forms Attachment 2.

1.3 SUBMISSIONS

The application was notified to neighbouring properties in accordance with Council's Community Participation Plan 2019. Nine (9) objections were received following the exhibition period.

Concern	Comment
The parking impacts on the locality from the development of the site.	The proposed development includes a double garage for each unit that complies with WDCP2009, Chapter B1, Clause 4.10, in addition the garage is setback from the front boundary by 6 metres allowing for additional stacked parking wholly contained within the site. The proposed driveway design allows for approximately 8.5 metres between the driveways.
The plans (specifically the balcony screening, privacy and window orientation to neighbouring sites).	The redesign includes the addition of privacy screening on the northern and southern elevation of the balconies, side boundaries. Unit one and two have been redesigned internally on the upper level to reorientate the study to address Kathleen Crescent and is considered to contribute to passive surveillance to the street and public areas. The master bedroom, walk in robe and en-suite have been relocated to the rear of the site (eastern elevation) and is considered to minimise overlooking to the rear properties. The highlight bedroom windows address the side boundaries and the main bathroom window. A condition of consent will recommend that all bathroom windows are opaque. The side setback to the upper level exceeds that required by the WDCP 2009, Chapter B1, Clause 4.3 Both units one and two includes a ground floor dinning window and laundry window orientated to the side boundaries. The dinning window has a minimum height of 1500mm from proposed ground level and maximum height of 2100mm. The boundary fence is 1800mm in height. The setback from the side boundaries is stepped and exceeds the minimum side setback of 900mm under WDCP 2009, Chapter B1, Clause 4.3, at greater than 2 metres.
Fencing not detailed on the plans.	Fencing between neighbours could be undertaken pursuant to the *Dividing Fences Act 1991*. Condition of consent recommended with regards to boundary fencing.
Landscaping plan (specifically planting along the southern front elevation, previous planting has lifted the neighbouring carport). Roof orientation does not allow for solar panels to be orientated towards the sun as south facing	The Southern neighbours open carport is located very close to the boundary, minimal setback. The proposed planting includes 4 purple Hop bushes with a maximum width of 1.5m and height of 2m across 4.5m. A condition of consent could be included to consult with the southern neighbour prior to planting in this location. The redesign of the dwellings includes unit one having a gable roof line and unit two a skillion roof orientated to the north. Both roofs are now considered to allow for solar panels to be installed by the owner at a later date.
Existing character of the area and built form (specifically that there is no duplexes in the locality and	The zoning for the area is R2, low density residential. Dual occupancies are permitted with consent under the Wollongong LEP 2009 in an R2 zone.

houses in the area are more traditional in design).	Acknowledgment of duplexes in the locality includes 27a and 27b Collaery Road, Russel Vale, located withing 300m of the subject site. The area is characterised by established dwellings that are undergoing rejuvenation.
View loss of the escarpment	 The above image from Intramaps – 19 September 2022 shows the direct surrounding sites of 3 Kathleen Crescent. The dwelling directly to the east of the subject site, that would be most impacted by the proposed development, includes a covered area from the dwelling to the boundary adjoining 3 Kathleen Crescent, Woonona. A site inspection on the 14 March 2022 detailed this addition to 6 Doris Steet is single storey, and the boundary fence is approximately 1.8m in height. A further covered single storey area is located along the western boundary of 6 Doris Street. Additional existing structures currently adjoin the boundary of 6 Doris Street from 3 Kathleen Crescent, as detailed in the above image. The site directly to the south of the subject site has a car port located to the west of their private open space and boundary fencing approximately 1.8m in height. The survey plan details the existing Ridge height is 19.8m, the proposed Ridge height of the dual occupancy is 22.535m. The height increase is 2.735m. The proposed development is 2 storey and 8.061m in height. The development complies with clause 4.1 of Chapter B1, WDCP 2009. The second storey is setback from the boundary with 6 Doris Street by 8.926m and complies with Clause 4.3 of the WLEP 2009. Consideration of the surrounding sites has been included within this assessment and attachment 6 – View impact assessment. The two directly impacted sites include structures that currently impact view corridors to the escarpment from within their own sites. The proposed development is under the 9m height limit allowed within this area and includes a second storey setback of greater than 8m. It is acknowledged that the existing structure on site is single storey and the proposed dual occupancy built form is larger in scale than that on site currently. See also DCP Compliance Table at Attachment 7.

1.4 CONSULTATION

1.4.1 INTERNAL CONSULTATION

Development Engineering Officer

The application has been assessed in regard to traffic, stormwater and subdivision matters and found to be satisfactory. Conditions of consent were recommended.

1.4.2 EXTERNAL CONSULTATION

None required.

2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

2.1 STATE ENVIRONMENTAL PLANNING POLICY (BIODIVERSITY AND CONSERVATION) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 applies to the Wollongong Local Government Area, identified as being in the South Coast koala management area.

4.9 Development assessment process—no approved koala plan of management for land

There is no approved koala plan of management applying to the land, and the land does not have an area of at least 1 hectare (including adjoining land within the same ownership). As such, Chapter 3.2 does not apply to the land.

4.10 Development assessment process—other land

Consent can be issued for development on the subject land if Council is satisfied that the land is not core koala habitat.

core koala habitat means—

(a) an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas are recorded as being present at the time of assessment of the land as highly suitable koala habitat, or

(b) an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas have been recorded as being present in the previous 18 years.

The land has not been assessed by a suitably qualified and experience person as being highly suitable koala habitat, and Council has no record of the presence of koalas on the site currently or within the previous 18 years. The proposal does not include the removal of native vegetation. As such, the land is not considered to core koala habitat and consent can be granted for the proposed development in this regard.

2.2 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

2.2.1 STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

Chapter 4 Remediation of land

4.6 **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.

(2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subsection (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

(3) The applicant for development consent must carry out the investigation required by subsection (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.

(4) The land concerned is—

(a) land that is within an investigation area,

(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,

(c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital—land—

(i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and

(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).

Council records do not indicate any historic use that would contribute to the potential contamination of the site and the land is not identified as being contaminated on Council's land mapping system. The proposal does not comprise a change of use. No concerns are raised regarding contamination as relates to the intended use of the land and the requirements of clause 4.6.

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

The proposal is BASIX (certificate no. 1269814S_02 and A1269182S_02, dated 15 September 2022) 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.

2.2.3 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Clause 1.4 Definitions

The proposal is categorised as a 'dual occupancy (attached)':

dual occupancy (attached) *means 2 attached dwellings on one lot of land but does not include a secondary dwelling.*

Note—

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

dual occupancy *means a dual occupancy (attached) or a dual occupancy (detached). Note. Dual occupancies are a type of residential accommodation*

residential accommodation *means a building or place used predominantly as a place of residence, and includes any of the following:*

(a) attached dwellings, (b) boarding houses, (c) dual occupancies, (d) dwelling houses, (e) group homes, (f) hostels, (g) multi dwelling housing, (h) residential flat buildings, (i) rural workers' dwellings, (j) secondary dwellings, (k) semi-detached dwellings, (l) seniors housing, (m) shop top housing

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 R2 Low Density Residential.

Clause 2.3 – Zone objectives and land use table

The objectives of the zone are as follows:

a) To provide for the housing needs of the community within a low-density residential environment.

b) To enable other land uses that provide facilities or services to meet the day to day needs of residents.

The proposal is satisfactory with regard to the above objectives. The development will promote the objective of providing for the housing needs of the community within a low-density residential environment. The second objective is not relevant to the proposal.

The land use table permits the following uses in the zone:-

*Attached dwellings; Backpackers' accommodation; Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; **Dual occupancies**; Dwelling houses; Exhibition homes; Exhibition villages; Group homes; Home-based child care; Hostels; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Signage; Tank-based aquaculture; Veterinary hospitals*

The proposal is categorised as a ***dual occupancy*** as defined above and is permissible in the zone with development consent.

Demolition is ancillary work to facilitate the proposal and as such is also permissible.

Clause 2.6 Subdivision—consent requirements

Consent is sought for subdivision as part of this application.

Clause 2.7 Demolition requires development consent

Consent is sought for the demolition of the existing structures on the site pursuant to this clause.

Part 4 Principal development standards

Clause 4.1 Minimum subdivision lot size

The minimum allotment size for the subdivision of the subject site under Clause 4.1 is 449m². However, Clause 4.1(4C) stipulates that this clause does not apply in relation to the subdivision of land in a residential zone on which there is an "existing" dual occupancy.

In relation to the requirement that a dual occupancy development first be "existing", Council's approach via conditions is to require the dual occupancy to first receive an occupation certificate before a subdivision certificate can be issued. In order to receive an occupation certificate, the dual occupancy is considered "existing". This is Council's consistent approach.

The application is satisfactory subject to a consent condition that an Occupation Certificate is issued for the dual occupancy prior to the release of the Subdivision Certificate. This ensures that the dual occupancy is completed prior to subdivision; therefore, the subdivision will be of an "existing" dual occupancy.

Clause 4.3 Height of buildings

Clause 4.3 stipulates a maximum building height of 9m. The proposed dual occupancy has a height of 8.061m which is compliant.

Clause 4.4 Floor space ratio

Maximum FSR permitted for the zone: **0.5:1**

Site area: **576m²**

GFA	Proposed	359.6m^2
	Exclusions	72m^2 (garages)
	Total GFA	287.6m^2
FSR Total	287.6m^2/576m^2 = **0.49:1**	
Lot one	Site area Unit one GFA 139.2m^2/294m^2	288m^2 143.8m^2 (exc. Garage 36m^2) = **0.49:1**
Lot two	Site area Unit two GFA 139.2m^2/306.7m^2	288m^2 143.8m^2 (exc. Garage 36m^2) = **0.49:1**

Part 5 Miscellaneous provisions

None applicable.

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

The development is already serviced by electricity, water and sewerage services. Conditions will be applied to the consent in relation to satisfying the requirements of the relevant servicing authorities. A condition in relation to the requirement for a s.73 certificate from Sydney Water has been imposed.

Clause 7.5 Acid Sulfate Soils

The site is identified as being affected by class 5 acid sulphate soils. An acid sulphate soils management plan is not required as the AHD RL for the subject site is a minimum of 14.25. As such, no conditions are recommended in this regard.

Clause 7.6 Earthworks

The proposal involves minor earthworks to facilitate the proposed development. The earthworks are not expected to have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features surrounding land.

2.3 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT

None applicable.

2.4 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN

2.4.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The development has been assessed against the relevant chapters of WDCP 2009 and found to be satisfactory. Variation to development controls of the WDCP2009 Chapter B1, Clauses 4.8.2.11 and 4.10.2.4 (a) have been requested as the garage door with exceeds 50% of the total width of the dwellings. A full assessment of the proposal in relation to Chapter B1 of WDCP 2009 is contained at Attachment 7.

2.4.2 WOLLONGONG CITY WIDE DEVELOPMENT CONTRIBUTIONS PLAN 2021

Figure 1 Intramaps - Development Contributions mapping - 14 September 2022

Wollongong City-Wide Development Plan - City Wide

The Wollongong City-Wide Development Contributions Plan applies to the subject property. This Plan levies a contribution based on the estimated cost of development.

The proposed cost of development* is over $200,001 – a levy rate of 1% applies.

***Contribution Amount** = Cost of Works $660,000 x 1% levy rate = $6,600.00.*

Note: The proposed cost of development is calculated in accordance with clause 25J of the EP&A Regulations, however if a separate cost estimate is not provided with the DA, use the cost of works stated on the application.*

2.5 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.

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

Environmental Planning and Assessment Regulation 2021

2 Savings

Any act, matter or thing that, immediately before the repeal of the 2000 Regulation, had effect under the 2000 Regulation continues to have effect under this Regulation.

'2000 Regulation' means the Environmental Planning and Assessment Regulation 2000 as in force immediately before its repeal on 1 March 2022.

6 Determination of BASIX development

BASIX Certificate A1269812S_02 and A1269814S_02, dated 15 September 2022 supplied for assessment.

61 Additional matters that consent authority must consider

The development proposal involves the demolition of the existing dwelling and strictures on the site and as such AS2601 - 2001: *The Demolition of Structures* is a prescribed matter for consideration under Clause 92. Demolition practices and procedures will be required to be undertaken in accordance with AS2601 – 2001; conditions of consent will be imposed in this regard.

62 Consideration of fire safety

Not applicable

63 Considerations for erection of temporary structures

Not applicable

64 Consent authority may require upgrade of buildings

Not applicable – existing dwelling and structures on site are proposed for demolition.

2.7 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT

There are not expected to be adverse environmental impacts on either the natural or built environments or any adverse social or economic impacts in the locality.

This is demonstrated through the following:

- The proposal is satisfactory with regard to the applicable planning controls as detailed in the body of this report:
- The concerns raised in submissions have been considered the plans have been revised to address some concerns.
- Internal referrals are satisfactory subject to appropriate conditions of consent.

Context and Setting:

The design of the proposed development is considered to be satisfactory with regard to the context of the neighbourhood and with regards to the desired future character statement for Woonona

Access, Transport and Traffic:

The design and configuration of the vehicular access and car parking arrangements is considered to be acceptable.

Public Domain:

The development is not expected to have adverse impact on the public domain. The form of the building is acceptable with regard to the current and desired future character of the area. Driveway placement ensures availability of on-street car parking and driveway design provides opportunities for landscaping inside the frontage of the site and adjacent to the boundaries.

Utilities:

Refer to discussion above in regards to Clause 7.1 of WLEP 2009. The site is serviced and minor augmentation of utilities to service the proposed development is expected. Conditions are recommended for imposition in this regard.

Heritage:

No heritage items will be impacted by the proposal.

Other land resources:

The proposal is considered to contribute to orderly development of the site and is not envisaged to impact upon valuable land resources.

Water:

Supply/ consumption – the site is connected to the reticulated water and sewerage system and some augmentation will be required. Rainwater tanks are also proposed.

Water quality impacts – with the implementation of appropriate soil and water management during construction, it is expected that water quality of downstream watercourses will not be affected.

Soils:

With the implementation of appropriate soil and water management during construction, it is expected that soil resources will not be compromised during the course of construction activities.

Air and Microclimate:

The proposal is not expected to have negative impact on air or microclimate.

Flora and Fauna:

The proposed development will not have significant impacts on local flora and fauna. There is no vegetation removal proposed or required. The proposal includes a landscape plan that makes provision for deep soil planting and other landscaping on site that will offer habitat opportunities within the subject site.

Waste:

Construction waste can be managed via the imposition of appropriate conditions.

Bins will be stored in an appropriate location and will be collected from the street frontage.

Energy:

The proposal is not expected to involve unreasonable energy consumption subject to the implementation of the measures identified in the BASIX certificate.

Noise and vibration:

A condition is to be imposed that nuisance be minimised during any construction, demolition, or works.

Natural hazards:

There are no known site constraints that would preclude development of the site.

Technological hazards:

There are no known hazards.

Safety, Security and Crime Prevention:

The development is not expected to give rise to increased opportunities for criminal and/ or antisocial behaviour.

Social Impact:

There are not expected to be adverse social impacts arising from the proposed development.

Economic Impact:

There are not expected to be adverse economic impacts arising from the proposed development.

Site Design and Internal Design:

The site design, car parking and manoeuvring arrangements proposed are acceptable. All other aspects of the proposal are compliant with applicable controls. The application does not result in any departures from development standards but does request a variation to the garage door width of Council's development control plan.

Construction:

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

Construction impacts have the potential to impact on the amenity of the neighbourhood. Conditions are imposed in relation to hours of work, erosion and sedimentation controls, works in the road reserve, excavation, demolition and use of any crane, hoist, plant or scaffolding.

Cumulative Impacts:

The proposal is not expected to have negative cumulative impacts.

2.8 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT

Does the proposal fit in the locality?

The proposal is considered appropriate with regard to the zoning of the site and is not expected to have negative impacts on the amenity of the locality or adjoining developments.

Are the site attributes conducive to development?

There are no site constraints that would prevent the proposal.

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

Refer to discussion above in Section 1.3 of this report.

2.10 SECTION 4.15(1)(E) THE PUBLIC INTEREST

The application is not expected to have unreasonable impacts on the environment or the amenity of the locality. It is considered appropriate with consideration to the zoning and the character of the area is satisfactory with regard to the applicable planning controls. The proposal is considered to be in the public interest.

3 CONCLUSION

The proposed development has been assessed with regard to the relevant prescribed matters for consideration outlined in Section 4.15 of the Environmental Planning & Assessment Act 1979, the provisions of the relevant State Environmental Planning Policies discussed in this report, Wollongong Local Environmental Plan 2009 and all relevant Council DCPs, Codes and Policies.

The proposed development is permissible with consent and is consistent with the zone objectives and the provisions of applicable planning controls. The proposal does request a variation to Council's DCP controls for garage door width which has been considered and is capable of support.

The social, environmental and economic impacts of the development have been assessed and no concerns are raised. Internal referrals were satisfactory. The plans have been revised to address the concerns raised in the neighbours' submissions and conditions imposed to mitigate potential impacts

4 RECOMMENDATION

DA-2022/60 be approved subject to the conditions at Attachment 8.

ATTACHMENTS

1 Aerial imagery and site inspection photos

2 Wollongong LEP 2009 zoning map

3 Architectural Plans

4 Drainage Plans

5 Landscape Plans

6 View impact assessment

7 WDCP 2009 compliance table

8 Draft Conditions

Attachment 1 - DA-2022/60

3 Kathleen Crescent, Woonona

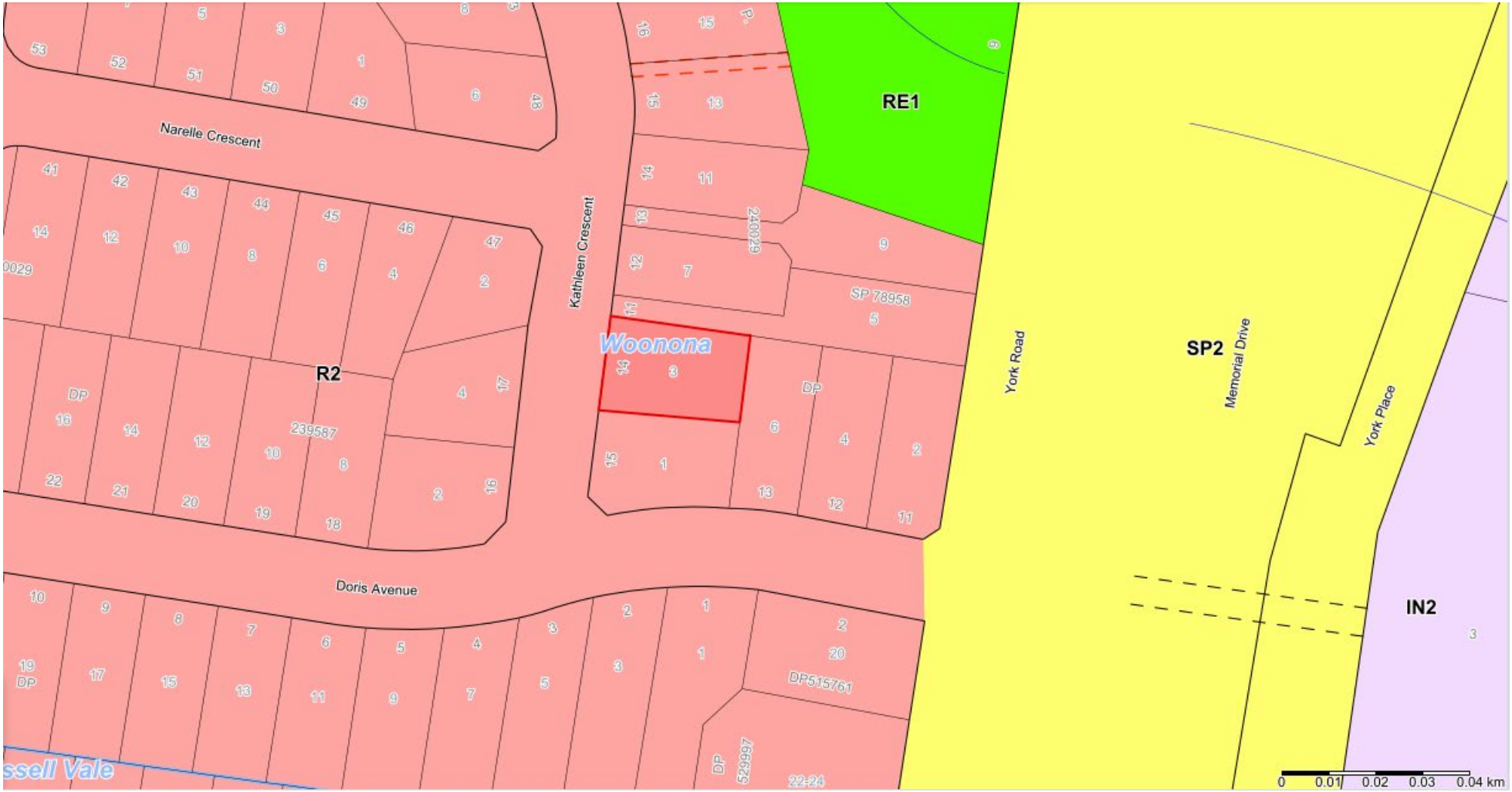
Site inspection 14 March 2022


freedom


Freedom
3

Doris Avenue

Attachment 2 - Wollongong LEP 2009 zoning map – Intamaps – 12 September 2022



Attachment 3 - Architectural Plans

DEVELOPMENT APPLICATION
ISSUE 'B'-30/06/22

INGENUITY
HOME DESIGN

PROPOSED DUAL OCCUPANCY

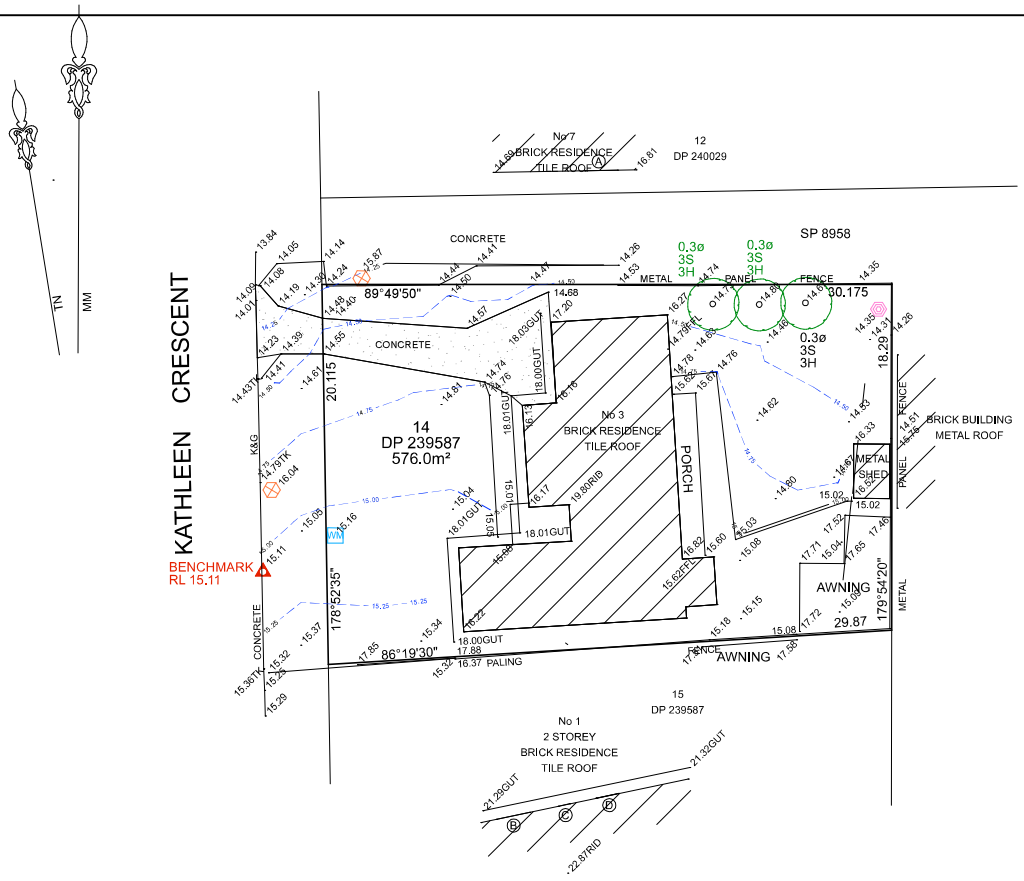
for

MIHAIL

at

LOT 14 IN DP 239587, 3 KATHLEEN CRES, WOONONA

CLIENT: Mihail	JOB ADDRESS: 3 KATHLEEN CRES, WOONONA	JOB NUMBER: 20210062 DATE: 30/06/2022 ISSUE: B SHEET 1 of 14	bdaa ACCREDITED BUILDING DESIGNER	Phone 0403 939 193 www.ingenuityhomedesign.com.au bryce@ingenuityhomedesign.com.au	INGENUITY HOME DESIGN



ORIGINAL SURVEY

SCALE 1:200 @A3

DIAL BEFORE YOU DIG www.1100.com.au

CLIENT:	JOB ADDRESS:	JOB NUMBER:	20210062
Mihail	3 KATHLEEN CRES, WOONONA	DATE:	30/06/2022
		ISSUE:	B
			SHEET 2 of 14

bdaa ACCREDITED BUILDING DESIGNER

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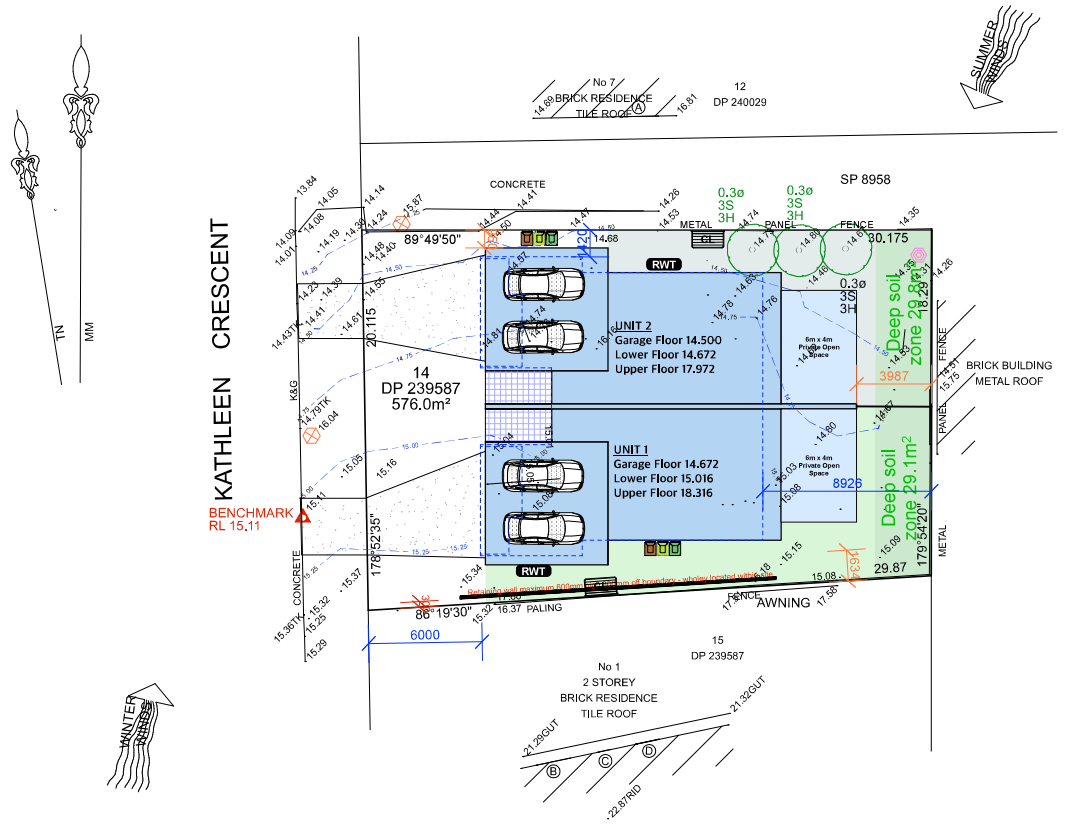
INGENUITY HOME DESIGN



NOTE:- WIDTH LESS THAN 1.5M HAVE NOT BEEN INCLUDED IN THE OPEN SPACE AREA CALCULATIONS

SITE PLAN

SCALE 1:200 @A3

SITE CALCULATIONS

UNIT 1	
Site Area	288.0 m²
Lower Floor Area	68.1m²
Upper Floor Area	75.7 m²
Garage	36.0 m²
TOTAL AREA	143.8 m²
FSR	0.499:1
UNIT 2	
Site Area	288.0 m²
Lower Floor Area	68.1m²
Upper Floor Area	75.7 m²
Garage	36.0 m²
TOTAL AREA	143.8 m²
FSR	0.499:1

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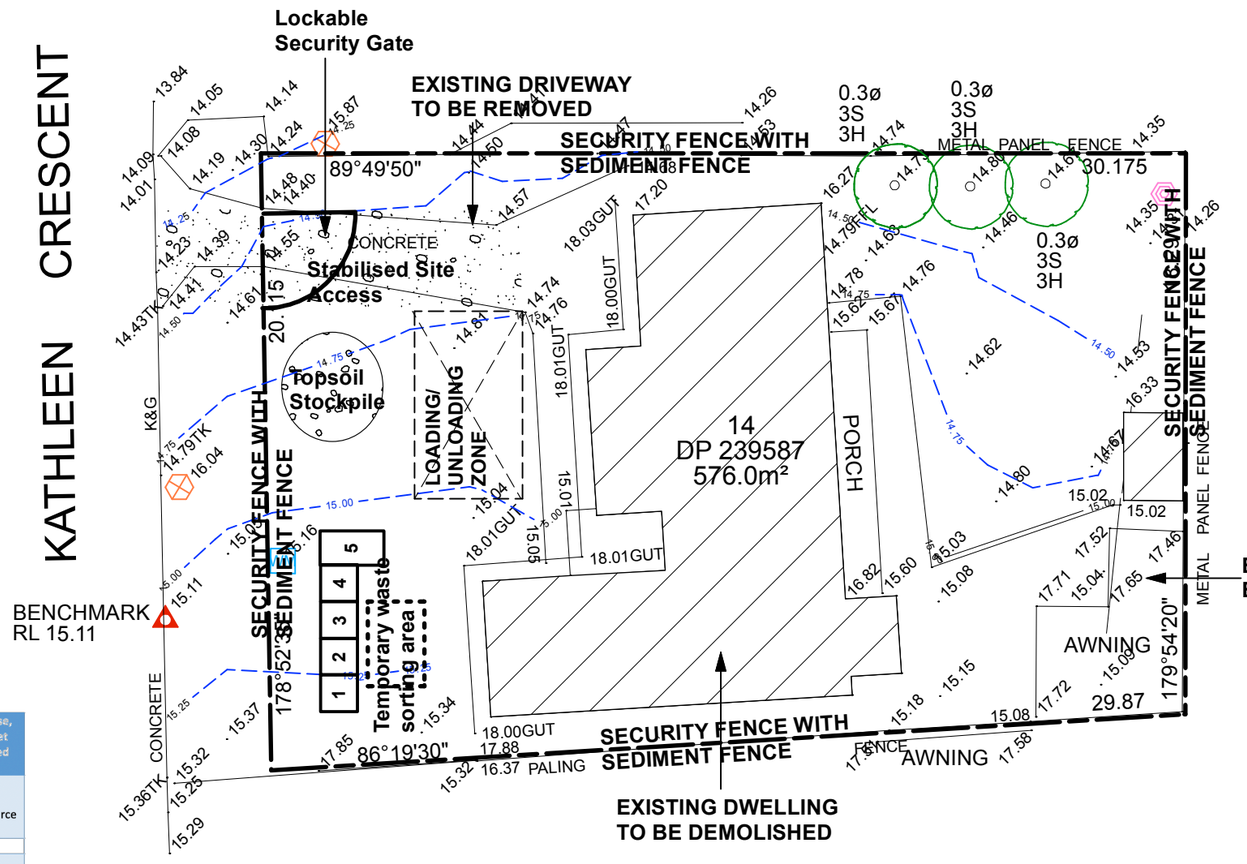
WASTE BAYS

1. BRICK / CONCRETE WASTE BAY
2. TIMBER WASTE BAY
3. PLASTERBOARD WASTE BAY
4. METAL WASTE BAY
5. GENERAL WASTE BAY

Demolition and Construction Material

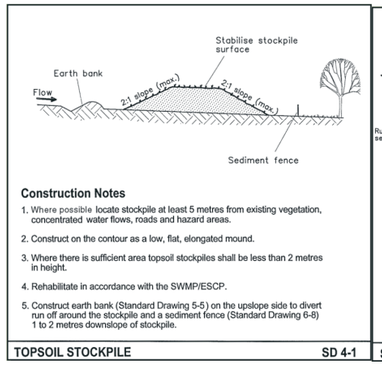
Type of Waste	REUSE Estimated Volume (m^3) or Weight (t)	RECYCLING Estimated Volume (m^3) or Weight (t)	DISPOSAL Estimated Volume (m^3) or Weight (t)	Specify method of onsite reuse, contractor and recycling outlet and/or waste depot to be used
Excavation Material			36m^3	Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Timber		2m^3		Reused on site / sold
Concrete			18m^3	Dispose via skip and waste removal contractor to Wollongong Recycling
Bricks			8m^3	Dispose via skip and waste removal contractor to Wollongong Recycling
Tiles			4m^3	Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Metal			2m^3	Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Glass			<1m^3	Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Plasterboard			3m^3	Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Fixtures and Fittings			<1m^3	Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Packaging and Paper / Cardboard		Qty Unknown		Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Residual Waste		Qty Unknown		Dispose via skip and waste removal contractor to Wollongong Waste and Resource Recovery Park
Hazardous / Special Waste			<1m^3 (Fibro cladding and eave lining is potentially Asbestos)	Removed and disposed of via licensed asbestos waste removal contractor

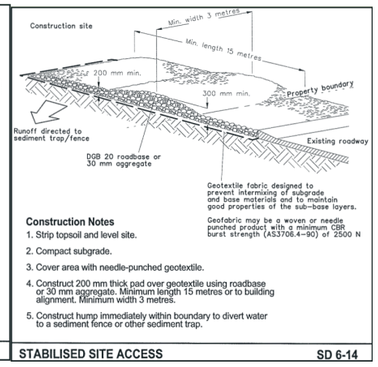


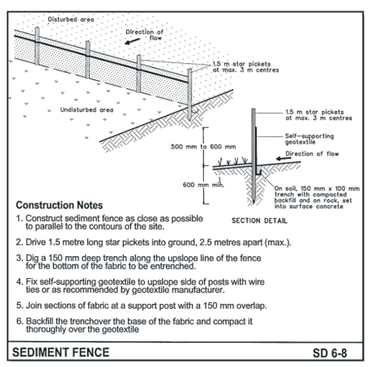
WASTE BAYS 1-4 ARE TO BE CONSTRUCTED USING SHADE CLOTH OR SEDIMENT FENCING. WHERE THE WASTE STREAM IS MADE UP OF LIGHT MATERIAL SUCH AS PAPER AND CARDBOARD, THE WASTE BAYS MUST CONSIST OF A CONTAINER FOR THE STORAGE OF THIS MATERIAL.

SITE DEMOLITION/ WASTE MANAGEMENT/ SOIL EROSION PLAN

SCALE 1:200 @A3







NOTES:

1. Site works will not start until erosion and sediment control works outlined in clauses 2 to 4 below, are installed and functional.
2. The entry to and dep[arture of vehicles from the site will be confined to one stabilised point. Barrier fencing will be used to restrict all vehicular movements to that point. Stabilisation will be achieved by constructing a stabilised site access following SD 6-14.
3. Sediment fences will be installed as shown on this plan.
4. Top soil from the construction area will be stripped and stockpiled in the location shown for later use in landscaping the site.
5. Approved bins for all waste types will be provided and arrangements made for regular collection and disposal.
6. Guttering to be connected to water tank and stormwater system as soon as practicable.
7. Topsoil to be spread and all disturbed areas to be stabilised within 4 weeks of completion of works.
8. All erosion and sediment controls to be checked at least weekly and after rain to ensure tey are maintained in a fully functional condition.

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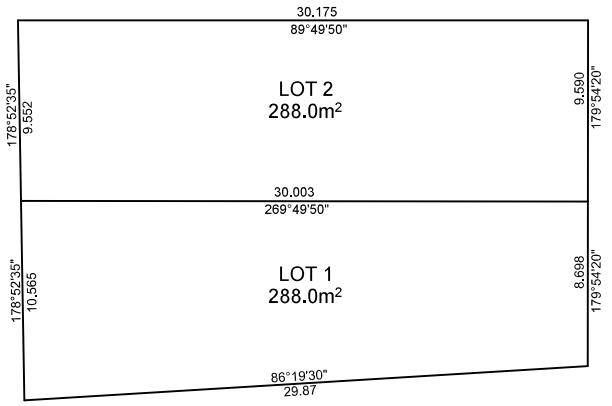

TORRENS SUBDIVISION PLAN

SCALE 1:200 @A3

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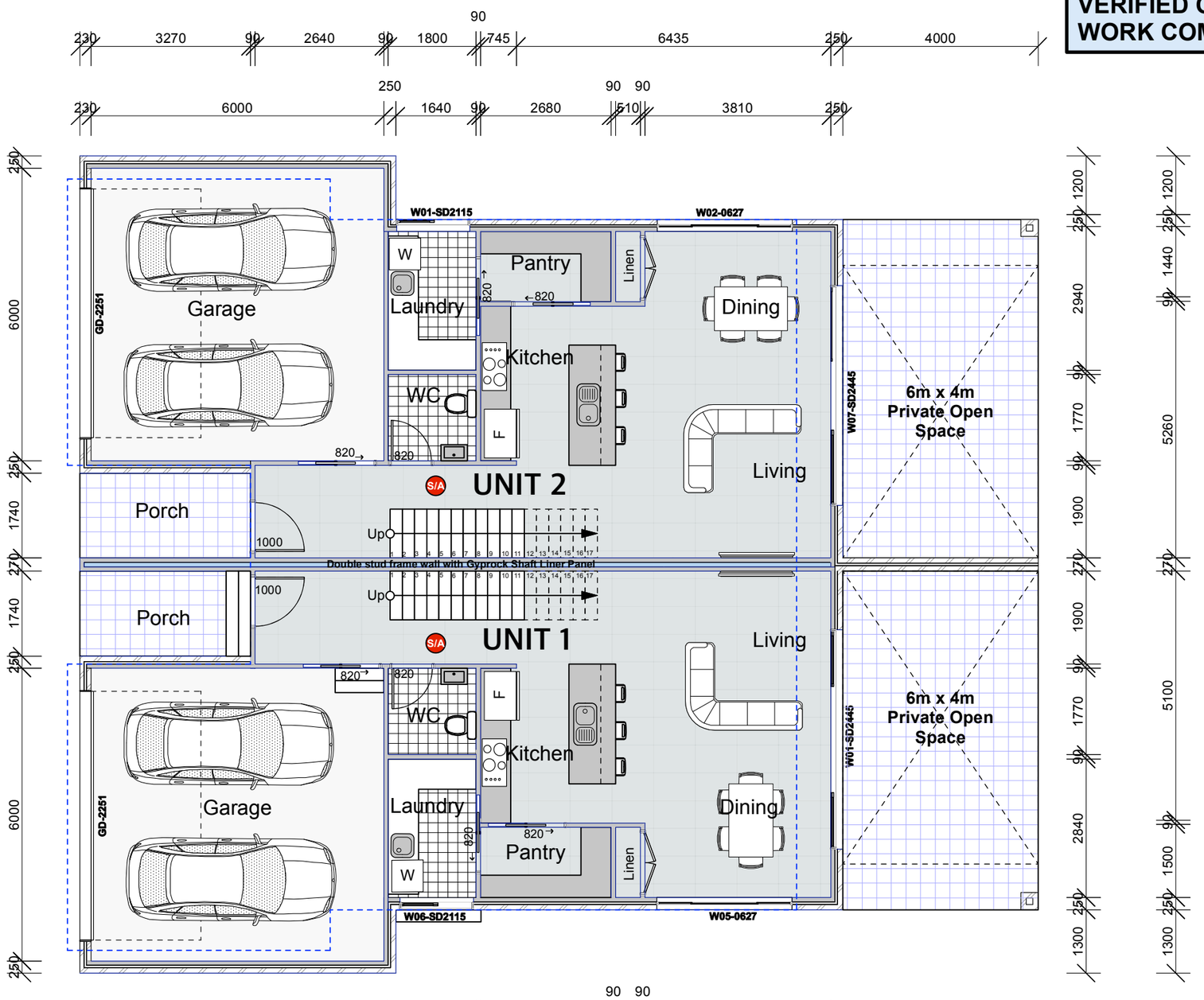
CERTIFICATE NUMBER: 1269812S_02 - UNIT 1

SCHEDULE FOR BASIX REQUIREMENTS

ITEM	REQUIREMENT UNDER BASIX	CERTIFIER CHECK
FIXTURES		
Shower Heads	4* Minimum Rating	Yes
Toilet Flushing System	4* in each toilet in the development	Yes
Kitchen Taps	3* Minimum Rating	
Bathroom Taps	3* Minimum Rating	
RAINWATER TANK		
Rainwater Tank	1000 Litres minimum capacity	Yes
Roof Area Collection	Rainwater tank to collect roof runoff from at least 120 square metres.	Yes
Rainwater Tank Connection	Tank to be connected to all toilets	Yes
Rainwater Tank Connection	Minimum one outdoor tap. Not for human consumption.	Yes
THERMAL COMFORT		
Nathers Energy Requirement	The development is to be constructed with all the thermal performance specifications set out in the Basix Certificate. -R2.4 in external walls -R2.58 in ceiling -55mm foil backed blanket under metal roof -All windows to be clear single glazing aluminium frame	Yes
ENERGY COMMITMENTS		
Hot Water	Gas Instantaneous - 6 star	Yes
Cooling System	Living Areas: 1-phase Air Conditioning 5.5 star Bedrooms: 1-phase Air Conditioning 5.5 star	Yes
Heating System	Living Areas: 1-phase Air Conditioning 5.5 star Bedrooms: 1-phase Air Conditioning 5.5 star	Yes
Lighting	Fluorescent or LED lighting to be installed thruout	Yes
Bathroom Ventilation	Individual fan, ducted. Manual on/off switch	Yes
Kitchen Ventilation	Individual fan, ducted. Manual on/off switch	Yes
Laundry Ventilation	Individual fan, ducted. Manual on/off switch	Yes
Refrigerator Space	Well Ventilated	
Clothes Drying	External clothes line	
Kitchen Appliances	Gas cooktop, electric oven	

ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO WORK COMMENCING.



W3 1206 ← WINDOW SIZE

DENOTES BASIX WINDOW REFERENCE

S/A DENOTES SMOKE ALARM TO AS3786 'HARD-WIRED' TO ELECTRICITY MAINS.
(THE LOCATION OF COMPLIANT SMOKE ALARMS MUST BE IN ACCORDANCE WITH THE PROVISIONS OF THE BUILDING CODE OF AUSTRALIA).

LOWER FLOOR PLAN

SCALE 1:100 @A3

All recessed downlights in the thermal envelope to be IC-4 rated and insulation installed directly over the top. All exhaust fans to be fitted with dampers and insulation installed up to cover where required

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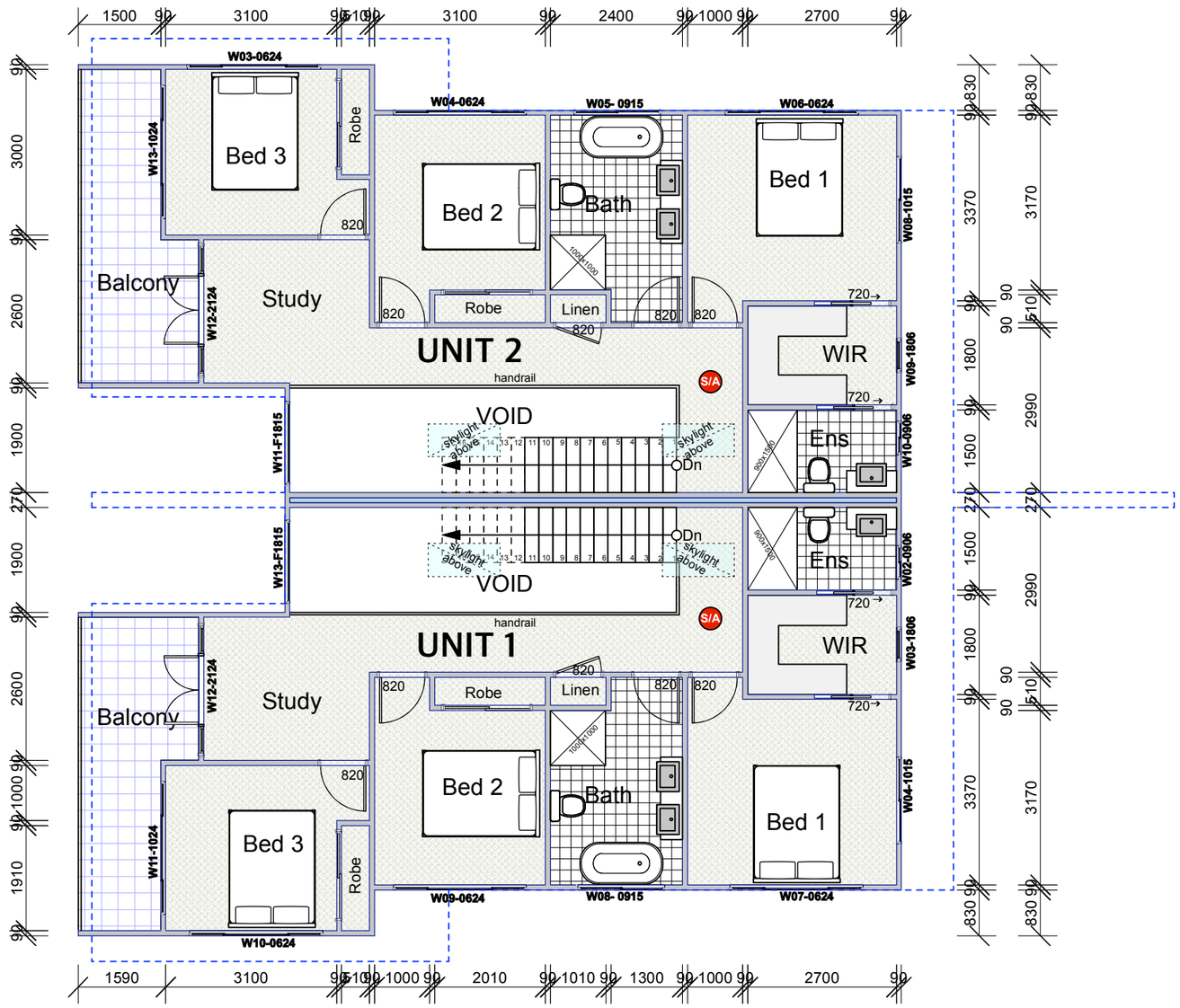
CERTIFICATE NUMBER: 1269814S_02 - UNIT 2

SCHEDULE FOR BASIX REQUIREMENTS

ITEM	REQUIREMENT UNDER BASIX	CERTIFIER CHECK
FIXTURES		
Shower Heads	4* Minimum Rating	Yes
Toilet Flushing System	4* in each toilet in the development	Yes
Kitchen Taps	3* Minimum Rating	
Bathroom Taps	3* Minimum Rating	
RAINWATER TANK		
Rainwater Tank	1000 Litres minimum capacity	Yes
Roof Area Collection	Rainwater tank to collect roof runoff from at least 120 square metres.	Yes
Rainwater Tank Connection	Tank to be connected to all toilets	Yes
Rainwater Tank Connection	Minimum one outdoor tap. Not for human consumption.	Yes
THERMAL COMFORT		
Nathers Energy Requirement	The development is to be constructed with all the thermal performance specifications set out in the Basix Certificate. -R2.4 in external walls -R2.58 in ceiling -55mm foil backed blanket under metal roof -All windows to be clear single glazing aluminium frame	Yes
ENERGY COMMITMENTS		
Hot Water	Gas Instantaneous - 6 star	Yes
Cooling System	Living Areas: 1-phase Air Conditioning 5.5 star Bedrooms: 1-phase Air Conditioning 5.5 star	Yes
Heating System	Living Areas: 1-phase Air Conditioning 5.5 star Bedrooms: 1-phase Air Conditioning 5.5 star	Yes
Lighting	Fluorescent or LED lighting to be installed thruout	Yes
Bathroom Ventilation	Individual fan, ducted. Manual on/off switch	Yes
Kitchen Ventilation	Individual fan, ducted. Manual on/off switch	Yes
Laundry Ventilation	Individual fan, ducted. Manual on/off switch	Yes
Refrigerator Space	Well Ventilated	
Clothes Drying	External clothes line	
Kitchen Appliances	Gas cooktop, electric oven	

ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO WORK COMMENCING.



W3-1206 ← WINDOW SIZE

└ DENOTES BASIX WINDOW REFERENCE

S/A DENOTES SMOKE ALARM TO AS3786 'HARD-WIRED' TO ELECTRICITY MAINS.
(THE LOCATION OF COMPLIANT SMOKE ALARMS MUST BE IN ACCORDANCE WITH THE PROVISIONS OF THE BUILDING CODE OF AUSTRALIA).

UPPER FLOOR PLAN

SCALE 1:100 @A3

All recessed downlights in the thermal envelope to be IC-4 rated and insulation installed directly over the top. All exhaust fans to be fitted with dampers and insulation installed up to cover where required

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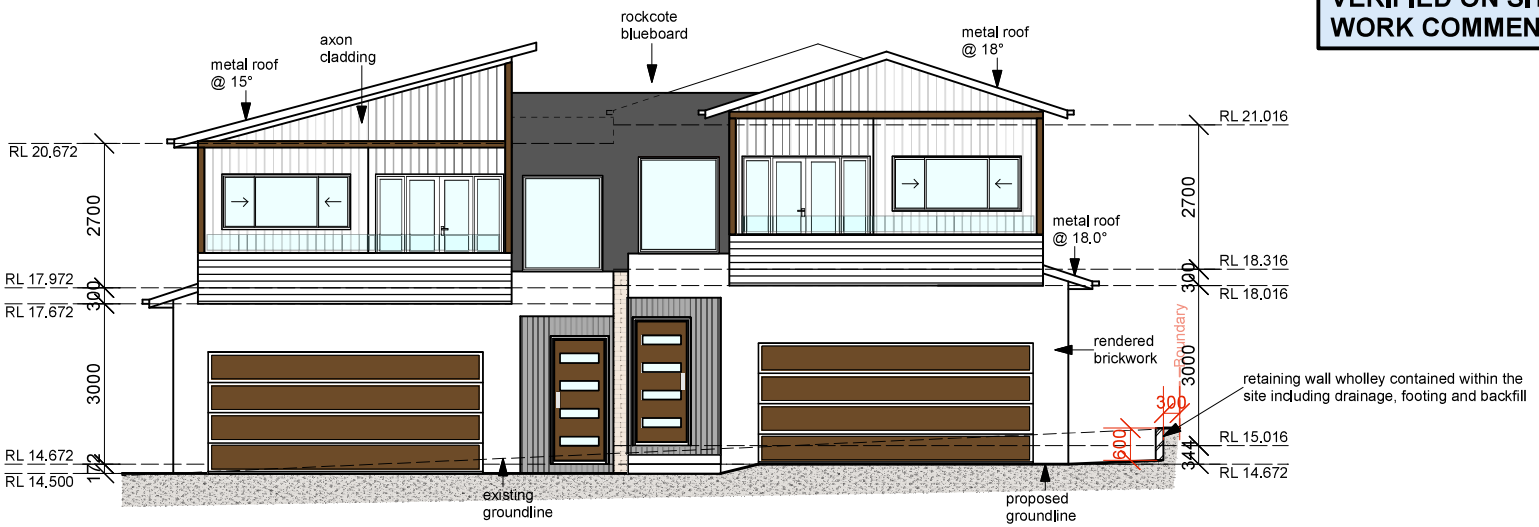
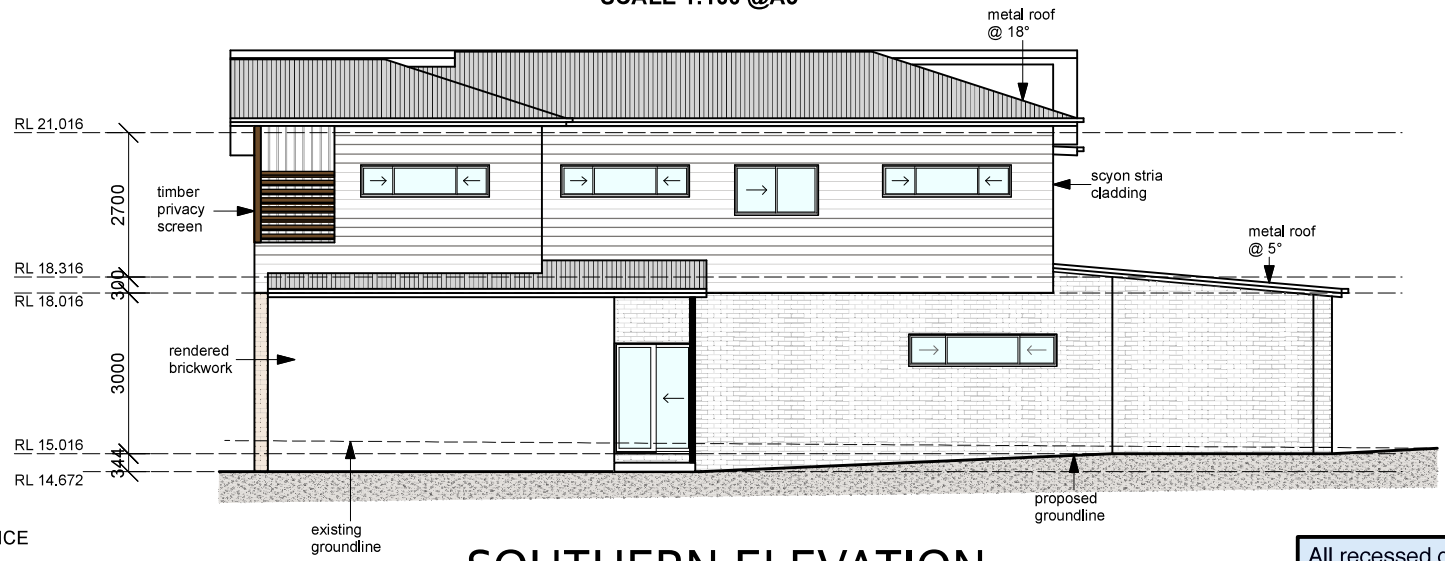


WESTERN ELEVATION
SCALE 1:100 @A3



W3-1206 ← WINDOW SIZE

└ DENOTES BASIX WINDOW REFERENCE

S/A DENOTES SMOKE ALARM TO AS3786 'HARD-WIRED' TO ELECTRICITY MAINS.
(THE LOCATION OF COMPLIANT SMOKE ALARMS MUST BE IN ACCORDANCE WITH THE PROVISIONS OF THE BUILDING CODE OF AUSTRALIA).

SOUTHERN ELEVATION
SCALE 1:100 @A3

All recessed downlights in the thermal envelope to be IC-4 rated and insulation installed directly over the top. All exhaust fans to be fitted with dampers and insulation installed up to cover where required

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EASTERN ELEVATION

SCALE 1:100 @A3

NORTHERN ELEVATION

SCALE 1:100 @A3

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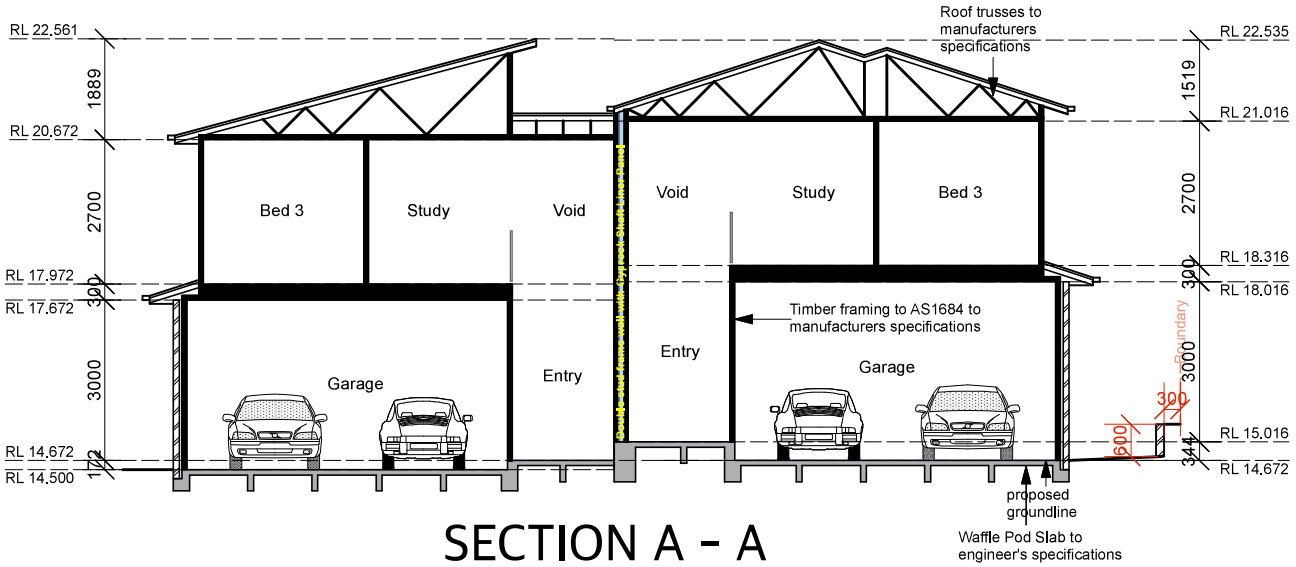
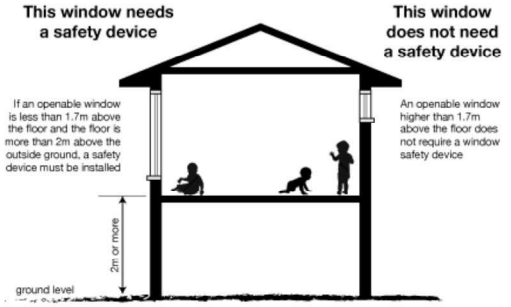


SECTION A – A

SCALE 1:100 @A3



An openable window will need a safety device installed if:

1. the lowest part of the window is less than 1.7m above the floor; and
2. the internal floor under the window is 2m or more above the outside surface.

The safety devices must be able to limit the maximum window opening to 12.5cm, must be robust, and must be childproof. Suitable window safety devices would include window locks or safety screens, but not ordinary insect screens.

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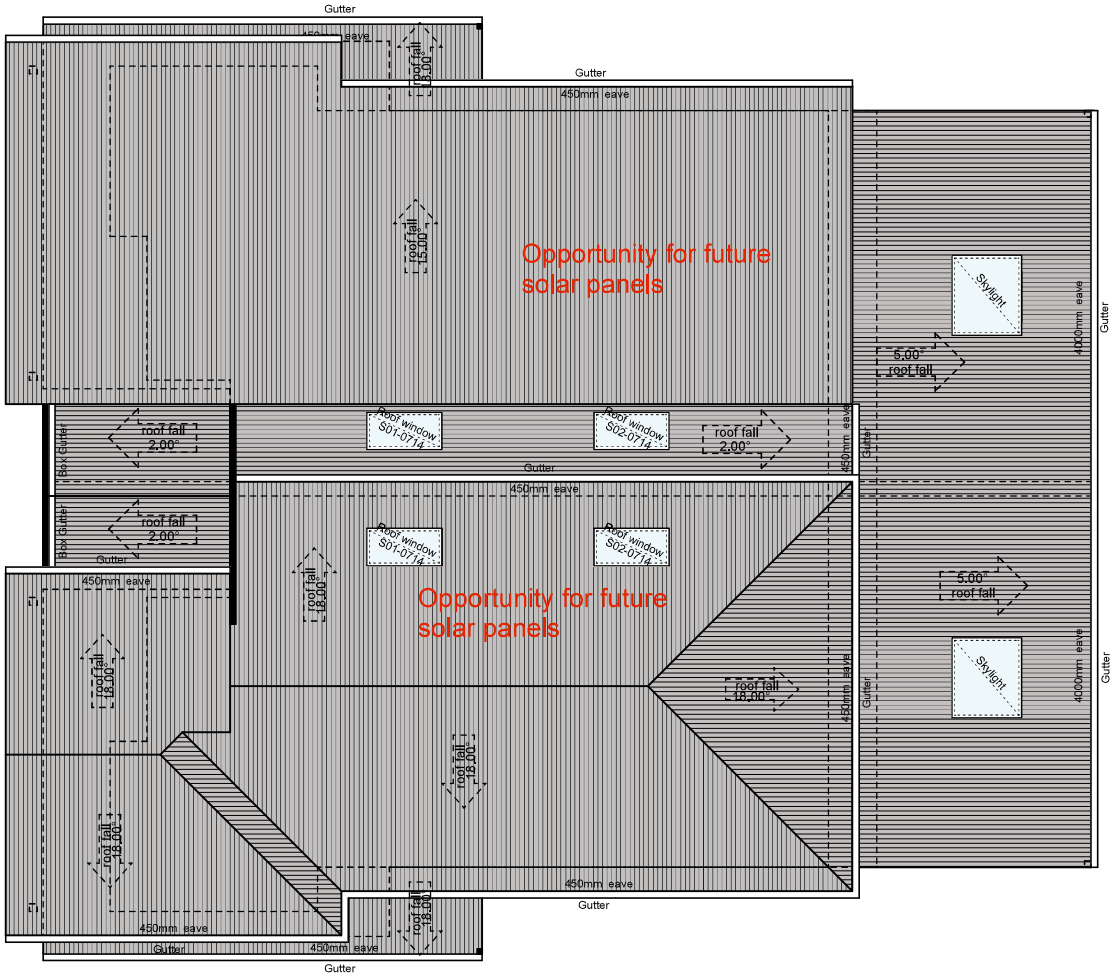

ROOF PLAN

SCALE 1:100 @A3

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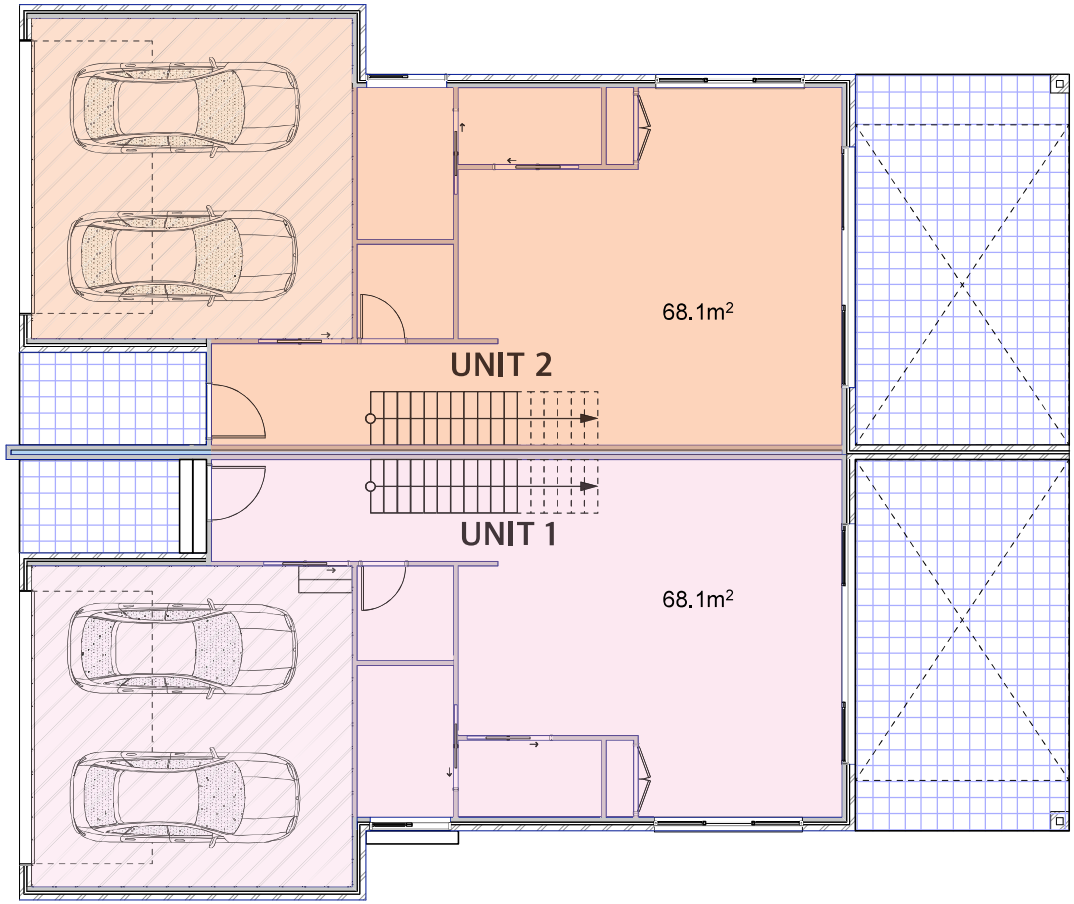

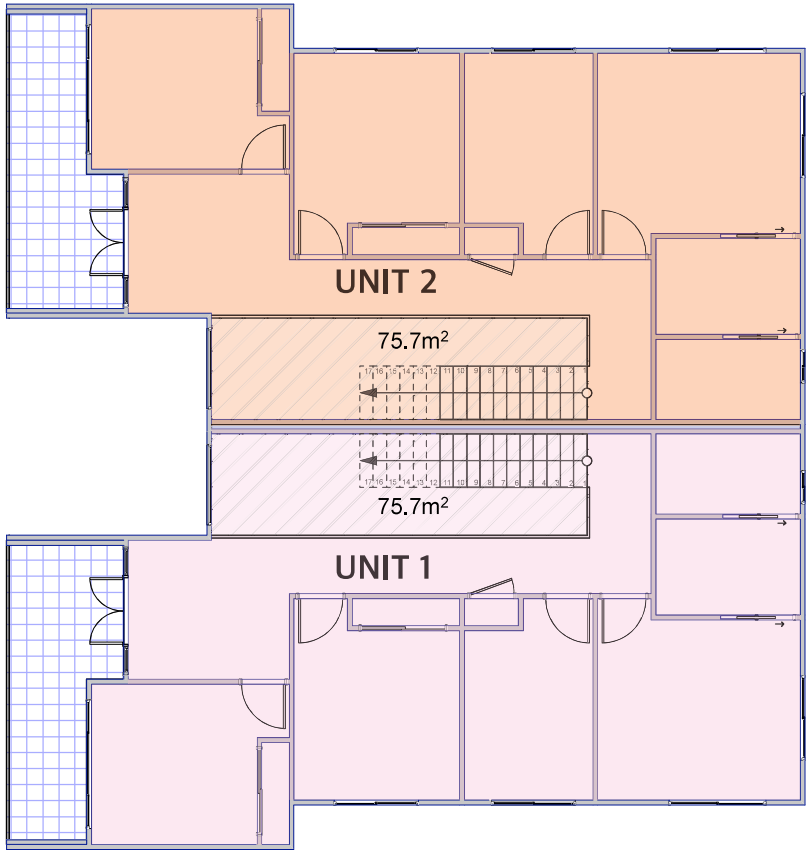

FLOOR AREA PLAN

SCALE 1:100 @A3

Unit 1 total area 143.8m³

Unit 2 total area 143.8m³

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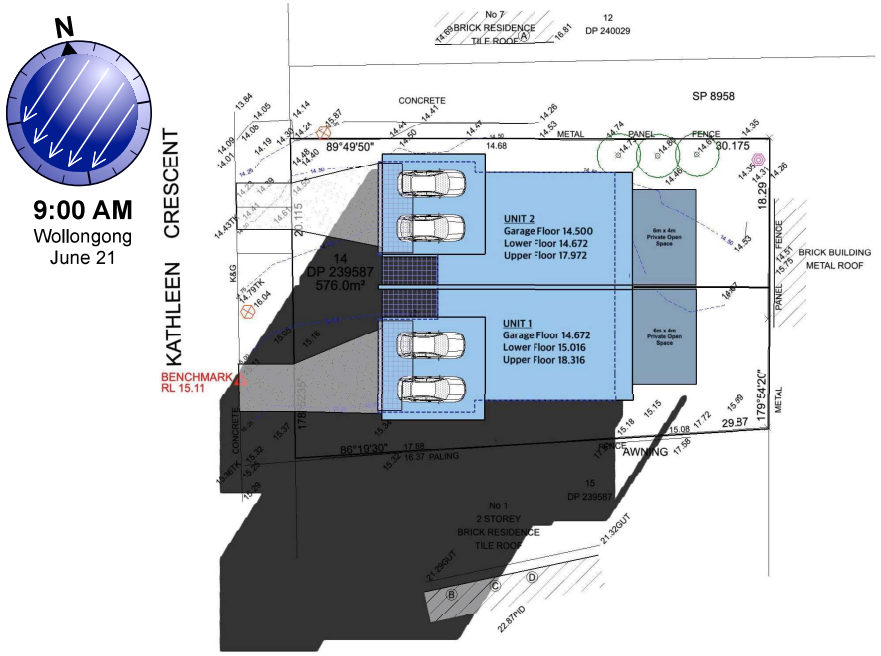

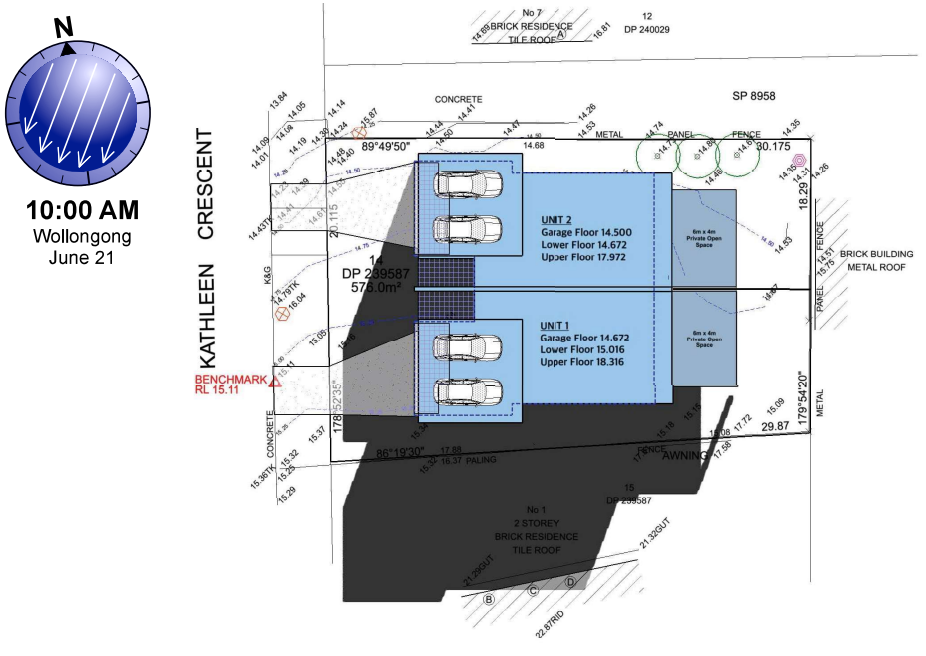

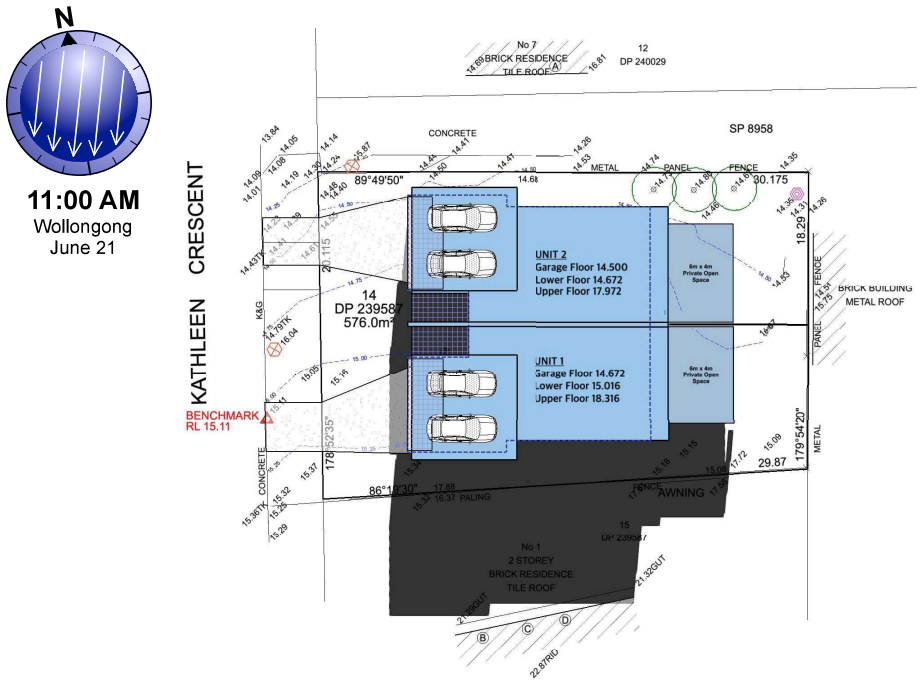

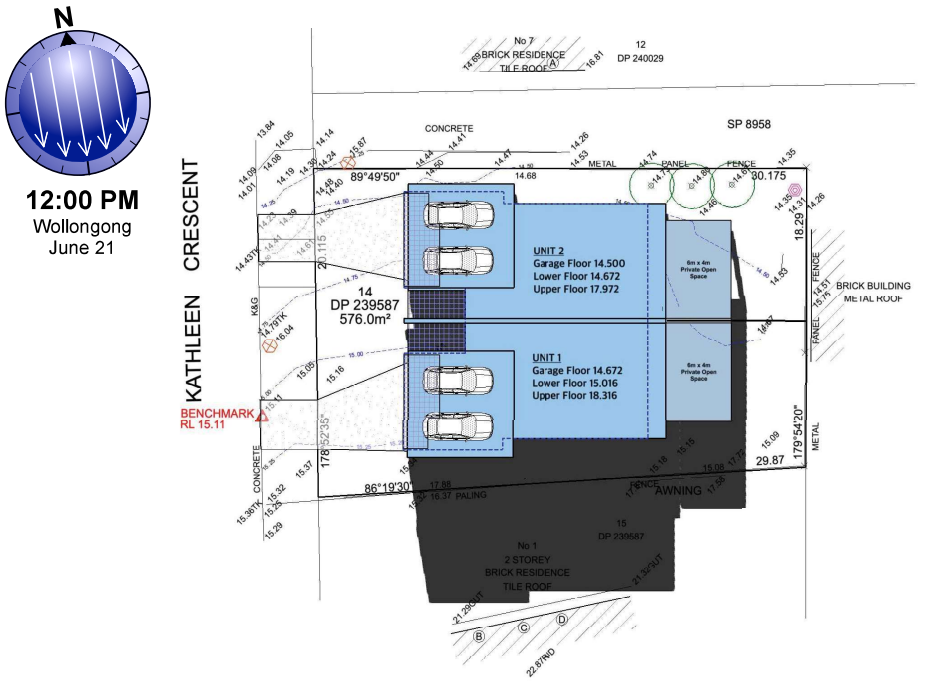

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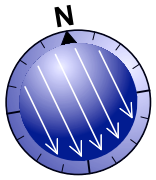
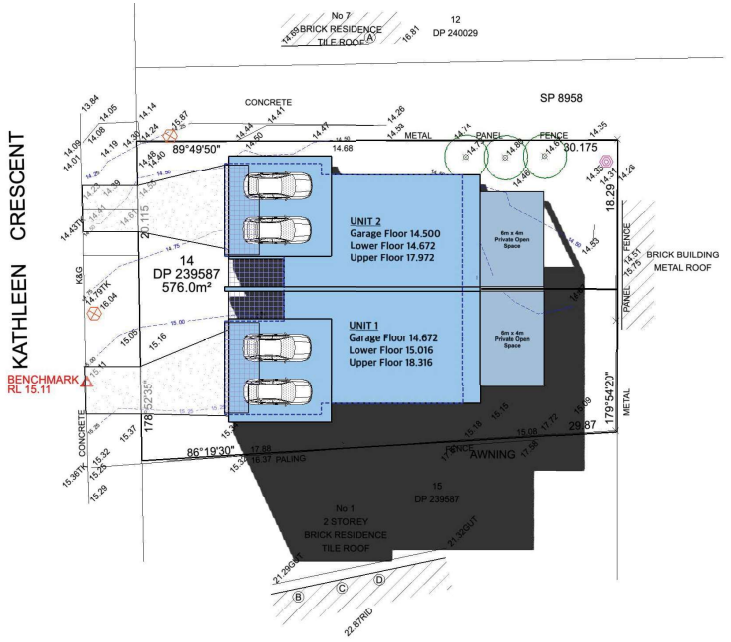
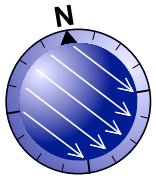


1:00 PM
Wollongong
June 21





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Wollongong
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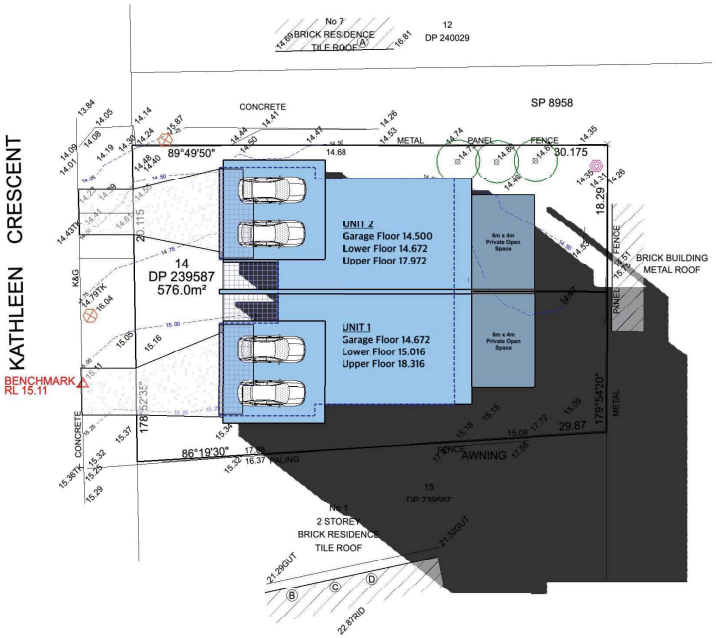
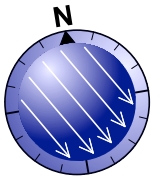
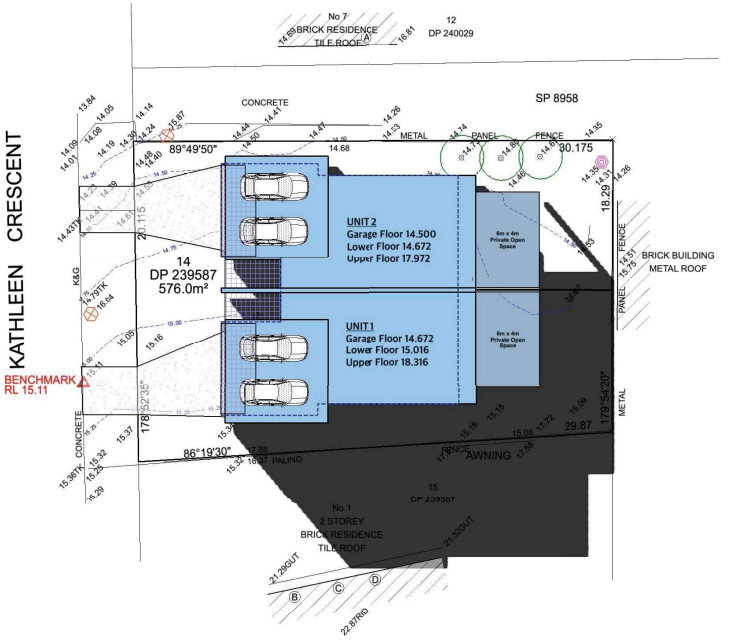




2:00 PM
Wollongong
June 21



SHADOW DIAGRAM

SCALE NTS @A3

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INGENUITY HOME DESIGN

GENERAL NOTES:

G1 – These drawings shall be read in conjunction with all architectural plans, other consultants plans and specifications that are issued before proceeding with the work.
G2 – Dimensions shall NOT be obtained by scaling Engineering drawings.
G3 – Setting out dimensions shown on the drawings shall be verified by the contractor.
G4 – During construction the structure shall be maintained in a stable condition by the contractor.
G5 – All workmanship and materials shall be in accordance with the requirements of relevant SAA Codes, the by–laws and ordinances of the relevant building authorities.
G6 – The structural work shown on these drawings has been designed for the following :

LOAD TYPE	Area	Load
LIVE LOAD	GENERALLY	To AS 1170 Pt 1
LIVE LOAD	BALCONY	To AS 1170 Pt 1
WIND LOAD	GENERALLY	To AS 1170 Pt 2
ROOF LOAD	GENERALLY	To AS 1170 Pt 1

G7 – All elements have been designed for roof trusses U.N.O.
G8 – All dimensions are in millimeters(mm) U.N.O.

EARTHWORKS NOTES:

E1 – The earthworks shall be carried out in accordance with the geotechnical report if one is provided.
E2 – The site shall be stripped a minimum depth of 150mm under pavements and buildings to remove the topsoil. Any remaining uncontrolled fill material, organic material, refuse or roots shall be removed.
E3 – The subgrade shall be inspected and approved by the geotechnical or by civil/structural design engineer.
E4 – The excavated subgrade shall be proof rolled a minimum of six (6) passes using a vibrating drum roller with a minimum deadweight of 10 tonnes. Any soft, wet & unsuitable spots shall be removed & reinstated using approved material.
E5 – The subgrade shall be compacted to not less than 98% dry density ratio within accordance with AS1289.
E6 – If a vibrating type roller is used, consideration shall be given to the effects on adjacent properties.
E7 – All batters shall be a minimum of 1:2 for temporary batters and 1:4 for final batters in clay material.
E8 – All filling shall be under the supervision of the project geotechnical engineer who shall provide compaction certificates to the engineer for approval.

FOUNDATION NOTES:

F1 – Unless otherwise noted footings have been designed for an allowable bearing pressure of 400 kPa. The contractor shall obtain approval of the foundation material before placing concrete.
F2 – Concrete footings and piers are to bear on rock foundation U.N.O.
F3 – If any of the footings or piers are founded on rock then all footings or piers shall be founded on rock.
F4 – The top of all strip footings are to be set min. 200mm below ground level UNO.
F5 – Slabs on ground have been design for a CBR of 5 in accordance with the Cement & Concrete Association Industrial Floors & Pavement Handbook.
F6 – Footings shall be located centrally under walls & columns UNO.
F7 – Fill used in the construction of slab on ground shall consist of controlled fill or rolled fill in accordance with AS2870.
A. Rolled fill consists of material compacted in layers by repeated rolling with an excavator. Rolled fill shall NOT exceed 600mm in height and must be compacted in layers not more than 200mm thick. All clay material used for fill must be moist during compaction.
B. Controlled fill consists of well graded sand fill up to 800mm in height and must be compacted in layers not more than 200mm thick with a vibrating plate or roller.

DRAINAGE NOTES:

D1 – All levels are in (m) and to AHD Datum U.N.O. All levels are shown as spot levels and/or contours.
D2 – Runoff is calculated using Rational Formula with time of concentration of 5 min. and 100 year ARI. Rainfall Intensity is 299 mm/hr.
D3 – Drainage design complies with AS3500:2018.
D4 – All drainage pipes are to be min. 100 mm dia. with min. 1 % fall U.N.O.
D5 – Ensure all drainage pipeline have min. 100 mm cover from the top of the pipe to the finished ground level or to the underside of the concrete driveway. Any pipelines that have less than 100mm cover to the underside of the concrete driveway/slab must be galvanised steel pipeline.
D6 – Basix commitments shall be complied with for both the rainwater tank size and connection of downpipes to the tanks. The minimum area of roof shall be connected to the rainwater tank as specified in Basix certificate.
D7 – OSD (Onsite Detention Basin) Where provided shall be kept clean of all rubbish and green waste that may fall into the basin. The basin should be checked by the owner every 6 months by removing the lockable grate, cleaning and checking both parts of the basin. Pipes should never be allowed to be blocked.
D8 – Overflow pipes from the rainwater tanks are to be connected to stormwater system.
D9 – Finished surface levels are shown as 45.25
D10 – Charged pipelines from down pipes (dp) to rainwater tank are shown as ——— . ——— . ———
D11 – Pipeline from rainwater tanks, pits, OSD etc. which are discharging into Council stormwater system or watercourse are shown as ——— — ———

CONCRETE NOTES:

C1 – All workmanship and materials shall be in accordance with AS3600:2018 (latest edition as amended), except where varied by specification.
C2 – Concrete quality to AS3600:2018 clause 20.7
C3 – Clear concrete cover to reinforcement shall be:

Element	Exposure	Cover	Cement Type	Concrete Grade F'c
Footings	A2	50	A	25 MPa
Slab internal	A1	40	A	25 MPa
Slab External	B1	40	A	32 MPa
Beam internal	A1	40	A	25 MPa
Beam External	B1	40	A	32 MPa
Column internal	A1	40	A	25 MPa
Column External	B1	40	A	32 MPa
Concrete Pool	B2	65	A	32 MPa

Max. aggregate size shall be 20mm U.N.O
Slump for all concrete elements shall be 80mm U.N.O.

C4 – Concrete finishes shall comply with AS1510.
C5 – Concrete surfaces shall be cured for a minimum period of 7 days commencing immediately after initial set. If curing compounds are used, they must be applied immediately after finishing of concrete and straight after stripping of formwork.
C6 – Size of concrete elements do not include thickness of finishes
C7 – Construction joints where not shown shall be located to approval of the engineer.
C8 – Beam depths are written first & include slab thickness if any.
C9 – No holes or chases other than those shown on engineering drawings shall be made in concrete members without engineer's approval.
C10 – Reinforcement is represented diagrammatically. It is not necessarily shown in true projection.
C11 – Splices in the reinforcement shall be to AS3600:2018.
C12 – Welding of reinforcement shall not be permitted U.N.O.
C13 – Pipes or conduits shall not be placed within concrete cover without Engineer's approval.
C14 – Reinforcement shall comply with AS1302, AS1303 & AS1304.
C15 – All requirements of the concrete specification shall apply to formwork, reinforcement, & concrete U.N.O.
C16 – No allowance for stacked materials on the concrete structure has been made U.N.O.
C17 – Brickwork or blockwork shall not be built off suspended slabs until slab has been cured & formwork removed.
C18– All polished concrete must have minimum concrete strength of 32 MPa.

WAFFLEPOD SLAB NOTES:

CWP1 – Beams to be founded or piered to an even bearing.
CWP2 – Piers shall be located under all beams at a maximum spacing of 2400mm centres U.N.O.
CWP3 – Piers are required under internal rib beams when in fill at a maximum spacing of 3600mm x 3600mm centres U.N.O.

FORMWORK NOTES:

CF1 – All workmanship and materials shall be in accordance with AS3610 & AS3600, except where varied by the project documentation.
CF2 – The design certification & the performance of the formwork shall be the responsibility of the contractor.
CF3 – During construction, support propping shall be required where there are loads from stacked materials, formwork & other supported slabs. Once the concrete has achieved its nominated 28 day strength, the imposed loads shall not exceed those given in the loading table.
CF4 – With multistory construction, it is expected that support propping will extend a minimum of 3 levels below the slab being poured. Prop removal is to be programmed so as not to overstress previously cast floors and shall be submitted to the engineer for approval.
CF5 – The suspended slabs shall be propped until 28 day strength has been achieved for slabs. The formwork may be removed once 25 MPa strength has been achieved, however the slab will need to be back propped until 28 day strength has been achieved. No masonry or partition walls are to be constructed on suspended levels until all propping is removed.
CF6 – All exposed corners shall have a 20 mm chamfer U.N.O.
CF7 – All finishes shall be in accordance with the architectural specification.
CF8 – The permanent metal formwork shall be installed in accordance with the manufacturers recommendations and shall NOT be substituted from the product specified without written approval from the engineer.
CF9 – The permanent metal formwork shall be suitably propped.
CF10 –The permanent metal formwork shall have a minimum end bearing of 50 mm.

FRAMING AND BRACING NOTES:

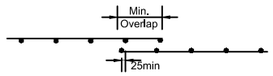
TF1 – Roof – Diagonal speed bracing throughout roof, screw fix to each purlin/batten and securely fasten to top plate/beam at ends.
TE2 – Stud walls – Strap top & bottom plate to a minimum of every second stud. Secure the bottom plate to slab below with M12 anchors or secure every second stud to floor bearers below in accordance with AS 1684.
TF3 – Masonry walls – Fasten top plate to brickwork using roof straps similar to Brunswick mfa22 at a maximum of 1200mm spacing anchored 10 courses down. Provide straps each side of all openings provide additional hold downs as detailed.
TF4 – Vertical bracing – Provide vertical bracing in accordance with AS1684. Provide additional vertical bracing where shown and as detailed on these drawings.

REINFORCING NOTES:

CR1 – Reinforcement symbols:
S – Denotes grade 250 S bars to AS1302.
N – Denotes grade 500 normal ductility deformed bars to AS4671.
R – Denotes grade 250 normal ductility round bars to AS4671.
SL – Denotes grade 500 low ductility square welded mesh to AS4671.
RL – Denotes grade 500 low ductility rectangular welded mesh to AS4671.
L – Denotes grade 500 low ductility trench welded mesh to AS4671.
CR2 – Reinforcement is represented diagrammatically & is not necessarily shown in true projection.
CR3 – Splices in reinforcement shall be made only in positions shown or otherwise approved by the engineer.
CR4 – Laps & cogs shall be in accordance with AS3600 & not less then the below:

	Minimum Splice Lengths	Minimum Overall Cog Lengths
N12	500mm	200mm
N16	700mm	225mm
N20	800mm	275mm
N24	1100mm	325mm
N28	1400mm	375mm

CR5 – Site bending of deformed reinforcing bars shall be done without heating and using mechanical bending tools.
CR6 – Welding of the reinforcement shall not be permitted unless shown on the structural drawing or approved by the engineer.
CR7 – Bundled bars shall be tied together at 30 bar diameter centers with 3 wraps of tie wire.
CR8 – Mesh shall be lapped with 2 transverse wires plus 25 mm.



CR9 – All reinforcing steel shall be inspected and approved by engineer prior to pouring of the concrete. Reinforcing steel shall be maintained in the correct position at all times during the pouring of the concrete.

BLOCKWORK NOTES:

B1 – All workmanship and materials shall be in accordance with AS3700
B2 – Reinforced concrete blockwork shall comply with the following, U.N.O. :
– Blocks: Minimum 10 MPa unconfined compressive strength conforming to AS 4455.
– Mortar: 1.0:1.0:6.0 ratio of cement : lime : sand : U.N.O.
– Blocks shall be either 'H' or Double–U configuration.
– Provide clean out holes at the base of the wall & rod core holes to remove excess mortar
– Core filling shall be 25 MPa concrete with maximum 10mm aggregate size with a slump of 180 ± 20mm.
– Minimum cover of 50mm from the outside of the blockwork.

B3 – Blockwork retaining walls are to be back filled with either of the following material:
– Coarse grained soil with low silt content
– Residual soil containing stones
– Fine silty sand
– Granular materials with low clay content

B4 – No admixtures shall be used to the mortar mix or the core fill mix without prior written consent from the engineer.
B5 – Provide vertical joints at maximum 10m centres generally and maximum 5m from corners or as specified in the B.C.A.
B6 – Provide clean out holes at base and rod core holes to remove protruding mortar.
B7 – Grout shall be placed in lifts of 1200mm maximum, compacted with a poker vibrator. Allow time to settle between lifts.
B8 – Flexible masonry anchors must be in at every fourth (4th) course.
B9 – Wall ties to be built in and flexed to the timber frame 200mm each side of the Expansion Joint at every (3rd) course.
B10 – Site maintenance is the responsibility of the home owner.

TIMBER NOTES:

T1 – All timber design, construction and material to be to AS1720.1 and AS1720.2.
T2 – AS1684 shall be applied to domestic construction in sheltered locations.
T3 – Softwood to be minimum grade F7 or MGP10 U.N.O. Hardwood to be minimum grade F11.
T4 – All bolts in timber construction to be minimum M16 U.N.O. Bolt holes to be drilled exact size. Washers under heads and nuts to be at least 2.5 times bolt diameter.
T5 – Timber dimensions on the finished width and thickness to be:
Seasoned Softwood +5, –0mm
Unseasoned Softwood >F7+3, –3mm; less than or equal to F7+2, –4mm
Seasoned Softwood +2, –0mm
Unseasoned Softwood +3, –3mm (see also clause 1.6.2 in AS2082)

T6– All timber joints and notches are to be 100mm minimum away from loose knots, severe sloping grain, gum veins or other minor defects.

MASONRY NOTES:

M1– All workmanship and materials shall be in accordance with AS3700.
M2– The design strength of masonry shall be:

Exposure Classification to AS3600	Brick Compressive Strength (MPa)	Brick Salt Resistance Grade	Durability Classification of Built in components	Mortar Mix	
				GP Portland Cement: Lime: Sand	f'c(MPa)
A1/A2	5	General Purpose	R3 (Galvanised)	1.0:1.0:6.0	2.8
B1	5			1.0:1.0:6.0	2.8
B2	5	Expose	R4 (Stainless)	1.0:0.5:4.5	2.8

M3 – All masonry walls supporting concrete slabs and beams shall have a slip joint comprising of two layers of galvanised steel in between the concrete and masonry.
M4 – All masonry walls supporting or supported by concrete floors shall have vertical joints located to match any control construction joints in the concrete.
M5 – Do not construct any masonry walls on suspended slabs until the slab formwork has been stripped and de–propped.
M6 – Non load bearing masonry walls shall be separated from concrete slab or beam above by 20 mm thick compressible filler.
M7 – Provide vertical control joints at 6 m maximum centres, 4 m maximum from corners in masonry walls, and between new & existing brickwork. The joint shall have expansion joint ties and suitably sealed with a mastic sealant.
M8 – Masonry retaining walls are to be back filled with either of the following material:
– Coarse grained soil with low silt content
–Residual soil containing stones
–Fine silty sand
–Granular materials with low clay content

STRUCTURAL STEEL NOTES:

S1 – All Work and Materials to be in accordance with AS 4100:2020
S2 – Unless noted otherwise
a. Use 10mm thick gusset, fin and end plates welded all round.
b. All welds to be 6mm continuous fillet U.N.O.
c. All bolts to be 20mm dia. U.N.O.
d. All bolts to be (including holding down bolts) hot dip galvanised.
e. All fillet welds to be category G.P. U.N.O.
f. Butt weld all flanges at end plates and at all mitre cuts. Butt weld all stiffener plates to flanges only.
g. All connections to have a minimum of 2 bolts.
h. Studs fabricated to AS1554.2. All shear studs (composite slab to steel) grade 410 MPa. All threaded studs (steel to steel) grade 380 MPa.
S3 – Butt welds where shown on drawings shall be complete penetration butt welds to AS1554.
S4 – Bolting categories are identified on the drawings in the following manner.
4.6/S Commercial bolts of grade 4.6 snug tightened.
8.8/S high strength bolts of grade 8.8 snug tightened.
8.8/TB high strength bolts of grade 8.8 fully tensioned to AS4100 as a bearing type joint.
8.8/TF high strength bolts of grade 8.8 fully tensioned to AS4100 as a friction type joint with facing surfaces left uncoated.
Note: Grade 8.8 bolts are NOT to be welded.

S5 – Chip all welds free of slag.
S6 – Provide temporary bracing to maintain stability of steelwork during construction.
S7 – Do not grout under base plates until first level steelwork is plumb and fixed by welding or bolting.
S8 – All Structural Steel shall have a surface treatment in accordance with AS 2312:2002. Generally internal steel should be wire brush cleaned and painted with a suitable paint. External steel should be galvanised or applied with a suitable paint in accordance with manufactures specification (usually sand blast clean surface treatment) and guaranteed for a minimum of 10 years.
S9 – Concrete encased steelwork shall be wrapped with WS wire @ 150 centres with min 50mm cover U.N.O.
S10 – The contractor shall provide all cleats and drill all holes necessary for fixing members whether detailed on plans or not.
S11 – All holding down bolts shall be hot dip galvanised. Other bolts to receive same surface treatment as adjacent steelwork.
S12 – Minimum yield stress of steel beams/columns is 300 MPa.
S13– All external beams/columns must be hot dip galvanised.

POOL NOTES:

P1 – All pool fences and gates to be installed as per BCA requirements.
P2 – All pool fences and gates must isolate the pool room the dwelling and other structures.
P3 – No doors can open into the pool area.
P4 – All windows that open into the pool area must have Crimsafe mesh installed to prevent entry and comply with AS1926.1–2012.
P5 – If a boundary fence is used as a pool fence it must have a minimum height of 1.8m.
P6 – Provide a minimum 900mm no climb zone around pool boundary fence inside and out.
P7 – The filter box is to be minimum 900mm from boundary fence and housed in a sound proof enclosure.

AMENDMENTS

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DRAINAGE PLAN FOR
3 KATHLEEN CRESCENT
WOONONA

DESIGNED A.D.D.	CODE 3kathd.dwg
DRAWN S.A.H.	DATUM A.H.D
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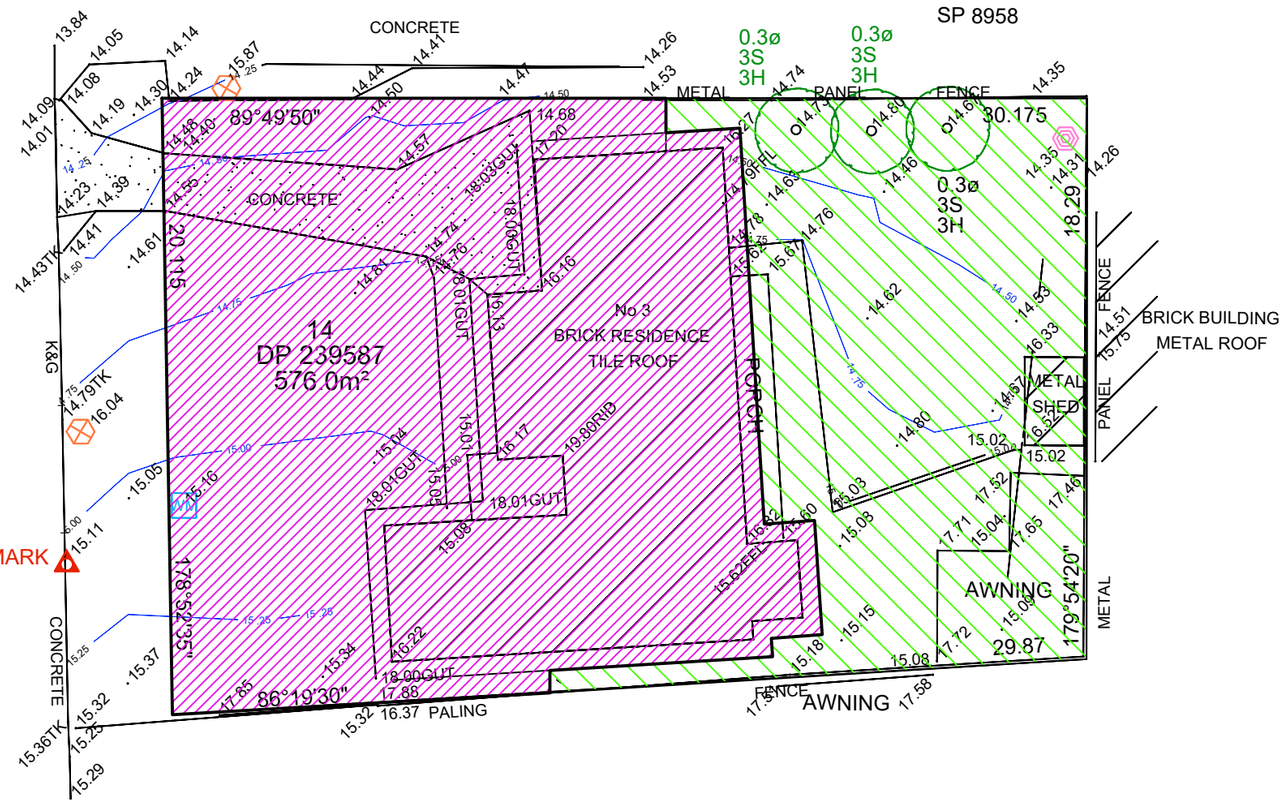
DATE 22/05/22	SHEET 1 OF 8
JOB No. 22/089	REVISION 0

TN

CRESCENT KATHLEEN



373.8m² draining to Kathleen Crescent

202.2m² draining away from Kathleen Crescent

PRE–DEVELOPMENT SITE CATCHMENT PLAN

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DRAINAGE PLAN FOR
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WOONONA

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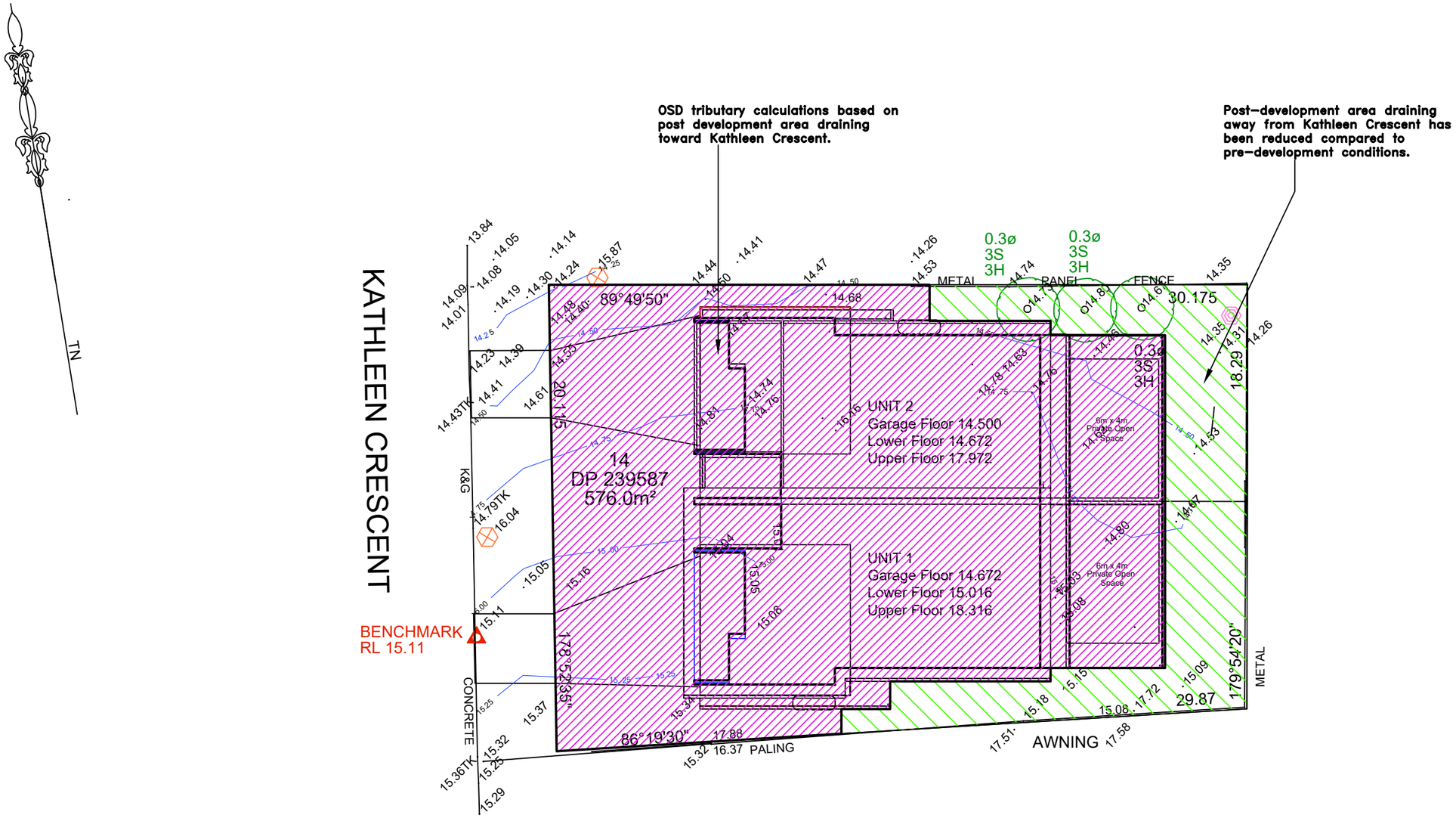
JOB No. 22/069	REVISION 0



465.9m² draining to Kathleen Crescent

110.1m² draining away from Kathleen Crescent

POST–DEVELOPMENT SITE CATCHMENT PLAN

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JOB No. 22/069	REVISION 0

Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher then the existing upslope adjacent ground levels.

All box gutters to be 250mm wide by 200mm deep sloped at minimum 1 in 200 toward the rain water head. Rain Water Head to be 250mm wide by 200mm long by 200mm deep. Box gutter and downpipes have been designed for 100 year ARI 5 min. tc of 299mm/hr.

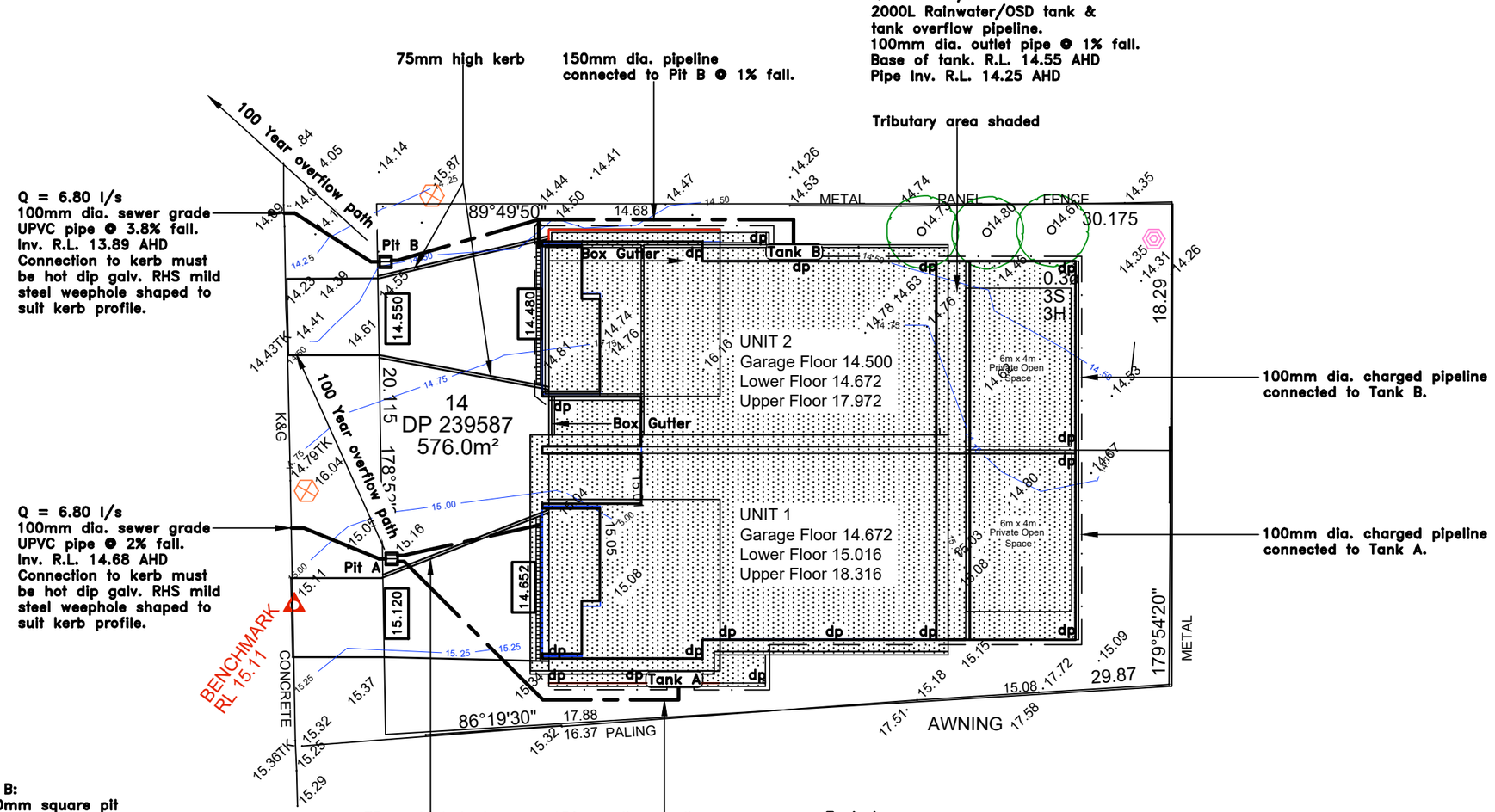
Roof gutter and downpipes have been designed for 100 year ARI 5 min. tc of 299mm/hr. Downpipes to be min. 100mm dia. PVC pipe downpipes as shown. Roof gutter cross sectional area to be min. 7300mm² with a slope of 1:500 or steeper. U.N.O.

Provide 53 l/min Monza pump for the rainwater tank to provide water to toilets, washing machines, and any other fixtures specified in the BASIX certificate. Refer to the BASIX certificate for rainwater tank specifications.

Connection across footways must be a maximum of two sewer grade UPVC 100mm dia. pipes with a continuous downslope gradient to the kerb. Connection to the kerb must be made with a hot dip galv. RHS weephole(s), with each weephole having the capacity equal to a 100mm dia. pipe. Alternatively, a maximum of two 150 x 100mm hot dip galv. steel pipes may be used across footways, with the 150mm dimension being parallel to the road surface to suit the kerb profile.

KATHLEEN

CRESCENT



Pit A:
450mm square pit
with debris screen
Inv. R.L. 14.76 AHD
Grate R.L. 15.16 AHD

Pit B:
450mm square pit
with debris screen
Inv. R.L. 14.05 AHD
Grate R.L. 14.50 AHD

Tank A:
Q = 4.70 l/s
2000L Rainwater/OSD tank &
tank overflow pipeline.
100mm dia. outlet pipe @ 2% fall.
Base of tank. R.L. 15.35 AHD
Pipe Inv. R.L. 15.05 AHD

All pipelines are min. 100mm dia. @ 1% fall. U.N.O.

Ensure all drainage pipelines have min. 100mm cover from the top of the pipe to the finished ground level or to the underside of the concrete driveway. Any pipelines that have less than 100mm of cover to the underside of the concrete driveway/slab must be galv. steel pipelines.

— · — Charged pipeline
——— Proposed pipeline
dp – Proposed downpipe

DRAINAGE PLAN

NOTES:
All levels and dimensions are in (m) U.N.O.
Runoff is calculated using Rational Formula with time of concentration of 5 min. and 100 year ARI. Rainfall intensity is 299 mm/hr.
Existing levels are shown as contours.
Drainage design complies with AS3500.

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DRAINAGE PLAN FOR
3 KATHLEEN CRESCENT
WOONONA

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DATE 22/05/22	SHEET 4 OF 6
JOB No. 22/089	REVISION 0

OSD – DATA & CALCULATIONS

File	WOO1	DATA	VALUE
Catchment Area (m^2)	465.9	$2i_1$	46.22
Impervious Area Pre – Dev. (%)	45.5	$2i_{12}$	11.19
Impervious Area Post – Dev. (%)	81.1	$2i_{72}$	3.96
Draining Through OSD (%)	70.5	$50i_1$	103.90
Gutter Flow (min.)	–	$50i_{12}$	26.96
		$50i_{72}$	8.57
Length (m)	31.3	F_2	4.28
Slope (%)	2.6	F_{50}	15.81
Roughness	0.2	G	0.00

ORIFICE PLATE	VALUE	
$Q = C A \sqrt{(2gh)}$ (l/s)	$4.15 \times 2 = 8.30$	5 Year flow
C	0.6	
A = Area (sq. mm) => dia.	1963	Adopt 50mm dia. orifice plate over each outlet pipe.
5 year head (mm)	626	Q = 4.13 * 2 = 8.26 l/s
100 year head (mm)	812	Q = 4.70 * 2 = 9.40 l/s
WEIR FLOW	**VALUE**	
Q (l/s)	5.90	(21.20 – 9.40)/2 = 5.90
HW (mm)	83	
L (mm)	150	
C	1.7	
$Q = CLH^{1.5}$	6.10	o.k.

A.R.I.	Pre – Development				POST – DEVELOPMENT				BASIN REQUIRED		BASIN PROVIDED	
(YRS.)	Tc (min.)	C	I (mm/hr)	Qout (l/s)	Tc (min.)	C	I (mm/hr)	Qout (l/s)	Qout (l/s)	Vol (m^3)	Qout (l/s)	Vol (m^3)
5	8	0.76	155	15	5	0.82	182	19.3	9.2	1.3	9.2	1.3
10	8	0.80	175	18	5	0.87	204	23.0	11.3	1.4	11.3	1.4
20	8	0.84	210	22	5	0.91	233	27.4	14.1	1.5	14.1	1.5
50	7	0.91	245	29	5	1.00	270	34.9	18.7	1.7	18.7	1.7
100	7	0.95	271	34	5	1.01	299	39.1	21.2	1.8	21.2	1.8

5 Year Pre–development flow rate draining toward Kathleen Crescent = 15.00 l/s
5 Year Pre–development flow rate draining away from Kathleen Crescent = 6.60 l/s
100 Year Pre–development flow rate draining toward Kathleen Crescent = 34.00 l/s
100 Year Pre–development flow rate draining away from Kathleen Crescent = 14.50 l/s
Total 5 Year pre–development flow rate = 21.60 l/s
Total 100 Year pre–development flow rate = 48.5 l/s

Draining Toward Kathleen Crescent:
5 Year Post–development flow rate not draining through OSD = 5.70 l/s
100 Year Post–development flow rate not draining through OSD = 11.50 l/s
5 year Post–development flow draining through OSD = 4.13 * 2 = 8.26 l/s
100 Year Post–development flow rate drainage through OSD (Incl. tank overflow) = 10.60 * 2 = 21.20 l/s
Total 5 Year post–development flow rate = 5.70 + 8.26 = 13.96 l/s
Total 100 Year Post–development flow rate = 21.20 + 11.50 = 32.70 l/s

Draining Away From Kathleen Crescent:
5 Year Post–development flow rate = 4.60 l/s
100 Year Post–development flow rate = 9.20 l/s

Total Post–development runoff:
Total 5 Year Post–development flow rate = 18.56 l/s
100 Year Post–development flow rate = 41.90 l/s

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DRAINAGE PLAN FOR
3 KATHLEEN CRESCENT
WOONONA

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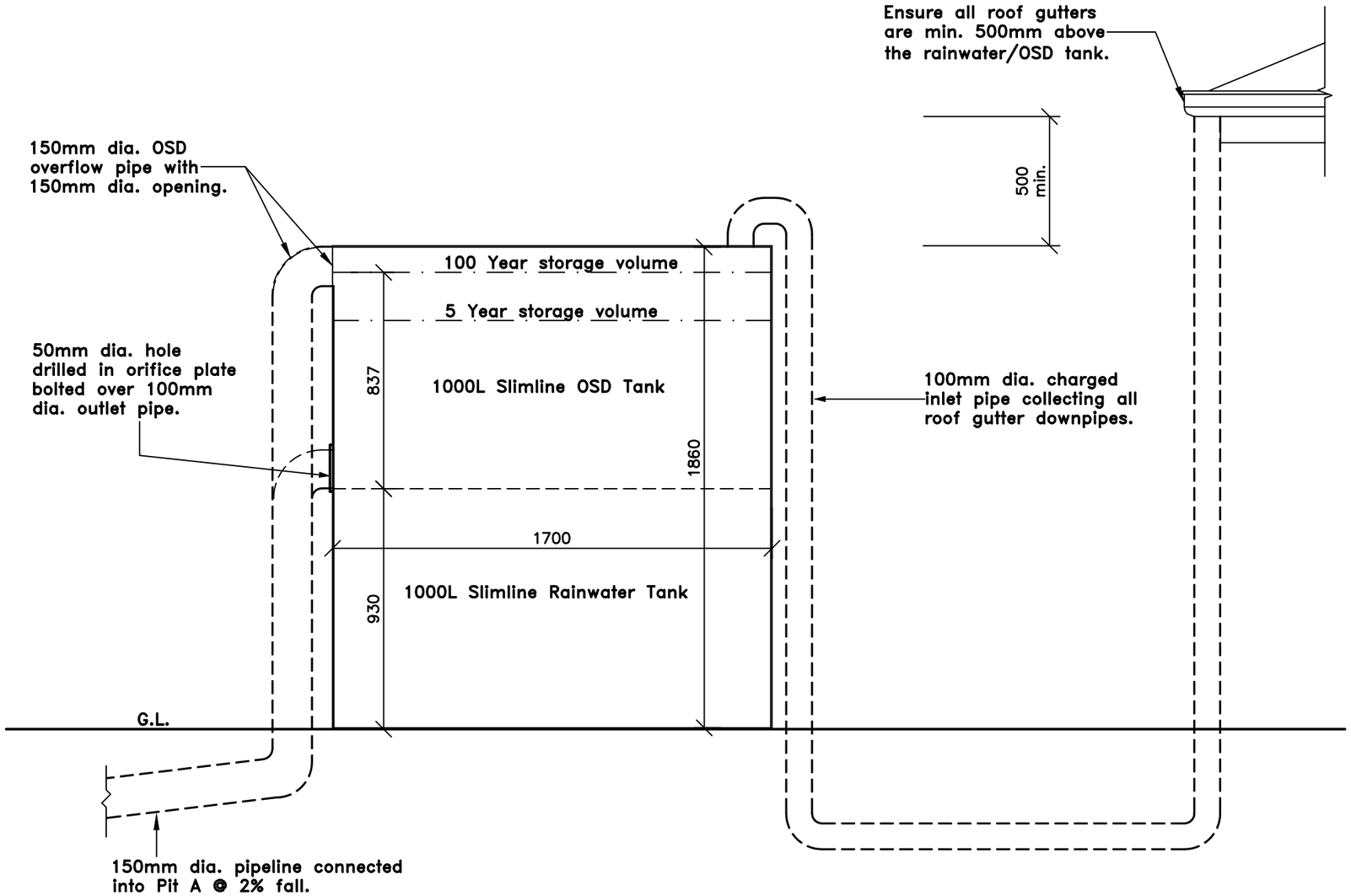

OSD SECTION UNIT 1
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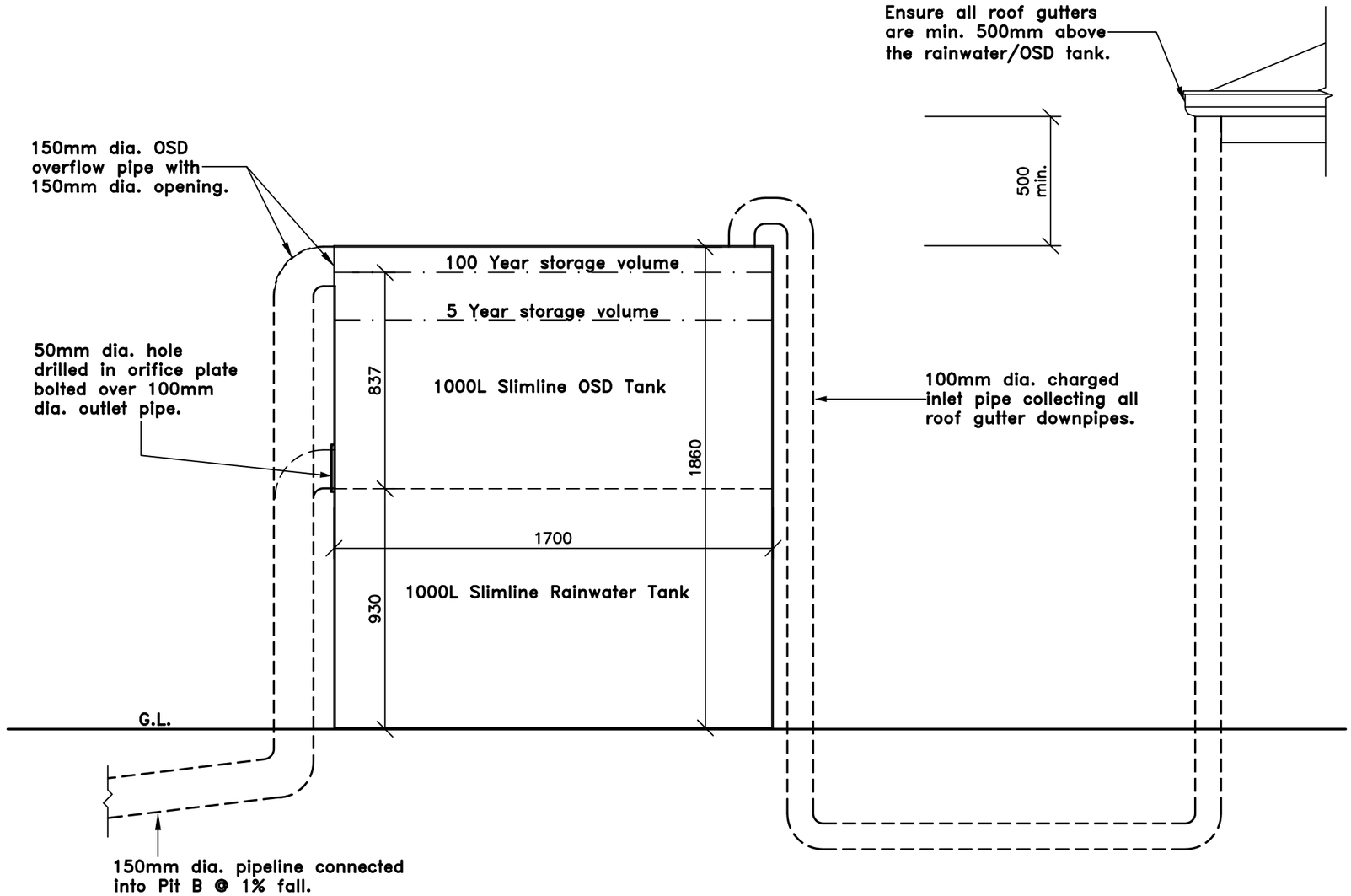

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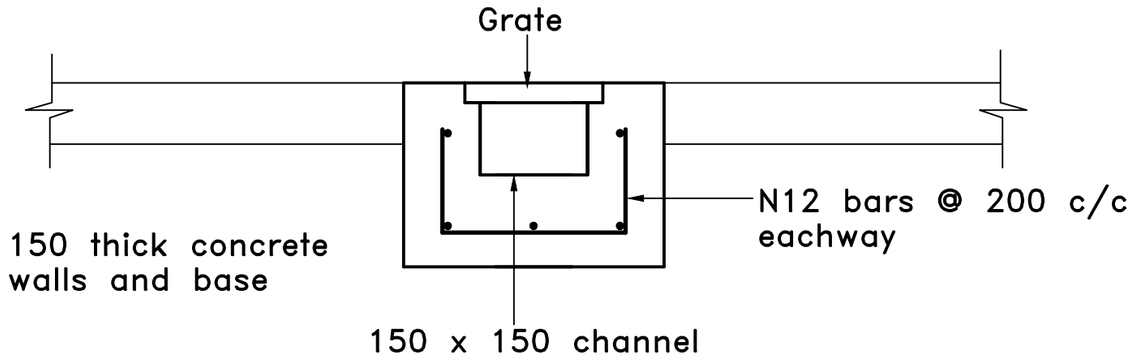
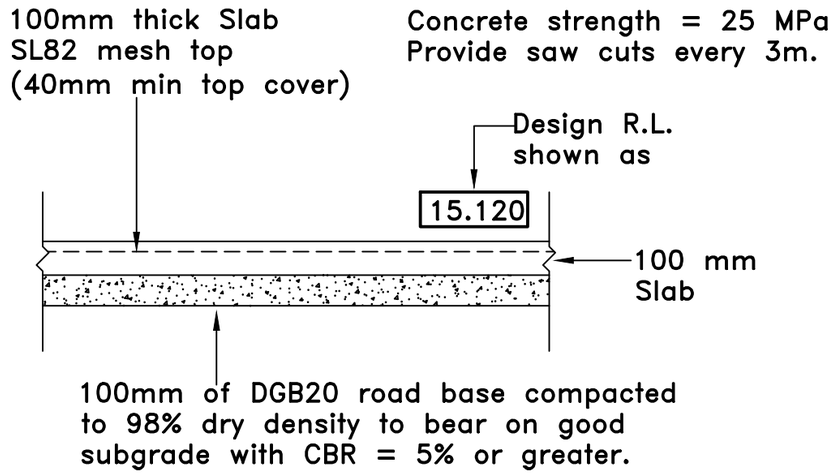
DRAINAGE PLAN FOR
3 KATHLEEN CRESCENT
WOONONA

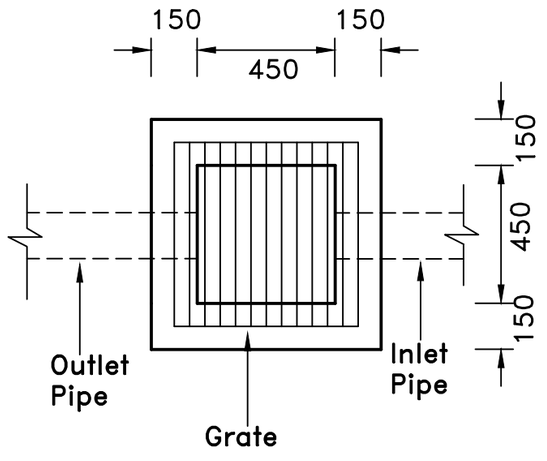
DESIGNED A.D.D.	CODE 3kathd.dwg
DRAWN S.A.H.	DATUM A.H.D
CHECKED A.D.D.	SCALE 1:20
DATE 22/05/22	SHEET 7 OF 8
JOB No. 22/089	REVISION 0



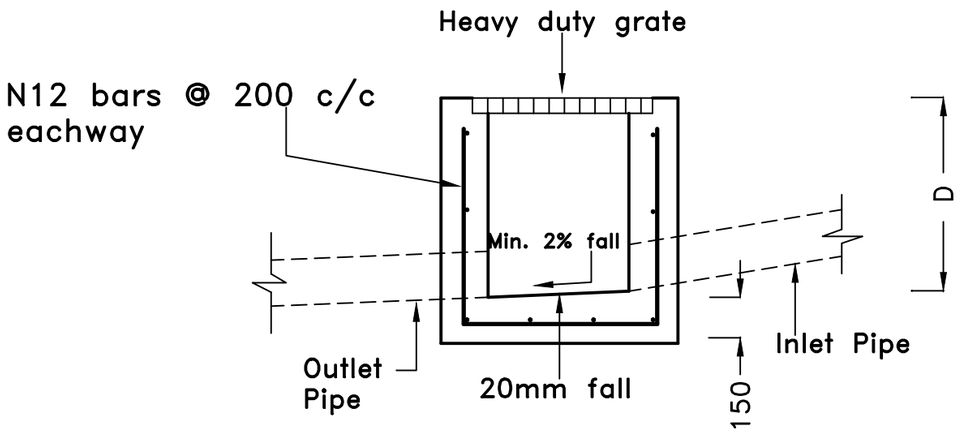
GRATE DETAIL



ENGINEER DESIGNED PAVEMENT DETAIL



450mm SQUARE PIT PLAN
Scale 1:20



450mm SQUARE PIT SECTION
Scale 1:20

AMENDMENTS
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ADD DESIGN & CONSULTING
CONSULTING CIVIL – STRUCTURAL ENGINEERS
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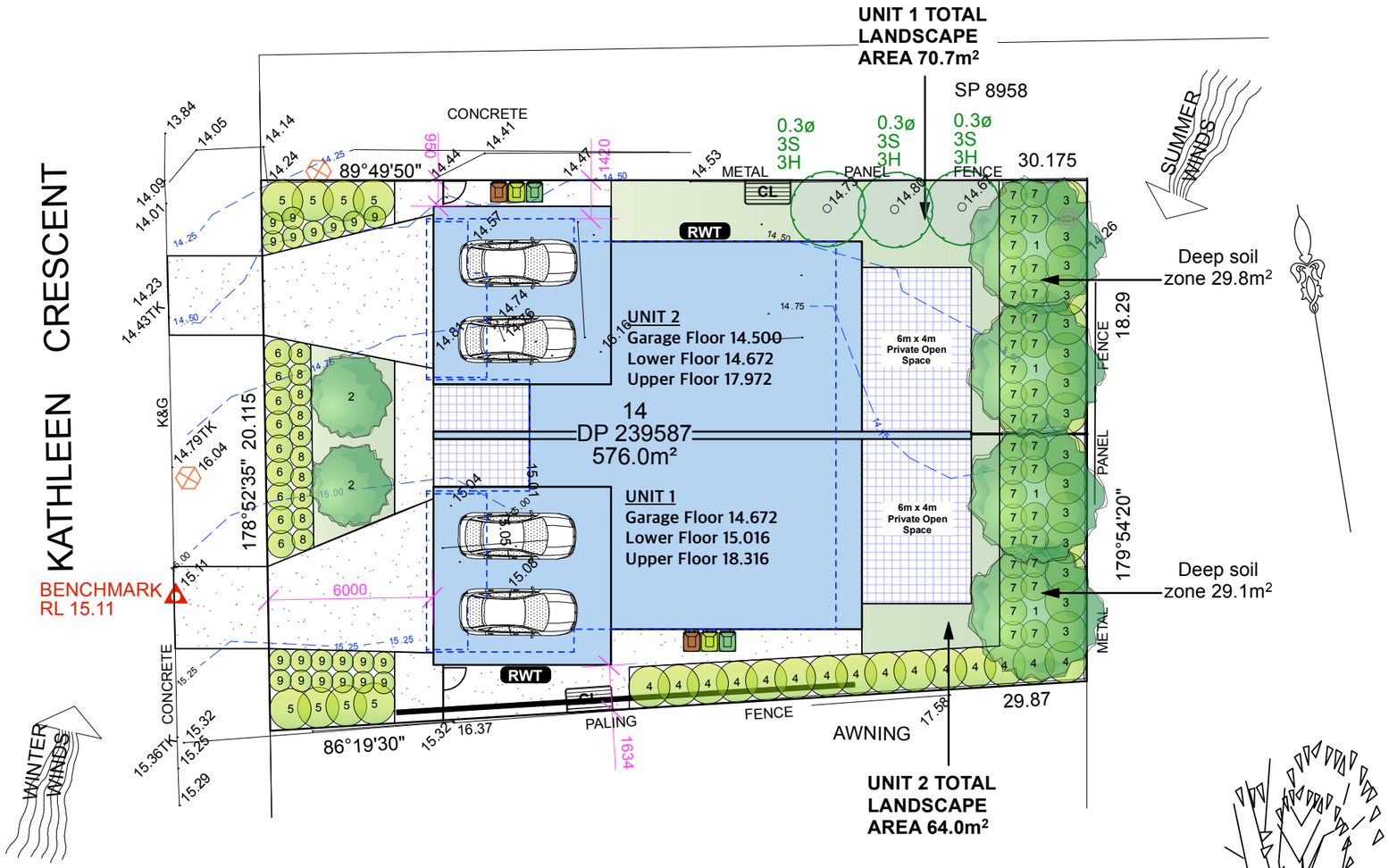
Attachment 5



PLANTING AND LANDSCAPE MAINTENANCE REQUIREMENTS

PLANT MATERIAL - Plants shall be pest and disese free and have correct shape and form. Plants shall be well advanced in the growing container but not be potbound.

STAKING - Stakes shall be hardwood timber measuring 50 x 50 x 2400mm. Jute webbing or similar should be used to secure the tree species to the timber stakes.

MULCHING - Mulch is to be placed in all areas of planting to a uniform depth of 75mm. Mulch should be hardwood woodchip, river gravel 5 - 10mm or similar. A consistent depth of mulch is to be maintained for a period of 12 months following the initial landscape installation.

TURF - Turf shall be quality kikuyu or buffalo grass that is weed, pest and disease free. Turf shall be maintained at regular intervals with fortnightly cutting during the growing season and monthly cutting during the cooler months. Cutting height shall ensure that the turf is not scalped or damaged by mowing.

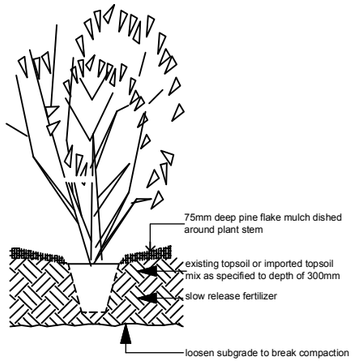
LAWN EDGING - Lawn areas that join garden beds and built structures shall be edged using a 110mm brick laid upon a 75mm depth concrete footing. Alternately, 75mm x 25mm hardwood timber edging may be used. Timber edging must be pegged and nailed to ensure the interity of the timber edging is maintained.

WATERING - Planted trees, lawn and garden areas shall be watered regularly to ensure continuous and healthy growth. Water shall be frequently applied after planting to ensure that plant establishment is rapid and healthy growth continues. Water shall be made available to all new plantings on an as need basis, this is a climate dependent variable.

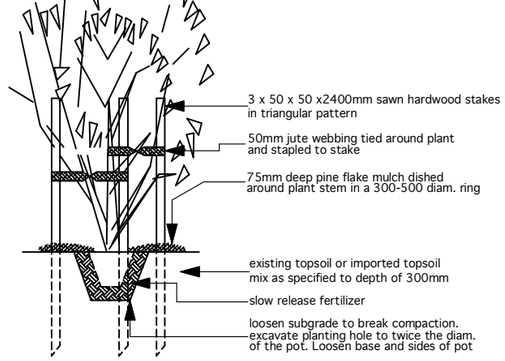
MAINTENANCE PERIOD - Shall be for a period of 12 months commencing from the completion of the initial landscape works.

LANDSCAPE PLANTING SCHEDULE

BOTANIC NAME	COMMON NAME	(H) x (W)	SIZE	QTY	STAKING
1 Waterhousia floribunda 'Sweeper'	Weeping Lilly Pilly	8 m x 5 m	45 litre	4	YES
2 Acacia cognata 'Lime Magik'	Lime Magik River Wattle	5 m x 3 m	45 litre	2	YES
3 Callistemon citrinus 'Perth Pink'	Perth Pink Bottlebrush	4 m x 2 m	200 mm	15	NO
4 Syzygium 'Cascade'	Cascade Lilly Pilly	2.5 m x 1.5 m	200 mm	15	NO
5 Dodonea viscosa 'Purpurea'	Purple Hop Bush	2 m x 1.5 m	200 mm	8	NO
6 Callistemon 'Scarlet Flame'	Scarlet Flame Bottlebrush	1.5 m x 1 m	200 mm	9	NO
7 Grevillea 'Crimson Villea'	Crimson Villea Grevillea	0.9 m x 0.9 m	200 mm	35	NO
8 Nandina 'SEKA'	Obsession Nandina	0.8 m x 0.6 m	200 mm	10	NO
9 Grevillea juniperina 'Molonglo'	Groundcover Grevillea	0.3 m x 1 m	200 mm	20	NO



PLANTING DETAILS - GARDEN AREAS



TREE PLANTING DETAILS

0 1 2 3 4 5

SCALE @ A3 = 1 : 200
SCALE @ A1 = 1 : 100

NO.	DATE	REVISION DETAILS	BY

PROJECT
LANDSCAPE CONCEPT PLAN

ADDRESS
3 KATHLEEN CRESCENT, WOONONA

CLIENT
IGENUITY HOME DESIGN

MIHAIL

PROJECT #	MS2021414
DWG DATE	27 / 11 / 2021
SCALE @ A3	1 : 200
DRAWN BY	MARK SPENCE
FILE NAME	MS2021414
PAGE #	PAGE 1 OF 1

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ATTACHMENT 6

Council View Impact Assessment

Whilst it is considered that the development has no impact on views from public places, the proposal has raised concerns relating to view loss of the escarpment from the adjoining property at No. 6 Doris Avenue, Woonona.

Following preliminary assessment of the submitted plans and consideration of the submissions received, a request for additional information was provided to the applicant that included the applicant address the built form of the site, including:

3. ***Built form***

It is noted that the applications supporting documentation stated that the application complied with the Wollongong Development Control Plan, WDCP 2009. Council's assessment of the proposed built form, plans and supporting documentation has identified issues that must be resolved. As such, the development must be redesigned to address the following items:

- *a Clause 4.2 and 4.10 of Chapter B1 WDCP2009, states that the front setback must be a minimum of 5.5m for garages and 6m for dwellings from the front boundary. Unit 2 proposes a garage front setback of 5.463m within the landscape concept plan, and Unit 1 proposes 5.5m while the site plan states unit 1 has a front setback of 6m. The garage must be setback a minimum of 5.5m and dwelling, including balcony 6m from the front boundary.*
- *b Clauses 4.8 and 4.10 of Chapter B1 WDCP2009, the proposed garages doors address the street and have a greater width than 50% of the dwelling/s. The plans furthermore do not adequately address passive surveillance to the street. If the revised design includes a garage width of more than 50% of the dwelling there must be passive surveillance of the street, this could be achieved by moving the study to the street frontage on the first floor.*
- *c Clause 4.8 (1.b) of Chapter B1 WDCP2009, The SoEE states the 'designed sympathetic with the existing character of the locality', the proposed is considered to differ from the existing character of the area. The existing locality development, addressing the street frontage is a mix of single- and two-story dwellings, not dual occupancies.*
- *d Clause 4.8 (2.5) of Chapter B1 WDCP2009 clearly states that utility windows (including bathrooms/toilets) on the front elevation will not be permitted.*
- *e Windows. Consideration in the design of a dwelling must include the surrounding neighbours and the occupants of the subject site. To allow privacy the redesign must include highlight windows along the boundaries, and where possible direct windows to the front and rear elevations. Balconies. These must be enclosed to the neighbouring sites, northern and southern elevations to allow privacy to the occupants and neighbouring sites.*
- *f The laundry is proposed as being located with access through the kitchen and walk in pantry. The final built form must consider the amenity and use of future occupants. As such, the redesign must include a clear accessway to the laundry.*
- *g Clause 4.23 (1) of Chapter B1 WDCP2009, states that a minimum of half the landscaped area must be deep soil zone, this is 28.8m2 per site. Note: revised landscape plans must integrate with the stormwater drainage plans/design.*

All plans must be consistent and accurate.

Wollongong Council has declared a Climate Emergency and adopted a target of zero carbon emissions for the LGA by 2050. In line with this, Council urges the proposal to consider the use of low emission technology in all facets of its development and operation. This includes the orientation of roofs to allow for the instillation of solar panels.

The applicant subsequently provided amended plans that addressed Councils concerns with regards to built form.

The following provides an assessment of view sharing against the principles laid out by Senior Commissioner Roseth SC in Tenacity Consulting v Warringah Council (2004) NSWLEC 140.

Assessment of views to be affected

Figure one details that No. 6 Doris Avenue, Woonona is a single storey dwelling and neighbouring sites include a single storey dwelling to the east and north. The west of the site includes two dwellings. 1 Kathleen Crescent includes a two-storey dwelling with the single storey garage orientated towards 6 Doris Avenue. 3 Kathleen Crescent, the subject site, currently includes a single storey dwelling with a ridge height of 19.8 AHD.

The current view corridor available to No 6 Doris Avenue consists of escarpment views to the west shown in figure two. It is considered that 6 Doris Avenue may be impacted by view loss from the proposed development.

Figure 1 -Intramaps - 19 September 2022

Figure 2 - Google maps - street view - captured June 2022

Assessment of impact of the proposed development at 3 Kathleen Crescent.

The application was notified to neighbouring properties in accordance with Council's Community Participation Plan 2019. During the exhibition period concerns were raised with regards to view loss that included a photo from 6 Doris Avenue, figure three. This image details the coved area located to the rear of 6 Doris Avenue, and the location of windows that may be impacted by the view loss. The windows are set back under the covered area. Figure one details that the covered area extends from the dwelling to the eastern boundary.

Figure 3 - Photo from objection received 14 February 2022 from the occupant of 6 Doris Avenue, Woonona

Figure four details the boundary between 3 Kathleen Crescent and 6 Doris Avenue. The photos shows that there 6 Doris Avenue includes a Colourbond shed to the north of the western boundary, traveling south along the boundary is a brick structure. 3 Katheen Crescent includes a shed and awning along the eastern boundary that are proposed for removal.

Figure 4 Site inspection photos of boundary between 3 Kathleen Crescent and 6 Doris Avenue - 14 March 2022 – Mcraig

The existing boundary fencing is not proposed to be demolished as part of this application. A condition of consent has been recommended that boundary fencing be installed at full cost to the developer that includes consultation with the neighbouring sites.

The proposed development is two storey with a maximum ridge height of AHD RL 22.535, maximum building height of 8.061m. A proposed difference of 2.735m between the existing structure and proposed structure. The developments building height complies with clause 4.1 of Chapter B1, WDCP 2009.

Figure five details the existing site survey overlayed by the proposed development on site. The second storey is setback greater that the requirement of Clause 4.3 of the WLEP 2009 at 8.926m. The existing single storey dwelling is sited on an angle. The proposed development seeks to develop

the site with a dual occupancy that addresses Kathleen Crescent in a formal form to allow a regular shaped site to the north and an irregular shaped site to the south.

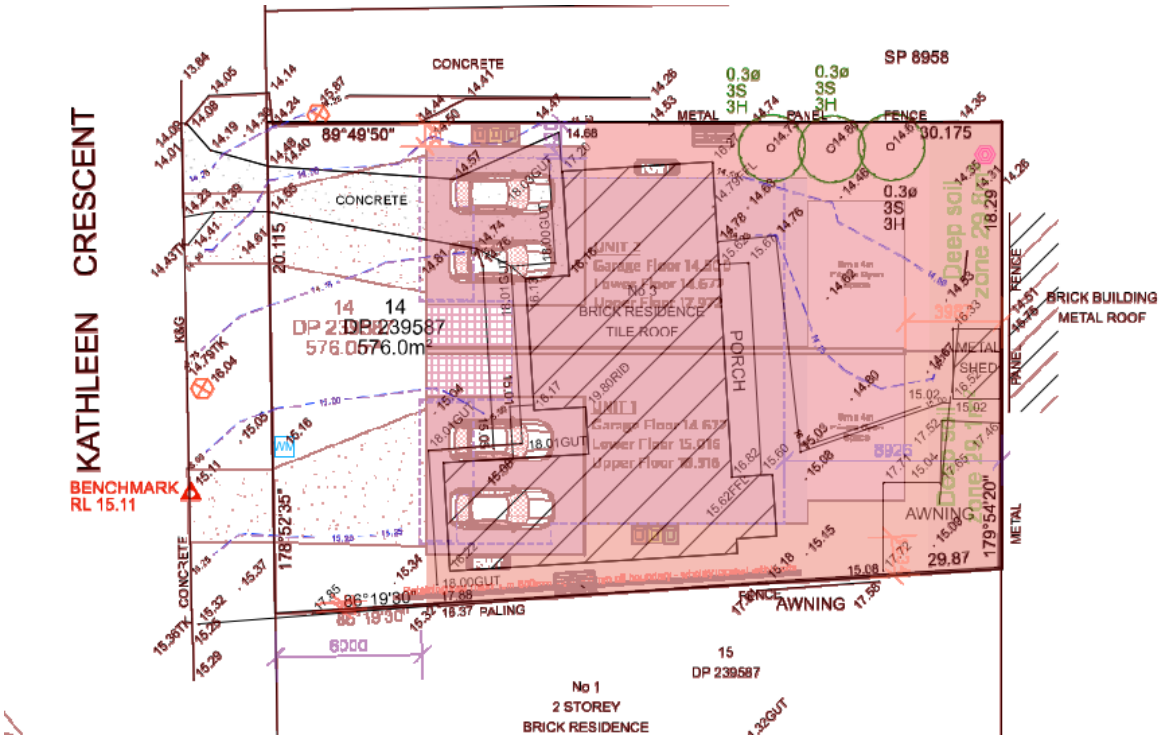

Figure 5 - survey plan overlayed with proposed development

The newly created sites include side setbacks to the north and south that exceed those prescribed by clause 4.3 of Chapter B1, WDCP 2009.

Due to the existing structures located on 6 Doris Avenue, Woonona and proposed demolition at 3 Kathleen Crescent, the greatest view impact loss is considered to be by the built form of unit one (1) at 3 Kathleen Crescent.

<u>The reasonableness of the development</u>
The proposal is compliant with Wollongong Local Environmental Plan 2009 and Wollongong Development Control Plan 2009 in terms of building height, number of storeys, side boundary setbacks and floor space ratio.

The proposal includes a request to vary clauses 4.8.2.11 and 4.10.2.4 of Chapter B1, WDCP2009 where the garage door opening faces the road, they shall be a maximum of 50% of the width of the dwelling. The proposed building design includes built form addressing passive surveillance of the street via an elevated study area and balcony and built form, landscaping that are considered to define the entry ways to both dwellings. The variation is considered to add to the bulk of the dwellings, however, is considered reasonable in this instance.

<u>View sharing conclusion</u>
The impacts arising from the proposed development of 3 Kathleen Crescent are considered by this assessment as minor to moderate, noting that existing structures located at 6 Doris Avenue, Woonona impact the existing view of the escarpment from within the site.

The demolition of the awning and shed located along the eastern boundary of 3 Kathleen Crescent, Woonona may allow greater solar access to the undercover area of 6 Doris Avenue. Consideration of

fencing behind the awning and shed have been considered within this assessment with the recommendation of condition of consent that boundary fencing be installed at full cost to the developer that includes consultation with the neighbouring sites.

The proposed development is generally compliant with the development standards and controls applicable to the land, with the exception of the increase in the garage door widths to 61%.

In conclusion, it is considered that the proposed dual occupancy at No 3 Kathleen Crescent, Woonona achieves sufficient view sharing opportunities to the 6 Doris Avenue, Woonona and can be supported.

Attachment 7 – Wollongong DCP 2009 Assessment

CHAPTER A1 – INTRODUCTION

8 Variations to development controls in the DCP

Section 4.8 Building Character and 4.10 Car Parking and Access	
Section 4.8.2.11 requires where the garage door addresses the street they must be a maximum of 50% of the width of the dwelling. And, section 4.10.2.4 a requires where garage door openings face a road they shall be a maximum of 50% of the width of the dwelling. The following outlines Council's consideration of the variation against the requirements of the DCP:	
Control	**Comment**
The variation statement must address the following points:	
a) The control being varied; and	The controls sought to be varied are 4.8.2.11 that requires where the garage door addresses the street they must be a maximum of 50% of the width of the dwelling. And, 4.10.2.4 that requires where garage door openings face a road they shall be a maximum of 50% of the width of the dwelling.
b) The extent of the proposed variation and the unique circumstances as to why the variation is requested;	**Applicant Response:** "It is requested that Wollongong City Council support the variation as the garage doors are 900mm wider than allowed under the 50% maximum. This variation is considered minor while allowing 2 vehicles to park securely in both dwellings. The glass elements to the front doors and the upper level balcony off a high use room provide adequate opportunities for passive surveillance." And "As shown on the submitted plans, the front facade of the dual occupancy development has both double garage doors facing the street. The garage door openings represent 61% of the width of the dwelling and therefore exceeds Council's maximum of 50%."
The applicant provided the following variation justifications: • The existing lot has a wider street frontage than a traditional block, therefore 2 dwellings fronting the street ensures the development responds to its natural and built context. The styling is complimentary to the existing streetscape. • The design ensures the development responds to the existing and future character, with façade styling and material selections sympathetic to the surrounding neighbourhood while having a modern touch with rendered and parapet elements. • The building design is highly articulated with a scale and form suitable to the wide street fronting block. The submitted landscape plan shows high quality landscaping is to be provided to contribute positively to the streetscape. • The colour scheme and material selections are similar to that within the streetscape. • Entry doors and windows from high use rooms both address the primary street frontage. • Passive surveillance is provided from the upper level balcony and street facing high use room. And • The development provides a double garage for both dwellings. • The vehicular access and manoeuvring is adequate for the scale of the development in the lower order road network street. • The building design is highly articulated with a scale and form suitable to the wide street fronting block. The use of mixed materials and design interest ensures the garage impact upon the streetscape is minimised.	

c) Demonstrate how the objectives are met with the proposed variations; and	The objectives of these controls are as per the below: 4.8.1 *a) To ensure the development responds to both its natural and built context.* *b) To design residential development that responds to the existing character and the future character of the area.* *c) To ensure building design contributes into the locality through a design that considers form, articulation and landscaping.* *d) To encourage colour schemes that are of similar hues and tones to that within the streetscape.* *e) To ensure buildings address the primary street frontage via entry doors and windows.* *f) To ensure that dwellings provide appropriate passive surveillance of public spaces and street frontages.* *g) To ensure that ancillary structures are not the dominate feature of the built form.* <u>Council comment:</u> • The proposed design is considered to address the street with passive surveillance via the elevated study areas and balcony. • The entries to both dwellings are considered to be defended through the built form and landscaping. • The subject site frontage is 20.115m. • The slight slope of the site has been addressed through the stepping of the dwellings down the site to reduce cut and fill. • The character of the area is aged housing with single dwelling and battle-axe sites contributing to the low density residential surrounding the subject site. The dwellings in the immediate locality are a mix of brick, render and clad. • The dwellings both address Kathleen Crescent, Woonona and are west facing, this elevation includes articulation through the design of the balconies and screening. • No ancillary structures are proposed. And 4.10.1 • *To provide car parking for residents,* • *To ensure that there is adequate provision for vehicular access and manoeuvring.* • *To minimise the impact of garages upon the streetscape.* <u>Council comment:</u> • The proposed design includes a double garage for each dwelling that comply with the requirements of the WDCP 2009. • Both dwellings include driveways that are 6m in length. • The driveways associated with the dwellings are considered to have been designed to allow for landscaping that contributes to the articulation of the front elevation. • Council are including a condition to provide a street tree of the same species as others in the existing street scape that is considered to assist with balancing the proposed dwellings and the existing streetscape.

d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.	No significant impacts are expected as a result of the proposal and variation sought.

Comment:

The variation has been considered and is supported in this case, as outlined above.

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 is considered to be consistent with the principles of Ecologically Sustainable Development. A BASIX certificate was provided in respect of the development which indicates that the building can achieve the BASIX energy and water efficiency and thermal comfort targets.

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

4.0 General Residential controls

Controls/objectives	*Comment*	*Compliance*
4.1 Maximum Number of Storeys		
• Maximum height of 9m – a maximum of 2 storeys • development occurs within the 8m rear setback the development is limited to single storey	Proposed: maximum height is 8.061m/ 2 storey. 2 storey component is setback 8.926m from rear boundary. The site is zoned R2.	Yes
4.2 Front Setbacks		
• a minimum setback of 6m from the front property boundary, or less than 6m where the prevailing street character permits and the future desired character of the area is not prejudiced. Reduced setbacks must be demonstrated through a Site and Context Analysis (Chapter A.1 cl.11.1). • Garages and carports setback has a minimum of 5.5m. • Secondary building line setback a minimum of 3 metres	6m min front setback proposed to the dwelling. Garages are setback 6.0m.	Yes
4.3 Side and Rear Setbacks		
• Walls must be setback at least 900mm from any side or rear property boundary • Walls (including gable ends and parapets) that exceed 7 metres overall	North/ side – min 1.42m South / side – min 1.5m side setback Eastern / rear – 3.987 to alfresco area; 7.8m to ground floor.	Yes

height must be setback at least 3 metres from the side and rear boundaries. • Eaves 450mm • Balconies and windows of habitable rooms designed to minimise any direct overlooking impact.	It is noted that none of the side walls exceed 7m in height (confirmed using RLs on plans). Ground level POS positioned at rear with minimal opportunity for overlooking in any direction. First floor balconies are 1.59m at the narrowest point with access from the front study area, orientated towards the street, including privacy screening to the north and south of the balconies to minimise overlooking and maximise the privacy of the occupants.	
4.4 Site coverage		
• The maximum site coverage is 50% of the area of the lot, based on lot size of 576sqm (288sqm) or post subdivision lot size of 288sqm (144sqm)	The site coverage is 49%. Lot coverage post-subdivision is also 49% for both units.	Yes, both across the whole site and post-subdivision lot areas
4.5 Landscaped Area		
• Significant trees are to be maintained on the site. • Min landscaped area – 20% of site area = 115.2sqm • At least 50% of the landscaped area located behind the building line to the primary road boundary. • Landscaped areas must be integrated with the drainage design. • Dual occupancy development requires: (a) a minimum of 1.5 metre wide landscape strip within the front setback for the majority of the site width (excluding the driveway). This area must be mulched and planted with appropriate trees, shrubs and/or groundcovers. A minimum of one (1) semi mature small to medium evergreen or deciduous tree (minimum pot size 45 litre) is to be provided within this landscape bed. (b) second semi mature small to medium tree (minimum pot size 45L) is	No tree removal is proposed. Required landscaped area: 115.2sqm. Proposed landscaped area is 188sqm (checked using objective trapeze). All areas included in the landscaped area calculation are more than 1.5m in width as required by Chapter E6 of the DCP. Post subdivision: Unit 1: 91sqm Unit 2: 97sqm >50% of overall landscaped area provision is to be provided behind the building line; complies. Landscaping strip has been provided to both side boundaries, but not along the full length of the site boundaries adjacent to the building where pathways are proposed for access to the rear yard. A garden bed has been provided between the two driveways.	Yes

to be provided onsite in the landscaped area or deep soil zone, planted at least 3m from any existing or proposed dwelling, building or structure on the lot.	The plans provide for dense planting within the DSZ area along the rear of the site. Unit 1: 29.1sqm Unit 2:29.8sqm	
4.6 Private Open Space		
• A 24m^2 area of private open space must be directly accessible from the living areas of each proposed dwelling and have a minimum width of 4 metres and be no steeper than 1:50. • Private open spaces and private courtyards should not be located on side boundaries or front yard. Variations may be permitted if POS sufficiently setback to ensure POS not impacted by existing or future complying dwellings on adjoining lots. • Private open space must be defined through the use of planting, fencing, or landscape features. • Private open space shall be screened where necessary to ensure privacy between dwellings in a dual occupancy and secondary dwellings. • Space shall be provided for clothes lines and waste/recycling bins and rain water tanks behind the front building line but outside of the private open space area.	More than 24m^2 POS proposed to be provided to each of the dwellings, both orientated to the rear of the site (eastern elevation). Both POS areas are accessible from the internal living areas. Minimum dimension requirements are achieved. Fence on proposed Torrens subdivision boundary and proposed landscaping will separate POS areas and provide adequate privacy. The plans indicate appropriate locations for clothes lines and waste/recycling bins behind the front building line but outside of the private open space areas. Shadow diagrams have been provided demonstrating compliant solar access to POS areas. Both covered POS areas include a skylight. ***Unit one*** is located to the south of the site with an eastern orientated POS area accessible from the living area and western balcony with access from the upper level study area. The proposed solution to the orientation of the site is considered to promote different opportunities within the site for POS. ***Unit two*** is orientated to the north of the site receiving more than 3 hours continuous solar access to the POS located on the eastern elevation.	Yes

4.7 Solar Access		
• Windows to living rooms of adjoining dwellings must receive at least 3 hours continuous sunlight, between hours of 9.00am and 3.00pm on 21 June. • At least 50% of the private open areas of adjoining residential properties must receive at least 3 hours of continuous sunlight, between hours of 9.00am and 3.00pm on June 21.	The development will have some overshadowing impacts on the direct southern neighbouring dwelling. Hourly shadow diagrams indicate that the POS of the neighbouring dwelling to the south will receive a minimum of 3 hours of continuous sunlight as at the winter solstice. Neighbouring dwellings to the north will continue to receive compliant solar access in accordance with the applicable controls. It is considered that the subject site maximises the solar access to the POS areas. Due to the orientation of the site the southern unit has included skylights in the dwelling and alfresco area. The main POS area is orientated to the east with a second POS balcony area located off the study on the upper level.	Yes
4.8 Building Character and Form		
• The design, height and siting of a new development must respond to its site context. • All residential buildings must be designed with building frontages and entries clearly addressing the street frontage. • The appearance of blank walls or walls with only utility windows on the front elevation will not be permitted. Note: Utility windows include windows for toilets, bathrooms, laundries etc which are small and / or translucent and hence, are not permitted within the front elevation of a dwelling. • Where garages are proposed on the front elevation they must be articulated from the front façade. • Additions to an existing dwelling-house must be compatible in terms of design, roof configuration and materials with the existing dwelling, unless the existing part of the dwelling	The plans have been revised to address earlier concerns raised regarding the build form and character of the development within the area. The design, height and siting of the proposed dual occupancy responds well to the development controls. The majority of nearby development comprises of single detached dwellings though there is a range of housing styles and scales in the locality, with some more contemporary development occurring in some parts of the broader area. The scale, form and finish of the development is considered to be appropriate with regard to the planning controls and the desired future character of the neighbourhood. The scale of the development when measured in terms of floor space ratio and overall	Variation sought and supported in this instance

is also upgraded to be sympathetic with the design, roof configuration and materials of the new addition. • Any secondary dwelling shall be designed and constructed of external building materials and colour finishes which are sympathetic to the principal dwelling. • Existing garages and outbuildings must not be used as a secondary dwelling, except where the required Development Application is supported with appropriate evidence which proves that the structure complies with the relevant provisions of the Building Code of Australia. • Fences in the front building line should be predominately constructed in transparent fence materials, allowing for visual connection between the dwelling and the street. • Where the garage door addresses the street they must be a maximum of 50% of the width of the dwelling.	bulk and scale is compliant with controls. The development has been designed with entries addressing the street frontage. There are no blank walls on the street frontage. The garages are located below the balconies and within the front façade of the dwelling. The entry way to both dwellings is set to the middle of the dual occupancy and setback to include a porch to each dwelling. The garage doors to each dwelling are greater than 50% width of each dwelling. A variation to this has been considered and supported in this instance.	
<u>4.9 Fences</u>		
• Fences within the front and secondary building lines should be predominantly constructed in transparent fence materials, allowing visual connection between the dwelling and the street. • Fences to be constructed to allow the natural flow of stormwater drainage or runoff • Any fence and associated retaining wall within the front setback area from the primary road frontage must be a maximum 1.2 metres in height, above existing ground level. • Front fences must be open for at least 50% of the upper 2/3 of the area of the fence. Any brick or other solid portion of the fence above 600mm must not be more than 250mm wide. • All front fences must be designed to ensure the safety of all pedestrians using any adjacent public footpath,	The landscape plan does not indicate any new boundary or front fencing. Dividing fencing between unit one and two complies with this clause. Fencing could be undertaken pursuant to the Dividing Fences Act 1991. Condition of consent recommended with regards to boundary fencing due to the demolition of structures on site that form a portion of the existing boundary fencing.	Yes

including children and people with a visual disability. • Front and return fences should reflect the design of the residential building, wherever practicable. • Front and return fences should be designed of materials which are compatible with other fences within the immediate streetscape, wherever practicable. • Side fences on corner blocks shall be a maximum of 1.2 metres in height within the front setback area (ie up to the front alignment of the dwelling) from the primary road frontage and shall be a maximum of 1.8m in height for the remainder of the secondary road frontage (ie behind the front building alignment). Fences must be constructed of timber, metal, lightweight materials or masonry. Fences in bush fire prone areas shall be of a metal or masonry construction only. • Dividing fences between the front building line and the rear property boundary must be a maximum of 1.8 metres in height. • Fences must be constructed of timber, metal, lightweight materials or masonry. Fences in bush fire prone areas shall be of a metal or masonry construction only. • Front and return fences are not to be of a timber paling, Colorbond, or chain wire mesh design.		
4.10 Car parking and Access		
• GFA<125m2: 1 car parking space • GFA>125m2: 2 car parking spaces • The minimum dimension for a single car parking space shall be 5.5 metres x 2.6 metres where unenclosed. • The minimum dimension for single garage shall be 6 metres x 3 metres.	Both dwellings have GFA over 125sqm. Both dwellings are to be provided with a double car garage with access via separate 3m wide driveways. Garage setback is 6m from the front boundary which allows for a stacked car space sited on the driveway in front of the dwellings.	Variation sought and supported in this instance

<table>
<tr><td>

- Where garage door openings face a road, they shall be a maximum of 50% of the width of the dwelling.
- Driveways shall be separated from side boundaries by a minimum of 1m.
- Driveway maximum 3m cross-over width.
- Access for a rear dwelling must be provided by a dedicated access corridor attached to the same ownership of the rear property.

</td><td>The garage doors to each dwelling are greater than 50% width of each dwelling. A variation to this has been considered and supported in this instance.

Driveways are located appropriately; landscape beds to either side as required.

Landscaping is proposed to front setback area. The landscape plan indicates planting including trees shrubs and ground covers.</td><td></td></tr>
<tr><td><u>4.11 Storage Facilities</u></td><td></td><td></td></tr>
<tr><td>

Dwelling	Storage Volume	Storage Area
Three or more bedrooms	$10m^3$	$5m^2$

</td><td>A review of the submitted plans shows that the storage provided is reasonable and is considered to comply with this clause.</td><td>Yes</td></tr>
<tr><td><u>4.12 Site Facilities</u></td><td></td><td></td></tr>
<tr><td>

- Letterboxes and clothes lines in an accessible location.

</td><td>Clothes lines provided for each dwelling in an appropriate and accessible location.

Letter boxes are properly located.</td><td>Yes</td></tr>
<tr><td><u>4.13 Fire Brigade Servicing</u></td><td></td><td></td></tr>
<tr><td>

- All dwellings, particularly dual occupancy and dwellings on battle axe allotment must be located within 60m of a fire hydrant, or the required distance as required by Australian Standard AS2419.1.

</td><td>Fire brigade servicing the subject site will remain as per existing for both dwellings.

Complies.</td><td>Yes</td></tr>
<tr><td><u>4.14 Services</u></td><td></td><td></td></tr>
<tr><td>

- Encourage early consideration of servicing requirements.

</td><td>The site is already serviced; it is expected that some augmentation to existing utilities will be required to facilitate the proposed development. Conditions can be imposed in this regard.</td><td>Yes</td></tr>
<tr><td><u>4.15 Development near the coastline</u></td><td></td><td></td></tr>
<tr><td></td><td>The subject site is not located within 10m of a cliff and/or beach.</td><td>N/A</td></tr>
<tr><td><u>4.16 View Sharing</u></td><td></td><td></td></tr>
<tr><td>(a) To encourage view sharing from adjoining or nearby properties, public places, and new development.</td><td>One submission was received concerned about view loss of the escarpment.</td><td>Yes</td></tr>
</table>

(b) To protect and enhance significant view corridors from public places. (c) To encourage the siting and design of new buildings which open up significant views from public areas.	Full analysis of surrounding sites is included in section 1.3 submissions and attachment 6 – view impact assessment. The sites directly to the east and south of the subject site include built structures that are considered to impact the view of the escarpment from within each sites. The existing single storey dwelling and structures on site will be demolished to allow the proposed dual occupancy to be constructed. The survey plan details the existing ridge height is 19.8m, the proposed ridge height of the dual occupancy is 22.535m. The height increase of 2.735m is expected. The proposed development is 2 storey and 8.061m in height. The development complies with a maximum 9m height of clause 4.1 of Chapter B1, WDCP 2009. The second storey is setback from the boundary with 6 Doris Street by 8.926m and complies with a minimum if 8m setback of clause 4.3 of the WLEP 2009 Council considers that while there will be a minor to moderate impact on views from the adjoining sites, the assessment indicates that the proposal provides sufficient view sharing	
4.17 Retaining walls		
• Max. 600mm high up to 900mm from boundary. • Max. 1m high >900mm from boundary. • Walls to be terraced in max. 1m steps.	Retaining walls are contained within the subject site along the southern elevation. Conditions of consent will be recommended to ensure the retaining wall, drainage and footing is wholly contained within the subject site. The maximum height of the retaining wall associated with unit one, southern boundary is 600mm	Yes

	and located 300mm from the southern boundary. The retaining wall is considered to comply with the recommendations of this clause.	
4.18 Swimming Pools and Spas		
	None proposed	N/A
4.21 Additional controls for Dual Occupancies minimum site width		
• A minimum site width of 15 metres is required for a dual occupancy development; to be measured for the full width of the site, perpendicular to the side property boundaries. • For corner allotments, a minimum 15 metre site width must be achieved for at least one (1) of the street frontages and a minimum 12 metre site width must be achieved for the other street frontage.	The site is irregular in shape with a front boundary width of 20.115m and rear boundary of 18.29m. Post subdivision: Unit one front boundary 10.565 and rear boundary 8.698m. Unit two front boundary 9.552m and rear boundary 9.590m.	Yes
4.22 Additional controls for Dual Occupancies –building character and form		
• Must address street on both frontages in the case of corner allotments • garages must be articulated from the front facade • Existing garages and outbuildings cannot be used as a dual occupancy	The development generally addresses the street frontage with garage and entry doors fronting the street.	Yes
4.23 Additional Controls for Dual Occupancy's – Deep Soil Zones		
• 50% landscaped area must be provided as a deep soil zone, having a minimum dimension of 3m. • The deep soil zone must be located outside the minimum private open space required. • Siting of DSZ to be determined following Site and Context analysis to investigate location: a) at rear of site to allow separation from adjacent dwellings and to provide corridor of vegetation or b) elsewhere to allow retention of significant trees and attain maximum access to sunlight.	Required landscaped area: 115.2sqm. Landscaped area provision is 188sqm (checked using 'objective trapeze'). All of the areas included in the landscaped area calculation are more than 1.5m in width as required by Chapter E6 of the DCP. Required DSZ: 57.6sqm Total DSZ provided: 58.9sqm Unit one: 29.1sqm Unit two: 29.8sqm DSZ indicated on the plans along the rear boundary of the site. This area	Yes

• No structures allowed in DSZ. • The deep soil zone shall be densely planted with trees and shrubs. Where the development is to be strata titled, the deep soil zone may be retained within the common property or allocated to an individual unit entitlement, where such dwelling is directly adjacent.	in total exceeds the minimum requirement. Dense planting of the DSZ is indicated on the landscape plan	

CHAPTER B2 – RESIDENTIAL SUBDIVISION

The proposal seeks consent for the Torrens title subdivision of the dual occupancy and 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.

Controls/objectives	*Comment*	*Compliance*
6 Subdivision design, topography, natural landform & significant vegetation		
	The subdivision is considered to have adequate regard to the natural topography of the site. The siting of the proposed development and subsequent development is considered appropriate as evidenced by the assessment against Chapter B1 above.	Yes
6.1 Subdivision lot layout – aspect & solar access		
	The subject site addresses Kathleen Crescent, Woonona to the West with the rear garden orientated to the east. Unit one is located to the south of the site. Solar access to the ground floor POS and living area is received during the morning with solar access increased via a skylight to the POS area. In addition, a balcony area is accessible to the west from the upper level study area with an area of 10sqm. Unit two is located to the north of the site and is considered to maximise solar access opportunities. Both units include consideration of energy efficiency opportunities by orientating the roof to allow for solar panels at a later stage.	Yes

6.2 minimum allotment size requirements		
	There is no minimum lot size requirements for the subdivision of an existing dual occupancy.	Yes
6.3 Lot width & depth requirements		
	The lot width predevelopment: Front boundary: 20.115m Rear boundary: 18.29m Northern side boundary: 30.175m Southern side boundary: 29.87m Post subdivision: Unit one Front boundary: 10.565m Northern side boundary: 30.003m Rear boundary: 8.698m Southern side boundary: 29.87m Unit two Front boundary: 9.552m Northern side boundary: 30.175m Rear boundary: 9.59mm Southern side boundary: 30.003m	Yes
6.4 Battle-axe lots		
	The development proposed dual occupancy that both address Kathleen Crescent. No Battle-axe site/s are created.	Yes
6.4 Building envelopes		
	Satisfactory – demonstrated by compliant dwellings on each site.	Yes
11 Street tree planting		
	The landscaping plan does not detail street tree planting. The driveway access to the site is separated by landscaping within the site. The street frontage includes one power pole. The existing street character includes street tree planting and it is considered that this development would benefit from street	Yes

	planting. As such, conditions of consent will include the planting of one street tree to be consistent with existing street tree character and a maintenance plan for a minimum of 12 months.	
15 Stormwater drainage		
	Drainage plans have been assessed by Councils Development Engineer who has provided a satisfactory referral and conditions of consent.	Yes
17 Servicing arrangements		
	The site is already serviced; it is expected that some augmentation to existing utilities will be required to facilitate the proposed development. Conditions can be imposed in this regard.	Yes

CHAPTER D1 – CHARACTER STATEMENTS

Woonona

Existing Character

Woonona is located approximately 10 kilometres north of Wollongong City Centre and stretches from the coastal foreshore to the east and the escarpment, to the west.

Woonona is a residential suburb which over the last two decades has experienced considerable growth with the release of several new residential housing estates.

Woonona contains a variety of housing forms, including detached dwellings and medium density housing in the form of townhouses and villas. The older residential suburbs of Woonona predominantly contain single storey weatherboard and brick dwellings on mid to larger sized allotments of land. The newer residential estates in Woonona contain a mix of single and two storey dwellings, predominantly of a face brick or rendered brick wall and pitched roof tile construction on smaller lots together with some new medium density housing in the form of townhouses and residential flat buildings.

The Woonona retail and business centre is located approximately 2 kilometres south of the Princes Highway and Lawrence Hargrave Drive intersection and is a traditional strip centre. The centre is situated on both sides of the Princes Highway and includes a free standing Franklins supermarket, a McDonalds fast food restaurant and a range of specialty retail shops and service orientated businesses.

Woonona also contains small remnant pockets of light industrial land uses.

Woonona is provided with a range of active and passive open space areas including Woonona Beach, Ocean Park, Nicholson Park, Collins Park, Hollymount Park, Woonona Heights Park and Carole Avenue Reserve.

Desired Future Character

Woonona is likely to experience continued growth as a result of the developing residential release areas as well as the replacement of older dwelling stock with larger dwelling-houses.

Woonona should remain a relative low density residential suburb, except for along the Princes Highway and in close proximity to Woonona railway station where medium density housing in the form of townhouses and residential flat buildings will be encouraged.

Individually designed dwellings with a distinctive coastal character are encouraged for the eastern coastal part of Woonona. Balconies should be lightly framed in stainless steel and / or timber finishes, rather than of brick or masonry construction.

For the central and western parts of Woonona, dwelling-houses and medium density housing should be of a face brickwork wall construction with pitched tile or colourbond roof forms preferred.

The Woonona retail and business centre functions as a large neighbourhood centre serving a predominantly residential area to the east and west of the Princes Highway. The role and function of this centre will continued to be focussed on providing daily convenience goods and services and only limited capacity to meet weekly shopping needs. Any new retail or business development in Woonona shall be contained within the confines of the existing business precinct.

The residential area between Hollymount Estate and south of Grey Street is recognised for its special "heritage" character and tree lined streets and hence, any alterations and additions to dwellings or new dwellings must be sympathetic with the character of this locality.

The proposed development is a permissible use in the R2 zone and satisfies the controls for dual occupancies under the Wollongong Development Control Plan 2009. The proposed development is considered to reflect the low-density character of the area. The surrounding existing development is a mixture of brick and clad single dwellings and battle-axe sites. The proposed dual occupancy is considered to be generally consistent with the existing and desired future character of the locality.

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

7 Parking demand and servicing requirements

	Rate	*Calculation*	*Required*	*Provided*	*Compliance*
Car parking	1 space per dwelling with a gross floor area of less than 125sqm	Dwelling 1 (>125m^2)	2	2	Yes
		Dwelling 1 (>125m^2)	2	2	Yes
	2 spaces per dwelling with a gross floor area of more than 125sqm				

The proposed development provides for compliant car parking, vehicular access and manoeuvring in compliance with Chapters B1 and E3 of the DCP. The proposal incorporates a double car garage and the availability of stacked car space for each of the dwellings. On-street car parking spaces will be available on the frontage between the two driveways.

8 Vehicular access

The application has been assessed by Council's Development Engineer. Driveway grades and sight distances comply with applicable standards.

CHAPTER E6: LANDSCAPING

The proposed development is considered acceptable with regard to the objectives and controls in Chapter E6 of the DCP. Conditions will be imposed in relation to maintenance and implementation of landscape works.

A landscape concept plan was submitted with the application. Appropriate planting is proposed within the front and rear setbacks. Adequate deep soil zone is proposed along the rear boundary of the site.

Suitable conditions relating to landscaping have been recommended.

CHAPTER E7: WASTE MANAGEMENT

A Site Waste Minimisation and Management Plan has been provided in accordance with this chapter. Appropriate conditions relating to waste management and minimisation will be included on the consent.

CHAPTER E14: STORMWATER MANAGEMENT

Council's Development Engineer has reviewed the proposal and has assessed it as satisfactory with regard to the provisions of Chapter E14.

CHAPTER E17: PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

No trees or vegetation is proposed for removal.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

Proposed earthworks are minor in nature and are required to develop the site to include the proposed dual occupancy and dwelling house. Draft conditions have been recommended in this regard.

CHAPTER E21: DEMOLITION AND HAZARDOUS BUILDING MATERIALS MANAGEMENT

Demolition of the existing dwelling and ancillary structures is proposed. Appropriate conditions will be included on the consent relating to demolition and waste management.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

Conditions of consent are recommended in regard to appropriate sediment and erosion control measures to be in place during works.

wollongong
city of innovation

WOLLONGONG CITY COUNCIL

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Attachment 8 - Draft conditions

For Office Use Only – Do Not Mail

Consent has been granted subject to the following conditions:

1. **Approved Plans and Supporting Documentation** Development must be carried out in accordance with the following approved plans and supporting documentation (stamped by Council), except where the conditions of this consent expressly require otherwise.

Plan No	Revision No	Plan Title	Drawn By	Dated
3	B	Site Plan	Ingenuity Home Design	30 June 2022
4	B	Site Demolition/Waste Management/Soil Erosion Plan	Ingenuity Home Design	30 June 2022
5	B	Torrens Subdivision Plan	Ingenuity Home Design	30 June 2022
6	B	Lower Floor Plan	Ingenuity Home Design	30 June 2022
7	B	Upper Floor Plan	Ingenuity Home Design	30 June 2022
8	B	Western Elevation/Southern Elevation	Ingenuity Home Design	30 June 2022
9	B	Eastern Elevation/Northern Elevation	Ingenuity Home Design	30 June 2022
10	B	Section A-A	Ingenuity Home Design	30 June 2022
11	B	Roof Plan	Ingenuity Home Design	30 June 2022

In the event of any inconsistency between the approved plans and the supporting documentation, the approved plans prevail. In the event of any inconsistency between the approved plans and a condition of this consent, the condition prevails.

Note: an inconsistency occurs between an approved plan and supporting documentation or between an approved plan and a condition when it is not possible to comply with both at the relevant time.

General Conditions

2. **Construction Certificate**
A Construction Certificate must be obtained from Council or a Registered Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Part 3 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The Certifier must cause notice of its determination to be given to the consent authority, and to the Council, by forwarding to it, within two (2) days after the date of the determination, the plans

and documentation referred to in Section 13 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.

3. Mailboxes
The developer must install mailboxes along street frontage of the property boundary in accordance with Australia Post Guidelines. Prominent house numbers are to be displayed, with a minimum number size of 150mm in height for each number and letter in the alphabet.

4. Occupation Certificate
An Occupation Certificate must be issued by the Principal Certifier prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifier must be satisfied that the requirements of section 6.9 of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

5. Development Contributions
In accordance with Section 4.17(1)(h) of the Environmental Planning and Assessment Act 1979 and the Wollongong City Wide Development Contributions Plan (2022), a monetary contribution of $6,600.00 (subject to indexation) must be paid to Council towards the provision of public amenities and services, prior to the release of any associated Construction Certificate.

This amount has been calculated based on the proposed cost of development and the applicable percentage levy rate.

The contribution amount will be indexed quarterly until the date of payment using Consumer Price Index; All Groups, Sydney (CPI) based on the formula show in the Contributions Plan.

To request an invoice to pay the contribution amount go www.wollongong.nsw.gov/contributions and submit a contributions enquiry. The following will be required:

- Application number and property address.
- Name and address of who the invoice and receipt should be issue to.
- Email address where the invoice should be sent.

A copy of the Contributions Plan and accompanying information is available on Council's website www.wollongong.gov.au.

Before the Issue of a Construction Certificate

6. Structures Adjacent to Driveway
Any proposed structures adjacent to the driveway shall comply with the requirements of the current relevant Australian Standard AS 2890.1 (figure 3.2 and 3.3) to provide for adequate pedestrian and vehicle sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate plans.

7. Depth and Location of Services
The depth and location of all services (ie gas, water, sewer, electricity, telephone, traffic lights, etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.

8. Certification for Landscape and Drainage
The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifier prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.

9. Retaining Wall adjacent to Common Boundary
Retaining wall adjacent to common boundary must be located wholly within the property, including the wall, footings and drainage lines. Construction of retaining walls or associated drainage work along common boundaries must not compromise the structural integrity of any existing structures.

Detailed plans verifying compliance with this requirement must be provided to the Certifying Authority prior to issue of the Construction Certificate.

10. Engineering Plans and Specifications - Retaining Wall Structures Greater than One (1) Metre

The submission of engineering plans and supporting documentation of all proposed retaining walls greater than one (1) metre to the Principal Certifier for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:

a. A plan of the wall showing location and proximity to property boundaries;

b. An elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;

c. Details of fencing or handrails to be erected on top of the wall;

d. Sections of the wall showing wall and footing design, property boundaries, subsoil drainage and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note that the retaining wall, subsoil drainage and footing structure must be contained wholly within the subject property;

e. The proposed method of subsurface and surface drainage, including water disposal. This is to include subsoil drainage connections to an inter-allotment drainage line or junction pit that discharges to the appropriate receiving system;

f. The assumed loading used by the engineer for the wall design.

g. Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels.

11. Stormwater Connection to Kerb

Connection across footways shall be by means of one or two (maximum), sewer grade UPVC pipe(s), 100mm diameter pipes with a continuous downslope gradient to the kerb. Connection to the kerb shall be made with a rectangular, hot dipped galvanised mild steel weephole(s) shaped to suit the kerb profile, with each weephole having the capacity equal to a 100mm diameter pipe. Alternatively, a maximum of two 150mm x 100mm hot dipped galvanised steel pipes may be used across footways, with the 150mm dimension being parallel to the road surface to suit the kerb profile.

12. Sizing of Drainage

All roof gutters, downpipes, pits, and pipelines draining roof areas and other impervious surfaces with no deliberate overflow path to the on-site stormwater detention (OSD) facility, shall be designed to cater for a 1 in 100 year ARI storm event in accordance with AS 3500.3: Plumbing and Drainage (Stormwater Drainage). Details of gutter/downpipe/pipeline sizes and locations shall be reflected on the Construction Certificate plans.

13. Stormwater Drainage Design

A detailed drainage design for the development must be submitted to and approved by the Principal Certifier prior to the release of the Construction Certificate. The detailed drainage design must satisfy the following requirements:

a. Be prepared by a suitably qualified civil engineer in accordance with Chapter E14 of Wollongong City Council's Development Control Plan 2009, Subdivision Policy, conditions listed under this consent, and generally in accordance with the concept plan/s lodged for development approval, prepared by ADD Design & Consulting, Reference No. 22/089 Sheet 4 of 8, issue 0, dated 22/05/22.

b. Include details of the method of stormwater disposal. Stormwater from the development must be piped to Council's street kerb and gutter.

c. Engineering plans and supporting calculations for the stormwater drainage system are to be prepared by a suitably qualified engineer and be designed to ensure that stormwater runoff

from upstream properties is conveyed through the site without adverse impact on the development or adjoining properties. The plan must indicate the method of disposal of all stormwater and must include rainwater tanks, existing ground levels, finished surface levels on all paved areas, estimated flow rates, invert levels and sizes of all pipelines.

d. Overflow paths shall be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land, as well as from any detention storage on the land. Blocked pipe situations with 1 in 100 year ARI events shall be incorporated in the design. Overflow paths shall also be provided in low points and depressions. Each overflow path shall be designed to ensure no entry of surface water flows into any building and no concentration of surface water flows onto any adjoining property. Details of each overflow path shall be shown on the detailed drainage design.

14. On-Site Stormwater Detention (OSD) Design

The developer must provide OSD storage for stormwater runoff from the development. The design and details of the OSD system must be provided in conjunction with the detailed drainage design and approved by the Principal Certifier prior to the release of the Construction Certificate. The OSD design and details must satisfy the following requirements:

a. Must be prepared by a suitable qualified engineer in accordance with Chapter E14 of the Wollongong DCP 2009.

b. Must include details of the Site Storage Requirement (SSR) and Permissible Site Discharge (PSD) values for the site in accordance with Section 10.2.4 of Chapter E14 of the Wollongong DCP 2009.

c. The OSD facility must be designed to withstand the maximum loadings occurring from any combination of traffic (with consideration to residential and heavy vehicles), hydrostatic, earth, and buoyancy forces. Details must be provided demonstrating these requirements have been achieved.

d. The OSD facility shall incorporate sufficient provisions for access and maintenance purposes, provision for safety, debris control screen, and a suitably graded invert to the outlet to prevent ponding.

e. Must include discharge control calculations (i.e. orifice/weir calculations) generally in accordance with Section 10.2.6 and 10.4.4 of Chapter E14 of the Wollongong DCP 2009.

f. Details of the orifice plate including diameter of orifice and method of fixing shall be provided.

g. Must include details of a corrosion resistant identification plaque for location on or close to the OSD facility. The plaque shall include the following information and shall be installed prior to the issue of the Occupation Certificate:

   i. The structure is an OSD facility, being part of the stormwater drainage network, and is not to be tampered with.
   ii. Identification number DA-2022/60;
   iii. Any specialist maintenance requirements.

h. Must include a maintenance schedule for the OSD system, generally in accordance with Chapter E14 of the Wollongong DCP 2009.

15. Council Footpath Reserve Works – Driveways and Crossings

All redundant vehicular crossings and laybacks rendered unnecessary by this development must be reconstructed to normal kerb and gutter or existing edge of carriageway treatment to match the existing. The verge from the back of kerb to the boundary must be restored and the area appropriately graded, topsoiled and turfed in a manner that conforms with adjoining road reserve. The area forward of the front boundary must be kept smooth, even and free from any trip hazards. All alterations of public infrastructure where necessary are at the developer's expense.

All new driveway laybacks and driveway crossings must be designed in accordance with Wollongong City Council Standards. Any redundant line marking such as 'marked parking bays'

are adjusted/removed at the developer's expense by a Council recognised contractor with the relevant insurances. Details and locations are to be shown on the Construction Certificate Plans.

16. No Adverse Runoff Impacts on Adjoining Properties
The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater runoff.

17. Flows from Adjoining Properties
Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels. The above requirements must be clearly shown on Construction Certificate plans prior to the release of the Construction Certificate.

18. Present Plans to Sydney Water
Approved plans must be submitted online using Sydney Water Tap, available through www.sydneywater.com.au to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

The Principal Certifier must ensure that Sydney Water has issued an approval receipt prior to the issue of a Construction Certificate.

Visit www.sydneywater.com.au or telephone 13 20 92 for further information.

19. Utilities and Services
Before the issue of the relevant Construction Certificate, the applicant must submit the following written evidence of service provider requirements to the certifier:

a. a letter of consent from Endeavour Energy demonstrating that satisfactory arrangements can be made for the installation and supply of electricity

b. a response from Sydney Water as to whether the plans proposed to accompany the application for a Construction Certificate would affect any Sydney Water infrastructure, and whether further requirements need to be met.

c. other relevant utilities or services - that the development as proposed to be carried out is satisfactory to those other service providers, or if it is not, what changes are required to make the development satisfactory to them.

20. Obscure Glazing for all Bathroom and WC Windows
The bathroom and WC windows for each dwelling in the development shall be frosted or opaque glass. This requirement shall be reflected on the Construction Certificate plans.

21. Schedule of External Building Materials/Finishes
The final details of the proposed external treatment/appearance of the development, including a schedule of building materials and external finishes (including the type and colour of the finishes) together with a sample board and an A4 or A3 sized photograph of the sample board shall be submitted for the separate approval of the Principal Certifier, prior to the release of the Construction Certificate.

22. Privacy screen
Nonadjustable privacy screens must be installed to the Northern and Southern elevations of the upper-level balcony.
The purpose of this condition is to prevent direct overlooking of adjoining properties on either side of the development.
Detailed plans verifying compliance with this requirement must be provided to the Certifying Authority prior to issue of the Construction Certificate.

23. External Clothes Drying Facilities
In the event that external clothes drying facilities are proposed, full details of the screening and the location of these facilities shall be reflected on the Construction Certificate plans and the final landscape plan.

24. Fencing

The development is to be provided with fencing and screen walls, in consultation with the neighbour, at full cost to the applicant/developer as follows:

a. where a screen wall faces the road, pedestrian walkway, reserve or public place that wall shall be constructed of the same brickwork as that used in the external wall of the building; and

b. rear and side property boundaries (behind the building line) and private rear courtyards are to be provided with minimum 1.8 metre high brick, timber lapped and capped or colorbond fences.

This requirement is to be reflected on the Construction Certificate plans.

25. Landscaping

The submission of a final Landscape Plan will be required in accordance with the requirements of Wollongong City Council DCP 2009 Chapter E6. The Landscape plan must ensure surrounding landscaping and structures are not impacted by the final landscape plan. The approved Landscape Plan (ie as part of this consent) for the approval by the Principal Certifier, prior to the release of the Construction Certificate.

26. Landscape Maintenance Plan

The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifier prior to release of the Construction Certificate.

27. Tree Protection and Management

The existing trees are to be retained upon the subject property and any trees on adjoining properties shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following:

a. Installation of Tree Protection Fencing - Protective fencing shall be 1.8 metre cyclone chainmesh fence, with posts and portable concrete footings. Details and location of protective fencing must be indicated on the architectural and engineering plans to be submitted to the Principal Certifier prior to release of the Construction Certificate.

b. Installation of Tree Protection Fencing - A one (1) metre high exclusion fence must be installed around the extremity of the dripline of the tree/trees to be retained prior to any site works commencing. The minimum acceptable standard is a 3 strand wire fence with star pickets at 1.8 metre centres. This fence must be maintained throughout the period of construction to prevent any access within the tree protection area. Details of tree protection and its locations must be indicated on the architectural and engineering plans to be submitted to the Principal Certifier prior to release of the Construction Certificate.

c. Mulch Tree Protection Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75mm thick 100% recycled hardwood chip/leaf litter mulch.

d. Irrigate: Areas within the Tree Protection Zone are to be regularly watered in accordance with the Arborist's recommendations.

28. Street Tree Establishment Period

The Developer must comply with the terms of an approved landscape maintenance program for a minimum period of 12 months to ensure that all landscape works within Council's road reserve or Council owned or controlled land becomes well established by regular maintenance. The Street Tree Establishment Period shall commence from the issue of the Occupation Certificate.

The program must include the following elements: watering, weeding, litter removal, mulching, fertilising, tree guard and grate maintenance, and pest and disease control.

Details of the proposed program must be submitted with the Landscape Plan to the Principal Certifier for approval prior to release of the Construction Certificate.

29. Property Addressing Policy Compliance

Prior to the issue of any Construction Certificate, the developer must ensure that any site addressing complies with Council's **Property Addressing Policy** (as amended). Where appropriate, the developer must also lodge a *General Property Addressing Request* through Online Services on Council's Website *(https://www.wollongong.nsw.gov.au/book-and-apply/online-services)*, for the site addressing prior to the issue of the Construction Certificate. Please allow up to 5 business days for a reply. Enquiries regarding property addressing may be made by calling (02) 4227 8660.

30. Street Trees

The developer must address the street frontage by installing street tree planting. The number and species for this development is one tree, *Lophostemon confertus* Brushbox, 45 litre container size, in accordance with AS 2303:2018: Tree stock for landscape use. Street trees are to be installed in accordance with Wollongong Development Control Plan 2009 – Chapter E6: Landscaping. 'Dial Before You Dig' must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Tree pits must be adequately mulched, plants installed and staking installed to the satisfaction of WCC Manager of Parks and Open Space. Staking is to consist of minimum 3 x 2400 x 50 x 50mm hardwood stakes driven minimum 600mm into firm ground. Hessian webbing is to be utilised to secure plant stock to industry standard.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

31. Dilapidation Report

Before the issue of a Construction Certificate, a suitably qualified engineer must prepare a dilapidation report detailing the structural condition of adjoining buildings, structures or works, and public land, to the satisfaction of the certifier. If the engineer is denied access to any adjoining properties to prepare the dilapidation report, the report must be based on a survey of what can be observed externally and demonstrate, in writing, to the certifier's satisfaction that all reasonable steps were taken to obtain access to the adjoining properties.

Before the Commencement of Building Work

32. Works in Road Reserve - Minor Works

Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing or any proposed interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development.

The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council's website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the Roads Act. It is advised that all applications are submitted and fees paid, five (5) days prior to the works within the road reserve are intended to commence. The Applicant is responsible for the restoration of all Council assets within the road reserve which are impacted by the works/occupation. Restoration must be in accordance with the following requirements:

a. All restorations are at the cost of the Applicant and must be undertaken in accordance with Council's standard document, "Specification for work within Council's road reserve".

b. Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.

33. Notification to Council of any Damage to Council's Infrastructure

Council must be notified in the event of any existing damage to any of Council's infrastructure including, but not limited to the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development prior to the commencement of work. Adequate protection must be provided to Council infrastructure prior to work commencing and during the construction

period. Any damage to Council's assets shall be restored in a satisfactory manner prior to the issue of the Occupation Certificate.

34. Adjustment to Public Utility Service

The arrangements and costs associated with any adjustment to a public utility service shall be borne by the applicant/developer. Any adjustment, deletion and/or creation of public utility easements associated with the approved works are the responsibility of the applicant/developer. The submission of documentary evidence to the Principal Certifier which confirms that satisfactory arrangements have been put in place regarding any adjustment to such services is required prior to any works commencing on site.

35. Appointment of Principal Certifier

Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate must:

a. appoint a Principal Certifier and notify Council in writing of the appointment irrespective of whether Council or a Registered Certifier is appointed; and

b. notify Council in writing of their intention to commence work (at least two [2] days notice is required).

The Principal Certifier must determine when inspections and compliance certificates are required.

36. Home Building Act Requirements

Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the Principal Certifier for the development to which the work relates (not being the Council) has given the Council written notice of the following information -

a. In the case of work for which a principal contractor is required to be appointed -

   i. the name and licence number of the principal contractor, and

   ii. the name of the insurer by which the work is insured under Part 6 of that Act,

b. In the case of work to be done by an owner-builder -

   i. the name of the owner-builder, and

   ii. if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

If arrangements for doing the residential building work are changed while the work is in progress so that the information notified becomes out of date, further work must not be carried out unless the Principal Certifier for the development to which the work relates (not being the Council) has given the Council written notice of the updated information.

37. Signs On Site

A sign must be erected in a prominent position on any site on which building work or demolition work is being carried out:

a. showing the name, address and telephone number of the Principal Certifier for the work, and

b. showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and

c. stating that unauthorised entry to the worksite is prohibited.

Any such sign is to be maintained while the building work or demolition work is being carried out, but must be removed when the work has been completed.

Note: This does not apply in relation to building work or demolition work that is carried out inside an existing building that does not affect the external walls of the building.

38. Temporary Toilet/Closet Facilities

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

a. Each toilet provided must be:

b. a standard flushing toilet; and

c. connected to either:

   i. the Sydney Water Corporation Ltd sewerage system or

   ii. an accredited sewage management facility or

   iii. an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

39. Structural Engineer's Details

Structural Engineer's details for all structurally designed building works such as reinforced concrete footings, reinforced concrete slabs and structural steelwork must be submitted to the Principal Certifier, prior to the commencement of any works on the site.

40. Enclosure of the Site

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifier. No building work is to commence until the fence is erected.

41. Demolition Works

The demolition of the existing shall be carried out in accordance with Australian Standard AS 2601:2001: The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of SafeWork NSW.

No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifier. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

42. Notification to SafeWork NSW

The demolition licence holder who proposes demolition of a structure or part of a structure that is loadbearing or otherwise related to the physical integrity of the structure that is at least six (6) metres in height, involving load shifting machinery on a suspended floor, or involving the use of explosives must notify SafeWork NSW in writing at least five (5) calendar days before the work commences.

43. Demolition Notification to Surrounding Residents

Demolition must not commence unless at least two (2) days written notice has been given to adjoining residents of the date on which demolition works will commence.

44. Consultation with SafeWork NSW - Prior to Asbestos Removal

A licensed asbestos removalist must give written notice to SafeWork NSW at least five (5) days before licensed asbestos removal work is commenced.

45. Waste Management

The developer must provide an adequate receptacle to store all waste generated by the development pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and reusable materials.

46. Public Liability Insurance

All contractors working in Council's road reserve and/or public reserve areas shall take out public liability insurance for a minimum amount of $10 Million. The policy shall specifically indemnify Council from all claims arising from the execution of the works. Written evidence of this insurance shall be supplied to the Principal Certifier and Council (in the event that Council is not the Principal Certifier) prior to the commencement of any such works in any road reserve or public reserve area.

47. Site Management Program - Sediment and Erosion Control Measures
A site management program incorporating all sediment and erosion control measures (eg cleaning of sediment traps, fences, basins and maintenance of vegetative cover) is to be initiated prior to the commencement of any demolition, excavation or construction works and maintained throughout the demolition, excavation and construction phases of the development.

48. Temporary Sediment Fences
Temporary sediment fences (eg haybales or geotextile fabric) must be installed on the site, prior to the commencement of any excavation, demolition or construction works in accordance with Council's guidelines. Upon completion of the development, sediment fencing is to remain until the site is grassed or alternatively, a two (2) metre strip of turf is provided along the perimeter of the site, particularly lower boundary areas.

49. All-weather Access
An all-weather stabilised access point must be provided to the site to prevent sediment leaving the site as a result of vehicular movement. Vehicular movement should be limited to this single accessway.

50. Sediment Control Measures
The developer must ensure that sediment-laden runoff from the site is controlled at all times subsequent to commencement of construction works. Sediment control measures must be maintained at all times and checked for adequacy at the conclusion of each day's work.

51. Tree Protection
Prior to commencement of any work on the site, including any demolition, all trees not approved for removal as part of this consent that may be subjected to impacts of this approved development must be protected in accordance with Section 4 of the Australian Standard Protection of Trees on Development Sites (AS 4970:2009).

Tree Protection Zones must be established prior to the commencement of any work associated with this approved development.

No excavation, construction activity, grade changes, storage of materials stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones.

While Building Work is Being Carried Out

52. Piping of Stormwater to Existing Stormwater Drainage System
Stormwater for the land must be piped to Council's existing street kerb and gutter.

53. No Adverse Run-off Impacts on Adjoining Properties
The design and construction of the development shall ensure there are no adverse effects to adjoining properties, as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.

54. Flows from Adjoining Properties
Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels.

55. Hours of Work
The Principal Certifier must ensure that building work, demolition or vegetation removal is only carried out between:

- 7:00am to 5:00pm on Monday to Saturday.

The Principal Certifier must ensure building work, demolition or vegetation removal is not carried out on Sundays and public holidays, except where there is an emergency.

Unless otherwise approved within a construction site management plan, construction vehicles, machinery, goods or materials must not be delivered to the site outside the approved hours of site works.

Any variation to the hours of work requires Council's approval.

Any request to vary the approved hours shall be submitted to the Council in writing detailing:

a. The variation in hours required (length of duration);

b. the reason for that variation (scope of works;

c. the type of work and machinery to be used;

d. method of neighbour notification;

e. supervisor contact number; and

f. any proposed measures required to mitigate the impacts of the works

Note: The developer is advised that other legislation may control the activities for which Council has granted consent, including but not limited to, the *Protection of the Environment Operations Act 1997*.

56. Control of Access to Prevent Tracking of Sediment
Vehicle access is to be controlled so as to prevent tracking of sediment onto adjoining roadways, particularly during wet weather or when the site has been affected by wet weather.

57. Building Operations Not to Discharge Pollutants
Building operations such as brick cutting, the washing of tools or paint brushes, or other equipment and the mixing of mortar must not be carried out on the roadway or public footpath or any other locations which could lead to the discharge of materials into the stormwater drainage system or natural watercourse.

58. Trucks to be Covered
Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading.

59. Excavation/Filling/Retaining Wall Structures
Any proposed filling on the site must not:

a. Encroach onto the adjoining properties, and

b. adversely affect the adjoining properties with surface run-off.

60. Cut and Fill Retained
All proposed cut and filling works must be adequately retained with all battered slopes being no steeper than 2H:1V.

61. Asbestos - Removal, Handling and Disposal Measures/Requirements Asbestos Removal by a Licensed Asbestos Removalist
The removal of any asbestos material must be carried out by a licensed asbestos removalist if over 10 square metres in area of non-friable asbestos, or if any type of friable asbestos in strict accordance with SafeWork NSW requirements (https://www.safework.nsw.gov.au).

62. Asbestos Clearance Certificate
The internal floor area affected or likely to be affected, by scattering of asbestos pieces, particles or fibres during demolition or cutting into the building, is to be cleaned by vacuuming by a contractor approved by SafeWork NSW. A Clearance Certificate to certify that the site area is free of asbestos is to be submitted to Council by a licensed asbestos assessor within 14 days of the completion of renovations (or prior to the Occupation Certificate being issued).

63. Asbestos Waste Collection, Transportation and Disposal
Asbestos waste must be prepared, contained, transported and disposed of in accordance with SafeWork NSW and NSW Environment Protection Authority requirements. Asbestos waste must only be disposed of at a landfill site that can lawfully receive this this type of waste. A receipt must

be retained and submitted to the Principal Certifier, and a copy submitted to Council (in the event that Council is not the Principal Certifier), prior to commencement of the construction works.

64. Provision of Waste Receptacle
The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

65. Implementation of BASIX Commitments
While building work is being carried out, the applicant must undertake the development strictly in accordance with the commitments listed in the BASIX certificate(s) approved by this consent, for the development to which the consent applies.

66. New Information/Unexpected Finds
In the event that demolition and/or construction works cause the generation of odours or the uncovering of copper slag, or other previously unidentified contaminants or hazardous materials, works must immediately cease and the Principal Certifier and Council (in the event that Council is not the Principal Certifier) must be notified in writing within seven (7) days and an appropriately qualified environmental consultant appointed to undertake an assessment of the potential contaminant and works required to make the site safe from potential human health and environmental harm.

67. Survey Report
The submission of a survey report by a registered Land Surveyor to the Principal Certifier is required, prior to the work proceeding beyond each of the following respective stages so as to guarantee that each stage of the development is completed in accordance with the approved plans:

a. Footing's excavation and set out;
b. Slab framework;
c. Foundation walls;
d. Walls and completion of eaves/gutter/fascia;
e. Siting levels comply with the approved plans, including maximum height.

Before the Issue of an Occupation Certificate

68. Drainage
The developer must obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage and on-site detention works have been constructed in accordance with the approved plans. In addition, full works-as-executed (WAE) plans, prepared and signed by a Registered Surveyor must be submitted. These plans and certification must satisfy all the stormwater requirements stated in Chapter E14 of the Wollongong DCP 2009. This information must be submitted to the Principal Certifier prior to the issue of the final Occupation Certificate.

69. Restriction on Use - On-Site Detention System (OSD)
The applicant must create a restriction on use under the Conveyancing Act 1919 over the OSD system. The following terms must be included in an appropriate instrument created under the Conveyancing Act 1919 for approval of Council:

"The registered proprietor of the lot burdened must not make or permit or suffer the making of any alterations to any on-site detention system on the lot(s) burdened without the prior consent in writing of the authority benefited. The expression 'on-site detention system' shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater as well as all surfaces graded to direct stormwater to those structures.

Name of the authority having the power to release, vary or modify the restriction referred to is Wollongong City Council."

The instrument, showing the restriction, must be submitted to the Principal Certifier for endorsement prior to the issue of the Occupation Certificate and the use of the development.

70. Retaining Wall Certification

The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifier is required, prior to the issue of the Occupation Certificate or commencement of the use. This certification is required to verify the structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifier.

71. Positive Covenant - On-Site Detention Maintenance Schedule

A positive covenant shall be created under the Conveyancing Act 1919, requiring the property owner(s) to undertake maintenance in accordance with the Construction Certificate approved On-Site Detention System and Maintenance Schedule (Application Number to be referenced).

The instrument, showing the positive covenant must be submitted to the Principal Certifier for endorsement prior to the issue of the Occupation Certificate and the use of the development.

72. Drainage WAE

The developer shall obtain written verification from a suitably qualified civil engineer, stating that all stormwater drainage and related work has been constructed in accordance with the approved Construction Certificate plans. In addition, full WAE plans, prepared and signed by a Registered Surveyor shall be submitted. These plans shall include levels and location for all drainage structures and works, buildings (including floor levels), and finished ground and pavement surface levels. This information shall be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

73. Section 73 Certificate

A Section 73 Certificate must be submitted to the Principal Certifier prior to occupation of the development/release of the plan of subdivision.

74. BASIX

An Occupation Certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifier must not issue the final Occupation Certificate unless satisfied that selected commitments have been complied with as specified in the relevant BASIX Certificate.

NOTE: Clause 154B of the Environmental Planning and Assessment Regulation 2000 provides for independent verification of compliance in relation to certain BASIX commitments.

75. Completion of Landscape and Tree Works

Before the issue of an Occupation Certificate, the Private Certifier must be satisfied that all landscape and tree works, including pruning in accordance with *AS 4373:2007 Pruning of amenity trees* and the removal of all noxious weed species, have been completed in accordance with the approved plans and any relevant conditions of this consent.

76. Completion of Landscape Works on Council Owned or Controlled Land

The Developer must complete all landscape works required within Council's road reserve, or other Council owned or controlled land, in accordance with the conditions of this consent. The total cost of all such landscape works shall be fully borne by the Developer and any damage to Council's assets shall be the subject of restoration works sufficient to restore the asset to its previous state and configuration previous to the commencement of works. Evidence that this requirement has been met must be satisfied prior to the issue of the Occupation Certificate.

77. Arborist Verification – Street Tree Installation

Prior to the issue of Occupation Certificate, the developer must supply certification in the form of a report, including photographic evidence, from an AQF Level 5 Arborist to the Principal Certifier and Wollongong City Council to verify:

a. The tree stock complies with AS 2203:2018 Tree Stock for Landscape Use.

b. The tree pits have been constructed and the trees installed in accordance with the requirements of the Wollongong City Council City Centre Public Domain Technical Manual and arboricultural best practice.

Occupation and Ongoing Use

78. Loading/Unloading Operations/Activities
All loading/unloading operations are to take place at all times wholly within the confines of the site or within the road reserve under an approved traffic control plan.

79. Privacy screens
Privacy screens required as a condition of this development consent must be maintained and kept in a sound condition throughout the life of the development.

Before the Issue of a Subdivision Certificate

80. Occupation Certificate Prior to Subdivision Certificate
An Occupation Certificate for the dwelling/s must be issued prior to the release of the Subdivision Certificate for the Torrens title subdivision. A copy of the Occupation Certificate shall be lodged to Council with the Subdivision Certificate application.

81. Existing Easements
All existing easements must be acknowledged on the final subdivision plan.

82. Existing Restriction as to Use
All existing restriction on the use of land must be acknowledged on the final subdivision plan.

83. Encroaching Pipes
A minimum one (1) metre wide easement to drain water shall be created over any encroaching drainage pipes.

For all drainage easements proposed over the subject lots, a WAE/survey plan of all stormwater drainage within the site is to be submitted with the Subdivision Certificate Application to confirm this.

84. Encroaching Services
A minimum one (1) metre wide easement for services must be created over any encroaching utility service.

85. Section 88B Instrument
The submission of a Final Section 88B Instrument to Council/Principal Certifier, which incorporates (but is not necessarily limited to) the following restrictions, easements and covenants, where applicable:

a. Easement for services;
b. easement for drainage;
c. restriction-as-to-user over the 'on-site stormwater detention system' which prohibits its alteration and/or removal;
d. positive covenant that requires maintenance to be in accordance with the Construction Certificate approved On-Site Detention System and Maintenance Schedule – DA-2022/60;
e. easement for encroachment;
f. party wall.

86. 88B Instrument Easements/Restrictions
Any easements or restrictions required by this consent must nominate Wollongong City Council as the authority to vary, modify or release/extinguish the easements or restrictions. The form of the easement(s) or restriction(s) created as a result of this consent must be in accordance with the standard format for easements and restrictions as accepted by NSW Land Registry Services.

87. Party Wall
The extent of the party wall shall be reflected on the final plan of subdivision, under Section 181B of the Conveyancing Act.

88. Final Documentation Required Prior to Issue of Subdivision Certificate

The submission of the following information/documentation to the Principal Certifier, prior to the issue of a Subdivision Certificate:

a. Completed Subdivision Certificate application form and fees in accordance with Council's fees and charges;

b. Certificate of Practical completion from Wollongong City Council or a Principal Certifier (if applicable);

c. Administration sheet prepared by a registered surveyor;

d. Section 88B Instrument covering all necessary easements and restrictions on the use of any lot within the subdivision;

e. Final plan of subdivision prepared by a registered surveyor;

f. Original Subdivider/Developer Compliance Certificate pursuant to Section 73 of the Water Board (Corporatisation) Act 1994 from Sydney Water;

g. Original Notification of Arrangement from an Endeavour Energy regarding the supply of underground electricity to the proposed allotments;

h. Original Compliance Certificate from Telstra or another Telecommunications Service Provider which confirms that the developer has consulted with the Provider with regard to the provision of telecommunication services for the development;

i. Payment of Development Contribution fees (Pro rata) (if applicable).

Reasons

The reasons for the imposition of the conditions are:

1. To minimise any likely adverse environmental impact of the proposed development.
2. To ensure the protection of the amenity and character of land adjoining and in the locality.
3. To ensure the proposed development complies with the provisions of Environmental Planning Instruments and Council's Codes and Policies.
4. To ensure the development does not conflict with the public interest.