Wollongong Local Planning Panel Assessment Report | 8 March 2022

WLPP No.	Item No. 3
DA No.	DA-2021/344
Proposal	Residential - demolition of existing dwelling and ancillary structures, removal of 15 trees and construction of three (3) townhouses with basement parking
Property	328 Gipps Road, KEIRAVILLE NSW 2500
Applicant	ADM Architects
Responsible Team	Development Assessment and Certification - City Wide Team (BM)

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Local Planning Panel - Determination

The proposal has been referred to the WLPP **for determination** pursuant to part 2(b) of Schedule 2 of the Local Planning Panels Direction as the application is the subject of 10 or more unique submissions by way of objection.

Proposal

The proposal is for demolition of existing dwelling and ancillary structures, removal of 15 trees and construction of three (3) townhouses with basement parking.

Permissibility

The site is zoned R2 Low Density Residential pursuant to Wollongong Local Environmental Plan (WLEP) 2009. The proposal is categorised as a multi dwelling development and is permissible in the zone with development consent. Demolition is also permitted with consent. Tree removal is considered ancillary to the proposed development and hence permitted.

Consultation

The proposal was exhibited in accordance with Wollongong Community Participation Plan 2019 on three occasions. In total thirty five (35) unique submissions were received during the entire period. The submissions received are discussed at section 1.5 of the assessment report.

Internal

Details of the proposal were referred to Council's Development Engineering, Landscape, Environment and Community Safety divisions for assessment. Satisfactory referral advice, comments and/or recommended conditions were provided.

<u>External</u>

No external referrals were required.

Main Issues

The main issues are,

• Exception sought to the development standard for site width and variation request to development control related to side setback

Recommendation

It is recommended that DA-2021/344 be approved subject to conditions at Attachment 4.

1 APPLICATION OVERVIEW

1.1 PLANNING CONTROLS

The following planning controls apply to the development:

State Environmental Planning Policies:

- SEPP No. 55 Remediation of Land
- SEPP (Building Sustainability Index: BASIX) 2004
- SEPP (Koala Habitat Protection) 2021

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 2021
- Wollongong Community Participation Plan 2019

1.2 DETAILED DESCRIPTION OF PROPOSAL

The proposal is for demolition of existing dwelling and ancillary structures, removal of 15 trees and construction of three (3) townhouses with basement parking.

Works / Construction / building details

- Demolition of all existing structures, including single storey dwelling house and associated shed;
- Removal of fifteen trees (15), six (6) of which are 'exempt species';
- Construction of a multi-dwelling development consisting of three (3) x two storey townhouses, with basement level parking and storage.
- Dwellings are accessed via a pedestrian walkway located to the west of the townhouses, which is separated from the western property boundary by a 1.5m wide landscaped area.
- Each dwelling contains a living/dining room, kitchen, laundry and WC, together with four (4) bedrooms, a bathroom and an ensuite.
- Private open space for each unit is provided in the form of a courtyard accessed from the ground level living/dining room for Units 2 and 3, and two balconies for Unit 1, both accessed off the living/dining room, and one additionally from the master bedroom.
- Each dwelling is provided with a double garage (total of 6 resident spaces) at the basement level, with one (1) 'at grade' visitor parking spaces located within the front setback. Direct access is provided to each dwelling from the basement internally.
- Vehicular access to the site will be provided along the south eastern side from Gipps Road, leading to a two way driveway which extends into the basement.
- A deep soil zone is located to the rear (north) of the site. Landscaped areas are provided along the sides.
- Bin storage areas located within the basement garages.

Architectural Plans are provided at Attachment 1.

1.3 BACKGROUND

Application Number	Description	Decision	Decision Date
PL-2018/241	Residential - multi dwelling development	None	24-Jan-2019
DA-2019/687	Residential - demolition of existing buildings, tree removals and construction of multi dwelling housing - three (3) townhouses	None	23-Aug-2019
DA-2020/178	Residential - demolition of existing buildings, tree removals, construction of multi dwelling housing - four (4) units and Subdivision - Strata title - four (4) lots	None	24-Apr-2020
PL-2020/184	Residential - multi dwelling housing TEAMS MEETING 16/11/2020 - 2PM	None	24-Nov-2020
DA-2021/344	Residential - demolition of existing dwelling and ancillary structures, removal of 15 trees and construction of three (3) townhouses with basement parking		

The submission made at lodgement proposed total four(4) units over basement parking). A number of issues were raised by council to the original design. The proposal was subsequently amended reducing to 3 units as presented.

Customer service actions

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

1.4 SITE DESCRIPTION

The site is located at 328 Gipps Road, KEIRAVILLE NSW 2500 and the title reference is Lot 10 DP 38803. The site has frontage to Gipps Road and is regular in shape. The allotment has a width/frontage of 17.793m, and length of 52.769m, providing a site area of 938m².

The site evenly slopes down to the street from approximately RL 51.8 in the north, to RL 45.54 in the south. The site currently features a detached timber cottage and metal shed. There are a few trees located on the site and two on the council verge fronting the site.

Adjoining developments are a two storey dwelling to the east and a single storey dwelling to the west. The locality is characterised by low density residential developments.

Property constraints

There are no constraints related to the property.

There are no restrictions on Title.



Figure 1: Aerial photograph



Figure 2: WLEP 2009 zoning map

1.5 SUBMISSIONS

The application was notified in accordance with Wollongong Community Participation Plan 2019 on three occasions between 15 April 2021 and 29 April 2021, between 26 November 2021 and 10 December 2021 upon submission of amended plans and additional information, and a third time from 16 December 2021 to 19 January 2022 to correct an error from on Council's part with the notification information details of the proposed development. Thirty five (35) unique submissions were received in total from the above time periods of notification. The issues identified are discussed below.

Table 1: Submissions

Concern		Comment		
1.	Non-compliances with development standard in site width and setbacks Development in-appropriate for the	Applicant has submitted Cl.4.6 variation in this regard which is considered capable of support as detailed in Section 2.1.4 of this report.		
	zone	The development is assessed to satisfy the objectives for the development control in relation to the setbacks. They are not considered to cause adverse amenity impacts to the neighbours in terms of overlooking, overshadowing or view loss. Variation request to Council's DCP controls are capable of support as detailed in Section 2.3.1		
2.	Impact on environment, drainage, infrastructure and soil conditions, amenity impacts to neighbours	Council's landscape, Environment and development engineering officers have provided satisfactory comments on the proposal subject to conditions of consent. No significant issues were raised.		
3.	Additional Traffic generation and parking issues	Council's Traffic Engineer has reviewed the proposal and indicated no objections. Parking and manoeuvring within the site are considered satisfactory.		
		Comments provided did not raise significant safety concerns and were found satisfactory subject to conditions of consent.		
4.	Bulk and scale due to 3 storeys, will	Units are of 2 storeys.		
	set precedence, impact on village character and not appropriate for the zone	The proposed multi-dwelling housing development is permissible in the R2 zone and complies with maximum floor space ratio and height as required under WLEP 2009.		
		The development can be considered worthy in meeting the zone objectives and is relatively consistent with the existing and future desired character for the locality.		
5.	Impact on trees, Tree removal and environmental, insufficient landscaping	Council's Landscape and Environment officers have provided satisfactory comments on the proposal subject to conditions of consent including compensatory tree planting to replace the trees being removed.		
		No significant issues were raised.		

Concern	Comment
6. Overshadowing, privacy impacts	The submitted shadow diagrams demonstrate reasonable compliance with the solar access requirement under the DCP.
	Privacy is addressed via fixed privacy screens or windows fitted with fixed obscure glazing and/or restricted operable panels and the screen planting along the side boundaries. Limited amenity impacts are expected from the Private Open Spaces (POS) located on or below the existing ground levels for Unit 2 & 3 and POS for Unit provided with the privacy screen along the eastern edge.
7. View Loss	The building is of two storeys and within the permitted height limit for the zone. The roof ridge is not excessively high above the existing ground level to obstruct existing views across the side boundary.
	Protecting (uphill) distant views across several properties along the side boundaries from developments on adjoining lots is generally considered difficult to be achieved and unavoidable. The proposal is considered comparable to any reasonably sized 2 storey single dwelling development that could also be built on the land.
8. Does not comply with the BCA	A new development must satisfy the Building Code of Australia requirement before occupation. A condition will be incorporated with the consent to satisfy the BCA requirements.

Table 2: Number of concerns raised in submissions

Concern	1	2	3	4	5	6	7	8
Frequency	22	15	10	8	14	2	1	2

1.6 CONSULTATION

1.6.1 INTERNAL CONSULTATION

Development Engineer

Council's Development Engineer has reviewed the proposal in terms of Traffic, Stormwater drainage and parking and provided a satisfactory referral subject to conditions.

Landscape Architect

Council's Landscape Officer has reviewed the proposal and provided a satisfactory referral subject to conditions.

Safe Community Action Team (SCAT) Officer

No concerns were raised subject to conditions.

Environment

Council's Environment officer has reviewed the proposal and provided a satisfactory referral subject to conditions.

2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 – 4.15 EVALUATION

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

2.1.1 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

7 Contamination and remediation to be considered in determining development application

(1) A consent authority must not consent to the carrying out of any development on land unless:

(a) it has considered whether the land is contaminated, and

(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and

(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

(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 subclause (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 subclause (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).

A desktop audit via Council's land information system database for property constraints and previous uses was undertaken to understand the likelihood of contamination issues.

The audit revealed there are no constraints or past uses that give rise to concerns or the need for further investigation regarding land contamination and the Local Planning Panel as determining

authority can be satisfied that clause 7 matters are thus satisfied. A specific condition of consent is proposed relating to an unexpected finds protocol.

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

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

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

2.1.3 STATE ENVIRONMENTAL PLANNING POLICY (KOALA HABITAT PROTECTION) 2021

The City of Wollongong is identified within Schedule 1 as land to which this Policy applies. Wollongong is located within the South Coast Koala Management Area.

The Koala SEPP only applies to development applications considered by councils on land over 1 hectare in size or on land if it is included in an approved council Koala Plan of Management. The lot size is less than one hectare and Council does not have an approved Koala Plan of Management for the land at the time of preparing this report. Consideration of this SEPP is not applicable in this case.

2.1.4 STATE ENVIRONMENTAL PLANNING POLICY (HOUSING) 2021

SEPP (Housing) 2021 came in force on 26 November 2021 supporting delivery on NSW Housing strategy by driving the development of affordable and diverse housing.

The Housing SEPP mainly consolidated five existing housing-related SEPPs:

- State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP);
- State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004 (Seniors SEPP);
- State Environmental Planning Policy No 70 Affordable Housing (Revised Schemes) (SEPP 70);
- State Environmental Planning Policy No 21—Caravan Parks; and
- State Environmental Planning Policy No 36—Manufactured Home Estates.

Given the proposal is for multi-dwelling housing the SEPP is of no specific relevance.

2.1.5 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Clause 1.4 Definitions

Multi dwelling housing means 3 or more dwellings (whether attached or detached) on one lot of land, each with access at ground level, but does not include a residential flat building.

Part 2 Permitted or prohibited development

<u>Clause 2.2</u> – zoning of land to which Plan applies

The zoning map identifies the land as being zoned R2 Low Density Residential

<u>Clause 2.3</u> – Zone objectives and land use table

The objectives of the zone R2 Low Density Residential are as follows:

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

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

The proposal is considered to provide housing needs within the zone.

The land use table permits the following uses in the zone.

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Boat launching ramps; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Environmental facilities; Exhibition homes; Exhibition villages; Group homes; Health consulting rooms; Hospitals; Hostels; Information and education facilities; Jetties; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Residential flat buildings; Roads; Semi-detached dwellings; Seniors housing; Shop top housing; Signage; Veterinary hospitals

The proposal is categorised as a multi dwelling housing as described above and is permissible in the zone with development consent.

Clause 2.7 Demolition requires development consent

The application proposes demolition of existing dwelling and shed. Standard conditions including asbestos management are provided for.

Part 4 Principal development standards

Clause 4.3 Height of buildings

The proposed building height of maximum 7.52m does not exceed the maximum of 9m permitted for the site.

Clause 4.4 Floor space ratio

Maximum FSR permitted for the zone: 0.5:1

Site area:	938 m²
Basement	(not included)
Ground Floor	263.14 m²
First floor	199.2 m²
Total GFA	462.34 m²
FSR:	462.34 m²/938 m² = 0.49:1

The proposal complies with the permitted FSR.

Clause 4.6 Exceptions to development standards

Clause 7.14 of the LEP states, "Development consent must not be granted for development for the purposes of multi dwelling housing unless the site area on which the development is to be carried out has a dimension of at least 18 metres."

The subject site has a shortfall of 207mm having a site width of 17.793m.

The proposal meets the required development standards and controls in terms FSR, height, landscaping, private open spaces and parking. No adverse impacts are expected to the neighbouring dwellings and the overall locality.

The departure to the development standard of 1.2% is considered capable of support.

Assessment of the development departure is provided below. The applicants Cl.4.6 Departure Request statement is provided at Attachment 2.

WLEP 2009 clause 4.6 proposed	development departure assessment
Development departure	Clause 7.14 – Minimum Site Width
Is the planning control in question a development standard	Yes
4.6 (3) Written request submitte	d by applicant contains a justification:
that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and	 Yes. The applicant has submitted a Clause 4.6 Statement with the following justification: This is not applicable as there are no objectives for the Development Standard. However, the following intent is assumed, based on the objectives of the 18m site width requirement within WDCP 2009 development control 5.1: To allow for development of sites which are of sufficient size to accommodate the required building envelope, car parking and landscaping requirements. To encourage amalgamation of allotments to provide for improved design outcomes. It is not considered to be warranted to amalgamate this site with an adjoining property as the design outcomes can be achieved within a single lot. Strict application and compliance with the control would effectively prohibit a multi dwelling housing development being undertaken on the subject site, despite it being a permitted form of development within the R2 Low Density Residential zone.
that there are sufficient environmental planning grounds to justify contravening the development standard.	 Yes, it is requested that Council give consideration to the following: The strict application of the site width standard would otherwise limit this generously sized allotment within good proximity to amenities to redevelopment as a dual occupancy. The ability to provide multi dwelling housing provides more housing choice within an established residential area and associated services. The departure requested provides the opportunity for an alternative (and satisfactory) site planning and built form outcome. The subject site is regular in shape which can readily accommodate the required 1.5m landscape strip. Further, the use of basement carparking significantly reduces the footprint of the building and provides additional area for open space and landscaping purposes. Flexibility is sought for the application of the site width requirements as the non-compliance is minor (207mm) as the design achieves a suitable design outcome.

4.6 (4) (a) Consent authority is sa	atisfied that:
the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and	The applicant's written request adequately addresses the matters required to be demonstrated under subclause 3. Following justifications are provided: The site width is 17.793 metres and has a very minor (207mm wide) deficiency of the 18 metre site width required by Clause 7.14 of WLEP 2009 for a multi dwelling development. The strict application of the site width standard would otherwise limit the future redevelopment potential of this generously sized allotment within good proximity to amenities (Keiraville village centre, transport and the university) to a dual occupancy. The ability to provide a multi-dwelling development provides more housing choice within an established residential area and associated services.
	The departure request provides the opportunity for an alternative (and satisfactory) site planning and built form outcome. The non-compliance with the site width has no bearing on the development satisfactorily meeting all of the other design controls for multi dwelling development (with the exception of minor variations in side setack that have no likely adverse impacts). The basement carparking level, whilst visible form the street, has a minimal level of visibility from adjacent properties as it is typically at, or below, ground level over the balance of the site. The reduced site width does not impact on the ability to provide the required level of landscaping and open space at the ground floor level. The proposed development will provide for an appropriate infill development. Hence, the proposed development represents a suitable design outcome for the site and support for the departure is considered capable of support.
the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and	 There are no objectives specified for Clause 7.14 within the LEP. The objectives of the R2 Low Density Residential zone are: To provide for the housing needs of the community within a low density residential environment. To enable other land uses that provide facilities or services to meet the day to day needs of residents. The development is considered consistent with the above

	 Provides a suitable built form which reflects the desired future character of Keiraville Adequately addresses privacy and overshadowing considerations with respect to the proposed dwellings. Provide landscaping which exceeds the requirements of Council. Provides a street elevation which matches the proportions of other residential buildings in the streetscape Overall, the development of the site as proposed will facilitate the housing choice within Keiraville with orderly and
	 economic development of land. The numerical departure of 207mm to the site width is considered minimal if to be strictly enforced. The overall shape and site dimensions are considered satisfactory to accommodate the multi dwelling development without detrimental impacts to the surrounding developments. Given that the development is consistent with the objectives of the zone, the proposed departure to the site width is considered
the concurrence of the Secretary has been obtained.	negligible and capable of support benefitting the public. Whilst this application is within the 10% concurrence delegated to Council the Local Planning Panel are the determining authority.

Comment: The requested departure to the development standard as detailed above is considered capable of support.

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

The development site is already serviced by electricity, water and sewage services which can be augmented to service the development.

Clause 7.6 Earthworks

The proposal comprises earthworks related to the construction of the buildings and related infrastructure and landscaping.

Clause 7.14 Site Width

The proposal does not comply with the required minimum site width of 18m. The requested departure to the development standard is considered capable of support.

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

Draft Environment SEPP

The Explanation of Intended Effect for the Environment SEPP was on exhibition from 31 October 2017 until the 31 January 2018.

This consolidated SEPP proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property.

Changes proposed include consolidating the following seven existing SEPPs:

- State Environmental Planning Policy No. 19 Bushland in Urban Areas
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
- State Environmental Planning Policy No. 50 Canal Estate Development
- Greater Metropolitan Regional Environmental Plan No. 2 Georges River Catchment
- Sydney Regional Environmental Plan No. 20 Hawkesbury-Nepean River (No.2-1997)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Willandra Lakes Regional Environmental Plan No. 1 World Heritage Property.

Changes are also proposed to the Standard Instrument – Principal Local Environmental Plan. Some provisions of the existing policies will be transferred to new Section 9.1 Local Planning Directions where appropriate.

Engagement is now closed and feedback is being considered by the Department.

In relation to Items 1.2 and 4 it is considered the draft SEPP is of limited relevance at this point in time

Draft Remediation of Land SEPP

The Explanation of Intended Effect for the Remediation of Land SEPP and the Managing Land Contamination guidelines were exhibited between 25 January 2018 and 13 April 2018.

The proposed SEPP: provides a state-wide planning framework for the remediation of land requires consent authorities to consider the potential for land to be contaminated when determining development applications clearly lists the remediation works that require development consent introduces certification and operational requirements for remediation works that can be undertaken without development consent.

Engagement is now closed and feedback is being considered by the Department.

In relation to Items 1.2 and 4 it is considered the draft SEPP is of limited relevance at this point in time.

Draft Design and Place SEPP

Public exhibition of the Design and Place SEPP Explanation of Intended Effect closed in April 2021.

The Design and Place SEPP will establish principles for the design and assessment of places in urban and regional NSW: PRINCIPLE 1. Design places with beauty and character that people feel proud to belong to PRINCIPLE 2. Design inviting public spaces to support engaged communities PRINCIPLE 3. Design productive and connected places to enable thriving communities PRINCIPLE 4. Design sustainable and greener places for the wellbeing of people and the environment PRINCIPLE 5. Design resilient and diverse places for enduring communities

The draft Design and Place SEPP will go on public exhibition later in 2021 to provide more opportunities for feedback. Supporting guidance and tools, drafts of which will also go on exhibition with the draft SEPP. These guides include revisions to the Apartment Design Guide and improvements to the Building Sustainability Index (BASIX), as well as the proposed Urban Design Guide, and Design Review Guide. The Department is currently conducting workshops with Council's around the State.

In relation to Items 1.2 and 4 it is considered the draft SEPP is of limited relevance at this point in time.

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

2.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

CHAPTER A1 – INTRODUCTION

8 Variations to development controls in the DCP

Clause 5.4 Side Setbacks:

The control being varied is:

R2 Low Density Residential Zone 0.8 x ceiling height 1.0 x ceiling height

Variation: Encroachment of Unit 1 (eastern façade) -Parts of the facade are located within the required minimum setback area of 3.68m keeping varying distances of 3.145 to 5.13m (due to the natural slope on ground) from the eastern side boundary.

Table 4 Proposed side setbacks

Side setback (eastern side) 0.8x ceiling Height – Unit 1	Min required (varies upslope)	Provided
Ground Floor	3.68m	3.145 to 5.13
Level 1	4.84m	4.455

The applicant has submitted a request for variation to the development control (see Attachment 3).

"A setback of 3.68m is required to the ground floor level of Unit 1 from the eastern boundary. The front section of this unit complies, with an eastern side setback of 5.13m, however the proposal has a noncompliant setback of 3.145m to the rear section (family room wall). This is a minor numerical variation of 0.535m, or 14.5% of the standard, for a length of wall of less than 5.38m. The wall which is subject to the variation does not contain a window, and is unlikely to create a privacy issue.

Shadowing impacts to the neighbouring property are limited to the afternoon in midwinter. Building separation is achieved along the eastern side of Unit 1 with a combination of a compliant 1.505m wide landscaping strip and an additional 1.640m wide paved outdoor area. There will be no unreasonable detrimental impacts to the eastern neighbour in terms of privacy and overshadowing.

• The proposed ground level balcony on the eastern elevation of Unit 1 is provided with a side setback of 1.505m. However, it is noted that screening is provided on the eastern elevation of the balcony to minimise privacy impacts.

• At the first floor level Unit 1 is required to have a setback of at least 4.84m to the eastern boundary. However, the proposal has a setback of 4.455m. This is a variation of 0.385m, or 8.1% of the numerical standard. As with the ground floor, there are no windows facing the eastern boundary, with the exception of an opaque bathroom window, and consequently impacts to privacy from the variation are negligible. The first floor of Unit 1 is aligned with the southern side of the neighbouring dwelling, and only minimally contributes to overshadowing in the afternoon in midwinter".

Comment:

The objectives of Clause 5.4 are:

(a) To provide adequate setbacks from boundaries and adjoining dwellings to retain privacy levels, views, sunlight and daylight access and to minimise overlooking.

(b) To provide appropriate separation between buildings to achieve the desired urban form.

(c) To optimise the use of land at the rear of the property and surveillance of the street at the front of the property.

(d) To minimise overshadowing of adjacent properties and private or shared open space.

The proposed variation request is consistent with the above objectives as there will not be adverse impact to privacy, overshadowing or daylight access for the subject property or the adjoining properties. The stepped side setbacks and staggered facades on the first floor level do not project adverse visual impacts. The balcony is fitted with a privacy screen along the eastern edge, the upper windows have obscure glazing and/or ensures restricted operable panels. Privacy and overlooking impacts are not considered significant with the above measures.

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.

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

4.0 General Residential controls

Controls/objectives	Comment	Compliance
4.11 Storage Facilities		
• Studio/1 bedroom- 6m3 storage volume to 3m2 storage area	Storage considered to be adequate.	Yes
• 2 bedroom- 8m3 storage volume to 4m2 storage area		
 3 bedroom- 10m3 storage volume to 5m2 storage area 		
4.15 Development near the coastline	NA	
4.16 View sharing		
 To protect and enhance view sharing, significant view corridors A range of view sharing measures to be considered for building design 	The building is of two storeys and within the permitted height limit. The roof line exhibits varying forms and is not excessively high above the existing ground. The development is considered reasonable which is permissible in the zone. Views across several properties along the side boundaries are generally difficult to be protected from such developments.	Yes
	The proposal is similar to any 2 storey reasonably sized development that could possibly	

	be built on the lot and the anticipated view loss as a result. A view analysis was not required to be submitted for this reason.	
4.17. Retaining walls		
 To ensure well designed retaining walls that are structurally sound 	retaining walls within the site proposed, conditions imposed ensuring structural stability	Yes

5.0 Attached dwellings and multi -dwelling housing

Controls/objectives	Comment	Compliance
5.1 Minimum Site Width	A minimum site width of 17.779m at the street	No
<u>Requirement</u> Minimum 18m	front.	(Cl.4.6 Departure request submitted and considered capable of support. refer Section 2.1.5)
5.2 Number of Storeys		
R2 zone – max 2 storeys	The development proposes 2 storeys. No wall of basement visible above ground is more than 1m hence does not add to a storey.	Yes
5.3 Front Setbacks		
6m min required to façade	9.88m	Yes
5.1m min to balconies/ building extrusions		
5.4 Side and Rear Setbacks		
R2 low density residential zone requires a minimum side/rear setback of 0.8 x ceiling height	Side: Maintains the required side setback except for	No, variation considered
Where balconies or windows of living areas face the rear boundary at first floor level or above, a minimum 1.0m x ceiling height is required	parts of the eastern facades of Unit 1 Rear: Required min 1.3m and 3.45m on Ground Floor and First Floor respectively Min 7m provided	capable of support see Section 2.3.1 under chapter A1)

5.5 Building Character and Form	The proposed development displays two storey dwellings which is considered to be consistent with the existing streetscape. The bulk and scale of the overall development on to the streetscape is assessed minimal in this case.	Yes
	The design incorporates stepped setbacks and staggered side facades on the first floor level thus considered not to project adverse visual impacts when viewed from adjoining lots. The external POS are below the existing ground levels , balcony (POS) above the ground level for Unit 1 is fitted with a privacy screen along the eastern edge, the upper windows have obscure glazing and/or ensures restricted operable panels. Privacy and overlooking impacts are not considered significant with the above measures.	
	Proposal is considered to fit sympathetically with the existing street character. The scale and form of the development exhibits conformity with the streetscape and locality.	
<u>5.6 Access / Driveway</u> <u>Requirements</u>		
	The proposal is considered to meet the design requirements of driveways by providing only one access point to the site, locating the driveway in a position which does not adversely impact on any services/trees within the road reserve, with sufficient landscaping and being of appropriate dimensions.	Yes
5.7 Car Parking Requirements		
	Refer chapter E3 below	.,
Car parking to be located behind front setback	Car parking proposed within the basement.	Yes
	Visitor car parking space provided behind the building line.	
	All units are over 110sqm requiring 2 spaces. Double garages provided for the units.	
5.8 Landscaping Requirements		
Min. 30% of site area must be provided as landscaped area	Council's Landscape officer has provided a satisfactory referral.	Yes

Min. 1.5m wide landscaping beds alongside & rear boundaries		
5.9 Deep Soil Planting	Sufficient DSZ is provided. Council's Landscape officer has reviewed the proposal and has not raised major concerns.	Yes
 5.11 Private Open Space Ground level POS with 4m x 5m minimum dimensions 70% of dwellings must receive minimum 3 hours direct sunlight 	POS is provided at ground level floor off the living areas. Unit 1 POS is distributed on two sides and considered satisfactory Shadow diagrams have been lodged indicating	Yes
to POS between 9am-3pm on June 21 Design private open spaces so that they act as direct extensions of the living areas of the dwellings they serve.	reasonable compliance.	
Clearly define private open space through use of planting, fencing or landscaping features.		
Screen private open space where appropriate to ensure privacy.		
5.12 Solar Access Requirements Windows to living rooms of adjoining dwellings must receive 3 hours of sunlight between 9.00am and 3.00pm on 21 June.	Submitted shadow diagrams indicate that the proposed units are situated at adequate distances from neighbouring dwellings so as not to cause adverse shadow impact to the living rooms and POS areas	Yes
At least 50% of the private open areas of adjoining residential properties must receive at least 3 hours of sunlight between 9.00am and 3.00pm on June 21.		
The primary balcony of at least 70% of the dwellings within a multi dwelling housing development shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.		
Windows to north facing living rooms for each of the subject		

dwellings in the development must receive at least 3 hours of sunlight between 9.00am and 3.00pm on 21 June.

At least 50% of the private open space area for each of the subject dwellings in the development must receive at least 3 hours of sunlight between 9.00am and 3.00pm on 21 June.

CHAPTER D1 – CHARACTER STATEMENTS

<u>Keiraville</u>

"Keiraville will remain a leafy suburb with a mix of housing types ranging from detached dwellinghouses, boarding-houses, villas, townhouses and some residential flat buildings. In this regard, additional medium density developments are likely to occur within reasonable walking distance to the University of Wollongong, especially in residential precincts directly to the east and south of the Wollongong Botanic Gardens."

The proposal is considered to be consistent with the existing and desired future character for the locality. The proposal is not expected to have adverse impact on the streetscape character while providing additional housing choice in the locality.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The design and layout of the development is expected to be consistent with this Chapter providing satisfactory casual surveillance opportunities to the street and throughout the site minimising areas of entrapment and concealment in the building design and landscape elements.

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

The car parking rates under Chapter E3 for multi dwelling housing are as follows:

1 car parking space per dwelling (<70m2) or 1.5 car parking spaces per dwelling (70-110m2) or 2 car parking spaces per dwelling (>110m2), plus 0.2 car parking spaces per dwelling for visitors, 1 bicycle space per 3 dwellings (residents) and 1 bicycle space per 12 dwellings (visitors), 1 motorcycle space per 15 dwellings, Large Rigid Vehicle (Waste Contractor), >10 dwellings – side loading waste collection vehicle

The application has been assessed by Council's Development engineer. The proposal provides total seven(7) parking spaces (double garages and an unenclosed visitor parking space).

CHAPTER E6: LANDSCAPING

A landscape concept plan and an Arborist Report has been submitted as part of the application. The provisions of this chapter have been considered and found to be satisfactory by Council's Landscape officer.

CHAPTER E7: WASTE MANAGEMENT

Site Waste Minimisation and Management Plan has been provided. Standard conditions to apply. Street collection of garbage is proposed for future occupants.

CHAPTER E14 STORMWATER MANAGEMENT

The application has been reviewed by Council's Development Engineer in relation to the stormwater drainage with no concerns raised subject to conditions.

CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

Proposal involves removal of 15 trees (6 are exempt species) located within the site. Council's Landscape and Environment officers have provided conditionally satisfactory comments and conditions including compensatory plantings for 15 trees.

CHAPTER E19 EARTHWORKS

Proposal involves excavations related to construction, infrastructure and other landscaping works. Council's Development Engineer has reviewed the proposal. No concerns were raised.

CHAPTER E21 DEMOLITION AND ASBESTOS MANAGEMENT

Demolition of existing dwelling house and ancillary structures located on the property forms part of this application and a demolition plan has been prepared.

Appropriate conditions are incorporated with the consent.

CHAPTER E22 SOIL EROSION

It is considered that the proposed development satisfies the objectives of this Chapter. Appropriate conditions are included in this regard.

2.3.2 WOLLONGONG CITY- WIDE DEVELOPMENT CONTRIBUTIONS PLAN - 2019

The estimated cost of works is >\$100,000, and a levy of 1% will be applicable under this plan as the threshold value is \$100,000

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

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

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

Context and Setting:

The proposal has been assessed with regard to the amenity impacts from the development, the zoning, permissible height and FSR for the land, and existing and future character of the area, and is considered to be compatible with the local area. The development is not considered to adversely impact on the existing character of the locality.

Access, Transport and Traffic:

Adequate car parking has been provided on site. There are no significant traffic impacts expected to be associated with the development.

Public Domain:

There is no likely impact on public domain.

Utilities:

The proposal is not envisaged to place an unreasonable demand on utilities supply.

Heritage:

No direct impact to the nearby heritage items is expected from the proposal.

Other land resources:

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

Water:

The site is presently serviced by Sydney Water, which can be readily extended to meet the requirements of the proposed development.

The proposal is not envisaged to have unreasonable water consumption.

Soils:

There are no anticipated impacts on the soils. Erosion and sediment measures are to be conditioned for.

Air and Microclimate:

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

Flora and Fauna:

The proposal is not expected to impact flora and fauna.

Waste:

A condition will be attached to any consent granted that an appropriate receptacle be in place for any waste generated during the construction.

Energy:

The proposal is not envisaged to have unreasonable energy consumption.

Noise and vibration:

A condition will be attached to any consent granted that nuisance be minimised during any construction, demolition, or works.

Natural hazards:

There are no natural hazards affecting the site that would prevent the proposal.

Technological hazards:

There are no technological hazards affecting the site that would prevent the proposal.

Safety, Security and Crime Prevention:

This application is not considered to result in greater opportunities for criminal or antisocial behaviour.

Social Impact:

There is not expected to be social impact associated with the proposed development.

Economic Impact:

The proposal is not expected to create negative economic impact.

Site Design and Internal Design:

Irrespective of the departure from the required site width as per the LEP and variation to the DCP control in relation to the side setback, the proposal is considered to be satisfactorily.

Construction:

Conditions of consent are recommended in relation to construction impacts such as hours of work, erosion and sedimentation controls, works in the road reserve, excavation, demolition and use of any crane, hoist, plant or scaffolding. A condition will be attached to any consent granted that all works are to be in compliance with the Building Code of Australia.

Cumulative Impacts:

The proposal is not expected to have negative cumulative impacts.

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

Does the proposal fit in the locality?

The proposal is considered appropriate with regard to 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.

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

Details of the proposal were publicly exhibited in accordance with Wollongong Community Participation Plan 2019 on three (3) occasions. Thirty five (35) submissions in total were received during the notification periods. Detailed discussion on submissions received is provided at section 1.5.

2.8 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 and is therefore considered to be in the public interest.

3 CONCLUSION

This application has been assessed as satisfactory having regard to the Heads of Consideration under Section S4.15(1) of the Environmental Planning and Assessment Act 1979, the provisions of Wollongong Local Environmental Plan 2009 and all relevant Council DCPs, Codes and Policies.

Pursuant to clause 2.3 of WLEP 2009, Multi dwellings are permissible in the R2 Low Density Residential zone with development consent. The proposal is not considered to be inconsistent with the zone objectives. The departure request to the Local provisions development standard regarding Site Width and the variation request to the development control for side setback are considered capable of support for reasons outlined in this report.

All relevant internal referrals are conditionally satisfactory. Some of the issues raised in submissions are either resolved through design or by way of conditions. Any remaining issues are not considered to be sufficient to refuse the application.

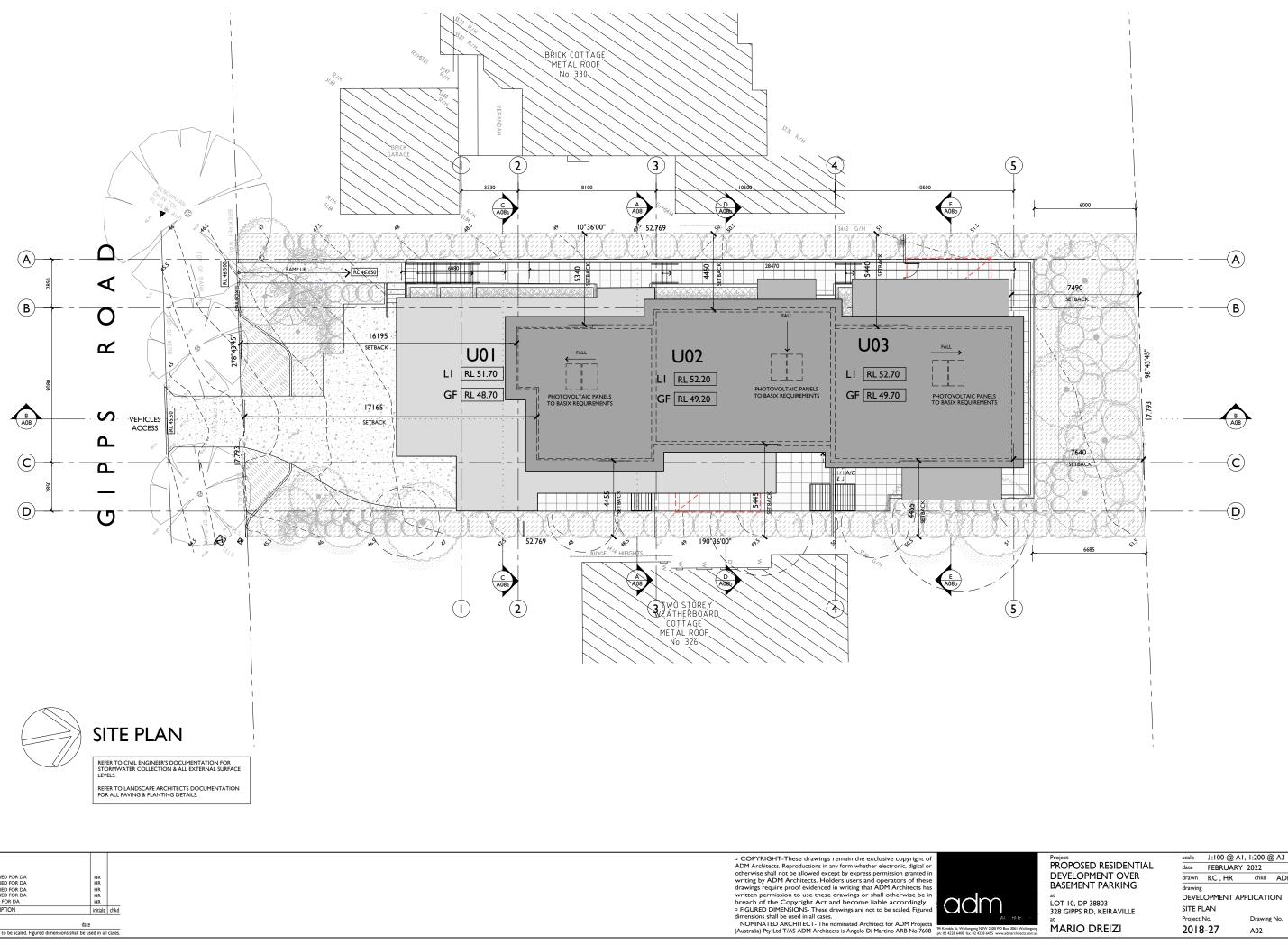
It is considered that the proposed development is not inconsistent with the existing and desired future character of the locality and is unlikely to result in adverse impacts on the amenity of the surrounding area.

4 RECOMMENDATION

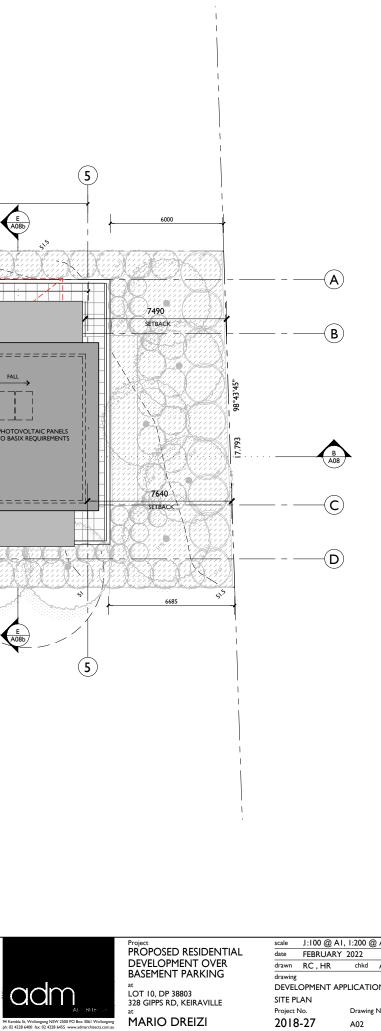
It is recommended that DA-2021/344 be **approved** and subject to conditions contained in Attachment 4.

5 ATTACHMENTS

- 1. Architectural Plans, Site Survey, Stormwater Drainage Plans, Shadow Diagram, Concept Landscape Plan,
- 2. Statement of Exception to development standard request Applicant
- 3. Applicant's variation request- side setback Unit 1
- 4. Conditions



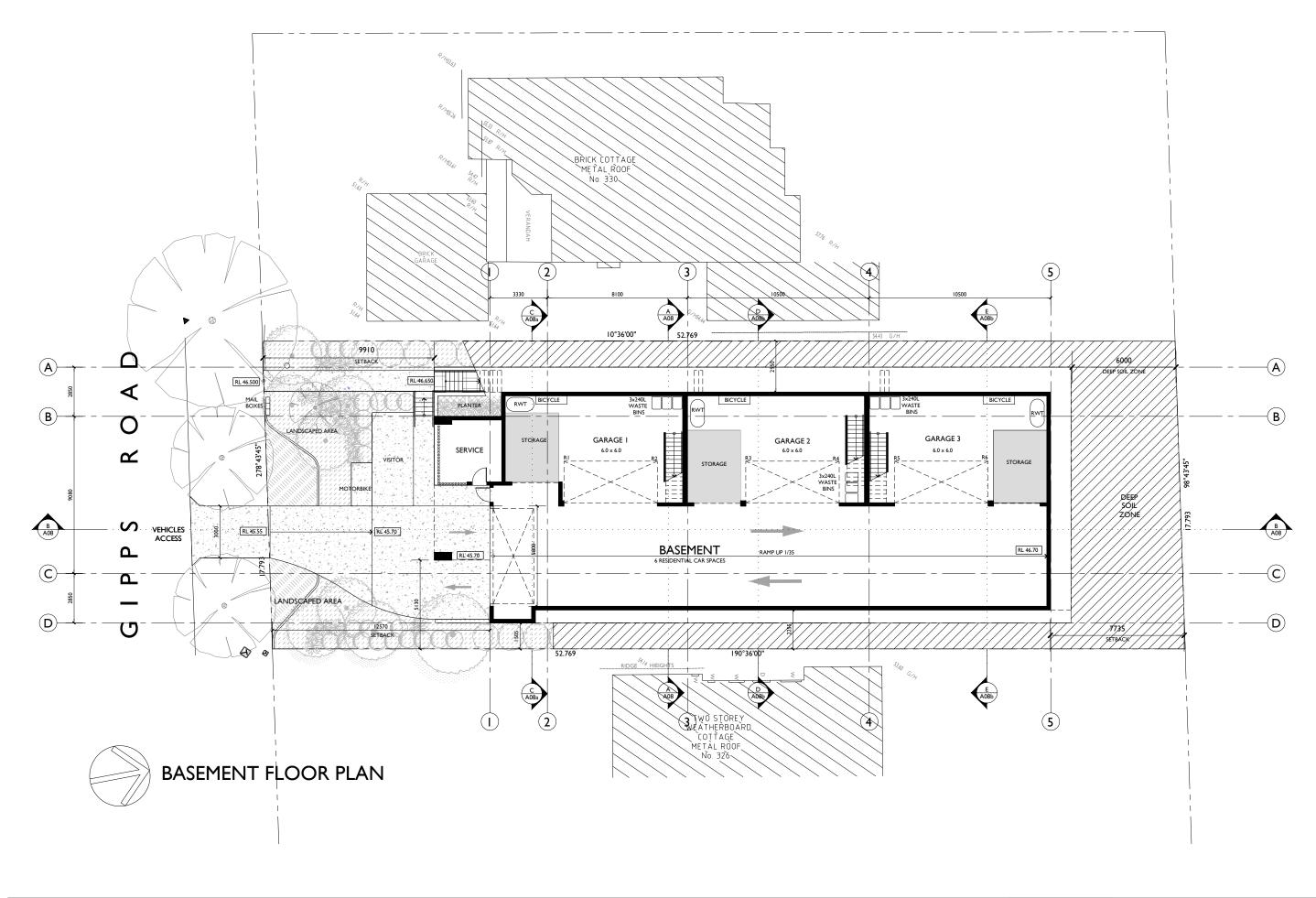




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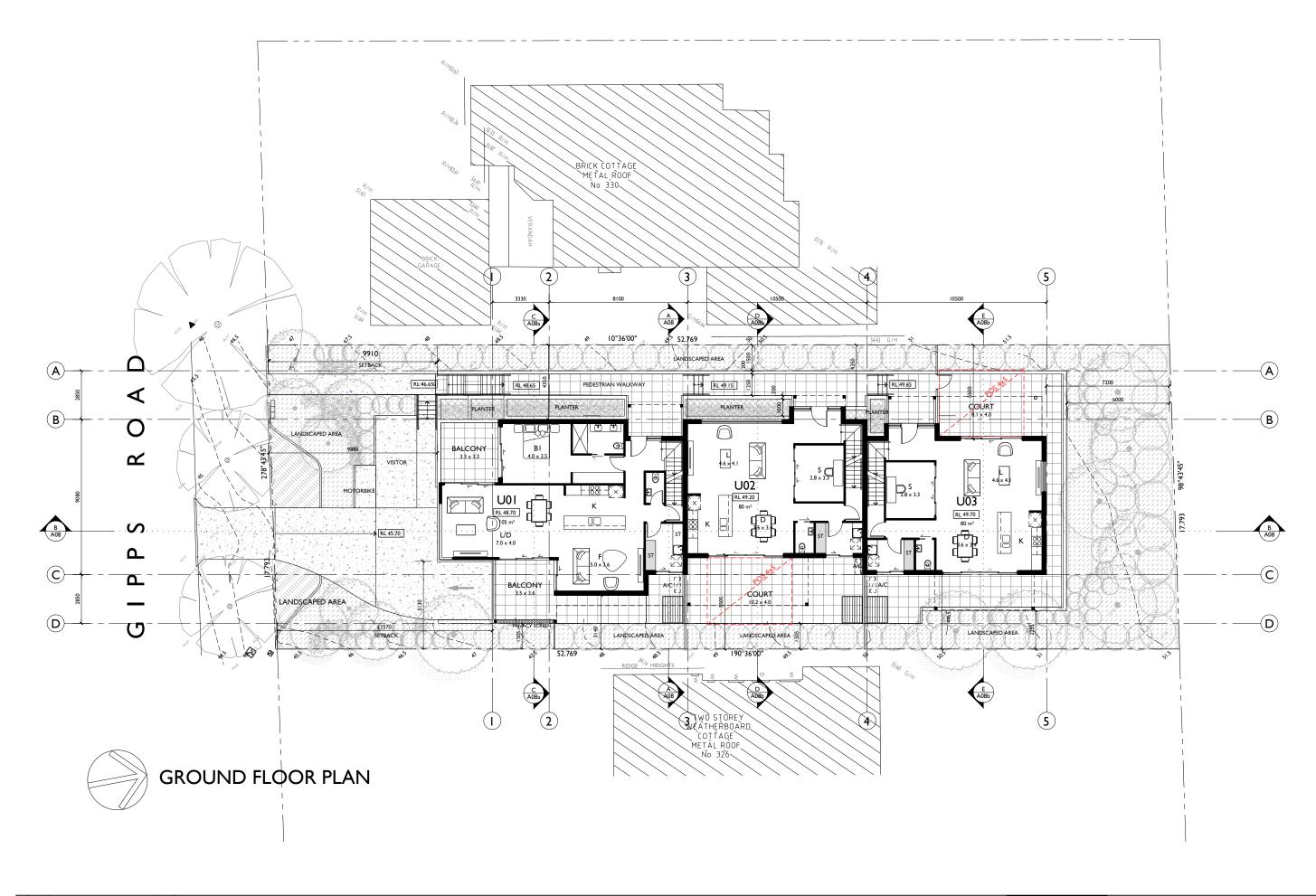


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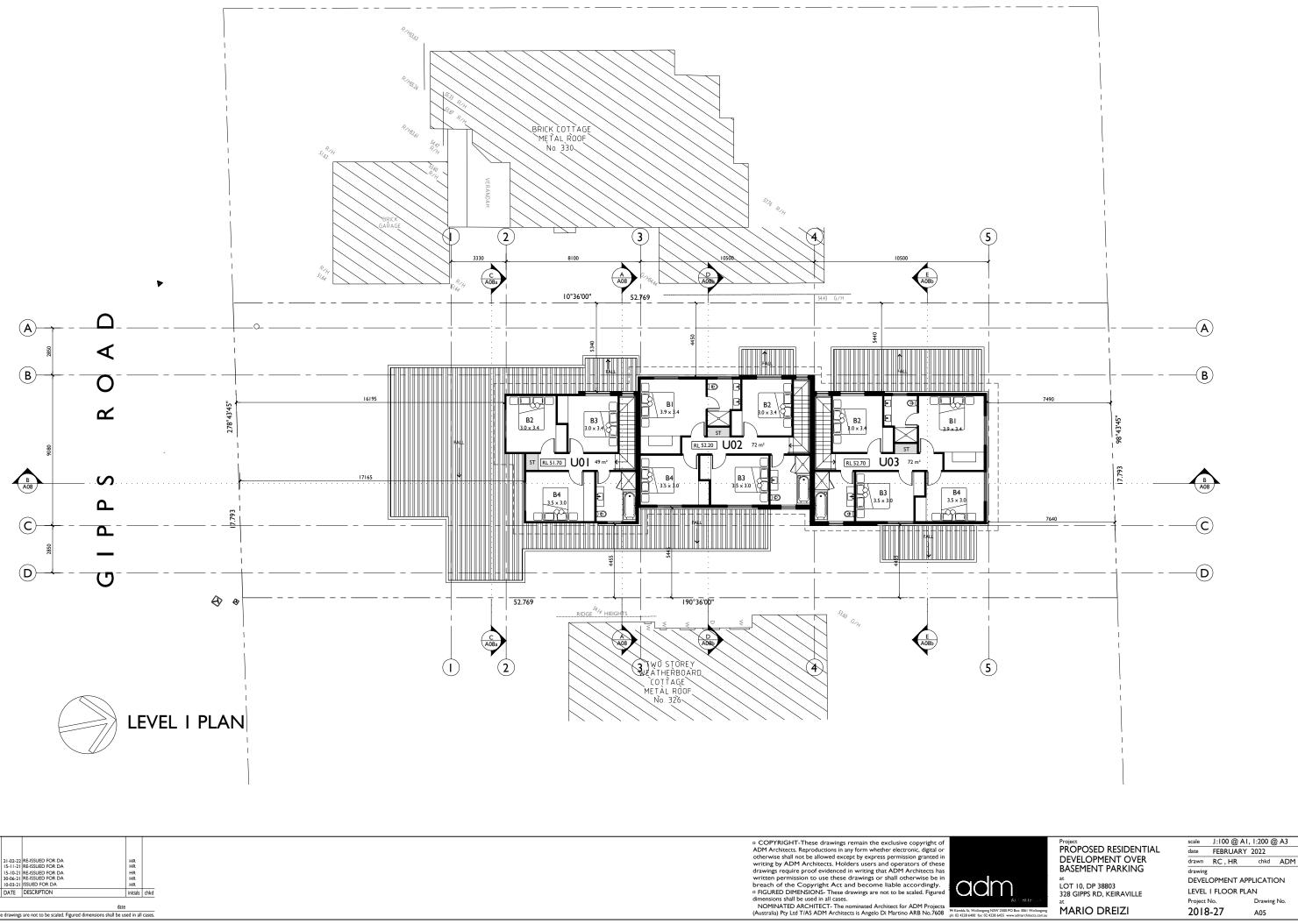
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PROPOSED RESIDENTIAL DEVELOPMENT OVER
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328 GIPPS RD, KEIRAVILLE

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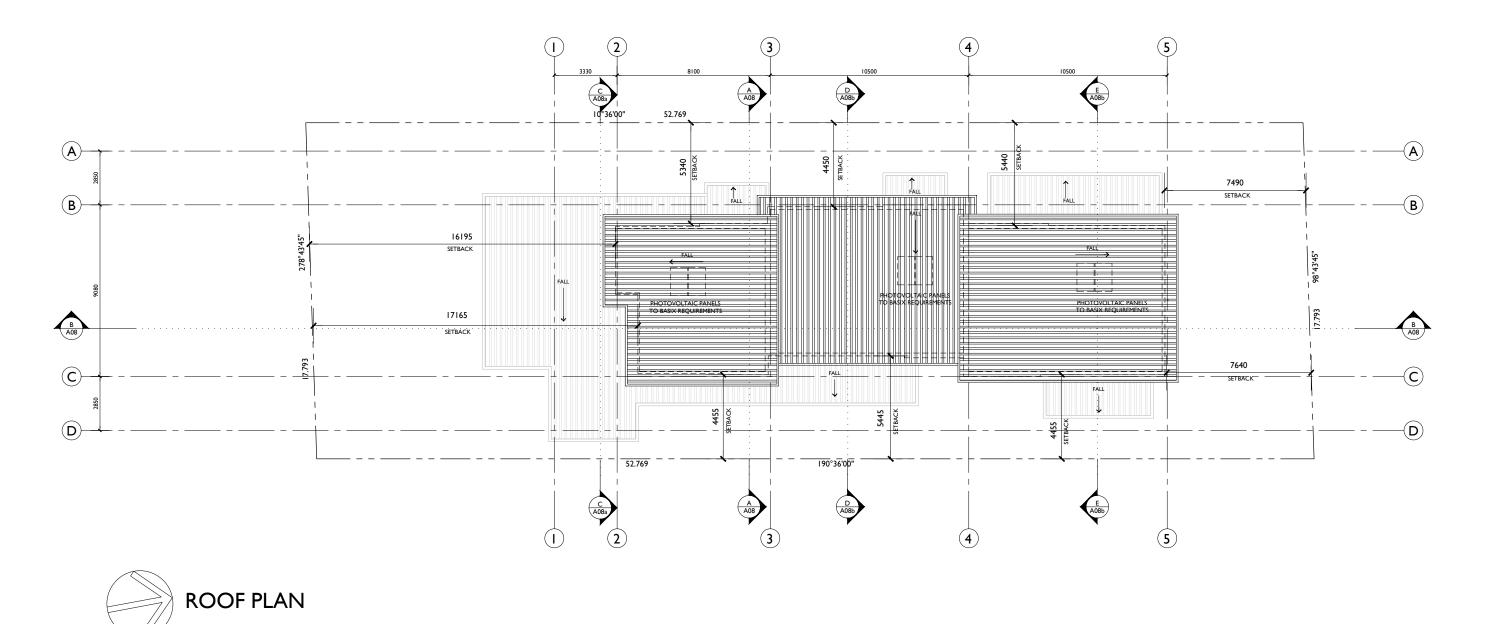


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Project
PROPOSED RESIDENTIAL
DEVELOPMENT OVER
BASEMENT PARKING
at
LOT 10, DP 38803
328 GIPPS RD, KEIRAVILLE
at
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02 WEST ELEVATION



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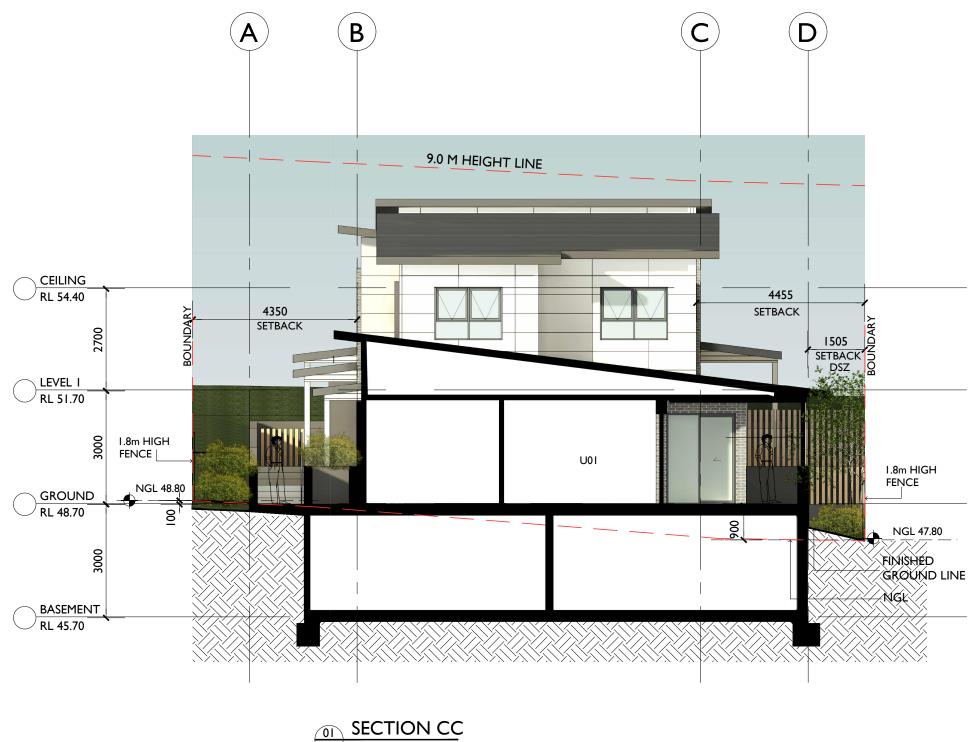


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PROPOSED RESIDENTIAL DEVELOPMENT OVER BASEMENT PARKING
at LOT 10, DP 38803 328 GIPPS RD, KEIRAVILLE
MARIO DREIZI

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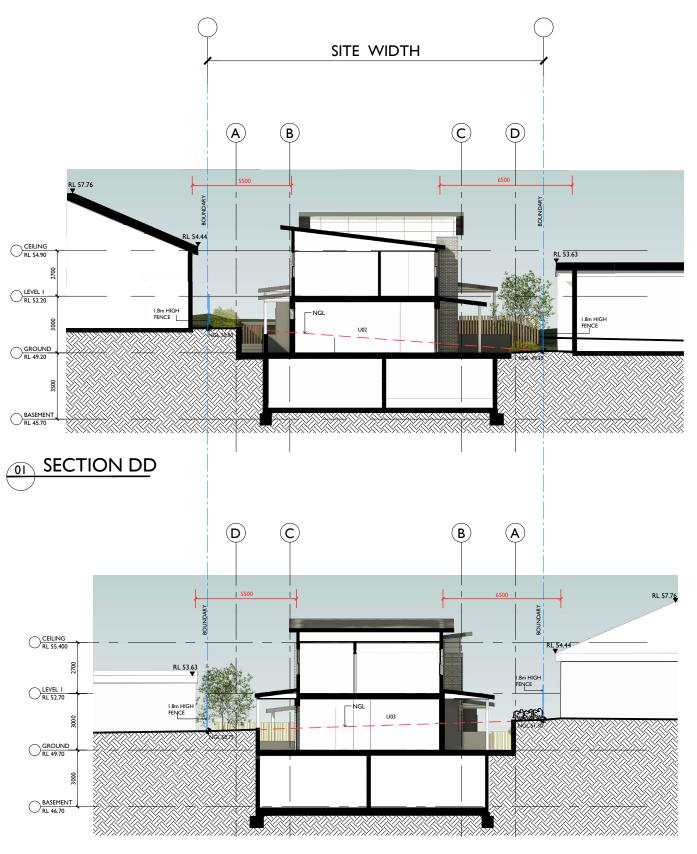
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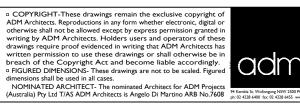
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Project PROPOSED RESIDENTIAL DEVELOPMENT OVER BASEMENT PARKING at LOT 10, DP 38803 328 GIPPS RD, KEIRAVILLE

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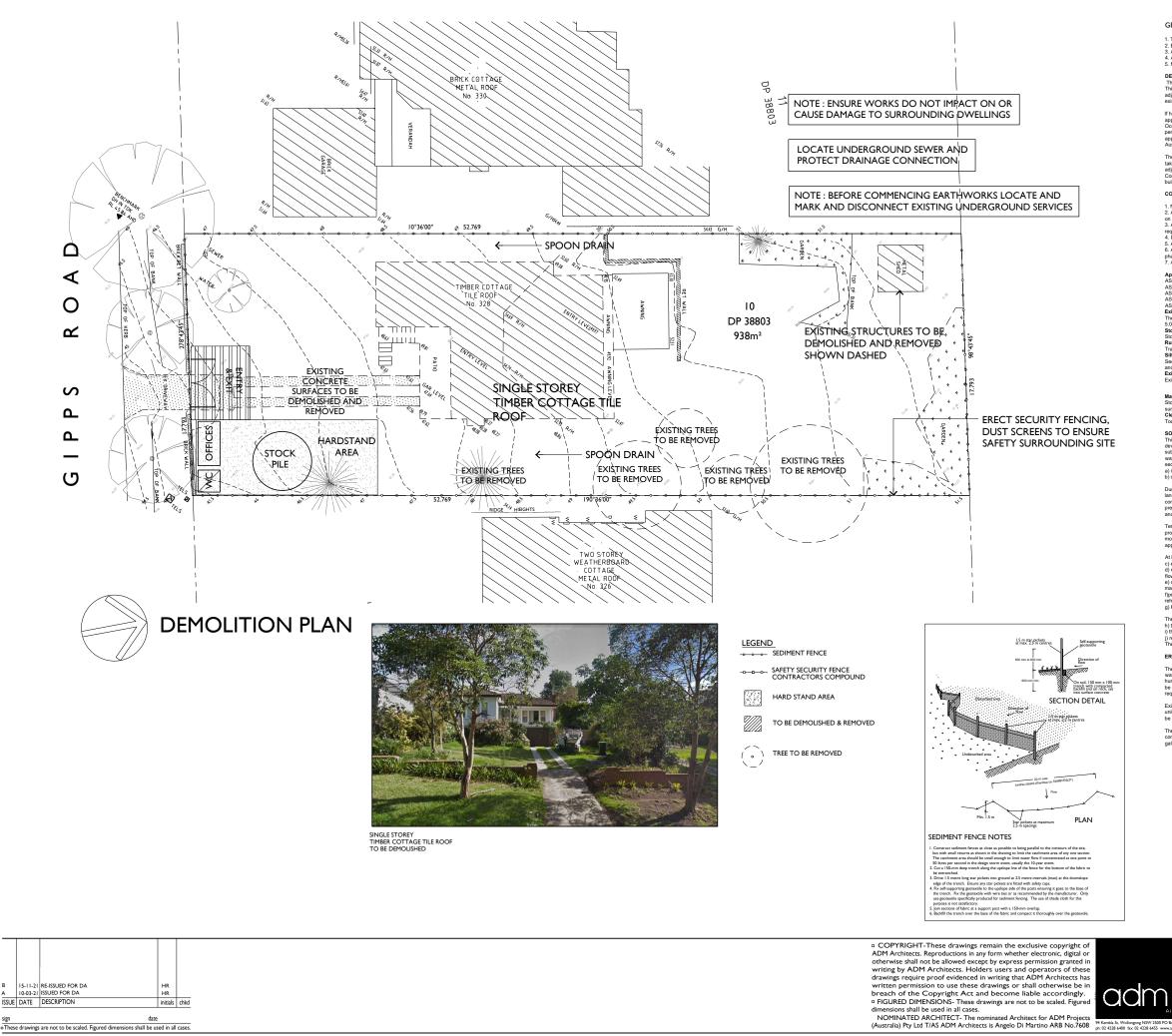


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GENERAL NOTES

Trade waste to be separated to recycle products, timber, glass and paper.
 Builder to reiocate site shed, amentiles, storage facilities, etc. as required during the construction process.
 Additional cargoritaring to be provided on site following construction of basement carparking area.
 All vehicles to leave the site in a forward direction.
 No vehicles to be parked on the folgobal network.

DEMOLITION, SITE CLEARING & CONTAMINATION The Contractor is to carry out necessary demolition and on-site clearance in accordance with AS 2601 (Demolition of Structures) on the subject site This is applicable to demolition of existing buildings, structures and services including planning and execution of the work, protection and support of adjacent structures and removal of demolished material. Demolished materials, hazardous materials (particularly if flowing in the environment) existing structures) and absetos shall be removed from site prior to any new construction work taking place on site.

If hazardous materials are encountered, appropriate and qualified personnel shall be employed to remove from site and dispose of such materials in approved manner in accordance with the provisions of all applicable legislation and with any relevant recommendations, published by the National Occupational Health and Salety Commission (Worksale Australia). It hazardous materials are encounteed underground, appropriate and qualified personnel shall be employed to remove from site and dispose of such materials in approved manner in accordance with the provisions of all aparticible and with any relevant recommendations published by the National Occupational Health and Salety Commission (Worksale Australia).

The Contractor shall be responsible for maintaining security fencing around the perimeter of the site and any additional precautionary mean taken as may be necessary to prevent unauthorised entry to the site at all times during the demolition period. Safe access to and egress fit adjoining properties shall be maintained at all times for the duration of the demolition work. In the event that the site is found to be contamin Contractor is to follow the directions and recommendations of a site contamination consultant to ensure that the site is un-contaminated pribuling works stating place on site.

CONSTRUCTION MANAGEMENT POINTS

Note that all proposed works will be undertaken whilst the building and site is vacant;
 All site fencing and sediment control used during demolition phase shall be retained for the construction phase and shall be extended as detailed on drawing;
 A new hard stand area and shaker grid shall be constructed on corkwood circuit frontage during all phases of the project. All to confirm with the requirements of the local council and RTA;
 During construction phase as area is set aside on sile for use of mobile crane or concrete pump;
 During construction phase as area is set aside on sile for use of mobile crane or concrete pump;

All construction materials are to be stored on site. A designated area has been allowed;
 All site accommodation and amenities as required will be located within the site. Some site sheds maybe relocated of

hase of construction; and 7. A dilapidation survey will be carried out by the contractor before the commencement of any work on site.

Applicable Australian Standards AS2601 - Demolition of structures AS2436 - Guide to noise control...demolition sites AS3798 - Guide to earthworks....residential developments AS1289 - Methods of tosting solis for engineering purposes AS1725 - Galvanised railess chairwire security fencing Ext/Entrance - Access Point

Exit/Entrance - Access Point

Executionative - AuCess Point The exit/entrance to the site will be constructed of a bed of 50-75mm aggregate, 200mm deep, for the vehicular exit/entrance width and to a length of 10 metres from the street kerk, so as to ensure soil and excavated materials are not transported off-site.

Storage Areas Storage areas will be front yard open space. Rubbish Disposal

Kubbish Disposal Trade waske will be contained on site until removal. Silt Barrier Sodiment will be prevented from washing off-site by geotextile fabric with metal support and/or continuous straw bales, placed in 100mm deep trench and fixed with stakes. All silt barriers are to be wholly with the site area. Existing Paving and Vegetation Existing parement and vegetation will be retained as much as possible to minimise the amount of exposed soil.

Material Stockpiles Stockpiles of loose mat erials (gravel, sand, etc.) will be contained undercover and water courses and within a suitable barrier. Footpaths and road Stockpiles of loose maternals (graver, sano, etc.) while contained undercored and the sub-surfaces will not be used for material stockpiles. Cleaning of Tools and Equipment Tools and equipments will be cleaned away form drainage lines, road and pavement.

SOIL & WATER MANAGEMENT

& WAILER MANAGEMENT lian shall be read in conjunction with the engineering plans, and any other plans or written instructions that may be issued relating to the future opment at the subject site. The contractor shall ensure that all soil and water management works are located as indicated on this drawing. All ontractors shall be made aware of their responsibilities in minimising the potential for soil erosion and pollution to down-slope lands and water Where practical, the soil erosion hazard on the site shall be kept as low as possible to this end. Works should be undertaken in the following

sequence. a) install any necessary security/boundary fences for this site; b) construct silt fencing as detailed along boundaries and contours.

During windy weather, large unprotected areas shall be kept moist (not wet) by sprinkling with water to keep the dust under control. Final site andscaping shall be undertaken as soon as possible, and within 20 working days from completion of construction activuties. Any sand used in the concrete curing process (spread over the surface) shall be removed as soon as possible, and within 10 working days from placement. Water shall be prevented from entering the permanent drainage system, unsets it is sediment free: i.e. - the catchment area has been permanently landscaped and/or any likely sediment has been filtered through an approved structure.

Temporary soil and water management structures shall be removed only after the lands they protected are rehabilitated. The contractors shall provide acceptable receptors for concrete and mortar slurries, paints acid washings, lightweight waste materials and litter. Receptors for concrete and mortar slurries, paints, acid washings, light-weight waste materials and litter are to be emptied as necessary. Disposal of waste shall be in a manner approved by the site superintendent.

At least weekly the contractor shall inspect the site, providing particular attention to the following matters: c) ensure drains operate freely, and inliate repair or maintenance as required; d) remove splite and (or other materials) from hazard areas, including lands closer than 2 metres from likely areas of concentrated or high-velocity flows such as waterways, guitters, paved areas and driveways; e) construct additional erosion and/or sediment works as necessary to ensure the desired protection is given to downslope lands and waterways i.e. male ongoing changes to the plan; Tome maintaing arcsion and sediment control measures in a functionion conditionion condition until all earthwork activities are completed and the site

fpme maintain erosion and sediment control measures in a functioning conditioning condition until all earthwork activities are completed and the site rehabiliteder and

Remove temporary soil conservation structures as a last activity in the rehabilitation programme.

The contractor shall keep a log book, making entries at least weekly, and after rainfall and/or site closure record

the volume of any rainfall events (check water bureau);
 the conditions of any soil and water management works

remedial work
 The book shall be kept on site and made available to any authorised person on request.

EROSION AND SEDIMENTATION CONTROL NOTES

The Contractor shall provide sediment fencing material during construction to be installed inside site fencing on low sides of site to contain all site water run off and prevent recision. The sediment flencing material to security flencing. Sediment control fabric shall be an approved material (e.g., humes propers site stop) standing Solomin above ground and extending 150 below ground. Site harriers, sitt larges, sallation screens and the like shall be constructed with geotextile sediment fabric attached to steel star pickets or security fencing, or with Hessian bags. All to conform with the requirements of the local council and RTA.

Existing drains located within the site shall be isolated by sediment control. No parking or stock piling of material is permitted in the public domain unless stated. Grass verges shall be maintained as much as practical to provide a buffer zone to the construction site. Construction entry/exits shall be located as per dwg.

The Contractor shall ensure all droppable soil and sediment is removed prior to construction traffic exiting the site. Builder shall ensure all construction traffic entering and leaving the site do so in a forward direction as much as possible. Site security fencing to consist of 1800n galvanised chains mesh panels fixed to galvanised playe frame and supported on concrete Teot".



PROPOSED RESIDENTIAL DEVELOPMENT OVER **BASEMENT PARKING**

LOT 10, DP 38803 328 GIPPS RD, KEIRAVILLE

MARIO DREIZI

date	NOVEMBE	R 2021	
drawn	RC, HR	chkd	ADM
drawing			
DEVEL	OPMENT A	PPLICATIO	ON
DEMC	LITION / SIT		GEMENT PLAN
Project	No.	Drawing	No. issue
2018	3-27	AI2	В

scale NTS

PROPOSED RESIDENTIAL TOWNHOUSE DEVELOPMENT 328 GIPPS ROAD KEIRAVILLE NSW2500

STANDARD SYMBOLS & NOTATIONS			
SYMBOL	DESCRIPTION		
	BOUNDARY LINE		
SW	PROPOSED STORMWATER DRAINAGE LINE (IN THE GROUND) Ø100 @ 1.0% MIN GRADE UNO.		
RW	PROPOSED RAINWATER DRAINAGE LINE Ø100 @ 1.0% MIN GRADE UNO. USE PRESSURE GRADE PIPES FOR CHARGED SYSTEM		
ExSW	EXISTING STORMWATER DRAINAGE PIT AND PIPE		
RM—	PUMP RISING MAIN		
S/S S/S-	90Ø SUBSOIL LINE CONNECT TO STORMWATER OUTLET OR VERTICAL SLOT DRAIN		
\ge \ge $>$	SPOON / SWALE DRAIN		
(##)	GRATED SURFACE INLET PIT WITH (OVERLAND FLOW DIRECTION). PIT DIMENSIONS ARE GOVERNED BY DEPTH REFER DETAIL		
##	SEALED JUNCTION PIT		
	GRATED DRAIN		
	KERB INLET PIT WITH LINTEL		
 ⊗ ^{RWO}	RAINWATER DRAINAGE OUTLET		
$22m^2 R \rightarrow$	CATCHMENT AREA TO STORMWATER PIT		
PO	DRAINAGE CELL PLANTER OUTLET		
o DP-100Ø	INDICATIVE DOWNPIPE - LOCATION AND MINIMUM SIZE		
	GUTTER		
IO o	INSPECTION OPENING		
DPS of	DOWNPIPES WITH SPREADER		
RWT	PROPOSED RAINWATER TANK		
+35.11	EXISTING SURFACE LEVEL		
	EXISTING SURVEY CONTOUR		
* RL35.40	FINISHED SURFACE LEVEL		
* P35.85	FINISHED PAVEMENT LEVEL		
* TK35.55	TOP OF NEW KERB LEVEL		
* TOW35.55	TOP OF NEW RETAINING WALL LEVEL		
GL 35.05	PROPOSED PIT SURFACE LEVEL		
IL 34.75	PROPOSED PIT INVERT LEVEL		
FFL23.56	PROPOSED FINISHED FLOOR LEVEL		
225Ø uPVC @ 1.0% MIN	PIPE SIZE, TYPE AND GRADE < > DENOTES DIRECTION OF FLOW		
UPVC	RIGID PVC PIPE		
RCP	REINFORCED CONCRETE PIPE		
RKG	ROLL KERB & GUTTER		
K&G	KERB & GUTTER		
150 KO	150 HIGH KERB ONLY		
	OVERLAND FLOW PATH		
FALL FALL	FALL DIRECTION		
TOW (X.XXm)	RETAINING WALL WITH HEIGHT		
— S S —	EXISTING SEWER LINE		
——— T —— T —	EXISTING TELSTRA LINE		
G G	EXISTING GAS LINE		
—————————————————————————————————————			
W W	EXISTING WATER MAIN		

ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

DEPTH AND LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED BY BUILDER ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

GENERAL

- 1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION. WHERE A SPECIFICATION HAS NOT BEEN NOMINATED THEN THE CURRENT NSW DEPARTMENT OF HOUSING CONSTRUCTION SPECIFICATION IS TO BE USED. THE NOMINATED SPECIFICATION SHALL TAKE PRECEDENCE TO THESE NOTES.
- 2. ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER CONSULTANTS.
- 3. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- 4. THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY AND IS NOT GUARANTEED
- COMPLETE NOR CORRECT. 5. CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- 6. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE. 7. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- 8. ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
- 9. THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT SPECIFIED.
- 10. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS, FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS.

SURVEY

SURVEYOR.

- 1. JN ARE NOT RESPONSIBLE FOR THE ACCURACY OF ANY SURVEY INFORMATION PROVIDED ON THIS DRAWING.
- 2. ALL LEVELS ARE TO A.H.D. 3. ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES. 4. CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED

EARTHWORKS

- 1. PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION.
- 2. OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOP SOIL. AVERAGE 100mm THICK. REMOVE FROM SITE, EXCEPT TOP SOIL FOR RE-USE.
- 3. CUT AND FILL OVER THE SITE TO LEVELS REQUIRED. 4. PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND, PROOF ROLL THE EXPOSED SURFACE WITH A ROLLER OF MINIMUM WEIGHT OF 5 TONNES WITH A MINIMUM
- OF 10 PASSES. 5. EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY
- AT OPTIMUM MOISTURE CONTENT ± 2%. 6. FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- 7. WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH EXCAVATION IS TAKEN.
- 8. FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 5.1.1). MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR FILL TO APPROVAL
- 9. COMPACTION TESTING SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRES PER LAYER BY A REGISTERED NATA LABORATORY. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
- 10. BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT : 4 HORIZ. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL PAVEMENT.
- ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP SOILED WITH 150mm APPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

DRAINAGE INSTALLATION

- RCP CONVENTIONAL INSTALLATIONS & ROAD CROSSINGS 1. SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS
- 2. BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:

SIEVE SIZE (mm) 19 2.36 0.60 0.30 0.15 0.075 % MASS PASSING 100 50-100 20-90 10-60 0-25 0-10

- AND THE MATERIAL PASSING THE 0.075 SIEVE HAVING LOW PLASTICITY AS DESCRIBED IN APPENDIX D OF AS1726.

b. BEDDING DEPTH UNDER THE PIPE TO BE 100mm.

- c. BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER. THIS REPRESENTS THE 'HAUNCH ZONE.' d. THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE
- COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% FISEWHERE FOR COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL. e. COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A
- NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & GUTTER OR PAVEMENT. 3. BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A
- GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO IT'S SELF COMPACTING ABILITY. 4. A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA.

SAFETY IN DESIGN

- 1. THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS DESIGN THAT ARE TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF
- WORKERS. 2. JN'S ASSESSMENT DID NOT IDENTIFY ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN.

a. COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS:

STORMWATER DRAINAGE

- 1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS AND COUNCIL'S SPECIFICATION. 2. PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC UNO.
- 3. PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO. 4. ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
- 5. PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS. 6. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS
- UNO 7. PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O
- 8. PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O. 9. BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
- 10. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS. 11. PITS SHALL BE AS DETAILED WITH METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1000mm TO HAVE CLIMB IRONS. 12. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
- 13. ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE, LOAD CLASS A, UNLESS NOTED OTHERWISE. 14. ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE, LOAD CLASS D, UNLESS NOTED OTHERWISE.
- 15. INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS, TO COUNCIL'S STANDARDS UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED
- 16. PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER. 17. DOWNPIPES SHOWN ARE INDICATIVE ONLY, ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS.
- 18. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE. 19. HAND-EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS.
- 20. FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS. 21. GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION.
- 22. ALL BASES OF PITS TO BE BENCHED TO HALF PIPE DEPTH AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE. 23. SUBSOIL LINE: PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS, LAY PIPES ON FLOOR OF
- TRENCH GRADED AT 1% MIN, AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL. PROVIDE FLUSHING EYE'S AT HIGH POINTS OR TO COUNCILS REQUIREMENTS. 24. SHOULD THE CONTRACTOR ELECT TO INSTALL PRECAST STORMWATER PITS AND THEY ARE PERMITTED BY COUNCIL AND
- THE CLIENT, THE PRECAST PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH RMS STANDARDS INCLUDING: a. SEAL THE SEGMENTS TOGETHER USING A SITE-APPROVED NON-SHRINK GROUT OR MASTIC-TYPE PRODUCT. APPLY THE SEALANT IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S REQUIREMENTS. b. ENSURE THAT NO GAPS REMAIN AND THAT A SMOOTH FACE EXISTS BETWEEN MULTIPLE UNITS.
- c. LEAVE THE SEGMENTS UNDISTURBED UNTIL THE PERIOD OF CURING IS COMPLETED IN ACCORDANCE WITH THE GROUT OR SEALANT PRODUCT MANUFACTURER'S REQUIREMENTS.

ENVIRONMENTAL SITE MANAGEMENT

- 1. EROSION & SEDIMENT CONTROLS TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S SPECIFICATION & THE NSW DEPARTMENT OF HOUSING "BLUE BOOK" - SOILS AND CONSTRUCTION - MANAGING URBAN STORMWATER, 2004. REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS "SD"
- 2. SEDIMENT & EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM, SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE. 4. RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE, TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE
- STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNHILL OF STOCKPILE. 5. AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERVISING ENGINEER MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS.
- 6. ALL DISTURBED AREAS ARE TO BE SEEDED & FERTILISED WITHIN 14 DAYS OF EXPOSURE. 7. ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.
- 8. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER, UNTIL SURROUNDING AREAS ARE PAVED OR REGRASSED. GRAVEL OR GEOTEXTILE INLET FILTERS TO SD6-11 & SD6-12. 9. ALL SILT FENCES & BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER & REGULARLY DESILTED DURING TH
- CONSTRUCTION PERIOD. SILT FENCES TO SD6-8 OR SD6-9. 10. STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL, PLASTIC SHEFTING OR MEMBRANE MUST NOT BE USED, SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
- 11. WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN. 12. NO MORE THAN 150m OF TRENCHING TO BE OPEN AT ANY ONE TIME. IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACINGS. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED
- 13. ALL VEHICLES LEAVING THE SITE MUST PASS OVER THE STABILISED SITE ACCESS BALLAST AREA (SIMILAR TO SD6-14) TO SHAKE OFF SITE CLAY AND SOIL, IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN, BALLAST IS TO BE MAINTAINED & REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD.
- 14. THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN. 15. ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE. IS TO BE REMOVED
- IMMEDIATELY. 16. PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
- 17. CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
- 18. DELIVERY VEHICLES MUST NOT STAND WITHIN THE PUBLIC ROADWAY FOR MORE THAN 20 MINUTES AT A TIME. 19. TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT
- HEAVY RIGID VEHICLES. (NO SEMITRAILERS) 20. ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM THE ENGINEER. 21.TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE
- TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED. 22. DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENT. 23.DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL (MIN HEIGHT 600mm) WHERE DIRECTED.
- MATERIAL TO BE RESPREAD ON FOOTWAYS AFTER FINAL TRIMMING. 24. UNDISTURBED BUFFER ZONE AREAS ARE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE NOTED BY THE SUPERINTENDENT AND ACCESS TO THE SEWER OR C.D.L. TRENCHING WILL BE AS SHOWN, OR HEAVY PENALTIES MAY BE IMPOSED.
- 25.TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH 'R.T.A. TRAFFIC CONTROL AT WORK SITES - CURRENT EDITION' AND AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'
- 26.PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	ΒY
А	19.02.21	ISSUED FOR DA	DJ
В	09.11.21	ISSUED FOR DA	DJ



Responsive Engineerin



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DISCIPLINE **CIVIL DESIGN** PROJECT

PROPOSED RESIDENTIAL TOWNHOUSE DEVELOPMENT DRAWING TITLE

GENERAL NOTES AND LEGENDS PLAN

ADDRESS 328 GIPPS ROAD, KEIRAVILLE NSW 2500

ROJECT DETAILS CALE AS SHOWN

WW.JN.COM.A



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Responsive Engineering



CLIENT

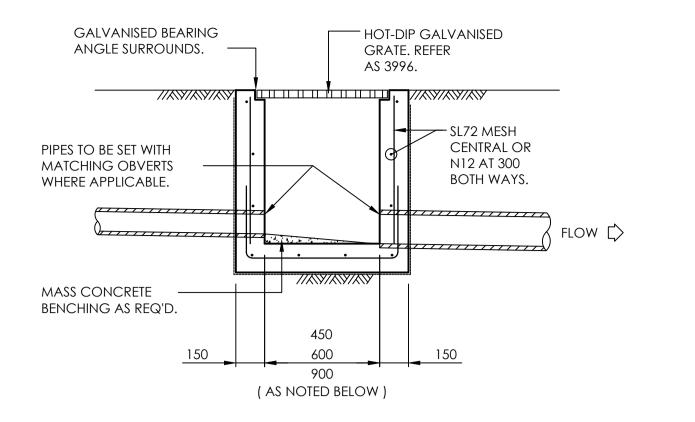


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			Responsive Engineering
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			DISCIPLINE CIVIL DESIGN PROJECT
			PROPOSED RESIDENTIAL TOWNHOUSE DEVELOPMENT
12	16	20m	DRAWING TITLE STORMWATER BASEMENT LAYOUT PLAN ADDRESS 328 GIPPS ROAD, KEIRAVILLE
A3) 6	8	10m	PROJECT DETAILS DESIGN SR DRAWN DJ Q0200052
41)			DRAWN DJ DATE FEB 2021 DRG SIZE A1 SCALE AS SHOWN PROJECT SF MGR WWW.JN.COM.AU



TYPICAL GRATED INLET PIT - NATURAL SURFACE

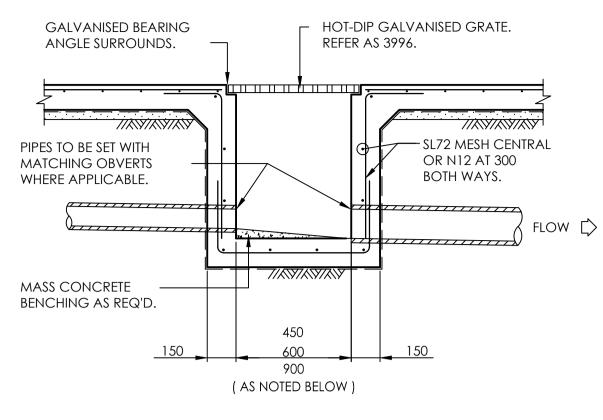
MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS				
		PIT MINIMUN	A INTERNAL	
DEPTH TO INVI	ERT OF OUTLET	DIMENSIC	NS (mm)	
		WIDTH	LENGTH	
	< 600	450	450	
> 600		600	600	
> 900		600	900	
> 1200		900	900	
STEP IRONS	Shall be prov	ided for pits v	with depths	
	EXCEEDING	<u>G 1200mm</u>		

NOTES

1. REINFORCEMENT NOTED IS ONLY REQUIRED FOR PITS EXCEEDING 900 DEEP, SUBJECT TO COUNCIL REQUIREMENTS. PITS GREATER THAN 3000 DEEP WILL REQUIRE STRUCTURAL ENGINEERS DESIGN.

2. PROVIDE 90Ø x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC. (BIDUM A24 OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.

- 3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
- 4. CONCRETE STRENGTH F'c = 32 Mpa

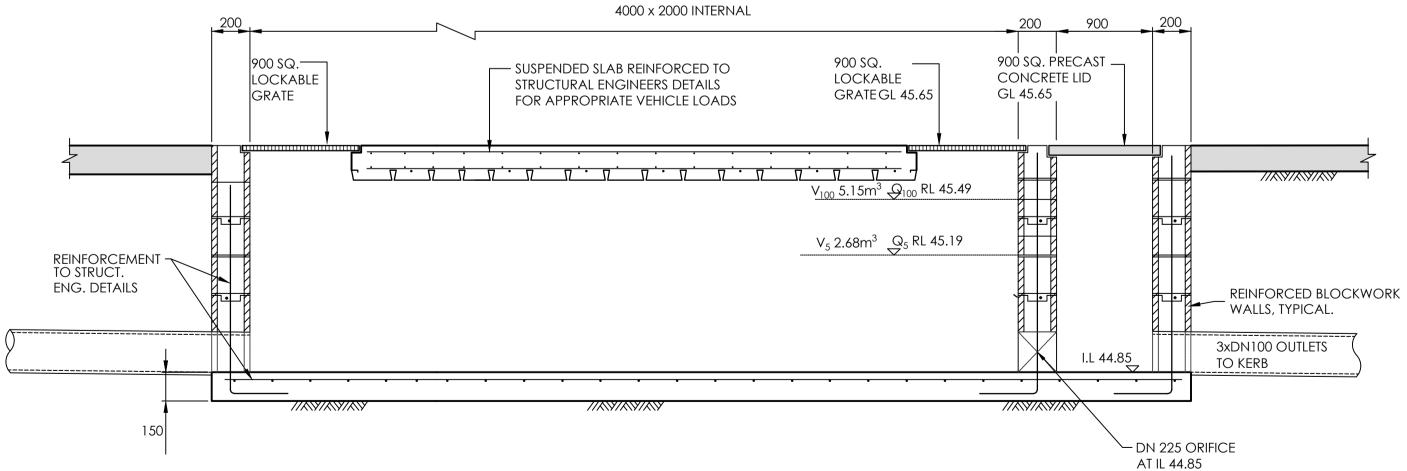


TYPICAL GRATED INLET PIT -CONCRETE SURFACE

	ERNAL DIMENS	ions for stor	MWATER PITS
		PIT MINIMUN	/ INTERNAL
DEPTH TO INVI	ERT OF OUTLET	DIMENSIC	NS (mm)
		WIDTH	<u>L</u> ENGTH
	< 600	450	450
> 600		600	600
> 900		600	900
> 1200		900	900
STEP IRONS	Shall be prov	ided for pits v	vith depths
	EXCEEDING	G 1200mm	

NOTES

- DEEP WILL REQUIRE STRUCTURAL ENGINEERS DESIGN.
- INLET PIPE.
- ENGINEERS APPROVAL.
- 4. CONCRETE STRENGTH F'c = 32 MPa



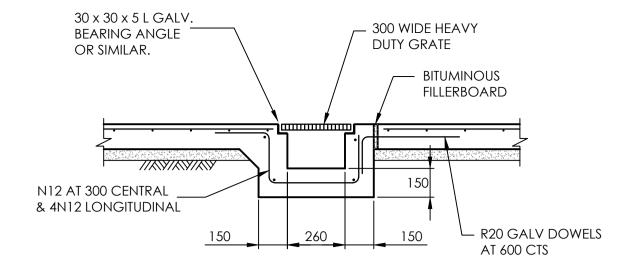
ON SITE DETENTION TANK

SCALE NTS CONTRACTOR IS TO VERIFY THE LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE.

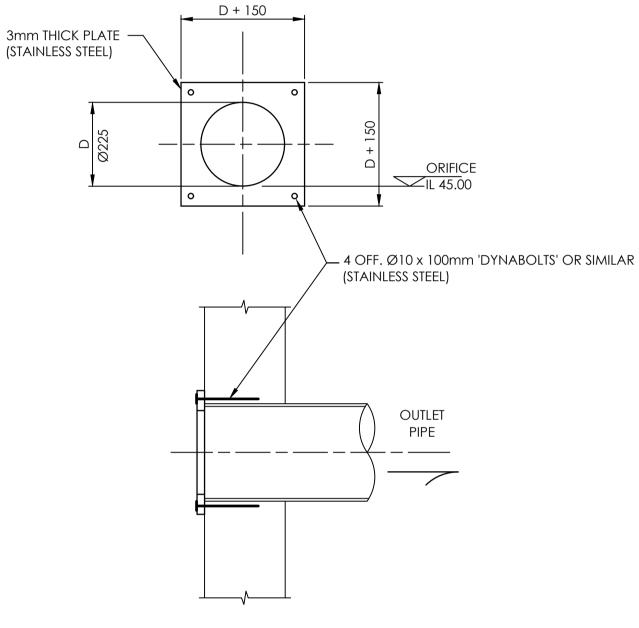
1. REINFORCEMENT NOTED IS ONLY REQUIRED FOR PITS EXCEEDING 900 DEEP, SUBJECT TO COUNCIL REQUIREMENTS. PITS GREATER THAN 3000

2. PROVIDE 90Ø x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC. (BIDUM A24 OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH

3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE



TYPICAL GRATED DRAIN DETAIL



LOW ORIFICE PLATE DETAIL

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	ΒY
Α	19.02.21	ISSUED FOR DA	DJ
В	09.11.21	ISSUED FOR DA	DJ



Responsive Engineering

CLIENT MARIO DREIZI STATUS **ISSUED FOR DA**

THIS DOCUMENT IS ISSUED BY MOSIAC Pty. Ltd. (ABN 19 609 901 528) AND IS SUBJECT TO THE RELEVANT CONTRACT BETWEEN MOSIAC Pty. Ltd. AND ITS CLIENT. THE CONCEPTS AND INFORMATION CONTAINED IN THE DOCUMENT ARE THE COPYRIGHT OF MOSIAC Pty. Ltd. USE OR COPYING OF THE DOCUMENT WITHOUT WRITTEN PERMISSION OF MOSIAC Pty. Ltd. CONSTITUTES AN INFRINGEMENT OF COPYRIGHT

DISCIPLINE **CIVIL DESIGN**

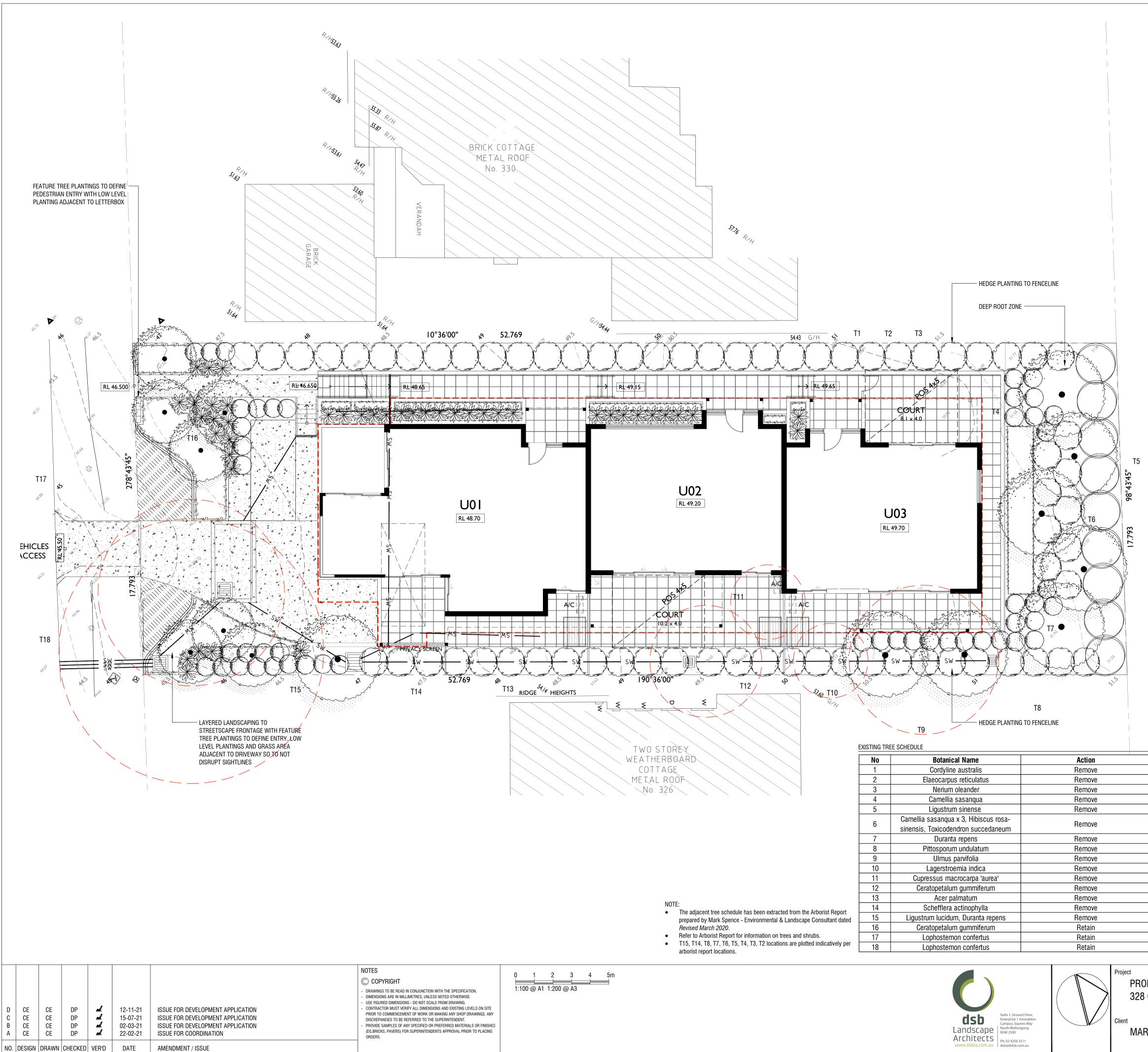
PROJECT PROPOSED RESIDENTIAL TOWNHOUSE DEVELOPMENT DRAWING TITLE

STORMWATER DETAILS PLAN ADDRESS

328 GIPPS ROAD, KEIRAVILLE NSW 2500

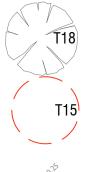
ROJECT DETAILS Q0200052 FEB 20

WW.JN.COM.AU



AMENDMENT / ISSUE

LEGEND - SITE



EXISTING TREES TO BE RETAINED & PROTECTED Tree Number In Accordance With Arborist Report

T15¹ EXISTING TREES TO BE REMOVED Tree Number In Accordance With Arborist Report

 $_$ $_$ $_$ $_$ $_$ EXISTING LEVEL AND CONTOURS



RL 46.950 PROPOSED LEVEL

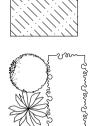
– – – – BASEMENT OUTLINE



CLOTHES LINE

LEGEND - FINISHES

SOFTSCAPE

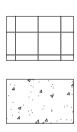


MASS PLANTING BED

GRASS

HARDSCAPE

-nernerner



UNIT PAVING

CONCRETE PAVING

Driveway To Engineers Details

RECOMMENDED PLANT SPECIES

CONCRETE MOWING EDGE

E	BOTANICAL	NAME

Acmena smithii

Brachychiton acerifolius

Largestroemia 'Indian Summer'

Tristaniopsis laurina 'Luscious'

Elaeocarpus eumundii

Magnolia 'Teddy Bear'

LARGE SHRUBS

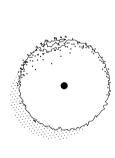
Acmena 'Cherry Surprise'

Gardenia augusta 'Magnifica'

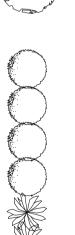
Backhousia citriodora

Camellia sasanqua

TREES







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-vsv

Syzigium 'Cascade' Syzigium 'Resilience' Photinia 'Red Robin' Viburnum odoratissimum Thysanoloea maxima Acmena 'Allyn Magic' Raphiolepis 'Snow Maiden' Raphiolepis 'Oriental Pearl" Anthropodium 'Matapouri Bay'

SMALL SHRUBS AND ACCENT PLANTS

Lorapetalum chinense 'Burgundy' Escallonia 'Apple Blossom' Gardenia augusta 'Florida' Phormium tenax 'Purpurea' Strelitzea reginae Zamia furfuracea

GROUND COVERS & ACCENT PLANTS Alternanthera 'Little Ruby' Dichondra repens Lomandra 'Tanika' Dianella 'King Alfred' Dianella 'Cassa Blue' Dianella 'Little Jess" Gardenia radicans Juniperous confertus Liriope muscari 'Evergreen Giant' Myoporum parvifolium Trachelospermum jasminoides

COMMON NAME

Lilypily Illawarra Flame Eumundi Quondong Crepe myrtle Dwarf Magnolia Water gum

Lilly Pilly

Lemon Myrtle Camellia Gardenia Weeping Brush Cherry Brush Cherry Photinia Sweet Viburnum Tiger Grass

Dwarf Lily Pily Chinese cherry Dwarf Hawthorn Dwarf Hawthorn Renga Lilly Escallonia Gardenia NZ Flax Bird of Paradise Cardboard plant

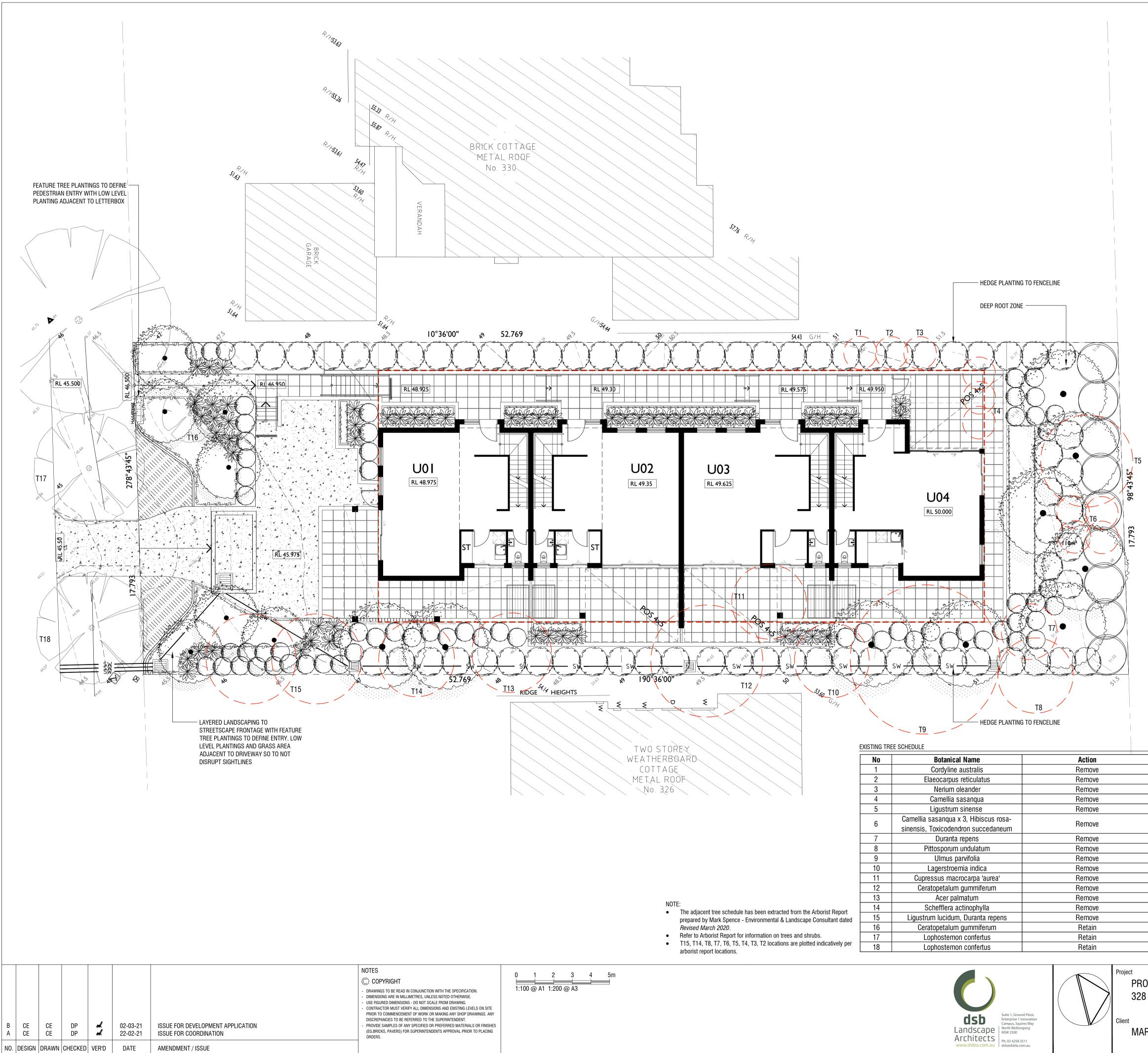
Alternanthera Kidney Weed Mat rush Paroo Lily Paroo Lily Paroo Lily Gardenia Shore Juniper Lily Turf Creeping Boobialla Star Jasmine

PROPOSED RESIDENTIAL DEVELOPMENT 328 GIPPS RD, KEIRAVILLE

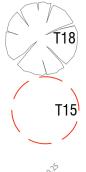
Drawing Title LANDSCAPE PLAN

Plot Date: 12-11-2021 Sheet No. Scale 1:100 @ A1 Drg. No. 4070-F101 D

MARIO DREIZI



LEGEND - SITE



T18 EXISTING TREES TO BE RETAINED & PROTECTED Tree Number In Accordance With Arborist Report

T15¹ EXISTING TREES TO BE REMOVED Tree Number In Accordance With Arborist Report

 $_$ $_$ $_$ $_$ EXISTING LEVEL AND CONTOURS



RL 46.950 PROPOSED LEVEL

– – – – BASEMENT OUTLINE



CLOTHES LINE

LEGEND - FINISHES

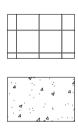


GRASS



MASS PLANTING BED

HARDSCAPE



UNIT PAVING

CONCRETE PAVING Driveway To Engineers Details

CONCRETE MOWING EDGE

BOTANICAL NAME

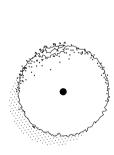
Brachychiton acerifolius

Largestroemia 'Indian Summer'

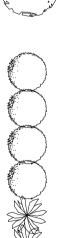
Elaeocarpus eumundii

TREES Acmena smithii

RECOMMENDED PLANT SPECIES







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لمريعين

Magnolia 'Teddy Bear' Tristaniopsis laurina 'Luscious' LARGE SHRUBS Acmena 'Cherry Surprise' Backhousia citriodora Camellia sasanqua Gardenia augusta 'Magnifica'

Syzigium 'Cascade'

Photinia 'Red Robin' Viburnum odoratissimum Thysanoloea maxima Acmena 'Allyn Magic' Lorapetalum chinense 'Burgundy' Raphiolepis 'Snow Maiden' Raphiolepis 'Oriental Pearl" Anthropodium 'Matapouri Bay'

Syzigium 'Resilience' SMALL SHRUBS AND ACCENT PLANTS

Escallonia 'Apple Blossom' Gardenia augusta 'Florida' Phormium tenax 'Purpurea' Strelitzea reginae Zamia furfuracea

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COMMON NAME

Lilypily Illawarra Flame Eumundi Quondong Crepe myrtle Dwarf Magnolia Water gum

Lilly Pilly

Lemon Myrtle Camellia Gardenia Weeping Brush Cherry Brush Cherry Photinia Sweet Viburnum Tiger Grass

Dwarf Lily Pily Chinese cherry Dwarf Hawthorn Dwarf Hawthorn Renga Lilly Escallonia Gardenia NZ Flax Bird of Paradise Cardboard plant

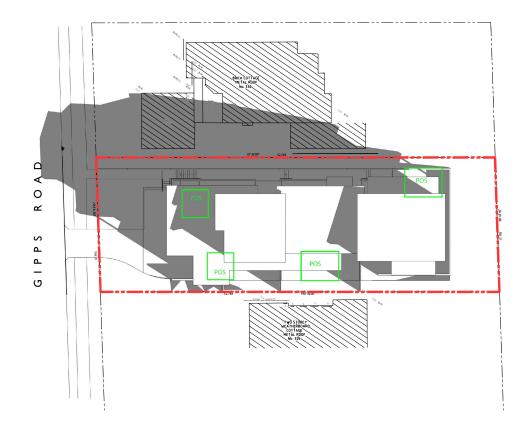
Alternanthera Kidney Weed Mat rush Paroo Lily Paroo Lily Paroo Lily Gardenia Shore Juniper Lily Turf Creeping Boobialla Star Jasmine

PROPOSED RESIDENTIAL DEVELOPMENT 328 GIPPS RD, KEIRAVILLE

Drawing Title LANDSCAPE PLAN

Plot Date: 22-02-2021 Sheet No. Scale 1:100 @ A1 Drg. No. 4070-F101 B

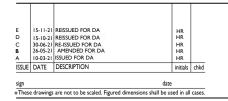
MARIO DREIZI

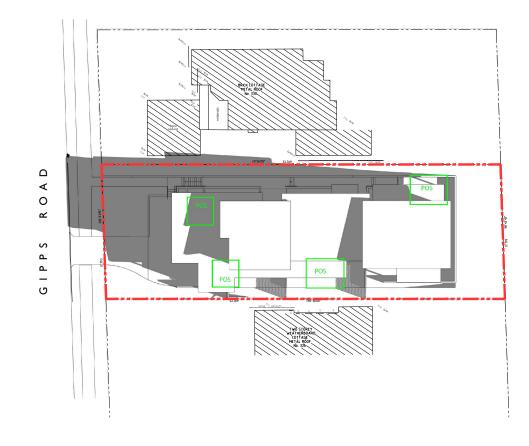




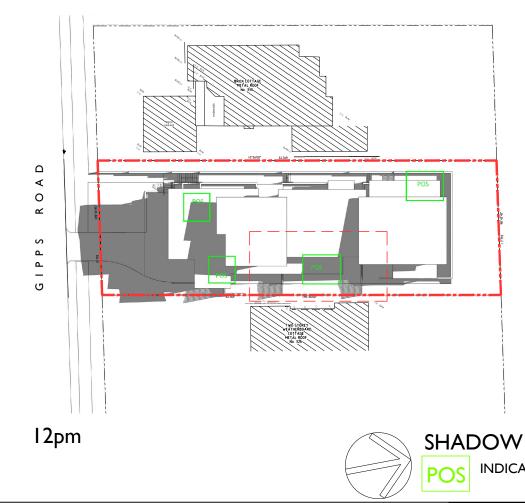








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 NOMINATED ARCHITECT- The nominated Architect for ADM Projects (Australia) Pty Ltd TIAS ADM Architects is Angelo Di Martino ARB No.7608



NOT FOR CONSTRUCTION

SHADOW ANALYSIS- 21ST OF JUNE

INDICATES LOCATION OF PRIVATE OPEN SPACES



Project PROPOSED RESIDENTIAL DEVELOPMENT OVER BASEMENT PARKING at LOT 10, DP 38803 328 GIPPS RD, KEIRAVILLE

MARIO DREIZI

scale	NTS			
date	NOVEMBE	R 2021		
drawn	RC , HR	chkd	ADM	
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Project	No.	Drawing	No.	issue
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SHADOW ANALYSIS- 21ST OF JUNE

INDICATES LOCATION OF PRIVATE OPEN SPACES



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 FIGURED DIMENSIONS- These drawings are not to be scaled. Figured imensions shall be used in all cases.
 NOMINATED ARCHITECT- The nominated Architect for ADM Projects (Australia) Pty Ltd TIAS ADM Architects is Angelo DI Martino ARB No.7608



< 3061 Wollongong

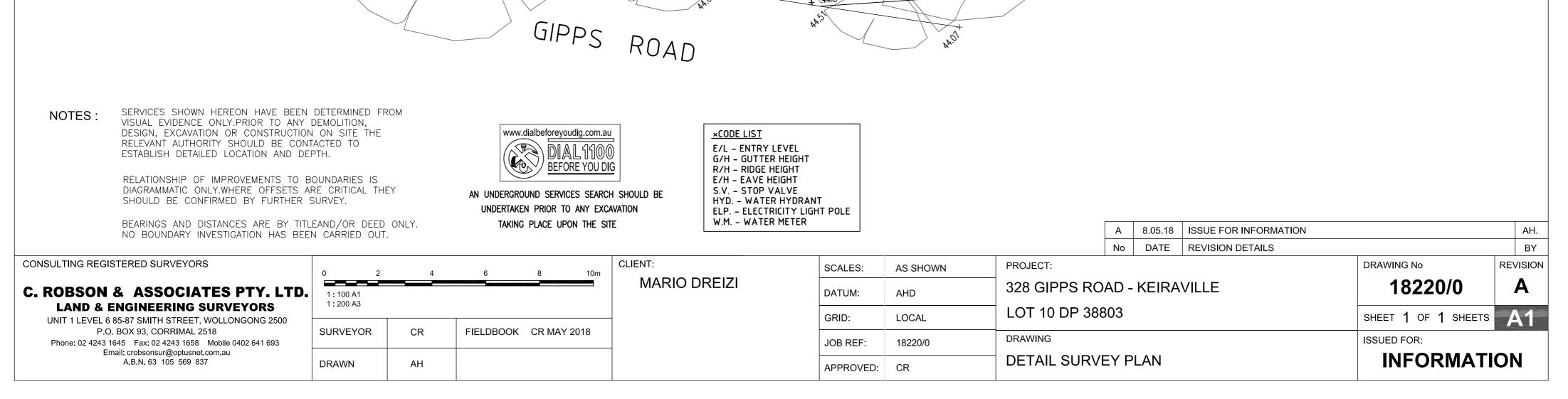
PROPOSED RESIDENTIAL
DEVELOPMENT OVER
BASEMENT PARKING
at
LOT 10, DP 38803
328 GIPPS RD. KEIRAVILLE

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MARIO	DREIZI

scale	NTS			
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drawn	RC , HR	chkd	ADM	
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Appendix 1: WLEP 2009 Clause 4.6 Variation Statement (Clause 7.14 Site Width)

WLEP 2009 Clause 4.6 'Exceptions to Development Standards'

This clause applies as the site width does not meet the development standard set out in **Clause 7.14(1)** 'Minimum Site Width' of WLEP 2009. The clause states that "*Development consent must not be granted for development for the purposes of a multi dwelling housing unless the site area on which the development is to be carried out has a dimension of at least 18 metres.*" The site width is 17.793 metres and has a very minor (207mm wide) deficiency for the length of the property.

The objectives of clause 4.6 are:

- a) "to provide an appropriate degree of flexibility in applying certain development standards to particular development, and
- b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances."

In preparing this statement, consideration has been given to Land and Environment Court Judgements *Four2Five Pty Ltd v Ashfield Council* [2015] NSWLEC 1009 (and appeal at NSWLEC 90) and Wehbe v Pittwater Council [2007] NSWLEC 827, namely that the objection is well founded, that compliance with the standard is unreasonable or unnecessary in the circumstances of the case, and that there are sufficient environmental planning grounds to justify contravening the development standard.

As Table 8 below demonstrates, the provisions relating to the contravention of the development standards with respect to the site width are satisfied.

Table 8: Compliance with WLEP 2009 - Contravention of Clause 7.1: Site Width			
Part/Clause 4.6 Requirement	Response and Justification	Consistent/ Complies	
(2) Consent may, subject to this clause, be granted for development even though the development may contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.	This subclause is not relevant to the subject proposal.	N/A	
 (3) Written request from the applicant that seeks to justify the contravention of the development standard by demonstrating: 	This table comprises the written request seeking to justify the contravention of the site width development standard.	Provided	
a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and	In Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 1009, para 61, Commissioner Person summarises the considerations from Wehbe v Pittwater Council [2007] NSWLEC 827 at [42] per Preston CJ, and notes in para 62 that clause 4.6 can be considered in a similar way to that of SEPP 1. In Wehbe at [44]-[48] Preston CJ identified other ways in which an applicant might establish that compliance with a development standard is unreasonable or unnecessary, namely that the underlying objective or purpose is not relevant to the development; that the objective would be defeated or thwarted if compliance was required; that the development standard has been virtually abandoned	Justified	

Part/Clause 4.6 Requirement	Response and Justification	Consistent/ Complies
	or destroyed by the Council's own actions in departing from the standard; or that the zoning of the land is unreasonable or inappropriate.	
	A response to each of these approaches is therefore provided as it relates to the current proposal:	
	The underlying objective or purpose is not relevant to the development	
	This is not applicable as there are no objectives for the Development Standard. However, the following intent is assumed, based on the objectives of the 18m site width requirement within WDCP 2009 development control 5.1:	
	(a) To allow for development of sites which are of sufficient size to accommodate the required building envelope, car parking and landscaping requirements.	
	(b) To encourage amalgamation of allotments to provide for improved design outcomes.	
	It is not considered to be warranted to amalgamate this site with an adjoining property as the design outcomes can be achieved within a single lot.	
	That the objective would be defeated or thwarted if compliance was required	
	As above.	
	That the development standard has been virtually abandoned or destroyed by the Council's own actions in departing from the standard	
	Not applicable	
	The zoning of the land is unreasonable or inappropriate.	
	The zoning of the land is appropriate.	
(b) that there are sufficient environmental planning grounds to justify contravening the development standard.	In Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 1009, Commissioner Person determined that it is necessary for applicants to show sufficient grounds <u>particular to the</u> <u>development</u> in the Clause 4.6 objection.	Justified
	The strict application of the site width standard would otherwise limit this generously sized allotment within good proximity to amenities to redevelopment as a dual occupancy. The ability to provide multi dwelling housing provides more housing choice within an established residential area and associated services. The variation provides the opportunity for an alternative (and satisfactory) site planning and built form outcome.	
	The 18m site width requirement was originally introduced by Council to ensure that all multi unit sites were of sufficient width to accommodate a building, driveway and private open space, whilst still maintaining sufficient area for a 1.5m landscape strip adjacent to each side boundary. The subject site is regular in shape which can readily accommodate the required 1.5m landscape strip. Further, the use of basement carparking significantly reduces the footprint of the building and provides additional area for open space and landscaping purposes.	
	Flexibility is sought for the application of the site width requirements as the non-compliance is minor (200mm) as the design achieves a suitable design outcome as detailed	

Part/Clause 4.6 Requirement	Response and Justification	Consistent/ Complies
	elsewhere in this Statement, and therefore is satisfactory outcome on environmental planning grounds. The provisions are therefore satisfied.	
(b) the concurrence of the Director- General has been obtained.	The concurrence of the DG is assumed in accordance with Planning Circular PS 08-003-Variations to Development Standards (Department of Planning, May 2008). Formal referral to the Department of Planning is not required in accordance with this Circular.	Yes
 (4) Consent must not be granted for development that contravenes a development standard unless: (a) the consent authority is satisfied that: 		
(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and	This Variation statement provides a discussion in support of the justification for varying the development standards as indicated in (3) above. In our opinion, there is sufficient justification provided to support a variation to the building separation requirements.	Satisfied
(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and	There are no objectives for Clause 7.14 Minimum Site width. As confirmed in Section 6.2 of this Statement the proposal is consistent with the first objective of the R2 Low Density Residential zone, as the proposed development will provide an appropriate low density form of two storey housing, with basement parking, within the locality. Despite the variation, the proposed development will be in the public interest as it still meets the objectives of the zone	Justified
 <u>Wollongong LEP 2009:</u> <u>Objectives of the Standard</u> "to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access". <u>Objectives of the Zones</u> The objectives of the R2 Low Density residential zone are: To provide for the housing needs of the community within a low density residential environment. To enable other land uses that provides facilities or services to meet the day to day needs of residents. 	 as it: Provides a suitable built form which reflects the desired future character of Keiraville Provides a suitable urban massing; Adequately addresses privacy and overshadowing considerations with respect to the proposed dwellings. Provide landscaping which exceeds the requirements of Council. Provides a design solution which utilises a basement to reduce the ground level building footprint Provides a street elevation which matches the proportions of other residential buildings in the streetscape Would not fit better with the streetscape pattern if required to amalgamate with an adjoining lot to achieve numeric compliance Overall, the development of the site as proposed will facilitate the housing choice within Keiraville and is in the public interest with orderly and economic development of land. Furthermore, it is considered that the proposed development meets the majority of the Aims of WLEP 2009 [Clause 1.2(2)] as follows: (b) encourage economic and business development to increase employment opportunities, 	

Part/Clause 4.6 Requirement	Response and Justification	Consistent/ Complies
	(g)ensure that development is consistent with the constraints of the land and can be appropriately serviced by infrastructure.	
(c) the concurrence of the Director- General has been obtained.	Council will need to consult with the Department of Planning and Infrastructure as to whether the concurrence of the DG can be assumed in accordance with Planning Circular PS 08-003-Variations to Development Standards (Department of Planning, May 2008).	Addressed
(5) In deciding whether to grant concurrence, the Director-General must consider:	There are no greater identifiable negative impacts resulting from the non-compliance with the site than if the development standard was maintained. Therefore, the proposal is considered acceptable with respect the existing site width for the lot and concurrence should be granted.	Justified
 (a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and 	The contravention of this development standard does not raise any matter of significance for state or regional environmental planning. Refer to further discussion below in this table.	N/A
(b) the public benefit of maintaining the development standard, and	There is a public benefit of providing the development in this location on a large site (within an established low density residential area in close proximity to the Keiraville village centre, transport and the university).	Justified
	Approval of the proposed development on this site would not result in a cumulative impact.	
	The non-compliance with the site width has no bearing on the development satisfactorily meeting the other design controls for multi dwelling development. The variations which are proposed are minor (eg. side setback to a limited area at the front of the site) and result from the fall of the land and the inclusion of basement parking which provides beneficial built form outcomes. The basement carparking level, whilst visible form the street, has a minimal level of visibility from adjacent properties as it is typically at, or below, ground level over the balance of the site.	
	The reduced site width does not impact on the ability to provide the required level of landscaping and open space at the ground floor level. Compliant side setbacks are typically provided to side boundaries or measures such as windows placement or balcony screening provided where a reduced setback is proposed.	
	On balance, there is no public benefit in maintaining the development standard as the site would be undevelopable for multi-dwelling housing which is clearly suitable for it.	
	The proposed development will provide an appropriate housing type within the locality, with a suitable streetscape character in the low density residential setting. Therefore, the development is in the public interest.	
(c) any other matters required to be taken into consideration by the Director- General before granting concurrence.	It is considered that there are no environmental planning considerations that would hinder the Director-General from providing concurrence.	Addressed

Table 8: Compliance with WLEP 2009 - Contravention of Clause 7.1: Site Width			
Part/Clause 4.6 Requirement	Response and Justification	Consistent/ Complies	
 (4) Consent must not be granted for development that contravenes a development standard unless: (a) the consent authority is satisfied that: 			
(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and	This Variation statement provides a discussion in support of the justification for varying the development standards as indicated in (3) above. In our opinion, there is sufficient justification provided to support a variation to the site width requirements.	Satisfied	

Conclusion with Respect to Variations to Site Width

The site width is 17.793 metres and has a very minor (207mm wide) deficiency of the 18 metre site width required by Clause 7.14 of WLEP 2009 for a multi dwelling development. The strict application of the site width standard would otherwise limit the future redevelopment potential of this generously sized allotment within good proximity to amenities (Keiraville village centre, transport and the university) to a dual occupancy. The ability to provide a multi dwelling development provides more housing choice within an established residential area and associated services. The variation provides the opportunity for an alternative (and satisfactory) site planning and built form outcome.

The non-compliance with the site width has no bearing on the development satisfactorily meeting all of the other design controls for multi dwelling development (with the exception of minor variations that have no likely adverse impacts). Any variation which is proposed to side boundary setbacks or number of storeys is a result of the inclusion of the basement level and the fall of the land towards the street, noting that this basement level provides a superior design outcome in terms of amenity, open space and landscaping.

The proposed development will provide for an appropriate infill development with a compatible scale to adjacent development.

Hence, the proposed development represents a suitable design outcome for the site and support for the variation is therefore warranted, as justified in the above table addressing the required provisions of Clause 4.6. Flexibility is sought for the application of the site width requirements as the non-compliance is minor (200mm) as the design achieves a suitable design outcome. On this basis, strict compliance with the 18 metre site width development controls of WLEP 2009 for the multi-dwelling development is considered unnecessary.

7.2.4 Setbacks – Variation Statement Clause 5.4.2 Chapter B1 of WDCP 2009

Unit 1 is the only dwelling with frontage to Gipps Road. The setback to the front façade is in excess of 12m (ground and first floor), significantly more than the minimum 6.0m and in average alignment with the adjoining dwellings noting a range of setbacks exist throughout the street.

Side Setback Control:

Clause 5.4.2 of Chapter B1 of WDCP 2009 requires minimum side and rear setbacks of 0.8 x ceiling heights and 1.0 x ceiling heights where balconies or windows of living rooms face the boundary at first floor level.

The objectives of this control are:

- (a) To provide adequate setbacks from boundaries and adjoining dwellings to retain privacy levels, views, sunlight and daylight access and to minimise overlooking.
 - (b) To provide appropriate separation between buildings to achieve the desired urban form.

(c) To optimise the use of land at the rear of the property and surveillance of the street at the front of the property.

(d) To minimise overshadowing of adjacent properties and private or shared open space.

Variation Sought:

Side setbacks are compliant at ground and first floor levels as detailed in Table 3 of this statement, with the exception of the following Unit 1 ground floor and first floor setback to the eastern boundary. The following variations are sought for Unit 1:

- A setback of 3.68m is required to the ground floor level of Unit 1 from the eastern boundary. The front section of this unit complies, with an eastern side setback of 5.13m, however the proposal has a non-compliant setback of 3.145m to the rear section (family room wall). This is a minor numerical variation of 0.535m, or 14.5% of the standard, for a length of wall of less than 5.38m. The wall which is subject to the variation does not contain a window, and is unlikely to create a privacy issue. Shadowing impacts to the neighbouring property are limited to the afternoon in midwinter. Building separation is achieved along the eastern side of Unit 1 with a combination of a compliant 1.505m wide landscaping strip and an additional 1.640m wide paved outdoor area. There will be no unreasonable detrimental impacts to the eastern neighbour in terms of privacy and overshadowing.
- The proposed ground level balcony on the eastern elevation of Unit 1 is provided with a side setback of 1.505m. However, it is noted that screening is provided on the eastern elevation of the balcony to minimise privacy impacts.
- At the first floor level Unit 1 is required to have a setback of at least 4.84m to the eastern boundary. However, the proposal has a setback of 4.455m. This is a variation of 0.385m, or 8.1% of the numerical

standard. As with the ground floor, there are no windows facing the eastern boundary, with the exception of an opaque bathroom window, and consequently impacts to privacy from the variation are negligible. The first floor of Unit 1 is aligned with the southern side of the neighbouring dwelling, and only minimally contributes to overshadowing in the afternoon in midwinter.

T820211631 | 19 November 2021 | Commercial in Confidence

ATTACHMENT 4 - CONDITIONS

Approved Plans and Specifications

1 The development shall be implemented substantially in accordance with the details and specifications set out on Project: 2018-27 Drawing No. A02-E to A06-E dated 21 February 2022, A07-E and A08b-A dated 16 February 2022 and A08-D, A08a-C and A12-B dated 15 November 2021 prepared by ADM Architects and any details on the application form, and with any supporting information received, except as amended by the conditions specified and imposed hereunder.

General Matters

2 Building Work - Compliance with the Building Code of Australia

All building work must be carried out in compliance with the provisions of the Building Code of Australia.

3 **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 Clauses 139-147 of the Environmental Planning and Assessment Regulation 2000 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 clause 142 (2) of the Environmental Planning and Assessment Regulation 2000.

4 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 150 mm in height for each number and letter in the alphabet.

5 **Occupation Certificate**

An Occupation Certificate must be issued by the Principal Certifier (PC) prior to occupation or use of the development. In issuing an Occupation Certificate, the PC 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.

6 Tree Retention/Removal

The developer shall retain the existing tree(s) indicated within the Arboricultural Impact Assessment by Mark Spence, dated March 2021 and the Landscape Plan by DSB Landscape Architects, Issue D, dated 12 November 2021 consisting of tree(s) numbered T16, T17 and T18.

Any branch pruning, which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS 4373:2007.

All tree protection measures are to be installed in accordance with Australian standard AS 4970:2009 Protection of Trees on development Sites.

All recommendations in the Aboricultural Impact Assessment by Mark Spence, dated March 2021 are to be implemented including and not restricted to: remedial tree pruning, dead wood removal, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

This consent permits the removal of trees numbered T1 - T15 as indicated on the Arboricultural Impact Assessment by Mark Spence, dated March 2021 and the Landscape Plan by DSB Landscape Architects, Issue B, dated 2 March 2021 No other trees shall be removed without prior written approval of Council.

Prior to the Issue of the Construction Certificate

7 Pump System

A pump system shall be provided in association with the detailed drainage design for the site to cater for stormwater from a prolonged/extreme storm event entering the basement. The pump system shall be designed by a suitably qualified and experienced civil engineer and reflected on the Construction Certificate plans and supporting documentation.

8 Present Plans to Sydney Water

Approved plans must be submitted online using Sydney Water Tap, available through <u>www.sydneywater.com.au</u> 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 PC 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.

9 Endeavour Energy Requirements

The submission of documentary evidence from Endeavour Energy to the PC is required confirming that satisfactory arrangements have been made with Endeavour Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

Note: Applications should be made to Customer Connections – South Coast, Endeavour Energy PO Box 811 Seven Hills NSW 1730.

10 **Telecommunications**

The submission of documentary evidence from an approved telecommunications carrier to the PC confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.

11 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.

12 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.

13 Car Parking and Access

The development shall make provision for a total of 2 car parking spaces per dwelling. This requirement shall be reflected on the Construction Certificate plans. Any change in above parking numbers shown on the approved DA plans shall be dealt with via a section 4.55 modification to the development. The approved car parking spaces shall be maintained to the satisfaction of Council, at all times.

14 Gradients of Ramps and Driveways as per AS 2890.1

All driveways shall be constructed with a maximum vertical alignment as shown in Council's standard drawings. This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.

Gradients of ramps and access driveways within the site must be provided in accordance with the current relevant Australian Standard AS 2890.1 - Off Street Car Parking. Details of the method of treatment of any fill/retaining wall which may be required in conjunction with the proposed driveway. This requirement must be reflected on the Construction Certificate plans.

15 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.

16 Landscaping

The submission of a final Landscape Plan will be required in accordance with the requirements of Wollongong City Council DCP 2009 Chapter E6 and the approved Landscape Plan (ie as part of this consent) for the approval by the PC, prior to the release of the Construction Certificate.

- 17 The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the PC prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.
- 18 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 PC prior to release of the Construction Certificate.

19 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 PC prior to release of the Construction Certificate.
- b Mulch Tree Protection Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75 mm thick 100% recycled hardwood chip/leaf litter mulch.
- c Irrigate: Areas within the Tree Protection Zone are to be regularly watered in accordance with the arborist's recommendations.

20 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 1m to the PC 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.

21 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.

22 **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 written request to Council's **Infrastructure Systems & Support – Property Addressing (propertyaddressing@wollongong.nsw.gov.au)**, for the site addressing prior to the issue of the Construction Certificate. Please allow up to 3-5 business days for a reply. Enquiries regarding property addressing may be made by calling 4227 8660.

23 Stormwater Drainage Design

A detailed drainage design for the development must be submitted to and approved by the PC 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 JNN Responsive Engineering, Reference No. Q0200052 C001-B and C002-B dated 9 November 2021.
- b Include details of the method of stormwater disposal. Stormwater from the development must be piped to Council's existing drainage system (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.

24 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 PC 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 a minimum 900mm x 900mm square lockable grate 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 12.2.6 and 12.5.4 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/Subdivision 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-2021/344;
 - 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.

25 **Development Contributions**

Pursuant to Section 4.17 of the Environmental Planning and Assessment Act 1979 and the Wollongong City-Wide Development Contributions Plan, a monetary contribution of \$17,210.00 (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 estimated cost of development and the applicable percentage rate.

The contribution amount will be subject to indexation until the date of payment. The formula for indexing the contribution is:

Contribution at time of payment = $C \times (CP2/CP1)$

Where:

\$C is the original contribution as set out in the Consent

CP1 is the Consumer Price Index; All Groups CPI; Sydney at the time the consent was issued

CP2 is the Consumer Price Index; All Groups CPI; Sydney at the time of payment

Details of CP1 and CP2 can be found in the Australian Bureau of Statistics website – Catalogue No. 6401.0 - Consumer Price Index, Australia.

METHOD	HOW	PAYMENT TYPE	
Online	http://www.wollongong.nsw.gov.au/applicationpayment <u>s</u> Your Payment Reference: 1321085	• Credit Card	
In Person	Wollongong City Council Administration Building - Customer Service Centre Ground Floor 41 Burelli Street, WOLLONGONG	CashCredit CardBank Cheque	
PLEASE MAKE BANK CHEQUE PAYABLE TO: Wollongong City Council (Personal or company cheques are not accepted)			

The following payment methods are available:

A copy of the Wollongong City-Wide Development Contributions Plan and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at www.wollongong.nsw.gov.au

Prior to the Commencement of Works

26 Appointment of PC

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

- a Appoint a PC 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 days notice is required).

The PC must determine when inspections and compliance certificates are required.

27 Sign – Supervisor Contact Details

Before commencement of any work, a sign must be erected in a prominent, visible position:

- a stating that unauthorised entry to the work site is not permitted;
- b showing the name, address and telephone number of the PC for the work; and
- c showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

28 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.

Each toilet provided must be:

- a a standard flushing toilet; and
- b 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.

29 Enclosure of the Site

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

30 **Demolition Works**

The demolition of the existing dwelling and ancillary structures 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 the 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 PC. 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.

31 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.

32 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.

33 Contaminated Roof Dust

Any existing accumulations of dust in ceiling voids and wall cavities must be removed prior to any demolition work commencing. Removal must take place by the use of an industrial vacuum fitted with a high efficiency particulate air (HEPA) filter.

34 Survey Report – Siting of Development within Property Boundaries

A survey report prepared by a registered surveyor is required to be submitted to the PC to ensure that the proposed development is located on the correct allotment and at the approved distances from the boundary. This must be verified by pegging the site prior to commencement of works.

35 Supervising Arborist – Tree Inspection and Installation of Tree Protection Measures

Prior to the commencement of any demolition, excavation or construction works, the supervising arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the arborist's recommendations and relevant conditions of this consent.

36 Certification from Arborist - Adequate Protection of Trees to be Retained

A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the PC is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.

37 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.

38 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.

39 Protect Excavation - Shoring

All excavations must be supported during and after construction to protect any adjoining property, fences and any drainage or service lines.

Details for appropriate methods of shoring or stabilising the side of excavations should be obtained from a structural engineer.

40 **Dilapidation Report**

The developer shall submit a Dilapidation Report recording the condition of the existing streetscape and adjoining properties prior to work commencing and include a detailed description of elements and photographic record.

41 Support for Neighbouring Buildings

This consent requires the preservation and protection of neighbouring buildings from any damage and if necessary, requires the underpinning and support of any neighbouring building in an approved manner. The applicant or the contractor carrying out the work must at least seven days in advance of any excavation works below the level of the base of the footings of a building on an adjoining allotment, including a public road or place, give written notice of intention to carry out such works to the property owner of the affected adjoining building and furnish specific written details and supporting plans or other documentation of the proposed work.

The adjoining property owner of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.

42 Residential Building Work – Compliance with the Requirements of the Home Building Act 1989

Building work involving residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the PC for the development to which the work relates:

- a in the case of work to be done by a licensee under that Act:
 - i has been informed in writing of the licensee's name, contractor license number and contact address details (in the case of building work undertaken by a contractor under the Home Building Act 1989); and
 - ii is satisfied that the licensee has complied with the requirements of Part 6 of the Home Building Act 1989; or
- b in the case of work to be done by any other person:
 - i has been informed in writing of the persons name, contact address details and owner-builder permit number; and
 - ii has been given a declaration signed by the property owner(s) of the land that states that the reasonable market cost of the labour and materials involved in the work is less than the amount prescribed for the purposes of the definition of ownerbuilder work in Section 29 of the Home Building Act 1989 and is given appropriate information and declarations under paragraphs (a) and (b) whenever arrangements for the doing of the work are changed in such a manner as to render out of date any information or declaration previously given under either of those paragraphs.

Note: A certificate issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that the specific person or licensed contractor is the holder of an insurance policy issued for the purposes of that Part of the Act is, for the purposes of this condition, sufficient evidence that the person has complied with the requirements of that Part of the Act.

43 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 PC, prior to the commencement of any works on the site.

44 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.

During Demolition, Excavation or Construction

45 New Information/Unexpected Finds

In the event that demolition and/or construction works cause the generation of odours or the uncovering of previously unidentified contaminants or hazardous materials, works must immediately cease and the PC and Council (in the event that Council is not the PC) 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.

46 Survey Report for Floor Levels

A Survey Report must be submitted to the PC verifying that each floor level accords with the floor levels as per the approved plans under this consent. The survey shall be undertaken after the formwork has been completed and prior to the pouring of concrete for each respective level of the building (if the building involves more than one level). All levels shall relate to Australian Height Datum.

47 Piping of Stormwater to Existing Stormwater Drainage System

Stormwater for the land must be piped to existing stormwater drainage system.

48 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.

49 Copy of Consent to be in Possession of Person carrying out Tree Removal

The Developer/Applicant must ensure that any person carrying out tree removal is in possession of this development consent and/or the approved landscape plan, in respect to the tree(s) which has/have been given approval to be removed in accordance with this consent.

50 Restricted Hours of Construction Work

The developer must not carry out any work, other than emergency procedures, to control dust or sediment laden runoff outside the normal working hours, namely, 7.00 am to 5.00 pm, Monday to Saturday, without the prior written consent of the PC and Council. No work is permitted on public holidays or Sundays.

Allowable construction activity noise levels must be within the limits identified in the NSW EPA Interim Construction Noise Guidelines (ICNG) July 2009. ICNG are also applied for blasting, rock hammer and drilling, external plant and equipment.

https://www.environment.nsw.gov.au/resources/noise/09265cng.pdf

Any request to vary these 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;
- 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.

51 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.

52 All proposed cut and filling works must be adequately retained with all battered slopes being no steeper than 2H: 1V and comply with Council's "Policy for Development on Sloping Sites".

53 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 (<<u>http://www.safework.nsw.gov.au></u>).

54 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 PC, and a copy submitted to Council (in the event that Council is not the PC), prior to commencement of the construction works.

55 **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.

56 **Provision of Taps/Irrigation System**

The provision of common taps and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be implemented in accordance with the approved Landscape Plan.

57 Screen Planting

To mitigate impact to adjoining dwelling a continuous hedge is to be established along eastern, western and northern boundary for the length of property boundary.

Recommended species:

- i Murraya paniculata, Photinia "Red Robin",
- ii Viburnum tinus, Syzygium australe "Aussie Southern",
- iii Syzygium australe "Aussie Compact",
- iv Syzygium luehmannii x S.wilsonii "Cascade",

Minimum spacing 900mm.

Minimum pot size 75 lt.

A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping.

58 **Podium Planting**

All podium planting areas are to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding is to be installed to protect membrane from damage.

All podium planting areas to be provided with an adequate drainage system connected to the stormwater drainage system. The planter box is to be backfilled with free draining planter box soil mix.

If selected mulch is decorative pebbles/gravel, the maximum gravel pebble size is 10mm diameter.

59 **BASIX**

All the commitments listed in each relevant BASIX Certificate for the development must be fulfilled in accordance with Clause 97A(2) of the Environmental Planning & Assessment Regulation 2000.

A relevant BASIX Certificate means:

- A BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 4.55 of the Environmental Planning & Assessment Act 1979, a BASIX Certificate that is applicable to the development when this development consent is modified); or
- if a replacement BASIX Certificate accompanies any subsequent application for a Construction Certificate, the replacement BASIX Certificate; and
- BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000."

Prior to the Issue of the Occupation Certificate

60 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-asexecuted 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 PC prior to the issue of the final Occupation Certificate.

61 **Restriction on Use – On-site Detention System**

The applicant must create a restriction on use under the Conveyancing Act 1919 over the on-site detention 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 stormwater detention system on the lot(s) burdened without the prior consent in writing of the authority benefited. The expression 'on-site stormwater 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 PC for endorsement prior to the issue of the Occupation Certificate and the use of the development.

62 Retaining Wall Certification

The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the PC 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 PC.

63 Compensatory Tree Planting

The developer must make compensatory provision for the trees required to be removed as a result of the development. In this regard, fifteen 100 litre container mature plant stock shall be placed along the property boundary of the site. The suggested species are Brachychiton acerifolius, Acmena smithii and Elaeocarpus eumundii.

64 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 OSD System and Maintenance Schedule (application number to be referenced).

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

65 **On-Site Detention – Structural Certification**

The submission of a certificate from a suitably qualified practising civil and/or structural engineer to the PC is required prior to the issue of the Occupation Certificate. This certification is required

to verify the structural adequacy of the on-site detention facility and that the facility has been constructed in accordance with the approved Construction Certificate plans.

66 Completion of Landscape Works

The completion of the landscaping works as per the final approved Landscape Plan is required prior to the issue of Occupation Certificate.

67 BASIX

An Occupation Certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The PC 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.

Operational Phases of the Development/Use of the Site

68 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.

69 Privacy Screens

Privacy screens proposed as part of this development must remain in place and be maintained in a sound condition, fit for purpose at all times and throughout the life of the development.