



## ACTIVITY DETERMINATION

Determined by the New South Wales Land and Housing Corporation

Project No. BGYVX

### Conflict of Interest<sup>1</sup>

In this matter:

1. I have declared any possible conflict of interests (real, potential or perceived) to the Head of Housing Portfolio, Homes NSW.
2. I do not consider I have any personal interests that would affect my professional judgement.
3. I will inform the Head of Housing Portfolio, Homes NSW as soon as I become aware of a possible conflict of interest.

Signed.....

Dated 23/06/2025

Lisa Marigliano  
Executive Director, Portfolio Development  
Housing Portfolio  
Homes NSW

Having regard to the Determination Recommendation Report, the Statement of Compliance and the Review of Environmental Factors for this project addressing matters under Part 5 of the *Environmental Planning and Assessment Act 1979*, I, as a delegate of the New South Wales Land and Housing Corporation, determine that the activity proceed as described below and subject to the identified requirements set out in **Schedule 1**.

### SITE IDENTIFICATION

#### STREET ADDRESS

Unit/Street No

12-16

Street or property name

Stuart Road

Suburb, town or locality

Warrawong

Postcode

2502

Local Government Area(s)

Wollongong

Real property description (Lot and DP)

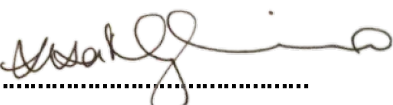
Lots 10,11, &12 in DP 35004

1. Conflict of interest includes actual and potential. A conflict of interest includes pecuniary i.e. financial interests to you or a related party or non-pecuniary i.e. benefits to relatives, friends, business associates and personal causes, etc. This includes "close relative of a person" as defined in section 49(6) of the Property and Stock Agents Act 2002.

## ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of existing dwellings and structures, removal of trees, and the construction of a two-storey residential flat building comprising 8 x 1-bedroom and 8 x 2-bedroom units, with associated landscaping and fencing, surface parking for 8 cars, and consolidation into a single lot.

Signed.....

Dated.....23/06/2025

Lisa Marigliano  
Executive Director, Portfolio Development  
Housing Portfolio  
Homes NSW

## SCHEDULE 1

### IDENTIFIED REQUIREMENTS

#### PART A – Standard Identified Requirements

#### THE DEVELOPMENT

*The following Identified Requirements are to ensure that the residential activity is carried out in accordance with the plans / documents and any amendments arising from the Review of Environmental Factors under Part 5 of the Environmental Planning & Assessment Act 1979, Section 171 of the Environmental Planning and Assessment Regulation 2021 and the requirements of State Environmental Planning Policy (Housing) 2021.*

1. The development shall be carried out substantially in accordance with the following plans / documents as modified below and by any of the undermentioned identified requirements:

Title / Name:	Drawing No. / Document Ref	Revision / Issue:	Date [dd.mm.yyyy] :	Prepared by:
Architectural plans				
Cover Page	A000	H	16.05.2025	SARM Architects
Context Block Analysis	A001	H	16.05.2025	SARM Architects
Site Analysis	A100	H	16.05.2025	SARM Architects
Demolition Plan	A101	H	16.05.2025	SARM Architects
Cut and Fill Plan	A103	H	16.05.2025	SARM Architects
Sediment Erosion & Control Plan	A104	H	16.05.2025	SARM Architects
Area Calculations	A105	H	16.05.2025	SARM Architects
Natural Ventilation Plans	A106	H	16.05.2025	SARM Architects
Site Plan	A200	H	16.05.2025	SARM Architects
Ground Floor Plan	A201	H	16.05.2025	SARM Architects
First Floor Plan	A202	H	16.05.2025	SARM Architects
Roof Plan	A203	H	16.05.2025	SARM Architects
Elevations East & West	A300	H	16.05.2025	SARM Architects
Elevations North & South	A301	H	16.05.2025	SARM Architects

Material & Finish Schedule	A302	H	16.05.2025	SARM Architects
Sections – Sheet 1	A303	H	16.05.2025	SARM Architects
Sections – Sheet 2	A304	H	16.05.2025	SARM Architects
View from Sun Study	A401	H	16.05.2025	SARM Architects
Shadow Diagrams	A402	H	16.05.2025	SARM Architects
Aerial Perspectives	A502	H	16.05.2025	SARM Architects
Landscape Plan				
Landscape Title, Existing Trees	L01	E	16.05.2025	Lindy Lean Landscape Architects
Landscape Site Plan	L02	E	16.05.2025	Lindy Lean Landscape Architects
Landscape Planting Concept	L03	E	16.05.2025	Lindy Lean Landscape Architects
Landscape Planting Plan	L04	E	16.05.2025	Lindy Lean Landscape Architects
Landscape Details	L05	E	16.05.2025	Lindy Lean Landscape Architects
Civil Development Plans				
Notes & Legends	C01	6	21.05.2025	Greenview Consulting
Ground Floor Drainage Plan	C02	6	21.05.2025	Greenview Consulting
Site Stormwater Details Sheet 1	C03	4	21.05.2025	Greenview Consulting
Site Stormwater Details Sheet 2	C04	3	21.05.2025	Greenview Consulting
Survey Plans				
Detail & Level Survey Sheet 1	56005	1	21.04.2022	Norton Survey Partners
Detail & Level Survey Sheet 2	56005	1	21.04.2022	Norton Survey Partners
Detail & Level Survey Sheet 3	56005	1	21.04.2022	Norton Survey Partners
Detail & Level Survey Sheet 4	56005	1	21.04.2022	Norton Survey Partners
Notification Plans				
Cover Page	NP01	2	10.01.2025	SARM Architects
Site & Landscape Plan	NP02	2	10.01.2025	SARM Architects
Development Data	NP03	2	10.01.2025	SARM Architects
Elevations	NP04	2	10.01.2025	SARM Architects
Schedule of Finishes	NP05	2	10.01.2025	SARM Architects
Shadow Diagrams	NP06	2	10.01.2025	SARM Architects
Specialist Reports				
Access Report	CA230031-W-DA-C	DA-C	23.02.2025	Accessed
Arboricultural Impact Assessment and Tree Management Plan	-	4	20.02.2025	Horticultural Management Services
BASIX Certificate	1784860M	-	25.02.2025	Greenview Consulting
Nationwide House Energy Rating Scheme – Class 2 Summary	0011746560	-	24.02.2025	-
NCC 2022 Compliance Report	-	-	25.02.2025	Buildcert
Geotechnical Investigation & Acid Sulfate Soils (ASS) Assessment	22/1316	-	April 2022	STS Geotechnics
Traffic and Parking Impact Assessment	N244186A	1A	March 2025	Motion Traffic Engineers
Waste Management Plan	-	-	-	-
Flood Study	230473	B	13.02.2025	Greenview Consulting

2. All building work is to be undertaken in accordance with the National Construction Code and referenced Australian Standards.
3. All commitments listed in the BASIX certificate and stamped plans shall be implemented.
4. All construction documentation and building work is to be certified in accordance with Section 6.28 of the Environmental Planning and Assessment Act 1979.
5. The land the subject of this determination shall be consolidated into a single lot. The plan of consolidation shall be lodged at the NSW Land Registry Services and shall be registered prior to the occupation of the development. A copy of the registered plan shall be provided to the Land & Housing Corporation.

## OPERATIONAL MATTERS

*The following Identified Requirements relate to the use of the site and are to ensure that the activity and its operation do not interfere with the amenity of the surrounding area.*

### Stormwater Run-off

6. Stormwater shall be collected within the site and conveyed in a pipeline to the appropriate gutter or drain under the control of Wollongong City Council substantially in accordance with the approved concept stormwater drainage plans.
7. Alterations to the natural surface contours or surface absorption characteristics of the site shall not impede, increase or divert natural surface water runoff so as to cause a nuisance to adjoining property owners.
8. All driveways shall be graded in such a manner as to provide continuous surface drainage flow paths to the appropriate points of discharge.
9. To prevent water from entering buildings, surface waters shall be collected and diverted clear of the buildings by a sub-surface / surface drainage system.

### Vehicular Access and Parking

10. A concrete vehicular crossing and layback shall be provided at the entrance / exit to the property. The crossing and layback shall be constructed in accordance with Wollongong City Council's standard requirements for residential crossings. Council shall be provided with plans for the crossing and layback together with the payment of any council inspection fees.
11. Particular care shall be taken in the location of the vehicular crossing and layback to avoid poles, pits etc. The cost of any necessary adjustments to utility mains and services associated with the construction of the layback / driveway shall be borne by the NSW Land & Housing Corporation. Obsolete gutter laybacks shall be constructed as kerb in accordance with Wollongong City Council's standards.

**Note:**

*It is recommended that discussion be held with the relevant authorities before construction works commence.*

12. Car parking spaces and driveways shall be constructed of concrete or other approved hard surfaced materials. The spaces must be clear of obstructions and columns, permanently line marked and provided with adequate manoeuvring facilities. The design of these spaces must comply with AS 2890.1.

### Site Works

13. All soil erosion and sediment control measures required to be put in place prior to the commencement of demolition / construction works shall be maintained during the entire period of the works until all the disturbed areas are restored by turfing, paving or revegetation. Soil erosion and sediment control measures shall be designed in accordance with the guidelines set out in the Blue Book *Managing Urban Stormwater: Soils and Construction* (4th edition, Landcom, 2004).



14. An appropriately qualified person shall design retaining walls or other methods necessary to prevent the movement of excavated or filled ground, including associated stormwater drainage measures.

#### **Building Siting**

15. All buildings shall be sited well clear of any easements affecting the site. The builder shall ascertain if any easements do exist and, if they do, obtain full details of such prior to construction commencing.

#### **Smoke Detection System(s)**

16. Smoke detection systems shall be installed throughout the building(s) in accordance with requirements of Clause E2.2a of the Building Code of Australia. Detectors and alarms shall comply with AS 3786 and AS 1670 and must:
  - i. be connected to a permanent 240V power supply; and
  - ii. be provided with a battery backup to activate the alarm unit in the event of failure of the permanent power supply.

#### **Site Soil Contamination**

17. If the site is identified as being potentially affected by soil contamination, it shall be inspected by a suitably qualified person to identify any contaminated or hazardous material present. A proposal for remediation shall be prepared, which may include preparation of a Remedial Action Plan, and remediation shall be carried out in accordance with the proposal. A Validation Report, prepared in accordance with Environment Protection Authority requirements, shall be obtained from a qualified expert on completion of the remediation work to verify that the site is suitable for the intended residential use. A copy of the Validation Report shall be provided to the Land & Housing Corporation on completion of the remediation works.

#### **Landscaping**

18. Landscaping shall be carried out substantially in accordance with the approved landscape plan(s) and maintained for a period of 12 months by the building contractor. Wollongong City Council shall be consulted in relation to the planting of any street trees.
19. All scheduled plant stock shall be pre-ordered, prior to commencement of construction or 3 months prior to the commencement of landscape construction works, whichever occurs sooner, for the supply to the site on time for installation. The builder shall provide written confirmation of the order to the NSW Land & Housing Corporation.

#### **Tree Removal**

20. Removal of trees within the boundaries of the site is to be carried out in accordance with the trees shown for removal on the approved Landscape Plan and Arboricultural Impact Assessment and Tree Management Plan and no other trees shall be removed without further approval(s).

## **Fencing**

21. All front fencing and gates shall be constructed wholly within the boundaries of the site. Any gates associated with the fencing shall swing inwards towards the site.

## **Provision of Letterbox Facilities**

22. Suitable letterbox facilities are to be provided in accordance with Australia Post specifications.

## **Public Liability Insurance**

23. A valid public liability insurance policy of at least \$10M shall be maintained throughout the demolition / construction works by the contractor.

## **PRIOR TO ANY WORK COMMENCING ON THE SITE**

*The following Identified Requirements are to be complied with prior to any work commencing on the site, including demolition.*

## **Disconnection of Services**

24. All services that are required to be disconnected shall be appropriately disconnected and made safe prior to commencement of the demolition / construction works. The various service authorities shall be consulted regarding their requirements for the disconnection of services.
25. All existing services within the boundary to remain live shall be identified, pegged and made safe.

## **Demolition**

26. The builder shall notify the occupants of premises on either side, opposite and at the rear of the site a minimum of five (5) working days prior to demolition. Such notification shall be clearly written on an A4 size paper giving the date demolition will commence and be placed in the letterbox of every premise (including every unit in a multi-unit residential building or mixed-use building). The demolition shall not commence prior to the date that is stated in the notice letter.
27. Prior to the demolition, a Work Plan shall be prepared by a competent person(s) in accordance with AS 2601 and shall be submitted to the Land & Housing Corporation. The Work Plan shall outline the identification of any hazardous materials (including surfaces coated with lead paint), method of demolition, the precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.
28. If buildings to be demolished are determined as, or suspected of, containing asbestos cement, a standard commercially manufactured sign containing the words 'DANGER ASBESTOS REMOVAL IN PROGRESS', and measuring not less than 400mm x 300mm, shall be erected in a prominent visible position on the site for the duration of the demolition works.

### **Note:**

*Any buildings constructed before 1987 is assumed to contain asbestos.*

## Utilities Service Provider Notification

29. The demolition / construction plans shall be submitted to the appropriate water utility's office (e.g. Sydney Water office) to determine whether or not the development will affect the utility's sewer and water mains, stormwater drains and any easements.

**Note:**

*If the development complies with water utility's requirements, the plans will be stamped indicating that no further requirements are necessary.*

## Council Notification

30. Wollongong City Council shall be advised in writing, of the date it is intended to commence work, including demolition. A minimum period of **five (5)** working days notification shall be given.

## Site Safety

31. A sign shall be erected in a prominent position on any site on which demolition or building work is being carried out:
- (a) showing the name, address and telephone number of the responsible Land & Housing Corporation officer for the work, and
  - (b) showing the name of the principal contractor (if any) and a telephone number on which that person may be contacted outside working hours, and
  - (c) stating that unauthorised entry to the work site is prohibited.

The sign shall be maintained while the work is being carried out but shall be removed when the work has been completed.

**Note:**

*This requirement does not apply in relation to building work that is carried out inside an existing building that does not affect the external walls of the building.*

32. A minimum 1.8m high security fence or Class A / Class B (overhead) hoarding must be erected between the work site and any public place prior to demolition / construction. Access to the site shall be restricted to authorised persons only and the site shall be secured against unauthorised entry when demolition / construction work is not in progress, or the site is otherwise unoccupied.

**Note:**

*Approval from the relevant roads authority will be required under Section 138 of the Roads Act 1993 where a Class A or B hoarding encroaches onto the footpath of / or a public thoroughfare within a classified road.*

33. No building or demolition materials are to be stored on the footpath or roadway.

## Site Facilities

34. The following facilities shall be installed on the site:
- (a) Toilet facilities shall be provided at the rate of 1 toilet for every 20 persons or part thereof employed at the site. Each toilet provided shall be a standard flushing toilet and shall be connected to a public sewer or if connection to a public sewer is not practicable, to an accredited sewerage management facility provided by

Wollongong City Council or if this is not practicable to some other council approved management facility.

- (b) Adequate refuse disposal methods and builders' storage facilities. Builders' wastes, materials or sheds shall not to be placed on any property other than that which this approval relates to.

- 35. Access to the site shall only be provided via an all-weather driveway on the property and is not to be provided from any other site.

### **Protection of Trees**

- 36. Trees and other vegetation that are to be retained on site shall be protected prior to the commencement of works and for the duration of the construction period in accordance with the details provided in the Arboricultural Impact Assessment and Tree Management Plan.

### **Waste Management**

- 37. A final Waste Management Plan shall be prepared and submitted to the NSW Land & Housing Corporation by the building contractor prior to the commencement of demolition / construction. The plan shall detail the amount of waste material and the destination of all materials, recyclable and non-recyclable.

### **PRIOR TO ANY CONSTRUCTION WORK COMMENCING ON SITE**

*The following Identified Requirements are to be complied with prior to any construction works occurring on the site, excluding demolition.*

### **Service Authority Clearances**

- 38. A compliance certificate, or other evidence, shall be obtained from Sydney Water confirming service availability prior to work commencing.

**Note:**

*Payment of water and/or sewer service charges and/or a notice of requirements for works to be carried out during construction / prior to occupation may be applicable prior to issue of the compliance certificate.*

- 39. A written clearance from an electricity supply authority stating that electrical services are available to the site, or that arrangements have been entered into for the provision of services to the site, shall be obtained prior to work commencing.
- 40. A certificate from an approved telecommunications carrier certifying that satisfactory arrangements have been made for the provision of underground telephone services, to the site and to each dwelling, shall be obtained prior to work commencing.
- 41. Where the site is to be connected to reticulated gas, a certificate from an approved gas carrier to certify that satisfactory arrangements have been made to ensure the provision of underground gas services to each dwelling in the development shall be obtained prior to work commencing.

## Stormwater Disposal

42. A detailed stormwater drainage plan(s), substantially in accordance with the approved concept stormwater drainage plan(s), shall be prepared and submitted to the Land & Housing Corporation. Any on-site detention system shall be designed in accordance with the relevant catchment authority's requirements (e.g. the Upper Parramatta River Catchment Trust On-site Detention Handbook) and/or Wollongong City Council's drainage code.
43. Where a drainage easement is required, proof of lodgement of the plan of the drainage easement at the NSW Land Registry Services shall be submitted to the Land & Housing Corporation prior to commencement of works. Registration of the plan of easement shall be completed prior to occupation of the development and a copy of the registered plan shall be provided to the Land & Housing Corporation.

## DURING DEMOLITION AND CONSTRUCTION WORKS

*The following Identified Requirements are to be complied with whilst demolition and construction works are occurring on the site.*

### Landfill

44. Where site filling is necessary, a minimum of 95% standard compacting shall be achieved and certified by a NATA registered Soils Lab.
45. Land fill materials must satisfy the following requirements:
  - i. be Virgin Excavated Natural Matter (VENM);
  - ii. be free of slag, hazardous, contaminated, putrescible, toxic or radio-active matter; and
  - iii. be free of industrial waste and building debris.

### Heritage

46. Historic and indigenous archaeological sites and relics are protected under the *Heritage Act 1977* and *National Parks and Wildlife Act 1974*, respectively. Should any relics be uncovered during the course of the approved works, work must cease immediately in the affected area. Subsequently, in cases where historical items have been uncovered, the Department of Climate Change, Energy, The Environment and Water must be contacted.
47. All workers / contractors on the site shall be informed of their obligations, under the *Heritage Act* and *National Parks and Wildlife Act 1974*, that it is illegal to disturb, damage or destroy a relic without the prior approval of the Department of Climate Change, Energy, The Environment and Water.

### Demolition

48. Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
49. Demolition shall be carried out in accordance with the appropriate provisions of AS 2601.

50. Where materials containing asbestos are to be removed, demolition shall be carried out by a licensed contractor(s) who have current SafeWork NSW accreditation in asbestos removal.
51. Removal of asbestos-based thermal or acoustic insulation, such as sprayed asbestos and asbestos-based lagging, including friable asbestos boards, shall be carried out in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos, 2<sup>nd</sup> Edition [NOHSC:2002 (2005)].
52. Hazardous or intractable wastes, including all asbestos laden waste, arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the Department of Planning, Housing and Infrastructure.
53. Documentary evidence, in the form of tip receipts from an approved Waste Management Facility, shall be obtained by the demolition contractor and submitted to the Land & Housing Corporation demonstrating the appropriate disposal of the asbestos waste.
54. Demolition procedures shall maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
55. During demolition, the public footpath and the public road shall not be obstructed by any vehicles. The public road and footpath shall be swept (not hosed) clean of any material, including clay, soil and sand.
56. All vehicles leaving the site with demolition materials shall have their loads covered and vehicles shall not track soil and other material onto the public roads and footpaths. The footpath shall be suitably protected against damage when plant and vehicles access the site. All loading of vehicles with demolished materials shall occur on site.

### **Survey Reports**

57. Survey reports shall be submitted by the building contractor to the Land & Housing Corporation prior to the placement of the footings / slab and on completion of the dwellings to verify the correct position of the structures in relation to the allotment boundaries.

### **Hours of Demolition / Construction / Civil Work**

58. Demolition / construction / Demolition / construction / civil work shall only occur on the site between the hours of 7am to 5pm Monday to Saturday with no work permitted on Sundays or public holidays.

### **Excavation & Backfilling**

59. All excavations and backfilling associated with the demolition or erection of building(s) shall be executed safely and in accordance with appropriate professional standards. All such work shall be guarded and protected to prevent it from being dangerous to life or property.

## **Pollution Control**

60. Any noise generated during the construction of the development shall not exceed the limits specified in the July 2009 Interim Construction Noise Guidelines, published by the former Department of Environment and Climate Change.
61. No fires shall be lit or waste materials burnt on the site.
62. No washing of concrete forms or trucks shall occur on the site.
63. Any contamination / spills on the site during construction works shall be actively managed and reported immediately to appropriate regulatory authorities to minimise any potential damage to the environment.
64. Dust generation during demolition / construction shall be controlled using regular control measures such as on-site watering or damp cloth fences.
65. All vehicles transporting loose materials and travelling on public roads shall be secured (i.e. closed tail gate and covered) to minimise dust generation.
66. Non-recyclable waste and containers shall be regularly collected and disposed of at a licensed landfill or other disposal site in accordance with details set out in the final Waste Management Plan.

## **Impact of Construction Works**

67. The Land & Housing Corporation shall bear the cost of any necessary adjustments to utility mains and services.
68. Care shall be taken to prevent any damage to adjoining properties. The building contractor shall be liable to pay compensation to any adjoining owner if, due to demolition/construction works, damage is caused to such adjoining property.

## **Termite Protection**

69. To protect buildings from subterranean termite, termite barriers installed in accordance with AS 3660.1, shall be placed on the underside and in penetrations of the concrete slab floor.

In addition, a durable notice must be permanently fixed inside the meter box indicating:

- (a) the method of protection,
- (b) the date of installation of the system,
- (c) where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label, and
- (d) the need to maintain and inspect the system on a regular basis.

## PRIOR TO OCCUPATION OF THE DEVELOPMENT

*The following Identified Requirements are to be complied with prior to the occupation of the development.*

### General

70. The use or occupation of the development shall not commence until all the identified requirements of this determination have been complied with.

### Council Infrastructure Damage

71. The cost of repairing any damage caused to Wollongong City Council's assets in the vicinity of the site as a result of demolition / construction works shall be met in full by the building contractor.

### Stormwater Drainage

72. Prior to occupation, a Work As Executed Plan shall be prepared by the building contractor clearly showing all aspects of the constructed stormwater drainage system, including any on-site detention system. The plan shall demonstrate general compliance with the approved concept stormwater drainage plan(s) and shall include:

- sufficient levels and dimensions to verify the constructed storage volumes; and
- location and surface levels of all pits; and
- invert levels of the internal drainage lines, orifice plates fitted and levels within the outlet control pits; and
- finished floor levels of all structures; and
- verification that any required trash screens have been installed; and
- locations and levels of any overland flow paths; and
- verification that any drainage lines are located wholly within easements, where applicable.

The Work-As-Executed Plan information shall be shown on the final civil works drawings.

A positive covenant and restriction-as-to-user shall be placed over the onsite detention system in accordance with Wollongong City Council's on-site detention policy to ensure that the system will be adequately maintained. The positive covenant and restriction-as-to-user shall be registered at NSW Land Registry Services prior to occupation. A copy of the registered restriction-as-to-user shall be provided to the Land & Housing Corporation and Wollongong City Council.

## PART B – Additional Identified Requirements

### 73. Air Conditioning

#### Design and Installation

Any air conditioning unit installed on the premises must be designed, specified and installed to ensure that they comply with the requirements of the *Protection of the Environment Operations (Noise Control) Regulations 2017* and must not emit a noise that exceeds 5dB(A) above the ambient background noise level measured at any property boundary. Acoustic treatment may be required to ensure this is achieved.



Certification, from an appropriately qualified acoustic consultant, shall be provided at construction documentation stage that the air conditioning units can comply with this requirement.

Further certification, from an appropriately qualified acoustic consultant, shall be provided prior to occupation that the installed air conditioning units comply with this requirement.

#### On-Going

The use of any air-conditioning unit must comply with the requirements of the *Protection of the Environment Operations (Noise Control) Regulations 2017* and must not:

- (a) emit a noise that is audible within a habitable room in any adjoining residence (regardless of whether any door or window to that room is open):
  - (i) before 8am and after 10pm on any Saturday, Sunday or Public Holiday; or
  - (ii) before 7am or after 10pm on any other day; and
- (b) emit a noise that exceeds 5dB(A) above the ambient background noise level measured at any property boundary.

#### **74. Solar (Photovoltaic Electricity Generating) Energy System**

Where a solar energy system is proposed it must satisfy the following requirements:

- (a) the system is installed in accordance with the manufacturer's specifications or by a person who is accredited by the Clean Energy Council for the installation of photovoltaic electricity generating systems, and
- (b) the solar energy system must not reduce the structural integrity of any building to which the system is attached, and
- (c) the system must not involve mirrors or lenses to reflect or concentrate sunlight, and
- (d) the system must not protrude more than 0.3m from the wall or roof (as measured from the point of attachment), and
- (e) the system is installed no less than 3m from any adjoining property boundary.

Certification from an appropriately person shall be provided at construction documentation stage that the solar energy system/s are capable of complying with this requirement.

Further certification, from an appropriately qualified person shall be provided prior to occupation that the installed solar energy system/s comply with this requirement.

#### **Site Specific Requirements**

- 75.** In accordance with the recommendations contained in the Flood Study report prepared by Greenview Consulting dated 13 February 2025, a report from a suitably qualified and experienced structural engineer is to be submitted to the Land and Housing Corporation (Homes NSW), prior to occupation of the development. This report shall verify that the building can withstand the forces such as hydrostatic loading, debris impact and uplift.

#### **Requirements Resulting from Council Comments**

- 76.** All works must be carried out in accordance with the geotechnical recommendations contained in the Geotechnical Investigation & Acid Sulfate Soils (Ass) Assessment report dated April 2022 by STS Geotechnics Pty Ltd. All excavations for the foundations are to be inspected by the geotechnical consultant and certified that the ground has been suitably prepared for the placement of footings.

## ADVISORY NOTES

- i. Approval of this development activity does not imply or infer compliance with Section 23 of the *Disability Discrimination Act 1992*. Refer to AS 1428.1 and the Building Code of Australia for detailed guidance.
- ii. Information regarding the location of underground services may be obtained from Dial Before You Dig at [www.1100.com.au](http://www.1100.com.au) or by dialing 1100.



DEVELOPMENT DATA	
JOB REFERENCE	BGYVX
LOCALITY / SUBURB	WARRAWONG
STREET ADDRESS	12-16 Stuart Road
LOT NUMBER & DEPOSITED PLAN	Lots 10, 11 & 12 in DP 35004
SITE AREA (sqm)	1985 m2 – sourced from Survey
NUMBER OF EXISTING LOTS	3
PROPOSED GFA (sqm)	1225sqm
NUMBER OF DWELLINGS	16

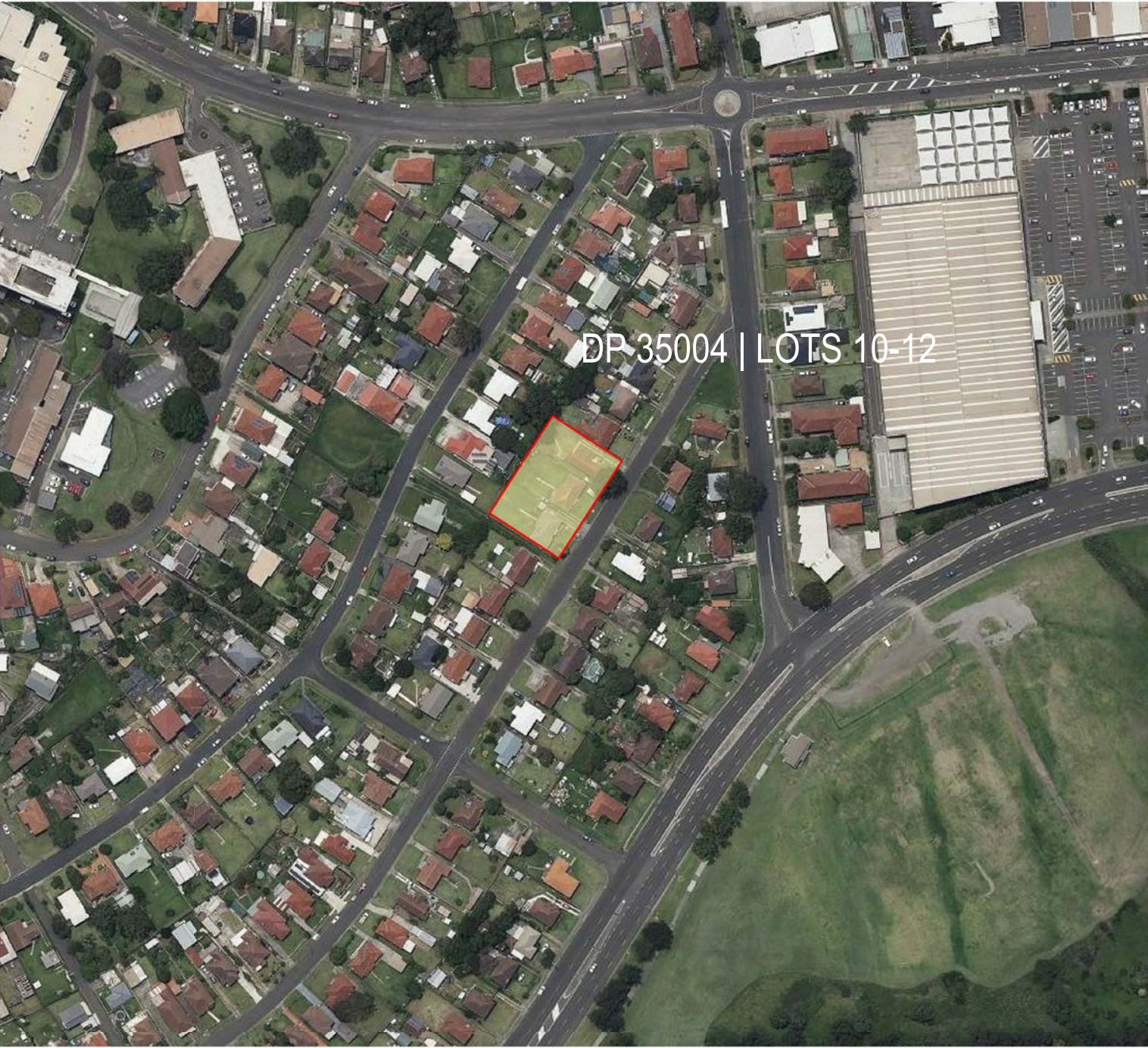
DWELLINGS	UNIT NO.	TYPE	NO. OF BEDROOMS	Internal Area	POS required	POS proposed
				sqm	sqm	sqm
	1	Ground	2	75.5	10	10.1
	2	Ground	2	83.4	10	10.5
	3	Ground	1	56.2	8	9.7
	4	Ground	2	70.8	10	10.7
	5	Ground	2	77.8	10	21.9
	6	Ground	1	54.5	8	10.3
	7	Ground	1	56.0	8	10.2
	8	Ground	1	50.7	8	10.4
	9	Level 1	2	75.5	10	11.1
	10	Level 1	2	86.4	10	10.1
	11	Level 1	1	54.4	8	10.4
	12	Level 1	2	70.7	10	10.9
	13	Level 1	2	77.4	10	10.1
	14	Level 1	1	54.5	8	10.3
	15	Level 1	1	56.0	8	10.3
	16	Level 1	1	50.0	8	9.7
	TOTAL			1109.8		

	CONTROL	REQUIREMENT	PROPOSED
BUILDING HEIGHT	Housing SEPP s.42 (1)(b)	11m	9.9m
	WLEP 2009 cl. 4.3	9m	
PARKING General	Housing SEPP s.42 (1)(e)	1B - 0.4 carpace 2B - 0.5 carspace 1 space per 3+ bedrooms	8
FSR	Housing SEPP s.42 (1)(c)	0.65:1	0.61:1
	WLEP 2009 cl. 4.4	0.5:1	
FRONT SETBACK	Housing SEPP	generally inline with existing	6m
	WLEP 2009 cl. 4.2.2, 6.4.2	6m	
REAR SETBACKS	WLEP 2009 cl. 4.2.2, 6.4.2	6m - habitable room/ balcony	6m
SIDE SETBACKS		3.5m - non-habitable room/ blank wall	3.5m
DEEP SOIL ZONE	Housing SEPP part 18(d)	15% of site area.(297.75m²) if practicable, 65% at rear (193.54m²) Min.3m.	319.5m² 16%
LANDSCAPE	Housing SEPP part 19 (2)	Lesser of 35 sqm PER DWELLING or 30% or site area(595.5m² )	604.4m² 30.4%
SOLAR COMPLIANCE	Housing SEPP	70% of dwellings have 3 hours sunlight between 9am and 3pm in mid-Winter i. Living Rooms ii. Private open space	70% complied

LAHC* - Development data for LAHC new housing supply. For details refer to current version of LAHC Design Requirements
EC* - Entry Corridor
AREA* - Dwelling floor area includes internal walls but excludes external walls
POS* - Private Open Space - In compliance with SLUDG
Type* - E.g. Universal / Non-Universal
Solar Orientation* - % with min. 3 hours of direct sunlight into living areas and private open space

# GENERAL HOUSING DEVELOPMENT

## 12-16 Stuart Road Warrawong



### BASIX Commitments Summary

#### WATER

Rainwater Tank	10000L central tank
Rainwater-Re-use	Rainwater used for garden irrigation of 610sqm on common landscaped area
Star Rating	4 star toilet suite, 6 star taps throughout, 4 star showerheads with flowrate > 4.5 but <=6L/min
Planting	Indigenous or low water use species of vegetation min 100m²

#### ENERGY

Lighting	Provide dedicated energy efficient lighting (fluoros, compact fluoros or LEDs) throughout
Ceiling Fans	Ceiling fans required in each living room and bedroom
Appliances	Electric cooktop & electric oven, well ventilated fridge space
Mechanical Ventilation	Bathroom / Kitchen / Laundry - Individual fan, ducted to facade or roof. Manual switch on / off interlocked to light
Clothes Lines	Private outdoor or unsheltered cloths drying line
Lift	Gearless traction with V V V F motor

Hot Water System	Mechanical Heat Pump for Ground Floor Units, Electric Instantaneous for First Floor Units
Alternative Energy Source	Photovoltaic system: Rated electrical output (min): 8.0 peak kW

NCC 2022 NATHERS Thermal Performance Specification - Warrawong			
External Walls			
Wall Type	Insulation	Colour	Comments
Cavity brick	R4.0 (Firemax A10 Plus)	Light - SA < 0.475 Med - SA 0.475 - 0.70 Dark - SA > 0.70 SA - Solar Absorptance	Throughout - As per elevations
Internal Walls			
Wall Type	Insulation	Comments	
Single skin brick	None	Ground floor internal walls	
Plasterboard stud (Steel studs)	None	L1 internal walls	
Cavity brick	None	Party walls between units	
Cavity brick	None	Shared walls with lobby/stairs/lift	
Floors			
Floor Type	Insulation	Comments	
Suspended concrete slab	Ametain Silverfloor	Ground floor, throughout	
Concrete	None	All units with adjoining unit below	
Ceilings			
Ceiling Type	Insulation	Comments	
Plasterboard	None	Unit above	
Plasterboard	R2.5	Roof/air above	
Insulation loss due to downlights has not been modelled in this assessment. A sealed exhaust fan has been included in every kitchen, bathroom, laundry and ensuite.			
Roof			
Roof Type	Insulation	Colour	Comments
Metal (Steel studs)	R1.3 foil-faced blanket	Med - SA 0.475 - 0.70 SA - Solar Absorptance	Throughout (Unventilated roof space)
Glazing			
Opening type	U-Value	SHGC	Glazing & Frame Type
Sliding + Fixed (Throughout)	4.3	0.53	e.g. Single glazed high performing Low-E clear Aluminium frame
Awning (Throughout)	4.8	0.51	e.g. Single glazed high performing Low-E clear Aluminium frame
U and SHGC values are based on the AFRC Default Windows Set. Glazing systems to be installed must have an equal or lower U value and a SHGC value ± 10% of the above specified values.			
Skylights			
Skylight Type	Frame Type	Comments	
na	na	na	
Ceiling fan			
Size	Location	Comments	
900mm in diameter	Living and bedrooms	Throughout	



### Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



Rev	Date	AMENDEMENTS	Ckd
A	05/07/24	PRELIM STAGE B DRAFT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

SARM Architects		STAGE C	
Suite 4, 7 Ridge Street North Sydney NSW 2060 p +61 2 9922 2799 f +61 2 9922 2755 e architects@sarm.com.au ABN 26 000 663 623 nominated architects: Stephen Arlton reg. no. 7645 Robert McNamara reg. no. 7271		Project Name <b>GENERAL HOUSING UNITS WARRAWONG</b> 12 - 16 STUART ROAD, WARRAWONG LOTS 10 - 12   DP 35004 Sheet Title <b>COVER PAGE &amp; DRAWING LIST</b>	
Date:	16/05/25	Scale	
Drawn:	Author	Project No.	BGYVX
Checked	Checker	Revision	H
Authorised	Approver	Drawing No.	A000





3 PORT KEMBLA NORTH STATION 1.9km  
4mins driving

4 COMMERCIAL STORES  
6mins walking

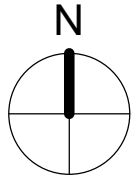
5 PROJECT SITE

6 NSW AMBULANCE

7 KULLY BAY SPORTS  
4min walking

LEGEND:

1. HILLVIEW CHILD CARE CENTRE
2. LEE PARK
3. PORT KEMBLA NORTH STATION
4. COMMERCIAL STORES
5. PROJECT SITE
6. NSW AMBULANCE
7. POST OFFICE
8. KULLY BAY SPORTS



7/30 Kembalawarra, Warrarong NSW 2502



99 Parkes, Warrarong NSW 2502



15 Holman Street, Warrarong NSW 2502

SITE CONTEXT ANALYSIS

ANALYSIS - KEY MATTERS

Predominant Block and Lot Patterns

Lot patterns are regular, with consistent dimensions and spacing.

Block and lot pattern change over time

The block has preserved its original lot configurations, characterized by predominantly single-storey buildings and consistent setback distances.

Typical Lot Size, Shape, Orientation

- Lot sizes are small to medium.
- Blocks are rectangular in shape.
- Lots are predominatly oriented parallel to the street.
- South East to North West.

Which Lots better for Intensification and which are not

As the lots are symmetrical, boundaries can easily be combined into larger rectangle to be amalgamated into unit / town house development.

Is amalgamation necessary to support future development.

Amalgamation is required for densification for low rise unit and townhouse developments.

Are better Sites Available

The proposed site is the most appropriate site for this development. It is on a relatively flat streetscape with northerly aspects. The site is close to surrounding parks, shops and various local services.

Homes NSW

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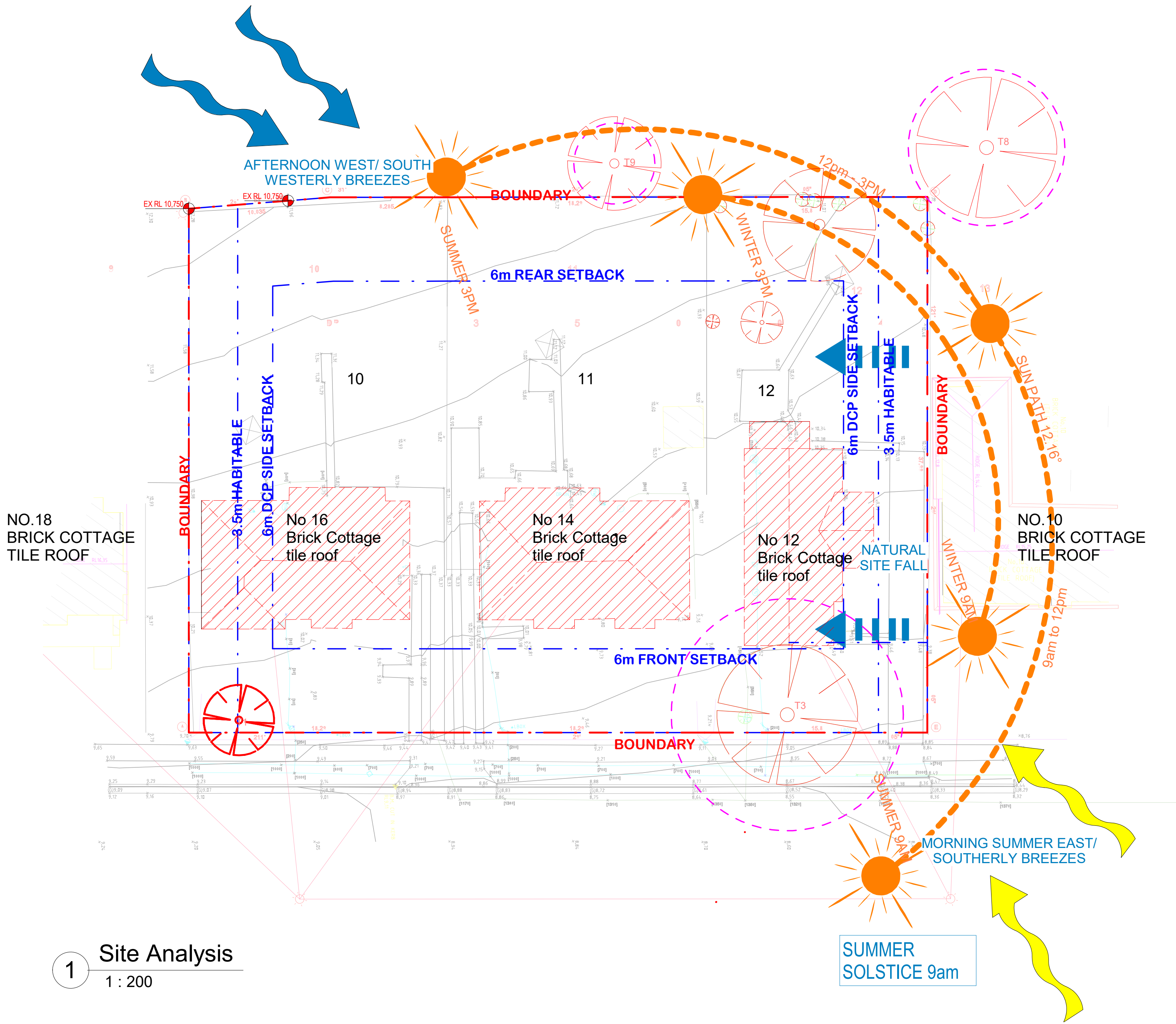
Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**  
12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
**CONTEXT BLOCK ANALYSIS**

Date:  
**16/05/25**  
Drawn:  
**Author**  
Checked  
**Checker**  
Approved  
**Approver**

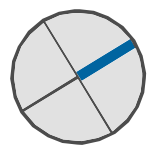
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Project No.  
**BGYVX**  
Revision  
**H**  
Drawing No.  
**A001**





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A	05/07/24	PRELIM STAGE B DRAFT	SA
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Checked  
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Authorised  
**Approver**

Scale  
  
Project No.  
**BGYVX**  
Revision  
**H**  
Drawing No.  
**A100**

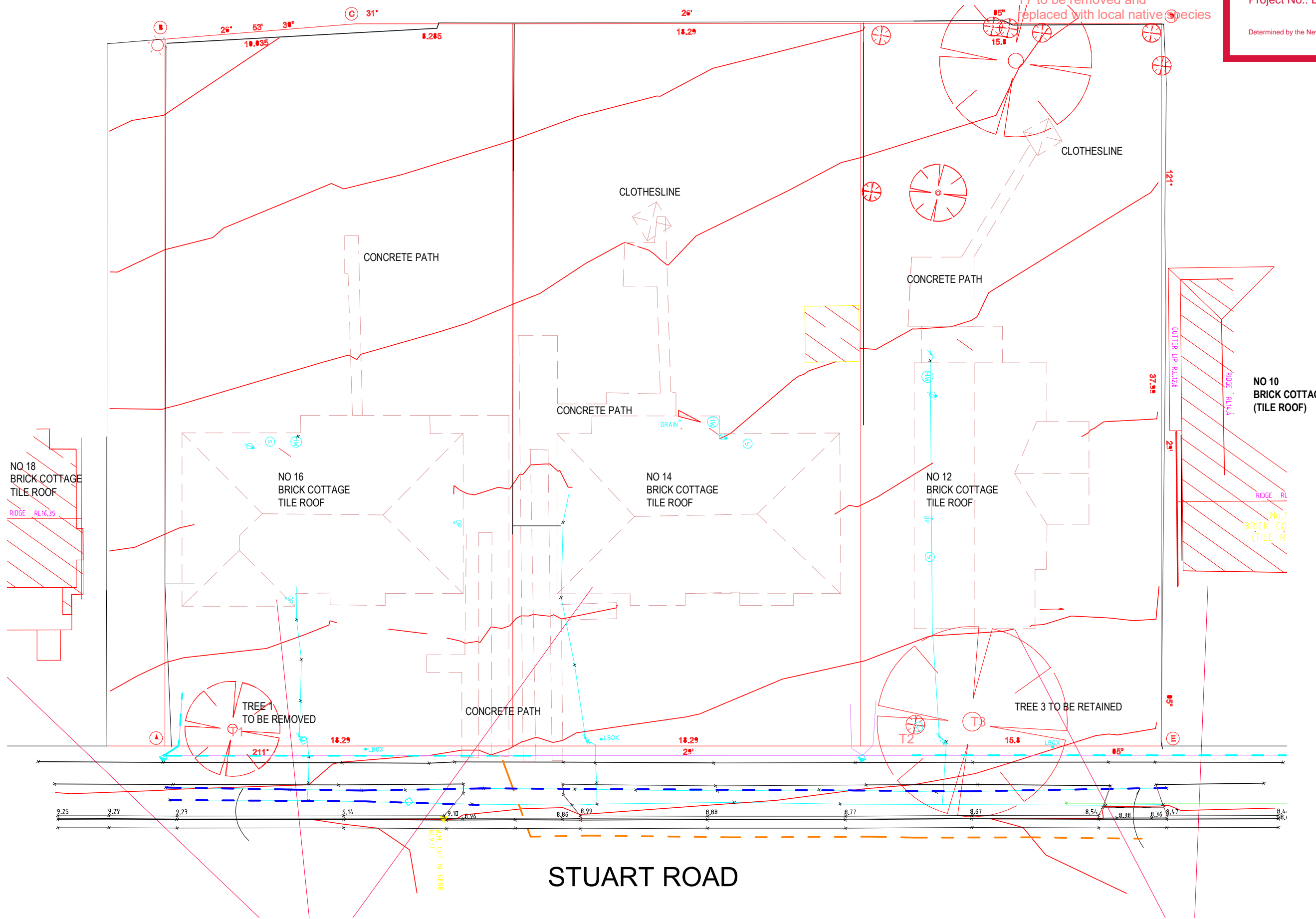


## Homes NSW

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PART 5 (DIV 5.1) ACTIVITY DETERMINATION

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### STUART ROAD

## DEMOLITION PLAN

1 : 200



TREE T1 \_ TO BE REMOVED



TREE T2, T3 \_ TO BE RETAINED

### DEMOLITION NOTES

#### DEMOLITION

DEMOLITION WORKS TO BE CONDUCTED IN ACCORDANCE WITH AS2601:2011: THE DEMOLITION OF STRUCTURES AND WORKERCOVER REQUIREMENTS

#### GENERAL

REMOVE EXISTING TREES, SHRUBS AND THE LIKE WHERE INDICATED ON THE DRAWINGS TO BE REMOVED AND AS NECESSARY TO CONSTRUCT THE WORKS, INCLUDING THE GRUBBING OUT OF THE TREE STUMPS

REMOVAL OF EXISTING PAVING, ACCESS PATHWAYS, STAIRS, CONCRETE SLABS, ASPHALTIC SURFACES, FOOTINGS, CONCRETE KERB SURROUNDS, FENCING, RETAINING WALLS, GARDEN BEDS, CHAIN WIRE BARRIERS, AND ASSOCIATED EQUIPMENT

REMOVE ALL EXISTING BOUNDARY FENCING OR WALLING TO PROPERTY ALIGNMENTS.

ALL REDUNDANT INGROUND SERVICES AND ALL EXISTING FOOTINGS FROM REMOVED STRUCTURES TO BE REMOVED.

THE CONTRACTOR SHALL ARRANGE FOR A QUALIFIED HYGIENIST TO INSPECT, REPORT AND CERTIFY CLEARANCE OF ALL MATERIAL REMOVED FROM SITE PRIOR TO DEMOLITION AND TO PROVIDE A CLEARANCE CERTIFICATE AFTER DEMOLITION IS COMPLETED

#### OPERATING HOURS

TO MINIMISE UNLIE LOSS OF AMENITY, HOURS OF WORK FOR DEMOLITION/ EXCAVATION/ CONSTRUCTION ARE TO BE RESTRICTED ABSOLUTELY TO THE HOURS INDICATED IN THE CONDITIONS OF CONSENT.

#### ACCESS POINT

TO LIMIT DISTURBANCE TO THE SITE AND TRACKING OF MATERIAL ONTO THE STREET, ALL VEHICLES AND PLANT EQUIPMENT WILL USE A SINGLE ENTRY / EXIT POINT. A SEDIMENT CONTROL DEVICE IS TO BE PLACED AT THE SITE ACCESS POINT TO PREVENT SEDIMENT DEPOSITION ON ADJOINING ROADS. THE CONTRACTOR IS RESPONSIBLE TO REMOVE ANY MATERIAL DEPOSITED OFFSITE AS A RESULT OF SPILLAGE OR VEHICLE MOVEMENT. RESTORE AREA TO PREVIOUS STANDARD OR EQUAL. FORM VEHICLE CROSSING FROM 150X50 HARDWOOD PLANKS, CHAMFERED AT ENDS, LAY OVER 150mm ROAD BASE. TIE WITH HOOP IRON STRAPS AT 600CC.

#### DISPOSAL OF CONTAMINANTS AND HAZARDOUS MATERIALS

THE MANAGEMENT AND DISPOSAL OF CONTAMINANTS AND HAZARDOUS MATERIALS, INCLUDING ASBESTOS, CHEMICALS, OILS SHALL BE IN ACCORDANCE WITH THE CURRENT RELEVANT LEGISLATION INCLUDING:

WORK HEALTH AND SAFETY ACT 2011  
WORK HEALTH AND SAFETY REGULATION 2011  
PROTECTION OF ENVIRONMENT OPERATIONS ACT 1997  
PROTECTION OF ENVIRONMENT OPERATIONS (WASTE) REGULATION 1997  
ENVIRONMENTALLY HAZARDOUS CHEMICALS ACT 1985  
AS2601 CLAUSE 1.6.2

#### ASBESTOS REMOVAL

THESE PROPERTIES WERE BUILT BEFORE 31.12.1987 AND IS LIKELY TO HAVE ASBESTOS CONTAINING MATERIAL. IF DEMOLITION INVOLVES THE DEMOLITION OF BUILDINGS OR PART OF A BUILDING THAT MAY CONTAIN ASBESTOS, A HAZMAT REPORT DOCUMENTING THE EXTENT OF ASBESTOS REMOVAL REQUIRED AND CONFIRMING THAT THE REMOVAL WILL BE UNDERTAKEN IN ACCORDANCE WITH WORKCOVER NSW REQUIREMENTS MUST BE PROVIDED.

ROOFING AND CLADDING MATERIALS MUST BE CHECKED FOR THE PRESENCE OF ASBESTOS BEFORE ANY SUCH MATERIAL IS DISTURBED OR REPLACED. ALL WORK, WHICH INVOLVES THE REMOVAL OF PRODUCTS CONTAINING ASBESTOS OR BRINGS PERSONS INTO CONTACT WITH ASBESTOS, MUST ONLY BE PERFORMED BY PERSONS LICENSED BY AND HOLDING A PERMIT ISSUED BY WORKCOVER AUTHORITY UNDER

WORK HEALTH AND SAFETY REGULATION 2011. A COPY OF LICENCE MUST BE SUBMITTED TO THE SUPERINTENDENT / AUTHORISED PERSON PRIOR TO COMMENCEMENT OF THIS WORK. IF ASBESTOS MATERIALS ARE ENCOUNTERED (I.E. IN THE GROUND) DURING CONSTRUCTION WORKS, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE SUPERINTENDENT / AUTHORISED PERSON AND SEEK FURTHER DIRECTIONS.

#### DEMOLISHED MATERIAL

REMOVAL: TAKE POSSESSION OF DEMOLISHED MATERIALS AND REMOVE THEM FROM THE SITE EXCEPT FOR ITEMS TO BE RECOVERED FOR RE-USE. BURNING OR BURYING DEMOLISHED MATERIALS ARE STRICTLY PROHIBITED ON THE SITE. PREVENT SPILLAGE OF DEMOLISHED MATERIALS IN TRANSIT

RECYCLE: DISMANTLE BUILDING COMPONENTS FOR OFF-SITE RECYCLING

#### DISPOSAL

REMOVE CLEARED AND GRUBBED MATERIAL FROM THE SITE AND DISPOSE OF LEGALLY

#### NOTICE OF COMPLETION GENERAL

GIVE AT LEAST 5 WORKING DAYS' NOTICE OF COMPLETION OF DEMOLITION SO THAT ADJACENT STRUCTURES MAY BE INSPECTION FOLLOWING COMPLETION OF DEMOLITION

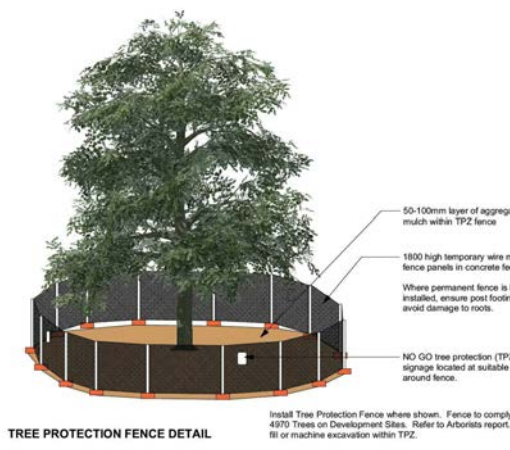
#### TREE PROTECTION

PROTECT EXISTING TREES AS SPECIFIED AND NOTED IN ARBORIST REPORT  
- TREE PROTECTION ZONE (TPZ) IN ACCORDANCE WITH AS4970:2009 SECTION 3  
- TREE PROTECTIVE MEASURES TO BE CONDUCTED IN ACCORDANCE WITH AS4970 SECTION 4

HAZARDOUS MATERIALS - KEEP AREA WITHIN DRIPLINE FREE OF SHADES AND PATHS, CONSTRUCTION MATERIAL AND DEBRIS

HAND METHODS - USE HAND METHODS TO LOCATE, EXPOSE AND CLEANLY REMOVE THE ROOTS ON THE LINE OF EXCAVATION

WORK UNDER TREES - DO NOT REMOVE TOPSOIL, FILL, OR ADD TOPSOIL TO, AREAS WITHIN DRIPLINE OF TREES



### PROTECTION OF TREES ON DEVELOPMENT SITES

#### PROTECTION OF TREES ON DEVELOPMENT SITES:

- THE TREE PROTECTION PLAN INDICATES THAT TREES T1, AND T2 LOCATED WITHIN THE SITE ARE TO BE REMOVED. TREES T2, T3 ARE TO BE RETAINED AND PROTECTED FOR THE DURATION OF DEVELOPMENT CONSENT.  
- TREES THAT HAVE A TP2-TREE PROTECTION ZONE AND SR2-STRUCTURAL ROOT ZONE, REFER TO SITE PLAN AND ARBORIST REPORT.  
- PROTECTIVE FENCING AROUND TREE T2 AND T3 ARE INSTALLED IN ACCORDANCE WITH AS 4970:2009 REQUIREMENTS, AND THE PROTECTIVE MEASURES FOLLOWS THE RECOMMENDATIONS OF THE ARBORIST REPORT.

THE ALIGNMENT OF THE DEVELOPMENT IS AN ENCROACHMENT TO THIS SPECIMEN. THE SECTION OF THE DEVELOPMENT WITHIN THE TP2 OF THESE SPECIMENS IS TO BE CONSTRUCTED USING TREE SENSITIVE EXCAVATION AND CONSTRUCTION TECHNIQUES SUCH AS PIER AND BEAM CONSTRUCTION WITH A SUSPENDED SLAB TO REDUCE ANY IMPACT ON THEIR STABILITY WITH PIERS TO BE DUG BY HAND WITH NON-MOTORISED MACHINERY TO FURTHER ASSIST IN THEIR PROTECTION.

#### PRUNING STANDARDS

- ANY PRUNING RECOMMENDED IN THIS REPORT IS TO BE TO THE AUSTRALIAN STANDARD® AS4373  
- AUTHORITY CODE OF PRACTICE, TREE WORK, 2007.  
- ALL PRUNING OR REMOVAL WORKS ARE TO BE IN ACCORDANCE WITH THE APPROPRIATE TREE MANAGEMENT POLICY WHERE APPLICABLE, OR TREE MANAGEMENT ORDER (TMO), OR TREE PRESERVATION ORDER (TPO).

- TREE MAINTENANCE WORK IS SPECIALISED AND IN ORDER TO BE UNDERTAKEN SAFELY TO ENSURE THE WORKS CARRIED OUT ARE NOT DETRIMENTAL TO THE SURVIVAL OF A TREE BEING RETAINED, AND TO ASSIST IN THE SAFE REMOVAL OF ANY TREE, SHOULD BE UNDERTAKEN BY A QUALIFIED ARBORICULTURIST WITH APPROPRIATE COMPETENCIES RECOGNISED WITHIN THE AUSTRALIAN QUALIFICATION FRAMEWORK, WITH A MINIMUM OF 5 YEARS OF CONTINUAL EXPERIENCE WITHIN THE INDUSTRY OF OPERATIONAL ARBORICULTURE, AND COVERED BY APPROPRIATE AND CURRENT TYPES OF INSURANCE TO UNDERTAKE SUCH WORKS.

#### GENERAL - TREE PROTECTION WORKS - PRIOR TO DEMOLITION

- MILESTONE - PRIOR TO DEMOLITION WORKS, A SITE ARBORIST SHALL BE APPOINTED TO SUPERVISE ALL TREE PROTECTION PROCEDURES DETAILED IN THIS SPECIFICATION. THE SITE ARBORIST SHALL HAVE A MINIMUM LEVEL 5 AOF QUALIFICATION IN ARBORICULTURE. MILESTONES ARE TO BE ADHERED TO THROUGHOUT THE DURATION OF THIS DEVELOPMENT AND ALL RELEVANT DOCUMENTATION IS TO BE SUBMITTED TO THE LOCAL AUTHORITY.  
- THE TREE PROTECTION ZONE FOR EACH TREE IS TO BE INCORPORATED INTO THE CONSTRUCTION WORKS FOR THE SITE AND THE PROTECTION FENCING OR WORKS AS SPECIFIED IN THE REPORT. THE SETBACKS FROM BUILDING WORKS ON THE SIDE CLOSEST TO EACH TREE ARE TO BE CARRIED OUT IN ACCORDANCE TO THE TREE PROTECTION ZONE. THE TREES WILL BE SUSTAINED WITHIN THE CONSTRAINTS OF THE MODIFICATIONS TO THE SITE BY THE PROPOSED DEVELOPMENT.  
- WORKS, TREES AS NOTED TO BE RETAINED AND PROTECTED AND INCORPORATED INTO THE LANDSCAPE WHERE APPROPRIATE AND INSTALLED PRIOR TO ANY DEMOLITION OR CONSTRUCTION.  
- GROUND PROTECTION - IF TEMPORARY ACCESS FOR MACHINERY IS REQUIRED WITHIN THE TP2 GROUND PROTECTION MEASURES WILL BE REQUIRED. THE PURPOSE OF GROUND PROTECTION IS TO PREVENT ROOT DAMAGE AND SOIL COMPACTION WITHIN THE TP2. MEASURES MAY INCLUDE A PERMEABLE MEMBRANE SUCH AS GEOTEXTILE FABRIC BENEATH A LAYER OF MULCH OR CRUSHED ROCK BELOW RUMBLE BOARDS. THESE MEASURES MAY BE APPLIED TO ROOT ZONES BEYOND THE TP2.  
- WHERE APPLICABLE, ANY EXCAVATION FOR THE ESTABLISHMENT OF A BATTER SLOPE OR BENCHING FOR REASONS OF SAFETY AND TO COMPLY WITH WORK COVER AUTHORITY SAFETY REGULATIONS SHOULD BE RESTRICTED AS FAR AS IS SAFELY POSSIBLE NEAR TO TREES TO BE RETAINED TO PREVENT ROOT DAMAGE. IF THE EXCAVATIONS CANNOT BE UNDERTAKEN NEAR TO VERTICAL THE STABILITY OF THESE TREES AND THEIR LONG-TERM VIABILITY MAY BE COMPROMISED AND THEIR RETENTION IN A SAFE AND HEALTHY CONDITION JEOPARDIZED AND THEY MAY NEED TO BE REVISED AND POSSIBLY REMOVED.

#### SPECIFIC - TREE PROTECTION WORKS - PRIOR TO DEMOLITION AND TREE REMOVAL

ALL OTHER TREES/SHRUBS, PRIOR TO DEMOLITION AND TREE REMOVAL WORKS THESE TREES ARE TO BE PLACED WITHIN A TREE PROTECTION ZONE WITH PROTECTIVE FENCING AND MAINTAINED AND RETAINED UNTIL THE COMPLETION OF ALL BUILDING WORKS. PROTECTIVE FENCING IS TO BE INSTALLED AS SHOWN IN APPENDIX A. TREE PROTECTION PLAN.  
- THE PROTECTIVE FENCING WHERE REQUIRED MAY DELINEATE THE TREE PROTECTION ZONE (TP2) AND SHOULD BE SITUATED AS DETERMINED BY THE PROJECT ARBORIST IN ACCORDANCE WITH AS4970 PROTECTION OF TREES ON DEVELOPMENT SITES. FENCING SHOULD BE ERECTED BEFORE ANY MACHINERY OR MATERIALS ARE BROUGHT ONTO THE SITE AND BEFORE THE COMMENCEMENT OF WORKS INCLUDING DEMOLITION. ONCE ERECTED, PROTECTIVE FENCING MUST NOT BE REMOVED OR ALTERED WITHOUT APPROVAL BY THE PROJECT ARBORIST. THE TP2 MUST BE SECURED TO RESTRICT ACCESS. AS4687 TEMPORARY FENCING AND HOARDINGS SPECIES APPLICABLE FENCING REQUIREMENTS. SHADE CLOTH OR SIMILAR SHOULD BE ATTACHED TO REDUCE THE TRANSPORT OF DUST, OTHER PARTICULATE MATTER AND LIQUIDS INTO THE PROTECTED AREA. FENCE POSTS AND SUPPORTS SHOULD HAVE A DIAMETER GREATER THAN 20 MM AND BE LOCATED CLEAR OF ROOTS. EXISTING PERIMETER FENCING AND OTHER STRUCTURES MAY BE SUITABLE AS PART OF THE PROTECTIVE FENCING OR SIMILAR.

- TREE PROTECTION SIGNAGE IS TO BE ATTACHED TO EACH TP2 AND DISPLAYED FROM WITHIN THE DEVELOPMENT SITE IN ACCORDANCE WITH AS4970 2009 PROTECTION OF TREES ON DEVELOPMENT SITES

- THE AREA OF THE TREE PROTECTION ZONE TO BE MULCHED TO A DEPTH OF 100 MM WITH ORGANIC MATERIAL BEING 75% LEAF LITTER AND 25% WOOD, AND THIS BEING COMPOSTED MATERIAL. PREFERABLY FROM THE SAME GENUS AND SPECIES OF TREE AS THAT TO WHERE THE MULCH IS TO BE APPLIED, I.E. SPECIES-SPECIFIC MULCH WHERE POSSIBLE. THE DEPTH OF MULCH AND TYPE AS INDICATED, TO BE MAINTAINED FOR THE DURATION OF THE PROJECT. WHERE DEEP EXCAVATION WILL EXPOSE THE SOIL PROFILE TO DRYING OUT THE ROOT PLATE IS TO BE PROTECTED BY PEGGING JUTE MATTING ACROSS THE GROUND SURFACE 2 M BACK FROM THE EDGE OF THE PROFILE AND 2 M DOWN THE FACE OF THE PROFILE AND IS TO BE IN ONE CONTINUOUS SHEET OR LAYERS UP TO 5 MM THICK AND OVERLAPPED 300 MM AND PEGGED. PEGS ARE TO BE A MINIMUM LENGTH OF 200 MM AND SPACED AT 500 MM INCREMENTS IN A GRID PATTERN. ONCE INSTALLED MULCH IS TO BE PLACED ON TOP OF THE JUTE MATTING PREVIOUSLY DESCRIBED.  
THERE IS TO BE NO STORAGE OF MATERIALS, RUBBISH, SOIL, EQUIPMENT, STRUCTURES, OR GOODS OF ANY TYPE TO BE KEPT OR PLACED WITHIN 5 METRES FROM THE TRUNK OR WITHIN THE DRIPLINE OF ANY TREE FOR THE DURATION OF THE DEVELOPMENT. THIS WILL ENSURE PROTECTION OF THE TREES TO BE RETAINED ON OR ADJACENT TO SITE.  
MILESTONE - PROJECT/SITE ARBORIST IS TO INSPECT/ASSESS ALL RETAINED SPECIMENS PRIOR TO DEMOLITION TO INSPECT TREE PROTECTION MEASURES TO MONITOR THAT THEY HAVE BEEN CARRIED OUT AS PER THE APPROVED DIA CONDITIONS FOR THE SITE. DOCUMENTATION IS TO BE SUBMITTED TO THE CONSENTING AUTHORITY AFTER EACH INSPECTION

#### DEMOLITION AND TREE REMOVALS

REMOVAL OF A TREE WITHIN 6 M OF A TREE TO BE RETAINED SHOULD BE UNDERTAKEN ONLY BY CUTTING DOWN SUCH A TREE WITHOUT DAMAGING THE TREES TO BE RETAINED, AND BY GRUBBING OUT ITS STUMP. WHERE POSSIBLE THE STRUCTURAL ROOTS OF 20 MM DIAMETER OR GREATER OF THE TREE TO BE CUT DOWN SHOULD NOT BE REMOVED, TO MINIMISE SOIL DISTURBANCE AND TO REDUCE THE IMPACT ON THE ROOTS OF ANY TREE TO BE RETAINED NEARBY. WHERE STRUCTURAL ROOTS ARE TO BE REMOVED THIS SHOULD BE UNDERTAKEN MANUALLY BY THE USE OF NON-MOTORISED HAND TOOLS AFTER THE STUMP HAS BEEN GRUBBED OUT WHEN SUCH ROOTS ARE OFTEN EASIER TO LOCATE FROM THE SITE OF THE STUMP FROM WHICH THEY HAVE BEEN SEVERED. GROUND PROTECTION IN ACCORDANCE WITH AS4970 MAY REQUIRE STEEL PLATES TO PROTECT THE GROUND SURFACE FROM COMPACTION TO PROTECT ROOTS BETWEEN THE STAGES OF DEMOLITION AND CONSTRUCTION.

#### SPECIFIC - TREE PROTECTION WORKS - DURING DEMOLITION

DEMOLITION OF EXISTING BUILDINGS SHOULD BE UNDERTAKEN WITH ACCESS RESTRICTED TO THE DRIVEWAY AND THE BUILDING PLATFORM FOR EACH OF THE EXISTING BUILDINGS, OR TO AREAS OF THE LAND WHERE NO TREES ARE GROWING WITHIN 6M OF ANY TREE TO BE RETAINED, WHERE ACCESS OR SPACE FOR A SAFE WORKING ENVIRONMENT IS RESTRICTED, OR WHERE THE AREA OF THE 6M SET BACK MUST BE COMPROMISED. A 100 MM LAYER OF WOOD MULCH MUST BE LAID OVER THE AREA OF ENCROACHMENT, WHERE VEHICULAR ACCESS IS REQUIRED ACROSS THE MULCH LAYER FURTHER ROOT PROTECTION SHOULD BE PROVIDED BY LAYING A TEMPORARY PATHWAY OVER THE MULCH. THE TEMPORARY PATHWAY SHOULD BE CONSTRUCTED OF A GRATED STEEL MATERIAL CAPABLE OF SUPPORTING THE VEHICLES USED DURING DEMOLITION E.G. LIKE RAMPS USED TO LOAD VEHICLES ONTO THE BACKS OF TRUCKS. TRUNKS OF TREES MAY REQUIRE PROTECTION FROM VEHICULAR DAMAGE.

DEMOLITION OF LANDSCAPE STRUCTURES: THE DEMOLITION OF WALLS, DRIVEWAYS RETAINING WALLS, PATHS, AND POOLS ETC. WITHIN 6 M OF A TREE TO BE RETAINED SHOULD BE UNDERTAKEN MANUALLY USING HAND TOOLS. WHERE A DRIVEWAY IS TO BE DEMOLISHED BEING OF CONCRETE STRIP OR SLAB TYPE CONSTRUCTION, IT SHOULD BE UNDERTAKEN BY WORKING FROM THE END OF THE DRIVEWAY CLOSEST TO THE BUILDINGS BACK TOWARDS THE STREET BY UTILISING THE DRIVEWAY AS A STABLE PLATFORM TO PREVENT SOIL COMPACTION. WHERE A CONCRETE SLAB DRIVEWAY PASSES LESS THAN 1 M FROM THE BASE OF A TREE AND THE AREA BENEATH THE DRIVEWAY IS TO BE UNDISTURBED AND INCORPORATED INTO THE LANDSCAPE WORKS FOR THE SITE, THE VOLUME OF SPACE PREVIOUSLY OCCUPIED BY THE DRIVEWAY MUST BE REPLACED WITH LOCAL TOP SOIL FROM THE SITE OR OTHERWISE A LOAMY SAND, TO REPLACE THE MASS OF THE CONCRETE ON THE ROOT PLATE WHICH MAY BE CRITICAL TO THE BALLAST AND CENTRE OF MASS FOR THE STABILITY OF THE TREE. IF THE TREE BECOMES UNSTABLE IMMEDIATELY CONTACT THE CONSULTANT ARBORICULTURIST.

### PROTECTION OF TREES ON DEVELOPMENT SITES

**SPECIFIC - TREE PROTECTION WORKS - POST DEMOLITION AND PRIOR TO CONSTRUCTION MILESTONE - PROJECT/SITE ARBORIST IS TO INSPECT/ASSESS ALL RETAINED SPECIMENS PRIOR TO CONSTRUCTION IN RELATION TO TREE PROTECTION MEASURES TO MONITOR THAT THEY HAVE BEEN CARRIED OUT AS PER THE APPROVED DIA CONDITIONS FOR THE SITE. DOCUMENTATION IS TO BE SUBMITTED TO THE CONSENTING AUTHORITY AFTER EACH INSPECTION.**

LOCATION OF UNDERGROUND UTILITIES WITHIN A TREE PROTECTION ZONE OF A RETAINED SPECIMEN.  
ANY UTILITY SERVICES TO BE SITUATED UNDERGROUND WITHIN THE TP2 ARE TO BE UNDERTAKEN UTILISING EXCAVATION TECHNIQUES THAT PREVENT OR MINIMISE DAMAGE TO STRUCTURAL ROOTS (ROOTS GREATER THAN >20 MM DIAMETER), TO PREVENT SOIL COMPACTION AND ROOT DAMAGE THESE WORKS SHOULD BE CONDUCTED WITH NON-MOTORISED HAND TOOLS, AIR RIFLE OR DIRECTED DRILLING. WHERE NECESSARY, THE USE OF SENSITIVE EXCAVATION AND CONSTRUCTION TECHNIQUES SUCH AS PIER AND BEAM CONSTRUCTION REGARDING OF SITE NEAR RETAINED TREES, GRADING &/OR RE-GRADING OF SITES/SLOPES WITHIN TREE PROTECTION ZONES OR NEAR RETAINED SPECIMENS IS TO BE UNDERTAKEN ONLY IF AT ALL, AFTER CONSULTATION WITH THE PROJECT ARBORIST. THIS IS TO PROTECT ALL STRUCTURAL ROOTS SYSTEMS FROM DAMAGE OR COMPACTION FROM MACHINERY. PLACEMENT OF RELOCATABLE BUILDINGS, CONSIDERATION SHOULD BE GIVEN TO TREE SENSITIVITY SUCH AS THE BUILDINGS BEING PLACED ON PIER AND BEAM OR SKIDS CONSTRUCTION AS THEY ARE TO BE POSITIONED ON THEIR DRIPLINES WITHIN THE TREE PROTECTION ZONE (TP2). THE AREA OF THE TREE PROTECTION ZONE UNDER THE BUILDINGS IS TO BE MULCHED TO A DEPTH OF 200 MM (IF INSTALLED ON SKIDS) WITH ORGANIC MATERIAL TO FURTHER REDUCE COMPACTION. THE MULCH IS TO BE COMPOSTED MATERIAL, I.E. SPECIES-SPECIFIC MULCH. ALTERNATIVELY, IF INSTALLED ON A PIER & BEAM CONSTRUCTION, PIERS ARE TO BE UNDERTAKEN MANUALLY BY USING NON-MOTORISED HAND TOOLS TO DETERMINE THE LOCATION OF FIRST ORDER AND LOWER ORDER STRUCTURAL ROOTS WITH A DIAMETER OF 20 MM (STRUCTURAL WOODY ROOTS) OR GREATER, WITHOUT DAMAGING THEM.

**SPECIFIC - TREE PROTECTION WORKS - DURING CONSTRUCTION MILESTONE - PROJECT/SITE ARBORIST IS TO INSPECT/ASSESS ALL RETAINED SPECIMENS DURING CONSTRUCTION IN RELATION TO TREE PROTECTION MEASURES TO MONITOR THAT THEY HAVE BEEN CARRIED OUT AS PER THE APPROVED DIA CONDITIONS FOR THE SITE. DOCUMENTATION IS TO BE SUBMITTED TO THE CONSENTING AUTHORITY AFTER EACH INSPECTION.**

WHERE ANY STRUCTURAL ROOTS (ROOTS WITH A DIAMETER OF GREATER THAN >20 MM) ENCOUNTERED BY EXCAVATION ARE TO BE PRUNED AND IT IS TO BE UNDERTAKEN WITH CLEAN SHARP PRUNING TOOLS, WITH A FINAL CUT TO UNDamaged WOOD TO PREVENT INFESTATION BY PATHOGENS AND ASSIST CONTINUED ROOT GROWTH AND UNDERTAKEN IN CONSULTATION WITH THE CONSULTING ARBORICULTURIST. TREE PROTECTION ZONE FENCES ARE TO BE MAINTAINED DURING THESE WORKS. GROUND PROTECTION IN ACCORDANCE WITH AS4970 MAY REQUIRE STEEL PLATES TO PROTECT THE GROUND SURFACE FROM COMPACTION TO PROTECT ROOTS BETWEEN THE STAGES OF DEMOLITION AND CONSTRUCTION OF THE NEW PAVEMENT.

ALL TREE PROTECTION ZONES OF RETAINED TREES ARE TO BE MONITORED FOR THE DURATION OF THE CONSTRUCTION PHASE OF THE DEVELOPMENT. THE THREE MAIN AREAS REQUIRING MONITORING ARE: MULCHING - MULCH MUST BE MAINTAINED TO A DEPTH OF 50-100 MM USING MATERIAL THAT COMPLIES WITH AS 4684, WHERE THE EXISTING LANDSCAPE WITHIN THE TP2 IS TO REMAIN UNALTERED (E.G. GARDEN BEDS OR TURF) MULCH MAY NOT BE REQUIRED, WATERING - SOIL MOISTURE LEVELS SHOULD BE REGULARLY MONITORED BY THE PROJECT ARBORIST. TEMPORARY IRRIGATION OR WATERING MAY BE REQUIRED WITHIN THE TP2. AN ABOVE-GROUND IRRIGATION SYSTEM COULD BE INSTALLED AND MAINTAINED BY A COMPETENT INDIVIDUAL AND WEEDING - WEEDS SHOULD BE REMOVED BY HAND WITHOUT DISTURBING SOIL OR SHOULD BE CONTROLLED WITH WEEDICIDE.

TREES TO BE REMOVED ARE TO BE REPLACED WITH ADVANCED SPECIMENS BEING MINFUL OF THE SPACE LIMITATIONS OF THE NEW USE OF THE SITE. THE ADVANCED TREES SHOULD BE SITUATED IN AREAS ALONG THE BOUNDARIES OF THE SITE. THE PLANTING IN THESE LOCATIONS WILL PROVIDE THE MAXIMUM BENEFIT TO THE SURROUNDING PROPERTIES BY SCREENING VIEWS TO AND FROM THE SITE AND THE PLANTINGS INCLUDED IN THE PROPOSED LANDSCAPE PLAN. THE REPLACEMENT TREES WILL BE SITUATED IN POSITIONS WHERE THEY MAY GROW TO MATURITY UNHINDERED AND WILL NOT CONFLICT WITH BUILT STRUCTURES OR UTILITY SERVICES AND IN GREATER NUMBERS THAN THE TREES REMOVED SHOULD PROVIDE A NET INCREASE IN THE LOCAL AMENITY.

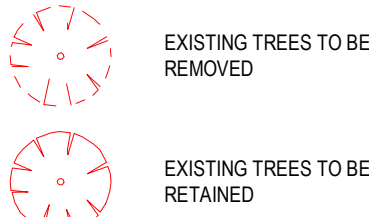
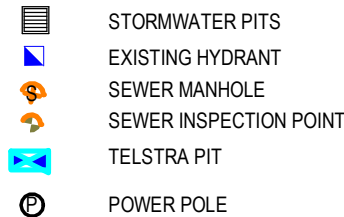
#### SPECIFIC - TREE PROTECTION WORKS - POST CONSTRUCTION

MILESTONE - AT COMPLETION OF CONSTRUCTION WORK THE SITE/PROJECT ARBORIST SHOULD CARRY OUT AN ASSESSMENT OF ALL TREES RETAINED &/OR AFFECTED BY WORKS. THIS ASSESSMENT IS TO DOCUMENT ANY REQUIRED ONGOING REMEDIAL CARE NEEDED TO ENSURE VIABLE RETENTION OF TREES AFFECTED. DOCUMENTATION IS TO BE SUBMITTED TO THE CONSENTING AUTHORITY.

NOTE: REFER TO ARBORIST REPORT

#### Rev Date AMENDMENTS Ckd

C	23/08/24	STAGE B	SA	SERVICES - STORMWATER
D	16/10/24	STAGE C PRELIM	SA	SERVICES - SEWER
E	18/11/24	STAGE C	SA	SERVICES - ELECTRICAL
G	10/01/25	STAGE C	SA	SERVICES - TELECOM
H	16/05/25	STAGE C	SA	SERVICES - NBN
			SA	SERVICES - GAS



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reg. no. 7271

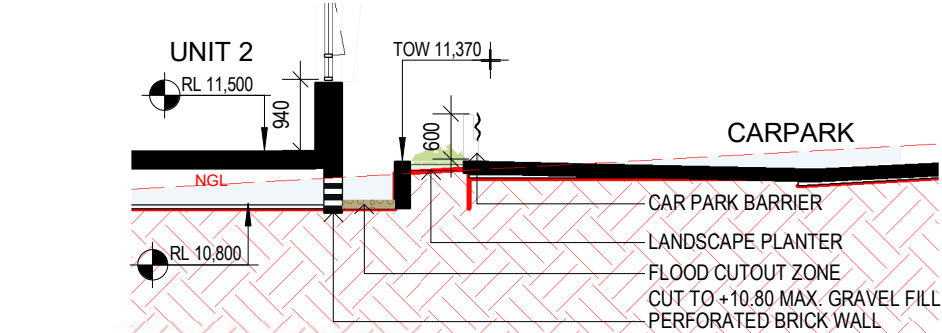
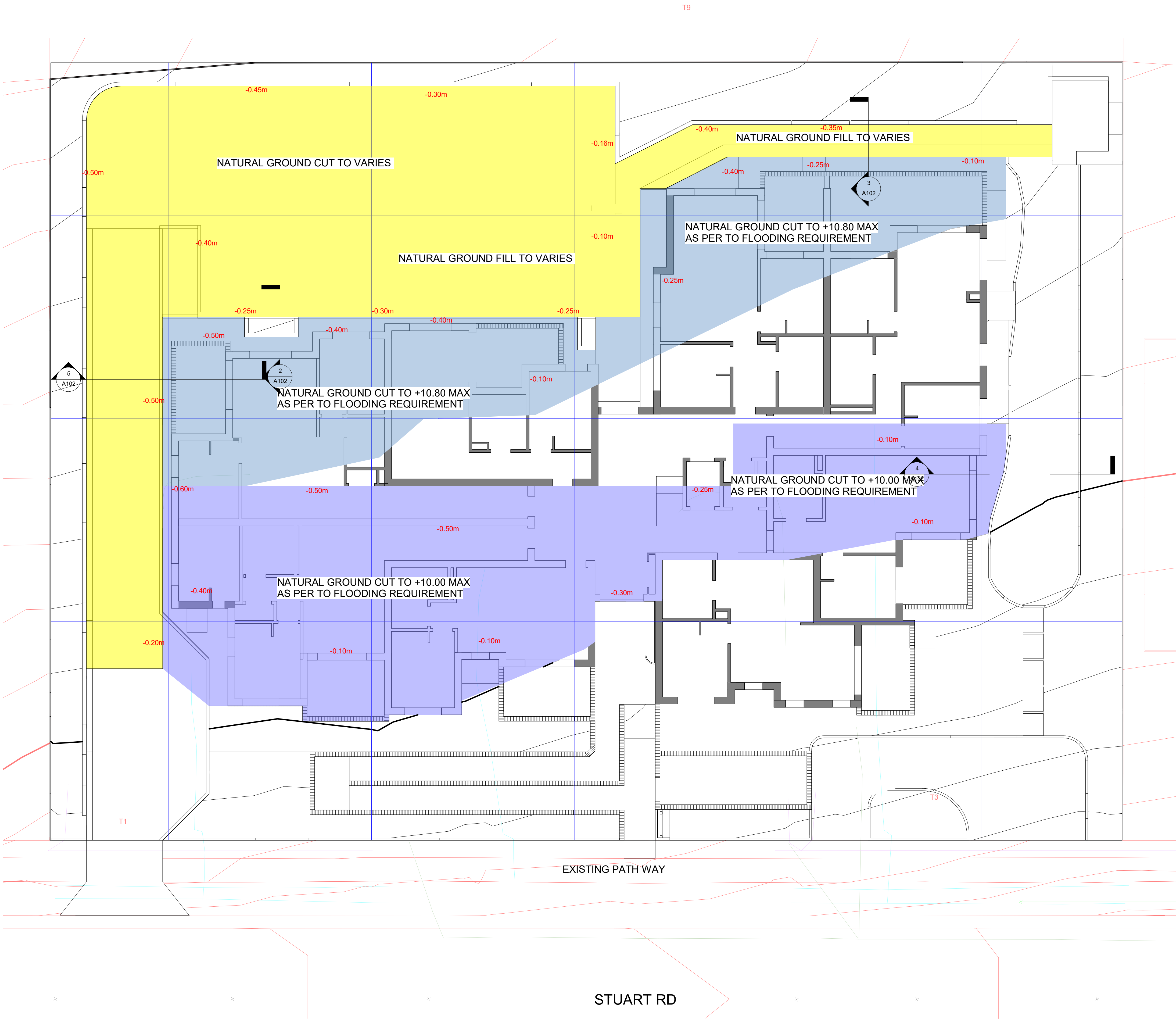


Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**  
12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
**DEMOLITION PLAN**

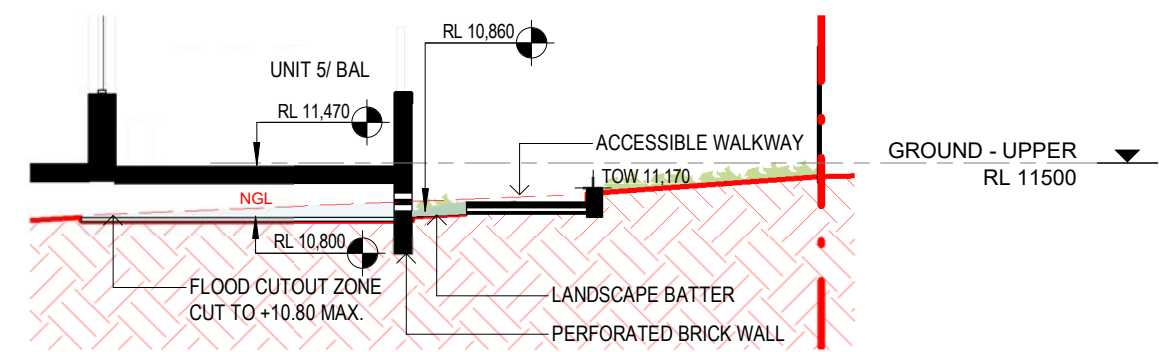
Date:  
**16/05/25**  
Drawn:  
**Author**  
Checked:  
**Checker**  
Authorised:  
**Approver**

Scale  
**Project No.**  
**BGVVX**  
Revision  
**H**  
Drawing No.  
**A101**

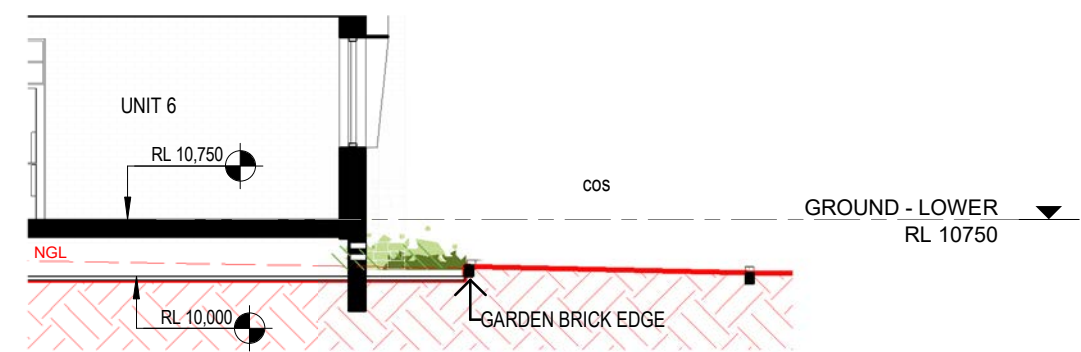




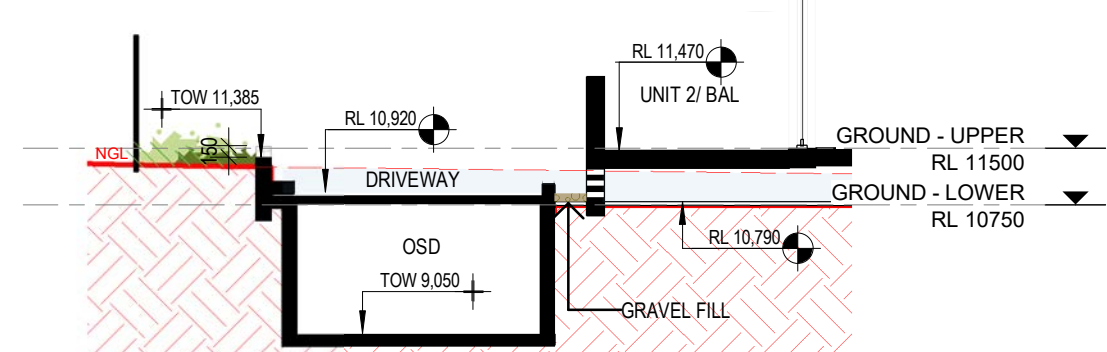
Section 1  
1 : 100



Section 2  
1 : 100



Section 3  
1 : 100



Section 4  
1 : 100

Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation

1 CUT AND FILL PLAN  
1 : 100

Rev	Date	AMENDMENTS	Ckd
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

EXTERNAL AREA

NATURAL GROUND CUT TO VARIES TO SITE CODITIONS

UPPER FLOOR LEVEL

NATURAL GROUND CUT TO RL+10.80 MAX.

LOWER FLOOR LEVEL

NATURAL GROUND CUT TO RL+10.00 MAX.

Certificate No. 0011746560

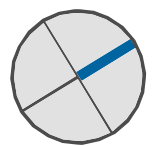
Scan QR code or follow website link for rating details.

Assessor name: Dean Gorman

Accreditation No. DMN/13/1645

Property Address: 12-16 Stuart Street, Warrarong NSW 2502

NSW/2502



SARM Architects

SA

ARM

STAGE C

Project Name  
GENERAL HOUSING UNITS  
WARRARONG

12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004

CUT AND FILL PLAN

Date: 16/05/25

Drawn: BGYVX

Author: BGYVX

Checked: H

Authorised: A102

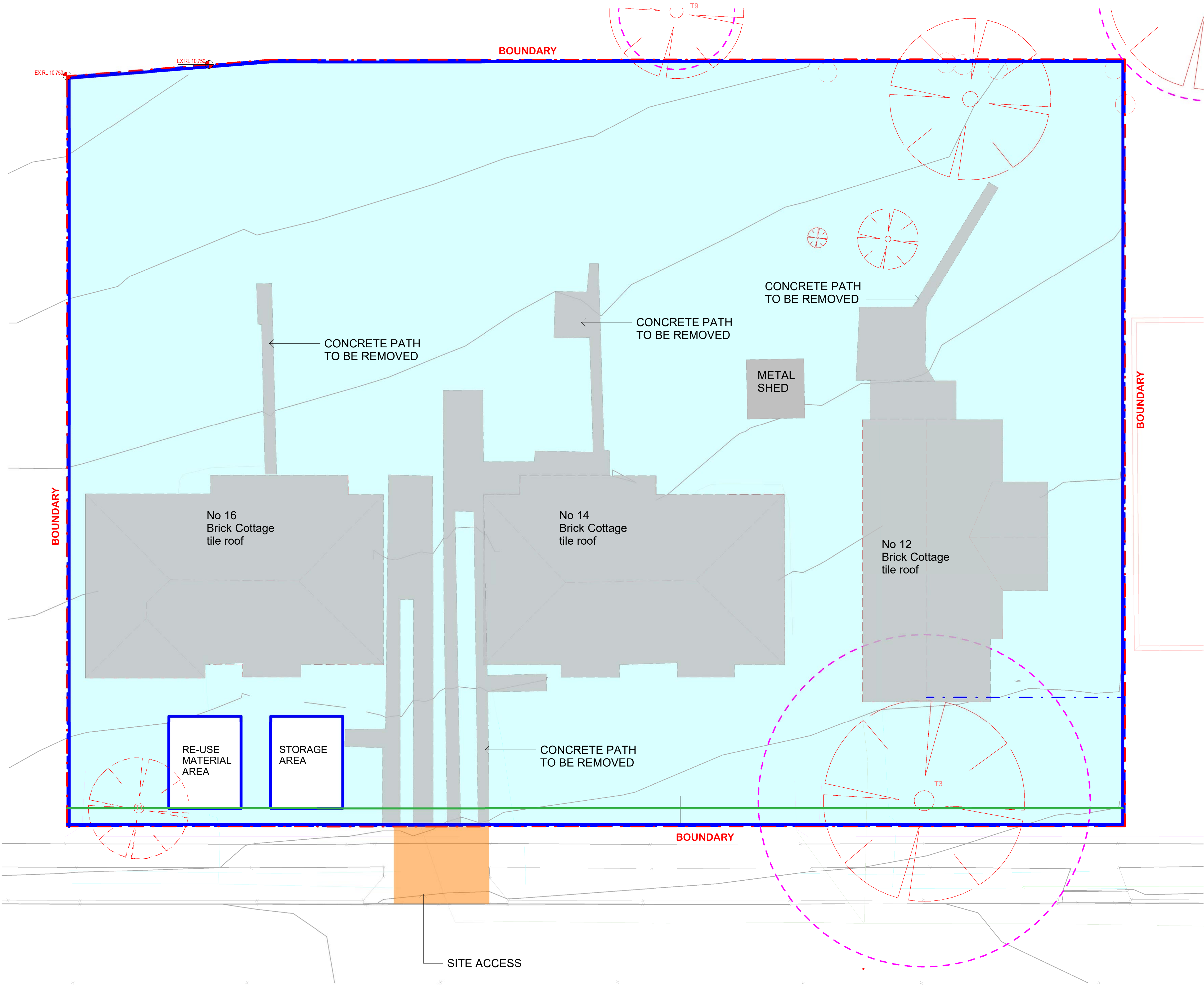
Scale

Project No. BGYVX

Revision

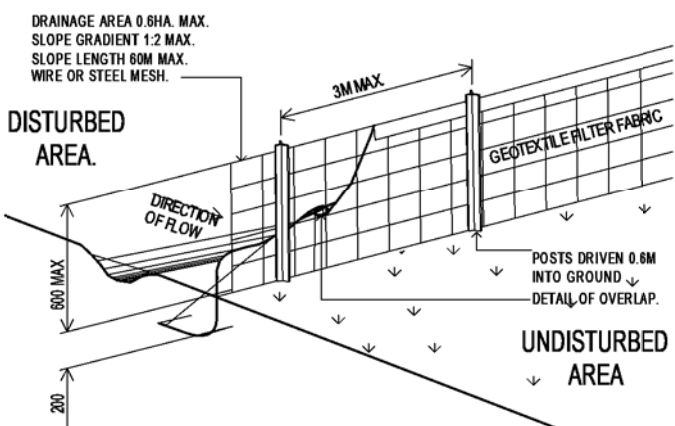
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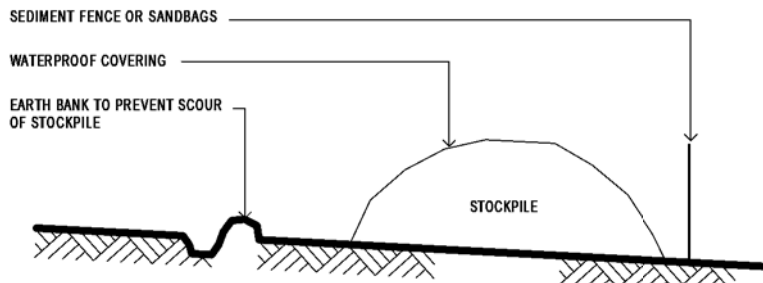


# EROSION AND SEDIMENT CONTROL MEASURES

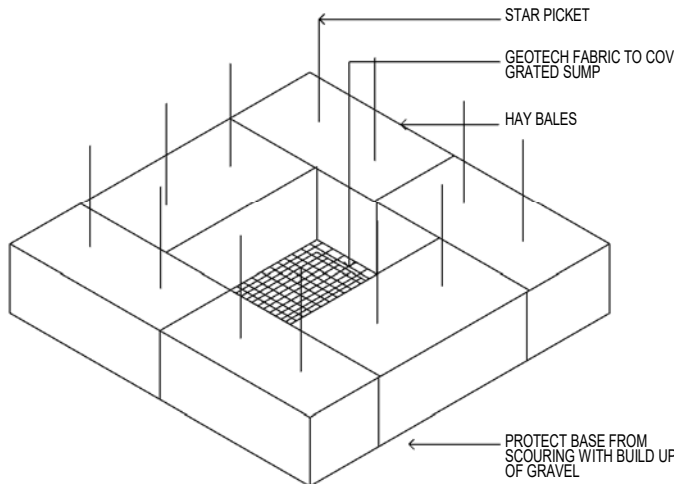
NOTE  
REFER TO CIVIL ENGINEER'S ENVIRONMENTAL SITE MANAGEMENT PLAN FOR FURTHER DETAILS



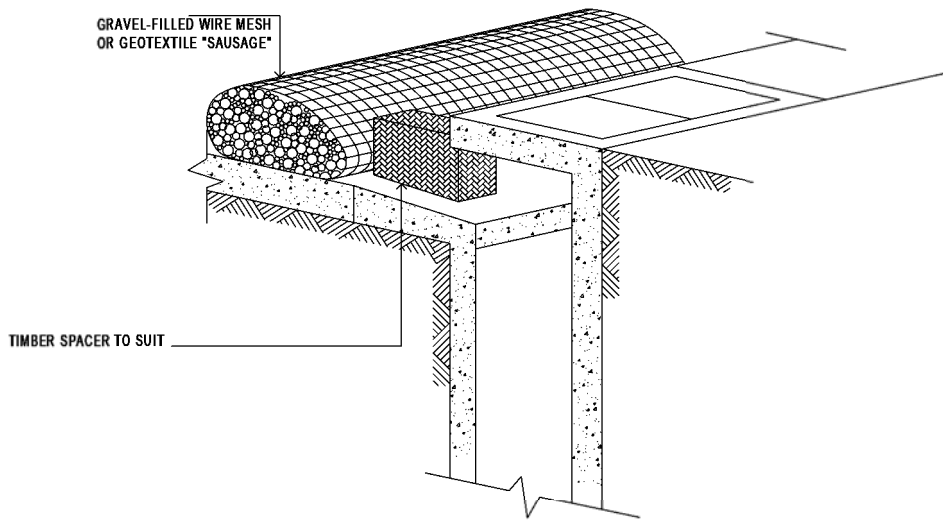
SEDIMENT FENCE  
N.T.S.



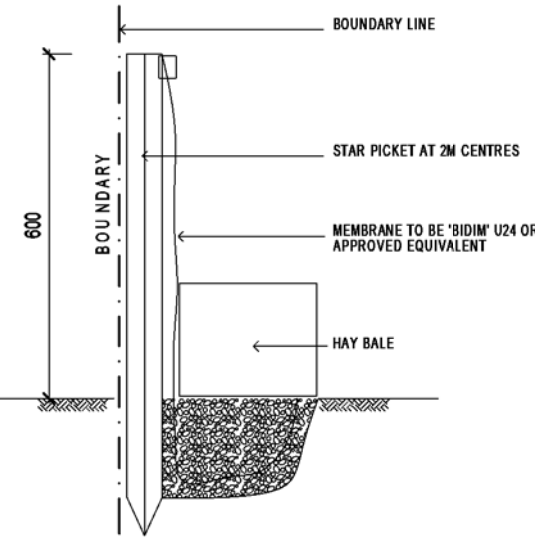
MATERIALS STOCKPILE  
N.T.S.



STORMWATER PIT INLET SEDIMENT TRAP  
N.T.S.



PORTABLE GRAVEL KERB  
INLET SEDIMENT TRAP  
N.T.S.



SILT FENCE DETAIL  
N.T.S.

## 1 EROSION AND SEDIMENT CONTROL PLAN

1 : 100

Rev	Date	AMENDMENTS	Ckd
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

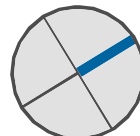
TEMPORARY FENCE	MAIN WORKS
SEDIMENT CONTROL	SITE ACCESS

### Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



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nominated architects:  
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reg. no. 7645  
Robert McNamara  
reg. no. 7271

Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**

12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004

Sheet Title  
**SEDIMENT EROSION & CONTROL  
PLAN**

Date:  
**16/05/25**

Drawn:  
**Author**

Checked  
**Checker**

Authorised  
**Approver**

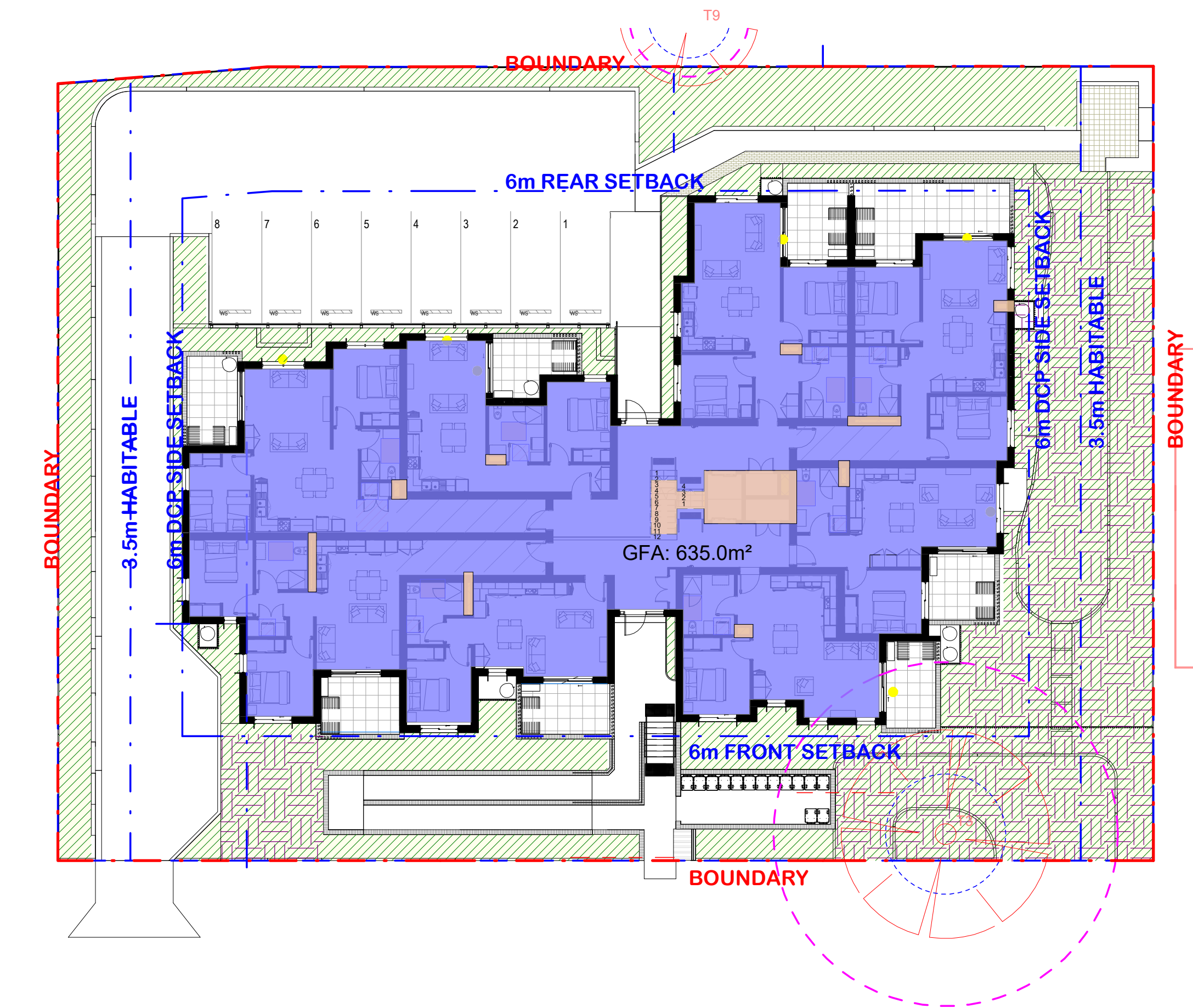
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Project No.  
**BGYVX**

Revision  
**H**

Drawing No.  
**A103**

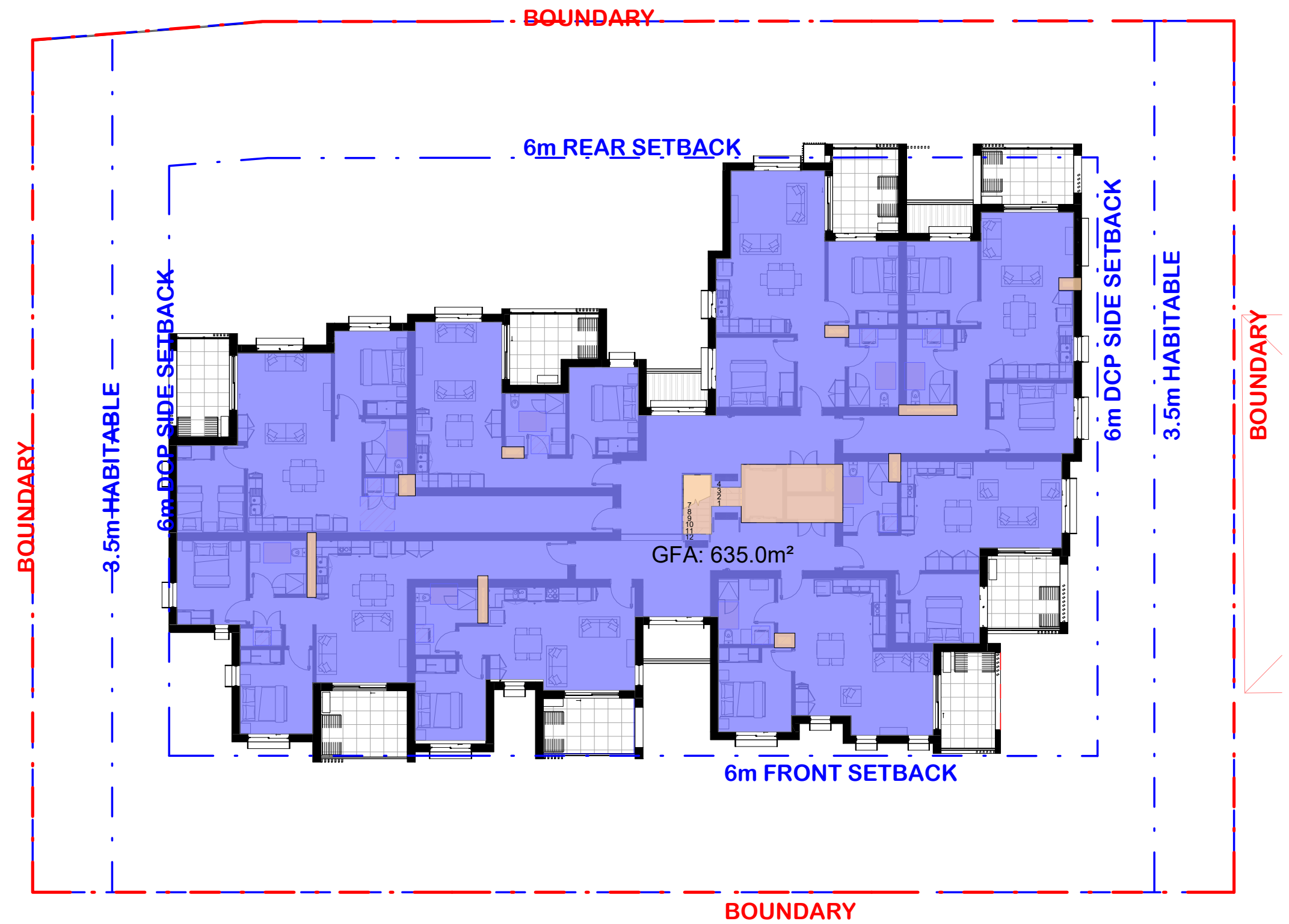




1 GROUND FLOOR AREA  
1 : 200

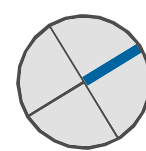
INTERNAL FLOOR AREA 1270m²  
AREA EXCLUDED FROM GFA 45.2m²  
DEEP SOIL ZONE 319.5m² WITH MIN 3m WIDTH  
16% PROPOSED > 15% HSEPP REQUIRED)  
LANDSCAPE 604.4m²  
(30.4% PROPOSED > 30% HSEPP REQUIRED)

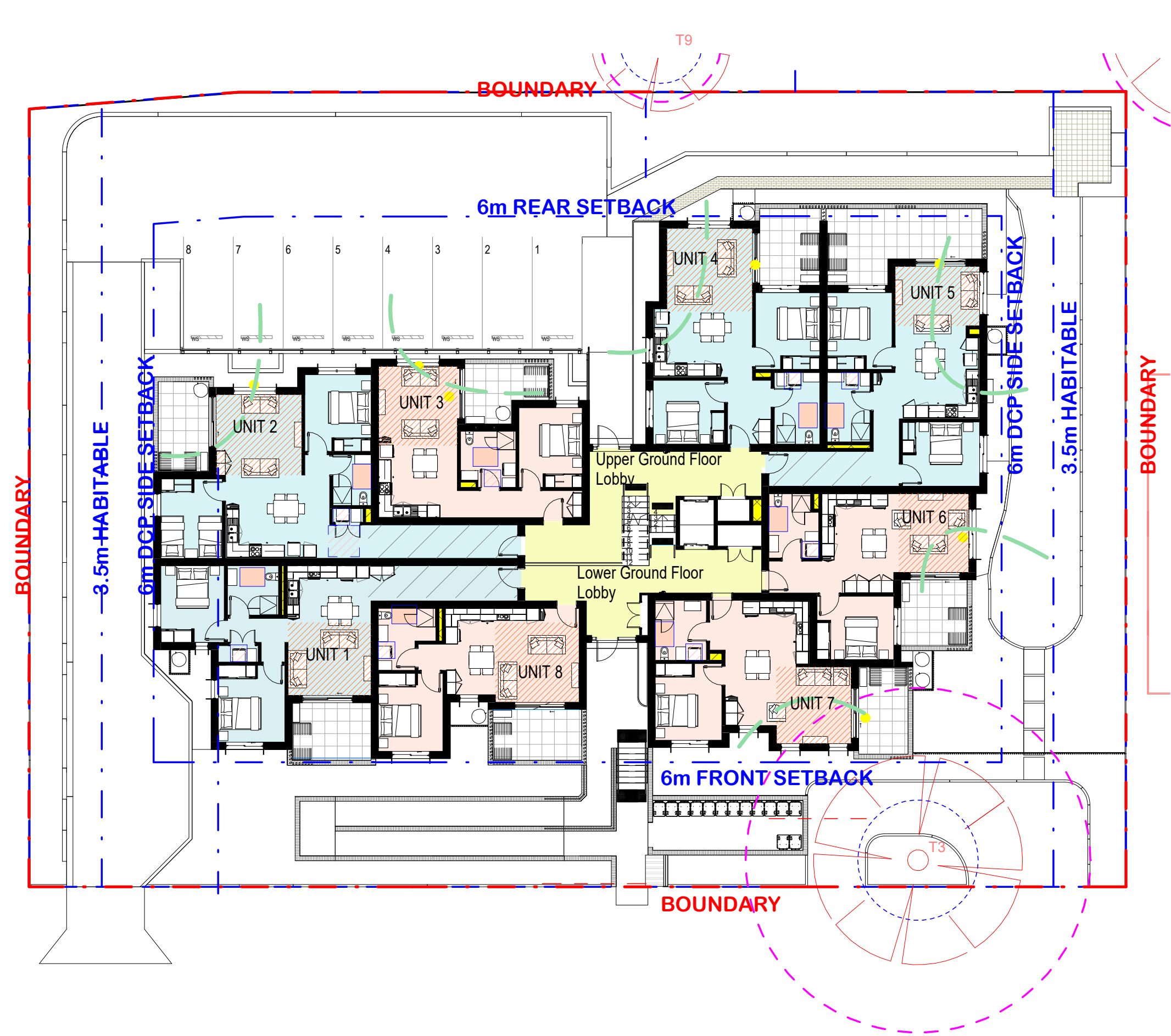
TOTAL GFA: 1225m²  
FSR: 0.61:1



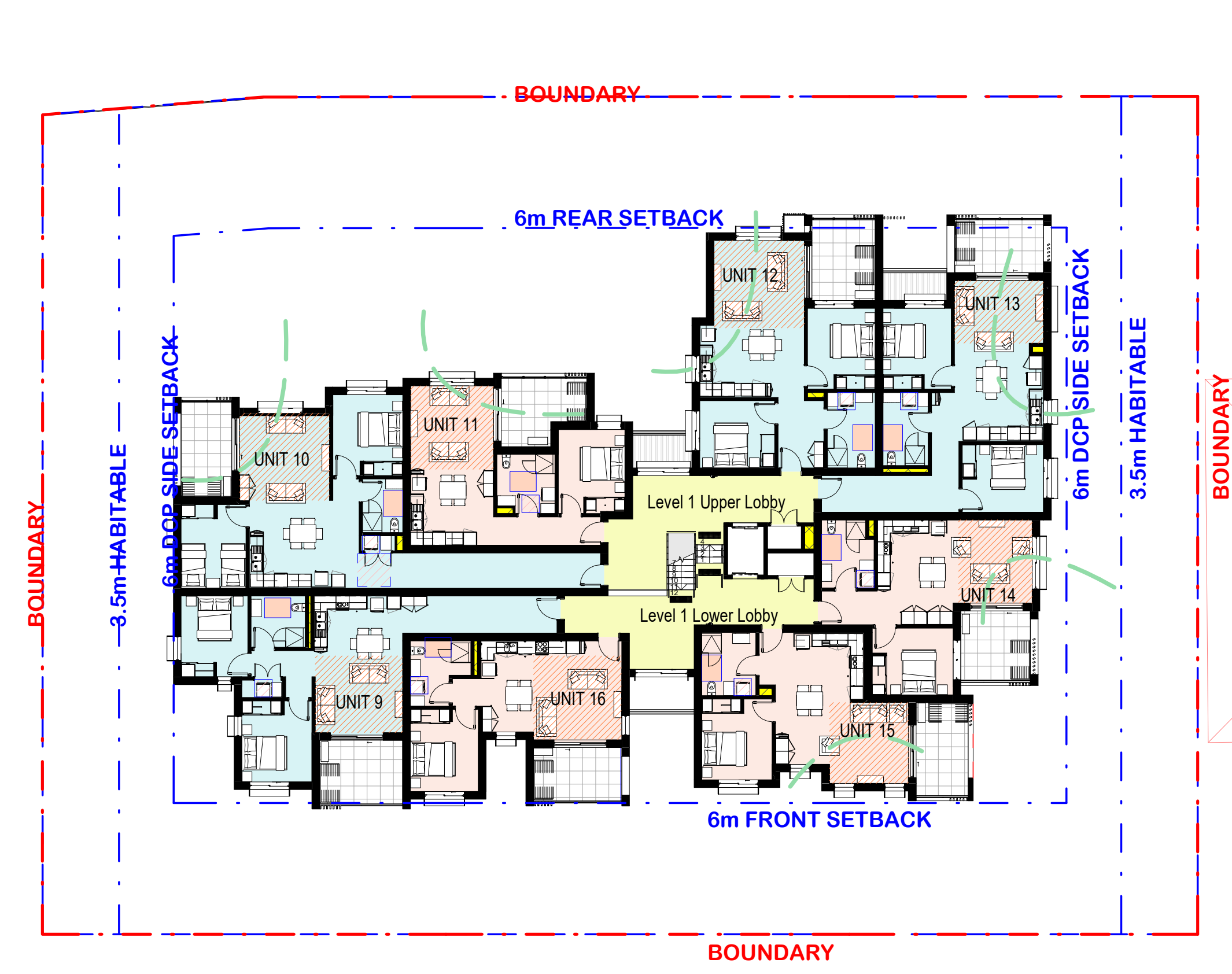
2 FIRST FLOOR AREA  
1 : 200

Rev	Date	AMENDEMENTS	Ckd
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA





1 NATURAL VENTILATION GROUND FLOOR PLAN  
1 : 200

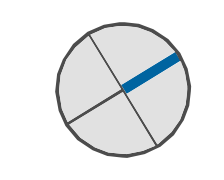
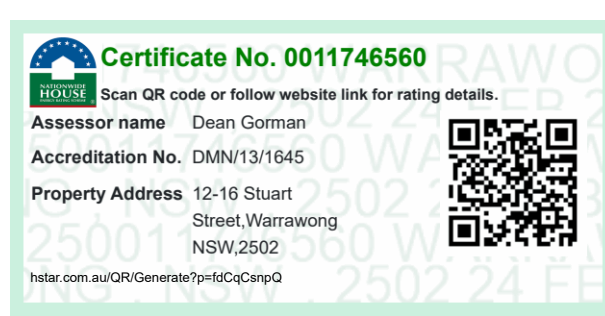


2 NATURAL VENTILATION FIRST FLOOR PLAN  
1 : 200

LIVING ROOM WITH A MINIMUM WIDTH  
1B = 3.6m  
2B = 4m

UNIT NO.	VENTILATION COMPLIANCE	<div>NATURAL VENTILATION REQUIREMENT</div> <div>TO APARTMENG DESIGN GUIDE PART 4B: MIN 60% UNITS ARE NATURALLY CROSS VENTILATED SHOWN WITH GREEN DASHED LINE ON PLANS</div> <div><div><div>✓</div>COMPLIANT</div><div><div></div>NON - COMPLIANT</div></div> <div>75% UNITS ARE NATURALLY CROSS VENTILATED.</div>
Unit 1		
Unit 2	✓	
Unit 3	✓	
Unit 4	✓	
Unit 5	✓	
Unit 6	✓	
Unit 7	✓	
Unit 8		
Unit 9		
Unit 10	✓	
Unit 11	✓	
Unit 12	✓	
Unit 13	✓	
Unit 14	✓	
Unit 15	✓	
Unit 16		

Rev	Date	AMENDEMENTS	Ckd
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA



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STAGE C

Project Name  
GENERAL HOUSING UNITS  
WARRAWONG

12 - 16 STUART ROAD, WARRAWONG  
LOTS 10 - 12 | DP 35004

NATURAL VENTILATION PLANS

Date:  
16/05/25

Drawn:  
Author

Checked  
Checker

Authorised  
Approver

Scale

Project No.  
BGVYX

Revision  
H

Drawing No.  
A105

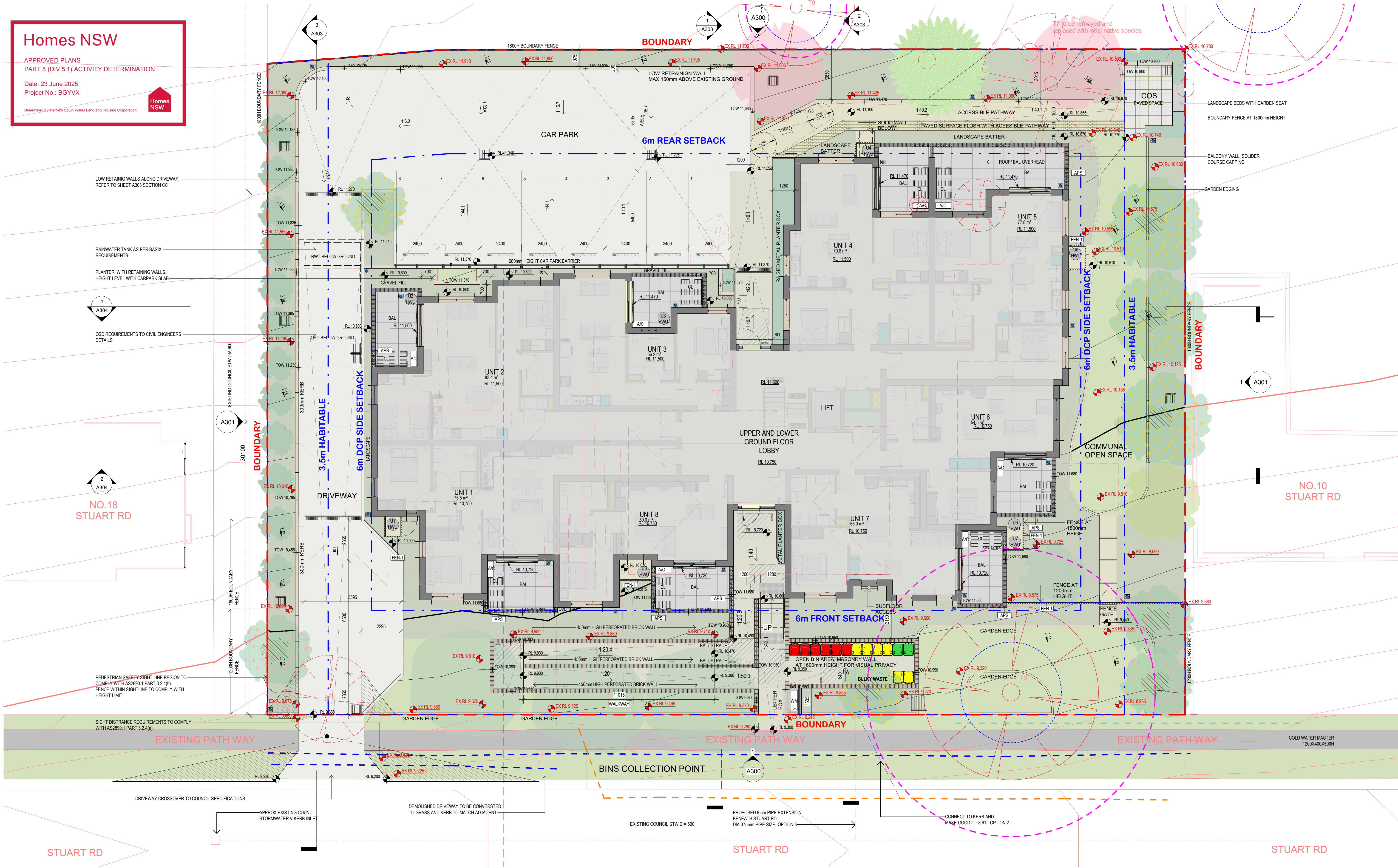


# Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



## 1 SITE PLAN 1:100

Rev	Date	AMENDMENTS	Ckd
A	05/07/24	PRELIM STAGE B DRAFT	SA
B	06/08/24	TO CONSULTANT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

---	BOUNDARY
---	SETBACK
---	TPZ
---	SRZ
---	DEMOLISHED
---	RETAINED
---	NATURAL GROUND LINE

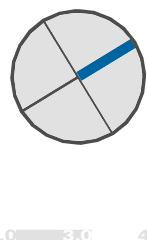
---	SERVICES - STORMWATER
---	SERVICES - SEWER
---	SERVICES - ELECTRICAL
---	SERVICES - TELECOM
---	SERVICES - NON
---	SERVICES - GAS
---	DRINAGE

---	STORMWATER PITS/ STRIP DRAINS
---	EXISTING HYDRANT
---	SEWER INSPECTION POINT
---	TELSTRA PIT
---	GARDEN TAP
---	POWER POLE

---	EXISTING TREES
---	PROPOSED TREES

---	MASS PLANTING BED
---	TURF - SOFT LEAF BUFFALO
---	HEDGING
---	BIN STORAGE
---	INSTANTANEOUS ELECTRIC
---	HOT WATER UNIT TO FIRST FLOOR ONLY

---	AC
---	CL
---	FEN-1
---	FEN-2
---	FW
---	HWU
---	WM
---	SP
---	SS



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Project Name  
**GENERAL HOUSING UNITS  
WARRAWONG**

12 - 16 STUART ROAD, WARRAWONG  
LOTS 10 - 12 | DP 35004

**SITE PLAN**

Date: 16/05/25  
Scale: Project No. BGYVX  
Author: H  
Checked: Revision  
Authorised: Drawing No. A200  
Approver:

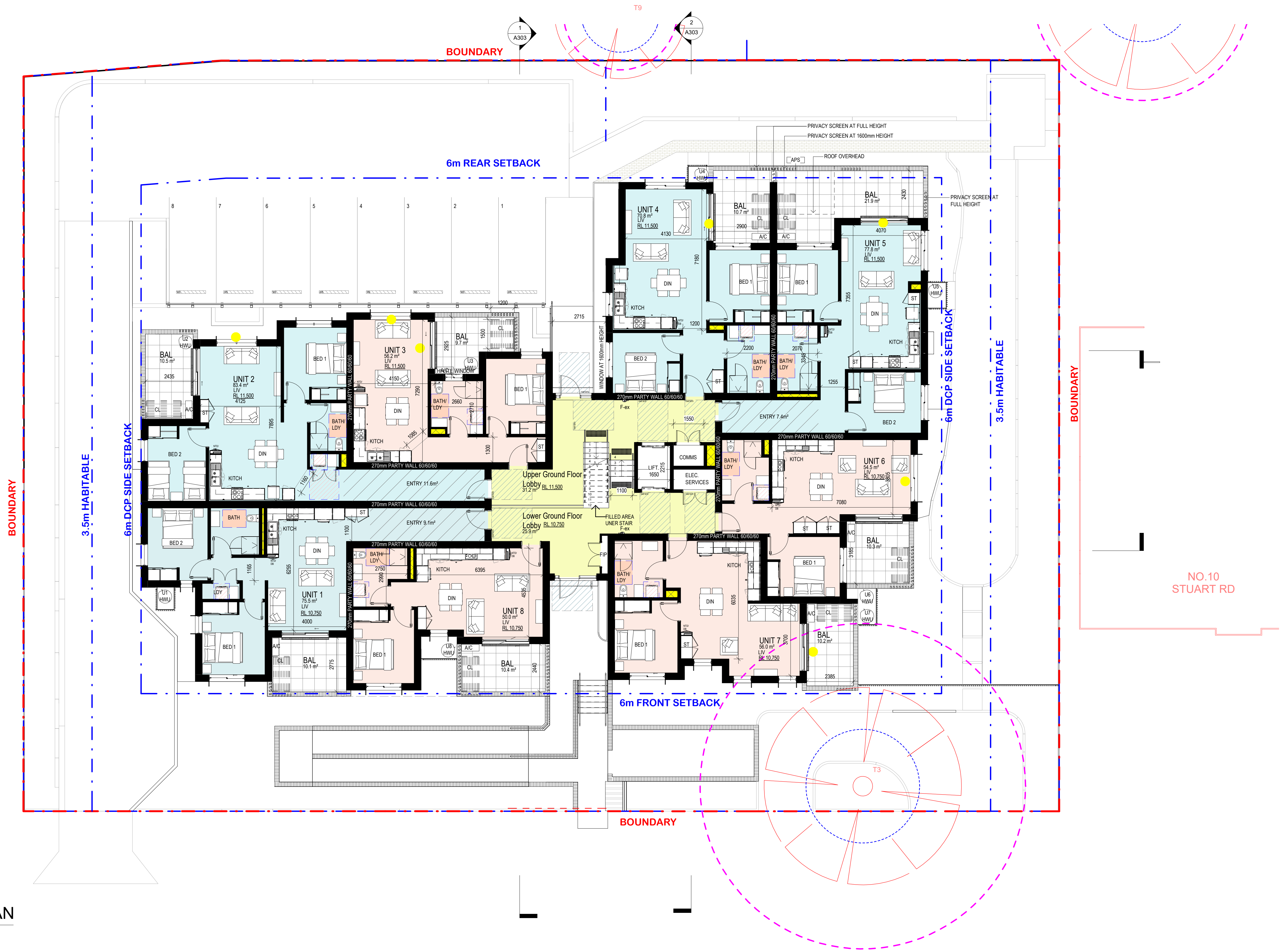


# Homes NSW

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PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGVVX

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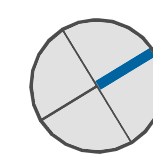
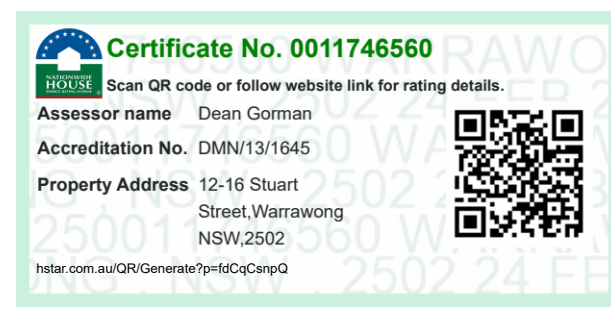
1 GROUND FLOOR PLAN  
1 : 100

Rev	Date	AMENDEMENTS	Ckd
A	05/07/24	PRELIM STAGE B DRAFT	SA
B	06/08/24	TO CONSULTANT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

Legend
BOUNDARY
SETBACK
TPZ
SRZ
DEMOLISHED
EXISTING/RETAINED

1 BEDROOM UNIT
2 BEDROOM UNIT
SOLAR AMENITY >2hrs (9am - 3pm, 21st Jun)
LETTERBOXES
OVERHEAD
INSTANTANEOUS ELECTRIC
HOT WATER UNIT

AC	A/C UNIT
CL	A/C UNIT
FEN-1	FENCE - COSI/HWU's
FEN-2	BOUNDARY FENCE
FW	FLOOR WASTE
WM	WATER METER
SP	SOLAR PANELS
SS	SUN SHROUD
ST	STORAGE



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Project Name  
GENERAL HOUSING UNITS  
WARRARONG  
12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
GROUND FLOOR PLAN

Date:  
16/05/25  
Drawn:  
Author:  
Checked:  
Checker:  
Authorised:  
Approver:

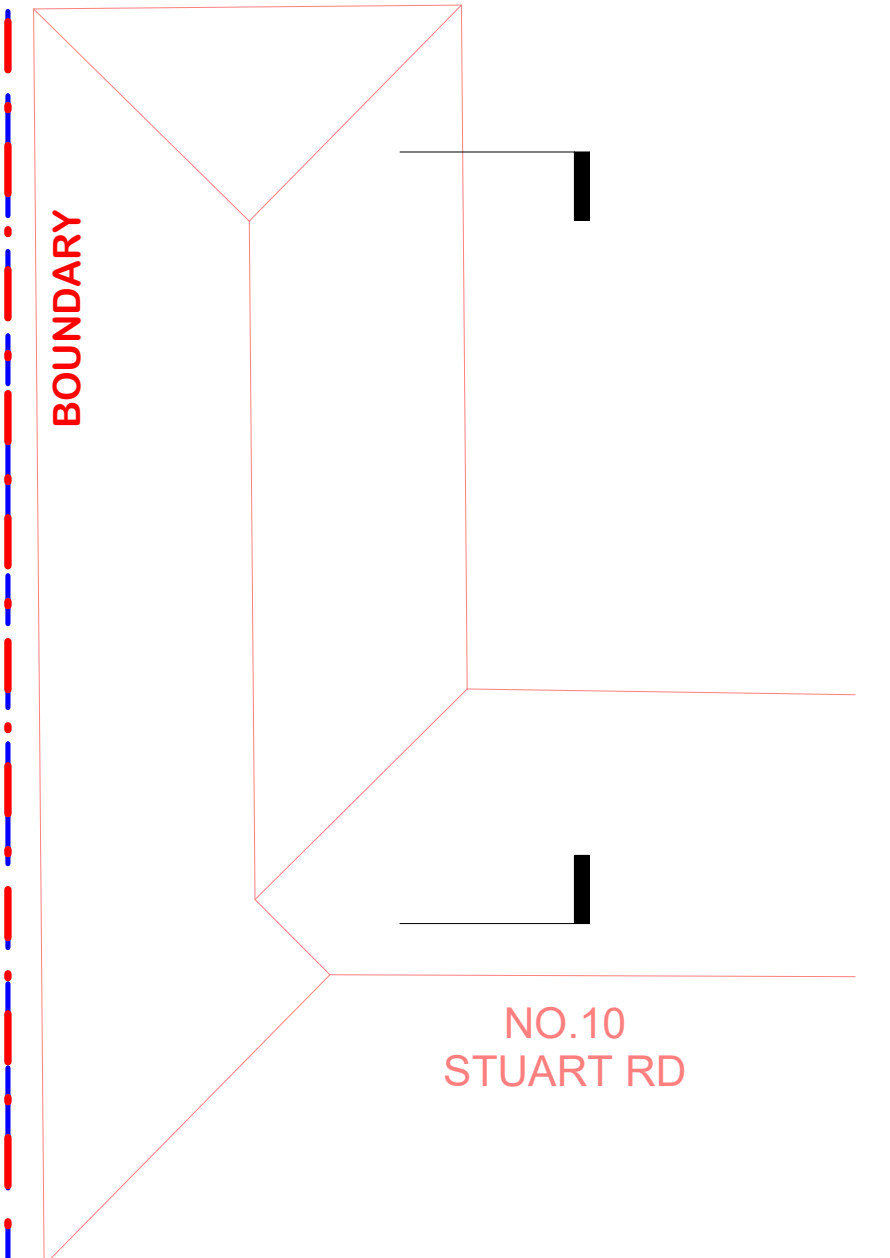
Scale  
Project No.  
BGVX  
Revision  
H  
Drawing No.  
A201

# Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



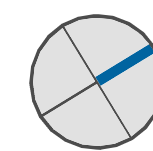
1 FIRST FLOOR PLAN  
1 : 100

Rev	Date	AMENDMENTS	Ckd
A	05/07/24	PRELIM STAGE B DRAFT	SA
B	06/08/24	TO CONSULTANT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

Legend
BOUNDARY
SETBACK
TPZ
SRZ
DEMOLISHED
EXISTING/RETAINED

1 BEDROOM UNIT
2 BEDROOM UNIT
SOLAR AMENITY >2hrs (9am - 3pm, 21th Jun)
LETTERBOXES
OVERHEAD
INSTANTANEOUS ELECTRIC
HOT WATER UNIT

AC	A/C UNIT
CL	A/C UNIT
FEN-1	FENCE - COS/HWU's
FEN-2	BOUNDARY FENCE
FW	FLOOR WASTE
WM	WATER METER
SP	SOLAR PANELS
SS	SUN SHROUD
ST	STORAGE



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e architects@sarm.com.au  
ABN 26 000 663 623  
nominated architects:  
Stephen Arlton  
reg. no. 7645  
Robert McNamara  
reg. no. 7271

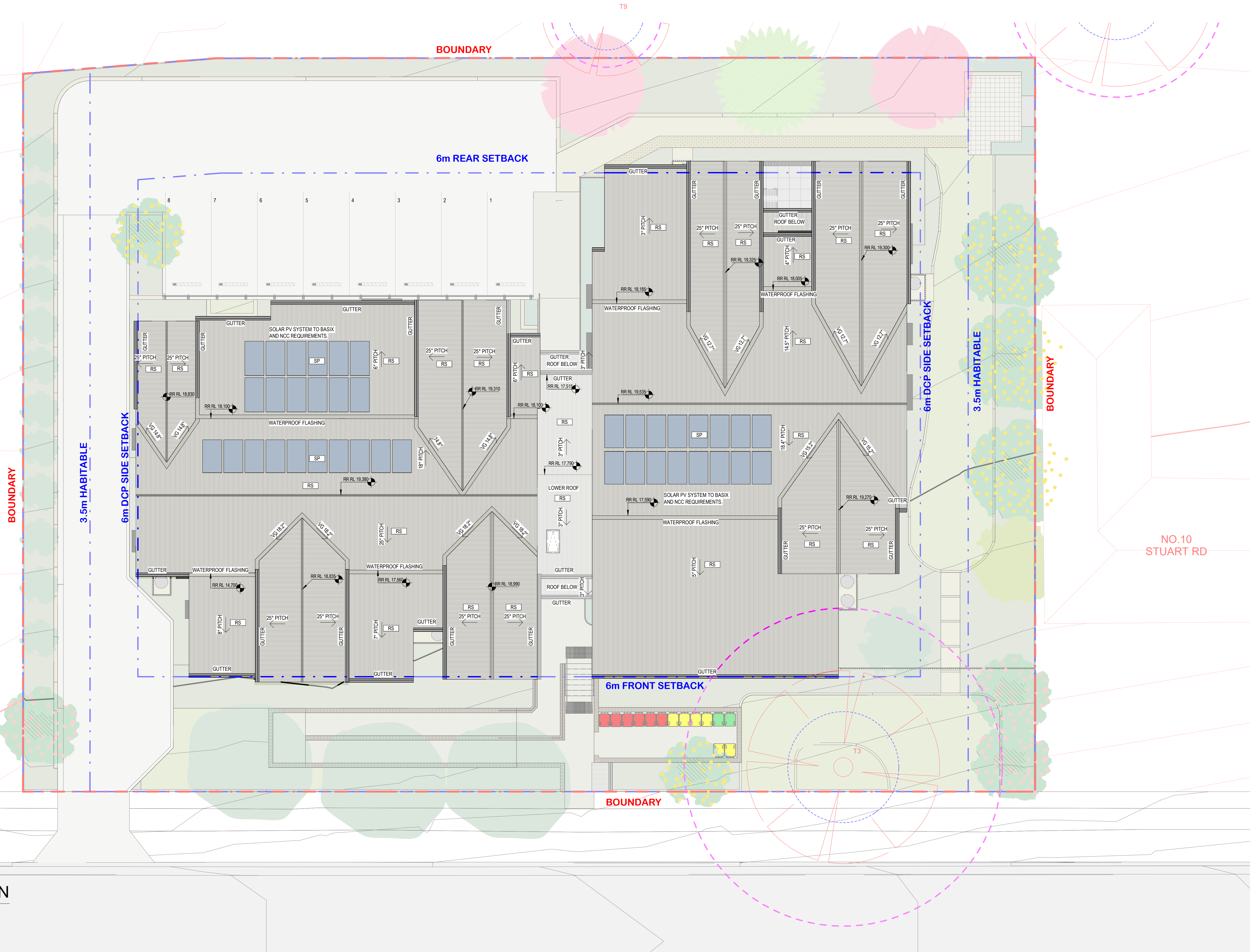
Project Name  
GENERAL HOUSING UNITS  
WARRARONG  
12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
FIRST FLOOR PLAN

Date: 16/05/25  
Drawn: BGYVX  
Author: BGYVX  
Checked: H  
Checker: H  
Authorised Approver: A202

Date: 16/05/25  
Drawn: BGYVX  
Author: BGYVX  
Checked: H  
Checker: H  
Authorised Approver: A202

Scale  
Project No. BGYVX  
Revision  
Drawing No. A202

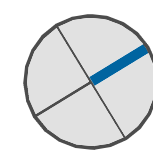




Rev	Date	AMENDEMENTS	Ckd	Legend
A	05/07/24	PRELIM STAGE B DRAFT	SA	1 BEDROOM UNIT
B	06/08/24	TO CONSULTANT	SA	2 BEDROOM UNIT
C	23/08/24	STAGE B	SA	SOLAR AMENITY >2hrs (9am - 3pm, 21th Jun)
D	16/10/24	STAGE C PRELIM	SA	LETTERBOXES
E	18/11/24	STAGE C	SA	OVERHEAD
G	10/01/25	STAGE C	SA	INSTANTANEOUS ELECTRIC
H	16/05/25	STAGE C	SA	HOT WATER UNIT

Legend
BOUNDARY
SETBACK
TPZ
SRZ
DEMOLISHED
EXISTING/RETAINED

AC	A/C UNIT
CL	A/C UNIT
FEN-1	FENCE - COS/HWU's
FEN-2	BOUNDARY FENCE
FW	FLOOR WASTE
WM	WATER METER
SP	SOLAR PANELS
SS	SUN SHROUD
ST	STORAGE



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nominated architects:  
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Robert McNamara  
reg. no. 7271

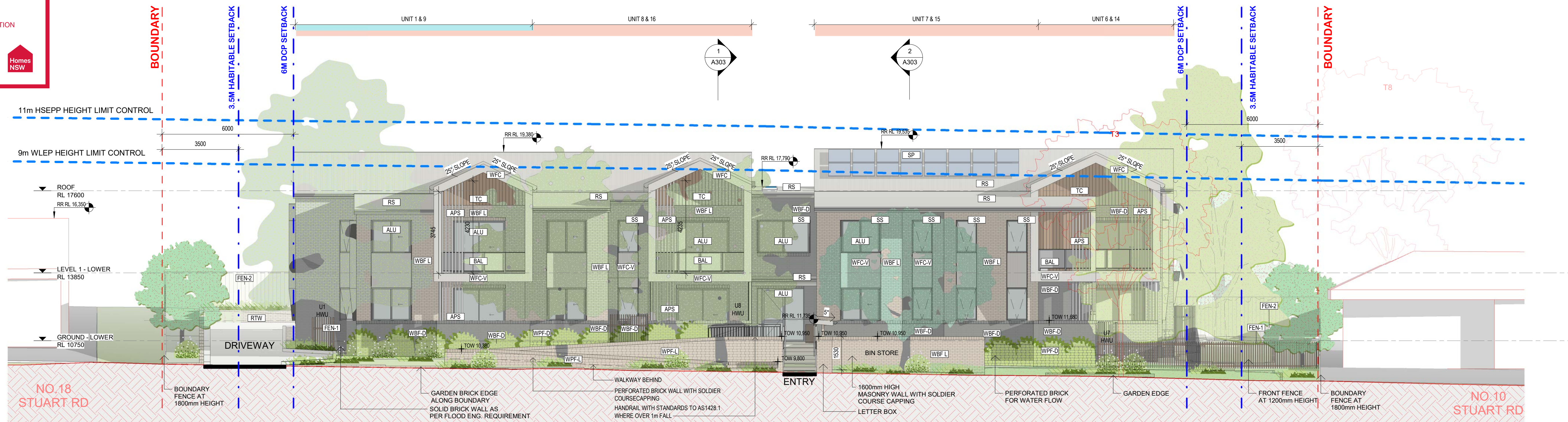
Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**

12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004

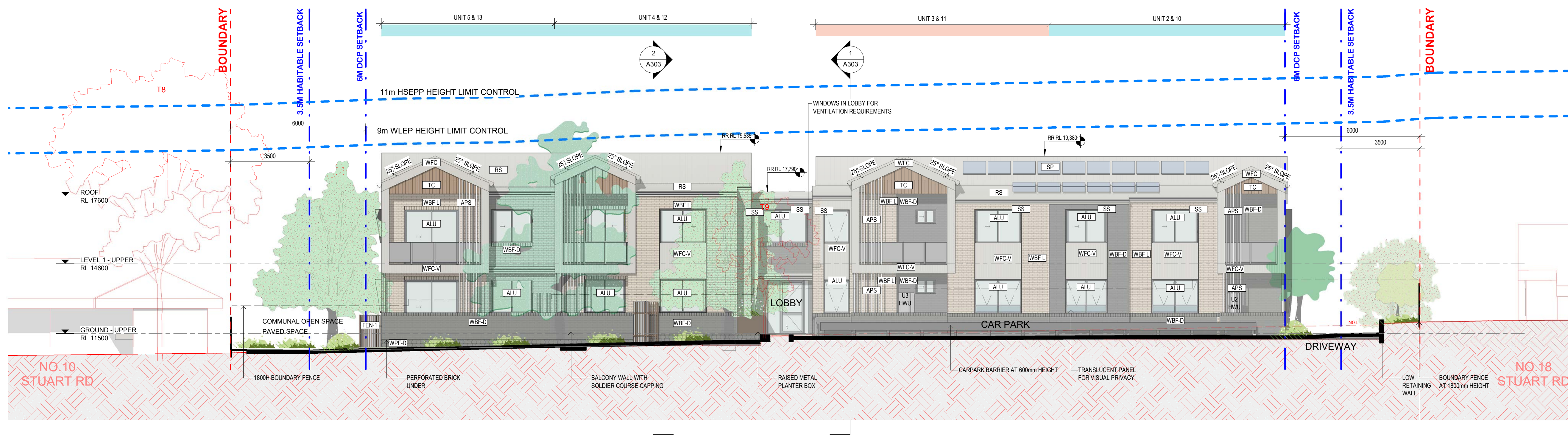
Sheet Title  
**ROOF PLAN**

Date: 16/05/25  
Scale: Project No. BGYVX  
Author: H  
Checked: Revision  
Checker: Drawing No.  
Authorised: A203  
Approver:







1 EASTERN ELEVATION STUART RD  
1 : 100



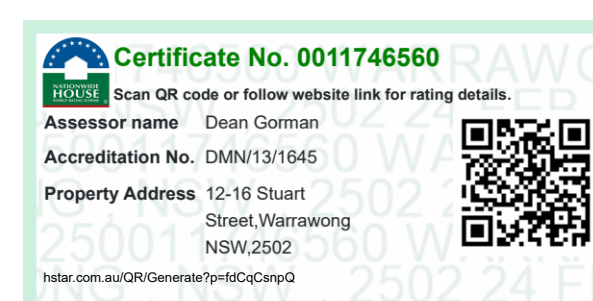
## 2 WESTERN ELEVATION

Rev	Date	AMENDMENTS	Ckd	
B	06/08/24	TO CONSULTANT	SA	
C	23/08/24	STAGE B	SA	
D	16/10/24	STAGE C PRELIM	SA	
E	18/11/24	STAGE C	SA	
G	10/01/25	STAGE C	SA	
H	16/05/25	STAGE C	SA	

 BOUNDARY  
 SETBACK  
 NGL NATURAL GROUND LINE  
 HEIGHT LIMIT CONTROL

AC	A/C UNIT
ALU	ALUMINIUM WINDOW FRAME
CL	A/C UNIT
FEN-1	FENCE - COS/ HWU's
FEN-2	BOUNDARY FENCE
HWU	HOT WATER UNIT
SP	SOLAR PANELS
SS	SUN SHROUD
TC	ALUMINIUM CLADDING
WM	WATER METER
WPF	PERFORATED BRICK WALL

PROPOSED NEW TREES ARE SHOWN AT THEIR MINIMUM MATURE HEIGHT  
REFER TO LANDSCAPE PLANT LIST SCHEDULE.



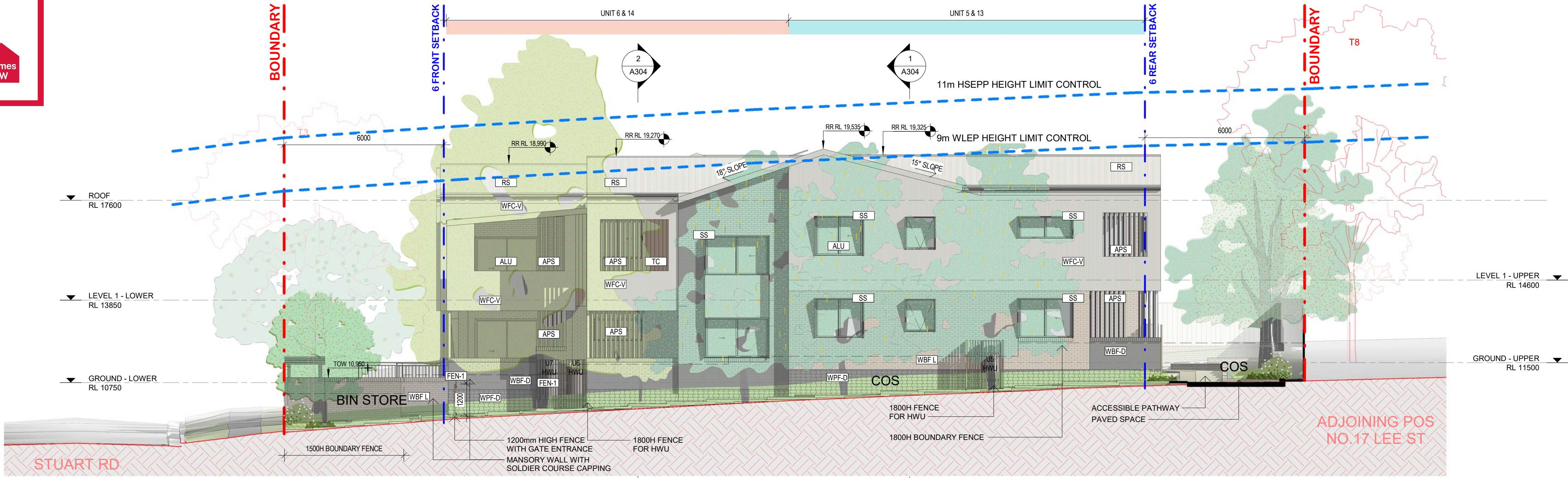


# Homes NSW

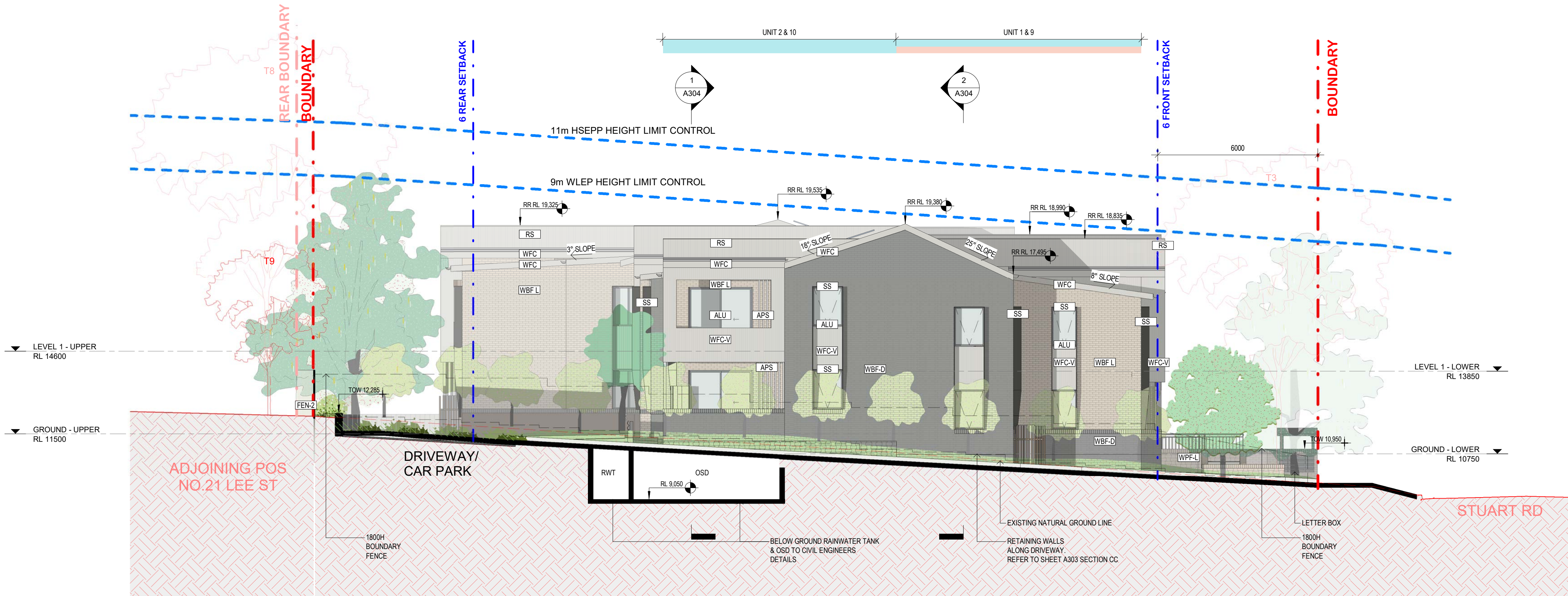
APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



1 NORTHERN ELEVATION  
1 : 100



2 SOUTHERN ELEVATION  
1 : 100

Rev	Date	AMENDMENTS	Ckd
B	06/08/24	TO CONSULTANT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

Legend
BOUNDARY
SETBACK
NGL NATURAL GROUND LINE
HEIGHT LIMIT CONTROL

AC	A/C UNIT
ALU	ALUMINUM WINDOW FRAME
CL	A/C UNIT
FEN-1	FENCE - COS/HWU's
FEN-2	BOUNDARY FENCE
HWU	HOT WATER UNIT
SP	SOLAR PANELS
SS	SUN SHROUD
TC	ALUMINUM CLADDING
WM	WATER METER
WPF	PERFORATED BRICK WALL

PROPOSED NEW TREES ARE SHOWN AT THEIR MINIMUM MATURE HEIGHT.  
REFER TO LANDSCAPE PLANT LIST SCHEDULE.



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nominated architects:  
Stephen Arlton  
reg. no. 7645  
Robert McNamara  
reg. no. 7271

**STAGE C**

Project Name  
**GENERAL HOUSING UNITS  
WARRAWONG**

LOTS 10 - 12 | DP 35004  
Sheet Title  
**ELEVATIONS NORTH & SOUTH**

Date: 16/05/25  
Scale: Project No. BGYVX  
Author: H  
Checked: Revision  
Checker: Drawing No. A301  
Approver:





ELEVATION - STUART ST

1 : 100

Material Exterior Schedule			
CODE	Material: Image	Material: Description	COLOUR
FEN-1		Aluminium Batten Fences Height: 1200mm/ Front Fencing: 1800mm/ HWU	Brown
FEN-2		Boundary Fence - 1.8m Colorbond Fence	Light Beige
APS		Aluminium Battens metallic-look powdercoat finishes	White
WFC		Boarded Finish Colour to match WFC-V	Shale Grey
WFC-V		Vertical Boarded Finish	Shale Grey
RTW		Retaining Wall Block	Light Blode
TC		Aluminium Vertical Slat Panels Balcony internal wall and ceiling	Brown
WBF L		Masonry	Blonde
WBF-D		Masonry	Dark Grey
WPF-D		Masonry Hit and Miss Brickwork for flood overflow to subfloor areas	Dark Grey To match WBF-D
WPF-L		Masonry Hit and Miss Brickwork	Blonde
RS		Metal Sheet Roofing	Light Grey
ALU		Aluminium window and door frame system	Grey
SS		Caprice Series with Mirage Series for Horizontal louvred portion. Vertical members: Caprice 334 Panel Horizontal members: Mirage MSG-605-30	Aluminium Sun Shade
BAL		Charcoal frame w/ translucent glazing vwith tint to match frame.	Charcoal

Rev	Date	AMENDEMENTS	Ckd
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA



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reg. no. 7271

Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**

**12 - 16 STUART ROAD, WARRARONG**  
LOTS 10 - 12 | DP 35004  
Sheet Title  
**MATERIAL & FINISH SCHEDULE**

Date:  
**16/05/25**

Drawn:  
**Author**

Checked  
**Checker**

Authorised  
**Approver**

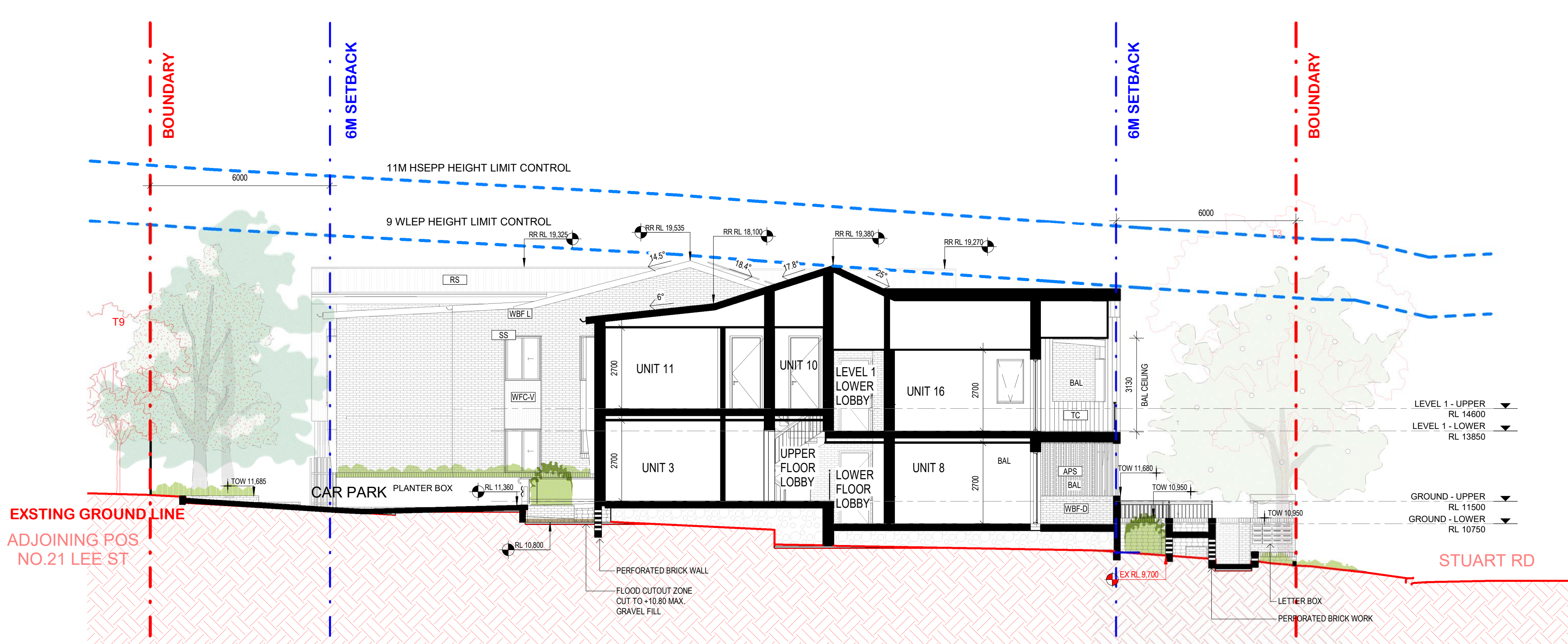
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Project No.  
**BGYVX**

Revision  
**H**

Drawing No.  
**A302**

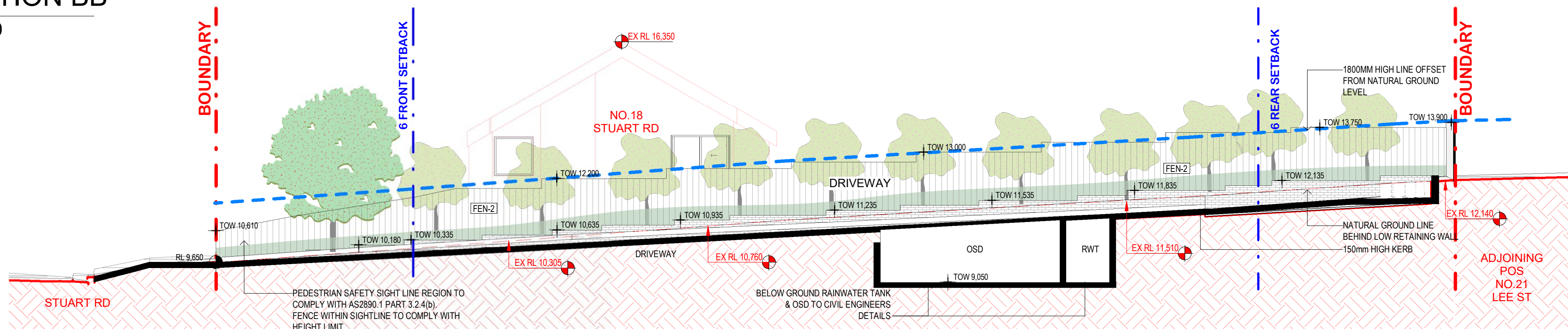




1 SECTION AA  
1 : 100



2 SECTION BB  
1 : 100



3 SECTION CC  
1 : 100

Rev	Date	AMENDMENTS	Ckd
B	06/08/24	TO CONSULTANT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

Legend	Symbol	Description
BOUNDARY	Red dashed line	BOUNDARY
SETBACK	Blue dashed line	SETBACK
NGL NATURAL GROUND LINE	Green dashed line	NGL NATURAL GROUND LINE
HEIGHT LIMIT CONTROL	Blue dashed line with arrows	HEIGHT LIMIT CONTROL
AC	Aluminum window frame	A/C UNIT
ALU	Aluminum window frame	A/C UNIT
CL	Aluminum window frame	A/C UNIT
FEN-1	Fence - COS/HWU's	BOUNDARY FENCE
FEN-2	Fence - COS/HWU's	BOUNDARY FENCE
HU	Hot water unit	HOT WATER UNIT
SP	Solar panels	SOLAR PANELS
SS	Sun shroud	SUN SHROUD
TC	Aluminum cladding	ALUMINUM CLADDING
WM	Water meter	WATER METER
WPF	Perforated brick wall	PERFORATED BRICK WALL

PROPOSED NEW TREES ARE SHOWN AT THEIR MINIMUM MATURE HEIGHT.  
REFER TO LANDSCAPE PLANT LIST SCHEDULE.



SARM Architects

STAGE C

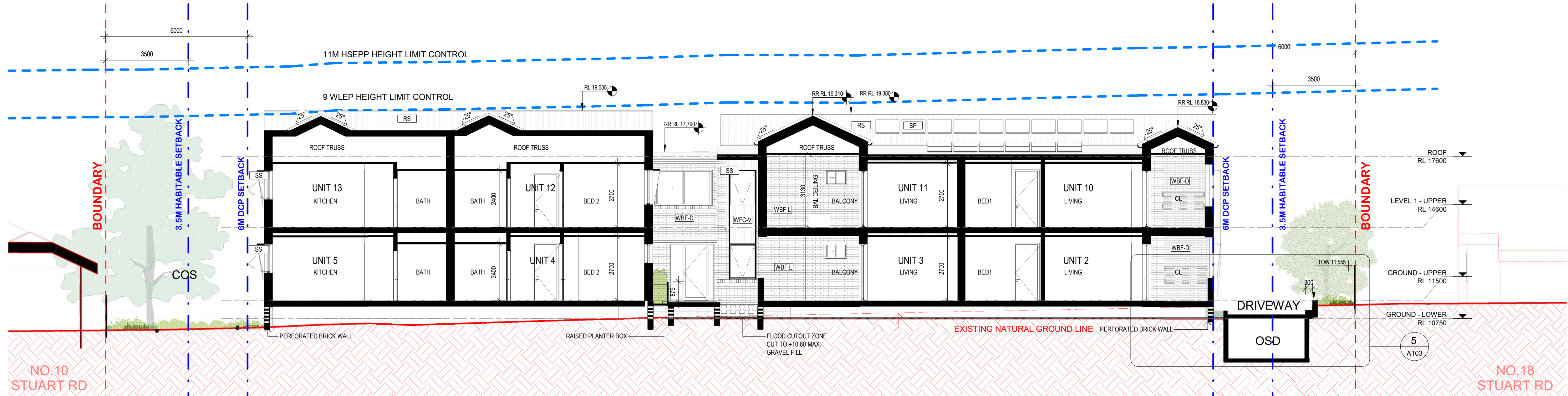
Project Name  
GENERAL HOUSING UNITS  
WARRAWONG

12 - 16 STUART ROAD, WARRAWONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
SECTIONS - SHEET 1

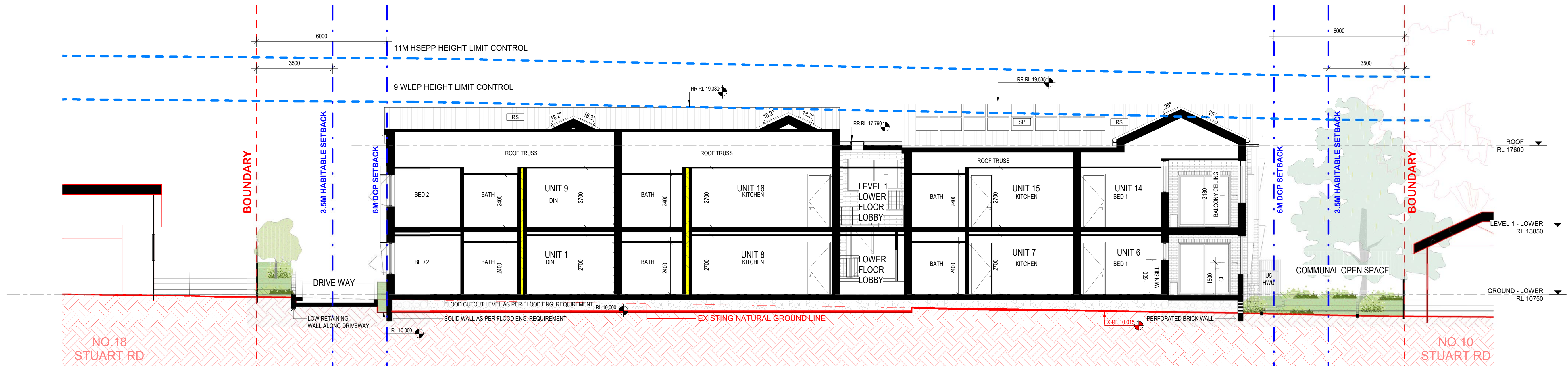
Date: 16/05/25  
Drawn: BGYVX  
Author: BGYVX  
Checked: H  
Checker: H  
Approved: H

Scale: Project No. BGYVX  
Revision: H  
Drawing No. A303





1 SECTION 01  
1 : 100



2 SECTION 02  
1 : 100

Rev	Date	AMENDMENTS	Ckd
B	06/08/24	TO CONSULTANT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

Legend
BOUNDARY
SETBACK
NGL NATURAL GROUND LINE
HEIGHT LIMIT CONTROL

AC	A/C UNIT
ALU	ALUMINUM WINDOW FRAME
CL	A/C UNIT
FEN-1	FENCE - COS/HWU's
FEN-2	BOUNDARY FENCE
HWU	HOT WATER UNIT
SP	SOLAR PANELS
SS	SUN SHROUD
TC	ALUMINUM CLADDING
WM	WATER METER
WPF	PERFORATED BRICK WALL

PROPOSED NEW TREES ARE SHOWN AT THEIR MINIMUM MATURE HEIGHT.  
REFER TO LANDSCAPE PLANT LIST SCHEDULE.



SARM Architects

STAGE C

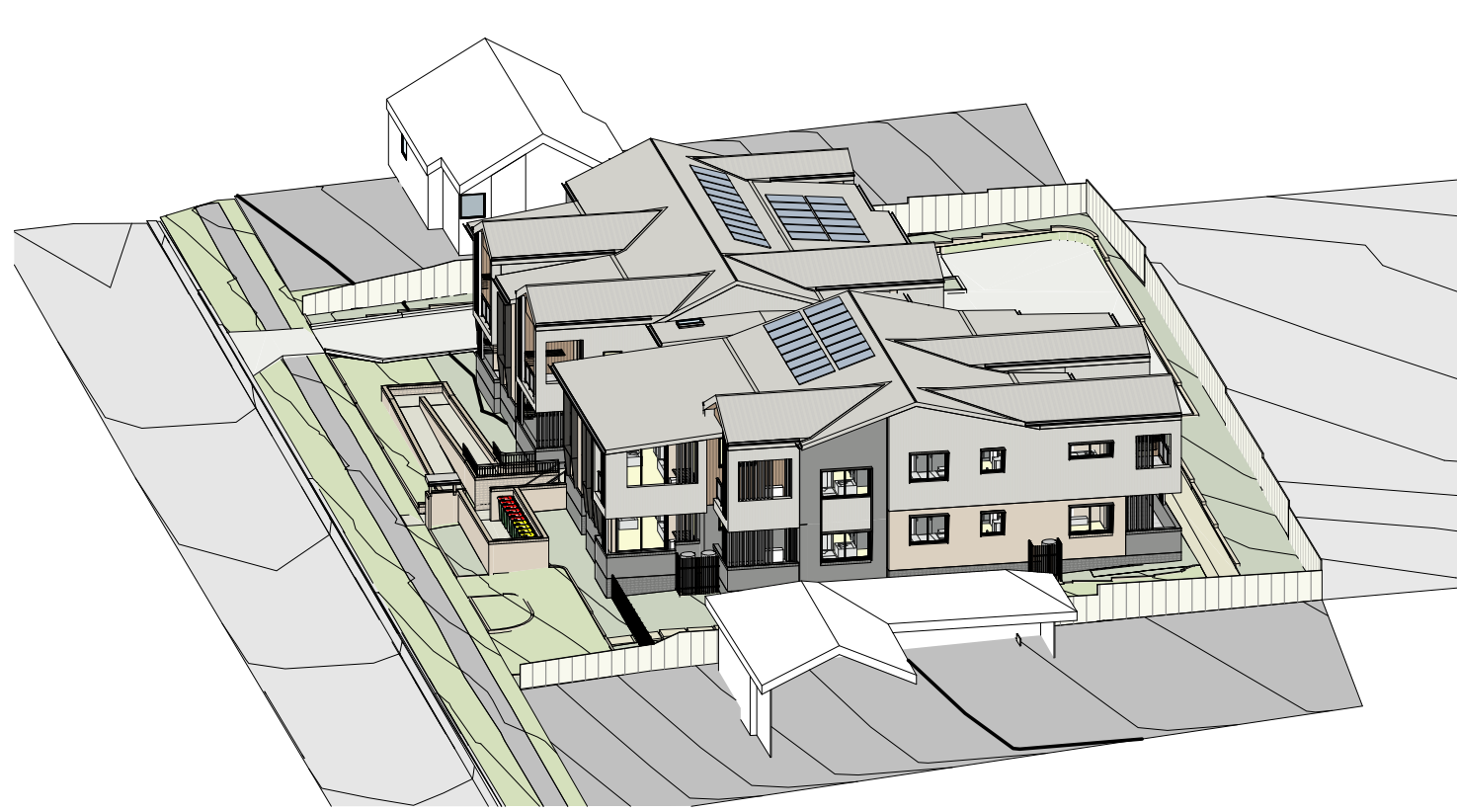
Suite 4, 7 Ridge Street  
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e architects@sarm.com.au  
ABN 26 000 663 623  
nominated architects:  
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reg. no. 7645  
Robert McNamara  
reg. no. 7271

Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**  
12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
**SECTIONS - SHEET 2**

Date:  
**16/05/25**  
Drawn:  
**Author**  
Checked  
**Checker**  
Authorised  
**Approver**

Scale  
Project No.  
**BGVVX**  
Revision  
**H**  
Drawing No.  
**A304**





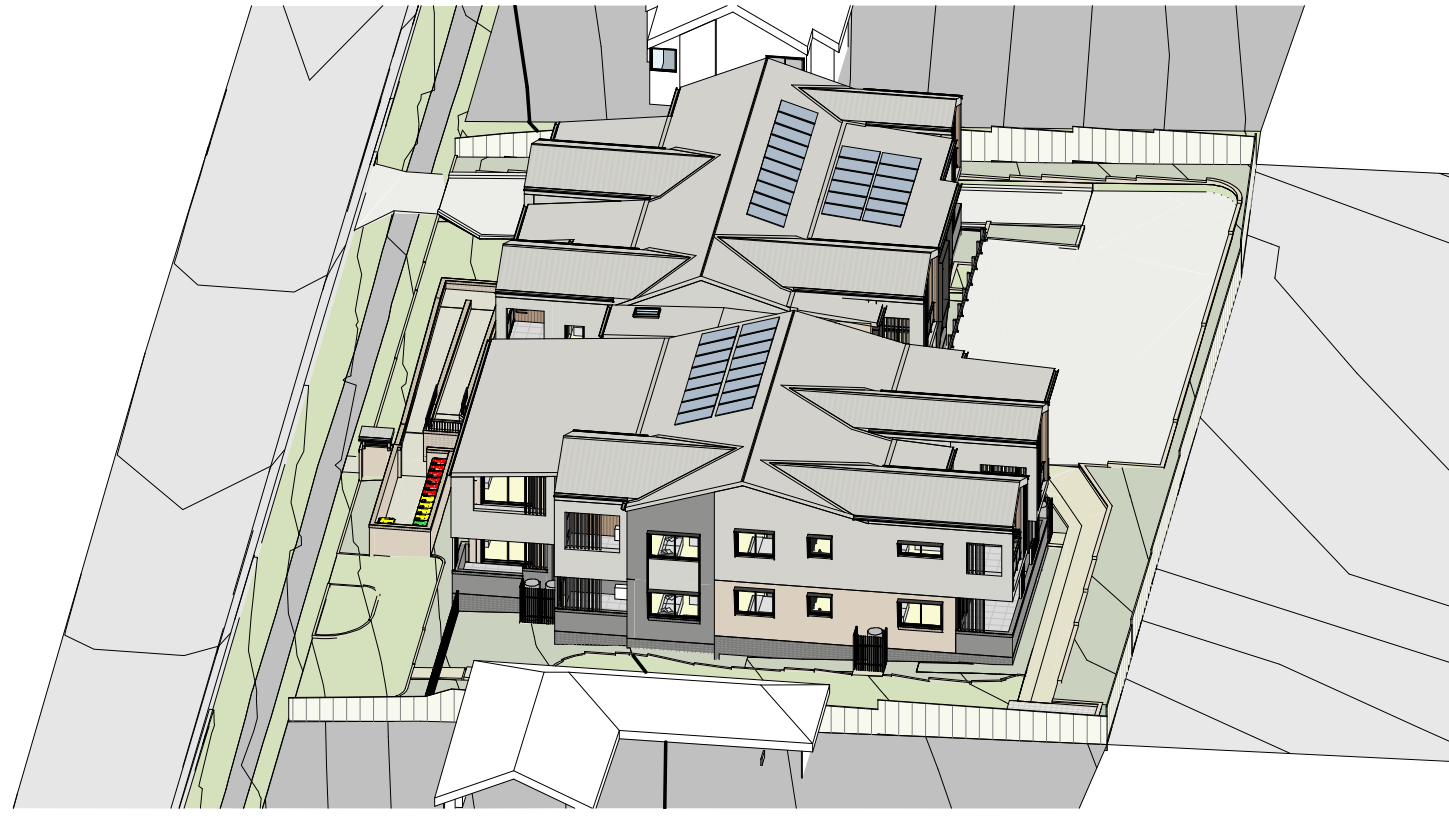
1 VIEW FROM SUN STUDY - JUNE 9am



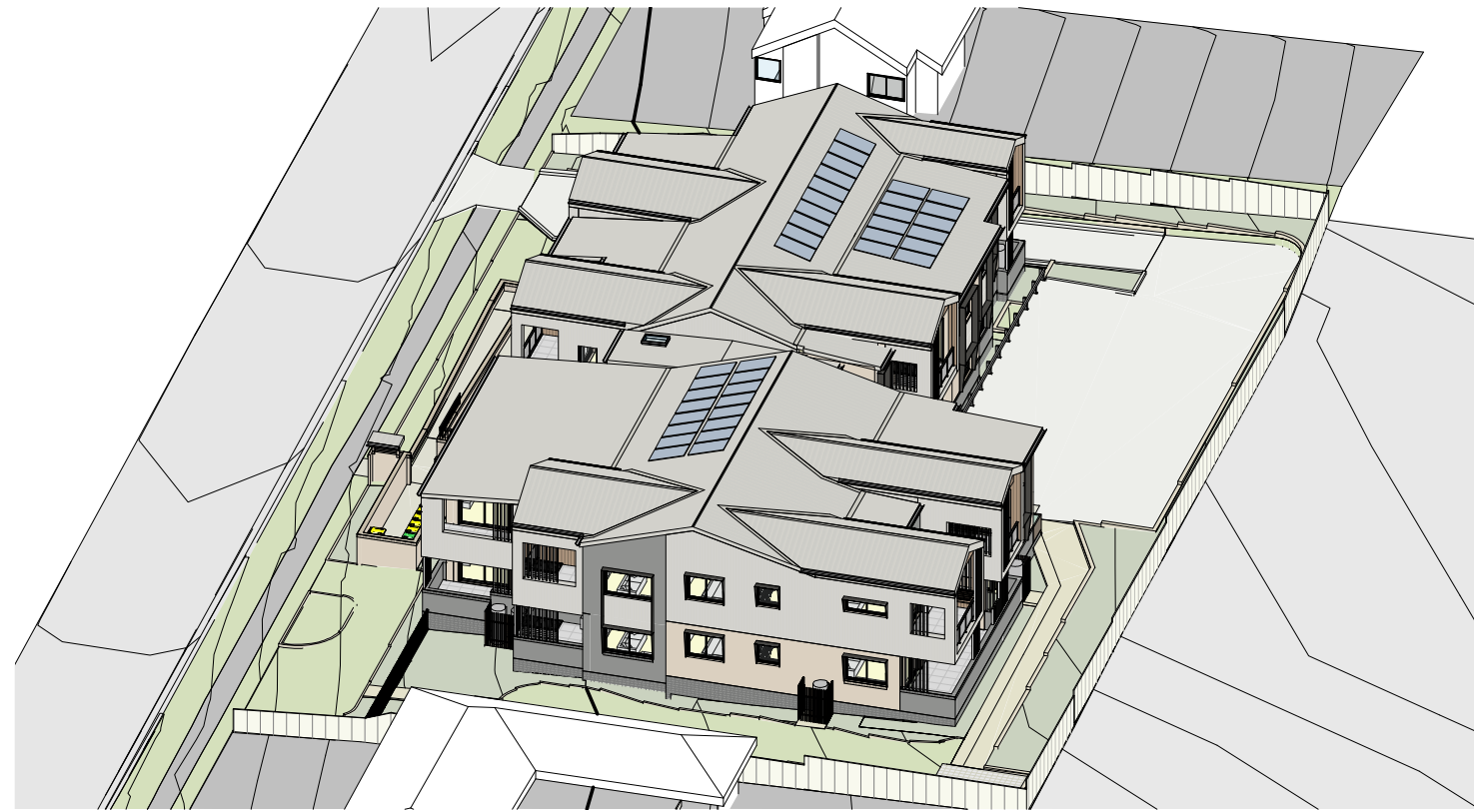
2 VIEW FROM SUN STUDY - JUNE 930am



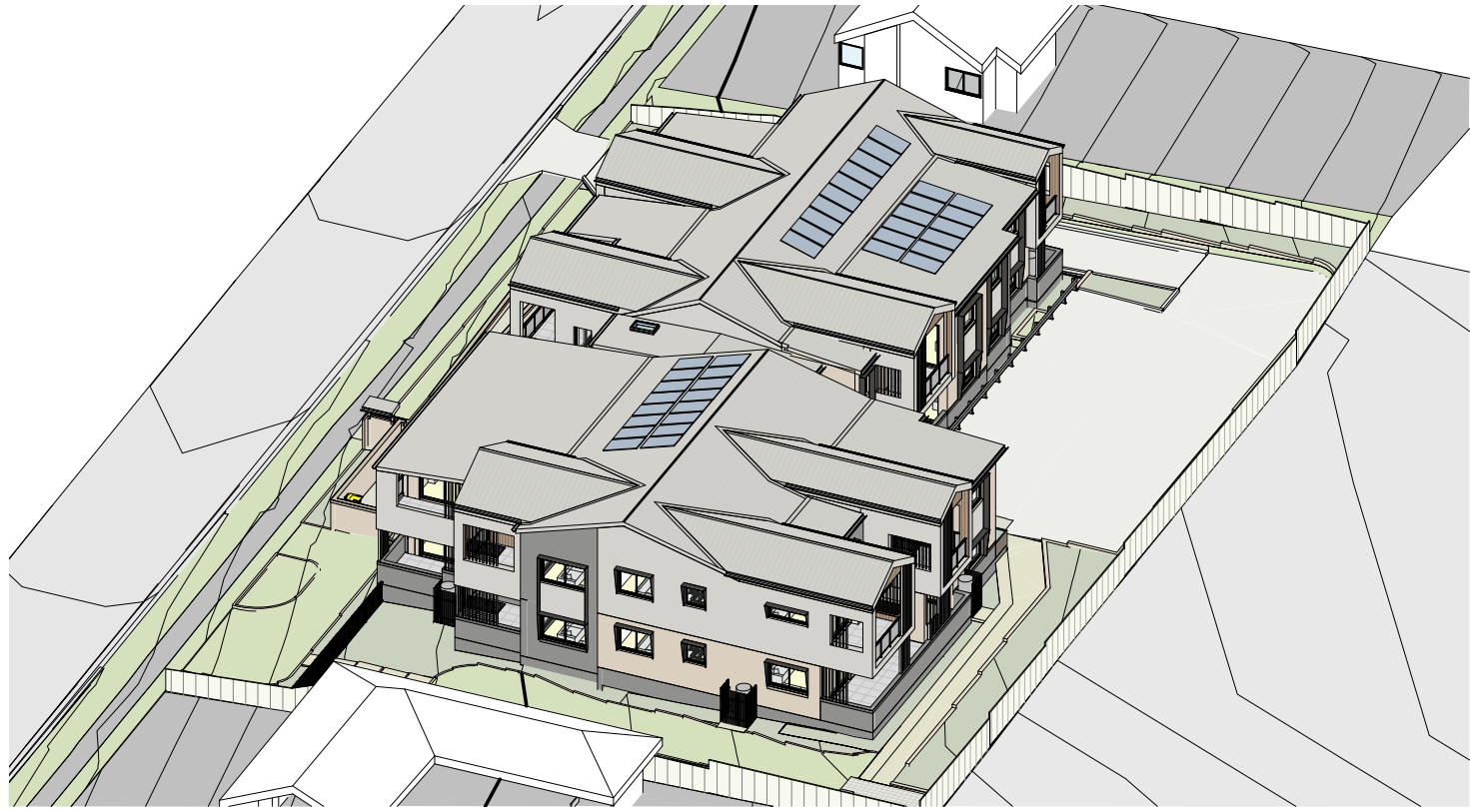
3 VIEW FROM SUN STUDY - JUNE 10am



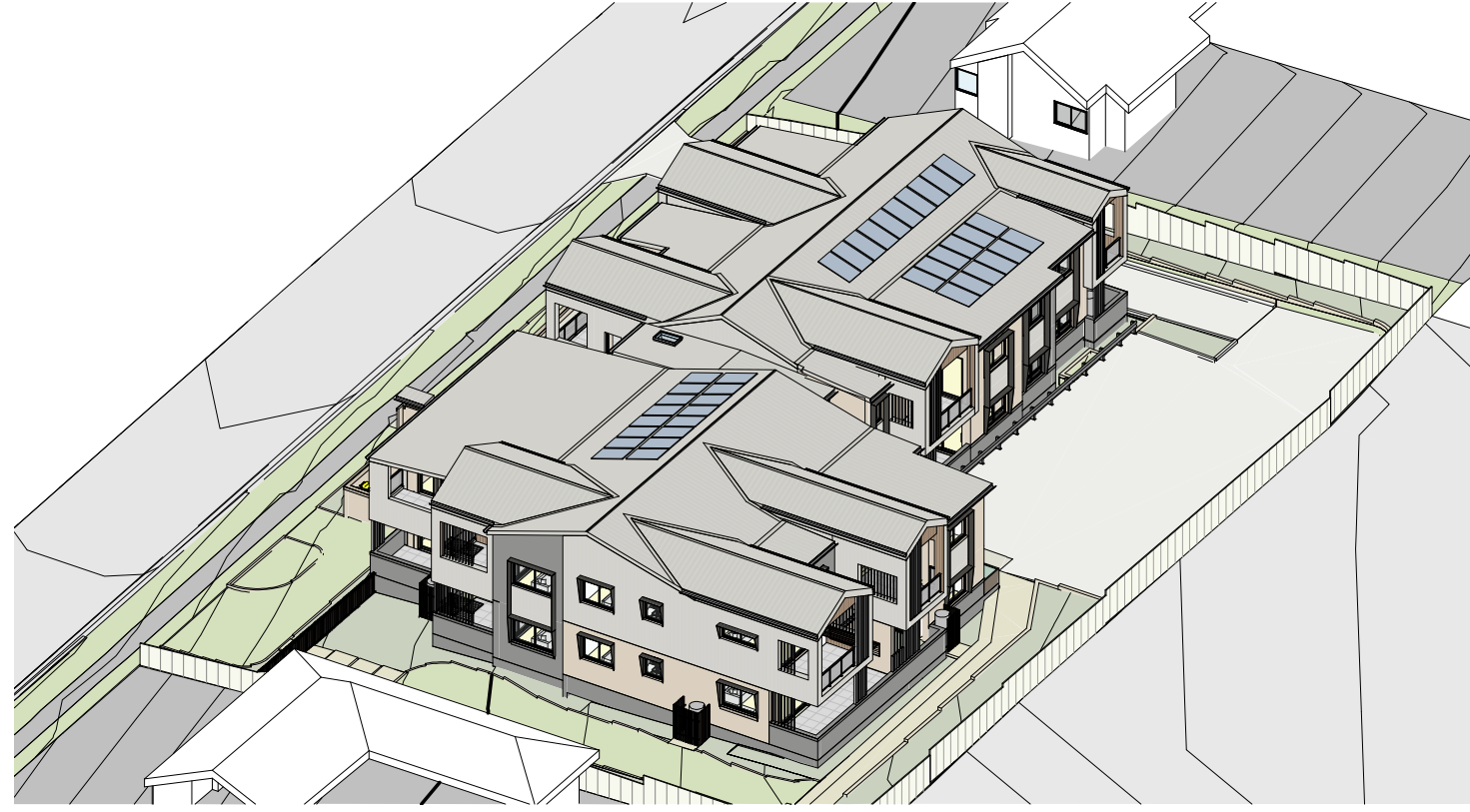
4 VIEW FROM SUN STUDY - JUNE 1030am



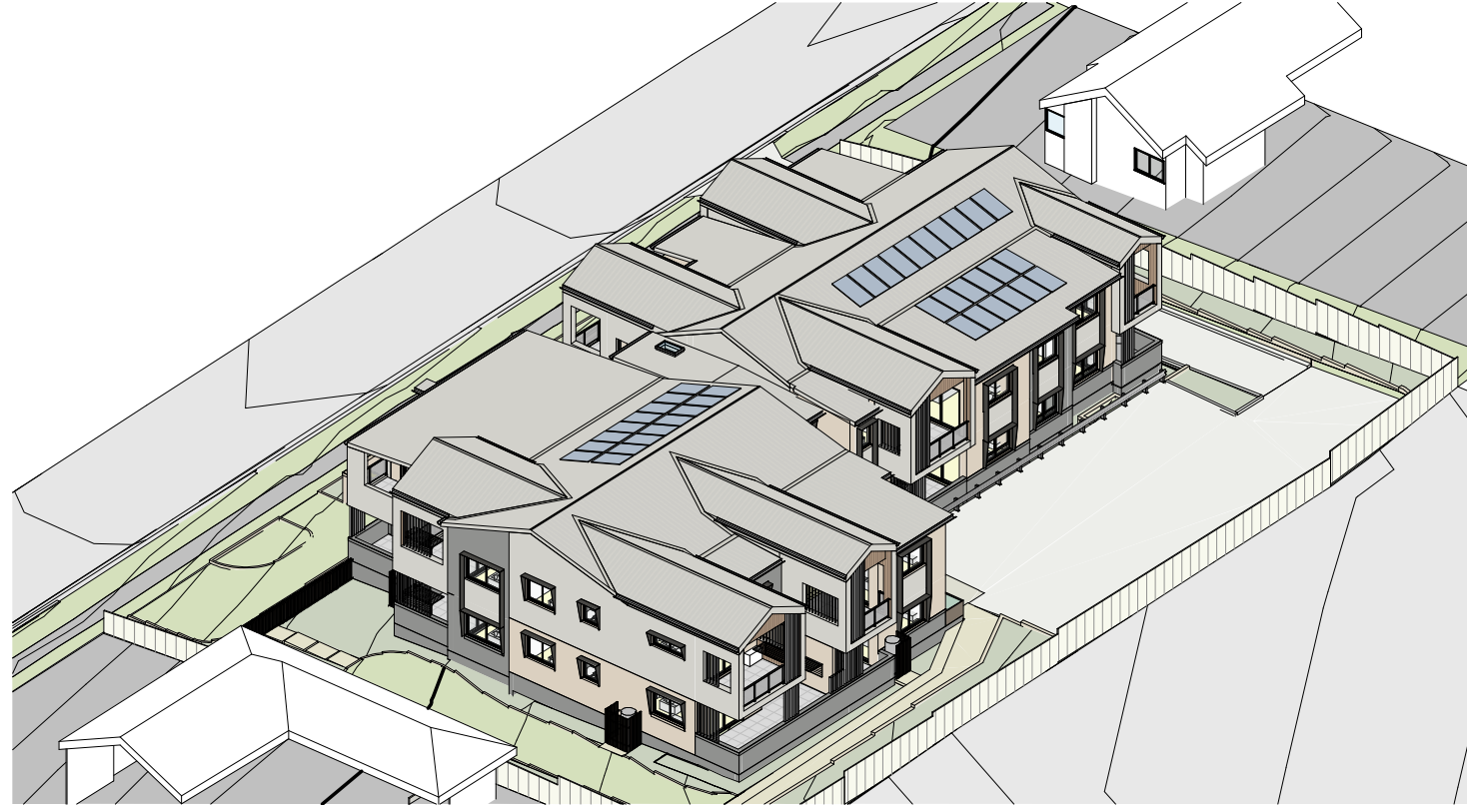
5 VIEW FROM SUN STUDY - JUNE 11am



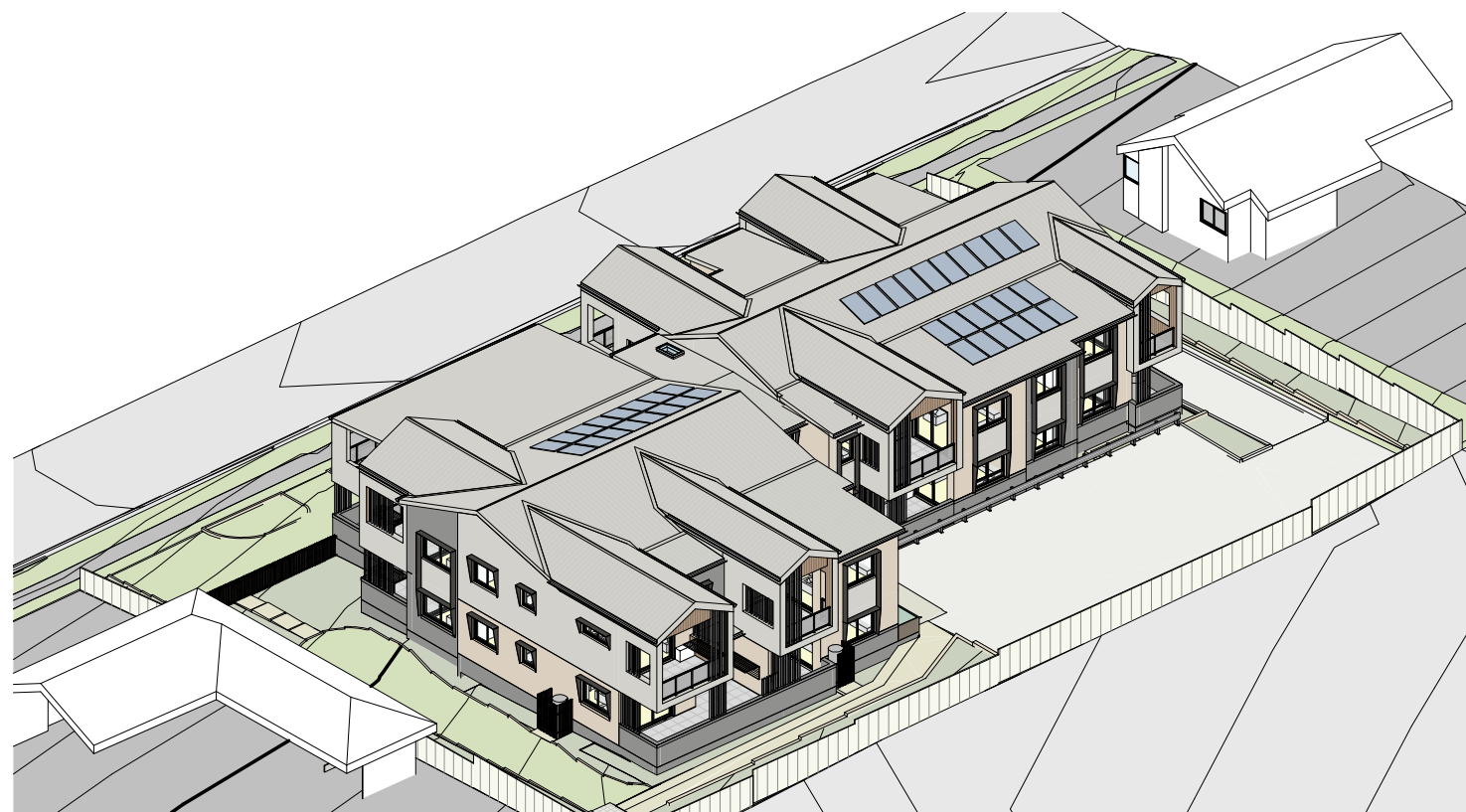
6 VIEW FROM SUN STUDY - JUNE 1130am



7 VIEW FROM SUN STUDY - JUNE 12pm



8 VIEW FROM SUN STUDY - JUNE 1230pm



9 VIEW FROM SUN STUDY - JUNE 1pm



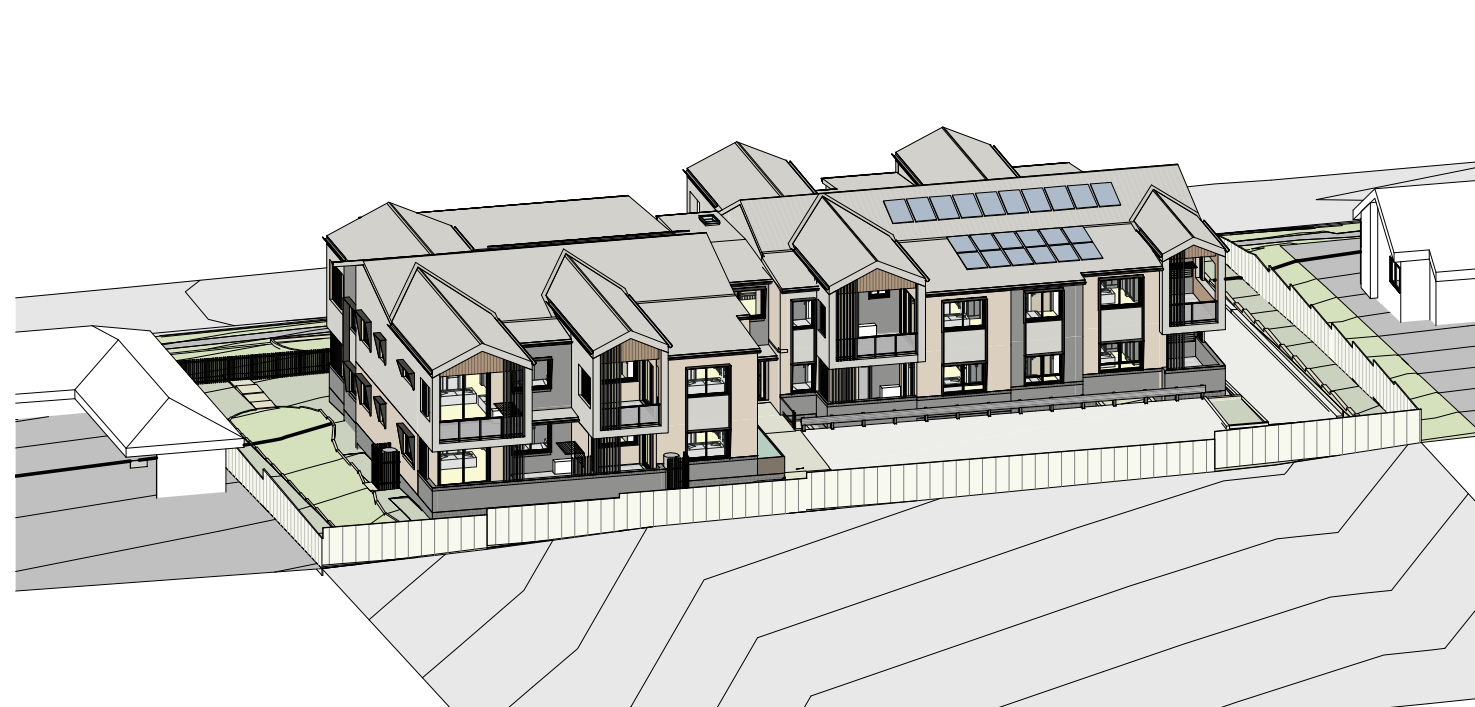
10 VIEW FROM SUN STUDY - JUNE 130pm



11 VIEW FROM SUN STUDY - JUNE 2pm



12 VIEW FROM SUN STUDY - JUNE 230pm



13 VIEW FROM SUN STUDY - JUNE 3pm

	9am	9:30am	10am	10:30am	11am	11:30am	12pm	12:30pm	1pm	1:30pm	2pm	2:30pm	3pm
Unit 1					✓	✓	✓	✓	✓	✓	✓	✓	✓
Unit 2													
Unit 3													
Unit 4													
Unit 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unit 6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unit 7	✓	✓	✓	✓	✓	✓							
Unit 8													
Unit 9													
Unit 10					✓	✓	✓	✓	✓	✓	✓	✓	✓
Unit 11													
Unit 12													
Unit 13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unit 14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unit 15	✓	✓	✓	✓	✓	✓	✓						
Unit 16													

Sunlight Access to Living rooms/ POSs  
in accordance with LAHC Deemed to Satisfy Compliance Part B4.2a



COMPLIANT



NON - COMPLIANT

75% RECEIVE 3 HOURS

75% TO POSs

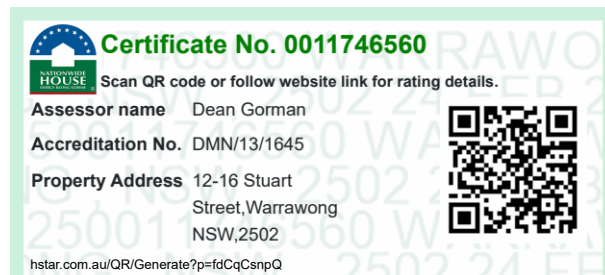
Rev	Date	AMENDMENTS	Ckd
A	05/07/24	PRELIM STAGE B DRAFT	SA
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA

## Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGVVX

Determined by the New South Wales Land and Housing Corporation



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reg. no. 7271

STAGE C

Project Name  
**GENERAL HOUSING UNITS  
WARRARONG**

12 - 16 STUART ROAD, WARRARONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
**VIEW FROM SUN STUDY**

Date: 16/05/25  
Drawn: BGVVX  
Author: BGVVX  
Checked: H  
Checker: H  
Authorised Approver: A401

Scale  
Project No. BGVVX  
Revision  
Drawing No. A401

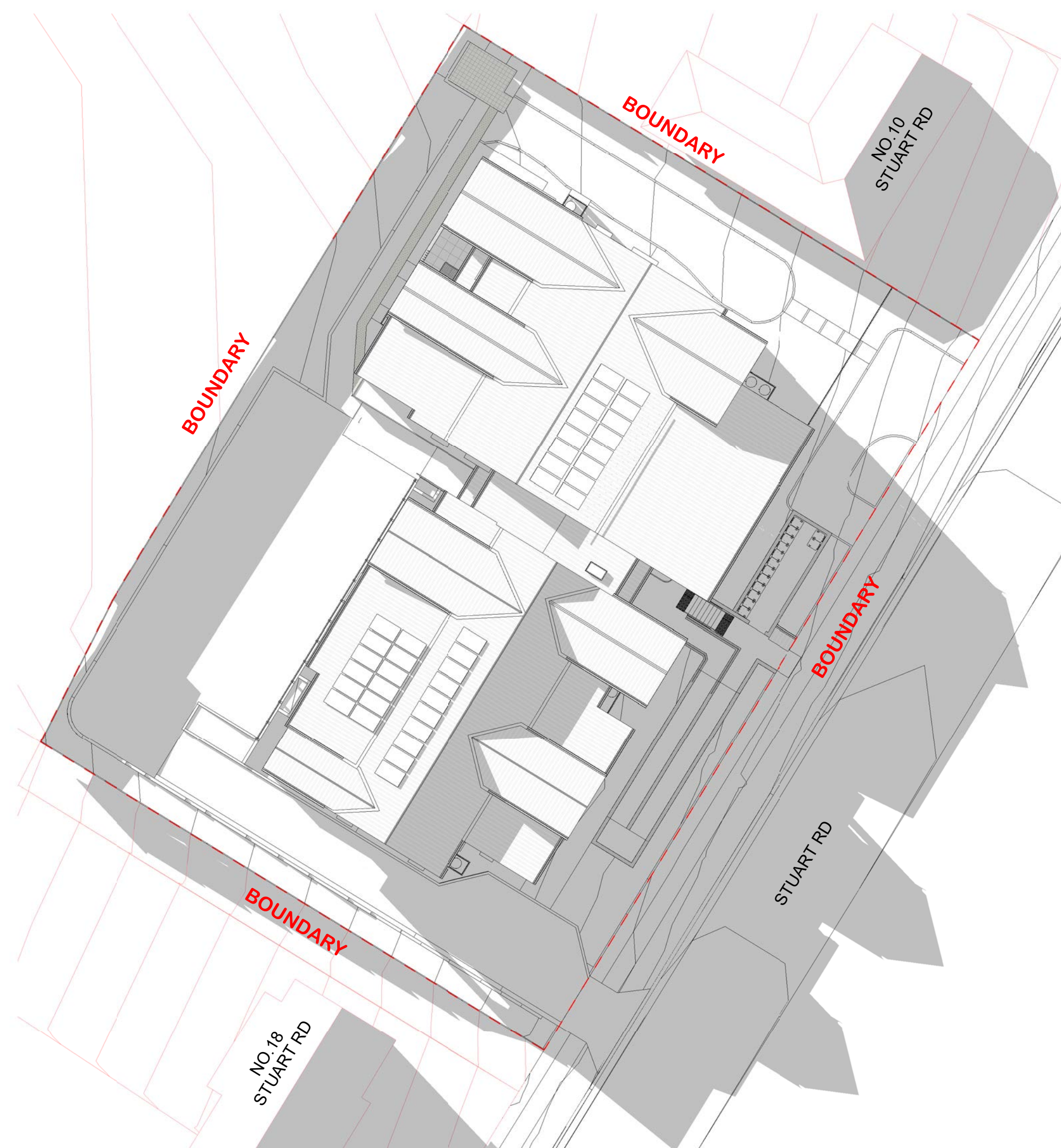
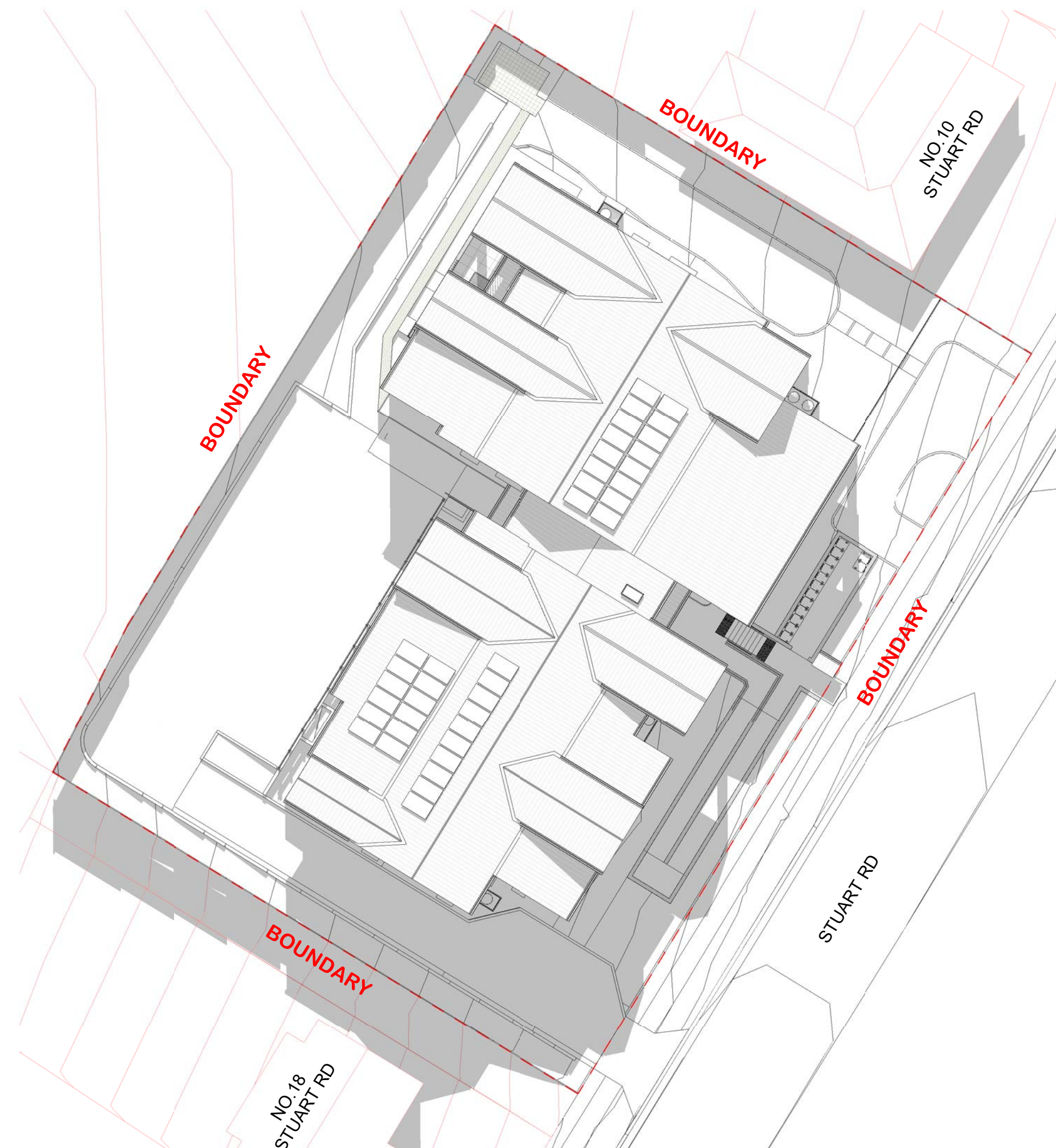
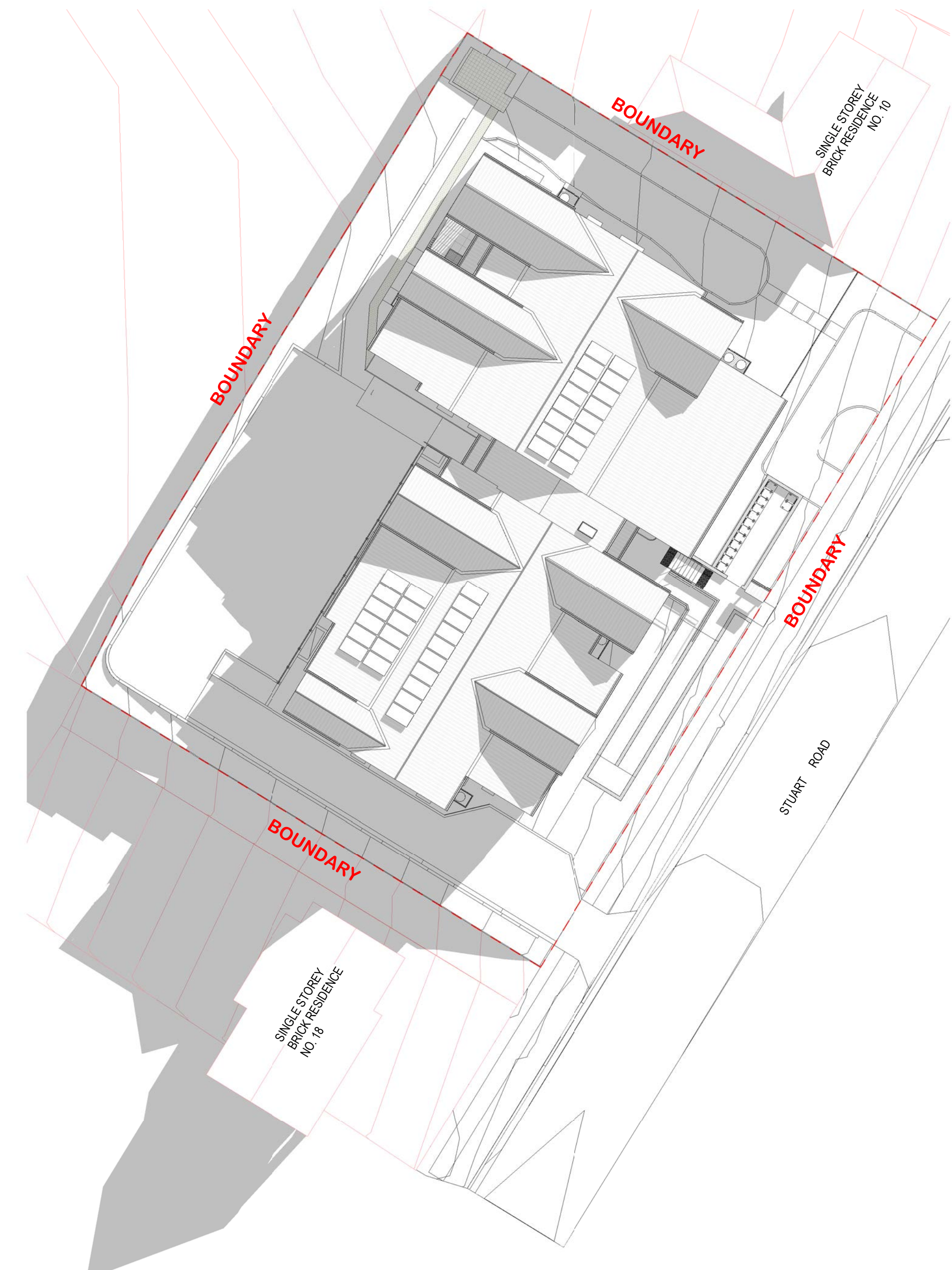


# Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation

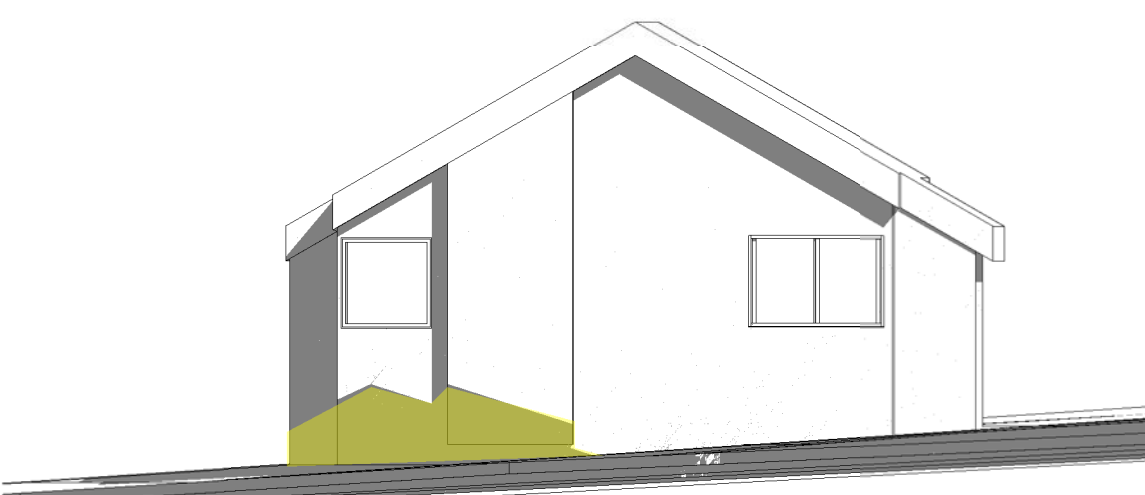


1 21st June 9am  
1 : 250



4 NO.18 SHADOW\_21 June 9am

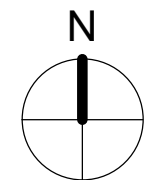
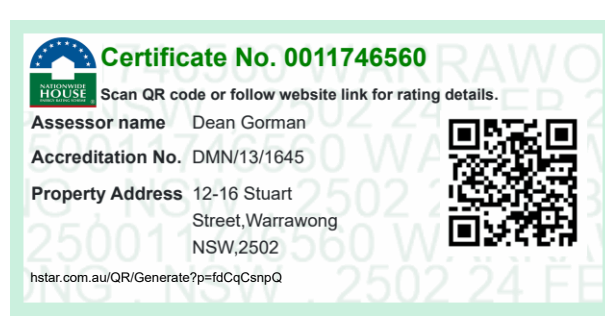
2 21st June 12pm  
1 : 250



5 NO.18 SHADOW\_21 June 12pm

3 21st June 3pm  
1 : 250

Rev	Date	AMENDEMENTS	Ckd
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA



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reg. no. 7271

Project Name  
**GENERAL HOUSING UNITS  
WARRAWONG**

12 - 16 STUART ROAD, WARRAWONG  
LOTS 10 - 12 | DP 35004  
Sheet Title  
**SHADOW DIAGRAMS**

Date:  
**16/05/25**

Drawn:  
**SA**

Author:  
**H**

Checked  
Checker

Authorised  
Approver

Scale

Project No.  
**BGYVX**

Revision  
**H**

Drawing No.  
**A402**





1 Sketch Perspective - Front

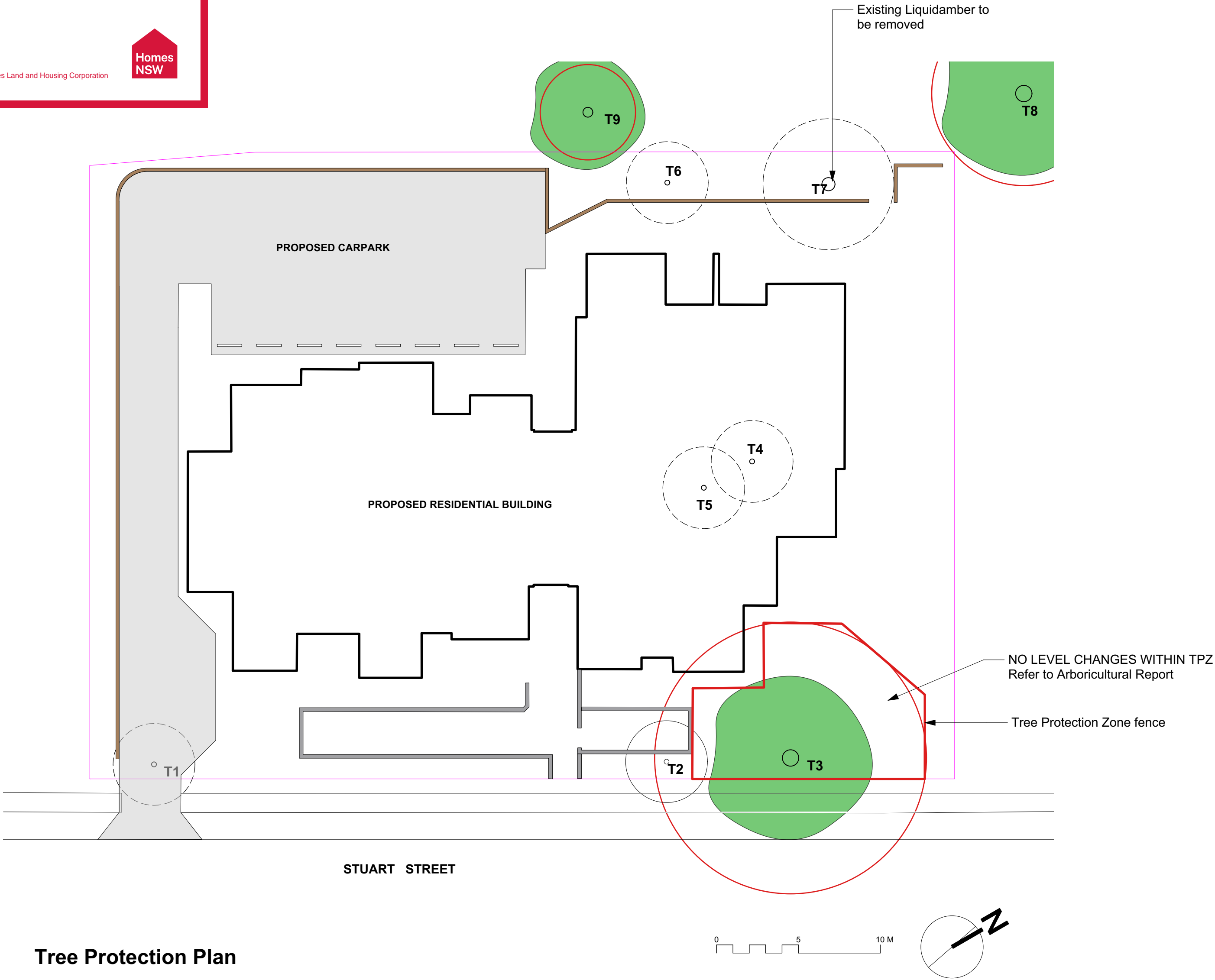


2 Sketch Perspective - Rear

Rev	Date	AMENDEMENTS	Ckd
C	23/08/24	STAGE B	SA
D	16/10/24	STAGE C PRELIM	SA
E	18/11/24	STAGE C	SA
G	10/01/25	STAGE C	SA
H	16/05/25	STAGE C	SA







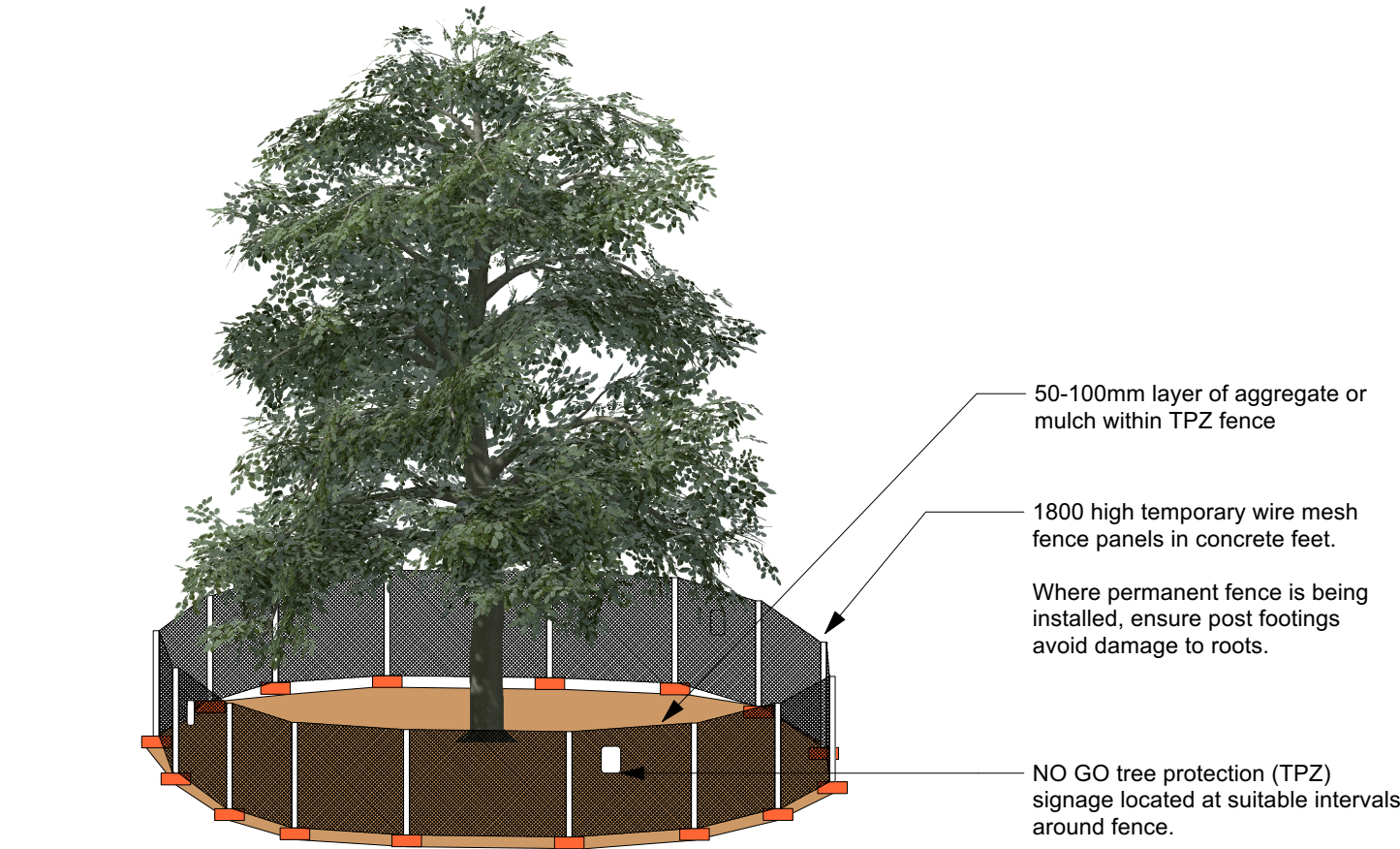
Tree Protection Plan

LANDSCAPE Drawing Register

Drawing No.	Drawing Title	Scale	Issue
L 01	Landscape Title , Existing trees	1:200	E
L 02	Landscape Site Plan	1:100	E
L03	Planting Concept Plan	1:100	E
L 04	Landscape Planting Plan	1:100	E
L 05	Landscape Details	1:20	E

ISSUE :	A 15 August 2024	Stage B review
	B 17 October 2024	Stage C first review
	C 22 November 2024	Stage C issue
	D 11 February 2025	Stage C Part 5 Issue
	E 16 May 2025	Stage C Part 5 reissue

Existing Tree Report				
ID	Botanical Name	Common Name	Action	Notes
T1	Ligustrum lucidum	Large leaf Privet	Remove	weed
T2	Schefflera arborcola	Dwarf Umbrella Tree	Not Set	TPO exempt
T3	Eucalyptus botryoides	Bangalay	Retain	TPZ 8.3, SRZ 2.9
T4	Cordylne australis	Cabbage tree	Remove	
T5	Schefflera actinophylla	Umbrella Tree	Remove	
T6	Ligustrum lucidum	Large leaf Privet	Remove	weed
T7	Liquidamber styraciflua	Liquidamber	Remove	TPO exempt
T8	Grevillea robusta	Silky Oak	Retain	TPZ 5.6, SRZ 2.6 neighbours tree
T9	Pittosporum undulatum	Sweet pittosporum	Retain	TPZ 2.9, SRZ 2.0, neighbours tree



TREE PROTECTION FENCE DETAIL

Install Tree Protection Fence where shown. Fence to comply with AS 4970 Trees on Development Sites. Refer to Arborists report. No cut, fill or machine excavation within TPZ.



LEGEND

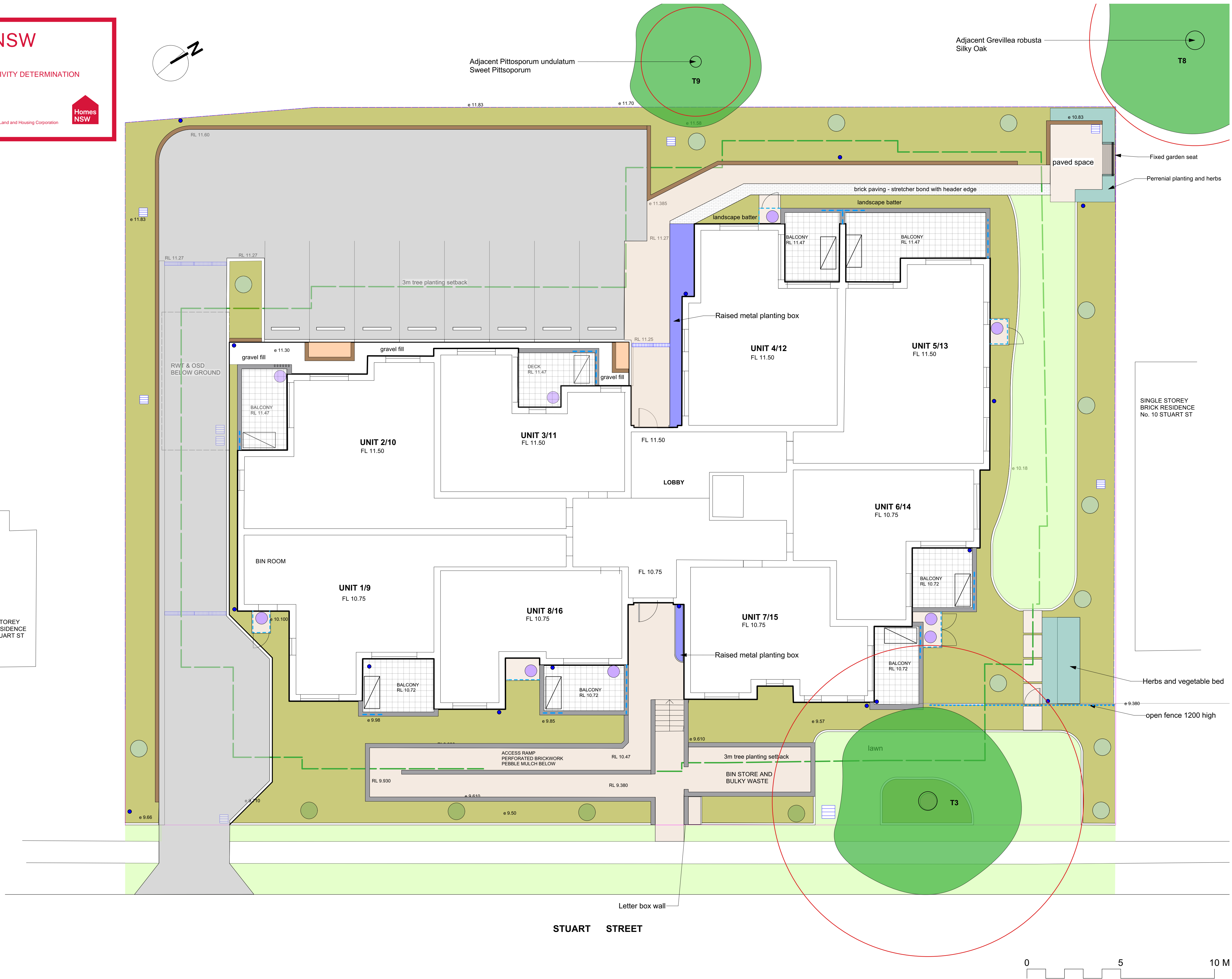
- Existing retained trees
- Mass planting bed - common area
- Raised planting bed
- Raised metal planting box
- Resident planter bed
- Turf - Soft leaf Buffalo
- Pedestrian paving paving - coloured concret
- Vehicular concrete paving
- Tiled courtyard paving
- Courtyard deck
- Drop down clothes line on wall
- Hot water tank on concrete
- Hose cock
- Proposed tree pit
- 1800 high lapped and capped timber fence
- Balcony height wall
- Privacy screen on wall
- 1500 high screen fence
- 1200 high fence
- Masonry retaining wall
- Stormwater pits, grated drains
- Brick garden edge

Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



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General Housing Units  
12-16 Stuart St Warrawong  
CLIENT : HOMES NSW

PROJECT  
BGYVX

Landscape Site Plan

1:100 @A1,  
1: 200@A3

16 May 2025

status: Stage C

ISSUE: E

L 02





Hymenosporum flavum - Native Frangipani



Cupaniopsis anacardioides - Tuckeroo



Brachychiton acerifolius - Illawarra Flame Tree



Melaleuca linariifolia - Snow in Summer



Citrus limonii Eureka - Lemon



Banksia serrata - Old man Banksia



Eucalyptus robusta - Swamp Mahogany



Callistemon salignus - Willow Bottlebrush



Acer rubrum - Red Maple

## Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

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General Housing Units  
12-16 Stuart St Warrawong  
CLIENT : HOMES NSW

PROJECT  
BGYVX

Landscape Planting Concept

1:100 @A1,  
1:200 @A3

16 May 2025

status: Stage C

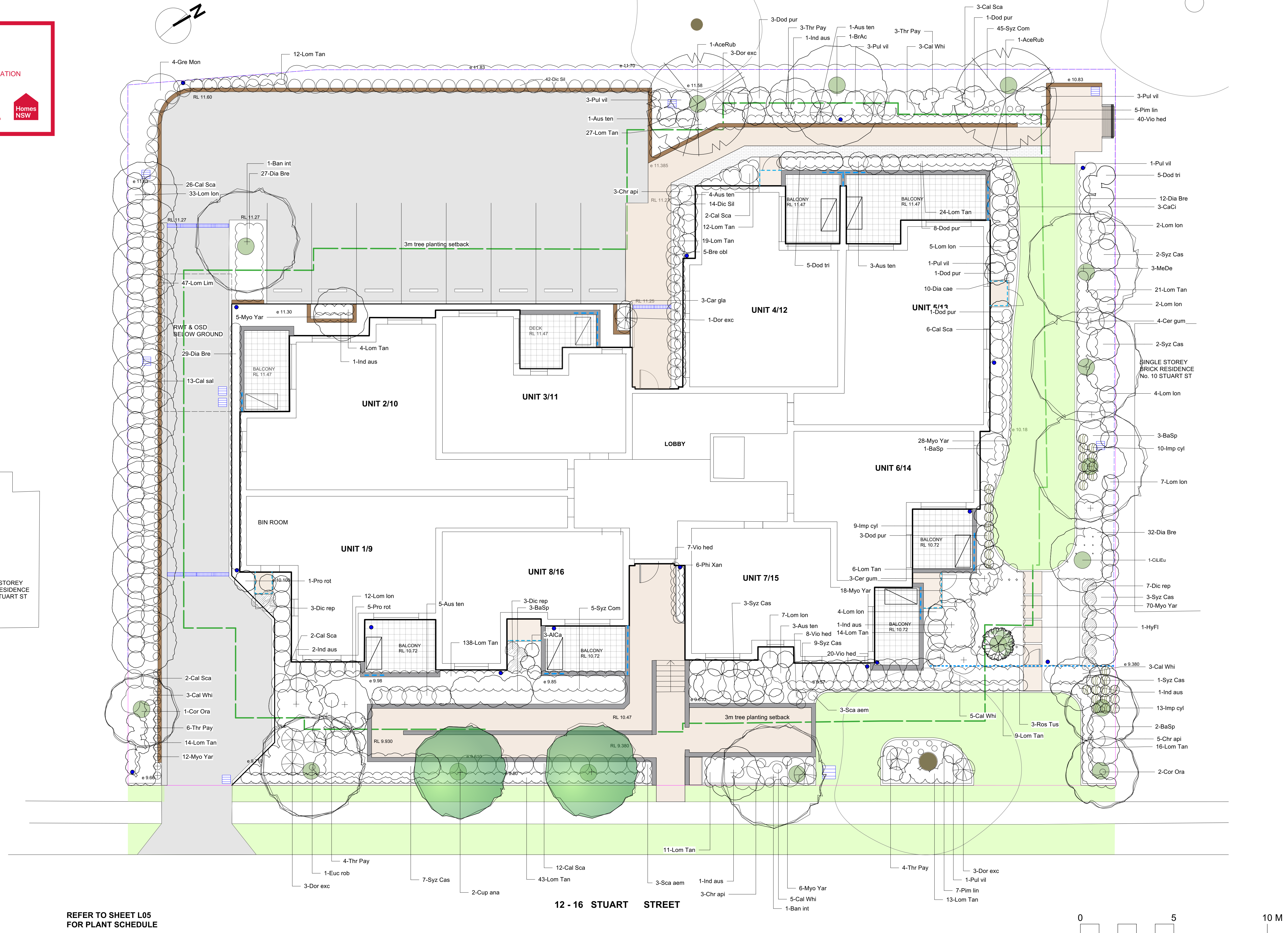
ISSUE: E

L 03





SINGLE STOREY  
BRICK RESIDENCE  
No. 18 STUART ST



**REFER TO SHEET L05  
FOR PLANT SCHEDULE**

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General Housing Units  
12-16 Stuart St Warrawong  
CLIENT : HOMES NSW

PROJECT	BGYVX
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## Landscape Planting Plan

1:100 @A1,  
1: 200@A3

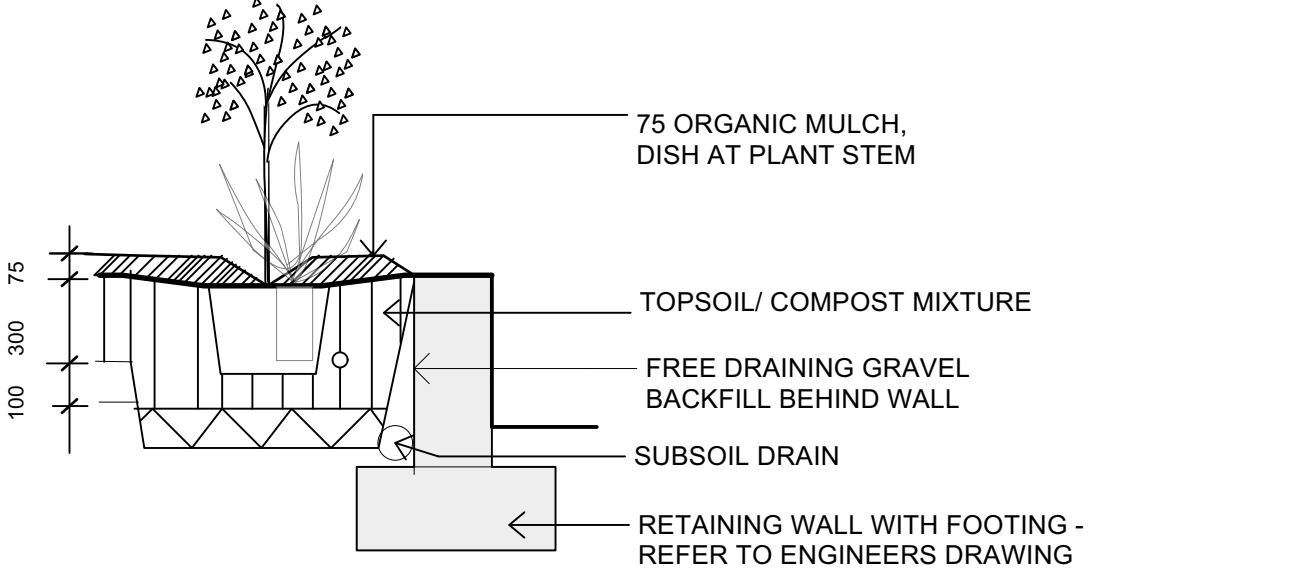
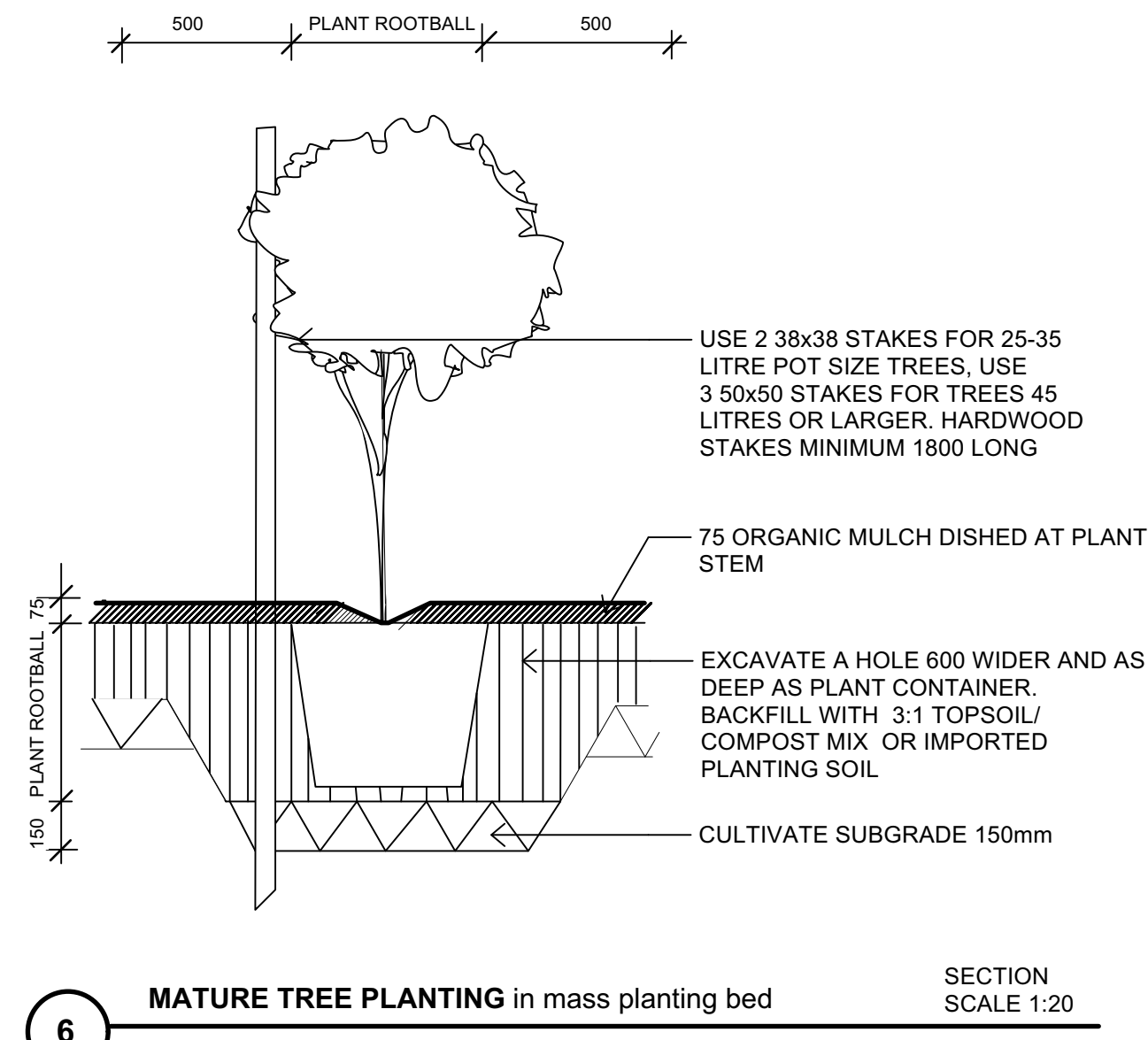
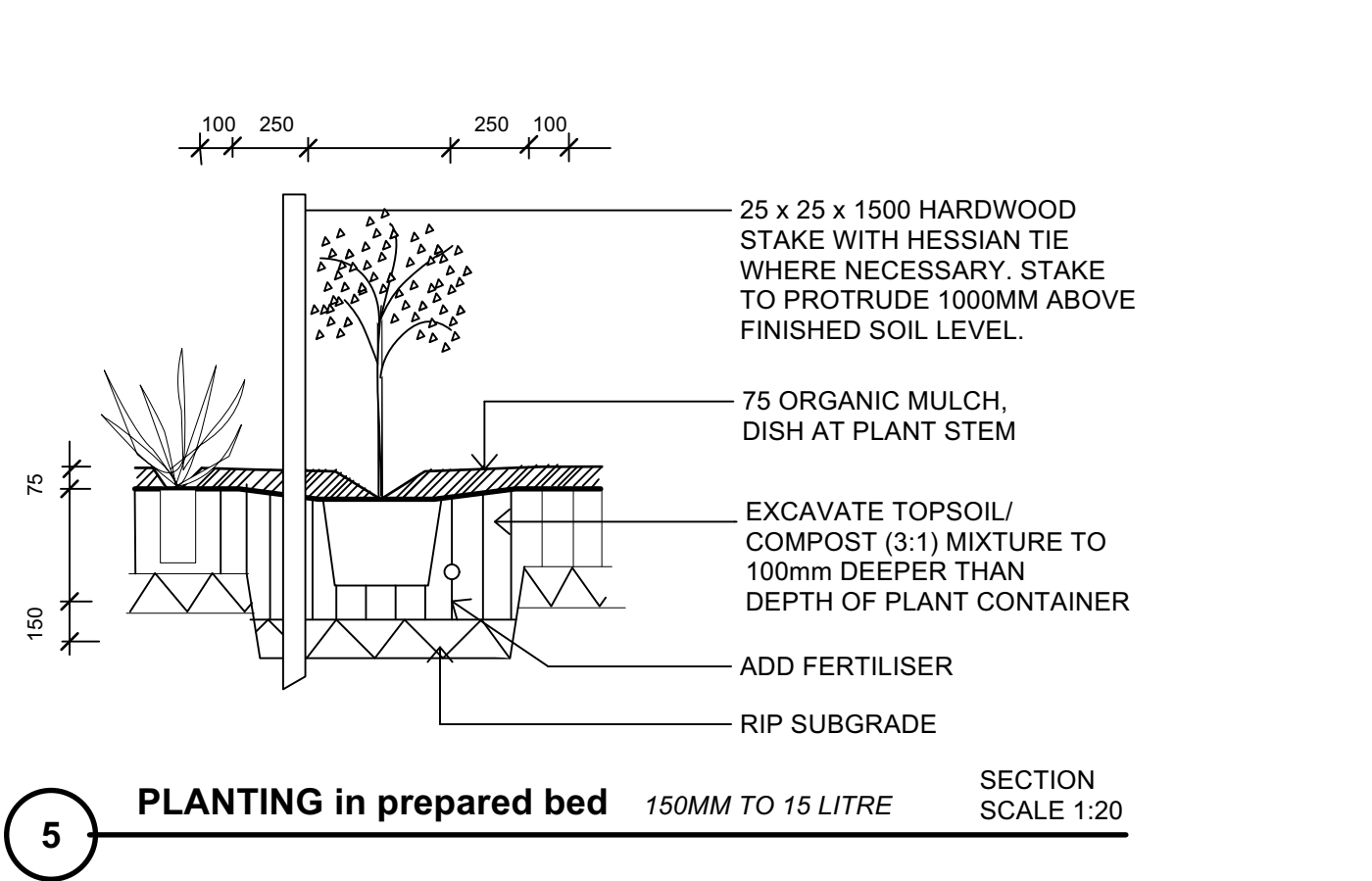
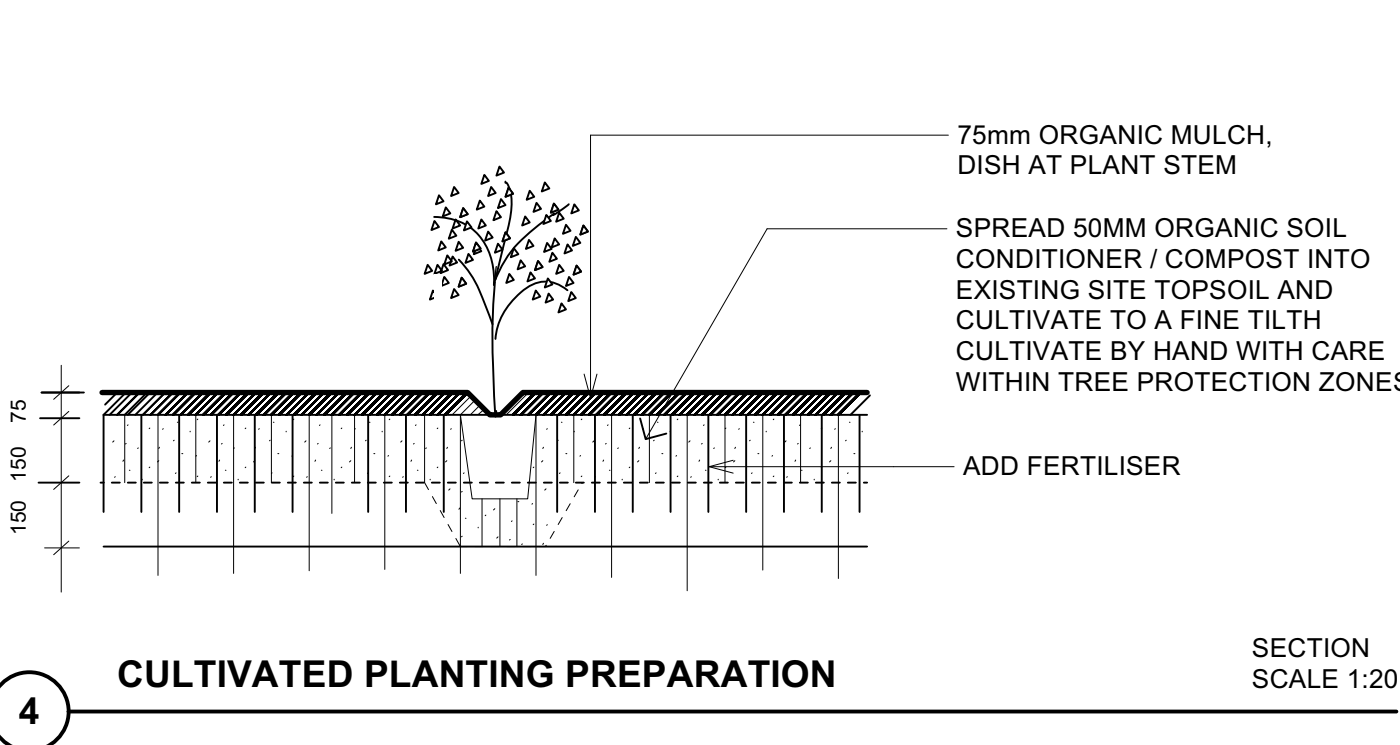
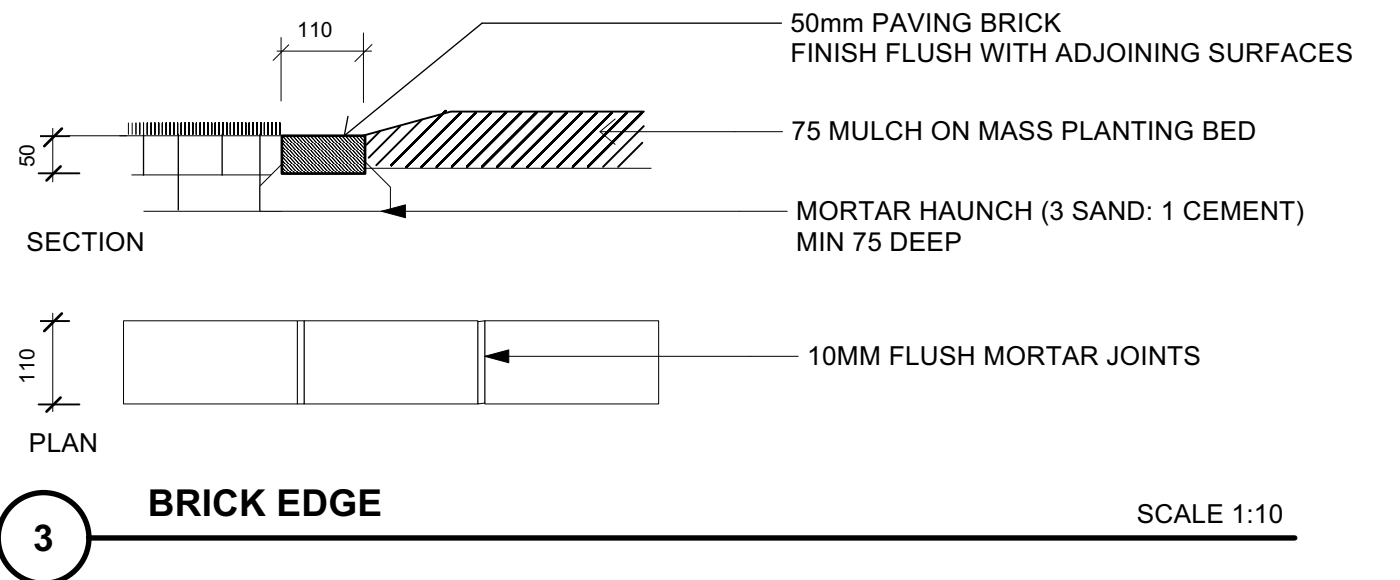
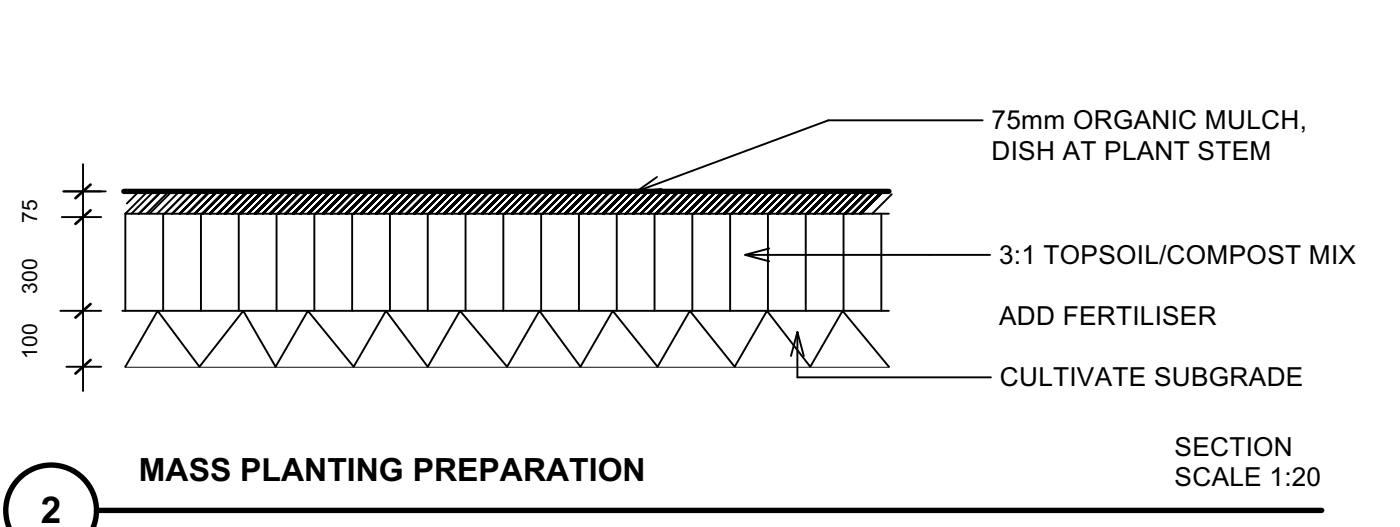
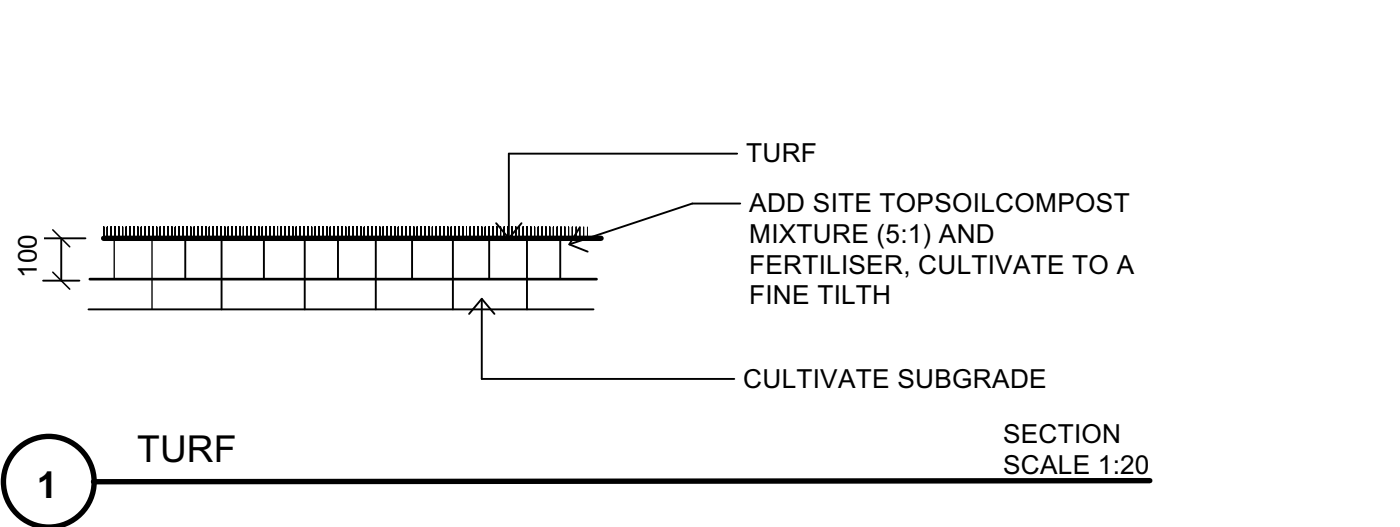
16 May 2025

status: Stage C

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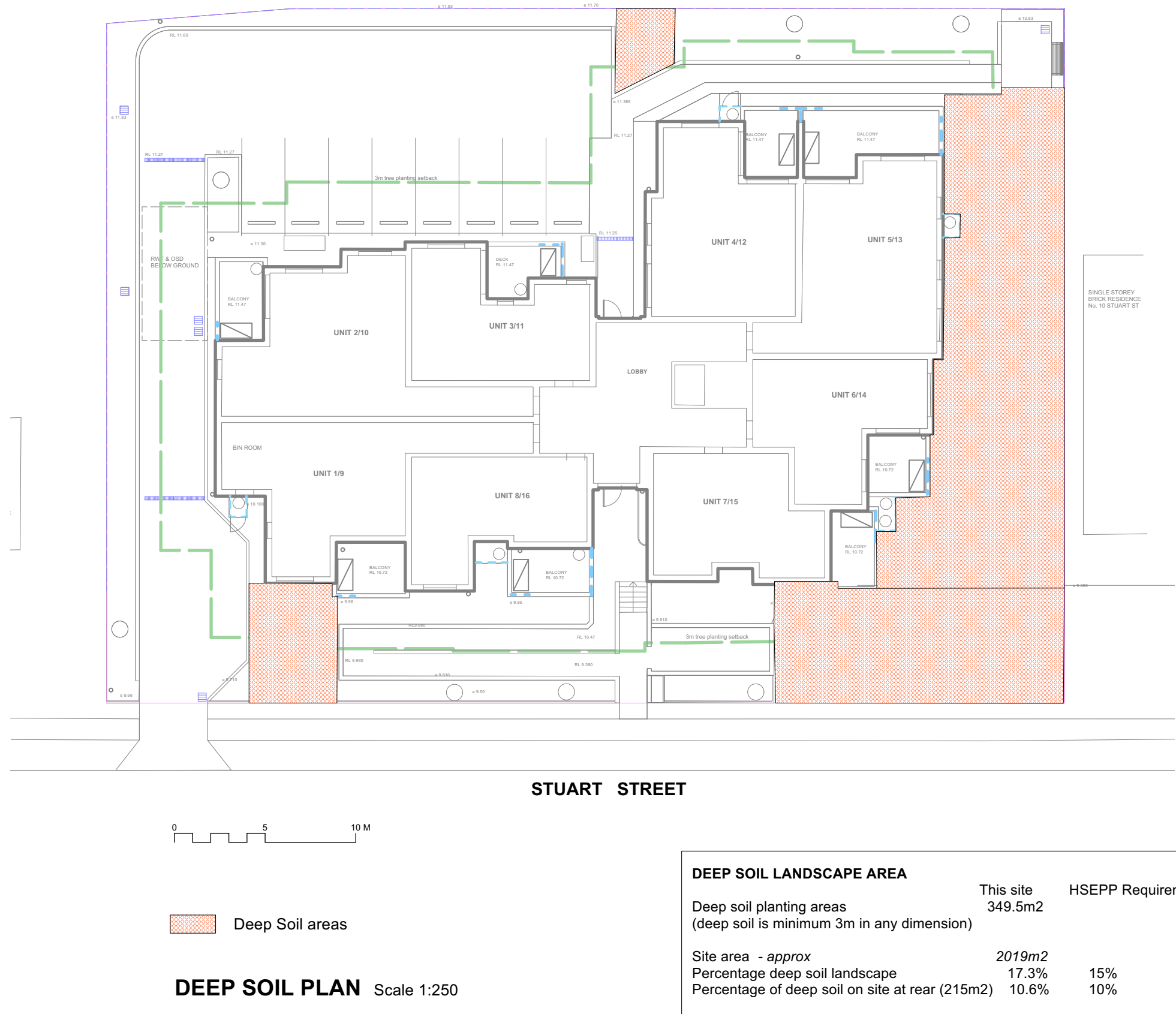


NOTE: SUBSOIL DRAINS TO BE INSTALLED BEHIND ALL RETAINING WALLS, AND ALL CONTAINED PLANTING AREAS. MINIMUM SLOPE 1:100.

USE SITE TOPSOIL WHEREVER IT IS AVAILABLE - USE FOR ALL GRASSED AREAS. WHERE THERE IS INSUFFICIENT SITE TOPSOIL, USE IMPORTED TOPSOIL FOR PLANTING BEDS AND TREE PLANTING HOLES, TO MEET SPECIFICATION.

FOR RAISED PLANTER BEDS USE PLANT SOIL EQUIVALENT TO BENEDICT SOIL. NATIVE GARDEN MIX SMARTMIX 6 AND BENEDICT NATIVE GARDEN SUB SMARTMIX 7

Plant List							
ID	Qty	Common Name	Botanical Name	Pot Size	Mature Height	Mature Spread	Remarks
<b>Trees</b>							
AceRub	2	Red Maple	Acer rubrum	75 litre	15 - 20m	10 - 15m	Exotic deciduous for solar access
Ban int	2	Coastal Banksia	Banksia integrifolia	75 litre	5 - 10m	3.5 - 6m	Local native
BrAc	1	Bottle Tree; Illawarra Flame Tree	Brachychiton acerifolius	75 litre	25 - 30m	3.5 - 6m	Local native
Cal sal	13	Willow Bottlebrush	Callistemon salignus	25 litre	5 - 10m	3.5 - 6m	Local native
CILIEu	1	Eureka Lemon	Citrus limon 'Eureka'	75 litre	3 - 6m	3.5 - 5m	Exotic - fruit tree
Cor Ora	3	Orange flowering gum	Corymbia ficifolia Dwarf Orange	75 litre	5 - 10m	6 - 10m	Native variety
Cup ana	2	Tuckeroo	Cupaniopsis anacardioides	75 litre	10 - 15m	3.5 - 6m	Native
Euc rob	1	Swamp Mahogany, Bengaly	Eucalyptus robusta	75 litre	25 - 30m	3.5 - 6m	Local native
HyFl	1	Native frangipani	Hymenosporum flavum	75 litre	20 - 25m	1.2 - 2.0m	Native
MeDe	3	White Feather Honeymyrtle	Melaleuca decora	75 litre	7 - 12m	5 - 8m	Local native
<b>Shrubs</b>							
AlCa	3	Native Ginger	Alpinia caerulea	15 litre	0.9 - 1.5m	0.9 - 1.2m	Native
Aus ten	17	Narrow-leaf Myrtle	Austromyrtus tenuifolia	25 litre	0.9 - 1.5m	0.9 - 1.2m	Native
BaSp	9	Banksia 'Coastal Cushion'	Banksia spinulosa	25 litre	0.45 - 0.60m	1.2 - 2.0m	Local native
Bre obl	5	Coffee Bush	Breynia oblongifolia	5 litre	1.5 - 3m	0.6 - 0.9m	Local native
CaCi	3	Lemon-scented Bottlebrush	Callistemon citrinus	25 litre	1.5 - 3m	1.2 - 2.0m	Native variety
Cal Sca	53	Scarlet Flame Bottlebrush	Callistemon Scarlet Flame	15 litre	0.9 - 1.5m	0.9 - 1.2m	Native variety
Cal Whi	19	White Anzac Bottlebrush	Callistemon 'White Anzac'	5 litre	0.9 - 1.5m	0.9 - 1.2m	Native variety
Cer gum	7	NSW Christmas Bush	Ceratopetalum gummiferum	25 litre	1.5 - 3m	0.9 - 1.2m	Native
Dod tri	10	Common Hop Bush	Dodonaea triquetra	5 litre	1.5 - 3m	1.2 - 2.0m	Local native
Dod pur	17	Purple Giant Hop Bush	Dodonaea viscosa Purpurea	5 litre	1 - 3m	1.0 - 2.0m	Native variety
Dor exc	10	Gymea Lily	Doryanthes excelsa	5 litre	1.5 - 3m	1.2 - 2.0m	Local native
Gre Mon	4	Grevillea Moonlight	Grevillea Moonlight	15 litre	2 - 3m	1.5 - 2.5m	Native variety
Ind aus	7	Australian Indigo	Indigofera australis	15 litre	1.5 - 3m	2.0 - 3.5m	Local native
Phi Xan	6	Xanadu	Philodendron Xanadu	5 litre	0.7 - 1.2m	0.9 - 1.2m	Exotic - dry shade
Pim lin	12	Slender Rice-flower	Pimelea linifolia	5 litre	0.45 - 0.6m	0.0 - 0.3m	Native
Pro rot	6	Round-leaved Mint Bush	Prostanthera rotundifolia	5 litre	1.5 - 3m	1.2 - 2.0m	Native
Pul vil	12	Hairy Bush Pea	Pultenaea villosa	5 litre	0.9 - 1.5m	0.9 - 1.2m	Local native
Ros Tus	3	Tuscan Blue Rosemary	Rosmarinus officinalis 'Tuscan Blue'	5 litre	1.2 - 2m	1.2 - 2.0m	Exotic - herb
Syz Com	50	Brush Cherry	Syzygium australe Aussie Compact	15 litre	3 - 5m	1.5 - 3.0m	Native variety
Syz Cas	27	Cascade Lillypilly	Syzygium Cascade	15 litre	1.5 - 3m	1.2 - 2.0m	Native variety
Thr Pay	20	Paynes Rock Thryptomene	Thryptomene saxicola Paynes Hybrid	5 litre	0.5 - 1.5m	1.0 - 1.8m	Native variety
<b>Ground Covers</b>							
Car gla	3	Pigface	Carpobrotus glaucescens	150mm	0.0 - 0.3m	1.2 - 2.0m	Native
Chr api	11	Yellow Buttons	Chrysocephalum apiculatum	150mm	0.0 - 0.3m	0.3 - 0.6m	Native
Dic Sil	56	Silver Kidney Weed	Dichondra argentea Silver Falls	5 litre	0.0 - 0.3m	0.9 - 1.2m	Native variety
Dic rep	13	Kidney Weed	Dichondra repens	5 litre	0.0 - 0.3m	0.9 - 1.2m	Local native
Myo Yar	139	Carpet Spreading Myoporum	Myoporum parvifolium 'Yareena'	5 litre	0.45 - 0.6m	0.9 - 1.2m	native
Sca aem	6	Blue Fanflower	Scaevola aemula	100mm	0.45 - 0.6m	0.0 - 0.3m	native
Vio hed	75	Native Violet	Viola hederacea	5 litre	0.0 - 0.3m	1.2 - 2.0m	local native
<b>Grasses</b>							
Dia cae	10	Paroo Lily, Blue Flax-lily	Dianella caerulea	100mm	0.45 - 0.6m	0.3 - 0.6m	local native
Dia Bre	100	Breeze Blue Flax-lily	Dianella caerulea 'Breeze'	140mm	0.45 - 0.6m	0.3 - 0.6m	Native variety
Imp cyl	32	Blady Grass	Imperata cylindrica	100mm	0.9 - 1.5m	0.3 - 0.6m	Native variety
Lom Lim	47	Lime Tuff mat rush	Lomandra Lime Tuff	5 litre	0.5 - 0.6m	0.5 - 0.6m	Native variety
Lom lon	76	Spiny-headed Mat-Rush	Lomandra longifolia	5 litre	0.75 - 0.9m	0.9 - 1.2m	Local native
Lom Tan	383	Spiny-headed mat rush	Lomandra Tanika	5 litre	0.4 - 0.55m	0.45 - 0.6m	Native variety





# PROPOSED DEVELOPMENT

12-16 Stuart Street, Warrawong, NSW  
greenview Job No: 230473

## GENERAL NOTES

- ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION.
- THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- IT IS THE RESPONSIBILITY OF THE TENDERER TO SEEK CLARIFICATION WHERE DOCUMENTATION IS CONFLICTING OR UNCLEAR, WHERE NO CLARITY IS OBTAINED, THE TENDERER IS TO ALLOW FOR BOTH INTERPRETATIONS IN THEIR PRICING.
- CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
- 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 AS REQUIRED.
- THESE PLANS SHALL BE A READJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS, SPECIFICATIONS, CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE REQUIREMENTS.
- THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE, FOOTPATH AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS, ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES.
- THE BUILDER IS TO VERIFY ALL LEVELS ON SITE PRIOR TO COMMENCING CONSTRUCTION.
- ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES.
- ALL TERRACE FLOOR AND PLANTER GRATES TO HAVE FIRE COLLARS FITTED EXCEPT FOR CLASS 1 BUILDINGS.
- ALL PITS HAVING AN INTERNAL DEPTH THAT EXCEEDS 1.0m SHALL BE PROVIDED WITH GALVANIZED STEP IRONS AT 300 mm CENTRES PLACED IN A STAGGERED PATTERN AND SHALL BE IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS AS/NZS 198-1994.
- ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON SITE DETENTION STORAGE SHALL BE OF A NON-FLOATABLE MATERIAL SUCH AS AGGREGATE RIVER GRAVEL. BARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
- PRIOR TO COMMENCING ANY WORKS ON THE SITE, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTION INTO COUNCILS FINISHED KERB/DRAINAGE SYSTEM MATCH THE DESIGN LEVELS, ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY.
- GREENVIEW IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY SURVEY INFORMATION PROVIDED ON THIS DRAWING.
- ALL LEVELS SHOWN ARE EXPECTED TO BE TO A.H.D.
- ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES, UNLESS NOTED OTHERWISE.
- THE SURVEY INFORMATION ON THIS DRAWING HAS BEEN PROVIDED BY THE ARCHITECT.
- CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.
- W/A E DRAWINGS BY A REGISTERED SURVEYOR ARE REQUIRED PRIOR TO CERTIFICATION OF DRAINAGE.
- WHERE THESE PLANS ARE NOTED FOR DEVELOPMENT APPLICATION PURPOSES ONLY, THEY SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE NOR USED FOR CONSTRUCTION PURPOSES WITHOUT WRITTEN APPROVAL.
- WATER TREATMENT DEVICES TO STRICTLY COMPLY WITH MANUFACTURING SPECIFICATIONS.

## RAINWATER REUSE SYSTEM NOTES

- RAINWATER SUPPLY PUMPING TO BE CONNECTED TO OUTLETS WHERE REQUIRED BY BASIX CERTIFICATE (BY OTHERS)
- NO DIRECT CONNECTION BETWEEN TOWN WATER SUPPLY AND THE RAINWATER SUPPLY.
- PROVIDE AN APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE AT THE RAINWATER TANK
- PROVIDE AT LEAST ONE EXTERNAL HOSE COCK ON THE TOWN WATER SUPPLY FOR FIRE FIGHTING.
- PROVIDE APPROPRIATE FLOAT VALVE AND/OR SOLENOID VALVES TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE THE TOP-UP INDICATED ON THE TYPICAL DETAIL.
- ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS/NZS3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.
- PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN.
- ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER TANK SURFACE WATER INLETS ARE NOT TO BE CONNECTED.
- PIPE MATERIALS FOR RAINWATER SUPPLY PUMPING ARE TO BE APPROVED MATERIALS TO AS/NZ3500 PART 1 SECTION 2 AND TO BE CLEARLY AND PERMANENTLY IDENTIFIED AS RAINWATER. THIS MAY BE ACHIEVED FOR BELOW GROUND PIPES USING IDENTIFICATION TAPE (MADE IN ACCORDANCE WITH AS2648) OR FOR ABOVE GROUND PIPES BY USING ADHESIVE PIPE MARKERS (MADE IN ACCORDANCE WITH AS1345)
- EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELLED 'RAINWATER' ON A METALLIC SIGN IN ACCORDANCE WITH AS1319
- ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT MOSQUITO AND VERMIN ENTRY.
- ALL DOWNPIPES CHARGED TO THE RAINWATER TANK ARE TO BE SEALED UP TO GUTTER LEVEL AND BE PRESSURE TESTED AND CERTIFIED
- TOWN WATER CONNECTION TO RAINWATER TANK TO BE TO THE SATISFACTION OF THE REGULATORY AUTHORITY. THIS MAY REQUIRE PROVISION OF

- 13.1. PERMANENT AIR GAP
- 13.2. BACKFLOW PREVENTION DEVICE

## SAFETY IN DESIGN NOTES

THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING. WE NOTE THIS DESIGN IS 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. GREENVIEW ASSESSMENT DID NOT IDENTIFY ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN.

## EARTHWORK NOTES

- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT OF THE PROPOSED DEVELOPED AREA.
- PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION.
- OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOP SOIL, AVERAGE 200mm THICK. REMOVE FROM SITE, EXCEPT TOP SOIL FOR RE-USE.
- CUT AND FILL OVER THE SITE TO LEVELS REQUIRED.
- 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.
- 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%.
- 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.
- 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.
- COMPACTION TESTING SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRE AND 10% OF THE TRENCH WALL FOR LABORATORY, THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
- 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 OF IMPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

## DRAINAGE INSTALLATION

### RCP CONVENTIONAL INSTALLATIONS & ROAD CROSSINGS

- SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
- 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 ITS SELF COMPACTING ABILITY.
- A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARRIERS AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA. AND 400mm CLEARANCE FOR PIPES > 1200 DIA.
- DEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:

a. COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS:						
M	19	2.3600	0.6000	0.3000	0.1500	0.0750
% 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% ELSEWHERE 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.

## ROOF DRAINAGE

- ALL ROOF DRAINAGE IS TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CURRENT APPLICABLE AUSTRALIAN STANDARDS INCLUDING AS3500.3, NCC AND COUNCIL'S SPECIFICATIONS.
- DOWNPIPES SHOWN ARE INDICATIVE ONLY. REFER ARCHITECTURAL'S FOR FINAL LOCATIONS.
- ALL DOWNPIPES TO BE CONSTRUCTED OF ONE MATERIAL FOR AESTHETICS REASONS AND PAINTED TO PROTECT THEM AGAINST ULTRA-VIOLET LIGHT DAMAGE, UNLESS APPROVED OTHERWISE BY THE PROJECT ARCHITECT.
- ALL DOWNPIPES TO HAVE LEAF GUARDS.
- ALL EAVES GUTTERS ARE TO BE DESIGNED TO THE 5% AEP (20YR) STORM EVENTS UNO
- ALL EAVES' GUTTER OVERFLOWS ARE TO BE IN ACCORDANCE WITH AS3500.3 G3
- ALL BOX GUTTERS ARE TO BE DESIGNED TO CATER TO THE 1% AEP (100YR) STORM EVENTS UNO
- IN ACCORDANCE WITH AS3500.3 CLAUSE 3.7.6 G, BOX GUTTERS SHALL:
  - BE STRAIGHT (WITHOUT CHANGE IN DIRECTION)
  - HAVE A HORIZONTAL CONSTANT WIDTH BASE (SOLE) WITH VERTICAL SIDES IN A CROSS-SECTION.
  - HAVE A CONSTANT LONGITUDINAL SLOPE BETWEEN 1:200 AND 1:40.
  - DISCHARGE AT THE DOWNSTREAM END WITHOUT CHANGE OF DIRECTION (I.E. NOT TO THE SIDE), AND
  - BE SEALED TO THE RAINHEADS AND SUMPS
- GREENVIEW RECOMMENDS THAT THE BUILDER VERIFIES THAT ANY AND ALL BOX GUTTERS HAVE BEEN DESIGNED BY A QUALIFIED CIVIL ENGINEER PRIOR TO THE COMMENCEMENT OF WORKS.
- GREENVIEW RECOMMENDS A SPECIFIC INSPECTION AND CERTIFICATION BY A QUALIFIED CIVIL ENGINEER OF ANY AND ALL BOX GUTTERS INSTALLED ON THE PROJECT PRIOR TO OCCUPATION CERTIFICATE
- ALL DOWNPIPES ARE TO BE PIPE CONNECTED INTO THE FORMAL RAINWATER OR STORMWATER LINE UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OTHERWISE.

## STORMWATER DRAINAGE NOTES

- STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS INCLUDING AS3500.3, NCC AND COUNCIL'S SPECIFICATION.
- MINIMUM PIT DIMENSIONS ARE TO BE IN ACCORDANCE WITH AS3500.3 TABLE 7.5.2.1 WHICH PROVIDES GUIDANCE ACCORDING TO PIT DEPTH U.N.O.

TABLE 7.5.2.1

Depth to invert of outlet	Minimum internal dimensions mm		
	Rectangular		Circular
	Width	Length	Diameter
≤450	350	350	—
≤600	450	450	600
>600 ≤900	600	600	900
>900 ≤1200	600	900	1000
>1200	900	900	1000

- PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC
- PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
- ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O. BY COUNCIL'S SPECIFICATION.
- PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS.
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
- ALL PIPES LOCATED IN LANDSCAPE AREAS TO HAVE 300mm COVER, WHERE NOT POSSIBLE AND COVER IS BETWEEN 150mm AND 300mm USE SEWER GRADE PIPE.
- PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O.
- PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O.
- BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
- ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
- THE MINIMUM SIZES OF THE STORMWATER DRAINAGE PIPES SHALL NOT BE LESS THAN 90mm DIA FOR CLASS 1 BUILDINGS AND 100mm DIA FOR OTHER CLASSES OF BUILDING OR AS REQUIRED BY THE REGULATORY AUTHORITY.
- BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
- ALL LANDSCAPED PITS TO BE MIN 450 SQUARE U.N.O OR LARGER AS REQUIRED BY AS3500.3 TABLE 7.5.2.1
- GREENVIEW RECOMMENDS ALL COURTYARDS TO HAVE 450 SQUARE PLASTIC PIT INSTALLED WITH A 150mm DIA. CONNECTION TO FORMAL DRAINAGE SYSTEM U.N.O.
- ALL DRIVEWAY PITS TO BE MIN 600 SQUARE U.N.O OR LARGER AS REQUIRED BY AS3500.3 TABLE 7.5.2.1
- ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- ALL STORMWATER DRAINAGE WORK TO AVOID TREE ROOTS, WHERE NOT POSSIBLE, ALL EXCAVATIONS IN VICINITY OF TREE ROOTS ARE TO BE HAND DUG.
- GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION WHERE APPLICABLE.
- ALL BASES OF PITS TO BE BENCHED (TO HALF PIPE DEPTH) TO THE INVERT OF THE OUTLET PIPE AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO PROTECT AGAINST CORROSION.

- ANY VARIATION TO THAT WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY THE ENGINEER PRIOR TO THE COMMENCEMENT.
- ALL BALCONIES AND ROOFS ARE TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- GREENVIEW RECOMMENDS ALL ACCESSIBLE GRATES TO BE FITTED WITH CHILDPROOF LOCKS.
- ALL WORK WITHIN COUNCIL RESERVE AREAS TO BE INSPECTED BY COUNCIL PRIOR TO BACKFILLING.
- COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
- WATER PROOF ALL CONCRETE BALCONIES & ROOFS TO ARCHITECTS DETAILS
- ALL BALCONIES TO HAVE FLOOR WASTE AND 1% FALL WITH SAFETY OVERFLOW.
- ALL SUBSOIL DRAINAGE SHALL BE A MINIMUM OF Ø95mm AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE CONSULTANT.
- SUBSOIL DRAINAGE 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 EYES AT HIGH POINTS OR TO COUNCILS REQUIREMENTS.
- ALL GRATES IN AREAS OF FREQUENT PEDESTRIAN TRAFFIC (IE FOOTPATHS, WALKWAYS, ETC.) TO BE REEL PROOF GRATE.
- REFER ARCHITECTS DETAIL FOR GRATE FINISH (IE STAINLESS STEEL OR GALVANISED).
- GRATES TO BE IN ACCORDANCE WITH TABLE BELOW:

### PIT GRATE INLINE TYPE

GRATE TYPE	TRAFFIC CONDITIONS
A - EXTRA LIGHT DUTY	FOOTWAYS AND AREAS ACCESSIBLE ONLY TO PEDESTRIANS AND REAR CYCLISTS.
B - LIGHT DUTY	FOOTWAYS THAT CAN BE MOUNTED BY VEHICLES.
C - MEDIUM DUTY	MALLS AND PEDESTRIAN AREAS OPEN TO SLOW MOVING COMMERCIAL VEHICLES.
D - HEAVY DUTY	CARRIAGEWAYS OF ROADS AND AREAS OPEN TO COMMERCIAL VEHICLES.

TABLE AS PER AS3500.3 - 2008. ENGINEER TO BE NOTIFIED IF LOAD CONDITIONS LISTED ABOVE ARE EXCEEDED.

- COVER TO PIPE TO BE AS PER TABLE BELOW:

### COVER TABLE

LOCATION	PIPE TYPE	COVER
LANDSCAPE	PVC	300
LANDSCAPE (SINGLE DWELLING)	PVC	100
UNDER TRAFFICABLE AREA	PVC	100 BELOW UNDERSIDE OF PAVEMENT
CONCRETE	STEEL	NIL BELOW UNDERSIDE OF PAVEMENT
ROADS	RCP	500 BELOW UNDERSIDE OF PAVEMENT

## STORMWATER DRAINAGE NOTES CONTINUED

- GREENVIEW'S STORMWATER SYSTEM HAS BEEN DESIGNED TO CAPTURE SURFACE RUNOFF FROM THE SITE ITSELF BUT DOES NOT INCORPORATE SPECIFIC GROUNDWATER CAPTURE MECHANISMS. IN SOME CASES, GROUNDWATER INUNDATION MAY BE A SIGNIFICANT SOURCE OF WATER DURING A STORM EVENT. GREENVIEW RECOMMENDS THAT A RETAINING WALL IS CLOSE TO HABITABLE AREAS BE FITTED WITH AN IMPERMEABLE MEMBRANE AND SUBSOIL DRAINAGE TO PREVENT GROUNDWATER INGRESS.
- ULL AREA OF EARTHWORKS SHALL BE SET OUT BY THE BUILDER PRIOR TO COMMENCEMENT OF WORKS, WHERE 300mm COVER IS NOT ACHIEVED, NOTIFY ENGINEER.
- WHERE STORMWATER DRAINAGE WORKS ARE TO BE UNDERTAKEN PRIOR TO THE CONSTRUCTION OF THE BUILDING, THE BUILDER IS TO SET OUT THE FLOOR LEVELS AND ENSURE PROPOSED STORMWATER DRAINAGE LEVELS AND BUILDING LEVELS ARE COMPATIBLE. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

## ON-SITE DETENTION

- ON-SITE DETENTION (OSD) TANKS ARE TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CURRENT APPLICABLE AUSTRALIAN STANDARDS INCLUDING AS3500.3, NCC AND COUNCIL'S SPECIFICATIONS.
- IT IS CRITICAL THAT THE MINIMUM OSD VOLUME AS CALCULATED BY THE DESIGN AND NOTED ON THESE PLANS IS ACHIEVED ON SITE. VOLUMES TO BE VERIFIED BE REGISTERED SURVEYOR AND NOTED IN THE WAE SURVEY PRIOR TO CERTIFICATION.
- OSD VOLUME MAY BE ACHIEVED IN BELOW GROUND TANK, OR ABOVE GROUND PONDING, OR RAINWATER TANK OFFSET, OR INFILTRATION/ABSORPTION SYSTEM. EACH COUNCIL HAS SPECIFIC GUIDELINES FOR HOW STORMWATER FLOWS ARE TO BE CONTROLLED AND DISCHARGED.
- PONDING AND OVERFLOW LEVELS FROM THE OSD SHALL BE NOT LESS THAN 300mm BELOW ADJACENT HABITABLE FLOOR LEVELS OF BUILDINGS AND NOT LESS THAN 150mm BELOW NON-HABITABLE FLOOR LEVELS (AS3500.1 CLAUSE 7.10.1)

## BELOW GROUND OSD TANKS

- THE HYDRAULIC CONTROL FOR THE STORAGE (USUALLY ORIFICE PLATE) SHALL BE FIRMLY FIXED IN PLACE TO PREVENT REMOVAL OR TAMPERING. A PLATE OF 3mm TO 5mm THICK STAINLESS STEEL WITH A CIRCULAR HOLE SHALL BE USED, PROVIDED:
  - IT IS MACHINED TO 0.5mm ACCURACY
  - IT RETAINS A SHARP EDGE, AND
  - THE ORIFICE DIAMETER IS NOT LESS THAN 25mm (AS 3500.3 CLAUSE 7.10.2
- INSPECTION / ACCESS OPENINGS SHALL BE PROVIDED ABOVE THE LOCATION OF THE OUTLET WITH DIMENSIONS AT LEAST 600mm x 600mm OR 600mm DIAMETER FOR STORAGE'S UP TO 600mm DEEP AND 600mm x 900mm FOR DEEPER STORAGE'S. THERE SHALL BE NO IMPEDIMENTS TO THE REMOVAL OF DEBRIS THROUGH THIS OPENING. INSPECTION SHALL BE POSSIBLE WITHOUT RESIDENTS OR OWNERS HAVING TO REMOVE HEAVY ACCESS COVERS (AS3500.3 CLAUSE 7.10.2.b.i)
- WHERE STORAGE'S ARE NOT DEEP ENOUGH TO WORK IN (<1.5m DEEP), ACCESS SHALL BE PROVIDED AT INTERVALS OF APPROXIMATELY 10m TO ALLOW THE SYSTEM TO BE FLUSHED TO THE STORAGE OUTLET- ACCESS SHALL BE PROVIDED AT THE OUTLET (AS3500.3 CLAUSE 7.10.2.b.ii)
- A SUMP SHALL BE PROVIDED AT THE OUTLET POINT, SET BELOW THE LEVEL OF THE MAIN STORAGE TO COLLECT DEBRIS, WHERE A DISCHARGE CONTROL PIT IS INCLUDED IN THE STORAGE- THIS SHALL CONTAIN A SUMP SET A MINIMUM OF 1.5 TIMES THE DIAMETER OF THE ORIFICE OF THE OUTLET BELOW THE CENTRE OF THE ORIFICE. SUMPS SHALL BE PROVIDED WITH WEEP HOLES TO DRAIN OUT TO THE SURROUNDING SOIL, AND SHALL BE FOUNDED ON A COMPACTED GRANULAR BASE.
- WHERE THE DEPTH OF THE TANK EXCEEDS 1.2m, A LADDER IN ACCORDANCE WITH AS3500.3 CLAUSE 7.5.5.4 SHALL BE INSTALLED.
- BELOW GROUND OSD SYSTEMS SHALL CONFORM WITH AS2865.
- IN ACCORDANCE WITH AS3500.3 CLAUSE 7.10.2.0 SCREENS (TRASH RACKS) WITH THE FOLLOWING CHARACTERISTICS SHOULD BE PROVIDED TO COVER EACH ORIFICE OUTLET:
  - FOR ORIFICES UP TO 150mm DIA. A FINE APERTURE-EXPANDED METAL MESH SCREEN WITH A MINIMUM AREA OF 50 TIMES THE AREA OF THE ORIFICE, FOR LARGER DIA. ORIFICES, A COARSER GRID MESH WITH A MINIMUM AREA OF 20 TIMES THE ORIFICE AREA MAY BE USED AS AN ALTERNATIVE.
  - STEEL SCREENS SHOULD BE STAINLESS STEEL OR HOT-DIP GALVANIZED
  - WHERE APERTURE-EXPANDED MESH SCREENS ARE EMPLOYED, THEY SHOULD BE POSITIONED SO THAT THE OVAL-SHAPED HOLES ARE HORIZONTAL, WITH THE PROTRUDING LIP ANGLED UPWARDS AND FACING DOWNSTREAM. A HANDLE MAY BE FITTED TO ENSURE CORRECT ORIENTATION AND EASY REMOVAL FOR MAINTENANCE.
  - SCREENS SHOULD BE PLACED NO FLATTER THAN 45 DEGREES TO THE HORIZONTAL IN SHALLOW STORAGE'S UP TO 600mm DEEP. IN DEEPER OR MORE REMOTE LOCATIONS, THE MINIMUM ANGLE SHOULD BE 60 DEGREES TO THE HORIZONTAL.
  - IF THE BELOW GROUND OSD STORAGE IS SEALED, A VENT SHOULD BE PROVIDED TO EXPEL ANY NOXIOUS GASES (AS3500.3 CLAUSE 7.10.2.D.B).
  - THE STORAGE SHOULD BE DESIGNED TO FILL WITHOUT CAUSING OVERFLOWS IN UPSTREAM CONDUITS DUE TO BACKWATER EFFECTS (AS3500.3 CLAUSE 7.10.2.D.C)
  - BELOW GROUND STORAGE'S SHALL BE CONSTRUCTED OF CONCRETE, MASONRY, ALUMINIUM ZINC AND ALUMINIUM MAGNESIUM ALLOY COATED STEEL, ZINC-COATED STEEL, GALVANISED IRON OR PLASTICS (AS3500.3 7.10.3)

## MAINTENANCE SCHEDULE: ON SITE DETENTION (OSD)

ALL OSD MAINTENANCE TASKS SHOULD BE UNDERTAKEN AFTER A SIGNIFICANT STORM EVENT

### 6 MONTHLY

ELEMENT	TASK	DESCRIPTION / ACTION
ORIFICE PLATE	INSPECT FOR BLOCKAGE	CHECK PLATE FOR BLOCKAGE AND CLEAN
TRASH SCREEN	CHECK / CLEAN	CHECK AND CLEAN TRASH SCREEN
PIT SUMP	CHECK FOR SEDIMENT	CHECK FOR SEDIMENT / LITTER / SLUDGE AND CLEAN-OUT
GRATED LIDS	CHECK FOR DAMAGE	CHECK FOR CORROSION OR OTHER DAMAGE AND REPAIR / REPLACE AS NEEDED
	CLEAR BLOCKAGES	CHECK AND CLEAR BLOCKAGES
STORAGE LIDS	CHECK	REMOVE DEBRIS / MULCH / LITTER / SEDIMENT
OUTLET PIPES	CHECK FOR BLOCKAGES	CHECK / CLEAN / FLUSH OUTLET PIPES, REMOVE ANY BLOCKAGES
STEP IRONS	CHECK FIXING	ENSURE STEP-IRON FIXINGS ARE SECURE AND REPAIR AS NEEDED

### ANNUALLY

ELEMENT	TASK	DESCRIPTION / ACTION
ORIFICE PLATE	CHECK ATTACHMENT	ENSURE PLATE IS MOUNTED SECURELY, TIGHTEN AND SEAL GAPS AS REQUIRED
TRASH SCREEN	CHECK ATTACHMENT	ENSURE PLATE IS MOUNTED SECURELY, TIGHTEN AND SEAL GAPS AS REQUIRED
	CHECK CORROSION	CHECK TRASH SCREEN FOR CORROSION, ESPECIALLY AT CORNERS NEAR WELDS AND REPAIR / REPLACE AS NEEDED
STEP IRONS	CHECK FOR CORROSION	EXAMINE STEP IRONS AND REPAIR ANY DAMAGE
INTERNAL WALLS	CHECK	CHECK FOR CRACKS / SPALLING AND REPAIR AS NEEDED
OSD SURROUNDS	CHECK FOR SUBSIDENCE	CHECK FOR SUBSIDENCE WHICH MAY INDICATE LEAKS) AND REPAIR AS NEEDED

### 5-YEARLY

ELEMENT	TASK	DESCRIPTION / ACTION
ORIFICE PLATE	CHECK ORIFICE PLATE	CHECK ORIFICE SIZE AGAINST WAE AND CHECK FOR FITTING / SCARRING, REPLACE IF NECESSARY

NEW (REFER TO SCHEDULES FOR COLOUR DEFINITION)

EXISTING

REMOVED OR RELOCATED

## COLOUR LEGEND

NEW (REFER TO SCHEDULES FOR COLOUR DEFINITION)
EXISTING
REMOVED OR RELOCATED

GREENVIEW CIVIL SHEET LIST		
No.	SHEET NAME	REV.
C01	NOTES & LEGENDS	6
C02	GROUND FLOOR DRAINAGE PLAN	6
C03	SITE STORMWATER DETAILS SHEET 1	4
C04	SITE STORMWATER DETAILS SHEET 2	3

## RECOMMENDED SAFETY SIGNS



## CONFINED SPACE DANGER SIGN

- A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANKS CONFINED SPACE.
  - MINIMUM DIMENSIONS OF THE SIGN
    - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
    - 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)
- THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINIUM OR POLYPROPYLENE
- SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN.

## EXISTING SERVICES



## ABBREVIATIONS

DP	DOWN PIPE
PFL	PROPOSED FINISHED FLOOR LEVEL
GL	PROPOSED PIT SURFACE LEVEL
IO	PROPOSED PIT INVERT LEVEL
KL	INSPECTION OPENING
KG	KERB & GUTTER
P	FINISHED PAVEMENT LEVEL
RCP	REINFORCED CONCRETE PIPE
RGK	ROLL KERB & GUTTER
RL	FINISHED SURFACE LEVEL
RWO	RAINWATER DRAINAGE OUTLET
RWT	PROPOSED RAINWATER TANK
TK	TOP OF NEW KERB LEVEL
TOW	TOP OF NEW RETAINING WALL LEVEL
TWL	TOP OF WATER LEVEL
uPVC	RIGID PVC PIPE
VD	VERTICAL DROPPER



GREENVIEW RECOMMENDS CARPARK SLAB TO FALL TOWARDS DRIVEWAY.

**BELOW GROUND RWT**  
MIN VOLUME PER BASIX  
MIN GL +10.60 APPROX  
TWL +10.30  
IL +8.60  
DEPTH = 1.70m  
VARY PLAN OR DEPTH AREA TO ACHIEVE BASIX VOLUME

**BELOW GROUND OSD**  
MIN VOLUME 18m³ (AIM FOR 20m³ TO ACCOUNT FOR STRUCTURAL SUPPORTS)  
MIN GL +10.50 APPROX  
TWL +10.00 (TO LIMIT BYPASS)  
MIN IL +9.01  
MAX IL +9.11  
AV IL +9.06  
MAX WATER DEPTH = 990mm  
AV WATER DEPTH = 940mm  
MIN PLAN AREA = 19.5m²  
PLAN AREA ACHIEVED = 21.3m²  
VOLUME ACHIEVED = 20.02m³ [OK]

ROOF AREA TO FALL TO RAINWATER TANK/OSD PER BASIX REQUIREMENTS. DESIGN BASED ON LOWER GROUND FLOOR FFL +10.750 & 11.500

GREENVIEW RECOMMENDS MIN 150mm STEP FROM INTERNAL FFL TO LANDSCAPE RL PER NCC REQUIREMENTS. TYPICAL

GROUND BELOW BUILDING TO BE CUT PER FLOODING REQUIREMENTS. REFER FLOOD REPORT BY GREENVIEW CONSULTING.

GREENVIEW NOTES 150mm STEP FROM INTERNAL LOBBY FFL TO ENTRY RL.

GREENVIEW NOTES 30mm STEP AT THRESHOLD FROM INTERNAL FFL TO BALCONY RL. TYPICAL

PROVIDE 100W GRATED DRAIN AT BALCONY AND DESK THRESHOLDS. TYPICAL

BALCONIES TO FALL AWAY FROM BUILDING AT MIN 2%. TYPICAL

GREENVIEW RECOMMENDS MIN 150mm STEP FROM INTERNAL FFL TO LANDSCAPE RL PER NCC REQUIREMENTS. TYPICAL

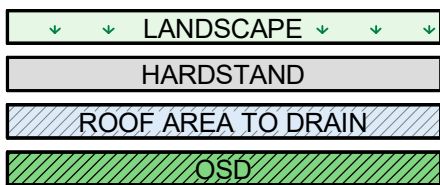
GREENVIEW NOTES >150mm STEP FROM INTERNAL FFL TO LANDSCAPE LEVELS FOR LOWER GROUND LEVEL UNITS. TYPICAL

GREENVIEW NOTES 30mm THRESHOLD RAMP FROM INTERNAL LOBBY FFL TO ENTRY RL.

LOBBY ENTRIES TO FALL AWAY FROM BUILDING AT MIN 2%. TYPICAL.

PRIOR TO COMMENCING ANY WORKS ON THE SITE, THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE, FOOTPATH, AREA AND ROAD RESERVE. THE BUILDER SHALL ALSO ENSURE THAT THE INVERT LEVELS OF THE SITE STORMWATER DISCHARGE CONNECTION POINT INTO COUNCIL'S KERB/DRAINAGE SYSTEM MATCH THE DESIGN LEVELS. ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY

## GENERAL LEGEND



CIV - FIXTURES SCHEDULE		
	TYPE	DESCRIPTION
		GRATED STORMWATER PIT
		PERIMETER STRIP DRAIN
		SEALED STORMWATER PIT

CIV - STANDARD SYMBOLS	
	DESCRIPTION
	FALL ARROW
	OVERLAND FLOW PATH

CIV - STORMWATER SERVICES		
	TYPE	DESCRIPTION
	STW	STORMWATER
	STW EX	EXISTING STORMWATER

## Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



## GROUND FLOOR DRAINAGE PLAN

Scale: 1 : 150

- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE, FOOTPATH AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES.
- PRIOR TO COMMENCING ANY WORKS ON THE SITE, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTION INTO COUNCIL'S KERB/DRAINAGE SYSTEM MATCH THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY
- ALL STORMWATER DRAINAGE WORK TO AVOID TREE ROOTS. WHERE NOT POSSIBLE, ALL EXCAVATIONS IN VICINITY OF TREE ROOTS ARE TO BE HAND DUG.
- ALL BASES OF PITS TO BE BENCHED (TO HALF PIPE DEPTH) TO THE INVERT OF THE OUTLET PIPE WITH ALL PIPES CUT FLUSH WITH SIDE OF PIT, TO ALLOW SMOOTH FLOW OF STORMWATER.
- PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE WHERE IN TRAFFICABLE AREAS.
- PROVIDE 100mm GAP IN BASE OF FENCE FOR EMERGENCY OVERFLOWS.
- PROVIDE SUBSOIL DRAINAGE AND OUTLETS TO ALL ON PODIUM PLANTER BOXES. OUTLET PIPES NOT SHOWN FOR CLARITY OF DOCUMENTATION.
- ALL DOWNPIPES ARE TO BE PIPE CONNECTED INTO THE FORMAL RAINWATER OR STORMWATER LINE UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OTHERWISE.
- ALL PIPES TO BE 100mmØ @ 1% MINIMUM UNLESS NOTED OTHERWISE.
- ALL BASES OF PITS TO BE BENCHED TO THE INVERT OF THE OUTLET PIPE WITH ALL PIPES CUT FLUSH WITH SIDE OF PIT, TO ALLOW SMOOTH FLOW OF STORMWATER.
- PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATES IN TRAFFICABLE AREAS.

NOTE: PROVIDE SUBSOIL DRAINAGE TO ALL RETAINING WALLS AND CONNECT TO STORMWATER SYSTEM. PIPES NOT SHOWN FOR CLARITY. TYPICAL.

NOTE: SITE IS WITHIN THE 5% AND 1% AEP FLOOD ZONE. REFER FLOOD REPORT BY GREENVIEW CONSULTING.

### OSD CALCULATIONS

- DESIGN CRITERIA: REDUCE 100YR (1%AEP) POST-DEVELOPMENT BACK TO PRE-DEVELOPMENT FLOWRATES, NOTING WCC ALLOW DRAINS TO BE USED IN LIEU OF SSR/PSD METHOD WHERE BYPASS EXISTS
- SITE AREA = 2017 m²
- PRE-DEVELOPMENT IMPERVIOUS AREA: 26% IMP.
- POST-DEVELOPMENT AREAS:
  - AREA BYPASSING OSD = 408 m² @ 20% IMP.
  - POST-DEVELOPMENT AREA TO OSD: 1609 m² @ 80% IMP.
  - LONGEST FLOW PATH = 60m @ 5% GRADE

- USE DRAINS RUNOFF-ROUTING MODEL TO ARR1987 METHODOLOGY (NOTE, ARR2019 NOT CURRENTLY SUPPORTED BY WCC)
- DRAINS PARAMETERS: IL = 0mm, CLR = 2.5 mm/hr, N\* (HARD) = 0.015, N\* (GRASS) = 0.170
- SSR100 (1%AEP) = 18m³
- Q5 PRE / POST = 84 / 83 L/s
- Q100 PRE / POST = 130 / 121 L/s
- ORIFICE CONTROL = Ø230mm BASED ON 990mm MAX. PONDING.

STORMWATER NOTES:  
NO WSUD REQUIRED FOR SITE PER WOLLONGONG DCP CHAPTER E14 SECTION 4.1.b AS SITE HAS LESS THAN 20 DWELLINGS



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REV.	DATE	BY	DESCRIPTION
6	21.05.2025	JPS	STAGE C ISSUE
5	24.02.2025	JPS	STAGE C ISSUE
4	21.10.2024	JPS	STAGE C DRAFT
3	11.10.2024	JPS	STAGE C DRAFT
2	23.08.2024	JPS	STAGE B ISSUE
1	21.06.2024	JPS	PRELIMINARY ISSUE

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STRUCTURAL CONSULTANT	GREENVIEW CONSULTING Pty Ltd
HYDRAULIC CONSULTANT	GREENVIEW CONSULTING Pty Ltd
LANDSCAPE CONSULTANT	



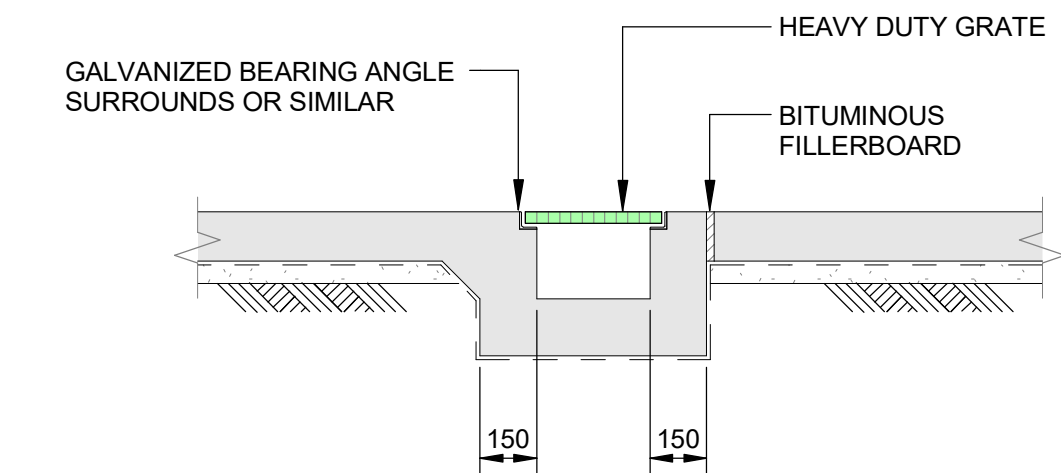
PROJECT:	PROPOSED DEVELOPMENT
AT	12-16 Stuart Street, Warrawong, NSW

TITLE:	GROUND FLOOR DRAINAGE PLAN
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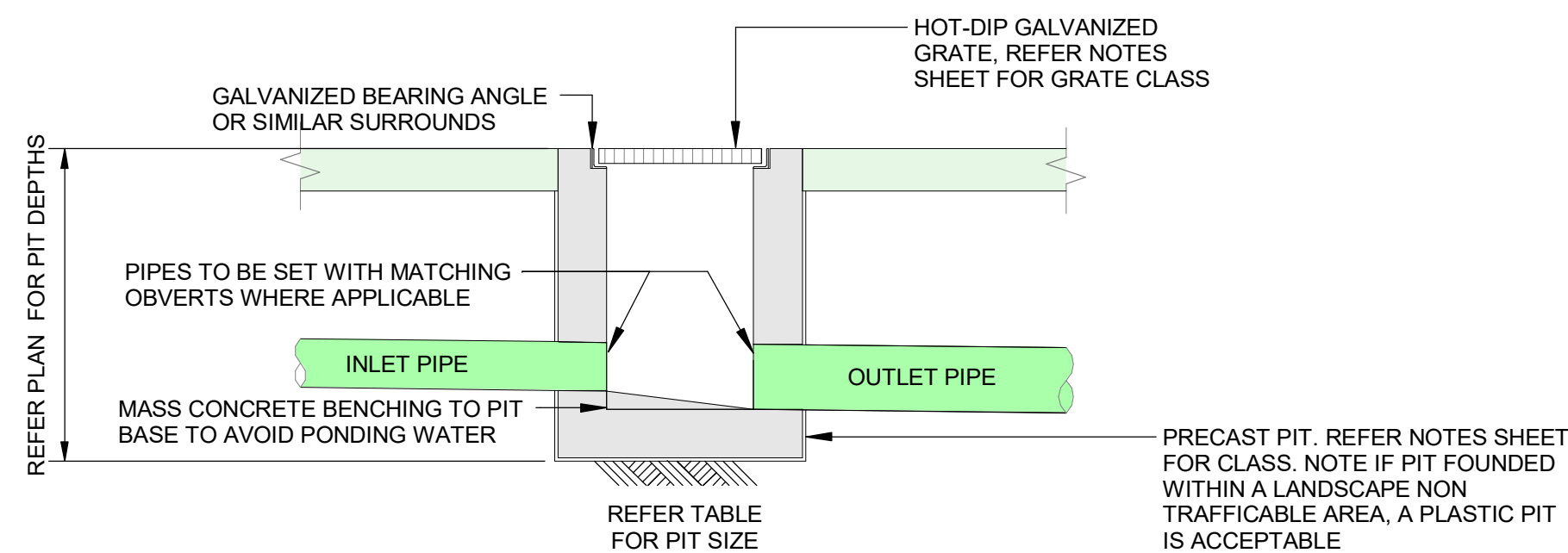


STATUS:	PRELIMINARY			
DATE:	SCALE:	PRJ:	JOB:	
21.05.2025	As indicated		230473	
STAGE:	DRAWN:	DESIGN:	CHECKED:	REV:
P	JPS	LM	AMcK	
TYPE:	SHEET:			
C	C02			6





TYPICAL GRATED DRAIN DETAIL  
Scale: 1 : 20

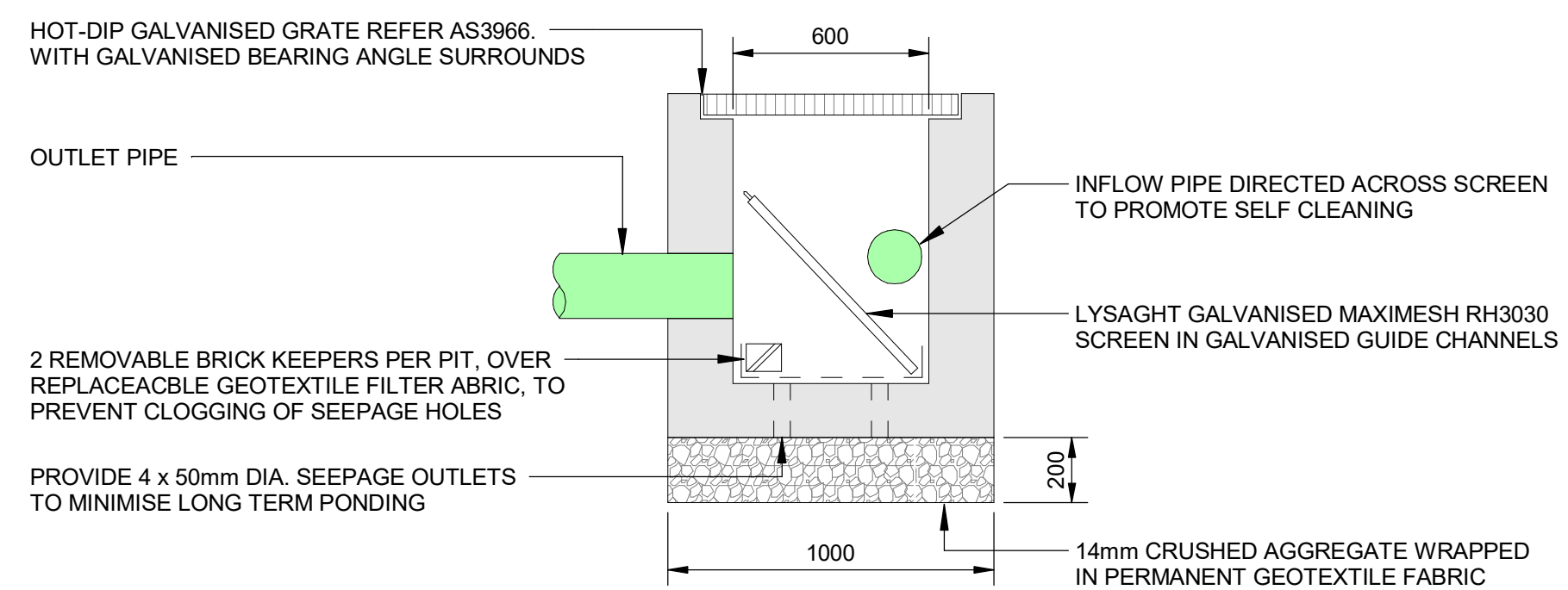


1. ENSURE CLIMB IRONS ARE PROVIDED UNDER LID AT 300 CTS TO COUNCIL'S SPECIFICATIONS WHERE PIT DEPTH IS DEEPER THAN 1000.
2. GREENVIEW RECOMMENDS THE PLUMBER PROVIDES 90Dia x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC. (BIDUM A24 OR APPROVED SIMILAR), TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.

PIT SIZE

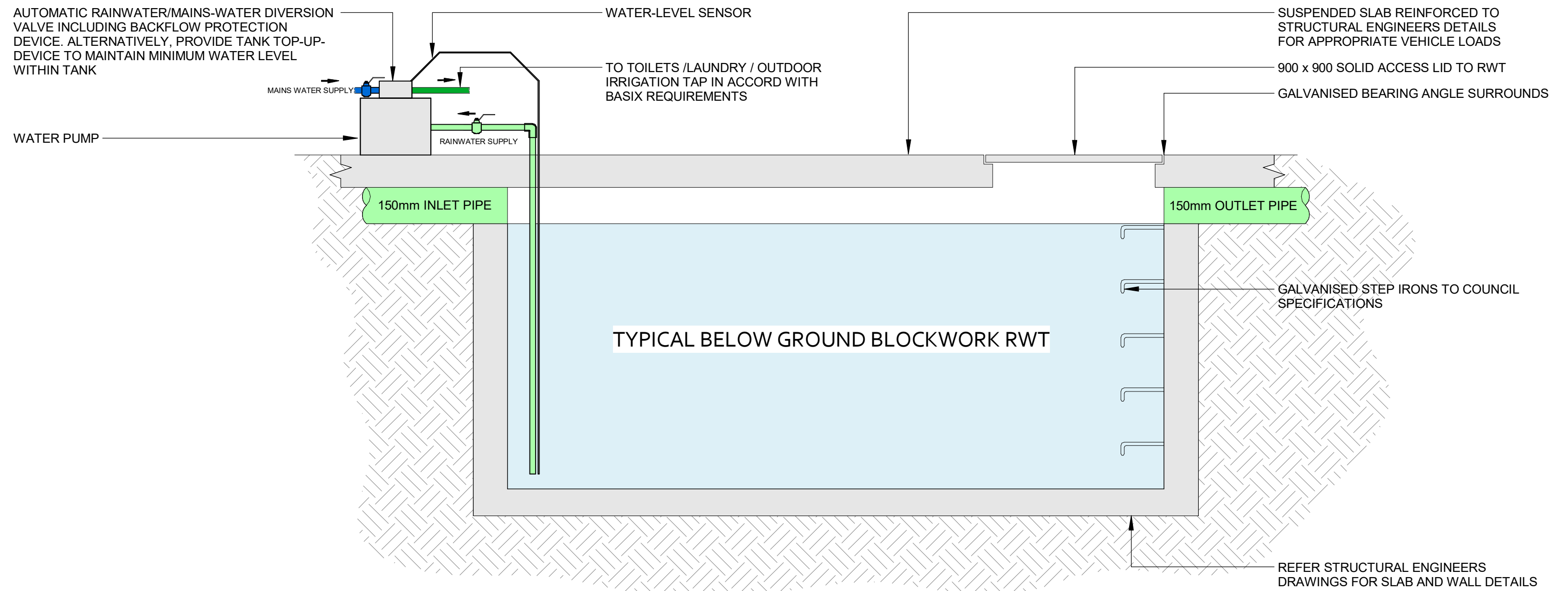
DEPTH	PIT DIMENSION
0 - 600	450 mm x 450 mm
600 - 900	600 mm x 600 mm
900 - 1200	600 mm x 900 mm
1200 +	900 mm x 900 mm

TYPICAL CONCRETE INLET PIT - LANDSCAPE SURFACE  
Scale: 1 : 20



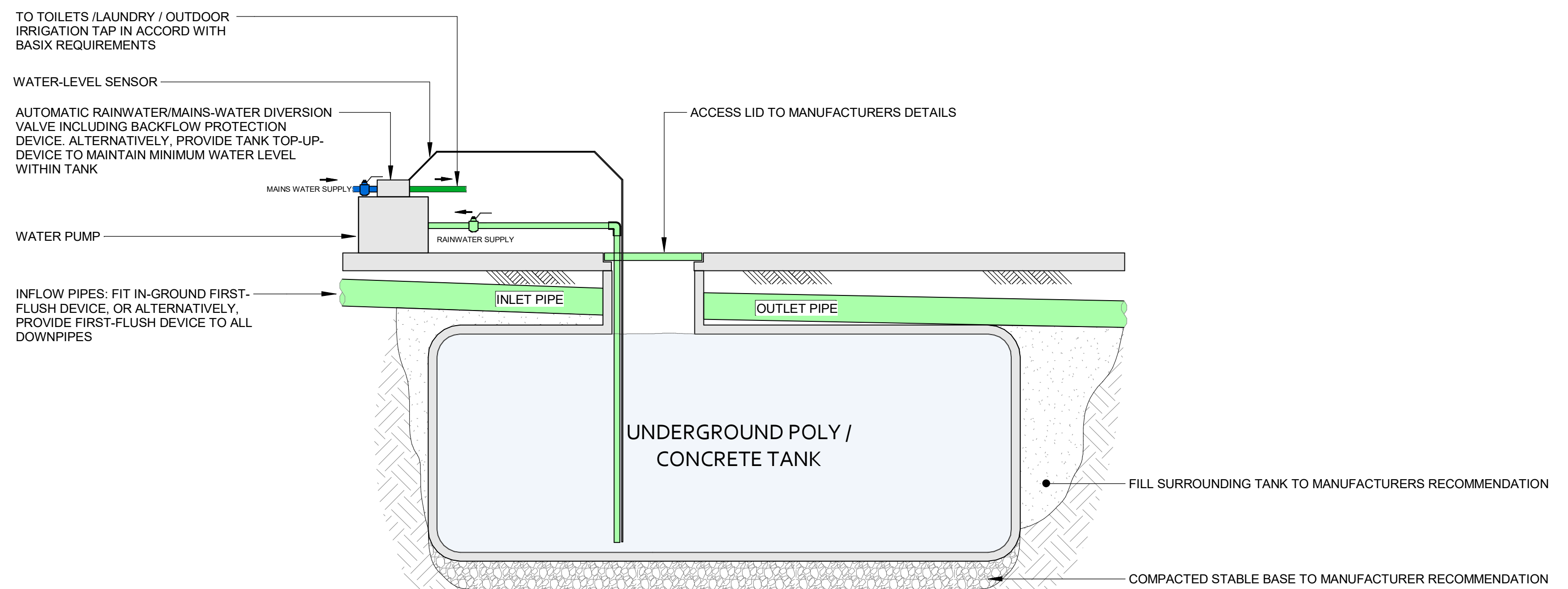
MAINTENANCE OF SILT ARRESTOR PIT IS TO BE CARRIED OUT AT LEAST EVERY SIX MONTHS AND AFTER EVERY SIGNIFICANT STORM EVENT

SILT ARRESTOR PIT  
Scale: 1 : 20



1. PROVIDE DIVERSION DEVICE AS SHOWN TO ENSURE MAINS-WATER SWITCH-OVER OCCURS ONCE WATER LEVEL IN TANK REACHES THE MINIMUM LEVEL. ALTERNATIVELY, A TOP-UP DEVICE (OR AIR-BREAK SYSTEM) MAY BE EMPLOYED TO ENSURE THE MINIMUM AFTER LEVEL IN THE TANK IS MAINTAINED.
2. RAINWATER FIXTURES, INFLOW AND OUTFLOW PIPES TO AS3500.1 (2003).
3. ANY CONTAINMENT/BACKFLOW PREVENTION DEVICE TO BE IN ACCORD WITH THE LOCAL WATER AUTHORITY.
4. RAINWATER USAGE AND MINIMUM VOLUMES TO BASIX OR AS SPECIFIED BY THE STORMWATER ENGINEER.
5. ALL PIPING SYSTEMS DELIVERING RAINWATER TO TAPS, FIXTURES, OUTLETS OR APPLIANCES MUST BE INSTALLED BY A LICENSED PLUMBER.

TYPICAL CAST INSITU (BELOW GROUND) RAINWATER TANK  
Scale: 1 : 20



1. PROVIDE DIVERSION DEVICE AS SHOWN TO ENSURE MAINS-WATER SWITCH-OVER OCCURS ONCE WATER LEVEL IN TANK REACHES THE MINIMUM LEVEL. ALTERNATIVELY, A TOP-UP DEVICE (OR AIR-BREAK SYSTEM) MAY BE EMPLOYED TO ENSURE THE MINIMUM AFTER LEVEL IN THE TANK IS MAINTAINED.
2. RAINWATER FIXTURES, INFLOW AND OUTFLOW PIPES TO AS3500.1 (2003).
3. ANY CONTAINMENT/BACKFLOW PREVENTION DEVICE TO BE IN ACCORD WITH THE LOCAL WATER AUTHORITY.
4. RAINWATER USAGE AND MINIMUM VOLUMES TO BASIX OR AS SPECIFIED BY THE STORMWATER ENGINEER.
5. ALL PIPING SYSTEMS DELIVERING RAINWATER TO TAPS, FIXTURES, OUTLETS OR APPLIANCES MUST BE INSTALLED BY A LICENSED PLUMBER.

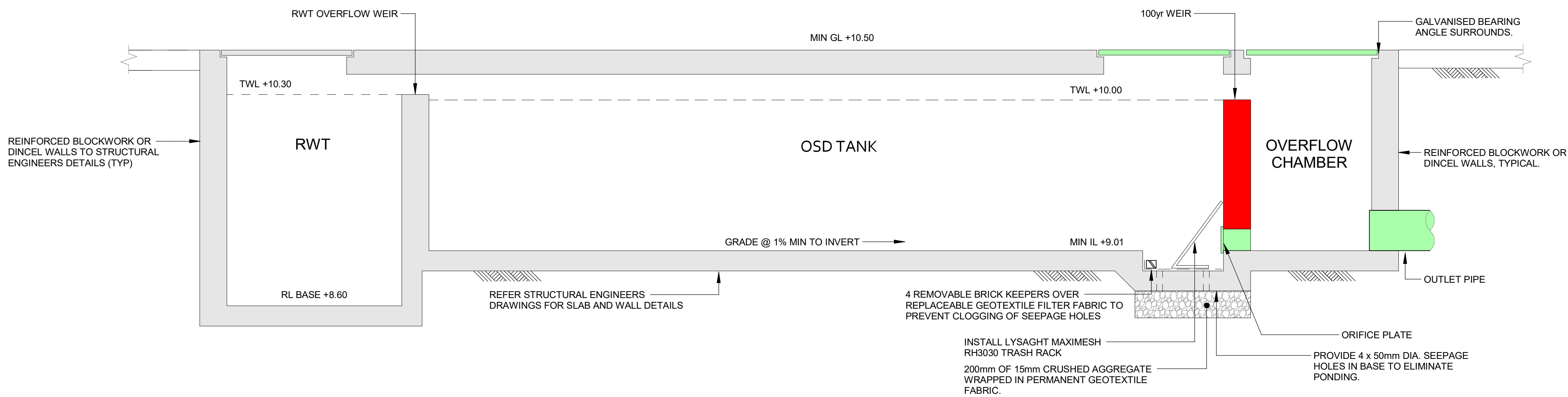
TYPICAL BELOW GROUND RAINWATER TANK  
Scale: 1 : 20

Homes NSW

APPROVED PLANS  
PART 5 (DIV 5.1) ACTIVITY DETERMINATION

Date: 23 June 2025  
Project No.: BGYVX

Determined by the New South Wales Land and Housing Corporation



1 OSD SECTION 1  
C02 Scale: 1 : 20